# Space Details

<table>
<thead>
<tr>
<th>Key:</th>
<th>DOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Confluence</td>
</tr>
<tr>
<td>Description:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Users</th>
<th>Guides</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feature Summary</strong></td>
<td><strong>User Guide</strong></td>
<td><strong>Plugins &amp; Tools</strong></td>
</tr>
<tr>
<td><strong>Live Demo</strong></td>
<td><strong>Install Guide</strong></td>
<td><strong>FAQ</strong></td>
</tr>
<tr>
<td><strong>System</strong></td>
<td><strong>Upgrade Guide</strong></td>
<td><strong>Technical Support</strong></td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td><strong>Administration Guide</strong></td>
<td><strong>Community Forum</strong></td>
</tr>
<tr>
<td><strong>Free Trial</strong></td>
<td><strong>Database</strong></td>
<td><strong>Wikipatterns.com</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Configuration</strong></td>
<td><strong>Community</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Server</strong></td>
<td><strong>Development Hub</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Configuration</strong></td>
<td><strong>Release Notes</strong></td>
</tr>
</tbody>
</table>

💡 Hosted users should check the feature comparison as some documents only apply to the installed version.

Click to view recently updated pages.

Recently Updated

by [Mohammed Alam](#) (2 hours ago)  
Customise Adobe PDF Exports (Confluence)

by [Charlie Perry](#) (6 hours ago)  
Re: Favourite Pages Macro (Confluence 2 User Guide)

by [Jared](#) (6 hours ago)  
Re: Modify Confluence Interface Text (Confluence)

by [Mark Maqin](#) (11 hours ago)  
Re: Modifying Look and Feel (for themes) (Confluence)

by [Mark Maqin](#) (12 hours ago)  
Re: Deleting a page (Confluence 2 User Guide)

by [Matt Ryall](#) (17 hours ago)  
HTTP authentication with Seraph (Confluence)

by [Rosie Jameson](#) (23 hours ago)  
Content by Label Macro (Confluence 2 User Guide)

by [Matt Ryall](#) (23 hours ago)  
Re: Profiling using the YourKit Plugin (Confluence)

by [Matt Ryall](#) (23 hours ago)  
Profiling using the YourKit Plugin (Confluence)

by [Christopher Owen](#) (29 Apr)  
Release Notes 2.5 (Confluence)

RSS Feed of recent updates.
Available Pages

- Confluence Development Hub
  - Confluence Developer FAQ
    - Encrypting error messages in Sybase
    - How do I associate my own properties with a ContentEntityObject?
    - How do I autowire a component?
    - How do I change the default polling time for email in Confluence?
    - How do I configure Confluence to use GMail as the mail server?
    - How do I convert wiki text to HTML?
    - How do I find information about lost attachments?
    - How do I find the logged in user?
    - How do I get a reference to a component?
    - How do I get hold of the HttpServletRequest?
    - How do I get the base URL and ContextPath of a Confluence installation?
    - How do I get the information about Confluence such as version number, build number, build date?
    - How do I get the location of the confluence.home directory?
    - How do I load a resource from a plugin?
    - How do I make my attachments open in a new window or a tab?
    - How do I prevent my rendered wiki text from being surrounded by paragraph tags?
    - How do I tell if a user has permission to...?
    - How does RENDERMODE work?
  - HTTP Response Code Definitions
  - I am trying to compile a plugin, but get an error about the target release
  - I have checked out the source, and use IntelliJ IDEA. Where do I go from here?
  - What class should my macro extend?
  - What class should my XWork action plugin extend?
  - What is Bandana? One form of Confluence Persistence
  - What’s the easiest way to render a velocity template from Java code?
  - Within a Confluence macro, how do I retrieve the current ContentEntityObject?
- Confluence Developer Forum
- Confluence Internals
  - Bandana caching
  - Character encodings in Confluence
  - Clustering in Confluence
  - Confluence rendering pipeline
• Date formatting with time zones
• HTTP authentication with Seraph
• Persistence in Confluence
• Spring IoC in Confluence
• Velocity Template Overview
  • Basic Introduction to Velocity
  • Confluence Objects Accessible From Velocity
• Confluence Plugin Guide
  • Installing and Configuring Plugins manually
  • Installing and Configuring Plugins using the Plugin Repository
  • Installing plugins overview
  • Single Sign-on
• Writing Confluence Plugins
  • Accessing Confluence Components From Plugin Modules
  • Confluence Plugin Module Types
    • Code Formatting Plugins
    • Component Plugins
    • Downloadable Plugin Resources
    • Event Listener Plugins
      • Writing an Event Listener Plugin Module
        • EventListener Example
    • Extractor Plugins
    • Attachment Content Extractor Plugins
  • Job Plugins
  • Language Pack Plugins
    • Creating A New Confluence Translation
    • Language Pack Flags
    • Translating ConfluenceActionSupport Content
    • Translations for the Rich Text Editor
    • Updating A Confluence Translation
  • Lifecycle Plugins
• Macro Plugins
  • Documenting Macros
  • User Macros
  • Writing Macros
• RPC Plugins
• Servlet Plugins
• Spring Component Plugins
• StateAware
• Theme Plugins
  • Creating a Theme Plugin
  • Packaging and installing a Theme Plugin
  • Theme Configuration
    • Saving Theme Configurations with Bandana
    • Updating a theme for editable comments
• Trigger Plugins
• User Macro Plugins
• Velocity Context Plugins
• Web UI Plugins
• Workflow Plugins
  • Workflow Plugin Prototype
  • Approval Workflow
• XWork-WebWork Plugins
• Plugin Self-Configuration
• Customise Confluence Page Exports
• Customise Adobe PDF Exports
• Customise MS Word Exports
• Getting Started
  • Build and Deploy Confluence and Confluence Plugins
  • Building and Deploying Confluence in IDEA
    • Compiling and Running Confluence
    • Creating an IDEA project with a Confluence distribution
    • Creating an IDEA project with a Confluence source release Maven1
    • Setup Confluence Source Code For Development
  • Building and Deploying Plugins in IDEA
    • Adding a plugin project to IDEA
    • Setting up a new Confluence plugin
    • Working on an existing Confluence plugin
• Developing with Eclipse
• Development Tips
  • Allocate more memory to IDEA
  • Disable Velocity Caching
  • Enabling Developer Mode
• Initial development environment setup
  • Example settings.xml
• Packaging and releasing a plugin
• Plugin Project Files
  • build.properties
  • project.properties
  • project.xml
• Userinfo Plugin Tutorial
  • UPT 1 - Getting Started
  • UPT 2 - Getting the Data
    • UPT 2.1 - The UserInfo Bean
    • UPT 2.2 - The XWork Action Class
    • UPT 2.3 - The Velocity Template
    • UPT 2.4 - Defining the XWork Plugin Module
  • UPT 3 - Integrating with the Confluence UI
    • UPT 3.1 - Linking Using Web UI Plugins
    • UPT 3.2 - Using Inline Decorators
• UPT4 - Display the info in a macro
• Remote API Specification
• Remote API Specification 2.4
• Alternative Backup Strategy for Large Confluence Sites
• Confluence Documentation Home 🏡
• Administrators Guide
  • __ConfluenceHosted
  • Administration
    • Cache Statistics
    • Changing time of Daily Backup
    • Confluence Data Directory Configuration
    • Content Index Administration
    • Important Directories and Files
    • Manually Backing Up The Site
    • Configuring Daily Backups
      • User Submitted Backup & Restore Scripts
    • Migrate Or Clone Confluence Between Servers
    • Moving Confluence Between Servers
    • Rebuilding the Ancestor Table
    • Restoring a Site
    • Restoring a Space
    • Restoring Data from other Backups
    • Restoring Data from the Administration Console
    • Retrieve file attachments from a backup
    • Troubleshooting failed XML site backups
    • Viewing License Details
    • Viewing System Information
    • Where Is My ConfluenceHome Directory?
• Administration Guide Attachments Directory
• Cluster Administration page
• Cluster Troubleshooting
• Configuring Confluence
  • Optional Settings
    • Attachment Storage Configuration
    • Enabling CamelCase Linking
    • Enabling Remote APIs
    • Enabling Rich Text Editing Option
    • Enabling Threaded Comments
    • Enabling Trackback
    • Making Rich Text Editing default
    • WebDAV Configuration
• Other Settings
  • Configuring Attachment Size
  • Configuring Character Encoding
- Configuring HTTP Timeout Settings
- Configuring Indexing Language
- Configuring Jira Issues Icon mappings
- Configuring Number Formats
- Configuring Shortcut Links
- Configuring Time and Date Formats
- Number of Ancestors to Show in Breadcrumbs
- Thumbnail Settings
- Site Configuration
  - Configuring the Server Base URL
  - Configuring the Site Homepage
  - Editing the Global Logo
  - Editing the Site Title
  - Editing the Site Welcome Message
  - View Space Goes to Browse Space
- Configuring Encoding
  - Troubleshooting Character Encodings
  - "€" Euro character
  - MySQL 3.x Character Encoding Problems
- Configuring Mail
  - Configuring a Server for Outgoing Mail
  - Enabling the 'Mail Page' plugin
  - The Mail Queue
- Confluence and JIRA
  - Add Confluence EAR-WAR to JIRA Standalone
  - Integrating JIRA and Confluence
  - Override properties in JIRA to Confluence Bridge
- Confluence Security
  - Confluence Community Security Advisory 2006-01-19
  - Confluence Security Advisory 2005-02-09
  - Confluence Security Advisory 2005-12-05
  - Confluence Security Advisory 2006-01-20
  - Confluence Security Advisory 2006-01-23
  - Confluence Security Advisory 2006-06-14
  - Java Policy Security with Confluence
  - NoFollow Support
- Design and Layout
  - Custom Decorator Templates
  - Customising Look and Feel Overview
    - Customising Colour Schemes
    - Customising Layouts
    - Global Templates
    - Working With Decorator Macros
- Themes Configuration
  - Applying a Theme To A Site
• Creating a Theme
  • Adding a theme icon
• Deploying the theme as a plugin
• Including Cascading Stylesheets in Themes
• Modifying Look and Feel (for themes)
  • Configuring the theme plugin
• Themes Overview

• Importing Data
  • Snip Snap Import

• Macros
  • Editing and Removing macros
  • Enabling HTML macros
  • Guide to Confluence Macros
    • Attachments Macro
    • Blog Posts Macro
    • Children Display Macro
      • Child Page 1
        • Grandchild Page
      • Child Page 2
    • Code Block Macro
    • Color Text Macro
    • Create Space Button Macro
    • Dynamic Tasklist Macro
    • Enable The Flowchart Macro
    • Gallery Macro
    • Global Reports Macro
    • IM Presence Macro
    • Include Page Macro
    • JIRA Issues Macro
      • JIRA 3.7 Link Format Change
    • JIRA Portlet Macro
    • JUnit Report Macro
    • Layout Macros
    • Noformat Macro
    • Recently Updated Content Macro
    • RSS Feed Macro
    • Search Macro
    • Space Details Macro
    • Spacegraph Macro
    • Spaces List Macro
    • Userlister Macro
    • Welcome Message Macro

• Performance Tuning
  • Configuring a Large Confluence Installation
  • Confluence Performance Enhancement
- Creating Memory Leaks with Spring
- Filtering Regular Expression Application
- How Adaptavist Runs Confluence
- Memory usage and requirements
  - java.util.zip.ZipFile.open causes OutOfMemoryError for large zip files
- Requesting Performance Support
- Troubleshooting Slow Performance Using Page Request Profiling
- Profiling using the YourKit Plugin
- Recognised System Properties
- Security
  - Adding SSL for Secure Logins and Page Security
  - Anonymous Access to Remote API
  - Enabling or Disabling Public Signup
  - Hiding External Links From Search Engines
  - Managing External Referrers
    - Excluding external referrers
    - Hiding external referrers
  - Shared Mode
  - User Email Visibility
- Spam Prevention (Captcha)
- Troubleshooting slow search performance and "Too many open files" problem
- User Management
  - Confluence User Management
    - Adding a Group
    - Adding a New User
    - Adding or Removing a User from a Group
    - Changing Usernames
    - Editing User Details
    - Global Groups Overview
    - Global Permissions Overview
    - Migrating to new User Management
    - Removing a Group
    - Removing a User
    - Setting up Anonymous Access
    - Viewing members of a group
- Integrating with Crowd
- JIRA User Management
  - Delegate user management to use JIRA logins
    - Revert from JIRA to internal user management
  - JIRA User Management FAQ
- LDAP User Management
  - Activating External User Management
  - Add LDAP Integration For User Authentication Only
• Add LDAP Integration With Group Management
  • Automatically Adding LDAP users to the confluence-users Group
  • Customising atlassian-user.xml
• atlassian-user.xml reference
• Changes in osuser.xml from 1.0.3a to 1.1.x
• Configuring multiple LDAP repositories
• Confluence Caching OSUser Provider
• Importing LDAP Users
• LDAP FAQ
• Troubleshooting the "Not Permitted" Screen under LDAP Integration
  • Cannot login with Confluence admin account
• Migrating users from Confluence to JIRA
• Requesting External User Management Support
• Understanding User Management in Confluence
• User Management Frequently Asked Questions

• Configuration Guide
  • Adding SSL on Confluence 2.1.5a and earlier
  • Application Server Configuration
    • Known Issues for Apache Tomcat
      • Configuring a MySQL DataSource in Apache Tomcat
      • Configuring Tomcat's URI encoding
      • Max size of HTTP POST request and Confluence page size
      • NotSerializableException on shutdown
      • Running Tomcat on a Different Port
    • Known Issues for JBoss
    • Known Issues for Jetty
    • Known Issues for Resin 2.x
    • Known Issues for Resin 3.x
      • Confluence and SOAP on Resin
      • Updating web.xml for Resin 3
    • Known Issues for SAP Application Server
    • Known Issues for WebLogic
    • Known Issues for Websphere
    • List Of Supported Application Servers
    • Websphere 6 Install Walkthrough
  • Application Server URL encoding
  • Confluence Installation Guide
    • Confluence Cluster Installation
      • Apache and Tomcat load balancing
    • Confluence Cluster Installation with Existing Data
      • Upgrading a Confluence Cluster
    • Confluence Unix and X11 Dependencies
    • Error creating bean with name 'scheduler'
• Get A Confluence Licence
• Installing Confluence Standalone
  • Change listen port for Confluence Standalone
• Installing the Confluence EAR-WAR edition
• License will not validate
• Server Hardware Requirements Guide
• Using the IBM 64bit J9 JDK
• Confluence Release Cycle
  • Development Releases
    • Development Release Warnings
    • Release Notes 1.3-DR1
    • Release Notes 1.3-DR2
    • Release Notes 1.3-DR3
    • Release Notes 1.3-DR4
    • Release Notes 1.3-final
    • Release Notes 1.4-DR1
    • Release Notes 1.4-DR2
    • Release Notes 1.4-DR3
      • 1.4 Interface - Where Did Everything Go?
    • Release Notes 1.4-DR4
    • Release Notes 1.4-DR6
      • Issues Resolved for 1.4-DR6
    • Release Notes 1.4-DR7
    • Release Notes 1.4-RC2
    • Release Notes 1.5-DR2
      • table test
    • Release Notes 2.0-RC1
    • Release Notes 2.0-RC2
    • Release Notes 2.3-DR1
    • Release Notes 2.3-DR2
  • Release Notes
    • Release Notes 1.0
      • Issues Resolved for 1.0
    • Release Notes 1.0.1
      • Issues Resolved for 1.0.1
    • Release Notes 1.0.3
      • Issues Resolved for 1.0.3
    • Release Notes 1.0a2
    • Release Notes 1.0a3
    • Release Notes 1.0b1
    • Release Notes 1.0b2
    • Release Notes 1.0b3
      • Issues Resolved for 1.0b3
    • Release Notes 1.0b4
      • Issues Resolved for 1.0b4
- Release Notes 1.0rc1
  - Issues Resolved for 1.0rc1
- Release Notes 1.0rc2
  - Issues Resolved for 1.0rc2
- Release Notes 1.0rc5
  - Issues Resolved for 1.0rc5
- Release Notes 1.0rc6
  - Issues Resolved for 1.0rc6
- Release Notes 1.1
  - Issues Resolved for 1.1
- Release Notes 1.1.1
  - Issues Resolved for 1.1.1
- Release Notes 1.1.2
- Release Notes 1.2
  - Issues Resolved for 1.2
  - Permissions Changes in 1.2
- Release Notes 1.2.1
  - Issues Resolved for 1.2.1
- Release Notes 1.2.2
  - Issues Resolved for 1.2.2
- Release Notes 1.2.3
  - Issues Resolved for 1.2.3
- Release Notes 1.3
  - Issues Resolved for 1.3
  - What's New in 1.3
- Release Notes 1.3.1
  - Issues Resolved for 1.3.1
- Release Notes 1.3.2
  - Issues Resolved for 1.3.2
- Release Notes 1.3.4
  - Issues Resolved for 1.3.4
- Release Notes 1.3.5
  - Issues Resolved for 1.3.5
- Release Notes 1.3.6
- Release Notes 1.4
  - Issues Resolved for 1.4
- Release Notes 1.4.1
  - Issues Resolved for 1.4.1
- Release Notes 1.4.2
  - Issues Resolved for 1.4.2
- Release Notes 1.4.3
  - Issues Resolved for 1.4.3
- Release Notes 1.4.4
  - Issues Resolved for 1.4.4
- Release Notes 2.0
- Issues Resolved for 2.0
- Release Notes 2.0.1
  - Issues resolved for 2.0.1
- Release Notes 2.0.2
  - Issues resolved for 2.0.2
- Release Notes 2.0.3
  - Issues resolved for 2.0.3
- Release Notes 2.1
  - Issues Resolved for 2.1
- Release Notes 2.1.1
  -Issues resolved for 2.1.1
- Release Notes 2.1.2
  - Issues resolved for 2.1.2
- Release Notes 2.1.3
  - Issues resolved for 2.1.3
- Release Notes 2.1.4
  - Issues resolved for 2.1.4
- Release Notes 2.1.5
  - Issues resolved for 2.1.5
- Release Notes 2.2
  - Issues Resolved for 2.2
- Release Notes 2.2.1
  - Issues resolved for 2.2.1
- Release Notes 2.2.10
- Release Notes 2.2.2
  - Issues resolved for 2.2.2
- Release Notes 2.2.3
  - Issues resolved for 2.2.3
- Release Notes 2.2.4
  - Issues Resolved for 2.2.4
- Release Notes 2.2.5
- Release Notes 2.2.6a
  - 2.2.5 Security Patch
  - Issues Resolved for 2.2.6a
- Release Notes 2.2.7
  - Issues Resolved for 2.2.7
- Release Notes 2.2.8
  - Issues Resolved for 2.2.8
- Release Notes 2.2.9
  - Issues Resolved for 2.2.9
- Release Notes 2.3
  - FileAppender log4j.properties
  - Issues Resolved for 2.3
- Release Notes 2.3.1
- Release Notes 2.3.2
• Release Notes 2.3.3
• Release Notes 2.4
• Release Notes 2.4.1
• Release Notes 2.4.2
  • Issues Resolved for 2.4.2
• Release Notes 2.4.3
• Release Notes 2.4.4
• Release Notes 2.4.5
• Release Notes 2.5
  • Issues Resolved for 2.5
• Release Notes_1.0.1
• Confluence Setup Guide
  • Custom Installation
    • External Database
    • Load Content for the site
    • Restoring from Backup During Setup
  • Standalone Setup Wizard
• Content Anonymiser for Data Backups
• Database Configuration
  • Database Setup Guides
    • Database Setup For Any External Database
    • Database Setup For mySQL
    • Database Setup for Oracle
      • Database Setup for Oracle (Pre Confluence 2.2)
    • Database Setup for SQL Server
  • Improving Database Performance
• Known Issues For Supported Databases
  • Configuring Database Character Encoding
• Known Issues for DB2
  • Interpreting DB2 error codes
• Known Issues for MySQL
• Known Issues For Oracle
• Known Issues for PostgreSQL
• Known Issues For SQL Server
• Known Issues for Sybase Database
• List Of Supported Databases
• Migrate to an External Database
• Database JDBC drivers
• Troubleshooting External Database Connections
• Troubleshooting the Embedded Database (hSQL DB)
• Upgrading From HSQL 1.7.1 to 1.8
• Guide to using Apache Tomcat's Virtual Hosts
• How to dump Active Directory data to a file
• Known Issues with Enterprise or Webhosting environments
• List Of Supported Operating Systems
- Managing Application Server Memory Settings
- Modify Confluence Interface Text
- Paddle
- Pull down RSS Feeds through a Proxy
- Running Confluence behind Apache
  - Using Apache with mod_jk
  - Using Apache with mod_proxy
  - Using Apache with virtual hosts and mod_proxy
- Set JAVA_HOME variable in Windows
- Setting up Confluence with IIS
- Setting Up Public Access
- Setup a mail session in standalone version
- Start Confluence automatically on system startup
  - Start Confluence automatically on Linux & Unix
  - Start Confluence automatically on OS X using launchd
  - Start Confluence automatically on Windows as a Service
    - Start Confluence automatically on Windows as a Service (Pre 2.2)
- Troubleshooting SQL Exceptions
- Upgrading Confluence
- Weblogic - Troubleshooting
- Webserver Configuration
  - Apache and Apache Connector Tips
  - Configure Web Proxy Support for Confluence
- Confluence Main FAQ
  - Copy Or Rename A Space
  - How do I change the space key?
  - How Do I?
    - Add Spell Checking To Confluence
    - Backup FAQ
    - Change default font size in Confluence
    - Disable public account signups
    - Enable public anonymous access
    - Enable user access logging
    - I can not find the "Rich Text" editor. Is the editor part of Confluence 1.4.3?
    - Migrate Confluence from one database to another
    - Redirect users to a page on login
    - Setup email notifications of page updates
    - Share users and groups between Confluence and JIRA
    - Where does Confluence store all its data?
- Installation Troubleshooting FAQ
- JIRA Issues Macro FAQ
- New User FAQ
  - Can Confluence retrieve search results from other sites?
• Can I use CamelCaseLinks like they do on WardsWiki?
• Can Users Edit Individual Sections Within a Page?
• How does Confluence differ from a wiki?
• Troubleshooting FAQ
  • Cannot install Confluence due to 'NullPointerException in DefaultPluginManager' error
  • Cannot install Confluence due to missing demo-site.zip
  • Cannot register Confluence due to 'License you entered was not valid' error
  • Cannot send email due to 'javax.mail.NoSuchProviderException' SMTP error
  • Confluence content or attachments are randomly lost
  • Confluence stops responding after some time
  • Confluence will not start - CommandBridge ClassNotFoundException
  • Confluence won't start with "Error creating Home directory"
  • Custom HTML broken in Look and Feel after saving invalid HTML
  • Dynamic tasklist macro edits fail with ConversionException after JDK upgrade
  • Edit page fails with 'DataIntegrityViolationException... Violation of PRIMARY KEY constraint'
  • Fix '404' errors in Space tree view
  • Fix 'Error using thumbnails - No image support in Java runtime'
  • Fix 'java.lang.UnsupportedClassVersionError... Unsupported major.minor version 49.0'
  • Fix 'Out of Memory' errors by increasing available memory
  • Fix 'Page Not Found' errors for pages with spaces in the title
  • Fix 'Too many open files' error on Linux by increasing filehandles
  • Fix JavaScript browser errors
  • PDF export fails on Linux with UnsatisfiedLinkError
  • Resolve Missing Attachments in Confluence
  • RSS Feed FAQ
  • Search is not finding my data AND the indexing process does not appear to be completing
  • View page containing Chart macro throws 'NoClassDefFoundError'
• Other
  • Changes to the Page Permission API in Confluence 2.4
  • Confluence Presentation
  • Confluence SOAP Provider Migration
  • Demonstration Site
  • Exported Docs
  • Enabling the html-include Macro
  • Feature List
  • Gallery Macro Themes
  • GZipping a HTTP Response within Confluence
  • Keyboard Shortcuts
• Mail Archiving FAQ
• Redirect users straight to space home page after successful login
• RSS Feeds Summary
• Running Confluence Behind a Caching Proxy Server
• Thumbnail and Gallery Example
• Troubleshooting & Technical Support
  • Enabling detailed Hibernate logging
  • General Support Enquiries
  • Logging A Thread Dump
Getting Started With Plugins

This is a quick guide to getting off the ground when starting a new plugin for Confluence.

The Guide

Building and Deploying Confluence has been broken into a series of steps.

1. **Initial development environment setup**
2. **Building and Deploying Confluence in IDEA**
   - Setup Confluence Source Code For Development
   - Creating an IDEA project with a Confluence distribution
3. **Building and Deploying Plugins in IDEA**
   - Setting up a new Confluence plugin
   - Working on an existing Confluence plugin
4. **Packaging and releasing a plugin**

Extra Information

- Development Tips
- Plugin Project Files
- Confluence Plugin Development Kit
- Userinfo Plugin Tutorial
- Developing with Eclipse

Confluence Internals

- Bandana caching
- Character encodings in Confluence
- Clustering in Confluence
- Confluence rendering pipeline
- Date formatting with time zones
- HTTP authentication with Seraph
- Persistence in Confluence
- Spring IoC in Confluence
- Velocity Template Overview
  - Basic Introduction to Velocity
  - Confluence Objects Accessible From Velocity

Confluence Plugin Guide

- Installing and Configuring Plugins manually
- Installing and Configuring Plugins using the Plugin Repository
- Installing plugins overview
- Single Sign-on
- Writing Confluence Plugins
  - Accessing Confluence Components From Plugin Modules
  - Confluence Plugin Module Types
    - Code Formatting Plugins — Code formatting plugin modules allow you to add new
      languages to the {code} macro.
    - Component Plugins
    - Downloadable Plugin Resources
    - Event Listener Plugins
    - Extractor Plugins — Extractor plugins allow you to hook into the mechanism by which
      Confluence populates its search index.
    - Job Plugins
    - Language Pack Plugins
    - Lifecycle Plugins — Lifecycle plugins allow you to perform tasks on application startup and
      shutdown
    - Macro Plugins
    - RPC Plugins
    - Servlet Plugins
    - Spring Component Plugins
    - StateAware
    - Theme Plugins
    - Trigger Plugins
    - User Macro Plugins
    - Velocity Context Plugins
    - Web UI Plugins — Web UI plugin modules allow you to insert links, tabs and sections of
      links into the Confluence web interface
    - Workflow Plugins
    - XWork-WebWork Plugins
  - Plugin Self-Configuration
Customise Confluence Page Exports

Modify the style or content of the following page exports:

- Customise Adobe PDF Exports
- Customise MS Word Exports

Remote API

- Remote API Specification

Resources

- Confluence Developer Forum
- Current Confluence API Documentation
- Confluence 1.3 API Documentation

The Confluence Confluence Developer FAQ

**How do I associate my own properties with a ContentEntityObject?** (Confluence)
**How do I autowire a component?** (Confluence)
**How do I change the default polling time for email in Confluence?** (Confluence)
**How do I configure Confluence to use GMail as the mail server** (Confluence)
**How do I convert wiki text to HTML?** (Confluence)
**How do I find information about lost attachments?** (Confluence)
**How do I find the logged in user?** (Confluence)
**How do I get a reference to a component?** (Confluence)
**How do I hold of the HttpServletRequest?** (Confluence)
**How do I get the base URL and ContextPath of a Confluence installation?** (Confluence)
**How do I get the information about Confluence such as version number, build number, build date?** (Confluence)
**How do I get the location of the confluence.home directory?** (Confluence)
**How do I load a resource from a plugin?** (Confluence)
**How do I make my attachments open in a new window or a tab?** (Confluence)
**How do I prevent my rendered wiki text from being surrounded by paragraph tags?** (Confluence)
**How do I tell if a user has permission to...?** (Confluence)
**How does RENDERMODE work?** (Confluence)
**HTTP Response Code Definitions** (Confluence)
**I am trying to compile a plugin, but get an error about the target release** (Confluence)
**I have checked out the source, and use IntelliJ IDEA, Where do I go from here?** (Confluence)
**What class should my macro extend?** (Confluence)
**What class should my XWork action plugin extend?** (Confluence)
**What’s the easiest way to render a velocity template from Java code?** (Confluence)
**Within a Confluence macro, how do I retrieve the current ContentEntityObject?** (Confluence)
Confluence Developer FAQ

This page last changed on Oct 03, 2006 by david.soul@atlassian.com.

This is a constantly updated FAQ listing questions and answers asked by people developing Confluence plugins and working with the Confluence codebase in general. For general questions, check Confluence Main FAQ.

⚠️ If you have a question, please ask it as a comment and someone from Atlassian will reply. Comment threads will gradually be merged back into this FAQ as needed. Please try to be as specific as possible with your questions.

Questions

How do I associate my own properties with a ContentEntityObject?
How do I autowire a component?
How do I change the default polling time for email in Confluence?
How do I configure Confluence to use GMail as the mail server
How do I convert wiki text to HTML?
How do I find information about lost attachments?
How do I find the logged in user?
How do I get a reference to a component?
How do I get hold of the HttpServletRequest?
How do I get the base URL and ContextPath of a Confluence installation?
How do I get the information about Confluence such as version number, build number, build date?
How do I get the location of the confluence.home directory?
How do I load a resource from a plugin?
How do I make my attachments open in a new window or a tab?
How do I prevent my rendered wiki text from being surrounded by paragraph tags?
How do I tell if a user has permission to...?
How does RENDERMODE work?
HTTP Response Code Definitions
I am trying to compile a plugin, but get an error about the target release
I have checked out the source, and use IntelliJ IDEA. Where do I go from here?
What class should my macro extend?
What class should my XWork action plugin extend?
What's the easiest way to render a velocity template from Java code?
Within a Confluence macro, how do I retrieve the current ContentEntityObject?
Encrypting error messages in Sybase

Adaptive server messages

How do I associate my own properties with a ContentEntityObject?

This page last changed on Jan 24, 2006 by jnolen.

Cannot resolve external resource into attachment. How do I associate my own properties with a ContentEntityObject?

You will need the ContentEntityManager (see how to retrieve it). This manager allows you to store and retrieve arbitrary String values associated with a ContentEntityObject.

Properties are stored as simple key/value pairs. We recommend that anyone writing a third-party plugin use the standard Java "reverse domain name" syntax to ensure their keys are unique. Keys may be no longer than 200 characters.

```java
// Set the property
contentPropertyManager.setText(page, "com.example.myProperty", "This is the value")
// Retrieve it
String myProperty = contentPropertyManager.getText(page, "com.example.myProperty")
```

getText and setText can store strings of arbitrary length (up to the size-limit for CLOBs in your database). There is also a getString and setString which is slightly more efficient, but limited to 255 characters per value.
How do I autowire a component?

This page last changed on Jan 24, 2006 by jnolen.

Cannot resolve external resource into attachment. How do I autowire a component?

Most of the time, you don't have to. All plugins will have their 'primary' objects (The macro in a macro plugin, the XWork actions in an XWork plugin, the RPC handler in an RPC plugin and so on...) autowired.

If you want to write an arbitrary object that is autowired, but that is not any particular plugin type itself, write a Component Plugin Module. The added advantage of this is that Confluence will then autowire other plugins with the component you have just written.

If, however, you find you need to autowire an arbitrary object with Spring components, use

```java
bucket.util.ContainerManager
```

```java
bucket.container.ContainerManager.autowireComponent(myObject);
```

Where `myObject` is the object instance that you wish to be autowired.
How do I change the default polling time for email in Confluence?

Modify the cronExpression property of the mailPollTrigger bean in schedulingSubsystemContext.xml file.

\etc\java\schedulingSubsystemContext.xml

For example, the expression below will fire at 12pm (noon) every day:

```xml
<property name="cronExpression">
  <value>0 0 12 * * ?</value>
</property>
```

Cron expression

You may also like to view an information on how to create Cron expressions to provide the ability to specify complex time combination.

http://quartz.sourceforge.net/javadoc/org/quartz/CronTrigger.html
How do I configure Confluence to use GMail as the mail server

To configure Confluence to use GMail to send emails, you will need to create a JNDI mail session and then have Confluence use it as per this document.

Please see Setup a mail session in standalone version for some guidelines.

```xml
<Resource name="mail/Session"
    auth="Container"
    type="javax.mail.Session"
    mail.smtp.host="smtp.gmail.com"
    mail.smtp.port="465"
    mail.smtp.auth="true"
    mail.smtp.user="nobody@gmail.com"
    password="foobar"
    mail.smtp.starttls.enable="true"
    mail.smtp.socketFactory.class="javax.net.ssl.SSLSocketFactory"
/>
```

Note: You may optionally add mail.debug=true into the <Resource> to see logs generated by JavaMail.
How do I convert wiki text to HTML?

This page last changed on Mar 16, 2006 by mryall.

Cannot resolve external resource into attachment. How do I convert wiki text to HTML?

This depends on where you want to do it:

In a macro...

You will need the SubRenderer (see how to retrieve it).

The SubRenderer has two render methods: one that allows you to specify a specific RenderMode for the rendered content, and another that uses the current RenderMode from the RenderContext.

⚠️ If you just want the body of your macro rendered, you can have this done for you by the macro subsystem by having your macro's getBodyRenderMode method return the appropriate RenderMode.

In some other component...

You will need the WikiStyleRenderer (see how to retrieve a component).

The WikiStyleRenderer has a convertWikiToHtml method that takes the wiki text you wish to convert, and a RenderContext. If you are converting the text in the context of some ContentEntityObject (for example within a page or blog post), then you can call contentEntityObject.toPageContext() to retrieve its RenderContext. Otherwise pass in a new PageContext().
How do I find information about lost attachments?

This page last changed on Jan 02, 2007 by ivan@atlassian.com.

You may like to use the findattachments.jsp which should detect missing attachments.

Simply copy it to confluence/admin/findattachments.jsp and access it at <confluence_base_url>/admin/findattachments.jsp

Below is an example of the result generated by http://<confluence_base_url>/admin/findattachments.jsp

```
Beginning search...
Missing attachment: <path>/attachments/3477/279/1, filename: Final-OdysseyCodingConventions.doc, filetype: Word Document
```

As you can see in the above example, the script will report:

<table>
<thead>
<tr>
<th>Location of the attachment missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Full Name of the attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>File type recognised :</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF Document</td>
</tr>
<tr>
<td>Image</td>
</tr>
<tr>
<td>XML File</td>
</tr>
<tr>
<td>HTML Document</td>
</tr>
<tr>
<td>Text File</td>
</tr>
<tr>
<td>Word Document</td>
</tr>
<tr>
<td>Excel Spreadsheet</td>
</tr>
<tr>
<td>PowerPoint Presentation</td>
</tr>
<tr>
<td>Java Source File</td>
</tr>
<tr>
<td>Zip Archive</td>
</tr>
</tbody>
</table>


How do I find the logged in user?

This page last changed on Feb 25, 2006 by dhardiker@adaptavist.com.

Cannot resolve external resource into attachment. How do I find the logged in user?

This can be retrieved easily from the
com.atlassian.confluence.user.AuthenticatedUserThreadLocal class which will give you the current logged in user as a com.atlassian.user.User object.

```java
User user = AuthenticatedUserThreadLocal.getUser();
```

Should the user not be logged in the user object will be null.
How do I get a reference to a component?

This page last changed on Jan 24, 2006 by jnolen.

Cannot resolve external resource into attachment. How do I get a reference to a component?

Confluence's component system is powered by Spring, but we've done a lot of nice things to make it easier for developers to get their hands on a component at any time.

Autowired Objects

If your object is being autowired (for example another plugin module or an XWork action), the easiest way to access a component is to add a basic Java setter method.

For example, if you need a SpaceManager simply add the following setter method. This setter will be called when the object is created.

```java
public void setSpaceManager(SpaceManager spaceManager)
{
    this.spaceManager = spaceManager;
}
```

⚠️ You can also write you own components which are automatically injected into your plugins in the same way. See Component Plugins for more detail

Non-autowired Objects

If your object is not being autowired, you may need to retrieve the component explicitly. This is done via the ContainerManager like so:

```java
SpaceManager spaceManager = (SpaceManager) ContainerManager.getComponent("spaceManager");
```
HttpServletRequest request = ServletActionContext.getRequest();
if (request != null)
{
    // do something here
}

You should always assume that ServletActionContext.getRequest() will return null. ServletActionContext is only populated if the request comes in through WebWork. There are a number of circumstances in which it will not be populated, either because a web request has come in through some other path, or because there was no web request in the first place:

- AJAX requests that come in via the DWR servlet
- SOAP/XML-RPC requests
- Scheduled tasks, including the sending of email notifications

Treat ServletActionContext as a bonus. If it's populated you can do neat things with it, but don't rely on it.
How do I get the base URL and ContextPath of a Confluence installation?

This page last changed on Apr 26, 2006 by cmiller.

Cannot resolve external resource into attachment. How do I get the base URL of a Confluence installation?

What are the base URL and context path?

The base URL is the URL for the root of your Confluence site. For example, the base URL for this site is http://confluence.atlassian.com. If you have installed Confluence somewhere other than the root directory of the webserver, for example http://www.example.com/confluence, then your base URL would be http://www.example.com/confluence.

Confluence attempts to guess the correct base URL for the site during setup. You can change it in the site's General Configuration.

The context path is the path to Confluence relative to the root directory of the webserver. For example, the context path for this site is an empty string, because it is deployed at the root. The context path for a Confluence instance deployed at http://www.example.com/confluence would be /confluence.

How do I determine the base URL and context path?

First you need the BootstrapManager (see how to retrieve it) then simply call the following method:

```java
String baseUrl = bootstrapManager.getBaseUrl();
```

In Confluence 2.0 and earlier the method was called bootstrapManager.getDomain(). The getDomain() method was deprecated in favour of getBaseUrl() in Confluence 2.1, because the latter name better describes the information it returns.

To get the context path, use

```java
String contextPath = bootstrapManager.getWebAppContextPath();
```
How do I get the information about Confluence such as version number, build number, build date?

Information about Confluence, such as the version number, build number and build date, can be retrieved from the `GeneralUtil` object.

You can use GeneralUtils public accessors to retrieve public static variables:

- `versionNumber`
- `buildDate`
- `buildNumber`

### In Java

```java
String versionNumber = GeneralUtil.getVersionNumber();
String buildNumber = GeneralUtil.getBuildNumber();
String buildDate = GeneralUtil.getBuildDateString();
```

or

```java
Date buildDate = GeneralUtil.getBuildDate();
```

### In Velocity

```velocity
$generalUtil.versionNumber
$generalUtil.buildNumber
$generalUtil.buildDateString
```

For instance, part of the Confluence footer is generated in the `footer.vm` file:

```velocity
(Version: $generalUtil.versionNumber Build:$generalUtil.buildNumber $generalUtil.buildDateString)
```

### In Wiki markup

User Macros can include the Velocity markup given above. For example, create a macro called 'version' with no body and the contents:

```velocity
$generalUtil.versionNumber
```

You can use this user macro in a page like this:
Congratulations, you're running Confluence version {version}!
How do I get the location of the confluence.home directory?

This page last changed on Jan 24, 2006 by jnolen.

Cannot resolve external resource into attachment. How do I get the location of the confluence.home directory?

First you need the BootstrapManager (see how to retrieve it) then simply call the following method:

```java
String confluenceHome = bootstrapManager.getConfluenceHome();
```

⚠️ The BootstrapManager also has a getConFiguredConfluenceHome method. This method is used during system startup to determine the location of confluence.home from first principles. There is no reason for you to call this method: getConfluenceHome should be sufficient.
How do I load a resource from a plugin?

This page last changed on Dec 04, 2006 by jnolen.

The recommended way to get resources from the classpath in Confluence is:

```java
InputStream in = com.atlassian.core.util.ClassLoaderUtils.getResourceAsStream(filename, this);
```

ClassLoaderUtils tries a couple of different classloaders, something we've occasionally found necessary in some application servers.
/ # $ -   +
!+

% 

     #   'D

+%#  & 9=@ 3AA: ' ? 

..

    6       + . / # $ -   +
    #T 'D



< #  ##  !&"5! U KJ' -K  + V +W /!1 %.
!+ &    #  /!1 #   + + +  + 6 -.
!+ /5   '      + 6 -   +  @ +   /!1 #   8(5"
%.
!+ !&"5!   '   #  +     +   + + + - + # ' ##. $ 
  + +   6
@ + - ##     #    ## ' +  .
    '%   +
 # . !+   #  + #
+ J' - + + # + -   @ #
 #.
V + TT.;.%T!T+  BA9T  T - .+  W
 6 @ '  % + /!1 # ' @  - %  + - K   #K 
K #.+  K %     #

 +

<A href="newwindow.html" _TARGET="_blank"_>a new window</A>

  +

#   

!  +  +
#  + Browse Space->Attachments '@     #@ +
..\confluence\src\webapp\pages\listattachmentsforspace.vm   #  V I   W
#   +  ' #  #. 0   +
#  
9.   +   % ' -  #  +

 +  .  

foreach ($attachment in $pagedAttachments)
<tr #alternateRowColors() id="attachment_$attachment.id">
<td width="1%" nowrap valign="top"><a
name="$generalUtil.urlEncode($attachment.content.realTitle)-attachment-$generalUtil.urlEncode($attachment.fi
("/pages/includes/attachment_icon.vm")</a> <a
href="$req.contextPath$attachment.downloadPathWithoutVersion"
>$attachment.fileName</a></td>
<td width="1%" nowrap valign="top">$attachment.niceFileSize</td>
<td width="1%" nowrap
valign="top">#usernameLink($attachment.creatorName) #if
($attachment.creatorName!=$attachment.lastModifierName) ($action.getText('last.modified.by')
#usernameLink($attachment.lastModifierName)) #end</td>
<td width="1%" nowrap
valign="top">$dateFormatter.format($attachment.lastModificationDate)</td>
<td>#contentLink2 ($attachment.getContent() true false)</td>
</tr>
#end

3. $ +  ' 

Document generated by Confluence on May 01, 2007 00:44

Page 36


<td width="1%" nowrap valign="top"><a
name="$generalUtil.urlEncode($attachment.content.realTitle)-attachment-$generalUtil.urlEncode($attachment.fi
#parse ("/pages/includes/attachment_icon.vm")</a> <a
href="$req.contextPath$attachment.downloadPathWithoutVersion"
>$attachment.fileName</a></td>

## +   !&"5! U KJ' -K  + V +W /!1 %@ + +    +    # 
+ +         #    % ## %  +     + ' .
 +  '  ' #  # 

<td width="1%" nowrap valign="top"><a
name="$generalUtil.urlEncode($attachment.content.realTitle)-attachment-$generalUtil.urlEncode($attachment.fi
#parse ("/pages/includes/attachment_icon.vm")</a> <a
href="$req.contextPath$attachment.downloadPathWithoutVersion"
*TARGET =
"_blank"*>$attachment.fileName</a></td>

  +

#   (%

!  + %  +
#  + (%F Attachment(s) '@     #@ +
..\confluence\src\webapp\pages\viewattachments.vm   #  V I   W #  
+  ' #  #. 0   +
#  
9.   +   % ' -  #  +   + .  

<td nowrap valign="top"><a
name="$generalUtil.htmlEncode($generalUtil.urlEncode($page.title))-attachment-$generalUtil.htmlEncode($gener
("/pages/includes/attachment_icon.vm")</a> <a href="$generalUtil.htmlEncode("
${req.contextPath}${attachment.downloadPathWithoutVersion}")"TARGET =
"_blank">$generalUtil.htmlEncode($attachment.fileName)</a></td>

3. $ +  ' 

<a
name="$generalUtil.htmlEncode($generalUtil.urlEncode($page.title))-attachment-$generalUtil.htmlEncode($gener
#parse ("/pages/includes/attachment_icon.vm")</a> <a href="$generalUtil.htmlEncode("
${req.contextPath}${attachment.downloadPathWithoutVersion}")">$generalUtil.htmlEncode($attachment.fileName)<

## +   !&"5! U KJ' -K  + VW /!1 %@ + +    +    #  +
+         #    % ## %  +     + ' . 
+  '  ' #  # 

<a
name="$generalUtil.htmlEncode($generalUtil.urlEncode($page.title))-attachment-$generalUtil.htmlEncode($gener
#parse ("/pages/includes/attachment_icon.vm")</a> <a href="$generalUtil.htmlEncode("
${req.contextPath}${attachment.downloadPathWithoutVersion}")" TARGET =
"_blank">$generalUtil.htmlEncode($attachment.fileName)</a>

Document generated by Confluence on May 01, 2007 00:44

Page 37


How do I prevent my rendered wiki text from being surrounded by paragraph tags?

This page last changed on Jan 24, 2006 by jnolen.

Cannot resolve external resource into attachment. How do I prevent my rendered wiki text from being surrounded by <p> tags?

When wiki text is converted to HTML, the level of conversion is determined by the RenderMode set within the RenderContext. Understanding RenderMode is quite important, so you should familiarise yourself with the documentation linked above.

There are two render modes that are useful if you want to avoid the output being placed inside paragraph tags:

RenderMode.INLINE will suppress the rendering of all block-level HTML elements, including paragraphs, blockquotes, tables and lists. Inline elements such as text decorations, links and images will still be rendered.

RenderMode.suppress( RenderMode.F_FIRST_PARA ) will render block-level elements as usual, but if the first such element is a paragraph, no paragraph tags will be drawn around it. This is useful if you’re placing your output inside a <div>.

If you are writing a macro, you will also need to return true from your macro’s isInline method.
How do I tell if a user has permission to...?

This page last changed on Oct 29, 2006 by ivan@atlassian.com.

Cannot resolve external resource into attachment. How do I tell if a user has permission to...?

When you're writing a Confluence plugin, it's important to check that the user has permission to do the operations your plugin is performing. Confluence does not enforce security for you, it's up to your code to perform these checks.

There are two places you might want to check permissions:

- In Java Code
- In Velocity Templates

In Java Code:

You will need:

1. the `User` object of the user whose permissions you want to check (How do I find the logged in user?)
2. the `permissionManager` component from Spring (How do I get a reference to a component?)

The PermissionManager has quite a few methods (Javadoc), but the most important are:

```java
/**
 * Determine whether a user has a particular permission against a given target.
 * @param user the user seeking permission, or null if the anonymous user is being checked
 * against
 * @param permission the permission to check
 * @param target the object that the permission is being checked against. If this object is
 * null, the method
 * will return false
 * @return true if the user has this permission, false otherwise
 * @throws IllegalStateException if the permission being checked against does not apply to
 * the target
 */
boolean hasPermission(User user, Permission permission, Object target);
/**
 * Determine whether a user has permission to create an entity of a particular type within
 * a given container.
 * <p>The container is the natural container of the object being created. For example, a
 * comment is contained
 * in a page, which is contained within TARGET_APPLICATION.
 * @param user the user seeking permission, or null if the anonymous user is being checked
 * against
 * @param container the target that the object is being created within. If this object is
 * null, the method
 * will return false
 * @param typeToCreate the type of object being created (see above)
 * @return true if the user has permission, false otherwise
 * @throws IllegalStateException if the permission being checked against does not apply to
 * the target
 */
```
the target
 */
 boolean hasCreatePermission(User user, Object container, Class typeToCreate);

Simple Permissions

Generally you’re going to be asking the question: "Does some user have permission to do something to some target?" For example: "Does BOB have permission to VIEW this PAGE?", "Does JANE have permission to REMOVE this ATTACHMENT?" These questions map to the hasPermission() method above.

The various values of "something" are all constants of the Permission class listed in this Javadoc. At the time this document was written, the permission 'verbs' are:

<table>
<thead>
<tr>
<th>Permission</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIEW</td>
</tr>
<tr>
<td>EDIT</td>
</tr>
<tr>
<td>EXPORT</td>
</tr>
<tr>
<td>REMOVE</td>
</tr>
<tr>
<td>SET_PERMISSIONS</td>
</tr>
<tr>
<td>ADMINISTER</td>
</tr>
</tbody>
</table>

So to check if your user has permission to edit a particular page, the call is:

permissionManager.hasPermission(myUser, Permission.EDIT, thePage)

For global permissions, the 'target object' is considered to be the Confluence application itself. There is a special target, TARGET_APPLICATION that represents the application as a whole. So to check if someone is a global administrator, call:

permissionManager.hasPermission(myUser, Permission.ADMINISTER, PermissionManager.TARGET_APPLICATION)

Create Permissions

Checking if someone has the ability to create an object (page, blogpost, space, etc) is a little more complicated. Every object is created inside some other object. Comments and Attachments are created inside Pages or BlogPosts. Pages are created inside Spaces. And Spaces are created inside TARGET_APPLICATION.

So to check if someone can create something, the question is: "Does this user have permission to create this KIND OF OBJECT, in this CONTAINER?" In Java, kinds of objects are represented by their class, so to see if a user can create a comment inside a particular page, you'd call:

permissionManager.hasCreatePermission(myUser, containingPage, Comment.class)

And to check if the user has permission to create spaces globally:

permissionManager.asCreatePermission(myUser, PermissionManager.TARGET_APPLICATION, Space.class)
In Velocity Templates

While all of the above is very powerful, it's a bit complicated to deal with in a Velocity file. There is an object in the default velocity context called $permissionHelper which has a bunch of useful methods on it. All the methods do pretty much what you'd expect them to do, so I'll just link to the Javadoc:

http://www.atlassian.com/software/confluence/docs/api/latest/com/atlassian/confluence/security/PermissionHelper.html

And give a simple example:

```velocity
#if ($permissionHelper.canEdit($remoteUser, $action.page))
  <b>You have Edit Permission for this Page</b>
#end
```
How does RENDERMODE work?

This page last changed on Mar 07, 2006 by jnolen.

Speaking generally, macros will want to do one of three things with their body:

1. Pass the body through wiki->html conversion, then do something to it like stick some more HTML around it. (i.e. `{panel}`)
2. Do something to the body, then pass it through wiki->html conversion (I don't really have an example of this)
3. Treat the body as data, not as wiki text. (i.e. `{tasklist}`)

`getBodyRenderMode()` makes the first case above really easy, because the macro renderer will convert your body from wiki text to HTML before it's passed to your macro's execute() method. That way your macro has ready-made HTML delivered to it, and you don't need to do anything.

If you return `RenderMode.ALL` from `getBodyRenderMode()`, then the body is rendered the same as a Confluence page. You can, however, return different values to only have a subset of renderings applied to your macro body: `RenderMode.INLINE`, for example, will ignore things like paragraphs, headers or blockquotes.

So, for example, the `{color}` macro returns `RenderMode.INLINE`, since you can only really use `{color}` inside a paragraph.

If you are doing macros of type 2 or 3, you'll need to return `RenderMode.NO_RENDER`, which means the raw body is passed into your macro with no pre-processing. You can then do whatever you want with it (including grabbing the SubRenderer component and converting it to wiki text yourself).

Here's the relevant portion of the MacroRendererComponent, which does all the work, if Java code is more your thing:

```java
private void processMacro(String command, Macro macro, String body, Map params, RenderContext context, StringBuffer buffer) {
    String renderedBody = body;
    try {
        if (TextUtils.stringSet(body) && macro.getBodyRenderMode() != null && !macro.getBodyRenderMode().renderNothing()) {
            renderedBody = subRenderer.render(body, context, macro.getBodyRenderMode());
        }
        String macroResult = macro.execute(params, renderedBody, context);
        if (macro.getBodyRenderMode() == null) {
            buffer.append(macroResult);
        } else if (macro.isInline()) {
            buffer.append(context.getRenderedContentStore().addInline(macroResult));
        } else {
            buffer.append(context.addRenderedContent(macroResult));
        }
    }
}
```
catch (MacroException e)
{
    log.info("Error formatting macro: " + command + ": " + e, e);
    buffer.append(makeMacroError(context, command + ": " + e.getMessage(), body));
}
catch (Throwable t)
{
    log.error("Unexpected error formatting macro: " + command, t);
    buffer.append(makeMacroError(context, "Error formatting macro: " + command + ": " + t.toString(), body));
}
}
HTTP Response Code Definitions

This page last changed on Apr 19, 2007 by ktran.

HTTP Response Codes

Below is a list of HTTP Response codes and their meaning.

This information was obtained from: HTTP Response Code Definitions

<table>
<thead>
<tr>
<th>Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Continue</td>
</tr>
<tr>
<td>101</td>
<td>Switching Protocols</td>
</tr>
<tr>
<td>200</td>
<td>OK</td>
</tr>
<tr>
<td>201</td>
<td>Created</td>
</tr>
<tr>
<td>202</td>
<td>Accepted</td>
</tr>
<tr>
<td>203</td>
<td>Non-Authoritative Information</td>
</tr>
<tr>
<td>204</td>
<td>No Content</td>
</tr>
<tr>
<td>205</td>
<td>Reset Content</td>
</tr>
<tr>
<td>206</td>
<td>Partial Content</td>
</tr>
<tr>
<td>300</td>
<td>Multiple Choices</td>
</tr>
<tr>
<td>301</td>
<td>Moved Permanently</td>
</tr>
<tr>
<td>302</td>
<td>Found</td>
</tr>
<tr>
<td>303</td>
<td>See Other</td>
</tr>
<tr>
<td>304</td>
<td>Not Modified</td>
</tr>
<tr>
<td>305</td>
<td>Use Proxy</td>
</tr>
<tr>
<td>307</td>
<td>Temporary Redirect</td>
</tr>
<tr>
<td>400</td>
<td>Bad Request</td>
</tr>
<tr>
<td>401</td>
<td>Unauthorized</td>
</tr>
<tr>
<td>402</td>
<td>Payment Required</td>
</tr>
<tr>
<td>403</td>
<td>Forbidden</td>
</tr>
<tr>
<td>404</td>
<td>Not Found</td>
</tr>
<tr>
<td>405</td>
<td>Method Not Allowed</td>
</tr>
<tr>
<td>406</td>
<td>Not Acceptable</td>
</tr>
<tr>
<td>407</td>
<td>Proxy Authentication Required</td>
</tr>
<tr>
<td>408</td>
<td>Request Time-out</td>
</tr>
<tr>
<td>409</td>
<td>Conflict</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>410</td>
<td>Gone</td>
</tr>
<tr>
<td>411</td>
<td>Length Required</td>
</tr>
<tr>
<td>412</td>
<td>Precondition Failed</td>
</tr>
<tr>
<td>413</td>
<td>Request Entity Too Large</td>
</tr>
<tr>
<td>414</td>
<td>Request-URI Too Large</td>
</tr>
<tr>
<td>415</td>
<td>Unsupported Media Type</td>
</tr>
<tr>
<td>416</td>
<td>Requested range not satisfiable</td>
</tr>
<tr>
<td>417</td>
<td>Expectation Failed</td>
</tr>
<tr>
<td>500</td>
<td>Internal Server Error</td>
</tr>
<tr>
<td>501</td>
<td>Not Implemented</td>
</tr>
<tr>
<td>502</td>
<td>Bad Gateway</td>
</tr>
<tr>
<td>503</td>
<td>Service Unavailable</td>
</tr>
<tr>
<td>504</td>
<td>Gateway Time-out</td>
</tr>
<tr>
<td>505</td>
<td>HTTP Version not supported</td>
</tr>
</tbody>
</table>

**Live HTTP Headers**

It would be useful to obtain information on HTTP response headers. If you are using Mozilla Firefox, you can download an 'add-ons' (extension) called LiveHTTPHeaders which will allow you to capture this information.

**Installation Instructions**

1. Download and install the Plugin
2. Restart Firefox
3. Go to Tools in the menu bar and click on Live HTTP Headers. This will trigger the functionality.

Now try accessing the Confluence main page and all HTTP request headers, cookies descriptions (such as the seraph authentication 'seraph.os.cookie') will be logged in the pop-up window. Please save this information in a text file, use the 'Save All' option.

Download Live HTTP Headers add-on
I am trying to compile a plugin, but get an error about the target release

When compiling plugins and using version 1.5 of the JDK, the following error may appear:

```
javac: target release 1.3 conflicts with default source release 1.5
```

**SOLUTION**

The solution is essentially to tell your compiler to target Java 1.3. How to do this will differ depending on what compiler you are using, but generally, something like this will work:

```
javac -target 1.3 <other options here>
```

If you are using Maven to build your project, try adding the following to your `project.properties` or `build.properties` file:

```
# Set the javac target to 1.3
maven.compile.target=1.3
maven.compile.source=1.3
```

**RELATED TOPICS**

Confluence Plugin Guide
FAQ Home
I have checked out the source, and use IntelliJ IDEA. Where do I go from here?

Cannot resolve external resource into attachment. I have checked out the source, and use IntelliJ IDEA. Where do I go from here?

See Build and Deploy Confluence and Confluence Plugins.
What class should my macro extend?

Cannot resolve external resource into attachment. What class should my macro extend?

It should extend com.atlassian.renderer.v2.macro.BaseMacro, not com.atlassian.renderer.macro.BaseMacro.
What class should my XWork action plugin extend?

Cannot resolve external resource into attachment. What class should my XWork action plugin extend?

WebWork actions must implement com.opensymphony.xwork.Action. However, we recommend you make your action extend ConfluenceActionSupport, which provides a number of helper methods and components that are useful when writing an Action that works within Confluence.

Other action base-classes can be found within Confluence, but we recommend you don't use them - the hierarchy of action classes in Confluence is over-complicated, and likely to be simplified in the future in a way that will break your plugins.
What is Bandana? One form of Confluence Persistence

Bandana is Atlassian's hierarchical data storage mechanism, it breaks objects into XML and stores them, to be retrieved later... uses xstream and a little hierarchical magic under the covers and has another strange Atlassian codename. It is one way to persist data inside your plugin. It is good for global config types of data.

It uses XStream to serialize Java strings (and objects?) to and from XML.

Examples:

The BandanaManager can be acquired via Confluence's (Spring's) dependency injection.

Data in this case is written to: confluence-data-dir/config/confluence-global.bandana.xml

Writing data:

```java
bandanaManager.setValue(new ConfluenceBandanaContext(), GmapsManager.GOOGLE_MAPS_API_KEY, updateApiKey);
```

Retrieving data:

```java
public String getGoogleApiKey()
{
    return (String) bandanaManager.getValue(new ConfluenceBandanaContext(), GmapsManager.GOOGLE_MAPS_API_KEY);
}
```

See also: Persistence in Confluence
What's the easiest way to render a velocity template from Java code?

This page last changed on Jan 24, 2006 by jnolen.

Cannot resolve external resource into attachment. What's the easiest way to render a velocity template from Java code?

Use VelocityUtils. You will need to provide VelocityUtils with the name of the template you want to render, and a map of parameters that will be made available within the template as $variables in velocity.

Confluence has a default set of objects for Confluence velocity templates. These are required for most Confluence velocity macros to work properly. To obtain this context, you should call MacroUtils.defaultVelocityContext();.

```
// Create the Velocity Context
HashMap context = MacroUtils.defaultVelocityContext();
context.put("myCustomVar", customVar);
context.put("otherCustomVar", otherCustomVar);
// Render the Template
String result = VelocityUtils.getRenderedTemplate("/com/myplugin/templates/macro.vm", context);
```
Within a Confluence macro, how do I retrieve the current ContentEntityObject?

This page last changed on Jan 24, 2006 by jnolen.

Cannot resolve external resource into attachment. Within a Confluence macro, how do I retrieve the current ContentEntityObject?

You can retrieve the current ContentEntityObject (ie the content object this macro is a part of), as follows:

```java
public String execute(Map parameters, String body, RenderContext renderContext) throws MacroException {
    // retrieve a reference to the body object this macro is in
    if (!(renderContext instanceof PageContext)) {
        throw new MacroException("This macro can only be used in a page");
    }
    ContentEntityObject contentObject = ((PageContext)renderContext).getEntity();
    ...
```

Note that this method might return null if there is no current content object (for example if you are previewing a page that has not been added yet, or if a remote user is rendering a fragment of notation).
Confluence Developer Forum

This page last changed on Nov 19, 2006 by cmiller.

The Confluence Developer Forum is a place for the discussion of extending and customising Confluence. There are two ways to join the discussion:

- Read the web-based forum
- Join the mailing-list

Forum Guidelines

The developer forum is set up for the discussion of:

- Confluence development: Plugins, themes or Confluence source customisation
- Confluence's internal and remote APIs
- Automation of tasks in Confluence
- Announcement of new Confluence developer releases
- Announcement of new plugin releases
- Requests for plugins or customisation services
- Complaints that Atlassian have broken the plugin APIs again

The following are discouraged:

- Requests for support setting up or running Confluence should be directed to [http://support.atlassian.com](http://support.atlassian.com)
- Bug-reports should be submitted to [http://jira.atlassian.com](http://jira.atlassian.com) (If the bug is specific to plugin development or Confluence's internal APIs, you can discuss it on the developer forum, but PLEASE submit a bug as well!)
- Questions about using, running or administering Confluence should be directed to [The general Confluence forum](http://jira.atlassian.com)
- It's OK to respond to requests for professional services on the forum, or to plug your business in plugin announcements or your signature, but please don't just post advertisements.

The Developer FAQ

Some questions come up on the forum a lot. Make sure you've checked the [Confluence Developer FAQ](http://jira.atlassian.com) first.

About the Participants

When taking part in the forum, please keep in mind that Confluence licenses do not include a guaranteed level of developer support. The Confluence development team follows and contributes to the forum because it's important to us to have a healthy ecosystem of third-party developers, and because we love seeing the cool stuff that our customers and partners come up with. That said, we can't respond to every request, and developers are also expected to help themselves by reading the available documentation, the API, and occasionally even looking at the Confluence source-code.
Also keep in mind that a lot of the people on the list don't work for Atlassian at all, and are answering questions because they're nice people.
Confluence Internals

This page last changed on Nov 20, 2006 by mryall.

Confluence is a large and complex application. This area documents some of the more complicated aspects of its design. For a complete reference, please refer to the source code which is available for download with all commercial licenses.

- Bandana caching
- Character encodings in Confluence
- Clustering in Confluence
- Confluence rendering pipeline
- Date formatting with time zones
- HTTP authentication with Seraph
- Persistence in Confluence
- Spring IoC in Confluence
- Velocity Template Overview
  - Basic Introduction to Velocity
  - Confluence Objects Accessible From Velocity
Bandana caching

This page last changed on Nov 21, 2006 by mryall.

Introduction

This is a technical description of Confluence’s Bandana caching mechanism. It is primarily designed for Confluence developers, but published here because it might prove useful to some plugin developers.

For an overview of all of Confluence’s persistence mechanisms, see Persistence in Confluence.

Confluence’s Bandana subsystem is used for persisting configuration settings for Confluence and its plugins. Any persistence mechanism requires careful thought with regard to updates. Transactions are the main mechanism for controlled updates to shared data, and it’s important that transactions are treated consistently across all the subsystems involved.

Confluence 2.3 has moved Bandana data to the database in order for it to be shared among clustered nodes. Using Hibernate meant that the updates done to the database were immediately transactional, but the Bandana caching layer still needed to be updated to be transaction-aware.

This document describes the caching system used by Bandana in Confluence 2.3 which allows it to deal correctly with transactional updates. The caching system may be used more extensively for other areas in Confluence going forward.

Caching layer

The caching layer for Bandana is necessary because all the data is persisted as XML. When configuration objects are retrieved from the data store, they are deserialized back into Java objects via XStream. This deserialization occurs after the XML has been retrieved by Hibernate, and is a time-consuming process. Because Bandana objects are used so frequently (at least one per request), a cache of configuration objects, independent of the Hibernate cache of XML, is required.

The interaction between the key components in the Bandana caching system is shown in the flowchart below.

Bandana caching flowchart
As you can see from the diagram, the CachingBandanaPersister is solely responsible for reading and updating the cache, only delegating queries to the HibernateBandanaPersister when the required data is not already in the case.

Problems to overcome

Having a cache separate to your transactional data store (Hibernate) presents a few tricky problems:

- A cache update is visible to other clients immediately; a database update is only visible to other clients once the transaction commits.
- A cache update can never be rolled back; if the associated database update gets rolled back, the cache is now inconsistent with the data.
- Two concurrent transactions which update multiple caches could interleave their changes, so that neither operation is completed in its entirety. This is one type of 'lost update' problem.
- Read-through cache updates (where a cache is empty and to be populated with data read from the database) should not result in an inconsistent cache when updates occur concurrently. This is another type of 'lost update' problem and was a serious bug in Confluence 2.2.

None of these problems is insurmountable, but the solution is fairly complex. The Bandana caching in Confluence 2.3 will have the following features:
1. Cache updates (except read-throughs) will be enacted on the Coherence cache only after the related database transaction has been completed successfully.
2. Read-through cache updates will be enacted immediately.
3. All cache updates will use locking when they are processed to prevent lost updates.
4. All cache updates will be visible when reading from the same cache during the same transaction, prior to commit.

These features are provided by a Confluence transactional cache, which is described in detail below.

**Transaction cache**

The transactional cache makes a best attempt at synchronising the data in the cache and the database when a transaction commits. A transactional cache consists of two components:

1. Deferred operations cache, which keeps track of update operations to an underlying cache but doesn’t actually perform them.
2. Deferred cache transaction synchronization, which performs the deferred updates on the cache once it gets notified of a successful transaction completion.

These two components collaborate with Spring for transaction management, and the locking and caching subsystems in Confluence.
Character encodings in Confluence

This page last changed on May 18, 2006 by mryall.

Where character encoding is used

There are three places that character encoding matters to Confluence:

1. Database encoding - usually the most important; it is where almost all user data is stored.
2. Filesystem encoding - important for attachment storage (pre-2.2), reading Velocity templates and writing exported files.
3. HTTP request and response encoding - important for form parsing, correct rendering by the browser and browser interpretation of encoded URLs.

Problems generally arise when Confluence thinks one of the above encoding is different to what it actually is. For example, Confluence might believe the database is using ISO-8859-1 encoding, when in fact it is UTF-8 encoded.

Java character encoding

Java always uses the double-byte UCS-2 character encoding for all char and String data. This means that each of the encodings above defines how, at that particular point, characters are converted to and from Java's native UCS-2 format into some other format that the browser, filesystem or database might understand.

So when a request comes in to Confluence, we convert it from the request encoding to UCS-2. Then we store that data into the database, converting from UCS-2 to the database's encoding. Retrieving information from the database and sending it back to the browser is the same process in the opposite direction.

Problems with character encodings

If Confluence has the wrong idea about encoding for one of the above, it manifests itself in different ways:

1. Incorrect database encoding - user data is corrupted between saving and restoring from the database. This often happens after a delay, as we cache data as it is written to the database and only later retrieve the corrupted copy from the database.
2. Incorrect/non-Unicode filesystem encoding - international filenames break attachment download/upload/removal (pre-2.2); exports break with international content or attachments.
3. Incorrect HTTP encoding - incorrect encoding selected by browser, resulting in incorrect rendering of characters. Changing browser encoding causes page to render properly. Broken URLs when linking to pages or attachments with non-ASCII characters.

Configuration of character encodings
The Confluence character encoding is a configuration setting found in Administration > General Configuration, and at runtime available in Settings.defaultEncoding. It is subsequently used in the following parts of the system:

- ConfluenceWebWorkConfiguration sets webwork.i18n.encoding to this encoding, which WebWork uses in the response Content-Type header.
- AbstractEncodingFilter sets the HTTP request encoding to this encoding. This seems unnecessary, since the Content-Type header from the client should include the encoding used. This affects form submissions and file uploads.
- VelocityUtils reads in Velocity templates using this encoding when reading templates from disk.
- AbstractXmlExporter creates its output using this encoding.
- GeneralUtil uses this encoding when doing URLEncode and URLEncode. Different browsers have different support for character sets in URLs, so it's uncertain how much benefit this provides.

In summary, changing the Confluence character encoding will change your HTTP request and response encoding and your Filesystem encoding as used by exports and velocity templates.

The database encoding is the responsibility of your JDBC drivers. The drivers are responsible for reading and writing from the database in its native encoding and translating this data to and from Java Strings (which are UCS-2). For some drivers, such as MySQL, you must set Unicode encoding explicitly in the JDBC URL. For others, the driver is smart enough to determine the database encoding automatically.

Ideally, your database itself should be in a Unicode encoding (and we recommend doing this for the simplest configuration), but that is not necessary as long as:

- the database encoding supports all the characters you want to store in Confluence
- your JDBC drivers can properly convert from the database encoding to UCS-2 and vice-versa.

The filesystem encoding is mostly ignored by Confluence, except for the cases where the above configuration setting above plays a part (exports, velocity). When attachments are uploaded, they are written as a stream of bytes directly to the filesystem. It is the same when they are downloaded: the bytes from the file InputStream are written directly to the HTTP response.

In some places in Confluence, we use the default filesystem encoding as determined by the JVM and stored in the file.encoding system property (it can be overridden by setting this property at startup). This encoding is used by the Java InputStreamReader and InputStreamReader classes by default. This encoding should probably never be used; for consistent results across all filesystem access we should be using the encoding set in the General Configuration.

In certain cases we explicitly hard-code the encoding used to read or write data to the filesystem. Two important examples are:

- importing Mbox mailboxes which are known to be ISO-8859-1
- Confluence Bandana config files are always stored as UTF-8.

Some application servers, Tomcat for example, have an encoding setting that modifies Confluence URLs before they reach the application. This can prevent access to international pages and attachments (really anything with international characters in the URL). See configuring your Application Server URL encoding.
Advice

In general, always set all character encodings to UTF-8. That includes database, JDBC drivers, application server, filesystem and Confluence.

In certain isolated cases (e.g. Microsoft Windows), it might not be possible to use a fully Unicode filesystem (that is, a default Windows install doesn't support Unicode filenames properly). If so, stick with UTF-8 for the other two and be aware that your operating system might have limitations around international attachments (pre-2.2), backup and restore of international data, etc.
Clustering in Confluence

This page last changed on Apr 26, 2007 by david.soul@atlassian.com.

Introduction

A new feature in Confluence 2.3 is the ability to configure run multiple copies of Confluence in a cluster, so that clients can connect to any copy and see the same information. While we have tried to make clustering Confluence as easy and administrator-friendly as possible, it is a major architectural change and requires extra planning for deployment and upgrades.

This document will give a technical overview of clustering in Confluence 2.3, primarily for those users and developers who will be installing and configuring Confluence in a cluster. A separate overview is available for Confluence plugin developers.

Cluster topology

A simple description of the cluster topology for Confluence would be multiple applications, shared data source. A cluster of Confluence consists of:

- multiple homogenous installations of Confluence (called nodes below)
  - a Confluence home directory for each installation.
- a distributed Tangosol Coherence cache, which all nodes use via a multicast group (see networking)
summary below)

• a single database, which all nodes connect to

The user is responsible for configuring an appropriate HTTP load balancer in front of the clustered installations. Typically this means using mod_jk or another application server load-balancing technology. The load balancer must be configured to support session affinity.

Communication between clustered nodes is minimised by using a distributed cache which propagates updates to all other nodes automatically. Where necessary, Coherence provides a locking mechanism for synchronising jobs and a RMI interface for more complex communication.

LAN Clustering Only

Atlassian only supports clustering over a local area network. While it is theoretically possible to configure Massive to cluster across a WAN, the latency involved is likely to kill performance of the cluster. We can’t stop you trying, of course, but you’re going to have to work out how to configure Coherence yourself, and we’re not going to support the resulting mess.

Homogenous Confluence installations

All the Confluence installations must be running exactly the same application, down to the lowest level. Items that must be the same include:

• Confluence version
• Application server version
• JDK version
• Libraries and plugins in the Confluence classpath, WEB-INF/lib
• Libraries in the application server classpath

The installation section has more information how to ensure homogenous node installations.

Creating a Confluence cluster

To get Confluence running in a cluster, you must do the following:

1. Obtain a clustered licence key from Atlassian for each node
2. Upgrade a single node to the clustered licence
3. Start the cluster from that node’s administration menu, specifying a name and optionally a preferred network interface
4. Restart the single node and test it
5. Copy the Confluence application and Confluence home directory to the second node
6. Bring up the second node and it will automatically join the cluster.

Copying the Confluence application and home directory helps ensure that the installations are homogenous.

An alternative to this method is to copy the Confluence web application, but not the Confluence home
directory. In this case, the installation wizard will require your cluster name to connect to the other nodes, and it will automatically configure itself. You will need to rebuild the index manually after this installation, however.

There is now full documentation for a Confluence cluster installation.

**Upgrade process**

Another consequence of the homogenous requirement is that upgrades must be done by following a strict process.

1. All cluster nodes are brought down
2. Upgrade a single node to the latest Confluence version
3. Start the single node so it can upgrade the database
4. Upgrade subsequent nodes and start them one-by-one.

This is the only safe method of upgrading a Confluence cluster.

**Single database**

The Confluence database in a cluster is shared by all nodes. This means that the database must be able to scale to service all the Confluence nodes, which will probably mean implementing some kind of database cluster and JDBC-level load balancing. We can not offer support with scaling or tuning your database, you will need to talk to your DBA or database vendor.

For obvious reasons, you must have an external database to run Massive - you can not cluster Confluence when using the embedded HSQL database.

The most important requirement for the cluster database is that it have sufficient connections available to support the expected number of application nodes. For example, if each Confluence instance has a connection pool of 20 connections and you expect to run a cluster with four nodes, your database server must allow at least 80 connections to the Confluence database. In practice, you may require more than the minimum for debugging or administrative purposes.

In a cluster, attachments must be stored in the database. Configuring a cluster in an existing installation will automatically migrate your attachments to the database. Non-clustered installations still have the option of using the Confluence home directory for storing attachments.

While attachments are stored in the database, they are temporarily written to the cluster node's local filesystem when being streamed to users (so Confluence doesn't have to hold open database connections unnecessarily). For this reason, Confluence will still need enough temporary disk space to hold any attachments currently in transit.

**Distributed cache**

In a normal configuration, Confluence uses many caches to reduce the number of database queries
required for common operations. Viewing a page might require dozens of permissions checks, and it
would be very slow if Confluence queried the database for this information with every page view.
However, caches must be carefully maintained so they are consistent with the application data. If the
page permissions change, the old invalid data needs to be removed from the cache so it can be replaced
with a fresh correct copy.

To preserve consistent caches across a cluster, Confluence uses a distributed cache called Tangosol
Coherence, which manages replicating cache updates transparently across all nodes. The network
requirements of the distributed cache are quite simple, but must be preserved if the cluster is to work
properly.

To discover other nodes in the cluster, Confluence broadcasts a join request on a multicast network
address. Confluence must be able to open a UDP port on this multicast address, or it will not be able to
find the other cluster nodes.

Once the nodes are discovered, each responds with a unicast (normal) IP address and port where it can
be contacted for cache updates. Confluence must be able to open a UDP port for regular communication
with the other nodes.

Because the Coherence network requirements are different to those required by the Confluence database
connection, the situation can arise where Confluence can use the database but not talk to the other nodes
in the cluster via Coherence. When Confluence detects this, it will shut itself down in a cluster panic.

For more details on the network configuration of the distributed cache, see the networking summary

<table>
<thead>
<tr>
<th>Home directory</th>
</tr>
</thead>
</table>

Confluence's home directory has a much-reduced role in a cluster. Because the application data must be
shared between all nodes for consistency, the only information stored in the Confluence home directory is
either node-specific, or needed to start Confluence. This includes information related to:

- database connection
- license
- cluster connection

The only application data stored in the Confluence home directory is the Lucene search index. Confluence
synchronises this data itself by keep track of indexing tasks in the database.

This is also why we recommend copying the Confluence home directory from the first node when setting
up subsequent nodes. If you did not copy the Confluence home directory, you would need to rebuild the
search index from scratch on the subsequent nodes after installation.

<table>
<thead>
<tr>
<th>Event handling</th>
</tr>
</thead>
</table>

Broadcasting events to all nodes in a cluster is supported in Confluence, but not recommended. The
cluster topology uses a shared data store so that application state does not need to be synchronised by
events.
The event broadcasting is done only for certain events, like installing a plugin. When a plugin is installed in one node, Confluence puts the plugin data in the database, and notifies the other nodes that they need to load the plugin into memory.

Indexing

Confluence maintains a copy of its Lucene search index on each node of the cluster. This index is used for many things beside full-text searches, including RSS feeds and lists of recently updated content. If a node is disconnected from the cluster for a short amount of time (less than three hours), it will be able to bring its copy of the index up-to-date when it rejoins the cluster. If the node is down for longer than that, it will be forced to completely rebuild its search index from scratch.

If a node is down for a long amount of time and its lucene index has become stale as a result, you may want to avoid the expensive operation of rebuilding the index. To do that, you must copy a "live" version of the Lucene index from an active node. Simply replace the contents of the confluence home/index directory with those from an active node before bringing the stale node back up.

Job synchronisation

For tasks such as sending the daily report emails, it is important that only one node in the cluster does this. Otherwise you would get multiple emails from Confluence every day.

Confluence uses locks in the Coherence distributed cache to ensure only one node can be running certain jobs at a time. This ensures email notifications will only be sent once.

Activity tracking

Activity tracking does not work in a cluster, and will be disabled for clustered deployments. We're working on making the activity tracker clusterable in a future release. You can follow this issue in JIRA: CONF-7520

Cluster panic

In some situations, there can be a network issue or firewall that prevents the distributed cache from communicating but still allows Confluence to update the database. This is a dangerous situation because when the caches on the detached nodes become inconsistent, users on different nodes will see different information and updates can be lost.

Confluence can detect this problem by checking a database value against a cached value, and if they differ, all the clustered nodes will be shut down with a 'Cluster panic' message. This is considered a fatal error because the consequences can cause damage to your data. For those administrators that like to live on the edge, there is a system property to prevent cluster panic and allow data corruption.

If a cluster panic does occur, you need to ensure proper network connectivity between the clustered nodes. Most likely multicast traffic is being blocked or not routed correctly. See the networking summary below.
Summary of network requirements

In addition to normal connectivity with its database, all clustered Confluence instances require access to a multicast group and the ability to open a UDP unicast port.

By default, the multicast address is automatically generated from the cluster name you provide when starting the cluster and the multicast port is fixed. During cluster setup, Confluence will prompt for the unicast IP address to use if the server has multiple network interfaces, and by default the unicast port is fixed. The cluster multicast group will be joined on the same network interface as the bound unicast IP address.

For any settings which are not configurable through the Confluence web interface, they can be configured via an XML file in the Confluence home directory for more exotic networking requirements.

Scaling Confluence On A Single Server

Since the maximum addressable memory on a 32 bit JVM is 4GB, some large servers may scale Java applications by running JVM instances concurrently. This would be implemented as separate, clustered Confluence nodes running on a single server and communicating internally. Because each JVM replicates the cache entirely, it may be useful to test a single, massive instance running a 64 bit JVM as an alternative. This configuration may result in superior performance than an internal cluster.

Geographically Distributed Clusters

Co-locating nodes is inadvisable as high latency may unacceptably degrade cache replication. Cluster nodes will provide the best performance if servers are physically adjacent. However, as long as all nodes share a LAN, users may wish to test alternative configurations to see how performance is affected.

Related Pages

Server Hardware Requirements Guide
Confluence rendering pipeline

This page last changed on Jan 16, 2007 by mryall.

Rendering frameworks

There are two frameworks that do the template rendering in Confluence: Webwork and Sitemesh. The confusing bit is that both of them use Velocity as their templating engine. We try to distinguish them by using *.vm for templates processed by Webwork, and *.vmd for those processed by Sitemesh.

Rendering contexts

There are four different Velocity contexts used in Confluence:

- templates processed by Webwork use the context defined in ConfluenceVelocityContext
- templates processed by Sitemesh as a result of the \#applyDecorator() directive use the context defined in ApplyDecoratorDirective
- templates processed by Sitemesh as a result of the URL mapping in decorators.xml use the context defined in ProfilingPageFilter
- templates processed by the notification queue use the context defined in VelocityRenderedQueueItem.

The two Sitemesh contexts are pretty much the same, but the Webwork velocity context contains a lot more stuff than either of the Sitemesh ones.

Rendering pipeline

So the general flow of control goes:

- Webwork gets request, maps request URL to action using xwork.xml
- Webwork maps response of action to a Velocity template using xwork.xml
- Webwork launches Velocity handler on template (*.vm) with context defined in ConfluenceVelocityContext
- Velocity process content in *.vm file
- Within an \#applyDecorator() directive:
  - Velocity calls the ApplyDecoratorDirective class with the parameters and body content of the directive
  - Any \#decoratorParam() directives are processed by the ParamDirective class, which pushes bits of the current Velocity context into the ApplyDecoratorDirective parameters
  - ApplyDecoratorDirective matches the name parameter of the directive with a *.vmd file from decorators.xml
  - ApplyDecoratorDirective launches Sitemesh on a decorator template (*.vmd) with context defined in ApplyDecoratorDirective
  - Sitemesh returns decorated content
- Velocity template finished processing rest of *.vm file, returns to Webwork
- Web.xml servlet filter ‘sitemesh’ maps to ProfilingPageFilter, a Sitemesh page filter
- Sitemesh uses the request URL mapping in decorators.xml to launch a decorator template (*.vmd) with context defined in ProfilingPageFilter
- Sitemesh returns decorated content as response.

You can find out which beans are in which context by looking in the classes above. A full list would be too long to include here. Note that even though the ApplyDecoratorDirective launches a Sitemesh decorator template, the Sitemesh template doesn't get automatic access to the Velocity context. The only bits that are passed through are done with the #decoratorParam() directive.

Wow, pretty complicated. But it lets us do cool stuff like implement custom themes, apply layouts and more.
Date formatting with time zones

Introduction

Confluence 2.3 supports a time zone preference for a user. This means all dates in the system must be formatted using the same process to appear in the user’s time zone correctly. This document describes how dates are formatted in Confluence. It may be useful to plugin developers who need to format dates in a special way inside Confluence.

DateFormatter

The new class introduced in Confluence 2.3, DateFormatter, allows formatting in the user's timezone. See the full javadoc for details, but methods include:

- String format(Date date) – Formats the date and returns it as a string, using the date formatting pattern.
- String formatDateTime(Date date) – Formats the date and returns it as a string, using the date-time formatting pattern.
- String formatServerDate(Date date) – Same as format(Date), but doesn't perform time zone conversion.

Most methods format the time in the user's time zone. The 'server' methods format the time in the server's time zone.

Accessing the DateFormatter in Velocity

In Velocity, using the DateFormatter is easy because it is in the Velocity context. In a normal Velocity template (*.vm), such as an action result, you might use it like this:

```
$dateFormatter.format($action.myBirthdayDate)
```

If you want to use the DateFormatter in a Velocity decorator (*.vmd), such as a custom layout or theme, you need to access it via its getter on the action:

```
$action.dateFormatter.format( $page.lastModificationDate )
```

Accessing the DateFormatter in code

The DateFormatter is constructed by the ConfluenceUserPreferences object, which can be obtained from the UserAccessor. The code below gives a demonstration:

```
ConfluenceUserPreferences preferences = userAccessor.getConfluenceUserPreferences(user);
```
The `userAccessor` and `formatSettingsManager` are Spring beans which can be injected into your object. You can usually get the `user` from the context of your macro or plugin, or using `AuthenticatedUserThreadLocal.getUser()`.
HTTP authentication with Seraph

This page last changed on Apr 30, 2007 by mryall.

Introduction

This document describes how the default security system in Confluence works, using the Seraph library for HTTP authentication.

Extending the security system by subclassing Seraph's authenticator and configuring the seraph-config.xml file is outside the scope of this document.

Flowchart diagrams

The easiest way to understand Confluence's authentication process is with the following diagrams.

![Authentication flowchart](image)

Because the Authenticator.login(request, response, username, password, rememberMe) method occurs three times, and is slightly complex, it has been broken into its own sub-flowchart.

![Login method flowchart](image)

Supported authentication methods
The default Seraph authenticator supports four methods of authentication, as can be seen in the flowchart:

- request parameters: os_username and os_password
- session attribute storing the logged-in user
- cookie storing username and password ('remember me' login)
- HTTP basic authentication via standard headers.

Each method is tried in the order above. A successful login at an earlier method continues without checking the later methods. Failure at one method means continuing with the later methods until all are exhausted. At this point, the user is considered an anonymous user, and treated according to the permissions of an anonymous user in Confluence.

Looking through the source code will show that Seraph supports role-based authentication, but this is only used in Confluence for the /admin/ URL restriction.

Related pages

Understanding User Management in Confluence
Confluence Internals
Persistence in Confluence

This page last changed on Dec 07, 2006 by mryall.

There are three main persistence APIs which are used in Confluence:

1. Hibernate - database persistence, difficult to extend.
2. Bandana - XML persistence, easy to use in plugins. Stored in database in Confluence 2.3+, or in Confluence home directory in 2.2.x and earlier.
3. Content properties - database persistence for properties associated with a piece of Confluence content.

Because Bandana is the primary persistence API used by plugin developers, it will be covered in more detail below.

Hibernate

Confluence uses the open source persistence framework Hibernate. Confluence 2.2.x uses Hibernate version 2.1.8.

Each object to be persisted has a *.hbm.xml file which sits in the same directory as the associated class in the Confluence web application. For example, Label.class has an associated Label.hbm.xml which describes how label objects will be persisted. The particular details vary from class to class, but typically include:

- the database table used to hold the data (Confluence bootstrap creates these tables if they do not exist)
- the column names and mappings to class attributes
- any special queries used for functionality in Confluence (for example, to retrieve a list of personal labels)

All this data is expressed in the standard Hibernate mapping format. In some cases, there is a single mapping file for all subclasses of a particular class. For example, ContentEntityObject.hbm.xml includes mappings for pages, news, mail and space descriptions.

The Hibernate mapping files are listed in mappingResources bean in applicationContext.xml.

Although it might be possible to extend Confluence's database through Hibernate, this is not recommended. There are a few downsides with extending our Hibernate configuration:

1. You need to maintain your forked copy of the hibernate mappings file against each new version of Confluence
2. Your new hibernate objects will not be protected from (or necessarily upgraded to) any changes we make in the schema in future versions
3. Unless you really understand our code, something weird will happen.

Avoid using Confluence's database to store custom data – use content properties or Bandana instead.
Bandana

Bandana is an Atlassian framework for persistence which uses XStream to convert arbitrary Java objects into XML for storage. The concepts used in Bandana are very simple:

- Bandana stores data in contexts. In Confluence, there is one global context, and one context per space. The relevant class is ConfluenceBandanaContext.
- Each context stores key-value pairs. The key is a String and the value can be any Object (it should typically implement Serializable).

Based on this design, the BandanaManager has methods for storing and retrieving values from a context by key:

- void setValue(BandanaContext context, String key, Object value) - store a value against a key in the Bandana context.
- Object getValue(BandanaContext context, String key) - get a key's value from the Bandana context. Returns null if no matching context and key exists.
- Object getValue(BandanaContext context, String key, boolean lookUp) - same as above, except if lookUp is true and the context is a space context, this method will also check the global context if no matching key is found in the space context.

For plugins, it is recommended to use a key for your Bandana values that includes the full package name of your plugin. For example, a theme plugin might use a key like org.acme.confluence.mytheme.importantPreference.

Prior to Confluence 2.3, this XML was written to the filesystem in the Confluence home directory. The file config/confluence-global.bandana.xml stores the global context, and there is a file config/spaceKey/confluence-space.bandana.xml with the configuration for each space. In Confluence 2.3 and above, Bandana data is written to the BANDANA table in the database, with three columns for context, key and an XML-serialized value.

To get access to the BandanaManager from your plugin code, normally you only need to include a private BandanaManager field with an associated setter method. Spring will automatically call the setter method before the first time your plugin is called.

```java
public class MyMacro extends BaseMacro {
    private BandanaManager bandanaManager;

    // setter called by Spring
    public void setBandanaManager(BandanaManager bandanaManager) {
        this.bandanaManager = bandanaManager;
    }

    // main method of macro
    public String execute(...) {
        // do stuff with bandanaManager
        return "...";
    }
}
```

Content properties
Another form of persistence, content properties are key-value pairs associated with a ContentEntityObject and stored in the database.
Spring IoC in Confluence

This page last changed on Mar 05, 2007 by jnolen.

Introduction

The Spring Framework provides an inversion of control (IoC) container that Confluence uses for managing objects at runtime. This document provides an overview of how this relates to Confluence, specifically focused at the needs of plugin developers and those extending Confluence.

If you're looking for the quick overview on how to access Confluence managers from your plugin, check out Accessing Confluence Components From Plugin Modules.

The purpose of an IoC container is to manage dependencies between objects. When you go to use an object in Confluence it will have all its dependencies ready and available to use. For example, calling a method on a PageManager will typically require a PageDao to work correctly. Spring ensures that these dependencies are available when they are needed, with a little bit of guidance from us.

Spring contexts

Confluence uses a number of Spring contexts to separate our objects into discrete subsystems. The contexts are declared as servlet context parameters in confluence/WEB-INF/web.xml. The snippet below shows the Spring contexts listed in web.xml for Confluence 2.3:

```xml
<context-param>
  <param-name>contextConfigLocation</param-name>
  <param-value>
    classpath:/applicationContext.xml,
    classpath:/securityContext.xml,
    classpath:/databaseSubsystemContext.xml,
    classpath:/indexingSubsystemContext.xml,
    classpath:/eventSubsystemContext.xml,
    classpath:/rpcSubsystemContext.xml,
    classpath:/upgradeSubsystemContext.xml,
    classpath:/wikiSubsystemContext.xml,
    classpath:/wikiFiltersSubsystemContext.xml,
    classpath:/importExportSubsystemContext.xml,
    classpath:/schedulingSubsystemContext.xml,
    classpath:/pluginSubsystemContext.xml,
    classpath:/atlassianUserContext.xml
  </param-value>
</context-param>
```

What this means is there are 13 context XML files in the Confluence classpath which specify the objects in Confluence which are managed by Spring. When I say 'in the Confluence classpath', in practice I mean they live in confluence/WEB-INF/classes/. The biggest and most important is applicationContext.xml, which we'll have a look at now.

Bean declarations

Around line 100 in the Confluence 2.3 applicationContext.xml, you'll find the schemaHelper bean as a good example:
The bean has an ID for Spring to reference it ('schemaHelper'), a class name which will be used to automatically create the bean ('bucket.core.persistence.hibernate.schema.SchemaHelper'), and a number of properties. In this case, the properties are references to other beans in the current context, mappingResources and hibernateConfig.

Because we use the setter injection method in Confluence, this declaration means two things about the SchemaHelper Java class:

- it must have a public no-args constructor
- it must have two public methods: setMappingResources() and setHibernateConfig(). Both these must take one argument which is an interface implemented by the appropriate bean.

Other than these two requirements, the SchemaHelper class can be any normal Java class. It can have other constructors, other public methods, and can implement or extend any interface or class that you like.

The purpose of registering a bean in Spring is two-fold:

1. When you access the SchemaHelper bean through Spring, it will have its mappingResources and hibernateConfig dependencies injected before you use it.
2. You use the bean as a dependency elsewhere, to automatically get it injected into your own class (more on this below).

Only Confluence beans are registered in Spring via an XML context. Spring Component Plugins are registered at runtime when the plugin is enabled. Other plugin classes such as actions are autowired without registration with Spring.

Autowiring

In the bean declaration for schemaHelper bean above, each property has the same name as the Spring bean which is used to satisfy it. For example, the 'mappingResources' property uses the mappingResources bean, which is set by the setMappingResources() method on the schemaHelper. Spring provides a shortcut for leaving these declarations out, called autowiring.

For example, the declaration for themeManager bean is marked as autowire 'byName' (near line 1000):

```
<bean id="themeManager" class="com.atlassian.confluence.themes.DefaultThemeManager" autowire="byName" />
```

Looking at the DefaultThemeManager class, we see it has four setter methods:
1. public void setBandanaManager(BandanaManager)
2. public void setEventManager(EventManager)
3. public void setGlobalTheme(String)
4. public void setPluginManager(PluginManager)

Spring looks at the names of the four methods, tries to find beans with IDs of 'bandanaManager', 'eventManager', 'globalTheme', and 'pluginManager'. If they exist, it calls the setter method with the relevant bean as an argument.

In this case, methods 1, 2 and 4 will be called by Spring to inject dependencies. Method 3 (setGlobalTheme) is just a setter used for something else, not called by Spring. This is the drawback of autowiring: it is slow and can waste time trying to find dependencies uselessly.

Using autowiring reduces the need for writing a lot of XML, and also provides a method of dependency injection for objects which aren't registered in the Spring context XML files like plugin modules.

**Plugin dependency injection**

Almost all Confluence plugin types are autowired. What this means, is if your macro plugin needs to access a Confluence page, it can simply do so like this:

```java
public class MyMacro extends BaseMacro
{
    private PageManager pageManager;

    public String execute(Map parameters, String body, RenderContext renderContext)
    {
        // ...
        Page page = pageManager.getPage(spaceKey, pageTitle);
        // ...
    }
    // ... implement other methods ...

    /**
     * Called by Spring to inject pageManager
     */
    public void setPageManager(PageManager pageManager)
    {
        this.pageManager = pageManager;
    }
}
```

Autowired components must use the interfaces used by the manager to work with different versions of Confluence. The implementing class used for various managers may change over time, but the bean ID and interface will be preserved.

Internally, the way the components are autowired is via Confluence's ContainerManager. You can also do this with your own objects if required:

```java
ContainerManager.autowireComponent(object);
```

**Accessing Spring beans directly**
If you need access to Confluence managers or other Spring beans without autowiring your class, you can use the `ContainerManager` directly. For example, to get the pageManager bean:

```java
PageManager pageManager = ContainerManager.getComponent("pageManager");
```

You should always use autowiring in preference to this method because it makes your code easier to change and easier to test. Inside Confluence this method is sometimes required to break circular dependencies.

**Transaction proxy beans**

Confluence uses Spring's transaction handling by wrapping some objects in transaction proxy beans.
Velocity Template Overview

Velocity is a server-side template language used by Confluence to render page content and permits Java objects to be called alongside standard HTML. Users who are writing user macros, plugins or custom PDF export output may need to modify Velocity content. General information is available from the Velocity Usage Guide.

Useful Resources

- Basic Introduction to Velocity
- Confluence Objects Accessible From Velocity
- Confluence rendering pipeline
- Customising Layouts
- Disable Velocity Caching
- What’s the easiest way to render a velocity template from Java code?
- Working With Decorator Macros
Basic Introduction to Velocity

This page last changed on Apr 22, 2007 by david.soul@atlassian.com.

Example Usage

A variable in velocity looks like this:

```velocity
$foo
```

To set a variable:

```velocity
#set ($message = "Hello")
```

A basic if statement:

```velocity
#if ($message == "Hello")
   Message received and is "Hello"
#end
```

✔ A velocity variable which evaluates to null will simply render as the variable name. See the [Velocity User's Guide](#)

Related Content

- [Basic Introduction to Velocity](#) (Confluence) Labels: velocity-related
- [Concourse Objects Accessible From Velocity](#) (Confluence) Labels: velocity-related
- [Confluence rendering pipeline](#) (Confluence) Labels: velocity-related
- [Customising Layouts](#) (Confluence) Labels: velocity-related, customising-looknfeel
- [Disable Velocity Caching](#) (Confluence) Labels: velocity-related
## Confluence Objects Accessible From Velocity

This page last changed on Dec 11, 2006 by [david.soul@atlassian.com](mailto:david.soul@atlassian.com).

The complete list of objects available for use are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Doc Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>$body</td>
<td>The body of the macro (if the macro has a body)</td>
<td></td>
</tr>
<tr>
<td>$param0-n</td>
<td>The parameters passed to your macro (as available)</td>
<td></td>
</tr>
<tr>
<td>$config</td>
<td>The <a href="https://confluence.plugins.atlassian.com/bootstrap-manager">BootstrapManager</a> object, useful for retrieving Confluence properties</td>
<td><a href="https://confluence.plugins.atlassian.com/bootstrap-manager">BootstrapManager</a></td>
</tr>
<tr>
<td>$content</td>
<td>The current <a href="https://confluence.plugins.atlassian.com/content-entity">ContentEntity</a> object that this macro is a included in (if available)</td>
<td><a href="https://confluence.plugins.atlassian.com/content-entity">ContentEntityObject</a></td>
</tr>
<tr>
<td>$space</td>
<td>The <a href="https://confluence.plugins.atlassian.com">Space</a> object that this content object is located in (if relevant)</td>
<td><a href="https://confluence.plugins.atlassian.com">Space</a></td>
</tr>
<tr>
<td>$generalUtil</td>
<td>A <a href="https://confluence.plugins.atlassian.com/general-util">GeneralUtil</a> object, with useful utility methods for URL encoding etc</td>
<td><a href="https://confluence.plugins.atlassian.com/general-util">GeneralUtil</a></td>
</tr>
<tr>
<td>$action</td>
<td>A blank <a href="https://confluence.plugins.atlassian.com/confluence-action-support">ConfluenceActionSupport</a> object, useful for retrieving i18n text if needed</td>
<td><a href="https://confluence.plugins.atlassian.com/confluence-action-support">ConfluenceActionSupport</a></td>
</tr>
<tr>
<td>$req</td>
<td>The current <a href="https://confluence.plugins.atlassian.com/http-request">HttpServletRequest</a> object (if the page is rendered as a result of an HTTP request)</td>
<td></td>
</tr>
<tr>
<td>$res</td>
<td>The corresponding <a href="https://confluence.plugins.atlassian.com/http-response">HttpServletResponse</a> object (not recommended to be played with)</td>
<td></td>
</tr>
<tr>
<td>$userAccessor</td>
<td>For retrieving users, groups and checking membership</td>
<td><a href="https://confluence.plugins.atlassian.com/user-accessor">UserAccessor</a></td>
</tr>
</tbody>
</table>
Confluence Plugin Guide

This page last changed on Mar 04, 2007 by jnolen.

Confluence's plugin system allows users and developers to customise and extend Confluence.

⚠️ Looking for existing plugins? See the existing plugins and extensions written by the community in the Confluence Extensions space.

A plugin is a bundle of code, resources and a special configuration file that can be dropped into a Confluence server to add new functionality, or change the behaviour of existing features.

- Administrators can drop plugins into their Confluence server to add new functionality to the system.
- Developers can write plugins for their own Confluence server, or share plugins with other Confluence users.

Some parts of Confluence are implemented entirely as plugins - for example all macros in Confluence 1.3 and later, even those included with the system, are written as plugins.

Confluence Plugin Guide Contents

- Installing and Configuring Plugins manually
- Installing and Configuring Plugins using the Plugin Repository
- Installing plugins overview
- Single Sign-on
- Writing Confluence Plugins
  - Accessing Confluence Components From Plugin Modules
  - Confluence Plugin Module Types
    - Code Formatting Plugins
    - Component Plugins
    - Downloadable Plugin Resources
    - Event Listener Plugins
    - Extractor Plugins
    - Job Plugins
    - Language Pack Plugins
    - Lifecycle Plugins
    - Macro Plugins
    - RPC Plugins
    - Servlet Plugins
    - Spring Component Plugins
    - StateAware
    - Theme Plugins
    - Trigger Plugins
    - User Macro Plugins
    - Velocity Context Plugins
    - Web UI Plugins
    - Workflow Plugins
    - XWork-WebWork Plugins
  - Plugin Self-Configuration
Plugins and Plugin Modules

Every plugin is made up of one or more plugin modules. A single plugin may do many things: a plugin module represents a single function of the plugin.

For example, a theme plugin will consist of a colour-scheme module to define the theme's colours, a number of layout modules to define the site's page layouts, and a theme module to combine those pieces together into a single theme.

Some plugins, such as the macro packs that come with Confluence, are just a collection of unrelated modules that just happen to be packaged together. Other plugins, such as theme plugins, have modules that work together to provide some orchestrated functionality.
Installing and Configuring Plugins manually

This page last changed on Jan 31, 2007 by jnolen.

This document is for Confluence administrators who wish to manage plugins installed in their Confluence server, or install new plugins. Confluence plugins were introduced in Confluence 1.3: for an overview of how plugins work in Confluence, read Confluence Plugin Guide.

⚠️ Looking for existing plugins? See the existing plugins and extensions written by the community in the Confluence Extensions space.

💡 Confluence versions 1.4. provide the ability for Confluence administrators to upload plugins from their browsers.

Confluence versions 2.0 and later support the Plugin Repository, which provides an alternative way to install and configure plugins with just a few mouse-clicks.

Installing Plugins manually

Plugins are distributed as a jar file. To install a plugin,

1. Locate the confluence/WEB-INF/lib directory in your Confluence installation. (This is inside the Confluence installation itself, not your configured ConfluenceHome directory).
2. Remove any previous version of the plugin you may have installed
3. Copy your plugin jar file into the directory
4. Restart Confluence
5. Check the Plugin Administration screen to see if the plugin is available
6. Enable the plugin if necessary

When you install a Confluence plugin, you should consider:

- When you upgrade or re-install Confluence, the WEB-INF/lib directory will be overwritten. You should keep a copy of all your installed plugins somewhere outside Confluence, so that you can copy them back in after an upgrade.
- If you install a Confluence plugin, and Confluence fails to restart (or does not behave correctly after the restart), you can uninstall the plugin by deleting it from the WEB-INF/lib directory.

⚠️ Plugin Safety

Plugins are very powerful: they can change the behaviour of almost any part of the Confluence server. This makes it very important that you trust a plugin before you install it. Always be aware of where (and who) a plugin comes from.
Some plugins will be enabled by default when they are installed. Others will have to be manually enabled from the Plugin Administration screen.

### Enabling and Disabling Plugins

**Plugin Manager**

Control which of the installed plugins are active for this Confluence installation.

<table>
<thead>
<tr>
<th>Plugins</th>
<th>JIRA Macros</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task List Macros</strong></td>
<td>Vendor: Atlassian Software Systems</td>
</tr>
<tr>
<td>All modules enabled.</td>
<td>Plugin Version: 1.4</td>
</tr>
<tr>
<td><strong>JIRA Macros</strong></td>
<td>Macros to retrieve information from JIRA.</td>
</tr>
<tr>
<td>1 of 2 modules enabled.</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td><strong>Basic Macros</strong></td>
<td><strong>jiraissues</strong></td>
</tr>
<tr>
<td>All modules enabled.</td>
<td>Retrieve a feed of JIRA issues and summarise them in the page</td>
</tr>
<tr>
<td><strong>Layout Macros</strong></td>
<td><strong>jiraportlet</strong></td>
</tr>
<tr>
<td>All modules enabled.</td>
<td>Displays a JIRA portlet - requires JIRA 3</td>
</tr>
<tr>
<td><strong>Core Listeners</strong></td>
<td></td>
</tr>
<tr>
<td>All modules enabled.</td>
<td></td>
</tr>
<tr>
<td><strong>Advanced Macros</strong></td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>All modules enabled.</td>
<td><strong>jiraissues</strong></td>
</tr>
<tr>
<td>![Disable plugin]</td>
<td>Retrieve a feed of JIRA issues and summarise them in the page</td>
</tr>
<tr>
<td>![Disable plugin]</td>
<td><strong>jiraportlet</strong></td>
</tr>
<tr>
<td>![Disable plugin]</td>
<td>Displays a JIRA portlet - requires JIRA 3</td>
</tr>
<tr>
<td><strong>User List Macros</strong></td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>All modules enabled.</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>![Disable plugin]</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td><strong>HTML Macros</strong></td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>Plugin disabled.</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>![Disable plugin]</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td><strong>Information Macros</strong></td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>All modules enabled.</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>![Disable plugin]</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td><strong>Compatibility Macros</strong></td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>All modules enabled.</td>
<td>![Disable plugin]</td>
</tr>
<tr>
<td>![Disable plugin]</td>
<td>![Disable plugin]</td>
</tr>
</tbody>
</table>

Plugins (and their constituent plugin modules) may be enabled and disabled by the site administrator. You can do this from the Plugins section of the global administration screen. All plugins installed in the Confluence server are listed on the left hand side. To enable or disable a plugin (or its modules) click on the plugin name.

On the right-hand side, a description of the plugin is shown, including its component plugin modules. You can enable or disable the whole plugin:
**Enable plugin**

**NOTE**: This plugin is disabled. You must enable it to enable or disable individual modules.

<table>
<thead>
<tr>
<th>html</th>
<th>Use HTML code within a Confluence page</th>
</tr>
</thead>
<tbody>
<tr>
<td>html-include</td>
<td>Retrieve an external HTML file and include it in the page</td>
</tr>
</tbody>
</table>

Or each module individually:

**Disable plugin**

<table>
<thead>
<tr>
<th>jiraissues</th>
<th>Disable</th>
<th>jiraportlet</th>
<th>Enable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrieve a feed of JIRA issues and summarise them in the page</td>
<td></td>
<td>Displays a JIRA portlet - requires JIRA 3</td>
<td></td>
</tr>
</tbody>
</table>

⚠️ Disabling a plugin module may cause other modules in the same plugin to cease to function correctly. When in doubt, make sure you disable or enable the entire plugin.

### Removing Plugins that prevent Confluence Running

Confluence goes to some lengths to prevent itself being unusable due to a problematic plugin. However, sometimes a plugin will manage to do this anyway.
To remove a plugin from Confluence when Confluence is not running:

<table>
<thead>
<tr>
<th>Prior to Confluence v2.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Remove the jar file from the <code>&lt;Confluence Home&gt;/plugins</code> directory.</td>
</tr>
<tr>
<td>• Restart Confluence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In Confluence v2.3 and later</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Connect to the confluence database.</td>
</tr>
<tr>
<td>• Remove the appropriate row from the PLUGINDATA table.</td>
</tr>
<tr>
<td>Eg suppose the google maps plugin was not working, you would run:</td>
</tr>
<tr>
<td><code>delete from plugindata where pluginkey = 'com.atlassian.confluence.ext.gmaps'</code></td>
</tr>
<tr>
<td>• Restart Confluence.</td>
</tr>
</tbody>
</table>
Installing and Configuring Plugins using the Plugin Repository

This page last changed on Jan 17, 2007 by rosie@atlassian.com.

The Plugin Repository provides an easy way to install and configure plugins. If you are using Confluence version 2.3 or later, the Plugin Repository is included as part of Confluence. If you are using Confluence 2.0 - 2.2.10, you can use the Plugin Repository after you install the Confluence Repository Client. Confluence versions prior to 2.0 cannot use the Plugin Repository, so you will need to install and configure plugins manually instead.

When you install a Confluence plugin, you should consider:

- Installed Confluence plugins are located in your confluence/WEB-INF/lib directory (this is inside the Confluence installation itself, not your configured ConfluenceHome directory). When you upgrade or re-install Confluence, the WEB-INF/lib directory will be overwritten. You should keep a copy of all your installed plugins somewhere outside Confluence, so that you can copy them back in after an upgrade.
- If you install a Confluence plugin, and Confluence fails to restart (or does not behave correctly after the restart), you can uninstall the plugin by deleting it from the WEB-INF/lib directory.

Plugin Safety
Plugins are very powerful: they can change the behaviour of almost any part of the Confluence server. This makes it very important that you trust a plugin before you install it. Always be aware of where (and who) a plugin comes from.

Using the Plugin Repository

Go to the 'Administration Console' and click on 'Plugin Repository' in the left panel. The following will be displayed:

```
<table>
<thead>
<tr>
<th>Available Plugins</th>
<th>Upload</th>
<th>Preferences</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Plugins</td>
<td>&lt;enter search terms here&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plugin Name</th>
<th>Payment</th>
<th>Status</th>
<th>Install</th>
<th>Enabled</th>
<th>Configure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJAX PageTree — Zohar Melamed</td>
<td>Free</td>
<td>Installed</td>
<td>Uninstall</td>
<td>✓</td>
<td>Configure</td>
</tr>
<tr>
<td>Admin Sections — Atlassian Software Systems</td>
<td>Unknown</td>
<td>Non-repository</td>
<td>System Plugin</td>
<td>✓</td>
<td>Configure</td>
</tr>
<tr>
<td>Advanced Macros — Atlassian Software Systems</td>
<td>Unknown</td>
<td>Non-repository</td>
<td>Static Plugin</td>
<td>✓</td>
<td>Configure</td>
</tr>
<tr>
<td>Advanced Search — Adapтивis.com Ltd</td>
<td>Donate</td>
<td>Available</td>
<td>Install</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Latest Version: 1.0.2 - Stable
License: BSD (donate)
```

This plugin provides a dynamic AJAX interface to the confluence search engine. The plugin also allows for specific (so called advanced search) fields to be placed down creating a customisable search interface. Useful if you want to provide a simple user interface for filtering blog posts / pages by a certain label or metadata value. See the metadata plugin for more information on using metadata.
Along the top of the page, you'll see three items (from left to right):

- **Status filter** (defaults to "All Plugins"):
  - Set to "Installed Plugins" to list plugins which have been installed
  - Set to "Outdated Plugins" to list installed plugins for which updates are available
  - Set to "Available Plugins" to list plugins which are available, but have not yet been installed

- **Search** - quickly find what you're looking for:
  - Quickly locate plugins by searching on their title, description, vendor and other details. Just type what you are looking for and let Confluence do the rest
  - The search results are filtered by the status filter (as discussed above), so if you want to see all installed plugins from Adaptavist.com, for example, set the filter to "Installed Plugins", enter "Adaptavist.com" in to the search box and click the search button.

- **Categories list - filter by category**:
  - Simply choose the desired category from the list and only plugins relating to that category will be displayed.
  - Note that plugins can exist in more than one category to make them easier to find

Under the filter options, the list of plugins matching the current filter settings is shown in a table:

- **Plugin Name**
  - Displays the name of the plugin (linked to the detailed information page), the plugin vendor (linked to their website if applicable)
  - Click the "+" icon to expand the information display showing plugin description; click the "-" icon to hide it again.

- **Payment - can be one of the following**:
  - Free (self explanatory)
  - Donate (it's free, but you should consider donating to keep it that way)
  - Buy (it's commercial - click the link to show a price list and purchase online)

- **Status - shows the current status of this plugin in respect to your Confluence installation**:
  - Installed - installed and up-to-date
  - Outdated - installed, but there are new versions available
  - Available - not installed yet
  - Non Repository - a version is installed which is not in the repository

- **Install - Install, upgrade or uninstall a plugin**
  - Install, upgrade, uninstall
  - When installing or upgrading, everything is automatic (ie. it downloads and installs for you, etc.). Although the client (since 1.0.2) warns you of dependancies and (since 1.0.3) will do its best to check what has been downloaded is what you asked for - Confluence may break as if you had uploaded the plugins to the Plugin Manger yourself. Where it can, the client will error constructively allowing you to choose the best course of action for yourself. In general, things usually work - and if they don't its a bug with the client or the metadata.
  - If the Confluence Repository Client encounters a password request when downloading the plugin (usually case with Commercial plugins), you will be prompted for a username and password.
  - If the plugin is installed into WEB-INF (or otherwise uninstallable) it will display "Manually Installed" where the actions would be.

- **Enabled - if the box is ticked, the plugin is enabled, otherwise it's either disabled or partially disabled. You can enable or disable individual modules within the plugin from the plugin details screen (see later)

**Note:** You can click the table headings to sort the table. Click a second time to reverse the sort.
Viewing Plugin Modules and Versions

When you click the name of a plugin on the Plugin List, you'll be taken to the detailed view for that plugin.

General information and plugin module details are shown at the top of the display and from here you can disable or enable individual modules.

⚠️ Disabling a plugin module may cause other modules in the same plugin to cease to function correctly. When in doubt, make sure you disable or enable the entire plugin.

Near the bottom of the display a table clearly outlines all versions and shows which you have installed. Just like the plugins list, you can click the "+" to expand the details shown for a specific version. This screen also allows you to quickly install, upgrade, downgrade and uninstall any version of the plugin.

Configuring a Plugin

There are various settings on the "Configure" tab.

The most important of these is the "Repository Path URL" setting - without this, you'll see no plugins in the list and will get a fair amount of errors.

The "Earliest Development State" allows you to filter the plugin list to versions at or above a specific state: Alpha, Beta, Prerelease, Stable. By default "Prerelease" versions are shown. If you are running in a production environment, you will usually want to set this setting to "Prerelease" or "Stable".

The "Only Show Plugins Confirmed as Working" setting allows you to restrict the list to only show plugin versions that are specifically known to work with your version of Confluence. It's important to note that in many cases, plugins will work with your version of Confluence but they might be marked as "unknown" compatibility if the plugin author hasn't been able to test with that specific Confluence version. As such, it's extremely useful if you find an "unknown" version of a plugin to work (or not work) with your Confluence that you let us know (by any means possible) so that we can update the repository to reflect this.

The "Hide Empty Categories" setting allows you to trim down the categories list by hiding categories that don't contain a plugin yet.

The "Automatically Refresh Cached Data" setting allows you select the interval at which the cached repository data will be looked up again. This defaults to 1 hour but is selectable from 5 minutes to Never (the latter which is what versions prior to 1.1 will be fixed to).

Uploading a plugin that is not listed in the Plugin Repository

There are several plugins that are not currently listed by the Plugin Repository which need to be manually uploaded either as a file or from a remote server URL.
1. Click the "Upload" tab
2. Enter either the file name or the URL of the remote server URL
3. Click the "Install" button.

**Debugging a Plugin**

If you are having problems with the repository which appears to be down to proxy issues, click the "Debug" tab. This allows you to test the downloading of a file and will output the relevant log information inline on the page. No more digging through server log files!
Installing plugins overview

This page last changed on Mar 13, 2007 by jnolen.

Use the plugin repository

If the plugin you wish to install is listed in the Confluence Plugin Repository, you can use the Confluence Repository Client to install it. Just find the plugin in the list and click the "install" link.

Install plugin manually

If the plugin you wish to install is not listed in the Confluence Plugin Repository, you can still install it by uploading it to Confluence.

1. In the 'Administration' section of Confluence, click the Plugin Repository link.
2. Click on the 'Upload' tab.
3. Use the 'Browse' button to find the plugin jar you wish to install on your harddrive.
4. Select the jar file and click 'Open'.
5. The plugin will be uploaded from your machine to Confluence, and will be automatically installed.
Single Sign-on

This page last changed on May 19, 2006 by donna@atlassian.com.

Single Sign-on Information
## Writing Confluence Plugins

Confluence plugins provide a standard mechanism for extending Confluence. By adding plugins to Confluence you will be able to customise the site's look and feel, add new macros, event listeners, periodic tasks, and even introduce whole new features.

⚠️ Looking for existing plugins? See the existing plugins and extensions written by the community in the [Confluence Extensions] space.

You can read [Confluence Plugin Guide](#) for an overview of what plugins are. This document introduces Confluence plugins to the developer who may want to write their own.

While Confluence plugins use the same plugin management code as [JIRA 3.0 plugins](#), it's very unlikely that a JIRA plugin will work in Confluence or vice versa.

### Anatomy of a Plugin

A plugin is a single jar file that can be dropped into Confluence's classpath. It consists of:

- A plugin descriptor
- (Optional) Java classes
- (Optional) Resources

Plugins are composed of a series of modules, each of which defines a point at which the plugin interfaces with Confluence.

### Creating a new plugin

See [Creating a new plugin](#).

### Confluence Plugin Module Types

The following types of plugin modules are supported by Confluence:

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Since version...</th>
<th>Documentation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>codeformatter</td>
<td>2.2</td>
<td><a href="#">Code Formatting Plugins</a></td>
<td>Adds new languages to the <code>{code}</code> macro</td>
</tr>
<tr>
<td>colour-scheme</td>
<td>1.3</td>
<td><a href="#">Theme Plugins</a></td>
<td>A colour-scheme for a theme</td>
</tr>
<tr>
<td>component</td>
<td>1.4</td>
<td><a href="#">Component Plugins</a></td>
<td>Allows developers to add components to Confluence's component system</td>
</tr>
<tr>
<td>Plugin</td>
<td>Version</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>decorator</td>
<td>2.5</td>
<td>Decorator Plugins adds decorators without using a Theme Plugin</td>
<td></td>
</tr>
<tr>
<td>extractor</td>
<td>1.4</td>
<td>Extractor Plugins adds information to the Confluence search index</td>
<td></td>
</tr>
<tr>
<td>editor</td>
<td>2.5</td>
<td>Editor Plugins adds a WYSIWYG editor to the Confluence edit page</td>
<td></td>
</tr>
<tr>
<td>job</td>
<td>2.2</td>
<td>Job Plugins adds repeatable jobs to Confluence</td>
<td></td>
</tr>
<tr>
<td>language</td>
<td>2.2</td>
<td>Language Pack Plugins adds language translations to Confluence</td>
<td></td>
</tr>
<tr>
<td>layout</td>
<td>1.3</td>
<td>Theme Plugins a layout (decorator) definition for a theme</td>
<td></td>
</tr>
<tr>
<td>lifecycle</td>
<td>2.3</td>
<td>Lifecycle Plugins schedule tasks to be run on application startup and shutdown</td>
<td></td>
</tr>
<tr>
<td>listener</td>
<td>1.4</td>
<td>Event Listener Plugins a component that can respond to events occurring in the Confluence server</td>
<td></td>
</tr>
<tr>
<td>macro</td>
<td>1.3</td>
<td>Macro Plugins a macro used in wiki to HTML conversions (e.g. {color}). Outputs HTML that can be embedded in a page or layout. Can retrieve user, page and space info, or external content (e.g. RSS)</td>
<td></td>
</tr>
<tr>
<td>rpc-soap</td>
<td>1.4</td>
<td>RPC Plugins deploys a SOAP service within Confluence</td>
<td></td>
</tr>
<tr>
<td>rpc-xmlrpc</td>
<td>1.4</td>
<td>RPC Plugins deploys an XML-RPC service within Confluence</td>
<td></td>
</tr>
<tr>
<td>servlet</td>
<td>1.4</td>
<td>Servlet Plugins a standard Java servlet deployed within a Confluence plugin</td>
<td></td>
</tr>
<tr>
<td>spring</td>
<td>2.2</td>
<td>Spring Component Plugins add a Spring component. Unlike component plugins these allow the use of full Spring configuration XML</td>
<td></td>
</tr>
<tr>
<td>theme</td>
<td>1.3</td>
<td>Theme Plugins a custom look-and-feel for a Confluence site or space</td>
<td></td>
</tr>
<tr>
<td>trigger</td>
<td>2.2</td>
<td>Trigger Plugins adds triggers which</td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td>Version</td>
<td>Group</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------</td>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>usermacro</td>
<td>2.3</td>
<td>User Macro Plugins</td>
<td>Allows a simple macro to be created in the plugin XML file, with no Java coding necessary</td>
</tr>
<tr>
<td>velocity-context-item</td>
<td>1.4</td>
<td>Velocity Context Plugins</td>
<td>Adds helper objects to Confluence's Velocity context</td>
</tr>
<tr>
<td>web-item</td>
<td>2.2</td>
<td>Web UI Plugins</td>
<td>Adds links or tabs to the Confluence UI</td>
</tr>
<tr>
<td>web-section</td>
<td>2.2</td>
<td>Web UI Plugins</td>
<td>Adds sections of links to the Confluence UI</td>
</tr>
<tr>
<td>xwork</td>
<td>1.4</td>
<td>XWork-WebWork Plugins</td>
<td>XWork/Webwork actions and views bundled with a plugin, enabling user interaction</td>
</tr>
</tbody>
</table>

The Plugin Descriptor

The Plugin descriptor is an XML file that tells Confluence all about the plugin, and the modules contained within it. The descriptor must be a single file named `atlassian-plugin.xml` and must be located at the root of the jar file. Here's a sample plugin descriptor:

```xml
<!-- Every plugin must have a key, which identifies the plugin uniquely to the system -->
<atlassian-plugin key="com.atlassian.confluence.plugins.example"
    name="Example Plugin">

    <!-- The plugin info block allows you to provide more information about your plugin -->
    <plugin-info>
        <description>A sample plugin for demonstrating the file format.</description>
        <application-version min="1.3" max="1.3"/>
    </plugin-info>

    <!-- Here is where you define your modules. The code you use -->
    <example key="module1" name="Example Module"
        class="com.atlassian.confluence.plugins.example.ExampleModule">
        <description>Example module</description>
    </example>

</atlassian-plugin>
```

Each plugin has a plugin key which must be unique to the plugin. We suggest using the Java convention of reversing your domain name in order to ensure your key is unique. Each module has a module key which need only be unique within the plugin it is defined.

⚠️ The plugin key has to be defined in lower-case in the plugin descriptor.
When you call the plugin in wiki markup you can use any capitalization (eg. `{module1}` or `{Module1}`)

Sometimes you will need to uniquely identify a module - you do this with the module complete key. A module with key `fred` in a plugin keyed as `com.example.modules` will have a complete key of `com.example.modules:fred`

All plugin modules have a class attribute, which tells the plugin manager which Java class it should instantiate when loading the module. What class you should provide depends on the module type. For example, theme, layout and colour-scheme modules can use classes already provided in Confluence (so you can write a theme pack without any Java code), but for macro and listener modules you need to write your own implementing class and include it in your plugin.

### Java Classes

Because the plugin is a JAR that is dropped into the Confluence classpath, all Java classes contained within the JAR become a part of the Confluence application. You can include as many classes as you like, and have them interact with each other. Obviously, it's important to follow the Java package naming conventions to ensure your plugin's classes do not conflict with Confluence classes, or other plugins.

If you are writing a Java implementation of a plugin module (see the description of the module's class attribute above), you will be interested in [Accessing Confluence Components From Plugin Modules](#).

You might also want to see the [Confluence Developer FAQ](#), which answers particular questions that have come up from users regarding coding within Confluence.

### Plugin and Module Resources

Resources are non-Java files that a plugin may need in order to operate. Examples of possible resources might be:

- A velocity file used to generate HTML for a macro or layout plugin module
- A CSS file required by a theme layout plugin module
- An image referenced from within a layout plugin module
- A macro help file
- A localisation property file

Resource definitions look like this. They can be either a part of the plugin, or part of a particular plugin module:

```xml
<resource type="velocity" name="template" location="com/example/plugin/template.vm"/>
```

```xml
<resource type="i18n" name="i18n" location="resources/exampleplugin"/>
```
The name of the resource defines how the plugin module can locate a particular resource. The type of a resource tells the module how that resource can be used. A module can look for resources of a certain type or name: for example the layout plugin required that its help file is a file of type velocity and name help.

The location of a resource tells the plugin where the resource can be found in the jar file (resources are loaded by Java’s classpath resource-loader). The full path to the file - without a leading slash - is required.

The simplest kind of resource, supported with all plugin module types, is of type download, which makes a resource available for download from the Confluence server at a particular URL. See: [Downloadable Plugin Resources](#).

### Plugin Self-Configuration

⚠️ **Plugin configuration is available in Confluence 2.2 and later. Versions of Confluence before 2.1 will simply ignore any of these parameters**

Plugins can specify internal links within Confluence to configure themselves. This is useful where your plugin requires any configuration or user specific settings to work. For example, the Google Maps plugin requires a Google API Key from Google (which needs to be configured on each server) before it will work properly.

- Configuration links will most often point to [XWork plugin modules](#) within the plugin itself
- Configuration links can be provided for a whole plugin and/or for any module within a plugin
- Configuration links are relative to the Confluence application

**Plugin configuration - to add a configuration link for the whole plugin, place a single param element with the name configure.url within the plugin-info element at the top of the plugin descriptor:**

```xml
<plugin-info>
  <description>A macro which displays Google maps within a Confluence page.</description>
  <vendor name="Atlassian Software Systems Pty Ltd" url="http://www.atlassian.com/">
    <version>0.1</version>
    <param name="configure.url">/admin/plugins/gmaps/configurePlugin.action</param>
  </vendor-info>
</plugin-info>
```

**Plugin module configuration - to add a configuration link for a single module, place the same param element with the name configure.url within the descriptor element for that module:**

```xml
<macro name="gmap" class="com.atlassian.confluence.ext.gmaps.GmapsMacro" key="gmap">
  <description>The individual map macro.</description>
  <param name="configure.url">/admin/plugins/gmaps/configureMacro.action</param>
</macro>
```
Here is an image showing where the Configure links appear for both a plugin and an individual module:
Accessing Confluence Components From Plugin Modules

This page last changed on Jan 24, 2006 by jnolen.

Confluence is built around Spring, an open-source component framework for Java.

If you are familiar with Spring, then you may only wish to know that Confluence plugin modules (and their implementing classes) are autowired by name. Thus, if you want to access a Confluence component from your plugin, just include the appropriate setter method in your implementing class.

If you want to write Confluence plugins but are unfamiliar with Spring, the rest of this page should give you more than enough information on how to have your plugin interact with Confluence.

Interacting with Confluence

When you are writing anything but the simplest Confluence plugin, you will need to interact with the Confluence application itself in order to retrieve, change or store information. This document describes how this can be done.

Manager Objects

At the core of Confluence is a group of "Manager" objects. For example, the pageManager is in charge of Confluence pages, the spaceManager of spaces, the attachmentManager of attachments, and so on.

Dependency Injection

Traditionally, in a component-based system, components are retrieved from some kind of central repository. For example, in an EJB-based system, you would retrieve the bean from the application server's JNDI repository.

Confluence works the other way round. When a plugin module is instantiated, Confluence determines which components the module needs, and delivers them to it.

Confluence determines which components a module needs by reflecting on the module's methods. Any method with a signature that matches a standard JavaBeans-style setter of the same name as a Confluence component will have that component passed to it when the module is initialised.

So, if your plugin module needs to access the pageManager, all you need to do is put the following setter method on your module's implementing class:

```java
public void setPageManager(PageManager pageManager) {
    this.pageManager = pageManager;
}
```

More Information
• The Confluence API documentation is available online.
• If you have any questions about the Confluence API, or which manager object you will need to look for to perform a particular function, or if this Dependency Injection thing just confuses you, you're best off asking on the confluence-user mailing-list, where the Confluence development team are happy to answer technical questions.
• You might also want to see the Confluence Developer FAQ, which answers particular questions that have come up from users regarding coding within Confluence. You can also ask questions using the comments there.
Confluence Plugin Module Types

This page last changed on Mar 18, 2007 by tom@atlassian.com.

The following types of plugin modules are supported by Confluence

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Since version...</th>
<th>Documentation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>codeformatter</td>
<td>2.2</td>
<td>Code Formatting Plugins</td>
<td>Adds new languages to the {code} macro</td>
</tr>
<tr>
<td>colour-scheme</td>
<td>1.3</td>
<td>Theme Plugins</td>
<td>A colour-scheme for a theme</td>
</tr>
<tr>
<td>component</td>
<td>1.4</td>
<td>Component Plugins</td>
<td>Allows developers to add components to Confluence's component system</td>
</tr>
<tr>
<td>decorator</td>
<td>2.5</td>
<td>Decorator Plugins</td>
<td>Adds decorators without using a Theme Plugin</td>
</tr>
<tr>
<td>extractor</td>
<td>1.4</td>
<td>Extractor Plugins</td>
<td>Adds information to the Confluence search index</td>
</tr>
<tr>
<td>editor</td>
<td>2.5</td>
<td>Editor Plugins</td>
<td>Adds a WYSIWYG editor to the Confluence edit page</td>
</tr>
<tr>
<td>job</td>
<td>2.2</td>
<td>Job Plugins</td>
<td>Adds repeatable jobs to Confluence</td>
</tr>
<tr>
<td>language</td>
<td>2.2</td>
<td>Language Pack Plugins</td>
<td>Adds language translations to Confluence</td>
</tr>
<tr>
<td>layout</td>
<td>1.3</td>
<td>Theme Plugins</td>
<td>A layout (decorator) definition for a theme</td>
</tr>
<tr>
<td>lifecycle</td>
<td>2.3</td>
<td>Lifecycle Plugins</td>
<td>Schedule tasks to be run on application startup and shutdown</td>
</tr>
<tr>
<td>listener</td>
<td>1.4</td>
<td>Event Listener Plugins</td>
<td>A component that can respond to events occurring in the Confluence server</td>
</tr>
<tr>
<td>macro</td>
<td>1.3</td>
<td>Macro Plugins</td>
<td>A macro used in wiki to HTML conversions (e.g. {color}). Outputs HTML that can be embedded in a page or layout. Can retrieve user, page and space info, or external content (eg RSS)</td>
</tr>
<tr>
<td>rpc-soap</td>
<td>1.4</td>
<td>RPC Plugins</td>
<td>Deploys a SOAP service within Confluence</td>
</tr>
<tr>
<td>Plugin</td>
<td>Version</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------</td>
<td>-----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>rpc-xmlrpc</td>
<td>1.4</td>
<td>RPC Plugins</td>
<td>Deploys an XML-RPC service within Confluence</td>
</tr>
<tr>
<td>servlet</td>
<td>1.4</td>
<td>Servlet Plugins</td>
<td>A standard Java servlet deployed within a Confluence plugin</td>
</tr>
<tr>
<td>spring</td>
<td>2.2</td>
<td>Spring Component Plugins</td>
<td>Add a Spring component. Unlike component plugins these allow the use of full Spring configuration XML</td>
</tr>
<tr>
<td>theme</td>
<td>1.3</td>
<td>Theme Plugins</td>
<td>A custom look-and-feel for a Confluence site or space</td>
</tr>
<tr>
<td>trigger</td>
<td>2.2</td>
<td>Trigger Plugins</td>
<td>Adds triggers which schedule jobs</td>
</tr>
<tr>
<td>usermacro</td>
<td>2.3</td>
<td>User Macro Plugins</td>
<td>Allows a simple macro to be created in the plugin XML file, with no Java coding necessary</td>
</tr>
<tr>
<td>velocity-context-item</td>
<td>1.4</td>
<td>Velocity Context Plugins</td>
<td>Adds helper objects to Confluence's Velocity context</td>
</tr>
<tr>
<td>web-item</td>
<td>2.2</td>
<td>Web UI Plugins</td>
<td>Adds links or tabs to the Confluence UI</td>
</tr>
<tr>
<td>web-section</td>
<td>2.2</td>
<td>Web UI Plugins</td>
<td>Adds sections of links to the Confluence UI</td>
</tr>
<tr>
<td>xwork</td>
<td>1.4</td>
<td>XWork-WebWork Plugins</td>
<td>XWork/Webwork actions and views bunded with a plugin, enabling user interaction</td>
</tr>
</tbody>
</table>
Code Formatting Plugins

This page last changed on Jan 17, 2007 by jnolen.

Code Formatting plugin modules are available in Confluence 2.2 and later versions

Code formatting plugin modules allow you to add new languages to the {code} macro. Whenever the code macro is invoked, the macro checks the 'language' parameter against the languages supported by the available formatting plugins, and uses that plugin to format the source code.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

Code Formatting Plugins

Here is an example atlassian-plugin.xml file containing a single code formatter:

```xml
<atlassian-plugin name="My Formatter" key="confluence.extra.formatters">
  ...
  <codeformatter name="ruby" key="ruby"
    class="com.example.confluence.formatters.RubyFormatter">
    <description>Code formatter for the Ruby programming language</description>
  </codeformatter>
  ...
</atlassian-plugin>
```

- the class attribute defines the class that will be added to the available formatters. This class must implement com.atlassian.renderer.v2.macro.code.SourceCodeFormatter

The SourceCodeFormatter Interface

All code formatters must implement the following simple interface:

```java
package com.atlassian.renderer.v2.macro.code;

/**
 * Strategy for converting a block of source code into pretty-printed HTML.
 * SourceCodeFormatters MUST be forgiving:
 * they will be dealing with user-supplied input, so they can't afford to blow up on bad data.
 */
public interface SourceCodeFormatter {
  /**
   * Inform the CodeMacro which languages this formatter supports. So if someone writes
   * {code:java}, then only
   * the formatter that returns "java" from this method will be used to format it.
   * @return an array of languages that this formatter supports
   */
  String[] getSupportedLanguages();
  /**
   */
```
* Convert source code into HTML.
  *
  * @param code the source code as a string
  * @param language the programming language that it is believed this code is written in
  * @return the source code formatted as HTML
  *
  String format(String code, String language);
  }

Formatter Priority

There is no concept of priority for formatters. If two formatters are installed and both return the same value from getSupportedLanguages(), one will be selected pretty much at random. If you want to avoid this behaviour, deactivate formatters that you no longer want to use.
Component Plugins

This page last changed on Jan 17, 2007 by jnolen.

Component plugin modules are available in Confluence 1.4 and later

Component plugin modules enable you to add components to Confluence's internal component system (powered by Spring).

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

Component Plugin Module

Each component module adds a single object to Confluence's component management system.

Other plugins and objects within Confluence can then be autowired with your component. This is very useful for having a single component that is automatically passed to all of your other plugin modules (ie a Manager object).

Here is an example atlassian-plugin.xml file containing a single component module:

```xml
<atlassian-plugin name="Sample Component" key="confluence.extra.component">
...
  <component name="Keyed Test Component"
    key="testComponent"
    alias="bogusComponent"
    class="com.atlassian.confluence.plugin.descriptor.BogusComponent" />
...
</atlassian-plugin>
```

- the name attribute represents how this component will be referred to in the interface.
- the key attribute represents the internal, system name for your component.
- the class attribute represents the class of the component to be created
- the alias attribute represents the alias this component will be stored with. This element is optional, if not specified the module key will be used instead.

Accessing Your Components

Accessing your components is extremely simple.

Autowired Objects

If your object is being autowired (for example another plugin module or an XWork action), the easiest way to access a component is to add a basic Java setter method.
For example, if you use the above `BogusComponent` module your object would retrieve the component as follows:

```java
public void setBogusComponent(BogusComponent bogusComponent) {
    this.bogusComponent = bogusComponent;
}
```

Non-autowired Objects

If your object is not being autowired, you may need to retrieve the component explicitly. This is done via the `ContainerManager` like so:

```java
BogusComponent bc = (BogusComponent) ContainerManager.getComponent("bogusComponent");
```

Notes

Some issues to be aware of when developing a component:

- One component module can depend on another component module but be careful of circular references (ie A requires B, B requires A).
- The component "namespace" is flat at the moment, so choose a sensible alias for your component.
Downloadable Plugin Resources

This page last changed on Jan 19, 2006 by jnolen.

Confluence plugins may define downloadable resources. If your plugin requires Confluence serve additional static files such as images, Javascript or CSS, you will need to use downloadable plugin resources to make them available.

Due to a bug in Confluence versions 1.4 through 1.4.2, downloadable plugin resources only function for plugins that have been deployed by copying them into /WEB-INF/lib. Plugins that have been uploaded dynamically through the web interface, or copied into /plugins will not be able to serve resources. This bug is fixed for Confluence 1.4.3.

Defining a Single Downloadable Resource

Downloadable resources are configured to map a name of some downloadable file to its location within the plugin jar-file.

```xml
<atlassian-plugin name='IM Presence Macros' key='confluence.extra.impresence'>
  <plugin-info>
    <description>Macros to show online status for popular Instant Messaging services.</description>
    <vendor name="Atlassian Software Systems" url="http://www.atlassian.com"/>
    <version>0.1</version>
  </plugin-info>
  <macro name='aim' class='com.atlassian.confluence.extra.impresence.AIMPresenceMacro' key='aim'>
    <description>Displays an AIM status graphic.</description>
    <resource type="download" name="aimon.gif" location="templates/extra/impresence/aimon.gif">
      <param name="content-type" value="image/gif"/>
    </resource>
  </macro>
  <resource type="download" name="aimoff.gif" location="templates/extra/impresence/aimoff.gif"/>
</atlassian-plugin>
```

- Resources can be downloaded either within a plugin module, or as a resource of the entire plugin.
  - Resources are always looked up relative to a plugin module (see below). If a resource can not be found in the plugin module, it will then be looked for in the plugin itself.
- Each resource must be of type="download"
- The name of the resource is how it will be referenced from within the application
- The location of the resource is where it appears within the plugin itself
- An optional `content-type` parameter can be used to supply the file's MIME type
  - In the absence of a `content-type`, the application will attempt to guess the file's type from its file extension. For common file extensions, an explicit `content-type` is not necessary.

Defining a Directory of Downloadable Resources

If your plugin requires a lot of resources, you may wish to expose a directory of files as resources, rather than writing definitions for each individual file.
The name and location must both have trailing slashes
Subdirectories are also exposed, so in the example above, icons/small/mail.gif will be mapped to the resource templates/extra/impresence/icons/small/mail.gif

Referring to Downloadable Resources

The URL for a downloadable resource is as follows:

(server root)/download/resources/{plugin key}:{module key}/{resource name}

For example:

http://confluence.example.com/download/resources/confluence.extra.impresence:aim/aimon.gif

In a velocity template, you should use the $req.contextPath property to ensure that your resources are always relative to the URL of the Confluence server:

$req.contextPath/download/resources/confluence.extra.impresence:aim/aimon.gif
Event Listener Plugins

Availability
Listener plugins are available in Confluence 1.4 and later.

Every time something important happens within Confluence (a page is added or modified, the configuration is changed, etc.), an 'event' is triggered. Listeners allow you to extend Confluence by installing code that responds to those events.

Plugin Events
It is possible to listen for plugin install/uninstall/enable/disable events, however this will be unreliable when trying to listen for events about your own plugin. You will not receive a PluginDisableEvent or PluginUninstallEvent for the plugin itself. To trigger actions for these events, one (or more) of your modules (macro, event listener, etc.) should implement the StateAware interface instead.

Synchronous Events
Confluence events are currently processed synchronously - that is, Confluence will wait for your event to finish processing before returning from the method that was the source of the event. This makes it very important that any event listener you write completes as quickly as possible.

Asynchronous events will be forthcoming in a future Developer Release.

Adding a listener plugin

Listeners are a kind of Confluence plugin module.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

The Listener Plugin Module

Each listener is a plugin module of type "listener", packaged with whatever Java classes and other resources that the listener requires in order to run. Here is an example atlassian-plugin.xml file containing a single listener:

```
<atlassian-plugin name='Optional Listeners' key='confluence.extra.auditor'>
  <plugin-info>
    <description>Audit Logging</description>
    <vendor name="Atlassian Software Systems" url="http://www.atlassian.com"/>
    <version>1.0</version>
  </plugin-info>
</atlassian-plugin>
```
The listener module definition has no configuration requirements beyond any other module: just give it a name, a key, and provide the name of the class that implements the listener.

### The Listener Class

The class attribute of the listener module definition must refer to a Java class that implements the `com.atlassian.confluence.event.EventListener` interface. This is the interface:

```java
package com.atlassian.confluence.event;
import com.atlassian.confluence.event.events.ConfluenceEvent;
/**
 * Defines a listener for Confluence events.
 */
public interface EventListener {
    /**
     * Perform some action as a response to a Confluence event. The EventManager will
     * ensure that this is only called if the class of the event matches one of the
     * classes returned by getHandledEventClasses
     * @param event some event triggered within Confluence
     */
    void handleEvent(ConfluenceEvent event);

    /**
     * Determine which event classes this listener is interested in.
     * The EventManager performs rudimentary filtering of events by their class. If
     * you want to receive only a subset of events passing through the system, return
     * an array of the Classes you wish to listen for from this method.
     * For the sake of efficiency, only exact class matches are performed. Sub/superclassing
     * is not taken into account.
     * Returning an empty array will allow you to receive every event.
     * @return An array of the event classes that this event listener is interested in, or an empty array if the listener should receive all events. <b>Must not</b> return null.
     */
    Class[] getHandledEventClasses();
}
```

### Events and Event Types

All events within Confluence extend from `com.atlassian.com.event.events.ConfluenceEvent`. In general, we use the following convention for naming each type of ConfluenceEvent:

```xml
<Object><Operation>Event
```
For example, we have the following event types relating to space events: SpaceCreateEvent, SpaceUpdateEvent, SpaceRemoveEvent. In the above description space would correspond to <Object> and create, update, or remove would correspond to <Operation>.

Occasionally, an operation is so singular that its meaning will be obvious without use of this naming convention; for example a LoginEvent or ConfigurationEvent.

A full catalogue of the events available within Confluence will be forthcoming before the 1.4 final release.

Limitations of Events

- Events are a notification that something has occurred. The event system is not designed to allow a listener to veto the action that caused the event.
- There is no loop-detection. If you write a listener for the SpaceModifiedEvent that itself causes a SpaceModifiedEvent to be generated, you are responsible for preventing the ensuing infinite loop.

Example Code

A more detailed example, with sample code, can be found in Writing an Event Listener Plugin Module.
Writing an Event Listener Plugin Module

This page last changed on Feb 15, 2006 by dhardiker@adaptavist.com.

Overview

For an introduction to event listener plugin modules, please read Event Listener Plugins.

Writing an Event Listener as a plugin module within Confluence

Writing an event listener is a four-step process:

1. Identify the events you wish to listen for
2. Create theEventListener Java class
   a. Implement getHandledEventClasses()
   b. Implement handleEvent()
3. Add the listener module to your atlassian-plugin.xml file

Identify the events you wish to listen for

The easiest thing here is to consult the latest API, in the package com.atlassian.confluence.event.events. When you implement an EventListener you will provide an array of Class objects which represent the events you wish to handle.

The naming of most events are self explanatory (GlobalSettingsChangedEvent or ReindexStartedEvent for example), however there are some which need further clarification:

<table>
<thead>
<tr>
<th>Event Class</th>
<th>Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>LabelCreateEvent</td>
<td>On the creation of the first label to the target Content Entity Object.</td>
</tr>
<tr>
<td>LabelRemoveEvent</td>
<td>On the removal of the last label from the target Content Entity Object.</td>
</tr>
<tr>
<td>LabelAddEvent</td>
<td>On the addition of any label to the target Content Entity Object.</td>
</tr>
<tr>
<td>LabelDeleteEvent</td>
<td>On the deletion of any label from the target Content Entity Object.</td>
</tr>
</tbody>
</table>

Create the EventListener

The EventListener interface defines two methods which must be implemented: getHandledEventClasses() and handleEvent().

Implement getHandledEventClasses()
The `getHandledEventClasses()` method holds an array of class objects representing the events you wish to listen for.

- Your listener will only receive events of the types specified in `getHandledEventClasses()`
- You must specify all the event types you need - specifying a superclass will not include its subclasses
- Returning an empty array will cause your listener to receive every event Confluence produces

So, if you want your listener to receive only `SpaceCreatedEvent` and `SpaceRemovedEvent`:

```java
private static final Class[] HANDLED_EVENTS = new Class[] {
    SpaceCreateEvent.class, SpaceRemovedEvent.class
};

public Class[] getHandledEventClasses()
{
    return HANDLED_EVENTS;
}
```

Alternatively, to receive all possible events:

```java
/**
 * Returns an empty array, thereby handling every ConfluenceEvent
 * @return *
 */
public Class[] getHandledEventClasses()
{
    return new Class[0];
}
```

Implement `handleEvent()`

The implementation below simply relies upon the `toString()` implementation of the event and logs it to a log4j appender.

```java
public void handleEvent(ConfluenceEvent event)
{
    if (!initialized)
    initializeLogger();
    log.info(event);
}
```

Most often, a `handleEvent(..)` method will type check each event sent through it and execute some conditional logic.

```java
public void handleEvent(ConfluenceEvent event)
{
    if (event instanceof LoginEvent)
    {
        LoginEvent loginEvent = (LoginEvent) event;
        // ... logic associated with the LoginEvent
    }
    else if (event instanceof LogoutEvent)
    {
        LogoutEvent logoutEvent = (LogoutEvent) event;
        // ... logic associated with the LogoutEvent
    }
```
A full example of an EventListener class that listens for login and logout events can be found in EventListener Example.

Add the EventListener as a module to your plugin by creating an atlassian-plugin.xml file.

The atlassian-plugin.xml file has been described elsewhere in detail. This is an example of a listener plugin module included in an atlassian-plugin.xml file.

```xml
<atlassian-plugin name='Optional Listeners' key='confluence.extra.auditor'>
  <plugin-info>
    <description>Audit Logging</description>
    <vendor name='Atlassian Software Systems' url='http://www.atlassian.com'/>
    <version>1.0</version>
  </plugin-info>
  <listener name='Audit Log Listener' class='com.atlassian.confluence.extra.auditer.AuditListener' key='auditListener'>
    <description>Provides an audit log for each event within Confluence.</description>
  </listener>
</atlassian-plugin>
```
EventListener Example

This page last changed on Jan 04, 2005 by cmiller.

Find an example of an EventListener below, which listens for the LoginEvent and LogoutEvent.

```java
package com.atlassian.confluence.extra.userlister;
import com.atlassian.confluence.event.EventListener;
import com.atlassian.confluence.event.events.ConfluenceEvent;
import com.atlassian.confluence.event.events.LoginEvent;
import com.atlassian.confluence.event.events.LogoutEvent;
import com.atlassian.plugin.PluginManager;
import bucket.container.ContainerManager;

public class UserListener implements EventListener {
    private UserLister userLister;
    private PluginManager pluginManager;
    Class[] handledClasses = new Class[]{LoginEvent.class, LogoutEvent.class};

    public void handleEvent(ConfluenceEvent event) {
        if (event instanceof LoginEvent) {
            LoginEvent loginEvent = (LoginEvent) event;
            getUserLister().userLoggedIn(loginEvent.getUsername(), loginEvent.getSessionId());
        } else if (event instanceof LogoutEvent) {
            LogoutEvent logoutEvent = (LogoutEvent) event;
            getUserLister().userLoggedIn(logoutEvent.getUsername(), logoutEvent.getSessionId());
        }
    }

    public UserLister getUserLister() {
        if (userLister == null) {
            if (pluginManager == null) {
                pluginManager = (PluginManager) ContainerManager.getInstance().getContainerContext().getComponent("pluginManager");
                userLister = (UserLister) pluginManager.getEnabledPluginModule("userlister");
            }
        }
        return userLister;
    }

    public Class[] getHandledEventClasses() {
        return handledClasses;
    }
}
```
Extractor Plugins

Extractor plugin modules are available in Confluence 1.4 and later versions

Extractor plugins allow you to hook into the mechanism by which Confluence populates its search index. Each time content is created or updated in Confluence, it is passed through a chain of extractors that assemble the fields and data that will be added to the search index for that content. By writing your own extractor you can add information to the index.

Extractor plugins can be used to extract the content from attachment types that Confluence does not support,

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins.
- Extractor plugins are closely tied to the API of the Lucene Java library.

Confluence’s internal search is built on top of the Lucene Java library. While familiarity with Lucene is not an absolute requirement for writing an extractor plugin, you’ll need it to write anything more than the most basic of plugins.

Extractor Plugins

Here is an example atlassian-plugin.xml file containing a single search extractor:

```xml
<atlassian-plugin name="Sample Extractor" key="confluence.extra.extractor">
  ...
  <extractor name="Page Metadata Extractor" key="pageMetadataExtractor"
    class="confluence.extra.extractor.PageMetadataExtractor" priority="1000">
    <description>Extracts certain keys from a page’s metadata and adds them to the search index.</description>
  </extractor>
  ...
</atlassian-plugin>
```

- the class attribute defines the class that will be added to the extractor chain. This class must implement bucket.search.lucene.Extractor
- the priority attribute determines the order in which extractors are run. Extractors are run from the highest to lowest priority. Extractors with the same priority may be run in any order.

As a general rule, all extractors should have priorities below 1000, unless you are writing an extractor for a new attachment type, in which case it should be greater than 1000.

If you are not sure what priority to choose, just go with priority="900" for regular extractors, and priority="1200" for attachment content extractors.

To see the priorities of the extractors that are built into Confluence, look in WEB-INF/classes/plugins/core-extractors.xml and
The Extractor Interface

All extractors must implement the following interface:

```java
package bucket.search.lucene;
import bucket.search.Searchable;
public interface Extractor
{
    public void addFields(Document document, StringBuffer defaultSearchableText, Searchable searchable);
}
```

- The `document` parameter is the Lucene document that will be added to the search index for the object that is being saved. You can add fields to this document, and the fields will be associated with the object in the index.
- The `defaultSearchableText` is the main body of text that is associated with this object in the search index. It is stored in the index as a Text field with the key "content". If you want to add text to the index such that the object can be found by a regular Confluence site search, append it to the `defaultSearchableText`. (Remember to also append a trailing space, or you'll confuse the next piece of text that's added!)
- The `searchable` is the object that is being saved, and passed through the extractor chain.

Attachment Content Extractors

If you are writing an extractor that indexes the contents of a particular attachment type (for example, OpenOffice documents or Flash files), you should extend the abstract class `bucket.search.lucene.extractor.BaseAttachmentContentExtractor`. This class ensures that only one attachment content extractor successfully runs against any file (you can manipulate the priorities of attachment content extractors to make sure they run in the right order).

For more information, see: Attachment Content Extractor Plugins

An Example Extractor

The following example extractor is untested, but it associates a set of page-level properties with the page in the index, both as part of the regular searchable text, and also as Lucene Text fields that can be searched individually, for example in a custom \{abstract-search\} macro.

```java
package com.example.extras.extractor;
import bucket.search.lucene.Extractor;
import bucket.search.Searchable;
import org.apache.lucene.document.Field;
```
import com.atlassian.confluence.core.ContentEntityObject;
import com.atlassian.confluence.core.ContentPropertyManager;
import com.opensymphony.util.TextUtils;

public class ContentPropertyExtractor implements Extractor{
    public static final String[] INDEXABLE_PROPERTIES = {"status", "abstract");
    private ContentPropertyManager contentPropertyManager;

    public void addFields(Document document, StringBuffer defaultSearchableText, Searchable searchable) {
        if (searchable instanceof ContentEntityObject){
            ContentEntityObject contentEntityObject = (ContentEntityObject) searchable;
            for (int i = 0; i < INDEXABLE_PROPERTIES.length; i++) {
                String key = INDEXABLE_PROPERTIES[i];
                String value = contentPropertyManager.getStringProperty(contentEntityObject, key);
                if (TextUtils.stringSet(value)) {
                    defaultSearchableText.append(value).append(" ");
                    document.add(Field.Text(key, value));
                }
            }
        }
    }

    public void setContentPropertyManager(ContentPropertyManager contentPropertyManager) {
        this.contentPropertyManager = contentPropertyManager;
    }
}

Debugging

There's a really primitive Lucene index browser hidden in Confluence which may help when debugging. You'll need to tell it the filesystem path to your $conf-home/index directory.

http://yourwiki.example.com/admin/indexbrowser.jsp
Attachment Content Extractor Plugins

This page last changed on Jan 09, 2006 by cmiller.

Extractor plugin modules are available in Confluence 1.4 and later

Attachment content extractor plugins enable Confluence to index the contents of attachments that it may not otherwise understand. Before you read this document, you should be familiar with Extractor Plugins.

The BaseAttachmentContentExtractor class

Attachment content extractor plugins must extend the bucket.search.lucene.extractor.BaseAttachmentContentExtractor base class. The skeleton of this class is:

```java
package bucket.search.lucene.extractor;
import bucket.search.lucene.Extractor;
import bucket.search.lucene.SearchableAttachment;
import bucket.search.Searchable;
import com.opensymphony.util.TextUtils;
import java.io.InputStream;
import java.io.IOException;
public abstract class BaseAttachmentContentExtractor implements Extractor {

    /** You should not have to override this method */
    public void addFields(Document document, StringBuffer defaultSearchableText, Searchable searchable); 

    /** Override this method if you can not get the functionality you want by overriding getMatchingContentTypes() and getMatchingFilenameExtensions() */
    protected boolean shouldExtractFrom(String fileName, String contentType);

    /** Override this method to return the MIME content-types that your plugin knows how to extract text from. If you have already overridden shouldExtractFrom(), this method is useless */
    protected String[] getMatchingContentTypes() {
        return new String[0];
    }

    /** Override this method to return the filename extensions that your plugin knows how to extract text from. If you have already overridden shouldExtractFrom(), this method is useless */
    protected String[] getMatchingFileExtensions() {
        return new String[0];
    }

    /** Override this method to do the actual work of extracting the content of the attachment. Your extractor should return the text that is to be indexed */
    protected abstract String extractText(InputStream is, SearchableAttachment attachment) throws IOException;
}
```

The first attachment content extractor that returns true from shouldExtractFrom, and a not-null, not-empty String from extractText() will cause all remaining attachment content extractors not to run against this file. Thus, it’s important to get the priority value for your plugin right, so
general, but inaccurate extractors are set to run after specific, more accurate extractors.
Other (non-attachment) content extractors will still run, regardless.

An Example

This is an example of a hypothetical extractor that extracts the contents of mp3 ID3 tags.

```java
package com.example.extras.extractor;
import com.hypothetical.id3.Id3Tag
import bucket.search.lucene.extractor.BaseAttachmentContentExtractor;
import bucket.search.lucene.SearchableAttachment;
import java.io.InputStream;
import java.io.IOException;

public class Id3Extractor extends BaseAttachmentContentExtractor {

    public static final String[] MIME_TYPES = {
        "audio/x-mp3",
        "audio/mpeg",
        "audio/mp4a-latm"
    };

    public static final String[] FILE_EXTS = {"mp3", "m4a"};

    protected String extractText(InputStream is, SearchableAttachment attachment)
            throws IOException
    {
        Id3Tag tag = Id3Tag.parse(is);
        return (tag.getTitle() + " "+ tag.getArtist() + " "+
                tag.getGenre() + " "+ tag.getAlbumTitle());
    }

    protected String[] getMatchingContentTypes()
    {
        return MIME_TYPES;
    }

    protected String[] getMatchingFileExtensions()
    {
        return FILE_EXTS;
    }
}
```
Job Plugins

This page last changed on Jan 17, 2007 by jnolen.

Job plugin modules are available in Confluence 2.2 and later.

Job plugin modules enable you to add repeatable tasks to Confluence, which are in turn scheduled by Trigger Plugins.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins.

Job Plugin Module

The Job plugin module adds a simple reusable component within a plugin. At a minimum, the module class must implement Quartz's Job interface, but for access to Confluence's objects and database you should extend com.atlassian.quartz.jobs.AbstractJob. Jobs are scheduled with Trigger Plugins.

Note that at the moment Jobs are not autowired by Spring.

Here is an example atlassian-plugin.xml fragment containing a single Job module:

```xml
<atlassian-plugin name="Sample Component" key="confluence.extra.component">
  ...
  <job key="myJob"
       name="My Job"
       class="com.example.myplugin.jobs.MyJob" />
  ...
</atlassian-plugin>
```

- the name attribute represents how this component will be referred to in the Confluence interface.
- the key attribute represents the internal, system name for your Job. This is what the Trigger will refer to.
- the class attribute represents the class of the Job to be created. The class must have a no-argument constructor, or it will not be able to be instantiated by Confluence.

For examples of how to schedule Jobs to be run, see Trigger Plugins.

Note that in Confluence 2.3 you can also use a Spring Plugin as a job. This allows you to inject other Spring components into the Job, via the "JobDataAsMap" property of the job. An example is shown below. You cannot do this in Confluence 2.2.

- Plugins containing Spring JobDetailBeans can’t be dynamically loaded at present, due to classloading issues.
<spring name="Space Cleaner Job" key="spaceCleanerJob" id="spaceCleanerJob"
class="org.springframework.scheduling.quartz.JobDetailBean">
    <property name="name">
        <value>Space Cleaner Job</value>
    </property>
    <property name="jobClass">
        <value>com.atlassian.confluence.extras.spacecleaner.SpaceCleanerJob</value>
    </property>
    <property name="jobDataAsMap">
        <map>
            <entry key="spaceManager"> <!-- these spring beans will be injected into the
                SpaceCleanerJob instance -->
                <ref bean="spaceManager"/>
            </entry>
            <entry key="pageManager">
                <ref bean="pageManager"/>
            </entry>
            <entry key="settingsManager">
                <ref bean="settingsManager"/>
            </entry>
            <entry key="trashManager">
                <ref bean="trashManager"/>
            </entry>
            <entry key="runOncePerCluster">
                <value>true</value>
            </entry>
        </map>
    </property>
</spring>
<trigger key="com.atlassian.confluence.extras.spacecleaner.SpaceCleanerJob.trigger"
    name="Space Cleaner Trigger">
    <job key="spaceCleanerJob" />
    <schedule cron-expression="0 * * * * ?" />
</trigger>
Language Pack Plugins

This page last changed on Aug 16, 2006 by jnolen.

To run Confluence in another language, you must install a language pack plugin for that translation. Guides and tools for collaboratively creating translations have been made available to the Confluence community.

This page provides a technical overview of plugins, for users interested in creating or updating a translation. To install a translation, check out Community Translations.

Language Pack Overview

Language plugins are placed in the `<CONFLUENCE-INSTALL-DIRECTORY>/languages/<KEY>` directory, where `<KEY>` is the international language identifier. They consist of three files:

<table>
<thead>
<tr>
<th>Name</th>
<th>Purpose</th>
<th>Filename</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Plugin Descriptor</td>
<td>Defines language settings in language tag</td>
<td>atlassian-plugin.xml</td>
<td>./src/etc</td>
</tr>
<tr>
<td>ConfluenceActionSupport Properties File</td>
<td>Contains text strings in key:value mapping</td>
<td>ConfluenceActionSupport_de_DE.properties</td>
<td>./src/etc/atlassian/confluence/core/ConfluenceActionSupport_de_DE.properties</td>
</tr>
<tr>
<td>Flag Image</td>
<td>Contains flag image for country</td>
<td>&lt;KEY&gt;.png</td>
<td>./src/etc/templates/languages/&lt;KEY&gt;.png</td>
</tr>
</tbody>
</table>

Directory Structure

The location of the three files that compose a Language Pack plugin is as follows:

```
./src/etc/com/atlassian/confluence/<PATH_OF_PROPERTIES_FILE>
./src/etc/templates/languages/<LANGUAGE_KEY>/<LANGUAGE_KEY>.gif
./src/etc/atlassian-plugin.xmlc
```

As an example, this is the directory listing of the German translation ("de_DE"):

```
./confluence-2.2-std/plugins/de_DE/src
./confluence-2.2-std/plugins/de_DE/src/etc
./confluence-2.2-std/plugins/de_DE/src/etc/atlassian-plugin.xml
./confluence-2.2-std/plugins/de_DE/src/etc/com/atlassian
./confluence-2.2-std/plugins/de_DE/src/etc/com/atlassian/confluence
./confluence-2.2-std/plugins/de_DE/src/etc/com/atlassian/confluence/core
./confluence-2.2-std/plugins/de_DE/src/etc/com/atlassian/confluence/core/ConfluenceActionSupport_de_DE.properties
./confluence-2.2-std/plugins/de_DE/src/etc/templates/languages/de_DE
./confluence-2.2-std/plugins/de_DE/src/etc/templates/languages/de_DE/de_DE.gif
```

Language Plugin Structure
The three components of a plugin must be updated for each translation. The following sections describe updating the language plugin descriptor, flag image and ConfluenceActionSupport properties file.

## Defining The Language Plugin Descriptor

This is an example `atlassian-plugin.xml` file for a Language Pack plugin for German:

```xml
<atlassian-plugin name='German language pack' key='confluence.languages.de_DE'>
  <plugin-info>
    <description>This plugin contains translations for the German language</description>
    <vendor name="Atlassian Software Systems" url="http://www.atlassian.com/">
      <version>1.0</version>
    </vendor-info>
    <language name="German" key="de_DE" language="de" country="DE">
      <!-- Define a flag that will be shown for this language -->
      <resource name="de_DE.gif" type="download" location="templates/languages/de_DE/de_DE.gif">
        <property key="content-type" value="image/gif"/>
      </resource>
    </language>
  </plugin-info>
</atlassian-plugin>
```

### Language Plugin Descriptor Attributes

The `atlassian-plugin.xml` file declares the language being bundled using the following attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>language</td>
<td>The language being defined</td>
<td>Yes</td>
</tr>
<tr>
<td>country</td>
<td>The country the language belongs to</td>
<td>No</td>
</tr>
<tr>
<td>variant</td>
<td>The variant of the language</td>
<td>No</td>
</tr>
</tbody>
</table>

These values are based off those defined in the `java.util.Locale` class. For information on the valid values for the `language`, `country` and `variant` attributes, please see the `java.util.Locale` documentation.

The `key` attribute is an aggregation of the three previous attributes, in the same format as that of `java.util.Locale`: `language[_country]_[variant]`.

### Flag Images

Language packs define a flag that is to be used to represent the language. The `atlassian-plugin.xml` defines the language property:

```xml
  <resource name="en_AU.gif" type="download" location="templates/languages/en_AU/en_AU.gif">
    <property key="content-type" value="image/gif"/>
  </resource>
```

When selecting a language, the flag defined above will be displayed. Additionally, the flag will appear
during the setup process.

ConfluenceActionSupport Properties File

This Java Properties file contains key-value pairs for each string in Confluence, and supports variables. For example:

```
remove.all.name=Remove All
view.mail.thread.desc.full=Entire Thread (Showing {0} of {1})
```
Creating A New Confluence Translation

This page last changed on Aug 16, 2006 by david.soul@atlassian.com.

If you would like to translate Confluence into your local language, follow the instructions below on creating a language pack plugin from an example.

The Confluence community is sharing their in-progress and complete translations. You should check that a shared translation to your target language has not already been started here.

Preparation

Start by checking out the technical overview of a Language Pack Plugin. Once you are familiar with the structure and content of a plugin, you can move on to creating your own:

1. Check that you have the latest version of Confluence here. If not, you are recommended to install the latest version for translation, though you can use any version newer than 2.2. Refer to the guide on upgrading Confluence for instructions.
2. If you do not already have Apache Ant installed, download the latest version and setup your environmental variables according to the manual.
3. If you are using Confluence 2.2.0 only, you will need to unzip the language plugin base files from languages.zip into a subdirectory of <CONFLUENCE-INSTALL-DIRECTORY> called languages

Modifying The Example Language Pack Settings

This example will work from an example plugin en_AU.zip.

1. Unzip the example en_AU language pack en_AU.zip into a subdirectory of <CONFLUENCE-INSTALL-DIRECTORY>/languages called en_AU. Note that is the file is just a renamed copy of default English properties file
2. We will now update the properties file in the example to the latest version. Open your Confluence install directory and copy the

confluence\WEB-INF\classes\com\atlassian\confluence\core\ConfluenceActionSupport.properties file to the example plugin directory src\etc\com\atlassian\confluence\core.
3. Remove the old ConfluenceActionSupport_en_AU.properties file, and rename

ConfluenceActionSupport.properties to ConfluenceActionSupport_en_AU.properties.
4. Locate the plugin descriptor file, ConfluenceActionSupport properties file and flag image

<CONFLUENCE-INSTALL-DIRECTORY>/languages/en_AU/src/etc/atlassian-plugin.xml
<CONFLUENCE-INSTALL-DIRECTORY>/languages/en_AU/src/etc/com/atlassian/confluence/core/ConfluenceActionSupport.properties

5. Determine your language plugin key <KEY> using your country and locale according to the Language Pack Plugins guide
6. Atlassian has licensed a set of flags for use with translations. Delete en_AU.png and download the appropriate flag from Language Pack Flags, renaming it to the correct key
7. Update atlassian-plugin.xml to contain the relevant <KEY> and other references, including image type. Refer to the first section from the above Language Pack Plugins for help on deciding what to modify
8. Rename the directory structure and filenames that contain en-AU to your own <KEY>. The directory should now appear as

```
<CONFLUENCE-INSTALL-DIRECTORY>/languages/<KEY>/src/etc/atlassian-plugin.xml
<CONFLUENCE-INSTALL-DIRECTORY>/languages/<KEY>/src/etc/com/atlassian/confluence/core/ConfluenceActionSupport<KEY>.properties
<CONFLUENCE-INSTALL-DIRECTORY>/languages/<KEY>/src/etc/templates/languages/<KEY>/<KEY>.png
```

You are now ready to build the plugin with the default English text to check that your setup is correct. These next few steps deploy the default English version of the pack under your own language

9. From the command line, go to <CONFLUENCE-INSTALL-DIRECTORY>/languages and execute

```
tag -Dlanguage=<KEY> build
```


11. Restart Confluence

12. From your browser, login as an Administrator, then go to Administration -> Language and verify that you are able to select the translation

### Updating The Language Pack

To collaborate on the translation process, you may wish to upload your translation to the [Community Translations page](#). Repeat these instructions to test each iteration of your translation attempt.

1. Unzip [excelbundle0.9.zip](#) to your local drive.
2. Browse to your Confluence install and go to the 
   \confluence\WEB-INF\classes\com\atlassian\confluence\core directory. Copy the ConfluenceActionSupport.properties file there into the translation_tool directory and rename it to ConfluenceActionSupport_en.properties.
3. If you want to start a fresh translation, skip this step. To work from an existing translation, copy it into the translation_tool directory and remove any country variant from the filename, eg ConfluenceActionSupport_ru_RU.properties becomes ConfluenceActionSupport_ru.properties.
4. Call the translation tool to create the spreadsheet file. For example, to create a Russian translation, open a terminal window in the translation_tool directory and call

```
java -jar excelbundle.jar -export translation_ru.xls -l en,ru -r "$cd%"
```

5. Edit the file content, referring to [Translating ConfluenceActionSupport Content](#) for more information on how to modify the string values.
6. Call the translation tool to export the updates back into the localised properties file. For the example Russian translation, open a terminal window, go to the translation_tool directory and call

```
java -jar excelbundle.jar -import translation_ru.xls -l ru -r "$cd%"
```

7. Once you have completed editing, you must copy and rename the localised translation back to the language plugin directory. For frequent updates, you may wish to create a script to do this.

### Building The Language Pack Plugin

Document generated by Confluence on May 01, 2007 00:44
To build the new language pack plugin, execute Ant in the `confluence/src/etc/languages` directory:

```
ant -Dlanguage=<LANGUAGE> build
```

A JAR will be created in the `languages/<LANGUAGE>/dist/` folder.

**Installation On A Confluence Server**

To install the translation in another instance of Confluence.

1. Copy `languages-<KEY>.jar` into the `<CONFLUENCE-INSTALL-DIRECTORY>/confluence/WEB-INF/lib` of your target installation
2. Restart Confluence
3. From your browser, login as an Administrator, then go to Administration -> Language and select the translation

**Submitting A Translation (Optional)**

If you would like to share your completed translation with other Confluence users, you can upload it [here](#).

By providing Atlassian permission to bundle complete translations with the Confluence install you will soon be able to select your local language from the Confluence translations list under System Administration, without needing to package it as a plugin.
Language Pack Flags

This page last changed on May 01, 2006 by david.soul@atlassian.com.

Below are flags that can be used with Language Pack Plugins in Confluence. For individual country names, see the attachments list.

These images are only for us within Confluence plugins and may not be redistributed with any other code. For license details, see license.txt

(view as slideshow)
Translating ConfluenceActionSupport Content

This page last changed on Jul 14, 2006 by david.soul@atlassian.com.

Guide for translating the values for each property in a
ConfluenceActionSupport_.<LANGUAGE>.properties file:

Translating Strings Without Variables Or Links

These links can be translated directly. Using German in this example

```properties
submit.query.name=Submit Query
```
can be translated directly into

```properties
submit.query.name=Anfrage senden
```

Translating Strings Containing Variables Or Links

Some strings use variables or hyperlinks to provide contextual information. Variables are shown as `{NUMBER}` while hyperlinks are shown as `<a href="{NUMBER}"">LINK ALIAS</a>`. Translations must take into account the positioning of variables, and check that links occur over the relevant phrase. Using German again as an example

```properties
search.include.matches.in.other.spaces=There are `<b>{0}</b>` matches in `<b>other spaces</b>`.<a href="{1}"">Include these matches</a>.
```

This tag uses a variable to show the number of matches, and a link the user can click to include those matches. The German version must place the 'matches' variable in the adjusted location, and reapply the hyperlink to the relevant phrase.

```properties
search.include.matches.in.other.spaces=Es wurden `<b>{0}</b>` Resultate in `<b>anderen Spaces</b>` gefunden. <a href="{1}"">Diese Resultate einschliessen</a>.
```
Translations for the Rich Text Editor

In Confluence version 2.2.10 and above it is possible to provide translations for the tooltips and labels in the Rich Text Editor.

Most of the editor's internationalised text consists of its tooltips. There are also a few labels such as those in the Image Properties dialog.

Unfortunately, translations of these to another language are not currently read from the ConfluenceActionSupport.properties file. Instead they are read from a collection of javascript files within Confluence's includes directory.

Rich Text Editor translations can not be installed as a language pack. Vote for CONF-6987 to get this fixed.

Incomplete Rich Text Editor translations result in the users seeing the "keys" for the missing translations, rather than falling back to another language.

Creating a new Translation

The Rich Text Editor provided by Confluence is Tiny MCE. The language files it uses are all within the confluence/includes/js/tiny_mce directory.
There are 7 files that need translating. They are located in 7 different directories and each english file is named "en.js". The translated files should be named with either a two letter language code or the combination of a two letter language and two letter country code.

The core editing strings are found in:

confluence/includes/js/tiny_mce/langs/en.js

Translations for most of these strings are included for a variety of languages. However, some of them may need to be re-encoded to UTF-8.

These two files:

confluence/includes/js/tiny_mce/themes/advanced/langs/en.js
confluence/includes/js/tiny_mce/plugins/table/langs/en.js

are also translated into the same languages. However some translations may be missing or out of date.

The remaining 4 files are all specific to Confluence and require translation for most or all languages:

confluence/includes/js/tiny_mce/plugins/confluence/langs/en.js
confluence/includes/js/tiny_mce/plugins/emotions/langs/en.js
confluence/includes/js/tiny_mce/plugins/fullscreen/langs/en.js
Using the Translations

Once you have translations for each file, you need to edit the locales-to-editor-languages.properties file located in confluence/WEB-INF/classes.
This file tells the Rich Text Editor which js files to use for a given language.

Example

Attached is a translation for US English. (Since tiny MCE is a US product the core text is all spelt in US English anyway, but there is one "Centre" in the Image Properties dialogue). It contains files named en_us.js in the required directories.

To add this translation to Confluence:

1. Download and install the US English Language Pack Plugin provided here.
2. Unzip the archive into the confluence/includes/js/tiny_mce directory.
4. Restart Confluence.

To test the translation is working:

1. Change your language to US English (Preferences -> Edit Profile -> General -> Preferred Languages
2. Edit a page using the Rich Text Editor
3. Click the Image icon
4. Check that the Alignment dropdown contains "Center"
Updating A Confluence Translation

This page last changed on Jul 25, 2006 by david.soul@atlassian.com.

This guide is for translating Confluence into non-English languages using a Spreadsheet, and covers:

1. Improving or finishing a translation for an existing Language Plugin
2. Updating an existing translation for a new version of Confluence

If you do not have a Language Plugin to deploy the updated
ConfluenceActionSupport_<LANGUAGE>.properties file, you should instead go to the Creating A New
Confluence Translation.

To make small updates, it is quicker to translate the file directly. If your changes are more substantial,
you may prefer to translate using Excel.

Translating Directly

This approach uses any file editor. If your translation uses English characters, you can skip to the next
section.

Preparing Non-Unicode Files For Direct Translation

If you do not have the Sun Java JDK installed, please download it now. Version 5.0 can be downloaded
here.

1. Create a script or batch file that uses the native2ascii.exe program bundled in
   <JAVA-JDK-DIRECTORY>/bin to convert from the natively encoded file back to the Unicode file. For
   example, update the Russian properties file with a script or batch file that calls

   native2ascii -encoding cp1251 JiraWebActionSupport_ru_RU-native.txt
   JiraWebActionSupport_ru_RU.properties

2. Copy ConfluenceActionSupport<KEY>.properties to a new file
   ConfluenceActionSupport<KEY>-native.txt. Save the new file local non-Unicode character
   encoding.

Performing Direct Translation

These steps apply to both Unicode and non-Unicode translations:

1. Open the properties file (or it’s natively encoded equivalent) for editing, translate some or all of the
   properties file into your target language, and save the changes. If you are translating into a
   non-Unicode language, always edit ConfluenceActionSupport<KEY>-native.txt, otherwise modify
   ConfluenceActionSupport<KEY>.properties.
2. Edit the file content in a text editor, referring to Translating ConfluenceActionSupport Content for
   more information on how to modify the string values. Users who are unsatisfied with simply opening
two copies of the file in their favourite editor may want to try this freeware properties editor, that allows side-by-side comparisons.

3. For non-Unicode translations only, run the native2ascii script to update
ConfluenceActionSupport<KEY>.properties

4. If you wish to test the update, copy the file back to its original location in the plugin. Then restart Confluence.

Translating Using A Spreadsheet

The guide below uses the open-source ExcelBundle, released under the Apache License 2.0. To translate from Excel or OpenOffice:

1. Unzip excelbundle0.9.zip to your local drive.
2. Browse to your Confluence install and go to the
   \confluence\WEB-INF\classes\com\atlassian\confluence\core directory. Copy the
   ConfluenceActionSupport.properties file there into the translation_tool directory and rename
   it to ConfluenceActionSupport_en.properties.
3. If you want to start a fresh translation, skip this step. To work from an existing translation, copy it
   into the translation_tool directory and remove any country variant from the filename, eg
   ConfluenceActionSupport_ru_RU.properties becomes
   ConfluenceActionSupport_ru.properties.
4. Call the translation tool to create the spreadsheet file. For example, to create a Russian translation,
   open a terminal window in the translation_tool directory and call

   java -jar excelbundle.jar -export translation_ru.xls -l en,ru -r "%cd%"

5. Edit the file content, referring to Translating ConfluenceActionSupport Content for more information
   on how to modify the string values.
6. Call the translation tool to export the updates back into the localised properties file. For the example
   Russian translation, open a terminal window, go to the translation_tool directory and call

   java -jar excelbundle.jar -import translation_ru.xls -l ru -r "%cd%"

7. Once you have completed editing, you must copy and rename the localised translation back to the
   language plugin directory. For frequent updates, you may wish to create a script to do this.
8. To view the updates after copying across the new properties file, select the language plugin for your
   translation, then restart Confluence and refresh your browser.
Lifecycle Plugins

This page last changed on Apr 24, 2007 by david@randombits.org.

Lifecycle plugin modules are available in Confluence 2.3 and later.

Lifecycle plugins allow you to perform tasks on application startup and shutdown.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

Application Lifecycle

Startup is performed after Confluence has brought up its Spring and Hibernate subsystems. If Confluence is being set up for the first time, the startup sequence is run after the completion of the setup wizard. This means that lifecycle plugins can assume access to a fully populated Spring container context, and a working database connection. (i.e. you don't need to check isContainerSetup() or isSetupComplete())

Shutdown is performed when the application server is shutting down the web application, but before the Spring context is disposed of.

- Plugin Activation and Deactivation
  Activating or deactivating a lifecycle plugin will not cause any of its lifecycle methods to be run. If you want your plugin to respond to activation and deactivation, you should make sure it implements StateAware.

- Shutdown is not guaranteed
  There are many situations in which the shutdown sequence will not be run, as it is dependent on the orderly shutdown of the application server. Plugins should not rely on shutdown being performed reliably, or even ever.

  Shutdown lifecycle tasks are most useful for cleaning up resources or services that would otherwise leak in situations where the web application is being restarted, but the JVM is not exiting. (i.e. services that retain classloaders or threads that would otherwise prevent the application from being garbage-collected)

Defining a Lifecycle Plugin

Lifecycle plugin definitions are quite simple. Here's a sample atlassian-plugin.xml fragment:

```xml
<lifecycle key="frobozz" name="Frobozz Service" class="com.example.frobozz.lifecycle" sequence="1200">
  <description>Start and stop the Frobozz service</description>
</lifecycle>
```
• The key is the required plugin module key, which must be unique within the plugin.
• The name is the required display name for the plugin.
• The class is the required class name for the lifecycle service implementation.
• The sequence number is required, and determines the order in which lifecycle plugins are run. On startup, they are run from lowest to highest sequence number, then in reverse order on shutdown.

Defining a Lifecycle Service Implementation

If you are implementing a new lifecycle service, you should implement

com.atlassian.config.lifecycle.LifecycleItem:

```java
package com.atlassian.config.lifecycle;

public interface LifecycleItem {
    /**
     * Called on application startup.
     * @param context the application's lifecycle context
     * @throws Exception if something goes wrong during startup. No more startup items will be run, and the application will post a fatal error, shut down all LifecycleItems that have run previously, and die horribly.
     */
    void startup(LifecycleContext context) throws Exception;

    /**
     * Called on application shutdown
     * @param context the application's lifecycle context
     * @throws Exception if something goes wrong during the shutdown process. The remaining shutdown items will still be run, but the lifecycle manager will log the error.
     */
    void shutdown(LifecycleContext context) throws Exception;
}
```

However, for convenience, and to make it easy to plug in third-party lifecycle events that are implemented as servlet context listeners, lifecycle service classes can instead implement javax.servlet.ServletContextListener - the contextInitialized() method will be called on startup, and contextDestroyed() on shutdown.

Sequences

The sequence numbers of the lifecycle modules determine the order in which they are run. On startup, modules are run from lowest to highest sequence number, then on shutdown that order is reversed (first in, last out). As a general guideline:

<table>
<thead>
<tr>
<th>Sequence number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 500</td>
<td>Configuration tweaks and application sanity checks.</td>
</tr>
<tr>
<td>800</td>
<td>Database and configuration upgrades.</td>
</tr>
<tr>
<td>5000</td>
<td>Start/stop the Quartz scheduler</td>
</tr>
</tbody>
</table>
• If your startup lifecycle item has a sequence less than 800, you can't assume that the configuration or database schema are current.
• If you have a sequence number greater than 5000, you must keep in mind that scheduled jobs (including Job Plugins) may run before you've started up, or after you've shut down.
Macro Plugins

This page last changed on Apr 09, 2007 by jnolen.

Macros are Confluence code that can be invoked from inside a page by putting the name of the macro in curly brackets. Users of Confluence will be familiar with macros like {color} or {children} or {rss}. Thanks to the plugin system, it is easy to write and install new macros into a Confluence server.

Created a new macro or looking for macros?
Share your macros and find new plugins in the Confluence extensions space.

For Simple Macros
If you want to create a macro that just inserts some boiler-plate text or performs simple formatting, you may only need a User Macro. User macros can be written entirely from within the Confluence web interface, and require no special installation or programming knowledge.

Adding a macro plugin

Macros are a kind of Confluence plugin module.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

The Macro Plugin Module

Each macro is a plugin module of type "macro", packaged with whatever Java classes and other resources (i.e. Velocity templates) that the macro requires in order to run. Generally, similar macros are packaged together into a single plugin, for ease of management. Here is an example atlassian-plugin.xml file

```
<atlassian-plugin name='Task List Macros' key='confluence.extra.tasklist'>
  <plugin-info>
    <description>Macros to generate simple task lists</description>
    <vendor name="Atlassian Software Systems" url="http://www.atlassian.com"/>
    <version>1.3</version>
  </plugin-info>
  <macro name='tasklist' class='com.atlassian.confluence.extra.tasklist.TaskListMacro' key='tasklist'>
    <description>Creates a very simple task list, with user checkable tasks</description>
  </macro>
  <!-- more macros... -->
</atlassian-plugin>
```

The name of the macro defines how it will be referenced from the page. So if you define your macro as having name="tasklist", the macro will be called from the page as {tasklist}.

The Macro Plugin Module Implementing Class
The class attribute of the macro defines what Java class will be used to process that macro. This is the class you need to write in order for the macro to function. It must implement the com.atlassian.renderer.v2.macro.Macro interface.

A more complete guide to writing macros can be found in Writing Macros.

Compatibility with Confluence 1.3 Macros

Confluence 1.4 includes a compatibility layer that will run the majority, but not all macros from Confluence 1.3. Two thirds of the macros shipped with Confluence are still written to the old Radeox macro API and are run in compatibility mode.

The best way to find out if your macro still runs in Confluence 1.4 is to try it. If it doesn't work you may need to update your macro slightly, as some classes have moved from the com.atlassian.confluence.renderer package into com.atlassian.renderer. If you still can't get your macro to run, then you should rewrite it to the 1.4 API. The process is simple and should take you only hours at most.

Build a plugin

Maven

If your plugin is one based on the Confluence Plugin Development Kit or has the appropriate project.xml files, you can use Maven to build your plugin. Simply run the command: maven jar. This will build a jar file and deposit it in the $my_plugin_dir/target directory.

Then you can install the plugin using the Plugin Administration interface within Confluence. However, if you need to install an XWork plugin, see the Ant instructions below.

Ant

You will have to have Ant installed in order to build the macro plugins.
Use the following commands from within the plugins directory in you Confluence installation to:

Create the jar file only:

```
ant -Dlibrary=macroname build
```

install the plugin:

```
You can install the plugin using ant, as shown below.

ant -Dlibrary=macroname install
```
You must use this method if your plugin contains xwork actions. Plugins installed via ant are not preserved when you upgrade Confluence, so if your plugin does not contain xwork actions, you should install it via the Administration, Plugin Manager page, where you can browse for and upload plugins.

## Plugin Building Walkthrough

This section is a step by step description of creating a plugin. It assumes familiarity with your operating system's command line.

1. Go to the `plugins` directory. Each plugin is a subdirectory in this directory.
2. Create a new plugin directory and source code. You can do this by copying an existing plugin, e.g. on unix `cp -r information information2`. You’ll then need to change the package of all the java source files to `com.atlassian.confluence.extra.information2` and change the name and key of the plugin and the keys of the macros in `information2/src/etc/atlassian-plugin.xml`. All the reference to the package `com.atlassian.confluence.extra.information` in this file need to be changed to `com.atlassian.confluence.extra.information2` as well.
3. Build the plugin. From the directory `plugins`, run the command `ant -Dlibrary=information2` build. This will create a jar file called `plugins/information2/dist/plugins-information2.jar`.
4. Install the plugin either by running `ant -Dlibrary=information2 install`, which copies the jar file to `confluence/WEB-INF/lib`, or by uploading the plugin using the Plugin Manager page, which copies the jar file to `<confluence.home>/plugins`.

## Example Macro Plugins

The source-code of a number of macros (some of which are already built and packaged with Confluence) can be found in the `plugins` directory of your Confluence distribution. You can modify these macros (consistent with the Confluence license). The most interesting macros to read if you're looking at writing your own are probably:

- `tasklist` – a simple macro that stores its state in a page’s PropertySet
- `userlister` – a macro that works in combination with an [event listener](http://example.com) to list logged-in users
- `livesearch` – a macro that leverages Javascript and XMLHttpRequest in combination with an [XWork plugin](http://example.com) to handle the server-side interaction.
- `graphviz` – a macro that interacts with an external, non-Java tool
Documenting Macros

This page last changed on May 12, 2005 by jnolen.

The Confluence notation guide is the popup window that describes all the markup and macros available within a Confluence installation. Obviously, if a macro is installed, you will want it to also appear in the notation guide.

To do this you will need to:

1. Write a help file
2. Tell Confluence where to find that help file

Writing the Help File

The help file is a file containing a fragment of HTML. Your HTML will be inserted into a two-columned table, so you should provide a single table row with two columns. On the left-hand side, put usage examples of your macro. On the right hand side provide a description and sample output.

The file will be rendered through Velocity, which means useful things like $req.contextPath are available to you.

Here's an example of the help file used for the `{note}` macro:

```html
<tr bgcolor=ffffff>
<!-- The left-hand table cell should contain usage examples -->
<td>
{note:title=Be Careful}<br />
The body of the note here..<br />
(note)
</td>
<!-- The right-hand cell describes the macro and its available arguments -->
<!-- and may include sample output -->
<td>
<p>Prints a simple note to the user.
</p>
</td>
</tr>
```

Configuring the help file in your macro
The help file is included in your macro as a plugin resource of type "velocity" and name "help". Here's the plugin definition of the note macro, including its help file:

```xml
<macro name='note' class='com.atlassian.confluence.extra.information.NoteMacro' key='note'>
  <description>Draws a note (yellow).</description>
  <resource type="velocity" name="help" location="templates/extra/layout/notemacro-help.vm">
    <param name="help-section" value="advanced"/>
  </resource>
</macro>
```

The "help-section" parameter is optional, and determines which section of the notation guide the macro will be documented in. The following sections are available (Note that regular wiki markup is also defined in here, so some sections like 'breaks' are unlikely to be appropriate for any real macro):

| texteffects | Macros that change the appearance of text contained within them (e.g. {color}) |
| headings    | Macros that create headings within a page                                      |
| breaks      | Macros related to line- or paragraph breaks, or rulers                        |
| links       | Macros related to links to other wiki or external content (e.g. {anchor})     |
| lists       | Macros related to lists                                                       |
| images      | Macros for inserting or manipulating images within a page (e.g. {gallery})    |
| tables      | Macros for forming static tables (e.g. {section} and {column})                |
| advanced    | Macros for creating more complex structures in a page (e.g. {panel} or {info})|
| confluence  | Macros for manipulating or displaying Confluence data (e.g. {children})       |
| external    | Macros for manipulating or displaying data from other systems (e.g. {rss})    |
| misc        | Macros that do anything else (Try to avoid using this section)                |

If you don't provide a help section, your macro documentation will appear in the "Macros" section of the notation guide. (This section only appears in the notation guide if it is needed).
User Macros

User macros are simple template-like macros that allow you to create simple formatting macros using the Confluence web interface.

⚠️ If you want to distribute your user macro as a plugin, please see User Macro Plugins. If you want to create more complex, programmatic macros in Confluence, you may need to write a Macro Plugin. Note also that Macro Plugins and User Macro Plugins can appear in the Confluence Notation Guide, whereas User Macros do not.

To create a user macro,

⚠️ You must be a Confluence administrator to create user macros.

1. Go to the 'Administration Console' and click 'User Macros in the left panel. (Users of Confluence 1.1 or 1.2 will find user macros under Administration -> Macro Management -> User Macros)
2. Click 'Create a User Macro' at the top of the list of macros.
3. Enter the macro attributes as explained below this screenshot, then click the 'Save' button.

| Macro Name: | floatright |
| Macro names are converted to lower-case |
| **Macro has a body** |
| Convert macro body wiki markup to HTML |
| **Output:** | Macro generates HTML markup |
| **Template:** | <div style="float: right; margin: 0 5px">$body</div> |

- 'Macro Name' — enter the text that you will type, within curly brackets, to invoke the macro from within a page. E.g. to invoke the 'floatright' macro defined in the above screenshot, you would type:

```html
{floatright}
```
• 'Macro has a body' — check this box if you will pass body-text to the macro when you invoke it from within a page, e.g.:

{floatright}my text{floatright}

If you tick the Macro has a body checkbox, you will need to choose one of three options listed below.

• For 'Output', choose one of the following options:
  o 'Macro generates HTML markup' — choose this if you wish to write your Template in HTML markup (as shown in the above screenshot).
  o 'Macro generates wiki markup' — choose this if you wish to write your Template in wiki markup.

• 'Template' — this is written in the Velocity templating language, and specifies what the macro will do. Note: If you ticked Macro has a body, your Template can refer to the body-text by specifying '$body'.

Options for 'Macro has a body':

When you select 'Macro has a body', anything the user types within the body of the macro will be available in the macro in the $body variable. The options below allow you to tell Confluence to pre-process the body before it is placed in the macro output.

• Use unprocessed macro body — the body of the macro will be output verbatim, including any HTML markup. For example if the macro body is <b>body</b>, it will be displayed as body in the page.
• Escape HTML in macro body — the body of the macro will be output with HTML markup escaped. So if the macro body is <b>body</b>, it will be displayed as <b>body</b> in the page.
• Convert macro body wiki markup to HTML — the body of the macro will be converted from wiki text to HTML markup. So if the macro body is *body*, it will be displayed as body in the page.

Writing user macros: some examples

• The name attribute of the macro is how you will use it from within a page, ie {name}.
• The template attribute of the macro is written in the Velocity templating language, and controls the rendering of the macro itself.

As an example, let's write a simple macro that simply creates a red box (using an existing Confluence style) around some text (useful for writing about error conditions for example - hence the macro name 'error').

After clicking "New User Macro", enter error as the Name of your macro, and then put the following in the Template text area:

<div class="errorbox">$body</div>
Then click Add. You should now see your new macro in the User Macros library, and you can now enable and disable it individually.

To use the macro within a page, you would add notation like:

```
{error}This is bad{error}
```

And your page would (magically!) have an error box on it, like so:

This is bad

Another example to demonstrate how you can pass parameters into your macro. Say you wanted to write your own font colour macro:

```
<\span style="\color: \$param0">$body</\span>
```

The usage of this macro would be:

```
{\colour:red}Some example text{\colour}
```

which will produce:
Some example text

If your macro requires more than one parameter, you can use variables $param0 to $param9 to represent them. To specify multiple parameters, use:

```
{\colour:red|blue|green}
```

Where red, blue and green are the 1st, 2nd and 3rd parameters respectively.

Available objects

The user macro above uses the $body object, which is available for use within your user macro template if the macro has a body.

You can pass parameters to your user macro in the same way as any other macro (separated by | signs), these parameters are provided to your template as param1, param2...paramN.

The complete list of objects available for use are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Doc Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>$body</td>
<td>The body of the macro (if the macro has a body)</td>
<td></td>
</tr>
<tr>
<td>$param0-n</td>
<td>The parameters passed to your macro (as available)</td>
<td></td>
</tr>
<tr>
<td>$config</td>
<td>The BootstrapManager object, useful for retrieving Confluence properties</td>
<td>BootstrapManager</td>
</tr>
<tr>
<td>$content</td>
<td>The current ContentEntity object that this macro is a included in (if available)</td>
<td>ContentEntityObject</td>
</tr>
<tr>
<td>$space</td>
<td>The Space object that this</td>
<td>Space</td>
</tr>
<tr>
<td>Identifier</td>
<td>Description</td>
<td>Class/Method</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>$generalUtil</td>
<td>A GeneralUtil object, with useful utility methods for URL encoding etc</td>
<td>GeneralUtil</td>
</tr>
<tr>
<td>$action</td>
<td>A blank ConfluenceActionSupport object, useful for retrieving i18n text if needed</td>
<td>ConfluenceActionSupport</td>
</tr>
<tr>
<td>$webwork</td>
<td>A VelocityWebWorkUtil object, for it's htmlEncode() method</td>
<td>VelocityWebWorkUtil</td>
</tr>
<tr>
<td>$req</td>
<td>The current HttpServletRequest object (if the page is rendered as a result of an HTTP request)</td>
<td></td>
</tr>
<tr>
<td>$res</td>
<td>The corresponding HttpServletResponse object (not recommended to be played with)</td>
<td></td>
</tr>
<tr>
<td>$userAccessor</td>
<td>For retrieving users, groups and checking membership</td>
<td>UserAccessor</td>
</tr>
</tbody>
</table>

More information on object usage is available from the [Velocity Template Overview](http://confluence.org).  

**User Macro Library**

Below is a list of existing user macros that can be installed.

- [Drop Shadows User Macro](http://confluence.org)
- [Escape User Macro](http://confluence.org)
- [Expand Text User Macro](http://confluence.org)
- [Show-to User Macro](http://confluence.org)
- [Typewriter text effect - User Macro](http://confluence.org)
Writing Macros

This page last changed on Mar 05, 2007 by jnolen.

Macros are written and deployed into Confluence as Macro Plugins. This page describes how to write a macro.

The Macro Class

All macros must implement the com.atlassian.renderer.v2.macro.Macro interface. The Javadoc comments are probably the best place to start:

http://www.atlassian.com/software/confluence/docs/api/latest/com/atlassian/renderer/v2/macro/Macro.html

⚠️ The BaseMacro class
While it's not a requirement, your macro should extend the com.atlassian.renderer.v2.macro.BaseMacro abstract class. As of Confluence 1.4 this class does not contain any functionality, but if the Macro interface changes in the future, the BaseMacro class will be maintained in order to ensure backwards compatibility with existing macros.

Writing Your Macro

When writing a macro, you will need to override the following methods:

<table>
<thead>
<tr>
<th>Method</th>
<th>Should return...</th>
</tr>
</thead>
<tbody>
<tr>
<td>hasBody()</td>
<td>true if this macro expects to have a body, false otherwise</td>
</tr>
<tr>
<td>getBodyRenderMode()</td>
<td>The RenderMode under which the body should be processed before being passed into the macro</td>
</tr>
<tr>
<td>isInLine()</td>
<td>false if the macro produces a block element (like a paragraph, table or div) true if it is inline and should be incorporated into surrounding paragraphs</td>
</tr>
<tr>
<td>execute()</td>
<td>a fragment of HTML that is the rendered macro contents</td>
</tr>
</tbody>
</table>

Understanding RenderMode

The RenderMode tells the Confluence wiki renderer which wiki-conversion rules should be applied to a piece of text. Once again, the best place to start is the Javadoc:

http://www.atlassian.com/software/confluence/docs/api/latest/com/atlassian/renderer/v2/RenderMode.html

There are a number of pre-defined render modes. The ones that would be useful to macro writers are probably:
### Mode Description

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RenderMode.ALL</td>
<td>Render everything</td>
</tr>
<tr>
<td>RenderMode.NO_RENDER</td>
<td>Don't render anything: just return the raw wiki text</td>
</tr>
<tr>
<td>RenderMode.INLINE</td>
<td>Render things you'd normally find inside a paragraph, like links, text effects and so on</td>
</tr>
<tr>
<td>RenderMode.SIMPLE_TEXT</td>
<td>Render text made up only of paragraphs, without images or links</td>
</tr>
</tbody>
</table>

If you want finer control, `RenderMode` is implemented as a bit-field. Each constant of `RenderMode` starting with `_F_` is a feature of the renderer that can be turned on or off. You can construct a `RenderMode` by manipulating these bits through the following methods:

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>allow()</code></td>
<td>Allow only the renderings specified</td>
<td>`RenderMode.allow(RenderMode._F_LINKS</td>
</tr>
<tr>
<td><code>suppress()</code></td>
<td>Allow all renderings except those specified</td>
<td>`RenderMode.suppress(RenderMode._F_MACROS</td>
</tr>
<tr>
<td><code>and()</code></td>
<td>Perform a logical AND on an existing render mode</td>
<td><code>RenderMode.SIMPLE_TEXT.and(RenderMode.suppress)</code> will render <code>SIMPLE_TEXT</code> without paragraphs</td>
</tr>
<tr>
<td><code>or()</code></td>
<td>Perform a logical OR on an existing render mode</td>
<td><code>RenderMode.SIMPLE_TEXT.and(RenderMode.allow(RenderMode._F_MACROS))</code> will render <code>SIMPLE_TEXT</code> with macros</td>
</tr>
</tbody>
</table>

⚠️ Many macros (like this note macro) produce a `div`. Often, if there's only one line of text within a `div`, you don't want it surrounded in paragraph tags. For this reason, the `RenderMode._F_FIRST_PARA` flag controls the first line of wiki text that is rendered. If `F_FIRST_PARA` is not set, and the first line of text is a paragraph, the paragraph tags will not be rendered.

### Accessing the Rest of the System

Like all Confluence plugin modules, Macros are autowired by the Spring framework. To obtain a manager object through which you can interact with Confluence itself, all you need to do is provide a Javabeans-style setter method for that component on your `Macro` class. See [Accessing Confluence Components From Plugin Modules](#).

### Advanced Macro Techniques

Macros are often most powerful when combined with other plugin modules. For example, the `{livesearch}` macro uses an XWork plugin to perform its server-side duties, and the `{userlister}` plugin uses a `listener`
plugin to listen for login events and determine who is online. You may also consider using a component plugin to share common code or state between macros.

## How Macros are Processed

If you want to know exactly what happens when a macro is processed, the following (slightly overly-detailed) description should help:

Consider the following code in a Wiki page:

```plaintext
{mymacro:blah|width=10|height=20}This _is_ my macro body{mymacro}
```

1. The MacroRendererComponent finds the first `{mymacro:blah|width=10|height=20}` tag, and asks the MacroManager if a macro is currently active with the name "mymacro". The MacroManager returns a singleton instance of your Macro.
2. The MacroRendererComponent calls `hasBody()` on the Macro.
   a. If `hasBody()` returns false, the macro is processed with a 'null' body, and the next `{mymacro}` tag will be processed as a separate macro.
   b. If `hasBody()` returns true, the MacroRendererComponent looks for the closing `{mymacro}`. Anything between the two becomes the macro body.
      i. If there is a macro body, the MacroRendererComponent then calls `getRenderMode()` on the macro to determine how that body should be rendered
      ii. The macro body is processed through the wiki renderer with the given RenderMode before being passed to the macro
3. The MacroRendererComponent calls `execute` on the macro, passing in the macro parameters, the (processed) body, and the current RenderMode
   - The `execute` method should return an HTML string. No further wiki processing is performed on macro output.
   - The parameters are a Map of `{{String}}`s, keyed by parameter name.
     - If any parameter is not named, it is keyed by the string representation of its position: so for the above example, `parameters.get("0")` would return "blah".
     - `parameters.get(Macro.RAW_PARAMS_KEY)` will return the raw parameter string, in this case: "blah|width=10|height=20"
4. The MacroRendererComponent calls `isInline()` on the macro to determine if its results should be inserted into the surrounding page as an inline (i.e. part of a surrounding paragraph) or a block element.
RPC Plugins

This page last changed on Jan 17, 2007 by jnolen.

Availability

RPC plugin modules are implemented in Confluence 1.4 and later.

RPC plugins allow you to deploy arbitrary SOAP or XML-RPC services within Confluence. These services may be completely independent of Confluence, or may take advantage of the Confluence APIs to provide a remote, programmatic interface to the Confluence server. Confluence's packaged remote API is implemented entirely as a plugin.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins.
- The Remote API packaged with Confluence is documented at Remote API Specification.

XML-RPC Plugins

Here is an example atlassian-plugin.xml file containing a single XML-RPC service:

```xml
<atlassian-plugin name="Sample XML-RPC" key="confluence.extra.xmlrpc">
  ...
  <rpc-xmlrpc key="helloworld-xmlrpc"
    name="Hello World XML-RPC"
    class="com.atlassian.confluence.extra.helloworldrpc.HelloWorld">
    <description>A public example XML-RPC service</description>
    <service-path>helloworld</service-path>
  </rpc-xmlrpc>
  ...
</atlassian-plugin>
```

- the class attribute defines the class that will be servicing XML-RPC requests. One instance of this class will be instantiated, and all of its public methods will be made available remotely. The instance is autowired from the Spring context.

- the service-path attribute is the method-prefix that is used to determine which XML-RPC method calls are routed to this plugin.

Confluence listens for XML-RPC requests at a single end-point. If your server is deployed at http://www.example.com then all XML-RPC requests must be made to http://www.example.com/rpc/xmlrpc. As such, the service-path is used to distinguish which plugin each request is directed at. If your RPC implementing class has a method `provideGreeting()`, and a service-prefix of `helloworld`, then the XML-RPC method call will be `helloworld.provideGreeting()`.

XML-RPC Interfaces

The XML-RPC specification is more limited than Java code. In particular:
Valid types for use as arguments in methods exposed via XML-RPC, or as return values from XML-RPC methods are:

- int
- boolean
- java.lang.String
- double
- java.util.Date
- java.util.Hashtable
- java.util.Vector
- byte[]

The object wrappers for the primitive types (java.lang.Integer, java.lang.Boolean, etc) may be used as return values, but not as method arguments. For more information, see: [http://ws.apache.org/xmlrpc/types.html](http://ws.apache.org/xmlrpc/types.html)

**SOAP Plugins**

Here is an example `atlassian-plugin.xml` file containing a single SOAP service:

```xml
<atlassian-plugin name="Sample XML-RPC" key="confluence.extra.xmlrpc">
  ...
  <rpc-soap key="helloworld-soap" name="Hello World SOAP" class="com.atlassian.confluence.extra.helloworldrpc.HelloWorld">
    <description>A public example SOAP service</description>
    <service-path>helloworld</service-path>
    <published-interface>com.atlassian.confluence.extra.helloworldrpc.HelloWorldPublic</published-interface>
  </rpc-soap>
  ...
</atlassian-plugin>
```

- the class attribute defines the class that will be servicing SOAP requests. One instance of this class is instantiated and autowired from the Spring context.
- the service-path element defines the SOAP service-path for this plugin, and where its WSDL file will be located.
- the published-interface element defines a Java interface that will be exposed via the SOAP service. The class defined in the class attribute must implement this interface.

Confluence listens for SOAP requests at a single end-point. If your server is deployed at
http://www.example.com then all XML-RPC requests must be made to 
http://www.example.com/rpc/soap. The preferred method for calling a SOAP service on Confluence is by 
parsing the WSDL file that is generated automatically for any deployed SOAP plugin. If your plugin has a 
service-path of helloworld, its WSDL file will be available at 
http://www.example.com/rpc/soap/helloworld.wsdl

Unlike XML-RPC, SOAP can accept and return complex types.

RPC Authentication

Confluence supplies a very simple, token-based authentication service for its remote API. Users log in 
over the remote interface using a login(username, password) method, and are supplied with a String 
token. This String token is then supplied as the first argument of any subsequent remote call, to 
authenticate the user with their previous login. More information about this protocol can be found in the 
Remote API Specification documentation.

Any RPC plugin can take advantage of the authentication service. To do so you must make some changes 
to your remote service objects, and to the configuration.

Here is an atlassian-plugin.xml containing SOAP and XML-RPC services that require authentication:

```
<atlassian-plugin name="Sample XML-RPC" key="confluence.extra.xmlrpc">
  ...
  <rpc-xmlrpc key="helloworldsecure-xmlrpc"
    name="Secure Hello World XML-RPC"
    class="com.atlassian.confluence.extra.helloworldrpc.HelloWorldSecureImpl">
    <description>An example XML-RPC service that requires a login</description>
    <service-path>helloworld-secure</service-path>
    <authenticate>true</authenticate>
  </rpc-xmlrpc>
  <rpc-soap key="helloworldsecure-soap"
    name="Secure Hello World SOAP"
    class="com.atlassian.confluence.extra.helloworldrpc.HelloWorldSecureImpl">
    <description>An example SOAP service that requires a login</description>
    <service-path>helloworld-secure</service-path>
    <authenticate>true</authenticate>
  </rpc-soap>
  ...
</atlassian-plugin>
```

An authenticated XML-RPC service requires an additional published-interface element that behaves like 
the published-interface element in the SOAP plugin: you must supply a Java Interface to represent which 
methods of your plugin class are being exposed remotely. The class represented by the class attribute 
must implement this interface.

There are two changes you have to make to your remote service objects (and their published interfaces) 
to allow them to take advantage of authentication:

1. You must implement the String login(String username, String password) and boolean 
   logout(String token) methods in com.atlassian.confluence.rpc.SecureRpc. However, since
these methods will be intercepted by the Confluence RPC framework, they will never actually be called on your object. As such, you can leave the implementations empty.

2. All methods in your published interface must have an initial argument that is a String (the authentication token). This token will also be intercepted by the Confluence RPC framework. Your code must not rely on this token having any value by the time the method is called on your plugin.

If you are providing an authenticated service, the logged-in User will be available to you from

com.atlassian.confluence.user.AuthenticatedUserThreadLocal.getUser()

If anonymous RPC is enabled for your server, the logged-in user may be null

Hibernate Session

If you use the Confluence API within your plugin you will probably need to create a Hibernate session, and start a transaction. Getting an error like: net.sf.hibernate.HibernateException: Could not initialize proxy - the owning Session was closed is one indication.

Using the HelloWorld example above:

The class which implements your service needs to delegate each call to another object, which will be supplied when the HelloWorld instance is autowired.

class HelloWorld implements HelloWorldPublic
{
    private HelloWorldDelegator helloWorldDelegator;
    public int doSomething(String arg)
    {
        return helloWorldDelegator.doSomething(arg);
    }
    public void setHelloWorldDelegator(HelloWorldHandler helloWorldDelegator)
    {
        this.helloWorldDelegator = helloWorldDelegator;
    }
}

HelloWorldDelegator contains the actual implementation of your service. It implements the same interface as HelloWorld, i.e. HelloWorldPublic. It is declared as a Spring bean, wrapped in a transaction:

<component name="HelloWorld SOAP Service core delegator"
    key="helloWorldDelegatorTarget"
    class="com.atlassian.confluence.extra.helloworldrpc.HelloWorldDelegator"/>

<spring key="helloWorldDelegator"
    class="org.springframework.transaction.interceptor.TransactionProxyFactoryBean">
    <property name="transactionManager">
        <ref local="transactionManager"/>
    </property>
    <property name="target">
        <ref local="helloWorldDelegatorTarget"/>
    </property>
</spring>
Example

Example XML-RPC and SOAP plugins are available in the Confluence distribution under plugins/helloworldrpc.

The full source to the Confluence remote API plugin can be found in the Confluence distribution under plugins/confluencerpc. The Confluence Remote API uses a mixture of RPC plugins and Component plugins, along with a simple mechanism to serialize Java objects into an XML-RPC compatible struct, to serve the same API over both SOAP and XML-RPC. We strongly recommend you use a similar mechanism to provide both RPC APIs.
Servlet Plugins

This page last changed on Jan 17, 2007 by jnolen.

Servlet plugin modules enable you to deploy Java servlets as a part of your plugins.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

The Servlet Plugin Module

Each servlet is deployed as a plugin module of type "servlet". Here is an example atlassian-plugin.xml file containing a single servlet:

```xml
<atlassian-plugin name='Hello World Servlet' key='confluence.extra.helloworld'>
  <plugin-info>
    <description>A basic Servlet module test - says "Hello World!"</description>
    <vendor name='Atlassian Software Systems' url='http://www.atlassian.com'/>
    <version>1.0</version>
  </plugin-info>
  <servlet name='Hello World Servlet' key='helloWorld'
    class='com.atlassian.confluence.extra.helloworld.HelloWorldServlet'>
    <description>Says Hello World, Australia or your name.</description>
    <url-pattern>/helloworld</url-pattern>
    <init-param>
      <param-name>defaultName</param-name>
      <param-value>Australia</param-value>
    </init-param>
  </servlet>
</atlassian-plugin>
```

- the class attribute of servlet is an subclass of javax.servlet.http.HttpServlet.
- the url-pattern elements (one or more) define the locations this servlet will be accessed.
- the init-param elements allow you to define initial parameters for your servlet, using the same method as you would normally in web.xml.

Accessing Your Servlet

You servlet will be accessed within the Confluence web application via each url-pattern you specify, beneath the /plugins/servlet parent path.

For example, if you specify a url-pattern of /helloworld as above, and your Confluence application was deployed at http://yourserver/confluence - then you servlet would be accessed at http://yourserver/confluence/plugins/servlet/helloworld.

Notes
Some information to be aware of when developing or configuring a servlet plugin module:

- Your servlet's \texttt{init()} method will not be called on web application startup, as for a normal servlet. Instead, this method will be called the first time your servlet is accessed after each time it is enabled. This means that if you disable a plugin containing a servlet, or a single servlet module, and re-enable it again \texttt{init()} will be called again.
- Because all servlet modules are deployed beneath a common \texttt{/plugins/servlet} root, be careful choosing each \texttt{url-pattern} under which your servlet is deployed. It is recommended to use a value that will always be unique to the world!

\textbf{Example}

There is an example servlet module within the \texttt{helloworldservlet} example.

Find this example in the \texttt{/plugins/helloworldservlet} directory within your Confluence distribution.
Spring Component Plugins

This page last changed on Nov 27, 2006 by jnolen.

Spring Modules

A Spring module allows you to use standard Spring XML configuration tags.

A spring module appears in atlassian-plugin.xml like this:

```xml
<spring name="Space Cleaner Job" key="spaceCleanerJob"
        class="org.springframework.scheduling.quartz.JobDetailBean">
    ... any standard spring configuration goes here...
</spring>
```

The above is equivalent to the following configuration in applicationContext.xml:

```xml
<bean id="spaceCleanerJob" class="org.springframework.scheduling.quartz.JobDetailBean">
    ...</bean>
```
StateAware

This page last changed on Apr 24, 2007 by david@randombits.org.

Description

The StateAware interface can be implemented by plugin modules which need to know when they are enabled or disabled.

Implementation

To be notified of enablement/disablement, implement the following in your Macro Plugins, Event Listener Plugins or Component Plugins:

```java
public class YourMacro extends BaseMacro implements com.atlassian.plugin.StateAware

This has two methods you must implement:

```java
public void enabled()
{
    // Your enablement code goes here.
}

public void disabled()
{
    // Your disablement code goes here.
}
```

Call Sequence

These methods are called in the following circumstances:

**enabled()**

1. At server startup, if the plugin is already installed and enabled.
2. If the plugin is installed via uploading
3. If the plugin is enabled after having been disabled.
4. If the specific module is enabled after having been disabled.

**disabled()**

1. At server shutdown, if the plugin is installed and enabled.
2. If the plugin is uninstalled.
3. If the plugin is disabled.
4. If the specific module is disabled.
Notes

Each method is only called once at each logical enablement/disablement event. Please note that the module class’s constructor is not a reliable place to put initialisation code either, as the classes are often constructed or destructed more often than they are disabled/enabled. However, once enabled, the same class will remain in memory until it is disabled.

Known Issues

Supported Module Types

Not all module types have been tested, but the following have the following status:

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Confluence Version</th>
<th>Working</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro Plugins</td>
<td>2.3.3</td>
<td>✔️</td>
</tr>
<tr>
<td>Component Plugins</td>
<td>2.3.3</td>
<td>✔️</td>
</tr>
<tr>
<td>Event Listener Plugins</td>
<td>2.3.3</td>
<td>✔️</td>
</tr>
<tr>
<td>Lifecycle Plugins</td>
<td>2.3.3</td>
<td>☠️</td>
</tr>
</tbody>
</table>
Theme Plugins

This page last changed on Jan 17, 2007 by jnolen.

Themes define a look and feel for Confluence. Confluence ships with several themes that you can use, such as the default theme and or the left-nav theme. Theme plugins, on the other hand, allow you to create your totally customized look and feel. A theme can be applied to an entire Confluence site or to individual spaces. Creating a new theme consists of two steps:

1. Creating a theme with decorators and colour schemes, which defines how each page looks.
2. Packaging and installing a Theme Plugin - themes are part of our plugin system.

To install it within Confluence, please read Installing and Configuring Plugins manually.

There are several other themes that you can use as examples to learn from and extend:

- Clickr Theme
- Comment Tab Theme
- Left-nav Theme

We've also provided a Confluence Space export for theme developers. You can import this space into your development Confluence, and check each page to make sure all of the Confluence content looks good in your new theme.

You may also want to read Including Cascading Stylesheets in Themes
Creating a Theme Plugin

This page last changed on Dec 11, 2006 by david.soul@atlassian.com.

- Using Decorators
- Using Colour Schemes

Using Decorators

A decorator defines Confluence page layout. By modifying a decorator file, you can move "Attachments" tab from the left of the screen to the right or remove it completely. Decorator files are written in the Velocity templating language and have the VMD extension. You can familiarise yourself with Velocity at the Velocity Template Overview and decorators in general at the Sitemesh homepage.

Decorators, Contexts and Modes

Confluence comes bundled with a set of decorator files that you can customize. Instead of having one decorator file for each screen, we've grouped together similar screens (example: view and edit page screens) to simplify editing layouts.

There is some terminology that we use when talking about decorators that should be defined. We've grouped all the screens in Confluence into major categories which we call contexts. Within each context are various modes (ways of viewing that particular layout).

The following table summarises how decorators use contexts and modes:

<table>
<thead>
<tr>
<th>Decorator</th>
<th>Context</th>
<th>Mode</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>page.vmd</td>
<td>page</td>
<td>'view', 'edit', 'edit-preview', 'view-information', and 'view-attachments'</td>
<td></td>
</tr>
<tr>
<td>blogpost.vmd</td>
<td>blogpost (news)</td>
<td>'view', 'edit', 'edit-preview', and 'remove'</td>
<td>We prefer to use 'news' as an end-user term; all templates and classes use 'blogpost' to indicate RSS related content</td>
</tr>
<tr>
<td>mail.vmd</td>
<td>mail</td>
<td>'view', 'view-thread' and 'remove'</td>
<td></td>
</tr>
<tr>
<td>global.vmd</td>
<td>global</td>
<td>'dashboard', 'view-profile', 'edit-profile', 'change-password-profile', 'edit-notifications-profile'</td>
<td></td>
</tr>
<tr>
<td>main.vmd</td>
<td>n/a (header and footer)</td>
<td></td>
<td>main.vmd is used to</td>
</tr>
<tr>
<td>Format</td>
<td>Purpose</td>
<td>Note</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>space.vmd</td>
<td>space-pages</td>
<td>list-alphabetically, list-recently-updated, list-content-tree, create-page</td>
<td>space.vmd handles a wide range of options, this context is accessed by clicking on 'browse space' in the default theme of Confluence (tabbed theme)</td>
</tr>
<tr>
<td>space-mails</td>
<td>view-mail-archive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>space-blogposts</td>
<td>view-blogposts, create-blogpost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>space-templates</td>
<td>view-templates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>space-operations</td>
<td>view-space-operations&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>space-administration</td>
<td>view-space-administration, list-permission-pages</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example**

As an example on how to use the table above, say we found the 'Attachments' tab on the view page screen annoying and wanted to remove it. We could make this layout change in the page.vmd file - where the 'view' mode is handled (as shown below).

```
## VIEW
#if ($mode == "view")
   <make layout modifications here>
#elseif ...
```

⚠️ When creating your own decorators, it is critical that you preserve the lines #parse ("/pages/page-breadcrumbs.vm") or #parse ("/pages/space-breadcrumbs.vm"). These include files pass important information about the space to other space decorators and hence must be included.

**The Theme Helper Object**

When editing decorator files you will come across a variable called $helper - this is the theme helper object.

The following table summarises what this object can do:
<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$helper.domainName</td>
<td>displays the base URL of your Confluence instance on your page. This is useful for constructing links to your own Confluence pages.</td>
</tr>
<tr>
<td>$helper.spaceKey()</td>
<td>returns the current space key or null if in a global context.</td>
</tr>
<tr>
<td>$helper.spaceName</td>
<td>returns the name of the current space</td>
</tr>
<tr>
<td>$helper.renderConfluenceMacro(&quot;{create-space-button}&quot;%20)</td>
<td>renders a call to a Confluence Macro for the velocity context</td>
</tr>
<tr>
<td>$helper.getText(&quot;key.key1&quot;)</td>
<td>looks up a key in a properties file matching key.key1=A piece of text and returns the matching value (&quot;A piece of text&quot;)</td>
</tr>
<tr>
<td>$helper.action</td>
<td>returns the XWork action which processed the request for the current page.</td>
</tr>
</tbody>
</table>

If you are on a page or space screen you also have access to the actual page and space object by using $helper.page and $helper.space respectively.

If you want to delve more into what other methods are available in this object, please see our API's for ThemeHelper.

**Velocity macros**

Finally, the last thing you need to decipher decorator files is an understanding of macros. A velocity macro looks like this:

```velocity
#myVelocityMacro()
```

In essence, each macro embodies a block of code. We've used these macros to simplify decorator files and make them easier to modify.

For example, the #editPageLink() macro will render the edit page link you see on the 'View Page Screen'. All the logic which checks whether a certain user has permissions to edit pages and hence see the link are hidden in this macro. As the theme writer, you need only care about calling it.

The easiest way to acquaint yourself with the macros is to browse through your macros.vm file, located in /template/includes/macros.vm (under the base Confluence installation).

**Writing your own Velocity Macros**

**Velocity macros** are very useful for abstracting out common presentation logic into a function call and for keeping decorators clean. If you wish to use them for your theme you can either:

h5 Write your own Macros file
Write your own Velocity macros library file, as we've done with macros.vm. If you elect to do this you
must locate the velocity.properties file beneath WEB-INF/classes and tell the Velocity engine where your library file can be located, relative to the base installation of Confluence.

velocimacro.library = template/includes/macros.vm

Use Inline Velocity Macros.

Inline velocity macros, when loaded once, can be called from anywhere. See decorators/mail.vmd for examples of inline decorators.

The Colour Scheme Module

Colour schemes can be pre-configured for your theme. It is possible to configure them dynamically, in Space Administration, within an existing space.

The following colours can be customised in this space:

<table>
<thead>
<tr>
<th>Top Bar</th>
<th>&lt;default&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space Name Text</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Heading Text</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Links</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Borders and Dividers</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Menu Bar Background</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Menu Bar Text</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Menu Bar Background Highlight</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Menu Bar Text Highlight</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Custom Colour 1</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Custom Colour 2</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Custom Colour 3</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Custom Colour 4</td>
<td>&lt;default&gt;</td>
</tr>
<tr>
<td>Custom Colour 5</td>
<td>&lt;default&gt;</td>
</tr>
</tbody>
</table>

To transport them within a theme, however, they need to be expressed in an XML document. Here the structure of the colour-scheme element which you will use to arrange your palette of colours.

<colour-scheme key="earth-colours" name="Brown and Red Earth Colours" class="com.atlassian.confluence.themes.BaseColourScheme">
  <colour key="topbar" value="#440000"/>
  <colour key="spacername" value="#999999"/>
  <colour key="headingtext" value="#663300"/>
  <colour key="link" value="#663300"/>
  <colour key="border" value="#440000"/>
  <colour key="nabg" value="#663300"/>
</colour-scheme>
The class of a colour scheme must implement `com.atlassian.confluence.themes.ColourScheme`. The
`com.atlassian.confluence.themes.BaseColourScheme` class provided with Confluence sets the colours
based on the module's configuration.

The available colours correspond to those that you would configure in the online colour-scheme editing,
and are:

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>topbar</td>
<td>The strip across the top of the page</td>
</tr>
<tr>
<td>spacename</td>
<td>The text of the current space name, or Confluence</td>
</tr>
<tr>
<td></td>
<td>in the top left</td>
</tr>
<tr>
<td>headingtext</td>
<td>All heading tags throughout the site</td>
</tr>
<tr>
<td>link</td>
<td>All links throughout the site</td>
</tr>
<tr>
<td>border</td>
<td>Table borders and dividing lines</td>
</tr>
<tr>
<td>navbg</td>
<td>Background of top navigational buttons</td>
</tr>
<tr>
<td>navtext</td>
<td>Text of top navigational buttons</td>
</tr>
<tr>
<td>navselecteddbg</td>
<td>Background of navigational buttons when selected</td>
</tr>
<tr>
<td></td>
<td>or hovered</td>
</tr>
<tr>
<td>navselectedtext</td>
<td>Text of navigational buttons when selected or</td>
</tr>
<tr>
<td></td>
<td>hovered</td>
</tr>
</tbody>
</table>
Packaging and installing a Theme Plugin

The Theme Plugin Module

The theme module defines the theme itself. When someone in Confluence selects a theme either globally or within a space, they are selecting from the available theme modules.

```xml
<theme key="dinosaurs" name="Dinosaur Theme"
       class="com.atlassian.confluence.themes.BasicTheme">
  <description>A nice theme for the kids</description>
  <colour-scheme key="com.example.themes.dinosaur:earth-colours"/>
  <layout key="com.example.themes.dinosaur:main"/>
  <layout key="com.example.themes.corporate:mail-template"/>
</theme>
```

The class of a theme must implement `com.atlassian.confluence.themes.Theme`. The `com.atlassian.confluence.themes.BasicTheme` class provided with Confluence gathers together all the resources listed within the module definition into a theme.

A theme can contain an optional `colour-scheme` element that defines which colour-scheme module this theme will use, and any number of `layout` elements that define which layouts should be applied in this theme. Refer to these modules by their module complete key.

It is possible for a theme to use modules that aren't in the same plugin as the theme. Just keep in mind that your theme will be messed up if some plugin that the theme depends on is removed.

Installing the Theme

Themes are installed as 'plugin modules'. The plugin module is a collection of files, usually zipped up in a jar archive, which tells Confluence how to find the decorators and colour-scheme of your theme.

Plugins are a general topic in Confluence and have other uses than themes. In every case, the central configuration file, which describes the plugin to Confluence, is named atlassian-plugin.xml.

There are two steps to creating the plugin module.

1. Create the central configuration file for the theme: `atlassian-plugin.xml`
2. Create the jar archive for your theme: `bundling your theme`

Writing the atlassian-plugin.xml file for your theme.

The structure of an atlassian-plugin.xml file is fairly self-explanatory. In the code segment below you will
find a full example of an atlassian-plugin.xml, which lists

- each of the decorators you have defined to customize Confluence
- your colour scheme

in a way which Confluence can use to override the default theme. In other words, this XML tells Confluence to look in certain locations for replacement decorators when processing a request.

```xml
<atlassian-plugin key="com.atlassian.confluence.themes.tabless" name="Plain Theme">
  <plugin-info>
    <description>
      This theme demonstrates a plain look and feel for Confluence.
      It is useful as a building block for your own themes.
    </description>
    <version>1.0</version>
    <vendor name="Atlassian Software Systems Pty Ltd" url="http://www.atlassian.com/"/>
  </plugin-info>
  <theme key="tabless" name="Tabless Theme"
        class="com.atlassian.confluence.themes.BasicTheme">
    <description>plain Confluence theme.</description>
    <layout key="com.atlassian.confluence.themes.tabless:main"/>
    <layout key="com.atlassian.confluence.themes.tabless:space"/>
    <layout key="com.atlassian.confluence.themes.tabless:page"/>
    <layout key="com.atlassian.confluence.themes.tabless:blogpost"/>
    <layout key="com.atlassian.confluence.themes.tabless:mail"/>
    <colour-scheme key="com.atlassian.confluence.themes.tabless:earth-colours"/>
    // Optional: for themes which need configuration.
    <param name="space-config-path" value="/themes/tabless/configuretheme.action"/>
    <param name="global-config-path" value="/admin/themes/tabless/configuretheme.action"/>
  </theme>
  <layout key="main" name="Main Decorator"
          class="com.atlassian.confluence.themes.VelocityDecorator"
          overrides="/decorators/main.vmd">
    <resource type="velocity" name="decorator"
              location="com/atlassian/confluence/themes/tabless/main.vmd"/>
  </layout>
  <layout key="global" name="Global Decorator"
          class="com.atlassian.confluence.themes.VelocityDecorator"
          overrides="/decorators/global.vmd">
    <resource type="velocity" name="decorator"
              location="com/atlassian/confluence/themes/tabless/global.vmd"/>
  </layout>
  <layout key="space" name="Space Decorator"
           class="com.atlassian.confluence.themes.VelocityDecorator"
           overrides="/decorators/space.vmd">
    <resource type="velocity" name="decorator"
              location="com/atlassian/confluence/themes/tabless/space.vmd"/>
  </layout>
  <layout key="page" name="Page Decorator"
           class="com.atlassian.confluence.themes.VelocityDecorator"
           overrides="/decorators/page.vmd">
    <resource type="velocity" name="decorator"
              location="com/atlassian/confluence/themes/tabless/page.vmd"/>
  </layout>
  <layout key="blogpost" name="Blogpost Decorator"
           class="com.atlassian.confluence.themes.VelocityDecorator"
           overrides="/decorators/blogpost.vmd">
    <resource type="velocity" name="decorator"
              location="com/atlassian/confluence/themes/tabless/blogpost.vmd"/>
  </layout>
  <layout key="mail" name="Mail Decorator"
           class="com.atlassian.confluence.themes.VelocityDecorator"
           overrides="/decorators/mail.vmd">
```
The class which each decorator, or layout, is mapped to must implement 

The layout entry must provide an overrides attribute which defines which decorator within Confluence is 
being overridden by the theme.

Importantly, when telling Confluence to override a particular decorator with another one, the location of 
the custom decorator is specified; for example:

```
<layout key="page" name="Page Decorator"
   class="com.atlassian.confluence.themes.VelocityDecorator"
   overrides="/decorators/page.vmd">
   <resource type="velocity" name="decorator"
      location="com/atlassian/confluence/themes/tabless/page.vmd"/>
</layout>
```

The location attribute needs to be represented in the jar archive you will use to bundle your theme.

### Bundling the Theme

Your decorators should be placed in a directory hierarchy which makes sense to you. The 
atlassian-plugin.xml file should be placed at the top level of the directory structure, afterwards the 
decorators should be placed in directories which make a meaningful division of what they do. It is your 
choice as to how the structure is laid out, each decorator could even be placed alongside 
atlassian-plugin.xml. The essential thing is for the location attribute of each decorator to accurately tell 
Confluence how to load it.

Thus, a recursive directory listing of the example theme above gives:

```
atlassian-plugin.xml
com/atlassian/confluence/themes/tabless/
com/atlassian/confluence/themes/tabless/global.vmd
com/atlassian/confluence/themes/tabless/space.vmd
com/atlassian/confluence/themes/tabless/mail.vmd
com/atlassian/confluence/themes/tabless/blogpost.vmd
com/atlassian/confluence/themes/tabless/main.vmd
```
Theme Configuration

This page last changed on Mar 05, 2007 by jnolen.

The themes can be configured via the Configuration link on the Choose Theme page on both the space and global level.

Choose a Theme
Assign a look and feel from an installed theme plugin. This theme will override any manually layouts.

- Plain Website Theme — demonstrates a plain web page view.
- Tableless Theme — plain Confluence theme.
- Left Navigation Theme — Left Navigation Bar Theme.

For example, the Left Navigation Theme allows for the specification of the title of the page which page should be used for navigation. The XWork module allows for developing complex configurations for themes, which can be saved in a config file.

Setting up the atlassian-plugin.xml

Configuration path parameter.

Specify the path to the configuration action in the atlassian-plugin.xml:

```xml
<theme key="dinosaurs" name="Dinosaur Theme"
    class="com.atlassian.confluencethemes.BasicTheme">
    <description>A nice theme for the kids</description>
    <colour-scheme key="com.example.themes.dinosaur:earth-colours"/>
    <layout key="com.example.themes.dinosaur:main"/>
    <param name="global-config-path" value="/admin/themes/dinosaurs/configuretheme.action"/>
</theme>
```

Note that two new parameters have been specified in the above xml.

- space-config-path points to the action connected with the space theme configuration.
- global-config-path points to the action connected with the global theme configuration.

As themes can be specified either on a global or space level, different configuration actions can be implemented for each level. If there is no need for configuration on a level, simply don't specify the config path.

XWork Actions

Specify the configuration actions via the Xwork plugin module.

Define two packages, one for the space-level and one for the global configuration.
configuretheme defines the velocity file used to display the input view.
doconfiguretheme defines the action to redirect to after the configuration was successful.

Note that the config-path parameters specified above matches the namespace plus the name of the action.

For example, given the above atlassian-plugin.xml, the configuretheme action would be accessed at

```
http://yourserver/confluence/themes/dinosaurs/configuretheme.action
```

! The namespace of the global action has to start with /admin. Otherwise the action will not be decorated by the admin decorator, and the navigation of the admin area will not be visible.
Saving Theme Configurations with Bandana

This page last changed on Nov 14, 2006 by jnolen.

To persist the configuration of a theme you can make use of the Bandana persistence framework. For example, the Left Navigation Theme uses the persister to store it's configuration values.

### Defining a Settings Bean

The recommended way of saving the settings, is to create a simple configuration bean which implements the Serializable interface. The bean for the Left Navigation Theme for example, simply consists of two String variables and their getter and setter methods.

```java
package com.atlassian.confluence.extra.leftnavigation;
import java.io.Serializable;
public class LeftNavSettings implements Serializable {
    private String space;
    private String page;

    public String getSpace() {
        return space;
    }

    public void setSpace(String space) {
        this.space = space;
    }

    public String getPage() {
        return page;
    }

    public void setPage(String page) {
        this.page = page;
    }
}
```

### Saving the Bean

Bandana can be used to save a configuration object with a given context, where the context refers to a space. The setValue function of the BandanaManager has three arguments:

- @param context The context to store this value in
- @param key The key of the object
- @param value The value to be stored

```java
// Create a setting bean.
LeftNavSettings settings = new LeftNavSettings();
settings.setSpace("example Space");
```
settings.setPage("example Page");

// Save the bean with the BandanaManager
bandanaManager.setValue(new ConfluenceBandanaContext(spaceKey), THEMEKEY, settings);

A Context can be defined on two levels:

- Global: new ConfluenceBandanaContext()
- Space level: new ConfluenceBandanaContext(spaceKey)

Retrieving the Bean

The configuration object can be retrieved by using bandanaManager.getValue. This method will get the configuration object, starting with the given context and looking up in the context hierarchy if no context is found.

- @param context The context to start looking in
- @param key The key of the BandanaConfigurationObject object
- @return Object object for this key, or null if none exists.

LeftNavSettings settings = (LeftNavSettings) bandanaManager.getValue(new ConfluenceBandanaContext(spaceKey), THEMEKEY);
Updating a theme for editable comments

This page last changed on Feb 05, 2007 by mryall.

This is a simple how-to that shows the steps to upgrade your plugin for editable comments.

Modify `sharedcomments.vmd`

Making your themes compatible with editable comment only requires modifying `sharedcomments.vmd`. There are 3 parts to update. A good example of this is the Clickr Theme.

Adding the edit link

First to enable editable comment you will need to give access to the edit function.
Adding the link is as simple as adding the following piece of code near your existing 'Permalink' and 'Remove Comment' links:

```groovy
#if ($permissionHelper.canEdit($remoteUser, $comment ))
    <a id="edit-$comment.id" href="$req.contextPath$generalUtil.customGetPageUrl($page)showComments=true&amp;editComment=true&amp;focusedCommentId=$comment.id#comment-$comment.id">$action.getText('edit.name')</a>
#end
```

Enable inline editing

Editing a comment happens inline. Therefore the editor must be added when rendering the comment being edited as follow:

```groovy
#if ($focusedCommentId == $comment.id && $action.editComment && $permissionHelper.canEdit($remoteUser, $comment))
    <form name="editcommentform" method="POST" action="$req.contextPath/pages/doeditcomment.action?pageId=$page.id&amp;commentId=$comment.id">
        <Component name='content' theme='notable' template='wiki-textarea.vm'/>
        #param ("formname" "editcommentform")
        #param ("spaceKey" "$generalUtil.urlEncode($spaceKey)")
        #param ("rows" 15)
        #param ("cols" 70)
        #param ("width" "100\%")
        #param ("tabindex" "4")
        #param ("tdcolor" "f0f0f0")
        #param ("toolbarExpanded" "false")
        #param ("initialFocus" "false")
        #param ("edit" "true")
        #param ("heartbeat" "false")
        #param ("wysiwygContent" "$comment.content")
        #param ("wikiContent" "$action.helper.wikiStyleRenderer.convertWikiToXHtml($comment.toPageContext(), $comment.content)"
    </form>
    #commentSubmission()
#else
    ## your current comment rendering...
#end
```

Add update information
This step is optional but it always nice for user to know when a comment has been updated and by who. The following piece of code gets the necessary information.

```java
if ($action.helper.shouldRenderCommentAsUpdated($comment) )
    if ( $comment.creatorName == $comment.lastModifierName )
        $action.getText("comment.updated.by.author", ["#usernameLink ($comment.lastModifierName)", $action.dateFormat.formatDateTime( $comment.lastModificationDate )])
    else
        $action.getText("comment.updated.by.non.author", ["#usernameLink ($comment.lastModificationName)", $action.dateFormat.formatDateTime( $comment.lastModificationDate )])
end
```

The `shouldRenderCommentAsUpdated` method is a convenience method that checks whether the comment has been updated by its creator more than 10 minutes after being created. It exists so that comments will not get cluttered with useless information because of a quick fix made shortly after the comment is posted. One can adjust the time frame by passing a number of seconds as the second argument to this method.

Finally, if the updater of the comment is different to the original author of the comment, his name is displayed.
Trigger Plugins

Trigger plugin modules are available in Confluence 2.2 and later.

Trigger plugin modules enable you to schedule when your Job Plugins are scheduled to run Confluence.

- For more information about plugins in general, read [Confluence Plugin Guide](http://confluence.atlassian.com/display/DOC/Confluence+Plugin+Guide).
- To learn how to install and configure plugins (including macros), read [Installing and Configuring Plugins manually](http://confluence.atlassian.com/display/DOC/Installing+and+Configuring+Plugins+manually).
- For an introduction to writing your own plugins, read [Writing Confluence Plugins](http://confluence.atlassian.com/display/DOC/Writing+Confluence+Plugins)

Trigger Plugin Module

The Trigger plugin module schedules Jobs within a plugin. Triggers are one of two types:

- cron - jobs are scheduled using cron syntax
- simple - jobs are scheduled to repeat every X seconds

Here is an example `atlassian-plugin.xml` fragment containing a Job with it's corresponding Trigger module using a cron-style expression (for reference, this expression will execute the job with key 'myJob' every minute):

```xml
<atlassian-plugin name="Sample Component" key="confluence.extra.component">
  ...
  <job key="myJob"
       name="My Job"
       class="com.example.myplugin.jobs.MyJob" />
  <trigger key="myTrigger" name="My Trigger">
    <job key="myJob" />
    <schedule cron-expression="0 * * * * ?" />
  </trigger>
  ...
</atlassian-plugin>
```

For the `<trigger>` element:

- the name attribute represents how this component will be referred to in the Confluence interface.
- the key attribute represents the internal, system name for your Trigger.
- the class attribute represents the class of the Job to be created. The class must have a no-argument constructor, or it will not be able to be instantiated by Confluence.

For more details on the cron expressions, see the Quartz documentation for [CronTrigger](http://www.quartz-scheduler.org/docs/index.html#Schedules).

Here is another example, this time using a simple trigger that repeats every 360000 seconds (1 hour) and will only repeat 5 times:

```xml
... <trigger key="myTrigger" name="My Trigger">
  ...
```

...
<job key="myJob" />
<schedule repeat-interval="360000" repeat-count="5" />
</trigger>
...

User Macro Plugins

This page last changed on Jan 17, 2007 by jnolen.

You can create user macros without writing a plugin through the User Macros administration menu.

Adding a user macro plugin

User Macros are a kind of Confluence plugin module.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

User macro plugin modules are available in Confluence 2.3 or later

User Macro Plugin Modules

User macro plugin modules allow plugin developers to define simple macros directly in the atlassian-plugin.xml file, without writing any additional Java code. User macro plugin modules are functionally identical to User Macros configured through the administrative console, except that they can be packaged and distributed in the same way as normal plugins.

User macros installed by plugin modules do not appear in the user macro section of the administrative console, and are not editable from within the user interface. They appear just as normal plugin modules in the plugin interface.

Configuring a Macro Plugin Module

Macro plugin modules are configured entirely inside the atlassian-plugin.xml file, as follows:

```xml
<atlassian-plugin name='Hello World Macro' key='confluence.extra.helloworld'>
  <plugin-info>
    <description>Example user macro</description>
    <vendor name='Atlassian Software Systems' url='http://www.atlassian.com'/>
    <version>1.0</version>
  </plugin-info>
  <user-macro name='helloworld' key='helloworld' hasBody='true' bodyType='raw' outputType='html'>
    <description>Hello, message</description>
    <template><![CDATA[Hello, $body!]]></template>
  </user-macro>
</atlassian-plugin>
```

- The <template> section is required, and defines the velocity template that will be used to render...
the macro
- All the velocity variables available in User Macros are available in user macro plugin modules
- The name and key of the macro must be specified the same as Macro Plugins
- No class attribute is required
- The attributes of the <user-macro> element match the corresponding configuration for user macros:

### Available Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Required</th>
<th>Default Value</th>
<th>Allowed Values</th>
</tr>
</thead>
</table>
| hasBody    | No       | false         | true – the macro expects a body (i.e. \{hello\}World\{hello\})
|            |          |               | false – the macro does not expect a body (i.e. Hello, \{name\}) |
| bodyType   | No       | raw           | raw – the body will not be processed before being given to the template
|            |          |               | escapehtml – HTML tags will be escaped before being given to the template
|            |          |               | rendered – the body will be rendered as wiki text before being given to the template |
| outputType | No       | html          | html – the template produces HTML that should be inserted directly into the page
|            |          |               | wiki – the template produces Wiki text that should be rendered to HTML before being inserted into the page |
Velocity Context Plugins

This page last changed on Jan 17, 2007 by jnolen.

Velocity Context plugin modules are available in Confluence 1.4 and later

Velocity Context plugin modules enable you to add components to Confluence's velocity context, making those components available in templates rendered from decorators, themes, XWork actions or macros.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

Velocity Context Plugin Module

Each component module adds a single object to Confluence's default velocity context. This context is the collection of objects that are passed to each velocity template during rendering of macros, decorators, themes and XWork actions. This allows you to create helper objects that perform tasks too complex to represent in Velocity templates.

The objects are autowired by Spring before being added to the context.

Here is an example atlassian-plugin.xml file containing a single velocity context module:

```xml
<atlassian-plugin name="Sample Component" key="confluence.extra.component">
  ...
  <velocity-context-item key="myVelocityHelper"
    name="My Plugin's Velocity Helper" context-key="myVelocityHelper"
    class="com.example.myplugin.helpers.MyVelocityHelper" />
  ...
</atlassian-plugin>
```

- the name attribute represents how this component will be referred to in the Confluence interface.
- the key attribute represents the internal, system name for your component.
- the context-key attribute represents the variable that will be created in Velocity for this item. So if you set a context-key of myVelocityHelper, the object will be available as $myVelocityHelper in Velocity templates
- the class attribute represents the class of the component to be created. The class must have a no-argument constructor, or it will not be able to be instantiated by Confluence.
Web UI Plugins

This page last changed on Mar 05, 2007 by jnolen.

⚠️ Web UI plugin modules are available in Confluence 2.2 and later.

Web UI plugin modules allow you to insert links, tabs and sections of links into the Confluence web interface. They're not much use on their own, but when combined with XWork-WebWork Plugins they become a powerful way to add functionality to Confluence.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

Sections and Items

Web UI plugins can consist of two kinds of plugin modules:

- web-item modules define links that are to be displayed in the UI at a particular location
- web-section modules define a collection of links to be displayed together

Web items or web sections (referred to collectively as 'web fragments') may be displayed in a number of different ways, depending on the location of the fragment and the theme under which it is being displayed.

Locations

In a number of places in the Confluence UI, there are lists of links representing operations relevant to the content being viewed. These are the locations that you can customise:

<table>
<thead>
<tr>
<th>Location key</th>
<th>Themeable?</th>
<th>Sectioned?</th>
<th>Description</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>system.admin</td>
<td>☒</td>
<td>✓</td>
<td>The links in the left-hand menu on the global administrative console</td>
<td>2.2</td>
</tr>
<tr>
<td>system.space</td>
<td>✓</td>
<td>☒</td>
<td>The tabs in 'Browse Space'</td>
<td>2.2</td>
</tr>
<tr>
<td>system.space.admin</td>
<td>☒</td>
<td>✓</td>
<td>The links in the left-hand menu on the space administrative tab</td>
<td>2.2</td>
</tr>
<tr>
<td>system.space.advanced</td>
<td>☒</td>
<td>✓</td>
<td>The links in the left-hand menu on the space advanced tab</td>
<td>2.2</td>
</tr>
<tr>
<td>System Space Pages</td>
<td>2.2</td>
<td>The 'sub-tabs' in Browse Space □ Pages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-----</td>
<td>--------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Space Labels</td>
<td>2.2</td>
<td>The 'sub-tabs' in Browse Space □ Labels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Space Actions</td>
<td>2.2</td>
<td>The action icons in the top-right of most space-related views</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Page</td>
<td>2.2</td>
<td>The tabs for 'View Page'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Page Actions</td>
<td>2.3</td>
<td>The action icons in the top right of the page view (eg. Watch this page)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System News</td>
<td>2.2</td>
<td>The tabs for 'View News'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Labels</td>
<td>2.2</td>
<td>The 'sub-tabs' in the global label view</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Profile</td>
<td>2.2</td>
<td>The tabs above the user profile</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Those locations marked as being 'themeable' can be moved around, reformatted or omitted by [Theme Plugins](#). The descriptions above refer to where they are located in the default theme.
- Locations marked as being 'sectioned' require that web items be grouped under web sections. In sectioned locations, web items that are not placed under a section will not be displayed.
- It is possible for themes to make any themeable locations sectioned, even when the default theme doesn't. We do not recommend this, as it would mean any plugin taking advantage of this would only be compatible with a particular theme.

### Theme Compatibility
Themes based on Confluence versions prior to 2.2 will continue to function with Confluence 2.2, but will not be able to display any custom Web UI fragments until they are updated.

### Web Item Definition

Here's a sample atlassian-plugin.xml fragment for a web item:

```xml
<web-item key="spacelogos" name="Space Logo" section="system.space.admin/looknfeel" weight="40">
    <label key="configure.space.logo" />
    <link>/spaces/configurespacelogo.action?key=$helper.spaceKey</link>
    <icon height="16" width="16">
        <link>/images/icons/logo_add_16.gif</link>
    </icon>
</web-item>
```
- The key is the required plugin module key, which must be unique within the plugin. It is also used in the UI for determining which module is currently being displayed.
- The name is a required displayable name for the module, only used in the plugin administrative UI.
- The section is the required location into which this web item should be placed. For non-sectioned locations, this is just the location key. For sectioned locations it is the location key, followed by a slash ('/'), and the name of the web section in which it should appear.
- The weight is required, and determines the order in which web items appear. Items are displayed top to bottom or left to right in order of ascending weight. (i.e. the 'lightest' weight is displayed first, the 'heaviest' weights sink to the bottom)
- The label element is required, and is the i18n key that will be used to look up the textual representation and mouse-over text of the link.
- The link element is required, and defines where the web item should link to. The contents of the link element will be rendered using Velocity, allowing you to put dynamic content in links. For more complex examples of links, see below.
- The icon element is optional, and defines an icon to display with or as the link.
- The condition element is optional, and defines a condition that must be satisfied for the web item to be displayed. If you want to 'invert' a condition, add an attribute 'invert="true"' to it. The web item will then be displayed if the condition returns false (not true).

### Label elements

Label elements may contain optional parameters, as shown below:

```xml
<label key="navlink.attachments">
  <param name="param0">$!helper.page.title</param>
  <param name="param1">$!helper.numberOfAttachments</param>
</label>
```

- The parameters allow you to insert values into the label using Java's MessageFormat syntax.
- Parameter names must start with param and will be mapped in alphabetical order to the substitutions in the format string.
- Parameter values are rendered using Velocity, allowing you to include dynamic content.

### Link elements

Link elements may contain additional information:

```xml
<link linkId="editPageLink"
      accessKey="@helper.action.getTextStrict('navlink.edit.accesskey')">/pages/editpage.action?pageId=@helper.page.id</link>
```

- The linkId is optional, and provides an XML id for the link being generated.
- The accessKey is optional and provides an access key for the link being generated. The contents of this element will be rendered using Velocity, allowing you to generate an access key dynamically.

⚠️  **There is no standard way for Confluence to display a web item, so depending on where the item is being displayed, some information in the configuration may be ignored. For example themes may choose not to display the icon, or may choose to only display the icon. Similarly, the linkId and accessKey are only used in some locations.**

### Condition elements
Condition elements must contain a class attribute with the fully-qualified name of a Java class. The referenced class:

- must implement `com.atlassian.confluence.plugin.descriptor.web.Condition`
- must be able to be instantiated via a no-argument constructor
- will be auto-wired by Spring before any condition checks are performed

Condition elements can take optional parameters. These parameters will be passed in to the Condition's `init()` method as a Map of String key/value pairs after autowiring, but before any condition checks are performed. For example:

```xml
<condition
class="com.atlassian.confluence.plugin.descriptor.web.conditions.PagePermissionCondition">
  <param name="permission">edit</param>
</condition>
```

Multiple condition elements can be included in a single web item. If a web item contains multiple conditions, all conditions must be satisfied for the web item to be displayed.

To invert a condition, add the attribute 'invert="true"' to the condition element. This is useful where you want to show the section if a certain condition is not satisfied.

**Web Section Definition**

Here's a sample `atlassian-plugin.xml` for a web section:

```xml
<web-section key="mail" name="Mail" location="system.space.admin" weight="300">
  <label key="space-mail" />
  <condition
class="com.atlassian.confluence.plugin.descriptor.web.conditions.NotPersonalSpaceCondition"/>
</web-section>
```

- key, name, weight, label and condition are all the same as `web-item`
- location is required, and serves the same purpose as section in `web-item`, except that a section can not be contained within another section.
- Web sections do not have links or icons.

**Q and A**

**How do I make use of sections or web items in my own themes?**

Take a look at how they are used in the default themes, you should be able to get a good idea of the necessary code. For example, here is some sample code from `space.vmd`

```vml
#foreach ($item in $action.webInterfaceManager.getDisplayableItems("system.space", $action.remoteUser, $helper))
  <li><a href="$item.link.getDisplayableUrl($req, $helper)" #if ($context == $item.key)
```
Can I create new locations for web UI plugins in my own themes?

Yes. Just pick a new key for the location or section parameters of your plugin modules. By convention, you should probably use the standard 'inverted domain name' prefix so as not to clash with anyone else's plugins. We reserve all system.* locations for Confluence's core use.

Once again, however, we don't recommend this as you end up with plugins that are only useful in your own themes. Try to at least provide an alternative set of UI modules for people who are using other themes and still want to access the same functionality. You could, for example, define alternative UI plugin modules that placed your functions in Confluence's standard locations, but have a <condition> that disabled them in favour of your custom locations if your theme was installed.

If I create a Web Item that links to my custom action, how do I make it appear in the same tabs/context as the other items in that location?

The best way is to look at the .vm file of one of the existing items in that location. You are most interested in the #applyDecorator directive being called from that file. For example viewpage.vm, which defines the "View" tab in the system.page location has the following #applyDecorator directive:

```
#applyDecorator("root")
#decoratorParam("helper" $action.helper)
#decoratorParam("mode" "view")
#decoratorParam("context" "page")
<!-- some stuff... -->
@end
```

If you were writing a plugin that was destined to be added as another item in the page tabs, your Velocity file for that action would also have to have a similar decorator directive around it:

```
#applyDecorator("root")
#decoratorParam("helper" $action.helper)
#decoratorParam("mode" "myPluginKey")
#decoratorParam("context" "page")
<!-- some stuff... -->
@end
```

Note that you should put your Web Item's plugin key as the "mode". This way, Confluence will make sure that the correct tab is highlighted as the active tab when people are viewing your action.

⚠️ In some cases, such as the browse space tabs, you may have to use "context" instead of "mode"
Workflow Plugins

This set of pages describes the Workflow Plugin. This is a work in progress and is useful as:

- An example of a reasonably complicated plugin, using macros, events and xwork actions which stores state as page properties and interacts with content entity versions and permissions.
- A starting point for discussion of what plugin-based workflow in Confluence might look like. A workflow implementation which made core Confluence changes might look different.

Here's a [description of the workflow model] implemented by the plugin.

Here's a [technical description] of the components of the Workflow Plugin.

⚠️ The workflow plugin as released in 1.4.2 does not have all the features described. It will be updated in the first 1.5DP release.

We're interested in getting feedback – how useful does the workflow model as described seem to you?
Workflow Plugin Prototype

This page describes a prototype Workflow Plugin for Confluence. After reading it you should be able to create a workflow description and use it to manage a set of pages in Confluence.

The purposes of the Confluence Workflow Plugin Prototype are:

1. To provide a simple but usable workflow system for Confluence.
2. To solicit further requirements for Workflow in Confluence.
3. To demonstrate the power of the Confluence Plugin system – the workflow plugin did not require any changes to the core of Confluence.

The feature that this does not provide is the ability of different users to see different versions of a page. This is a problem for approval workflows, where we want an edit to remain invisible to 'ordinary' users until it has been approved.

I've also written up some ideas for a minimal Approval Workflow.

Plugin Information

You will need Java and Groovy development skills to implement this plugin. This is currently provided 'as-is' without Atlassian technical support, but you can search for or post questions relating to it in the Developer Forums. Alternatively, the Atlassian partner Saikore now offers paid support.

Workflow Concepts

This section describes the concepts used in building the Workflow Plugin.

Workflow Client

This is the entity whose life cycle is managed by the workflow plugin. In this implementation a client is a Confluence page. The client is responsible for remembering which workflow it is taking part in, remembering its workflow state, and changing this state when told to by the workflow system. A client may (and should) have other state information which is not visible to the workflow system, for instance the contents of a Confluence page are not managed by the workflow system at all.

Workflow Type

This is the set of data which defines a workflow. A workflow type is assembled from collections of States, Operations, Triggers and Actions.
Workflow State

At any time a Workflow Client is in one (and only one) State. This state determines which Operations are available to be performed on the client.

Operation

An Operation may be requested by the user on a Workflow Client. An Operation itself doesn't change any state, either in the workflow system or in the Workflow Client, but simply sends a signal to the Workflow Type that this Operation has been requested on that particular Workflow Client. It is just a description meaningful to a user, associated with a code meaningful to the Workflow Type, together with security rules to determine when the Operation can be performed. The signals sent to the Workflow Type may cause one or more Triggers to fire. Whether an Operation is available on a particular Client depends on the State of the client and the group membership of the current user. In addition to Operations defined in a particular Workflow Type, all Workflow Types recognize page edit and page view operations.

Trigger

A Trigger listens for Operations, and either fires or does not fire, depending on the Operation, its internal state (if any – many simple triggers are stateless) and its implementation. When a Trigger fires it tells the set of Actions it contains to execute.

Examples of Triggers are:

1. Fire every time you receive a particular event.
2. Fire after receiving any of a set of events.
3. Fire after receiving all of a set of events, in any order. (This requires a Trigger which can maintain internal state)

Action

An Action is a piece of code which is executed in response to the firing of a Trigger.

Some Actions interact with the Workflow System:

2. Create a new Trigger.
3. Remove a Trigger.

Others interact with Confluence:

1. Restrict Page Permissions
2. Remove Page Permissions restriction.
3. Send Notification to prior editor of page.

Others could interact with the contents of the page itself:
1. Add 'Draft' warning to page contents.
2. Validate field values in the page contents.

Using The Prototype Confluence Workflow Plugin

Build and Install the Workflow Plugin

From your Confluence install directory, go to plugins/workflow or access from the Confluence source under src/etc/plugins/workflow. Build the plugin into a JAR file.

Configure groups and permissions

Decide what groups will be involved in the workflow, create them and assign appropriate users to them. Grant suitable permissions to the space.

Create a WorkflowType

You need to create an instance of a class which implements com.atlassian.confluence.extra.workflow.WorkflowType, and register it by passing it to WorkflowManager.registerType().

One way to do this on a test basis is to put your workflow type in a {script} macro. The script macro can be downloaded from [here](#). You'll need to visit the page after restarting the server.

The example below uses a Groovy script – you could just as well use Beanshell, Jython or JRuby.

```groovy
import com.atlassian.confluence.extra.workflow.*;
import com.atlassian.confluence.core.ContentPermission;
State requested = new State("test", "In Progress", "In Progress");
State readyToReview = new State("test", "Ready for review", "Ready for review");
State accepted = new State("test", "Accepted", "Accepted");
State rejected = new State("test", "Rejected", "Rejected");
def states = [DEV:requested, readyToReview, accepted, rejected];
def ops = [
    new DefaultOperation([DEV:requested, rejected], [DEV:"writer"], "completed", "Submit for Review"),
    new DefaultOperation([DEV:readyToReview], [DEV:"reviewer"], "accept", "Accept"),
    new DefaultOperation([DEV:readyToReview], [DEV:"reviewer"], "reject", "Reject"),
];
def groups = [DEV:"writer", "reviewer", "confluence-administrator"];
def triggers = [
    new SingleEventTrigger("init", [DEV:"
        new StateChangeAction(requested),
        new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.EDIT_PERMISSION,"writer")),
        new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.VIEW_PERMISSION,"writer"))
    ]),
    new SingleEventTrigger("completed", [DEV:"
        new StateChangeAction(readyToReview),
        new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.EDIT_PERMISSION,"reviewer"))
    ])
];
```
new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.VIEW_PERMISSION, "reviewer")),
],
),
new SingleEventTrigger("accept",
[DEV:
new StateChangeAction(accepted),
new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.EDIT_PERMISSION, "empty-group")),
new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.VIEW_PERMISSION, "confluence-users"))
],
),
new SingleEventTrigger("reject",
[DEV:
new StateChangeAction(rejected),
new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.EDIT_PERMISSION, "writer")),
new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.VIEW_PERMISSION, "writer"))
],
),
new SingleEventTrigger(
PageEditOperation.OPERATION_NAME,
[DEV:
new StateChangeAction(requested),
new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.EDIT_PERMISSION, "writer")),
new RestrictAccessToGroupAction(new ContentPermission(ContentPermission.VIEW_PERMISSION, "writer"))
],
),
)
); WorkflowManager.registerType(new DefaultWorkflowType("test2", "Page Review 2", states, ops, triggers, groups));

Put a \{workflowtype:yourWorkflowTypeName\} macro after your script, so you can see that it is properly creating the WorkflowType.

Create a Workflow Page

To make a page take part in the workflow you have just created, add the \{workflow:workflowTypeName\} macro to the page and hit Update.

You'll get a workflow box with the option 'Start Workflow'. Select this and the page will refresh. The workflow box will now indicate that the page is in the starting state for that workflow type.

Monitoring Workflow

You can use the \{workflowTasks\} macro to display a list of all workflow pages which are descendants of the current page. Any task which the viewing user can perform an action on will be starred.

To Do

1. More Trigger types.
3. Easy editing of WorkflowTypes.
4. Workflow of parent can depend on states of children
5. Introduce concept of 'Assignments', where at one workflow step a particular user is assigned to a role which nominates them to perform other operations.
6. Think about the visual style – the current style is good for when workflow is 'out of band', that is, it's an activity undertaken by site maintainers invisible to site users, but doesn't suit a 'Confluence as web-app' application, where workflow should blend in...
Approval Workflow

This page describes the details of an approval workflow.

- Users may be members of an 'author' group which is allowed to edit pages, an 'approver' group which is allowed to approve edited pages, or both groups (in which case they can't approve their own changes) or neither (in which case they are just consumers of the content).

- When an 'author' edits a page, the page goes into a 'editing in progress' state.

- When an author views an 'editing in progress' page, they are presented with an option to submit the page for review. This puts the page into the 'waiting for approval' state.

- Members of the approver group have access to a page in confluence which automatically lists the pages waiting for approval.

- When an 'approver' visits a 'waiting for approval' page, they are presented with options to accept or reject the changes. If they accept the changes, the page goes to the 'accepted' state, where pages spend most of their life, otherwise it goes to the 'rejected' state.

- Members of the 'author' group have access to a page in Confluence where they can see all the pages which they edited which have been rejected, or are waiting for approval. They don't see pages other authors have edited.

- When an author visits a page in the 'rejected' or 'waiting for approval' state, they have the option of withdrawing the change, which moves the page to the accepted state, and rolls back to the most recent approved version.

- When an author edits a page in the rejected state, it moves to the 'editing in progress' state.

All of this can be done with the Workflow Plugin Prototype.

But we probably also want to show consumers the most recently approved version of a page, not the one currently under review. Without core Confluence changes, the best we can do is show users a banner which says "This content is being reviewed. The most recent approved content is here".
XWork-WebWork Plugins

This page last changed on Mar 05, 2007 by jnolen.

XWork plugin modules are available in Confluence 1.4 and later.

XWork plugin modules enable you to deploy XWork / WebWork actions and views as a part of your plugins.

- For more information about plugins in general, read Confluence Plugin Guide.
- To learn how to install and configure plugins (including macros), read Installing and Configuring Plugins manually.
- For an introduction to writing your own plugins, read Writing Confluence Plugins

The XWork Plugin Module

Each XWork module is deployed as a plugin module of type xwork and contains one of more XWork package elements.

Here is an example atlassian-plugin.xml file containing a single XWork module:

```xml
<atlassian-plugin name='List Search Macros' key='confluence.extra.livesearch'>
  ...
  <xwork name="livesearchaction" key="livesearchaction">
    <package name="livesearch" extends="default" namespace="/plugins/livesearch">
      <default-interceptor-ref name="defaultStack" />
      <action name="livesearch"
        class="com.atlassian.confluence.extra.livesearch.LiveSearchAction">
        <result name="success" type="velocity">
          /templates/extra/livesearch/livesearchaction.vm
        </result>
      </action>
    </package>
  </xwork>
</atlassian-plugin>
```

- the xwork element has no class attribute.
- beneath this element, multiple package elements can be specified. These are standard XWork package elements, just as you would specify in xwork.xml.

Writing an Action

For information on how to write a WebWork action, please consult the WebWork documentation.

WebWork actions must implement com.opensymphony.xwork.Action. However, we recommend you make your action extend ConfluenceActionSupport, which provides a number of helper methods and components that are useful when writing an Action that works within Confluence.

Other action base-classes can be found within Confluence, but we recommend you don't use them - the
hierarchy of action classes in Confluence is over-complicated, and likely to be simplified in the future in a way that will break your plugins.

**Accessing Your Actions**

Actions are added to the XWork core configuration within Confluence, which means they are accessed like any other action!

For example, given the above `atlassian-plugin.xml`, the `livesearch` action would be accessed at `http://yourserver/confluence/plugins/livesearch/livesearch.action`.

**Notes**

Some issues to be aware of when developing or configuring an XWork plugin:

- Your packages should almost always extend the `default` Confluence package. It is useful to be aware of what this provides to you in the way of interceptors and result types.
- You can give your packages any namespace you like, but we recommend using `/plugins/unique/value` - that is prefixing plugin packages with `/plugins` and then adding a string globally unique to your plugin. The only name you can't use is `servlet` as the `/plugins/servlet` URL pattern is reserved for Servlet plugins.
- Views must be bundled in the JAR file in order to be used by your actions. This almost always means using Velocity views.
- It is useful to be aware of the actions and features already bundled with Confluence, for example your actions will all be auto-wired by Spring (see Accessing Confluence Components From Plugin Modules) and your actions can use useful interfaces like PageAware and SpaceAware to reduce the amount of work they need to do.

**Example**

The LiveSearch example is a neat example of an Ajax-style Confluence plugin which uses a bundled XWork module to do it's work:

Find this example in the `/plugins/macros/livesearch` directory within your Confluence distribution.
Plugin Self-Configuration

This page last changed on Mar 05, 2007 by jnolen.

⚠️ Plugin configuration is available in Confluence 2.2 and later. Versions of Confluence before 2.1 will simply ignore any of these parameters

Plugins can specify internal links within Confluence to configure themselves. This is useful where your plugin requires any configuration or user specific settings to work. For example, the Google Maps plugin requires a Google API Key from Google (which needs to be configured on each server) before it will work properly.

- Configuration links will most often point to XWork plugin modules within the plugin itself
- Configuration links can be provided for a whole plugin and/or for any module within a plugin
- Configuration links are relative to the Confluence application

Plugin configuration - to add a configuration link for the whole plugin, place a single param element with the name configure.url within the plugin-info element at the top of the plugin descriptor:

```xml
<plugin-info>
  <description>A macro which displays Google maps within a Confluence page.</description>
  <vendor name="Atlassian Software Systems Pty Ltd" url="http://www.atlassian.com/">
    <version>0.1</version>
    <param name="configure.url">/admin/plugins/gmaps/configurePlugin.action</param>
  </vendor>
</plugin-info>
```

Plugin module configuration - to add a configuration link for a single module, place the same param element with the name configure.url within the descriptor element for that module:

```xml
<macro name="gmap" class="com.atlassian.confluence.ext.gmaps.GmapsMacro" key="gmap">
  <description>The individual map macro.</description>
  <param name="configure.url">/admin/plugins/gmaps/configureMacro.action</param>
</macro>
```

Here is an image showing where the Configure links appear for both a plugin and an individual module:
Customise Confluence Page Exports

This page last changed on Dec 18, 2006 by david.soul@atlassian.com.

Modify the style or content of the following page exports:

- Customise Adobe PDF Exports
- Customise MS Word Exports
Customise Adobe PDF Exports

This page last changed on Apr 30, 2007 by malam.

Confluence pages can be output to PDF and some resulting PDF content can be modified. While page content itself is not open to customisation without major source-code modifications, this guide covers the easier task of modifying the plain text contained in page titles, headers and footers and page size.

### Change PDF page size

#### How to Change the page size

The default PDF page size is A4 (210mm x 297mm or 8.27in x 11.7in). Modify the file under your Confluence install directory:

```
.../confluence/WEB-INF/classes/com/atlassian/confluence/importexport/common_fop.vm
```

To change the page size for PDF export, page-width and page-height parameters have to be edited in the above mentioned file. Locate the line

```
<fo:simple-page-master margin-right="2cm" margin-left="2cm" margin-bottom="1cm" margin-top="1cm" page-width="21cm" page-height="29.7cm" master-name="all-pages">
```

and change the values for page-width and page-height as required.

This file is pretty self-explanatory. Change to the following values:

- page-width="21.59cm"
- page-height="27.94cm"

Optionally you can modify the margins. To give the page a half-inch margin all around:

- margin-right="1.27cm"
- margin-left="1.27cm"
- margin-bottom="1.27cm"
- margin-top="1.27cm"

### Landscape orientation

To change the default A4 +Portrait+ size to +Landscape+ follow the instructions below:

By default the page orientation for PDF export is set to "Portrait" with page-width="21cm" and page-height="29.7cm". To change the orientation to Landscape, swap the page-width and page-height measurement values as shown below:
This will generate a PDF export with a Landscape orientation.

**Editing PDF content**

How to edit PDF content:

Confluence uses Apache FOP to write Confluence content to XSL-FO format, and uses Velocity macro files to render PDF headers, footers and page titles. For information on more content editing, study the [XSL-FO examples](#).

Always stop Confluence before editing a Velocity macro file. Users who are stuck can obtain technical assistance by posting the modified Velocity file to the [Confluence Developer Forum](#).

**List Of PDF-Related Files**

- `.../confluence/WEB-INF/classes/com/atlassian/confluence/importexport/common_header_fop.vm`
- `.../confluence/WEB-INF/classes/com/atlassian/confluence/importexport/common_footer_fop.vm`
- `.../confluence/WEB-INF/classes/com/atlassian/confluence/importexport/common_fop.vm`
- `.../confluence/WEB-INF/classes/com/atlassian/confluence/pages/Page.pdfexport.vm`

- The above example is for Unix-based systems, so Windows users should use back-slashes instead forward-slashes
- An example Windows install directory is `C:\confluence-2.2.9-std`
- An example Linux install directory is `/opt/confluence-2.2.9/`

**Text**

Inserting the example XSL-FO tag below into the relevant Velocity macro file will output a new line with This text is printed in plain text.

```xml
<fo:block text-align="left" font-family="$generalUtil.getDefaultFontFamily()" color="#0050B2">
  This text is printed
</fo:block>
```

**Images**

There are two steps involved in adding images to the header and the footer:

1. You need to modify common_fop.vm and adjust the margins, and sizes of the two regions (region-before and region-after) to fit in the image.

```xml
<fo:region-before extent="1cm"/>
<fo:region-after extent="1cm"/>
```
In the example above, change the "1cm" value to allow yourself as much space as you need for your customization.

2. Insert the example XSL-FO tag below into the relevant Velocity macro file to embed the local image C:\\operahouse.png into the PDF.
   If using windows, please make sure to use forward slashes, instead of backslashes while specifying directory paths.
   Eg: Use "c:\images\operahouse.png" for windows and "c:/images/operahouse.png" for Unix.

Modifying Page Title

Modify page title for single page export

This title appears once on the first page of the PDF. An example title is

Demonstration Space : Timesheets
This page last changed on Nov 02, 2006 by Administrator

To modify the page title, go to your Confluence install directory and modify the Velocity macro file

...\confluence\WEB-INF\classes\com\atlassian\confluence\pages\Page.pdfexport.vm

The file contents are shown below

Explanation of the Velocity code from the above example

<table>
<thead>
<tr>
<th>Velocity Code</th>
<th>Prints</th>
</tr>
</thead>
<tbody>
<tr>
<td>$generalUtil.escapeXml($page.space.name)</td>
<td>Space Name</td>
</tr>
<tr>
<td>$rendererBean.nativeToAscii($generalUtil.escapeXml($page.title))</td>
<td>Page Title</td>
</tr>
</tbody>
</table>

Modify Page Headers for Space Export

How to modify page headers
By default, no page header is printed with PDF exports. To add one, go to your Confluence install directory and modify the Velocity macro file

```text
...\confluence\WEB-INF\classes\com\atlassian\confluence\importexport\common_header_fop.vm
```

### Example Header Modification

In between the two FO lines, add

```text
<fo:block text-align="left" font-family="$generalUtil.getDefaultFontFamily()" color="#0050B2">
  Custom Header
</fo:block>
```

### Example Header Modification with Banner

Below is a sample common_header_fop.vm velocity template for header with Banner. You need to update the value of `<fo:region-before extent="1cm"/>` on common_fop.vm template into 4 or 5 cm according to the size of your banner.

```text
<fo:static-content flow-name="xsl-region-before">
  <fo:table width="100%" table-layout="fixed" font-family="serif" font-size="10pt">
    <fo:table-column column-width="14cm"/>
    <fo:table-column column-width="3cm"/>
    <fo:table-body>
      <fo:table-row>
        <fo:table-cell color="grey">
          <fo:block text-align="left" font-family="$generalUtil.getDefaultFontFamily()" color="#0050B2">
            <fo:external-graphic width="auto" height="auto" src="/home/malam/Desktop/Temp/Top_Banner.jpg"/>
          </fo:block>
        </fo:table-cell>
        <fo:table-cell color="grey">
          <fo:block text-align="right">
            This is your Customer Header
          </fo:block>
        </fo:table-cell>
      </fo:table-row>
    </fo:table-body>
  </fo:table>
</fo:static-content>
```

A Sample of Custom PDF Header with A Banner on the top
A Sample of Custom PDF Header with A Logo on the Right Top

Modify Page Footers for Space Export

How to modify page footer

Page footers appear on the bottom of every page. An example footer is

![Document generated by Confluence on Dec 11, 2006 09:35](https://example.com)

To modify the footer, go to your Confluence install directory and modify the Velocity macro file

```...\confluence\WEB-INF\classes\com\atlassian\confluence\importexport\common_footer_fop.vm```

Example Footer Modification

To produce this footer

```Created on Dec 11, 2006 11:43
Copyright Atlassian Software
```

Locate this line in `common_footer_fop.vm`
Replace it with the following Velocity code

```
<fo:block>Created on $generalUtil.formatDateTime($exportDate)</fo:block>
<fo:block>Copyright Altassian Software</fo:block>

To produce a footer with a ruler on top and page number on right and some copy right content on bottom then you can use the sample common_footer_fop.vm template below

```
<fo:static-content flow-name="xsl-region-after">
  <fo:block>
    <fo:leader leader-pattern="rule" leader-length="100%"/>
  </fo:block>
  <fo:table width="100%" table-layout="fixed" font-family="serif" font-size="10pt">
    <fo:table-column column-width="14cm"/>
    <fo:table-column column-width="3cm"/>
    <fo:table-body>
      <fo:table-row>
        <fo:table-cell color="grey">
          <fo:block>Document generated by Confluence on $dateFormatter.formatDateTime($exportDate)</fo:block>
          <fo:block>Created on $generalUtil.formatDateTime($exportDate)</fo:block>
          <fo:block>Copyright Altassian Software</fo:block>
        </fo:table-cell>
      </fo:table-row>
    </fo:table-body>
  </fo:table>
</fo:static-content>
```

Sample PDF Footer Image:
Customise MS Word Exports

Overview

Confluence exports a Confluence page as a Microsoft Word document by:

1. Generating the HTML rendering of a page from Confluence wiki markup
2. Overriding some Confluence page styles with MS Word styles using a CSS wrapper

The wrapper is generated using a Velocity macro to provide CSS style information specific to MS Word exports.

Modifying Content

Please do not attempt to modify the output without some experience in CSS and HTML markup. You may also need to review Velocity template language.

- W3Schools CSS Tutorial
- W3Schools HTML Tutorial
- Velocity Template Overview

Before modifying any styles, you should always take a backup of both any files you are modifying and your entire Confluence install directory. If you require assistance with your customisation attempt, you should post your modified files along with a technical description to our Confluence Developer Forum.

Important Files

The formatting is defined using the CSS styles in main Confluence stylesheet and overridden by any styles in the Word export wrapper.

Main Stylesheet

This file formats the default appearance of all Confluence content. Changes to this document will be shown when viewing a page from within Confluence, as well as in HTML or MS Word exports. You should avoid changing this document unless you wish a style to be changed throughout Confluence. The file is located under the Confluence install directory:

```plaintext
...\confluence\WEB-INF\classes\styles\site-css.vm
```

Export Wrapper

This file overrides the main Confluence stylesheet, so styles outlined in this file will be specific to MS
Word exports. It set the font and style for body text, some macro and grids, and a default background colour. The file is located under the Confluence install directory:

```bash
...\confluence\pages\exportword.vm
```

**How To Modify Styles**

If the CSS tag already exists in the Word export wrapper, you can modify it directly. If the CSS tag is defined by the main stylesheet, copy it into the export wrapper as a new entry in the `<style>` element and update it there:

1. Identify its CSS tag in the main stylesheet. You may need to use trial and error to identify which cascading property is relevant
2. Transfer the tag into the Word export wrapper so that it overrides the main stylesheet
3. Modify the tag style in the wrapper

**Common Modifications**

You can easily set the body font or background colour in the export wrapper.

**Modify Body Font**

The wrapper sets the body font:

```css
body, p, td, table, tr, .bodytext, .stepfield {
  font-family: Verdana, arial, sans-serif;
}
```

**Modify Background Colour**

The wrapper sets the background colour:

```html
<body style="background-color: white; padding: 10px;">
<h1>$page.title</h1>
$renderedPageContent
</body>
```
Getting Started

This page last changed on Mar 28, 2007 by jnolen.

This is a quick guide to getting off the ground when starting a new plugin for Confluence.

The Guide

Building and Deploying Confluence has been broken into a series of steps.

1. Initial development environment setup
2. Building and Deploying Confluence in IDEA
   • Setup Confluence Source Code For Development
   • Creating an IDEA project with a Confluence distribution
3. Building and Deploying Plugins in IDEA
   • Setting up a new Confluence plugin
   • Working on an existing Confluence plugin
4. Packaging and releasing a plugin

Extra Information

- Development Tips
- Plugin Project Files
- Confluence Plugin Development Kit
- Userinfo Plugin Tutorial
- Developing with Eclipse
Building and Deploying Confluence has been broken into a series of steps.

1. Initial development environment setup
2. Building and Deploying Confluence in IDEA
   - Setup Confluence Source Code For Development
   - Creating an IDEA project with a Confluence distribution
3. Building and Deploying Plugins in IDEA
   - Setting up a new Confluence plugin
   - Working on an existing Confluence plugin
4. Packaging and releasing a plugin
Building and Deploying Confluence in IDEA

This page last changed on Apr 04, 2007 by david.soul@atlassian.com.

Please ensure you have completed the Initial development environment setup before following this guide.

There are two main ways of deploying Confluence inside IDEA. The main reason you would want to is so that you can debug your plugins.

Confluence Source

This is the preferred of the two, since it will allow you to step through Confluence code as well as your own plugin code when debugging. However, it is only available if you have a source code license, which generally only comes with a full Commercial license.

Confluence Distribution

The other way is to get a regular Confluence distribution running inside IDEA. This works just fine, but you won’t be able to step into code outside your own plugin.

<table>
<thead>
<tr>
<th>I have the source code</th>
<th>I just have a regular distribution</th>
</tr>
</thead>
</table>
Compiling and Running Confluence

Now that it's set up, we should make sure it's all working by getting it to run inside IDEA.

1. Click the 'confluence' module and then select 'Build > Make Project' from the menu. Alternately, click the button.
2. From the drop-down beside the button, select your app server (eg. 'Tomcat').
3. Click the button next to the app server drop-down.

⚠️ The most common problem here is that the JDK has not been set up correctly. If you have a problem, check the following:

1. Right-click on the 'confluence' module in the project window and select 'Module Settings' at the bottom of the popup-window.
2. Select the 'Libraries' tab
3. Check that a valid JDK has been selected for the module.
4. Check the other modules in the project for the same.
Creating an IDEA project with a Confluence distribution

This page last changed on Apr 04, 2007 by david.soul@atlassian.com.

Please ensure you have completed the Initial development environment setup properly before following this guide.

This page is useful for academic and open-source customers who do not have access to the Confluence source distribution. If you are a commercial customer, you should download the Confluence source and follow these instructions.

Getting the EAR/WAR distribution

1. Download the latest EAR/WAR distribution release of Confluence and expand it to a location on your hard disk (we'll call it 'CONFBASE')
2. Download confluence-dist.zip file, which contains stripped-down project files for Maven, expand it and copy it's contents into root of your Confluence release (CONFBASE).
3. Open the contained build.properties file in a text editor and adjust it to meet your environment settings. In particular, pay attention to the following:
   - JDK Version - This should be set to whatever your target JDK is called in IDEA. On Mac OS X, this is usually '1.4' or '1.5' (without quotes). Eg:
     ```
     atlassian.idea.jdk.name=1.4
     ```
   - Application Server Settings - Uncomment these and point to your app server installation. Only uncomment the ones you actually have installed. Eg:
     ```
     atlassian.idea.tomcat.location=/apache-tomcat-5.5.12
     atlassian.idea.resin3.location=$PATH_TO_MY_INSTALLATION
     atlassian.idea.resin.location=$PATH_TO_MY_INSTALLATION
     atlassian.idea.orion.location=$PATH_TO_MY_INSTALLATION
     ```
   - Application Settings - The settings in which your application server will launch confluence. The settings below will allow you to access the running server at
     ```
     http://localhost:8080/confluence
     ```
     ```
     # port on which Confluence will listen
     atlassian.idea.application.port=8080
     # the context root at which Confluence will be deployed
     atlassian.idea.application.webapp.contextpath=confluence
     ```

Creating the IDEA project files

1. Open a command prompt and enter the following:
   ```
   cd $CONFBASE
   maven atlassian-idea
   ```
2. That's it! Now just open up the freshly-generated 'confluence.ipr' file in IDEA. It should look something like this:
Setting up the Confluence environment

Once the project is loaded, you will need to set up where the 'confluence home' is.

1. Open \texttt{confluence/WEB-INF/classes/confluence-init.properties}
2. Set the 'confluence.home' property to the location you want confluence data stored. An example might be $\texttt{SCONFBASE/confluence/home}$, or somewhere in your home directory. If the location doesn't exist, Confluence will try to create it when you run the webapp.

Compiling and running Confluence

Now that it's set up, we should make sure it's all working by getting it to run inside IDEA.

1. Click the 'confluence' module and then select 'Build > Make Project' from the menu. Alternately, click the \texttt{\$utton{build}} button.
2. From the drop-down beside the \texttt{\$utton{run}} button, select your app server (eg. 'Tomcat').
3. Click the \texttt{\$utton{run}} button next to the app server drop-down.

⚠️ The most common problem here is that the JDK has not been set up correctly. If you have a problem, check the following:

1. Right-click on the 'confluence' module in the project window and select 'Module Settings' at the bottom of the popup-window.
2. Select the 'Libraries' tab
3. Check that a valid JDK has been selected for the module.
4. Check the other modules in the project for the same.

What's Next?

Now that we've got Confluence running, we can start working on plugins.
| I want to start one from scratch | I want to work on an existing plugin |
Creating an IDEA project with a Confluence source release Maven1

Please ensure you have completed the steps required to develop with IntelliJ IDEA before attempting the following.

Getting the source code

Firstly, you will probably only have access to the source code if you have a commercial license. If you don’t, but feel you should, contact Atlassian and see what you can work out.

Assuming the above, do the following:

1. Download the desired version of Confluence.
2. Expand the archive to your desired location (we’ll call it $CONF_SRC)
3. Open the ‘confluence’ subdirectory under it.
4. Open the contained build.properties file in a text editor and adjust it to meet your environment settings. In particular, pay attention to the following:
   - JDK Version - This should be set to whatever your target JDK is called in IDEA. On Mac OS X, this is usually ’1.4’ or ’1.5’ (without quotes). Eg:
     atlassian.idea.jdk.name=1.4
   - Source code location - The location of extra source code. For some reason this is set incorrectly in the default source release. Set it to this:
     atlassian.idea.src.relative.location=..
   - Application Server Settings - Uncomment these and point to your app server installation. Only uncomment the ones you actually have installed. Eg:
     atlassian.idea.tomcat.location=/apache-tomcat-5.5.12
     #atlassian.idea.resin3.location=$PATH_TO_MY_INSTALLATION
     #atlassian.idea.resin.location=$PATH_TO_MY_INSTALLATION
     #atlassian.idea.orion.location=$PATH_TO_MY_INSTALLATION
     - Application Settings - The settings in which your application server will launch confluence. The settings below will allow you to access the running server at http://localhost:8080/confluence:
       # port on which Confluence will listen
       atlassian.idea.application.port=8080
       # the context root at which Confluence will be deployed
       atlassian.idea.application.webapp.contextpath=confluence
     - WAR Settings - These should already be set for you in later versions, but it’s good to check them. Eg:
       maven.multiproject.type=war
       maven.war.webxml=src/webapp/WEB-INF/web.xml
       maven.war.webapp.dir=target/exploded
     - Database Settings - If you are using an external database, set this up as documentation dictates.
Creating the IDEA project files

1. Open a command prompt and enter the following:
   
   `cd $CONFSRC/confluence
   maven atlassian-idea`

2. That’s it! Now just open up the freshly-generated ‘confluence.ipr’ file in IDEA. It should look something like this:

![IDEA project structure]

Setting up the Confluence environment

Once the project is loaded, you will need to set up where the 'confluence home' is.

1. Open `src/etc/java/confluence-init.properties`
2. Set the 'confluence.home' property to the location you want confluence data stored. An example might be $CONFSRC/confluence/home, or somewhere in your home directory. If the location doesn't exist, Confluence will try to create it when you run the webapp.

Compiling and running/debugging Confluence

Now that it's set up, we should make sure it's all working by getting it to run inside IDEA.

1. Click the 'confluence' module and then select 'Build > Make Project' from the menu. Alternately,
click the button.

The most common problem here is that the JDK has not been set up correctly. If you have a problem, check the following:
   a. Right-click on the 'confluence' module in the project window and select 'Module Settings' at the bottom of the popup-window.
   b. Select the 'Libraries' tab
   c. Check that a valid JDK has been selected for the module.
   d. Check the other modules in the project for the same.

2. From the drop-down beside the button, select your app server (e.g. 'Tomcat').
3. Click the button next to the app server drop-down.

Hopefully your project will now run and you will be able to access Confluence through your web browser.

To debug, basically switch the last step of the above to clicking the button instead of the button.

What's Next?

Now that we've got Confluence running, we can start working on plugins.

| I want to start one from scratch | I want to work on an existing plugin |
Setup Confluence Source Code For Development

This page last changed on Apr 17, 2007 by mjensen.

Software developers can customise Confluence extensively by modifying the source code. Follow the instructions to build Confluence from source using IntelliJ IDEA.

Setup Development Environment

Complete the Initial Development Environment Setup to setup your environment.

Download Confluence Source Code

Access to the Confluence source code is provided to all commercial license holders. If you don't have a commercial licence but believe you have a valid reason to need the source, you can request access.

If you have source-code access:

1. Download the desired version of Confluence.
2. Expand the archive to your desired location (we'll call it $CONFSRC)

Configure settings.xml

The settings.xml file is the file that stores the configurations that are relevant to Maven 2. This should be under your $HOME/.m2/ directory (which is located at C:\Documents and Settings[your username]\.m2 on a Windows environment). Dependencies are, by default, downloaded in $HOME/.m2/repository.

You can see an example settings.xml.

⚠️ You will need to update the <properties> section to match where you installed Tomcat and/or Resin.

If you don't have any existing file, create a new file called settings.xml and paste the example code into it. If you have already a settings.xml then just add the extra information.

⚠️ Configure your web application server. For example to configure Resin uncomment the atlassian.idea.resin.location variable and set its value to the path of your Resin installation. You can do the same with the Tomcat and Orion parameters to use different application servers. Comment out any application servers which are not relevant for you.

Install Confluence into the local Maven2 repository

Because of Maven2's dependencies you have to install Confluence into the local repository to get rid of any warning messages that pop up with maven commands. So use the following command:
> cd $CONFSRC/confluence
> mvn install -Pcore,bamboo -Dunit-test=false

⚠️ Where $CONFSRC is the root directory of the expanded confluence source release.

This will take approximately 10 minutes to run for the first time, as all the dependencies are downloaded from the Internet. Go get a cup of coffee or find a blog to read.

Building a new Standalone

You can build a Confluence standalone distribution from this source release using the 'standalone' maven profile.

1. To do this you must download the zip release of Tomcat and the Tomcat JDK 1.4 Compatibility Package. Place them in the same directory. Download them from [here](#).
2. Add two new properties to the settings.xml file described above.

   `<standalone.tomcat.zip.location>/path/to/zip</standalone.tomcat.zip.location>
   <standalone.confluence.tomcat.version>5.5.23</standalone.confluence.tomcat.version>`

3. Then run this command in the root of the confluence source.

   `mvn -Pstandalone -Dmaven.test.skip=true`

   This will create a `confluence-VERSION-std.tar.gz` and `confluence-VERSION-std.zip` in `confluence/conf-standalone/release` relative to your confluence source root.

Create the IDEA project files

Open a command prompt and enter the following:

> cd $CONFSRC/confluence
> mvn atlassian-idea:all -Pidea

That's it! Now just open up the freshly-generated 'confluence-project.ipr' file in IDEA. It should look something like this:
Setup Confluence Environment

Once the project is loaded, you will need to set up where the 'confluence home' is.

1. **Open** `src/etc/java/confluence-init.properties`
2. **Set the** 'confluence.home' **property to the location you want confluence data stored. An example might be $CONFSRC/confluence/home, or somewhere in your home directory.** If the location doesn't exist, Confluence will try to create it when you run the webapp.

Compiling and running Confluence

Now that it's set up, we should make sure it's all working by getting it to run inside IDEA.

1. **Click the** 'confluence' **module and then select 'Build > Make Project' from the menu.** Alternately, click the **button.
2. **From the drop-down beside the button, select your app server (eg. 'Tomcat').**
3. **Click the button next to the app server drop-down.**

⚠️ The most common problem here is that the JDK has not been set up correctly. If you have a problem, check the following:
1. Right-click on the 'confluence' module in the project window and select 'Module Settings' at the bottom of the popup-window.
2. Select the 'Libraries' tab
3. Check that a valid JDK has been selected for the module.
4. Check the other modules in the project for the same.

Hopefully your project will now run and you will be able to access Confluence through your web browser.

**What's Next?**

Now that we've got Confluence running, we can start working on plugins.

| I want to start a brand new plugin | I want to work on an existing plugin |
Building and Deploying Plugins in IDEA

This page last changed on Sep 26, 2006 by jnolen.

This guide assumes that you have already set IDEA to build and deploy Confluence.

There are two basic scenarios when starting plugin development with IDEA (well, in general really).

1. Starting from scratch
   You have been inspired/ordered to make Confluence to something totally new and interesting.
2. Enhancing/maintaining an existing plugin
   You want to fix some bugs or add some cool new functionality to an existing project, but you've just downloaded the source, or are switching from a different IDE.

<table>
<thead>
<tr>
<th>I want to start one from scratch</th>
<th>I want to work on an existing plugin</th>
</tr>
</thead>
</table>

Document generated by Confluence on May 01, 2007 00:44
Adding a plugin project to IDEA

This guide assumes you have set up IDEA and have

- created a new plugin from scratch or
- downloaded and set up an existing plugin.

Now that we have our web application project and our plugin projects set up, we need to connect them together. The good news is, most of the hard work has been done now.

Adding a plugin

1. Open up your main Confluence project in IDEA. Your project should look something like this:

2. Now we add the plugin project you just created. First, select 'File > New Module'.

3. Select the 'Create new module' option and click next.

4. In 'Module Content Root', select to the root directotry for the plugin.
5. After continuing, the module should now have been added to your main project.

Checking the plugin settings

Next, we check that the plugin was actually generated correctly by `atlassian-idea`. Right-click on your new plugin module and select 'Module Settings'. We'll check through the tabs one-by-one.

Paths: In addition to the `java/src` path, you should add `java/etc/`. Your source paths look something like this:

Libraries (Classpath): If your JDK is labelled 'Invalid', you need to select a JDK for your project (it should be the same one used by the main Confluence Module.

Dependencies: Make sure that your plugin depends on the 'confluence' module.

Order/Export: No changes here.

JavaDoc: This one stays as-is.

Linking the plugin to Confluence
So far, the plugin should compile nicely, but it won't actually be hooked into Confluence if you run it in Tomcat (or your chosen application server). Let's set that up.

1. Open the Module Settings for the 'tomcat_env' project (Or your application server) and switch to Dependencies.
2. Select your new plugin as a dependency.

Building and Testing your Plugin

Now, you just need to develop your plugin. Once you have some code to test, do the following:

1. Start 'Build > Make Project'. This will put the necessary files into the webapp, ready to run, including your plugin source code.
2. Run the server ('Run > Run') or set some break-points and debug it ('Run > Debug').

What Next?

Now it's up to you to build something cool. Take a look at our plugin guide to see what the possibilities are.

Once you've completed your plugin, it's time to package it for distribution.

I'm ready to package my plugin
Setting up a new Confluence plugin

This page last changed on Apr 25, 2007 by jnolen.

ℹ️ Please ensure you have set up IDEA with Confluence before following these instructions.

Creating the base plugin

Method 1: Extract the sample project

1. Download example-plugin-2.0.zip, and extract it somewhere where you can edit it.
2. Run `mvn eclipse:eclipse` to generate an Eclipse project file.

Follow the instructions in the README.txt for generating an IDE project file and customising the plugin.

The contents of the sample project are like this:

```
example-plugin/pom.xml
example-plugin/README.txt
example-plugin/src/main/java/com/example/confluence/plugin/ExampleMacro.java
example-plugin/src/main/resources/atlassian-plugin.xml
example-plugin/src/test/java/com/example/confluence/plugin/TestExampleMacro.java
```

It includes a sample macro, `ExampleMacro.java`, a test case for that macro, `TestExampleMacro.java`, and a plugin descriptor, `atlassian-plugin.xml`.

Method 2: Use the Confluence plugin archetype

This Maven archetype automatically creates a simple plugin project, customising the sample files according to the parameters you provide on the command line. The Maven archetype plugin is responsible for downloading the Confluence plugin archetype and extracting it.

All you need to do is run the archetype:create goal from the command line. Here is the command used to create the attached sample project:

```
mvn archetype:create
   -DarchetypeGroupId=com.atlassian.maven.archetypes
   -DarchetypeArtifactId=confluence-plugin-archetype
   -DarchetypeVersion=2.0
   -DremoteRepositories=http://repository.atlassian.com/maven2/
   -DgroupId=com.example.confluence.plugin
   -DartifactId=example-plugin
```

The last two parameters, `groupId` and `artifactId`, should be customised to suit your project. The first four parameters select the archetype to use, and should not be changed.

Related pages
For more information on writing Confluence plugins, see the Confluence plugin guide.

Now what?

Next, we have to add your new project to the Confluence project you set up earlier.

I'm ready to add my plugin project
Working on an existing Confluence plugin

This page last changed on Sep 26, 2006 by jnolen.

Get the plugin source code

Many plugin authors have been generous in sharing their plugin source code to allow other users to modify and contribute to their plugins. Some have chosen to use the Atlassian Developer Network Subversion Repository to maintain their source code.

You can generally find the source code location of a plugin by looking at table at the top of the plugin homepage (like this one. Most will list a source-code location, either a download or a Subversion URL.

Subversion

If the plugin source code is stored in Subversion, you need to check out the source code using your subversion client. If you're using the commandline client, you'd type:

```
```

This should download all of the plugin's current source code into a directory called 'sql-plugin.'

Download

If the plugin author has attached the source code to the plugin homepage, just download the zip file and expand it.

Once you have the plugin source code, you're ready to move to the next step.

I'm ready to add my plugin project
Developing with Eclipse

How to use Eclipse for Confluence plugin development

Eclipse can be used to make Confluence plugin development easier.

General setup

- **Install Eclipse**
- **Use Subversion**
  - Install the SVN plugin for Eclipse
  - Add the Confluence Subversion site to Eclipse
    - Window->Open perspective and then find the Subversion perspective
- **Use Maven**
  - Install Maven 1.0.x
  - Install the [Maven (1.x) Eclipse plugin](https://mvn.apache.org/maven-release/maven-1 download by downloading the jar and copying to the Eclipse plugin directory
  - Setup your MAVEN_REPO property in Eclipse to point to your Eclipse workspace location

```sh
maven eclipse:add-maven-repo -Dmaven.eclipse.workspace=C:/...
```

Plugin specific

The following assumes you have a somewhat standard plugin directory structure that you created or checked out from Subversion. For example:

```sh
xxx-plugin
  trunk
    src
    etc
    java
    target
```

- Edit the project.xml file to make sure it contains all the dependencies needed
  - This must be done before generating the Eclipse project files
  - If the dependencies need to be changed later, the Eclipse project files will need to be re-generated and then in Eclipse, refresh your project using right click -> Refresh
- Generate the Eclipse project and classpath files
  - From a command line, cd to the trunk directory
```
cd .../xxx-plugin/trunk
maven eclipse
```

- Move the .project and .classpath files to the xxx-plugin directory
- Import the project by pointing at the plugin directory (that now contains a .project file!)
  - Right click Import
Choose Existing Projects into Workspace
Customize the build path source using right click on project -> Build Path -> Configure Build Path

- removing the default location
- adding /trunk/src/etc
- adding /trunk/src/java
- adding /trunk (last)
- Add MAVEN_REPO classpath variable to Eclipse
  - This only needs to be done for the first plugin you set up
  - MAVEN_REPO is used in the Maven generated .classpath file that contains references to all the dependencies defined to Maven in the project.xml and related files
  - Customize the build path libraries using right click on project -> Build Path -> Configure Build Path
Summary

- Eclipse should now analyse the plugin code and report errors
- Once all errors are fixed in Eclipse, a maven build (run outside Eclipse) should be clean
Development Tips

This page last changed on Feb 12, 2006 by david@randombits.org.

Here are some tips for debugging and optimising the development process.

Contents

- Allocate more memory to IDEA
- Disable Velocity Caching
- Enabling Developer Mode
Allocate more memory to IDEA

This page last changed on Feb 19, 2007 by jnolen.

You may like to increase the default memory allocated for the IDEA app. via modifying the VM options located in:

for Windows

<Install-dir>\bin\idea.exe.vmoptions

for Unix

<Install-dir>\bin\idea.vmoptions

For example, if you installed the application in it's default location on Windows you may see something like this:

C:\Program Files\JetBrains\IntelliJ IDEA 6.0\bin\idea.exe.vmoptions

Below is an example of settings:

-Xms32m
-Xmx256m
-XX:MaxPermSize=128m
-ea
Disable Velocity Caching

This page last changed on Nov 01, 2006 by mryall.

When you are developing for Confluence, it is often useful to disable the caching of the velocity templates so that you don’t have to restart the server to see velocity changes.

Perform the following modifications before starting the server, or restart it afterwards:

1. Edit `/confluence/src/etc/java/velocity.properties (or /WEB-INF/classes/velocity.properties if you are using the webapp).
2. Set all the "...resource.loader.cache" values to false.
3. Set the "class.resource.loader.cache" to false.
4. Set "velocimacro.library.autoreload" to true ( uncomment the line if necessary).

This will allow even the macro library (macros.vm) to reload automatically.
Enabling Developer Mode

This page last changed on Nov 08, 2005 by david@randombits.org.

Confluence’s Developer Mode is a system property setting that tells Confluence to enable various debugging features that are not otherwise exposed to users. To enable Developer Mode, you should start Confluence with the following system property set:

-Dconfluence.devmode=true

If you are writing a Confluence extension and want to check if Developer Mode is active, you can call ConfluenceActionSupport#isDevMode() if you have an action available ($action.devMode in Velocity templates), or Boolean.getBoolean(ConfluenceActionSupport.DEVMODE) if you don’t.

Developer Mode Features

Currently, enabling Developer Mode will activate the following features:

Prior to Confluence 2.0

- Developer Mode not available in these releases

Confluence 2.0

- The System Information page and 500 error page will contain an entry noting that Developer Mode is enabled
- The "view as HTML" button will be made available in the WYSIWYG rich-text editor
Initial development environment setup

This page last changed on Apr 04, 2007 by david.soul@atlassian.com.

The first time you set out to develop, you will need to make sure you have the supporting environment set up.

1. Java Development Kit
2. Maven
3. Application Server
4. Database
5. Subversion
6. IDE

Java Development Kit (JDK)

Any of the following should work:

- Sun JDK 1.4.2_x
- Sun JDK 1.5.0_x
- Sun JDK 1.6.0_x
- Jikes

Follow the installation instructions for your choice and platform.

If you're planning to distribute your work to the Confluence user community, we strongly encourage you to use JDK 1.4 instead of 1.5 or 1.6. We make sure that Confluence is compatible with JDK 1.4, and many Confluence users still run on the older JVM. If you're developing for your own use only, you are free to use the JDK version your internal Confluence instance is running on.

Maven 2.0.5

Quoting its homepage, "Maven is a software project management and comprehension tool. Based on the concept of a project object model (POM), Maven can manage a project's build, reporting and documentation from a central piece of information."

Both Confluence and Jira are set up to use Maven. And although it's not a requirement, most of the open-source plugins in the Developer Subversion Repository also use Maven. This guide assumes you will be using Maven for your plugins.

Confluence is now built using Maven2, and so the

1. Download and install Maven 2.0.5
2. Set up your environment variables:
   - Define $MAVEN_HOME in your shell config
   - Add $MAVEN_HOME/bin to your path
Application Server Setup

You can use the Atlassian-IDEA Maven plugin to configure deployment environments for Resin 2, Resin 3, Tomcat 5.5.x and Orion 2. You can run on any or all of these appservers. Unless you’re testing compatibility, you probably only need one. Resin seems to be the most popular, but Tomcat is the basis for the standalone dist, so either of those are good choices.

Tomcat Installation

1. Download & install Tomcat 5.5.x
2. If you want to run Tomcat 5.5 on a 1.4 JDK, download the Compatibility package and install it.

Resin 3 Installation

1. Download & install Resin 3.0.x (see also jira documentation)

Resin 2 Installation

1. Download & install Resin 2.1.x (see also jira documentation)

Orion 2 Installation

1. Download & install Orion 2.0.x (see also jira documentation)

Database Setup (optional)

While both JIRA and Confluence come with the HSQLDB file-based database, it is sometimes useful to have a non-file-based database for development - it’s faster and it’s easier to find out what’s going on inside. However, there are other cases where it is completely appropriate to stick with the HSQLDB as provided. If you want to use the standalone database, you can skip this step.

If you’re using a database other than HSQLDB, then you need to create a database and a user which can access that database. If you’re using HSQLDB, skip this step.

A wide variety of databases are supported. MySQL 4.1 is used in this example. Follow a similar procedure for your database of choice.

1. Download & install MySQL 4.1.
2. Make sure the database is running and will restart after reboot.
3. Create a new database (eg. ‘confdb’).
4. Create a new username/password (eg. ‘confuser’/’confuser’).
5. Grant the new user full rights on the new database.
6. Download & install the database driver into $TOMCAT_HOME/common/lib, $RESIN_HOME/lib,
Subversion (optional)

Atlassian hosts a Subversion repository for developers to contribute open-source plugins. If you want to contribute your plugin, or get the latest version of helpful development resources, installing a subversion client is recommended.

Most modern IDEs include some support for Subversion, but you can also install the command-line client. This can also be helpful if the IDE's implementation doesn't quite do what you expected. You can find out where to get a command-line client (and other types of clients too) here:

http://subversion.tigris.org/project_packages.html

IDE

Now that the basic development environment is ready, we need to set up the IDE (Integrated Development Environment) environment. Development can be done with any Java development environment. At Atlassian, we prefer IntelliJ's IDEA, and our instructions follow that path. We also have some user-contributed documentation about Developing with Eclipse.

JetBrains IntelliJ IDEA Installation

1. Download & install the latest version of IDEA (5.0 or later).

Eclipse

1. Download & install the latest version of Eclipse.

What's Next?

Now that we've got the pieces in place, the next stage is to get Confluence setup and running inside IDEA. How you do this will depend on whether or not you have access to the Confluence source code. Currently this is only available to commercial licensees. Choose your setup type:

| I have the source code | I have a distribution |

Related topics

Increase memory for IDEA
Example settings.xml

This is an example settings.xml for Maven 2. It can be placed in your $HOME/.m2/ directory and it will apply to all maven projects that you build. If you would rather, you can make this a per-project settings by including a profile.xml in your project base directory. See Maven's documentation on Build Profile Settings.

```xml
<settings>
  <pluginGroups>
    <pluginGroup>com.atlassian.confluence.maven.plugins</pluginGroup>
    <pluginGroup>com.atlassian.maven.plugins</pluginGroup>
  </pluginGroups>
  <mirrors>
    <mirror>
      <id>ibiblio.net</id>
      <url>http://www.ibiblio.net/pub/packages/maven2</url>
      <mirrorOf>central</mirrorOf>
    </mirror>
  </mirrors>
  <servers>
    <server>
      <id>atlassian-m2-repository</id>
    </server>
    <server>
      <id>atlassian-m1-repository</id>
    </server>
  </servers>
  <profiles>
    <profile>
      <id>default</id>
      <activation>
        <activeByDefault>true</activeByDefault>
      </activation>
      <repositories>
        <repository>
          <id>atlassian-m2-repository</id>
          <name>Atlassian Maven 2.x Repository</name>
          <url>http://repository.atlassian.com/maven2</url>
          <snapshots>
            <enabled>true</enabled>
            <updatePolicy>interval:30</updatePolicy>
          </snapshots>
        </repository>
        <repository>
          <id>atlassian-m1-repository</id>
          <name>Atlassian Maven 1.x Repository</name>
          <url>http://repository.atlassian.com</url>
          <layout>legacy</layout>
          <snapshots>
            <enabled>true</enabled>
          </snapshots>
        </repository>
        <repository>
          <id>Codehaus</id>
          <name>Codehaus Repository</name>
          <url>http://repository.codehaus.org</url>
          <snapshots>
            <enabled>true</enabled>
          </snapshots>
        </repository>
      </repositories>
    </profile>
  </profiles>
  <pluginRepositories>
    <pluginRepository>
      <id>atlassian-m2-repository</id>
      <name>Atlassian Maven 2.x Repository</name>
      <url>http://repository.atlassian.com/maven2</url>
      <snapshots>
        <enabled>true</enabled>
        <updatePolicy>always</updatePolicy>
      </snapshots>
    </pluginRepository>
  </pluginRepositories>
</settings>
```
Packaging and releasing a plugin

Packaging your plugin

In order to install your new plugin on your production instance of Confluence, you'll need to package it up and install it there.

1. Navigate to your plugin's root directory.
2. Make sure that your POM.xml is depending to the version of Confluence on which you plan to deploy.
3. Run the command `mvn package`
4. That will create `my-plugin-X.X.X.jar` in the target directory.
5. You can now install this plugin in Confluence.

* If your plugin has dependent jars, see this page.

Releasing your plugin

We encourage you to open-source (we recommend a BSD-style license) your plugin and put in on Atlassian's Developer Subversion Repository and add it to the Confluence Extensions Library for other Confluence users to use and enhance. Never underestimate the power of collaboration!

1. Get Subversion access (email developer-relations@atlassian.com).
2. Request a JIRA project for your plugin (email developer-relations@atlassian.com).
3. Check in your code to Subversion.
4. Add your plugin to the Plugin Repository
5. Create a homepage for your plugin in the Confluence Plugin Library.
6. Announce your plugin on the Confluence Mailing Lists.
Plugin Project Files

This page last changed on Feb 13, 2006 by david@randombits.org.

There are several files common to most plugin projects. Here is a summary of the areas of interest to plugin developers.

Files

- build.properties
- project.properties
- project.xml
**build.properties**

This page last changed on Feb 14, 2006 by david@randombits.org.

The `build.properties` file contains project properties specific to the specific developer's environment. It should NOT be checked into source control, or it will break other people's build environment. Also, properties which should apply to the project independent of the build environment should be put in `project.properties` instead.

As well as the properties listed below, you can override any of the properties specified in `project.properties`, so it may be worth checking those options too.

Below are some examples of common properties which may need to be set in your environment.

## Maven Properties

### Remote Repositories

This property allows you to specify remote repositories which Maven can download dependent libraries from. In general, this should be specified in `project.properties`, however there are some occasions where a repository isn't available (eg. it is a private repository inside an organisation) and outsiders will have to get the libraries from elsewhere. This should be avoided if possible.

```properties
```

### Proxy Settings

If you are behind a firewall, you may need to specify how Maven can get through your proxy server. Only complete the ones which are required for your server.

```properties
## Specify these properties if you are behind a proxy server
maven.proxy.host=192.168.0.1
maven.proxy.port=8080
maven.proxy.username=xxx
maven.proxy.password=yyy
maven.proxy.ntlm.host=server
maven.proxy.ntlm.domain=domain
```

## IntelliJ IDEA Properties

If you are using the 'atlassian-idea' plugin to build your project files, there are several custom properties available to make project setup simpler.

### Jikes

You can specify that IDEA uses the open-source [Jikes](http://jikes.sourceforge.net) compiler if you wish.
JDK

Usually, however, you'll be using one of the standard JDKs set up in IDEA. Specify the name that IDEA has given the JDK here. You can find the name by opening IDEA and selecting 'File > Settings', then 'JDK & Global Libraries'. The value you need is in the 'Name' field of the JDK.

Source Code

If you have access to the Confluence or JIRA source code, it can be handy to have your linked libraries referencing that source code when debugging. You can specify a basic set of source code links by pointing the plugin at the root of the downloaded source distribution. Debugging will still work fine without it, but it will get lost once the trace leaves your plugin code.

Global Libraries

Sometimes you will need to specify extra global libraries that need to be linked to by your project. Often these are items like JDBC drivers, and are more often required when setting up Confluence or JIRA as a whole, rather than a plugin project. However, this is where you do it.

Application Server Settings

These properties will only be relevant in the project files for Confluence or JIRA, not plugin projects. They point to your app server installation(s). Currently supported are Tomcat 4 & 5, Resin 2 & 3, and Orion.

Only include/uncomment the ones you actually have installed.

Application Server Settings

Once you've picked your application server, the following will specify how the web application is launched.

The settings below will allow you to access the running server at http://localhost:8080/confluence:
# port on which Confluence will listen
atlassian.idea.application.port=8080

# the context root at which Confluence will be deployed
atlassian.idea.application.webapp.contextpath=confluence

## WAR Settings

Again, these are not relevant for plugin projects and in fact should not be present. These should already be set for you in later versions of Confluence and JIRA, but it's good to check them.

maven.multiproject.type=war
maven.war.webxml=src/webapp/WEB-INF/web.xml
maven.war.webapp.dir=target/exploded

## Database Settings

If you are using an external database, set this up as documentation dictates. Confluence and JIRA build.properties files have some instructions for common database engines which should be fairly easy to adapt to your environment.
This file contains properties relating to the project which do not change in a given development environment.
The project.xml file describes the project structure to Maven, which is used to build and deploy the plugin. It can also be used to create project files for IntelliJ IDEA and Eclipse.

**File Contents**

1. `<extend>` - This determines most of the dependencies for your plugin and should be set to the oldest version of Confluence your plugin will support. There are often significant changes between different versions of Confluence, so it's probably best to stick with the most recent version initially. This value should match one of the 'confluence-x.x.xml' files in the project directory. Start with something like this:

   ```xml
   <extend>confluence-2.1.3.xml</extend>
   ```

2. `<id>` - The name of the plugin. Since this will turn into file names, it's best to stick with alphanumeric and '-' for the name (eg. 'my-plugin' rather than 'My Most Excellent Plugin!).

3. `<name>` - This is your human-readable name for the plugin. 'My Most Excellent Plugin!' will work fine here.

4. `<currentVersion>` - The current version of the project. This will be updated each time you do a major release. You will also need to update the number in the `atlassian-plugin.xml` file at the same time (more on that later).

   ```xml
   <id>my-plugin</id>
   <name>My Most Excellent Plugin</name>
   <currentVersion>1.0</currentVersion>
   ```

5. `<organization>` - Details about your organisation go here.

   ```xml
   <organization>
   <name>My Organization</name>
   <url>http://www.myorganization.com/</url>
   </organization>
   ```

6. `<package>` - The base package for your project. This is used when generating the JavaDocs for the project, so make it the lowest common package name. Eg, if you have classes in 'com.myorg.confluence' and 'com.myorg.utilities' in the plugin, then make this value 'com.myorg'.

   ```xml
   <package>com.myorg.confluence.plugin</package>
   ```

7. `<description>` - Just a regular, human-readable description of the project.

8. `<dependencies>` - This is where you can specify extra dependencies specific to your plugin. Don't bother listing libraries which are already in the standard Confluence build - they're already taken care of by the `<extend>` tag above. If your extra library is not in one of the standard Maven repositories, you will have to do some extra work here to get it going, which will, for the moment, be left as an exercise for the reader.

   Also, this example uses `<id>`, which is not Maven best-practice. The overall guide is being updated to Maven 2, and this will be addressed during that process. Stay tuned.

   ```xml
   <dependencies>
   ```
9. `<build>` - There isn't too much in this section that you will need to change, other than the `<nagEmailAddress>`.

```xml
<build>
  <nagEmailAddress>me@myorg.com</nagEmailAddress>
  <!-- The rest of the settings stay the same... -->
</build>
```
Userinfo Plugin Tutorial

This page last changed on Jun 30, 2006 by cmiller.

Introduction

This tutorial is being written during the course of the development of a Confluence plugin. It is a demonstration of a number of techniques and tips useful to plugin development, and also of how all the various types of Confluence plugin modules can be combined to add new features to the Confluence application.

The plugin being developed during the course of this tutorial is not just a toy or a random idea that was thought up to write a guide around, it's actually something that we intend to make use of on the Atlassian extranet, fulfilling a real requirement of our business.

I'm hoping to add new chapters to the tutorial each week until it development of the plugin is complete.

Requirements

In order to get the most out of this tutorial, you should have:

1. Confluence 2.2 (the plugin makes use of features that were not available in Confluence 2.1 or earlier)
2. A suitable plugin development environment.

The Plugin

On the Atlassian extranet, which is obviously powered by Confluence, we keep a staff directory. This directory is really just a single Confluence page with a section for each staff member. Here's mine:
When we started the page, there were only about twenty people in the company. Now we've grown over fifty, it has started to become unwieldy, and with each new hire it gets a little harder to maintain. Thus, the aims of the userinfo plugin are:

- Allow users to maintain their own contact details
- Provide a way to display contact information in wiki pages

Once that's done, we could add more features like:

- A searchable / categorisable staff directory
- vCard export of contact information
- iCalendar export of staff birthdays

(How many of these we get done really depends on how much time I have to spare 😞)

Contents

- UPT 1 - Getting Started
- UPT 2 - Getting the Data
- UPT 3 - Integrating with the Confluence UI
- UPT4 - Display the info in a macro

Coming Soon:

- UPT 3 - Integrating with the Confluence UI
- UPT 4 - The userinfo Macro
- More...
UPT 1 - Getting Started

This page last changed on Jun 30, 2006 by cmiller.

Set up the Plugin Source Directory

First things first, I'm going to need somewhere to put all my source code.

The Confluence Plugin Development Kit contains a template directory that you can rename to use for your own plugin. Having a standard directory structure is useful, because it allows you to use maven (or the ant tasks packaged in the plugins directory of your Confluence installation) to build your plugin jar. If you use a different directory structure, you'll have to build the plugin yourself.

You'll have to think of a name for your plugin. There are probably better names than userinfo, but I started this late on a Thursday afternoon. Also, you'll need a package name for your Java code. The Java standard for package names is to reverse your company's domain-name, which is exactly what I've done here:

I'm going to be doing all my development for this tutorial in the plugins directory of a copy of Confluence 2.2.5 that I downloaded from the Atlassian website

The Unreliable Narrator

In fact, I'll be doing all of my development in the same development environment I use to develop Confluence itself. I will then be copying it into the aforementioned plugins directory and taking screenshots, and pretending that's how I developed it in the first place.

In cooking shows, this would be called "...and here's one I prepared earlier."

Make an Empty atlassian-plugin.xml file.
You'll need to choose a unique plugin key. I can use the `confluence.extra` prefix for my plugin keys because I work at Atlassian. You should make your plugin key the same as the Java package name you chose earlier. You should also fill in the plugin metadata.

```xml
<atlassian-plugin name='User Information' key='confluence.extra.userinfo'>
  <plugin-info>
    <description>Allows users to store personal data/contact details about themselves</description>
    <vendor name="Atlassian Software Systems" url="http://www.atlassian.com"/>
    <version>1.0</version>
  </plugin-info>
</atlassian-plugin>
```

Once again, there's a template file in the Plugin Development Kit.

### Compile and Upload

The plugin can now be built and installed into Confluence. I have no idea why you'd want to do it, but it's sort of necessary to come away from each step in a tutorial with some tangible evidence you've accomplished something. So here's what my new plugin looks like when I upload it into Confluence's plugin manager:

**User Information**

**Vendor:** Atlassian Software Systems  
**Plugin Version:** 1.0

Allows users to store personal data/contact details about themselves

- Disable plugin
- Uninstall plugin

That's it. A plugin with no plugin modules. Next, we write some code!

### Downloads

- The source for the empty plugin: `userinfo-src-1.tgz`
- The compiled empty plugin jar: `plugins-userinfo-1.jar`
UPT 2 - Getting the Data

Planning Ahead

The initial requirements for the userinfo plugin are that I need to:

1. Gather contact data from users, somehow.
2. Display it, somehow.

In this part of the tutorial, I'm going to cover the first step. But in order to do so, I need to decide how I'm going to gather this information.

The traditional wiki way to do this would be through "magic markup". We would define some special Confluence markup (in Confluence that would be a macro) that users could insert into a page to set their contact information, and have the macro save that somewhere for later retrieval. This approach makes the programmatic interface very simple (you're only ever writing macros), but it doesn't make life particularly easy for users who have to remember, or continually look up, some obscure wiki syntax.

Metadata Plugin

The Metadata Plugin is an excellent Confluence plugin that does just this. It allows arbitrary metadata to be added to any page through a macro, and then allows you to collate, tabulate and aggregate that data in some pretty cool ways. If we wanted to go the "magic markup" route, I could just stop the tutorial now and say "use the Metadata Plugin instead".

The Metadata Plugin was written by the Pantero Corporation, and won an honourable mention in our first ever plugin development competition.

Confluence has powerful plugin module types that allow you to modify not only the content of wiki pages, but the functionality of the Confluence application itself. It's those modules that we will be using to gather our users' contact information:

1. XWork-WebWork Plugins to provide the web form
2. Web UI Plugins to add links to the form into the Confluence UI

In this second part of the tutorial, we will concentrate on using an XWork plugin to display a form to the user, and store and retrieve the information they submit.

Writing the Code

- UPT 2.1 - The UserInfo Bean
- UPT 2.2 - The XWork Action Class
- UPT 2.3 - The Velocity Template
- UPT 2.4 - Defining the XWork Plugin Module
The End Result

Compiling and uploading the plugin I've written so far gives me the ability to set and edit my user information:

![Edit Contact Details](http://192.168.0.30:8081/users/userinfo/edituserinfo.action)

- **Position:** Confluence Lead Developer
- **Office:** Sydney
- **Extension:** 12
- **Mobile Phone:** +61 414 366 511
- **MSN Messenger:** cmiller@pastiche.org
- **Yahoo:** carlfishie
- **Jabber:** charles@chat.atlassian.com
- **ICQ:** 1939355
- **Skype:** carlfishy

It's a bit ugly, though:

- I have to navigate to the edit URL myself - /users/userinfo/edituserinfo.action - there's no link from the Confluence UI.
- The page doesn't look like it's integrated into Confluence very well. It doesn't fit in to the right navigational structure.

I'll fix those problems in the part three of the tutorial.
1. The source code for this tutorial: `userinfo-src-2.tgz`
2. The compiled plugin jar for this tutorial: `plugins-userinfo-2.jar`
The first thing I need is an object to store the user information in. I already know what information I need to store: I'm replicating the contents of our existing staff directory. In Ruby, I’d write something like this:

```ruby
class UserInfo
  attr_accessor :position, :office, :extension, :mobile_phone, :other_phone,
end
```

However, Confluence plugins are written in Java. I’ve got to write this instead:

```java
package com.atlassian.confluence.extra.userinfo;

import java.io.Serializable;

/**
 * Dumb serializable bean so we can fit all the user info in a single property
 */
public class UserInformation implements Serializable {
  private String position;
  private String office;
  private String extension;
  private String mobilePhone;
  private String otherPhone;
  private String aimId;
  private String msnId;
  private String yahooId;
  private String jabberId;
  private String icqId;
  private String skypeId;

  public String getPosition()
  {
    return position;
  }

  public void setPosition(String position)
  {
    this.position = position;
  }

  public String getOffice()
  {
    return office;
  }

  public void setOffice(String office)
  {
    this.office = office;
  }

  public String getExtension()
  {
    return extension;
  }

  public void setExtension(String extension)
  {
    this.extension = extension;
  }
```

Document generated by Confluence on May 01, 2007 00:44
public String getMobilePhone()
{
    return mobilePhone;
}

public void setMobilePhone(String mobilePhone)
{
    this.mobilePhone = mobilePhone;
}

public String getOtherPhone()
{
    return otherPhone;
}

public void setOtherPhone(String otherPhone)
{
    this.otherPhone = otherPhone;
}

public String getAimId()
{
    return aimId;
}

public void setAimId(String aimId)
{
    this.aimId = aimId;
}

public String getMsnId()
{
    return msnId;
}

public void setMsnId(String msnId)
{
    this.msnId = msnId;
}

public String getYahooId()
{
    return yahooId;
}

public void setYahooId(String yahooId)
{
    this.yahooId = yahooId;
}

public String getJabberId()
{
    return jabberId;
}

public void setJabberId(String jabberId)
{
    this.jabberId = jabberId;
}

public String getIcqId()
{
    return icqId;
}

public void setIcqId(String icqId)
{
    this.icqId = icqId;
}

public String getSkypeId()
{
    return skypeId;
}

public void setSkypeId(String skypeId)
this.skypeId = skypeId;
}
}

Luckily, 90% of the typing above can be done for me by any decent Java IDE.

The most important part of the code above is that the object is Serializable. This is what makes it possible to store and retrieve the object later.
UPT 2.2 - The XWork Action Class

The Skeleton XWork Action

Confluence uses WebWork 2 as its web framework, which in turn uses a command framework called XWork. XWork plugins allow you to add new commands to Confluence’s web framework, which allows you to add pretty much anything to the Confluence web application. For the userinfo plugin, I’m going to add a form page into which users can input their contact details.

I need an action class. It needs to extend ConfluenceActionSupport, a base class that contains the minimum functionality necessary for an action to play well with Confluence.

The Action will also need an instance of the UserInformation object that I defined earlier. I will expose that property with a standard Java getter method, which will make it available when we write our form in the next step.

```
package com.atlassian.confluence.extra.userinfo;
import com.atlassian.confluence.core.ConfluenceActionSupport;
public class EditUserInfoAction extends ConfluenceActionSupport {
    private UserInformation userInfo = new UserInformation();

    public UserInformation getUserInfo() {
        return userInfo;
    }
}
```

Introducing XStream and the ContentPropertyManager

XStream is a library for serializing Java objects to and from XML. The ContentPropertyManager is a Confluence component that allows you to associate arbitrary properties with any Confluence content object. Every Confluence user has a Content object associated with them, their PersonalInformation.

The combination of these three things is how I am going to store a user’s contact details, by adding the following to the EditUserInfoAction.

```
private static final Category log = Category.getInstance(EditUserInfoAction.class);
private static final String USERINFO_PROPERTY_KEY = "confluence.extra.userinfo";
private PersonalInformationManager personalInformationManager;
private ContentPropertyManager contentPropertyManager;
private XStream xStream;

private void setUserInformation(String username, UserInformation userInformation) {
    contentPropertyManager.setTextProperty(personalInformationManager.getPersonalInformation(username),
        USERINFO_PROPERTY_KEY, xStream.toXML(userInformation));
}

private UserInformation getUserInformation(String username) {
}
```
String userInfoXml = contentPropertyManager.getTextProperty(personalInformationManager.getPersonalInformation(username), USERINFO_PROPERTY_KEY);

if (TextUtilsestringSet(userInfoXml)) {
    try {
        return (UserInformation) xStream.fromXML(userInfoXml);
    } catch (Throwable t) {
        log.warn("Error unpacking user's personal information: " + username + ": " + t.getMessage(), t);
    }
}
return new UserInformation();

public void setPersonalInformationManager(PersonalInformationManager personalInformationManager) {
    this.personalInformationManager = personalInformationManager;
}

public void setContentPropertyManager(ContentPropertyManager contentPropertyManager) {
    this.contentPropertyManager = contentPropertyManager;
}

public void setxStream(XStream xStream) {
    this.xStream = xStream;
}

In the above code, we are relying on the fact that Spring, Confluence's component manager, will wire XWork actions (or any other plugin module). If you need a reference to any Confluence component (like the xStream service, ContentPropertyManager or PersonalInformationManager), all you need to do is provide the appropriate setter method, and the component will be provided to the action before it is executed.

From there we can write the code to write and read our contact details from the appropriate content property.

XWork Action Methods

Our XWork action class is going to handle two situations.

1. The user is viewing the 'edit my contact information' form. The form should be pre-filled with their contact information
2. The user is submitting changes to the form.

By convention, these two cases are dealt with using the action's doDefault and execute methods, respectively. For the doDefault method, all I have to do is make sure that the userInfo property contains the user's up-to-date contact details. getRemoteUser is a method on ConfluenceActionSupport that returns the currently logged-in user.

public String doDefault() throws Exception {
    userInfo = getUserInformation(getRemoteUser().getName());
For the `execute` method, I have to write the `userInfo` property back out. For now, let's assume that XWork is magic, and that by the time `execute()` is invoked, `userInfo` has been populated with the values submitted by the user.

```java
public String execute() throws Exception {
    setUserInformation(getRemoteUser().getName(), userInfo);
    return super.execute();
}
```

**Validation**

One thing I'm not doing here is validating the form input. This is mostly because the data I am collecting requires more effort to validate than it is worth. I don't really care too much if someone types an invalid email address, they can just go fix it themselves.

If you wanted to add validation to the action, you could do so by implementing a `validate()` method, as described in the [XWork custom validation documentation](#).
Having written the model and the controller, it's now time to work on the view. Confluence views are written in Velocity.

Our velocity template needs to draw a form. It needs to populate that form with the UserInformation object we loaded during the doDefault method of the EditUserInfoAction, and submit it back to the action for saving.

I put the velocity file in src/etc/templates/extra/userinfo/edituserinfo.vm.

```html
<html>
<head>
	<title>Edit Contact Details</title>
</head>
<body>
<div class="thickPadded">
<form name="edituserinfo.form" method="POST" action="doedituserinfo.action">
	<table class="greyBox" width="450" cellpadding="2" cellspacing="4">
		#tag( TextField "label='Position'" "name='userInfo.position'" "size='50'" )
		#tag( TextField "label='Office'" "name='userInfo.office'" "size='50'" )
		#tag( TextField "label='Extension'" "name='userInfo.extension'" "size='4'" )

	</table>
	<br/>
	<tr><td colspan="2" >&nbsp;</td></tr>
	#tag( TextField "label='Mobile Phone'" "name='userInfo.mobilePhone'" "size='20'" )
	#tag( TextField "label='Other Phone'" "name='userInfo.otherPhone'" "size='20'" )
	#tag( TextField "label='AOL Instant Messenger'" "name='userInfo.aimId'" "size='30'" )
	#tag( TextField "label='MSN Messenger'" "name='userInfo.msnId'" "size='30'" )
	#tag( TextField "label='Yahoo!'" "name='userInfo.yahooId'" "size='30'" )
	#tag( TextField "label='ICQ'" "name='userInfo.icqId'" "size='10'" )
	#tag( TextField "label='Skype'" "name='userInfo.skypeId'" "size='30'" )
	<br/>
	<tr><td colspan="2" align="center">
		<br/>
		#tag( Submit "name='confirm'" "value='update.name'" "theme='notable'" )
		#tag( Submit "name='cancel'" "value='cancel.name'" "theme='notable'" )
	</td></tr>
</form>
</div>
</body>
</html>
```

Here I'm taking advantage of WebWork Velocity tags to draw the form elements. The velocity tags take care of making the form elements part of the surrounding table, formatting them, filling them with their associated data, and if necessarily associating them with validation errors.

Note that we've called each form userInfo.propertyName. This means that when we submit the form, XWork will call getUserInfo().setPropertyame(value) for each property, thus populating our UserInformation bean before it is saved in the execute() method.
Note also that this HTML is lacking anything to define the Confluence look and feel. SiteMesh will take care of filling in the surrounding detail.
Now I've written my action class, I'll need to define a plugin module that adds my class to Confluence's XWork configuration. This is done by adding this section to my atlassian-plugin.xml file.

```xml
<xwork name="userinfoactions" key="userinfoactions">
  <description>Actions for manipulating a user's personal information.</description>
  <package name="userinfo" extends="default" namespace="/users/userinfo">
    <default-interceptor-ref name="defaultStack" />
    <action name="edituserinfo"
      class="com.atlassian.confluence.extra.userinfo.EditUserInfoAction" method="doDefault">
      <result name="input" type="velocity">/templates/extra/userinfo/edituserinfo.vm</result>
    </action>
    <action name="doedituserinfo"
      class="com.atlassian.confluence.extra.userinfo.EditUserInfoAction">
      <result name="input" type="velocity">/templates/extra/userinfo/edituserinfo.vm</result>
      <result name="success" type="velocity">/templates/extra/userinfo/edituserinfo.vm</result>
    </action>
  </package>
</xwork>
```

Some notes:

- You can read more about XWork plugin modules here: XWork-WebWork Plugins
- The `<package>` section is essentially passed verbatim to XWork as if it was an xwork.xml file, so the best place to look for more information is the XWork documentation.
- I've define two actions: one for viewing the form, and the other for submitting it.
- Since I'm not doing any input validation, I'm using the defaultStack interceptor chain.
Making it Look Good

I've written my form for entering my contact information, but it doesn't exactly look like a part of the Confluence UI yet. There's no link to it from the regular navigation, and it's not decorated with all of the the Confluence look and feel.

Writing the Code

- [UPT 3.1 - Linking Using Web UI Plugins](#)
- [UPT 3.2 - Using Inline Decorators](#)

The End Result

The input page for my details is now decorated to look like a part of the user's profile editing screen, and is linked from just where you'd expect to find it:

Downloads

1. The source code for this tutorial: [userinfo-src-3.tgz](#)
2. The compiled plugin jar for this tutorial: [userinfo-3.jar](#)
UPT 3.1 - Linking Using Web UI Plugins

This page last changed on Aug 03, 2006 by cmiller.

Web UI Plugins allow plugin authors to insert links to their custom actions or servlets directly into the Confluence UI, at predetermined locations. The implementation is pretty simple: for the most part you don't need any custom code to implement them, you just need to add their definitions to atlassian-plugin.xml.

For my userinfo plugin, I am going to create a link to my custom action in the user's profile, just where they would edit any of their other account details:

```xml
<web-item key="edituserinfo" name="Edit Profile" section="system.profile.edit/yourprofile" weight="20">
  <label key="Contact Details" />
  <link>/users/userinfo/edituserinfo.action</link>
</web-item>
```

Some notes:

- The section attribute determines where in the Confluence UI the item will be inserted. The best way to find out which section is correct is to look at Confluence's default web items in WEB-INF/classes/plugins (they're defined in the -sections.xml and -tabs.xml files)
- You can also define icons for your link, but since this section doesn't use icons, we don't bother.

Now the link points to where we want it to, but when you follow the link, you're blown out of the theme's tab layout. This is what we fix by adding a decorator to the form template.
UPT 3.2 - Using Inline Decorators

This page last changed on Aug 03, 2006 by cmiller.

This is the part of the tutorial with the most voodoo, at least so far. It involves changing the edituserinfo.vm file so that it will invoke the correct decorator, which in turn will make the plugin look like it is an integrated part of the Confluence UI. While following the instructions in this page will give you a general idea of what I'm accomplishing, some of the decisions I make, like which decorator to call and which action class to extend, are only applicable to this particular plugin.

The best way to find out what's right for your plugin, if you're not familiar enough with the Confluence codebase to find out for yourself, is to ask on the developer mailing list. This tutorial should at least give you a good idea what questions you need to ask.

Inline Decorators

Confluence makes heavy use of the Sitemesh library to lay out pages. Sitemesh works by decorating content. The main decorator, main.vmd is applied to each page automatically. You can see this by looking at the results of part 2 of the tutorial. Despite the fact that edituserinfo.vm does not contain any of the code for the search bar, top bar or profile links, they're included on the resulting page.

The decorators that are used to build the tab panels and other themeable parts of the Confluence page are invoked manually as inline decorators. In order to make the plugin a part of the profile tab infrastructure, I modify the vm file like this (The full velocity file is [attached] ^edituserinfo.vm), this is just the important bit we're adding):

```
#applyDecorator("root")
  #decoratorParam("context" "profile")
  #decoratorParam("mode" "edit-profile")
  #decoratorParam("helper" $action.helper)
  #decoratorParam("infopanel-width" "200px")

<!-- the stuff we want decorated -->
#end
```

- You will always be applying the "root" decorator. The root decorator is a dispatcher which chooses the correct theme decorator to apply, based on the context and mode arguments supplied.
- The profile context and edit-profile mode tell the root decorator that we are displaying the profile tabs, and that we currently have the edit tab selected.
- The helper must always be passed as a parameter.
- The infopanel-width should also be passed, it doesn't really do anything useful but some pages still need it.

Modifying the Action

Each inline decorator makes certain assumptions about the action class that it is a result of. For example, when drawing the HTML for the profile context, the decorator assumes the existence of a getUser() method on the action. The easiest way to ensure that I have all the right methods for the decorator is to find the abstract class that all of the stock Confluence actions that use that decorator extends. In the case of the profile, this is com.atlassian.confluence.user.actions.AbstractUserProfileAction. By modifying my EditUserInfoAction so that it extends AbstractUserProfileAction, the decorator will
be able to render successfully.

```java
public class EditUserInfoAction extends AbstractUserProfileAction {
    // ...
}
```
UPT4 - Display the info in a macro

This page last changed on Jan 17, 2007 by jnolen.

- Plugin Module definition
- Macro class
- Template
Remote API Specification

This page last changed on Apr 19, 2007 by jnolen.

- Introduction
- XML-RPC
- SOAP
- Remote Methods
- Data Objects
- Notes
- Scripts Examples
- Changelog

Introduction

Confluence provides remote APIs as both XML-RPC and SOAP. This document refers to the XML-RPC specification, see SOAP details below. XML-RPC and SOAP are both remote choices, as they have bindings for almost every language making them very portable.

Which should I use?

- SOAP is generally more useful from a strongly typed language (like Java or C#) but these require more setup.
- XML-RPC is easier to use from a scripting language (like Perl, Python, AppleScript etc) and hence is often quicker to use.

⚠️ Looking for the JIRA remote APIs? They are here.

XML-RPC Information

Some borrowed from the VPWik specification):

- The URL for XML-RPC requests is http://confluence-install/rpc/xmlrpc.
- All XML-RPC methods must be prefixed by confluence1. - to indicate this is version 1 of the API. We might introduce another version in the future. For example to call the getPage method, the method name is confluence1.getPage.
- All keys in structs are case sensitive.
- All strings are passed as UTF-8, and not ASCII per the XML-RPC update on 6/30/2003
- Confluence uses 64 big long values for things like object IDs, but XML-RPC's largest supported numeric type is int32. As such, all IDs and other long values must be converted to Strings when passed through XML-RPC API.
- Anywhere you see the word Vector, you can interchange it with "Array" or "List" depending on what language you prefer. This is the array data type as defined in the XML-RPC spec.
- Anywhere you see the word Hashtable, you can interchange it with "Struct" or "Dictionary" or "Map" depending on what language you prefer. This is the struct data type as defined in the XML-RPC spec.
- The default session lifetime is 30 minutes, but that can be controlled by the deployer from the applicationContext.xml file.
SOAP Information

The SOAP API follows the same methods as below, except with typed objects (as SOAP allows for).

To find out more about the SOAP API, simply point your SOAP 'stub generator' at the WSDL file, located at http://<confluence-install>/rpc/soap-axis/confluenceservice-v1?wsdl.

For reference, the confluence.atlassian.com WSDL file is here.

Remote Methods

Authentication Methods

- String login(String username, String password) - login a user. Returns a String authentication token to be passed as authentication to all other remote calls. It's not bulletproof auth, but it will do for now. Must be called before any other method in a 'remote conversation'. From 1.3 onwards, you can supply an empty string as the token to be treated as being the anonymous user.
- boolean logout(String token) - remove this token from the list of logged in tokens. Returns true if the user was logged out, false if they were not logged in in the first place (we don't really need this return, but void seems to kill XML-RPC for me)

Administration

- String exportSite(String token, boolean exportAttachments) - exports a Confluence instance and returns a String holding the URL for the download. The boolean argument indicates whether or not attachments ought to be included in the export.
- ClusterInformation getClusterInformation(String token) - returns information about the cluster this node is part of.
- Vector getClusterNodeStatuses(String token) - returns a Vector of NodeStatus objects containing information about each node in the cluster.

General

- ServerInfo getServerInfo(String token) - retrieve some basic information about the server being connected to. Useful for clients that need to turn certain features on or off depending on the version of the server. (Since 1.0.3)

Spaces

Retrieval

- Vector getSpaces(String token) - returns all the SpaceSummaries that the current user can see.
- Space getSpace(String token, String spaceKey) - returns a single Space.
- String exportSpace(String token, String spaceKey, String exportType) - exports a space and returns
a String holding the URL for the download. The export type argument indicates whether or not to export in XML, PDF, or HTML format - use "TYPE_XML", "TYPE_PDF", or "TYPE_HTML" respectively. Also, using "all" will select TYPE_XML.

Management

- Space addSpace(String token, Space space) - create a new space, passing in name, key and description.
- Boolean removeSpace(String token, String spaceKey) - remove a space completely.
- Space addPersonalSpace(String token, Space personalSpace, String userName) - add a new space as a personal space.
- boolean convertToPersonalSpace(String token, String userName, String spaceKey, String newSpaceName, boolean updateLinks) - convert an existing space to a personal space.

Pages

Retrieval

- Vector getPages(String token, String spaceKey) - returns all the PageSummaries in the space. Doesn't include pages which are in the Trash. Equivalent to calling Space.getCurrentPages().

- Page getPage(String token, String pageId) - returns a single Page
- Page getPage(String token, String spaceKey, String pageTitle) - returns a single Page
- Vector getPageHistory(String token, String pageId) - returns all the PageHistorySummaries - useful for looking up the previous versions of a page, and who changed them.
- Vector getPagePermissions(String token, String pageId) - returns the page level permissions for this page (since 1.4)

Dependencies

- Vector getAttachments(String token, String pageId) - returns all the Attachments for this page (useful to point users to download them with the full file download URL returned).
- Vector getAncestors(String token, String pageId) - returns all the ancestors (as PageSummaries) of this page (parent, parent's parent etc).
- Vector getChildren(String token, String pageId) - returns all the direct children (as PageSummaries) of this page.
- Vector getDescendents(String token, String pageId) - returns all the descendents (as PageSummaries) of this page (children, children's children etc).
- Vector getComments(String token, String pageId) - returns all the comments for this page.
- Comment getComment(String token, String commentId) - returns an individual comment.
- Comment addComment(String token, Comment comment) - adds a comment to the page.
- boolean removeComment(String token, String commentId) - removes a comment from the page.

Management

- Page storePage(String token, Page page) - add or update a page. For adding, the Page given as an argument should have space, title and content fields at a minimum. For updating, the Page given should have id, space, title, content and version fields at a minimum. The parentId field is always optional. All other fields will be ignored.
- String renderContent(String token, String spaceKey, String pageId, String content) - returns the
HTML rendered content for this page. If 'content' is provided, then that is rendered as if it were the body of the page (useful for a 'preview page' function). If it's not provided, then the existing content of the page is used instead (i.e. useful for 'view page' function).

- **String renderContent(String token, String spaceKey, String pageId, String content, Hashable parameters)** - Like the above renderContent(), but you can supply an optional hash (map, dictionary, etc) containing additional instructions for the renderer. Currently, only one such parameter is supported:
  - "style = clean" Setting the "style" parameter to "clean" will cause the page to be rendered as just a single block of HTML within a div, without the HTML preamble and stylesheet that would otherwise be added.
- **void removePage(String token, String pageId)** - remove a page

### Attachments - new in version 2.0

**Retrieval**

- **Attachment** getAttachment(String token, String pageId, String fileName, String versionNumber) - get information about an attachment.
- **byte[]** getAttachmentData(String token, String pageId, String fileName, String versionNumber) - get the contents of an attachment.

**Management**

- **Attachment** addAttachment(String token, long contentId, **Attachment** attachment, byte[] attachmentData) - add a new attachment to a content entity object. Note that this uses a lot of memory - about 4 times the size of the attachment. The 'long contentId' is actually a String pageId for XML-RPC.
- **boolean** removeAttachment(String token, String contentId, String fileName) - remove an attachment from a content entity object.
- **boolean** moveAttachment(String token, String originalContentId, String originalName, String newContentId, String newName) - move an attachment to a different content entity object and/or give it a new name.

### Blog Entries

- **Vector** getBlogEntries(String token, String spaceKey) - returns all the **BlogEntrySummaries** in the space.
- **BlogEntry** getBlogEntry(String token, String pageId) - returns a single **BlogEntry**.
- **BlogEntry** storeBlogEntry(String token, **BlogEntry** entry) - add or update a blog entry. For adding, the **BlogEntry** given as an argument should have space, title and content fields at a minimum. For updating, the **BlogEntry** given should have id, space, title, content and version fields at a minimum. All other fields will be ignored.
- **BlogEntry** getBlogEntryByDayAndTitle(String token, String spaceKey, int dayOfMonth, String postTitle) - Retrieves a blog post in the Space with the given spaceKey, with the title 'postTitle' and posted on the day 'dayOfMonth'.

### Search

- **Vector** search(String token, String query, int maxResults) - return a list of **SearchResults** which
match a given search query (including pages and other content types). This is the same as a performing a parameterised search (see below) with an empty parameter map.

- Vector search(String token, String query, Map parameters, int maxResults) - (since 1.3) like the previous search, but you can optionally limit your search by adding parameters to the parameter map. If you do not include a parameter, the default is used instead.

### Parameters for Limiting Search Results

<table>
<thead>
<tr>
<th>key</th>
<th>description</th>
<th>values</th>
<th>default</th>
</tr>
</thead>
<tbody>
<tr>
<td>spaceKey</td>
<td>search a single space</td>
<td>(any valid space key)</td>
<td>Search all spaces</td>
</tr>
<tr>
<td>type</td>
<td>Limit types of search results to return</td>
<td>all page blogpost mail comment attachment spacedescription personalinformation</td>
<td>All except mail</td>
</tr>
<tr>
<td>lastModified</td>
<td>Search recently modified content</td>
<td>today yesterday lastweek lastmonth</td>
<td>No limit</td>
</tr>
</tbody>
</table>

### Security

- Vector getPermissions(String token, String spaceKey) - Returns a Vector of Strings representing the permissions the current user has for this space (a list of "view", "modify", "comment" and / or "admin").
- Vector getPermissionsForUser(String token, String spaceKey, String userName) - Returns a Vector of Strings representing the permissions the given user has for this space. (since 2.1.4)
- Vector getPagePermissions(String token, String pageId) - Returns a Vector of Permissions representing the permissions set on the given page.
- Vector getSpaceLevelPermissions(String token) - returns all of the space level permissions which may be granted. This is a list of possible permissions to use with addPermissionToSpace, below, not a list of current permissions on a Space.
- boolean addPermissionToSpace(String token, String permission, String remoteEntityName, String spaceKey) - Give the entity named remoteEntityName (either a group or a user) the permission permission on the space with the key spaceKey.
- boolean addPermissionsToSpace(String token, Vector permissions, String remoteEntityName, String spaceKey) - Give the entity named remoteEntityName (either a group or a user) the permissions permissions on the space with the key spaceKey.
- boolean removePermissionFromSpace(String token, String permission, String remoteEntityName, String spaceKey) - Remove the permission permission from the entity named {{remoteEntityName (either a group or a user) on the space with the key spaceKey.
- boolean addAnonymousPermissionToSpace(String token, String permission, String spaceKey) - Give anonymous users the permission permission on the space with the key spaceKey. (since 2.0)
- boolean addAnonymousPermissionsToSpace(String token, Vector permissions, String spaceKey) - Give anonymous users the permissions permissions on the space with the key spaceKey. (since 2.0)
- boolean removeAnonymousPermissionFromSpace(String token, String permission, String spaceKey)
- Remove the permission permission} from anonymous users on the space with the key
  (since 2.0)
- boolean removeAllPermissionsForGroup(String token, String groupname) - Remove all the global
  and space level permissions for groupname.

User Management

  - User getUser(String token, String username) - get a single user
  - void addUser(String token, User user, String password) - add a new user with the given password
  - void addGroup(String token, String group) - add a new group
  - Vector getUserGroups(String token, String username) - get a user's current groups
  - void addUserToGroup(String token, String username, String groupname) - add a user to a particular
    group
  - boolean removeUserFromGroup(String token, String username, String groupname) - remove a user
    from a group.
  - boolean removeUser(String token, String username) - delete a user.
  - boolean removeGroup(String token, String groupname, String defaultGroupName) - remove a
group. If defaultGroupName is specified, users belonging to groupname will be added to
defaultGroupName.
  - Vector getGroups(String token) - gets all groups
  - boolean hasUser(String token, String username) - checks if a user exists
  - boolean hasGroup(String token, String groupname) - checks if a group exists
  - boolean editUser(String token, RemoteUser remoteUser) - edits the details of a user
  - boolean deactivateUser(String token, String username) - deactivates the specified user
  - boolean reactivateUser(String token, String username) - reactivates the specified user
  - Vector getActiveUsers(String token, boolean viewAll) - returns all registered users
  - boolean setUserInfo(String token, UserInformation userInfo) - updates user information
  - UserInformation getUserInformation(String token, String username) - Retrieves user information
  - boolean changeMyPassword(String token, String oldPass, String newPass) - changes the current
    user's password
  - boolean changeUserPassword(String token, String username, String newPass) - changes the
    specified user's password
  - boolean addProfilePicture(String token, String userName, String fileName, String mimeType, byte[]
    pictureData) - add and set the profile picture for a user.

Labels

  - Vector getLabelsById(String token, long objectId) - Returns all Labels for the given
    ContentEntityObject ID
  - Vector getMostPopularLabels(String token, int maxCount) - Returns the most popular Labels for the
    Confluence instance, with a specified maximum number.
  - Vector getMostPopularLabelsInSpace(String token, String spaceKey, int maxCount) - Returns the
    most popular Labels for the given spaceKey, with a specified maximum number of results.
  - Vector getRecentlyUsedLabels(String token, int maxResults) - Returns the recently used Labels for
    the Confluence instance, with a specified maximum number of results.
  - Vector getRecentlyUsedLabelsInSpace(String token, String spaceKey, int maxResults) - Returns the
    recently used Labels for the given spaceKey, with a specified maximum number of results.
  - Vector getSpacesWithLabel(String token, String labelName) - Returns an array of Spaces that have
    been labelled with labelName.
  - Vector getRelatedLabels(String token, String labelName, int maxResults) - Returns the Labels
    related to the given label name, with a specified maximum number of results.
  - Vector getRelatedLabelsInSpace(String token, String labelName, String spaceKey, int maxResults) -
Returns the `Labels` related to the given label name for the given `spaceKey`, with a specified maximum number of results.

- Vector `getLabelsByDetail(String token, String labelName, String namespace, String spaceKey, String owner)` - Retrieves the `Labels` matching the given `labelName`, `namespace`, `spaceKey` or `owner`.
- Vector `getLabelContentById(String token, long labelId)` - Returns the content for a given label ID
- Vector `getLabelContentByName(String token, String labelName)` - Returns the content for a given label name.
- Vector `getLabelContentForObject(String token, Label labelObject)` - Returns the content for a given `Label` object.
- Vector `getSpacesContainingContentWithName(String token, String labelName)` - Returns all `Spaces` that have content labelled with `labelName`.
- boolean `addLabelByName(String token, String labelName, long objectID)` - Adds label(s) to the object with the given `ContentEntityObject` ID. For multiple labels, `labelName` should be in the form of a space-separated or comma-separated string.
- boolean `addLabelById(String token, long labelId, long objectID)` - Adds a label with the given ID to the object with the given `ContentEntityObject` ID.
- boolean `addLabelForObject(String token, Label labelObject, long objectID)` - Adds the given label object to the object with the given `ContentEntityObject` ID.
- boolean `addLabelByNameToSpace(String token, String labelName, String spaceKey)` - Adds a label to the object with the given `ContentEntityObject` ID.
- boolean `removeLabelByName(String token, String labelName, long objectID)` - Removes the given label from the object with the given `ContentEntityObject` ID.
- boolean `removeLabelById(String token, long labelId, long objectID)` - Removes the label with the given ID from the object with the given `ContentEntityObject` ID.
- boolean `removeLabelForObject(String token, Label labelObject, long objectID)` - Removes the given label object from the object with the given `ContentEntityObject` ID.
- boolean `removeLabelByNameFromSpace(String token, String labelName, String spaceKey)` - Removes the given label from the given `spaceKey`.

**Data Objects**

Most returned structs have a summary and a detailed form:

- The summary form is a primary key (ie space key, page id) and a representative form (ie space name, page title)
- The detailed form will have all of the entity details as might be needed for the client.

Unless otherwise specified, all returned structs are in detailed form.

### ServerInfo

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>majorVersion</td>
<td>int</td>
<td>the major version number of the Confluence instance</td>
</tr>
<tr>
<td>minorVersion</td>
<td>int</td>
<td>the minor version number of the Confluence instance</td>
</tr>
<tr>
<td>patchLevel</td>
<td>int</td>
<td>the patch-level of the Confluence instance</td>
</tr>
<tr>
<td>BuildId</td>
<td>String</td>
<td>the build ID of the Confluence instance (usually a number)</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>developmentBuild</td>
<td>Boolean</td>
<td>Whether the build is a developer-only release or not</td>
</tr>
<tr>
<td>baseUrl</td>
<td>String</td>
<td>The base URL for the Confluence instance</td>
</tr>
</tbody>
</table>

Note: Version 1.0.3 of Confluence would be major-version: 1, minor-version: 0, patch-level: 3. Version 2.0 would have a patch-level of 0, even if it's not visible in the version number.

### SpaceSummary

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>String</td>
<td>the space key</td>
</tr>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the space</td>
</tr>
<tr>
<td>type</td>
<td>String</td>
<td>type of the space</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this space online</td>
</tr>
</tbody>
</table>

### Space

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>String</td>
<td>the space key</td>
</tr>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the space</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this space online</td>
</tr>
<tr>
<td>homepage</td>
<td>String</td>
<td>the id of the space homepage</td>
</tr>
<tr>
<td>description</td>
<td>String</td>
<td>the HTML rendered space description</td>
</tr>
</tbody>
</table>

### PageSummary

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the page</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this page belongs to</td>
</tr>
<tr>
<td>parentId</td>
<td>String</td>
<td>the id of the parent page</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the page</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this page online</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on this page</td>
</tr>
</tbody>
</table>

### Page
<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the page</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this page belongs to</td>
</tr>
<tr>
<td>parentId</td>
<td>String</td>
<td>the id of the parent page</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the page</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this page online</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version number of this page</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>the page content</td>
</tr>
<tr>
<td>created</td>
<td>Date</td>
<td>timestamp page was created</td>
</tr>
<tr>
<td>creator</td>
<td>String</td>
<td>username of the creator</td>
</tr>
<tr>
<td>modified</td>
<td>Date</td>
<td>timestamp page was modified</td>
</tr>
<tr>
<td>modifier</td>
<td>String</td>
<td>username of the page's last modifier</td>
</tr>
<tr>
<td>homePage</td>
<td>Boolean</td>
<td>whether or not this page is the space's homepage</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on this page</td>
</tr>
<tr>
<td>contentStatus</td>
<td>String</td>
<td>status of the page (eg. current or deleted)</td>
</tr>
<tr>
<td>current</td>
<td>Boolean</td>
<td>whether the page is current and not deleted</td>
</tr>
</tbody>
</table>

**PageHistorySummary**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the historical page</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version of this historical page</td>
</tr>
<tr>
<td>modifier</td>
<td>String</td>
<td>the user who made this change</td>
</tr>
<tr>
<td>modified</td>
<td>Date</td>
<td>timestamp change was made</td>
</tr>
</tbody>
</table>

**BlogEntrySummary**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the blog entry</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this blog entry belongs to</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the blog entry</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this blog entry</td>
</tr>
<tr>
<td></td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on this page</td>
</tr>
<tr>
<td>publishDate</td>
<td>Date</td>
<td>the date the blog post was published</td>
</tr>
</tbody>
</table>

**BlogEntry**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the blog entry</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this blog entry belongs to</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the page</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this blog entry online</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version number of this blog entry</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>the blog entry content</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on this page</td>
</tr>
</tbody>
</table>

**RSS Feed**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>url</td>
<td>String</td>
<td>the URL of the RSS feed</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the feed's title</td>
</tr>
</tbody>
</table>

**Search Result**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>title</td>
<td>String</td>
<td>the feed's title</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the remote URL needed to view this search result online</td>
</tr>
<tr>
<td>excerpt</td>
<td>String</td>
<td>a short excerpt of this result if it makes sense</td>
</tr>
<tr>
<td>type</td>
<td>String</td>
<td>the type of this result - page, comment, spacedesc, attachment, userinfo, blogpost</td>
</tr>
<tr>
<td>id</td>
<td>String</td>
<td>the long ID of this result (if the type has one)</td>
</tr>
</tbody>
</table>

**Attachment**
<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>numeric id of the attachment</td>
</tr>
<tr>
<td>pageId</td>
<td>String</td>
<td>page ID of the attachment</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>title of the attachment</td>
</tr>
<tr>
<td>fileName</td>
<td>String</td>
<td>file name of the attachment (Required)</td>
</tr>
<tr>
<td>fileSize</td>
<td>String</td>
<td>numeric file size of the attachment in bytes</td>
</tr>
<tr>
<td>contentType</td>
<td>String</td>
<td>mime content type of the attachment (Required)</td>
</tr>
<tr>
<td>created</td>
<td>Date</td>
<td>creation date of the attachment</td>
</tr>
<tr>
<td>creator</td>
<td>String</td>
<td>creator of the attachment</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>url to download the attachment online</td>
</tr>
<tr>
<td>comment</td>
<td>String</td>
<td>comment for the attachment (Required)</td>
</tr>
</tbody>
</table>

**Comment**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>numeric id of the comment</td>
</tr>
<tr>
<td>pageId</td>
<td>String</td>
<td>page ID of the comment</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>title of the comment</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>notated content of the comment (use renderContent to render)</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>url to view the comment online</td>
</tr>
<tr>
<td>created</td>
<td>Date</td>
<td>creation date of the attachment</td>
</tr>
<tr>
<td>creator</td>
<td>String</td>
<td>creator of the attachment</td>
</tr>
</tbody>
</table>

**User**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>String</td>
<td>the username of this user</td>
</tr>
<tr>
<td>fullname</td>
<td>String</td>
<td>the full name of this user</td>
</tr>
<tr>
<td>email</td>
<td>String</td>
<td>the email address of this user</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this user online</td>
</tr>
</tbody>
</table>

**Permission**
<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>lockType</td>
<td>String</td>
<td>The type of permission. One of 'View' or 'Edit'</td>
</tr>
<tr>
<td>lockedBy</td>
<td>String</td>
<td>The user or group name of the permission's owner</td>
</tr>
</tbody>
</table>

Label

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the label</td>
</tr>
<tr>
<td>owner</td>
<td>String</td>
<td>the username of the owner</td>
</tr>
<tr>
<td>namespace</td>
<td>String</td>
<td>the namespace of the label</td>
</tr>
<tr>
<td>id</td>
<td>String</td>
<td>the ID of the label</td>
</tr>
</tbody>
</table>

UserInformation

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>username</td>
<td>String</td>
<td>the username of this user</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>the user description</td>
</tr>
<tr>
<td>creatorName</td>
<td>String</td>
<td>the creator of the user</td>
</tr>
<tr>
<td>lastModifierName</td>
<td>String</td>
<td>the URL to view this user online</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version</td>
</tr>
<tr>
<td>id</td>
<td>String</td>
<td>the ID of the user</td>
</tr>
<tr>
<td>creationDate</td>
<td>Date</td>
<td>the date the user was created</td>
</tr>
<tr>
<td>lastModificationDate</td>
<td>Date</td>
<td>the date the user was last modified</td>
</tr>
</tbody>
</table>

ClusterInformation

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>isRunning</td>
<td>boolean</td>
<td>true if this node is part of a cluster.</td>
</tr>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the cluster.</td>
</tr>
<tr>
<td>memberCount</td>
<td>int</td>
<td>the number of nodes in the cluster, including this node (this will be zero if this node is not clustered.)</td>
</tr>
<tr>
<td>description</td>
<td>String</td>
<td>a description of the cluster.</td>
</tr>
<tr>
<td>multicastAddress</td>
<td>String</td>
<td>the address that this cluster uses for multicast communication.</td>
</tr>
</tbody>
</table>
multicastPort | String | the port that this cluster uses for multicast communication.

NodeStatus

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>nodeId</td>
<td>int</td>
<td>an integer uniquely identifying the node within the cluster.</td>
</tr>
<tr>
<td>jvmStats</td>
<td>Map</td>
<td>a Map containing attributes about the JVM memory usage of node. Keys are &quot;total.memory&quot;, &quot;free.memory&quot;, &quot;used.memory&quot;.</td>
</tr>
<tr>
<td>props</td>
<td>Map</td>
<td>a Map containing attributes of the node. Keys are &quot;system.date&quot;, &quot;system.time&quot;, &quot;system.favourite.colour&quot;, &quot;java.version&quot;, &quot;java.vendor&quot;, &quot;jvm.version&quot;, &quot;jvm.vendor&quot;, &quot;jvm.implementation.version&quot;, &quot;java.runtime&quot;, &quot;java.vm&quot;, &quot;user.name.word&quot;, &quot;user.timezone&quot;, &quot;operating.system&quot;, &quot;os.architecture&quot;, &quot;fs.encoding&quot;.</td>
</tr>
<tr>
<td>buildStats</td>
<td>Map</td>
<td>a Map containing attributes of the build of Confluence running on the node. Keys are &quot;confluence.home&quot;, &quot;system.uptime&quot;, &quot;system.version&quot;, &quot;build.number&quot;.</td>
</tr>
</tbody>
</table>

Script Examples

The Confluence Extension space contains various examples of scripts.

Changelog

2.3

- Added getClusterInformation and getClusterNodeStatuses.

2.2
• Added addPersonalSpace, convertToPersonalSpace and addProfilePicture.

2.1.4

• Added getPermissionsForUser.

2.0

• Updated getLocks() to getPagePermissions()
• Added addAttachment, getAttachment, getAttachmentData, removeAttachment and moveAttachment methods to allow remote attachment handling. Note that adding large attachments with this API uses a lot of memory during the addAttachment operation.
• Added addAnonymousPermissionToSpace, addAnonymousPermissionsToSpace and removeAnonymousPermissionFromSpace.
• Added the addComment and removeComment methods for comment manipulation.
• Added hasGroup and hasUser methods to determine if a group or user exists.
• Added editUser method.
• Added ability to deactivate and reactivate users.
• Added getActiveUsers method to retrieve a user list.
• Added ability to change the user password.
• Added ability to retrieve and modify user information.
• Added ability to retrieve, add and remove labels.
• Added getBlogEntryByDayAndTitle

1.4

• Added new exportSpace and exportSite methods to build exports of an individual space or an entire Confluence instance and return with a URL leading to the download.
• Added new getChildren and getDescendents methods to get the direct children and all descendents of a given page.
• Added new getAncestors method to get the ancestors of a given page.
• Removed the old getLocks as locks are superceded by page level permissions.
• Added new getPagePermissions method to retrieve page level permissions.
• Added new removeUser, removeGroup, removeAllPermissionsForGroup, addUserToGroup and removeUserFromGroup methods.
• Added new addPermissionToSpace method.
• Added new Permission data object.
• Added new getSpaceLevelPermissions method.

1.3

• Added new getPage method which retrieves a page by space key and page title.
• Added new removeSpace method to remove an entire space.
• Added ability to limit search by parameters.
• Allow anonymous access.

1.2
• renderContent takes an optional hashtable for rendering hints, the only one supported right now is "style=clean"

1.1

• getLocks gives you back a list of any locks that apply to a given page
• added a locks field to the various Page structs containing a count of any applicable page-level locks
• CRUD methods added for blog-posts

1.0.3

• getServerInfo gives you some basic information about the server version CONF1123
• storePage now allows you to change the page's name (incoming links are all renamed) CONF-974
• storePage now reliably allows you to re-parent pages
• WSDL now respects the server's configured base URL, allowing it to work on proxy-hosted servers CONF-1088
Remote API Specification 2.4

This page last changed on Apr 19, 2007 by jnolen.

- Introduction
- XML-RPC
- SOAP
- Changelog
- Remote Methods
- Data Objects
- Notes
- Scripts Examples

Introduction

Confluence provides remote APIs as both XML-RPC and SOAP. This document refers to the XML-RPC specification, see SOAP details below. XML-RPC and SOAP are both remote choices, as they have bindings for almost every language making them very portable.

Which should I use?

- SOAP is generally more useful from a strongly typed language (like Java or C#) but these require more setup.
- XML-RPC is easier to use from a scripting language (like Perl, Python, AppleScript etc) and hence is often quicker to use.

⚠️ Looking for the JIRA remote APIs? They are here.

XML-RPC

⚠️ Read Me First!

XML-RPC notes: (some borrowed from the VPWik specification)

- The URL for XML-RPC requests is http://confluence-install/rpc/xmlrpc.
- All XML-RPC methods must be prefixed by confluence1. - to indicate this is version 1 of the API. We might introduce another version in the future. For example to call the getPage method, the method name is confluence1.getPage.
- All keys in structs are case sensitive.
- All strings are passed as UTF-8, and not ASCII per the XML-RPC update on 6/30/2003
- Confluence uses 64 big long values for things like object IDs, but XML-RPC's largest supported numeric type is int32. As such, all IDs and other long values must be converted to Strings when passed through XML-RPC API.
- Anywhere you see the word Vector, you can interchange it with "Array" or "List" depending on what language you prefer. This is the array data type as defined in the XML-RPC spec.
- Anywhere you see the word Hashtable, you can interchange it with "Struct" or "Dictionary" or "Map" depending on what language you prefer. This is the struct data type as defined in the XML-RPC spec.
- The default session lifetime is 30 minutes, but that can be controlled by the deployer from
SOAP

The SOAP API follows the same methods as below, except with typed objects (as SOAP allows for).

To find out more about the SOAP API, simply point your SOAP 'stub generator' at the WSDL file, located at http://<confluence-install>/rpc/soap-axis/confluenceservice-v1.wsdl.

For reference, the confluence.atlassian.com WSDL file is here.

Changelog

2.4

Following methods were added:

- storeSpace
- importSpace
- getSpacesInGroup
- addSpaceGroup
- getSpaceGroups
- removeSpaceGroup

Added new SpaceGroup data object.

2.3

- Added getClusterInformation and getClusterNodeStatuses.

2.2

- Added addPersonalSpace, convertToPersonalSpace and addProfilePicture.

2.1.4

- Added getPermissionsForUser.

2.0
• Updated getLocks() to getPagePermissions()
• Added addAttachment, getAttachment, getAttachmentData, removeAttachment and
  moveAttachment methods to allow remote attachment handling. Note that adding large attachments
  with this API uses a lot of memory during the addAttachment operation.
• Added addAnonymousPermissionToSpace, addAnonymousPermissionsToSpace and
  removeAnonymousPermissionFromSpace.
• Added the addComment and removeComment methods for comment manipulation.
• Added hasGroup and hasUser methods to determine if a group or user exists.
• Added editUser method.
• Added ability to deactivate and reactivate users.
• Added getActiveUsers method to retrieve a user list.
• Added ability to change the user password.
• Added ability to retrieve and modify user information.
• Added ability to retrieve, add and remove labels.
• Added getBlogEntryByDayAndTitle

1.4

• Added new exportSpace and exportSite methods to build exports of an individual space or an
  entire Confluence instance and return with a URL leading to the download.
• Added new getChildren and getDescendants methods to get the direct children and all
  descendants of a given page.
• Added new getAncestors method to get the ancestors of a given page.
• Removed the old getLocks as locks are superceded by page level permissions.
• Added new getPagePermissions method to retrieve page level permissions.
• Added new removeUser, removeGroup, removeAllPermissionsForGroup, addUserToGroup and
  removeUserFromGroup methods.
• Added new addPermissionToSpace method.
• Added new Permission data object.
• Added new getSpaceLevelPermissions method.

1.3

• Added new getPage method which retrieves a page by space key and page title.
• Added new removeSpace method to remove an entire space.
• Added ability to limit search by parameters.
• Allow anonymous access.

1.2

• renderContent takes an optional hashtable for rendering hints, the only one supported right now is
  "style=clean"

1.1

• getLocks gives you back a list of any locks that apply to a given page
• added a locks field to the various Page structs containing a count of any applicable page-level locks
• CRUD methods added for blog-posts
1.0.3

- `getServerInfo` gives you some basic information about the server version [CONF1123]
- `storePage` now allows you to change the page's name (incoming links are all renamed) [CONF-974]
- `storePage` now reliably allows you to re-parent pages
- WSDL now respects the server's configured base URL, allowing it to work on proxy-hosted servers [CONF-1088]

Remote Methods

Authentication Methods

- `String login(String username, String password) - login a user. Returns a String authentication token to be passed as authentication to all other remote calls. It's not bulletproof auth, but it will do for now. Must be called before any other method in a 'remote conversation'. From 1.3 onwards, you can supply an empty string as the token to be treated as being the anonymous user.``
- `boolean logout(String token) - remove this token from the list of logged in tokens. Returns true if the user was logged out, false if they were not logged in in the first place (we don't really need this return, but void seems to kill XML-RPC for me)`

Administration

- `String exportSite(String token, boolean exportAttachments) - exports a Confluence instance and returns a String holding the URL for the download. The boolean argument indicates whether or not attachments ought to be included in the export.`
- `ClusterInformation getClusterInformation(String token) - returns information about the cluster this node is part of.`
- `Vector getClusterNodeStatuses(String token) - returns a Vector of NodeStatus objects containing information about each node in the cluster.`

General

- `ServerInfo getServerInfo(String token) - retrieve some basic information about the server being connected to. Useful for clients that need to turn certain features on or off depending on the version of the server. (Since 1.0.3)`

Spaces

Retrieval

- `Vector getSpaces(String token) - returns all the SpaceSummaries that the current user can see.`
- `Vector getSpacesInGroup(String token, String spaceGroupKey) - returns all the SpaceSummaries from a given group that the current user can see.`
- `Space getSpace(String token, String spaceKey) - returns a single Space.`
- `boolean storeSpace(String token, HasTable Space) - Allows for modifying space details. Currently`
you can update the name, homepage and spaceGroup properties of a space. Note that changing the space key and other properties will have no effect.

Management

- **Space** addSpace(String token, **Space** space) - create a new space, passing in name, key and description.
- Boolean removeSpace(String token, String spaceKey) - remove a space completely.
- **Space** addPersonalSpace(String token, **Space** personalSpace, String userName) - add a new space as a personal space.
- boolean convertToPersonalSpace(String token, String userName, String spaceKey, String newSpaceName, boolean updateLinks) - convert an existing space to a personal space.
- **Space** exportSpace(String token, String spaceKey, String exportType) - exports a space and returns a String holding the URL for the download. The export type argument indicates whether or not to export in XML, PDF, or HTML format - use "TYPE_XML", "TYPE_PDF", or "TYPE_HTML" respectively. Also, using "all" will select TYPE_XML.
- boolean importSpace(String token, byte[] importData) - import a space in a compressed XML format.

**SpaceGroups**

Retrieval

- **SpaceGroup** addSpaceGroup(String token, **SpaceGroup** spaceGroup) - create a new space group passing in a **SpaceGroup** data object
- Vector getSpaceGroups(String token) - returns all the **SpaceGroups** in Confluence. ▲ Requires Confluence Administrator permission.
- boolean removeSpaceGroup(String token, String spaceGroupKey) - removes the **SpaceGroup** with the given key from the system. The contained spaces will not be deleted. ▲ Requires Confluence Administrator permission.

Management

**Pages**

Retrieval

- Vector getPages(String token, String spaceKey) - returns all the **PageSummaries** in the space. Doesn't include pages which are in the Trash. Equivalent to calling Space.getCurrentPages().

- **Page** getPage(String token, String pageId) - returns a single **Page**
- **Page** getPage(String token, String spaceKey, String pageTitle) - returns a single **Page**
- Vector getPageHistory(String token, String pageId) - returns all the **PageHistorySummaries** - useful for looking up the previous versions of a page, and who changed them.
- Vector getPagePermissions(String token, String pageId) - returns the page level permissions for this page (since 1.4)

Dependencies
• Vector getAttachments(String token, String pageId) - returns all the Attachments for this page (useful to point users to download them with the full file download URL returned).
• Vector getAncestors(String token, String pageId) - returns all the ancestors (as PageSummaries) of this page (parent, parent's parent etc).
• Vector getChildren(String token, String pageId) - returns all the direct children (as PageSummaries) of this page.
• Vector getDescendants(String token, String pageId) - returns all the descendents (as PageSummaries) of this page (children, children's children etc).
• Vector getComments(String token, String pageId) - returns all the comments for this page.
  • Comment getComment(String token, String commentId) - returns an individual comment.
  • Comment addComment(String token, Comment comment) - adds a comment to the page.
  • boolean removeComment(String token, String commentId) - removes a comment from the page.

Management

• Page storePage(String token, Page page) - add or update a page. For adding, the Page given as an argument should have space, title and content fields at a minimum. For updating, the Page given should have id, space, title, content and version fields at a minimum. The parentId field is always optional. All other fields will be ignored.
• String renderContent(String token, String spaceKey, String pageId, String content) - returns the HTML rendered content for this page. If 'content' is provided, then that is rendered as if it were the body of the page (useful for a 'preview page' function). If it's not provided, then the existing content of the page is used instead (i.e useful for 'view page' function).
• String renderContent(String token, String spaceKey, String pageId, String content, Hashtable parameters) - Like the above renderContent(), but you can supply an optional hash (map, dictionary, etc) containing additional instructions for the renderer. Currently, only one such parameter is supported:
  ° "style = clean" Setting the "style" parameter to "clean" will cause the page to be rendered as just a single block of HTML within a div, without the HTML preamble and stylesheet that would otherwise be added.
• void removePage(String token, String pageId) - remove a page

Attachments - new in version 2.0

Retrieval

• Attachment getAttachment(String token, String pageId, String fileName, String versionNumber) - get information about an attachment.
• byte[] getAttachmentData(String token, String pageId, String fileName, String versionNumber) - get the contents of an attachment.

Management

• Attachment addAttachment(String token, long contentId, Attachment attachment, byte[] attachmentData) - add a new attachment to a content entity object. Note that this uses a lot of memory - about 4 times the size of the attachment. The 'long contentId' is actually a String pageId for XML-RPC.
• boolean removeAttachment(String token, String contentId, String fileName) - remove an attachment from a content entity object.
• boolean moveAttachment(String token, String originalContentId, String originalName, String newContentEntityId, String newName) - move an attachment to a different content entity object
and/or give it a new name.

Blog Entries

- Vector getBlogEntries(String token, String spaceKey) - returns all the BlogEntrySummaries in the space.
- BlogEntry getBlogEntry(String token, String pageId) - returns a single BlogEntry.
- BlogEntry storeBlogEntry(String token, BlogEntry entry) - add or update a blog entry. For adding, the BlogEntry given as an argument should have space, title and content fields at a minimum. For updating, the BlogEntry given should have id, space, title, content and version fields at a minimum. All other fields will be ignored.
- BlogEntry getBlogEntryByDayAndTitle(String token, String spaceKey, int dayOfMonth, String postTitle) - Retrieves a blog post in the Space with the given spaceKey, with the title 'postTitle' and posted on the day 'dayOfMonth'.

Search

- Vector search(String token, String query, int maxResults) - return a list of SearchResults which match a given search query (including pages and other content types). This is the same as a performing a parameterised search (see below) with an empty parameter map.
- Vector search(String token, String query, Map parameters, int maxResults) - (since 1.3) like the previous search, but you can optionally limit your search by adding parameters to the parameter map. If you do not include a parameter, the default is used instead.

Parameters for Limiting Search Results

<table>
<thead>
<tr>
<th>key</th>
<th>description</th>
<th>values</th>
<th>default</th>
</tr>
</thead>
<tbody>
<tr>
<td>spaceKey</td>
<td>search a single space</td>
<td>(any valid space key)</td>
<td>Search all spaces</td>
</tr>
<tr>
<td>type</td>
<td>Limit types of search results to return</td>
<td>all page blogpost mail comment attachment spaceldescription personalinformation</td>
<td>All except mail</td>
</tr>
<tr>
<td>lastModified</td>
<td>Search recently modified content</td>
<td>today yesterday lastweek lastmonth</td>
<td>No limit</td>
</tr>
</tbody>
</table>

Security

- Vector getPermissions(String token, String spaceKey) - Returns a Vector of Strings representing the permissions the current user has for this space (a list of "view", "modify", "comment" and / or "admin").
- Vector getPermissionsForUser(String token, String spaceKey, String userName) - Returns a Vector of Strings representing the permissions the given user has for this space. (since 2.1.4)
• Vector getPagePermissions(String token, String pageId) - Returns a Vector of Permissions representing the permissions set on the given page.
• Vector getSpaceLevelPermissions(String token) - returns all of the space level permissions which may be granted. This is a list of possible permissions to use with addPermissionToSpace, below, not a list of current permissions on a Space.
• boolean addPermissionToSpace(String token, String permission, String remoteEntityName, String spaceKey) - Give the entity named remoteEntityName (either a group or a user) the permission permission on the space with the key spaceKey.
• boolean addPermissionsToSpace(String token, Vector permissions, String remoteEntityName, String spaceKey) - Give the entity named remoteEntityName (either a group or a user) the permissions permissions on the space with the key spaceKey.
• boolean removePermissionFromSpace(String token, String permission, String remoteEntityName, String spaceKey) - Remove the permission permission from the entity named remoteEntityName (either a group or a user) on the space with the key spaceKey.
• boolean addAnonymousPermissionToSpace(String token, String permission, String spaceKey) - Give anonymous users the permission permission on the space with the key spaceKey. (since 2.0)

• boolean addAnonymousPermissionsToSpace(String token, Vector permissions, String spaceKey) - Give anonymous users the permissions permissions on the space with the key spaceKey. (since 2.0)
• boolean removeAnonymousPermissionFromSpace(String token, String permission, String spaceKey) - Remove the permission permission from anonymous users on the space with the key spaceKey. (since 2.0)
• boolean removeAllPermissionsForGroup(String token, String groupname) - Remove all the global and space level permissions for groupname.

User Management

• User getUser(String token, String username) - get a single user
• void addUser(String token, User user, String password) - add a new user with the given password
• void addGroup(String token, String group) - add a new group
• Vector getUserGroups(String token, String username) - get a user's current groups
• void addUserToGroup(String token, String username, String groupname) - add a user to a particular group
• boolean removeUserFromGroup(String token, String username, String groupname) - remove a user from a group.
• boolean removeUser(String token, String username) - delete a user.
• boolean removeGroup(String token, String groupname, String defaultGroupName) - remove a group. If defaultGroupName is specified, users belonging to groupname will be added to defaultGroupName.
• Vector getGroups(String token) - gets all groups
• boolean hasUser(String token, String username) - checks if a user exists
• boolean hasGroup(String token, String groupname) - checks if a group exists
• boolean editUser(String token, RemoteUser remoteUser) - edits the details of a user
• boolean deactivateUser(String token, String username) - deactivates the specified user
• boolean reactivateUser(String token, String username) - reactivates the specified user
• Vector getActiveUsers(String token, boolean viewAll) - returns all registered users
• boolean setUserInfo(String token, UserInformation userInfo) - updates user information
• UserInformation getUserInformation(String token, String username) - Retrieves user information
• boolean changeMyPassword(String token, String oldPass, String newPass) - changes the current user's password
• boolean changeUserPassword(String token, String username, String newPass) - changes the specified user's password
- boolean addProfilePicture(String token, String userName, String fileName, String mimeType, byte[] pictureData) - add and set the profile picture for a user.

**Labels**

- Vector getLabelsById(String token, long objectId) - Returns all Labels for the given ContentEntityObject ID
- Vector getMostPopularLabels(String token, int maxCount) - Returns the most popular Labels for the Confluence instance, with a specified maximum number.
- Vector getMostPopularLabelsInSpace(String token, String spaceKey, int maxCount) - Returns the most popular Labels for the given spaceKey, with a specified maximum number of results.
- Vector getRecentlyUsedLabels(String token, int maxResults) - Returns the recently used Labels for the Confluence instance, with a specified maximum number of results.
- Vector getRecentlyUsedLabelsInSpace(String token, String spaceKey, int maxResults) - Returns the recently used Labels for the given spaceKey, with a specified maximum number of results.
- Vector getSpacesWithLabel(String token, String labelName) - Returns an array of Spaces that have been labelled with labelName.
- Vector getRelatedLabels(String token, String labelName, int maxResults) - Returns the Labels related to the given label name, with a specified maximum number of results.
- Vector getRelatedLabelsInSpace(String token, String labelName, String spaceKey, int maxResults) - Returns the Labels related to the given label name for the given spaceKey, with a specified maximum number of results.
- Vector getLabelsByDetail(String token, String labelName, String namespace, String spaceKey, String owner) - Retrieves the Labels matching the given labelName, namespace, spaceKey or owner.
- Vector getLabelContentById(String token, long labelId) - Returns the content for a given label ID
- Vector getLabelContentByName(String token, String labelName) - Returns the content for a given label name.
- Vector getLabelContentForObject(String token, Label labelObject) - Returns the content for a given Label object.
- Vector getSpacesContainingContentWithLabel(String token, String labelName) - Returns all Spaces that have content labelled with labelName.
- boolean addLabelByName(String token, String labelName, long objectId) - Adds a label to the object with the given ContentEntityObject ID.
- boolean addLabelById(String token, long labelId, long objectId) - Adds a label with the given ID to the object with the given ContentEntityObject ID.
- boolean addLabelForObject(String token, Label labelObject, long objectId) - Adds the given label object to the object with the given ContentEntityObject ID.
- boolean addLabelByNameToSpace(String token, String labelName, String spaceKey) - Adds a label to the object with the given ContentEntityObject ID.
- boolean removeLabelByName(String token, String labelName, long objectId) - Removes the given label from the object with the given ContentEntityObject ID.
- boolean removeLabelById(String token, long labelId, long objectId) - Removes the label with the given ID from the object with the given ContentEntityObject ID.
- boolean removeLabelForObject(String token, Label labelObject, long objectId) - Removes the given label object from the object with the given ContentEntityObject ID.
- boolean removeLabelByNameFromSpace(String token, String labelName, String spaceKey) - Removes the given label from the given spaceKey.

**Data Objects**

Most returned structs have a summary and a detailed form:
• The summary form is a primary key (ie space key, page id) and a representative form (ie space name, page title)
• The detailed form will have all of the entity details as might be needed for the client.

Unless otherwise specified, all returned structs are in detailed form.

**ServerInfo**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>majorVersion</td>
<td>int</td>
<td>the major version number of the Confluence instance</td>
</tr>
<tr>
<td>minorVersion</td>
<td>int</td>
<td>the minor version number of the Confluence instance</td>
</tr>
<tr>
<td>patchLevel</td>
<td>int</td>
<td>the patch-level of the Confluence instance</td>
</tr>
<tr>
<td>buildId</td>
<td>String</td>
<td>the build ID of the Confluence instance (usually a number)</td>
</tr>
<tr>
<td>developmentBuild</td>
<td>Boolean</td>
<td>Whether the build is a developer-only release or not</td>
</tr>
<tr>
<td>baseUrl</td>
<td>String</td>
<td>The base URL for the confluence instance</td>
</tr>
</tbody>
</table>

Note: Version 1.0.3 of Confluence would be major-version: 1, minor-version: 0, patch-level: 3. Version 2.0 would have a patch-level of 0, even if it's not visible in the version number.

**SpaceSummary**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>String</td>
<td>the space key</td>
</tr>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the space</td>
</tr>
<tr>
<td>type</td>
<td>String</td>
<td>type of the space</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this space online</td>
</tr>
</tbody>
</table>

**Space**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>String</td>
<td>the space key</td>
</tr>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the space</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this space online</td>
</tr>
<tr>
<td>homepage</td>
<td>String</td>
<td>the id of the space homepage</td>
</tr>
<tr>
<td>description</td>
<td>String</td>
<td>the HTML rendered space description</td>
</tr>
</tbody>
</table>
## SpaceGroup

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>key</td>
<td>String</td>
<td>the space-group key</td>
</tr>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the space-group</td>
</tr>
<tr>
<td>licenseKey</td>
<td>String</td>
<td>license stored against the space group</td>
</tr>
</tbody>
</table>

## PageSummary

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the page</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this page belongs to</td>
</tr>
<tr>
<td>parentID</td>
<td>String</td>
<td>the id of the parent page</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the page</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this page online</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on this page</td>
</tr>
</tbody>
</table>

## Page

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the page</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this page belongs to</td>
</tr>
<tr>
<td>parentID</td>
<td>String</td>
<td>the id of the parent page</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the page</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this page online</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version number of this page</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>the page content</td>
</tr>
<tr>
<td>created</td>
<td>Date</td>
<td>timestamp page was created</td>
</tr>
<tr>
<td>creator</td>
<td>String</td>
<td>username of the creator</td>
</tr>
<tr>
<td>modified</td>
<td>Date</td>
<td>timestamp page was modified</td>
</tr>
<tr>
<td>modifier</td>
<td>String</td>
<td>username of the page's last modifier</td>
</tr>
<tr>
<td>homepage</td>
<td>Boolean</td>
<td>whether or not this page is the space's homepage</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on</td>
</tr>
<tr>
<td>Key</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>contentStatus</td>
<td>String</td>
<td>status of the page (eg. current or deleted)</td>
</tr>
<tr>
<td>current</td>
<td>Boolean</td>
<td>whether the page is current and not deleted</td>
</tr>
</tbody>
</table>

**PageHistorySummary**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the historical page</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version of this historical page</td>
</tr>
<tr>
<td>modifier</td>
<td>String</td>
<td>the user who made this change</td>
</tr>
<tr>
<td>modified</td>
<td>Date</td>
<td>timestamp change was made</td>
</tr>
</tbody>
</table>

**BlogEntrySummary**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the blog entry</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this blog entry belongs to</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the blog entry</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this blog entry online</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on this page</td>
</tr>
<tr>
<td>publishDate</td>
<td>Date</td>
<td>the date the blog post was published</td>
</tr>
</tbody>
</table>

**BlogEntry**

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>the id of the blog entry</td>
</tr>
<tr>
<td>space</td>
<td>String</td>
<td>the key of the space that this blog entry belongs to</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the title of the page</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this blog entry online</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version number of this blog entry</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>the blog entry content</td>
</tr>
<tr>
<td>locks</td>
<td>int</td>
<td>the number of locks current on this page</td>
</tr>
</tbody>
</table>
RSS Feed

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>url</td>
<td>String</td>
<td>the URL of the RSS feed</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>the feed's title</td>
</tr>
</tbody>
</table>

Search Result

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>title</td>
<td>String</td>
<td>the feed's title</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the remote URL needed to view this search result online</td>
</tr>
<tr>
<td>excerpt</td>
<td>String</td>
<td>a short excerpt of this result if it makes sense</td>
</tr>
<tr>
<td>type</td>
<td>String</td>
<td>the type of this result - page, comment, spacedesc, attachment, userinfo, blogpost</td>
</tr>
<tr>
<td>id</td>
<td>String</td>
<td>the long ID of this result (if the type has one)</td>
</tr>
</tbody>
</table>

Attachment

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>numeric id of the attachment</td>
</tr>
<tr>
<td>pageId</td>
<td>String</td>
<td>page ID of the attachment</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>title of the attachment</td>
</tr>
<tr>
<td>fileName</td>
<td>String</td>
<td>file name of the attachment (Required)</td>
</tr>
<tr>
<td>fileSize</td>
<td>String</td>
<td>numeric file size of the attachment in bytes</td>
</tr>
<tr>
<td>contentType</td>
<td>String</td>
<td>mime content type of the attachment (Required)</td>
</tr>
<tr>
<td>created</td>
<td>Date</td>
<td>creation date of the attachment</td>
</tr>
<tr>
<td>creator</td>
<td>String</td>
<td>creator of the attachment</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>url to download the attachment online</td>
</tr>
<tr>
<td>comment</td>
<td>String</td>
<td>comment for the attachment (Required)</td>
</tr>
</tbody>
</table>
### Comment

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>String</td>
<td>numeric id of the comment</td>
</tr>
<tr>
<td>pageId</td>
<td>String</td>
<td>page ID of the comment</td>
</tr>
<tr>
<td>title</td>
<td>String</td>
<td>title of the comment</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>notated content of the comment (use renderContent to render)</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>url to view the comment online</td>
</tr>
<tr>
<td>created</td>
<td>Date</td>
<td>creation date of the attachment</td>
</tr>
<tr>
<td>creator</td>
<td>String</td>
<td>creator of the attachment</td>
</tr>
</tbody>
</table>

### User

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>String</td>
<td>the username of this user</td>
</tr>
<tr>
<td>fullname</td>
<td>String</td>
<td>the full name of this user</td>
</tr>
<tr>
<td>email</td>
<td>String</td>
<td>the email address of this user</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>the url to view this user online</td>
</tr>
</tbody>
</table>

### Permission

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>lockType</td>
<td>String</td>
<td>The type of permission. One of 'View' or 'Edit'</td>
</tr>
<tr>
<td>lockedBy</td>
<td>String</td>
<td>The user or group name of the permission's owner</td>
</tr>
</tbody>
</table>

### Label

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the label</td>
</tr>
<tr>
<td>owner</td>
<td>String</td>
<td>the username of the owner</td>
</tr>
<tr>
<td>namespace</td>
<td>String</td>
<td>the namespace of the label</td>
</tr>
<tr>
<td>id</td>
<td>String</td>
<td>the ID of the label</td>
</tr>
</tbody>
</table>

### UserInformation

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>username</td>
<td>String</td>
<td>the username of this user</td>
</tr>
<tr>
<td>content</td>
<td>String</td>
<td>the user description</td>
</tr>
<tr>
<td>creatorName</td>
<td>String</td>
<td>the creator of the user</td>
</tr>
<tr>
<td>lastModifierName</td>
<td>String</td>
<td>the url to view this user online</td>
</tr>
<tr>
<td>version</td>
<td>int</td>
<td>the version</td>
</tr>
<tr>
<td>id</td>
<td>String</td>
<td>the ID of the user</td>
</tr>
<tr>
<td>creationDate</td>
<td>Date</td>
<td>the date the user was created</td>
</tr>
<tr>
<td>lastModificationDate</td>
<td>Date</td>
<td>the date the user was last modified</td>
</tr>
</tbody>
</table>

### ClusterInformation

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>isRunning</td>
<td>boolean</td>
<td>true if this node is part of a cluster.</td>
</tr>
<tr>
<td>name</td>
<td>String</td>
<td>the name of the cluster.</td>
</tr>
<tr>
<td>memberCount</td>
<td>int</td>
<td>the number of nodes in the cluster, including this node (this will be zero if this node is not clustered.)</td>
</tr>
<tr>
<td>description</td>
<td>String</td>
<td>a description of the cluster.</td>
</tr>
<tr>
<td>multicastAddress</td>
<td>String</td>
<td>the address that this cluster uses for multicasr communication.</td>
</tr>
<tr>
<td>multicastPort</td>
<td>String</td>
<td>the port that this cluster uses for multicast communication.</td>
</tr>
</tbody>
</table>

### NodeStatus

<table>
<thead>
<tr>
<th>Key</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>nodeId</td>
<td>int</td>
<td>an integer uniquely identifying the node within the cluster.</td>
</tr>
<tr>
<td>jvmStats</td>
<td>Map</td>
<td>a Map containing attributes about the JVM memory usage of node. Keys are &quot;total.memory&quot;, &quot;free.memory&quot;, &quot;used.memory&quot;.</td>
</tr>
<tr>
<td>props</td>
<td>Map</td>
<td>a Map containing attributes of the node. Keys are &quot;system.date&quot;, &quot;system.time&quot;, &quot;system.favourite.colour&quot;, &quot;java.version&quot;, &quot;java.vendor&quot;, &quot;jvm.version&quot;, &quot;jvm.vendor&quot;, &quot;jvm.implementation.version&quot;, &quot;java.runtime&quot;, &quot;java.vm&quot;,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;user.name.word&quot;, &quot;user.timezone&quot;, &quot;operating.system&quot;, &quot;os.architecture&quot;, &quot;fs.encoding&quot;.</td>
</tr>
<tr>
<td>buildStats</td>
<td>Map</td>
<td>a Map containing attributes of the build of Confluence running on the node. Keys are &quot;confluence.home&quot;, &quot;system.uptime&quot;, &quot;system.version&quot;, &quot;build.number&quot;.</td>
</tr>
</tbody>
</table>

**Scripts examples**

The [Confluence Extension space](https://confluencelassian.com) contains various examples of scripts.
Alternative Backup Strategy for Large Confluence Sites

If these apply to you:

- encountering problems creating a site backup from the Administration > Backup and Restore page
- automatic daily backups do not work anymore
- last working backup size without attachments is large (say over 500Mb)

You may want to consider an alternative backup strategy. As you may have already discovered, the built-in backup functionality in Confluence requires a lot of memory to run. In some cases, increasing the total memory allocated your Confluence instance will still not help.

In these circumstances we recommend that you:

- Create a backup or dump of your database using tools provided by your database
- Create a backup of your Confluence home directory

We want to stress that creating these two backups is just as good as having a Confluence backup. You will be able to restore your whole site, including all data, attachments and configuration information intact with these two backups. We have written up a document on how to do this here.
Confluence Documentation Home

This page last changed on Apr 15, 2007 by smader.

<table>
<thead>
<tr>
<th>New Users</th>
<th>Guides</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature Summary</td>
<td>User Guide</td>
<td>Plugins &amp; Tools</td>
</tr>
<tr>
<td>Live Demo</td>
<td>Install Guide</td>
<td>FAQ</td>
</tr>
<tr>
<td>System Requirements</td>
<td>Upgrade Guide</td>
<td>Technical Support</td>
</tr>
<tr>
<td>Free Trial</td>
<td>Administration Guide</td>
<td>Community Forum</td>
</tr>
<tr>
<td></td>
<td>Database Configuration</td>
<td>Wikipatterns.com</td>
</tr>
<tr>
<td></td>
<td>Server Configuration</td>
<td>Community Development Hub</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Release Notes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feature Requests &amp; Bugs</td>
</tr>
</tbody>
</table>

Hosted users should check the feature comparison as some documents only apply to the installed version.

Click to view recently updated pages.

Recently Updated

by Mohammed Alam (2 hours ago)
Customise Adobe PDF Exports (Confluence)

by Charlie Perry (6 hours ago)
Re: Favourite Pages Macro (Confluence 2 User Guide)

by Jared (6 hours ago)
Re: Modify Confluence Interface Text (Confluence)

by Mark Magin (11 hours ago)
Re: Modifying Look and Feel (for themes) (Confluence)

by Mark Magin (12 hours ago)
Re: Deleting a page (Confluence 2 User Guide)

by Matt Ryall (17 hours ago)
HTTP authentication with Seraph (Confluence)

by Rosie Jameson (23 hours ago)
Content by Label Macro (Confluence 2 User Guide)

by Matt Ryall (23 hours ago)
Re: Profiling using the YourKit Plugin (Confluence)

by Matt Ryall (23 hours ago)
Profiling using the YourKit Plugin (Confluence)

by Christopher Owen (29 Apr)
Release Notes 2.5 (Confluence)

RSS Feed of recent updates.
## Administrators Guide

This page last changed on Apr 23, 2007 by david.soul@atlassian.com.

<table>
<thead>
<tr>
<th>Confluence 2 Administrator's Guide</th>
<th>Download</th>
</tr>
</thead>
</table>
| **Configuring Confluence**        | ![PDF](https://atlassian.com/)
| **Data and Backups**              | You can [download the Confluence Admin Guide](https://atlassian.com/) in PDF, HTML or XML formats. |
| **System Administration**         |          |
| **Importing Data**                |          |
| **Mail Configuration**            |          |
| **Security**                      |          |
| **User Management**               |          |
| **Design and Layout**             |          |
| **Integrating Confluence and JIRA** |          |
| **Plugin Management**             |          |
| **Performance Tuning**            |          |
| **Character Encoding**            |          |
| **Support**                       |          |

### Site Administrator?

The Confluence Administrators Guide provides information to site administrators on how to manage their Confluence instances.

If you still have a question that hasn't been answered, write and tell us about it.

Hosted users should check the [feature comparison](https://atlassian.com/) as some documents only apply to the installed version.

### Configuring Confluence

- **Site Configuration**
  - [Configuring the Site Homepage](https://atlassian.com/)
  - [Editing the Site Title](https://atlassian.com/)
  - [Editing the Site Welcome Message](https://atlassian.com/)
  - [View Space Goes to Browse Space](https://atlassian.com/)
  - [Editing the Global Logo](https://atlassian.com/)
  - [Configuring the Server Base URL](https://atlassian.com/)
  - [Configuring HTTP Timeout Settings](https://atlassian.com/)
  - [Recognised System Properties](https://atlassian.com/)

### User Management

- **Confluence User Management**
  - [Global Groups Overview](https://atlassian.com/)
  - [Global Permissions Overview](https://atlassian.com/)
  - [Setting up Anonymous Access](https://atlassian.com/)
  - [Adding a New User](https://atlassian.com/)
  - [Editing User Details](https://atlassian.com/)
  - [Removing a User](https://atlassian.com/)
  - [Enabling or Disabling Public Signup](https://atlassian.com/)
  - [Adding or Removing a User from a Group](https://atlassian.com/)
  - [Adding a Group](https://atlassian.com/)
  - [Removing a Group](https://atlassian.com/)
  - [Viewing Members of a group](https://atlassian.com/)
<table>
<thead>
<tr>
<th>Content Index Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgrading Confluence</td>
</tr>
<tr>
<td>Moving Confluence Between</td>
</tr>
<tr>
<td>Servers</td>
</tr>
<tr>
<td>Migrate to an External Database</td>
</tr>
<tr>
<td>Migrate Or Clone Confluence Between Servers</td>
</tr>
<tr>
<td>Important Directories and Files</td>
</tr>
<tr>
<td>Rebuilding the Ancestor Table</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Importing Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importing From JSPWiki</td>
</tr>
<tr>
<td>Build JSPWiki-exporter from source</td>
</tr>
<tr>
<td>Snip Snap Import</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mail Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuring a Server for</td>
</tr>
<tr>
<td>Outgoing Mail</td>
</tr>
<tr>
<td>The Mail Queue</td>
</tr>
<tr>
<td>Enabling the 'Mail Page' plugin</td>
</tr>
<tr>
<td>NEW in 2.4!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisory</td>
</tr>
<tr>
<td>Confluence Security Advisory</td>
</tr>
<tr>
<td>2005-02-09</td>
</tr>
<tr>
<td>Confluence Security Advisory</td>
</tr>
<tr>
<td>2005-12-05</td>
</tr>
<tr>
<td>Java Policy Security with</td>
</tr>
<tr>
<td>Confluence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spam Prevention (Captcha)</td>
</tr>
<tr>
<td>NEW in 2.2!</td>
</tr>
<tr>
<td>Managing External Referrers</td>
</tr>
<tr>
<td>Hiding External Referrers</td>
</tr>
<tr>
<td>Hiding External Links From</td>
</tr>
<tr>
<td>Search Engines</td>
</tr>
<tr>
<td>Excluding External Referrers</td>
</tr>
<tr>
<td>User Email Visibility</td>
</tr>
<tr>
<td>Anonymous Access to Remote API</td>
</tr>
<tr>
<td>Adding SSL for Secure Logins and Page Security</td>
</tr>
</tbody>
</table>

| Integrating JIRA and Confluence |
| Configuring Jira Issues Icon mappings |
| Add Confluence EAR-WAR to JIRA Standalone |

<table>
<thead>
<tr>
<th>Plugin Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installing and Configuring Plugins manually</td>
</tr>
<tr>
<td>Installing and Configuring Plugins using the Plugin Repository</td>
</tr>
<tr>
<td>Confluence Plugin Guide</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Macros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuring User Macros</td>
</tr>
<tr>
<td>Writing Macros</td>
</tr>
<tr>
<td>Editing and Removing macros</td>
</tr>
<tr>
<td>Enabling HTML Macros</td>
</tr>
<tr>
<td>Enabling the html-include Macro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Tuning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory usage and requirements</td>
</tr>
<tr>
<td>Configuring a Large Confluence Installation</td>
</tr>
<tr>
<td>Tuning Tips</td>
</tr>
<tr>
<td>Profiling using the YourKit Plugin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Character Encoding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuring Encoding</td>
</tr>
<tr>
<td>Troubleshooting Character Encodings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to Get Support</td>
</tr>
</tbody>
</table>
Hosted users should check the feature comparison as some documents only apply to the installed version.
Administration

- Cache Statistics
- Changing time of Daily Backup
- Confluence Data Directory Configuration
- Content Index Administration
- Important Directories and Files
- Manually Backing Up The Site
  - Configuring Daily Backups
    - User Submitted Backup & Restore Scripts
- Migrate Or Clone Confluence Between Servers
- Moving Confluence Between Servers
- Rebuilding the Ancestor Table
- Restoring a Site
- Restoring a Space
- Restoring Data from other Backups
- Restoring Data from the Administration Console
- Retrieve file attachments from a backup
- Troubleshooting failed XML site backups
- Viewing License Details
- Viewing System Information
- Where Is My ConfluenceHome Directory?
Cache Statistics

This page last changed on Oct 30, 2006 by ivan@atlassian.com.

Confluence provides statistical information about its internal caches that allows you to track the size and hit ratio of each cache and tune it if necessary, for better performance. See Performance Tuning for more information.

To view the cache statistics, go to the 'Administration Console' and click on 'Cache Statistics' in the left panel. Here, you will find a list of all objects cached within Confluence. For example, one of the main ones is the ContentEntityObject.

```
com.atlassian.confluence.core.ContentEntityObject (Alive): flush
```

<table>
<thead>
<tr>
<th>Size</th>
<th>Total</th>
<th>Hits</th>
<th>Not Found</th>
<th>Expired</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000</td>
<td>24827480</td>
<td>11332536</td>
<td>13494944</td>
<td>0</td>
<td>45%</td>
</tr>
</tbody>
</table>

About the generated numbers:

- **Size**: the max number of items in the cache (can be configured in ehcache.xml)
- **Accesses, Total**: the number of reads from the cache
- **Accesses, Hits**: the number of reads accessing cache and required content existed
- **Accesses, Not Found**: the number of reads accessing cache and required content was not-found
- **Accesses, Expired**: the number of items which were evicted from the cache, due to age or replacement by new entries (timeout or expired)
- **Ratio**: the percentage of reads which were hits

For instance to calculate Ratio:

\[
\text{Hits/Total} \times 100 = \text{Ratio}
\]

\[
11332536/24827480 = 0.45645131 \times 100 = 45\%
\]

and to calculate Total:

\[
\text{Total} = \text{Hits} + \text{Not Found} + \text{Expired}
\]

\[
24827480 = 11332536 + 13494944 + 0
\]

flush - clears cache
The upcoming new release of cluster-able Confluence 2.3 will be using distributed cache called Tangosol Coherence.

Performance Tuning

If you require to tune your application when under high usage, you may like to review this document for suggestions.

RELATED TOPICS

Cache Statistics
Viewing License Details
Viewing System Information

Administrators Guide Home Confluence Documentation Home
Changing time of Daily Backup

This page last changed on Feb 02, 2006 by vidya.

By default, Confluence runs its daily backup at 2.00 AM. You can configure Confluence to perform the backup at a time that is best suited to you or your organisational needs.

Confluence uses Quartz for scheduling periodic jobs. To change the time of your daily backup, you will need to edit the Quartz configuration.

To change the time of your daily backup

1. Open the Quartz configuration file schedulingSubsystemContext.xml located under confluence/WEB-INF/classes/
2. Find the following section of the file:
   ```xml
   <bean id="backupTrigger" class="org.springframework.scheduling.quartz.CronTriggerBean">
     <property name="jobDetail">
       <ref bean="backupJob"/>
     </property>
     <property name="cronExpression">
       <value>0 0 2 * * ?</value>
     </property>
   </bean>
   ``
3. The string '0 0 2 * * ?' sets up a Cron Trigger for the job to run at the zeroth second of the zeroth minute of the 2nd hour, every day of every month, every day of the week.
4. You can set a new time by editing this string. Note that the date and time format in this configuration file is in this order:
   Second minute hour day

For example, to set the new time to twenty past ten PM, change the string to '0 20 22 * * ?'. If you wanted to back up only once a week, for example, at midnight on Sundays, you would change the string to '0 0 0 ? * SUN'.

For complete details on the formatting of the cron string, please see http://www.opensymphony.com/quartz/api/org/quartz/CronTrigger.html.

RELATED TOPICS
Backup FAQ
Changing time of Daily Backup
Configuring Daily Backups
Manually Backing Up The Site
Site Backup and Restore

 Administrators Guide Home  Confluence Documentation Home
Confluence Data Directory Configuration

This page last changed on May 22, 2006 by david.soul@atlassian.com.

Here is a link listing important Confluence files.

The home directory defines the location of the directory where Confluence will store its data, including attachments, indexes and backups. Administrators can set this location by defining a value for the file <MY-INSTALL>/confluence/WEB-INF/classes/confluence-init.properties. To find what your home directory is currently set to, open this file and check the confluence.home property. It is unset on new installations.

Windows Configuration

On Windows, the path

C:\confluence\data

will be written as:

confluence.home=C:/confluence/data

Note that all backslashes (\) are written as forward slashes (/).

UNIX/Linux/Mac Configuration

On any UNIX-based system, the property is defined using the normal directory syntax:

confluence.home=/var/confluence/

Symbolic links

If your confluence.home directory contains a symbolic link, you must define the absolute path.

Please note that there can be no symbolic links within the confluence.home directory. If disk space is an issue, place the entire confluence.home directory on a disk partition where there is enough space.

The absolute path of generated files (such as exports) is compared with the absolute path of the confluence.home directory when constructing URLs. When a sub-directory has a different path, the URL will be incorrect, and you may receive "Page not found" errors. These measures are in place to prevent "directory traversal" attacks.

Fixing the Confluence Configuration
The Confluence configuration file: confluence-cfg.xml inside the home directory may contain references to the original location of your Confluence home. You will need to edit this file to update these references to also point to the new location. The two properties in this file that need to change are:

- `daily.backup.dir` if you have not configured your backups to be placed elsewhere already
- `hibernate.connection.url` if you are using the embedded HSQL database.
The Content Index powers Confluence's search functionality and is also used for a number of related functions such as building email threads in the mail archive. While the index is maintained automatically, you may need to rebuild it manually under these circumstances:

- If you find that your searching and mail threading are malfunctioning.
- After an upgrade (if a reindex is required after an upgrade, it will be noted in upgrade section of the release notes).

To manually rebuild the content index,

1. Go to the 'Administration Console' and click on 'Content Indexing' under the heading 'Administration' in the left panel.
   
   For reasons of efficiency, content is not immediately added to the index. New and modified Confluence content is first placed in a queue, and the queue is processed once every minute.

2. Click 'Rebuild Index'.

**Slow reindexing?**

Indexing can take a long time to complete, depending on the number of pages, number, type and size of attachments and the amount of memory allocated to Confluence.

It may help to increase the heap memory allocation of Confluence by following these instructions.

If you are running an older version of Confluence and find that the index rebuild is not progressing, you may need to shut down Confluence, and restart it with the following Java system property set: `bucket.indexing.threads.fixed=1`. This will cause the re-indexing to happen in a single thread and be much more stable (but slower).
Important Directories and Files

This page last changed on Aug 31, 2006 by david.soul@atlassian.com.

**Application Directory**

This is the directory into which the downloaded Confluence application has been unpacked. Confluence does not modify or store any data in this directory.

**Important Files and Directories**

- **confluence/WEB-INF/classes/confluence-init.properties**: This file tells Confluence where to find the Confluence Home Directory. This file is modified by the administrator when installing Confluence.
- **confluence/WEB-INF/classes/osuser.xml**: This file is modified when connecting Confluence to an external user management system such as an LDAP server or JIRA instance in Confluence 2.0 and earlier.
- **confluence/WEB-INF/lib/**: This directory is used when deploying plugins, especially those plugins that cannot automatically be loaded through the Administration Console.
- **confluence/WEB-INF/classes/log4j.properties**: Confluence's logging configuration file.
- **confluence/WEB-INF/classes/ehcache.xml**: This is where you can configure the size of Confluence's internal caches.
- **confluence/WEB-INF/classes/styles/site-css.vm**: Confluence's main stylesheet, modify at your own risk.
- **conf/server.xml**: SSL configuration.

**The Temp Directory**

The temp directory is configured in the Java runtime and some Confluence components write temporary files or lockfiles into this directory.

Typically, this directory is `/tmp` on Unix systems, or `C:\Temp` on Windows.

To change the location of this directory, you should start the Java Virtual Machine in which confluence is running with the argument:

```
-Djava.io.tmpdir=/path/to/your/own/temp/directory.
```

**The Confluence Home Directory**

This is the directory in which Confluence stores its configuration information, search indexes, custom decorators and page attachments. Also, if you're using the embedded HSQL database, the database is also stored in this directory. Administrators can expect the Confluence Home Directory to grow quite large in a busy site.

The location of this directory is configured by the Confluence administrator during installation (see
Important Files and Directories

- **confluence-init.properties**: Confluence's core configuration file; includes the configuration for connecting to its database.
- **default-formatting.properties**: Some auxiliary configuration data concerning default number and date formats.
- **attachments/**: All file attachments in the Confluence site are stored under this directory. This is the only place Confluence keeps attachment files.
- **backups/**: If Confluence is configured to produce daily backups, these are kept in this directory. Administrators should occasionally delete old or unwanted backups from this directory to prevent it from growing too large.
- **config/**: Miscellaneous global and per-space configuration files are kept in this directory.
- **database/**: If Confluence is being run from the embedded HSQL database, the database files will be kept in this directory.
- **index/**: The full-text search index is kept in this directory. Removing or modifying files in this directory may cause search to no longer function. Rebuilding the search index from Confluence's global administration screen will completely regenerate the contents of this directory.
- **plugins/**: Dynamically uploaded plugins are stored in this directory. Administrators can install new plugins by copying them into this directory and triggering a scan from the plugin management page.
- **temp/**: Confluence stores temporary files in this directory, especially during backups and exports. A daily job within Confluence deletes files that are no longer needed.
- **thumbnails/**: Stores temporary files for image thumbnails. The contents of this directory can be safely deleted, as Confluence will regenerate thumbnails as required.
- **velocity/**: Storage for customised page layouts, globally and per-space.

**Database**

All other data - page contents, links, archived mail and so on is kept in the database. If you have configured Confluence to use the embedded HSQL database, the database will store its files under **database/** in the Confluence Home Directory. Otherwise, the database management system you are connecting to is responsible for where and how your remaining data is being stored.

**Tip**

All of Confluence's persistent data is stored either in the Confluence Home Directory, or the database. If you have backup copies of both of these, taken at the same time, you will be able to restore Confluence from them (see [Restoring Data from other Backups](#)).

**RELATED TOPICS**

![Administrators Guide Home](http://localhost/doctree/attachment/77228/6478/1/1 Attached%20Image%2012345.png)
Manually Backing Up The Site

This page last changed on Feb 02, 2006 by vidya.

Confluence is configured to make a daily backup of your data and store it as a zipped XML file in the 'backups' folder under the Confluence Home Directory. A site administrator can also manually backup the data from the Administration Console.

To manually backup your site,

1. Go to the 'Administration Console' and click on 'Backup and Restore' in the left panel.
2. Select 'Archive to Backups Folder' to store a copy of the backup in the same folder as Confluence's daily backups (if you do not archive the backup it will be made available for you to download, and then deleted from the server after 24 hours).
3. Select 'Backup Attachments' to include attachments in your backup.
4. Click 'Backup'.

⚠ Please note that this process will take a few minutes.
5. Once the backup is completed, you will be prompted to download the zipped backup file.

RELATED TOPICS

Backup FAQ
Changing time of Daily Backup
Configuring Daily Backups
Manually Backing Up The Site
Site Backup and Restore

行政部门指南主页
Confluence 文档主页
Configuring Daily Backups

Confluence backs up your data on a daily basis into a zipped XML file. By default, the backup is performed at 2.00 am and the backup files are stored in the backups folder under the Confluence Home Directory.

The default naming convention for the backup files is 'daily-backup-yyyy_MM_dd'. Confluence can write backups to both local and mapped network drives. From the Administration Console, you can:

- Enable or disable backups
- Include or exclude attachments in back ups
- Configure a different path to store backup files
- Change the naming format used for the files.

To configure your daily backups,

Go to the Administration Console and click 'Daily Backup Administration' under 'Configuration'.

1. Select 'Disable' to disable backups.
2. Select 'Custom' if you want to provide an alternate path to store backup files. Enter the path in the input field displayed.
3. Select 'Off' beside 'Backup Attachments' to exclude attachments from backups. By default, this is 'on'.
4. To use a different naming prefix format, enter the new format in the 'Backup File Prefix' input field.
5. To use a different date format, enter it in in the 'Backup File Date Pattern' input field using the syntax described in this document.
6. 'Save' your changes.

Below is an example of daily backup being disabled.

![Backup Configuration](image)

**RELATED TOPICS**

Backup FAQ
Changing time of Daily Backup
Configuring Daily Backups
Manually Backing Up The Site
Site Backup and Restore
User Submitted Backup & Restore Scripts

This page last changed on Oct 26, 2006 by david.soul@atlassian.com.

These scripts are user-submitted and are unsupported by Atlassian technical support. Please use with caution.

If you would like to submit or update a script, please append it as a comment.

Delete Old Backups - Wscript Script On Windows

This script examines backup filename and deletes them if necessary, it may need to be edited.

```
'If you want 3 day old files to be deleted then insert 3 next to Date - "your number here"
'This script will search out and delete files with this string in them ".2005-12-04-" This of course depends on the number you enter.
'You can always do a wscript.echo strYesterday or strFileName to see what the script thinks you are searching for.

dtmYesterday = Date - 3
strYear = Year(dtmYesterday)
strMonth = Month(dtmYesterday)
If Len(strMonth) = 1 Then
    strMonth = "0" & strMonth
End If
strDay = Day(dtmYesterday)
If Len(strDay) = 1 Then
    strDay = "0" & strDay
End If
strYesterday = strYear & "-" & strMonth & "-" & strDay
strFileName = "C:\test*." & strYesterday & "*"
Set objFSO = CreateObject("Scripting.FileSystemObject")
objFSO.DeleteFile(strFileName)
```

Delete Old Backups - Basic Bash Script For Linux

Old XML backups can be deleted automatically by inserting a nightly or weekly automation script or cron similar to the following:

```
ls -t <path to your backup dir>/ | tail +6 | xargs -l rm {} 
```

Delete Old Backups - Advanced Bash Script For Linux

Old XML backups can be deleted automatically by inserting a nightly or weekly automation script or cron similar to the following. Set the BACKUP_DIR and DAYS_TO RETAIN variables to appropriate values for your site. Between runs, more files than DAYS_TO RETAIN builds up.
Manual Database & Home Backup - Bash Script For Linux

This backs up a mySQL database and the Confluence home directory.

```bash
#!/bin/bash
CNFL=/var/confluence
CNFL_BACKUP=/backup/cnflBackup/`date +%Y%m%d-%H%M%S`
rm -rf $CNFL/temp/*
mkdir $CNFL_BACKUP
mysqldump -uroot -p<password> confluence|gzip > $CNFL_BACKUP/confluence.mysql.data.gz
tar -cjvf $CNFL_BACKUP/data.bzip $CNFL > $CNFL_BACKUP/homedir.status
```

Related Topics

- [Site Backup and Restore](#)
- [Backup FAQ](#)
Migrate Or Clone Confluence Between Servers

This page last changed on Apr 19, 2007 by david.soul@atlassian.com.

To copy a Confluence instance from one server to another, for example to transfer the current production snapshot to a test server as permitted in the licence agreement:

On the original server:

1. Stop Confluence
2. Copy your Confluence install directory
3. Copy your Confluence home directory
4. Use your database administration tool to access your external database and create a Confluence database export
5. Start Confluence

On the target server:

1. If you are not using Standalone Confluence, setup the same version of the application server use on the original
2. Setup the database to be an exact clone of the original
   a. Setup the same database version and driver
   b. Setup the database user to have the same permissions as the original
   c. Import the Confluence database export
3. Place the Confluence install directory but do not start Confluence yet
4. Place the Confluence home directory
5. If the home directory is in a different location, go to the Confluence install directory and edit ..\confluence\WEB-INF\classes\confluence-init.properties. The home directory is set under confluence.home
6. To modify any database connection information, go to the Confluence home directory and edit confluence.cfg.xml. The connection URL is set under hibernate.connection.url
7. Start Confluence

The target instance will be a clone of the original instance.
Moving Confluence Between Servers

This page last changed on Oct 17, 2006 by david.soul@atlassian.com.

Adminstrators may need to move a Confluence instance from one server to another for upgrades or downtime.

⚠️ Avoid upgrades while transferring

If you are planning to switch databases, application servers or Confluence versions, perform the transfer and test that it is successful separately to any other changes.

Transferring Confluence Standalone To Another Server Using The Same Operating System

If you are using Confluence Standalone and the operating systems on both servers are the same, then the home and install folders can be copied straight into an identical external database and user management setup.

1. On the original server, create zips of the Confluence install and home directories. Copy the zips to the new server.
2. On the new server, unzip the install and home directories. Windows users should avoid unzipping with the Windows built-in extractor, instead use Winzip or the free 7Zip. If you are changing the location of the home directory, open the Confluence install\confluence\WEB-INF\classes directory and edit confluence-init.properties by changing the line starting with 'confluence.home='.
3. This next step is dependent on your database:
   - For users of the internal database, the content is stored inside the home directory. You should consider switching to an external database after the transfer is successful.
   - For databases stored on another server, change the user account or datasource permissions so that the new server has the same network access permissions as the original. Then confirm from the new server that the hostname can be resolved and is listening for database connections on the expected port.
   - For external databases stored locally:
     A. On the original server, create a manual database backup.
     B. Copy the database backup to the new server.
     C. On the new server, install or upgrade the database version to match the original server.
     D. Import the database backup.
     E. Add a database user account with the same username and password as the original.
     F. Provide the user with the full access to the imported database.
     G. Use a database administration tool to confirm that the user can login from the localhost.
4. If you are using internal user management, skip this step. For users who have JIRA or LDAP integration, provide the new server with network or local access to the same hosts as the original.
5. If you configured Confluence as a Windows service, repeat those instructions.

All Other Transfers

Create a backup and import into the new server.
1. Create a backup from Confluence by going to 'Administration' -> 'Backup & Restore', checking the 'Backup Attachments' and selecting 'Backup'.
2. Identify the current version of Confluence you are using, displayed at the bottom of each Confluence page.
3. Download the same version as you are currently using to the new server, which may be the current Confluence release, or an older version.
4. Using the same version, follow the Upgrading Confluence guide.
Rebuilding the Ancestor Table

This page last changed on Mar 22, 2007 by ivan@atlassian.com.

In Confluence, the ancestor table controls the breadcrumb navigation at the top of each Confluence page. Occasionally, the ancestor table will become out of sync. When this happens, you can rebuild the table to restore everything to normal.

Simply access this URL:

http://yoursite/admin/permissions/rebuild_ancestor_table.action

DashBoard > Administration > Page Level Permissions

Dashboard

Page Level Permissions

- General Configuration
- Daily Backup Admin
- Manage Referrers
- Plugins

Related Topics

- Administrators Guide Home
- Confluence Documentation Home
Restoring a Site

This page last changed on Apr 26, 2007 by ganand.

CAUTION: Restoring a backup of an entire confluence site (consisting of multiple spaces) will:

- Wipe out all confluence content in the database. Ensure that your database is backed up.
- Log you out after the restore process. Make sure you know your login details in the data being restored.

Confluence only supports Backward Compatibility for site backups. You can only successfully restore backups of a site from an older major version of Confluence to a newer major version of Confluence.
For example, if you create a Site backup in Confluence v 2.4.5, it cannot be restored into a Confluence v2.2.2. It can however, be restored in 2.5.x (because 2.5.x is a newer 'major' version)

There are two ways to restore a site from a backup file:

1. Restore a site from the Confluence Setup Wizard: This restores the data into a new instance of Confluence.
2. Restore a site from the Administration Console: This restores data into the current instance of Confluence.

If your daily backup zips cannot be restored for whatever reason, but you have both a database backup and backups of your confluence home directory, then it is still possible to restore from these backups.

You cannot restore a particular space only from the entire site backup when the backup contains more than one space.

RELATED TOPICS

Confluence
Manually Backing Up The Site
Restoring a Site
Restoring a Space
Restoring Data from the Administration Console

Administrators Guide Home Confluence Documentation Home
Restoring a Space

Confluence will only allow you to restore a space if a space by that name does not already exist on the site. If you already have a space with the identical name, you will need to delete (or rename) the existing space before restoring the new one.

**Before you begin**

Confluence only supports Forward Compatibility and Backward Compatibility for individual space import and export when executed within the same major version of Confluence instances. This means that a space export created in a newer major version of Confluence cannot be imported into an older major version of Confluence. For example, if you create a Space export in Confluence v2.4.5, it cannot be imported into a Confluence v2.2.2. It can be however imported into 2.4.6. (because 2.2.2 and 2.4.5 are two different 'major' versions) Similarly, a space export created in v 2.2.2 can not be imported into v 2.4.5. Yet it can be restored in 2.2.10. (2.2.2 and 2.2.10 belong to the same major version release) If such an operation is carried out, an error message similar to the one below will be displayed and the import action will be stopped.

The following error(s) occurred:
- Restore denied. You can only restore space backups exported from the same major version (e.g. 2.2.x or 2.3.x).

To restore a space,

Go to the 'Administration Console' and click on 'Backup and Restore' in the left panel.

You can restore data in one of two ways:

1. **Upload a zipped backup to Confluence**
   - Browse for the backup file.
   - Uncheck 'Build Index' if you want to create the index at a later stage.
   - Click 'Upload and Restore'.
2. **Restore a backup from the filesystem**
   - Select the backup file from the form field displayed. If you do not see your backup file, make you sure that it has been copied into the /opt/java/src/confluence/deployments/conf.atlassian.com/home/restore directory.
   - Click 'Restore'.
Restoring Data from other Backups

Typically, Confluence data is restored from the Administration Console or from the Confluence Setup Wizard.

If you are experiencing problems restoring from an zipped XML backup file, it is still possible to restore provided you have:

1. a backup of your home directory
2. a backup of your database (if you’re using an external database)

Instructions for this method of restoring differ depending on whether you are using the embedded database or an external database (like Oracle, MS SQL Server, MySQL or Postgres).

Embedded Database
If you are running against the embedded database, the database is located inside the database folder of your Confluence Home Directory. Hence, all you need to do is:

1. retrieve the most recent backup of your home directory
2. unpack the Confluence distribution and point the confluence-init.properties file to this directory

External Database
If you’re using an external database, you need to:

1. prepare backups of your home directory and database (preferably backups that are dated the same). That is, make sure the home directory is accessible on the filesystem and the database available to be connected to.
2. if this database happens to have a different name, or is on a different server, you need to modify the jdbc url in the confluence.cfg.xml file inside the Confluence Home Directory. The value of this property is specified as hibernate.connection.url.
3. unpack the Confluence distribution and point the confluence-init.properties file to the home directory.

RELATED TOPICS

Migrate to an External Database

 Administrators Guide Home Confluence Documentation Home
Restoring Data from the Administration Console

This page last changed on Apr 26, 2007 by ganand.

Use this option if you want to restore data into your current instance of Confluence. If you want to restore data into a new instance, follow the instructions here.

**CAUTION:**

Restoring a backup of an entire confluence site (consisting of multiple spaces) will:

- Wipe out all confluence content in the database. Ensure that you your database is backed up.
- Log you out after the restore process. Make sure you know your login details in the data being restored.

To restore data from backup,

Go to the 'Administration Console' and click on 'Backup and Restore' in the left panel.

You can restore data in one of two ways:

1. Upload a zipped backup to Confluence
   - Browse for the backup file.
   - Uncheck 'Build Index' if you want to create the index at a later stage.
   - Click 'Upload and Restore'.
2. Restore a backup from the filesystem
   - Select the backup file from the form field displayed. If you do not see your backup file, make you sure that it has been copied into the /opt/java/src/confluence/deployments/conf.atlassian.com/home/restore directory.
   - Click 'Restore'.

**RELATED TOPICS**

- Confluence
- Manually Backing Up The Site
- Restoring a Site
- Restoring a Space
- Restoring Data from the Administration Console

[ Administrators Guide Home ] [ Confluence Documentation Home ]
Retrieve file attachments from a backup

This page last changed on Jan 02, 2007 by ivan@atlassian.com.

File attachments on pages can be retrieved from a backup without needing to import the the backup into Confluence. This is useful for recovering attachments that have been deleted by users.

Both daily and manual backups allow this, as long as the 'Include attachments' property was set. Users wanting to restore pages, spaces or sites should check out the Administrators Guide instead.

Before following the instructions for recovering attachments, please review how backups store file and page information.

How Backups Store File and Page Information

The backup zip file contains entities.xml, an XML file containing the Confluence content, and a directory for storing attachments.

Backup Zip File Structure

Page attachments are stored under the attachments directory by page and attachment id. Here is an example listing:

Listing for test-2006033012_00_00.zip
\attachments\98\10001
\attachments\98\10002
\attachments\99\10001
entities.xml

Inside the attachment directory, each numbered directory inside is one page, and the numbered file inside is one attachment. The directory number is the page id, and the file number is the attachment id. For example, the file \attachments\98\10001 is an attachment with page id 98 and attachment id 10001. You can read entities.xml to link those numbers to the original filename. Entities.xml also links each page id to the page title.

Entities.xml Attachment Object

Inside the entities.xml is an Attachment object written in XML. In this example, the page id is 98, the attachment id is 10001 and the filename is myimportantfile.doc. The rest of the XML can be ignored:
Entities.xml Page Object

This XML describes a page. In this example, the page id is 98 and the title is Editing Your Files. The rest of the XML can be ignored:

```
<object class="Page" package="com.atlassian.confluence.pages">
  <id name="id">98</id>
  <property name="title"><![CDATA[Editing Your Files]]></property>
  ...
</object>
```

Instructions for Recovering Attachments

Each file must be individually renamed and re-uploaded back into Confluence by following the instructions below. Choose one of the three methods:

**Choice A - Recover Attachments By Filename**

Best if you know each filename you need to restore, especially if you want just a few files:

1. Unzip the backup directory and open entities.xml.
2. Search entities.xml for the filename and find the attachment object with that filename. Locate its page and attachment id.
3. Using the page and attachment id from entities.xml, go to the attachments directory and open that directory with that page id. Locate the file with the attachment id.
4. Rename the file to the original filename and test it.
5. Repeat for each file.
6. To import each file back into Confluence, upload to the original page by attaching the file from within Confluence.

**Choice B - Restore Files By Page**

Best if you only want to restore attachments for certain pages:

1. Unzip the backup directory and open entities.xml.
2. Search entities.xml for the page title and find the page object with that title. Locate its page id.
3. Go to the attachments directory and open that directory with that page id. Each of the files in the directory is an attachment that must be renamed.
4. Search entities.xml for attachment objects with that page id. Every attachment object for the page will have an attachment id and filename.
5. Rename the file with that attachment id to the original filename and test it.
6. Repeat for each page.
7. To import each file back into Confluence, upload to the original page by attaching the file from within Confluence.

**Choice C - Restore All Files**
Best if you have a small backup but want to restore many or all the attachments inside:

1. Unzip the backup directory and open entities.xml.
2. Go to the attachments directory and open any directory. The directory name is a page id. Each of the files in the directory is an attachment that must be renamed.
3. Search entities.xml for attachment objects with that page id. When one is found, locate the attachment id and filename.
4. Rename the file with that attachment id to the original filename and test it.
5. Find the next attachment id and rename it. Repeat for each file in the directory.
6. Once all files in the current directory are renamed to their original filenames, search entities.xml for the page id, eg directory name. Find the page object with that page id and locate its page title.
7. Rename the directory to the page title and move on to the next directory. Repeat for each un-renamed directory in the attachments directory.
8. To import each file back into Confluence, upload to the original page by attaching the file from within Confluence.

⚠️ To obtain detailed information about lost attachments, location, name and type of the attachments, you may use the findattachments script
Troubleshooting failed XML site backups

This page last changed on Mar 22, 2007 by dave@atlassian.com.

Seeing an error when creating or importing a backup?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exception while creating backup</td>
<td>Follow instructions below</td>
</tr>
<tr>
<td>Exception while importing backup</td>
<td>Follow Troubleshooting XML backups that fail on restore instead</td>
</tr>
</tbody>
</table>

Resolve Errors With Creating An XML Backup

The errors may be caused by a slightly corrupt database. If you're seeing errors such as 'Could't backup database data' in your logs, this guide will help you correct the error on your own. We strongly recommend that you backup your database and your Confluence home directory beforehand, so that you can restore your site from those if required. If you are unfamiliar with SQL, we suggest you contact your database administrator for assistance.

To Identify And Correct The Problem

To work out where the data corruption or problems are, increase the status information reported during backup, then edit the invalid database entry:

1. Stop Confluence.
2. If you have an external database, use a database administration tool to create a manual database backup.
3. Backup your Confluence home directory. You will be able to restore your whole site using this and the database backup.
4. Open the my_confluence_install/confluence/WEB-INF/classes/log4j.properties and add this to the bottom and save:

```
log4j.logger.com.atlassian.confluence.importexport.impl.XMLDatabinder=DEBUG, confluencelog
log4j.additivity.com.atlassian.confluence.importexport.impl.XMLDatabinder=false
```

5. Find your Confluence output logs. On standalone, this is the /logs directory under your Confluence install. Move or delete all existing Confluence logs to makes it easier to find the relevant logging output.
6. Restart Confluence and login.
7. Begin a backup so that the error reoccurs.
8. You must now check your log files to find out what object could not be converted into XML format. Open my_confluence_install/logs/catalina.out. Scroll to the bottom of the file.
9. Do a search for 'ObjectNotFound'. You should see an error similar to this:

```
01 2005-08-24 00:00:33,743 DEBUG [DOCPRIV2:confluence.importexport.impl.XMLDatabinder] Writing object: com.atlassian.confluence.core.ContentPermission with ID: 5 to XML.
02 2005-08-24 00:00:33,743 DEBUG [DOCPRIV2:confluence.importexport.impl.XMLDatabinder] Writing property: type
03 2005-08-24 00:00:33,743 DEBUG [DOCPRIV2:confluence.importexport.impl.XMLDatabinder] Writing property: group
04 2005-08-24 00:00:33,743 DEBUG [DOCPRIV2:confluence.importexport.impl.XMLDatabinder] Writing property: expiry
```
10. Open a DBA tool such as DbVisualizer and connect to your database instance. Scan the table names in the schema. You will have to modify a row in one of these tables.

11. To work out which table, open catalina.out, check the first line of the exception. This says there was an error writing the ContentPermission object with id 5 into XML. This translates as the row with primary key 5 in the CONTENTLOCK table needs fixing. To work out what table an object maps to in the database, here's a rough guide:
   - Pages, blogposts, comments --> CONTENT table
   - attachments --> ATTACHMENTS table

12. Now you must find the primary key of the incorrect row in this table. In this case, you can check the first line and see that the row has a primary key of 5.

13. Each property is written to a column, so the last property that was being written has the incorrect value. The row being written to when the exception was thrown was CONTENT (line 5) with a value of 2535 (line 6). Now you know the column and value. This value 2535 is the id of an entry that no longer exists.

14. Using a database administrative tool, login to the Confluence database. Locate the row in the relevant table and correct the entry. Check other rows in the table for the default column value, which may be null, 0 or blank. Overwrite the invalid row value with the default.

15. Restart Confluence.

16. Attempt the backup again. If the backup fails and you are stuck, please lodge a support request with your latest logs.

To Help Prevent This Issue From Reoccuring

1. If you are using the embedded database, be aware that it is bundled for evaluation purposes and does not offer full transactional integrity in the event of sudden power loss, which is why an external database is recommended for production use. You should migrate to an external database.

2. If you are using an older version of Confluence than the latest, you should consider upgrading at this point.
Viewing License Details

The license details page will tell you how many users your Confluence instance is licensed to support (and how many are currently registered), and how much time remains in your one-year support and upgrades period (for full licenses) or 30-day trial (for trial licenses).

To view the details of your Confluence license,

1. Go to the 'Administration Console' and click on 'License Details' under the heading 'Administration in the left panel.
2. To update your license, enter it in the form field displayed and 'Save'.

The number of licensed users only includes users who have use Confluence permission. Deactivated users are not included.

RELATED TOPICS

Cache Statistics
Viewing License Details
Viewing System Information

Confluence Documentation Home
Viewing System Information

This page last changed on Feb 14, 2007 by ivan@atlassian.com.

The System Information screen provides information about Confluence's configuration, and the environment in which Confluence has been deployed. Your system configuration information is helpful to us when diagnosing errors you may face using Confluence. If you file a support request or bug report, the more detail you can provide about your installation and environment the faster we will be able to help.

To view your system information, go to the 'Administration Console' and click on 'System Configuration'.

✓ The handy Memory Graph helps you keep track of Confluence's memory usage.

RELATED TOPICS

Cache Statistics
Viewing License Details
Viewing System Information

Confluence Documentation Home
Where Is My ConfluenceHome Directory?

This page last changed on Mar 04, 2004 by vidya.

Often in the documentation, you'll see a reference to the "ConfluenceHome" directory. This is the directory in which Confluence stores its configuration information, search indexes, custom decorators and page attachments. Also, if you're using the embedded HSQL database, the database is also stored in this directory.

When Confluence first starts up, it reads a file called confluence-init.properties, which is located inside the confluence/WEB-INF/classes directory under where you unpacked the distribution. This file contains a single line telling Confluence where the ConfluenceHome directory is. If you ever forget where you put your home directory, check confluence-init.properties.
This page contains the attachments for the Administrators Guide.
Cluster Administration page

Overview

Any copy of Confluence which uses a clustered license has a Cluster Administration Page which includes information about the active cluster.

1. Click 'Administration', available at the top-right of every Confluence page.
2. Click 'Cluster Configuration' in the left-hand menu, in the section called 'Clustering'.

Availability

To access this functionality, you must:

- be a Confluence site administrator (i.e. have global Administer Confluence permission)
- be using Confluence 2.3 or later
- be using a clustered Confluence license.

Screenshot
Cluster Status indicates whether your cluster is currently running.

Licensed nodes is the maximum number of instances of Confluence your license allows in a cluster.

Active nodes lists the instances of Confluence currently participating in the cluster.

Starting a new cluster will perform the following changes:

- enable a clustered cache
- migrate attachments from file system to the database
- publish database connection information so other nodes can join the cluster.

⚠️ All access to Confluence will be locked while this take place, and you will be forced to restart Confluence afterwards.
Cluster name is a short name for identifying your cluster. Other Confluence instances can join the cluster using this name.

To join an existing cluster, start a clean copy of Confluence on this node and select 'Join Cluster' during the setup wizard.

Related documents

Confluence Cluster Installation
Cluster Troubleshooting
Cluster Troubleshooting

This page last changed on Feb 21, 2007 by rosie@atlassian.com.

Symptoms

Below is a list of potential problems with a Confluence cluster, and their likely solutions. The solutions are listed below.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Likely solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster panic errors at startup</td>
<td>Add multicast route, Check firewall</td>
</tr>
<tr>
<td>Error in log: The interface is not suitable for multicast communication</td>
<td>Change multicast interface, Add multicast route</td>
</tr>
<tr>
<td>Multicast being sent, but not received (detectable with tcpdump)</td>
<td>Check firewall, Check intermediate routers, Increase multicast TTL</td>
</tr>
<tr>
<td>Any issue not covered here</td>
<td>Contact support</td>
</tr>
</tbody>
</table>

Which multicast address?

The multicast address and port used by Confluence can be found on the Cluster Administration page, or in confluence.cfg.xml in the Confluence home directory.

Debugging tools

Listed below are some debugging tools that help determine what the status of the multicast traffic is:

<table>
<thead>
<tr>
<th>Tool</th>
<th>Information provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>netstat -gn</td>
<td>Lists multicast groups. Does not work on Mac OS X.</td>
</tr>
<tr>
<td>netstat -rn</td>
<td>Lists system routing table.</td>
</tr>
<tr>
<td>tcpdump -i interface</td>
<td>Captures network traffic on the given interface. Most useful on an interface that only receives cluster traffic.</td>
</tr>
</tbody>
</table>

Add multicast route

Multicast networking requirements vary across operating systems. Some operating systems require little configuration, while some require the multicast address to be explicitly added to a network interface before Confluence can use it.

Usually, adding a route for all multicast traffic to use the correct interface will fix multicast traffic. The example below is for a Ubuntu Linux system:
route add -net 224.0.0.0 netmask 240.0.0.0 dev eth0

To support multiple applications using multicast on different interfaces, you may need to specify a route specific to the Confluence multicast address.

Check firewall

Ensure your firewall allows UDP traffic on the multicast address and port used by Confluence.

Change multicast interface

Confluence might have selected the incorrect interface for multicast traffic, which means it cannot connect to other nodes in the cluster. To override the interface used for multicast traffic after initial setup, edit confluence.cfg.xml in the Confluence home directory and add a property (or change the existing one) to select your desired network interface. For example to tell Confluence to use eth1:

```
<property name="confluence.cluster.interface">eth1</property>
```

Increase multicast TTL

The multicast time-to-live (TTL) specifies how many hops a multicast packet should be allowed to travel before it is discarded by a router. It should be set to the number of routers in between your clustered nodes: 0 if both are on the same machine, 1 if on two different machines linked by a switch or cable, 2 if on two different machines with one intermediate router, and so on.

Create a file in the Confluence home directory called tangosol-coherence-override.xml. Add the following to it, setting the TTL value appropriately (1 is the default):

```
<?xml version='1.0'?>
<coherence>
<cluster-config>
  <multicast-listener>
    <time-to-live system-property='tangosol.coherence.ttl'>1</time-to-live>
  </multicast-listener>
</cluster-config>
</coherence>
```

Alternatively, simply start Confluence with the system property: `-Dtangosol.coherence.ttl=1`. Again, 1 is the default value, and you should change it to something appropriate to your network topology.

Check intermediate routers

Advanced switches and routers have the ability to understand multicast traffic, and route it appropriately. Unfortunately sometimes this functionality doesn't work correctly with the multicast management information (IGMP) published by the operating system running Confluence.
If multicast traffic is problematic, try disabling advanced multicast features on switches and routers in between the clustered nodes. These features can prevent multicast traffic being transmitted by certain operating systems.

For best results, use the simplest network topology possible for the cluster traffic between the nodes. For two nodes, that means a single network cable. For larger numbers, try using a single high-quality switch.

### Advanced Tangosol configuration

If the solution to your problem involves changes to the Tangosol configuration, these changes should not be made to the Confluence configuration in `confluence/WEB-INF/classes/`. Instead, to ensure your configuration survives upgrades, make your changes via:

- Tangosol system properties
- creating a `tangosol-coherence-override.xml` file in the Confluence home directory.

Examples of making these changes are shown in the [increasing the TTL section](#).

### Didn't find a solution? Contact Atlassian support

We have dedicated staff on hand to support your installation of Confluence. Please follow the instructions for [raising a support request](#) and mention that you're having trouble setting up your Confluence cluster.
Configuring Confluence

This page last changed on Feb 02, 2006 by vidya.

- Optional Settings
  - Attachment Storage Configuration
  - Enabling CamelCase Linking
  - Enabling Remote APIs
  - Enabling Rich Text Editing Option
  - Enabling Threaded Comments
  - Enabling Trackback
  - Making Rich Text Editing default
  - WebDAV Configuration
- Other Settings
  - Configuring Attachment Size
  - Configuring Character Encoding
  - Configuring HTTP Timeout Settings
  - Configuring Indexing Language
  - Configuring Jira Issues Icon mappings
  - Configuring Number Formats
  - Configuring Shortcut Links
  - Configuring Time and Date Formats
  - Number of Ancestors to Show in Breadcrumbs
  - Thumbnail Settings
- Site Configuration
  - Configuring the Server Base URL
  - Configuring the Site Homepage
  - Editing the Global Logo
  - Editing the Site Title
  - Editing the Site Welcome Message
  - View Space Goes to Browse Space
Optional Settings

This page last changed on Jan 31, 2006 by vidya.

- Attachment Storage Configuration
- Enabling CamelCase Linking
- Enabling Remote APIs
- Enabling Rich Text Editing Option
- Enabling Threaded Comments
- Enabling Trackback
- Making Rich Text Editing default
- WebDAV Configuration
## Attachment Storage Configuration

This page last changed on Apr 01, 2007 by mryall.

Confluence 2.2 introduces the ability to store Attachments in one of three places.

### Local filesystem

In the past, Confluence has stored Attachments in the `attachments` directory within the configured Confluence home folder. This remains the default in version 2.2.

### Database

Confluence 2.2 gives administrators the option to store attachments in the database that Confluence is configured to use.

There are a number of reasons why, as an administrator, you may want to choose this storage system:

- Ease of backup
- Avoid issues with certain characters in attachment filenames

⚠️ While storing Attachments in the database can offer some advantages, please be aware that the amount of space used by the database will increase, because of the greater storage requirements of Confluence.

### WebDAV

Confluence also allows administrators to set a WebDAV repository as the location for Attachment storage.

### Migration between Attachment storage systems

An improvement introduced in Confluence 2.2 is the ability to "migrate" between different Attachment storage systems. All existing Attachments will be moved over to the new Attachment storage system.

⚠️ When the migration occurs, all other users will be locked out of the Confluence instance. This is to prevent modification of Attachments while the migration process occurs. Access will be restored as soon as the migration is complete.

To perform a migration, follow the steps below:

1. View the 'Administration Console'
2. Click on 'Attachment Storage'. The current configuration will be displayed.
Attachment storage configuration

3. Click on the 'Edit' button to modify the configuration. Select the storage system you desire.

Edit attachment storage

4. Click on the 'Save' button to save the changes.

5. A screen will appear, asking you to confirm your changes. Clicking 'Migrate' will take you to a screen that displays the progress of the migration.

**WARNING:**
Changing your attachment storage location from the current setting will result in migration occurring. This may take time (depending on the amount of attachments).
During the migration process, users will not be able to access the system.

Migration Notes:
Prior to migration, all records in the Attachment data database table will be removed.

Are you sure you want to perform this migration?

- [ ] Migrate
- [ ] Cancel

Migration warning

**Troubleshooting**

To enable debug logging for WebDAV attachment storage, add the following to the bottom of WEB-INF/classes/log4j.properties and restart Confluence:
Enabling CamelCase Linking

This page last changed on Feb 02, 2006 by vidya.

CamelCase linking is a form of markup used in many wikis where words capitalized and compounded together without spaces 'LikeThis', are used to create links.

By default, CamelCasing is not enabled in Confluence. To use CamelCasing, a site administrator will need to enable this option from the 'Administration Console'.

To enable CamelCasing,

1. From the 'Administration Console' click on 'General Configuration' in the left panel.
2. This will display the 'Options and Settings' screen. Click 'Edit'.
3. Select 'On' beside 'CamelCasing'.
4. Click 'Save'.

RELATED TOPICS

Attachment Storage Configuration
Enabling CamelCase Linking
Enabling Remote APIs
Enabling Rich Text Editing Option
Enabling Threaded Comments

!Administration Guide Attachments directory^adminhome.gif
Enabling Remote APIs

This page last changed on Feb 02, 2006 by vidya.

Confluence provides XML-RPC and SOAP remote APIs. A site administrator will need to enable the APIs from the Administration Console before you can access Confluence remotely.

To enable the Remote API,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Select 'On' beside 'Remote API'.
4. 'Save' your changes.

RELATED TOPICS

Confluenter.NET
Remote API Specification
RPC Plugins

Administrators Guide Home Confluence Documentation Home
Enabling Rich Text Editing Option

This page last changed on Feb 02, 2006 by vidya.

With Confluence 2.0 and later versions, users have the option of using the Rich Text editor to create pages. By default, this is set to 'On'. If desired, a site administrator can disable 'Rich Text Editing' from the Administration Console.

To disable Rich Text editing,

1. Go to the Administration Console, click on 'General Configuration' in the left panel.
2. In the 'Options and Settings' screen, click 'Edit'.
3. Select 'Off' beside 'Rich Text Editing'.
4. Click 'Save'.

RELATED TOPICS

- Enabling Rich Text Editing Option
- Making Rich Text Editing default
- Rich Text Editor Overview

[Home](http://admin.home) [Confluence Documentation Home](http://doc.home)
Enabling Threaded Comments

This page last changed on Feb 02, 2006 by vidya.

Comments on pages or news items are displayed in one of two views:

- **Threaded**: Shows the comments in a hierarchy of responses. Each subsequent reply to a comment is indented to indicate the relationships between the comments.
- **Flat**: Displays all the comments in one single list and does not indicate the relationships between comments.

By default, comments are displayed in Flat mode.

To enable or disable the 'threaded view',

1. Go to the 'Administration Console', click on 'General Configuration' in the left panel.
2. In the 'Options and Settings' screen, click 'Edit'.
3. Select "On" beside 'Threaded Comments'.
4. Click 'Save'.

**RELATED TOPICS**

- Commenting on a Page
- Viewing Comments

[Administrators Guide Home](#) [Confluence Documentation Home](#)
Enabling Trackback

When Trackback is enabled, any time you link to an external webpage that supports Trackback Autodiscovery, Confluence will send a trackback ping to that page to inform it that it has been linked to.

Confluence pages also support Trackback Autodiscovery and when Trackback is enabled, can receive trackback pings sent by other sites.

To enable trackback,

1. Go to the 'Administration Console', click on 'General Configuration' in the left panel.
2. In the 'Feature Settings' screen, click 'Edit'.
3. Select "On" beside 'Trackback' and click 'Save'.

RELATED TOPICS

Attachment Storage Configuration
Enabling CamelCase Linking

Administrators Guide Home  Confluence Documentation Home
Making Rich Text Editing default

This page last changed on Feb 02, 2006 by vidya.

A site administrator can configure whether the default mode of editing on the site is 'Rich Text' or 'Wiki Markup'.

Users will still be able to configure their individual preferences from the 'Edit' tab of a page.

To Make Rich Text Editing Default,

1. From the 'Administration Console' click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Select 'On' beside 'Users see rich text editor by default'. Select 'Off' to make 'Wiki Markup' editing default.
4. Click 'Save'.

RELATED TOPICS

Enabling Rich Text Editing Option
Making Rich Text Editing default
Rich Text Editor Overview

!Administration Guide Attachments directory^adminhome.gif
WebDAV Configuration

This page last changed on Sep 24, 2006 by ivan@atlassian.com.

You can configure Confluence to store attachments in an external WebDAV server. This provides users with an existing WebDAV infrastructure with an alternative way of accessing attachments, and of attaching files to Confluence pages.

⚠️ If you have existing attachments on your file system, these will no longer be accessible once you switch over to WebDAV.

To store attachments remotely on a WebDav server,

1. From the 'Administration Console' under 'Attachment Storage' click on 'WebDav Configuration' in the left panel.
2. This will display the current storage location for attachments. Click 'Edit'.
3. Select the radio button 'Remotely on a WebDav server'.
4. Enter the 'WebDav Server URL' where you want to store your attachments.
5. Enter your username and password and click 'Save'.

RELATED TOPICS

Important Directories and Files

行政部门 Guide Home  Confluence Documentation Home
Other Settings

This page last changed on Jan 31, 2006 by vidya.

- Configuring Attachment Size
- Configuring Character Encoding
- Configuring HTTP Timeout Settings
- Configuring Indexing Language
- Configuring Jira Issues Icon mappings
- Configuring Number Formats
- Configuring Shortcut Links
- Configuring Time and Date Formats
- Number of Ancestors to Show in Breadcrumbs
- Thumbnail Settings
Configuring Attachment Size

Confluence gives you the option of limiting the maximum size of a single file attachment. Site administrators should keep in mind that the amount of disk space used by Confluence is directly proportional to the number and size of attachments put into the system.

To configure the maximum size of an attachment,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Beside 'Attachment Maximum Size', enter the maximum size. The default is 10 mb.
4. 'Save' your changes.

RELATED TOPICS

Configuring Attachment Size
Configuring Character Encoding
Configuring HTTP Timeout Settings
Configuring Indexing Language
Configuring Number Formats

Administrators Guide Home Confluence Documentation Home
**Configuring Character Encoding**

This page last changed on Feb 02, 2006 by vidya.

Confluence uses UTF-8 character encoding to deliver its pages.

⚠️ While it is possible to change the character encoding, unless you are certain of what you are doing, we recommend that you leave this as it is.

To change the character encoding,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Beside 'Encoding', enter the new character encoding of your choice.
4. 'Save' your changes.

**RELATED LINKS**

Joel Spolsky: [The Absolute Minimum Every Software Developer Absolutely, Positively Must Know About Unicode and Character Sets (No Excuses!)](http://www.joelonsoftware.com/articles/Unicode.html)

**RELATED TOPICS**

- Configuring Attachment Size
- Configuring Character Encoding
- Configuring HTTP Timeout Settings
- Configuring Indexing Language
- Configuring Number Formats

[Administrators Guide Home](http://confluence.atlassian.com/administrators-guide.html)  [Confluence Documentation Home](http://confluence.atlassian.com/)
Configuring HTTP Timeout Settings

This page last changed on Aug 07, 2006 by tom@atlassian.com.

⚠️ This feature is available in 2.2.8 and later versions of Confluence

When macros such as the RSS macro, the Calendar macro or the Repository Client Plugin make HTTP requests to servers which are down, a long timeout value is used. You can set this timeout value through a system parameter to avoid this.

If you are using Tomcat, you can add this to the catalina.bat/sh file:

```
JAVA_OPTS=-Dhttp.timeout=timeInSecondsHere
```
Configuring Indexing Language

Changing the Indexing Language setting may improve the accuracy of Confluence search results if the majority of the content of your site is in some language other than English. Since Confluence v. 2.2.5, the content indexing support is provided in German, Russian, Chinese, CJK, French, Brazilian, Czech and Greek besides English (default).

To configure a different indexing language,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' on the right hands side of the 'Formatting and International Settings' section.
3. There is a drop-down list of 'Indexing Language' currently supported in Confluence.
4. 'Save' your changes.

RELATED TOPICS

8.1 Locating Important Directories and Files
Configuring Indexing Language
Content Index Administration
Macro Parameters Index
Working with Macros
Configuring Jira Issues Icon mappings

This page last changed on Feb 02, 2006 by vidya.

If you are using the \{jiraissues\} macro to retrieve information from a JIRA server, you will have to tell Confluence where to find the icons for any custom statuses or issue types you have configured in JIRA.

💡 Confluence is configured by default with all JIRA’s standard issue type and status icons. You will only need to change these settings if you have customised additional statuses or issue types for JIRA or have changed JIRA’s default icons.

To configure custom icons,

1. Go to the 'Administration Console' and click on 'Jira Issue Icon Mappings' in the left panel.
2. For each icon you wish to configure, enter the name of the issue type or status into the Jira entity field, and the filename of its icon into the filename field. 💡 Ensure that the icon with that filename is located in the \images/icons directory of the JIRA server.
3. You may edit existing icon mappings by clicking on the remove link by an existing mapping, then re-adding it with a new icon filename.

RELATED TOPICS

Configuring Attachment Size
Configuring Character Encoding
Configuring HTTP Timeout Settings
Configuring Indexing Language
Configuring Number Formats

🏠 Administrators Guide Home 🏠 Confluence Documentation Home
**Configuring Number Formats**

This page last changed on Feb 02, 2006 by vidya.

To change the number formats,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
   - There are two number format settings:
     - Long Number Format
     - Decimal Number Format
3. Change the formats using the guidelines in this document.
4. 'Save' your changes.

**RELATED TOPICS**

- Configuring Attachment Size
- Configuring Character Encoding
- Configuring HTTP Timeout Settings
- Configuring Indexing Language
- Configuring Number Formats

[Administrators Guide Home](#) [Confluence Documentation Home](#)
Configuring Shortcut Links

This page last changed on Jan 03, 2007 by mryall.

Shortcut links provide a quick way of linking to resources frequently referenced from Confluence. When you create a shortcut link, you are assigning a key to a url so that when a user edits Confluence documents they can type the key instead of the complete url.

Here is an example:

Most Google searches look like this: http://www.google.com/search?q=. If you create a shortcut for this search with the key 'google', every time a user needs to use http://www.google.com/search?q= searchterms, they can just type [searchterms@google] instead.

Here is a screenshot showing the shortcuts currently defined on http://confluence.atlassian.com:

<table>
<thead>
<tr>
<th>Key</th>
<th>Expanded Valuc</th>
<th>Default Alias</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>cache</td>
<td><a href="http://www.google.com/search?q=cache">http://www.google.com/search?q=cache</a>:</td>
<td>Remove</td>
<td></td>
</tr>
<tr>
<td>imdb</td>
<td><a href="http://us.imdb.com/title">http://us.imdb.com/title</a>?</td>
<td>Remove</td>
<td></td>
</tr>
<tr>
<td>jira</td>
<td><a href="http://jira.atlassian.com/secure/QuickSearch.jspa?searchString=">http://jira.atlassian.com/secure/QuickSearch.jspa?searchString=</a> JIRA Issue %s</td>
<td>Remove</td>
<td></td>
</tr>
<tr>
<td>googlegroups</td>
<td><a href="http://groups.google.com/groups?q=">http://groups.google.com/groups?q=</a></td>
<td>Remove</td>
<td></td>
</tr>
<tr>
<td>google</td>
<td><a href="http://www.google.com/search?q=">http://www.google.com/search?q=</a></td>
<td>Remove</td>
<td></td>
</tr>
<tr>
<td>dictionary</td>
<td><a href="http://www.dict.org/bin/DickDatabase=*&amp;Form=Dict1&amp;Strategy=*&amp;Query=">http://www.dict.org/bin/DickDatabase=*&amp;Form=Dict1&amp;Strategy=*&amp;Query=</a></td>
<td>Remove</td>
<td></td>
</tr>
</tbody>
</table>

Shortcut links are added and maintained by site administrators from the Administration Console.

To create a shortcut link,

1. Go to the 'Administration Console' and click on 'Shortcut Links' in the left panel.
2. Enter a 'Key' for your shortcut. This is the shortcut name a user will use to reference the url.
3. Enter the 'Expanded Value'. This is the url for the link. You can use '%s' in the URL to specify where the user's input is inserted. If there is no '%s' in the URL, the user's input will be put at the end.
4. (Optional. Available in Confluence version 2.3 and later.) Enter a 'Default Alias'. This is the text of the link which will be displayed on the page where the shortcut is used, with the user's text being substituted for '%s'.
5. Click 'Save'.

Using Shortcut Links

Simply specify in the link what should go on the end of the shortcut URL, followed by an at-sign and the key of the shortcut. Shortcut names are case-insensitive. So, for example, using the keys shown in the above screenshot:

<table>
<thead>
<tr>
<th>To link to...</th>
<th>Type this</th>
<th>Resulting URL</th>
<th>Demonstration</th>
</tr>
</thead>
<tbody>
<tr>
<td>a JIRA issue</td>
<td>[CONF-1000@JIRA]</td>
<td><a href="http://jira.atlassian.com/secure/QuickSearch.jspa?searchString=CONF-1000">http://jira.atlassian.com/secure/QuickSearch.jspa?searchString=CONF-1000</a></td>
<td></td>
</tr>
</tbody>
</table>
Shortcut links can have titles just like any other link:

<table>
<thead>
<tr>
<th>To link to...</th>
<th>Type this</th>
<th>Resulting URL</th>
<th>Demonstration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Movie</td>
<td>[Fight Club]tt0137523@IMDB</td>
<td>[<a href="http://us.imdb.com/Title?tt0137523">http://us.imdb.com/Title?tt0137523</a>]</td>
<td></td>
</tr>
<tr>
<td>Database</td>
<td></td>
<td>[<a href="http://www.google.com/search?q=Atlassian+Confluence">http://www.google.com/search?q=Atlassian+Confluence</a>]</td>
<td></td>
</tr>
</tbody>
</table>

Deleting Shortcut Links

Once you create a shortcut link, it is listed under 'Shortcut Links' in the 'Administration Console'. Click 'Remove' to delete the shortcut.
Configuring Time and Date Formats

This page last changed on Feb 02, 2006 by vidya.

Confluence allows you to localise the formats used to display dates and times within the web interface. The settings use the syntax of Java's SimpleDateFormat class (described below).

To change the time and date formats,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
   - There are three time and date format settings:
     - Time Format: displaying only the time of day (for example, when each news item is posted)
     - Date Time Format: displaying both the date and the time of day (for example, in historical versions of pages)
     - Date Format: displaying only the date (for example, the creation and most recent modification dates of pages)
3. Change the formats using the guidelines in this document.
4. 'Save' your changes.

RELATED LINKS

- [Java 1.4.2 SimpleDateFormat API](#)

RELATED TOPICS

- Configuring Attachment Size
- Configuring Character Encoding
- Configuring HTTP Timeout Settings
- Configuring Indexing Language
- Configuring Number Formats

[Administrators Guide Home](#) [Confluence Documentation Home](#)
Number of Ancestors to Show in Breadcrumbs

Whenever there are three or more page links to be displayed in the breadcrumbs, Confluence will use an ellipsis like this '...' and display only the topmost and lowermost page links. Clicking on the ellipsis will display the page links in between.

Note that the Dashboard and space homepage links are always displayed at the start of the breadcrumbs, and are not counted as ancestors for the purpose of this setting.

Screenshot: Breadcrumbs

You can configure how many immediate ancestors you want displayed in the breadcrumbs when you go to the page.

To configure the number of ancestors to show in the breadcrumbs,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Beside 'Number of Ancestors to show in Breadcrumbs', enter a number. For example, if you enter 2, two immediate ancestors for the page will be displayed following the dots.
4. 'Save' your changes.
Thumbnail Settings

This page last changed on Feb 02, 2006 by vidya.

The thumbnail settings allow you to define the height and width of images when they are displayed as thumbnails.

To configure thumbnail settings,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Under the heading 'Thumbnail Settings', enter a value in pixels for:
   - Maximum Height: 200 pixels by default.
   - Maximum Width: 200 pixels by default.
4. 'Save' your changes.

RELATED TOPICS

Gallery Macro
Thumbnail Macro
Uploading a Profile Picture

 Administrators Guide Home Confluence Documentation Home
Site Configuration

This page last changed on Jan 31, 2006 by vidya.

- Configuring the Server Base URL
- Configuring the Site Homepage
- Editing the Global Logo
- Editing the Site Title
- Editing the Site Welcome Message
- View Space Goes to Browse Space
Configuring the Server Base URL

The Server Base URL is the url via which users access Confluence. The base url must be set to the same URL by which browsers will be viewing your Confluence site.

Confluence will autodetect the base url during setup, but you may need to set it manually if your site's URL changes, or if you set up Confluence from a different URL to the one that will be used to access it publicly.

To configure the Server Base Url,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
4. 'Save' your changes.

Warning

If you configure a different base url, or if visitors use some other URL to access Confluence, it is possible that you may encounter errors while viewing some pages.

RELATED TOPICS

Configuring the Server Base URL
Configuring the Site Homepage
Editing the Global Logo
Editing the Site Title
Editing the Site Welcome Message
Configuring the Site Homepage

You can configure Confluence to direct users to any of the space homepages on the site when they login, rather than to the Dashboard.

To configure the site-wide homepage,

1. Go to the 'Administration Console' and click 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Select the space you want to set as homepage from the 'Set Homepage' drop-down menu .
   • Ensure that the 'View Space Goes to Browse Space' setting is set to 'OFF' if you want users to be
     sent to the space homepage and not the summary page

The spaces available to be set as your homepage will depend on the access permissions of the space and the site.

• If your site allows anonymous access, the site homepage must also be anonymously accessible.
• If your site does not allow anonymous access, the site homepage must be accessible to the
  'confluence-users' group.

Screenshot : Configuring the site homepage

<table>
<thead>
<tr>
<th>Site Homepage:</th>
<th>dashboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Title:</td>
<td></td>
</tr>
<tr>
<td>Maximum Size (B):</td>
<td></td>
</tr>
<tr>
<td>Welcome Message:</td>
<td></td>
</tr>
<tr>
<td>Indexing Language:</td>
<td></td>
</tr>
<tr>
<td>Server Base URL:</td>
<td></td>
</tr>
<tr>
<td>Now in Breadcrumbs:</td>
<td></td>
</tr>
</tbody>
</table>

RELATED TOPICS

- Configuring the Server Base URL
- Configuring the Site Homepage
- Editing the Global Logo
- Editing the Site Title
- Editing the Site Welcome Message
Editing the Global Logo

By default, the global logo appears beside the page title on all pages in the site. You can disable the logo or replace it with one of your own.

To edit the global logo,

1. From the 'Administration Console' click on 'Global logo' under the heading 'Look and Feel' in the left panel.
2. In the screen displayed, select 'Off' to disable logo.
3. To upload a new logo, click 'Browse' to select a new image and click 'Upload Logo'.

RELATED TOPICS

Configuring the Server Base URL  
Configuring the Site Homepage  
Editing the Global Logo  
Editing the Site Title  
Editing the Site Welcome Message

Governors Guide Home  Confluence Documentation Home
Editing the Site Title

This page last changed on Feb 02, 2006 by vidya.

The site title appears in your browser's title bar. By default, it is set to 'Confluence'.

To change the title of your Confluence instance,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Enter a new title for your site in the input field beside 'Site Title' and 'Save'.

RELATED TOPICS

- Configuring the Server Base URL
- Configuring the Site Homepage
- Editing the Global Logo
- Editing the Site Title
- Editing the Site Welcome Message

Administrators Guide Home  Confluence Documentation Home
Editing the Site Welcome Message

This page last changed on Feb 02, 2006 by vidya.

The site welcome message appears on the Dashboard. It can be used to provide users with an introduction of the site, or as a "message of the day".

To edit the site welcome message,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. In the text-entry box beside 'Site Welcome Message' enter your text using regular Confluence markup.
4. 'Save' your changes.

RELATED TOPICS

Configuring the Server Base URL
Configuring the Site Homepage
Editing the Global Logo
Editing the Site Title
Editing the Site Welcome Message

Confluence Documentation Home
View Space Goes to Browse Space

This page last changed on Feb 02, 2006 by vidya.

By default, when you click on a space link, you are taken to the space's homepage. If you wish, you can configure Confluence to redirect all space links on the site to the 'Browse Space' view of the space instead.

To direct the space link to the 'browse space' view,

1. Go to the 'Administration Console' click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Select 'ON' beside 'View Space goes to Browse Space' and click 'Save'.

RELATED TOPICS

Configuring the Server Base URL
Configuring the Site Homepage
Editing the Global Logo
Editing the Site Title
Editing the Site Welcome Message

行政部门 Guide Home  Confluence Documentation Home
Configuring Encoding

This page last changed on Apr 09, 2007 by mjensen.

Confluence allows the configuration of which character encoding is used to deliver pages.

- While different character encodings are supported, we strongly recommend that UTF-8 is used. Confluence is heavily tested on UTF-8, and users are likely to have less problems with this encoding than others.

- Mac Users
  Mac Users please note that MacRoman encoding is compatible with UTF-8. You do not need to change your encoding settings if you are already using MacRoman.

To avoid problems with character encoding, make sure the encoding used across the different components of your system are the same:

- Configuring Database Character Encoding
- Application Server URL encoding
- Confluence Character Encoding

If you are having problems with the character encoding in Confluence, please see the Troubleshooting Character Encodings page.
Troubleshooting Character Encodings

Often users may have problems with certain characters in a Confluence instance. Symptoms may include:

- Non-ASCII characters appearing as question marks (?)
- Page links with non-ASCII characters not working
- Single characters being displayed as two characters
- Garbled text appearing

In most cases, it is due to a mis-configuration in one of the components that Confluence uses.

Follow these steps to diagnose the problem:

1. Run the encoding test

Confluence includes an encoding test that can reveal problems with your configuration.

To perform the test, view the `/admin/encodingtest.action` page on your Confluence instance. You will be required to copy and paste a line of text and submit a form. The test will take the text and pass it through Confluence, the application server and the database, and return the results.

If the text displayed in the encoding test is different to what was entered, then there are problems with your character encoding settings.

A successful test looks like the following:
The encoding test has now been run. Below, you can compare the raw text delivered from Confluence to a round-trip through the database. All the test results should appear identical.

### Test 1: Raw text

This is the test string generated in Confluence

### Test 2: Form submission

This is the test string pasted by you into the web form and submitted back to Confluence

### Test 3: Database round-trip (select as LOWER)

This is the string from Test 2 after being stored in the database and then retrieved

Expected result (converting Java string to lowercase)

### Test 4: Database round-trip (select as UPPER)

This is the string from Test 2 after being stored in the database and then retrieved

Expected result (converting Java string to uppercase)

---

**MySQL 3.x**

MySQL 3.x is known to have some problems with the upper- and lower-casing of some characters, and may fail the last two tests. For more information, see [MySQL 3.x Character Encoding Problems](#).

---

2. Ensure the same encoding is used across all components

As mentioned in the Configuring Encoding document, the same character encoding should be used across the database, application server and web application (Confluence).

- To change the character encoding used in Confluence, see Configuring Character Encoding.
- To change the character encoding used in the application server, please ensure you set the Application Server URL encoding and view your application server's documentation on any other settings required to enable your encoding.
- To change the character encoding used in the database, see Configuring Database Character Encoding.
3. Requesting support

If there are still problems with character encoding after following the above steps, create a support request, and our support staff will aid in solving your problem.

Entering in the following details will help us to identify your problem:

- Attach screenshots of the problem
- Attach the results of the encoding test (above)
- Select which application server (and version) you are using
- Select which database (and version) you are using
- Copy the contents of the System Information page into the 'Description' field
"€" Euro character

This page last changed on Sep 17, 2006 by cmiller.

The € (euro) symbol is a three byte character, with byte values in file (UTF-8) of 0xE2, 0x82, 0xAC.

Sometimes, if the character encoding is not set consistently among all participating entities of the system, Confluence, server and the database, one may experience strange behaviour.

... I write a page with a Euro sign in it (€). All is well, the Euro sign shows up in the wiki markup text-box, and the preview, and the display of the saved page. One day later, the Euro sign has changed into a question mark upside down! ...

What is going on? Why does the Euro sign mysteriously change? How do I prevent it?

Interestingly enough the character encoding test passes with no problems, demonstrating that Confluence and the connected Database both recognise the € symbol.

There are two potential reasons for this behaviour:

Database and Confluence is using utf-8 encoding. The connection is not.

When data transferred to it via the connection which does not use utf-8 encoding gets encoded incorrectly. Hence, updating the connection encoding may resolve this problem from now on, yet it probably would not affect already existing data.

Database is not using utf-8. Confluence and your connection are.

If your Database encoding is not set to UTF-8, yet is using some other encoding such as latin1, it could be one of the potential reasons why you lose the "€" characters at some stage. It could be occurring due to caching. When Confluence saves data to the database, it may also keep a local cached copy. If the database encoding is set incorrectly, the Euro character may not be correctly recorded in the database, but Confluence will continue to use its cached copy of that data (which is encoded correctly). The encoding error will only be noticed when the cache expires, and the incorrectly encoded data is fetched from the database.

For instance the latin1 encoding would store and display all 2-byte UTF8 characters correctly except for the euro character which is replaced by '?' before being stored. As Confluence's encoding was set to UTF-8, the 2-byte UTF-8 characters were stored in latin1 database assuming that they were two latin1 different characters, instead of one utf8 character. Nevertheless, this is not the case for 3-byte utf8 characters, such as the Euro symbol.

Please ensure that you set the character encoding to UTF-8 for all the entities of your system as advised in this guide.
MySQL 3.x Character Encoding Problems

MySQL 3.x is known to have some problems upper- and lower-casing certain (non-ASCII) characters.

Diagnosing the problem

1. Follow the instructions for Troubleshooting Character Encodings.
2. If the upper- and lower-cased strings displayed on the Encoding Test are different, then your database is probably affected.

An example (faulty) output of the Encoding Test is shown below:

The encoding test has now been run. Below, you can compare the raw text delivered from Cox round-trip through the database. All the test results should appear identical.

| Internationalization | This image is how all of the test results below should appear on this page, and all of your System Information.
|---|---

**Test 1: Raw text**

This is the test string generated in Confluence

**Internationalization**

**Test 2: Form submission**

This is the test string pasted by you into the web form and submitted back to Confluence

**Internationalization**

**Test 3: Database round-trip (select as LOWER)**

This is the string from Test 2 after being stored in the database and then retrieved

**internationalization**

Expected result (converting Java string to lowercase)

**internationalization**

**Test 4: Database round-trip (select as UPPER)**

This is the string from Test 2 after being stored in the database and then retrieved

**Internationalization**

Expected result (converting Java string to uppercase)

**Internationalization**

**Solution**
Upgrade to a newer version of MySQL. (4.1 is confirmed to work.)
Configuring Mail

This page last changed on Feb 02, 2006 by vidya.

- Configuring a Server for Outgoing Mail
- Enabling the 'Mail Page' plugin
- The Mail Queue
Configuring a Server for Outgoing Mail

Configuring your Confluence server to send outgoing mail allows Confluence users to:

- receive Daily Reports
- send a page via email

To configure Confluence Standalone to send outgoing mail,

1. Go to the 'Administration Console' and click 'Mail Servers' under 'Configuration' in the left panel. This will list all currently configured SMTP servers.
2. Click 'Add New SMTP Server' (or edit an existing server)
   - Name: By default, this is set to 'SMTP Server'.
   - From: Enter the email id that will be displayed in the 'from' field for email messages originating from this server.
   - Subject Prefix: Enter a subject prefix, if required.
3. Configuring the Host Address, Username and Password.
   - Manually enter your 'Host Address', 'Username' and 'Password' details in the form fields displayed (recommended).
   OR
   - Specify the 'JNDI' location of a mail session configured in your application server in the form field displayed.

Troubleshooting

If you experience problems with these configurations, please check that your
<Confluence-Install>/confluence/WEB-INF/lib contains only one copy of the following JAR files:

1. javamail-x.x.x.jar
2. activation-x.x.x.jar
3. mail-x.x.x.jar

Ideally, these should be:

- javamail-1.3.2.jar
- activation-1.0.2.jar
- mail-1.3.2.jar

You will then need to move these into the proper directory:

Standalone Version

Please move the above three jar files from the confluence/WEB-INF/lib directory to the common/lib directory and restart Confluence.
EAR/WAR Version
To Be Confirmed

RELATED TOPICS

Configuring a Server for Outgoing Mail
Enabling the 'Mail Page' plugin
The Mail Queue
Enabling the 'Mail Page' plugin

The 'Mail Page' plugin allows anyone with the 'View' space permission to email a Confluence page.

Confluence versions 2.4 and later come with the 'Mail Page' plugin preinstalled.

The 'Mail Page' plugin is disabled by default. This is because, when someone emails a Confluence page, they can select from a list of all Confluence users and groups (note, however, that email addresses are not visible), or even mail the page to arbitrary addresses. If you have enabled anonymous access or self-signup, visitors could potentially use this feature to send spam or nuisance email through your Confluence server.

⚠️ Please note that this plugin only works when the mail server is configured.

To enable the 'Mail Page' plugin,

1. Go to the 'Administration Console' and click 'Plugins' (under 'Configuration' in the left panel).
2. This will list all plugins that are currently installed in your Confluence system. Click 'Mail Page Plugin'.
3. This will display the 'Mail Page Plugin' details. To enable the 'Mail Page' plugin, click 'Enable plugin'.
4. Ensure that both of the following are enabled:
   - 'Mail Page Link' — displays the 'E-mail' link next to the 'Copy' link on the 'Page Info' screen (see 'E-mailing a page')
   - 'mailpageactions' — enables the e-mail operation to be performed.

Related Topics

 Configuring a Server for Outgoing Mail
 Enabling the 'Mail Page' plugin
 The Mail Queue
The Mail Queue

This page last changed on Feb 02, 2006 by vidya.

Email messages waiting to be sent out are queued in a 'Mail Queue' and periodically flushed from Confluence once a minute. A site administrator can also manually flush emails from the mail queue.

If there is an error sending messages, the failed emails are sent to an 'Error Queue' from which you can either try to resend them or delete them.

To view the mail queue,

1. Go to the 'Administration Console' and click on 'Mail Queue' in the left panel. This will display the emails currently in the queue.
2. Click 'Flush Mail Queue' to send all emails immediately.
3. Click 'Error Queue' to view failed email messages. You can try to 'Resend' the messages, which will flush the mails back to the 'Mail Queue' or 'Delete' them from here.

RELATED TOPICS

Configuring a Server for Outgoing Mail
Enabling the 'Mail Page' plugin
The Mail Queue

RELATED TOPICS
Confluence and JIRA

This page last changed on Feb 01, 2006 by vidya.

- Add Confluence EAR-WAR to JIRA Standalone
- Integrating JIRA and Confluence
- Override properties in JIRA to Confluence Bridge
Add Confluence EAR-WAR to JIRA Standalone

This document will assist you in adding Confluence to your existing JIRA Standalone.

**Step 0 - Consider alternatives**

This guide is for experts only. If you run into any difficulties with this process, Atlassian technical support may provide limited assistance outside of helping users switch to running Confluence Standalone separately.

Before embarking on this process, consider whether you could not rather run JIRA and Confluence in separate Tomcat instances running behind an Apache frontend server (see guides for Confluence and JIRA). There are some benefits to keeping them separate:

- Each app can be restarted without affecting the other.
- If one webapp hangs for any reason (e.g. running out of memory), it doesn't affect the other.
- Any problems can be debugged more easily. Logs are separate and product-specific, rather than everything going to catalina.out. Thread and heap dumps are smaller and more relevant.
- It reduces the likelihood of jar conflicts (e.g. jars that must be installed in common/lib), particularly if you later want to install a third webapp not from Atlassian.

Offsetting this is the extra complexity of having to run Apache.

If you wish to proceed, please follow these instructions:

**Step 1 - Download and extract WAR**

1. Download the Confluence WAR file
2. Extract the downloaded zip file. It should extract to a folder called confluence-<version>. Inside this folder you'll find a folder called "confluence". Make a note of the absolute path to this directory (as you will need to use it later). Note: Do not copy the confluence folder to the webapps folder inside tomcat - this may cause Confluence to be deployed more than once.

**Step 2 - Configure confluence-init.properties**

1. Open confluence/WEB-INF/classes/confluence-init.properties in a text editor
2. Set the confluence.home property to a directory of your choosing. This is the directory that will contain all of Confluence's configuration, backup and attachment files.

**Step 3 - Edit tomcat context descriptors**

If you are deploying to JIRA version 3.3 or higher:
1. Create a file called confluence.xml in your JIRA standalone's conf/Catalina/localhost directory (if you have set up a different hostname for your JIRA tomcat instance, please specify that instead of localhost)

2. Open confluence.xml and add these lines:

```xml
<Context path="/confluence" docBase="c:/applications/confluence-2.1.3/confluence" debug="0" reloadable="true"> <Logger className="org.apache.catalina.logger.FileLogger" prefix="atlassian-confluence." suffix=".log" timestamp="true"/>
</Context>
```

3. For docBase specify the value you noted down earlier. ! This is the full path to the confluence folder in your confluence-<version> installation folder, not the confluence home folder. It should look like: c:/<path to confluence installation>/confluence-<version>/confluence.

Otherwise (for older versions of JIRA):

1. Open conf/server.xml in a text editor
2. Find the block that begins: <Context path="" docBase="../atlassian-jira" debug="0" reloadable="true"> and ends with </Context> block.
3. After the </Context>, append the following:

```xml
<Context path="/confluence" docBase="c:/applications/confluence-2.1.3/confluence" debug="0" reloadable="true"> <Logger className="org.apache.catalina.logger.FileLogger" prefix="atlassian-confluence." suffix=".log" timestamp="true"/>
</Context>
```

4. For docBase specify the value you noted down earlier. ! This is the full path to the confluence folder in your confluence-<version> installation folder, not the confluence home folder. It should look like: c:/<path to confluence installation>/confluence-<version>/confluence.

5. Remove the commons-logging-1.0.4.jar file from the confluence\WEB-INF\lib directory

! Do not delete the existing Jira <Context> block. Insert the code above after the Jira <Context> block.

**Step 4 - Modify your setenv.sh/bat (ONLY IF YOU ARE RUNNING A SUN MICROSYSTEMS JVM)**

1. Open JIRA's bin/setenv.sh/bat (.sh on unix, .bat on windows) in a text editor.
2. Find the line that says: 
   "... JAVA_OPTS=... " and add 
   
   ```
   &XX:MaxPermSize=128m
   ```
   
   to its end.

The Java Virtual Machine sets aside a portion of memory as the "permanent space", for objects that it never expects to have to garbage-collect. Because JIRA and Confluence are both quite large applications, it is possible that this permanent space will be filled up. Increasing the application heap size will not help, because the permanent generation size is a separate setting.

! This flag is only supported on JVM's created by Sun Microsystems. If you include this flag while running another vendors JVM (such as JRocket, or IBM's JVM) they will not start.

**Step 5 - Restart the Server**

1. Shut down, and then restart the standalone server
2. Confluence should now be accessible on the same server as your existing JIRA standalone, under
the confluence directory.
For example, if your JIRA is running at http://jira.example.org:8080/, Confluence will be running on http://jira.example.org:8080/confluence/reuse

⚠️ When setting up the Confluence database do not reuse the JIRA database. Create a new database for Confluence.

Troubleshooting

When I try to send a test mail from Confluence, I get javax.mail.NoSuchProviderException: smtp

In some circumstances, Confluence will be unable to send email after being deployed in the same application-server as JIRA. If, when you try to send a test mail from the administration tool, you get the error: "javax.mail.NoSuchProviderException: smtp", please follow these instructions to fix it.

I have installed JIRA and Confluence in some other application server than Tomcat

These instructions only apply to the standalone Tomcat version of JIRA. Other application servers have not been tested in this configuration, and users have specifically reported difficulties deploying the two applications together in Orion Server and JBoss. We hope to resolve these issues soon.

Confluence is slow, and dumps enormous amounts of information to its logfiles

If you are seeing a large amount of DEBUG logging output, then ensure that you have removed the commons-logging-1.0.4.jar file from the confluence\WEB-INF\lib directory
Integrating JIRA and Confluence

If you are looking for a technical guide to the process, see Add Confluence EAR-WAR to JIRA Standalone

JIRA and Confluence were designed to complement each other. We've all seen projects where people try to store all their knowledge in the issue tracker, and we've seen projects where people have suffered trying to track issues in a knowledge management tool. We say: collect your team's thoughts, plans and knowledge in Confluence, track your issues in JIRA, and let the two applications work together to help you get your job done.

Here are four ways you can get JIRA and Confluence working together: use Confluence shortcuts to make easy links to JIRA issues, use trackback for two-way linking between Confluence and JIRA, use macros to include JIRA reports in Confluence pages, and integrate your JIRA and Confluence user management.

Combine Confluence Shortcuts and JIRA Quick Search

The simplest ideas can often be the most useful. In our Confluence site's global configuration - Administration > Shorcut Links, we have the following shortcut defined:

JIRA: http://jira.atlassian.com/secure/QuickSearch.jspa?searchString=

This way, it's simple to create links using Confluence's shortcut notation. Link directly to JIRA issues: CONF-1000, or use JIRA's intuitive quick-search functionality to create links to particular groups of issue: CONF open improvements will link to a list of all open issues in the Confluence project of type "Improvement" (try it and see!)
Use Trackback for easy two-way linking

Activate Trackback in JIRA and Confluence, and if someone makes a link from one application to the other, the link will automatically lead both ways: create a link from a JIRA issue to an example in a Confluence page, and the Confluence page will automatically know to link back to the JIRA issue, and vice versa. This is the perfect way to keep discussion connected to an issue.

- Document your user stories or use-cases in Confluence, and see at a glance which issues affect each use-case.
- If a JIRA issue requires more discussion or thought than can be conveniently held in comments, link them to a Confluence page.

(Note: as of Confluence 1.0 and JIRA 2.6, there is no mechanism for trackback to log in to JIRA or Confluence, so the use of trackback is limited to pages that are visible to anonymous visitors. In a protected Intranet environment, you may wish to open up Anonymous access to JIRA and Confluence to allow trackback to take place. Future revisions of the applications will give you the opportunity to allow Confluence to "log in" to JIRA and vice versa, avoiding this limitation)

Use the \{jiraissues\} macro to embed JIRA reports into your Confluence site

Any JIRA search-result can be embedded in a Confluence page using the \{jiraissues\} macro with your choice of included fields and field ordering. This way you can incorporate information from JIRA into the normal flow of your knowledge management. Combined with other macros like \{junitreport\}, \{rss\} and \{html-include\} and the FatCow suite, you can create dashboards in Confluence consolidating information from across your project, with Confluence and JIRA at the centre.

Link to Confluence pages from JIRA issues

While it is possible to simply paste links to Confluence pages into text fields of an issue (e.g. descriptions), the JIRA Linker Plugin provides a custom field that helps you find the correct page.

Integrate JIRA and Confluence user-management

To save you having to enter users into both JIRA and Confluence, you can configure Confluence to use JIRA’s user database (this requires that you are using JIRA with an external database, it will not work if you are using JIRA with an embedded HSQL database)

And much more coming...

When you buy a license for JIRA or Confluence, you are automatically entitled to a year of updates. We listen to our customers needs, and having our products complement and work well with each other is very important to us. So if there is any way you think Confluence and JIRA could be made to work better,
suggest it in our discussion space, and it may very well end up in a future version.
Override properties in JIRA to Confluence Bridge

This page last changed on May 10, 2005 by vidya.

Overriding properties used in the JIRA and Confluence Bridge

If, for some reason, you need to override the name of a column or a table used in Confluence's bridge to JIRA, you may do so in osuser.xml (see below).

This is most likely something you would consider doing if columns names were failing because your database is case sensitive.

```xml
<provider class="bucket.user.providers.CachingCredentialsProvider">
    <property name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcCredentialsProvider</property>
    <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
</provider>

<provider class="bucket.user.providers.CachingAccessProvider">
    <property name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcAccessProvider</property>
    <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
</provider>

<provider class="bucket.user.providers.CachingProfileProvider">
    <property name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcProfileProvider</property>
    <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
    <property name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
```

Simply add the `<property name="chain.PROPERTY_NAME_HERE">NEW_VALUE</property>` element, to override a property (see below) with a new value.

Name Value Pairs for JiraJdbcAccessProvider, JiraJdbcProfileProvider and JiraJdbcCredentialsProvider

<table>
<thead>
<tr>
<th>Property</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>userTable</td>
<td>userbase</td>
</tr>
<tr>
<td>userName</td>
<td>userName</td>
</tr>
<tr>
<td>userPassword</td>
<td>password_hash</td>
</tr>
<tr>
<td>groupTable</td>
<td>groupbase</td>
</tr>
<tr>
<td>groupName</td>
<td>groupname</td>
</tr>
<tr>
<td>membershipTable</td>
<td>membershipbase</td>
</tr>
<tr>
<td>membershipUserName</td>
<td>user_name</td>
</tr>
<tr>
<td>membershipGroupName</td>
<td>group_name</td>
</tr>
<tr>
<td>userId</td>
<td>id</td>
</tr>
<tr>
<td>membershipId</td>
<td>userId</td>
</tr>
</tbody>
</table>
Confluence Security

This page last changed on Oct 03, 2005 by vidya.

- Confluence Community Security Advisory 2006-01-19
- Confluence Security Advisory 2005-02-09
- Confluence Security Advisory 2005-12-05
- Confluence Security Advisory 2006-01-20
- Confluence Security Advisory 2006-01-23
- Confluence Security Advisory 2006-06-14
- Java Policy Security with Confluence — If you would like to secure the confluence webapp to make sure plugins (or other code executed) cannot access unwanted system resources, the following will restrict file system access.
- NoFollow Support
Confluence Community Security Advisory 2006-01-19

This page last changed on Jan 20, 2006 by jeremy@atlassian.com.

This security advisory is not endorsed by Atlassian - this is a public service advisory from a member of the confluence community. Please remember to backup any modified files, and use these instructions at your own risk. While this information is based on Confluence v2.1.2, it may have uses with older affected versions of Confluence.

The official security advisory is located at Confluence Security Advisory 2006-01-20

Problem

There is a possibility of XSS exploitation of the Full Name user profile field when displayed.

Solution

The problem was unescaped outputting of the fullname - wrapping the output in $generalUtil.htmlEncode() resolve it. The vast majority of the problem can be resolved by changing /confluence/template/includes/macros.vm in the distribution on the following lines:

- 180
- 186
- 200
- 340
- 893

I have attached the modified macros.vm file here which you can copy into your distribution.

Scope

There are other places which are still affected which Atlassian have been made aware of, a complete resolution should be provided by Atlassian in their own official advisory.

I hope this helps some of you!
Confluence Security Advisory 2005-02-09

This page last changed on Feb 08, 2005 by jnolen.

A flaw has been found in Confluence by which attackers can bypass Confluence security and change content on the site. Atlassian STRONGLY recommends that all Confluence customers apply the fix described below immediately, or upgrade to Confluence 1.3.3

**Vulnerability**

By crafting custom URLs, any person with the ability to browse Confluence can modify content on the site, bypassing security settings. This vulnerability does not allow users to view content they would not normally be able to view, or escalate their privileges in other ways.

This flaw affects all versions of Confluence prior to 1.3.3, including the 1.4-DR development releases.

**Fix**

This vulnerability is fixed in Confluence 1.3.3 and later. Customers who do not wish to migrate to 1.3.3 can fix this bug using the procedure below:

1. Edit the file confluence/WEB-INF/classes/xwork.xml
2. Find the following section near the top of the file (around line 34):
   ```xml
   <interceptor-stack name="defaultStack">
     <interceptor-ref name="profiling">
       <param name="location">Before defaultStack</param>
     </interceptor-ref>
     <interceptor-ref name="transaction"/>
     <interceptor-ref name="authentication"/>
     <interceptor-ref name="requestParameterHack"/>
     <interceptor-ref name="eventnotifier"/>
     <interceptor-ref name="autowire"/>
     <interceptor-ref name="params"/>
     <interceptor-ref name="servlet"/>
     <interceptor-ref name="pageAware"/>
     <interceptor-ref name="permissions"/>
     <interceptor-ref name="profileing">
       <param name="location">After defaultStack</param>
     </interceptor-ref>
   </interceptor-stack>
   ```
3. Locate the "autowire" and "params" entries:
   ```xml
   <interceptor-ref name="eventnotifier"/>
   --> <interceptor-ref name="autowire"/>  <--
   --> <interceptor-ref name="params"/>  <--
   <interceptor-ref name="servlet"/>
   ```
4. Swap the two lines around. The whole stack should now look like this:
   ```xml
   <interceptor-stack name="defaultStack">
     <interceptor-ref name="profiling">
       <param name="location">Before defaultStack</param>
     </interceptor-ref>
     <interceptor-ref name="transaction"/>
     <interceptor-ref name="authentication"/>
   </interceptor-stack>
   ```

Document generated by Confluence on May 01, 2007 00:44  Page 411
5. Restart Confluence.
Confluence Security Advisory 2005-12-05

This page last changed on Dec 04, 2005 by cmiller.

A flaw has been found in Confluence by which attackers to inject malicious HTML code into Confluence. Atlassian STRONGLY recommends that all Confluence customers apply the fix described below immediately, or upgrade to Confluence 2.0.2

Vulnerability

By entering HTML code into the Confluence search input fields, attackers can cause arbitrary scripting code to be executed by the user's browser in the security context of the Confluence instance.

This flaw affects all versions of Confluence between 1.4-DR releases and 2.0.1.

(Atlassian was not informed of the problem before it was published by third-party security researchers. You can read the third-party security advisory here: http://secunia.com/advisories/17833/. The vulnerability was originally reported here.)

Fix

This vulnerability is fixed in Confluence 2.0.2 and later. Customers who do not wish to migrate to 2.0.2 can fix this bug using the procedure below:

1. Edit the confluence/decorators/components/searchresults.vmd
2. Replace the following reference (around line 48):

   $action.getText("search.result", [$start, $end, $total, $queryString])

   with

   $action.getText("search.result", [$start, $end, $total, $generalUtil.escapeXml($queryString)])

3. Edit the confluence/search/searchsite-results.vm.
4. Replace the following reference (around line 11):

   $searched for &lt;b&gt;$action.searchQuery.queryString&lt;/b&gt;

   with

   $searched for &lt;b&gt;$generalUtil.escapeXml($action.searchQuery.queryString)&lt;/b&gt;

5. Restart Confluence.

Alternatively, you can download the patched source files from CONF-4825. If you are patching a 2.0.x installation, then use the files with the .2.0 suffix. If you are patching a 1.4.x installation, then use the files with the .1.4 suffix.
Confluence Security Advisory 2006-01-20

A flaw has been found in Confluence by which attackers to inject malicious HTML code into Confluence. Atlassian STRONGLY recommends that all Confluence customers apply the fix described below immediately, or upgrade to Confluence 2.1.3.

Vulnerability

By entering HTML/JavaScript code into the full name of a user's profile, attackers can cause arbitrary scripting code to be executed by the user's browser in the security context of the Confluence instance.

This flaw affects all versions of Confluence between 1.4-DR releases and 2.1.2.

This issue was initially reported by Ricardo Sueiras and a fix was quickly documented by Dan Hardiker at the Confluence Community Security Advisory 2006-01-19 page. Our thanks to them for bringing this to our attention.

There is an issue in JIRA at CONF-5233.

Fix

This vulnerability is fixed in Confluence 2.1.3 and later. Customers who do not wish to migrate to 2.1.3 can fix this bug using the procedure below:

Steps to fix:

1. Copy macros.vm to your confluence/template/includes folder
2. Restart Confluence

Note: If you are using version 1.4.4, please download and copy this file instead. You will need to rename it back to macros.vm.

If you are not using any of the above versions, you will need to replace wrap calls to display full names of users in $generalUtil.htmlEncode(). Alternatively, send us an email. We do however encourage you to use the latest stable point release regardless of the version you are using.
Confluence Security Advisory 2006-01-23

This page last changed on Jan 20, 2006 by jeremy@atlassian.com.

A flaw has been found in Confluence by which the unrestricted content of a space can be revealed in search results.

Vulnerability

By entering in a space key and blank query string into the Search macro, pages from the specified space will be displayed, without filtering on page and space permissions. This can allow unpermitted users to view the excerpts of pages they don't have access to.

This flaw is confirmed to affect all releases from 1.4 to 2.1.2.

More information is available at CONF-5189.

Fix

This vulnerability is fixed in Confluence 2.1.3 and later. We strongly suggest that customers upgrade to this release to fix the vulnerability.

Customers who are using 1.4.x and do not wish to upgrade can download a patched class from CONF-5198.
Confluence Security Advisory 2006-06-14

Vulnerability

By crafting a custom HTTP request, an attacker can delete or modify global permissions settings on a Confluence site.

This flaw affects all Confluence versions between 1.4 and 2.2.2. 2.2.3 and later are not vulnerable.

Fix

This issue has been fixed in Confluence 2.2.3. Patches are also available for all versions of Confluence between 1.4 and 2.2.2. For more information, please see this issue report.

Atlassian STRONGLY recommends that all customers either upgrade to Confluence 2.2.3, or apply the patch.
Java Policy Security with Confluence

If you would like to secure the confluence webapp to make sure plugins (or other code executed) cannot access unwanted system resources, the following will restrict file system access.

Create the following .java.policy file and place it somewhere:

```
grant {
    permission java.util.PropertyPermission "*", "read,write";
    permission java.net.SocketPermission "*:-", "connect,accept,listen";
    permission java.io.FilePermission "/tangosol-coherence-override.xml","read";
    permission java.io.FilePermission "/tangosol-coherence-override-prod.xml","read";
    permission java.io.FilePermission "/path/to/confluenceWebapp/-","read,write";
    permission java.io.FilePermission "/path/to/confluence.home","read,write,delete";
    permission java.io.FilePermission "/path/to/confluence.home/-","read,write,delete";
    permission java.io.FilePermission "/path/to/resin/lib/-","read";
    permission java.io.FilePermission "/tmp", "read";
    permission java.io.FilePermission "/tmp/-", "read,write,delete";
    permission java.io.FilePermission "quartz.properties", "read";
    permission java.util.logging.LoggingPermission "control";
    permission java.awt.AWTPermission "*";
    permission java.lang.reflect.ReflectionPermission "suppressAccessChecks";
    permission java.io.SerializablePermission "*";
    permission java.lang.RuntimePermission "*";
    permission java.net.NetPermission "*";
    permission ognl.OgnlInvokePermission "*";
}
```

Make sure the following are java options are defined:

```
-Djava.security.manager -Djava.security.policy=/path/to/.java.policy
```

Of course you might be able to get away with less - please edit with any improvements you have!
NoFollow Support

This page last changed on May 23, 2005 by vidya.

NoFollow support is a new feature in the release of Confluence 1.4.

Nofollow Support

As part of the effort to combat the spamming of wikis and blogs (Confluence being both), Google came up with some markup which instructs search-engines not to follow links. By removing the main benefit of wiki-spamming it’s hoped that the practice will stop being cost-effective and eventually die out.

By default, all URLs inserted in a page (or in comments) will be given the nofollow tag. Inter-page links (i.e. Documentation Home) or shortcut links (i.e. CONF-2622@JIRA) will not be tagged.

The site administrator can turn the feature off in General Configuration.

| Hide External Links From Search Engines: | ON |
Design and Layout

This page last changed on Jan 31, 2006 by vidya.

- Custom Decorator Templates
- Customising Look and Feel Overview
  - Customising Colour Schemes
  - Customising Layouts
  - Global Templates
  - Working With Decorator Macros
- Themes Configuration
  - Applying a Theme To A Site
  - Creating a Theme
    - Adding a theme icon
  - Deploying the theme as a plugin
  - Including Cascading Stylesheets in Themes
  - Modifying Look and Feel (for themes)
    - Configuring the theme plugin
  - Themes Overview
Custom Decorator Templates

This page last changed on Mar 28, 2006 by mryall.

About Decorators

Confluence is built on top of the Open Source SiteMesh library, a web-page layout system that provides a
consistent look and feel across a site. SiteMesh works through "decorators" that define a page's layout
and structure, and into which the specific content of the page is placed. If you are interested, you can
read more on the SiteMesh website.

What this means for Confluence is that you can customise the look and feel of almost all of your
Confluence site through editing three decorators:

- The "Main" decorator defines the look and feel of most pages on the site
- The "Popup" decorator defines the look and feel of the popup windows such as the "Insert Link" and
  "History" pages.
- The "Printable" decorator defines the look and feel of the printable versions of pages (available
  through the Cannot resolve external resource into attachment. icon on each page)

You can view and edit these decorators from within Confluence: they are available from the "Site
Decorators" section of the site Administration menu. Changes to the decorators will affect all spaces
hosted on that Confluence installation.

The decorator that is used to draw Confluence's administrative pages can not be edited from within
Confluence. This means that if you make some editing mistake that renders the rest of the site
unuseable, the administrative pages should still be available for you to fix the template.

Browsing the Default Decorators

At any time, you can browse the default decorators that come packaged with Confluence by following the
"View Default" links. The template browser also allows you to view the "#parsed" templates that are
included within the template when it is compiled. While you can't edit these included templates, you will
probably have to copy some or all of them into your custom template as you do your customisation.

Editing Custom Decorators: Add a Logo

To edit Confluence decorators, you should have a good knowledge of HTML, and some understanding of
the Velocity templating language.

The first thing you will see when you choose to create a custom "Main" decorator is... there's not much to
edit. By default, most of the content of this decorator is included from other files:

```html
<html>
<head>
    <title>$title - Confluence</title>
```
We can add our logo, changing the "logocell" table cell:

```html
<td width="60%" rowspan=2 class="logocell">
  <img align="right" src=http://www.atlassian.com/images/atlassian_logo.gif width="203" height="60" #pagetitle("spacenametitle")></td>
</tr>
```

When you insert this into the right section of the template and hit save, visitors to the site will see the logo at the top of each page. Note, the administrative pages will be unaffected: you will have to go to the dashboard or to a space to see the changes you have made.

**Macros**

Some parts of the page are drawn using Velocity macros, including the navigation bar. The macros you should know about when editing decorators are described in [Decorator Macros](#)
If Something Goes Terribly Wrong

From the "Site Decorators" page in Confluence's administrative menu, you can delete your custom templates. When you do this, the default template will be restored, fixing anything that may have been broken.

Alternatively, the custom templates are stored inside the confluence.home directory you defined in confluence-init.properties when installing Confluence. If you have somehow managed to render Confluence completely unuseable through editing your templates, simply delete the confluence.home/velocity directory, and restart Confluence. The default templates will be restored.

WARNING: Only delete the velocity directory! Changing anything else inside your confluence.home is dangerous, and you could lose important data!

For Advanced Users

The velocity directory is at the front of Confluence's velocity template search path. As such, you can override any of Confluence's velocity templates by placing an identically named file in the right place.

While we don't recommend you do this unless you know exactly what you're doing, it does give you complete control over the look of every aspect of Confluence. It also means that you can edit your templates in a text-editor if you wish, rather than through the web interface.

There are, however, two important caveats:

1. Velocity is configured to cache templates in memory. When you edit a page from within Confluence, it knows to reload that page from disk. If you are editing the pages on disk, you will either have to turn off velocity's caching temporarily in WEB-INF/classes/velocity.properties, or restart the server to make your changes visible.

2. Because we only officially support the modification of the three global decorator files, other changes may interact unpredictably with future versions of Confluence. When upgrading, you should always test your custom modifications thoroughly before deploying them on a live site.
Customising Look and Feel Overview

You can customise the 'look and feel' of Confluence at both the global and space levels.

Any changes you make to the 'look and feel' of the site at the global level will be applied as the default 'look and feel' for all the spaces in the site.

An individual space can be configured to have its own 'look and feel' through the space administration screens.

Here's how you can customise the look and feel of your site:

- **Colour Scheme** : Change the colour scheme of the user interface.
- **Layouts** : Edit how the controls are laid out in the site. This does not change the actual page layouts but the way the surrounding controls appear in the page.
- **Themes** : Use themes for advanced layout customisation.

**RELATED TOPICS**

- Customising Colour Schemes
- Customising Layouts
- Customising Look and Feel Overview
- Global Templates
- Working With Decorator Macros
Customising Colour Schemes

This page last changed on Feb 02, 2006 by vidya.

A site administrator can configure a new colour scheme for the site dynamically from the Administration Console.

The default colour scheme for the site will also become the default for all spaces within it. However, it is possible for space administrators to configure a different colour scheme for spaces from the space administration screens.

To change the site's colour scheme,

1. Go to the 'Administration Console' and click 'Colour schemes' in the left panel. This will bring up a new screen. See Screenshot below.
2. Click 'Edit colour scheme'. Enter standard HTML/CSS2 colour codes, or use the colour-picker to choose a new colour from the palette provided. Any changes you make will immediately be reflected across the Confluence installation.

The colour scheme applies to the following UI elements:

- Top Bar - the bar across the top of the page that contains the breadcrumbs.
- Space Name Text - the text of the current space name located above the page title.
- Heading Text - all heading tags throughout the space.
- Links - all links throughout the space.
- Borders and Dividers - table borders and dividing lines.
- Menu Bar Background - background of top navigational buttons
- Menu Bar Text - text that appears on the menu bar
- Menu Bar Background Highlight - background colour of menu bar when highlighted.
- Menu Bar Text Highlight - menu bar text when highlighted

Screenshot : Editing a site's colour scheme
 Handy Hint
If you mess things up, just click the 'Reset Default Colour Scheme' button and then try again.

RELATED TOPICS

Customising Colour Schemes
Customising Layouts
Customising Look and Feel Overview
Global Templates
Working With Decorator Macros

 Administrators Guide Home Confluence Documentation Home
Customising Layouts

This page last changed on Apr 22, 2007 by david.soul@atlassian.com.

You can customise the layout of your Confluence instance by editing the "decorators" that define the look and feel of the site.

Confluence is built on top of the Open Source SiteMesh library, a web-page layout system. Read more on the [SiteMesh website](http://siteMesh.sourceforge.net). To edit the layout of Confluence, you will need to modify these decorator files. A decorator file is a vmd file and is written in a very simple programming language called Velocity. Learn more about Velocity. Once you become familiar with Velocity, you can edit the decorator files to personalise the appearance of Confluence.

You can customise the layouts for the entire site or for an individual space.

⚠️ You need to be a site administrator to edit site decorator files.

The decorator files are grouped into:

- **Site layouts**: These are used to define the controls that surround each page in the site. For example, the header and the footer.

- **Content layouts**: These control the appearance of content such as pages and news items: they don't change the way the pages themselves are displayed, but allow you to alter the way the surrounding comments or attachments are displayed.

- **Export Layouts**: These control the appearance of spaces and pages when they are exported to HTML. If you are using Confluence to generate a static website, for example, you will need to modify these layouts.

To edit a site decorator file,

1. Go to the 'Administration Console' and click on 'Layouts' under 'Look and Feel' in the left navigation panel. The decorators are grouped under Site, Content and Group layouts.
   - Click 'View Default' to view the vmd file.
   - Click 'Create Custom' to edit the default vmd file. This will open up the vmd file in edit mode.
2. Make changes and click 'Update'.

⚠️ If something goes wrong : Click 'Reset Default' to revert to the original layouts.

Alternatively, the custom templates are stored inside the `confluence.home` directory you defined in `confluence-init.properties` when installing Confluence. If you have somehow managed to render Confluence completely unusable through editing your templates, simply delete the `confluence.home/velocity` directory, and restart Confluence. The default templates will be restored.

CAUTION: Only delete the `velocity` directory! Changing anything else inside your `confluence.home` is
dangerous, and you could lose important data!

Using Velocity Macros

When editing Custom Decorator Templates, there are a number of macros available to define complex or variable parts of the page such as menus and breadcrumbs. You may insert these macros anywhere in your templates. More information on Working With Decorator Macros.

For Advanced Users

The velocity directory is at the front of Confluence’s velocity template search path. As such, you can override any of Confluence’s velocity templates by placing an identically named file in the right place. While we don’t recommend you do this unless you know exactly what you’re doing, it does give you complete control over the look of every aspect of Confluence. It also means that you can edit your templates in a text-editor if you wish, rather than through the web interface.

**WARNING**

1. Velocity is configured to cache templates in memory. When you edit a page from within Confluence, it knows to reload that page from disk. If you are editing the pages on disk, you will either have to turn off velocity’s caching temporarily in WEB-INF/classes/velocity.properties, or restart the server to make your changes visible.
2. Because we only officially support the modification of the three global decorator files, other changes may interact unpredictably with future versions of Confluence. When upgrading, you should always test your custom modifications thoroughly before deploying them on a live site.

**RELATED TOPICS**

- Customising Colour Schemes
- Customising Layouts
- Customising Look and Feel Overview
- Global Templates
- Working With Decorator Macros

[@Administrators Guide Home](#) [@Confluence Documentation Home](#)
Global Templates

This page last changed on Jan 31, 2006 by vidya.

A template is a pre-defined page that can be used as a prototype when creating new pages. Templates are useful for giving pages a common style or format.

Global Templates are defined by site administrators and are available in every space across the site.

Templates are written in regular Confluence markup, using special markup to define form fields that need to be filled in.

To add a global template,

1. Go to the Administration Console, click on 'Global templates' in the left navigation panel.
2. Click 'Add new global template'.
3. Enter a name for your template in the 'Name' text field and an optional description in the 'Description' text field.
4. Using regular Confluence markup and form field markup (if you are using forms), enter content in the text-entry box as you would in any other Confluence page.
5. Preview and click 'Add'.

Screenshot: A template

---

Step 2: Fill in template variables

Choose values for the variables in this template. These values will be automatically inserted into the template for you in the correct locations.

This is a template about [ ] (Thing)

<table>
<thead>
<tr>
<th>Name</th>
<th>(Name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Number</td>
<td>(Phone/Number)</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>(D/Ob)</td>
</tr>
</tbody>
</table>

[<< Back  Insert Variables]

RELATED TOPICS

Creating a Page using a Template
Form Field Markup for Templates
Working With Decorator Macros

This page last changed on Apr 22, 2007 by david.soul@atlassian.com.

Decorator Macros are Velocity macros which are used to draw complex or variable parts of the page such as menus and breadcrumbs when editing Custom decorators. Decorator macros can be inserted anywhere in your templates.

The macro is called by inserting a string of the form: #macroName("argument1" "argument2" "argument3"). There are no commas between the arguments. Unless otherwise noted, these macros take no arguments.

**NOTE:** These macros will only work reliably when customising main.vmd. They may not work in other Velocity decorators. Decorator macros will not work inside normal confluence pages.

<table>
<thead>
<tr>
<th>Macro</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>#breadcrumbs()</td>
<td>Draws the &quot;You are here&quot; breadcrumbs list, like the one found above the page name in the default template.</td>
</tr>
<tr>
<td>#includePage(pageTitle)</td>
<td>Includes a confluence page with the specified title. If you have 2 or more pages with the same title across multiple spaces, this macro will include the page belonging to the space you are currently viewing.</td>
</tr>
<tr>
<td>#searchbox()</td>
<td>Inserts a search box into the page, like the one to the far right of the breadcrumbs in the default template.</td>
</tr>
<tr>
<td>#globalnavbar(type)</td>
<td>Draws the global navigation bar, as found in the top right-hand corner of the default template. The navigation bar can be displayed in two modes:</td>
</tr>
<tr>
<td>#globalnavbar(&quot;table&quot;)</td>
<td>Displays the navigation bar in its default mode: drawn as a table of links with coloured backgrounds and mouse-over effects.</td>
</tr>
<tr>
<td>#globalnavbar(&quot;text&quot;)</td>
<td>Displays the navigation bar as series of text links separated by</td>
</tr>
<tr>
<td>#usernavbar()</td>
<td>Draws the user-specific navigation-bar. This bar contains the links to the user's profile and history, or to the login and signup pages if the user is not logged in.</td>
</tr>
<tr>
<td>#helpicon()</td>
<td>Draws the Cannot resolve external resource into attachment. help icon, and link to the Confluence help page.</td>
</tr>
<tr>
<td>#printableicon()</td>
<td>On pages where a printable version is available, draws the Cannot resolve external resource into attachment. printable page icon, linking to the printable version of the page. Otherwise, draws nothing</td>
</tr>
</tbody>
</table>
When you are viewing a page in a Confluence space, draws the name of the space that page is in. Otherwise, writes the word "CONFLUENCE". The "class" argument is the CSS class that the title should be drawn in. Unless you have customised your Confluence installation's CSS file, you should call this with "spacenametitle" as the class: #pagetitle("spacenametitle")

Writes out the "Powered by Confluence" and Confluence version-number boilerplate found at the bottom of the default template.

Draws the fading shadow-effect found at the bottom of the content area in the default template.

Inserts a link to the dashboard page.

**RELATED TOPICS**

- Editing and Removing macros
- Enabling HTML macros
- Enabling the html-include Macro
- User Macros
- Writing Macros
Themes Configuration

This page last changed on Jan 31, 2006 by vidya.

- Applying a Theme To A Site
- Creating a Theme
  - Adding a theme icon
- Deploying the theme as a plugin
- Including Cascading Stylesheets in Themes
- Modifying Look and Feel (for themes)
  - Configuring the theme plugin
- Themes Overview
Applying a Theme To A Site

This page last changed on Apr 23, 2007 by david.soul@atlassian.com.

Themes can be applied across the site or to individual spaces.

Themes are installed as plugins and added via the administration console by a site administrator. Once installed, themes become available to be applied across a site or to individual spaces. Any theme applied at the global level will become the default theme for all spaces in the site.

To apply a theme across the site,

1. Ensure that the theme plugin you wish to apply has been installed.
2. Go to the 'Administration Console' and click on 'Themes' under 'Look and Feel' in the left navigation panel.
3. If there are any themes installed, they will be listed here.
4. Select a theme and click 'Confirm'.

RELATED TOPICS

Adding a theme icon
Applying a Theme To A Site
Applying A Theme To A Space
Creating a Theme
Including Cascading Stylesheets in Themes

Administrators Guide Home Confluence Documentation Home
Creating a Theme

This page last changed on Mar 30, 2006 by jens@atlassian.com.

There are three steps involved involved in creating a theme:

- **Modifying the look and feel of Confluence**: Work with the different components that define the look and feel of Confluence and modify them to suit your theme:
  - Layout
  - Colour Scheme (optional)
  - Stylesheet (optional)
- **Configuring the atlassian-plugin.xml file**: Edit the central configuration file for the theme plugin to reference the new files defining your theme.
- **Adding a theme icon**: Add a preview icon for your theme.
- **Deploying the theme as a plugin**: Bundle the files into a jar file and deploy the theme as a plugin into Confluence.

**Unsure what a theme is?**

**RELATED TOPICS**

- Adding a theme icon
- Applying a Theme To A Site
- Applying A Theme To A Space
- Creating a Theme
- Including Cascading Stylesheets in Themes

Confluence Documentation Home

Document generated by Confluence on May 01, 2007 00:44
Adding a theme icon

This page last changed on Mar 30, 2006 by jens@atlassian.com.

A theme icon can be packed with a theme to give the user a little preview on how the theme will change the layout of Confluence. If you do not specify a custom icon for your theme, a default icon will be shown in the preview.

Defining the theme icon in the atlassian-plugin.xml

To include an icon in the theme, you will need to reference it as a Downloadable Plugin Resource from within the theme module.

Here is an example where an icon called my-theme-icon.gif is being used in the Dinosaur Theme:

```xml
<theme key="dinosaurs" name="Dinosaur Theme" class="com.atlassian.confluence.themes.BasicTheme">
   <description>A nice theme for the kids</description>
   <colour-scheme key="com.example.themes.dinosaur:earth-colours"/>
   <layout key="com.example.themes.dinosaur:main"/>
   <layout key="com.example.themes.dinosaur:mail-template"/>
   <resource name="themeicon.gif" type="download" location="com/example/themes/dinosaur/my-theme-icon.gif">
      <property key="content-type" value="image/gif"/>
   </resource>
</theme>
```

The resource parameter takes three arguments:

- Name: The name of the icon (⚠️ has to be themeicon.gif).
- Type: The type of resource—in this instance, ‘download’.
- Location: The location of the file represented in the jar archive you will use to bundle your theme.

The icon will automatically appear on the themes screen in the space and global administration and will be displayed next to the text and description of the theme.

Creating your own theme icon

In order to keep the look and feel of the icons consistent, we recommend to base the icon style on icons shipped with the Confluence themes. A good starting point when creating new icons is to use the default theme icon or the left navigation theme icon:
RELATED TOPICS

Adding a theme icon (Confluence)
Applying a Theme To A Site (Confluence)
Applying A Theme To A Space (Confluence 2 User Guide)
Creating a Theme (Confluence)
Including Cascading Stylesheets in Themes (Confluence)

Administrators Guide Home Confluence Documentation Home
Deploying the theme as a plugin

This page last changed on Feb 26, 2007 by david.soul@atlassian.com.

In order to deploy your custom Confluence theme, you will have to have Ant installed. To learn how to install and use Ant, please follow the instructions on the projects website.

To deploy the theme, execute the following command from within the theme directory in your Confluence installation:

```
ant build -Dtheme=<specifynameoftheme>
```

For example to build a theme with the name dinosaur, you will have to type:

```
ant build -Dtheme=dinosaur
```

You will find the build jar of the dinosaur theme in you Confluence install directory under .../themes/dinosaur/dist_ directory.

Installing the theme

To install the theme you can simply drop the previously created .jar file into the ...
.../confluence/WEB-INF/lib directory in your Confluence installation as described under Installing and Configuring Plugins.

As a second option, you can also call the following ant command instead of the one found above to install the theme and copy the jar automatically in the appropriate directory.

```
ant install -Dtheme=<specifynameoftheme>
```

Read more about plugins

To change the time and date formats,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
   - There are three time and date format settings:
     - Time Format : determines the time format for when each news item is posted
     - Date Time Format : determines date and time format for historical versions of pages.
     - Date Format : determines date and time format for all new and modified content.
3. Change the formats using the guidelines in this document.
4. 'Save' your changes.
Including Cascading Stylesheets in Themes

This page last changed on Apr 24, 2007 by david.soul@atlassian.com.

Confluence allows you to integrate your own stylesheets within the theme plugin so you can have greater control over the appearance of your site. Confluence's main stylesheet is a useful reference when overriding styles and can be found in the Confluence install directory under ...

...confluence/WEB-INF/classes/styles/site-css.vm.

**Step One: Defining the stylesheet in the atlassian-plugin.xml**

To make a stylesheet available to a decorator, you will need to reference it as a resource from within the central configuration file - atlassian-plugin.xml.

Here is an example where a stylesheet is being used to define the 'leftnavigation' theme:

```xml
<layout key="main" name="Main Decorator"
    class="com.atlassian.confluence.themes.VelocityDecorator"
    overrides="/decorators/main.vmd">
    <resource type="velocity" name="decorator"
        location="templates/leftnavigation/main.vmd"/>
    <resource type="stylesheet" name="leftnav.css"
        location="templates/leftnavigation/leftnav-css.vm">
    </resource>
</layout>
```

The resource parameter takes three arguments:

- **Type**: The type of resource-in this instance, 'stylesheet'.
- **Name**: The name of the stylesheet.
- **Location**: The location of the file represented in the jar archive you will use to bundle your theme.

**Step Two: Using the stylesheet in the decorator**

To reference the stylesheet in the decorator, you will need to use the #pluginStylesheet velocity macro.

For example, here's how you reference the leftnav.css file defined in the layout entry above:

```velocity
#pluginStylesheet("com.atlassian.confluence.themes.leftnavigation:main" "leftnav.css")
```

The macro takes two arguments:

- **completePluginKey**: The complete plugin key which is constructed from the pluginkey and the layout key like this: {pluginKey}:{layoutKey}
  In the above example, com.atlassian.confluence.themes.leftnavigation is the key of the plugin, and main is the key of the layout.
- **stylesheetName**: the name of the stylesheet
If you place your stylesheet after the `#standardHeader` macro in the decorator, the contents of your custom stylesheet will override those in Confluence's default stylesheet.

If your stylesheet needs to reference the colour scheme, you need to use the space stylesheet macro instead:

```
#pluginSpaceStylesheet("com.atlassian.confluence.themes.leftnavigation:main" "leftnav.css" $spaceKey)
```

You can then use colour scheme references in your stylesheet, similar to Confluence's stylesheets, and they will be replaced with the appropriate global or space-specific colour scheme:

```
.navItemOver {
    color: $action.navSelectedTextColor;
}
```

RELATED TOPICS

- [Adding a theme icon](Confluence) (Confluence)
- [Applying a Theme To A Site](Confluence)
- [Applying A Theme To A Space](Confluence 2 User Guide)
- [Creating a Theme](Confluence)
- [Including Cascading Stylesheets in Themes](Confluence)

---

*Administrators Guide Home*  *Confluence Documentation Home*
Modifying Look and Feel (for themes)

This page last changed on Feb 01, 2007 by dchui.

Here's how you can define a new look and feel for Confluence in your theme:

1. **Layout:** Edit Confluence's layout by modifying the decorator files that are used to define it.
   - Working with Decorators
   - Velocity Template Overview
   - Configuring the atlassian.plugin.xml file to reference the decorators

2. **Colour schemes:** Configure a new colour scheme for your theme. Optional
   - Configuring a new colour scheme
   - Configuring the atlassian.plugin.xml file to include the new colour scheme

3. **Stylesheet:** Include a stylesheet to define your theme. Optional

Note that for every component you edit, you will need to configure the atlassian-plugin.xml which is the central configuration file for the plugin to override the default files with the new files you've created.

---

## Layout: Working with decorators

What are decorators?

Confluence is built on top of the Open Source [SiteMesh](http://wiki Atlassian.com) library, a web-page layout system. To edit the layout of Confluence, you will need to modify these decorator files. A decorator file is a vmd file and is written in a very simple programming language called Velocity. Learn [more about Velocity](http://wiki Atlassian.com).

Confluence comes bundled with a set of decorator or VMD files that you can customize. Broadly these are categorised into Site, Content and Export decorators. These are further grouped into categories called contexts and under each context has various modes (ways of viewing the context).

To make editing easier, layout for similar screens (example: view and edit page screens) is configured through the same VMD file. So, if you want to customize how the Confluence View Page Screen or Edit Page Screen looks, you can make both of these changes inside one decorator file: page.vmd.

<table>
<thead>
<tr>
<th>Decorator</th>
<th>Context</th>
<th>Mode</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>page.vmd</td>
<td>page</td>
<td>'view', 'edit',</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'edit-preview',</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'view-information', and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'view-attachments'</td>
<td></td>
</tr>
<tr>
<td>blogpost.vmd</td>
<td>blogpost (news)</td>
<td>'view', 'edit',</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'edit-preview',</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>and 'remove'</td>
<td></td>
</tr>
<tr>
<td>mail.vmd</td>
<td>mail</td>
<td>'view', 'view-thread' and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'view-thread'</td>
<td></td>
</tr>
</tbody>
</table>

Note: We prefer to use 'news' as an end-user term; all templates and classes use 'blogpost' to indicate RSS related content.
<table>
<thead>
<tr>
<th>space.vmd</th>
<th>space-pages, space-mails, space-blogposts, space-templates, space-operations, space-administration</th>
<th>'remove'</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONTEXT: &quot;space-pages&quot;. MODES: &quot;list-alphabetically&quot;, &quot;list-recently-updated&quot;, &quot;list-content-tree&quot;, &quot;create-page&quot;. CONTEXT: &quot;space-mail&quot;. MODES: &quot;view-mail-archive&quot;. CONTEXT: &quot;space-blogposts&quot;. MODES: &quot;view-blogposts&quot;, &quot;create-blogpost&quot;. CONTEXT: &quot;space-templates&quot;. MODES: &quot;view-templates&quot;. CONTEXT: &quot;space-operations&quot;. MODES: &quot;view-space-operations&quot;. CONTEXT: &quot;space-administration&quot;. MODES: &quot;view-space-administration&quot;, &quot;list-permission-pages&quot;.</td>
<td>space.vmd handles a wide range of options, this context is accessed by clicking on 'browse space' in the default theme of Confluence (tabbed theme)</td>
</tr>
<tr>
<td>global.vmd</td>
<td>global</td>
<td>'dashboard', 'view-profile', 'edit-profile', 'change-password-profile', 'edit-notifications-profile'</td>
</tr>
<tr>
<td>main.vmd</td>
<td>n/a (header and footer formatting)</td>
<td>main.vmd is used to control the header and footer of each page, not the page specific presentation logic</td>
</tr>
</tbody>
</table>

For example, if you wanted to remove the 'Attachments' tab on the view page screen, you would make this layout change in the page.vmd file - where the 'view' mode is handled (as shown below).

```markdown
** Display page based on mode: currently 'view', 'edit', 'preview-edit', 'info' and 'attachments'.
See the individual page templates (viewpage.vm, editpage.vm, etc.) for the setting of the mode parameter.
**
## VIEW
#if ($mode == "view")
   <make layout modifications here>
#elseif ...
```
Step One: Copying the decorators

The easiest way to begin configuring a new layout is by copying the default decorator files and editing them to suit your theme.

1. Go to the 'Administration Console' and click on Layouts in the left panel. This will display options to view and edit the default decorators.
2. Copy the files that you intend to modify and place them in a directory structure that makes sense to you. See example below.

Step Two: Creating a directory structure for the decorators:

You should place your decorators in a directory hierarchy which makes sense to you. We recommend that you place the atlassian-plugin.xml file at the top level of the directory structure, and then place the decorators in directories which make a meaningful division of what they do.

Here is an example:

- atlassian-plugin.xml
- com/atlassian/confluence/themes/mytheme/
  - com/atlassian/confluence/themes/mytheme/global.vmd
  - com/atlassian/confluence/themes/mytheme/space.vmd
  - com/atlassian/confluence/themes/mytheme/mail.vmd
  - com/atlassian/confluence/themes/mytheme/blogpost.vmd
  - com/atlassian/confluence/themes/mytheme/main.vmd
  - com/atlassian/confluence/themes/mytheme/page.vmd

Step Three: Editing the decorators

To edit the decorators, you will require knowledge of a very simple programming language called Velocity. Learn more about Velocity.

Decorator Macros

When editing the decorators, you will need to use Decorator Macros to draw complex or variable parts of the page such as menus and breadcrumbs. See DOCPRIV2:Working with Decorator Macros

Theme Helper Object

When editing decorator files you will also come across a variable called $helper - this is the theme helper object.

The following table summarises what this object can do:

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$helper.domainName</td>
<td>displays the base URL of your Confluence instance</td>
</tr>
</tbody>
</table>
on your page. This is useful for constructing links to your own Confluence pages.

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$helper.spaceKey</td>
<td>returns the current space key or null if in a global context.</td>
</tr>
<tr>
<td>$helper.spaceName</td>
<td>returns the name of the current space.</td>
</tr>
<tr>
<td>$helper.renderConfluenceMacro(&quot;{create-space-button}&quot;&quot;)</td>
<td>renders a call to a Confluence Macro for the velocity context.</td>
</tr>
<tr>
<td>$helper.getTex(&quot;key.key1&quot;)</td>
<td>looks up a key in a properties file matching key.key1=A piece of text and returns the matching value (&quot;A piece of text&quot;)</td>
</tr>
<tr>
<td>$helper.action</td>
<td>returns the XWork action which processed the request for the current page.</td>
</tr>
</tbody>
</table>

If you are on a page or space screen you also have access to the actual page and space object by using $helper.page and $helper.space respectively.

If you want to deliver more into what other methods are available in this object, please see our API's for ThemeHelper.

Step Four: Configuring the central configuration file to reference the new decorators

How to do this is explained in Configuring the theme plugin

Working with colour schemes for themes

Configuring the colour scheme

The easiest way to configure a colour scheme is to do it dynamically from the Administration Console (as you would normally when you want to change the site's colour scheme online), and then express it as an xml file. This method makes it possible for you to experiment with different colours and test them out before including the colour scheme in your theme.

1. Go to the 'Administration Console' and click on 'Colour scheme' in the left panel.
2. Use the colour picker to define the colours for the following UI elements:

   - Top Bar - the bar across the top of the page that contains the breadcrumbs.
   - Space Name Text - the text of the current space name located above the page title.
   - Heading Text - all heading tags throughout the space.
   - Links - all links throughout the space.
   - Borders and Dividers - table borders and dividing lines.
   - Menu Bar Background - background of top navigational buttons.
Menu Bar Text - text that appears on the menu bar
Menu Bar Background Highlight - background colour of menu bar when highlighted.
Menu Bar Text Highlight - menu bar text when highlighted

More information on customising colour schemes

Expressing the colour scheme as XML

Once, you have decided on the colours for the different UI elements, you will need to configure the
atlassian.plugin.xml to include the new colour scheme. How to do this is explained in detail in Configuring
the theme plugin.

RELATED TOPICS

Adding a theme icon
Applying a Theme To A Site
Applying A Theme To A Space
Creating a Theme
Including Cascading Stylesheets in Themes

Confluence Documentation Home
Configuring the theme plugin

This page last changed on Sep 28, 2006 by tom@atlassian.com.

Each plugin is described in its own atlassian-plugin.xml file, which specifies attributes of the plugin, including a description of each module it contains. Once you have modified the different components to define a new look and feel for your theme, you will need to configure this file so Confluence knows where to look when overriding the default files.

The easiest way to begin is by copying the atlassian-plugin.xml from one of the default themes bundled with confluence and modifying it for your theme.

The structure of an atlassian-plugin.xml file is fairly self-explanatory. In the code segment below you will find a full example of an atlassian-plugin.xml:

```xml
<atlassian-plugin key="com.atlassian.confluence.themes.tables" name="Plain Theme">
  <plugin-info>
    <description>This theme demonstrates a plain look and feel for Confluence. It is useful as a building block for your own themes.</description>
    <version>1.0</version>
    <vendor name="Atlassian Software Systems Pty Ltd" url="http://www.atlassian.com/"/>
  </plugin-info>
  <theme key="tabless" name="Tabless Theme" class="com.atlassian.confluence.themes.BasicTheme">
    <description>plain Confluence theme.</description>
    <layout key="com.atlassian.confluence.themes.tables:main"/>
    <layout key="com.atlassian.confluence.themes.tables:global"/>
    <layout key="com.atlassian.confluence.themes.tables:space"/>
    <layout key="com.atlassian.confluence.themes.tables:page"/>
    <layout key="com.atlassian.confluence.themes.tables:blogpost"/>
    <layout key="com.atlassian.confluence.themes.tables:mail"/>
    <colour-scheme key="com.atlassian.confluence.themes.tables:earth-colours"/>
  </theme>
  <layout key="main" name="Main Decorator" class="com.atlassian.confluence.themes.VelocityDecorator" overrides="/decorators/main.vmd">
    <resource type="velocity" name="decorator" location="com/atlassian/confluence/themes/tabless/main.vmd"/>
  </layout>
  <layout key="global" name="Global Decorator" class="com.atlassian.confluence.themes.VelocityDecorator" overrides="/decorators/global.vmd">
    <resource type="velocity" name="decorator" location="com/atlassian/confluence/themes/tabless/global.vmd"/>
  </layout>
  <layout key="space" name="Space Decorator" class="com.atlassian.confluence.themes.VelocityDecorator" overrides="/decorators/space.vmd">
    <resource type="velocity" name="decorator" location="com/atlassian/confluence/themes/tabless/space.vmd"/>
  </layout>
  <layout key="page" name="Page Decorator" class="com.atlassian.confluence.themes.VelocityDecorator" overrides="/decorators/page.vmd">
    <resource type="velocity" name="decorator" location="com/atlassian/confluence/themes/tabless/page.vmd"/>
  </layout>
  <layout key="blogpost" name="Blogpost Decorator" class="com.atlassian.confluence.themes.VelocityDecorator" overrides="/decorators/blogpost.vmd">
    <resource type="velocity" name="decorator" location="com/atlassian/confluence/themes/tabless/blogpost.vmd"/>
  </layout>
</atlassian-plugin>
```
Modifying the `{{atlassian-plugin.xml}}` file

We will configure this file section by section

### Plugin information

```xml
<atlassian-plugin key="com.atlassian.confluence.themes.tabless" name="Plain Theme">
  <plugin-info>
    <description>This theme demonstrates a plain look and feel for Confluence. It is useful as a building block for your own themes.</description>
    <version>1.0</version>
    <vendor name="Atlassian Software Systems Pty Ltd" url="http://www.atlassian.com/"/>
  </plugin-info>
</atlassian-plugin>
```

**plugin key** : Specify a key that uniquely identifies the plugin, eg. `com.example.themes.dinosaur`

**name** : Give the plugin a name.

**description** : Provide a short description of the plugin.

**vendor** : Replace the text with your information.

### Theme information

```xml
<theme key="dinosaurs" name="Dinosaur Theme" class="com.atlassian.confluence.themes.BasicTheme">
  <description>A nice theme for the kids</description>
  <colour-scheme key="earth-colours" name="Brown and Red Earth Colours" class="com.atlassian.confluence.themes.BaseColourScheme">
    <colour key="topbar" value="#440000"/>
    <colour key="spacename" value="#999999"/>
    <colour key="headingtext" value="#663300"/>
    <colour key="link" value="#663300"/>
    <colour key="border" value="#440000"/>
    <colour key="navbg" value="#663300"/>
    <colour key="navtext" value="#ffffff"/>
    <colour key="navselectedbg" value="#440000"/>
    <colour key="navselectedtext" value="#ffffff"/>
  </colour-scheme>
</theme>
```

**theme key** : Specify a key that uniquely identifies the theme, eg. `com.example.themes.dinosaur`
theme key: Specify a key that uniquely identifies the theme.

class: The class of a theme must implement com.atlassian.confluence.themes.Theme. The com.atlassian.confluence.themes.BasicTheme class provided with Confluence gathers together all the resources listed within the module definition into a theme.

ame: Give the theme a name. Make sure that you replace all instances of the theme name with this name.

description: Provide a short description of your theme

colour-scheme key: A theme can contain an optional colour-scheme element that defines which colour-scheme module this theme will use. If you are using a new colour scheme, enter its key.

layout key: A theme can contain any number of layout elements that define which layouts should be applied in this theme. Refer to these modules by their module complete key as shown above.

---

Referencing the decorators

You will need to add a layout entity as shown below for each of the decorators you are using. See working with decorators

```xml
<layout key="page" name="Page Decorator"
class="com.atlassian.confluence.themes.VelocityDecorator"
overrides="/decorators/page.vmd">
  <resource type="velocity" name="decorator"
    location="com/atlassian/confluence/themes/tabless/page.vmd"/>
</layout>
```

class: The class which each decorator, or layout, is mapped to must implement com.atlassian.confluence.themes.VelocityDecorator.

overrides: The layout entry must provide an overrides attribute which defines which decorator within Confluence is being overridden by the theme.

Location: Specify the location of the new decorator file, so Confluence know where to look when overriding the default decorator.

ℹ️ It is possible for a theme to use modules that aren't in the same plugin as the theme. Just keep in mind that your theme will be messed up if the plugin that the theme depends on is removed.

---

Including the colour scheme

Colour schemes can be pre-configured for your theme dynamically from the Administration Console. See configuring colour schemes

To transport them within a theme however, they need to be expressed in the atlassian-plugin.xml file
as shown above.

```xml
<colour-scheme key="earth-colours" name="Brown and Red Earth Colours"
   class="com.atlassian.confluence.themes.BaseColourScheme">
  <colour key="topbar" value="#440000"/>
  <colour key="spacename" value="#999999"/>
  <colour key="headingtext" value="#663300"/>
  <colour key="link" value="#663300"/>
  <colour key="border" value="#440000"/>
  <colour key="navbg" value="#663300"/>
  <colour key="navtext" value="#ffffff"/>
  <colour key="navselectedbg" value="#440000"/>
  <colour key="navselectedtext" value="#ffffff"/>
</colour-scheme>
```

colour-scheme key: Specify a key that uniquely identifies the colour scheme.

name: Give a name to the colour scheme.

class: The class of the colour scheme must implement
com.atlassian.confluence.themes.ColourScheme. The
com.atlassian.confluence.themes.BaseColourScheme class provided with Confluence sets the colours
based on the module's configuration.

colour key: For each UI element, you will need to add its name and value.

see configuring colour scheme

RELATED TOPICS

Adding a theme icon
Applying a Theme To A Site
Applying A Theme To A Space
Creating a Theme
Including Cascading Stylesheets in Themes

Administrators Guide Home Confluence Documentation Home
Themes Overview

Themes are pre-defined styles that can be applied to alter the appearance of your site.

Use themes when you want to add new functionalities or to change the appearance of Confluence. For example, you will need to use themes to apply a left-navigation scheme instead of the default top-navigation scheme.

Themes are installed as plugins and added via the Administration Console by a site administrator. Once installed, themes can be applied across the site or to individual spaces.

What do you want to do?

- Apply a theme
- Create a new theme
- Include cascading stylesheets in a theme

RELATED TOPICS

- Adding a theme icon
- Applying a Theme To A Site
- Applying A Theme To A Space
- Creating a Theme
- Including Cascading Stylesheets in Themes
Importing Data

This page last changed on Jan 31, 2006 by vidya.

- Snip Snap Import
Snip Snap Import

The snipsnap importer allows you to import a Snip Snap XML backup file into a space in Confluence.

Currently, attachments are not imported, and Confluence does not recognise duplicate users.

To import a SnipSnap backup file,

1. Go to the Administration Console and click on 'Snip Snap Import' in the left panel.
2. Enter the location of the backup file in the input field displayed. You can also 'browse' and locate the file.
3. Select a space to import the content into and click 'Save'.
   ⚠ You cannot import content into multiple spaces.

RELATED TOPICS

Confluence File Uploader
Perl XML-RPC client
Snip Snap Import
Wiki Importer

行政部门指南首页 Confluence 文档指南首页
Macros

- Editing and Removing macros
- Enabling HTML macros
- Guide to Confluence Macros
  - Attachments Macro
  - Blog Posts Macro
  - Children Display Macro
    - Child Page 1
    - Grandchild Page
    - Child Page 2
  - Code Block Macro
  - Color Text Macro
  - Create Space Button Macro
  - Dynamic Tasklist Macro
  - Enable The Flowchart Macro
  - Gallery Macro
  - Global Reports Macro
  - IM Presence Macro
  - Include Page Macro
  - JIRA Issues Macro
    - JIRA 3.7 Link Format Change
  - JIRA Portlet Macro
  - JUnit Report Macro
  - Layout Macros
  - Noformat Macro
  - Recently Updated Content Macro
  - RSS Feed Macro
  - Search Macro
  - Space Details Macro
  - Spacegraph Macro
  - Spaces List Macro
  - Userlister Macro
  - Welcome Message Macro
Editing and Removing macros

To edit or remove a user macro,

1. Go to the 'Administration Console' and click on 'User Macros' in the left panel. This will list the currently configured user macros with options to 'Edit' or 'Remove' each macro.
   - Click 'Edit'. This will display the edit screen for the macro. Make changes in the 'template' input field and click 'Save'.
     Templates are in HTML, not wiki markup.
   - Click 'Remove' to delete the macro.

RELATED TOPICS

Editing and Removing macros
Enabling HTML macros
Enabling the html-include Macro
User Macros
Writing Macros
Enabling HTML macros

This page last changed on Aug 07, 2006 by tom@atlassian.com.

The `{html}` macro allows you to use HTML code within a Confluence page.

The `{html-include}` macro allows you to include the contents of an HTML file in a Confluence page.

CAUTION: Including unknown HTML inside a webpage is dangerous. Because HTML can contain active scripting components, it would be possible for a malicious attacker to present a user of your site with script that their web browser would believe came from you. Such code could be used, for example, to steal a user's authentication cookie and give the attacker their Confluence login password.

By default, the html macros are disabled. You should only turn on these macros if you trust all your users not to attempt to exploit them.

To enable the HTML macros,

1. Go to the 'Administration Console' and click 'Plugins' in the left panel. This will display the installed plugins active for this Confluence installation.
2. Click 'HTML macros', then click 'Enable Plugin'

RELATED TOPICS

- Editing and Removing macros
- Enabling HTML macros
- Enabling the html-include Macro
- User Macros
- Writing Macros

Confluence Documentation Home

Administrators Guide Home
Guide to Confluence Macros

This page last changed on Oct 20, 2005 by vidya.

Macros allow you to perform programmatic functions within a page, and can be used for generating more complex content structures.

Generally speaking, a macro is simply a command wrapped inside curly braces {...}. To learn how to write your own macro, or use macros written by other people, read the Confluence Plugin Guide.

Macros currently available in Confluence include:

- **Attachments Macro** — Show a list of attachments belonging to the current page.
- **Blog Posts Macro** — Lists the most recent blog entries in the space.
- **Children Display Macro** — Displays the children and descendants of the current page.
- **Code Block Macro** — Allows you to display code in your document with the appropriate syntax highlighting.
- **Color Text Macro** — Change the color of a block of text.
- **Create Space Button Macro** — Renders a create space button linked to the create space page.
- **Dynamic Tasklist Macro** — Displays a dynamic task list which can be modified in View mode.
- **Enable The Flowchart Macro**
- **Gallery Macro** — Forms a thumbnail gallery of all images attached to a page
- **Global Reports Macro** — Renders a list of links to global reports within a table
- **IM Presence Macro** — Show a graphic indication of when someone is online
- **Include Page Macro** — Inserts the contents of the specified page into the current one.
- **JIRA Issues Macro** — Display a list of JIRA issues in a page.
- **JIRA Portlet Macro** — Display a JIRA dashboard portlet in Confluence
- **JUnit Report Macro** — Display a summary of JUnit test results
- **Layout Macros** — Allows display content in multiple columns.
- **Noformat Macro** — Displays a block of text in monospace font
- **Recently Updated Content Macro** — Include a list of which Confluence content has changed recently
- **RSS Feed Macro** — Displays the contents of an RSS feed.
- **Search Macro** — Search Confluence, and include the results in the page
- **Space Details Macro** — Include the summary of a Confluence space in the page
- **Spacegraph Macro** — Displays a chart of the pages in a space and their connections.
- **Spaces List Macro** — Displays a list of all spaces visible to the user
- **Userlister Macro** — Display a list of Confluence users, from an optional group
- **Welcome Message Macro** — Include the Confluence site welcome message.
Attachments Macro

This page last changed on Apr 19, 2007 by cmiller.

Attachments Macro

Usage:  
{attachments:patterns=pattern,  
...|old=true/false|sortBy=name/size/date|upload=true/false}
the patterns, old and sortBy arguments are all optional

Description:
Show a list of attachments belonging to the current page.
Optionally filter attachments by name, optionally include old attachments, optionally allow uploads of new attachments.

Example:

{attachments:patterns=.*.jpg,.*.gif|old=true|sortBy=date}

Input:
patterns An optional comma separated list of regular expressions, any of which must match a complete file name for it to included in the output of the macro. Note that the patterns are regular expressions, so to match a file suffix of 'jpg', use '*.jpg', not '*.jp'.
old An optional true/false value which determines whether to show old versions of attachments. False by default.

Output:
A list of attachments belonging to the current page.

Bundled with Confluence?:
Yes

Here's a detailed tutorial on regular expressions, but often you just need to know that '.' matches any character and " matches zero or more occurrences of the preceding character. So '.' in a regular expression matches anything (including nothing).

The regular expression pattern 'a.jpg' will match 'a123.jpg', 'axxxxxxxxjpg' or 'ajpg'. The regular expression '.*handout.' would match 'Biology handout number one.doc', 'Chemistry handout2.txt' or 'handout'.

Issue

There is a current issue open against this bug that prevent the "old" parameter to work on Confluence 2.3.3 onwards. Please see CONF-8297 for more details.

This bug is fixed in Confluence 2.4.6

Document generated by Confluence on May 01, 2007 00:44
### Blog Posts Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th><code>{blog-posts:1}</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Lists the most recent blog entries in the space.</td>
</tr>
<tr>
<td>Example:</td>
<td></td>
</tr>
</tbody>
</table>

*Sunday, September 25, 2005*

**Confluence 1.4.4 Released**

Confluence 1.4.4 is a maintenance release that resolves some issues users may have encountered using Confluence 1.4 or higher. It fixes approximately 40 issues, including making the dynamic uploading of plugins significantly more reliable.

1.4.4 is a free upgrade for all customers who purchased their Confluence license after September 23, 2004. If you're not a Confluence customer, you can download a fully functional 30-day trial. Also don’t forget we offer free licenses to registered non-profit organisations and qualifying open source projects.

**Further Reading**

- Find out what's new in the [Confluence 1.4.4 Release Notes](#)
- [Download Confluence 1.4.4](#)

Posted at 25 Sep @ 9:26 AM by [Charles Miller](#) | 0 comments | Edit

<table>
<thead>
<tr>
<th>Arguments:</th>
<th>1: The number of posts to display content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output:</td>
<td>A listing of blog posts the number of which determined by input</td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>yes</td>
</tr>
</tbody>
</table>
Children Display Macro

This page last changed on Nov 22, 2005 by tom@atlassian.com.

Displays the children and descendants of the current page.

Usage:
{children}
OR
{children:page=a_page_title}
OR
{children:all=true}
OR
{children:depth=a_depth}
OR
{children:depth=_a_depth_[style=heading_style]}
OR
{children:_sort=<mode>[reverse=<true or false>}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>no</td>
<td>the current page</td>
<td>Specify which page to display children for</td>
</tr>
<tr>
<td>depth</td>
<td>no</td>
<td>none</td>
<td>Specify the depth of descendants to display</td>
</tr>
<tr>
<td>style</td>
<td>no</td>
<td>none</td>
<td>One of 'h1', 'h2' .... 'h6' - displays children in a contents view</td>
</tr>
<tr>
<td>excerpt</td>
<td>no</td>
<td>false</td>
<td>Display the child pages' excerpts (if they exist)</td>
</tr>
<tr>
<td>sort</td>
<td>no</td>
<td>title</td>
<td>The 'sort' attribute is an optional attribute that allows you to configure how the children are sorted. Specify 'creation' to sort by content creation date, 'title' to sort alphabetically on title and 'modified' to sort of last modification date.</td>
</tr>
<tr>
<td>reverse</td>
<td>no</td>
<td>false</td>
<td>Use the reverse attribute to optionally reverse the sorting.</td>
</tr>
</tbody>
</table>

If the page parameter is '/', then the macro will list all the current space's "top level" pages - those without parents. If the page parameter is a space key followed by a colon (e.g {children:page=DOC:}), then the top level pages of that space will be listed.
Example 1:

```text
{children:all=true}
```

gives:

- **Child Page 1**
  - **Grandchild Page**
- **Child Page 2**

Example 2:

A depth of 1 will only display the first generation descendents of the current page. That is it will only display the direct children of the current page.

```text
{children:depth=1}
```

gives:

- **Child Page 1**
- **Child Page 2**

Example 3:

A style of "h3" will display the page's direct children as level 3 headings, with their children as lists below the headings. Very useful for quickly generating a contents page.

```text
{children:all=true|style=h3}
```

gives

- **Child Page 1**
  - **Grandchild Page**
- **Child Page 2**
Grandchild Page

This page last changed on Mar 18, 2004 by mike@atlassian.com.

This is the grandchild page!
Code Block Macro

This page last changed on Jan 24, 2005 by cmiller.

Allows you to display code in your document with the appropriate syntax highlighting.

Usage:
\{code:language\} ... code ... \{code\}
OR
\{code\} ... java code ... \{code\}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>language</td>
<td>no</td>
<td>Java</td>
<td>Specify the programming language. Currently supported: Java, XML and SQL.</td>
</tr>
</tbody>
</table>

Example 1: Java
\{code\}
public String getFoo()
{
    return foo;
}
\{code\}

gives:

```java
    public String getFoo()
    {
        return foo;
    }
```

Example 2: XML
\{code:XML\}
<test>
<another tag="attribute"/>
</test>
\{code\}

gives:

```xml
    <test>
        <another tag="attribute"/>
    </test>
```
Color Text Macro

This page last changed on Jan 24, 2005 by cmiller.

Change the color of a block of text.

Usage:
{color:mycolor} ... text ... {color}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>mycolor</td>
<td>yes</td>
<td>none</td>
<td>color of text. You can use names for common colors or use the hex code for a more specific color</td>
</tr>
</tbody>
</table>

Example:
{color:red}red{color}
{color:orange}orange{color}
{color:yellow}yellow{color}
{color:green}green{color}
{color:blue}blue{color}
{color:purple}purple{color}
{color:violet}violet{color}

{color:003366}#003366{color}

gives:

red
orange
yellow
green
blue
purple
violet

#003366
### Create Space Button

| **Usage:** | `{create-space-button: size=large | width=32 | height=32}` |
|------------|-----------------------------------------------------------|
| **Description:** | Renders a create space button linked to the create space page. |
| **Example:** | `{create-space-button}` |
| **Input:** | size=small (size of 'small' uses a smaller graphic, whereas size of 'large' uses a larger one) \ height=x (pixel height in pixels) \ width=y (width in pixels) |
| **Output:** | a create space icon linked to the create space page |
| **Bundled with Confluence?:** | Yes |
| **Since:** | 1.4 DR2 |
Dynamic Tasklist Macro

This page last changed on Jan 03, 2007 by david.soul@atlassian.com.

<table>
<thead>
<tr>
<th>Usage:</th>
<th>{dynamictasklist:tasklist name}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Displays a dynamic task list which can be modified in View mode.</td>
</tr>
<tr>
<td>Example:</td>
<td>{dynamictasklist:Shopping}</td>
</tr>
<tr>
<td>Input:</td>
<td>optional task list name, defaults to no visible name.</td>
</tr>
<tr>
<td>Output:</td>
<td>A task list on the page.</td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Install Instructions

Users must [upgrade to JDK 1.5](#) before installing the plugin.

This plugin must be installed using ant, it cannot be uploaded. If you are having problems, ensure that you have installed it using the command `ant -Dlibrary=dynamictasklist install` and that there is no `dynamictasklist.jar` or `plugins-dynamictasklist.jar` file in your `<confluence home>/plugins` directory, and only a `plugins-dynamictasklist.jar`, not a `dynamictasklist.jar` in your WEB-INF/lib directory.

JDK Upgrade Problem

If you are using JDK 1.4 or earlier, tasklist content created while [must be manually transferred into a new list](#) when you upgrade your JDK. New users can avoid this by [upgrading to JDK 1.5](#) before installing the plugin.

Example Tasklist Screenshot:

Here is a screenshot of what the dynamic tasklist looks like:

![Example Tasklist Screenshot](#)

Live Example

Document generated by Confluence on May 01, 2007 00:44  Page 466
Below is a live example of the dynamic task list in operation. Play with it! Add new tasks, complete or uncomplete tasks, grab the handles on the right hand side to reorder your tasks.

<table>
<thead>
<tr>
<th>Tasks: To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ () anotherone (del)</td>
</tr>
<tr>
<td>✔ Review (del)</td>
</tr>
<tr>
<td>✔ asdasdad (del)</td>
</tr>
<tr>
<td>✔ kj (del)</td>
</tr>
<tr>
<td>✔ another new one (del)</td>
</tr>
<tr>
<td>✔ () ss (del)</td>
</tr>
<tr>
<td>✔ Buy confluence (del)</td>
</tr>
<tr>
<td>✔ sss (del)</td>
</tr>
<tr>
<td>✔ wow! (del)</td>
</tr>
<tr>
<td>✔ () shopping (del)</td>
</tr>
</tbody>
</table>

Add Task:
Enable The Flowchart Macro

This page last changed on Mar 01, 2007 by david.soul@atlassian.com.

Installation

This plugin must be installed by a Confluence administrator.

1. Install GraphViz
2. Install Apache Ant
3. If running on Windows, restart your computer
4. Instructions to insert the GraphViz installation directory path into PATH variable depend on your operating system.
   Windows Users
   1. Open the directory GraphViz is installed under and confirm the path. An example path is C:\Program Files\ATT\Graphviz\bin
   2. Go to Start > Control Panel > System
   3. Select the 'Advanced' tab, then 'Environment Variables'
   4. Under 'System Variables', select the 'Path' variable
   5. Select 'Edit' and view the 'Variable value' text
   6. Confirm that path to the bin directory of GraphViz is appended to this string in the MS-DOS 8.3 standard and separated by a semicolon. An example might be ;C:\PROGRA~1\ATT\Graphviz\bin
   Linux, OS X or Unix Users
   1. Open the directory GraphViz is installed under and confirm the path
   2. Login as the user who runs Confluence or starts the Confluence service
   3. Append the path to the bin directory of GraphViz to the 'Path' variable
5. Build the GraphViz plugin from source.
   2. Stop Confluence
   3. Open a command window in your Confluence install directory and go to the plugins directory
   4. From the plugins directory, compile the GraphViz by running ant -Dlibrary=graphviz install
   5. Start Confluence

Usage

See the Enable The Flowchart Macro in the User Guide.

Troubleshooting

Error Message

flowchart: No useable executable name defined in graphviz.properties
graphviz: No useable executable name defined in graphviz.properties
spacegraph: No useable executable name defined in graphviz.properties

Solution

1. Check that the system 'Path' variable includes a path to dot.exe, the executable file contained in the Graphviz bin directory.
2. Restart Confluence server
### Gallery Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th><code>{gallery:columns=3|title=Example Title}\n\{gallery\}</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Forms a thumbnail gallery of all images attached to a page</td>
</tr>
<tr>
<td>Example:</td>
<td><code>{gallery:columns=3|title=Example Title}\n\{gallery\}</code></td>
</tr>
<tr>
<td>Input:</td>
<td>optional: `columns=&lt;int n&gt;</td>
</tr>
<tr>
<td>Output:</td>
<td>a thumbnail gallery with the number of columns specified (default 4) and a heading for the title parameter</td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>yes</td>
</tr>
</tbody>
</table>

#### Troubleshooting

If you encounter the following error message: System does not support thumbnails: no JDK image support then ensure that you have following system property available for your JVM:

```
JAVA_OPTS=-Djava.awt.headless=true
```

Also see [CONF-1737](CONF-1737)

⚠️ Please note that gallery-ext.jar is available at [CONF-6620](CONF-6620)
## Global Reports Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th>{global-reports: width=x}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Renders a list of links to global reports within a table of width x (defaults to 99%).</td>
</tr>
<tr>
<td>Example:</td>
<td>{global-reports} (arguments are optional)</td>
</tr>
<tr>
<td>Input:</td>
<td>width=x</td>
</tr>
<tr>
<td>Output:</td>
<td>A table of links leading to global reports</td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>Yes</td>
</tr>
<tr>
<td>Since</td>
<td>1.4 DR2</td>
</tr>
</tbody>
</table>
**IM Presence Macro**

This page last changed on May 18, 2005 by daniel@atlassian.com.

The IM presence macros allow you to show a graphic indication when someone is online.

The supported systems are

1. Yahoo!
2. AIM
3. ICQ

### Yahoo! Presence Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th>{yahoo:yahooID}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Show a graphic indication of when someone is online</td>
</tr>
<tr>
<td>Example:</td>
<td>{yahoo:myYahooId}</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input:</th>
<th>yahooID: is required and should be a valid Yahoo! account ID.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output:</td>
<td>An image indicating the online status of the specified user. eg: <a href="#">Online Now</a> or <a href="#">Not online</a></td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>Yes</td>
</tr>
<tr>
<td>Since:</td>
<td>1.4</td>
</tr>
</tbody>
</table>

### AIM Presence Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th>{aim:screenname}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Show a graphic indication of when someone is online</td>
</tr>
<tr>
<td>Example:</td>
<td>{aim:myScreenName}</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input:</th>
<th>screenname: is required and should be a valid AIM screen name.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output:</td>
<td>An image indicating the online status of the specified user. eg: <a href="#">Online</a> or <a href="#">Away</a></td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>Yes</td>
</tr>
<tr>
<td>Since:</td>
<td>1.4</td>
</tr>
</tbody>
</table>

### ICQ Presence Macro
<table>
<thead>
<tr>
<th>Usage:</th>
<th><code>{icq:icqnumber}</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Show a graphic indication of when someone is online</td>
</tr>
<tr>
<td>Example:</td>
<td><code>{icq:12345678}</code></td>
</tr>
<tr>
<td>Input:</td>
<td>icqnumber: is required and should be a valid ICQ UIN.</td>
</tr>
<tr>
<td>Output:</td>
<td>An image indicating the online status of the specified user. eg: <img src="icon" alt="Online" /> or <img src="icon" alt="Offline" /></td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>Yes</td>
</tr>
<tr>
<td>Since:</td>
<td>1.4</td>
</tr>
</tbody>
</table>
Include Page Macro

This page last changed on Feb 12, 2007 by mryall.

Summary

Inserts the contents of the specified page into the current one.

Usage

{include:Some page}
{include:spaceKey=KEY|pageTitle=Another page}

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(default)</td>
<td>yes, if no pageTitle parameter</td>
<td>none</td>
<td>Name of a page in the current space to include</td>
</tr>
<tr>
<td>pageTitle</td>
<td>yes, if no default parameter</td>
<td>none</td>
<td>Name of a page to include</td>
</tr>
<tr>
<td>spaceKey</td>
<td>no</td>
<td>current space</td>
<td>Key for space which has the page</td>
</tr>
</tbody>
</table>

Notes

Users without permission to view the included page will see an error that the page could not be found.

A page cannot include itself or a page that includes itself. An error message will be displayed if this occurs.
JIRA Issues Macro

This page last changed on Jan 04, 2007 by david.soul@atlassian.com.

You can embed a JIRA issue into your Confluence page. This page covers parameters available when calling the macro.

| Usage:          | \{jiraissues:url=jira_rss_url|columns(columns) \} |
|-----------------|---------------------------------------------------|
| Description:    | Display a list of JIRA issues in a page.          |
| Input:          | See parameters table below.                       |
| Output:         | Nice looking list of issues in a Confluence page. |
| Bundled with Confluence?: | ✓       |

Setup Notes

1. HTTPS

The JIRA issues macro can access a JIRA instance running under SSL as long as the Confluence server is set to accept the JIRA SSL certificate.

2. JIRA 3.7 Link Format Change

As a result of RSS feed improvements, the JIRA Issues Macro differs between JIRA 3.6 and 3.7.

This is not an issue for users running the latest versions of Confluence and JIRA. However, users using Confluence versions older than 2.2.10 to access JIRA 3.7 must upgrade Confluence or patch the JIRA issues macro to handle the 3.7 format.

<table>
<thead>
<tr>
<th>Confluence</th>
<th>JIRA</th>
<th>OK</th>
<th>Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.10, 2.3</td>
<td>Any version</td>
<td>✓</td>
<td>None</td>
</tr>
<tr>
<td>Older than 2.2.10</td>
<td>3.7</td>
<td>✗</td>
<td>Stop Confluence, open your Confluence install directory and remove the file \WEB-INF\lib\jira3.jar. Download the JIRA 3.7 version and rename it to jira3.jar</td>
</tr>
<tr>
<td>Older than 2.2.10</td>
<td>Older than 3.7</td>
<td>✓</td>
<td>None</td>
</tr>
</tbody>
</table>

Using The JIRA Issues Macro

See the User Guide entry.
JIRA Issue Parameters

The following parameters can be embedded in the macro call.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>url</td>
<td>yes</td>
<td>none</td>
<td>The URL of the XML view of your selected issues in Jira Issue Navigator.</td>
</tr>
<tr>
<td>columns</td>
<td>no</td>
<td>none</td>
<td>a semi-colon delimited list of jira column names. Valid columns are key, summary, type, created, updated, due, assignee, reporter, priority, status and resolution</td>
</tr>
<tr>
<td>count</td>
<td>no</td>
<td>false</td>
<td>true will output the number of issues in JIRA, linking the count to the JIRA instance</td>
</tr>
<tr>
<td>cache</td>
<td>no</td>
<td>on</td>
<td>'off' will refresh the jiraissues cache, forcing a reload on the page before the display</td>
</tr>
<tr>
<td>baseurl</td>
<td>no</td>
<td></td>
<td>the header link to the issue navigator will use this base url (used when Confluence connects to Jira with a different URL to normal users)</td>
</tr>
<tr>
<td>tempMax</td>
<td>no</td>
<td>20</td>
<td>limits the number of results you get back. This is the case even when count is set to true.</td>
</tr>
</tbody>
</table>

Example

This macro call requests a filter results from the Atlassian public JIRA instance:

```
{jiraissues:url=http://jira.atlassian.com/secure/IssueNavigator.jspa?view=rss&pid=10470&fixfor=10650&sorter/field=issuekey&sorter/order=DESC&tempMax=25&reset=true|columns=type;key;summary}
```

The filter results are embedded in the page as:
Atlassian JIRA (3 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-497</td>
<td>Search includes old versions of pages</td>
</tr>
<tr>
<td></td>
<td>CONF-496</td>
<td>Problem with rename</td>
</tr>
<tr>
<td></td>
<td>CONF-495</td>
<td>Problem with incoming links</td>
</tr>
</tbody>
</table>

Troubleshooting

For problems relating to the JIRA Issues Macro, click on your query below for the solution.

Issues Appear Out Of Date
Using cache with this macro it can be that you have stale data in your table. You can force a refresh of the table by clicking the Refresh button in the top-right hand corner of the table.

Cannot Access Issues When JIRA Uses HTTPS
Check out Troubleshooting HTTPS or SSL-related Problems.

>Error Rendering Macro' or No Issues Are Displayed or Not All Issues Are Displayed
You must append a JIRA username and password to your JIRA issues filter URL. That JIRA user must also have permission to view the all issues returned by the filter, otherwise they will be omitted. Please append the os_username and os_password as described below so that
jiraissues:url=http://host.com/secure/IssueNavigator.jspa... becomes
jiraissues:url=http://host.com/secure/IssueNavigator.jspa?...&os_username=MYUSERNAME&os_password=MYPASSWORD
where MYUSERNAME and MYPASSWORD are a JIRA login.

>Error rendering macro: java.io.IOException: Could not download'
You may need to configure Confluence to acknowledge your proxy server before it is able to download the feed.

>Error rendering macro: java.io.IOException: Error on line -1: Premature end of file'
Did you select an existing JIRA filter? If you did, your issues filter URL will end with
.../12345/SearchRequest-12345.xml where 12345 is any number. You should retry using a new and unsaved filter.

Issue icons are not displayed
Check that you are using the correct macro version for JIRA.
JIRA 3.7 Link Format Change

This page last changed on Jan 10, 2007 by sleberrigaud.

As a result of RSS feed improvements, the JIRA Issues Macro differs between JIRA 3.6 and 3.7.

This is not an issue for users running the latest versions of Confluence and JIRA. However, users using Confluence versions older than 2.2.10 to access JIRA 3.7 must upgrade Confluence or patch the JIRA issues macro to handle the 3.7 format.

<table>
<thead>
<tr>
<th>Confluence</th>
<th>JIRA</th>
<th>OK</th>
<th>Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.10, 2.3</td>
<td>Any version</td>
<td>✔</td>
<td>None</td>
</tr>
<tr>
<td>Older than 2.2.10</td>
<td>3.7</td>
<td>✖</td>
<td>Stop Confluence, open your Confluence install directory and remove the file \WEB-INF\lib\jira3.jar. Download the JIRA 3.7 version and rename it to jira3.jar</td>
</tr>
<tr>
<td>Older than 2.2.10</td>
<td>Older than 3.7</td>
<td>✔</td>
<td>None</td>
</tr>
</tbody>
</table>
JIRA Portlet Macro

This page last changed on May 11, 2005 by mike@atlassian.com.

## Jira Portlet Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th>jiraportlet:url=</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Display a JIRA dashboard portlet in Confluence</td>
</tr>
<tr>
<td>Input:</td>
<td>url=</td>
</tr>
</tbody>
</table>


| Output: | Nice looking portlet in a Confluence page |
| Bundled with Confluence?: | yes |

### Example

**Statistics:** Confluence  (Fix For Versions (non-archived))

<table>
<thead>
<tr>
<th>Version</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5.1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>2.5.x</td>
<td>132</td>
<td>5%</td>
</tr>
<tr>
<td>2.6</td>
<td>15</td>
<td>1%</td>
</tr>
<tr>
<td>Buffy</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Unscheduled</td>
<td>2586</td>
<td>94%</td>
</tr>
</tbody>
</table>

### How to find the URL for a JIRA Portlet

Confluence needs a URL in order to retrieve JIRA portlets.

If your JIRA instance requires you to log in, you must add &os_username=username&os_password=password to the end of the URL (substituting a valid JIRA username and password) so that Confluence can log in to retrieve the portlet. This is a temporary measure until we get Confluence and JIRA cross-authentication working more effectively.

1. Add the portlet you wish to include in Confluence to your JIRA dashboard (Once you have copied the portlet's URL into Confluence, you will be able to remove from your JIRA dashboard)
2. Configure your dashboard
3. Locate the portlet's direct link in the top-left corner

4. Right-click on the link to copy it to your clipboard, and paste it into the `{jiraportlet}` macro

(Note, the command for copying a link to the clipboard may differ in your browser)
JUnit Report Macro

This page last changed on Jul 06, 2005 by tom@atlassian.com.

Display a summary of JUnit test results from a directory accessible from the Confluence server.

When generating reports, set ant formatter to "xml".

Usage:
{JUnit:directory=file:///*directory*/}
OR
{JUnit:report=http://*host*/*path*/}

<table>
<thead>
<tr>
<th>parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>directory</td>
<td>no</td>
<td>none</td>
<td>URI of a directory containing your test result files.</td>
</tr>
<tr>
<td>url</td>
<td>no</td>
<td>none</td>
<td>URI of a particular test result XML file.</td>
</tr>
<tr>
<td>reportdetail</td>
<td>no</td>
<td>'fixture'</td>
<td>Detail for report. Can be 'all', 'fixture', 'summary' or 'failuresonly'.</td>
</tr>
<tr>
<td>debug</td>
<td>no</td>
<td>false</td>
<td>Show the content of failures, as well as their message.</td>
</tr>
</tbody>
</table>
## Layout Macros

This page last changed on Jul 12, 2006 by mryall.

<table>
<thead>
<tr>
<th>Usage:</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>{section}\{column:width=30%}\{content}{column}\{column:width=70%}\{content}{column}\{section}</code></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allows display content in multiple columns.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>{section}\{column:width=30%}\{content some stuff goes here}{column}\{column:width=70%}\{content some more stuff goes here}{column}\{section}</code></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any wiki content within columns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A column display of that content.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bundled with Confluence?:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

Layout macros allow you to define a `{section}` of the page that is divided into multiple `{column}`'s.

You must always define `{column}`s inside a `{section}`, or the macro will not work.

### Optional parameters for the `{section}` macro:

- `border` - use `{section: border=true}` to draw the columns with borders around them. The default is no border.

### Option parameters for the `{column}` macro:

- `width` - use the width parameter to determine how wide each column should be. By default, the columns are automatically resized to fit their contents.

### Example:

```wiki
{section}
{column:width=30%}
    This is some _wiki Markup_
{column}

{column:width=70%}
    This is some more wiki *markup*
{column}
{section}
```

**Produces:**
<table>
<thead>
<tr>
<th>This is some Wiki Markup</th>
<th>This is some more wiki markup</th>
</tr>
</thead>
</table>

And the same with `{section:border=true}`

| This is some Wiki Markup | This is some more wiki markup |
Noformat Macro

This page last changed on Jan 24, 2005 by cmiller.

Displays a block of text in monospace font.

Usage:

{noformat} ... text ... {noformat}

Example:

{noformat}
Hello World!
Hello Mike!
{noformat}

gives:

Hello World!
Hello Mike!
| Usage:                  | \{recently-updated: spaces=foo1,foo2 | width=50% \} |
|------------------------|------------------------------------------------------|
| Description:           | Include a list of which Confluence content has changed recently Content will be listed from the current space or for each space defined in a comma separated list (space = x, y). The list will be rendered in a table with width matching the width argument (width=z) or defaulting to 99% |
| Example:               | \{recently-updated\} (arguments are optional) |
| Input:                 | spaces= x, y | width=z |
| Output:                | a table of width z, listing recently updated content for spaces x and y |
| Bundled with Confluence?: | yes |
| Since                  | 1.4 DR2 |
RSS Feed Macro

This page last changed on Nov 17, 2005 by jens@atlassian.com.

Displays the contents of an RSS feed. RSS is an Internet standard for syndicating news, and is used by many news sites and weblogs.

Please note that updates are only retrieved after at least an hour has elapsed since the last update.

Usage:
\{rss:url=my_rss_url\}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>my_rss_url</td>
<td>yes</td>
<td>none</td>
<td>the url to the RSS feed</td>
</tr>
<tr>
<td>max</td>
<td>no</td>
<td>none</td>
<td>Maximum entries to be displayed</td>
</tr>
<tr>
<td>showTitlesOnly</td>
<td>no</td>
<td>false</td>
<td>Show only the title of the entry</td>
</tr>
</tbody>
</table>

Example:
\{rss:url=http://feeds.feedburner.com/AtlassianDeveloperBlog\}

gives:

**Atlassian Developer Blog** (rss_2.0)

**Codegeist Update: Plugin Hosting**
We're starting to get some great entries in for Codegeist. There's a lot of activity around Bamboo, our new continuous integration server, which is very exciting to us. There's a Cobertura code-coverage plugin, which we're already using on the JIRA...

**Codegeist Dev Chat Tomorrow**
We're holding another Dev Chat tomorrow evening (US time) to help out with folks building plugins for Codegeist. If you have any development questions, come by and we'll help you out. The chat is tomorrow, April 25th at 6pm PST....

**OpenID 2.0 Logo Concepts**
The OpenID project has proposed a new marketing image with the launch of the 2.0 version of the protocol, quoting the email thread: The existing OpenID logo has been a good fit over the last year or so. Its easily...

**OMG, OpenID -- how do I do it?**
Everyone seems to be going nuts for OpenID. The concept is still new, yet new sites pop up every day supporting the technology. There is plenty of chatter on various blogs and mailing list about integrating with OpenID, yet...

**Searching the Confluence Plugin Library**
I added a new feature to the Confluence plugin library: searching! You can now list, filter, sort and search all of the plugins in the Confluence Plugin Repository. This is the same list that Confluence admins will see when they...

**Codegeist II: Release Early, release often**
One of the most valuable things that I learned from last year's Codegeist competition is that openness wins. Some of our competitors got their plugins working and put them up for download in the entries section very early in the...

**4 more days in a leaky boat**
Random Mortal Combat quote: Sonya Blade: A handful of people on a leaky boat are gonna save the world? Lord Rayden: Exactly. Another month and more memory problems for one of our products. "Let mortal combat begin" The JIRA 1.5...

**Codegeist Dev Chats**

'Tis the season of Codegeist, and that means lots of people jumping in to new coding projects. And that inevitably means lots of questions. So to make sure that you get lots of answers, we're going to be holding developer...

**Survey about wiki habits**

Eugene Eric Kim, co-founder of the collaboration consulting firm Blue Oxen Associates and active member of the wiki community, is working on a study of wiki interoperability. He's published a survey about users' wiki habits, focusing primarily on people who...

**Codegeist II is here**

It's that time of the year again! Atlassian is kicking off Codegeist II, our second annual plugin competition. We're putting up twice as much money this year -- $20k in cash prizes -- and have lined up a selection of...

**Guest Bloggers Wanted: JIRA for Agile Development**

A JIRA customer recently asked us if we had a best practices guide on the use of JIRA for agile development. This is a project we had started but never completed, though it's clearly a topic of interest. Here's one...

**SVN Scheduled Maintenance Tonight**

The Atlassian Developer Network SVN server is going offline tonight for about 3.5 hours for scheduled maintenance. The outage will last from 3am until 7.30am Pacific time. If you have any problems or questions, please contact me directly....

**Migration to JPA: experts wanted**

In the Confluence team, we're investigating an upgrade of our data access layer of Hibernate 2 with Spring 1.1 to a shiny new OpenJPA and Spring 2.0 implementation. If you have experience with a migration of a large enterprise application...

**From manual to automatic**

When Crowd first became an Atlassian product it was built using a bunch of ant scripts and lived in CVS, this is quite common for a lot of projects out there, but it is something that can be improved on....

**Confluence adoption in the trenches**

Simon posts a terrific article about driving Confluence adoption in his consulting firm. There are some really good tips in here about the techniques he's used to introduce his colleagues to the wiki. Many suggestions are similar to ones you'll...
Search Macro

This page last changed on Sep 10, 2005 by cmiller.

Search Confluence, and include the results in the page. The search macro behaves identically to Confluence's built-in site search.

Usage:
{search:my_query}
OR
{search:my_query|maxLimit=maxLimit}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>query</td>
<td>yes</td>
<td>none</td>
<td>search query (what you enter in the search box)</td>
</tr>
<tr>
<td>maxLimit</td>
<td>no</td>
<td>none</td>
<td>sets the maximum number of search results to return</td>
</tr>
<tr>
<td>type</td>
<td>no</td>
<td>all except mail</td>
<td>sets the kind of content to search</td>
</tr>
<tr>
<td>spaceKey</td>
<td>no</td>
<td>none</td>
<td>Limit the search to the contents of a particular space</td>
</tr>
</tbody>
</table>

Available types:

<table>
<thead>
<tr>
<th>type parameter</th>
<th>Will search:</th>
</tr>
</thead>
<tbody>
<tr>
<td>all</td>
<td>all content, including mail</td>
</tr>
<tr>
<td>page</td>
<td>only pages</td>
</tr>
<tr>
<td>blogpost</td>
<td>only news</td>
</tr>
<tr>
<td>mail</td>
<td>only mail</td>
</tr>
<tr>
<td>attachment</td>
<td>only attachments</td>
</tr>
<tr>
<td>comment</td>
<td>only comments</td>
</tr>
<tr>
<td>userinfo</td>
<td>only user profiles</td>
</tr>
<tr>
<td>spacedesc</td>
<td>only space descriptions</td>
</tr>
</tbody>
</table>

Supplying no type will result in the search returning results from all content except mail.

Example:
{search:confluence|maxLimit=5}

gives:

*Found 11763 search result(s) for confluence (Display limit: 5)*
Confluence Community (Space Description)
space is for discussing ideas, new features and suggestions for Confluence. null
Sep 26, 2005
Labels: confluence

Confluence 2 User Guide (Space Description)
User Guide for Confluence version 2
Jan 02, 2007
Labels: confluence,

Offline Confluence Editor (Atlassian Developer Network)
Offline Confluence Editor High Provide an offline client that would allow a user to add/edit
pages/news/comments when disconnected. \ Name Offline Confluence Editor Author(s) Priority High
Description Provide an offline client ...
Mar 22, 2007
Labels: confluence

Confluence (Space Description)
Dec 14, 2005
Labels: confluence, restoring-data

Confluencer (Confluence Extension)
page has been discontinued. See Confluencer.NET, new version of Confluencer. Name Confluencer
Version 0.1 beta 4 Product Versions Author(s) Jinwoo Min Homepage http://sf.net/projects/confluencer
Price $0 License not yet JavaDocs ...
Apr 27, 2007
Labels: plugin, soap, xmlrpc, remote_api, delphi ... 4 more labels.
### Space Details Macro

This page last changed on Sep 04, 2006 by ivan@atlassian.com.

<table>
<thead>
<tr>
<th>Usage:</th>
<th><code>{space-details: width=x}</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Include the summary of a Confluence space in the page. Renders space details within a table with width specified by width argument or defaulting to 99%.</td>
</tr>
<tr>
<td>Example:</td>
<td><code>{space-details}</code> (width argument is optional)</td>
</tr>
<tr>
<td>Input:</td>
<td>width = x</td>
</tr>
<tr>
<td>Output:</td>
<td>a table holding the current's space's details</td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>Yes</td>
</tr>
<tr>
<td>Since</td>
<td>1.4 DR2</td>
</tr>
</tbody>
</table>

You may also be interested in [Spaces List Macro](#).
Spacegraph Macro

This macro requires that [GraphViz](http://graphviz.org) is installed. You should perform the default installation for your operating system. See the [Enable The Flowchart Macro](http://confluence.atlassian.com/display/C57/Enable+The+Flowchart+Macro) for Graphviz configuration information.

For details on composing diagrams, see the [GraphViz Documentation](http://graphviz.org).

This macro is shipped with Confluence as source, to use it you need to build the 'graphviz' plugin. To do this, you need to install `ant` and run the command:

```
ant -Dlibrary=graphviz install
```

from the [plugins directory](http://confluence.atlassian.com/display/C57/Plugins+Directory).
## Spaces List Macro

This page last changed on Sep 04, 2006 by ivan@atlassian.com.

### spaces-list Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th><code>{spaces-list:width=&lt;width_variable&gt;}</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Displays a list of all spaces visible to the user, with linked icons leading to various space content functionality, within a table. The width parameter expresses the specifies the table on the page.</td>
</tr>
<tr>
<td>Example:</td>
<td><code>{spaces-list:width=40%}</code></td>
</tr>
<tr>
<td>Input:</td>
<td>width</td>
</tr>
<tr>
<td>Output:</td>
<td>a list of spaces</td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>yes</td>
</tr>
<tr>
<td>Since:</td>
<td>1.4 DR2</td>
</tr>
</tbody>
</table>

You may also be interested in [Space Details Macro](#)
# Userlister Macro

The Userlister macro has been updated for the Confluence 1.4 release to provide a greater range of flexibility. For convenience, the [1.3 Userlister usage documentation](#) is provided below.

| Usage                       | `{userlister:groups=group,...|online=true/false}` |
|-----------------------------|----------------------------------------------------|
| Description                 | Display a list of Confluence users, from an optional set of groups |
| Example                     | `{userlister:groups=confluence-users|online=true}` |
| Input                       | groups: is an optional comma separated list of group names online: is an optional true/false value to filter the users based upon there online status |
| Output                      | Displays a table of user names and emails |
| Bundled with Confluence?    | Yes |
| Since                       | 1.4 |

**Examples:**

- `{userlister}` List all users
- `{userlister:groups=confluence-users}` List all users in group `confluence-users`
- `{userlister:groups=project1,project2}` List all users in group `project1` or `project2`
- `{userlister:online=true}` List all users currently online (may not be 100% accurate)
- `{userlister:groups=confluence-users|online=true}` List all currently online users in group `confluence-users`

## 1.3 Userlister Macro usage documentation

<table>
<thead>
<tr>
<th>Usage</th>
<th><code>{userlister:group-name}</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Display a list of Confluence users, from an optional group</td>
</tr>
<tr>
<td>Example</td>
<td><code>{userlister:confluence-users}</code></td>
</tr>
<tr>
<td>Input</td>
<td>a group-name is optional and will restrict the user list to members of that group</td>
</tr>
<tr>
<td>Output</td>
<td>Displays a table of user names and emails</td>
</tr>
<tr>
<td>Bundled with Confluence?:</td>
<td>Yes</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Since:</td>
<td>1.3</td>
</tr>
</tbody>
</table>
## Welcome Message Macro

This page last changed on Jan 24, 2005 by cmiller.

### welcome-message Macro

<table>
<thead>
<tr>
<th>Usage:</th>
<th>{welcome-message}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Include the Confluence site welcome message. The site welcome message may be configured in the Administration -&gt; General Configuration section.</td>
</tr>
<tr>
<td>Example:</td>
<td>{welcome-message}</td>
</tr>
</tbody>
</table>

**Input:**

**Output:** The site welcome message

**Bundled with Confluence?:** Yes

**Since:** 1.4 DR2
Performance Tuning

Like any server application, Confluence may require some tuning as it is put under heavier use. We do our best to make sure Confluence performs well under a wide variety of circumstances, but there's no single configuration that is best for everyone's environment and usage patterns.

If you are having problems with the performance of Confluence and need our help resolving them, you should read this document: Requesting Performance Support

Built-in Profiler

You can identify the cause of page delays using Confluence's built-in profiler according to Troubleshooting Slow Performance Using Page Request Profiling.

Choice of Database

The embedded database that is provided with Confluence is meant only to be used for evaluation, or for low-volume Confluence sites. Once your site grows, you will almost certainly need to switch to an external relational database management system. Beyond this, we do not recommend any particular RDBMS over another. We recommend using what you are familiar with, because your ability to maintain the database will probably make far more difference to what you get out of it than the choice of database itself.

Antivirus Software

Antivirus Software can greatly decrease the performance of Confluence. Antivirus Software that intercepts all access to the hard disk is particularly detrimental, and may even cause errors with Confluence. If possible configure your software to ignore the Confluence home directory, or at least its index directory.

Database Indexes

If Confluence is running slowly, the most likely cause is that there is some kind of bottleneck in the database.

If you have the luxury of access to a DBA, it would be worthwhile having her tune the database specifically to the demands that your particular Confluence installation is placing on it. If you do not have a DBA, you may want to consult the database indexing advice that we have been gathering from customer reports and our own experience running and developing Confluence. The instructions on that page are for Oracle, but most of the indexes can be applied to (and will help with) any database.

(These database indexes are now created automatically when Confluence is installed, but existing
installations upgrading to a more recent version may still need to add them manually)

**Cache Tuning**

To reduce the load on the database, and speed up many operations, Confluence keeps its own cache of data. Tuning the size of this cache may speed up Confluence (if the caches are too small), or reduce memory (if the caches are too big). Future versions of Confluence will allow you to tune the size of this cache from within the web application.

In Confluence versions prior to 2.3 cache is entirely configured from the file `confluence/WEB-INF/classes/ehcache.xml`. In Confluence 2.3 and above cache is configured in `confluence/WEB-INF/classes/confluence-coherence-cache-config.xml` or `confluence/WEB-INF/classes/confluence-coherence-cache-config-clustered.xml` for clustered versions. More information about cache Coherence configuration can be found on [Coherence cache reference](http://your.confluence.install.example.com/admin/cachestatistics.action). This page will show you the size of each cache, and its hit ratio.

**Important Caches**

- `com.atlassian.confluence.core.ContentEntityObject` should be set to at least 20-30% of the number of content entity objects (pages, comments, emails, news items) in your system. To find the number of content entity objects, use the query `select count(*) from CONTENT`.
- `com.atlassian.confluence.core.ContentEntityObject.bodyContents` should be set to at least 20% of the number of content entity objects (pages, comments, emails, news items) in your system. To find the number of content entity objects, use the query `select count(*) from CONTENT`.
- `com.atlassian.confluence.security.PermissionCheckDispatcher.isPermitted()` should be set to at least the number of concurrent users you expect to access Confluence at the same time
- `com.atlassian.confluence.user.DefaultUserAccessor.deactivatedUsers` must be set to at least the number of users with USE_CONFLUENCE permission (don't worry, it only takes up a few bytes per user). To find an upper bound for this, use the query `select count(*) from OS_USER`, or if you have configured atlassian-user.xml to use the Hibernate repository, `select count(*) from users`.
- `com.atlassian.confluence.security.SpacePermission` should be set to the number of space permissions in your deployment (a good rule of thumb is 20 times the number of spaces). You can find the number of space permissions using the query `select count(*) from SPACEPERMISSIONS`.

The following are more specific performance problems that can be resolved from tuning the cache.

"Edit Page" screen takes a long time to load

If your installation of Confluence is suffering from this problem, it may be due to an insufficient SpacePermissions cache size. To address this problem, first determine the number of space permission objects in your Confluence instance. You can do this by running this query against your database:
> select count(*) from SPACEPERMISSIONS

Now locate the cache entry for SpacePermissions in your ehcache.xml file. It looks like this:

```xml
<cache name="com.atlassian.confluence.security.SpacePermission" maxElementsInMemory="10000" eternal="false" timeToIdleSeconds="3600" timeToLiveSeconds="0" overflowToDisk="false" />
```

The equivalent for confluence-coherence-cache-config.xml would be:

```xml
<local-scheme>
 <scheme-name>cache:com.atlassian.confluence.security.CachingSpacePermissionManager.permissions</scheme-name>
 <scheme-ref>default</scheme-ref>
 <high-units>10000</high-units>
 <expiry-delay>0s</expiry-delay>
</local-scheme>
```

Adjust the maxElementsInMemory or high-units property to the number of space permissions you have (in the example above, I've used 10000). Also, just as important, you need to adjust the timeToLiveSeconds or expiry-delay property to 0.

Note: 10K of space permissions consumes approximately 8MB of memory. Please ensure there is enough memory allocated to your instance to cater for this.

Adjust Application Server Memory Settings

See [Managing Application Server Memory Settings](#).

Use A Web Server

For high-load environments, performance can be improved by using a web server such as Apache in front of the application server. There is a configuration guide to [running Confluence behind Apache](#).

When configuring your new web server, make sure you configure sufficient threads/processes to handle the load. This applies to both the web server and the application server connector, which are typically configured separately. If possible, you should enable connection pooling in your web server connections to the application server.
Configuring a Large Confluence Installation

This page last changed on Jan 24, 2007 by noam@atlassian.com.

Deploying any application to several thousand users requires care and planning, especially if those users are going to be relying on the application to get their work done.

General Advice

Staged Rollout

Do not try to deploy Confluence immediately to your whole organisation. Instead, roll it out department by department, or project by project.

How Confluence will scale given a particular software and hardware configuration depends very much on how Confluence is likely to be used in your organisation. Launching Confluence to everybody at once may seem like a neat idea, but it also means that any problems you might experience scaling the system up to your entire organisation will hit you all at once, annoy everyone and possibly hurt adoption.

Rolling Confluence out gradually will give you the chance to tune it as you go, resulting in a much more painless experience. There will also be organisational advantages: you can identify those teams or projects who are most likely to be successful 'early adopters', and those teams can experiment with how best a wiki might suit your organisation, and pass on their 'best wiki practices' as usage of Confluence expands.

Configuring your Application Server, Web Server and Database

Because Confluence can be deployed in so many server combinations, we do not currently have guides on the best tuning parameters for each individual server. We will be happy to provide support, however. If you have any tuning parameters that you find particularly useful for Confluence instances, feel free to share them with other Confluence users in the Confluence Community space.

Things to Keep an Eye On

Memory Usage

The Java virtual machine is configured with a "maximum heap size" that limits the amount of memory it will consume. If Confluence fills up this maximum heap size it will run out of memory, and start behaving unpredictably. You can keep track of Confluence's memory usage from the System Information screen of the administration console:
### Java VM Memory Statistics

<table>
<thead>
<tr>
<th>Memory Statistics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Memory</td>
<td>313 MB</td>
</tr>
<tr>
<td>Free Memory</td>
<td>140 MB</td>
</tr>
<tr>
<td>Used Memory</td>
<td>173 MB</td>
</tr>
<tr>
<td>Memory Graph</td>
<td>![Graph] 45% Free</td>
</tr>
</tbody>
</table>

This example shows that, at the time of writing, confluence.atlassian.com is using 173MB of an allocated 313MB of heap. (The JVM was configured with a maximum heap size of 450MB, but this information is not available in the graph. The 313MB figure shows that the full 450MB of heap has not yet been needed)

### Database Connection Pool

Confluence will need a database connection for each simultaneous user connection to the server. It is also a good idea to have 5-10 connections spare for Confluence internal processes such as backups, re-indexing or daily notification jobs.

Running out of pooled connections will cause the server to slow down as more users are waiting for a connection to be freed before starting their own request, and will eventually cause visible system errors as Confluence times out waiting for a database connection.

If you are using Confluence's internal connection pool, you can increase the number of available connections by modifying the `hibernate.c3p0.max_size` property in `\{confluence_home}/confluence-cfg.xml`, and restarting Confluence. Make sure you have also configured your database to be able to support that many simultaneous connections.

### Cache Sizes

The [Performance Tuning](#) page includes some useful rules of thumb for configuring the sizes of Confluence's internal caches.
Confluence Performance Enhancement

This page last changed on Oct 24, 2005 by jnolen.

One of our current tasks is improving Confluence's performance, in time and space. This page lists some of the things we've done to speed up Confluence, and to reduce its memory footprint.

- Creating Memory Leaks with Spring
- Filtering Regular Expression Application
Creating Memory Leaks with Spring

I've spent the last few days looking at Confluence's memory footprint.

The biggest win so far (besides turning off all the caches 😊) has been in Spring. Confluence uses dependency injection everywhere, both for its services and to initialise short lived objects like xwork actions. It seems that Spring doesn't directly cater for the latter use, and is very easy to misuse if you aren't careful.

Spring keeps track of dependencies between the beans it manages, so if you inject bean A into bean B, Spring will record the fact. Spring will call B.setA(A) of course, to perform the injection. Then it adds the name of B to the list of beans which depend on A, so that during shutdown it can remove B before A.

Confluence autowires beans using the DefaultListableBeanFactory.autowireBeanProperties() method. This assumes that the bean is a singleton, and registers it. It also doesn't check whether the bean it is registering is already a dependent of the bean being injected. So the linked list of dependencies grows with every page view. Five hundred views go it up to almost 10MB!

Spring does allow non-singleton beans, and it understands that they shouldn't be registered as dependents, but DefaultListableBeanFactory doesn't provide a way of autowiring a non-singleton bean.

I created a new factory to do the job:

```
private static class BucketListableBeanFactory extends DefaultListableBeanFactory
{
    public BucketListableBeanFactory(ApplicationContext context)
    {
        super(context);
    }

    public void autowireNonSingletonBeanProperties(Object existingBean, int autowireMode,
    boolean dependencyCheck)
    throws BeansException
    {
        if (autowireMode != AUTOWIRE_BY_NAME && autowireMode != AUTOWIRE_BY_TYPE)
        {
            throw new IllegalArgumentException("Just constants AUTOWIRE_BY_NAME and AUTOWIRE_BY_TYPE allowed");
        }
        RootBeanDefinition bd = new RootBeanDefinition(existingBean.getClass(),
        autowireMode, dependencyCheck);
        bd.setSingleton(false);
        populateBean(existingBean.getClass().getName(), bd, new BeanWrapperImpl(existingBean));
    }
}
```

That's just a copy of autowireBeanProperties(), with the addition of a call to setSingleton().

Confluence's calisthenics and orthodontia is under way. Soon we'll be running light without overbyte!
Filtering Regular Expression Application

Confluence uses (mostly) regular expressions to convert wiki style markup into html. These are simple to write, fairly simple to compose (that is, you can add another regular expression which gets applied on top of the ones you already have), and most importantly, are forgiving.

It wouldn't be too hard to write a grammar expressing the markup language, but when a user enters markup which the system doesn't understand, you need to fail softly – not throwing away any input, and not presenting the user with an error message. The mechanics of the markup process must be invisible to the user.

Regular expressions can be expensive to apply – for instance, when viewing a 100 line page in Confluence 1.4, 17% of the CPU time used during the request is used in java.util.regex.Matcher.replaceAll().

A typical regular expression is

```
"(^|\s)---(\s|$)"
```

which finds

```
---
```

and replaces it with an emdash,

```
&#8212;
```

which renders as — .

It's simple to see when this regular expression certainly doesn't apply to some wiki text – when that text doesn't include

```
---
```

You can do an analagous test for each of our many regular expressions, just look for a constant part of the regex. Of course, the existence of the constant part is a necessary, not a sufficient condition to know that the regex will match, but it works well enough to be worthwhile.

A simple

```
wikiText.indexOf(constantPart) > 0
```

check before each application of a regular expression reduces that 17% to 9%, on a page of 100 lines which has bold and italic markup on every other line.

It's interesting that replaceAll() doesn't try that itself. Presumably its optimised for the case when the string you give it does match the expression, which is probably the most common situation.

A very simple but worthwhile saving. The only situation we need to worry about is if many of the lines in our pages have many types of markup on them, because then we not only pay for the replaceAll(), but
also pay for the `indexOf`.
How Adaptable Runs Confluence

This page last changed on Sep 19, 2006 by brendan.patterson@gmail.com.

Key information about performance tuning and how Adaptable runs many instances of Confluence. This was posted to the mailing list but not captured in the forums so I wanted to copy it here:

Confluence Performance Recommendations from Adaptable

Hi,

> 1) Opterons – for better or worse, we're solely an Intel shop at this point (i.e. I'll get some resistance going down the AMD path). It seems like the latest Woodcrest Xeons have caught up with the Opterons performance-wise (although AMD was smacking around Intel for a while before that). Have you the Woodcrest Xeons at all? (I'm guessing at this point you're probably just interested in pursuing an Opteron path but figured I'd ask.)
We found the Opterons are perfect for running multithreaded apps - especially when running lots of Confluence / JIRA installs on a server in their own Resin containers. In addition, the Opterons use a less electrical power than their Intel counterparts which reduces our energy bills - for that reason we've not tried the Woodcrest chip yet. The chassis used for Opteron chips is also more established than the Woodcrest counterpart and is thus cheaper at the moment and has more options. Any dual-core will likely give better results, but you'll obviously need your OS and other software on the server to be set-up to take advantage of them.

> 2) Resin vs. Tomcat – would you mind guessing at performance numbers from what you've seen? In a ton of Googling, it seems like people are saying that Tomcat was slow back with 4.x but got much faster with 5.x and even more with 5.5.x. See the comments in the first link.
Resin, properly configured, is still faster😊 In addition, it uses a lot less RAM (important when you have 50 web apps in their own containers). We spent a lot of time super-fine-tuning Resin (about 4 months if memory serves - huge thanks to Caucho and the chaps at BeJUG) to run Confluence very nicely indeed. I can't vouch for it's speed with regards to other apps. We've found Resin to be highly stable (when correctly configured) and it deals very well with that elusive Confluence memory leak (something you notice on a site like JavaPolis1 with over 17,600 registered users). It's garbage collection, again when properly tuned, was better than Tomcat and we found many tasks easier to automate with Resin as compared to Tomcat.

Admittedly, a lot of the reasons that we chose Resin for are geared to an environment where we're running up to 50 Confluences on a single server, each in their own web app. That's quite a different scenario to what you are doing where you maybe have one or two Confluences on a server. Although, having said that, we use the same set-up for our dedicated hosting (we're hosting some real BIG Confluence installs as you'll know if you followed the discussion about the import routine we've been working on) and it works great in that environment too.

We use the commercial version of Resin2 - it's much better than the OS version as it has fewer bugs, runs more smoothly and has some real nice features (read: absolutely critically essential for the sanity of our staff thus reducing our monthly bills for padded cells and therapy) for the type of environment we use it in. We also really liked Caucho's licensing of resin3: $500 per physical server with 2 cores (additional cores @ $500/core which is very reasonable) regardless of the number of Resin containers on that server.

It should be noted that some of the stats you provided links to were done on Windows running Cygwin - hardly an ideal server environment😊 The second link (with all the graphs that people like me understand) was far more representative. We run on SuSE Linux 10 EMT64 (or something like that -
whatever the latest version of their 64-bit OS is) so there's no Windows bloat getting in the way of the web apps, etc.

> 3) Memory. I think I'll go for DDR667 and see if I can bump Confluence up to 2 GB. Is there ever a point where you can allocate too much RAM? (i.e. java and/or Confluence just don't handle tracking that many cached objects well)
I think we're up to 16GB in most of our servers now. Confluence does enjoy more RAM (although containers such as Resin bring the overall RAM consumption down a fair bit - very noticeable on servers with 50 containers/apps). More RAM means more space to cache and longer gaps between forced GC. RAM allocation is also vital when it comes to the nightly backup (or "the dreaded backup hour" as we refer to it) - you can imagine the CPU and RAM spikes caused by 50 large Confluence installations all deciding to backup at the same time (roll on Confluence 2.3!)...

Should you have too much memory, you can always run a Quake server on there :o)

FYI: We also separate our database out on to a separate server.

Best Regards,

Guy

1. [http://www.javapolis.com](http://www.javapolis.com) - at last year's conference the Belgian's were somewhat annoyed at the term "SOA" which is an obscenity over there. They were also less than happy about the spoons in sexual positions plastered all over Antwerp (and several thousand Javapolisians wearing the conference t-shirts). So this year Stephan and the crew have decided to push the boundaries to hitherto unimaginable levels - anyone who's seen the promo video will know exactly what I mean (and no, not the white painted bloke next to the urinal - the video goes waaaay beyond that - how they got James Gosling to... well, you'll have to wait and see)
2. [http://www.caucho.com/resin-3.0/features/overview.xtp](http://www.caucho.com/resin-3.0/features/overview.xtp)

Dan will probably be along in the morning to correct any mistakes I've made 😛

-
Memory usage and requirements

This page last changed on Sep 18, 2006 by david.soul@atlassian.com.

Managing Confluence's performance and memory usage really depends on what resources are available - Confluence will run faster if you give it lots of memory for its caches, but it should still be able to run quite well in low-memory environments, with the right tuning. Below are some tips on getting the most out of your Confluence site:

Increasing the amount of memory available to Confluence

See [JIRA:Increasing JIRA memory](https://confluence.atlassian.com/display/FP/Caching) for details on how to increase the memory available to web application servers typically used to run Confluence.

Embedded Database

The embedded HSQL database that comes with Confluence essentially holds all your data in memory while the Confluence server is running. If you are running out of memory, you should consider [migrating Confluence to some external RDBMS](https://confluence.atlassian.com/display/FP/Gating).

Caching

By default, Confluence keeps large in-memory caches of data to improve its responsiveness and the user experience. The trade off is an increase in memory requirements to support the cache. The default size of these caches will be reduced significantly in Confluence 1.5 (although this means that administrators of larger Confluence sites may need to configure the size of their caches to improve performance).

To customise confluences cache to meet your needs, see [cache tuning](https://confluence.atlassian.com/display/FP/Customising+the+size+of+Confluence+caches).

To increase the amount of memory available to confluence, see [allocating more memory to tomcat](https://confluence.atlassian.com/display/FP/Allocating+more+memory+to+tomcat).

Mail error queue

Confluence keeps a copy of all emails that it failed to send within an internal error queue. In the event of intermittent failures such as network connectivity issues, the emails in this queue can be manually resent when the problem is fixed. Under certain circumstances, the mail queue can fill up with large objects. Since Confluence 1.4.1 the queue is regularly flushed, but if you get a lot of mail errors, you might get a spike in memory usage.

Attachments

The indexing of large attachments requires that the attachment be loaded into memory. In the case of large attachments, this can cause a temporary strain on the systems resources, and may result in indexing failing because the attachment could not be fully loaded into memory.

System backup / resort
The Confluence backup and resort process scales linearly with the size of data. This can have a significant impact on large Confluence instances where the amount of data exceeds the amount of available memory. If you are experiencing OutOfMemoryErrors during either a backup or restore, you will need to move to per space backups or increase the memory allocated to Confluence. This is addressed in the upcoming Confluence 2.0.

If you are attempting to restore a backup and encountering the OutOfMemoryError, how much memory will you need to make it work? A good rule of thumb is to have a look at the size of the entities.xml file in your backup. This file contains all of the data Confluence will be loading, so at least that much is required. Add another 64-128Mb to ensure that Confluence has enough memory to load and function and that should be enough.

This problem has been resolved in Confluence post 1.4.x. To increase the amount of memory available to confluence, see allocating more memory to tomcat.

<table>
<thead>
<tr>
<th>Known issues that we do not have control over.</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are also some memory issues we don't have any control over. For example,</td>
</tr>
<tr>
<td>• There's a memory leak in the Oracle 10g JDBC drivers. Not much we can do about that.</td>
</tr>
<tr>
<td>• one customer found a rather nasty memory leak that appeared to originate inside Tomcat 5, but</td>
</tr>
<tr>
<td>only using the IBM JDK on PowerPC.</td>
</tr>
</tbody>
</table>

If you're having problems that appear to be a memory leak, file an issue on http://support.atlassian.com. Our memory profiler of choice is YourKit, so if you can get a memory dump from that tool showing a leak

<table>
<thead>
<tr>
<th>Confluence is taking long periods of time to respond to some actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A common cause of random pauses in Confluence is the jvm running garbage collection. To determine if this is what is happening, enable verbose garbage collection and look at how long java is taking to free up memory. If the random pauses match when java is running its garbage collection, garbage collection is the cause of the pause.</td>
</tr>
<tr>
<td>Verbose garbage collection will generate log statements that indicate when java is collecting garbage, how long it takes, and how much memory has been freed. You can enable verbose garbage collection by specifying the -verbose:gc jvm option. To have the garbage collection logs written to a file, use</td>
</tr>
<tr>
<td>-Xloggc:&lt;filename&gt;</td>
</tr>
<tr>
<td>What can you do to minimise the time taken to handle the garbage collection? See</td>
</tr>
<tr>
<td><a href="http://java.sun.com/docs/hotspot/gc1.4.2/">http://java.sun.com/docs/hotspot/gc1.4.2/</a> for details on tuning the jvm to minimize the impact that</td>
</tr>
<tr>
<td>garbage collection has on the running application.</td>
</tr>
</tbody>
</table>
java.util.zip.ZipFile.open causes OutOfMemoryError for large zip files

This page last changed on Nov 29, 2006 by ivan@atlassian.com.

Problem

For large backup zip files (bigger than 1GB) OutOfMemoryErrors can occur during restore, even though the maximum heap size is way above this value.

The error will look something like this:

```
Caused by: java.lang.OutOfMemoryError
	a t java.util.zip.ZipFile.open(Native Method)
```

However, when looking at the system information you will find that there is still a lot of memory available on the heap.

```
Memory Information:
Total Memory: 2480 MB
Free Memory: 2385 MB
Used Memory: 95 MB
```

Solution

The problem seems to be a bug in Java. The method java.util.zip.ZipFile.open does not actually use the allocated memory of the heap, it maps the entire zip file into virtual memory outside the heap. If you run into this problem, you should try to reduce your heap size to about 600MB and try the restore again. This seems to accord with the experience of other developers:

if you set a small value for max heap size, it works correctly, but if you specify too large a value, then OutOfMemoryErrors occur.

There is no obvious relationship between the max heap size, the size of the zip file, and the computer's available memory. With a max heap size less than about 600 MB, errors never occur. Large than that, and they occur. A 1.2 GB zip file always opens correctly, but a 1.4 GB one never does (if the max heap size is larger than 600 MB). I have tested this on computers with both 256 MB of RAM and 2 GB of RAM, and the behavior is nearly identical.

Related topics
Allocating more memory
Requesting Performance Support

If you are having performance issues with Confluence, and the advice on Performance Tuning has not helped, you can always ask us for help. Performance issues can be hard to diagnose, however, and we often spend a lot of time going back and forth looking for more information about what may be causing Confluence to be slow for you. The best way to get a speedy resolution to your issue is to provide this information up front.

Please gather all of the information listed below and include it in your support request, even if you think you have a good idea what's causing the problem. That way we don't have to ask for it later.

**System Information**

**Confluence Server**

- Take a screenshot of Confluence's Administration # System Information (or save the page as HTML)
- Take a screenshot of Confluence's Administration # Cache Statistics (or save the page as HTML)
- Find out the exact hardware Confluence is running on
  - How many CPUs? What make and model? What MHz?
  - How much memory is installed on the machine?
  - How much memory is assigned to Confluence's JVM? (i.e. what are the -Xmx and -Xms settings for the JVM?)
  - What other applications are being hosted on the same box?

**Confluence Content**

- How many users are registered in Confluence?
- How many spaces are there in your Confluence server?
- Approximately how many pages? (Connect to your database and perform `select count(*) from content where prevver is null and contenttype = 'PAGE'`)

**The Database**

- What is the exact version number of Confluence's database server?
- What is the exact version number of the JDBC drivers being used to access it? (For some databases, the full filename of the driver JAR file will suffice)
- Is the database being hosted on the same server as Confluence?
- If it is on a different server, what is the network latency between Confluence and the database?
- What are the database connection details? How big is the connection pool? If you are using the standard configuration this information will be in your confluence_cfg.xml file. Collect this file. If you are using a Data source this information will be stored in your application server's configuration file, collect this data.
User Management

- Are you using external user management or authentication? (i.e. JIRA or LDAP user delegation, or single sign-on)
- If you are using external JIRA user management, what is the latency between Confluence and JIRA's database server?
- If you are using LDAP user management:
  - What version of which LDAP server are you using?
  - What is the latency between Confluence and the LDAP server?

Diagnostics

Observed Problems

- Which pages are slow to load?
  - If it is a specific wiki page, attach the wiki source-code for that page
- Are they always slow to load, or is the slowness intermittent?

Profiling and Logs

- Enable Confluence's built-in profiling for long enough to demonstrate the performance problem using [Troubleshooting Slow Performance Using Page Request Profiling](#).
  - If a single page is reliably slow, you should make several requests to that page
  - If the performance problem is intermittent, or is just a general slowness, leave profiling enabled for thirty minutes to an hour to get a good sample of profiling times
- Find Confluence's standard output logs (which will include the profiling data above). Take a zip of the entire logs directory.
- Take a thread dump during times of poor performance

CPU Load

- If you are experiencing high CPU load, please install the YourKit profile and attach two profiler dumps taken during a CPU spike. If the CPU spikes are long enough, please take the profiles 30-60 seconds apart.

Next Step

Open a ticket on [http://support.atlassian.com](http://support.atlassian.com) and attach all the data you have collected. This should give us the information we need to track down the source of your performance problems and suggest a solution. Please follow the progress of your enquiry on the support ticket you have created.

If your site is non-responsive, please use our [Live Support](#) during business hours once you have created the ticket to escalate your problem.
Troubleshooting Slow Performance Using Page Request Profiling

This page last changed on Mar 11, 2007 by david.soul@atlassian.com.

If Confluence is responding slowly, an internal timing trace of the slow page request can help to identify the cause of the delay.

Profiling An Activity

You will need access to the Confluence server to view a profile.

1. Locate Confluence's standard screen output, or stdout, on the Confluence server. Users running Confluence as a Windows service may have this logged to the /logs/stdout.log file under the Confluence install directory, while users running Confluence using startup.bat under Windows have stdout written to the command prompt window.
   Enable profiling using ?profile=on
2. Enable profiling by accessing any page in your Confluence instance. Modify the URL by appending ?profile=on to the end of the URL for static pages, or &profile=on if the URL is dynamic and already has parameters. For example, if your Dashboard link is

   http://localhost:8080/dashboard.action

   You would manually add ?profile=on to the end of the URL and visit

   http://localhost:8080/dashboard.action?profile=on

   Profiles for every page hit, for all users, will now be logged to stdout until Confluence is restarted. Note that each time a user visits a link, a single profile is printed.

3. Confirm that profiles are being printed to stdout.
4. Perform the activity that is resulting in unusually slow response time and copy the profile for that action. The relevant profiles are for links that took a long time to respond. If a single page is slow, only that profile is necessary. If Confluence is generally or intermittently slow, copy all profiles logged during the slowdown until a reasonable sample has been collected.
5. If you were instructed to profile your instance by Atlassian technical support, attach all relevant profiles to your support ticket.
6. Turn profiling off again by appending ?profile=off to the end of the URL for static pages, or &profile=off if the URL is dynamic and already has parameters. For example, if your Dashboard link is

   http://localhost:8080/dashboard.action

   You would add ?profile=off to the end of the URL and visit

   http://localhost:8080/dashboard.action?profile=off

7. Confirm that profiles are no longer being printed to stdout

Example Profile
The first few lines of a normal profile for accessing a page called Confluence Overview.

[344ms] - /display/ds/Confluence+Overview
[313ms] - XW Interceptor: Before defaultStack: /pages/viewpage.action
(ViewPageAction.execute())
[0ms] - SpaceAwareInterceptor.intercept()
[16ms] - PageAwareInterceptor.intercept()
[0ms] - AOP: PageManager.getPage()
[16ms] - AOP: PermissionManager.hasPermission()
[0ms] - AOP: SpacePermissionManager.hasPermission()
[16ms] - AOP: SpacePermissionManager.hasPermission()
[0ms] - AOP: SpacePermissionManager.hasPermission()
[0ms] - AOP: SpacePermissionManager.hasPermission()
[281ms] - XW Interceptor: After defaultStack: /pages/viewpage.action
(ViewPageAction.execute())
[281ms] - XW Interceptor: After validatingStack: /pages/viewpage.action
(ViewPageAction.execute())
...

Related Topics

Requesting Performance Support
Profiling using the YourKit Plugin

This page last changed on Apr 30, 2007 by mryall.

Introduction

There is a plugin for Confluence 2.2 and later which allows easy profiling using the YourKit profiler. No license is required to generate a memory or CPU snapshot, but you will need at least an evaluation license to analyse the results.

JIRA also has a plugin to profile JIRA's CPU and memory usage with YourKit.

Configuring YourKit in your JVM

Download YourKit 6.0 for your platform, and install it by following the installation instructions.

The following instructions apply to Confluence Standalone and Tomcat installations with Sun JDK 1.5. They should be easily applicable to other application servers and JVMs, however. The YourKit documentation covers this in more detail.

Windows configuration

On Windows, add to your PATH environment variable the bin/win32/ directory underneath the YourKit installation directory. For example, you might add "C:\Program Files\YourKit Java Profiler 6.0.12\bin\win32" to your PATH, via Control Panel, System, Advanced, Environment Variables.

To configure Confluence's JVM to use the YourKit agent, you need to add a parameter to JAVA_OPTS in the bin/setenv.bat file in your Confluence application directory. This file controls the startup parameters for Tomcat, so you'll need to restart it after making the changes.

Add the 'agentlib' parameter to the end like this:

```batch
set JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx256m -agentlib:yjpagent
```

Linux/Mac OS X configuration

On Unix-based systems, include the installation directory in the LD_LIBRARY_PATH environment variable, as shown below:

```bash
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/path/to/yourKitAgent
```

In general, to configure a Sun 1.5 JDK, you add the agentlib parameter:
java -agentlib:yjpagent ...

You can add this to Tomcat's bin/setenv.sh like this:

JAVA_OPTS="-Xms128m -Xmx256m $JAVA_OPTS -Djava.awt.headless=true -agentlib:yjpagent "

Installing the YourKit plugin

Download the plugin and upload it into Confluence through the Administration, Plugins page.

A new menu option will appear under the 'Administration' heading. Click it and you should see the options to take a memory or CPU snapshot.

**Administration**
- Backup & Restore
- Content Indexing
- Mail Queue
- Cache Statistics
- SnapImport
- License Details
- System Information
- Site Statistics
- Global Activity
- YourKit Profiling

YourKit Profiling menu item

This profiler dump will be saved to a local temp directory, and the path shown once it is complete. For the CPU snapshot, this will take at least 30 seconds. For the memory snapshot, 10-15 seconds.

You can take either a memory or CPU snapshot

**Why would I do this?**

Analysing a profiler dump enables Atlassian Support (or you, if you are interested) to see exactly what is happening in your application: what classes are using the memory, what is using CPU and so on. This can
help us debug tricky performance problems which would otherwise be impossible to analyse remotely.

Take a CPU snapshot if:

- Confluence is sometimes unresponsive
- Pages take a long time to load
- Confluence's CPU usage is peaking.

Take a memory snapshot if:

- Confluence's memory usage is higher than you expect
- You are getting OutOfMemoryError's in your logs.

Plugin source code

The source code for this Confluence plugin is available from Subversion and browseable in Fisheye. To rebuild the JAR attached to this page, you need to run maven jar, and then extract the YourKit controller dependency (yjp-controller-api-redist-6.0.14.jar) and include that in the 'mashed' JAR too.
## Recognised System Properties

Confluence has a small number of obscure configuration and debugging settings that can be enabled through Java system properties. System properties are usually set by passing the `-D` flag to the Java virtual machine in which Confluence is running.

<table>
<thead>
<tr>
<th>Property</th>
<th>Possible Values</th>
<th>Module...</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>confluence.home</td>
<td>Any filesystem path</td>
<td>Confluence and atlassian-config</td>
<td>If this system property is set, Confluence will ignore the contents of the <code>confluence-init.properties</code> file, and use this property as the setting for the Confluence Home directory.</td>
</tr>
<tr>
<td>confluence.devmode=true</td>
<td></td>
<td>Confluence</td>
<td>Enables additional debugging options that may be of use to Confluence developers. Do not enable this flag on a production system.</td>
</tr>
<tr>
<td>atlassian.forceSchemaUpdate</td>
<td></td>
<td>atlassian-config</td>
<td>By default, Confluence will only run its database schema update when it detects that it has been upgraded. This flag will force Confluence to perform the schema update on system startup.</td>
</tr>
<tr>
<td>confluence.ignore.debug.logging</td>
<td></td>
<td>Confluence</td>
<td>Confluence will normally log a severe error message if it detects that DEBUG level logging is enabled (as DEBUG logging generally causes a significant degradation in</td>
</tr>
</tbody>
</table>

...
<table>
<thead>
<tr>
<th>Property</th>
<th>Confluence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>confluence.i18n.reloadbundles</td>
<td>Confluence</td>
<td>Setting this property will cause Confluence to reload its i18n resource bundles every time an internationalised string is looked up. This can be useful when testing translations, but will make Confluence run insanely slowly.</td>
</tr>
<tr>
<td>atlassian.disable.caches</td>
<td>atlassian-plugins, atlassian-cache-service</td>
<td>Setting this property will disable conditional get and expires: headers on some web resources. This will significantly slow down the user experience, but is useful in development if you are frequently changing static resources and don't want to continually flush your browser cache.</td>
</tr>
</tbody>
</table>
Security

This page last changed on Jan 31, 2006 by vidya.

- Adding SSL for Secure Logins and Page Security
- Anonymous Access to Remote API
- Enabling or Disabling Public Signup
- Hiding External Links From Search Engines
- Managing External Referrers
  - Excluding external referrers
  - Hiding external referrers
- Shared Mode
- User Email Visibility
Adding SSL for Secure Logins and Page Security

This page last changed on Feb 21, 2007 by dave@atlassian.com.

This document describes how to configure Confluence to use a HTTPS encrypted secure socket layer for user logins and page data.

Unencrypted confidential data within Confluence may be intercepted by an attacker. To secure user logins, you can enable access via HTTPS (HTTP over SSL), and require its use for pages where passwords are sent. In some cases where issue data is sensitive, all pages can be set to be accessed over HTTPS.

Enabling SSL access is different for each application server, but specifying which pages to require protection for is generic. This document is specific to Tomcat, the default application server shipped with Confluence.

Adding Secure User Logins

Adding HTTPS requires a valid SSL certificate. If you have a Certificate prepared, skip to the 'Modify the <INSTALL>/conf/server.xml File' section.

Creating A New SSL Certificate

On Windows, perform the following at the command prompt:

```
"%JAVA_HOME%\bin\keytool" -genkey -alias tomcat -keyalg RSA
```

Or on other platforms, perform the following at the command prompt:

```
$JAVA_HOME/bin/keytool -genkey -alias tomcat -keyalg RSA
```

Some questions will be asked, including a password for the certificate (the default is 'changeit'). Please note down what you choose, as it will be used in the next step.

Modify the <INSTALL>/conf/server.xml File

In the confluence directory, open the conf/server.xml file and insert one of the following just after the closing </Engine> tag:

1. For users of Confluence 2.2 or later:

```
Open conf/server.xml, uncomment the lines:
```

```
<Connector port="8443" maxHttpHeaderSize="8192"
    maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
    enableLookups="false" disableUploadTimeout="true"
    acceptCount="100" scheme="https" secure="true"
    clientAuth="false" sslProtocol="TLS"
```
Or for users of Confluence 2.1.x or earlier, add or uncomment the following lines:

```xml
<Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8443" minProcessors="5" maxProcessors="75" enableLookups="true" acceptCount="100" debug="0" scheme="https" secure="true" useURIValidationHack="false" URIEncoding="UTF-8">
  <Factory className="org.apache.coyote.tomcat4.CoyoteServerSocketFactory" clientAuth="false" protocol="TLS" keystorePass="<MY_CERTIFICATE_PASSWORD>" />
</Connector>
```

2. Change `<MY_CERTIFICATE_PASSWORD>` to the password you entered for the certificate when you generated it.

### If you have a Certificate Prepared

If you just created your new Certificate or your existing one is in the default location, skip to the 'Testing SSL' section. By default, Tomcat will look for the certificates in C:\Documents and Settings\#CURRENT_USER#\.keystore on Windows or ~/.keystore on Unix. If your Certificate is not in this location, you will need to update your `<INSTALL>/conf/server.xml` file as outlined below, so that Tomcat can find it. Advanced users who require an official CA-issued key pair for their Certificate can find instructions in the [Tomcat documentation](https://tomcat.apache.org/tomcat-7.0-doc/ssl-howto.html).

1. For users of Confluence 2.2 or later:
   Open `conf/server.xml`, add the `keyStoreFile="<MY_CERTIFICATE_LOCATION>"` parameter to the `Connector` tag as shown below:

```xml
<Connector port="8443" maxHttpHeaderSize="8192" maxThreads="150" minSpareThreads="25" maxSpareThreads="75" enableLookups="false" disableUploadTimeout="true" acceptCount="100" scheme="https" secure="true">
  <Factory className="org.apache.coyote.tomcat4.CoyoteServerSocketFactory" clientAuth="false" protocol="TLS" keystoreFile="<MY_CERTIFICATE_LOCATION>" keyStorePass="<MY_CERTIFICATE_PASSWORD>"/>
</Connector>
```

2. Change `<MY_CERTIFICATE_LOCATION>` to the path of the Certificate.

### Testing SSL

Restart Tomcat and access your instance on `https://<MY_BASE_URL>:8443`/.

For more detailed information on setting up SSL with Tomcat (including additional configuration options), have a look at [Tomcat 4 SSL Howto](https://tomcat.apache.org/tomcat-4.0-doc/ssl-howto.html) or [Tomcat 5.5 SSL Howto](https://tomcat.apache.org/tomcat-5.5-doc/ssl-howto.html).

Although HTTPS is now activated and available, the old HTTP URLs (`http://localhost:8080`) are still available.
available. In most situations one wants these URLs to continue working, but for some to redirect to their HTTPS equivalent.

To configure which URL's you want secured, edit the confluence/WEB-INF/web.xml file and add to the end the following declaration:

```xml
<security-constraint>
  <web-resource-collection>
    <web-resource-name>Login and Restricted Space URLs</web-resource-name>
    <url-pattern>/login.action</url-pattern>
  </web-resource-collection>
  <user-data-constraint>
    <transport-guarantee>CONFIDENTIAL</transport-guarantee>
  </user-data-constraint>
</security-constraint>
```

Note that the example above specifies a url-pattern for the login URL /login.action. This means that whenever a user tries to access the unprotected version of the login page, they will be redirected automatically to the secured version of it.

If you want to protect individual spaces, there isn't a complete way of doing this at the moment. You can add a pattern like this:

```xml
<security-constraint>
  <web-resource-collection>
    <web-resource-name>Login and Restricted Space URLs</web-resource-name>
    <url-pattern>/login.action</url-pattern>
    <url-pattern>/display/SALARIES/*</url-pattern>
  </web-resource-collection>
  <user-data-constraint>
    <transport-guarantee>CONFIDENTIAL</transport-guarantee>
  </user-data-constraint>
</security-constraint>
```

This will redirect all URL's for page views in the SALARIES space. This does not however, protect pages that are accessed via a URL like /pages/viewpage.action?pageId=123. Confluence generates these types of URL's for pages that have non-ASCII characters in the title. Hence this is not a complete solution.

If you want to protect all pages and spaces, use:

```xml
<security-constraint>
  <web-resource-collection>
    <web-resource-name>Restricted URLs</web-resource-name>
    <url-pattern>*.action</url-pattern>
  </web-resource-collection>
  <user-data-constraint>
    <transport-guarantee>CONFIDENTIAL</transport-guarantee>
  </user-data-constraint>
</security-constraint>
```

Once this change is made, restart Confluence and access http://localhost:8080. You should be redirected to https://localhost:8443/login.action.

⚠️ There does not seem to be an easy way to make subsequent pages revert to HTTP after logging in via HTTPS - see JRA-7250
You are required to configure a Realm, even though the security-constraint above does not access it. Add this realm tag inside the Engine tag:

```
<Engine ...
    <Realm className="org.apache.catalina.realm.MemoryRealm" />
    ...
</Engine>
```

🚫 You can protect other paths as necessary, but be aware that if attachments are protected, they will not be downloadable from Internet Explorer (see [this issue](#)).
Anonymous Access to Remote API

This page last changed on Feb 02, 2006 by vidya.

Sites may wish to disable anonymous access to the remote API to make it harder for malicious users to write 'bots' that perform bulk changes to the site. If you wish to enable the Remote APIs but do not want anonymous users to access Confluence remotely, you can disable anonymous access from the Administration Console.

To disable anonymous access to Remote APIs,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. Click 'Edit' at the bottom of the 'Options and Settings' screen.
3. Select 'Off' beside 'Anonymous Access to API'.
4. 'Save' your changes.

RELATED TOPICS

Adding SSL for Secure Logins and Page Security
Anonymous Access to Remote API
Enabling or Disabling Public Signup
Excluding external referrers
Hiding External Links From Search Engines

Administrators Guide Home Confluence Documentation Home
Enabling or Disabling Public Signup

This page last changed on Feb 02, 2006 by vidya.

Enabling 'Public Signup' allows users to sign themselves up to the site.

If you want to restrict your site to a particular set of users, you may want to disable 'Public Signup'. In this instance, site administrators can add new users from the Administration Console.

To enable or disable 'Public Signup',

1. From the 'Administration Console' click on 'General Configuration' in the left panel.
2. This will display the 'Options and Settings' screen. Click 'Edit'.
3. Beside 'Public Signup', select 'On' to enable Public Signup. Select 'Off' to disable it.
4. Click 'Save'.

RELATED TOPICS

- Adding a Group
- Adding a New User
- Adding or Removing a User from a Group
- Adding SSL for Secure Logins and Page Security
- Anonymous Access to Remote API

行政部门指南 Home  |  Confluence 文档指南 Home
Hiding External Links From Search Engines

This page last changed on Feb 02, 2006 by vidya.

Hiding external links from search engines helps to discourage spammers from posting links on your site. If you turn this option on, any urls inserted in pages and comments will be given the "nofollow" attribute, which prevents search engines from following them.

 Shortcut links and links to other pages within Confluence are not affected.

To hide external links from search engines,

1. Go to the 'Administration Console' and click on 'General Configuration' in the left panel.
2. This will display the 'Options and Settings' screen. Click 'Edit'.
3. Select 'On' beside 'Hide External Links From Search Engines'.
4. 'Save' your changes.

RELATED TOPICS

Adding SSL for Secure Logins and Page Security
Anonymous Access to Remote API
Enabling or Disabling Public Signup
Excluding external referrers
Hiding External Links From Search Engines
Managing External Referrers

This page last changed on Feb 02, 2006 by vidya.

An external referrer is any site that links to your Confluence instance.

By default, external referrers for a page are listed under 'Incoming Links' under the 'Info' tab of the page.

Here’s how you can manage your external referrers:
1. Hide all external referrers: By default, Confluence lists all external referrers under the 'Info' tab of a page. If you turn this option on, external referrers will not be listed here.
2. Specify which external referrers to exclude: You can decide which referrers you want to exclude from being displayed on your site.

RELATED TOPICS

- Adding SSL for Secure Logins and Page Security (Confluence)
- Anonymous Access to Remote API (Confluence)
- Enabling or Disabling Public Signup (Confluence)
- Excluding external referrers (Confluence)
- Hiding External Links From Search Engines (Confluence)
Excluding external referrers

Excluding external referrers prevents them from being displayed anywhere on your site.

There are two instances where you may want to do this:

1. If you are running a Confluence installation that is open to public:

In a site that is open to public, one unfortunate problem is that malicious sites can "spam" a page's incoming links statistics. This is usually done to get the site's URL to appear in the sidebar. By adding these sites to the 'excluded referrers' list, you can prevent them from being listed on your site.

2. If Confluence is installed on a server with multiple domain names or IP addresses:

Confluence will consider any url originating from the domain name where Confluence is installed as an internal link. However, if Confluence is installed on a server with multiple domain names or IP addresses, you will need to add the other domain name prefixes to this list to let Confluence know that any links from these domains should not be considered external links.

💡 You need to be a site administrator and know the url of the site to add it to the excluded referrers list.

To add a url to the excluded referrers list,

1. Go to the Administration Console and click on 'Manage External Referrers' in the left panel.
2. Add the URL to the 'Excluded External Referrer Prefixes' section. You must include 'http://' at the front of the URL.
   💡 You can add more than one url by separating each new url with a new line.

Once saved, all incoming links URLs that match the blocked list will no longer be recorded. Referrer URLs are blocked if they start with any of the URLs in the exclusion list. So http://evilspamsite.blogspot.com will also match http://evilspamsite.blogspot.com/nastypage.html

RELATED TOPICS

- Adding SSL for Secure Logins and Page Security
- Anonymous Access to Remote API
- Enabling or Disabling Public Signup
- Excluding external referrers
- Hiding External Links From Search Engines

 Administrators Guide Home Confluence Documentation Home
Hiding external referrers

By default, Confluence lists all external referrers under the 'Info' tab of a page. You can configure Confluence to hide referrers from this view.

To hide external referrers,

1. Go to the 'Administration Console' and click on 'Manage External Referrers' in the left panel.
2. Click 'Off' beside 'External Referrers'

RELATED TOPICS

Adding SSL for Secure Logins and Page Security
Anonymous Access to Remote API
Enabling or Disabling Public Signup
Excluding external referrers
Hiding External Links From Search Engines
When Confluence is run in a shared environment, certain changes to Confluence features have to be applied in order to guarantee privacy. To account for this, we’ve added a new setting in the general configuration called Shared Mode.

### When should shared mode be used?

The shared mode setting should be used when Confluence is run in a shared environment where distinct groups and users share the same instance. To ensure that one party can not bring down the whole system, certain features will be disabled in a shared environment. Also to guarantee the privacy of independent groups, search and security behaviour is different in Shared Mode.

### What is affected?

<table>
<thead>
<tr>
<th>Feature</th>
<th>Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search</td>
<td>Searching for users is currently disabled in shared mode</td>
</tr>
<tr>
<td>User/Group Picker</td>
<td>Only groups the current users is a member of, and their users will be displayed in the picker</td>
</tr>
<tr>
<td>Mail</td>
<td>The mail feature is currently disabled in shared mode</td>
</tr>
<tr>
<td>People Directory</td>
<td>The people directory will be disabled in shared mode</td>
</tr>
</tbody>
</table>
User Email Visibility

This page last changed on Feb 02, 2006 by vidya.

Confluence provides three options for email address privacy which can be configured by a site administrator from the Administration Console:

- Public: email addresses are displayed publicly.
- Masked: email addresses are still displayed publicly, but masked in such a way to make it harder for spam-bots to harvest them.
- Private: only site administrators can see the email addresses.

Anyone in the confluence-administrators group will still be listed (with their email address) on the administrators page, although their addresses will be masked.

To configure user email visibility,

1. From the 'Administration Console' click on 'General Configuration' in the left panel.
2. This will display the 'Options and Settings' screen. Click 'Edit'.
3. Beside 'User email visibility', select one of the options: 'Public', 'Masked', or 'Private'.
4. 'Save' your changes.

Screenshot : email visibility

User email visibility:
- public
- masked (i.e. user at example dot com)
- only visible to site administrators

RELATED TOPICS

Adding SSL for Secure Logins and Page Security
Anonymous Access to Remote API
Enabling or Disabling Public Signup
Excluding external referrers
Hiding External Links From Search Engines

Administrators Guide Home Confluence Documentation Home
Spam Prevention (Captcha)

This page last changed on Jan 02, 2007 by rosie@atlassian.com.

Captcha Configuration

If your Confluence site is open to the public you may find that automated spam is being added, in the form of comments or new pages.

You can configure Confluence to deter automated spam by asking users to prove that they are human before they are allowed to:

- Sign up for an account
- Add a comment
- Create a page
- Edit a page

Captcha is the technical term for a test that can distinguish a human being from an automated agent such as a web spider or robot. When Captcha is enabled, users are required to read some text from an image (example on the right) and type it into the form.

When it is on, users will need to recognise a distorted picture of a word, and must type the word into a text field. This is easy for humans to do, but very difficult for computers.

You can choose which users don't have to complete Captchas. You can exempt signed-in users (they will have completed a Captcha when they signed up), or members of particular groups.

You can also customise the Captcha image (see Advanced Configuration below).

To enable captchas for Confluence,

You need to be a space administrator to enable captcha.

1. Click on the 'Administration' link in the top right corner of the screen.
2. Choose Spam Configuration' from the Configuration menu on the left.
3. Click on 'Change Space Logo' in the left panel under the heading 'Look and Feel'. This will bring up a new screen.
4. Turn on captchas by clicking the 'ON' link.
To disable captcha for certain groups,

By default captchas will not be shown to registered users. Only anonymous users will have to perform the captcha test when creating comments or editing pages.

If you don't trust all registered users, captchas can also be disabled for only a certain group/groups of users.

1. Select the 'Members of Group' and click the 'Save' button.
2. Use the 'Group Picker' in the Groups menu and click the 'Add' button to add a single or multiple groups to the list.
3. To remove a group from the list, click the 'Remove Symbol' behind the group name.

Take me back to Confluence 2.0 Home

Advanced Configuration

You can also control which type of image is presented to your users. This requires editing the applicationContext.xml file which you can find in the confluence/WEB-INF/classes directory under your Confluence installation.

The section of this file which configures Captchas looks like this:

```xml
<!-- Image capture service -->
<!-- this is a very easy captcha generator. If you want difficult captures, uncomment the
DefaultGimpyEngine below,
 or use an engine class from http://jcaptcha.sourceforge.net -->
<bean id="captchaEngine" class="com.atlassian.confluence.security.ConfluenceCaptchaEngine"
 autowire="byName"/>
<!bean id="captchaEngine" class="com.octo.captcha.engine.image.gimpy.DefaultGimpyEngine"
 autowire="byName"/>
<bean id="captchaManager" class="com.atlassian.confluence.security.DefaultCaptchaManager"
 autowire="byName"/>
```

You can replace the 'captchaEngine' class with any text-based engine from jcaptcha.
Troubleshooting slow search performance and "Too many open files" problem

The purpose of this document is to provide a workaround for customers using Confluence version 2.2.x and who are experiencing slow search performance and/or Too many open files error in their logs.

This problem has been properly addressed as of Confluence 2.3. If upgrading is an option for you, we recommend upgrading to the latest stable version.

The workaround

The workaround for this problem involves two steps.

1. Reducing the frequency of index optimisation

Index optimisation is performed over your entire search index periodically to maintain good search performance. However, this process will lock down the index for the entire duration that it occurs. Searching will not be possible during this time. For small Confluence instances with small indexes, optimisation time is negligible. However, for larger instances, where optimisation is potentially expensive to perform, it could cause a noticeable inconvenience for users.

In Confluence 2.2.x, index optimisation is scheduled to occur every time the index queue is flushed (every minute). Optimisation does not need to performed this regularly. To fix this:

1. Extract DefaultConfluenceLuceneIndexManager.zip to your confluence/WEB-INF/classes/com/atlassian/confluence/search/lucene directory. This patch will allow you to specify a JVM parameter to adjust the frequency of optimization. For example if you want it to occur on every 20th flush of the index queue start Confluence with this JVM parameter:

```
-Dconfluence.optimize.index.modulo=20
```

   Setting it back to 1 will revert back to normal behaviour (optimize on every flush).

2. Restart Confluence

2. Apply a patched bonnie jar

To address the Too many open files issue, you need to download the patched bonnie jar attached to this issue: http://jira.atlassian.com/browse/CONF-7401. Copy the jar to your {confluence/WEB-INF/lib} directory and remove the old one. Now restart and rebuild the index.

If are still experiencing problems after this, please file a support request at http://support.atlassian.com and we'll investigate the issue further.
User Management

This page last changed on Jan 31, 2006 by vidya.

- Confluence User Management
  - Adding a Group
  - Adding a New User
  - Adding or Removing a User from a Group
  - Changing Usernames
  - Editing User Details
  - Global Groups Overview
  - Global Permissions Overview
  - Migrating to new User Management
  - Removing a Group
  - Removing a User
  - Setting up Anonymous Access
  - Viewing members of a group
- Integrating with Crowd
- JIRA User Management
  - Delegate user management to use JIRA logins
    - Revert from JIRA to internal user management
  - JIRA User Management FAQ
- LDAP User Management
  - Activating External User Management
  - Add LDAP Integration For User Authentication Only
  - Add LDAP Integration With Group Management
    - Automatically Adding LDAP users to the confluence-users Group
    - Customising atlassian-user.xml
  - atlassian-user.xml reference
  - Changes in osuser.xml from 1.0.3a to 1.1.x
  - Configuring multiple LDAP repositories
  - Confluence Caching OSUser Provider
  - Importing LDAP Users
  - LDAP FAQ
  - Troubleshooting the "Not Permitted" Screen under LDAP Integration
    - Cannot login with Confluence admin account
- Migrating users from Confluence to JIRA — There is currently no way to delegate user management from JIRA to Confluence. So, if you are in a situation where your users are defined in Confluence and would like to take advantage of Confluence's ability to use JIRA user management, you will need to transfer all of your existing Confluence users into JIRA. You can do this manually, or if you have a large number of users, you can use the attached XML-RPC script.
- Requesting External User Management Support
- Understanding User Management in Confluence
- User Management Frequently Asked Questions
Confluence User Management

This page last changed on Jan 31, 2006 by vidya.

- Adding a Group
- Adding a New User
- Adding or Removing a User from a Group
- Changing Usernames
- Editing User Details
- Global Groups Overview
- Global Permissions Overview
- Migrating to new User Management
- Removing a Group
- Removing a User
- Setting up Anonymous Access
- Viewing members of a group
Adding a Group

This page last changed on Feb 02, 2006 by vidya.

To add a new group,

1. Go to the 'Administration Console' and click on 'Manage Groups' in the left panel.
2. Enter a name for your group in the 'Add Group' input field and click 'Save'.

You are now ready to start adding users to the group.

RELATED TOPICS

Adding or Removing a User from a Group
Global Groups Overview
Removing a Group
Viewing members of a group

Administration Guide Attachments directory ^adminhome.gif
Adding a New User

There are two ways a new user can be added to Confluence:

Public Signup: Enabling public signup from the Administration Console allows users to sign themselves up to the site.
By Site Administrators: If you want to restrict your site to a select group of users, you may want to disable 'Public Signup'. In this instance, site administrators can add new users from the Administration Console.

To add a new user to Confluence from the Administration Console,

1. Go to the 'Administration Console' and click on 'Manage Users' in the left panel.
2. Click on the link 'Add new user' listed at the top of the page.
3. In the form displayed, enter the user’s details: username, password, name and email id.
4. Click 'Create' to add the user.

RELATED TOPICS

Adding a Group
Adding a New User
Adding or Removing a User from a Group
Changing Usernames
Editing User Details
Adding or Removing a User from a Group

To add or remove a user from a group,

1. Go to the 'Administration Console' and click on 'Manage Users' in the left panel.  
All members of the Confluence-Users group are listed in alphabetical order (first name). To find a user, you can either browse through the pages; or do a search on the user's mail id or the group to which they belong.  
2. Click on the user link. This will display the user's current details and links to edit them.  
3. Click 'Edit Groups'. This will display two lists of groups:  
   - 'Not a member of groups': All groups to which the user doesn't belong. To add the user to a group, select a group and click 'Join'. Hold Ctrl and click to select more than one group.  
   - 'Member of groups': All groups to which the user belongs. Select a group and click 'Leave' to remove the user from the group.

You cannot use the Edit Groups option to add or remove users from external groups, as Confluence access to LDAP and JIRA groups is read only.

RELATED TOPICS

- Adding a Group
- Adding a New User
- Adding or Removing a User from a Group
- Changing Usernames
- Editing User Details

Administrators Guide Home Confluence Documentation Home
Changing Usernames

This page last changed on Mar 01, 2007 by ivan@atlassian.com.

A username is the name used to login to Confluence, eg. jsmith. There is no support for changing a username via Confluence yet, but you can to vote towards a feature request to allow usernames to be changed from the web interface.

Instructions For Changing Usernames

Usernames can only be changed through direct update to the Confluence database.

1. If you have a database administrator, request that they approve the database-related steps described below
2. If you are using JIRA user management, Revert from JIRA To Internal User Management
3. Backup Confluence
4. Creating a usermigration table:

```sql
CREATE TABLE usermigration
(oldusername VARCHAR,
newusername VARCHAR);
```

5. Usernames that will be changed must be placed in the usermigration table with their current and planned usernames:

```sql
INSERT INTO usermigration (oldusername, newusername)
VALUES ('oldusername', 'newusername');
```

6. If your DB administration tool does not support multiple SQL queries, these must be entered individually:

```sql
UPDATE attachments
SET creator = newusername FROM usermigration u
WHERE creator = u.oldusername;

UPDATE attachments
SET lastmodifier = newusername FROM usermigration u
WHERE lastmodifier = u.oldusername;

UPDATE content
SET lastmodifier = newusername FROM usermigration u
WHERE lastmodifier = u.oldusername;

UPDATE content
SET creator = newusername FROM usermigration u
WHERE creator = u.oldusername;

UPDATE content
SET username = newusername FROM usermigration u
WHERE username = u.oldusername;

UPDATE extrnlnks
SET creator = newusername FROM usermigration u
WHERE creator = u.oldusername;

UPDATE extrnlnks
SET lastmodifier = newusername FROM usermigration u
WHERE lastmodifier = u.oldusername;

UPDATE links
```
7. If using Confluence 2.1 or newer, run the following command:

```sql
update user
set name = newusername from usermigration u
where name = u.oldusername;
```

8. Reassign personal spaces associated with the old username to the new username. The tilda (~) is required as it is prepended to the space key of all personal spaces.

```sql
update spaces
set spacekey = '-newusername'
```
9. Each username is associated with a full name. For example, username ‘jsmith’ may have a full name of ‘John M Smith’. If this fullname needs to be changed, modify the fullname in the `user` or `os_user` table.

All old usernames in Confluence should now be replaced with the new usernames from the `usermigration` table.

RELATED TOPICS

- Adding a Group
- Adding a New User
- Adding or Removing a User from a Group
- Changing Usernames
- Editing User Details

[Administrators Guide Home][Confluence Documentation Home]
Editing User Details

To update a user's details,

1. Go to the 'Administration Console' and click on the link 'Manage Users' in the left panel.
2. Locate the user by doing a search on the user's mail id or the groups to which they belong.
3. Click on the user link. This will display the user's current details and links to edit them.
   - View Profile : View the user's profile.
   - Edit Groups : Add or remove this user from a group.
   - Edit Details : Edit the user's name and email address. Changing a user's username is not supported through the application, see Changing Usernames for other solutions.
   - Set Password : Edit the user's password details.
   - Deactivate : It is not possible to 'remove' a user if the user is responsible for content on the site because Confluence will need the user information to maintain history of pages. In this instance, you can deactivate the user so that they can no longer log in to Confluence.
   - Remove : You can remove a user permanently if the user has not added or edited any content on the site.

⚠️ Deactivating users

This functionality was removed in Confluence 2.1.x. See Removing a User for more information.

Screenshot : User Details

<table>
<thead>
<tr>
<th>User</th>
<th><a href="mailto:testfoo2@atlassian.com">testfoo2@atlassian.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name</td>
<td>test foo 2</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:testfoo2@atlassian.com">testfoo2@atlassian.com</a></td>
</tr>
<tr>
<td>Groups</td>
<td>confluence-users</td>
</tr>
<tr>
<td>View Profile</td>
<td>Edit Groups</td>
</tr>
</tbody>
</table>

RELATED TOPICS

- Adding a New User
- Adding or Removing a User from a Group
- Editing User Details
- Global Permissions Overview
- Removing a User
Global Groups Overview

This page last changed on Feb 02, 2006 by vidya.

There are two special default groups in Confluence:

1. Confluence-Administrators: This is a 'super-group' of users who can access the 'Administration Console' from which site-wide administration is performed. A user from this group has permission to do anything in the site regardless of any other setting.
2. Confluence-Users: This is a default group of all new users. Permissions you assign to this group will be assigned to all new signed-up users of Confluence.

Other user-groups: A site administrator can also group users together into user-groups for more convenient administration. Once created, user-groups become available at the space and page levels to allow for flexible permissioning. A user in one of these groups will automatically be granted all permissions granted to the group.

Anonymous-Users: Confluence treats all users who do not log in when they access Confluence as being 'Anonymous'. Enabling anonymous 'Use permission' allows non-registered users to browse pages and spaces in Confluence.

RELATED TOPICS

Adding a Group
Adding a New User
Adding or Removing a User from a Group
Changing Usernames
Editing User Details

 Administrators Guide Home  Confluence Documentation Home
Global Permissions Overview

Permissions determine what actions a user is allowed to perform within Confluence.

Global permissions control which users can:

- Can Use: This is the most basic permission that allows users to access the site.
- Attach Files to User Profile: This allows the user to upload files to be stored in their user profile.
- Personal Space: This permission allows the user to create a personal space.
- Create Space: This permission allows users to create new spaces within a Confluence site. When a space is created, the creator automatically has the 'Administrators' permission for that space and can perform space-wide administrative functions.
- Administrate Confluence: This permission allows users to access the Administration Console that controls site-wide administrative functions.

Global Permissions are granted in the Global Permissions section of the Administration Console. In order to assign these permissions, a user must already have the global 'Administrators' permission.

Site administrators can assign global permissions to user-groups, individual users, and to anonymous users. Further permissioning is granted from the space administration Screens.

Note about 'Administrators' permission

Granting a user 'Administrators' permission will not automatically grant her access to all spaces in the site. It will only grant the user access to the Administration menu.

Automatically being an administrator of all spaces is only available to the special "confluence-administrators" group (internally called the superuser group). There is an outstanding enhancement request to replace the superuser group with something better.

Be aware, however, that users will 'administrators' permission must still be trusted. They have access to modify users and groups in Confluence, so can always add themselves to the 'confluence-administrators' group and become a superuser.

RELATED TOPICS

Adding a Group
Adding a New User
Adding or Removing a User from a Group
Changing Usernames
Editing User Details
Migrating to new User Management

In order to support advanced forms of User Management, Confluence now uses new user management which can store users through hibernate instead of delegating the user management to OSuser.

By default Confluence still delegates User Management to OSuser. However, you may wish to migrate your users away from OSuser, either in preparation to use external user management, or because you are having problems with OSuser, such as CONF-5218.

⚠️ These migration instructions are only valid since version 2.2 of Confluence.

Step 1 - Upgrade Confluence

Please check that you are running the latest version of Confluence. If not, we strongly recommend that you consider upgrading Confluence according to this guide. Confirm that you have upgraded successfully before trying to add LDAP to the new version.

Step 2 - Confluence user migration

1. You will need to find out your Confluence base URL. To check this from Confluence, go to Administration > General Configuration > Base Url. Record this for later in the process.
2. Make a backup of your:
   - database
   - Confluence home directory
   - confluence/WEB-INF/classes/atlassian-user.xml (only if you have made changes)

⚠️ If you do not create a backup, you cannot rollback to the old version if the migration is unsuccessful.

3. Download hibernate_osuser_atlassian-user.xml and rename to atlassian-user.xml. Then copy this file to your confluence/WEB-INF/classes directory (you can overwrite the one that's there).
4. Restart Confluence.
5. Login as an Administrator, copy the address http://<BASEURL>/<contextpath>/admin/osuser2atluser.jsp and paste it into your browser's address bar. Edit the <BASEURL> to your actual base URL and <contextpath> to your context path (usually 'confluence') and follow the link.
6. Click the link Begin migration. You will know the migration has been successful if you see this reported:

   Migrating users ... Users migrated successfully!
   Migrating propertyset data ... Propertyset data migrated successfully!
   Migrating groups ... Groups migrated successfully!

If you encounter errors, please create a support ticket at http://support.atlassian.com and attach your application server logs.

7. Stop Confluence.
8. Start up Confluence and check that you can login using the admin account you first set up when running through the Confluence Setup Wizard. If not, re-examine your steps and repeat from there.
9. Download `hibernate_cache_atlassian-user.xml`, rename it to `atlassian-user.xml` then copy to your `<INSTALL>/confluence/WEB-INF/classes` directory. It should overwrite the previous `atlassian-user.xml`.

10. Restart Confluence. Check that your users can still log in.
Removing a Group

To remove a group,

1. Go to the 'Administration Console' and click on 'Manage Groups' in the left panel. A list of all existing groups is displayed along with links to remove them.
2. Click 'Remove' beside the group you want to remove. You will need to confirm your action before the group is deleted.

RELATED TOPICS

Configuring Attachment Size
Configuring Character Encoding
Configuring HTTP Timeout Settings
Configuring Indexing Language
Configuring Number Formats
Removing a User

It is not possible to 'remove' a user if the user is responsible for content on the site because Confluence will need the user information to maintain a history of pages. If you wish to prevent a user from accessing Confluence, you can 'deactivate' a user the that they can no longer log in to Confluence.

You can however, 'remove' a user if the user has not added or edited any content on the site.

To deactivate or remove a user,

1. Go to the 'Administration Console' and click on 'Manage Users' in the left panel. All members of the Confluence-Users group are listed in alphabetical order (first name). To find a user, you can either browse through the pages, or do a search on the user's mail id or the group to which they belong.
2. Click on the user link. This will display the user's current details and links to edit them.
   - Click 'Deactivate' if the user is responsible for any content on the site. Deactivating will prevent them from logging in to the site. (Only prior to 2.1, see below.)
   - Click 'Remove' if the user is not responsible for any content on the site.

**Note on deactivating users**

This functionality was removed in Confluence 2.1.x in line with the incorporation of the new Polis library. This was done for performance reasons and we are still in the process of coming up with a more performant solution.

In the meantime, to deactivate a user, you will need to remove him/her from all groups that have currently been assigned global "Use Confluence" permission. If you have assigned "Use Confluence" permission to the specific user, you will also need to remove this. See Global Permissions Overview for how to do the latter.

**Screenshot: Adding and removing users**

<table>
<thead>
<tr>
<th>Not a member of groups:</th>
<th>Member of groups:</th>
</tr>
</thead>
<tbody>
<tr>
<td>allsodian-developers</td>
<td>confluence-users</td>
</tr>
<tr>
<td>allsodian-partners</td>
<td></td>
</tr>
<tr>
<td>allsodian-staff</td>
<td></td>
</tr>
<tr>
<td>allsodian-training</td>
<td></td>
</tr>
<tr>
<td>bnp-consulting</td>
<td></td>
</tr>
<tr>
<td>bnp-boys</td>
<td></td>
</tr>
<tr>
<td>case-studies</td>
<td></td>
</tr>
<tr>
<td>citgroup-users</td>
<td></td>
</tr>
</tbody>
</table>

**RELATED TOPICS**
Adding a Group
Adding a New User
Adding or Removing a User from a Group
Changing Usernames
Editing User Details
Setting up Anonymous Access

This page last changed on Mar 01, 2007 by ktran.

You can enable public access to your site by granting the 'Use Confluence' permission to 'Anonymous' users from the Administration Console.

This user category has been created for convenient administration of users who have not logged into the site. Permissions assigned to this group apply to all anonymous users of the site.

To enable public access to your site,

1. Go to the 'Administration Console' and click 'Global Permissions' in the left panel.
2. Click 'Edit Permissions'.

Once you grant this permission, further permissions can be granted from the space administration screens to control the viewing and editing privileges of anonymous users. See Space Permissions Overview.

⚠ To turn off "Anonymous Access", uncheck the "Can Use" option.

RELATED TOPICS

- Adding a New User
- Adding or Removing a User from a Group
- Editing User Details
- Global Permissions Overview
- Removing a User

行政部门指南 Home Confluence 文档中心 Home
Viewing members of a group

To view the members of a group,

1. Go to the 'Administration Console' and click on 'Manage Groups' in the left panel. This will list all the existing groups on the site along with the number of users in each group (displayed within parenthesis).
2. Click on the number within the parenthesis to display all the users in the group.

RELATED TOPICS

Adding or Removing a User from a Group
Global Groups Overview
Removing a Group
Viewing members of a group
Integrating with Crowd

This page last changed on Mar 19, 2007 by rosie@atlassian.com.

Atlassian's Crowd identity management system can be integrated with Confluence. Please see Integrating Crowd with Confluence.
JIRA User Management

This page last changed on Jan 31, 2006 by vidya.

- Delegate user management to use JIRA logins
  - Revert from JIRA to internal user management
- JIRA User Management FAQ
Delegate user management to use JIRA logins

This page last changed on Apr 02, 2007 by tom@atlassian.com.

If you already have a significant user base set up inside JIRA, it makes sense to connect Confluence up to it so user management is centralised and not duplicated. This document outlines how to delegate Confluence's user authentication and group management to JIRA so that you can use your JIRA users to login to Confluence.

Read Before Proceeding

1. The examples used in this document are based on Tomcat Application Server and the MySQL database, but the same concepts (but not the verbatim examples) can be applied to other application servers or databases.
2. Always install Confluence with a new database. Do not attempt to use the existing Jira database, with either JDBC or data source. Do not add any spaces or content once Confluence installation is complete. Users in Confluence will no longer be valid once you switch over to using your JIRA users.
3. If JIRA is using LDAP for authentication, you should not use JIRA for Confluence user management.
   Use Add LDAP Integration With Group Management instead
4. If you have existing users or groups in Confluence, these users will not be available once you switch to using JIRA's user management. Any existing content will no longer be associated with valid users.
5. If you run into a problem, check the Troubleshooting section

Technical Overview

In the configuration described below, Confluence will use JIRA's database for its user and group information. The Confluence application will have two database connections:

1. A connection to the primary database, set up during Confluence installation. This database stores all the normal Confluence data: spaces, pages, comments, etc.
2. A read-only data source connection to JIRA's database, set up after Confluence is installed.
   Confluence reads information about users and groups from this database.

The reason this works is because both JIRA and Confluence use the same user management library, OSUser. The OSUser database schema is the same in JIRA and Confluence, so Confluence can easily read from JIRA's tables to get the user and group information.

Step One: Installing Confluence

Skip this step if you have installed Confluence already and completed the setup wizard.

1. If you are running JIRA standalone please follow these instructions for installing Confluence.

2. If you have JIRA deployed under your own tomcat server, please follow these instructions.

3. Ensure that Confluence is running and has been set up, that is, you have completed the setup wizard and verified that you can create pages.

**Step Two: Setting up datasource to JIRA's database**

To enable Confluence to delegate all user authentication attempts and group membership queries to JIRA, it needs to be made aware of JIRA's database (and hence the user tables in JIRA's database).

In Tomcat this is achieved by specifying JIRA's database as a resource. You will need to declare it inside the `<context>` descriptor you set up in Step One.

1. If there is an existing block of `<Resource>` in the `<context>` descriptor, please do not replace it. Rather, just add the following `<Resource>` block inside the `<context>` descriptor.

2. If you are running Confluence WAR/EAR version separate to Jira, or under Jira standalone 3.3 and later, your Confluence context will be in the `confluence.xml` file.
   If you are running Confluence standalone separate to Jira, or Confluence WAR/EAR version under an older version of Jira, your Confluence context will be in the `server.xml` file. You should never have a Confluence context in both.

If you are running Confluence stand-alone (or Confluence inside a JIRA stand-alone) and aren't sure which version of Tomcat you are using, check your log files. You'll see *INFO: Starting Servlet Engine: Apache Tomcat/5.5.nn* if you are using Tomcat 5.5.

3. The DataSource configuration below is using MySQL as an example. You will need to modify these settings according to the database that you are using.

   **Tomcat 4.x and Tomcat 5.0.x: Sample context descriptor**

```
<Resource name="jdbc/JiraDS" auth="Container" type="javax.sql.DataSource">
    <ResourceParams name="jdbc/JiraDS">
        <parameter>
            <name>username</name>
            <value>your_db_username</value>
        </parameter>
        <parameter>
            <name>password</name>
            <value>your_db_password</value>
        </parameter>
        <parameter>
            <name>driverClassName</name>
            <value>com.mysql.jdbc.Driver</value>
        </parameter>
        <parameter>
            <name>url</name>
            <value>jdbc:mysql://your.domain.com/jira_database_name?autoReconnect=true</value>
        </parameter>
        <parameter>
            <name>factory</name>
            <value>org.apache.commons.dbcp.BasicDataSourceFactory</value>
        </parameter>
    </ResourceParams>
</Resource>
```

Document generated by Confluence on May 01, 2007 00:44
• Tomcat 5.5.x: This version of Tomcat has a new syntax for specifying resources (note that you don't add a new context to server.xml, just add the Resource to your existing Context):

```xml
<Resource name="jdbc/JiraDS" auth="Container" type="javax.sql.DataSource"
   username="your_db_username"
   password="your_db_password"
   driverClassName="com.mysql.jdbc.Driver"
   url="jdbc:mysql://your.domain.com/jira_database_name?autoReconnect=true"/>
```

**Step Three: Installing the JDBC driver**

Ensure that your JDBC driver is on the classpath of your application server. In this example, a jar for the mysql driver should be in the /common/lib folder.

1. Download the mysql driver from [here](#).
2. Copy the jar file into the /common/lib folder

**Step Four: Modify osuser.xml**

⚠️ Please perform this step after you have completed the Confluence setup wizard.

1. Find the osuser.xml file in the /confluence/WEB-INF/classes folder and open in a text editor. Comment out the following block of code:

```xml
<provider class="bucket.user.providers.CachingCredentialsProvider">
   <property
      name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateCredentialsProvider</property>
   <property
      name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
<provider class="bucket.user.providers.CachingAccessProvider">
   <property
      name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateAccessProvider</property>
   <property
      name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
<provider class="bucket.user.providers.CachingProfileProvider">
   <property
      name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateProfileProvider</property>
   <property
      name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
```

2. Uncomment this block:

```xml
<provider class="bucket.user.providers.CachingCredentialsProvider">
   <property
      name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcCredentialsProvider</property>
   <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
</provider>
<provider class="bucket.user.providers.CachingAccessProvider">
   <property
      name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcAccessProvider</property>
   <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
</provider>
```
<opensymphony-user>
<!-- Authenticators can take properties just like providers. -->
    This smart authenticator should work for 'most' cases - it dynamically looks up
    the most appropriate authenticator for the current server.
<!-- JIRA User management (with caching) -->
<!-- Note: Do not add any line breaks or spaces when specifying the chain.classname,
    otherwise a ClassNotFoundException will be thrown -->
    <provider class="bucket.user.providers.CachingCredentialsProvider">
        <property name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcCredentialsProvider</property>
        <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
    </provider>
    <provider class="bucket.user.providers.CachingAccessProvider">
        <property name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcAccessProvider</property>
        <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
    </provider>
    <provider class="bucket.user.providers.CachingProfileProvider">
        <property name="chain.classname">com.atlassian.confluence.user.providers.jira.JiraJdbcProfileProvider</property>
        <property name="chain.datasource">java:comp/env/jdbc/JiraDS</property>
        <property name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
    </provider>
    <property class="com.opensymphony.user.provider.memory.MemoryCredentialsProvider"/>
    <property class="com.opensymphony.user.provider.memory.MemoryAccessProvider"/>
    <property class="com.opensymphony.user.provider.memory.MemoryProfileProvider"/>
    </opensymphony-user>

Please make sure your file looks like this.
In this example, JiraDS is the name of the JIRA datasource you are sharing with Confluence. If you have changed the name in step 2 of this documentation, you will need change all occurrences of the value here too.

You can also download the already configured file here.

Step Five: Customize osuser.xml

In some cases you may need to customize the behavior of the JiraJdbc classes, you can do this by setting properties within the osuser.xml file.

This process is documented here.

Step Six: Creating Confluence Groups in JIRA

1. Add confluence-users and confluence-administrators groups in JIRA
2. Add yourself to both these groups.
   • To give your existing JIRA users access to Confluence, you have two options.
   • Manually edit the groups of these users inside JIRA and give them membership to one or both of these confluence groups OR
   • Startup Confluence. Log in using your JIRA account, and go to Administration and then Global Permissions. Now add USE permission to your desired JIRA groups.

⚠️ In order to use Confluence, users must be a member of the confluence-users group (or have confluence USE permission).

Step Seven: Activating External User Management

Since user management is now conducted in JIRA and outside of Confluence, you will need to switch external user management on.

NOTE: Activating external user management will remove user and group management options from Confluence. Your users will also no longer be able to edit their full name or email address inside Confluence (if they want to, they would have to do so in JIRA). To do this:

1. Log into Confluence using your JIRA account.
2. Go to the Administration Console and click General Configuration in the left panel
3. Click 'Edit' at the bottom of the 'Options and Settings' screen.
4. Select 'ON' beside 'External User Management'.

For answers relating to JIRA User Management, click on any query below.

Troubleshooting
Confluence login page loads with 'nullPointerException' system error

If the page loads with 'System error' with cause 'java.lang.NullPointerException at com.atlassian.user.impl.osuser.OSUUserManager.getOpenSymphonyUser(OSUUserManager.java:85)' and output logs shows 'user.provider.jdbc.BaseJDBCProvider] init Could not look up DataSource using JNDI location' error, either the Resource for the DataSource is not being loaded by the application server, or it is being loaded but the resource names do not match. Check the names first, so if '/confluence/WEB-INF/classes/osuser.xml' specifies a datasource named 'java:comp/env/jdbc/JiraDS', the datasource specified in server.xml or confluence.xml must be 'jdbc/JiraDS'.

Confluence login page loads with 'HTTP Status 404' and output log shows 'java.lang.ClassNotFoundException' for driver, eg 'com.mysql.jdbc.Driver'

Missing the database driver library. On standalone or Apache Tomcat, download the database jar to the common\lib directory.

Confluence login page loads but login fails with 'Username and password are incorrect' and output log shows 'Access denied for user'

Caused by an incorrect database URL or login in the datasource.

Confluence login page loads but login fails with 'Username and password are incorrect' and output log shows 'Cannot create JDBC driver'

If your log outputs an error with "FATAL [user.provider.jdbc.JDBCCredentialsProvider] Could not list users. org.apache.commons.dbcp.SQLNestedException: Cannot create JDBC driver of class " for connect URL 'null'", you are using the incorrect Tomcat format for specifying the Data source resource. You should check your Tomcat version and use the alternative format.

I cannot get my JIRA integration to work, where can I get technical support?

See Requesting External User Management Support for information on logging a support request.

Related topics

Delegate user management to use JIRA logins
Migrating users from Confluence to JIRA
Revert from JIRA to internal user management

Administrators Guide Home Confluence Documentation Home
Revert from JIRA to internal user management

This page last changed on Oct 25, 2006 by david.soul@atlassian.com.

Administrators can revert a Confluence instance that uses JIRA for user management back to internal user management. With few users, it is easier to manually recreate the JIRA users and groups in Confluence. For more users, migrate JIRA users and groups into the Confluence database instead.

Option A - Manually Recreate Users In Confluence

This option is too time consuming for hundreds or thousands of users. After completing the reversion, links to users who created or updated Confluence content may go to error screens.

To manually recreate the users, you must first have an instance of Confluence with internal user management and your data.

- If you have made limited customisations to Confluence and migrating would be desirable - follow the upgrade guide and import your data to a new installation.
- Alternatively, if you have made extensive customisations or do not wish to migrate - go to delegating user management to JIRA and remove your JIRA user management by undoing the instructions in reverse order. These steps are specific to your instance so cannot be covered here.

Then manually create JIRA’s groups and users in Confluence. If you have assigned permissions in Confluence to a group which exists in JIRA, you must create a group in Confluence with the same name. If a user who exists in JIRA has created content or has had permissions assigned to them, you must also create that user in Confluence.

Option B - Transfer JIRA Users & Groups To Confluence

This option manually migrates JIRA users into the Confluence database, but requires knowledge of SQL.

⚠️ Users not using mySQL

Users of non-mySQL databases must be experienced enough to modify the SQL to work in their database as examples are provided for mySQL only. If you adapt the SQL to another database, please consider posting the SQL you used to the comments.

⚠️ Users of Confluence 2.0 or older

Pre-Confluence 2.0 users may need to modify the instructions to your older schema, or upgrade Confluence. For example, on Confluence 2.1.5 and older, SQL references to the property table must be updated to be called OSPROPERTYENTRY in all upper-case.

Stage One - Create Backups
Creating backups is the only way to restore your data if something goes wrong.

1. From Confluence, create a full XML backup including attachments.
2. Stop Confluence.
3. Take a backup copy of the Confluence home and install directories.
4. Repeat the above steps for JIRA.
5. From your mySQL admin tool, create a database backup for the JIRA and Confluence databases.

**Stage Two - Replace Confluence User Management**

Replace the Confluence user and group permissions with JIRA by transferring table content. The SQL provided is specific to mySQL and must be modified for other databases. For each SQL statement, do a find and replace on the JIRA and Confluence table names to your table names. In the examples, they are called confluence224 and jira364.

1. Login to a DBA tool that can execute SQL on your DB.
2. Erase user and group content from the Confluence DB:

   ```sql
   delete from confluence224.os_propertyentry where entity_name='OSUser_user';
   delete from confluence224.os_user_group;
   delete from confluence224.os_group;
   delete from confluence224.os_user;
   ```

3. Copy JIRA's groupbase table into Confluence's os_group table:

   ```sql
   insert into confluence224.os_group (id, groupname)
   select * 
   from jira364.groupbase;
   ```

4. Copy JIRA's userbase table into Confluence's os_user table:

   ```sql
   insert into confluence224.os_user (id, username, passwd)
   select * 
   from jira364.userbase;
   ```

5. Copy JIRA's membershipbase table into Confluence's os_user_group table.

   ```sql
   insert into confluence224.os_user_group (group_id, user_id)
   select distinct groupbase.id as "group_id", userbase.id as "user_id"
   from jira364.groupbase, jira364.membershipbase, jira364.userbase
   where membershipbase.user_name = userbase.username and membershipbase.group_name =
   groupbase.groupname;
   ```

6. Merge relevant content from JIRA's propertyentry and propertystring tables into Confluence's os_propertyentry table. Some versions of SQL use "0" instead of "false" for boolean values.

   ```sql
   insert into confluence224.os_propertyentry (entity_name, entity_id, entity_key, key_type, 
   boolean_val, double_val, string_val, text_val, long_val, int_val, date_val)
   select 'OSUser_user', propertyentry.entity_id, propertyentry.property_key, 5, false, 0, 
   propertystring.propertyvalue, '', 0, 0, null
   from jira364.propertyentry, jira364.propertystring
   where propertyentry.entity_name='OSUser' and propertyentry.id=propertystring.id;
   ```

**Stage Three - Revert To Local Management**
• If you have made limited customisations to Confluence and migrating would be desirable - Install a new instance of Confluence using the upgrade guide and use Method 1 to import your updated database.
• Alternatively, if you have made extensive customisations or do not wish to migrate - go to Delegating User Management to JIRA and remove your JIRA user management by undoing the instructions in reverse order. These steps are specific to your instance so cannot be covered here.

Done! Note that the original administrator may not display their groups correctly, however their groups are still present.
JIRA User Management FAQ

This page last changed on Jan 14, 2007 by david.soul@atlassian.com.

For answers relating to JIRA User Management, click on any query below.

Troubleshooting

Confluence login page loads with 'NullPointerException' system error

If the page loads with 'System error' with cause 'java.lang.NullPointerException at com.atlassian.user.impl.osuser.OSUUserManager.getOpensymphonyUser(OSUUserManager.java:85)' and output logs shows 'user.provider.jdbc.BaseJDBCProvider] init Could not look up DataSource using JNDI location' error, either the Resource for the DataSource is not being loaded by the application server, or it is being loaded but the resource names do not match. Check the names first, so if '/confluence/WEB-INF/classes/osuser.xml' specifies a datasource named 'java:comp/env/jdbc/JiraDS', the datasource specified in server.xml or confluence.xml must be 'jdbc/JiraDS'.

Confluence login page loads with 'HTTP Status 404' and output log shows 'java.lang.ClassNotFoundException' for driver, eg 'com.mysql.jdbc.Driver'

Missing the database driver library. On standalone or Apache Tomcat, download the database jar to the common\lib directory.

Confluence login page loads but login fails with 'Username and password are incorrect' and output log shows 'Access denied for user'

Caused by an incorrect database URL or login in the datasource.

Confluence login page loads but login fails with 'Username and password are incorrect' and output log shows 'Cannot create JDBC driver'

If your log outputs an error with "FATAL [user.provider.jdbc.JDBCCredentialsProvider] Could not list users. org.apache.commons.dbcp.SQLNestedException: Cannot create JDBC driver of class " for connect URL 'null'", you are using the incorrect Tomcat format for specifying the Datasource resource. You should check your Tomcat version and use the alternative format.

I cannot get my JIRA integration to work, where can I get technical support?

See Requesting External User Management Support for information on logging a support request.
LDAP User Management

This page last changed on Jan 14, 2007 by david.soul@atlassian.com.

Grouping page for external user management documentation (including LDAP, ActiveDirectory, etc). What resource do you need?

- Overview of external user management
- Help with troubleshooting external user management
- Guide to adding LDAP integration with group management
- LDAP FAQ

Check the listing of children pages below for other useful resources.
Activating External User Management

This page last changed on Aug 06, 2006 by tom@atlassian.com.

If your user management is being handled outside of Confluence by JIRA you will need to turn on the external management option from the Administration Console.

If your user management is being done with LDAP, you must not turn on external user management, although users and groups which exist in your LDAP repository cannot be modified.

Activating an external user management system will remove all user and group management options from Confluence. The assignment of permissions to groups and users is still carried out within Confluence, but the creation of groups and users is not.

This will also disable users from signing up to the site, as well as editing their name, email and password particulars from within Confluence.

To activate an external user management system,

1. Go to the 'Administration Console', click on 'General Configuration' in the left panel.
2. In the 'Security and Privacy' screen, click 'Edit'.
3. Select 'On' beside 'External User Management'.
4. Click 'Save'.

RELATED TOPICS

Activating External User Management
Add LDAP Integration For User Authentication Only
Changes in osuser.xml from 1.0.3a to 1.1.x
Confluence Caching OSUser Provider
Importing LDAP Users

Administrators Guide Home Confluence Documentation Home
Add LDAP Integration For User Authentication Only

This page last changed on Jan 22, 2007 by david.soul@atlassian.com.

Description

There are two kinds of Confluence/LDAP integration available:

<table>
<thead>
<tr>
<th>User Authentication</th>
<th>Internal Users</th>
<th>Internal Groups</th>
<th>LDAP Users</th>
<th>LDAP Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDAP Without Groups</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>❌</td>
</tr>
<tr>
<td>LDAP With Groups</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
</tr>
</tbody>
</table>

This guide covers LDAP without groups, where if a username exists in both Confluence and LDAP, they use their LDAP password to login. You still maintain users from Confluence and use internal Confluence groups for group permissions.

Alternatively, you may use [LDAP with Groups](#) to have users and groups automatically updated from LDAP, and use LDAP groups for group permissions.

Applies For

- Enabling LDAP for the first time
- Upgrading existing LDAP without enabling group management

Important Points

- Only the password lookup is done against LDAP and only if the Confluence username coincides with the LDAP username. Users and user profiles are still managed in Confluence. See [technical explanation](#) below.

- Confluence account must be created for each LDAP user, as they do not automatically have access. For an LDAP user to access Confluence, a site administrator will still need to create an account for them. The password in this Confluence account will be ignored as the LDAP password will override it.

- User management in Confluence 2.0 and earlier is handled by [OSUser](#). OSUser is configured through the osuser.xml file located in `confluence/WEB-INF/classes`.

Instructions

CAUTION: Make sure that when you first set up Confluence, you make no changes to the default osuser.xml. Once Confluence is up and running, you can then apply the changes described here to enable LDAP integration.
Step One: Open the osuser.xml file located in your home directory under WEB-INF/classes

In the osuser.xml file, the CredentialsProviders are responsible for authenticating passwords. The default CachingCredentialsProvider looks in the Confluence database. To enable LDAP authentication, you will need to add a LDAPCredentialsProvider, so that LDAP users can also be authenticated:

Here's what the default osuser.xml contains:

```xml
<provider class="bucket.user.providers.CachingCredentialsProvider">
  <property
    name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateCredentialsProvider</property>
  <property
    name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
<provider class="bucket.user.providers.CachingAccessProvider">
  <property
    name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateAccessProvider</property>
  <property
    name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
<provider class="bucket.user.providers.CachingProfileProvider">
  <property
    name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateProfileProvider</property>
  <property
    name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
```

Step Two: Edit the osuser.xml file as shown below:

For Confluence version 2.1 and later:

```xml
<provider class="com.atlassian.confluence.user.ConfluenceLDAPCredentialsProvider">
  <property
    name="java.naming.factory.initial">com.sun.jndi.ldap.LdapCtxFactory</property>
  <property
    name="java.naming.provider.url">ldap://localhost:389</property>
  <property
    name="searchBase">dc=atlassian,dc=com</property>
  <property
    name="uidSearchName">cn</property>
  <!--
  <property
    name="java.naming.security.principal">cn=Manager,dc=atlassian,dc=com</property>
  <property
    name="java.naming.security.credentials">secret</property>
  <property
    name="exclusive-access">true</property>
  -->
  </provider>
<provider class="bucket.user.providers.CachingCredentialsProvider">
  <property
    name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateCredentialsProvider</property>
  <property
    name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
<provider class="bucket.user.providers.CachingAccessProvider">
  <property
    name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateAccessProvider</property>
  <property
    name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
<provider class="bucket.user.providers.CachingProfileProvider">
  <property
    name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateProfileProvider</property>
  <property
    name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
```
For older versions of Confluence

```
<provider class="com.opensymphony.user.provider.ldap.LDAPCredentialsProvider">
 <property name="java.naming.factory.initial">com.sun.jndi.ldap.LdapCtxFactory</property>
 <property name="java.naming.provider.url">ldap://localhost:389</property>
 <property name="searchBase">dc=atlassian,dc=com</property>
 <property name="uidSearchName">cn</property>
</provider>

<provider class="bucket.user.providers.CachingCredentialsProvider">
 <property name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateCredentialsProvider</property>
 <property name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>

<provider class="bucket.user.providers.CachingAccessProvider">
 <property name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateAccessProvider</property>
 <property name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>

<provider class="bucket.user.providers.CachingProfileProvider">
 <property name="chain.classname">com.opensymphony.user.provider.hibernate.HibernateProfileProvider</property>
 <property name="chain.configuration.provider.class">bucket.user.BucketHibernateConfigProvider</property>
</provider>
```

- Update the following properties to suit your LDAP server:
  - url (currently set to ldap://localhost:389)
  - searchBase (currently set to dc=atlassian,dc=com)
  - uidSearchName (currently set to cn)
- If your LDAP server is not configured to allow anonymous lookups, you need to:
  - remove comment tags
  - enter the username; including searchBase (currently set to cn=Manager,dc=atlassian,dc=com)
  - enter password (currently set to secret)

The Credentials (password) checking is a separate operation from user-profile lookups. The profile can be loaded from the Confluence database, but the password is looked up from LDAP. Furthermore, multiple credentials providers can be specified (here, LDAP and OSUser), and if one fails, the other will be used. This allows non-LDAP users to log in with their Confluence password.

**RELATED TOPICS**

- Activating External User Management
- Add LDAP Integration For User Authentication Only
- Changes in osuser.xml from 1.0.3a to 1.1.x
- Confluence Caching OSUser Provider
- Importing LDAP Users

Document generated by Confluence on May 01, 2007 00:44
Add LDAP Integration With Group Management

This page last changed on Apr 23, 2007 by david.soul@atlassian.com.

Confluence can delegate user authentication to LDAP and use LDAP group memberships to set the user’s Confluence access permissions. This also allows Active Directory (AD) integration. This guide is for both users enabling LDAP, and those upgrading their LDAP scheme to support group management. It applies to LDAP over HTTP and SSL/HTTPS:

Once the LDAP is enabled and LDAP users are using Confluence, you cannot revert back to local user management without those users being disabled. However, you can create new local users while using LDAP integration.

Who is this guide for?

To decide if this is the correct document for you, please answer these 3 questions:

1. Do you want use keep using internal Confluence groups but have LDAP passwords for logins? If so, follow [Adding LDAP Integration Authentication Only](#) instead.
2. Are you using Atlassian-User LDAP on Confluence 2.1.x? If so, follow the [2.1.x LDAP Upgrade Instructions](#) instead.
3. Are you using a version of Confluence older than 2.1? If you are using 2.0.x, follow [OSUser LDAP integration](#) instead. If it is older than 2.0, you must upgrade Confluence.

Step 1 - Upgrade Confluence

Please check that you are running the [latest version](#) of Confluence. If not, we strongly recommend that you consider upgrading Confluence according to [this guide](#). Confirm that you have upgraded successfully before trying to add LDAP to the new version.

Step 2 - Contact your LDAP/AD Administrator

Integration can only be setup by an administrator confident with running user queries against their LDAP directory. You should request assistance from your LDAP or Active Directory administrator for the following steps.

Step 3 - Check your LDAP server

Confirm this information about your LDAP server.

1. Check your server LDAP version. Supported versions are v2 and v3. Supported LDAP servers include OpenLDAP, Microsoft Active Directory, Novell eDirectory, and any server that uses Java JNDI-LDAP mapping.
2. Your LDAP or Active Directory server must support static groups. This means that the user DN's must be stored against a membership attribute inside an LDAP groups. An example of a static groups is shown below:
The membership attribute in this case is member, but this is not required. Note that the full DN's of John and Sally Smith are listed. If the values against member are not full DNs, but are just usernames, then you need to add the flag
<useUnqualifiedUsernameForMembershipComparison>true</useUnqualifiedUsernameForMembershipComparison>
to your LDAP configuration. Open Directory on OS X uses this configuration.
3. You must not have LDAP groups called 'confluence-users' or 'confluence-administrators'.
4. You must have at least one existing Confluence administrator who's username does not exist in the LDAP server.

Step 4 - Administrator account check

This step assumes that you have at least one account which has permissions to administer your Confluence site. For this account, please check that there isn't an account on your LDAP system that has the exact same username.

If this is the case and you do not have another local account that has administration rights, then you should perform one of the following:

- create another account to act as the administrator that doesn't exist on LDAP
- rename your local admin account to use another username that doesn't exist in LDAP
- rename your LDAP account

This will ensure that you will have an account that has sufficient rights to administer your site after you migrate your users (next step).

Step 5 - Confluence user migration

The new Atlassian-User-LDAP-Integration depends on a new user management component and requires you to migrate your current users even in the case of new installs. The following steps will guide you:

1. You will need to find out your Confluence base URL. To check this from Confluence, go to Administration > General Configuration > Base Url. Record this for later in the process.
2. You must create backups in order to rollback to the old version if the migration is unsuccessful. Make a backup of your:
   - database
   - Confluence home directory
   - conf/confluence/WEB-INF/classes/numbers-atlassian-user.xml (only if you have made changes)
3. Download hibernate_osuser_atlassian-user.xml and rename to atlassian-user.xml and copy to your conf/confluence/WEB-INF/classes directory (you can overwrite the one that's there)

Are you using Confluence 2.3.x?
Right click on \osuser2atuser.jsp and download it to the \confluence=admin subdirectory of your
Confluence install. Overwrite the existing osuser2atluser.jsp file.

4. Restart Confluence. Login as an Administrator, and go to this URL:

\(<\text{BASEURL}>/\text{admin/osuser2atluser.jsp}\>

Please ensure you replace \(<\text{BASEURL}>\) with the URL you currently use to access Confluence. For example, http://confluence.atlassian.com or http://foobar.com/confluence.

5. Click the link Begin migration. You will know the migration has been successful if you see this reported:

Migrating users ... Users migrated successfully!
Migrating propertyset data ... Propertyset data migrated successfully!
Migrating groups ... Groups migrated successfully!

If you encounter errors, please create a support ticket at http://support.atlassian.com and attach your application server logs.

7. Start up Confluence and check that you can login using the admin account you first set up when running through the Confluence Setup Wizard. If not, re-examine your steps and repeat from there.
8. If you can't successfully login with this account, please check that the username of this account does not already exist in your LDAP server. If usernames are the same, Confluence recognises LDAP accounts over local Confluence accounts.

**Step 6 - Configure LDAP connection in atlassian-user.xml**

1. Download \(\text{ldap.hibernate.cache.atlassian-user.xml}\), rename it to \atlassian-user.xml then copy to your \(<\text{INSTALL}>/\text{confluence/WEB-INF/classes}\) directory. It should overwrite the previous \atlassian-user.xml.
2. Follow Customising \atlassian-user.xml

**Step 7 - Grant access to LDAP users and groups**

To grant Confluence access to an LDAP group:

1. From Confluence, go to Administration > Global Permissions
2. Click to Edit Permissions for Groups
3. In the textbox to Grant Browse Permission, enter the name of an LDAP group that should have Confluence access. Click Add.
4. Tick the Can Use box for the LDAP group. If the group is not found, it was not present in your LDAP server.
5. For other LDAP groups that need access to Confluence, add them using the same method.
6. Setup your Confluence page and space permissions for these LDAP groups.

Installation complete!

**Troubleshooting Resources**
- **LDAP FAQ**
- If LDAP users or groups are not displayed in Confluence, download the [Paddle diagnostic tool](#).
- List of [known, unresolved LDAP bugs](#).
- Comments on this page

Failing that, lodge a [support request](#). Be sure to attach your atlassian-user.xml, [Paddle](#) logs and a zip of your Confluence logs.
Automatically Adding LDAP users to the confluence-users Group

This Authenticator adds users to confluence-users as they log in. To use it, change the line:

```xml
<authenticator class="com.atlassian.confluence.user.ConfluenceAuthenticator"/>
```

in seraph-config.xml to:

```xml
<authenticator class="com.atlassian.confluence.user.ConfluenceGroupJoiningAuthenticator"/>
```

If you are using Confluence 2.2 you need to download the `ConfluenceGroupJoiningAuthenticator.class` file and put it in WEB-INF/classes/com/atlassian/confluence/user.

Confluence 2.3 and later include this class as standard.
Customising atlassian-user.xml

This page last changed on Apr 26, 2007 by mryall.

The LDAP server connection is specified by manually editing the file atlassian-user.xml. Confluence 2.3 onwards supports multiple LDAP servers by repeating the instructions below for each server so that there are multiple repositories defined.

Stage 1 - Configure Connection Details

1. Edit the file .../confluence/WEB-INF/classes/atlassian-user.xml and configure the connection for either AD or LDAP.
   - Connections in Active Directory
   - Connections in other LDAP servers
2. If your Active Directory Server allows anonymous searches, then you do not need to specify a securityPrincipal and securityCredential at all. For an example of how you would configure Confluence to allow anonymous authentication, see Enable Anonymous Authentication in LDAP or Active Directory
3. To connect to LDAP over SSL, see Connect to LDAP via SSL
4. Check your configuration against the example connection details shown below.

```xml
<ldap key="ldapRepository" name="LDAP Repository@hecate.atlassian.com" cache="true">
    <host>hecate.atlassian.com</host>
    <port>389</port>
    <securityPrincipal>cn=admin,dc=atlassian,dc=private</securityPrincipal>
    <securityCredential>secret</securityCredential>
    <securityProtocol>plain</securityProtocol>
    <securityAuthentication>simple</securityAuthentication>
    <baseContext>dc=atlassian,dc=private</baseContext>
    ...
</ldap>
```

Stage 2 - Map LDAP Data Tree

1. Configuring the mappings in atlassian-user.xml for either AD or LDAP.
   - Mapping Active Directory
   - Mapping other LDAP servers
2. Check your configuration against the example connection details shown below.

```xml
...
    <baseUserNamespace>dc=staff,dc=perftest,dc=atlassian,dc=private</baseUserNamespace>
    <baseGroupNamespace>dc=groups,dc=perftest,dc=atlassian,dc=private</baseGroupNamespace>
    <usernameAttribute>cn</usernameAttribute>
    <firstnameAttribute>givenname</firstnameAttribute>
    <surnameAttribute>sn</surnameAttribute>
    <emailAttribute>mail</emailAttribute>
    <groupSearchFilter>(objectClass=groupOfNames)</groupSearchFilter>
    <membershipAttribute>member</membershipAttribute>
</ldap>
```

Stage 3 - Optional LDAP Settings
The following settings do not appear in the default `atlassian-user.xml` file:

```xml
<poolingOn>true</poolingOn>
<maxSize>0</maxSize>
<initSize>10</initSize>
<prefSize>10</prefSize>
<debugLevel>none</debugLevel>
<securityProtocol/plain ssl</securityProtocol>
<authentication/simple</authentication>
<timeout>0</timeout>
<initialContextFactory/com.sun.jndi.ldap.LdapCtxFactory</initialContextFactory>
<batchSize>100</batchSize>
<timeToLive>0</timeToLive>
<userSearchAllDepths>true</userSearchAllDepths>
</ldap>
```

However, if you want to override the default values listed above, you can add the value onto the end like so:

```xml
...<groupNameAttribute>cn</groupNameAttribute>
<groupSearchFilter>(objectClass=groupOfNames)</groupSearchFilter>
<membershipAttribute>member</membershipAttribute>
<initSize>20</initSize>
</ldap>
```

It is important that the connection pool timeout value be set to 0, as this will force Atlassian User (via the JNDI layer) to clean up lingering connections that have lived past one request. More information about LDAP pools [here](#).

### Configuring multiple LDAP repositories

For some LDAP servers, it might be necessary to configure Confluence to connect to multiple LDAP servers. This functionality is available in Confluence 2.3 and above, and has a separate guide: Configuring multiple LDAP repositories.

### Related pages

- Add LDAP Integration With Group Management
- Configuring multiple LDAP repositories
**atlassian-user.xml reference**

This page last changed on Sep 17, 2006 by dave@atlassian.com.

This page describes the function of each of the tags in an atlassian-user.xml file.

**Child tags of the `<ldap>` tag:**

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>host</td>
<td>The host name of the machine running the LDAP server. This must resolve from the machine running Confluence.</td>
</tr>
<tr>
<td>port</td>
<td>The port number that the LDAP server is running on. This should usually be 389.</td>
</tr>
<tr>
<td>securityPrincipal</td>
<td>The distinguished name of a user who is allowed to browse the entire LDAP repository. This is omitted if the repository has anonymous access enabled.</td>
</tr>
<tr>
<td>securityCredential</td>
<td>That user’s password. This is omitted if the repository has anonymous access enabled.</td>
</tr>
<tr>
<td>securityProtocol</td>
<td>Must be ‘plain’. This is omitted if the repository has anonymous access enabled.</td>
</tr>
<tr>
<td>securityAuthentication</td>
<td>Must be 'simple', or 'none' if the repository has anonymous access enabled.</td>
</tr>
<tr>
<td>baseContext</td>
<td>This should be set to a context at the 'top' of your LDAP tree.</td>
</tr>
<tr>
<td>baseUserNamespace</td>
<td>This should be set to a context which contains all your user entities.</td>
</tr>
<tr>
<td>userSearchFilter</td>
<td>A filter which matches only user entities.</td>
</tr>
<tr>
<td>baseGroupNamespace</td>
<td>This should be set to a context which contains all your group entities</td>
</tr>
<tr>
<td>groupSearchFilter</td>
<td>A filter which matches only group entities</td>
</tr>
<tr>
<td>usernameAttribute</td>
<td>The name of the attribute on a user entity which contains the Confluence user name of the user.</td>
</tr>
<tr>
<td>firstnameAttribute</td>
<td>The name of the attribute on a user entity which contains the first name of the user.</td>
</tr>
<tr>
<td>surnameAttribute</td>
<td>The name of the attribute on a user entity which contains the surname of the user.</td>
</tr>
<tr>
<td>emailAttribute</td>
<td>The name of the attribute on a user entity which contains the email address of the user.</td>
</tr>
<tr>
<td>groupnameAttribute</td>
<td>The name of the attribute on a group entity which contains the Confluence group name of the group.</td>
</tr>
<tr>
<td>membershipAttribute</td>
<td>The name of an attribute on a group entity which contains the distinguished name of a member of a group. This should occur multiple times on a group</td>
</tr>
<tr>
<td>Setting</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>userSearchAllDepths</td>
<td>Set to 'true' to search the baseUserNamespace level and all nodes underneath for users. Defaults to 'false'.</td>
</tr>
<tr>
<td>groupSearchAllDepths</td>
<td>Set to 'true' to search the baseGroupNamespace level and all nodes underneath for groups. Defaults to 'false'.</td>
</tr>
<tr>
<td>useUnqualifiedUsernameForMembershipComparison</td>
<td>Set to 'true' to use the value of the usernameAttribute for membership comparisons instead of the distinguished name. Defaults to 'false'.</td>
</tr>
</tbody>
</table>
Changes in osuser.xml from 1.0.3a to 1.1.x

This page last changed on Sep 14, 2006 by david.soul@atlassian.com.

If you have setup Confluence to:

- delegate user management to JIRA (as per our documentation here) or
- use LDAP/Active directory authentication (as per our documentation here)

Then you will need to make the following changes to your osuser.xml file:

1. replace

   \texttt{com.atlassian.confluence.user.providers.Caching}

   with

   \texttt{bucket.user.providers.Caching}

   Doing this will effectively convert the following:

   \texttt{com.atlassian.confluence.user.providers.CachingCredentialsProvider}
   \texttt{com.atlassian.confluence.user.providers.CachingAccessProvider}
   \texttt{com.atlassian.confluence.user.providers.CachingProfileProvider}

   to

   \texttt{bucket.user.providers.CachingCredentialsProvider}
   \texttt{bucket.user.providers.CachingAccessProvider}
   \texttt{bucket.user.providers.CachingProfileProvider}

2. and replace

   \texttt{com.atlassian.confluence.user.ConfluenceHibernateConfigProvider}

   with

   \texttt{bucket.user.BucketHibernateConfigProvider}

Alternatively

You can just reconfigure the new osuser.xml with your changes.
Configuring multiple LDAP repositories

This page last changed on Apr 27, 2007 by mryall.

Availability

Confluence 2.3 and above support multiple LDAP servers configured in atlassian-user.xml. Instructions are below.

Confluence releases prior to 2.3 do not support multiple LDAP repositories.

Prerequisites

Before reading this, ensure you understand the configuration details outlined in Customising atlassian-user.xml. This describes how to configure a single LDAP repository in Confluence, and is prerequisite knowledge for following the instructions below.

For brevity, all examples on this page are partial examples. A complete atlassian-user.xml LDAP configuration can be found in Customising atlassian-user.xml.

Configuration

To configure multiple LDAP repositories in Confluence, put multiple <ldap>...</ldap> entries into confluence/WEB-INF/classes/atlassian-user.xml.

The order of the entries in the file will be the order that the repositories are searched for users. That is, if a user tries to log in with the username jsmith, the first repository in atlassian-user.xml will be searched for the user with the username jsmith. If no user is found in that repository, the second repository specified in atlassian-user.xml will be searched.

Here is a partial configuration that connects Confluence to two different LDAP servers. They are given the identifiers ldap1 and ldap2, and connect to the servers ldap-sf.example.org and ldap-nyc.example.org respectively.

```xml
<atlassian-user>
  <repositories>
    <ldap key="ldap1" name="San Francisco Example Repository" cache="true">
      <host>ldap-sf.example.org</host>
      <port>389</port>
      <!-- ... remainder of server configuration ... -->
    </ldap>
    <ldap key="ldap2" name="New York City Example Repository" cache="true">
      <host>ldap-nyc.example.org</host>
      <port>389</port>
      <!-- ... remainder of server configuration ... -->
    </ldap>
  </repositories>
</atlassian-user>
```
Points to note:

- each server must have a unique key attribute
- each server must include the full LDAP configuration, including `baseUserNamespace`, `baseGroupNamespace` and so on
- Confluence's internal repository, the `<hibernate>` repository, must be specified last
- you can include more than two LDAP repositories, but please read the Side effects section below.

## Side effects

The main side effect of configuring multiple LDAP servers is degrading performance. There are many activities in Confluence where user or group information is retrieved:

- logging in
- user/group searches
- permission checks when viewing or editing a page.

Confluence tries to cache as much information as possible from the LDAP queries, but almost certainly adding multiple LDAP servers will degrade the performance of the application. This is especially true if any of the LDAP servers are geographically distant from Confluence, where any LDAP query has a significant latency (> 50 ms roundtrip).

## Two connections to the same server

It also possible, but not usually recommended, for Confluence to connect twice to the same server. When connecting twice to the same server, you must not have overlapping group or user namespaces in the LDAP tree.

Here is an partial configuration, retrieving two separate LDAP user branches, but only one LDAP group branch. To configure only a single group branch, the group filter in the second LDAP repository searches for a non-existent value so it will not return any results. (This is generally fast as long as your LDAP server has an index on objectClass for the given tree section.)

```xml
<repositories>
  <repository key="ldap1" name="Example Repository, SF user tree" cache="true">
    <host>ldap.example.org</host>
    <port>389</port>
    <!-- ... remainder of connection configuration ... -->
    <!-- user search filter -->
    <baseUserNamespace>cn=San Francisco,dc=ldap,dc=example,dc=org</baseUserNamespace>
    <userSearchFilter>(objectClass=user)</userSearchFilter>
    <!-- ... remainder of user configuration ... -->
    <!-- group search filter -->
    <baseGroupNamespace>cn=Groups,dc=ldap,dc=example,dc=org</baseGroupNamespace>
  </repository>
</repositories>
```
<groupSearchFilter>(objectClass=group)</groupSearchFilter>

<!-- ... remainder of server configuration ... -->
</ldap>
<ldap key="ldap2" name="Example Repository, NYC user tree" cache="true">
  <host>ldap.example.org</host>
  <port>389</port>
  <!-- ... remainder of connection configuration ... -->
  <userSearchFilter>(objectClass=user)</userSearchFilter>
  <!-- ... remainder of user configuration ... -->
  <baseGroupNamespace>cn=Groups,dc=ldap,dc=example,dc=org</baseGroupNamespace>
  <groupSearchFilter>(objectClass=nothing)</groupSearchFilter>
  <!-- ... remainder of server configuration ... -->
</ldap>
<hibernate key="hibernate" name="Hibernate Repository" description="Hibernate Repository" />
</repositories>
</atlassian-user>

Points to note:

- each repository will have its own connection pool, so Confluence will use twice as many connections to the LDAP server
- performance will typically be degraded, as discussed in Side effects above
- each server must have a unique key attribute
- each server must include the full LDAP configuration, including baseUserNamespace, baseGroupNamespace and so on
- Confluence's internal repository, the <hibernate> repository, must be specified last.

Related pages

Customising atlassian-user.xml
Add LDAP Integration With Group Management
Confluence Caching OSUser Provider

This page last changed on Apr 06, 2004 by mryall.

During some operations such as rendering pages, Confluence makes a large number of queries to the user management subsystem (OSUser). To cater for this, the OSUser providers built in to Confluence in v1.0 performed a certain amount of in-memory caching of user identities. Unfortunately, this means that if you configure Confluence to use some other provider (such as LDAP or JIRA), this caching is no longer performed, and the application slows significantly as a result.

This document is aimed at Confluence users who have, or wish to have Confluence use an external user management through customising their osuser.xml file. If you are just using Confluence's built-in user-management, you do not need to read this document.

Note

While the caching providers should work with any OSUser provider, we have only tested them against Confluence's built-in user-management, and the JIRA provider that ships with Confluence.

Provider Configuration

Confluence 1.0.1 introduces the following OSUser providers:
com.atlassian.confluence.user.providers.CachingCredentialsProvider,
com.atlassian.confluence.user.providers.CachingAccessProvider,
com.atlassian.confluence.user.providers.CachingProfileProvider. They are written as caching wrappers around another provider that does all the real work. So, for example, this is the default CredentialsProvider configuration that ships with Confluence:

```
<provider class="com.atlassian.confluence.user.providers.CachingCredentialsProvider">
    <property name="chain.classname">
        com.opensymphony.user.provider.hibernate.HibernateCredentialsProvider
    </property>
    <property name="chain.configuration.provider.class">
        com.atlassian.confluence.user.ConfluenceHibernateConfigProvider
    </property>
</provider>
```

To configure the caching provider, you need to supply:

1. The class-name of the provider that will ultimately be providing the credentials, as the property chain.classname
2. Any properties that need to be passed to that next provider. If the next provider requires a property configuration.provider.class, then you can pass that property to the provider by prepending chain. to the property name: chain.configuration.provider.class

The configuration for the Access and Profile providers is identical.
Importing LDAP Users

This page last changed on Nov 30, 2006 by dave@atlassian.com.

⚠️ Deprecation Notice
A new improved LDAP integration was introduced in Confluence 2.1. This document describes the old style LDAP integration and has been deprecated. If you are new to Confluence and have not set up LDAP integration before, we recommend using the new LDAP integration.

To import users from your LDAP server into Confluence,

1. Download the LDAP user importer.
2. Open ldap2confluence.sh (Unix) or ldap2confluence.bat (Windows)
3. Set the Base URL to the URL of your Confluence system (e.g. http://my.server/confluence).
4. Set the 'ADMINUSER' and 'ADMINPASSWORD' variables to the username and password of your Confluence Admin user.
5. Setup the connection.properties file as described here.
6. Setup the mappings.properties file as described here.
7. Run ldap2confluence to import your users.

RELATED TOPICS

Activating External User Management
Add LDAP Integration For User Authentication Only
Changes in osuser.xml from 1.0.3a to 1.1.x
Confluence Caching OSUser Provider
Importing LDAP Users

行政部门 Guide Home Confluence Documentation Home
LDAP FAQ

This page last changed on Mar 31, 2007 by david.soul@atlassian.com.

For answers relating to LDAP User Management, click on any query below.

Troubleshooting

I just added LDAP integration, why can't I login using my original account?

If there is an LDAP user with the same username as your administrator account, you must now use their password to login. LDAP logins override internal logins.

Why do my LDAP users see 'Not Permitted' screens when they login?

To login, the user must be a member of one or more groups that have been granted 'Can Use' permission from the Administration -> Global Permissions -> Group Permissions.

Confluence fails to start with error 'Error creating bean with name 'userManager' defined in class path resource [atlassianUserContext.xml]'?

Your atlassian.xml file may contain filters with characters that must be escaped from XML. Check here for details.

Editing a user under Administration -> Manage Users throws an error 'org.apache.velocity.exception.MethodInvocationException'

If you see an error:
You should open \confluence\WEB-INF\classes\atlassian-user.xml and check that your Hibernate Repository is not wrapped in a comment tag (<!-- and -->). The line to uncomment is:
<hibernate name="Hibernate Repository" key="hibernateRepository" description="Hibernate Repository"/>

After setting up LDAP, I cannot see LDAP users or groups from the Confluence user or group browser

Are your users or groups located in subtrees beneath the directory returned by the search filter? If so, you may need to add <usersearchalldepths>TRUE</usersearchalldepths> or <groupsearchalldepths>TRUE</groupsearchalldepths> to your altassian-user.xml See Map LDAP Users and Groups for details.
Cannot edit user groups under Administration -> Manage Users as nothing happens

If nothing happens when you add or remove membership to an internal group, you should check that your OSUser Repository is commented out as described in Add LDAP Integration With Group Management. To do so, go to your Confluence install directory and open \confluence\WEB-INF\classes\atlassian-user.xml. Find the entry below.

```xml
<osuser key="osuserRepository" name="OSUser Repository"/>
```

If not commented out, you should stop Confluence then remove or comment out that line.

Cannot edit groups for LDAP users

Confluence has read-only access to LDAP groups, they cannot be updated from within Confluence. However you should be able to edit the internal group memberships for all users. If nothing happens when you add or remove membership to an internal group, you should check that your OSUser Repository is commented out as described in Add LDAP Integration With Group Management. To do so, go to your Confluence install directory and open \confluence\WEB-INF\classes\atlassian-user.xml. Find the entry below.

```xml
<osuser key="osuserRepository" name="OSUser Repository"/>
```

If not commented out, you should stop Confluence then remove or comment out that line.

I cannot see an LDAP/AD group in Confluence

Is the group in a subtree? If so, you will need to edit atlassian-user.xml and add a `groupSearchAllDepths=true` parameter to the LDAP repository to set Confluence to search subtrees of the base group namespace. See Map LDAP Users and Groups for details.

I cannot get my LDAP to work, where can I get technical support?

See Requesting External User Management Support for information on logging a support request.

General Questions

How can I enable LDAP?

See Add LDAP Integration With Group Management.

Are all users in LDAP visible in Confluence administration? Can they be assigned groups/permissions?
All LDAP users with 'Can Use' permission can be viewed from the user browser, even if they have never logged in. When an LDAP user logs in for the first time, a Confluence user account is created automatically to store their information. You have read-only access to LDAP groups, and can add/remove Confluence internal groups to any user.

When a user is deleted from LDAP, how does Confluence handle this? Is the user's assignment to one or more groups still visible?

Users are not deleted from Confluence, but their logins are disabled within one hour as they expire in the cache. Only non-LDAP groups are retained. Refer to the overview for more detail.

How can I assign an LDAP user a Confluence account?

LDAP groups or users granted 'Can Use' permission under 'Global Permissions' can login to Confluence.

Can we use LDAP and Confluence groups simultaneously, as a "mixed mode", where some groups are kept in Confluence and others in LDAP?

Yes.

If a user is in Confluence with one password, and an LDAP user with the same username is added, which password gets used?

The LDAP login has priority over the Confluence login. If LDAP 'Can Use' permission is removed or the user is deleted, the Confluence login will still work.

I enabled LDAP and some users are now returned twice under the user browser.

When LDAP is enabled, it is normal for the user browser to return two copies of users who have both LDAP and internal users accounts. If you are interested in a fix for this, please vote towards User browser shows duplicate accounts when a user exists both locally and in LDAP.

Active Directory Questions

Can it make distinctions between security and distribution groups, or group types?

No, Confluence has no group types. However, you can configure Confluence to only recognise some of these groups over others. For example, you can configure Confluence to only recognise distribution
groups. This is done by adjusting the `groupSearchFilter` in your `atlassian-user.xml` file.

Can group memberships be retrieved from multi-domain forests?

| Not without an LDAP proxy to combine multiple LDAP repositories |

Can Confluence support multiple Active Directory repositories?

| Yes. |

Can it handle nesting?

| No, each child group must be individually specified instead. You may wish to vote towards support for nested groups at [CONF-6755](https://confluence.example.com/conf-6755). |

**Other Questions**

For troubleshooting, please [create a problem report](https://confluence.example.com/); general enquiries should be [posted to a support ticket](https://confluence.example.com/support-ticket).
Troubleshooting the "Not Permitted" Screen under LDAP Integration

This page last changed on Jun 14, 2006 by mryall.

If you have set up Confluence with AtlassianUser integration and attempted a login with an LDAP/AD account and got a page titled "Not Permitted" here are the steps to troubleshoot this:

- Have you assigned USE permission to the relevant LDAP groups from the Administration > Global Permissions page?

Before an LDAP user can login and use Confluence, the LDAP group they belong to must be given USE permission directly. (Please note: nested groups is not supported in Confluence as yet, so you cannot specify the parent group. If you want this feature, please vote for it [here](#).)

- Does an account exist on your LDAP/AD server that has the same name as your local admin account? (for example, is there an account on LDAP called 'admin')

If so, then you will not be able to login with your local admin account once you enable LDAP integration. To rectify this, you need to either rename your LDAP admin account or rollback your LDAP integration and create another Confluence admin account.

- You have assigned USE permission to the relevant LDAP groups, but LDAP users in those groups still get "Not Permitted"?

Here, you need to check if Confluence is actually aware that your LDAP users belong to those LDAP groups. To work this out, here is what we need from you:

1. login as the local admin account you created when you first set up Confluence.
2. enable profiling by appending ?profile=on to the end of a Confluence URL (say the URL of the dashboard, if you happen to be on that page) and hit enter to refresh the page. This setting will now be enabled and cause additional information to be written to your log files to help us diagnose the problem.
3. Now browse to the Administration > Manage Users screen and do a search for any LDAP user.
4. Now click on the user to view their details (including the groups they belong to).
5. Now submit a support ticket at [http://support.atlassian.com](http://support.atlassian.com) and attach:
   - a screenshot of the user details page
   - your server logs files

If you are feeling brave, you can attempt to decipher the logs yourself. Here’s how:

1. your logs should display something similar to this:

```
[0ms] - com.atlassian.user.impl.ldap.adaptor.LDAPStaticGroupAdaptor_search((objectClass=groupOfNames)(member=cn=confadmin,ou=users,ou=people,ou=functest,dc=atlassian,dc=com))
[0ms] - com.atlassian.user.impl.ldap.adaptor.LDAPStaticGroupAdaptor_search_JNDI_RAW_((objectClass=groupOfNames)(member=cn=confadmin,ou=users,ou=people,ou=functest,dc=atlassian,dc=com))
```

This means that Confluence is using this LDAP search filter

```
(&(objectClass=groupOfNames)(member=cn=confadmin,ou=users,ou=people,ou=functest,dc=atlassian,dc=com))
```

to find the groups that the user 'confadmin' belongs to. Obviously, the objectClass and member
attributes may differ in your install, but the filter should be similar.

2. connect to your LDAP/AD server with JXplorer or an LDAP tool of your choice, and issue the above filter and check that you get the results you expect. This should help you to identify if and why the filter is incorrect and what it should be. Please add what you find in this step to the support ticket if you are unable to resolve it from here.
Cannot login with Confluence admin account

This page last changed on Aug 20, 2006 by dave@atlassian.com.

By 'admin account', we are referring to the account that was setup during the Confluence setup wizard.

If you have just integrated Confluence with LDAP or Active Directory, but find yourself not being able to login with this account but instead get a 'not permitted' screen: here's the explanation and fix:

### Explanation

This is caused by there being an account on LDAP with the same username as your admin account. (so for example, your Confluence admin account is 'admin' and there's a user on LDAP that also has username 'admin').

### Fix

1. Shutdown Confluence
2. Open confluence/WEB-INF/classes/atlassian-user.xml in a text editor and comment out the LDAP statements for now. For example:

```xml
<atlassian-user>
  <repositories>
    <osuser key="osuserRepository" name="OSUser Repository"/>
    <!--
    <ldap key="ldapRepository" name="LDAP Repository@hecate.atlassian.com" cache="true">
      <host>hecate.atlassian.com</host>
      <port>389</port>
      <securityPrincipal>cn=admin,dc=atlassian,dc=private</securityPrincipal>
      <securityCredential>secret</securityCredential>
      <securityProtocol>plain</securityProtocol>
      <securityAuthentication>simple</securityAuthentication>
      <baseContext>dc=atlassian,dc=private</baseContext>
      <baseUserNamespace>dc=staff,dc=perftest,dc=atlassian,dc=private</baseUserNamespace>
      <baseGroupNamespace>dc=groups,dc=perftest,dc=atlassian,dc=private</baseGroupNamespace>
      <usernameAttribute>cn</usernameAttribute>
      <userSearchFilter>(objectClass=inetorgperson)</userSearchFilter>
      <firstnameAttribute>givenname</firstnameAttribute>
      <surnameAttribute>sn</surnameAttribute>
      <emailAttribute>mail</emailAttribute>
      <groupnameAttribute>cn</groupnameAttribute>
      <groupSearchFilter>(objectClass=groupOfNames)</groupSearchFilter>
      <membershipAttribute>member</membershipAttribute>
    </ldap>
    -->
    <!--
    <hibernate name="Hibernate Repository" key="hibernateRepository" description="Hibernate Repository" />
    -->
  </repositories>
</atlassian-user>
```

Notice the <!-- and --> symbols added before and after the <ldap> tags.

3. Start up Confluence. You should now be able to login with your admin account
4. Create another admin account that has a different name to the one that exists in LDAP or Active Directory.
5. Undo the changes you made to atlassian-user.xml and restart Confluence.

**Alternative Fix**

Alternatively, you can either rename or remove the admin account present on LDAP or Active Directory. But if this is not an option, stick to the fix above.
Migrating users from Confluence to JIRA

This page last changed on Sep 06, 2006 by mryall.

There is currently no way to delegate user management from JIRA to Confluence. So, if you are in a situation where your users are defined in Confluence and would like to take advantage of Confluence's ability to use JIRA user management, you will need to transfer all of your existing Confluence users into JIRA. You can do this manually, or if you have a large number of users, you can use the attached XML-RPC script.

⚠️ You should backup your JIRA installation before running this script. This is an experimental script that has not gone through the same extensive testing as the Confluence and JIRA products.

Getting the migration tool

- Download the attached rpc-tools-0.9.zip.
- Extract the ZIP file to a temporary directory on your computer.

Patching Confluence 2.0.x

A patched RPC plugin is included in the ZIP file to allow remote retrieval of a full list of users from Confluence 2.0.x. To install it:

- In your Confluence webapp, move confluence/WEB-INF/lib/confluencrepc.jar to a backup location
- Copy plugins-confluencrepc.jar from the patch/ directory in the extracted ZIP file to confluence/WEB-INF/lib.

No patch is required for Confluence 2.1 and later.

Running the migration tool

- Back up your JIRA database.
- If you do not have an 'admin' username with password 'admin' in both JIRA and Confluence, create it now.
- Ensure JIRA and Confluence have remote API access enabled. In both applications, it is configured in the General Configuration screen in Administration.
- Edit connection.properties in the extracted ZIP file to set the XML-RPC URLs for JIRA and Confluence. The XML-RPC URLs in the default file correspond to the following application base URLs:
  - JIRA - http://localhost:8080
  - Confluence - http://localhost:8080/confluence
- Run java -jar tools.jar in the extracted ZIP file directory.

A successful run will generate output like the following:
Things to note:

- This script requires that both the Confluence and JIRA remote APIs are available and accessible to a username 'admin', password 'admin'. You can temporarily add this user to both system to run the script, then remove it afterwards.
- A random password will be assigned to each user that is transferred because it is not possible to access password information via the XML-RPC API. Therefore they will have retrieve a new password via the password reminder.
- Jira does not allow users to sign up if they do not have a valid email address. Therefore we will assign them an email address of type username@example.com to any Confluence users that do not have a email address. This will allow you to find the users and help them to create a password or change the email address.

Trouble running the script?

- Ensure you have created a user 'admin' with password 'admin' in both Confluence and JIRA.
- Ensure both applications have remote API access enabled (see above).
- Ensure you have patched the Confluence RPC plugin if running Confluence 2.0.x.

If you're still having trouble, please raise a support request, and include a copy of the error you're getting.
Requesting External User Management Support

This page last changed on Apr 01, 2007 by ktran.

If you are having external user management issues with Confluence, and the advice on Add LDAP Integration With Group Management has not helped, you can always ask us for help. External user management issues can be hard to diagnose, however, and we often spend a lot of time understanding the particular configuration you have. The best way to get a speedy resolution to your issue is to provide this information up front.

Please gather all of the information listed below and include it in your support request (http://support.atlassian.com), even if you think you have a good idea what's causing the problem. That way we don't have to ask for it later.

Confluence server

- Take a screenshot of Confluence's Administration # System Information (or save the page as HTML)
- Take a screenshot of Confluence's Administration # Global Permissions, if you are having problems with logging in
- Take a screenshot of the Space permissions page, if you are having problems with space or page permissions.

Confluence configuration files

- Attach a copy of atlassian-user.xml, found in confluence/WEB-INF/classes
- Attach a copy of osuser.xml, found in confluence/WEB-INF/classes.

If you are running Confluence 2.1 you will have to attach the following file instead of atlassian-user.xml

- Attach a copy of atlassianUserContext.xml, found in confluence/WEB-INF/classes

User management system

- What is the name and version of your LDAP server?
- Does your LDAP server use dynamic or static groups?

Using Active Directory for LDAP?

Please include IXplorer Table Editor snapshots with the information specified on this page

Diagnostics

- Enable profiling (as described here)
- Enable detailed user management logging by editing confluence/WEB-INF/classes/log4j.properties:
Change this section:

```java
###
#	Atlassian User
###
log4j.logger.com.atlassian.user=DEBUG, confluencelog
log4j.additivity.com.atlassian.user=false
log4j.logger.com.atlassian.confluence.user=DEBUG, console
log4j.additivity.com.atlassian.confluence.user=false
log4j.logger.bucket.user=DEBUG, console
log4j.additivity.bucket.user=false
```

To this:

```java
###
#	Atlassian User
###
log4j.logger.com.atlassian.user=DEBUG, confluencelog
log4j.additivity.com.atlassian.user=false
log4j.logger.com.atlassian.confluence.user=DEBUG, confluencelog
log4j.additivity.com.atlassian.confluence.user=false
log4j.logger.bucket.user=DEBUG, confluencelog
log4j.additivity.bucket.user=false
log4j.logger.com.atlassian.seraph=DEBUG, confluencelog
log4j.additivity.com.atlassian.seraph=false
log4j.logger.com.opensymphony.user=DEBUG, confluencelog
log4j.additivity.com.opensymphony.user=false
```

- After enabling both the above, please attempt a Confluence LDAP account login and attach a copy of the log files that are produced when the problem occurs. To do this, locate your install directory or exploded WAR directory, then zip the full /logs subdirectory into a single file for us to examine. An example location might be confluence-2.2.2-std/logs.

⚠️ If you are using LDAP, download Paddle and run it. Attach the logs created to the support ticket.
Understanding User Management in Confluence

This page last changed on Sep 14, 2006 by david.soul@atlassian.com.

Looking for help with your user management configuration? See Requesting External User Management Support.

Components of user management

1. Authentication - determining what user identity is making a request to Confluence
2. User management - storing and retrieving core information about users
3. Group membership - storing and retrieving groups, and group membership
4. Profile information - providing metadata associated with users.

It’s important to understand that these are separate components of the user management system. The term LDAP integration is not really meaningful, because you could use LDAP repository for any or all of the above tasks.

For example, in OSUser authentication can be performed against different repository to that used for group membership queries. In AtlassianUser/Polis, authentication and group membership can be retrieved from LDAP, but profile information is still stored in the Confluence database.

Authentication

Seraph

Almost all authentication in Confluence (and JIRA) is performed through Seraph, Atlassian's open source web authentication framework. The goal of seraph is to provide a simple, extensible authentication system that we can use on any application server.

Seraph is implemented as a servlet filter. Its sole job is, given a web request, to associate that request with a particular user (or no user if the request is anonymous). It supports several methods of authentication, including HTTP Basic Authentication, form-based authentication, and looking up credentials already stored in the user's session.

Seraph performs no user management itself. It merely checks the credentials of the incoming request, and delegates any user-management functions (looking up a user, checking a user's password is correct) to Confluence's user-management subsystem.

If you were looking to integrate Confluence with a Single Sign-On (SSO) infrastructure, you would do so by writing a custom Seraph authenticator (and in fact, many customers have done so).

XML-RPC and SOAP Authentication

Authentication for requests performed by the remote API do not go through Seraph, so they can't take
advantage of Seraph authenticators. XML-RPC and SOAP authentication requests are checked directly against the user-management framework, and tokens are assigned directly by the remote API subsystem.

Password Authentication and User Management

By default, password authentication is delegated from Seraph to the user management system. This is not necessary, however. Single Sign-On systems may have no password authentication at all, and get all the necessary credentials from the SSO provider.

Confluence user management frameworks

The rest of this document covers the user management frameworks used by Confluence: AtlassianUser and OSUser.

AtlassianUser

AtlassianUser is a new user and group management framework developed by Atlassian, and is the core framework used in Confluence since version 2.1. AtlassianUser was developed with the following goals in mind:

- Support LDAP as a fully functional repository for authentication, group management and profile information (profile information not yet implemented).
- Compatibility with both JIRA and Confluence (JIRA support not yet implemented).
- Be simple to configure (partially complete, needs better migration and UI integration).

We plan to release AtlassianUser as an open source project some time in the future (probably under the name Polis), but right now the system is still under heavy development inside Atlassian.

AtlassianUser provides user, group and profile management services to Confluence. It does so by delegating tasks to configurable repositories. Multiple repositories can be configured, so for example Confluence can draw user information from both the database _and_ an LDAP server.

Default configuration

By default, Confluence's AtlassianUser configuration delegates all user, group, profile and password authentication to OSUser. This is done to minimise the impact of the migration from OSUser to AtlassianUser. At some time in the future, we will migrate all user management to AtlassianUser's native providers, and the OSUser delegation will only be needed by customers who are still relying on the OSUser/JIRA bridge, or the old-style OSUser LDAP support.

Configuration of AtlassianUser is done through the atlassian-user.xml file (in Confluence 2.2+) or atlassianUserContext.xml (in Confluence 2.1).

Database (Hibernate) Support
AtlassianUser can store user, group and profile data directly in Confluence's database. This will be the default behaviour for Confluence once we have completed the migration from OSUser.

**LDAP support**

AtlassianUser currently supports password authentication, user management and group management with an LDAP server. There are instructions on [how to configure AtlassianUser LDAP integration](#).

At this point, only read-only access to LDAP is planned. Java's JNDI-LDAP interface does not support updating an LDAP repository, and the administration tools that come with LDAP servers such as Microsoft Active Directory are generally comprehensive and already available in enterprise IT departments.

**JIRA integration?**

AtlassianUser will not support delegating Confluence user management to JIRA. Instead, our goal is to implement AtlassianUser as the JIRA user management framework as well. Once this is done, both Confluence and JIRA can use the same LDAP server for their authentication and group management.

**OSUser**

[OpenSymphony User](#) was Confluence's core user management framework up until it was replaced by AtlassianUser in version 2.1. OSUser is still heavily used within Confluence through AtlassianUser's OSUser repositories, and for the time being remains the default user, group and profile repository for Confluence.

OSUser is also built around the model of pluggable providers, but its LDAP support is limited.

**OSUser Database (Hibernate) Providers**

In its default configuration, Confluence's OSUser providers store a list of users and groups together with profile information in tables in the Confluence database:

- os_user (authentication)
- os_group (group membership)
- os_user_group (group membership)
- os_propertyentry (profile information)

The hashed password in the os_user table is used to authenticate the user unless LDAP support is enabled. The os_user_group table is queries for group membership information.

OSUser configuration is controlled through the os-user.xml file.

**LDAP support**

OSUser only supports authentication against an LDAP server. That is, you can check user passwords against LDAP, but all other user information must be shadowed in the Confluence database. There are
instructions on how to configure OSUser LDAP authentication.

If you need support for LDAP user information or group membership as well, AtlassianUser should be used instead (see above).

### Delegating user management to JIRA

Confluence can use OSUser to retrieve information for authentication, group membership and profile information from JIRA.

If you look at the discussion of OSUser’s implementation above, you can see how this can works pretty easily. A data source to JIRA database is configured in Confluence which lets Confluence read directly from JIRA’s os_* tables. For example, when a user is created in JIRA, the username and password goes in the os_user table in the JIRA database. Confluence looks at the same table in the JIRA database to authenticate the user.

Access to the JIRA database is read-only. For this reason, Confluence maintains a subset of the user’s profile information (things like last login time and user preferences that Confluence needs to be able to modify) locally in the Confluence database.

There are instructions on how to configure OSUser delegation to JIRA.
User Management Frequently Asked Questions

This page last changed on Jan 17, 2007 by david.soul@atlassian.com.

This page has been split into the LDAP FAQ and JIRA User Management FAQ.
The Configuration Guide contains instructions on installing and configuring Confluence. If you cannot find what you are looking for, try the Search box in the top right-hand corner.

## TOPICS

<table>
<thead>
<tr>
<th>Installation and Setup</th>
<th>Application Server Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td>To install the Confluence EAR-WAR edition in an application server, <a href="#">click here</a>.</td>
</tr>
<tr>
<td>Installing Confluence Standalone</td>
<td>• <a href="#">Known Issues for Apache Tomcat</a></td>
</tr>
<tr>
<td>Installing Confluence EAR-WAR</td>
<td>• <a href="#">Known Issues for JBoss</a></td>
</tr>
<tr>
<td>Standalone Setup Wizard</td>
<td>• <a href="#">Known Issues for Jetty</a></td>
</tr>
<tr>
<td>Custom Installation</td>
<td>• <a href="#">Known Issues for Resin 2.x</a></td>
</tr>
<tr>
<td>Confluence Cluster Installation</td>
<td>• <a href="#">Known Issues for Resin 3.x</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upgrading Confluence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgrading Confluence</td>
</tr>
<tr>
<td>Release Notes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Guides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Confluence automatically on system startup</td>
</tr>
<tr>
<td>Known Issues with Enterprise or Webhosting environments</td>
</tr>
<tr>
<td>Pull down RSS Feeds through a Proxy</td>
</tr>
<tr>
<td>Set JAVA_HOME variable in Windows</td>
</tr>
<tr>
<td>Setup a mail session in standalone version</td>
</tr>
<tr>
<td>Where Is My ConfluenceHome Directory?</td>
</tr>
<tr>
<td>Configure Web Proxy Support for Confluence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Webserver Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running Confluence behind Apache</td>
</tr>
<tr>
<td>Setting up Confluence with IIS</td>
</tr>
<tr>
<td>Using Apache with mod_proxy</td>
</tr>
<tr>
<td>Using Apache with mod_jk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RELATED CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrate to an External Database</td>
</tr>
<tr>
<td>Troubleshooting Embedded Database (HSQL DB)</td>
</tr>
<tr>
<td>Upgrading From HSQL 1.7.1 to 1.8</td>
</tr>
</tbody>
</table>

Document generated by Confluence on May 01, 2007 00:44
Adding SSL on Confluence 2.1.5a and earlier

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

How to setup SSL/HTTPS access in Confluence Standalone

This section describes how to enable secure access on a Confluence Standalone instance (running Tomcat 4.1.30). The configuration details may be slightly different for newer versions of Tomcat and different application servers.

⚠️ Users of Confluence 2.2.0 and newer

Please follow [this guide](#) instead.

Create an SSL certificate using keytool

Before configuring SSL, an SSL certificate must be created. If you have already configured one, you can skip this step.

Windows configuration

On Windows, perform the following at the command prompt:

```bash
%JAVA_HOME%/bin/keytool -genkey -alias tomcat -keyalg RSA
```

Unix/Linux configuration

On Unix/Linux, perform the following at the command prompt:

```bash
$JAVA_HOME/bin/keytool -genkey -alias tomcat -keyalg RSA
```

This will also apply to MacOS X systems.

Some questions will be asked, including a password for the certificate (the default is 'changeit'). Please note down what this is, as it will be used in the next step.

Modify the conf/server.xml file

In the confluence directory, open the conf/server.xml file and insert one of the following just after the closing </Engine> tag:

For Tomcat 4 (Confluence 2.1.x and below):

```xml
`
<Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8443" minProcessors="5" maxProcessors="75" enableLookups="true" acceptCount="100" debug="0" scheme="https" secure="true" useURIVалиdationHack="false" disableUploadTimeout="true">
  <Factory className="org.apache.coyote.tomcat4.CoyoteServerSocketFactory" clientAuth="false" protocol="TLS" keystorePass="#CERT_PASSWORD#" /></Connector>

For Tomcat 5.5 (Confluence 2.2 and above):

<Connector port="8443" maxHttpHeaderSize="8192" maxThreads="150" minSpareThreads="25" maxSpareThreads="75" enableLookups="false" disableUploadTimeout="true" acceptCount="100" scheme="https" secure="true" clientAuth="false" sslProtocol="TLS" URIEncoding="UTF-8" keystorePass="#CERT_PASSWORD#" />

Please note that the above configuration is included in the Confluence Standalone conf/server.xml file, and only needs to be uncommented.

Change #CERT_PASSWORD# to the password you entered for the certificate when you generated it.

⚠️ By default, Tomcat will look in C:\Documents and Settings\#CURRENT_USER\keystore (Windows) or ~/.keystore (Unix) for the certificates. If you have previously generated an SSL certificate and it is located in a different location, you will need to add an additional attribute in the conf/server.xml file.

On Tomcat 4 change the <Factory> tag to following:

<Factory className="org.apache.coyote.tomcat4.CoyoteServerSocketFactory" clientAuth="false" protocol="TLS" keystoreFile="#KEYSTORE_LOCATION#" keystorePass="#CERT_PASSWORD#" />

On Tomcat 5.5 change the <Connector> tag to following:

<Connector port="8443" maxHttpHeaderSize="8192" maxThreads="150" minSpareThreads="25" maxSpareThreads="75" enableLookups="false" disableUploadTimeout="true" acceptCount="100" scheme="https" secure="true" clientAuth="false" sslProtocol="TLS" URIEncoding="UTF-8" keystorePass="#CERT_PASSWORD#" keystoreFile="#KEYSTORE_LOCATION#" />

Also replace the #KEYSTORE_LOCATION# and #CERT_PASSWORD#.

After that, restart Tomcat and access your instance on https://host.domain:8443/.

For more detailed information on setting up SSL with Tomcat (including additional configuration options), have a look at Tomcat 4 SSL Howto or Tomcat 5.5 SSL Howto.
Application Server Configuration

This page last changed on Sep 20, 2006 by david.soul@atlassian.com.

Before deploying the EAR/WAR version of Confluence in your choice of application server, please review the setup notes and any known issues.

- [Known Issues for Apache Tomcat](#)
- [Known Issues for JBoss](#)
- [Known Issues for Jetty](#)
- [Known Issues for Resin 2.x](#)
- [Known Issues for Resin 3.x](#)
- [Known Issues for SAP Application Server](#)
- [Known Issues for WebLogic](#)
- [Known Issues for Websphere](#)
Known Issues for Apache Tomcat

This page last changed on May 25, 2006 by mryall.

- Configuring a MySQL DataSource in Apache Tomcat
- Configuring Tomcat’s URI encoding
- Max size of HTTP POST request and Confluence page size
- NotSerializableException on shutdown
- Running Tomcat on a Different Port
Configuring a MySQL Datasource in Apache Tomcat

This page last changed on Jul 18, 2006 by david.soul@atlassian.com.

Instructions on setting up a MySQL DataSource connection for Confluence Standalone or EAR/WAR.

⚠️ autoReconnect=true is required

The Confluence database connection URL must have autoReconnect=true added to the end to prevent disconnection issues.

Shut down Tomcat

- Run `bin/shutdown.sh` or `bin/shutdown.bat` to bring Tomcat down while you are making these changes.

Install the Drivers

- After unpacking the file you have downloaded, you'll find a file called something like `mysql-connector-java-3.0.10-stable-bin.jar`.
- Copy this file into the `common/lib` directory of your Tomcat installation.

Configure Tomcat

The configuration is different for Confluence 2.2 onwards due to an upgrade to Tomcat 5.5

For users of Confluence 2.2 and later

- If you are using the Standalone distribution, edit the `conf/server.xml` file in your Tomcat installation. Users running their own Tomcat instance must edit the xml file where they declared the Confluence Context descriptor.
- If editing `conf/server.xml`, find the following lines:

  ```xml
  <Context path="" docBase="../confluence" debug="0" reloadable="true">
  <!-- Logger is deprecated in Tomcat 5.5. Logging configuration for Confluence is specified in conf/WEB-INF/classes/log4j.properties -->
  ```

- Within the `Context` tags, directly after the opening `<Context.../>` line, insert the DataSource Resource tag:

  ```xml
  <Resource name="jdbc/confluence" auth="Container" type="javax.sql.DataSource"
    username="yourusername"
    password="yourpassword"
    driverClassName="com.mysql.jdbc.Driver"
    url="jdbc:mysql://localhost:3306/confluence?autoReconnect=true"
    validationQuery="Select 1" />
  ```

  ○ Replace the username and password parameters with the correct values for your database

```
° In the url parameter, replace the word 'confluence' with the name of the database your confluence data will be stored in.
° If you plan to use non-latin characters, you will also need to add "&useUnicode=true&characterEncoding=utf8" on the end of the above URL. These options are not required for any database other than MySQL.

For users of Confluence 2.1.x and earlier

- Edit the conf/server.xml file in your Tomcat installation
- Find the following lines:

```xml
<Context path="" docBase="../confluence" debug="0" reloadable="true">
  <Logger className="org.apache.catalina.logger.FileLogger" prefix="atlassian-confluence." suffix=".log" timestamp="true"/>
  <Resource name="jdbc/confluence" auth="Container" type="javax.sql.DataSource"/>
  <ResourceParams name="jdbc/confluence">
    <parameter>
      <name>factory</name>
      <value>org.apache.commons.dbcp.BasicDataSourceFactory</value>
    </parameter>
    <parameter>
      <name>maxActive</name>
      <value>20</value>
    </parameter>
    <parameter>
      <name>maxIdle</name>
      <value>10</value>
    </parameter>
    <parameter>
      <name>maxWait</name>
      <value>10000</value>
    </parameter>
    <parameter>
      <name>username</name>
      <value>yourusername</value>
    </parameter>
    <parameter>
      <name>password</name>
      <value>yourpassword</value>
    </parameter>
    <parameter>
      <name>driverClassName</name>
      <value>com.mysql.jdbc.Driver</value>
    </parameter>
    <parameter>
      <name>url</name>
      <value>jdbc:mysql://localhost:3306/confluence?autoReconnect=true</value>
    </parameter>
  </ResourceParams>
</Context>
```

° You may want to choose different maxActive and maxIdle values: these are how many total database connections will be allowed at one time, and how many will be kept open even when there is no database activity
° Replace the username and password parameters with the correct values for your database
° In the url parameter, replace the word 'confluence' with the name of the database your confluence data will be stored in.
° If you plan to use non-latin characters, you will also need to add &useUnicode=true&characterEncoding=utf8 on the end of the above URL. These options are not required for any database other than MySQL.

Configure the Confluence web application
• Edit confluence/WEB-INF/web.xml in your confluence installation
• Go to the end of the file and just before </web-app>, insert the following:

```xml
<resource-ref>
  <description>Connection Pool</description>
  <res-ref-name>jdbc/confluence</res-ref-name>
  <res-type>javax.sql.Datasource</res-type>
  <res-auth>Container</res-auth>
</resource-ref>
```

Configure Confluence

• If you have not yet set up Confluence
  ◦ Follow the steps in the Confluence Setup Guide
  ◦ In the Database Setup section, choose the "Datasource Connection" option.
  ◦ Set the JNDI name to java:comp/env/jdbc/confluence
  ◦ Set the Database dialect to MySQL.
• If you are changing an existing Confluence installation over to using a Tomcat datasource
  ◦ Find your ConfluenceHome directory (see: Where Is My ConfluenceHome Directory? if you don’t know where it is).
  ◦ Edit the confluence.cfg.xml file
  ◦ Delete any line that contains a property that begins with hibernate.
  ◦ Insert the following at the start of the <properties> section.

```xml
<property name="hibernate.setup"><![CDATA[true]]></property>
<property name="hibernate.dialect"><![CDATA[net.sf.hibernate.dialect.MySQLDialect]]></property>
<property name="hibernate.connection.datasource"><![CDATA[java:comp/env/jdbc/confluence]]></property>
```

Restart Confluence

• Run bin/startup.sh or bin/startup.bat to start Tomcat with the new settings.

F.A.Q.

I see "Can't call commit when autocommit=true" during an upgrade of Confluence or otherwise.

Check out http://jira.atlassian.com/browse/CONF-1710 This error can be fixed by adding: &relaxAutoCommit=true

to the end of your JDBC url.

Example:
jdbc:mysql://localhost/confdb?autoReconnect=true&relaxAutoCommit=true

This JDBC url can be found in your confluence.cfg.xml file located in your confluence home folder.
Configuring Tomcat's URI encoding

This page last changed on May 25, 2006 by mryall.

By default, Tomcat uses ISO-8859-1 character encoding when decoding URLs received from a browser. This can cause problems when Confluence's encoding is UTF-8, and you are using international characters in attachment or page names.

1. Edit conf/server.xml and find the line where the Coyote HTTP Connector is defined. It will look something like this, possibly with more parameters:

   ```xml
   <Connector port="8080"/>
   ```

2. Add a `URIEncoding="UTF-8"` property to the connector:

   ```xml
   <Connector port="8080" UIRIEncoding="UTF-8"/>
   ```

3. Restart Tomcat

   If you are using mod_jk

   You should apply the same `URIEncoding` parameter as above to the AJP connector if you are using mod_jk, and add the following option to your Apache mod_jk configuration:

   ```xml
   <Connector port="8009" protocol="AJP/1.3" UIRIEncoding="UTF-8"/>
   ```

   ```xml
   JkOptions +ForwardURICompatUnparsed
   ```

   More information using Apache with Tomcat

   For comprehensive examples of how to use Tomcat and Apache with Confluence, see Running Confluence behind Apache.
Max size of HTTP POST request and Confluence page size

This page last changed on Aug 01, 2006 by ivan@atlassian.com.

There is no maximum limit stipulated on a page size in Confluence. However, if a page larger then 2Mb is created, an user can experience two problems:

Rendering of a page is slow

Understandably, rendering of a large page is going to take excessive time. Don't try to put the entire content of a book into one page, split it into pages/chapters. It is easier to manage and fast to render too.

HTTP POST error when Tomcat 5 is used

```
java.lang.IllegalArgumentException: Post too large
    at org.apache.catalina.connector.Request.parseParameters(Request.java:2361)
```

This error manifests that a page is far too large, larger then 2 MB. Apache Tomcat 5, by default, sets the maximum size of acceptable HTTP POST request to 2MB.

You can reconfigure Tomcat to accept larger requests. This can be done by increasing the allowable limit or just simply disabling this functionality. The file you need to edit is `<Tomcat-Dir>/server.xml`. Set the Tomcat configuration parameter `maxPostSize` for the HTTPConnector to a larger value (in bytes) to increase the limit. Setting it to 0 will disable the size check.

See the [Tomcat Configuration Reference](#) for more information.

maxPostSize - "The maximum size in bytes of the POST which will be handled by the container FORM URL parameter parsing. The feature can be disabled by setting this attribute to a value inferior or equal to 0. If not specified, this attribute is set to 2097152 (2 megabytes)."
NotSerializableException on shutdown

This page last changed on Sep 20, 2006 by ivan@atlassian.com.

You may see an exception similar to this:

```
StandardManager[/confluence]: IOException while loading persisted sessions:
java.io.WriteAbortedException: writing aborted;
java.io.NotSerializableException: bucket.search.lucene.SearchWordsLister
java.io.WriteAbortedException: writing aborted; java.io.NotSerializableException:
bucket.search.lucene.SearchWordsLister
at java.io.ObjectInputStream.readObject0(ObjectInputStream.java:1278)
at java.io.ObjectInputStream.defaultReadFields(ObjectInputStream.java:1845)
at java.io.ObjectInputStream.readSerialData(ObjectInputStream.java:1769)
```

This is because Confluence's HTTP sessions may contain objects which cannot be serialized to disk. Tomcat tries to serialize existing sessions by default during shutdown.

You can add the following configuration parameter into Tomcat's `server.xml` file between the `<Context>` tags to disable this:

```
<Manager className="org.apache.catalina.session.PersistentManager" saveOnRestart="false"/>
```
Running Tomcat on a Different Port

By default Confluence's Tomcat instance listens on port 8080 for connections, and port 8005 for the command to shut down.

If you see errors like:

```
java.net.BindException: Address already in use:8080
```

in your logs, then you need to change the port number Confluence listens on (or you may be trying to start Confluence twice).

Confluence WAR/EAR edition

Modify Tomcat conf/server.xml, change the ports used on the Server tag and HTTP Connector tag. If you don't know what this means, see the example in the Standalone configuration below.

Confluence Standalone 2.2 and newer

Edit conf/server.xml in your Confluence application directory, and change the ports on the Server tag and the Connector tag to unused ports on your system. The following example shows the relevant section of server.xml where they are changed to 8100 (Server) and 8180 (HTTP Connector). In this configuration you would access Confluence on the URL: http://localhost:8180/confluence.

```
<Server port="8100" shutdown="SHUTDOWN" debug="0">
  <Service name="Tomcat-Standalone">
    <Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8180" minProcessors="5" maxProcessors="75" enableLookups="true" redirectPort="8444" acceptCount="10" debug="0" connectionTimeout="20000" useURIValidationHack="false" URIEncoding="UTF-8"/>
  </Service>
</Server>
```

Confluence prior to 2.2

You can change the port number by editing the file <confluence install directory>/conf/server.xml.

Find the line:

```
<Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8080" minProcessors="5" maxProcessors="75"
```

and change 8080 to the port you want to use.
If you are running two Tomcat instances, you'll also need to change the shutdown port in the line:

```
<Server port="8005" shutdown="SHUTDOWN" debug="0">
```
Known Issues for JBoss

This page last changed on Nov 30, 2006 by jon@atlassian.com.

A Quick Note about Confluence and JBoss

Confluence does not make any use of the JBoss container beyond its embedded Tomcat web application server, as can be easily demonstrated by the fact that our standalone Confluence ships with, and runs entirely inside, Tomcat. In addition deploying Confluence inside JBoss can cause additional problems, as described below.

While JBoss is a supported platform, and (subject to the limitations below) you can deploy Confluence into it successfully, we recommend that unless there is some overriding reason to run JBoss - i.e. you are making use of its specific management features, or you’re already running several other JBoss servers and want to keep your deployments consistent - you just run Confluence directly under Tomcat instead.

JBoss and Multiple Application Deployments

Atlassian do not currently support configuring Confluence on the same JBoss instance as an existing Confluence or JIRA server.

Due to JBoss’s inventive interpretation of the J2EE Classloader specification, multiple applications deployed on the same JBoss instance can interfere with each other. The most common symptom of this problem from the Confluence side is for a user to be unable to edit their profile (although it causes many other seemingly random problems). As such, we do not recommend running Confluence on the same JBoss instance as any other J2EE application.

This issue is reported in CONF-1635.

Some customers have reported success having Confluence share a server with other Confluence or JIRA instances by tweaking their classloader settings or server configurations. A number of recipes for doing so are mentioned below in comments. We currently have not verified these configurations at Atlassian. You're welcome to try them yourself, but if they do not work for you, we can not currently provide support getting them to work.

JBoss Root Logging

On starting up Confluence under JBoss, you may see the following message logged to the console:

```
ERROR [lifecycle] The root log4j logger is set to DEBUG level. This may cause Confluence to run slowly.
ERROR [lifecycle] If you are running Confluence under JBoss, please read http://confluence.atlassian.com/x/PtAB
ERROR [lifecycle] To disable this error message, start Confluence with the system property -Dconfluence.ignore.debug.logging=true
```

By default, JBoss ships with the root confluence logger set to DEBUG level. This means that Confluence
(and any other log4j-enabled application deployed in the JBoss server) will spend a lot of time generating debugging information that will just end up wasting processor cycles and disk space.

To fix this problem, edit the `conf/log4j.xml` file in your JBoss server installation. Find the following section:

```xml
<root>
    <appender-ref ref="CONSOLE"/>
    <appender-ref ref="FILE"/>
</root>
```

Replace it with this:

```xml
<root>
    <priority value="warn" />
    <appender-ref ref="CONSOLE"/>
    <appender-ref ref="FILE"/>
</root>
```

This will raise the default log level to WARN, which is where Confluence is most comfortable running day-to-day. Logging at INFO level should also be safe, but it will result in a lot more unnecessary information being logged. We recommend you keep Confluence logging at WARN level unless something is going wrong that you need to diagnose (or you're asked to log at a lower level by support).

### Additional `log4j.xml` Configuration

The Confluence `log4j.properties` file includes some additional logging configuration, which is overridden by JBoss's `log4j.xml`. To set logging to the same level as the standard Confluence distribution, you should include the following in `log4j.xml` immediately above the root declaration you edited above.

⚠️ Putting this anywhere else in the file will probably break your JBoss logging configuration.

```xml
<logger name="com.atlassian.confluence.lifecycle" additivity="false">
    <level value="INFO"/>
    <appender-ref ref="FILE"/>
    <appender-ref ref="CONSOLE"/>
</logger>
<logger name="com.atlassian.confluence.upgrade" additivity="false">
    <level value="INFO"/>
    <appender-ref ref="FILE"/>
    <appender-ref ref="CONSOLE"/>
</logger>
```
Known Issues for Jetty

This page last changed on Jun 15, 2006 by christopher.owen@atlassian.com.

Form sizes

Jetty limits form submission sizes to 200000 bytes by default. This can cause the following error to occur when attempting to edit a large page in Confluence.

```
java.lang.IllegalArgumentException: Form too large
```

This limit may be adjusted via the `org.mortbay.http.HttpRequest.maxFormContentSize` system property passed to the JVM on startup. Setting this value to 500000 may be a good start to avoid this problem but please note that setting this value too high can leave your server vulnerable to denial of service attacks.
Known Issues for Resin 2.x

This page last changed on Nov 09, 2006 by mryall.

Resin caching breaks Confluence stylesheets

Resin 2 has a broken caching algorithm that for certain URLs will always return a 304 Not-Modified status and return no content, even when the client does not send a Last-Modified header. This usually results in broken stylesheets in Confluence.

To fix this disable caching in Resin by commenting out the following line in resin.conf:

```xml
<!-- <cache dir='cache' size='4096' entries='4096'/> -->
```
Known Issues for Resin 3.x

The Symptoms

Whenever you use Confluence under Resin 3.0:

- You can't seem to stay logged in, and are continually asked to enter your username and password
- The Edit tab (or other links) only appear if you grant Anonymous users permission to perform those functions

See also:

- CONF-1000
- CONF-1509
- CONF-1511
- CONF-3397

Resin 2 Users
Confluence has always run without modification on Resin 2.1.11 and later. These instructions only apply to Resin 3.0

Resin and SOAP
If you want to use Confluence's SOAP interface under Resin, you will need to follow these instructions as well: Confluence and SOAP on Resin

The Solution

Resin 3.0 does not correctly support the Servlet 2.3 specification. Confluence relies on this specification to function. The workaround is to modify Confluence's web.xml file so that it is conformant with the Servlet 2.4 specification. A big thankyou to Matthew Schmidt for supplying us with this workaround.

Premodified files

You can download one of the premodified web.xml files that are attached to this page. After downloading rename to web.xml and place in the $confluenceWebapp/WEB-INF/ directory, overwriting the existing web.xml in there. Don't forget to keep a backup!

<table>
<thead>
<tr>
<th>Confluence Release</th>
<th>File</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>resin-3.conf-2.1-web.xml</td>
</tr>
<tr>
<td>2.1.2</td>
<td>resin-3.conf-2.1.2-web.xml</td>
</tr>
<tr>
<td>2.1.4</td>
<td>resin-3.conf-2.1.4-web.xml</td>
</tr>
<tr>
<td>2.2.1a</td>
<td>resin-3.conf-2.2.1a-web.xml</td>
</tr>
<tr>
<td>2.2.4</td>
<td>resin-3.conf-2.2.4-web.xml</td>
</tr>
</tbody>
</table>
Please only use the file with the exact version of Confluence you are using. An incorrect web.xml file can cause strange problems. You can follow the instructions below to patch any other version.

Modifying `web.xml` manually

**Step One: The `web.xml` header**

First, you will need to change the XML preamble for the `web.xml` file. Servlet 2.3 validates against a DTD, Servlet 2.4 validates against a schema. Also note that the `<display-name>` and `<description>` elements have reversed orders.

**Before:**

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE web-app PUBLIC "+//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd">
<web-app>
<display-name>Confluence</display-name>
<description>Confluence Web App</description>
</web-app>
```

**After:**

```xml
<?xml version="1.0" encoding="UTF-8"?>
<web-app id="ConfluenceWebApp" version="2.4" xmlns="http://java.sun.com/xml/ns/j2ee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
<description>Confluence Web App</description>
<display-name>Confluence</display-name>
</web-app>
```

**Step two: filter-mapping dispatchers**

Move down `web.xml` until you find the definition of the login filter-mapping. You need to change the definitions of the login, security and sitemesh filters:

**Before:**

```xml
<filter-mapping>
<filter-name>login</filter-name>
<url-pattern>/</url-pattern>
</filter-mapping>
<filter-mapping>
<filter-name>security</filter-name>
<url-pattern>/</url-pattern>
</filter-mapping>
<filter-mapping>
<filter-name>sitemesh</filter-name>
<url-pattern>*.action</url-pattern>
</filter-mapping>
<filter-mapping>
<filter-name>sitemesh</filter-name>
```
<url-pattern>*.vm</url-pattern>
</filter-mapping>

<filter-mapping>
  <filter-name>sitemesh</filter-name>
  <url-pattern>/display/*</url-pattern>
  <dispatcher>REQUEST</dispatcher>
  <dispatcher>FORWARD</dispatcher>
</filter-mapping>

After:

<filter-mapping>
  <filter-name>login</filter-name>
  <url-pattern>/*</url-pattern>
  <dispatcher>REQUEST</dispatcher>
  <dispatcher>FORWARD</dispatcher>
</filter-mapping>

<filter-mapping>
  <filter-name>security</filter-name>
  <url-pattern>/*</url-pattern>
  <dispatcher>REQUEST</dispatcher>
  <dispatcher>FORWARD</dispatcher>
</filter-mapping>

<filter-mapping>
  <filter-name>sitemesh</filter-name>
  <url-pattern>*.action</url-pattern>
  <dispatcher>REQUEST</dispatcher>
  <dispatcher>FORWARD</dispatcher>
</filter-mapping>

Confluence 2.0

In Confluence 2.0, you will need to add dispatcher tags to another of the sitemesh filter mappings:

<filter-mapping>
  <filter-name>sitemesh</filter-name>
  <url-pattern>*.vm</url-pattern>
  <dispatcher>REQUEST</dispatcher>
  <dispatcher>FORWARD</dispatcher>
</filter-mapping>

You will also need to find all the <display-name> servlet attributes and remove them as well. For example:

Before

<servlet>
  <servlet-name>dwr-invoker</servlet-name>
<display-name>DWR Servlet</display-name>  
<servlet-class>uk.ltd.getahead.dwr.DWRServlet</servlet-class>

After

<servlet>
  <servlet-name>dwr-invoker</servlet-name>
  <servlet-class>uk.ltd.getahead.dwr.DWRServlet</servlet-class>
</servlet>

This will need to be done for the **dwr-invoker**, **labels-javascript**, **editpage-javascript**, **wysiwyg-javascript**, **labels** and **tinymce** **servlets**.

### Confluence 2.1

In addition to the Confluence 2.0 modifications you will also need to remove the Selenese servlet and mappings:

<servlet>
  <servlet-name>SeleneseServletSpike</servlet-name>
  <servlet-class>com.thoughtworks.selenium.outbedded.CommandBridge</servlet-class>
</servlet>

<servlet-mapping>
  <servlet-name>SeleneseServletSpike</servlet-name>
  <url-pattern>/selenium-driver/driver</url-pattern>
</servlet-mapping>

Otherwise you might get the following error when starting up resin:

```
```

### Confluence 2.2

The removal of the `<display-name/>` element from the **dwr-invoker**, **labels-javascript**, **editpage-javascript**, **wysiwyg-javascript**, **labels** and **tinymce** **servlets**, as described in the Confluence 2.0 appendage, is no longer required.

Done

Confluence should now run under Resin 3.0. Please [report any other bugs](#) as you find them.
Confluence and SOAP on Resin

This page last changed on Apr 26, 2006 by cmiller.

Symptom

The WSDL generated by Confluence on the Resin application server is invalid. Attempting to parse it gives you an error like this (using Axis as the client):

WSDLException (at /wsdl:definitions/types): faultCode=INVALID_WSDL: Encountered illegal extension element 'types' in the context of a 'javax.wsdl.Definition'. Extension elements must be in a namespace other than WSDL's.

Cause

The default XML parser included with the Resin application server is incompatible with the Axis SOAP library, and causes Axis to generate an invalid WSDL file. You can find information about this issue here:

- http://issues.apache.org/jira/browse/AXIS-2235

Solution

The solution is to override Resin's default XML parser by placing the following within the <server> section of resin.conf:

```xml
<system-property
<system-property
javax.xml.parsers.SAXParserFactory="org.apache.xerces.jaxp.SAXParserFactoryImpl"/>
```

(You can also make this configuration per web-app by putting it in the <web-app> section. For more information see this page: JAXP - specifying XML and XSLT implementations)

The Confluence issue for this error is here:

- http://jira.atlassian.com/browse/CONF-5953
Updating web.xml for Resin 3

In order to run Confluence under Resin 3, you will need to use a special version of web.xml. This has been bundled in the main Confluence download as:

```
confluence/WEB-INF/web.resin3.xml
```

To enable it, simply remove the default `confluence/WEB-INF/web.xml` and then rename `web.resin3.xml` to `web.xml`. Now restart.
Known Issues for SAP Application Server

This page last changed on Oct 12, 2006 by tom@atlassian.com.

SAP WebAS thinks that the Confluence responses are gzipped, which makes your setup page appear like this:

You need to reconfigure the HTTP server part of WebAS to disable gzip output.

Make the change on this Visual Administrator screen:
Known Issues for WebLogic

This page last changed on Apr 20, 2007 by mjensen.

WebLogic Configuration tips

Enabling logging

Confluence sends its log output to standard out, so by default Weblogic does not record it. To redirect Confluence's log output to a file follow these instructions Redacting System.out and System.err to a File

Caution

Confluence must be deployed as an exploded war file to WebLogic. Otherwise you may experience errors as such:

```java
java.lang.IllegalStateException: Spring Application context has not been set at
bucket.container.SpringContainerContext.getComponent(SpringContainerContext.java:98)
```

Deploying Confluence on Weblogic 9.x

If you are seeing the following error -- or other NoSuchMethodErrors -- then this tip is for you!

```java
java.lang.NoSuchMethodError:
org.objectweb.asm.ClassVisitor.visit(ILjava/lang/String;Ljava/lang/String;[Ljava/lang/String;Ljava/lang/String;)V
```

It appears that WLS 9 ships with an incompatible version of org.objectweb.asm.* packages which clash with the ones required by Hibernate. You can fix this by adding to the weblogic.xml deployment descriptor the settings.

```xml
<container-descriptor>
  <prefer-web-inf-classes>true</prefer-web-inf-classes>
</container-descriptor>
```

WebLogic 8.1 performance problems

Creating a weblogic.xml file can improve the performance of Confluence within the WebLogic 8.1 series. This is particularly suitable in cases where WebLogic continually seeks to reload files from jars - which can be noticed when profiling Confluence in WebLogic and encountering excessive calls to java.util.zip.ZipFile.getEntry()

Find a typical example immediately below with an explanation of terms following:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE weblogic-web-app PUBLIC "-//BEA Systems, Inc.//DTD Web Application 8.1//EN"
```
This file should be created in the WEB-INF/ directory of your Confluence deployment.

The full weblogic.xml syntax is described in [BEA's documentation](http://www.bea.com/servers/wls810/dtd/weblogic810-web-jar.dtd). Here we describe some important parameters you should consider setting.

**Disabling JSP reload checks**

Performance can be considerably affected by Weblogic's tendency to scan JSPs for changes on every page load. This can be disabled by setting pageCheckSeconds to -1.

**Disabling servlet reload checks**

Similar to the JSP reload checks, Weblogic will scan servlets for modifications every second (by default), hurting performance. This can be prevented by setting the servlet-reload-check-secs element to -1.

**Avoiding JSP recompiles on redeploy**

If you Weblogic instance is often restarted, performance can be improved by explicitly setting a directory to save compile JSPs to (the workingDir parameter), and setting precompile to 'false'.

**Character Encoding**

A JIRA user has reported that the following configuration can ensure that Chinese character sets are displayed correctly - add the following entry to the weblogic.xml file.
Most of this page duplicates JIRA documentation - you might also like to read http://www.atlassian.com/software/jira/docs/latest/servers/weblogic.html.

Disabling the OSCache for Confluence 2.x

Confluence 2.0 uses oscache 2.1.1, which causes problems when Confluence is deployed in a weblogic container. This problem will show up by the Confluence css file taking a very long time (upwards of 30mins) to load. To fix this, you will need to disable the oscache, by removing the following entry from the WEB-INF/web.xml file.

```xml
<filter>
  <filter-name>CacheFilter</filter-name>
  <filter-class>com.opensymphony.oscache.web.filter.CacheFilter</filter-class>
</filter>
```

We are currently investigating the root cause of this problem.

Custom templates (decorators) do not work on WebLogic 8.1 SP2.

If, after creating a custom template, you see no result, check your velocity.log for a statement similar to:

```
```

where `<space_key>`, of course, matches your space key.

This problem does not occur on WebLogic 8.1 SP3.

WebLogic 8.1 Soap issues

Axis 1.2 is known to not work out of the box with WebLogic 8.1. Please refer to the AXIS installation instructions for details. The following excerpt was taken from the AXIS documentation.

```
WebLogic 8.1 ships with webservices.jar that conflicts with Axis' saaj.jar and prevents Axis 1.2 from working right out of the box. This conflict exists because WebLogic uses an older definition of javax.xml.soap.* package from Java Web Services Developer Pack Version 1.0, whereas Axis uses a
```
newer revision from J2EE 1.4.

However, there are two alternative configuration changes that enable Axis based web services to run on Weblogic 8.1.

In a webapp containing Axis, set <prefer-web-inf-classes> element in WEB-INF/weblogic.xml to true. An example of weblogic.xml is shown below:

```
<weblogic-web-app>
  <container-descriptor>
    <prefer-web-inf-classes>true</prefer-web-inf-classes>
  </container-descriptor>
</weblogic-web-app>
```

If set to true, the <prefer-web-inf-classes> element will force WebLogic's classloader to load classes located in the WEB-INF directory of a web application in preference to application or system classes. This is a recommended approach since it only impacts a single web module.

In a script used to start WebLogic server, modify CLASSPATH property by placing Axis's saaj.jar library in front of WebLogic's webservices.jar.

NOTE: This approach impacts all applications deployed on a particular WebLogic instance and may prevent them from using WebLogic's webservices.

For more information on how WebLogic's class loader works, see WebLogic Server Application Classloading.

### WebLogic 8.1 & HTTP Compression

There may be problems with WebLogic 8.1 and HTTP compression (by default disabled). This issue is being investigated and tracked at [CONF-6304](CONF-6304)

### ATT: HSQL or Embedded Database users - Webapp redeployment problems

A customer has reported that it is not possible to redeploy Confluence when it has been set up against a HSQL or embedded database. In general we do not recommend customers use the embedded database on production systems. If you want the ability to redeploy Confluence (particulary if you have other applications deployed in your weblogic server), you must use an external database in order for it to work. Thanks to Eric Black for this tip.
Known Issues for Websphere

This page last changed on Oct 18, 2006 by david.soul@atlassian.com.

Version Requirements

To run Confluence on Websphere, you will need to be running Confluence 1.4.2 or higher, against Websphere 5.1.1 with fixpack 3 or higher installed (5.1.1.3 or higher). There are known issues running Confluence against earlier versions of Websphere.

Websphere and Oracle

Confluence can not currently use Websphere datasources to access an Oracle database. This is because in order to effectively store pages in the database, Confluence needs access to the raw Oracle connection object, rather than the wrapper that Websphere places around it.

We are currently working on fixing this problem (CONF-3580), but for now the workaround is to not use a Websphere datasource. Use Confluence's internal connection pool instead (the "Direct JDBC Connection" option during setup).

Websphere on Windows platform

Most Windows OS have a file path limit of 255 characters. When an application is deployed with a long name, it is possible the deployed application files will reach this path limit. Currently, there is no check performed and the error messages when trying to create such long files are not very descriptive.

Example of installing Confluence on Windows XP Professional '02 sp 2. and Websphere App Server v 6.0 produced by default this deployed location:

1) C:\Program Files\IBM\WebSphere\AppServer\profiles/default\wstemp\92668751\workspace\cells\bluetongueNode01Cell\applications\atlassian-confluence-2_2_8_war.ear\atlassian-confluence-2_2_8_war.ear\atlassian-confluence-2_2_8_war\WEB-INF\classes\com\atlassian\confluence\user\actions\UserPickerAction$UsernameToUserTranslatingPaginationSupport

To get to the class structure of Confluence that needs to be used

2) atlassian-confluence-2_2_8.war\WEB-INF\classes\com\atlassian\confluence\user\actions\UserPickerAction$UsernameToUserTranslatingPaginationSupport

Hence the length to that particular class

$ perl -e 'print length "C:\Program Files\IBM\WebSphere\AppServer\profiles/default\wstemp\92668751\workspace\cells\bluetongueNode01Cell\applications\atlassian-confluence-2_2_8_war.ear\atlassian-confluence-2_2_8_war\WEB-INF\classes\com\atlassian\confluence\user\actions\UserPickerAction$UsernameToUserTranslatingPaginationSupport"';

264

and consequently an error which is produced when attempted to run Confluence 1) + 2):
**Troubleshooting**

I can not view any Confluence page with a space in the title


When I visit some URL, I get a blank page

This is a known issue, caused when you visit a page in Confluence that does not exist. Confluence's "Page Not Found" error page is not being displayed correctly by Websphere. For more information, please visit the issue in JIRA: [CONF-3487](https://issues.confluencelassian.com/browse/CONF-3487).

I am having trouble with the £ and € characters

Confluence allows you to specify which character encoding should be used for its requests. To use the £ and € characters, you will need to use the "UTF-8" option. However, in some cases, WebSphere will encode the characters using ISO-8859-1 before they get to Confluence. If you have set the Confluence character encoding to "UTF-8" and are having problems, have a look at [http://www-306.ibm.com/software/globalization/j2ee/encoding.jsp](http://www-306.ibm.com/software/globalization/j2ee/encoding.jsp) for an explanation of WebSphere and Character encoding. In particular, the -Dclient.encoding.override=UTF-8 system property allows you to override WebSpheres defaults.
List Of Supported Application Servers

Supported

- Apache Tomcat (4.1 and 5.5)
- Weblogic (8.1 SP3 and above)
- Resin (2.11.11 and above)
- JBoss
- Orion (2.0.2 and above)
- Websphere (5.1.1.3 and above)

Unsupported

- Macromedia JRun - untested

Incompatible

- Oracle OC4J - JIRA Issue CONF-2919
- Sun Application Server - JIRA Issue CONF-5509
- GlassFish - JIRA Issue CONF-6603
Websphere 6 Install Walkthrough

This page describes installing Confluence on a plain Websphere 6.0 installation.

Installation

You need to start with a confluence.war file which has had the WEB-INF/classes/confluence-init.properties file modified to set confluence.home.

Log on to the administration console, i.e. http://localhost:9060/ibm/console/secu/l/ogon.do

Choose the 'Install New Application' link.

Specify a path to the confluence.war file on the local file system, and choose the context root which you want to deploy confluence at (this is the context you'll access Confluence on, i.e: http://yourserver/context_root). Click Next. (You just accept the default from here on)

On the 'Choose to generate default bindings and mappings' page, just click Next.

On the 'Application Security Warnings' page, just click Continue.

On 'Step 1', just click Next.

On 'Step 2' and 'Step 3', just click Next. On 'Step 4' click finish.

The installation will be performed. Click 'Save to Master Configuration', then click the Save button.

At this point you can make adjustments to the exploded version of Confluence which Websphere has put in <WAS Install Dir>\AppServer\profiles\default\installedApps\<node id>\confluence_war.ear\confluence.war. You can edit confluence-init.properties or add JDBC drivers to WEB-INF/lib -- just remember that you'll need to do this again if you reinstall the application.

When that completes you'll be returned to the console. Click 'Enterprise Applications', check the 'confluence_war' checkbox and click the Start button.

Go to http://localhost:9080/confluence. You should get the setup page.

You don't need to use 'parent last' classloading, the default 'parent_first' works, with the changes in the position of jar files mentioned below.

Known Problems
RSS Generation Fails

The error:

```
com.atlassian.core.exception.InfrastructureException: java.lang.NoClassDefFoundError: com/sun/syndication/io/WireFeedOutput

at com.atlassian.xwork.interceptors.XWorkTransactionInterceptor.intercept(XWorkTransactionInterceptor.java(Compiled Code))

caused by: java.lang.NoClassDefFoundError: com/sun/syndication/io/WireFeedOutput

at com.atlassian.xwork.results.RssResult.doExecute(RssResult.java:41)
```

To correct this, copy the files 'jdom-1.0.jar' and 'dom4j-1.4-full.jar' from Confluence's WEB-INF/lib directory into your `<appServerRoot>/lib` directory (that is, the `lib` subdirectory of the directory named `AppServer` in the default Websphere install)

URLs with International Characters Don't Work

For example, a personal space for the user häns generates a URL which Websphere doesn't correctly interpret. We don't have a solution for this at the moment.

Error registering bean with name 'fileSystemAttachmentDataDao'

If you get that error message, it is because the path to a class file is longer than Windows can handle. You need to rename your war file to a shorter name.
Application Server URL encoding

This page last changed on Mar 22, 2006 by david.soul@atlassian.com.

Application servers may have different settings for character encodings. We strongly suggest setting this to UTF-8 where possible.

Information on setting the character encoding is available at:

- Configuring Tomcat's URI Encoding
Confluence Installation Guide

Please review the system requirements before installing Confluence:

CLIENT REQUIREMENTS

Clients can access Confluence using:

- Internet Explorer 6 or later
- Firefox
- Mozilla-based browsers (Some do not support Rich Text Editing)

SERVER REQUIREMENTS

Server load depends primarily on the number of users online at once and their usage of Confluence.

Under 25 Online Users

- 1GHz+ CPU Pentium 4 or equivalent
- 256MB RAM

Over 25 Online Users

- Dual 2.4GHz CPU Pentium Xeon or equivalent
- 512MB+ RAM

See Server Hardware Requirements Guide for details.

OPERATING SYSTEM

Supported

- Windows
- Linux
- Mac OS X
- Solaris
- AIX
- Unix

Any OS that support J2EE 1.4

DISK SPACE
Confluence Install Directory - 250MB

- Install files
- Nightly site backups
- Temporary files

Confluence Home Directory or External Database - 250MB minimum

- Text content
- File attachments

JAVA

Confluence requires JDK 1.4 or later.

⚠️ JDK 1.6 is not yet fully supported

DATABASE

⚠️ Confluence is bundled with a pre-configured HSQL database for evaluation purposes only.

For safe production use, it must be configured to use one of the following databases:

**Fully Supported**

- PostgreSQL 8+
- MySQL 4.1+ ([MySQL 5 is unsupported](#))
- Oracle 10g+
- DB2 8.2+

**Supported With Minor Workarounds**

- PostgreSQL 7.1+
- Oracle 8i, 9i or later
- Microsoft SQL Server 2000+
- Sybase ASE 12.5.1+

If you have no preference, PostgreSQL is scalable, free and easy to setup. For database setup information, see Database Configuration.

**SELECT CONFLUENCE EDITION**

Confluence can be deployed in either:

<table>
<thead>
<tr>
<th>Standalone Edition</th>
<th>EAR-WAR Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Document generated by Confluence on May 01, 2007 00:44
<table>
<thead>
<tr>
<th>Ready for production use after connection to an external database</th>
<th>Deploys into an existing application server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaged with Apache Tomcat for performance and scalability</td>
<td>Suitable only for server administrators</td>
</tr>
<tr>
<td>Recommended for evaluation users</td>
<td></td>
</tr>
</tbody>
</table>

[Standalone Install Guide](#) or [EAR-WAR Install Guide](#)

**OTHER TOPICS**

- [Confluence Setup Guide](#)
- [Confluence Cluster Installation](#)
- [Confluence 2.0 User Guide](#)
- [How to add Confluence to a JIRA Standalone Installation](#)
- [Documentation Home](#)
**Confluence Cluster Installation**

This page last changed on Feb 21, 2007 by rosie@atlassian.com.

---

### Overview

There are two methods of installing Confluence in a cluster, depending on whether you have existing data. This page describes a fresh installation with no existing data.

See also [Confluence Cluster Installation with Existing Data](#).

---

### Installation with no existing data

To get Confluence running in a two-node cluster, you must do the following:

1. Ensure you meet the clustering requirements, including obtaining a clustered license key from Atlassian for each node
2. Install Confluence on a single node, configuring an external database and a cluster name
3. Load test the single node installation, see whether clustering is required
4. Shut down the first node, copy the Confluence application and Confluence home directory to the second node
5. Start the first node, wait until it is running, then bring up the second node and it will automatically join the cluster
6. Test the cluster is working correctly
7. Configure a load balancer in front of the two clustered nodes.

Each of these steps will be described in detail below.

---

### 1. Clustering requirements

Your Confluence cluster installation must meet all the following criteria for clustering:

- you must be running Confluence 2.3 or later
- you must have a clustered license
- you must use an external database
- you must use a load balancer with session affinity in front of the cluster.

Clustered licenses are available through the [Confluence website](#).

A cluster can run using two copies of Confluence Standalone. However, cluster administrators must understand how to configure an application server and web server with load balancing, so we recommend you are comfortable installing Confluence as a EARWAR in your application server before proceeding with a clustered installation.

---

### 2. Installation on first node
Cluster administrators should already be comfortable with the normal installation method, so it won't be repeated here. There are two differences in the Confluence Setup Wizard from a normal installation:

- you must use an external database
- you must enter a cluster name.

Enter a cluster name to create a new cluster

Technical note
The cluster name will be converted into a unique multicast IP address and port for your Confluence cluster. UDP multicast traffic is used for Confluence to automatically discover other nodes in the cluster when they start up.

3. Load test the single node

Most Confluence installations do not need to be clustered. Ensure you have tested your single node installation with the number of users you expect to host before going ahead with the additional complexity of clustering.

Check out our performance tuning tips for ways to improve the performance of a single instance of Confluence.

You can upgrade your single node to a multi-node cluster at any time by resuming this guide from step 4 below.

4. Copy Confluence to second node

Confluence clusters must use the same JDK, application server and application. The easiest way to ensure this is to shut down Confluence on the first node, then copy its web application and home directory to the second node:

1. Shut down Confluence on node #1.
2. Shut down your application server on node #2, or stop it automatically loading web applications.
3. Copy the Confluence web application from node #1 to node #2.
4. Copy the Confluence home directory from node #1 to node #2.

Copying the web application ensures any modifications you have made to the application itself, custom LDAP settings (atlassian-user.xml), and any other advanced configuration are copied to node #2.

Copying the home directory ensures the Confluence search index (the index/ directory), the database
and cluster configuration (confluence.cfg.xml), and any other home directory settings are copied to node #2.

5. Start Confluence on the first node, wait, then start Confluence on second node

For the most stable start-up process, it is important to start Confluence one server at a time.

1. Start Confluence on node #1.
2. Wait for Confluence to become available on node #1.
3. Start Confluence on node #2.
4. Wait for Confluence to become available on node #2.

6. Test cluster connectivity

The Cluster Administration page (Administration, Cluster Configuration) includes information about the active cluster. When the cluster is running properly, this page displays:

- a correct count of the nodes in the cluster
- a status display for each node in the cluster
- an uptime for each node that is accurate.

![Cluster Administration page](image)

A simple process to ensure your cluster is working correctly is:

1. Create a new document on node #1
2. Ensure the new document is visible by accessing it directly on node #2
3. Wait one minute (Confluence does batch indexing once per minute)
4. Search for the new document on node #1, ensure it appears
5. Search for the new document on node #2, ensure it appears.

⚠️ Technical note
If Confluence detects more than one instance accessing the database but not in a working cluster, it will shut itself down in a cluster panic. This can be fixed by troubleshooting the network connectivity of the cluster.

7. Configure load balancer
For the moment, configuring the load balancer is outside the scope of this document.

However, a simple Apache and Tomcat load-balancing configuration is available, which includes sample configuration for the Apache Tomcat and the Apache web server, using its load-balancing JK connector.

**Troubleshooting**

If you have problems with the above procedure, please see our [Cluster Troubleshooting guide](#).

**Upgrading a cluster**

It is important that upgrades follow the procedure for [Upgrading a Confluence Cluster](#).

**Related documentation**

- [Confluence Cluster Installation with Existing Data](#)
- [Confluence Installation Guide](#)
- [Upgrading a Confluence Cluster](#)
- [Cluster Administration page](#)
Apache and Tomcat load balancing

This page last changed on Dec 29, 2006 by mryall.

Overview

The following is a description of how to setup a Confluence Cluster on a Windows machine using Apache and mod_jk to handle the loadbalancing.

The characteristics of this cluster are:

- Session affinity: sessions are associated with single servers.
- Failover: if a server dies, a connection will be directed to the nearest available server. (NOTE: sessions are not replicated)
- Failback: when a server comes back online, it will rejoin the cluster.
- Weighted load balancing: the load balancing can be controlled to take into account machine differences. (See the mod_jk documentation for details on this.)

What do you need?

1. Download and install one copy of Apache httpd. Do not install Apache as a service, but set it to listen on port 8080. (Tested with Apache httpd 2.0.55.)
2. Download the latest version of mod_jk. Copy this file into the Apache modules/ directory and rename it to mod_jk.so. (Tested with JK-1.2.19.)
3. Download and extract one copy of the ZIP distribution of Apache Tomcat. (Tested with Tomcat 5.5.)

Apache configuration

Edit the main Apache config file, conf/http.conf:

- add the following immediately after the other LoadModule directives:

  ```
  LoadModule jk_module modules/mod_jk.so
  ```

- add the following just before the end of the file:

  ```
  JkWorkersFile conf/workers.properties
  JkLogFile logs/mod_jk.log
  JkLogLevel info

  JkMount /confluence loadbalancer
  JkMount /confluence/* loadbalancer
  ```

Create a workers.properties file in the Apache conf/ directory. This version of the workers.properties file is configured to use 2 Tomcat instances: tomcat1 and tomcat2.
<table>
<thead>
<tr>
<th>worker.list=loadbalancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>worker.tomcat1.port=18081</td>
</tr>
<tr>
<td>worker.tomcat1.host=localhost</td>
</tr>
<tr>
<td>worker.tomcat1.type=ajp13</td>
</tr>
<tr>
<td>worker.tomcat1.lbfactor=1</td>
</tr>
<tr>
<td>worker.tomcat2.port=28081</td>
</tr>
<tr>
<td>worker.tomcat2.host=localhost</td>
</tr>
<tr>
<td>worker.tomcat2.type=ajp13</td>
</tr>
<tr>
<td>worker.tomcat2.lbfactor=1</td>
</tr>
<tr>
<td>worker.loadbalancer.type=lb</td>
</tr>
<tr>
<td>worker.loadbalancer.balanced_workers=tomcat1, tomcat2</td>
</tr>
<tr>
<td>worker.loadbalancer.method=Busyness</td>
</tr>
</tbody>
</table>

**Tomcat configuration**

The Tomcat configuration below will run multiple instances from the same binaries in the main Tomcat directory. For complete documentation of this configuration, see the `RUNNING.txt` file in the Tomcat distribution.

Create instance home directories

Create a directory for each instance of Tomcat, somewhere outside where you installed Tomcat. For example, if you extracted Tomcat to `/opt/apache/tomcat-5.5`, your instances could be in `/var/tomcat-instances/tomcat1, /var/tomcat-instances/tomcat2`. These folders will be referred to as the instance home directories.

Copy the following folders from the Tomcat installation directory into each instance home directory. Some of the folders may be empty, but copy them anyway.

- conf
- logs
- shared
- webapps

Configure server.xml in each instance

Edit `conf/server.xml` in the instance home directories to include the Confluence application and have distinct listen ports for Server, HTTP Connector and AJP13 Connector. All nodes can use the same Confluence webapp as long as you set `confluence.home` via a system property (see startup scripts below).

Attached are two sample configurations:

- `tomcat1/conf/server.xml` - listens on port 18080 (http) and 18081 (ajp13)
- `tomcat2/conf/server.xml` - listens on port 28080 (http) and 28081 (ajp13)

To use these sample config files, you will need to edit them to set the Confluence web-app location and the data source configuration.
If editing the configuration files yourself, the points to note are:

- 'Server' port must be distinct
- 'Connector' for HTTP must be uncommented and use a distinct port. Use this port for testing the node individually.
- 'Connector' for AJP13 must be uncommented and use a distinct port. This port must match the port of the worker in the Apache workers.properties.
- 'Engine' for localhost must have jvmRoute matching the name of the worker in Apache's workers.properties.
- 'Context' for Confluence must be added inside the 'Host' tag, and include a 'Resource' for the datasource, as per normal Confluence installation under Tomcat.

Create a startup script for each instance

The startup scripts for each instance must set the CATALINA_BASE environment variable and confluence.home system property. The variables in the sample scripts below should reference:

- CATALINA_HOME - Tomcat installation directory
- CATALINA_BASE - Tomcat instance home directory (distinct for each node)
- JRE_HOME - Java runtime directory
- JAVA_OPTS - include a confluence-home system property (distinct for each node)

**tomcat1/startup.bat:**

```plaintext
set CATALINA_HOME=C:\home\mryall\opt\apache\apache-tomcat-5.5.16
set CATALINA_BASE=C:\home\mryall\var\tomcat-instances\tomcat1
set JRE_HOME=C:\Java\jre1.5.0_06
set JAVA_OPTS=-Dconfluence.home=C:\home\mryall\data\confluence\cluster\tomcat1 -Xmx512m
%CATALINA_HOME%\bin\startup.bat
```

**tomcat2/startup.bat:**

```plaintext
set CATALINA_HOME=C:\home\mryall\opt\apache\apache-tomcat-5.5.16
set CATALINA_BASE=C:\home\mryall\var\tomcat-instances\tomcat2
set JRE_HOME=C:\Java\jre1.5.0_06
set JAVA_OPTS=-Dconfluence.home=C:\home\mryall\data\confluence\cluster\tomcat2 -Xmx512m
%CATALINA_HOME%\bin\startup.bat
```

Continue setting up Confluence

Follow the [Confluence Cluster Installation] procedure with the steps following the app server setup.

Troubleshooting

General advice

The above tomcat configurations enable HTTP connectors on each Tomcat instance so that you can connect to the nodes individually. To check whether the load balancer (Apache & mod_jk) is causing the...
problem, try connecting to the individual Tomcat instances.

Session-affinity doesn't seem to be working?

Ensure the name you use for your worker in workers.properties (e.g. tomcat1) matches the jvmRoute attribute of the engine tag in your Tomcat server.xml. For an example, search for 'Engine' in the attached sample config.

For troubleshooting your Confluence cluster, see Cluster Troubleshooting.

References

General

http://raibledesigns.com/tomcat/
http://httpd.apache.org/

Tomcat Clustering support

http://tomcat.apache.org/tomcat-5.0-doc/cluster-howto.html
http://tomcat.apache.org/tomcat-3.3-doc/mod_ik-howto.html
Clustering and Load Balancing in Tomcat 5, Part 1
Clustering and Load Balancing in Tomcat 5, Part 2
Confluence Cluster Installation with Existing Data

Overview

There are two methods of installing Confluence in a cluster, depending on whether you have existing data. This page describes how to upgrade an existing Confluence instance into a cluster.

See also Cluster installation without existing data.

Cluster installation from an existing copy of Confluence

To upgrade an existing copy of Confluence to run in a two-node cluster, you must do the following:

1. Ensure you meet the clustering requirements, including obtaining a clustered license key from Atlassian for each node
2. Upgrade the existing Confluence instance to a clustered license
3. Enable clustering and select a cluster name
4. Shut down the first node, copy the Confluence application and Confluence home directory to the second node
5. Start the first node, wait until it is running, then bring up the second node and it will automatically join the cluster
6. Test the cluster is working correctly
7. Configure a load balancer in front of the two clustered nodes.

Each of these steps will be described in detail below.

1. Clustering requirements

Your Confluence cluster installation must meet all the following criteria for clustering:

- you must be running Confluence 2.3 or later
- you must have a clustered license
- you must use an external database
- you must use a load balancer with session affinity in front of the cluster.

Clustered licenses are available through the Confluence website.

A cluster can run using two copies of Confluence Standalone. However, cluster administrators must understand how to configure an application server and web server with load balancing, so we recommend you are comfortable installing Confluence as a EAR/WAR in your application server before proceeding with a clustered installation.

You can follow the instructions to Migrate Confluence to an external database.
2. Upgrade existing instance to clustered license

Once you’ve obtained your clustered license from Atlassian, you can simply update the license in your running Confluence instance:

1. Go to 'Administration'.
2. Go to 'License Details', and paste in the new license.
3. Click 'Save'.

When you enter a clustered license, you will see a new line appear on this page: Licensed Clustered Nodes. This tells you how many nodes your Confluence license will allow.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Atlassian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Purchased</td>
<td>Aug 15, 2006</td>
</tr>
<tr>
<td>License Type</td>
<td>Confluence: Commercial Server</td>
</tr>
<tr>
<td>Licensed Users</td>
<td>Unlimited</td>
</tr>
<tr>
<td>Licensed Nodes</td>
<td>8 nodes (2 nodes currently clustered).</td>
</tr>
</tbody>
</table>

License Details page shows the number of cluster nodes permitted

3. Enable clustering and select a cluster name

When you change Confluence to use a cluster license, a new menu option will be revealed on the left: Cluster Configuration. Open this menu item to configure your cluster.

On this page, you need to enter a name for your cluster, and possibly select which network interface on your server will be used for the cluster (only if you have more than one suitable interface).

Clicking 'Start cluster' will migrate your attachments to the database, then prevent any access to Confluence until it is restarted.

⚠️ Technical note
The cluster name will be converted into a unique multicast IP address and port for your Confluence cluster. UDP multicast traffic is used for Confluence to automatically discover other nodes in the cluster when they start up.

4. Copy Confluence to second node

For the remaining steps in setting up a cluster with existing data, please continue from step 4 in the normal Confluence cluster installation guide.

5. Start Confluence on the first node, wait, then start Confluence on second node
See comment in step 4.

6. Test cluster connectivity

See comment in step 4.

7. Configure load balancer

See comment in step 4.

Troubleshooting

If you have problems with the above procedure, please see our Cluster Troubleshooting guide.

Upgrading a cluster

It is important that upgrades follow the procedure for Upgrading a Confluence Cluster.

Related documentation

Confluence Cluster Installation
Confluence Installation Guide
Upgrading a Confluence Cluster
Confluence User Guide
Upgrading a Confluence Cluster

This page last changed on Jan 03, 2007 by mryall.

This page contains instructions for upgrading an existing Confluence cluster to a new version of Confluence. If you are not running a clustered instance of Confluence and wish to, see Confluence Cluster installation with existing data.

You can download the latest version of Confluence from here.

Overview

The steps involved in upgrading a multi-node Confluence cluster are:

1. Backup your confluence instance.
2. Read the Release Notes for this version and check you have the required expertise to perform the upgrade.
3. Stop each node in the cluster.
4. Install the new version into the application server on the first node.
5. Install the new version into the application server onto the remaining nodes.

Step One: Backing up

⚠️ We highly recommend that you backup your Confluence home and install directories and your database before proceeding.

For specific files to backup see Upgrading Confluence.

Step Two: Things you need to check ...

- Always check the release-notes for the version of Confluence you are installing for upgrade instructions specific to that version.
- To perform this upgrade you must be familiar with the usage of the application server running your Confluence Cluster, and the web server load balancing it.
- Check the Configuration Guide for your application server and database, to make sure there isn't anything extra you need to do to get Confluence running.
- Check that you know what configurations or customisations have been made to your Confluence instance. These may include specialised user management configurations and changes to Confluence's Java classes and Velocity templates.

Step Three: Stopping the cluster

⚠️ It is vital that all nodes in the cluster are running the same version of Confluence. That's why the first step is to stop all the nodes.

Stop the Confluence application on each node using your application server.
Step Four: Upgrading the first node

⚠️ We advise configuring your load balancing web server to redirect traffic away from Confluence until the upgrade is complete on multiple nodes.

Upgrading a cluster node uses the same process as "Method One" on [Upgrading Confluence](#).

1. Unzip the new version.
2. Edit its confluence-init.properties to point to the existing home directory.
3. Port any immediately required customisations from the old version to the new one. Eg atlassian-user.xml.
4. Install the new version into the application server. Eg for Tomcat edit confluence.xml or server.xml to point to the new location, and restart Tomcat.
5. Wait for the Node to finish upgrading and confirm that you can log in and view pages before continuing to Step Five.
6. Port any additional customisations from the old version to the new version. Eg modifications to Java classes or Velocity templates.

Step Five: Upgrading other nodes

Copy the confluence installation, complete with customisations, to the next node.

1. Edit its confluence-init.properties to point to the existing home directory.
2. Install the new version into the application server. Eg for Tomcat 5 edit confluence.xml to point to the new location, and restart Tomcat.
3. Wait for the Node to finish upgrading and confirm that you can log in and view pages before continuing with the next node.

Troubleshooting

For suggested troubleshooting techniques, see our [Cluster Troubleshooting](#) page.

Related documentation

- [Confluence Installation Guide](#)
- [Cluster Troubleshooting](#)
- [Confluence Cluster Installation](#)
- [Confluence Cluster Installation with existing data](#)
- [Confluence User Guide](#)
Confluence Unix and X11 Dependencies

This page last changed on Apr 06, 2007 by dchui.

⚠ If This Doesn't Help
If you have X11 installed and thumbnailing still does not work, please ensure that you are running Java in headless mode: see the FAQ "Fix 'Error using thumbnails - No image support in Java runtime'."

Java X11 Dependencies

On Unix-based operating systems, the Java runtime makes use of certain parts of the platform's native X11 graphics libraries. The X Server does not have to be running, but the libraries must be available on the server. Confluence will run on a server that does not have Xlib installed, but parts of the application that manipulate graphics: PDF exports, image thumbnailing, the image gallery macro, CAPTCHA, and the resizing of profile pictures, will fail.

Mac OS X
You do not need to install X11 on Mac OS X, as it has its own graphics libraries.

If X11 is not present, you may see any of the following errors

- "This Confluence installation can not generate thumbnails: no image support in Java runtime"
- "Exception in thread "main" java.lang.UnsatisfiedLinkError: /usr/local/j2sdk1.4.2_09/jre/lib/i386/libawt.so: libXp.so.6: cannot open shared object file: No such file or directory" when exporting a PDF
- "NoClassDefFoundError" when uploading a profile picture

Specific Installation Instructions

Fedora Core

On Fedora Core, you will need to install the xorg-x11-deprecated-libs package. (https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=130239)

Fedora Core 6

- libXp
- libXp-devel (if you wish to compile against this library)

Debian Linux

On Debian, you will need to install the following packages (CONF-6411):

```
apt-get install libx11-6 libx11-dev libxt6 libxt6-dbg libxext6 libxtst-dev libxtst6
```
xlibs-db xlibs-dev

**Gentoo Linux**

emerge libICE libSM libX11 libXext libXp libXt libXtst
Error creating bean with name 'scheduler'

If you install Confluence 'out of the box' and encounter the error below, consider your location's way of calculating the current date.

```
org.springframework.beans.factory.BeanCreationException: Error creating bean with name 'scheduler' defined in class path resource schedulingSubsystemContext.xml: Initialization of bean failed; nested exception is org.quartz.SchedulerException: Based on configured schedule, the given trigger will never fire.
```

It's possible to encounter this if your current country's way of reading timestamps differs from the norm. For example, one of our users encountered this problem in Thailand, which worked out the current year (2005) to be 2548.

Simply change the operating system's calculation of the date to resemble "the norm" - i.e., European style calculation - and start your application server again.

The scheduling subsystem in Confluence is based on Quartz.
Get A Confluence Licence

This page last changed on Jan 01, 2007 by david.soul@atlassian.com.

Don't have a licence yet?

- New users can get a free multi-user Evaluation licence or two-user Personal licence immediately
- For enterprise, non-profit, open source and educational licences, see Confluence Licencing and Pricing
- Existing users can retrieve their key from the Licence Viewer
- If you can't find your key or are having problems, contact sales@atlassian.com
Installing Confluence Standalone

This page last changed on Apr 12, 2007 by tom@atlassian.com.

This install guide is for users running Windows, Mac OS X, Solaris, Unix or Linux.

Notes

- You must be able to use a command prompt and install Java to continue. If not, please contact your system administrator to assist you or consider the Online Trial.
- Have your licence key ready. You can obtain a trial, free or commercial licence now, or retrieve your existing key.
- Help is available under Troubleshooting.

STAGE 1 - Install The Java Developers Kit

Do you already have the Java Developers Kit 1.4 or newer installed?

- Yes
- No, or not sure

(Mac users can go straight to STAGE 2, as OS X comes with a Java Development Kit.)

JDK 1.5 Or Earlier
You must confirm the JDK is installed correctly:

1. Open a command prompt. On Windows this is done by opening your Start menu and selecting Run, then typing cmd and pressing OK.
2. In the command prompt, type echo %JAVA_HOME% and press Enter.
   If a line is printed such as C:\Progra~1\Java\jdk1.5.0_06 with the last two letters being dk, the JDK is installed. If nothing is printed, or the last two letters in the path are not dk, follow the 'No, or not sure' instructions.
3. Users who have installed a non-Sun JDK must install the Sun JSSE package.
4. Go to STAGE 2

JDK Unknown or Not Installed
Install the JDK:

1. Download JDK 1.5.08 to the Confluence server.
2. Once downloaded, run the installer. At one point, you will be asked to choose a directory to install to. Copy or write this directory down for use later.
3. Windows users follow these instructions to set your JAVA_HOME environment variable to the directory you just installed the JDK in. The default directory is under C:\Program Files\Java.
4. Go to STAGE 2.
STAGE 2 - Download & Unzip Confluence

Select your operating system:

- **Windows**
- **Unix, Linux or Solaris**
- **Mac**

⚠️ The Install Directory is also referred to as the `<Confluence-Install>` Directory. The Home Directory is also referred to as the `<Confluence-Home>` Directory.

---

**Windows**

1. The default Windows unzipper cannot unzip Confluence
   If you have already unzipped Confluence using the default Windows unzip, delete the directory created now
2. You will need a third-party unzip program like 7Zip or Winzip. If you do not have one, download and install one before continuing:
   - **7Zip** Recommended. If in doubt, download the '32-bit .exe' version
   - **Winzip**
3. If you have not downloaded Confluence already, [download the Standalone zip](#)
4. Use your unzip program to unzip the install file to a directory such as `c:\confluence`, avoiding directories with spaces. To make upgrades easier, Windows users should aim to create a directory structure like below:

```
c:\confluence\confluence-2.2.10-std     <-- <Confluence-Install> directory, unzipped now
c:\confluence\data                      <-- <Confluence-Home> directory, created next
```

You have now created your `<Confluence-Install>` directory. This is the directory where you unzipped Confluence, for example `c:\confluence\confluence-2.2.10-std`

5. Go to [STAGE 3](#)

---

**Unix, Linux or Solaris**

1. Install [these X11 libraries](#)
2. If you have not downloaded Confluence already, [download the Standalone TAR](#)
3. Use your unzip program to unzip the install file to a directory such as
   `/home/jsmith/confluence-2.4.2-std/`, avoiding directories with spaces. Linux or Unix users can use any unzip program to unzip Confluence, but Solaris users must use **GNU Tar** instead of **Solaris Tar**

```
/home/jsmith/confluence-2.4.2-std/     <-- <Confluence-Install> directory, unzipped now
/home/jsmith/confluence-data/confluence-2.4.2-std/     <-- <Confluence-Home> directory, created next
```
You have now created your <Confluence-Install> directory. This is the directory where you unzipped Confluence, for example /home/jsmith/confluence-2.4.2-std/

4. Go to STAGE 3

---

Mac OS X 10.3 or 10.4

1. Before you begin, it is recommended that you run Software Update to ensure that your operating system is up to date.
2. If you have not downloaded Confluence already, download the Standalone TAR.
3. Find the downloaded file in the Finder. OS X has uncompressed the file, so it has only a .tar suffix, not the .tar.gz suffix of the file you downloaded. Double-click on the confluence-2.4.2-std file. This will open the archive file and expand it into a folder hierarchy containing the Confluence installation. This folder is called the <Confluence-Install> folder.
4. Move this folder to wherever you want to keep your Confluence installation (e.g. your home folder). Ensure that there are no spaces in the folder name, or in the names of any of its parent folders.
5. Create a folder named confluence-data. You can create this anywhere, e.g. in your home folder, but not inside the <Confluence-Install> directory. Ensure that there are no spaces in the folder name, or in the names of any of its parent folders. Create this folder in the Finder, using the 'New Folder' command in the 'File' menu. This folder is called the <Confluence-Home> folder.
6. You now need to set up an environment variable which tells Confluence where your Java Virtual Machine is installed. Inside the <Confluence-Install> folder, locate the file named catalina.sh. Open it with TextEdit, and add the following line as the second line of the file:

```bash
export JAVA_HOME=/Library/Java/Home
```

(The first line of the file will be: `#!/bin/sh`)

7. Go to STAGE 3

---

STAGE 3 - Set Your Home Directory

This stage creates a Home directory where Confluence will store its configuration information, indexes and attachments.

1. Open your <Confluence-Install> directory
2. Under the install directory, find `\confluence\WEB-INF\classes\confluence-init.properties`
3. Open the file `confluence-init.properties` in a text editor such as Notepad (Windows) or TextEdit (Mac).

4. Scroll to the bottom and find the line

```plaintext
confluence.home=c:/confluence/data
```

5. Remove the `#` and the space at the front of this line to uncomment it. It should now begin with `confluence.home`

6. Choose what your `<Confluence-Home>` directory will be.
   - Windows users should use the default `c:\confluence\data` for simplicity but you can choose any directory that does not contain a space in the path.
   - Mac users should use the `<Confluence-Home>` folder they created earlier.

7. If you are using a different `<Confluence-Home>` directory from `c:\confluence\data`, edit the line now.
   - Windows users must use `/` characters to separate each directory in the path. Windows users can save the `<Confluence-Home>` directory as the default by saving the line as

```plaintext
confluence.home=c:/confluence/data
```

   - Linux users should specify `<Confluence-Home>` using the absolute path instead of a symbolic link, e.g:

```plaintext
confluence.home=/home/jsmith/confluence-data/confluence-2.4.2-std/
```

   - Mac users should place the cursor after the `-' sign, find the the `<Confluence-Home>` folder which you created earlier and drag it to TextEdit. This will insert the full path of the folder into the file. It's important to make sure that you deleted the leading `#` character, and that the path after the `-' sign starts with a `'` character. The line should now look something like this:

```plaintext
confluence.home=/Users/jsmith/confluence-data
```
You have now set your `<Confluence-Home>` directory.

**STAGE 4 - Review Release Notes**

Review the [Release Notes for your Confluence version](#) and apply any patches listed.

**STAGE 5 - Start Confluence**

To start Confluence for the first time,

1. Go to your `<Confluence-Install>` directory
2. Under your `<Confluence-Install>` directory, open the `bin` directory and run the startup script. Windows users run `startup.bat` while users with other operating systems run `startup.sh`.

Mac users will be prompted by OS X to choose an application to use. Choose the Terminal application, which is inside the Utilities folder.

If the window closes immediately when started, click here for assistance:

```
An error is preventing Confluence from starting. To view this error:
1. Open a command prompt. On Windows, do this by clicking on your Start menu, then click Run. In the Run box, type `cmd` and press OK
2. From the command prompt, go to your `<Confluence-Install>` directory
3. Go into the `bin` subdirectory
4. Run `startup.bat` and read the error message
5. Find the solution to that error in the Troubleshooting section
```

3. Once Confluence is running, open a web browser and visit [http://localhost:8080/](http://localhost:8080/)
The Confluence Setup Wizard should appear for you to enter your licence key. If the address shows an error, check the Troubleshooting section

NEXT STEP

Proceed to the Confluence Setup Wizard Guide

TROUBLESHOOTING

Solutions to common issues with installing Confluence. Review your logs by opening the Confluence install directory and checking the /logs/catalina.out and /logs/catalina.out files for errors described below. Click on a problem to show the solution.

Confluence window closes immediately when started

An error is preventing Confluence from starting.

1. Open a command prompt. On Windows, do this by clicking on your Start menu, then click Run. In the Run box, type cmd and press OK
2. From the command prompt, go to your Confluence install directory
3. Go into the bin subdirectory
4. Run startup.bat and read the error message
5. Find the solution to that error below

Confluence won't start - java.lang.NoClassDefFoundError IntraHibernateAttachmentCopier

If you are seeing "java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/hibernate/AbstractHibernateAttachmentDao$IntraHibernateAttachmentCopier", you have unzipped Confluence using a program that cannot handle long filenames. You must delete your install directory and go back to the point in the instructions that covers unzipping Confluence using a third-party unzipped program.

Confluence won’t start - Exception in thread "main" java.lang.NoClassDefFoundError: ...

If http://localhost:8080 goes to an error page when you run Confluence, go to the install directory and find the /logs/catalina.out. If this file contains a single line error starting with "Exception in thread "main" java.lang.NoClassDefFoundError", your install path may contain spaces. The solution is to rename your install directory path so that there are no spaces, then restart Confluence.

Confluence won’t start - Error creating Confluence Home directory
The confluence.home variable specified in confluence-init.properties cannot be created. To fix this, edit /confluence/WEB-INF/classes/confluence-init.properties and check the path specified exists. Make sure all the directory slashes use / and that the # has been removed. If you're stuck, try using confluence.home=c:/confluence/data

Confluence won't start - JAVA_HOME environment variable is not defined correctly

You have not installed the Java Development Kit, or not set the %JAVA_HOME% to the directory of the JDK. You should re-check your steps in Stage 2.

Confluence won't start - Port 8080 is in use

If you have another Tomcat running on the same machine, you must edit <INSTALL>/conf/server.xml and change both 8080 and 8005 to ports that do not conflict with your other Tomcat instance according to these instructions.

Confluence won't start - Error creating bean with name 'scheduler'

You will need to adjust your system time.

Confluence won't start - Error registering bean with name 'fileSystemAttachmentDataDao'

If you did not use one of the recommended unzipping tools, and happened to use for instance the default Windows XP extractor, one of the classes required for starting up Confluence may not be located due to the lengthy file-path. This is due to the reason that the default Windows tool silently fails to extract files with long names. We suggest you to use other tools such as WinZIP and 7zip and redo the deployment process.

Cause:
org.springframework.beans.factory.BeanDefinitionStoreException: Error registering bean with name 'fileSystemAttachmentDataDao' defined in class path resource [applicationContext.xml]: Class that bean "com.atlassian.confluence.pages.persistence.dao.FileSystemAttachmentDataDao" depends on not found; nested exception is java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/FileSystemAttachmentDataDao$FileSystemAttachmentNamingStrategy.
at org.springframework.beans.factory.xml.DefaultXmlBeanDefinitionParser.parseBeanDefinition(DefaultXmlBeanDefinitionParser)
at java.lang.Class.forName0(Native Method)

Confluence starts but localhost:8080 times out
Check the server logs for errors. If you are running Confluence Standalone on Windows, error messages will be printed to the console window that opened when you ran startup.bat. On Unix systems, Confluence will log messages to logs/catalina.out.

Confluence starts but localhost:8080 goes to Tomcat start homepage

The CATALINA_HOME environment variable is set to another instance of Tomcat. You should run shutdown.sh, remove the CATALINA_HOME reference to the other Tomcat version, and run startup.sh again.

Confluence starts but logins fail at login screen

If you try to login with the correct username and password but are always returned to the login screen without any error messages, and you are running Zone Alarm, please check that it is not blocking the Confluence server.

RELATED TOPICS

Change listen port for Confluence Standalone
Adding SSL on Confluence 2.1.5a and earlier
Confluence Setup Guide
Configuration Guide
Documentation Home
Change listen port for Confluence Standalone

This page last changed on Mar 04, 2007 by rosie@atlassian.com.

Problem

You get errors like the following when starting Confluence Standalone, and can't access Confluence on port 8080.

```
java.net.BindException: Address already in use: JVM_Bind:8080
```

This means you are running other software on Tomcat's default port 8080. This may either be another Tomcat or some other process.

To find out what process is listening on that port, load a command prompt and type: `netstat -an`

```
-a : Displays all active TCP connections and the TCP and UDP ports on which the computer is
listening.
-n : Displays active TCP connections, however, addresses and port numbers are expressed
numerically and no attempt is made to determine names.
```

There is also Process Explorer tool available to determine what is binding port 8080.

Solution: change Confluence listen ports

To change the ports for Confluence Standalone, open the file `conf/server.xml` under your Confluence installation. The first four lines of the file look like this:

```
<Server port="8005" shutdown="SHUTDOWN" debug="0">
  <Service name="Tomcat-Standalone">
    <Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8080"
     minProcessors="5" maxProcessors="75"
     enableLookups="true" redirectPort="8443" acceptCount="10" debug="0"
     connectionTimeout="20000" useURIVerification="false"/>
    ...
  </Service>
</Server>
```

You need to modify both the server port (8005) and the connector port (8080) to ports that are free on the machine hosting Confluence. If required, `netstat` can be used to identify free ports on your machine [1].

For example, the first four lines of a modified server.xml using ports 8015 and 8090 is below:

```
<Server port="8015" shutdown="SHUTDOWN" debug="0">
  <Service name="Tomcat-Standalone">
    <Connector className="org.apache.coyote.tomcat4.CoyoteConnector" port="8090"
     minProcessors="5" maxProcessors="75"
     enableLookups="true" redirectPort="8443" acceptCount="10" debug="0"
     connectionTimeout="20000" useURIVerification="false"/>
    ...
  </Service>
</Server>
```
To access Confluence in this configuration, point your web browser to http://localhost:8090/.

NOTES

[1] For more information on netstat, see using netstat on Windows, or netstat man page (Linux).

[2] JIRA Standalone also runs on port 8080 by default. If you're looking to change the port of JIRA Standalone, see Changing JIRA Standalone's port.

RELATED PAGES

Installing Confluence Standalone
Documentation Home
Installing the Confluence EAR-WAR edition

This page last changed on Apr 27, 2007 by david.soul@atlassian.com.

Confluence EAR/WAR Requirements

The EAR-WAR edition of Confluence is intended for deployment into an existing J2EE application server. It is assumed that you already know how to deploy a webapp on the application server of choice. If not, we recommend installing the Confluence Standalone Edition.

- Supported
  - Apache Tomcat (4.1 and 5.5)
  - Weblogic (8.1 SP3 and above)
  - Resin (2.11.11 and above)
  - JBoss
  - Orion (2.0.2 and above)
  - Websphere (5.1.1.3 and above)

- Unsupported
  - Macromedia JRun - untested

- Incompatible
  - Oracle OC4J - JIRA Issue CONF-2919
  - Sun Application Server - JIRA Issue CONF-5509
  - GlassFish - JIRA Issue CONF-6603

⚠️ If you are not confident with application server configuration, please contact your system administrator to assist you before proceeding or consider installing Confluence Standalone.

- If deploying to an application server other than Apache Tomcat server, review the Application Server Configuration guide.
- If deploying as an unexploded WAR, Ant 1.3 or later is required
- If deploying on an unsupported servers, server-related issues cannot be covered by Atlassian technical support. Requests for assistance can be directed to the user forums instead
- Confluence, the database and application server must use the same character encoding. UTF-8 is recommended
- A user-contributed Fedora or RHEL/Centos Install Guide is also available for reference
- Unix, Linux or Solaris users must install these X11 libraries

- Known Issues For Application Servers

Before installing the WAR version of Confluence, please go through this checklist of requirements.

Instructions on how to install the WAR version on Tomcat
Step 1 - Download and extract WAR

1. Download the Confluence WAR zip file
2. Extract the downloaded zip file. It will unzip your Confluence install directory, which should contain the version number e.g. confluence-2.2.9 or confluence-2.5.0. This directory will be later referred to as the Confluence install directory. Inside is a confluence subdirectory, referred to later as the Confluence WAR directory. Record the absolute path to the Confluence WAR directory.

   ! Tomcat Users must not unzip their Confluence install to inside the Tomcat webapps folder as this may cause Confluence to be deployed more than once.

Windows users avoid Win XP's built-in unzip as it doesn't extract all the files. Use a 3rd party zip extractor like WinZip.
Solaris users will need to use GNU tar to handle the long filenames.

Step 2 - Check for patches

Review the Release Notes for your Confluence version and apply any patches listed

Step 3 - Configure confluence-init.properties

1. Inside the Confluence install directory, edit ...
   ...confluence/WEB-INF/classes/confluence-init.properties in a text editor
2. Set the confluence.home property to a directory of your choosing. This is the directory that will contain all of Confluence's configuration, backup and attachment files.

Step 4 - Edit Tomcat context descriptors

If you using Tomcat 5.0.x or Tomcat 5.5.x:

1. Create a file called confluence.xml in your Tomcat installation's conf/Catalina/localhost directory (if you have set up a different hostname for your tomcat instance, please specify that instead of localhost)
2. Open confluence.xml and add these lines:

   
   <Context path="/confluence" docBase="c:/applications/confluence-2.1.3/confluence" debug="0"
   reloadable="true">
   <Logger className="org.apache.catalina.logger.FileLogger"
   prefix="atlassian-confluence." suffix=".log" timestamp="true"/>
   </Context>

3. For docBase specify the value you noted down earlier.

If you are using Tomcat 4.x
1. Open `conf/server.xml` in a text editor
2. Add the following:

```xml
<Context path="/confluence" docBase="c:/applications/confluence-2.1.3/confluence" debug="0" reloadable="true">
  <Logger className="org.apache.catalina.logger.FileLogger" prefix="atlassian-confluence." suffix=".log" timestamp="true"/>
</Context>
```

3. For docBase specify the value you noted down earlier.

**Step 5 - Configure Your Application server**

Review any documentation associated with your webserver [here](#). If your application server requires deploying Confluence as a EAR/WAR:

To build the WAR File:

Windows users

1. Open a the command line prompt
2. Navigate to the Confluence WAR directory
3. Run the command `build war`

Linux users

1. Open a terminal window
2. Navigate to the Confluence WAR directory
3. Add executable mode to `build.sh`: `chmod +x build.sh`
4. Run `build.sh`
5. The WAR file is now located in the **dist** subfolder in your Confluence WAR directory

**Step 6 - Restart Server**

1. Shut down, and then restart tomcat
2. Confluence should now be accessible on [http://host:port/confluence](http://host:port/confluence)

**Next Step**

[Setup Confluence](#)

**General Tips & Information**

- [Start Confluence automatically on Windows as a Service](#)
- [Known Issues with Enterprise or Webhosting environments](#)
- [Pull down RSS Feeds through a Proxy](#)
• Set JAVA_HOME variable in Windows
• Setup a mail session in standalone version
• Where Is My ConfluenceHome Directory?

Troubleshooting

Solutions to common issues with installing Confluence. Review your logs by opening the Confluence install directory and checking the /logs/catalina.out and /logs/catalina.out files for errors described below. Click on a problem to show the solution.

Confluence window closes immediately when started

An error is preventing Confluence from starting.

1. Open a command prompt. On Windows, do this by clicking on your Start menu, then click Run. In the Run box, type cmd and press OK
2. From the command prompt, go to your Confluence install directory
3. Go into the bin subdirectory
4. Run startup.bat and read the error message
5. Find the solution to that error below

Confluence won't start - java.lang.NoClassDefFoundError IntraHibernateAttachmentCopier

If you are seeing "java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/hibernate/AbstractHibernateAttachmentDao$IntraHibernateAttachmentCopier" you have unzipped Confluence using a program that cannot handle long filenames. You must delete your install directory and go back to the point in the instructions that covers unzipping Confluence using a third-party unzip program.

Confluence won't start - Exception in thread "main" java.lang.NoClassDefFoundError: ...

If http://localhost:8080 goes to an error page when you run Confluence, go to the install directory and find the /logs/catalina.out. If this file contains a single line error starting with "Exception in thread "main" java.lang.NoClassDefFoundError", your install path may contain spaces. The solution is to rename your install directory path so that there are no spaces, then restart Confluence.

Confluence won't start - Error creating Confluence Home directory

The confluence.home variable specified in confluence-init.properties cannot be created. To fix this, edit /confluence/WEB-INF/classes/confluence-init.properties and check the path specified exists. Make sure all the directory slashes use / and that the # has been removed. If you're stuck, try using confluence.home=c:/confluence/data
Confluence won't start - JAVA_HOME environment variable is not defined correctly

You have not installed the Java Development Kit, or not set the %JAVA_HOME% to the directory of the JDK. You should re-check your steps in Stage 2.

Confluence won't start - Port 8080 is in use

If you have another Tomcat running on the same machine, you must edit <INSTALL>/conf/server.xml and change both 8080 and 8005 to ports that do not conflict with your other Tomcat instance according to these instructions.

Confluence won't start - Error creating bean with name 'scheduler'

You will need to adjust your system time.

Confluence won't start - Error registering bean with name 'fileSystemAttachmentDataDao'

If you did not use one of the recommended unzipping tools, and happened to use for instance the default Windows XP extractor, one of the classes required for starting up Confluence may not be located due to the lengthy file-path. This is due to the reason that the default Windows tool silently fails to extract files with long names. We suggest you to use other tools such as WinZIP and 7zip and redo the deployment process.

Cause:
org.springframework.beans.factory.BeanDefinitionStoreException: Error registering bean with name 'fileSystemAttachmentDataDao' defined in class path resource applicationContext.xml: Class that bean class com.atlassian.confluence.pages.persistence.dao.FileSystemAttachmentDataDao depends on not found; nested exception is java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/FileSystemAttachmentDataDao$FileSystemAttachmentNamingStrategy at
org.springframework.beans.factory.xml.DefaultXmlBeanDefinitionParser.parseBeanDefinition(DefaultXmlBeanDefinitionParser) caused by: java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/FileSystemAttachmentDataDao$FileSystemAttachmentNamingStrategy at java.lang.Class.forName0(Native Method)

Confluence starts but localhost:8080 times out

Check the server logs for errors. If you are running Confluence Standalone on Windows, error messages will be printed to the console window that opened when you ran startup.bat. On Unix systems, Confluence will log messages to logs/catalina.out.

Confluence starts but localhost:8080 goes to Tomcat start homepage
The CATALINA_HOME environment variable is set to another instance of Tomcat. You should run shutdown.sh, remove the CATALINA_HOME reference to the other Tomcat version, and run startup.sh again.

Confluence starts but logins fail at login screen

If you try to login with the correct username and password but are always returned to the login screen without any error messages, and you are running Zone Alarm, please check that it is not blocking the Confluence server

RELATED TOPICS

Confluence Cluster Installation
Configuration Guide
Confluence Setup Guide
Confluence Documentation Home
License will not validate

This page last changed on Apr 26, 2005 by vidya.

This issue has been fixed and the solution will be shipped as part of future confluence releases, beginning with confluence 1.4. In the interim, if you are experiencing this problem, see below.

Some users have recently reported problems when installing Confluence regarding licensing. This problem is encountered in the first stage of the Setup Wizard, where a provided license will simply not validate. The log file resembles the below.

```
```

Our own testing shows that this problem replicates under Windows XP, Service Pack 2 with with JDKs 1.4.2_08, 1.5_02. The problem does not occur when running JDK 1.4.2_07 and below.

A simple workaround is to download the file in attachment, Page.key, and place it in the WEB-INF/classes directory of your Confluence installation beneath the following path:

```
WEB-INF/classes/com/atlassian/confluence/page/Page.key
```

Here it will load correctly and the license will validate.
Server Hardware Requirements Guide

This page last changed on Apr 26, 2007 by david.soul@atlassian.com.

New users can use this guide in combination with the free Confluence trial period to evaluate their server hardware requirements. Because server load is difficult to predict, live testing is the best way to determine what hardware a Confluence instance will require in production.

Minimum Hardware Requirements

On small instances, server load is primarily driven by the peak number of anonymous or logged-in clients browsing or editing Confluence simultaneously.

5 Concurrent Users

- 1GHz+ CPU Pentium 4 or equivalent
- 256MB RAM

25 Concurrent Users

- Dual 2.4GHz CPU Pentium Xeon or equivalent
- 512MB+ RAM

Example Hardware Specifications

These are example hardware specifications for non-clustered Confluence instances. It not recorded whether the RAM refers to either total server memory or memory allocated to the JVM, while blank settings indicate that the information was not provided.

<table>
<thead>
<tr>
<th>Accounts</th>
<th>Spaces</th>
<th>Pages</th>
<th>CPUs</th>
<th>CPU (GHz)</th>
<th>RAM (Meg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>30</td>
<td>1,000</td>
<td>1</td>
<td>2.6</td>
<td>1,024</td>
</tr>
<tr>
<td>350</td>
<td>100</td>
<td>15,000</td>
<td>2</td>
<td>2.8</td>
<td>700</td>
</tr>
<tr>
<td>5,000</td>
<td>500</td>
<td>15,000</td>
<td>4</td>
<td>3</td>
<td>2,024</td>
</tr>
<tr>
<td>10,000</td>
<td>350</td>
<td>16,000</td>
<td>2</td>
<td>3.8</td>
<td>2,024</td>
</tr>
<tr>
<td>10,000</td>
<td>60</td>
<td>3,500</td>
<td>2</td>
<td>3.6</td>
<td>512</td>
</tr>
<tr>
<td>21,000</td>
<td>950</td>
<td>15,000</td>
<td>2</td>
<td>3.6</td>
<td>4,048</td>
</tr>
</tbody>
</table>

Server Load & Scalability

When planning server hardware requirements for your Confluence deployment, you will need to estimate the server scalability based on peak concurrent users, the editor to viewer ratio and total content.

- Peak concurrent users is the maximum number of clients ever simultaneously browsing or editing Confluence, even if anonymous.
• The editor to viewer ratio is how many clients are performing updates to versus those only viewing content
• Total content is best estimated by a count of total spaces

Confluence scales best with a low peak user load, few editors and few spaces. Users should also take into account:

• Total pages is not a major consideration for performance. For example, instances hosting 80K of pages can consume under 512 meg of memory
• Always use an external database

<table>
<thead>
<tr>
<th>Maximum Reported Usages</th>
</tr>
</thead>
<tbody>
<tr>
<td>The largest customer instances reported to Atlassian or created internally.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Most Spaces</th>
<th>1700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Internal Users</td>
<td>15K</td>
</tr>
<tr>
<td>Most LDAP Users</td>
<td>100K</td>
</tr>
<tr>
<td>Most Pages</td>
<td>80K</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clustering In Confluence</td>
</tr>
</tbody>
</table>
Using the IBM 64bit J9 JDK

This page last changed on Sep 04, 2006 by tom@atlassian.com.

This JVM must be started with the argument:  -Dsun.reflect.inflationThreshold=0

Otherwise you will see an error message like:

```
bucket.core.InfrastructureException: java.lang.NoClassDefFoundError:
com.atlassian.confluence.spaces.Space$$EnhancerByCGLIB$$58d74b80
at
com.atlassian.confluence.util.XWorkTransactionInterceptor.intercept (XWorkTransactionInterceptor.java:151)
caused by: java.lang.NoClassDefFoundError:
com.atlassian.confluence.spaces.Space$$EnhancerByCGLIB$$58d74b80
at sun.reflect.GeneratedMethodAccessor311.invoke (Unknown Source)
```
Confluence Release Cycle

This page last changed on May 17, 2006 by david.soul@atlassian.com.

New versions of Confluence are released frequently. Our goals are to:

- Make bug-fixes available to customers sooner
- Give interested customers early access to new features and API changes
- Make Confluence major releases predictable

Feature Releases

We aim to release new versions of Confluence every two to three months. These releases will contain the bulk of new functionality.

Feature releases are numbered by incrementing Confluence's minor version number, so the move from Confluence 2.0 to 2.1 and 2.1 to 2.2 both introduced significant new features to the product. Occasionally we may change to a whole new major version number (Confluence 2.0 was originally slated to be released as 1.5), but that is mostly done for marketing purposes, and shouldn't be considered to have any practical meaning.

Feature releases may not be API-compatible with the previous release. This means that you should test RPC clients, macros and plugins before running them on a newer version of Confluence.

Bug-Fix Releases

Confluence bug-fix releases are scheduled every two to three weeks, depending on the number and urgency of the bugs that have been fixed during that particular development cycle. We aim to minimise the time between a bug being reported and a fix being available, without either us or our customers having to manage clumsy sets of manual patches.

Bug-fix releases will contain mostly bug-fixes, plus the occasional minor new feature or enhancement. Enhancements will be limited, however, as the main aim of these point releases is to improve stability, and make no significant API changes.

Bug-fix releases are numbered by incrementing the patch-level. So the first bug-fix release after Confluence 2.2 is 2.2.1, followed by 2.2.2. Occasionally, we will re-issue a bug-fix release because something was faulty with the original download. In that case we will create a "re-issue" release number, for example 2.1.5a or 2.2.1a.

Obviously, we don't expect anyone to upgrade Confluence every two weeks, administrators should keep their own schedule, based on how much of an inconvenience is being caused by any bugs that may have been fixed since. Sometimes, however, a security issue or serious application bug will arise that we feel it is in everyone's best interests to fix as soon as possible. In such cases, we will recommend in the Release Notes that all customers upgrade to the latest version.

Development Releases
Occasionally, when possible, we will release preview "development snapshots" of the next major Confluence version. How often and when we do so depends on the particulars of the current development cycle. In situations where we are working on a number of disparate features we may be able to do a number of progressive development releases, whereas in iterations where we are making significant changes to the Confluence internals, we may not have anything suitable for public consumption until quite late in the release cycle.

Development releases will be announced on the Development Releases page, and to the confluence-developer mailing list.

The version number of a Development Release will be the version number of the next major release, suffixed with -dev. So Confluence 2.3-dr1 will be followed by 2.3-dr2, and so on until the ultimate release of the finished Confluence 2.3
Development Releases

Development Releases are approximately fortnightly builds of Confluence that we make available so that interested customers can try out new features, especially those features that you may have been waiting for, and don't want to wait another month for the next official release.

- Development Releases are Not Safe
  Development releases are snapshots of the ongoing Confluence development process. As such:
  - While we try to keep these releases stable, they have not undergone the same degree of testing as a full release.
  - Features in development releases may be incomplete, or may change or be removed before the next full release.

- No Upgrade Path
  Because Development releases represent work in progress, we can not provide a supported upgrade path between DRs, or from any DR to the eventual final release. Thus, any data you store in a Confluence DR may not be able to be migrated to a future Confluence release.

Current Development Release Cycle

- Release Notes 2.3-DR1
- Release Notes 2.3-DR2

Previous Development Release Cycles

1.5 - 2.0 Development

- 1.5-DR1 was not released
- Release Notes 1.5-DR2
- Release Notes 2.0-RC1
- Release Notes 2.0-RC2

1.4 Development

- Release Notes 1.4-DR1
- Release Notes 1.4-DR2
- Release Notes 1.4-DR3
- Release Notes 1.4-DR4
- 1.4-DR5 was not released
- Release Notes 1.4-DR6
- Release Notes 1.4-DR7
- 1.4-RC1 was not released
- Release Notes 1.4-RC2

1.3 Development
• Release Notes 1.3-DR1
• Release Notes 1.3-DR2
• Release Notes 1.3-DR3
• Release Notes 1.3-DR4
• Release Notes 1.3-final
Development Release Warnings

This page last changed on Nov 13, 2006 by cmiller.

⚠️ Development Releases are Not Safe
Development releases are snapshots of the ongoing Confluence development process. As such:

- While we try to keep these releases stable, they have not undergone the same degree of testing as a full release.
- Features in development releases may be incomplete, or may change or be removed before the next full release.

⚠️ No Upgrade Path
Because Development releases represent work in progress, we can not provide a supported upgrade path between DRs, or from any DR to the eventual final release. Thus, any data you store in a Confluence DR may not be able to be migrated to a future Confluence release.
Release Notes 1.3-DR1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3-DR1 is the first development release in the cycle leading up to Confluence 1.3. In it, we have rewritten the Space Summary/Space Administration pages to be more useable, adn implemented a much-requested feature: the ability to undelete pages.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

New Features in Confluence 1.3-DR1

Space Summary

The Space Summary page has been the dumping-ground for every space-related operation and report since Confluence's early alpha releases. As such, it had become confusing to navigate and hard to find anything on.

For 1.3-DR1, we have rewritten the space summary to be a suite of tabbed pages, making that whole area of Confluence easier to navigate, more self-explanatory, and much better-looking.

The Trash Can

When a page or blog post is deleted, it is no longer removed completely, but is placed in a space-wide trash can.

The trash can be found in the Administration tab of the newly rearranged Space Summary pages. Space Administrators can choose to restore pages from the trash, or purge them so they are unrecoverable.

New Emoticons
Just because.

Cannot resolve external resource into attachment.

Bug Fixes

All the bug-fixes that were part of the Confluence 1.2.2 release have also been incorporated into 1.3-DR1. In addition, we've fixed one or two issues specifically for 1.3-DR1, take a look in JIRA for the full list.
Release Notes 1.3-DR2

Confluence 1.3-DR2 is the second development release in the cycle leading up to Confluence 1.3. For DR2, we have made space-level permissions a lot more fine-grained, and added a new plugin manager which should open the way to making it easier for people to write extensions to Confluence:

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

Note: Because we have made significant changes to permissions in 1.3-DR2, you should check that your user permissions have been correctly migrated. The upgrade manager should ensure permissions remain consistent between versions, but as with anything related to security, it's best to double-check.

New Features in Confluence 1.3-DR2

New Space-Level Permissions

(CONF-1375, CONF-1764 and their linked issues)

Groups

These are the permissions currently assigned to groups for this space.
We've been getting a lot of requests for more fine-grained control over who can do what in a space, so as a result, we've added a whole raft of new permissions at the space level:

<table>
<thead>
<tr>
<th>Object</th>
<th>Permissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page</td>
<td>create/edit, remove, export</td>
</tr>
<tr>
<td>Blog Post</td>
<td>create/edit, remove</td>
</tr>
<tr>
<td>Comment</td>
<td>create, remove</td>
</tr>
<tr>
<td>Attachment</td>
<td>create, remove</td>
</tr>
<tr>
<td>Space</td>
<td>export, administer</td>
</tr>
</tbody>
</table>

Create space permission is still managed at the global level.

The permissions editing screens have been changed a little, too, taking into consideration the feedback we received from the last DR. All editing functions are now firmly on the edit screen, and we have introduced a user-picker to avoid having to find users in a massive drop-down list.

New Plugin Architecture

(CONF-1877)

Confluence now incorporates the plugin architecture that was written for JIRA 3.0 (which in turn was adapted from Confluence's macro management. Who said code reuse was dead?). Right now, there's not much you can do with it, but plugins pave the way to making Confluence a great deal more flexible and extensible.

See: Writing Confluence Plugins

New Macro Descriptor Format

(CONF-1878)

Macro libraries are now implemented as plugins, which means that if you have written a macro library, you will need to convert your macro-library.xml files to atlassian-plugin.xml files.

See: Converting Macro Libraries to Confluence Plugins

Themes

(CONF-1856)

It is now possible to package a colour-scheme and a set of customised decorators into a portable Confluence plugin. Just drop the theme jar into your server's classpath, restart the server and space administrators will be able to select the theme from the space administration console.
**Space Theme**

**Global Look and Feel**
Use the globally configured look and feel. You can customise colour-schemes and layouts manually.

- **No Theme**

**Choose a Theme**
Assign a look and feel from an installed theme plugin. This theme will override any manually configured colour-schemes or layouts.

- **Clean Anonymous** — Only show menus and toolbars to users who are logged in.
- **Left Navigation** — Draw a navigation menu on the left-hand side

**Confirm**

DR-2 comes with two very simple themes (look under themes/ in your Confluence directory), but we will have more (and more useful) themes available by the time 1.3.0 is released. In addition, we're hoping that users will continue to share their Confluence modifications in the Confluence Extensions Space, and that themes will help you continue to share neat things you've done with Confluence.

See: Confluence Themes

**Bugs fixed for 1.3-DR2**

All the bug-fixes that were part of the Confluence 1.2.3 release have also been incorporated into 1.3-DR2. In addition, we've fixed a handful of issues specifically for 1.3-DR2, take a look in JIRA for the full list.
Release Notes 1.3-DR3

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3-DR3 is the third development release in the cycle leading up to Confluence 1.3 - and a momentous day in the history of Confluence.

We've finally made it to that special point in every applications life.

Confluence has evolved.

1.3-DR3 is best summed up by Jamie Zawinski's Law of Software Envelopment:

Every program attempts to expand until it can read mail. Those programs which cannot so expand are replaced by ones which can.

That's right - Confluence now has more content than ever before. It reads, stores and indexes email. Oh, and as a nifty little bonus - it also indexes Word documents, PDF documents, RTF documents, Excel spreadsheets, PowerPoint files, text files, source files etc... attached to your mail!

Have we got your interest? How does all this magic happen you ask? Read on to pull back the curtain.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

Note: Because we have made significant changes to permissions in 1.3-DR2, you should check that your user permissions have been correctly migrated. The upgrade manager should ensure permissions remain consistent between versions, but as with anything related to security, it's best to double-check.

New Features in Confluence 1.3-DR2
Mail Archiving

(CONF-1965)

Confluence is a collaboration tool. When communication happens through email instead of through Confluence, information will get lost in the depths of someone's mail folders, instead of shared with the team, archived, interlinked and indexed.

While we would love to see all collaboration within a group to happen through Confluence, it's often not possible to change the way people work. So instead of finding new ways to force people to use Confluence instead of email, why not route all the relevant email into Confluence?

Location: Dashboard > BUGTRaq > Mail Archive > MySQL Authentication Bypass

Subject: MySQL Authentication Bypass
From: NGSSoftware Insight Security Research
Date: Oct 22, 2004

NGSSoftware Insight Security Research Advisory

Name: MySQL Authentication Bypass / Buffer Overflow
Systems Affected: MySQL 4.1 prior to 4.1.3, and MySQL 5.0.
Severity: High
Vendor URL: http://www.mysql.com
Author: Chris Anley [ chris@ngssoftware.com ]
Date of Advisory: 1st July 2004

It is now possible to archive email within a Confluence space. The support for mail is only just getting started in DR3, but we believe this is an incredibly useful direction for Confluence to go, and will be expanding and improving the mail integration in future releases.

Confluence spaces can retrieve mail periodically from a POP mailbox (this will delete all mail from that POP account, so don't try it on an account you want to keep mail on), or space administrators can import mail directly from a standard mbox-format mail file.

Once mail is imported into Confluence, it can be browsed chronologically from the Content pane of the Space Summary page, and can be searched through Confluence's search interface.

In the future, we will be adding new ways to link to and between email (bringing the email closer to the other content of the wiki), proper representation of email threads, more flexible search, and much, much more.

Read the Mail Archiving FAQ for more information

Want to play with it now?

We love to play with features right now, so here's how you can:

- Testing mail search is a snap. We're indexing our own mailing list on this very space! View archives
or search mail.

* Testing mailing content into Confluence is also easy - well, relatively. Simply mail mailtest@atlassian.com and your email will show up [here](#) (it only polls the box once an hour, but it will show up eventually!). It will also be indexed.

**Improved Indexing Performance**

We now make much more efficient use of resources by batching updates to full-text search index. This should lead to improved performance for many tasks within Confluence, but will mean that it may take up to a minute for a change in the site to be reflected in the site's index. ([CONF-2029](#))

In addition, we have made a number of improvements to the indexing of large PDFs, including fixing some cases where a PDF might cause indexing to freeze indefinitely. ([CONF-1953](#), [CONF-1954](#))

**Library Upgrades**

Many of the libraries Confluence is dependent on have been upgraded for this release, which should result in improved stability and performance.

<table>
<thead>
<tr>
<th>Bugs fixed for 1.3-DR3</th>
</tr>
</thead>
</table>

We've fixed a handful of issues specifically for 1.3-DR3, take a look in [JIRA](#) for the full list.
Release Notes 1.3-DR4

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3-DR4 is the fourth development release in the cycle leading up to Confluence 1.3. We're on the home stretch! The final, stable 1.3 isn't far away.

Confluence 1.3-DR4 includes a raft of improvements to mail archiving, a redesigned setup wizard, significant improvements to the way we back up and restore your system configuration, and a truck-load of bug fixes.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

Note: You will need to rebuild the search index after you upgrade for certain features (including mail threading) to work properly.

New Features in Confluence 1.3-DR4

Setup Improvements

Confluence's setup wizard was badly in need of an overhaul, so that's exactly what we've done. Among the improvements, we have:

- Improved the ordering of steps. For example, if you are importing straight from a backup, you no longer need a redundant administrative user.
- Added a quick, two-step setup process to get Confluence running straight away
- Made the database setup much more robust, and much better at reporting errors
- Removed those steps that weren't really necessary to get Confluence running

Hopefully this will make it a lot easier to get Confluence up and running, or show off Confluence to your friends and family.
Mail Archive Improvements

(CONF-2050)

We've been working hard to build on the basic mail-archiving features included in 1.3-DR3. Included in the new version are:

- Improved indexing of mail senders, message-ids and subjects
- Improved integration of mail with search
- The ability to delete mail (if you have been assigned the delete mail permission)
- Direct access to mail archives from the dashboard
- Display of mail attachments in the "view mail" page
- The ability to link to a single message by its internal Confluence ID ( [\$1234] will link to message 1234)
- The ability to navigate forward and back through mails chronologically
- Email addresses are displayed or masked in accordance with your global preferences

We still have a few things to do (date based views, a calendar), but the mail archive is now very useable. Especially when you take into account...

Mail Threading

(CONF-2059)

Of course, it's important for your mail archive to be able to represent conversation threads. How you present threads, though, is just as important.

Here's how most mail-based web archives present your thread at the bottom of each message:

- **Follow-Ups:**
  - **RE: PaceDateModified**
    - **From:** Bob Wyman

- **References:**
  - **Re: PaceDateModified**
    - **From:** Tim Bray

Not very helpful, is it. Here's how that same bottom-of-the-message view looks in Confluence:
At a glance, you can see exactly where the message sits in a conversation.

Backup Improvements

(CONF-1090 and CONF-2046)

Confluence 1.3-DR4 contains two significant improvements to backing up and restoring the system.

- You can now exclude attached files from your backups. Of course, this means you have to back up your attachment directory separately, but if you already have a good backup regime for your filesystem (and can thus restore the attached files separately), it means that your Confluence data backups will take up far less room.
- We now include important parts system configuration in your backups. this means that colour-schemes and plugin preferences are now saved, and fixes a large number of issues that users have filed due to the restore process not bringing the system back up in the same state as when they saved it.

Library Upgrades

We have continued the process of upgrading to the most recent stable versions of those libraries Confluence is built on, which should result in improved stability and performance.

Bugs fixed for 1.3-DR4

We've also fixed a lot of bugs, as we ramp up for the stable 1.3 release. Take a look in [JIRA: http://jira.atlassian.com/sec]ure/IssueNavigator.jspa?reset=true&mode=hide&sorter/order=ASC&sorter/order=pre 10933] for the full list.
Release Notes 1.3-final

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3-final is the stable release of Confluence 1.3. Woohoo! We made it! The full release-notes for Confluence 1.3 are located here, this page documents only the changes made since the 1.3-DR4 development release.

1.3-final contains over 100 improvements over 1.3-DR4, mostly focused around fixing bugs, polishing the interface, and making Confluence ready for a stable release.

Who should upgrade?

Confluence 1.3 is the new stable release of Confluence. It contains a huge raft of enhancements and fixes made since 1.2.3. If you are running Confluence (and not using Oracle, see below), you should upgrade to Confluence 1.3. If you are not running Confluence, you should install 1.3 immediately, regardless of your database.

Current users of Confluence on Oracle databases users may wish to delay upgrading. Read this document for more details.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

Note: You will need to rebuild the search index after you upgrade for certain features (including mail threading) to work properly.

New Features in Confluence 1.3-final

New Demonstration Content

As part of the DR4 setup improvements, users were given the option to install an example space, but the demonstration content that was loaded was pretty uninspiring. For the final release, the demonstration space now contains a suite of demonstration pages, examples of what Confluence can do, and a few pictures of the Sydney Opera House. This should make it much easier to get Confluence up and running quickly.

Referrer Performance Improvement

We discovered (from monitoring the http://confluence.atlassian.com site) that our recording of HTTP referrers was causing some serious performance problems for public Confluence sites. Upgrading to
Confluence 1.3-final should make Confluence a lot more responsive, especially under heavy load.

Improved Notation Guide

The notation guide has been reorganised to be more user-focused, making it easier to find the markup or macro you are looking for.

It is also now possible for macro plugins to insert themselves into the notation guide. Just write your macro description as a two-column HTML table row, put it in a vm file, and include the following in your atlassian-plugin.xml file:

```
<resource type="velocity" name="help" location="/path/to/your/helpfile.vm">
  <param name="help-section" value="tables"/>
</resource>
```

The help section can be one of: texteffects, headings, breaks, links, lists, images, tables, advanced, confluence, external or miscellaneous. If you don't include a help section, it will be put in the 'macros' section.

Improved Search Indexing

We've updated the way we index content within Confluence. A lot of searches that came up empty before will now find something. In addition, you can now set your primary language for indexing under General Configuration, so that the indexer can better optimise itself for non-English content.

Also

- By popular demand (it was our most highly voted-for bug), pages are now exported in alphabetical order, not in order of creation.
- The Remote API can be accessed anonymously, if you wish (anonymous remote access must be turned on in the general configuration).
- When previewing a page, you can continue to edit on that screen, instead of having to go back to the edit page.
- The thread view on a mail page has been improved, and the full-thread view is no longer a pop-up.
- You no longer need to be in the confluence-admin group to access the administration pages, you just need global administrative privileges.
- You can link to anything in Confluence if you know its ID in the database (currently this is how you must link to email): [$1234]
- You can link to anything relative to the root of the Confluence site (useful for pointing to parts of the site that can't otherwise be linked): [///pages/editpage.action?pageId=1234]
- New macros: \{jiraportlet\}, \{note\} \{tip\}, \{information\} and \{warning\}
- A lot more...

Issues Resolved for 1.3-final

In all, over 130 issues were resolved between DR4 and 1.3-final. Unfortunately, merging all the versions together in JIRA means the list of precisely what went into those 130 has been lost, but if you sort this list by last-modification date, you'll get some idea... Issues Resolved for 1.3
Release Notes 1.4-DR1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4-DR1 is the first development release in the cycle leading up to Confluence 1.4. On the surface, we have implemented one of Confluence’s most requested features. Under the hood, there’s a whole new event system to play with.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Downloads

All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 1.4-DR1

Consult JIRA for the full list of issues resolved for 1.4-DR1 (Note, this list doesn't include all the 1.3.1 fixes that were also merged into the development release)

Move Page Hierarchy

When you move a page between spaces, you now have the option to include all children of that page in the move. With 13 votes, this was one of Confluence’s most requested features.

(Note, as of DR1, you can not both move a hierarchy of pages and rename the root page at the same time. This bug is filed as CONF-2452)

Attach Multiple Files
Another commonly requested feature, you can now attach multiple files to a page at once. By default, you can attach a maximum of five at a time, but this maximum is configurable.

GZip Content Encoding

Pages are served with GZip content encoding, which means less bandwidth consumption and faster page downloads.

Events and Listeners

We have implemented the beginnings of a pervasive system of events within Confluence.

By the final release of 1.4, all major actions within Confluence will trigger an event. These events can be listened for, and reacted to by a new plugin module type: "listener". This will allow Confluence to be further customised, as extensions can react to anything that happens within the system.

Creating an event listener plugin is insanely easy. Step one, implement this interface:

```java
package com.atlassian.confluence.event;
import com.atlassian.confluence.event.events.ConfluenceEvent;

/**
 * Defines a listener for Confluence events.
 */
public interface EventListener
{
    /**
     * Perform some action as a response to a Confluence event. The EventManager will
     * ensure that this is only called if the class of the event matches one of the
     * classes returned by getHandledEventClasses
     *
     * @param event some event triggered within Confluence
     */
    void handleEvent(ConfluenceEvent event);

    /**
     * Determine which event classes this listener is interested in.
     *
     * The EventManager performs rudimentary filtering of events by their class. If
     * you want to receive only a subset of events passing through the system, return
     * an array of the Classes you wish to listen for from this method.
     *
     * For the sake of efficiency, only exact class matches are performed. Sub/superclassing
     * is not taken into account.
     *
     * Returning an empty array will allow you to receive every event.
     *
     * @return An array of the event classes that this event listener is interested in,
     * or an empty array if the listener should receive all events. Must not
     * return null.
     */
    Class[] getHandledEventClasses();
}
```

Step two: Package it as a plugin module with a descriptor like this:

```xml
(listener name="My Listener" key="mylistener"
    class="com.example.listeners.MyListener">
    <description>Listens for stuff.</description>
</listener>
```
And that's about it. We'll be adding information about the events that are being produced in Confluence over the next couple of days (We would have had them documented today, but Nick, who wrote most of them, was sick).

| Bugs Fixed |

All bugs that were fixed in [Confluence 1.3.1](http://www.confluence.com) are also fixed in Confluence 1.4-DR1.
Release Notes 1.4-DR2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4-DR2 is the second development release in the cycle leading up to Confluence 1.4. Seeing as the DR2 development fortnight straddled Christmas it's not quite as feature-laden as some previous releases, but we thought we'd give you a few new toys to play with for the New Year.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Downloads

All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 1.4-DR2

Consult JIRA for the full list of issues resolved for 1.4-DR2

Export Page Hierarchy

When you export a page to PDF or HTML, you have the option to include its children in the export.
Popup Page Picker

We now have a popup that can be used to select pages for inserting links, or choosing a page's parent. The picker lets you choose from your recently visited pages, the list of pages that link to the current page, or you can perform a search within the picker itself.

New Macros

As part of the process of making Confluence more flexible, we have implemented the various functions of the Confluence dashboard and space summary pages as macros. These macros are currently disabled by default, but if you're interested in using them within regular pages, you can enable them from your global plugin configuration.
This currently has no effect on the dashboard itself - but will become useful in the future when the dashboard becomes customisable. For example, the {spaces-list} macro will reproduce the list of spaces that appears on the dashboard:

- Spaces:
  - My
  - Team
  - New (1)
  - All

**ABC** (ABC)
**Artwork** (art)
**Atlassian Developer Network** (DEVNET)
**Atlassian Developer Network Private** (DEVCOM)
**Atlassian Development** (DEV)
**Atlassian Japan** (IMH)
**Atlassian Jobs** (AJOBS)
**Atlassian Media Room** (NEWS)
**Atlassian Meetings** (MEET)
**Atlassian Partner Tools** (APT)
**Atlassian Partner Wiki** (APW)
**Atlassian Referrals** (RFL)
**Atlassian Support** (Support)
**Atlassian Training** (Training)
**Atlassian User Group** (AUG)
**Bamboo** (BAMBOO)
**Bamboo Extensions** (BAMEXT)
**BusDev Demo Space** (BDD)
**Business Objects Discussions** (BODiscussion)
**Case Studies** (CS)
**Citigroup** (citigroup)
**CodeGear** (CG)
**Codegeist** (CODEGEIST)
**Concinnity Solutions Workspace** (CSW)
**Confluence** (DOC)
**Confluence 1.4 User Guide** (CONF14)
**Confluence 2 User Guide** (CONF20)
**Confluence Community** (DISC)
**Confluence Extension** (CONFEXT)
**Confluence Hosted** (CSH)
**Crowd** (CROWD)
**Crowd Extension** (CROWDEXT)
**Custom Plugin Packs** (aps)
**Demo for OpenText** (DFOT)
**Demo Lab** (DEMOLAB)
**Demonstration Space** (ds)
**Demos for Anthony** (DEMOTONY)
**Demo Space** (DEMOSTONY)
**Dextrus Prosoft Collaboration** (DPC)
**Documentation** (ALLDOC)
**Documentation Staging** (DOCPRIV)
**Documentation Staging 2** (DOCPRIV2)
**EditLive Integration** (EDITLIVE)
There is a known bug that occurs whenever you enable or disable a plugin in Confluence 1.4-DR2. The error will appear to be 'null', but the following will appear in the logfiles:

```
[ERROR] Tue Jan 04 18:01:20 CST 2005 [com.atlassian.core.util.DateUtils]
java.util.MissingResourceException: Can't find resource for bundle
java.util.PropertyResourceBundle, key core.dateutils.minutes
```

This is issue [CONF-2513](http://example.com/conf-2513) and will be fixed in the next DR.
Release Notes 1.4-DR3

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4-DR3 is the third development release in the cycle leading up to Confluence 1.4. It is the first step in a process of making the Confluence User Interface simpler, and easier to navigate.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Downloads

All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 1.4-DR3

User Interface Enhancements
Some of the most frequent feedback we get about Confluence is that while users like the wealth of features on offer, the interface is often overwhelmed by too much information and too many options, making Confluence difficult to navigate, and difficult to introduce to non-technical users. Confluence 1.4-DR3 is the first step in an attempt to present a cleaner, more useable design for Confluence, while still providing a powerful interface for experienced users.

1.4-DR3 is a developer release. As such, some of the changes to the interface are incomplete, and some may not make it into the final version. Please offer your feedback on DISC:1.4 UI Discussion.

While the obvious way to get a look at the new interface is just to explore this site, here are a few screenshots that might help:

<table>
<thead>
<tr>
<th>More Functional</th>
<th>Cleaner (and wider) page view</th>
<th>New-look recently updated list for spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit Page</td>
<td>Simpler Dashboard</td>
<td></td>
</tr>
</tbody>
</table>
I'm also compiling a page to help people who are used to Confluence Classic, and might be a little lost in the new interface: 1.4 Interface - Where Did Everything Go?

**Known Bugs**

A page has been created in the Discussion space to gather comments, suggestions, compliments and complaints about the new interface: DISC:1.4 UI Discussion
1.4 Interface - Where Did Everything Go?

If you're used to the Confluence Classic interface, the new 1.4 interface might be a little hard to navigate at first. We think that the new design is a vast improvement, but it's inevitable that people who have used the application since its release will be wondering where some of the buttons they were used to have gone...

Where Did They Go...

- [Blogs](#)
- [Rename Page](#)
- [Move Page](#)
- [Create Child Page](#)
- [Page Locks](#)

Like it? Don't? Join the [discussion](#).

Cannot resolve external resource into attachment. Blogs?

By [incredibly popular demand](#), blogs have been renamed to "News" across the site. While blogs are all the rage at the moment (or, as my brother would say, very zeitgeisty), it's still far easier to explain "News" to someone familiar with blogs, than it is to explain blogs to someone who is familiar with news.

Cannot resolve external resource into attachment. Rename Page?

Rename page is no longer a separate function. Just edit the page and change the page title, and Confluence will rename all the links to the page for you.

Cannot resolve external resource into attachment. Move Page?

Move page is no longer a separate function. Just edit the page and change its space, and Confluence will
move the page to the new space for you, renaming any links to the page. If the page has children, you will be given the option to move all the children as well.

Cannot resolve external resource into attachment. Create Child Page?

Whenever you select the "Add Page" link from the top of the page, your current page will be automatically inserted into the Parent Page box. We've found that this is the way most people use Confluence anyway.

Cannot resolve external resource into attachment. Page Locks?

Page locks have been renamed "Permissions" and moved to the bottom of the edit page. We found that most people didn't understand (or couldn't find) locks, and thus didn't understand that Confluence has page-level edit security.

Cannot resolve external resource into attachment. Page History? Short URL? Incoming Links? Hot Referrers?

All this information has been moved under the "Info" tab when you view a page.
<table>
<thead>
<tr>
<th>Title:</th>
<th>1.4 Interface - Where Did Everything Go?</th>
<th>View Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author:</td>
<td>Charles Miller</td>
<td>Jan 25, 2005</td>
</tr>
<tr>
<td>Last Changed by:</td>
<td>Jens Schumacher</td>
<td>May 16, 2005</td>
</tr>
<tr>
<td>Tiny Link: (useful for email)</td>
<td><a href="http://confluence.atlassian.com/x/XoAB">http://confluence.atlassian.com/x/XoAB</a></td>
<td></td>
</tr>
</tbody>
</table>

**Recent Changes**

Since you last logged in:
- Jens Schumacher made 1 change. (view)

<table>
<thead>
<tr>
<th>Time</th>
<th>Editor</th>
<th>view changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 25, 2005 12:53</td>
<td>Charles Miller</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.4-DR4

Confluence 1.4-DR4

Confluence 1.4-DR4 is the fourth development release in the cycle leading up to Confluence 1.4. In 1.4-DR4 the user interface continues to improve, and our new wiki->HTML renderer lands, fixing a large number of bugs (but probably introducing a few more)

1.4-DR4a

One of the bugs that was introduced in 1.4-DR4 caused the edit option to disappear completely from the Confluence interface for anyone who was not a global administrator. Because that issue rendered Confluence mostly unusable, 1.4-DR4a has been released including a fix to that problem. 1.4-DR4a also includes the patch for Confluence Security Advisory 2005-02-09.

We would like to remind everyone who downloads the developer releases that they are not fully stable.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Downloads

All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 1.4-DR4

User Interface Enhancements
The user interface of Confluence continues to improve. A big thank you to all the users who contributed feedback on DR3. While the changes between DR3 and DR4 aren't as radical as the last release, we've been able to polish up a lot of the edges, and make Confluence even easier and more pleasant to use.

We're still gathering feedback on the UI changes, add your input here: [DISC:1.4 UI Discussion](http://confluence.example.com/)

Mail Archives

- You can now bulk-delete all mail within a space (mail deleted this way does not go to the trash, and cannot be recovered later!)
- Pagination on the mail archives is a bit more sane: it doesn't try to tell you about every single page of mail in the archives.
- The mbox importer detects if you're trying to import something that isn't an mbox file, making you much less likely to break anything if you upload the wrong file.

Nofollow Support

As part of the effort to combat spam on wikis and blogs (Confluence being both), Google [came up with some markup](http://example.com/) that will cause search-engines not to follow links. By removing the main benefit of wiki-spamming (increased search-engine PageRank), it's hoped that the noxious practice will stop being cost-effective, and eventually die out.

By default, all URLs inserted in a page (or in comments) will be given the `nofollow` tag. Inter-page links (i.e. [Documentation Home](http://example.com/)) or shortcut links (i.e. [CONF-2622](http://example.com/)) will not be tagged. If your wiki doesn't support public editing or commenting, or you just [disapprove of nofollow on principle](http://example.com/), the site administrator can turn the feature off in General Configuration.

V2Renderer

Over the last few releases of Confluence, it has become apparent that the engine we were using to convert wiki text to HTML was starting to cause us problems. There were a growing number of bugs that we simply couldn't fix, because the nature of the engine meant that fixing one bug would cause ten worse bugs to spring up in its place. After a few false starts, we can now introduce 'v2Renderer', which fixes quite a few of these problems already, and promises to make fixing the rest of them much easier:

<table>
<thead>
<tr>
<th>Atlassian JIRA (0 issues)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
</tr>
</tbody>
</table>

Because this is the first public release of v2Renderer, it's likely that there are some situations in which the markup of pages may change. We've been pretty careful, but users who have been making heavy use of undocumented (or accidental) features of the old markup may encounter situations in which the page displays differently to before. Please, please [report these problems to us](http://example.com/), so that we can fix the renderer for the final release, or perhaps provide you with a script to painlessly convert your pages to a markup that works.

⚠️ Renderer Bugs

If you file a bug about the v2Renderer, PLEASE make sure you put it in the Wiki/XHTML component: this makes finding all the relevant bugs so much easier for me. ~ [Charles Miller](http://example.com/)
 Macros

There is a new macro API that we will be rolling out for 1.4. However, there's a compatibility layer in place to make sure that most 1.3 macros will continue to function properly. Most macros written for Confluence 1.3 will continue to work in 1.4-DR4. Most of our macros are running without any changes at all, and many of the ones we did migrate were changed over in order to use the capabilities of the new engine to fix bugs.

We suggest that macro authors who are worried about compatibility test their macros with 1.4-DR4 and contact us as soon as possible to discuss how we can improve the compatibility layer before the final release, or help you migrate to the new API.

Known Bugs

The renaming of links when a page is moved or renamed is currently unreliable. This is a side-effect of the change in renderers, and will be fixed before the final version of 1.4 is released.
Release Notes 1.4-DR6

Confluence 1.4-DR6

Confluence 1.4-DR6 is the next development release in the cycle leading up to Confluence 1.4. In 1.4-DR6 we:

- introduce page-level view permissions,
- make Confluence radically more themeable,
- further improved the overall user interface and usability,
- add several interesting new plugin types,
- add file attachments to blog posts and user profile pages,
- let you customize Confluence logos at a space and global level, and
- help you keep track of all the email watches you might have set up in Confluence.

Phew! Got all that?

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

⚠️ Note for Oracle Users
Confluence 1.4-DR6 is currently not recommended for Oracle users, as it has not passed our test-suite against the Oracle database. This will (obviously) be fixed before we release Confluence 1.4.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

⚠️ If you upgrade to Confluence 1.4-DR6 you will need to rebuild your search indexes before search will function correctly. Look for “Rebuild Search Index” on the global Administration page.

Downloads
All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 1.4-DR6

See also: Issues Resolved for 1.4-DR6

Page Level Permissioning

A highly-requested feature, and the reason this DR took so long to get out, you can now hide pages from other users. The option for hiding pages can be found at the bottom of the page's "Edit" screen.

- You can hide a page so it is only visible to yourself, or only visible to members of groups you belong to.
- Once a page is hidden, all its child pages (and their children, and so on) are also hidden.
- A new space-level permission has been introduced to determine which users are permitted to hide pages.

Please note that it may be possible for users to learn the names of hidden pages, even if they can't see their content. So don't make a page called "We Hate Bob Smith" if Bob Smith has access to your wiki. Just make a page called "We hate..." and put Bob's name in the body. 😁

Improved Themes

While the overwhelming reaction to the User Interface changes we have made in the 1.4-DR series has been positive, it has sparked continuing discussions on the user mailing list about various aspects of the presentation of a Confluence site. From these discussions we have determined:

- Everyone wants something slightly different.
- Some people want something completely different.

In response, we've moved to vastly improve the level of themeability that Confluence offers. Almost all of the user interface elements have been pushed into customisable decorators, so if you don't like the tabs, you will be able to install a theme that removes them entirely! We're hoping to bring out some example themes with the 1.4 release that do just this, but for now you can read the documentation for the new decorators in the Theme Plugins documentation.

Plugin Improvements

To make Confluence more flexible, we're introducing more ways for advanced users to extend the system:

Uploadable Plugins

Confluence administrators can now upload new plugins through the administrative interface, and have them installed without restarting the server.
Search Extractor Plugins

Extractor plugins allow you to add custom information to Confluence's full-text index when Confluence content is saved or updated. The most obvious application for this plugin type is to allow you to index attachment formats that Confluence does not yet support, but more creative plugin authors might make use of this as a sneaky way to store and retrieve metadata about any content in the Confluence system. Documentation for Extractor plugins is coming soon.

XWork Plugins

XWork plugins allow you to add new XWork (Webwork 2) actions to Confluence. Advanced programmers can add entirely new behaviours to the application: take a look at the examples in XWork-WebWork Plugins, in which we've implemented a rudimentary "Google Suggest"-like live search entry box for Confluence:

Servlet Plugins

Servlet plugins allow you to deploy servlets into Confluence dynamically – perfect for integrating Confluence with some legacy application that is only available as a servlet. See Servlet Plugins for an example.

Attachments for Blog Posts and User Profiles

You can now upload attachments to blog posts and user profiles, both frequently requested features. Users have the option to nominate one picture attached to their profile as their "profile picture", but we haven't quite decided what to do with this information yet. 😊

There is a new global permission to determine if users can attach files to their profile. This permission is not assigned by default, so you will need to explicitly give it to users if you want to enable this feature.

Customizing Logos at a Space and Global Level

Space and global administrators may now easily configure the image displayed as the Confluence logo. This can be done for each space, or at a global level, without having to actually edit a single file.

Keeping track of your Email Watches

A Notifications link on your profile displays a list of all currently configured email watches you might have set up on various spaces or pages. You can now delete them in one, central, place or simply visit them.

Bug fixes

All bugs fixes made between Confluence 1.3.2 and Confluence 1.3.5 have been merged into the
developer release branch, fixing many annoying bugs including the crash on selecting "Next" in search results. See also: [Issues Resolved for 1.3.4](#), [Issues Resolved for 1.3.5](#).
## Issues Resolved for 1.4-DR6

This page last changed on Mar 31, 2005 by cmiller.

### Issues resolved for 1.4-DR5

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
</table>

### Issues resolved for 1.4-DR6

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
</table>
Release Notes 1.4-DR7

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4-DR7

Confluence 1.4-DR7 is the first release-candidate build of Confluence 1.4. In 1.4-DR7 we have resolved over 120 issues: mostly related to fixing bugs and polishing up the application for a stable release. We anticipate that DR7 will be the last major build before the stable 1.4 release.

DR7 is not a public release. It has been built and deployed onto http://confluence.atlassian.com as part of our internal quality-control process, but we have decided that the developer time required to make this a public beta release would be better directed towards continuing the push towards a final, stable 1.4 build.

Who should upgrade?

Since Confluence 1.4-DR7 is not publicly available, nobody should upgrade. The upgrade note below is just for completeness, so when we come to gather all these release notes together into a single note for 1.4, we don't miss the warning.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

When you first start Confluence 1.4-DR7 after upgrading, the server may take a few minutes to become fully functional. This is because Confluence is rearranging information in the database so that it can be looked up more efficiently. This will only be done the first time Confluence is started after upgrading.

New Features in Confluence 1.4-DR7

The changes made between DR6 and DR7 are mostly correctness and polish issues - major feature development on Confluence 1.4 has been completed. A few notable changes however are:

- The space content tree is now updated dynamically, leading to much faster page-load times and much less load on the server (for large spaces, this page was turning into a reliable way to DOS Confluence). However, you must have a modern web browser with Javascript enabled for the tree to work. (A non-Javascript fallback will be included in 1.4-final - CONF-3098)
- You can now customise the site's name alongside the logo
- The display and navigation of page history diffs has been improved significantly
- Webdav configuration has been reinstated to the same functionality as 1.3.5
• An "insert image" popup has been added to the page editing screen, that can select images from the page's attachments. There is also an Attachments tab in the "insert link" popup. Allowing file upload from these popups has not yet been implemented (CONF-3099)
• Many improvements and fixes to email notifications
• Marking your change as a "minor edit" will prevent email notifications being sent
• The new Component plugin module adds new beans to the Spring context
• You can now uninstall plugins via the web interface
• The default theme has various keyboard shortcuts (see the tabs on this page)
• The Include Page Macro can now include pages from other spaces
• For developers, macros can now decide whether or not they have a body
• Report showing all attachments to pages in a space (check it out!)
• Generally improved notifications including a much more usable "File Attached" notification
• "View wiki source" link, for all those source junkies...

And much much more.
Release Notes 1.4-RC2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4 Release Candidate 2

1.4-RC2 is now available for download here.

Confluence 1.4-RC2 is (barring some absolute disaster) the final public developer build for Confluence 1.4. It incorporates all the changes that were deployed in the private DR7 build, as well as around 60 new bug fixes and improvements.

Confluence 1.4-RC2 is being released to give Confluence customers the opportunity to test the upgrade path for their existing Confluence installation. By testing your migration with this pre-release, you can ensure that any problems you may experience will be fixed before the final 1.4 release, rather than having to rely on ad-hoc patches or wait for 1.4.1.

Who should upgrade?

While 1.4-RC2 is still pre-release software, and we do not recommend upgrading production Confluence sites until the release of 1.4-final, we would recommend any existing Confluence customer install this release on a test server, and try to import their existing Confluence data into it.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

When you first start Confluence 1.4-RC2 after upgrading, the server may take a few minutes to become fully functional. This is because Confluence is rearranging information in the database so that it can be looked up more efficiently. This will only be done the first time Confluence is started after upgrading.

New Features in Confluence 1.4-RC2

The changes made between DR7 and RC2 are mostly correctness and polish issues - major feature development on Confluence 1.4 has been completed. A few notable changes however are:

- You can upload attachments while editing a page – from the “Insert Link” popup
- The dynamic content-tree degrades gracefully on unsupported browsers
- Many bugs related to PDF export (and images included in PDF exports) have been fixed
- Ü characters in page titles no longer confuse the database
• Text properties set via the contentPropertyManager can now be longer than 255 characters, fixing related bugs in the {tasklist} and {excerpt} macros
• The {attachments} macro can display the list of attachments inline within a page
• New XML-RPC and SOAP plugin types allow you to deploy web services dynamically into Confluence
• A potential connection leak that has been causing problems for Oracle users has been fixed.

And much much more.
Release Notes 1.5-DR2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.5-DR2 is the first public development release leading up to Confluence 1.5. (Confluence 1.5-DR1 was an internal release only). Developer releases are a snapshot of our work in progress, allowing our customers to see what we’re up to, and provide feedback

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features. Developer releases are not suitable for running on production systems.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

- Macro Compatibility
  Incompatibilities exist that may cause Confluence not to start if custom macros are deployed. When upgrading to Confluence 1.5-DR2, be sure to remove any custom Macro plugins from your $confluencehome/plugins and WEB-INF/lib directories. These incompatibilities should be resolved before the final, stable release.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.4 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.3.x or earlier, be sure to read the upgrade instructions in the Confluence 1.4 release notes.

Downloads

All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 1.5-DR2

We've been pretty busy, but the four major new features you can find in 1.5-DR2 are:

- WYSIWYG Editing
- Labels for content
- A dynamic RSS Builder
- Change summaries
Consult JIRA for the full list of issues resolved for 1.5-DR2. 1.5-DR2 also incorporates all the bug-fixes that were made between TestTest.

**WYSIWYG Editing**

⚠️ Browser Compatibility
The Confluence WYSIWYG editor is currently only compatible with Internet Explorer 6 on Windows, plus Mozilla and Firefox across platforms. Javascript must be enabled in the browser for the editor to function. Support for Safari under Mac OS X is currently not available. To track Safari compatibility, please follow this JIRA issue: CONF-3864

The WYSIWYG editor allows for Confluence pages to be edited directly through an editing GUI embedded in the web browser, without having to remember Confluence's wiki markup. It almost goes without saying that this has been our number one most requested features, and we're glad we can finally offer it!

Global administrators can enable WYSIWYG editing in the General Configuration screen of the site's preferences. They can also choose whether users are presented with the WYSIWYG editor by default, or whether users default to the old wiki markup text-field.

If WYSIWYG markup is enabled, but an individual user does not like the default set by the administrator, they are free to override it via a "make this my default" link that will appear on whichever editor is currently not your default.

For the "feature mad" amongst us, here are some neat things you can do with the WYSIWYG editor:

- Full screen view - really useful for editing large pages. Click Cannot resolve external resource into attachment. in the menu bar.
- Quickly switch between WYSIWYG and Wiki markup without a page refresh
- Change the size of your editing window to suit your browser. Your size preference is remembered across sessions. To change it, drag the handle in the bottom right hand corner of the editor.
- Undo and redo!

**Labels for content**

Another highly requested feature was the ability to categorise content within Confluence beyond the rigid heirarchy allowed by spaces and parent-child relationships between pages. To this end we have introduced labels.
Labels are simple one-word 'tags' that can be added to any page or blog-post the user has permission to edit. Labels can be used to categorise content, bookmark it, flag it for attention, or anything else you can think of.

**A Tag By Any Other Name**

Picking a name for labels wasn't easy. Google's [GMail](https://mail.google.com) service calls them labels, while other collaborative categorisation systems such as [del.icio.us](http://del.icio.us) and [Flickr](https://flickr.com) call them tags. We decided that 'label' was a more natural description. For more information about the philosophy behind labels and tags, check out the [Folksonomy page on Wikipedia](https://en.wikipedia.org/wiki/Folksonomy).

Labels can be added to any page from the edit screen, as a space-separated list of words. If you are browsing the site with a modern, Javascript-enabled browser, you'll also be able to use the dynamic web UI to add labels while viewing the page through an interactive interface.

Once a page is labeled, then clicking on the label's name allows you to browse other pages with the same label, or view related labels that commonly occur on the same pages. You can also view the space's most popular labels from the space browser, to get an idea of the most popular topics within the space.

Many other Confluence features interact with labels: they can be searched for through the search interface, the new RSS builder can filter pages by their label, and we're looking forward to building label support into Confluence's packaged macros, and even the dashboard.

**Personal Labels**

If you prepend `my:` to a label (for example, `my:todo` or `my:favourite`, then the label is a personal label – only visible to you. Personal labels allow you to tag content for your own purposes. You can browse your personal labels from your user profile. Any user can add their personal labels to any page, even when they don't have editing permission.
Personal Label Privacy

It is possible in Confluence 1.5-DR2 to see other people's personal labels in various views through the system. This is a known issue and in the final release, personal labels will be private to the user. (sharing personal labels at the user's discretion is also planned for the future)

Favourites

Favourites are a special personal label: `my:favourite` or `my:favorite`. Whenever you see the Cannot resolve external resource into attachment. icon, it means you can label this content as being your favourite, and whenever you see the Cannot resolve external resource into attachment. icon, it means that the content is currently in your list of favourites. You can view your favourites from the Labels tab of your user profile, but they come in handy for...

Labels and the Dashboard

Labels can be used on the Dashboard to create different views of the Confluence site. The list of spaces now offers the following tabs:

- My shows you spaces that you have labelled as a Favourite. You can label any space you see on the dashboard by clicking its Cannot resolve external resource into attachment. icon.
- Team allows space admins to dynamically create lists of spaces on particular topics (see below. This tab only appears if there are teams that the user can see)
- New shows any spaces that have been created in the last week (This tab only appears if there are new spaces)
- All shows all the spaces in the Confluence site

A "team" is a group of spaces that share a common team label. Spaces can be labeled from the Advanced tab of Browse Space.

As of Confluence 1.5-DR2, anyone can add space-level labels. This will be fixed in the final release.

The Recent Changes list on the dashboard will show only content that has been changed in the spaces that are currently listed in the space view. So if you are currently viewing the 'My' tab, only updates in
your favourite spaces will be shown on the dashboard.

If you are logged in, Confluence will remember your most recently selected tab and team on the dashboard.

Dynamic RSS Builder

A third highly-requested feature. Confluence has always provided a brace of useful RSS feeds, but the problem is that for every feed we provided, users wanted half a dozen more. The obvious answer is to let users build RSS feeds based on their own chosen criteria. You can access the RSS builder from the Confluence dashboard.

Once in the builder, you can choose

- Which spaces to include in the feed
- Which types of content should be tracked
- Which labels, if any, you are interested in
- How many items to include in the feed
- Whether you want a single RSS entry per page or one for each time the page is edited
- Whether you want an RSS 2.0 or Atom 0.3 feed
- Whether Confluence should require authentication to view the feed

Once you have decided what you want, Confluence will give you a URL to paste into your RSS reader. These URLs can be shared with other Confluence users, although they will only ever be allowed to see content that they have permission to view. If you have asked to authenticate, Confluence will require HTTP Basic Authentication, which is supported by most RSS readers.

We've also taken the opportunity to improve the presentation of our RSS feeds - including a lot more information in each feed so you can follow your Confluence site entirely from your newsreader.

⚠ The Atom 1.0 draft has just been accepted as an IETF standard. Future versions of Confluence will be phasing out use of Atom 0.3 in favour of Atom 1.0

Change summaries

In a very late addition (added during our recent Fedex Day 2), Confluence now has change summaries. These allow you to add a comment to each edit that will appear in change histories, allowing you to keep a more complete record of how and why a particular page has been modified.
There is also a \{change-history\} macro to enable you to display a page's history within its body if you so desire.

### Other Things to Check Out

**Embed Flash and Movies**

You can now embed Flash content or movies (Quicktime or Windows Media) into a page as easily as you can an image: just attach the Flash or movie file to the page, then include it as you would include an image (!filename.mov!).

**Export Pages as Word Documents**

You can now export pages straight into Word from the Info tab. This is extremely useful for emailing around content to non-Confluence users, printing a document or just creating a backup in Word.

**Improved Search Interface**

Results returned from Confluence's search engine now have:

- Improved contextual results, showing the most important text around where your query was matched in the page
- Contextual results for any attachment: see where a search was matched even inside PDF, Word, PowerPoint or Excel documents!
- Search results for attachments give you more (and clearer) information about what the attachment is, and where it's from!search-result-fragments.png|thumbnail, align=center!

Improved Gallery Macro

The gallery macro has been spruced up, and now has a slideshow view:

![Confluence 1.5DR2 Screenshots](view as slideshow)
These release notes exported to Word (even on a Mac!) - great for printing too.

The new RSS builder lets you construct RSS feeds of exactly the content you want.

View page label interface showing autocomplete.

Improved search showing fragments from attachments, file sizes and types.

My personal labels! Only for me!

The new Dashboard space tabs, here showing the "jira" team tab and one favourite space.

A very basic (quite boring - sorry, it's late) example of change summaries.

Popular labels for a given space.
Alphabetically organised labels for a given space.

Also:

- Additions to the Confluence Remote API including:
  - Comment manipulation
  - Label manipulation
  - Attachment uploading and editing
  - Improved user- and permissions management
- Import and restore now have progress indicators
- Backup and restore use significantly less memory
- The embedded database has been upgraded to HSQL 1.8, which should be significantly more reliable
- Collapsed breadcrumbs now expand with a single mouse click

Known Bugs

Confluence 1.5-DR2 is a preview, not a full Confluence release, and as such there are a number of known bugs included in the release (at no extra cost!). Important bugs include:

- The left-navigation theme is currently broken
- The "make this my default editor" link does not always appear (try switching back and forth between views)
- The Info page may cause a Hibernate exception when its parent has page level permissions
- The space export may be unreliable, and does not properly back up labels.
- Incoming Trackback pings are not recognised
- Various WYSIWYG round-trip inconsistencies
table test

This page last changed on Oct 25, 2005 by vidya.
Release Notes 2.0-RC1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.0-RC1 is the first release candidate for Confluence 2.0 (previously known as Confluence 1.5). It resolves almost 150 issues since the 1.5-RC2 release.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features. Developer releases are not suitable for running on production systems.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.4 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.3.x or earlier, be sure to read the upgrade instructions in the Confluence 1.4 release notes.

⚠️ Important Notice

If, after you have upgraded Confluence, the "Recent Changes" list on the dashboard is empty, this may be because you need to re-build your site's search index. You can do this under Administration # Content Indexing # Rebuild Search Index

Downloads

All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 2.0-RC1

The 2.0-RC1 has largely concentrated on fixing bugs and polishing existing features. If you are upgrading from Confluence 1.4 or earlier, you should read the 1.5-DR2 Release Notes for a description of the major new features in Confluence 2.0.

Consult JIRA for the full list of issues resolved for 2.0-RC1.

Notable Features and Improvements

- You can now place markup such as bold or italics within a word if you are using the WYSIWYG editor
- The following characters are now permitted in page titles: ! & ( ) * ~ _ Pages can not, however, start with ~ or $.
- The most recent change comment for a page is now included in the page's searchable text
- rel="nofollow" added to links to printable versions of pages, to prevent them from being indexed by search engines
- The Recent Changes list on the dashboard now correctly reflects whether you are viewing all spaces, a team, or your favourite spaces
- Further improvements to the edit page UI including:
  - Improved label editing
  - Inline page previewing
  - Hiding of lesser-used functions such as moving a page or editing page permissions
- Attachment downloads now support HTTP conditional get
- Space exports now include that space's labels and page-level properties
- Support for labels in the SOAP and XML-RPC remote APIs has been completed
- Determining if a user exists via the remote API is now supported
Release Notes 2.0-RC2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.0-RC2 is the second release candidate for Confluence 2.0 (previously known as Confluence 1.5). It resolves almost 80 issues since the 1.5-RC1 release.

Who should upgrade?

Development releases are snapshots of the ongoing Confluence development process. We make them available for customers who are willing to risk an unpolished release in order to have early access to new features. Developer releases are not suitable for running on production systems.

If you want to be running the most stable and most reliable version of Confluence, you should stick with the official, numbered releases.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.4 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.3.x or earlier, be sure to read the upgrade instructions in the Confluence 1.4 release notes.

Important Notice
If, after you have upgraded Confluence, the "Recent Changes" list on the dashboard is empty, this may be because you need to re-build your site's search index. You can do this under Administration # Content Indexing # Rebuild Search Index

Important Notice 2
If, after you have upgraded Confluence and you find the page breadcrumbs do not show the page's parents correctly, log into your site as administrator, then visit http://yoursite.example.com/admin/permissions/rebuild_ancestor_table.action (substituting your own site's URL, obviously) to rebuild the ancestor table (this will be fixed for the final release).

Downloads

All development releases are available from Development Releases on the Atlassian website.

New Features in Confluence 2.0-RC2

The 2.0-RC2 has largely concentrated on fixing bugs and polishing existing features. If you are upgrading from Confluence 1.4 or earlier, you should read the 1.5-DR2 Release Notes for a description of the major new features in Confluence 2.0.
Consult JIRA for the [full list of issues resolved for 2.0-RC2](#).

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Assignee</th>
<th>Reporter</th>
<th>Pr</th>
<th>Status</th>
<th>Res</th>
<th>Created</th>
<th>Updated</th>
<th>Due</th>
</tr>
</thead>
</table>

**Atlassian JIRA** (0 issues)
Release Notes 2.3-DR1

This page last changed on Nov 13, 2006 by cmiller.

Confluence 2.3-DR1 is the first public development release leading up to Confluence 2.3. Development releases are a snapshot of our work in progress, allowing our customers to see what we're up to.

⚠️ Development Releases are Not Safe
Development releases are snapshots of the ongoing Confluence development process. As such:

- While we try to keep these releases stable, they have not undergone the same degree of testing as a full release.
- Features in development releases may be incomplete, or may change or be removed before the next full release.

⚠️ No Upgrade Path
Because Development releases represent work in progress, we can not provide a supported upgrade path between DRs, or from any DR to the eventual final release. Thus, any data you store in a Confluence DR may not be able to be migrated to a future Confluence release.

Who should upgrade?

This development release is being made available specifically for Confluence plugin developers. The changes to the Confluence API discussed below mean that many plugins will need to be updated to work with Confluence 2.3.

For all production use and testing of Confluence, please use the latest official release.

⚠️ The bundled Tangosol library with this development release has a license which expires on August 31, 2006. This release will not operate after that date.

This release should not be used for testing a clustered deployment; the clustering user interface is not yet complete.

Upgrade Procedure

Follow the normal upgrade instructions to upgrade from Confluence 2.2.x to this release. We strongly recommend that you backup your confluence-home directory and database before upgrading!

If you are upgrading from Confluence 2.1.x or earlier, be sure to read the upgrade instructions in the Confluence 2.2 release notes.

Downloads

All development releases are available from Development Releases on the Atlassian website.
New features in Confluence 2.3

In short, the new features of Confluence 2.3 are:

- Clustering support (not available in 2.3-DR1)
- People directory
- Bundled Plugin Repository Client

Architecture changes between Confluence 2.2 and 2.3-DR1

Summarised below are architectural changes that might be relevant to plugin developers. Please add a comment below if there is anything else that should be listed here.

We've kicked the Bucket!

Most of the functionality of Confluence's biggest internal library, bucket, has been split into three new components: atlassian-config, atlassian-spring and atlassian-event.

Where practical, the old interface is still available as deprecated classes and methods. However, some plugins will not compile unless modified to use the new package names.

Please refer to the source code or Javadoc for details on the new interface.

Tangosol Coherence replaces EhCache

Tangosol Coherence is now the caching library used by Confluence, both in clustered and non-clustered mode. To facilitate this, some of the caching APIs have been updated.

As mentioned above, the Tangosol license included with this release is specifically for testing purposes and will expire on August 31, 2006.

Bandana configuration stored in database

The Bandana Confluence configuration files previously stored in confluence-home are now stored in the database. An upgrade from a previous version will automatically move existing configuration settings to the database.
Release Notes 2.3-DR2

This page last changed on Nov 13, 2006 by cmiller.

Confluence 2.3-DR2 is the second public development release leading up to Confluence 2.3. Development releases are a snapshot of our work in progress, allowing our customers to see what we're up to.

Who should upgrade?

⚠️ Development Releases are Not Safe
Development releases are snapshots of the ongoing Confluence development process. As such:

- While we try to keep these releases stable, they have not undergone the same degree of testing as a full release.
- Features in development releases may be incomplete, or may change or be removed before the next full release.

⚠️ No Upgrade Path
Because Development releases represent work in progress, we can not provide a supported upgrade path between DRs, or from any DR to the eventual final release. Thus, any data you store in a Confluence DR may not be able to be migrated to a future Confluence release.

This development release is being made available specifically for Confluence plugin developers. The changes to the Confluence API discussed below mean that many plugins will need to be updated to work with Confluence 2.3.

For all production use and testing of Confluence, please use the latest official release.

This release should not be used for testing a clustered deployment; the clustering user interface is not yet complete.

Upgrade Procedure

Follow the normal upgrade instructions to upgrade from Confluence 2.2.x to this release. We strongly recommend that you backup your confluence-home directory and database before upgrading!

If you are upgrading from Confluence 2.1.x or earlier, be sure to read the upgrade instructions in the Confluence 2.2 release notes.

Downloads

All development releases are available from Development Releases on the Atlassian website.

Things to look out for
• The Tangosol Coherence jars included in this DR are now fully licensed.
• The API for retrieving historical versions of content has changed.

Architecture changes between Confluence 2.3-DR1 and 2.3-DR2

Content history API changed

The `getPreviousVersions` method of `ContentEntityObject` has been removed, because it was insanely inefficient as soon as a piece of content started having lots of versions. It has been replaced with the following methods on the `ContentEntityManager`:

```java
ContentEntityObject getPreviousVersion(ContentEntityObject ceo);
ContentEntityObject getNextVersion(ContentEntityObject ceo);
ContentEntityObject getOtherVersion(ContentEntityObject ceo, int version);
/**
 * Get a VersionHistorySummary for all previous versions of a ContentEntityObject, starting
 * with the current
 * @param ceo the entity object to return the version history of
 * @return the full version history of that object, as VersionHistorySummary objects.
 */
List getVersionHistorySummaries(ContentEntityObject ceo);
```

The `VersionHistorySummary` class defines a limited set of Content data that is relevant to viewing version histories.
Release Notes

This page last changed on Apr 26, 2007 by dave@atlassian.com.

The current version of Confluence is 2.5. Release notes for this version can be found here. Links to older release notes are at the end of the page.

Confluence 2.5

Confluence 2.5 is the tenth release of Confluence. It introduces more flexible page restrictions, and also includes a number of minor fixes.

Read the full release notes.

Older Release Notes:

<table>
<thead>
<tr>
<th>Confluence 2.5</th>
<th>Confluence 1.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Release Notes 2.5</td>
<td>• Release Notes 1.4.4</td>
</tr>
<tr>
<td>• Release Notes 2.5</td>
<td>• Release Notes 1.4.3</td>
</tr>
<tr>
<td>• Release Notes 2.4.5</td>
<td>• Release Notes 1.4.2</td>
</tr>
<tr>
<td>• Release Notes 2.4.4</td>
<td>• Release Notes 1.4.1</td>
</tr>
<tr>
<td>• Release Notes 2.4.3</td>
<td>• Release Notes 1.4</td>
</tr>
<tr>
<td>• Release Notes 2.4.2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confluence 2.4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Release Notes 2.4.5</td>
<td>• Release Notes 1.3.6</td>
</tr>
<tr>
<td>• Release Notes 2.4.4</td>
<td>• Release Notes 1.3.5</td>
</tr>
<tr>
<td>• Release Notes 2.4.3</td>
<td>• Release Notes 1.3.4</td>
</tr>
<tr>
<td>• Release Notes 2.4.2</td>
<td>• Release Notes 1.3.2</td>
</tr>
<tr>
<td>• Release Notes 2.4.1</td>
<td>• Release Notes 1.3.1</td>
</tr>
<tr>
<td>• Release Notes 2.3</td>
<td>• Release Notes 1.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confluence 2.3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Release Notes 2.3.3</td>
<td>• Release Notes 1.2.3</td>
</tr>
<tr>
<td>• Release Notes 2.3.2</td>
<td>• Release Notes 1.2.2</td>
</tr>
<tr>
<td>• Release Notes 2.3.1</td>
<td>• Release Notes 1.2.1</td>
</tr>
<tr>
<td>• Release Notes 2.3</td>
<td>• Release Notes 1.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confluence 2.2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Release Notes 2.2.10</td>
<td>• Release Notes 1.1.2</td>
</tr>
<tr>
<td>• Release Notes 2.2.9</td>
<td>• Release Notes 1.1.1</td>
</tr>
<tr>
<td>• Release Notes 2.2.8</td>
<td>• Release Notes 1.1</td>
</tr>
<tr>
<td>• Release Notes 2.2.7</td>
<td></td>
</tr>
<tr>
<td>• Release Notes 2.2.6a</td>
<td></td>
</tr>
<tr>
<td>• Release Notes 2.2.5</td>
<td></td>
</tr>
<tr>
<td>• Release Notes 2.2.4</td>
<td></td>
</tr>
<tr>
<td>• Release Notes 2.2.3</td>
<td></td>
</tr>
<tr>
<td>• Release Notes 2.2.2</td>
<td></td>
</tr>
<tr>
<td>Confluence 2.1</td>
<td>Confluence 1.0</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>- Release Notes 2.1.1</td>
<td>- Release Notes 1.0.3</td>
</tr>
<tr>
<td>- Release Notes 2.2</td>
<td>- Release Notes 1.0.1</td>
</tr>
<tr>
<td></td>
<td>- Release Notes 1.0</td>
</tr>
<tr>
<td>Confluence 2.0</td>
<td></td>
</tr>
<tr>
<td>- Release Notes 2.0.3</td>
<td></td>
</tr>
<tr>
<td>- Release Notes 2.0.2</td>
<td></td>
</tr>
<tr>
<td>- Release Notes 2.0.1</td>
<td></td>
</tr>
<tr>
<td>- Release Notes 2.0</td>
<td></td>
</tr>
</tbody>
</table>

Document generated by Confluence on May 01, 2007 00:44
Release Notes 1.0

Ring the bells. Break out the champagne. Paint the town red. Dance naked in the streets. Or at least that's what we'll be up to tonight, because we're finally releasing Confluence 1.0!

Confluence 1.0 represents the hard work and dedication of quite a few people. Obviously there's the development team: Ara, Armond, Charles, Dave, Mike and Ross, but there's also the JIRA team and the rest of the guys at Altlassian who have offered support, advice, and loud music. A huge thanks also goes out to everyone involved in the beta-testing program. Your real-world use of Confluence gave us invaluable suggestions and bug-reports, and we apologise for the times we've messed up your databases on the way.

We're pretty proud of all the cool stuff we've managed to fit into Confluence already, and we're looking forward to making it even better in forthcoming versions (Remember, a license entitles you to a year of upgrades).

The only sad moment for the day is that for the 1.0 release, we had to lose emoticons. The regular expression responsible for turning 😊 into a smiley-face was causing pages to take ten seconds to render. Commenting out the filter lowers the rendering time of even highly complex pages to a few hundred milliseconds. We promise, the smileys will return in a future version, faster and stronger than ever! Or if you don't mind the cost, you can re-enable them by uncommenting the emoticonFilter line in wikiSubsystemContext.xml

Users of late Release Candidate builds will notice a substantial improvement in performance as a result.

Contents

1. New Features
2. Notable Bug-fixes since RC6
3. Outstanding Issues
4. Upgrading from RC6
5. Notable Features from Previous Releases

See also: Issues Resolved for 1.0

New Features

For once, we managed to resist the urge to add any new features this week, since we were busy cleaning everything up for today's release.

Notable Bug-fixes
We have verified that you can now use Confluence's internal datasources with MySQL (for users of RC5 or earlier, see the upgrade section below for information on how to change to the production-ready datasources).

- Fixed the database transaction problems that were causing problems with user/group management, page renaming and commenting
- [~user] links no longer place the context path in the link twice
- Fixed a rendering regression that caused text to be spaced incorrectly within panels
- The 404 error page no longer causes a NullPointerException
- The recent comments RSS feed returns a valid RSS version number
- The 'diff' link now works in HTML edit notification emails when Confluence is installed in a non-root context.

Outstanding Issues

- The Emoticon filter is currently shipped disabled, because it was causing page-load times to go through the roof CONF-963
- You cannot complete the Confluence setup process if you have external user-management enabled. Set up Confluence before setting up external user-management. CONF-950
- It is possible to make a "create page" link to a page with invalid characters in its title (which will thus fail to be created) CONF-810
- If you are using PostgreSQL, please make sure you use the JDBC3 version of the Postgres JDBC drivers. Some users have encountered problems with the JDBC2 drivers.
- Links to images that are page-attachments are broken in email notifications CONF-878
- There continue to be problems with high-bit characters in pages when Confluence is deployed on Resin CONF-569

Upgrading from RC6

We haven't made any changes to the database schema, so you should just be able to install the new version of Confluence, point it at your existing confluenceHome directory, and carry on as before. I would, however, recommend making a backup before you upgrade, just in case.

If you:

1. have not gone through the Confluence database setup steps since Confluence 1.0RC5
2. are running the embedded HSQL database, or are connecting to a database directly (not through an Application Server Datasource)

Then you will need to add a few connection pooling properties to confluence.cfg.xml file in your confluenceHome directory. Edit the file, and insert the following somewhere in the <Properties> section:

If you do not fall into the category described above, or if you find these lines are already in the file, you do not need to do this!

```xml
<property name="hibernate.c3p0.max_statements"><!CDATA[0]]></property>
<property name="hibernate.c3p0.min_size"><!CDATA[0]]></property>
<property name="hibernate.c3p0.timeout"><!CDATA[30]]></property>
<property name="hibernate.c3p0.max_size"><!CDATA[4]]></property>
```

This will enable c3p0 connection-pooling, which is far more reliable than the default pooling that we were
using previously.

Notable Features from Previous Releases

Here's a quick retrospective of some of the cool things we have added to Confluence during the beta- and RC- releases. It is by no means comprehensive, but you can follow the links to the original release notes for an idea of just how busy we've been in recent months.

**Confluence 1.0a2** (November 6, 2003)

- Shortcut links allow you to create special URL Shortcuts to point to existing web services: i.e. [CONF-195](#)
- Undefined and Orphaned Pages reports
- Revert page to previous version

**Confluence 1.0a3** (December 5, 2003)

- Comments for pages
- Links in exported PDFs are internal links if the destination page has also been exported, external links otherwise
- Personal History popup keeps track of the pages you have visited
- Page Information screen lists all the incoming and outgoing links on a page
- Printable version of every page

**Confluence 1.0b1** (December 19, 2003)

- Pages that have changed since your last login are highlighted in the 'recent changes' list
- Pages can be organised in parent-child hierarchies, allowing for clearer organisation of pages within a space
- Page renaming refactors links to the page, wherever they may appear in the site
- Search works across all content in the site, including comments, space descriptions and user information
- A new permission was added for creating comments
- `{color}` macro for coloured text
- Parameters allowed on image links

**Confluence 1.0b3** (January 19, 2004)

- Beta2 was released a few days earlier, but we'd prefer not to talk about it.
- Searching works across PDF, HTML, XML and Word attachments
- The colour-scheme and page decorators can be configured across the site
- The site homepage is configurable
- Emoticons 😊
- New macros: `{include}`, `{include-html}`, `{rss}`, `{search}`, `{jiraissues}`, `{junitreport}`
- User profiles can be longer than 255 characters
- Much better handling of anonymous contributions

**Confluence 1.0b4** (January 26, 2004)
- **FatCow**, our acceptance-testing framework was introduced to the world
- Confluence now supports chronologically organised content: blog posts
- You can now move pages between spaces, and have their links updated accordingly
- en – and em — dashes are supported
- You can link directly to attachments
- New macros: `{blog-posts}`, `{anchor}`, and an improved `{rss}` macro

**Confluence 1.0rc1** (February 6, 2004)

- XML-RPC and SOAP APIs allow you to programmatically interact with Confluence
- Trackback allows Confluence to notify other sites of links, and be notified by them
- User notifications on page and space editing were overhauled
- Look and Feel configuration was enabled individually for each space
- Linking to space descriptions and user profile pages directly is now possible: DISC; Mike Cannon-Brookes
- History popup tracks more than just pages

**Confluence 1.0rc2** (February 13, 2004)

- Improvements to the remote API
- RSS and HTML macros now use HTTP proxies if configured to

**Confluence 1.0rc5** (February 20, 2004)

- RC3, RC4 and RC5 were released within days of each other, in a flurry of mad bug-fixing
- Page templates can now be filled in in-line
- If a page is moved or renamed and you go to the URL it used to inhabit, Confluence will try to direct you to its new location
- Exported PDFs now incorporate the site's stylesheet

**Confluence 1.0rc6** (March 5, 2004)

- You can prevent people signing up, for private Confluence installations
- You can configure Confluence to mask user email addresses
- User management can now be shared with JIRA
- Page templates can now contain drop-down menus and text areas
- New macro: `{html}`
<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>CONF-797</td>
<td>Provide documentation about shared user database (Jira+Confluence)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-219</td>
<td>Import from other wiki's</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-1060</td>
<td>PDF Indexing</td>
<td>Closed</td>
<td>INVALID</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-764</td>
<td>Create jspwiki importer</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-936</td>
<td>Page save and preview is slow for large pages with lots of markup</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-944</td>
<td>Linking Images (thumbnailing / popups)</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-916</td>
<td>Joined Numbered Bullet Points</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-551</td>
<td>export page is unusable for large spaces</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-876</td>
<td>Possibility to hide email addresses</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-913</td>
<td>Blog post results in the search page don't have edit and remove icons next to them</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-899</td>
<td>Image attributes don't work when embedded in links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-943</td>
<td>Can not delete users under Postgres</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-833</td>
<td>rss feed cannot read a confluence feed</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-941</td>
<td>Access Administration.action results in a Page Not Found</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-883</td>
<td>Security Management vs Group confluence-users</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>✅</td>
<td>CONF-937</td>
<td>User to group assignments don't</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
</tbody>
</table>
CONF-806  stick  Email report shows incorrect # of comments on a topic  Closed  FIXED
CONF-904  java.lang.RuntimeException  Caught an Ognl exception while getting property space  Closed  CANNOT REPRODUCE
CONF-933  Delegating user management to JIRA causes Exception  Closed  FIXED
CONF-919  commentrss.action  returning rss 0 92  Closed  FIXED
CONF-1008  Cannot add page comments  Closed  FIXED
CONF-1057  Daily backup doesn't seem to do anything  Closed  INVALID
CONF-931  apostrophe followed by closing parenthesis rendered as wink emoticon  Closed  FIXED
CONF-918  Sticky "Add Comment" Textfield  Closed  WON'T FIX
CONF-917  Tables not getting formatted correctly within the lists!  Closed  FIXED
CONF-932  exporting table to PDF fails  Closed  FIXED
CONF-921  Regression: Spacing within a panel.  Closed  FIXED
CONF-924  [~username] links are wrong if Confluence is run through forwarding  Closed  DUPLICATE
CONF-896  Batch update row count wrong: 0  Closed  CANNOT REPRODUCE
CONF-1161  Must remove correct email adress from profile to prevent spam  Closed  DUPLICATE
CONF-897  [~profile] links place context name twice in link  Closed  FIXED
CONF-643  soap wsdl is broken ( and you need to add a remote api component )  Closed  FIXED
CONF-946  NPE trying to rename the space home page  Closed  FIXED
CONF-940  Page edited email does not use full URL for 'View Changes'  Closed  FIXED
<table>
<thead>
<tr>
<th>Issue ID</th>
<th>Description</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-923</td>
<td><a href="#">link can't assign users to groups</a></td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-920</td>
<td>Paragrap spacing issues, Panel and after headings</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 1.0.1

This page last changed on Sep 14, 2006 by david.soul@atlassian.com.

Confluence 1.0.1

Over the course of the last month of supporting Confluence 1.0, there are a number of patches that we have been distributing to fix specific problems our users have encountered. Confluence 1.0.1 is a maintenance release into which all these patches have been integrated.

Who Should Upgrade?

All the issues that were resolved for this release are listed below. We have not snuck in any other changes: what you see here in the release notes is precisely what you will get. If you find something on the list that directly affects you, or that you feel justifies the effort of an upgrade, then do so. Otherwise, feel free to stick with 1.0.

Upgrade Procedure

If You Have Customised osuser.xml

If you have customised Confluence's user-management, for example to integrate it with LDAP or JIRA, you will have to integrate your changes to account for the caching OSUser providers we introduced in Confluence 1.0.1. See this document for more details: Confluence Caching OSUser Provider. Updated instructions for integrating with JIRA user management are here: Delegate user management to use JIRA logins

Otherwise

To avoid the possibility of data-loss, you should back up your ConfluenceHome directory and your database before upgrading, and perform a full backup from within the application.

Changes in 1.0.1

See also Issues Resolved for 1.0.1

Direct Attachment Links

In response to a loud demand from users, links to attachments using the [^attachment.jpg] syntax will download the attachment file directly, instead of linking to an anchor in the destination page.

Sybase ASE Support

Confluence 1.0.1 resolves the following problems that were causing Confluence not to work with Sybase ASE 12.5.1:
ORDER-BY mappings failing on Sybase (CONF-1021)
Can't add users under Sybase (CONF-1022)
Weird datatype error under Sybase (CONF-1024)
Sybase doesn't like complicated distinct selects (404 page fails) (CONF-1025)
Backup import fails under Sybase (CONF-1063)

These bug-fixes may also improve Confluence's compatibility with other untested databases. They will not, however, have any effect on Confluence's operation against PostgreSQL, MySQL or HSQL.

Microsoft SQL Server Dialect in Setup Page

The Microsoft SQL Server database dialect was missing from the database setup page. It has now been added to the list. Confluence has not yet been tested on Microsoft SQL Server, and the usefulness of this option is not yet guaranteed. However, since the Sybase issues above are now resolved and SQL Server belongs to the same family as Sybase, it would be well worth a try.

JIRA User Provider Caching

Users who were linking their user management to JIRA's using the supplied provider were experiencing significant performance problems as a result. 1.0.1 introduces caching to the user provider, which should speed up these installations significantly.

Global Reports Visibility

Under Confluence 1.0, the global "undefined pages" and "orphaned pages" reports did not properly filter out pages that the user could not see. The user could not see the content of any page they did not have access to, but they could learn of the existence of (and names of) pages and spaces they were not permitted to see. This bug is fixed in 1.0.1

Locale-Independent Dates in Backup/Restore

In Confluence 1.0, dates were written into backup files using a localised representation of the month. As such, if you exported Confluence data from a server in one locale it might not import successfully into a server with a different Locale setting. Confluence 1.0.1 still recognises the 1.0 export format, but its own exports will write out dates in a locale-independent format.

As noted above, this means that data exported from Confluence 1.0.1 can not be imported successfully into Confluence 1.0.

Fix Browser Crash on Viewing Some Templates

Previously, if you created a template containing no variables, then anyone attempting to preview or use that template would have their browser hang in an infinite Javascript loop. Confluence 1.0.1 fixes this bug.

Typo Fixed on User Group Editing Page

A single-character change from "privilage" to "privilege".
# Issues Resolved for 1.0.1

This page last changed on Apr 06, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-1007</td>
<td>Ability to specify attachment link behavior</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1065</td>
<td>Add Caching to JIRA user providers</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1025</td>
<td>Sybase doesn't like complicated distinct selects</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1020</td>
<td>Dates are localised on backup, lost on restore</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1021</td>
<td>ORDER-BY mappings failing on Sybase</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1043</td>
<td>Missing Dialect Class Name for Microsoft Sql Server</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1063</td>
<td>Backup import fails under Sybase</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1003</td>
<td>typo on edit user groups</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1028</td>
<td>JavaScript runs bananas when viewing Templates</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-1114</td>
<td>The emoticons don't seem to work....</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-1038</td>
<td>Template with no form fields can't be previewed</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1070</td>
<td>Users without permissions can see undefined pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1005</td>
<td>Script causing browser to hang</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-1055</td>
<td>&quot;Global reports&quot; visibility bug</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1022</td>
<td>Can't add a user under Sybase</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1024</td>
<td>Weird datatype error under Sybase</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 1.0.3

This page last changed on Jul 20, 2004 by mike@atlassian.com.

Confluence 1.0.3

Confluence 1.0.3 is another maintenance release, hopefully the last maintenance release we will need on the 1.0 branch before moving full steam ahead towards version 1.1. It fixes some bugs regarding the remote SOAP/XML-RPC API, the display of the 404 error page under Postgresql, and the display of the site's stylesheet under certain versions of Internet Explorer.

The Confluence development team are now working hard on 1.1, which will contain significant improvements and new features. Remember, a Confluence license entitles you to a year of upgrades, so if you buy 1.0.3 today, you'll be able to upgrade to 1.1 for no extra charge when the time comes.

See also: Issues Resolved for 1.0.3

Who should upgrade?

Confluence users should be running at least Confluence 1.0.2. Versions prior to 1.0.2 contain a bug that will cause their licenses to expire a month after the build date listed in the page footer, regardless of the true expiry date of the license. Versions 1.0.2 and later do not contain this bug. (Note: In the absence of this bug, only trial licenses ever expire. Purchased licenses for Confluence do not expire.)

All the issues that were resolved for this release are listed below. We have not snuck in any other changes: what you see here in the release notes is precisely what you will get. If you find something on the list that directly affects you, or that you feel justifies the effort of an upgrade, then do so. Otherwise, feel free to stick with 1.0.2

Upgrade Procedure

Confluence 1.0.3 contains no database or configuration file changes, so you should just be able to unpack it on top of your existing Confluence installation:

1. Shut down the Confluence server
2. Back up confluence/WEB-INF/classes/confluence-init.properties, and if you have customised it, confluence/WEB-INF/classes/osuser.xml
3. Unpack Confluence 1.0.3 in the same location as your existing Confluence installation
4. Restore the two files you backed up in step 1 to the 1.0.3 installation.
5. Start Confluence

To avoid the possibility of data-loss, you should back up your ConfluenceHome directory and your database before upgrading, and perform a full backup from within the application.

Changes in 1.0.3
Global RSS Feed Fixes

The global RSS feeds found on the Dashboard page were not being generated correctly: an extra ')' was being added to the end of links. This has been fixed in 1.0.3

Page Not Found Fix for Postgresql

Users running Confluence against a Postgresql database were encountering a system error whenever someone attempted to visit a page that did not exist. This has been fixed.

Remote API Fixes

Several outstanding issues with the remote API that were holding back the [TimTam!] client have been fixed. In addition a getVersion method has been added to allow client authors to determine which version of Confluence a server is running, and adjust their features to match. The full description of Confluence's remote API is here: Remote API Specification

- The WSDL file now respects the server's configured base URL, so SOAP can be used on servers that are behind a proxy.
- getPermissions now recognises when a user is in the confluence-administrators super-user group.
- storePage handles re-parenting a page correctly
- storePage will now allow a page to be renamed (all links to the page are automatically redirected)

Other Fixes

- You can now comment on a blog post when the title contains non-US-ASCII characters
- The bug that was causing some versions of Internet Explorer 6 to not display the site's stylesheet has been fixed
# Issues Resolved for 1.0.3

This page last changed on Apr 30, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-1123</td>
<td>Add getVersion to remote api</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1100</td>
<td>404 page dies under Postgresql</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1101</td>
<td>Global RSS feed links have extra )</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1091</td>
<td>storePage does not handle re-parenting correctly</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-974</td>
<td>Store Page fails when page is renamed.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1140</td>
<td>Remote API permissions not respecting &quot;superuser&quot; group</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1068</td>
<td>Can not comment on blog posts which title contain special characters</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1088</td>
<td>SOAP Service broken on confluence.at</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1186</td>
<td>Some versions of IE6 can't see the stylesheet</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1166</td>
<td>SOAP interface not using Base URL</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1083</td>
<td>Cannot Delete User from Group confluence-administrators</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td></td>
<td>CONF-1200</td>
<td>Permissions check for commenting fails</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-982</td>
<td>Page not found blows up with oracle dialect</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1118</td>
<td>Some SQL Exception raise randomly</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
</tbody>
</table>
Release Notes 1.0a2

This page last changed on Jan 18, 2004 by cmiller.

Confluence 1.0a2

Confluence 1.0a2 was released November 6, 2003.

New Features

- Shortcut links ([CONF-195](#) & [CONF-247](#)) - shortcut links enable you to easily make links to any 'web service' from within the syntax of a Confluence page. Simply specify your shortcut and the URL to link to (eg "google", "http://www.google.com/search?q=$1") to add your own links. You could use this to link directly to JIRA installations, Google, intranets, searches or anything that has a 'URI' based interface.
- Revert page to a previous version ([CONF-32](#)) - revert to a previous version of any given page from the list of previous versions.
- Forgot password function ([CONF-88](#)) - retrieve your password if you happen to have forgotten it
- Report: undefined pages ([CONF-197](#)) - list of all pages which are linked to from other pages, but not defined.
- Report: orphaned pages ([CONF-198](#)) - shows all the pages which are never linked to (ie have content but no way to get to them).
- Interstitial help page after creating a space ([CONF-251](#))
- 'Notify me', and HTML/text email preferences, with HTML email content
- Links to non-exported pages are now maintained in exported PDFs (the links point back to the online Confluence installation)
- Custom Radeox macros can now be used within Confluence - this enables you to write your own macros to produce custom content
- XML import/export of a single space ([CONF-199](#)) - useful for porting spaces between installations
- XML import/export of a single page ([CONF-200](#)) - useful for creating pages automatically, or sync'ing pages between installations.
- Many other minor fixes, improvements and performance tweaks
Release Notes 1.0a3

This page last changed on Jan 18, 2004 by cmiller.

Confluence 1.0a3

Confluence 1.0a3 was released December 5 2003

New Features

- Completely rearchitected around the spring framework
- Page comments (CONF-235) - users can now attach comments to a page.
- Email notification for new comments.
- Supports non-ASCII characters in page names (CONF-297)
- Improved handling of internal and external links in exported PDFs
- Editing popup to help with inserting links (internal and external) into pages (CONF-129)
- Personal history (CONF-196) - a popup window containing your recently visited pages.
- Page information screen (CONF-270) lists all the incoming and outgoing links for a page, and all attachments
- User profile UI has been enhanced (CONF-172)
- Dashboard and Space summary pages have had a big UI overhaul
- Brief help on Wiki notation now available on create and edit pages. (CONF-295)
- Improved available help on various pages.
- Enhanced mail-server administration.
- All pages have a printable version accessible from the icon at the top-right of the page (CONF-338)
- HTML and text email notifications have been greatly improved and are now much more useful. Links in HTML emails work seamlessly with online Confluence version.
- Many other minor fixes, improvements and performance tweaks
Release Notes 1.0b1

This page last changed on Jan 18, 2004 by cmiller.

Confluence 1.0b1

Confluence 1.0b1 was released 19th December 2003.

That's right - we finally got it out the door! cheers from around the room erupt as developers across in the Atlassian offices crack open a beer.

New Features

- It's soooo much faster as we've implemented caching at multiple levels - trust me, it now flies in development. Here's hoping it flies for you too. (For those with a development bent, turn on profiling via the URL to see a beautiful profiling stack trace on stdout)
- The last login date is now tracked, pages and spaces changed since your last login are highlighted in green (as these are presumably pages you want to view), you can see a diff of the currently viewed page against the date you last logged in and there are various related reports of spaces/pages changed since your last login.
- Parent/child page hierarchies have been implemented. You can specify the parent for any pages and the ancestry is reflected in the breadcrumbs list. The full hierarchy is shown (including the current page's position) on the Page Information screen, and there is a related macro to show the children in various different types of trees (see the Notation Guide for details)
- Search has been completely overhauled - search now works across pages, comments and space descriptions and the results now display descriptions with highlighted search terms (this is really cool!)
- Page renaming and link refactoring now works across comments, space descriptions and pages - neat!
- The Notation Guide has been significantly improved with more useful examples, a list of the available macros and a tabbed interface. Also the edit/create pages now have a 'quick notation guide' to the most commonly used operations
- There is a new 'Create Comment' permission - so that you can make spaces which are publicly viewable/commentable, but not editable.
- The UI of the 'create link' and 'external link' links within a rendered page have been improved with subtle icons
- Page comments now have a sexy icon of their own, and can be shown/hidden at will. You can also permalink to any given comment and comments are fully indexed.
- Undefined and orphaned pages reports have been tightened significantly so that they now report truly undefined/orphaned pages
- You can create a list of URLs ignored from external referrers - this is useful where your server is known by multiple IP / domain name combinations, or you want to ignore all internal referrers (Admin / General configuration)
- `{color}` macro to colour blocks of text
- Logging in to Confluence now takes you to your intended destination, not the Dashboard
- There is an option to choose whether the default link for a space goes to the space homepage or the space summary (people internally and externally seem to be divided about which it should go to - so you can choose for yourselves)
- You can now edit and add SMTP servers through the web interface
- The administration interface has been completely overhauled and tightened
- Added a Mail Queue administration page
• Added a View System Information page
• Added a pretty error page, and the ability to submit but reports (including exports) directly to us
• The permissions viewing and editing pages have been greatly simplified and improved across the application
• Confluence now has a licensing system, so you will need a license key to evaluate (these can be generated online as with JIRA).
• Image embedding can now include parameters (such as height, width, alignment etc) - see the Notation Guide for details.
• https:// links are now treated just like ftp:// and http:// external links
• Various rendering bugs have been fixed.
• Many other minor fixes, improvements and performance tweaks
Release Notes 1.0b2

This page last changed on Jan 18, 2004 by cmiller.

I see dead pages!

Confluence 1.0b2 was released on Friday January 16, 2004 with a major bug in its search indexing that caused it to index pages that no longer existed. It was replaced by 1.0b3 the next Monday.

See also: Release Notes 1.0b3 and Issues Resolved for 1.0b3
Release Notes 1.0b3

This page last changed on Jan 19, 2004 by mike@atlassian.com.

Confluence 1.0b3

1.0b3 was released on January 19th, 2004. It replaces the short-lived 1.0b2 release, after 1.0b2 managed to escape into the wild with a bug in the search index that made it see pages that weren't there any more. Since 1.0b2 only existed for one weekend, the release-notes for both versions have been folded into a single document.

This is a massive release. Over 90 issues (new features, improvements and bug-fixes) were resolved between beta-1 and beta-3, with even more improvements made below the issue-tracking radar.

Contents

1. New Features
2. New Macros
3. Improvements
4. Notable Bug-fixes
5. Outstanding Issues

See also: Issues Resolved for 1.0b3

New Features

Search Attachments

Attachments are now indexed for searching just like any other content in the Confluence space. Alongside text, HTML and XML attachments, Confluence will also index Word, RTF and PDF documents.

Configurable Look and Feel

The site administrators can now customise the colour-scheme of the Confluence installation. More advanced configuration can be done by editing the site's templates through a web interface, changing the appearance of the whole site. See Customising Confluence for examples and information.

Site Homepage

The site administrator can now set the site homepage for users who have not logged in: choosing from either the dashboard (the default behaviour in beta1 and before), or any of the Space homepages within the site.

Users who have logged in can choose their own site homepage in their user profile.
RSS Feed for New Comments

You can subscribe to all new comments added to a space using an RSS newsreader. (The link to the RSS feed can be found on the Space Summary page)

Emoticons

New Macros

- `{include}` – include the contents of one Confluence page within another (see Include Page Macro for more details)
- `{include-html}` – include the contents of an HTML document within a Confluence page (turned off by default. See Enabling the html-include Macro for more information)
- `{rss}` – include an external RSS feed (see RSS Feed Macro for details and example)
- `{search}` – include the results of a Confluence search (see Search Macro for details and example)
- `{jiraissues}` – integrate Jira issue reports with your Confluence site (see JIRA Issues Macro for details and example)
- `{junitreport}` – include JUnit test result data (see JUnit Report Macro for details and example)

Improvements

- Users' login names and full names are indexed for searching
- Users' profiles may now be longer than 255 characters, and are also indexed for searching
- Usernames are no longer case-sensitive
- Anonymous contributions are clearly labeled
- Users are warned if they are editing or commenting without having logged in
- Notification emails now link to the appropriate 'diff' page, so you can quickly see what has changed
- Page diffs now highlight precisely what changed within each line: very useful when just one or two words change in a long paragraph
- Lists of child pages and links are sorted alphabetically
- Long lists of pages or search results are paginated
- Shortcut links can be given different link text in the same way as other links (e.g. [Search for Confluence on Google](conf@confluence@com))
- Incoming links and "hot referrers" are listed in the sidebar of the page view
- Child pages are listed below the page contents in the page view

Notable Bug-fixes

- You no longer get the old page (or don't see the comment) immediately after editing or commenting on a page CONF-453
- Persistent login cookies no longer conflict with a JIRA installation on the same server CONF-440
- Persistent login cookies no longer fail for users with certain characters in their username CONF-387
- Notification emails no longer send out garbage for anonymous changes. CONF-421
- Users who are not logged in no longer see strange table titles CONF-422
- And many more...
Outstanding Issues

- You should restart Confluence immediately after finishing the initial setup steps, to avoid data loss [CONF-493]
- New-lines may not be drawn if the next line starts with whitespace [CONF-475]
- Emoticons are rendered inside {noformat} blocks [CONF-502]
- If you put a {children} macro after an {include} macro, it will list the children of the included page. [CONF-504]
Issues Resolved for 1.0b3

This page last changed on Jan 18, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-497</td>
<td>Search includes old versions of pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-495</td>
<td>Problem with incoming links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-496</td>
<td>Problem with rename</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>

Issues resolved for 1.0b2

1.0b3 was a quick bug-fix release for 1.0b2, so here are the issues resolved in 1.0b2:

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-304</td>
<td>Sitemesh/Velocity Integration</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-429</td>
<td>Upgrade SiteMesh and use Velocity decorators</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-410</td>
<td>Update confluence features list</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-425</td>
<td>Upgrade to CVS HEAD of XWork / WebWork 2</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-438</td>
<td>JUnit XML displaying macro !</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-407</td>
<td>RSS feed for recently added comments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-483</td>
<td>(include:page) macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-290</td>
<td>Configurable Look &amp; Feel</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-173</td>
<td>Remote editable space decorators</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-420</td>
<td>Set &quot;Site Homepage&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-307</td>
<td>Ability to search attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-437</td>
<td>External RSS macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-417</td>
<td>One-click bug submission</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-449</td>
<td>Macro for fetching/importing JIRA issues</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>JIRA Key</td>
<td>Summary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-456</td>
<td>Global colour-scheme configuration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-418</td>
<td>Better handling of anonymous contributions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-412</td>
<td>Make usernames and user full names searchable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-388</td>
<td>Include user in &quot;Recently Updated Pages&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-458</td>
<td>JIRA macro column selection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-462</td>
<td>Documentation for decorator editing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-394</td>
<td>Update links from other spaces when renaming pages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-431</td>
<td>Per word differencing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-443</td>
<td>Shortcuts should allow “my link name” like other links do</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-457</td>
<td>Put nice colour-picker on colour customisation screen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-387</td>
<td>Move &quot;incoming links&quot; back to the page</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-401</td>
<td>Parent child relationships should be thought about more</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-371</td>
<td>Child pages invisible by default</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-413</td>
<td>Add diff link to &quot;page edited&quot; email</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-415</td>
<td>Make diffs highlight changes within a line.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-397</td>
<td>Fix user profile so it can hold &gt; 255 chars</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-373</td>
<td>Upgrade to the Spring SessionInView filter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-419</td>
<td>Warn user if they’re commenting/editing anonymously</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-454</td>
<td>Improve the JUNIT macro</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-477</td>
<td>Add emoticons to confluence</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Status:** Closed

**Resolution:** FIXED
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-471</td>
<td>Pagination for long lists (search is the first!)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-482</td>
<td>Page templates should be editable on the web interface and saved in exports</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-421</td>
<td>NPE when sending notifications for anonymous user activity</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-452</td>
<td>Permissions check for /signup.action always fails</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-408</td>
<td>Escaped characters don't work as they should</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-450</td>
<td>BackupJob does not have a Hibernate session</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-392</td>
<td>Mistyped link syntax gets rendered weirdly</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-406</td>
<td>Could not parse : Dec 19, 2003 : java.text.ParseException</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-441</td>
<td>&quot;my link name&quot; links in tables don't work right</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-433</td>
<td>No security checking in FileServerServlet!</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-468</td>
<td>Link extraction should exclude {code} contents ampersand in links breaks them</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-446</td>
<td>&quot;Display Default Decorator&quot; shows edited template, not default {children}.macro bars on removed child page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-494</td>
<td>Export from data originating in beta1 may be unimportable in beta2</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-414</td>
<td>Replace all workweb.urlEncode with generalUtil.urlEncode</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Ticket</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-393</td>
<td>(<em>boldme</em> does not work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-435</td>
<td>Macros still run inside <code>{noformat}</code> block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-463</td>
<td>Path admin page still thinks it's a setup step</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-481</td>
<td>Newly added comment doesn't appear when posted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-411</td>
<td>Cancel button not working on Add Comment Dialog</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-440</td>
<td>Confluence Login cookies conflict with JIRA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-383</td>
<td>Export space fails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-486</td>
<td>Space descriptions can't contain links in their space</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-453</td>
<td>&quot;Add Page&quot; permission checking is not consistent when logging in as anonymous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-451</td>
<td>Setting a homepage makes dashboard inaccessible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-405</td>
<td>Usernames (while logging in or setting up a new account) shouldn't be considered as case sensitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-409</td>
<td>Logging in anonymously &amp; the UI display keys!</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-485</td>
<td>Incoming links from space descriptions buggy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-442</td>
<td>line breaks (`) don't work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-487</td>
<td>HTML emails contain <code>#emailUserLink (mike)</code></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-476</td>
<td>Editing personal information in user profile stops working</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-470</td>
<td>Apostrophe double-encoded inside <code>{code}</code> block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-432</td>
<td>Exception when diffing added line</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONF-479  Errors invisible on "rename page" form markup  Closed  FIXED
CONF-466  (color) macro messed up by surrounding \{\{monospace\}\} markup  Closed  FIXED
CONF-354  Can not use LDAPCredentialsProvider  Closed  WON'T FIX
CONF-439  Email password doesn't seem to work  Closed  FIXED
CONF-422  i18n text inside a wework 2 component do not display (only their keys do) for anonymous users  Closed  DUPLICATE
CONF-459  ' is converted into &#8217  Closed  CANNOT REPRODUCE
CONF-472  adding a comment does not display it right away  Resolved  FIXED
CONF-404  Undefined pages report misrenders when link source is a comment  Closed  FIXED
CONF-423  Should not be able to add ANYONE group to ADMINISTRATE Confluence/Space permissions  Closed  FIXED
CONF-384  Login cookie appears to be broken on confluence.atlassian.com:8080  Closed  FIXED
CONF-464  Standalone tomcat version is not working!  Closed  FIXED
CONF-447  Error automatically creating pages with illegal names  Closed  FIXED
Release Notes 1.0b4

This page last changed on Jul 01, 2004 by jnoien.

Confluence 1.0b4

To belatedly ring in the Year of the Code-Monkey, it's time for Confluence 1.0 beta 4. We've had some great feedback on the last few betas, thanks to everyone for submitting bugs, and contributing to the forums and discussion space.

Contents

1. FatCow
2. New Features
3. New Macros
4. Improvements
5. Notable Bug-fixes
6. Outstanding Issues

See also: Issues Resolved for 1.0b4

Atlassian FatCow

Along with 1.0b4, we're also releasing FatCow: Functional Acceptance Testing for the Confluence Wiki. Styled after Ward Cunningham's FIT and Bob Martin's Fitnesse, FatCow allows you to define web-based acceptance tests in wiki notation, and then run them from inside Confluence. Here's a tutorial showing how to write a quick FatCow test suite that makes sure Confluence shows up on Google. 😊

FatCow is Open Source, and also serves as example code for anyone who wants to extend Confluence by writing their own macros (something that we'll be looking to make easier in future releases).

New Features

Blog Posts

Each space can now host a "blog" of pages that are organised by date, rather than just by title. This is pretty useful if you want to attach some kind of updating news to a space. The "create blog post" button can be found on the right-hand toolbar.

Blogging support is pretty basic right now: you can create posts, and you can include the most recent posts in a page using the {blog-posts} macro. Rest assured, we'll be piling on the features in the next few releases.

Move Pages Between Spaces

A much requested feature, our newest refactoring lets you move pages cleanly from one space to
another. We're using this already to maintain a private space where we stage documentation waiting to be transferred to the main documentation space.

Configurable Site Description

You can now change the text in the site description that appears on the user's dashboard: somewhere to put welcome messages or MOTDs. And, of course, it understands Confluence markup.

@includePage("Page") Velocimacro

For the decorator-editors, you can use this render the contents of a page anywhere inside a decorator. The page has to be in the space that the user is looking at, and if the page does not exist, nothing will be rendered.

New Macros

- `{blog-posts}` displays the most recent blog posts for a space.
- `{rss}` macro now has `maxEntries` and `titleBar` parameters.
- `{anchor}` macro allows you to create named anchors in a page (link to them with `[SPACE:page#anchor]`)

Improvements

- You can now draw en dashes and em dashes.
- mailto: links are now drawn as just the email address, like so user@example.com
- the `{search}` macro now excludes the page it was included in from the search results
- you can also link to attachments using #-anchors [SPACE:page#attachment.pdf]
- you are given the opportunity to pick a template when creating a page from a link, and any entered page title survives picking a page template

Notable Bug-fixes

- Spurious error message about editing a stale version of a page have been squashed.
- No longer crashes when you add a user to certain groups.
- Some database queries have been rewritten to work around the fact that MySQL doesn't understand sub-selects.
- diffs more reliably highlight changed words
- Several minor rendering problems to do with deeply nested lists have been fixed.
- and many more...

Outstanding Issues

- You should restart Confluence immediately after finishing the initial setup steps, to avoid data loss
  [CONFLICT]
- New-lines may not be drawn if the next line starts with whitespace
  [CONFLICT]
- Emoticons are rendered inside `{noformat}` blocks
  [CONFLICT]
## Issues Resolved for 1.0b4

This page last changed on Jan 27, 2004 by [jnoen](#).

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>![ ]</td>
<td>CONF-460</td>
<td>FIT macros and integration</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-501</td>
<td>— and – filters</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-509</td>
<td>Site description</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-291</td>
<td>Ability to move a pages between spaces</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-192</td>
<td>Ability to link to attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-234</td>
<td>Blog posts</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-531</td>
<td>Add Max Entries parameter to rss macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-534</td>
<td>Search macro should exclude page it's included on</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-544</td>
<td>Add a titleBar=true/false option to rss macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-555</td>
<td>mailto links should look better</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-554</td>
<td>Support emdash like Textile</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-515</td>
<td>Home link on summary page goes to... summary,</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-513</td>
<td>Form rules on 'Create Admin Account' during setup!</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-507</td>
<td>SnipSnap import does not add users to confluence-users</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-474</td>
<td>Don't get the chance to fill out variables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-543</td>
<td>Preview &amp; Confirm is always telling me the page is outdated</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-517</td>
<td>Back button &quot;rollbacks&quot; changes when previewing a page</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-535</td>
<td>Removing a page gives exception on</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-529</td>
<td>MySQL template variables with an underscore in the name don't highlight properly</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-505</td>
<td>Internal anchor links have the external link icon</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-537</td>
<td>HTML export is broken</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-528</td>
<td>jiraissues macro does not display due column</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-516</td>
<td>Cannot add user to additional groups</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-524</td>
<td>Edit Page Conflicts is buggy - often seems to detect conflicts which aren't there</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-519</td>
<td>Lists only work to 4 levels</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-504</td>
<td><code>include</code> macro confuses <code>children</code> macro.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-567</td>
<td>Home link should take users to the home page</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-508</td>
<td>Space description links don't take you to the space description</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-445</td>
<td>JDBC error accessing undefined pages on mysql</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-518</td>
<td>Deeper item in list can't be bold</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-547</td>
<td>MySQL doesn't support sub-selects</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-546</td>
<td>Hot Referrers includes editing links</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-510</td>
<td>'Browse Pages' does not show the recently modified pages (in green)...</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-512</td>
<td>Confluence doesn't like it when I re-add a deleted child page</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-566</td>
<td>Previewing multiple times while editing confuses the versioning system</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-522</td>
<td>Page-Space relation is corrupted after latest upgrade (blog</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-526</td>
<td>Moving page doesn't break parent/child relationships</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-444</td>
<td>JDB error accessing orphaned pages on mysql</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-523</td>
<td>Single word diff rendering is buggy</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.0rc1

Confluence 1.0rc1

It's Friday again, and that means it's time for us to release Murray; Confluence 1.0 Release Candidate 1.

RC1 marks the start of the feature-freeze as we plunge headfirst towards a stable 1.0 release. From now until 1.0-final we will be concentrating on fixing up the remaining bugs and polishing the interface. We are hoping that we won't need to send out a second release candidate, but we can't really make any promises until we've had a chance to go through the inevitable deluge of new issues that will follow this release.

Of course, this means that there are features you want to see in Confluence that won't make it into 1.0-final. Keep those ideas and suggestions coming. Confluence isn't going to stop at 1.0 – we just had to draw a line somewhere or we'd end up perpetually in beta. We have no plans to slow down development after the first major release. Your Confluence licence includes a year of upgrades, and if you think Confluence is way cool now, it's just going to get better.

As always, before upgrading an existing Confluence installation, be sure to back up your data.

As you can see below, we've been busy the last two weeks. A hard-earned thirst needs a good cold beer.

Contents

1. New Features
2. New Macros
3. Improvements
4. Notable Bug-fixes
5. Outstanding Issues
6. Database Changes from Beta4

See also: [DOC:Issues Resolved for 1.0rc1](#)

New Features

Remote API

Cannot resolve external resource into attachment.

Confluence can now be browsed and edited remotely via SOAP or XML-RPC. [There are more details of the XML-RPC API here](#), while the SOAP WSDL can be downloaded from

`$your_confluence_root$/rpc/soap/conflusenservice-v1.wsdl`. Throwing together a GUI client for Confluence is now [pretty easy](#), so feel free to embed Confluence support into your favourite editor, web browser or IDE.
Blogging Enhancements

The sketchy blogging support from Beta4 has been upgraded and overhauled. Enhancements include:

- The look and feel of blog pages has been greatly improved
- A "recent blog posts" list available from the Space Summary page
- Daily and monthly views for blog posts
- Blog posts can now be edited and deleted
- You can now link to blog posts using the internal link syntax. Blog posts are addressed by their posting-date and title, like so: [SPACEKEY:/2004/01/03/Blog Post Title]
- You can link to the daily views, too: [SPACEKEY:/2004/01/03/]
- RSS feeds are available for new blog posts, both globally (from the dashboard), and for each space (from the space summary page)

Also, anonymous users are no longer allowed to post blog entries. We couldn't really think of a use-case where anonymous blog-posts would be wanted, but if you can, let us know!

Configurable User Notification

With any knowledge-sharing application, it's important to keep informed as to what has changed. One way to do this is by subscribing to any of the RSS feeds offered by Confluence. Another is to have Confluence email you directly whenever there has been a change. Up 'til now, users have had to make do with the ad-hoc regular-expression based notifications that were put in for developers. With RC1, we now have a more fine-grained and user-friendly way to choose how you find out about changes to the site.

1. Each day, Confluence can email you a summary of any changes that have been made to the site in the past 24 hours. You can activate this feature in your user preferences.
2. You can subscribe to "watch" a page from the option in the right-hand operations menu. Whenever the page is modified, commented on, or a new attachment is added, you will receive an email. When you no longer want to watch the page, you can click the icon again to unsubscribe.
3. You can subscribe to watch an entire space from the option on the space summary page. This subscribes you to all pages in that space, and also notifies you when new pages are created.

Each user can now also choose whether or not they will be notified of changes they make themselves.

Trackbacks

While Confluence has always tracked links between pages within the Confluence site, it now has a way to track links to and from external sites: the Trackback API. In this way, a Confluence page can be informed when another site has mentioned it, and inform other sites that it has linked to them.

We have implemented the Trackback and Trackback auto-discovery APIs across pages and blog-posts. Trackback is a widely implemented API that allows web pages to notify each other of links. You can enable (or disable) trackbacks from the Confluence general administration page.

When Trackbacks are enabled, each Page and Blog Post within Confluence is set up to receive trackback pings, and contains the auto-discovery code to allow clients to automatically find out how to send those pings. Trackbacks that are received are listed in the right-hand sidebar of the page.
Also when Trackbacks are enabled, Confluence will perform auto-discovery on each outgoing link from a page to see if the destination is equipped to receive trackbacks, and send its own trackback ping.

Look forward to future versions of Confluence making very interesting use of this feature. 😊

Per-Space Look and Feel

The template-- and colour-scheme editing features that were available on a global basis in previous versions of Confluence can now be configured separately for each space, allowing you to apply a different look and feel to the various spaces within your Confluence site.

New Macros

- `{panel}` macro allows you to draw a shaded box containing some content

Improvements

- Import and Export should now be much faster, and use significantly less memory
- The user browser now has a search function, to make it possible to manage large numbers of users effectively
- Incoming links are no longer displayed on a page if the user is unable to view the page being linked from
- The `{anchor}`, `{blog-posts}`, `{index}` and `{quote}` macros are now documented properly.
- You can escape smileys by putting a backslash before their last character, to cause them not to be rendered as images :) 
- You can now link to peoples' user profile pages with [~username] (e.g. Charles Miller)
- You can now link to space homepages with [SPACEKEY:] (e.g. TEST:)
- mailto: links have a nifty icon: user@example.com
- The History popup now tracks your visits to blog posts, space summaries and user profile pages
- Recent changes listings on the dashboard, user profile and space summary pages now includes changes to all content, not just pages.
- New Emoticons! (well, icons really)

<table>
<thead>
<tr>
<th>(y)</th>
<th>(n)</th>
<th>(i)</th>
<th>(/)</th>
<th>(x)</th>
<th>(!)</th>
</tr>
</thead>
<tbody>
<tr>
<td>🙅‍♂️</td>
<td>🎤</td>
<td>😆</td>
<td>✓</td>
<td>✖</td>
<td>⚠</td>
</tr>
</tbody>
</table>

Notable Bug-fixes

- Added HTML headers to detect and prevent RSS, HTML-Include and FatCow macros from being made to loop in on themselves. CONF-525
- The `{anchor}` macro, and [DOCPRIV:null] links now work as advertised. CONF-616, CONF-605
- Fixed a divide-by-zero error in page diffs CONF-584
- Included javax.transaction libraries with release, to allow the WAR to run under Tomcat 5 CONF-613
- And many more rendering and stability fixes...

Outstanding Issues

---

Document generated by Confluence on May 01, 2007 00:44
Still some problems with character encoding in page titles [CONF-569]
HTML include macro interacts badly with other Radeox filters [CONF-549]

### Database Changes from Beta4

**New Tables**

TRACKBACK and NOTIFICATION tables were introduced. These tables should be generated automatically when you first start RC1.

**New column in the EXTRNLINKS table**

- alter table EXTRNLINKS add column CONTENTTYPE varchar(255);

**Constraint Change on LINKS Table**

The "not null" constraint was removed from the DESTPAGETITLE column of the LINKS table. Consult your database documentation on how to alter your database for this change. For example:

- MySQL 3.23: alter table LINKS modify DESTPAGETITLE VARCHAR(255);
- PostgreSQL 7.3.2 alter table LINKS alter DESTPAGETITLE drop not null;
## Issues Resolved for 1.0rc1

This page last changed on Feb 06, 2004 by cmler.

### Atlassian JIRA (63 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-579</td>
<td>Daily Notification Report</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-540</td>
<td>Recent Blog Posts RSS feed</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-559</td>
<td>Add Trackback support</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-280</td>
<td>Implement VP Wiki API</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td></td>
<td>CONF-626</td>
<td>Recent Blog Posts page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-545</td>
<td>create a panel macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-581</td>
<td>Notify me for this page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-591</td>
<td>Remote XML-RPC API</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-615</td>
<td>Create SOAP API</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-553</td>
<td>Link directly to user profile</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-541</td>
<td>Blog Post Daily View</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-538</td>
<td>Internal links to blog-posts</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-465</td>
<td>Per-space colour schemes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-542</td>
<td>Blog Post Monthly View</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-580</td>
<td>Notify me for this space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-561</td>
<td>Space specific decorators</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-600</td>
<td>listpages.action should show a page count</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-617</td>
<td>History popup now tracks viewing user info pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-576</td>
<td>Blog page L&amp;F needs to be more blog like</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-583</td>
<td>Do not notify user of his own actions documentation for (anchor) macro missing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-601</td>
<td>J18n for execution threads that aren't triggered by web</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Conf</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-625</td>
<td>&quot;Recent Changes&quot; lists should include changes to all content types</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-562</td>
<td>&quot;New file attached&quot; notification email</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-558</td>
<td>nice icon for mailto: links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-506</td>
<td>Remove blurb from {jiraissues} header.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-557</td>
<td>Improve user browser</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-578</td>
<td>Display of comment section remembered by page</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-539</td>
<td>Edit/delete blog posts</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-502</td>
<td>Need a way to escape smileys</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-582</td>
<td>exception when removing page</td>
<td>Closed</td>
<td>CAN'T REPRODUCE FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-552</td>
<td>search macro output is not updated</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-573</td>
<td>Insert Link is broken</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-475</td>
<td>New line disappears</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-564</td>
<td>Error deleting template</td>
<td>Closed</td>
<td>CAN'T REPRODUCE FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-609</td>
<td>Deny blog posting for anonymous users</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-624</td>
<td>Prevent trackback autodiscovery from downloading just anything</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-623</td>
<td>children Hierarchy macro fails if page is assigned to hierarchy later</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-610</td>
<td>Pages with a parent are, by definition, not orphaned</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-563</td>
<td>Incoming links displayed for pages you can’t see</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-588</td>
<td>Links in noformat macro broken</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-572</td>
<td>ImportExportException</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-570</td>
<td>Moving page doesn’t update internal links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-612</td>
<td>Bug on &quot;Moving Page&quot;</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3286</td>
<td>CLONE - New line disappears</td>
<td>Closed</td>
<td>CAN'T REPRODUCE FIXED</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-622</td>
<td>Errors with new links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-621</td>
<td>Stack trace editing issue</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-618</td>
<td>Can not setup with hsqd!</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-620</td>
<td>Can't edit personal profile</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-597</td>
<td>Templates feature doesn't seem to work in B3</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-571</td>
<td>Links in PDF export broken (contain <a href="http://www.atlassiannull.com/blah">www.atlassiannull.com/blah</a>)</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-590</td>
<td>When renaming a page name truncalates first letter of new link</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-585</td>
<td>Faulty rendering of anchor links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-613</td>
<td>javax.transaction not included in lib jars</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-616</td>
<td>Links containing 'xxx' entities are malformed</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-536</td>
<td>Renaming backup files is dangerous</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-574</td>
<td>Missing velocity file for blog post preview</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-584</td>
<td>Page diff results in ArithmeticException</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-525</td>
<td>RSS macro can loop on itself</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-592</td>
<td>Changing parent page doesn't work</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-605</td>
<td>Page anchors showing in links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-628</td>
<td>Can not choose custom backup path</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-602</td>
<td>No notification email is sent</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.0rc2

This page last changed on Feb 13, 2004 by cmiller.

Confluence 1.0rc2

After a week of frantic bug-fixing, we have released Confluence 1.0 Release Candidate 2. Thanks everyone for reporting all the bugs they found in RC1. While we really hope you'll keep reporting anything you find that doesn't work, we're also hoping that there's a lot less to report now.

We have released RC2 because it's a lot more stable than RC1. We know a lot of you are already using Confluence in some kind of production capacity, and we don't want to keep you waiting for the important fixes that we put in this week.

Since we're in the middle of a feature freeze, there obviously aren't any new major features in this release, but there are a number of incremental improvements, and a lot of fixes.

But first, a...

WARNING

If you are upgrading from Confluence 1.0rc1, do not perform a backup of your data from within Confluence. There was a serious bug with RC1 that caused user permissions to be corrupted during data exports.

There have been no database changes between RC1 and RC2, so you should simply be able to run RC2 against your existing data without performing a backup/restore.

If you wish to back your data up safely before the upgrade, you will need to do so manually: shut down Confluence, make a copy of your Confluence home directory (as defined in confluence-init.properties, and if you are storing your data in something other than HSQL, use your database's native backup procedure.

Contents

1. Improvements
2. Other Bug-fixes
3. Outstanding Issues

See also: Issues Resolved for 1.0rc2

Improvements

- Remote XML-RPC and SOAP APIs now have a getPermissions() method
- {noformat} macro accepts a title parameter
- Page view and create links are no longer displayed if the user does not have permission to view or
create the destination page.

- When you create a page from viewing a previous page, you are given another chance to make that page the new page's parent.
- RSS and HTML include macros use HTML proxies if they are defined using the standard Java http.proxyHost and http.proxyPort system properties.
- Default session timeout is now 60 minutes
- Improvements to user browser and user profile page UI
- Shortcut link definitions are now backed up and restored

### Notable Bug-fixes

### Stability

We've done a lot of work tracking down the source of any exception and page error that has been reported to us, and fixing their causes. We've also made one or two improvements to the error reporting page, but we're hoping you won't see it nearly as often (if at all) any more.

### Page Templates

The creation, editing and deletion of page templates should now be a lot more reliable and provide a smoother user experience.

### Also

- You no longer have to restart Confluence after its initial setup [CONF-493](http://example.com/CONF-493)
- Performing a full data export no longer corrupts users' group membership data. [CONF-645](http://example.com/CONF-645)
- You can now link to profiles of users with an @ symbol in their usernames [CONF-639](http://example.com/CONF-639)
- Trying to create a page with illegal characters in its name no longer loses your page content on some browsers. [CONF-713](http://example.com/CONF-713)
- Trackback pings are now sent for URLs that are not surrounded by square brackets [CONF-708](http://example.com/CONF-708)
- And, of course, [many more...](http://example.com/many-more)

### Outstanding Issues

The two major areas we still need to work on are the PDF export and the use of non-ASCII characters in pages (especially page titles). Handling of both are much better than they were a week ago, but there's still some work to do before they're completely reliable.
## Issues Resolved for 1.0rc2

This page last changed on Feb 13, 2004 by cmiller.

### Atlassian JIRA (74 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>![ ]</td>
<td>CONF-589</td>
<td>Way to prevent a http URL from being rendered as a link</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-255</td>
<td>Please please please. Support external (LDAP) groups.</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-532</td>
<td>Add title parameter to noformat macro (and you can rename it at the same time to 'block')</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-714</td>
<td>RSS and HTML include macros should use proxies if defined</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-642</td>
<td>Pages that have more than one version have different icon</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-666</td>
<td>Remote APIs need a getPermissions() method</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-668</td>
<td>Up default session timeout to 60 minutes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-654</td>
<td>Make double-encoding smarter</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-636</td>
<td>anchor links to local page anchors classed as incoming link</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-641</td>
<td>Improve user profile UI</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-670</td>
<td>Javascript 'Make previous page into parent' link</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-596</td>
<td>User friendly options for exporting a space</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-700</td>
<td>Create a page from a sub page should implicit include the parent page in the Create Page Dialogue</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![ ]</td>
<td>CONF-646</td>
<td>Move &quot;new blog&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td>Title</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>CONF-697</td>
<td>Edit my profile page help information is inconsistent</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-640</td>
<td>Fix user browser UI</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-701</td>
<td>Export page to PDF, click on generated link for page that doesn't exist...generates a NPE</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-687</td>
<td>Comments to blog posts that appear on the dashboard recently updated list are broken</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-627</td>
<td>Link icons don't show up in PDFs</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-716</td>
<td>SQL error removing user on Postore emoticons path is wrong</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-656</td>
<td>Some links in the documentation site are &quot;create new page&quot; links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-484</td>
<td>Upload attachment without specifying file should have nicer error</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-655</td>
<td>SOAP service can't get started ....</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-631</td>
<td>pdf export of page containing ndash (--) fails</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-689</td>
<td>Blog RSS DTD gives 404</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-679</td>
<td>External links that are not bracketed &quot;[&quot; [],&quot;]&quot;, are not pinged for trackbacks</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-708</td>
<td>italic text effect must have link text broken</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-690</td>
<td>Snipsnap Import Fails</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-659</td>
<td>Login required to browse spaces</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-662</td>
<td>Unable to create template of same name, after deleting original</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-703</td>
<td>Template stops working once you've</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-706</td>
<td>Recent updates list gets page modifier wrong if anonymously edited.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-673</td>
<td>isUserWatchingSpace throws null pointer sometimes</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-657</td>
<td>Various crashes with space-less links in user profiles</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-639</td>
<td>[~username] link fails when username contains @</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-647</td>
<td>Templates feature doesn't seem to work in RCI</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-675</td>
<td>When running confluence under a non-default context, exporting PDF breaks</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-493</td>
<td>Confluence not fully set up until first restart</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-674</td>
<td>Notifications not updated when a page is deleted</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-648</td>
<td>Unable to set the name of a page using templates once a template is selected</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-685</td>
<td>Attempting to export a non-perfect page as PDF breaks</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-651</td>
<td>Viewing previous version diff &quot;to previous&quot; throws NullPointerExceptions</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-684</td>
<td>Clicking on Previous Version -&gt; Version gives NPE</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-619</td>
<td>Upgrade from B3 to B4 gives InfrastructureException</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-633</td>
<td>Can't restore the extranet data locally</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-360</td>
<td>Edit Profile corrupts user record</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-683</td>
<td>PDF export fails on {children}: macro</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-699</td>
<td>Renaming page and only changing the</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-695</td>
<td>Inconsistencies in remote soap api</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-677</td>
<td>Exporting a page as PDF with macros results in &quot;null&quot;</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-705</td>
<td>When creating a document with the template Java error occurs</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-696</td>
<td>Wrong type of date returned incall to getPage and getPageHistory</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-686</td>
<td>Servlet context added for export causing problem with mod_jk</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-667</td>
<td>admin login doesn't work in Safari</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-681</td>
<td>Rename problems (CONF-496) persist in pages made with previous versions</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-635</td>
<td>Can not view the users which have their username start with capital !</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-669</td>
<td>Exception clicking &quot;New Blogs&quot; link</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-672</td>
<td>NPE with GlobalRSSFeed</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-645</td>
<td>groups disappearing for users</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-644</td>
<td>Cannot backup data</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-691</td>
<td>Can't delete page templates that have been edited</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-702</td>
<td>Export to PDF doesn't render all text correctly</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-688</td>
<td>SOAP service has $Proxy name</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-713</td>
<td>Creating a page with bad characters in the title loses page content</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-658</td>
<td>Panel, first list item not recognized, and not closing on multiple list items</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-632</td>
<td>ClassCastException in BackupJob</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-678</td>
<td>Exporting entire space gives ImportExportException</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-649</td>
<td>&quot;Create Page&quot; link displayed even when user can't create a page</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-634</td>
<td>Shortcut/Interwiki links are not backed up and restored!</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-711</td>
<td>NPE in Global &quot;spaces report&quot;</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-349</td>
<td>Create page from template</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-652</td>
<td>RSS feeds throw NullPointerExceptions</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-698</td>
<td>Anonymous users cannot access the RSS feeds. Throws a NPE</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.0rc5

This page last changed on Sep 18, 2004 by timcolson.

Confluence 1.0rc5

It's time to release Confluence 1.0rc5 into the wild: it's the fourth Release Candidate since last Friday, and we're definitely getting close here. The last two release-candidates did not have their own release-notes, so these notes will also include things that were fixed for those versions.

Contents

1. New Features
2. New Macros
3. Improvements
4. Notable Bug-fixes
5. Outstanding Issues

See also: Issues Resolved for 1.0rc5

New Features

In keeping with our promise to not add any features during the Release Candidate process, we have been very restrained, and only added two new features 😊

Template Preview

Page templates have been given an overhaul: when filling in your template variables, you are presented with a template of the rendered page, with input fields where the variables will be inserted. If you have the same variable used in several places, the form will take care of keeping them all in synch.
Step 2: Fill in template variables

Choose values for the variables in this template. These values will be automatically inserted into the template for you in the correct locations.

New template (Title)
by David Loeng (author)

February (month) 20th (day), 200 (year)

After a week of frantic bug-fixing, we have released Confluence 1.0 Release Candidate 2. Thanks everyone for reporting all the bugs they found in RC1. While we really hope you'll keep reporting anything you find that doesn't work, we're also hoping that there's a lot less to report now.

(from) - (to)
(from) - (to)
(from) - (to)

We have released RC2 because it's a lot more stable than RC1. We know a lot of you are already using Confluence in some kind of production capacity, and we don't want to keep you waiting for the important fixes that we put in this week.

Since we're in the middle of a feature freeze, there obviously aren't any major features in this release, but there are a number of incremental improvements, and a lot of fixes.

Regards,

David Loeng (author)

Page Redirection

When you rename or move a page, the page's old URL will attempt to give users some clue as to where they should be looking: checking which pages have had this name in the past, or redirecting users to pages in another space with the same name.
In This Space
The page you were looking for may have been renamed to one of the following:

- **Ridiculous** (Fish Space)
  And yet another page to add to the confusion

- **Before** (Fish Space)
  Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer euismod tellus et sem. Aliquam ullamcorper hendrerit arcu. Sed lacin, odio, mattis ut, sollicitudin at, tincidunt vitae, magna. Integer aliquam nibh sed libero....

In Other Spaces
The page you were looking for may have moved to another space:

- **Cows** (Bouncy Space)
  This is the page before it was renamed.

New Macros

- `{weblogs}` is a synonym for `{blog-posts}`

Improvements

- The user signup screen has a more friendly UI
- Exported PDFs now incorporate the site's stylesheet, and thus look a lot better.
- Confluence now has a useful "404" error page that gives the user some suggestions of how to find what they were looking for.
- An Administrators page, linked from the footer of each page, lists those users in the "confluence-admin" group. (If you don't want your address to be made public on this page, create an administrative group with some other name)
- The error you receive when you exceed your licensed user limit is more informative, and no longer directs users to email Atlassian.
- The SnipSnap importer converts SnipSnap blog posts to Confluence blog posts.
- Several methods added to the XML-RPC and SOAP APIs for managing users and spaces. (See [DISC:Conf Remote API Additions](https://issues.redhat.com/browse/CONF-4537))
- The Daily Report email is more informative and more readable
- Page comments and Parent/child relationships are maintained during HTML and PDF exports
- news: and nntp: URL schemes are now recognised in bracketed links

Notable Bug-fixes

Since RC2

- Links between pages now work when you have a context path other than / (oops!)
- The daily report email is no longer sent every minute (oops!)
- You can no longer download attachments without being logged in (OOPS!)
- Search results no longer highlight words that were terms in previous searches

Since RC3
• Page redirects now work properly under Orion 2.0.2

Since RC4

• Removing a user no longer causes their notifications to hang around and crash things
• Removing a blog post works, too
• Many fixes to PDF rendering and exporting
• Many fixes to handling of Latin character set (See outstanding issues below)
• Invalid macros now give a more informative error than "no group 3"
• The 404 error page no longer requires you to log in to view it
• Macros that generate HTML (page include, HTML include, JIRA, RSS, FatCow) bypass the remainder of the page processing, and so should have far fewer formatting errors now.
• User browser filter remembers your search across pages

Plus, of course, innumerable fixed to annoying crashing bugs across all three releases.

Outstanding Issues

Latin Characters under Resin

We've tested creating pages with non-ASCII titles and content across several different browsers and several different operating systems, and they seem to be working reliably now... except on Resin. This will be quite noticeable since confluence.atlassian.com itself is running under Resin, but we have so far been unable to come up with a solution that works on this application server.

For users who need this functionality, we suggest running under Tomcat.

• On MySQL, the "orphaned pages" report may include the space's homepage CONF-766
• Combining block macros with lists is dangerous CONF-756
• Under some circumstances, paragraph tags will not be closed CONF-746
## Issues Resolved for 1.0rc5

This page last changed on Feb 20, 2004 by mike@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-775</td>
<td>Add user management methods to remote API for administrators</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-787</td>
<td>Allow news: and nnftp: URL schemes in [links]</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-788</td>
<td>Forced newline // should give &lt;br clear=&quot;all&quot;/&gt;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-750</td>
<td>Improve the UI of the signup screen</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-773</td>
<td>Make daily email a bit more readable</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-499</td>
<td>Renaming a page should leave behind an HTTP redirect</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-719</td>
<td>PDF Export Bookmark browser doesn't reflex parent/child page relationship</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-755</td>
<td>create a ConfluenceException and throw when we have a user correctable error</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-723</td>
<td>The parent/child relationships are not reflected in HTML exports!</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-763</td>
<td>space scoped templates not showing up on Browse Templates page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-760</td>
<td>Error message for an unknown macro is misleading</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-758</td>
<td>content-by-user macro broken</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-781</td>
<td>NPE on 500 error response that contains no exception under</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-745 Orion Panel, extra white space at top and extra extra when included
CONF-751 Moving page edits space descriptions?
CONF-729 renderContent generates bad html for images from blog macro & for attached images
CONF-739 User browser filter not maintained in session
CONF-774 Daily Email not picking up all of the changes in a day
CONF-768 Logging in occasionally redirects user straight to the fourohfour page :
CONF-757 PDF's show question marks instead of bulletin points
CONF-744 Exporting a page as PDF with \{fatcontroller\} breaks
CONF-676 Exporting as a PDF, document with list items generates garbage in PDF
CONF-779 Removing a user doesn't remove notifications
CONF-710 Can not export a page (as PDF) while there are two anchors with the same name!
CONF-777 Remote API does not incubate space comment or admin perms
CONF-772 putting in bogus URL doesn't show 404, later 404 looks unwell
CONF-782 Page doesn't get listed instantly
CONF-752 ImmutableException when trying to reset
<table>
<thead>
<tr>
<th>Ticket</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-771</td>
<td>NPE on &quot;recently updated pages report&quot; on dashboard</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-769</td>
<td>Getting a lot of these traces running RC4 under tomcat 4.1.27</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-767</td>
<td>html export zip appears empty as XP compressed folder</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-761</td>
<td>Watch this Space didn't work</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-556</td>
<td>Import fails if export is from different database</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-770</td>
<td>NPE in space look and feel action</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-754</td>
<td>weblog macro broken in rc3 after a snipsnap import</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 1.0rc6

This page last changed on May 23, 2006 by david.soul@atlassian.com.

Confluence 1.0rc6

Confluence 1.0rc6 fixes more bugs. Lots of them. There aren't many new and interesting features to report, although we have implemented the much-requested ability to mask email addresses and prevent public signup. Mostly, we've been toiling away fixing the lots of little problems that are getting in the way of us calling Confluence truly worthy of the 1.0 label.

Contents

1. New Features
2. New Macros
3. Improvements
4. Notable Bug-fixes
5. Outstanding Issues

See also: Issues Resolved for 1.0rc6

New Features

Private Confluence Configuration

In private mode, the only way to add users to Confluence is through the administrative interface: users can not sign up on their own. This way, you can prevent random passers-by from signing on to your Confluence installation. The site administrator can configure this in the general administration settings.

Email Address Privacy

Another much-requested feature, the site administrator has three options for email-address privacy:

- Public: just like pre-rc6, users email addresses are displayed publicly.
- Masked: email addresses are still displayed publicly, but masked in such a way to make it harder for spam-bots to harvest them.
- Private: only site administrators can see users' email addresses.

Administrators should be aware that even in private mode, anyone in the confluence-admin group will still be listed (with their email address) on the administrators page, although their addresses will be masked.

Share User Management with JIRA

For sites with both a Confluence and a JIRA installation, Confluence can be set up to delegate its user-management to JIRA. You can find detailed instructions here.
Template Field Types

Templates now support drop-down menus and text-input areas.

@variablename|textarea(5,10)@ will give you a 5 x 10 text-area called 'variablename'.
@variablename|list(one,two,three,four)@ will give you a drop-down list called 'variablename', with options one, two, three and four.

---

**Step 2: Fill in template variables**

Choose values for the variables in this template. These values will be automatically inserted into the template for you in the correct locations.

<table>
<thead>
<tr>
<th>Name of software:</th>
<th>postfix</th>
<th>(name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed on:</td>
<td>mail</td>
<td>(server)</td>
</tr>
<tr>
<td>Installed by:</td>
<td>Charles Miller</td>
<td>(installer)</td>
</tr>
</tbody>
</table>

**Configuration Notes**

Follow the instructions for installing SASL authentication from [here][1]

---

New Macros

- The \{html\} will allow you to insert arbitrary HTML code into a page. This macro is turned off by default, as it is a security-risk on public systems. We only recommend you enable it on private or intranet-based Confluence installations where you trust your users not to write malicious HTML code. Here's a trivial example of its use:

  ```html
  \{html\}
  \p>This HTML is <b>inserted</b> into the page</p>
  \{html\}
  ```

- The \{junitreport\} macro has an option: "reportdetails=failuresonly" that will cause it to only show details of tests that have failed. For example:

  ```markdown
  \{junitreport:directory=file:///var/tests reportdetail=failuresonly\}
  ```

---

Improvements

---

[1]: http://ezine.daemonnews.org/200308/postfix-sasl.htm
• Users are now taken to their preferred homepage rather than the dashboard after logging in
• Text-fields in a template are disabled during preview and viewing
• Orphaned and Undefined page reports are now paginated
• Macros such as {code} or {noformat} are now made part of a list if they are placed adjacent to them

Notable Bug-fixes

• User->Group relationships should no longer disappear during manual or scheduled backups
• Search results no longer allow people to see content they might not be allowed to see
• Comments should no longer appear out of order on a page
• Moving a page between spaces no longer breaks #anchor links
• Many rendering fixes, some subtle, some not so
• Many stability fixes, especially regarding import and export

Outstanding Issues

Random MySQL Disconnections

If you are running Confluence against MySQL using Confluence's built-in datasource, the connection with
the database server may be lost after long periods of inactivity. We are pretty sure we have a fix for this,
but since the bug takes several hours to manifest, we were not able to test the fix before the release of
rc6.

The good news is that if we are right, it will only require a quick edit of your configuration file to
implement the fix. Further announcements will be made both on confluence.atlassian.com, and the
confluence-user mailing-list.

In the meantime, the workaround is to not use Confluence's built-in datasource, but to configure
Confluence to use your application-server's JNDI datasources instead. Instructions for doing this with
Tomcat can be found here, and if you need more help, don't hesitate to contact us at
confluence-support@atlassian.com.

Latin Characters under Resin

We've tested creating pages with non-ASCII titles and content across several different browsers and
several different operating systems, and they seem to be working reliably now... except on Resin. This
will be quite noticeable since confluence.atlassian.com itself is running under Resin, but we have so far
been unable to come up with a solution that works on this application server.

For users who need this functionality, we suggest running under Tomcat.

Also...

• On MySQL, the "orphaned pages" report may include the space's homepage CONF-766
• You can create a link to a page with an illegal title: prompting the user to create a page that can not
  exist CONF-810
• Trackbacks are not sent for shortcut links CONF-888
Issues Resolved for 1.0rc6

This page last changed on Mar 05, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>CONF-786</td>
<td>Document running JIRA and Confluence on one standalone</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-849</td>
<td>Delegate confluence user management to JIRA</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-792</td>
<td>Private setup</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-813</td>
<td>Mask/hide email preference</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-868</td>
<td>Inline HTML Macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-906</td>
<td>Users should be taken to their specified home page after successful login</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-815</td>
<td>Disable textfields in template on viewing and preview</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-808</td>
<td>Undefined and Orphanned pages are not getting paginated!</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-812</td>
<td>Wording on signup page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-837</td>
<td>Have Junit report show failures only</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-903</td>
<td>Some final really quick UI fixes?</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>+</td>
<td>CONF-905</td>
<td>It would be nice to be able to break up a list over several lines</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-789</td>
<td>Allow Template variables to have types</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-549</td>
<td>html-include macro broken</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-756</td>
<td>Lists, and noformat blocks combination not working</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-912</td>
<td>Templates barf on anchors with no context</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-855</td>
<td>Change notification email links do not use full server path</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-82</td>
<td>Browse pages does not show newly added pages until a page is deleted</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-872</td>
<td>List items with russian symbols break list</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-909</td>
<td>MySQL disconnects if configured for direct connection</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-846</td>
<td>(noformat) renders spurious semicolon</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-804</td>
<td>Daily Email says all edits are by Anonymous</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-874</td>
<td>Auto backup is not working</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-854</td>
<td>ParseException when trying to use rss / jiraiissues macro</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-881</td>
<td>User/group relations vanish</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-908</td>
<td>Input area to enter info in user profile is very small when using IE 6.0</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-891</td>
<td>Comments appearing out-of-order</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-860</td>
<td>Date / Time display in 12 hour format, without AM/PM</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-826</td>
<td>Jira issues macro doesn't render correct title if it includes html tag</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-873</td>
<td>Need to restart tomcat if confluence unused for a while</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-829</td>
<td>Licensing error appears on 'enter licence' screen</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-910</td>
<td>Image attributes allow malicious javascript</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-894</td>
<td>RSS feeds</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-869</td>
<td>Crash on viewing own profile</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-863</td>
<td>Inline images get garbled when exporting to PDF</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-798</td>
<td>Inter-page links in exported PDF wrong</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-857</td>
<td>Blank Space on Enclosed {panel}</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-870</td>
<td>Remove space fails with a SQL Integrity Constraint Violation</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-746</td>
<td>HTML Paragraph not closed if starts with number colon</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-682</td>
<td>Single letter phrase notation doesn't work</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-821</td>
<td>{blog-posts} macro gives weird black/grey/black/grey stripes</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-836</td>
<td>Primary key conflicts after an import</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-871</td>
<td>Faulty rendering of sequenced text effects</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-841</td>
<td>Moving page between space borks #anchor links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-820</td>
<td>Hibernate lazy instantiation problem on getRecentlyUpdatedContent() in ViewSpaceAction</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-915</td>
<td>Bold not working inside a sub-numbered Bullet {noformat} inside bullets</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-790</td>
<td>Blog post macro recursion problem</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-902</td>
<td>Template of email notifications for 'text format doesn't exist.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-839</td>
<td>Group bases permissions doesn't work properly</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-875</td>
<td>Unexpected end of input stream</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-828</td>
<td>Search results include restricted spaces</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Nymboida, Nym to his friends, is Confluence 1.1. He wants to be your friend.

Confluence 1.1 is the first major update to Confluence. It's faster, more reliable, and packed with new features. Thanks to our policy of a year's free upgrades, any current Confluence customer will be able to upgrade to 1.1 at no cost.

Current customers, or new users who wish to try out Confluence for 30 days can download either the standalone or WAR distributions from the Atlassian website: http://www.atlassian.com/software/confluence

Upgrading from 1.0.3a

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

- Users who have enabled external user-management by customising their osuser.xml file will need to read this document also.
- Users who have used MySQL or Postgresql with Confluence 1.0 should read this document which explains how to get rid of any extraneous triggers or indexes that might have been created.

Contents

1. New Features
2. New Macros
3. Improvements
4. Notable Bug-fixes
5. Outstanding Issues

See also: Issues Resolved for 1.1

New Features

Macro Management

The biggest Nymboida new feature from an end user point of view is going to be the rewritten macro support.

Management - You can now enable and disable macros from this convenient (and very attractive) console. Macros are now grouped into libraries to make the management and creation of related macros simpler. Libraries can be installed, activated or deactivated as a single entity.

Cannot resolve external resource into attachment.
User Macros - We've also had a lot of requests from users for simple formatting macros: people who wanted their code snippets or notes to be formatted in a certain way. Confluence 1.1 contains a simple way for administrators to create new macros from within the application without a restart: defining a template that the macro will apply to its arguments or content. User macros are very handy for providing consistent formatting and layouts across your pages.

Cannot resolve external resource into attachment.

Custom Macros - Installation of new macro libraries is a breeze: simply drop the library .jar file inside the web application, restart Confluence, and your new macros will appear in the management console. Confluence 1.1 also includes a custom macro toolkit (with Task List example shown below) to help users build their own complex macros easily using Java.

Cannot resolve external resource into attachment.

More information:

- DOC:Macro Management - a guide to the Macro Management console
- DOC:User Macros - how to write User Macros
- DOC:Custom Java Macros - a guide (and worked example) for writing and distributing your own Java macros for Confluence

Attachments: versioning, comments and WebDAV support

Versioning - The number one feature request for Confluence 1.0 was versioned attachments. You ask, we deliver! Confluence can now have multiple versions of the same file attached to a page. It will keep a history of different versions of attachments, expandable dynamically.

Comments - Each attachment can now be accompanied with a comment describing why it is there, what it's about or the reason for it being attached. This is useful for tracking the differences between attachment versions, as well as for informing users as to why they should be interested in a particular file.

Cannot resolve external resource into attachment.

WebDAV - You can configure Confluence to store attachments in an external WebDAV server. This allows companies with an existing WebDAV infrastructure to give users alternative ways of accessing attachments and attaching files to Confluence pages.

Improvements to Page and Space Exports

- Exporting pages and spaces to PDF should be a great deal more reliable now. Whereas in Confluence 1.0, the export was likely to fail if the pages contained questionable markup, we now dynamically clean up each page before we export it.
- You can choose whether or not page comments are exported. Often you want to exclude comments if you want to send out a PDF of a page or publish a space as a website.
- The templates used to publish pages and spaces to HTML can be customised on a global and per-space basis. This makes it easy to publish a static website from the contents of a Confluence
space: customise your templates, choose which pages to export, and voila.

Customise Display of Blog Posts

The templates used to display blog posts (both individually and in lists) can be edited either globally, or on a per-space basis, in the same way as the site's main decorators are editable. Also, the interface for editing templates has improved and will continue to do so in future releases.

Page Locking

If you want to prevent another user from editing, deleting or renaming a page, you can now lock it. You may want to do this because certain pages in an otherwise public space (for example, front pages, disclaimers or copyright notices) must remain un-edited, or just because you're working on the page and don't want anyone else to interfere just yet.

Locking a page restricts editing to a single user (yourself), or members of a particular group. Anyone with the space administrative permission can override or delete a lock.

Oracle and Weblogic Support

We have made a concerted attack on the various issues that were making Confluence unreliable on Oracle and Weblogic, and we're pleased to report that both have been running just fine in testing. Most importantly, the bug that was preventing pages being saved to Oracle when they were over 4Kb in length has been fixed.

For details of what precisely was fixed, see:

- The Weblogic support super-issue in JIRA
- The Oracle support super-issue in JIRA

Search Powerpoint and Excel Attachments

Confluence already searches across attached Word, PDF and RTF documents, XML, HTML and any plain text file. This search support has now been expanded in Nymboida to include searching and indexing of all text within Microsoft Powerpoint presentations and Excel spreadsheets.

In addition, the new attachment comments are also searchable.

TinyURL

Every page has a unique, short URL displayed at the top of its Page Information page. This makes it easier to send colleague's the URLs for pages with long titles via email, instant message or IRC.

New and Improved Macros
New

- \{excerpt\} allows you to mark a portion of the page as its "excerpt". This has no effect on the page itself, but other macros (such as \{blog-posts\} and \{children\}) can use the excerpt as a short summary of the content of the page.
- \{excerpt-include\} includes one page's excerpt in another page.

Improved

- \{code\} macro supports coloured highlighting for several more languages: JavaScript, ActionScript, XML and SQL.
- \{code\} macro can have its title and border customised in the same way as the \{panel\} macro
- \{blog-posts\} takes an optional \texttt{time} parameter to indicate how far back it should look for blog posts. For example, \{blog-posts:time=7d\} will show all blog-posts within the last seven days
- \{blog-posts\} takes an optional \texttt{content} parameter to change the way the blog-posts are displayed. \texttt{content-excerpts} displays excerpts instead of the full content of the blog entry (using the \{excerpt\} macro if available, otherwise extracting the first few hundred characters of the post). \texttt{content-titles} displays the entries as a list of titles.
- \{children\} takes an optional \texttt{excerpts=true} parameter: if any of the children have an excerpt available, the first line will be displayed in the list.

Improvements

Improvements to the Markup Engine

Many improvements have been made to the Confluence markup parser, fixing nigging inconsistencies, and allowing many more combinations of effects. If you want to produce something like the following, you can:

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some code</td>
<td>public static void main(String[] args) {\n</td>
</tr>
<tr>
<td>A list</td>
<td>• Item 1 \n</td>
</tr>
<tr>
<td>A panel</td>
<td>I like cheese \n</td>
</tr>
</tbody>
</table>
You can also center an image using !image.gif|align=center!

| Cheddar |

Improvements to Linking

- You can specify a link title (which appears in the mouse-over tooltip) by adding another section to the link: [Link Body Text|Page Name|Link Title]
- [/foo/bar/baz.html] will create a relative URL link to /foo/bar/baz.html on the same server as Confluence is running
- file: URL links work
- UNC-style links: [\SERVER\share\directory\file.doc] will create a file:// link to the file on an external share

Note: Some web browsers (specifically Mozilla) consider file: URLs to be a security hazard, and do not follow them.

And a whole lot more...

Here's the quick fire version of some of the other improvements we've made in this release:

- You can resize the recent changes lists on the dashboard and space summary pages. This change is persisted in your user preferences.
- UI state (whether comments or attachments are open, size of recent changes lists) persists between sessions for registered users.
- The maximum attachment size can be configured from the General Configuration administration page.
- Going to http://yoursite.example.com/display now brings up a list of spaces instead of an error page.
- The display of the space summary page is significantly faster.
- Newly created users don't show up on the dashboard recent changes list unless they edit their profiles.
- The word "Confluence" has been moved to the end of page titles instead of the beginning, making them easier to distinguish in tabs and bookmarks.
- There are more ways to navigate to the "recent blog posts" page for a space.
- Removing a user is significantly faster.
- Headings in pages are automatically turned into anchors with the same name.
- Creating a space now creates an index page as well as a home-page.

Notable Bug-fixes

It's hard to know where to start. We've fixed a lot of bugs across the whole application. If you want to know what's been fixed, you're probably best off looking for yourself.

Two areas, however, have been improved enough to deserve special mention.
• PDF Export - as mentioned above, we've made the PDF export much, much more reliable than it once was. Where before a page or space may have confused the PDF converter into not working, it should now be able to handle any markup you throw up at it.

• International characters - Many issues related to the use of non-ASCII characters in page titles, links, page contents and RSS feeds have been resolved since Confluence 1.0. Our users in non-English-speaking countries should find Confluence a much more pleasant and seamless experience now than they may have before.
## Issues Resolved for 1.1

This page last changed on Jun 09, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CONF-978</td>
<td>Mark 1.0 as a Released Version in jira.atlassian.com</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1067</td>
<td>Documentation for Confluence Integration with Active Directory</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1132</td>
<td>Merge 1.0.x branch changes into HEAD</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-956</td>
<td>Rev atlassian-confluence-extras to 1.1 in project.xml</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1255</td>
<td>Document 1.1 macro packaging and creation</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-935</td>
<td>Document how to use LDAP authentication in Jira</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1254</td>
<td>Upgrade FatCow to be shipped as a 1.1 macro library</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1235</td>
<td>Attachment Improvements</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1230</td>
<td>Weblogic Support</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1258</td>
<td>Test PDF export!</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-893</td>
<td>Syntax Highlighting for Java Script and Action Script creating links within tables</td>
<td>Closed</td>
<td>CANNOT REPRODUCE DUPLICATE</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1081</td>
<td>Customise HTML export templates per-space</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>X</td>
<td>CONF-614</td>
<td>Ability to put a description next to an attachment and rename</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-527</td>
<td>Attachment versioning</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1712</td>
<td>Get Blog posts via XML-RPC?</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-794</td>
<td>Configurable permissions for Recent Changes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-660</td>
<td>Lock Pages and/or</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-1150  sub pages  Choose whether comments get exported or not  Closed  FIXED
CONF-1218  Center/middle alignment on images - how?  Closed  FIXED
CONF-1220  Resize "recent changes" list in dashboard and space summary page  Closed  FIXED
CONF-1211  Enhance blog-posts macro to expire old blog posts from view  Closed  FIXED
CONF-1263  Excerpt macro  Closed  FIXED
CONF-1307  Add comments to a Blog  Closed  FIXED
CONF-430  Template for exporting space / page  Closed  FIXED
CONF-802  WebDAV access to attachments  Closed  FIXED
CONF-608  Customise look and feel of blog posts  Closed  FIXED
CONF-1308  Build custom macro builder toolkit  Closed  FIXED
CONF-968  Custom Defined Macro's  Closed  FIXED
CONF-1213  Support UNC path linking syntax  Closed  FIXED
CONF-1178  Macro Enable / Disable switches  Closed  FIXED
CONF-1262  Blog titles macro  Closed  FIXED
CONF-1183  Oracle Support  Closed  FIXED
CONF-1184  Weblogic support  Closed  DUPLICATE
CONF-834  longer list of page updates  Closed  FIXED
CONF-952  Tiny URL support for Pages  Closed  FIXED
CONF-1141  Confusing page titles  Closed  FIXED
CONF-867  Ask if you want to overwrite if attaching file with same name as existing attachment  Closed  WON'T FIX
CONF-1032  Wiki markup guide doesn't describe named links  Closed  FIXED
CONF-712  Headings should automatically generate anchors  Closed  FIXED
CONF-692  Rename templates  Closed  FIXED
<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-892</td>
<td>Syntax Highlighting for XML <code>{code}</code> macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1047</td>
<td>Hide <code>add comments</code> text box on print preview</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1035</td>
<td>Have the</td>
<td></td>
<td>table markup allow multi line cells</td>
</tr>
<tr>
<td>CONF-606</td>
<td>Add title parameter to links (hrefs)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1086</td>
<td>Make <code>/display</code> and <code>/display/</code> aliases for <code>listspaces.action</code></td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-402</td>
<td>Improve links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-907</td>
<td>Timestamps on attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-929</td>
<td>White Space above a <strong>h1</strong> header</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1108</td>
<td>How to create relative site hrefs?</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-879</td>
<td>Customisable Maximum Attachment Size</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1192</td>
<td>Fix any possible wiki redening/exporting flaws caused by invalid HTML by applying JTTidy</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-845</td>
<td>Creating a space should create an index page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1154</td>
<td>Allow linking to files on shared network drives</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1303</td>
<td>Trim length of outgoing links so they don't overflow</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1127</td>
<td>Remember UI state across sessions</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1015</td>
<td>Remote renderContent() method bugs</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1208</td>
<td>Add ability to start a numbered list at a specific starting value</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-1185</td>
<td>Only &quot;view page&quot; links should go by page title, rest by page ID</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-827</td>
<td>Border around comments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue Key</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-884</td>
<td>Shortcuts pages needs minor reworking</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1257</td>
<td>Index attachment comment</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1286</td>
<td>Make Excel spreadsheets searchable</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1051</td>
<td>Need icon to decorate attachment links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-694</td>
<td>Blog Management missing in API</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1267</td>
<td>Make blog display use inline decorators</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1259</td>
<td>Buttons at top and bottom</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1256</td>
<td>Add brief descriptions for all existing macros</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1187</td>
<td>Improve error message for trying to remove yourself from admin group</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1275</td>
<td>Dashboard recent updates lists irrelevant personal information entities</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1266</td>
<td>Add more links to the recent blog posts page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1274</td>
<td>Allow user macros to be deleted</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1288</td>
<td>Make PowerPoint presentations searchable</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1122</td>
<td>User can import pages from arbitrary directories</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1250</td>
<td>Edit page and edit blog post links should use page id rather than page title</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-1224</td>
<td>Allow caption to be specified in {code} macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-962</td>
<td>Recent updates list for space is very slow</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1064</td>
<td>Rewrite wiki -&gt; link transformation code</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1144</td>
<td>Removing a user is very slow</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-1226</td>
<td>Change number of entries in Dashboard: &quot;Recently Updated&quot;</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-1232</td>
<td>State attachment file name on &quot;delete attachment&quot; dialog</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2078</td>
<td>Add tiny URL support</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-945</td>
<td>Unrecognised macro {Weblog} created on start page by snipsnap import</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-926</td>
<td>Improper link processing when CamelCase link style is turned on</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-793</td>
<td>PDF export does not maintain spaces between links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-963</td>
<td>Emoticon filter kills page-rendering performance</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1044</td>
<td>Parent page info lost after choosing a template</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-810</td>
<td>Page(link) creation process &amp; the invalid characters in page title!</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1039</td>
<td>Mixed # and * items do not render correctly</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1058</td>
<td>Viewing profile of a user with no blog posts logs an NPE</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1036</td>
<td>Unable to link to URL's with single quote's as they are escaped</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1071</td>
<td>Text -format email notifications are HTML-formatted</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1084</td>
<td>Disabled users still get updates email</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1042</td>
<td>Export to PDF throws following exception</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1102</td>
<td>Deactivated users show up in manage users</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-816</td>
<td>Exporting page with {children:all=true} breaks PDF export</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-1103</td>
<td>Deactivated users should not show up</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-1001</td>
<td>PDF export removes newlines in {noformat}</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-997</td>
<td>panel macro display incorrect border</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1098</td>
<td>Possible to add page names in the errors? {children:depth=2} can generate a &quot;create page&quot; link</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1142</td>
<td>Can't generate hrefs to IRC</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1128</td>
<td>Titled links to attachments display filename instead</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1169</td>
<td>{include} macro fails with quotes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1097</td>
<td>unescaped ampersands kill PDF export</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1165</td>
<td>PDF export throws exception</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-1124</td>
<td>MethodInvocationException thrown during space export</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1125</td>
<td>ImportExportException during space PDF export</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-859</td>
<td>List not functioning inside of a Table</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1149</td>
<td>No easy way to insert literal \ tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1157</td>
<td>{noformat} inside tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-992</td>
<td>{html-inlude} not being process before a table is outputted</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1182</td>
<td>back ticks cause line breaks in lists</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-1190</td>
<td>Export to PDF dies due to ampersand</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-1175</td>
<td>Write XML with special symbols: &amp;&lt;&gt;, etc</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1194</td>
<td>List items ending with a tab misrender</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1094</td>
<td>UTF-8 characters (russians at least) breaks the table</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1173</td>
<td>Setup steps don't check any more</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1013</td>
<td>High unicode</td>
<td>Closed</td>
<td>INVALID</td>
</tr>
</tbody>
</table>
CONF-1289 characters not displaying properly
getActiveUsers loads property set for
Every Single USer

CONF-1030 code macro is totally screwed up when exported as PDF

CONF-1313 Another strange problem editing pages

CONF-1301 Create-this-page links aren't being stored

CONF-1317 rss not well formed error

CONF-1188 Apache XML-RPC library blows up on high-bit chars

CONF-1079 korean language title link problem

CONF-1180 Cannot delete page with accent in title

CONF-1037 Errors with database - can not save in Oracle

CONF-778 New remote API methods are not documented

CONF-964 subsequent ampersands not rendered as entities

CONF-970 Unable to export to PDF on Linux server VM

CONF-1181 Parse exception in jiraissues

CONF-1050 Changing server path does not change path in internal links

CONF-1323 Error when the page title contains Chinese words

CONF-995 Export cleanup

CONF-1229 Link names not showing up for attachments

CONF-1242 JIRA issue macro fails on certain URL

CONF-1236 Chinese characters garbled under Resin and Tomcat due to sitemesh bug
CONF-976  File name with non us characters  Closed  FIXED
CONF-1199  KeyFactory provider still hardcoded to "SUN"  Closed  FIXED
CONF-842  Trackbacks seem to be being added multiple times  Closed  FIXED
CONF-1139  Regression: Next/Prev entry blog links still displayed on first/last blog  Closed  FIXED
CONF-1243  Need a safe way to make "Create" links for high-bit pages  Closed  FIXED
CONF-942  os_property entry table getting out of sync with os_user  Closed  FIXED
CONF-1027  New installation on Oracle 9i, errors in log  Closed  FIXED
CONF-1244  Create links pass potential parents between spaces  Closed  FIXED
CONF-1059  Nested lists break PDF export (smart quotes)  Closed  FIXED
CONF-1191  Export to XML dies due to ampersand  Closed  DUPLICATE
CONF-1277  Create page with template may have problems if parent page has non-ASCII title  Closed  FIXED
CONF-898  Cannot create pages with () in title  Closed  FIXED
CONF-951  page names ending is space are not properly linked  Closed  FIXED
CONF-1048  List items, panels and code:xml conflict  Closed  FIXED
CONF-1152  Duplicate pages with same name  Closed  CANNOT REPRODUCE
CONF-1056  Attachments with irregular characters (commons, pounds, spaces) fail to download  Closed  FIXED
CONF-877  Email search is case-sensitive  Closed  FIXED
CONF-1168  NullPointerExeption in LinkManager when renaming page  Closed  FIXED
CONF-1204  Multiple indexes in same DB column  Closed  FIXED
CONF-1216  Export space problem  Closed  FIXED
CONF-975  Linking and non-us characters  Closed  FIXED
CONF-1268  Can not rename page when it has links from a user profile  Closed  FIXED
CONF-959  Search results on user with no personal info results in visible velocity crap  Closed  CANNOT REPRODUCE
CONF-971  Stream type cannot be used in batching  Closed  FIXED
CONF-818  Hibernate lazy instantiation problem (in Oracle)  Closed  FIXED
CONF-1078  RSS Feed Error  Closed  FIXED
CONF-1167  Backups created on Windows can't restore on Unix.  Closed  DUPLICATE
CONF-1117  Restore from Backup Zip file cannot over 20+M bytes...  Closed  FIXED
CONF-1046  Missing text keys  Closed  FIXED
CONF-1709  New Links resolve to different project  Closed  FIXED
CONF-569  cannot use latin characters in page title  Closed  FIXED
CONF-1319  Save of blog comment breaks when preview is done first.  Closed  FIXED
CONF-1283  Renaming attachments screen is incorrect  Closed  FIXED
CONF-780  Confirming user deactivation takes forever?  Closed  FIXED
CONF-1011  Export to PDF stack trace  Closed  FIXED
CONF-1300  Watch this page without being logged-in  Closed  FIXED
CONF-1018  Wiki outgoing links are incorrectly reported (false positive)  Closed  FIXED
CONF-1278  Tables containing  Closed  FIXED
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-1316</td>
<td>form fields are messed up not permitted to view previous versions of page</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1148</td>
<td>Some page-related views fail on a renamed page</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1219</td>
<td>Confluence: The title you have entered contains invalid characters (...) (question mark)</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-795</td>
<td>Signing up creates user profile page with Anonymous editor</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-1306</td>
<td>IE browser bug on 'page does not exist' page</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1310</td>
<td>Cannot remove page with problematic titles</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-1201</td>
<td>NPE when clicking on the previous versions link when viewing v.1 of a page</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-1247</td>
<td>Confluence Crash on selecting Profile</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1270</td>
<td>Form templates don't work any more</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1012</td>
<td>NPE in Page template wizard</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-1116</td>
<td>Potential Race condition</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1233</td>
<td>FileNotFoundException for default-formatting.properties on weblogic restart</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1170</td>
<td>Log4j properties not being recognized in weblogic</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1174</td>
<td>Shouldn't need to escape things inside {code}</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-993</td>
<td>Lose Parent page when selecting a template</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-981</td>
<td>RSS feed has a ) in link</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-949</td>
<td>Deploy to weblogic as a war causes load resrouce to fail</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-1074  Can not setup the embedded database!  Closed  FIXED
CONF-822  Error adding child pages on Oracle  Closed  FIXED
CONF-1197  New line code (\) around images not working in 1.0.3  Closed  FIXED
CONF-1126  ImportExportException caused by ClassCastException when doing Export Space as XML  Closed  FIXED
CONF-1320  Error drawing panel  Closed  FIXED
CONF-1312  Problem linking to an attachment whose name contains a special character  Closed  FIXED
CONF-1325  Wrong URL in daily summary  Closed  FIXED
CONF-1089  Results of getPermissions are incorrect  Closed  FIXED
CONF-927  Blogging Varies in Output depending on Link  Closed  FIXED
CONF-1280  Search macro results are borked  Closed  FIXED
CONF-1010  Space-level custom printable decorator broken  Closed  FIXED
CONF-1284  Link in format [my link name|pagename^attachment.ext] shows attachment.ext  Closed  FIXED
CONF-888  Trackbacks are not sent for shortcut links  Closed  FIXED
CONF-911  Creating a child page with a template loses parent information  Closed  FIXED
CONF-979  Snipsnap Import Fails  Closed  FIXED
Release Notes 1.1.1

This page last changed on Jun 21, 2004 by jnolen.

Confluence 1.1.1 is a maintenance release that fixes some bugs regarding attachments, page links and notifications. Remember, a Confluence license entitles you to a year of upgrades, and this upgrade along with future updates will be free of charge.

Who should upgrade?

This release mainly fixes the bugs discovered in our recent 1.1 release. The major issues resolved are listed below, or you can see the full list here. As some of the issues resolved have a significant impact on the user experience of Confluence, we recommend that anyone currently running 1.1 upgrade to 1.1.1.

Upgrade Procedure

1. Shut down the Confluence server
2. Back up confluence/WEB-INF/classes/confluence-init.properties, and if you have customised it, confluence/WEB-INF/classes/osuser.xml
3. Unpack Confluence 1.1.1 in the same location as your existing Confluence installation
4. Restore the two files you backed up in step 1 to the 1.1.1 installation.
5. Start Confluence

To avoid the possibility of data-loss, you should back up your ConfluenceHome directory and your database before upgrading, and perform a full backup from within the application.

Changes in 1.1.1

Attachment fixes

- Attachment versioning introduced a new table in Confluence that had a column whose name conflicted with some databases like Sybase
- Links to older version of attachments could not be accessed if the webapp was deployed with a context path
- Attaching files that contained '+' and '&' symbols caused certain pages in Confluence to break

These have been fixed in 1.1.1.

Notification fixes

Users opting to receive html formatted email received emails with the correct subject but no content. In addition, the "View Changes" link in the daily change email was broken. These are now fixed.

Email Server fixes

An upgrade to an email component used in Confluence in 1.1, caused an error to be displayed when users attempted to modify their email server settings. An upgrade has been added in 1.1.1 that will fix this
problem to save users from having to perform the fix manually.

Export to PDF fix

Spaces labelled with names containing an '& ' symbol could not be exported to PDF. This has been fixed.

Wiki Notation fix

The notation for a horizontal ruler was changed to five dashes (up from 4) in 1.1. This stopped the ruler from showing. This has been changed back in 1.1.1.
# Issues Resolved for 1.1.1

This page last changed on Jun 18, 2004 by jnolen.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-1391</td>
<td>Old versions of pages appear when you reindex</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1384</td>
<td>Redirect sometimes faster than previous tx commit</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1358</td>
<td>&quot;VERSION&quot; is a reserved word in a lot of databases</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1344</td>
<td>Confluence 1.1 Installation wizard - step 7 System Error</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1342</td>
<td>Restore exception: Bad SQL grammar [null] in task 'HibernateAccessor'</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1341</td>
<td>ClobString Type requires active transaction sync exception</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1386</td>
<td>Problem after Upgrade from 1.0.3 to 1.1</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1343</td>
<td>WAR release has wrong readme.txt etc</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1340</td>
<td>Url containing CamelCase words are not parsed properly</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1510</td>
<td>Mail Queued problem</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1388</td>
<td>.sh files in the standalone release aren't executable</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1387</td>
<td>URL for the non-tip version of an attachment is incorrect</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-1382</td>
<td>Notifications are missing content</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1380</td>
<td>Crash at creating new group</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1377</td>
<td>SEVERE Ognl exception in server logs</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1365</td>
<td>Wrong interaction between include and children macros</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1362</td>
<td>Restore just spins when file access is denied and attachment directories cannot be restored</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1361</td>
<td>Using Ampersand (&amp;) in Space names breaks PDF export</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1357</td>
<td>Incorrect title is passed when page is created from the link</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1356</td>
<td>Reset Default Colour Scheme</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1352</td>
<td>Attachments with plus sign in file name cause an NPE when loaded</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1349</td>
<td>Links to attachments includes the ^ symbol</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1346</td>
<td>No such setting:webwork.ui.templateDir - When confluence is root web app</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1345</td>
<td>Moving page with linked attachment</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1335</td>
<td>horizontal ruler notation broken</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.1.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

This fixes an upgrade problem in 1.1.1 where users attempting to upgrade from 1.0.x directly to 1.1.1 encountered an "Upgrade Failed" error. Therefore, if you are still using a version older than 1.1, and are planning to upgrade, please upgrade to 1.1.2 to avoid this problem.

If you have already upgraded to 1.1.1 from 1.0.3a and cannot start Confluence due to the upgrade error, simply download 1.1.2 and upgrade to it. This should fix the problem.

If you have already upgraded successfully to 1.1.1 from 1.1 then you may safely ignore this upgrade.

Useful tips when upgrading from 1.0.3a

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

- Users who have enabled external user-management by customising their osuser.xml file will need to read this document also.
- Users who have used MySQL or Postgresql with Confluence 1.0 should read this document which explains how to get rid of any extraneous triggers or indexes that might have been created.
Release Notes 1.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Atlassian is proud to present Confluence 1.2, otherwise known as Swan, to the world. Existing customers who wish to upgrade, or new users who wish to try out Confluence for 30 days can download either the standalone or WAR distributions from the Atlassian website: http://www.atlassian.com/software/confluence

Swan is the second major update to Confluence, and once again all existing customers can upgrade for free, thanks to the provision for one year of free upgrades in your license. You will find that Swan contains significant new features in the areas of user management, search and space browsing, as well as the usual raft of enhancements, bug fixes and things we just couldn't resist throwing in at the last minute.

In all, 109 issues were resolved between 1.1.2 and 1.2. You can see the full list here: DOC:Issues Resolved for 1.2

Looking towards the future, we are going to attempt to increase the frequency of releases. While having one release every three months makes for impressively long release notes, it also means that customers are often left waiting longer than might be necessary for important enhancements or bug-fixes.

Upgrading from 1.1.2

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

You will need to reindex your site after upgrading to enable some of the new site search features. You can do this from the "Rebuild Search Index" link on the Administration Console.

Site administrators upgrading from 1.1.2 or earlier should take particular note of the changes to global and space permissions. Confluence should automatically upgrade old permissions to the new scheme when upgrading from or importing data from earlier versions, but it is a good idea to check that your spaces are still secure and accessible after the upgrade, just in case.

Upgrading from 1.0.3a

Users upgrading directly from 1.0.3a should also read the Nymboida Release Notes for caveats regarding the 1.0 -> 1.1 upgrade.

Contents

1. New Features
2. Improvements
3. Notable Bug-fixes

See also: DOC:Issues Resolved for 1.1
New Features

Page List Views

The old "list pages" screen has been enhanced, almost to the point of being unrecognizable. In its place, we now offer three ways to browse the contents of a space.

The Alphabetical View looks like the "list pages" screen from 1.1 and earlier, but it has been enhanced to allow you to find pages quickly by the first letter of their title.

The Directory View presents the contents of a space as a tree, allowing you to drill down the hierarchy of parent and child pages (You will need Javascript turned on to use this view).

The Search View presents Swan's enhanced search interface, already focused on the space you are looking at.

Image Thumbnails and Thumbnail Galleries

You can now display a thumbnail of any image attached to a page. Clicking on the thumbnail will pop up
a window containing the full-sized image. For example, the nice picture of the waterfall from my holiday in California was generated by the following wiki-markup.

!waterfall.jpg|align=right thumbnail!

In addition, the \{gallery\} macro will create a thumbnail gallery of all the images that are attached to the page the macro is included in. You can see an example of this macro in action here: DOC:Thumbnail and Gallery Example.

The maximum sizes for thumbnails are configured in the General Configuration section of the Administrative Console.

**Threaded Comments**

Bowing to public demand, we have added the ability to arrange comments by thread: users may respond to a particular comment, and the comments will be arranged in accordance with who responded to what.

The default is still for comments to be presented as a flat list, but you can enable comment-threading in the General Configuration section of the Administrative Console.

**Improvements**

**Enhanced Search**
The site-search functionality of Confluence has been enhanced, both subtly behind the scenes, and quite obviously in front of them.

Behind the scenes, we now index more information such as attachment comments and filenames. We have improved the indexing of Powerpoint presentations so that more text is extracted from the Powerpoint file. We have also tweaked the ranking algorithms behind the search so that you are more likely to find the page (space, comment, blog post, attachment, user...) you are looking for.

More obviously, we have given the user a lot more control over searching with an intuitive user interface that allows you to limit searches by space, type of content, or date last modified, and to group search results by type and space.

The `{search}` macro has also been updated to take advantage of the new search features (the options are described more fully in the notation guide linked from Confluence's edit page):

```
{search:query=Confluence|maxLimit=5|spacekey=DISC|type=page}
```

New Permissions Interface
Two of the biggest issues users have been having with permissions in Confluence were:

- The interface for setting permissions was confusing.
- It was hard to keep sites that allowed anonymous access below the workgroup license 25-user limit, especially if they used external user management.

Both of these issues have been fixed in Swan, but it has involved a slight change in the way permissions are checked. This should not be a problem for new Confluence users: the new system is easier to use than the old,. However, if you are upgrading from 1.1.2 or earlier, you should read [this document](#) to see what's different.

And a whole lot more…

Here's the quick fire version of some of the other improvements we've made in this release:

- The "double-click to edit" feature has been removed.
- Blog views now come with a monthly calendar showing nearby posts
- Macro libraries can now include images, or any other content the macro needs to serve over the web: look out for new example code in the macro documentation soon.
- Users can set their profile page to be their site homepage
- You can delete all referrer links that match your exclusion list (in General Configuration), to rid the site of referrer spam
- The site's administrative, search and editing pages are served with [robots exclusion meta tags](#) so that only the site's main content will be indexed by well-behaved search engines
- Restoring backups should be significantly faster for installations with many users
- Administrators can choose to restore backups from the filesystem instead of uploading them (important if your backup is quite large)
- Confluence now serves files with a proper Content-Length header, so browsers can display the download accurately
- CSS stylesheets are hidden in emails so they don't mess up Lotus Notes
- Export and backup filenames use a neater yyyyMMdd date format

**Notable Bug-fixes**

- Exports created on Windows can now be imported on Unix-like operating systems without having to fix the path separators
- Hyphens in page headings or anchors will no longer render strangely
- Restoring a backup during setup now properly generates the search indexes
• Page "short links" now respect the configured site URL, regardless of which URL the user is accessing the site from
• Strange Powerpoint files no longer choke the indexer
• Users with Admin privileges can now see the link to the Administration Console without being in the 'confluence-administrators' superuser group
• Space administrators can modify space templates without having global administrator privileges.
• User macros are now lower-cased by default
• It is now possible to change the case of a page title by renaming the page
## Issues Resolved for 1.2

This page last changed on Aug 23, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>CONF-1442</td>
<td>Use atlassian core's thread append instead of confluence's BOB tests against Weblogic</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1264</td>
<td>Upgrade libraries</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-756</td>
<td>Calendar for blog posts</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1130</td>
<td>Allow import/restore from server local filesystem</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1497</td>
<td>Option to scope searching</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1539</td>
<td>&quot;View in hierarchy&quot; link from a page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-784</td>
<td>Inline image attachment as thumbnail</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-785</td>
<td>Gallery Page Macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1695</td>
<td>Improve threaded comments L&amp;F</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1668</td>
<td>Improve Administration Setup Paths page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-665</td>
<td>Warn if adding a space permission to user without USECONFLUENCE permission</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1239</td>
<td>Ability to clear Referrers</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1408</td>
<td>Restoration process take a long time updating indexes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1487</td>
<td>Alphabetical, Directory and Search views for page listing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-985</td>
<td>Threaded Comments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✔</td>
<td>CONF-1490</td>
<td>Add &quot;Hide Comments&quot; link when comments are shown</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td><strong>CONF-1529</strong></td>
<td>Incorrect number of licensed users displayed</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-817</strong></td>
<td>Revisit UI for adding permissions</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1676</strong></td>
<td>Email template fix for Lotus Notes 6.5</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1477</strong></td>
<td>Change backup filenames to 2004-06-29 format</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1658</strong></td>
<td>Zipped exports created on a Windows Confluence instance are not platform-independent</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-961</strong></td>
<td>Add &quot;my profile&quot; to the list of a user's available homepages</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-809</strong></td>
<td>Scope-base searches (on-site and via {search} macro)!</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1376</strong></td>
<td>Allow macro libraries to include web-served resources</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1163</strong></td>
<td>Put NOINDEX NOARCHIVE tags on administrative and search actions</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1359</strong></td>
<td>Improve search</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1196</strong></td>
<td>Add App Specific Exceptions to Remote API</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-957</strong></td>
<td>Quick Search should notice if you've typed in a page title</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1588</strong></td>
<td>FileServerServlet doesn't serve file sizes</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-480</strong></td>
<td>Alphabet links in paged search results / page links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1260</strong></td>
<td>DHTML spaces control</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1447</strong></td>
<td>Index attachment names</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-886</strong></td>
<td>Hierarchy view as propertreeview</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1491</strong></td>
<td>Double-click to edit page feature unintuitive</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td><strong>CONF-1564</strong></td>
<td>ClobStringType requires active transaction</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>Issue ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-1682</td>
<td>Space keys are alphanumeric, not ASCII</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1205</td>
<td>Search results for velocity get truncated on wiki.opensymphony.com</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1692</td>
<td>Update Page fails in MailNotificationQueueItem.createFromTemplateFile</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-1417</td>
<td>jiraissues macro ignores the first entry in the columns parameter</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-1710</td>
<td>Upgrade failed: Can't call commit when autocommit=true</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1617</td>
<td>Couldn't restore directory from backup error</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1486</td>
<td>i18n title shows up as hashes when exporting to PDF</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1524</td>
<td>Hyphen in Blog text causes corruption.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1392</td>
<td>Import on initial setup doesn't index</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1501</td>
<td>Rebuilding Search Index take forever</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1423</td>
<td>View mail servers doesn't show From address, but Edit operation does.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1612</td>
<td>Brackets &quot;(*) break rendering of headings</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1508</td>
<td>Very long headings render bad anchor tag</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1536</td>
<td>template not found - i8n message missing</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1292</td>
<td>Mail queue not updated with queued notification items</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1548</td>
<td>User History page with velocity bug?</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1419</td>
<td>Dates in a heading are not rendered correctly</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1045</td>
<td>Exports performed on Windows may have \ as path separator in zip</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-1659</td>
<td>Anchor links don't</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
CONF-1492  "short link" not respecting site URL  Closed  FIXED
CONF-1666  Deleting a group should delete that group's permissions  Closed  FIXED
CONF-1426  Please remove the double-click-starts-editing feature  Closed  FIXED
CONF-1471  Broken links in 'Confluence Notation Guide'  Closed  FIXED
CONF-1696  Must-fixes for search  Closed  FIXED
CONF-1701  Gallery macro prints $thumb.attachment_comment under all thumbnails  Closed  FIXED
CONF-1430  Children macro choking on dashes in page names  Closed  FIXED
CONF-1690  Bad URL for "edit space homepage" in space created screen  Closed  FIXED
CONF-1121  Changing a word in a page shows wrong diff  Closed  FIXED
CONF-1684  Attachment search fails when limited by space  Closed  FIXED
CONF-1582  Links not rendered correctly using Remote render  Closed  FIXED
CONF-1440  Confluence still doesn't clean the temp directory  Closed  WON'T FIX
CONF-1454  h3 element rendering junk  Closed  FIXED
CONF-1407  Headers with Certain Characters  Closed  FIXED
CONF-1615  user suddenly gets system error messages  Closed  FIXED
CONF-1441  Special Characters in headers do not render properly  Closed  FIXED
CONF-1599  Children macro chokes on minus characters  Closed  FIXED
CONF-1630  View space permission description wrongly says that a user can edit a page  Closed  FIXED
<p>| CONF-1403 | Date formats of jiraissues macro | Closed | FIXED |
| CONF-1439 | TXT daily summary generate raw HTML | Closed | DUPLICATE |
| CONF-1431 | Error commenting Blog | Closed | RESOLVED LOCALLY |
| CONF-1432 | InfrastructureException after update | Closed | RESOLVED LOCALLY |
| CONF-1519 | page anchor links break | Closed | FIXED |
| CONF-1550 | Page Information: Incorrect Short URL if webapp context is not &quot;/&quot; | Closed | CANNOT REPRODUCE |
| CONF-1579 | Exception when attaching a file | Closed | FIXED |
| CONF-1418 | Spaces in File links not preserved on Wiki Export | Closed | FIXED |
| CONF-1428 | cannot set page with unicode characters in title as parent page | Closed | FIXED |
| CONF-1445 | Icons don't get exported in PDFs | Resolved | FIXED |
| CONF-1691 | $generalUtil.formatDate(page.lastModificationDate) showing up all over the place | Closed | FIXED |
| CONF-1252 | (Confluence Changes in the last 24 hours) has incorrect link to edit profile | Closed | FIXED |
| CONF-1468 | Display of paragraphs in comment blocks not consistent | Closed | FIXED |
| CONF-1512 | User Macros with upper-case characters ignored | Closed | FIXED |
| CONF-1350 | Random PermissionCheckDispatcher crashes when viewing pages | Closed | FIXED |
| CONF-1650 | Administrate tab only shows if user is in confluence-administrators | Closed | FIXED |
| CONF-1533 | PowerPoint search not working (example included) | Closed | FIXED |
| CONF-1673 | Importing into Swan seems to wipe space permissions | Closed | FIXED |
| CONF-1681 | Only confluence | Closed | FIXED |</p>
<table>
<thead>
<tr>
<th>Issue Key</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-1369</td>
<td>Error when export page as PDF</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1326</td>
<td>Can't change mail format of daily summary messages.</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1249</td>
<td>Zip file creation problems</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1269</td>
<td>Export space (html) fails, if attached image missing</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1677</td>
<td>java.lang.IllegalArgumentException on PDF Export</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1146</td>
<td>Use of quotes in page name brings issues with it</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1452</td>
<td>rename page bug</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1480</td>
<td>URL returned from search is incorrect for attachments</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1574</td>
<td>Using % in page title causes error</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1507</td>
<td>Non-administrator users can perform some admin tasks</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1404</td>
<td>Empty error queue message incorrect</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1549</td>
<td>&quot;Restore Page&quot; restores entire confluence?</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1645</td>
<td>(excerpt-include) macro is documented with the wrong syntax</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1663</td>
<td>A small error in the</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1499</td>
<td>Wrong number of licensed users reported when anonymous access enabled</td>
<td>Duplicate</td>
</tr>
<tr>
<td>CONF-1228</td>
<td>Granting &quot;anyone&quot; use permission breaks with JIRA user management</td>
<td>Duplicate</td>
</tr>
<tr>
<td>CONF-1593</td>
<td>java.lang.ClassNotFoundException</td>
<td>Fixed</td>
</tr>
<tr>
<td>CONF-1662</td>
<td>NPE in Mail notification</td>
<td>Duplicate</td>
</tr>
<tr>
<td>CONF-1443</td>
<td>On doubleclick inside Add Comment editor new page is loaded</td>
<td>Fixed</td>
</tr>
<tr>
<td>Issue Number</td>
<td>Description</td>
<td>Status</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>CONF-1459</td>
<td>Special characters in &quot;search&quot; result in various problems</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-1535</td>
<td>Nullpointer exception on updating a page that is being watched by a new user</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1420</td>
<td>Bulleted list items from JSPWiki not converted when no space after *</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1699</td>
<td>Entering &quot;*&quot; as search string causes error</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1401</td>
<td>Wrong document tree in exported PDF files</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1515</td>
<td>Special german characters (ä ö ü) not being exported to PDF properly</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Permissions Changes in 1.2

For Swan, changes were made to the way Confluence manages and checks permissions. This document is a guide for anyone migrating from Confluence 1.1.2 or earlier describing why the changes were made, and what this means to existing Confluence installations.

Why Change?

There were two goals behind changing permissions in Confluence:

1. Fix a significant problem whereby users with external user management enabled could not also enable Confluence anonymous access without blowing out their 25-user workgroup license.
2. Make the user interface for assigning and viewing permissions easier to use and understand.

What Changed?

"Anyone" User Removed

In Confluence 1.1.3, there was an "Anyone" user, who represented anyone using the system, whether logged in or not.

This user was the source of the licensing problem, and no longer exists in Confluence 1.2

Anonymous Permissions Added

Confluence 1.2 has explicit permissions for anonymous users. These permissions are only granted to users who are not logged in.

There is nothing stopping an administrator granting some permission to anonymous users, but not granting it to logged-in users. This results in the slightly bizarre possibility that a user might be able to do more before logging in than they can after. Luckily, this is a pretty easy situation for administrators to avoid.

Enabling anonymous access has no effect on Confluence's user count for licensing purposes.

Guard Permissions Added

The roles of the "Use Confluence" and "View Space" permissions have been expanded so that now they are required permissions before a user or group can be granted any more rights.

Before a user has access to anything in the Confluence server, they must first have "Use Confluence" permission, and likewise before a user has access of any kind to a space, they must first have the "View Space" permission.
For licensing purposes, your number of users is equivalent to the number of non-anonymous users with the "Use Confluence" guard permission.

### Migrating from 1.1 to 1.2

#### Migrating Automatically

When you upgrade from Confluence 1.1, or when you restore a backup created in 1.1 into Confluence 1.2, an upgrade task will run to automatically migrate your permissions to the new scheme, while keeping them consistent with your 1.1 security settings. The task will make the following changes:

- All "Anyone" permissions will be converted into two separate permissions: one for Anonymous access, and one for the `confluence-users` group. (If the `confluence-users` group does not exist, this step will be skipped)
- Any user or group with some global or space permission will also be granted the equivalent guard permission.

After starting up with the new version of Confluence, we suggest that you check that the permissions have migrated successfully. While we have tested the migration code, maintaining your site's security is important enough to warrant a double-check, just in case.

#### Migrating Manually

If the automatic migration does not complete successfully, which would most likely happen if you have removed the "confluence-users" group, you will need to perform the above steps manually, through the user administration interface.
Release Notes 1.2.1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.2.1 is a maintenance release that fixes some bugs that users may have encountered using Confluence 1.2. It incorporates improvements to performance for large Confluence installations, and fixes bugs related to the remote API, over-use of disk space, and a few annoying errors users were experiencing when setting up a new Confluence instance.

1.2.1 is a free upgrade for all existing Confluence customers.

Who should upgrade?

The issues resolved below are all either fixes to problems that have effected small numbers of users, or improve areas of Confluence that may not be used in your installation. As such, we recommend you read through the release notes and decide whether this upgrade is necessary.

If 1.2 is working fine, and none of the issues below are bothering you, there is no need to upgrade.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

Changes in 1.2.1

See also: Issues Resolved for 1.2.1

Remote API Fixes

- getBlogEntries() will no longer erroneously return SQL Timestamps instead of date objects — [CONF-1756]
- getPage() will now successfully retrieve a previous page version — [CONF-1721]
- renderContent() can now successfully render a page containing the \{blog-posts\} macro — [CONF-1717]

Setup Fixes

- Some users were encountering the following error during setup: "Unable to store Trigger with name: 'backupTrigger' and group: 'DEFAULT', because one already exists with this identification." This should no longer occur — [CONF-1760]
- Some users were encountering a NullPointerException in org.apache.lucene.store.FSDirectory.create() during setup when connecting to an external
datasource. This should no longer occur — CONF-1767

Performance and Efficiency Fixes

- Installations with large search indexes will no longer experience a performance degradation when saving content — CONF-1759
- Backups will no longer leave a redundant exploded copy of the files being backed up in the temp directory — CONF-1752
- Deleting a space was not deleting its attachments from the confluence home directory. This is now fixed — CONF-1765
- Thumbnails are now stored in their own directory, so they won't be included unnecessarily in backups — CONF-1785

Other Issues Resolved

- Confluence now generates significantly higher-quality image thumbnails (Thanks to Mike Aizatsky for the tip) — CONF-1725

⚠️ Note ⚠️

Unless you are running JDK 5.0 (which we do not recommend as it is still in pre-release), this improvement will only be visible if you are running Confluence on Mac OS X

- URLs longer than 255 characters will no longer cause an exception when saving a page — CONF-1743
- Pages with titles containing quotes no longer break PDF exports — CONF-1719
- Internet Explorer 6 SP2 will no longer corrupt zip-files downloaded from Confluence — CONF-1669
# Issues Resolved for 1.2.1

This page last changed on Sep 09, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-1785</td>
<td>Move thumbnails out of attachments directory</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1825</td>
<td>&quot;Log In&quot; link should not be relative to server base URL</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1759</td>
<td>Don't optimise lucene index every time we add to it</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1752</td>
<td>Be more proactive about cleaning temp directory after backup</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1729</td>
<td>Error purging referrers</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-1717</td>
<td>{blog-posts} macro isn't rendered during RPC renderContent call</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1743</td>
<td>URLs &gt; 255 chars in a page kill page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1669</td>
<td>Downloads corrupt in IE 6 XP SP2</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1775</td>
<td>Strange behaviour with deactivated users &amp; JIRA user delegation</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1721</td>
<td>getPage for a prev version fails</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1719</td>
<td>Exporting a page with a quote in the title breaks space exporting</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1756</td>
<td>getBlogEntires marshalling bug</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1494</td>
<td>Quartz ObjectAlreadyExistsException exception on MS SQL Server</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-1760</td>
<td>Unable to store Trigger with name: 'backupTrigger' and group: 'DEFAULT', because one already exists with this identification.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-1592</td>
<td>SnipSnap import renames pages because of illegal title characters - but doesn't update the links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1476</td>
<td>Attachments seem to randomly fail</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1765</td>
<td>Deleting a space does not delete its attachments</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1767</td>
<td>NullPointerException in Lucene FSDirectory.create() during setup</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1725</td>
<td>Poor quality of thumbnails</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.2.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.2.2 is a maintenance release that fixes some bugs that users may have encountered using Confluence 1.2 and 1.2.1. It fixes problems with attachment downloading, text file imports and text-only emails.

1.2.2 is a free upgrade for all existing Confluence customers.

Who should upgrade?

Confluence 1.2.2 includes a fix for CONF-1810. This bug will cause serious problems for anyone who attaches multiple versions of the same file to a Confluence page, corrupting subsequent downloads.

As such, Confluence 1.2.2 is a recommended upgrade for anyone running 1.2 or 1.2.1.

Upgrading Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2 or 1.2.1, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

Changes in 1.2.2

See also: Issues Resolved for 1.2.2

- The correct file size will now be stored for multiple versions of the same attachment, fixing a serious download corruption bug – CONF-1810
- Long {excerpt} blocks no longer overrun their database field – CONF-1705
- The {code} macro will no longer garble XML – CONF-1829
- Page diffs now escape HTML tags correctly – CONF-1830
- Fixed Postgresql error when you try to import text files that contain the nul (\0) character – CONF-1739
- "New Blog Post" icon in Page Operations URL now goes to the correct URL – CONF-1848
- "Next" link at the bottom of the alphabetical page listing now works – CONF-1797
- Text-formatted Confluence daily emails are now sent as text – CONF-1724
- The search input box on the "404 Not Found" page has been fixed – CONF-1800
## Issues Resolved for 1.2.2

This page last changed on Sep 23, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-1812</td>
<td>Modified user list was being confused with new user list for daily email notifications</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1731</td>
<td>Phrase searches are case-sensitive</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-1739</td>
<td>java.lang.IllegalArgumentException: \0 not allowed during text file import</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1724</td>
<td>Confluence daily mails are HTML but wrong Content-type</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1797</td>
<td>&quot;Next&quot; link at bottom of alphabetical listing page is broken.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1670</td>
<td>NullPointerException in setup restore step</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1800</td>
<td>Search form on 404 page not working</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1848</td>
<td>&quot;New Blog Post&quot; icon in Page Operations (page.operations-icons) has incorrect URL.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1830</td>
<td>Diff output is not HTML escaped</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1810</td>
<td>Uploading new version of attachment does not update file size in database</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1705</td>
<td>Long excerpts (&gt;255 characters) kills page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 1.2.3

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.2.3 is a maintenance release that fixes some bugs that users may have encountered using the 1.2 series of Confluence. It fixes problems with Oracle support on Weblogic, thumbnail display, errors moving pages between spaces.

1.2.2 is a free upgrade for all existing Confluence customers.

Who should upgrade?

The issues resolved below are all either fixes to problems that have effected small numbers of users, or improve areas of Confluence that may not be used in your installation. As such, we recommend you read through the release notes and decide whether this upgrade is necessary.

Of particular note should be CONF-1911 which might effect customers trying to use Confluence with Oracle under Weblogic, and CONF-1914, a security issue where users may determine the names of attachments that they can not access.

If Confluence 1.2.2 is working fine for you, feel free to stick with it.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.2 or higher, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.1.2 or earlier, be sure to read the upgrade instructions in the Confluence 1.2 release notes.

Changes in 1.2.3

See also: Issues Resolved for 1.2.3

- Oracle LOB handler now works correctly under Weblogic – CONF-1911
- Attachments are no longer listed in search results if the user is not permitted to download them – CONF-1914
- Tomcat no longer hijacks Confluence's logging – CONF-1934
- Incoming page links no longer listed multiple times – CONF-1928
- Comments in daily update report are now linked properly – CONF-1904
- Thumbnails and the gallery macro no longer draw images with width and height of 0 – CONF-1861
- Fixed a system error moving pages between spaces when they are linked to from a comment – CONF-1851
- Fixed a system error when removing an attachment – CONF-1861
### Issues Resolved for 1.2.3

This page last changed on Oct 08, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-1817</td>
<td>Datasource issues</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1751</td>
<td>Add an &quot;archive this backup&quot; option to the manual backups</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1928</td>
<td>Only list a referring page once</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1730</td>
<td>Incoming links are duplicated if the links are to different anchors</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-1774</td>
<td>Renaming Home page causes system error</td>
<td>Closed</td>
<td>HANDLED BY SUPPORT</td>
</tr>
<tr>
<td></td>
<td>CONF-1622</td>
<td>Top re-edit button for Templates does not work</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-1913</td>
<td>Invalid key param throws NPE</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1581</td>
<td>RPC call to render does not render blog posts</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-1794</td>
<td>&quot;Incoming Links&quot; only works for links in correct case</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-1911</td>
<td>Could not create Oracle LOB</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1869</td>
<td>The <code>(gallery)</code> macro generates 1 pixel thumbnails</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1904</td>
<td>New comments in daily change report not linked</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1603</td>
<td>Log4j configuration is ignored in stand-alone Confluence - and seems to be using jdk1.4 logging</td>
<td>Resolved</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td></td>
<td>CONF-1933</td>
<td>NullPointerExcpetion when removing attachment</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1757</td>
<td>RPC exception returns html (500 page)</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-1851</td>
<td>Exception moving page between spaces</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>CONF-1600</td>
<td>NullPointerException</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-1778</td>
<td>Directory view listing only shows space link</td>
<td>Resolved</td>
<td>WON’T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-1472</td>
<td>Repository corruption</td>
<td>Resolved</td>
<td>INCOMPLETE</td>
<td></td>
</tr>
<tr>
<td>CONF-1914</td>
<td>Unpermitted attachments are displayed in search results</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1905</td>
<td>Watch spaces does not send notifications unless &quot;Notify on my actions&quot; is checked</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-1920</td>
<td>Importing from JSPWiki breaks some links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1861</td>
<td>Thumbnails are referenced that can not be drawn</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1527</td>
<td>ClobStringType requires active transaction synchronization</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-1934</td>
<td>Replace commons-logging usages with log4j</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1627</td>
<td>x Identical Incoming links are displayed x times</td>
<td>Resolved</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-1737</td>
<td>Gallery macro: no JDK image support</td>
<td>Closed</td>
<td>WON’T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-1626</td>
<td>Page title is changed to Error and Page Operations is blank</td>
<td>Closed</td>
<td>INCOMPLETE</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.3

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Atlassian Software is proud to present Confluence 1.3 (otherwise known as Murrumbidgee). Existing customers who wish to upgrade, or new users who wish to try out Confluence for 30 days can download either the standalone or WAR distributions from the Atlassian website: http://www.atlassian.com/software/confluence

Murrumbidgee is the third major update to Confluence (in less than nine months!), and once again we've raised the bar of what you should expect from a professional wiki. Confluence 1.3 looks better, performs better, installs more easily and does far more than it ever has before.

A big thanks to everyone who reported bugs, and offered suggestions over the last few months, especially everyone who helped by trying out our Development Releases.

Upgrading from 1.2.3

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

You will need to reindex your site after upgrading to enable some of the new site search features. You can do this from the "Rebuild Search Index" link on the Administration Console.

Also, we've added a bunch of space-level permissions since 1.2. While our upgrade process should make sure everyone has the same permissions after the upgrade as they did before, it's a good idea to check to make sure nothing has been missed.

Oracle Users

If you are connecting Confluence to an Oracle database, it is very important that you read this before upgrading: Oracle and Confluence 1.3

Upgrading from 1.1.2 or Earlier

Users upgrading from an earlier version of Confluence should check the release-notes of the other major Confluence releases:

- Release Notes 1.2
- Release Notes 1.1

Contents

- New Features
- New Macros
- Improvements
- Notable Bug-fixes
New Features

Many of the features added to Confluence 1.3 are of interest only to site administrators. To get an idea of what's changed from the perspective of a user, you should read What's New in 1.3

Mail Archiving

Location: Dashboard > BUGTRAQ > Mail Archive > MySQL Authentication Bypass

Subject: MySQL Authentication Bypass
From: NGSSoftware Insight Security Research
Date: Oct 22, 2004

NGSSoftware Insight Security Research Advisory

Name: MySQL Authentication Bypass / Buffer Overflow
Systems Affected: MySQL 4.1 prior to 4.1.3, and MySQL 5.0.
Severity: High
Vendor URL: http://www.mysql.com
Author: Chris Anley [ chris@ngssoftware.com ]
Date of Advisory: 1st July 2004

Confluence is a collaboration tool. When communication happens through Confluence, it gets archived, indexed and interlinked so the whole team can benefit from the information. But what happens to communication that happens via email? At best it gets hidden away in the corner of one team member's inbox, at worst it just falls into nowhere.

Now, you can put that mail into Confluence as well.

Each Confluence space has a mail archive. You can import mail directly by uploading an mbox file, or you can have Confluence regularly poll a POP mailbox for new mail. Once mail is imported into Confluence it can be browsed chronologically or by thread, and searched using Confluence's powerful full-text search functionality.
The threading and searching functionalities within Confluence are more powerful, and more usable than most dedicated mail archives that you will find online! For more information about Confluence's mail support, read the Mail Archiving FAQ.

### Space Theme

#### Global Look and Feel
Use the globally configured look and feel. You can customise colour-schemes and layouts manually.

- [ ] No Theme

#### Choose a Theme
Assign a look and feel from an installed theme plugin. This theme will override any manually configured colour-schemes or layouts.

- [ ] Clean Anonymous — Only show menus and toolbars to users who are logged in.
- [ ] Left Navigation — Draw a navigation menu on the left-hand side

[Confirm]

It is now possible to package a particular Confluence look and feel into a theme. Themes can be dropped into a Confluence installation, after which they will be available for global or space administrators to customise the look and feel of the site.

Themes are built using the new plugin architecture that has been built into Confluence: for more details on how to create your own theme, see DOC:Theme Plugins.
Trash

The trash stores all deleted pages or blog posts. You can restore or purge deleted pages from this screen.

- **Purge all** - permanently remove all items from the trash can.

<table>
<thead>
<tr>
<th>Page Title (Space)</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Page with attachment</td>
<td>Restore</td>
</tr>
</tbody>
</table>

One of the most popular feature-requests, it is now possible to undelete pages, mail and blog-posts. When content is deleted from a space it is moved to that space's trash can. Space administrators can restore deleted pages, or consign them to oblivion.

More Granular Space Permissions

Groups

These are the permissions currently assigned to groups for this space.

<table>
<thead>
<tr>
<th>Group</th>
<th>View</th>
<th>Create</th>
<th>Export</th>
<th>Remove</th>
<th>Create</th>
<th>Remove</th>
<th>Create</th>
<th>Remove</th>
<th>Export</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>atlassian-developers</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>atlassian-staff</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>confluence-administrators</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>confluence-users</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Another of our most popular feature-requests, we've divided up the space permissions so administrators have more control over what users can and can not do.

New Emoticons

<table>
<thead>
<tr>
<th>Emoticon</th>
<th>Name</th>
<th>Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌞</td>
<td>add</td>
<td>(+)</td>
</tr>
<tr>
<td>🌞</td>
<td>forbidden</td>
<td>(-)</td>
</tr>
<tr>
<td>🌞</td>
<td>help</td>
<td>(?)</td>
</tr>
<tr>
<td>🌞</td>
<td>idea on</td>
<td>(on)</td>
</tr>
<tr>
<td>🌞</td>
<td>idea off</td>
<td>(off)</td>
</tr>
<tr>
<td>🌞</td>
<td>star</td>
<td>(*)</td>
</tr>
<tr>
<td>🌞</td>
<td>red star</td>
<td>(*r)</td>
</tr>
<tr>
<td>🌞</td>
<td>green star</td>
<td>(*g)</td>
</tr>
<tr>
<td>🌞</td>
<td>blue star</td>
<td>(*b)</td>
</tr>
<tr>
<td>🌞</td>
<td>yellow star</td>
<td>(*y)</td>
</tr>
</tbody>
</table>
Because you can never have enough neat-looking graphics.

### Macros

- `{note}`, `{information}`, `{warning}` and `{tip}` macros let you add coloured notes to your page.
- The `{section}` and `{column}` macros give you an alternative to wiki-markup tables.
- The `{jiraportlet}` macro allows you to embed a JIRA 3 portlet into a Confluence page.
- The `{excerpt}` macro has an optional `hidden=true` parameter to hide the contents of the excerpt within the page.
- The `{excerpt-include}` macro has an optional `nopanel=true` parameter to display the excerpt without any decoration.
- The `{jiraissues}` macro has an optional `count=true` parameter to display only the number of issues found, not the details of those issues. It also has an optional `cache-off` parameter to ensure that a list of Jira issues will refresh on each request.
- The `{blog-posts}` macro consistently displays blog-posts in reverse chronological order.
- The `{search}` macro can be limited to particular types of content.
- The [notation guide](https://example.com) has been reorganised to be more friendly to users who don't know what a macro is.

### Improvements

**Referrer Management**

![Manage Referrers](https://example.com)

For public sites, referrer management has been vastly improved in Confluence 1.3, with a new management screen, the ability to block unwanted referrers right from where they are displayed, and the ability to turn off referrer tracking with a single click.

**Setup Wizard**

The Confluence setup wizard has been rewritten from the ground up. We've made it task-oriented, and stripped it back to just the stuff you need to get Confluence running. The result is a much smoother, much faster installation.
User Interface

We've made a lot of improvements to Confluence's user interface. You'll notice some improvements on the Dashboard, making it easier to see exactly what's changed recently. You'll notice some huge changes to the space summary/space administration section of the site.

Backups

- You can now exclude attached files from your backups. Of course, this means you have to back up your attachment directory separately, but if you already have a good backup regime for your filesystem (and can thus restore attachments separately), it means your Confluence data backups will take a lot less space.
- We now include important system configuration in your backups, so that when you restore a site from backup, it will work the same way as it did when you backed it up.

Indexing

We have improved the way we index content within Confluence, which means your searches are even more likely to find the right result.

If the primary language of your Confluence site is not English, you should change the "Indexing Language" preference in Confluence's General Configuration.

Site Performance

We've identified a number of places that were slowing down the performance of Confluence sites, from the dashboard to the spaces list page, to the search indexer, to the storing of referrers. Confluence should now perform faster than ever.

Also...

- Pages in an export are now in alphabetical, not creation order.
- The remote API can be accessed by anonymous users (this must be turned on in General Configuration)
- When previewing a page, you can continue editing without having to go back to the edit page
- You can link to anything in Confluence if you know its ID in the database (currently this is how you must link directly to mail) using the following link format: [$1234]
- You can link to anything relative to the root of the Confluence installation (useful for pointing to parts of the site that can't otherwise be linked) using three leading slashes: [///pages/editpage.action?pageId=1234]
- A whole lot more that we've forgotten...

Notable Bug Fixes

We resolved a lot of issues between Confluence 1.2.3 and Confluence 1.3. The best way to see what
we've fixed is to ask JIRA, the world's best issue-tracker: Issues Resolved for 1.3
# Issues Resolved for 1.3

This page last changed on Nov 30, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CONF-2241</td>
<td>1.3 Release Tasks</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1953</td>
<td>Library upgrade: TextMining</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-2185</td>
<td>Task Macro should be installed in default build of Conf.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1958</td>
<td>EDITSPACE permission is confusingly named now that it's really &quot;create page&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1964</td>
<td>Make the capitalisation of TrackBack consistent</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1948</td>
<td>Library upgrade: HTTP Client</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1950</td>
<td>Library upgrade: Seraph</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1952</td>
<td>Library upgrade: WebWork</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-2022</td>
<td>Improve unit testing on attachments being exported</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-2032</td>
<td>Library upgrade: EHCache</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-2048</td>
<td>Library upgrade: Hibernate 2.1.6</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1949</td>
<td>Library upgrade: Spring</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1951</td>
<td>Library upgrade: Sitemesh upgrade</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1955</td>
<td>Library upgrade: Lucene</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1954</td>
<td>Library upgrade: PDFBox</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1878</td>
<td>Plugin-ify Confluence macros</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-1877</td>
<td>Incorporate atlassian-plugins module into Confluence</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-2138</td>
<td>Confluence has performance issue that the frontend Apache Proxy did not get response</td>
<td>Closed</td>
<td>HANDLED BY SUPPORT</td>
</tr>
</tbody>
</table>
CONF-2292  sometimes, revise 'Setting up Confluence'
CONF-2286  back out fix on ConfluenceAuthenticator which forced to lower case
CONF-2278  Link API docs from everywhere
CONF-2244  Get DamageControl UATs running again
CONF-2288  Upgrade wiki.theserverside.com and remove referrers
CONF-2267  Document Blog-entry macro
CONF-2061  Create demo content for first-time users
CONF-2248  Remove paths from admin
CONF-2247  Remove dummy.gif
CONF-2280  Test FatCow on 1.3 final
CONF-2269  Document gallery macro
CONF-2243  Merge 1.2 STABLE into HEAD
CONF-2255  Check unit tests are running 100%
CONF-2249  Base URL admin
CONF-2226  Add JIRA portlet macro
CONF-2242  Remove 1.2.4 from JIRA. Check issues fixed in HEAD.
CONF-2069  Improve final setup screen
CONF-2149  Add not-yet-configured warnings to confluence admin console
CONF-2067  Remove paths configuration from setup
CONF-2013  Search Interface for Mail
CONF-2096  Link to single message
CONF-2119  Add Mail Operations menu
CONF-2053  Add delete mail functionality
<table>
<thead>
<tr>
<th>Issue Key</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2052</td>
<td>Add delete mail permission</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2055</td>
<td>Notify of unviewed mail matches in search</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2051</td>
<td>Index messageid column in database</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2057</td>
<td>Display attachments in view mail page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2054</td>
<td>Add Mail icon to spaces list on dashboard</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2012</td>
<td>View Single Mail</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2018</td>
<td>Test mail accounts</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1974</td>
<td>POP mailbox polling</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2058</td>
<td>Database checking added to setup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2068</td>
<td>Data set in setup - demo, no data, import</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2014</td>
<td>Mail Browser</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2024</td>
<td>Remove mails from recent changes mail</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2016</td>
<td>Mail Account Management</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1972</td>
<td>Mail domain objects/manager/dao</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2015</td>
<td>Extract Attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1976</td>
<td>Mail indexing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1136</td>
<td>Radical idea, archive external email in Confluence</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1894</td>
<td>Confluence needs a note macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2224</td>
<td>Improve JIRA macros</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1654</td>
<td>Ability to add extra colour settings to a colour scheme</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2220</td>
<td>Self-documenting macros</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2221</td>
<td>Limit remote API search by space/date/content types</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2256</td>
<td>Layout macros to enable people to create complex page layouts</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1871</td>
<td>Include default demo space as a new</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-2195  install option
CONF-2212  Create system link capability
CONF-1610  Add preference to disable remote API
CONF-2110  Count (include:Page) as a link to "Page"
CONF-2029  Link to any content object by ID
CONF-2059  Lucene indexing queue
CONF-1992  Threading and Related Mail
CONF-1936  Retrieve page by space key and page title
CONF-1375  How about more complex permission?
CONF-1965  Confluence Mail Archive
CONF-1856  Decorator Themes
CONF-1870  Access key for edit
CONF-1586  Allow referrers to be turned off
CONF-1779  Make exporting a permission
CONF-851  Deleted Pages - Need a 'recycle bin'
CONF-1052  Remove "Path" section of admin config
CONF-1631  Page Edition / Preview should be in one
CONF-2028  Space summary recently updated panel should show new comments, blogs, etc
CONF-2271  Add "nopanel" parameter to excerpt-include macro
CONF-2139  Make full thread view not a popup
CONF-2270  Add "hidden" parameter to excerpt macro
CONF-2148  'browse templates' in admin. screen breaks with the admin decorator
**CONF-1740**  When text file import fails, report name of file that died.  Closed  FIXED

**CONF-1221**  When previewing a page, display edit box below the preview  Closed  FIXED

**CONF-2245**  Allow macros to choose which page documentation occurs on  Closed  FIXED

**CONF-2211**  Improve referrer links performance  Resolved  FIXED

**CONF-2210**  Fix Setup UI for select db connection type  Closed  FIXED

**CONF-1999**  Move "Start watching this space" next to the RSS icon - and make it just an icon (use the tooltip for description)  Closed  FIXED

**CONF-1578**  Remove/Delete Space should be on "Spaces" page  Closed  FIXED

**CONF-2151**  Indicate where a thread continues back or forward in mail view  Closed  FIXED

**CONF-1793**  Handle things better if we get an error loading confluence.cfg.xml  Resolved  FIXED

**CONF-2197**  Reorganise Notation Guide  Closed  FIXED

**CONF-1639**  Anonymous SOAP and XML-RPC access  Closed  FIXED

**CONF-2201**  Remove space link in spacelist.vm has 'Add Page' title text on the img  Closed  FIXED

**CONF-2049**  Setup Wizard Improvements  Closed  FIXED

**CONF-2223**  Improve mail excerpting slightly  Closed  FIXED

**CONF-2094**  excerpt on mail search result contains return path  Resolved  FIXED

**CONF-2182**  Improve performance of getSpace(key)  Closed  FIXED

**CONF-1176**  When moving an page, it should not select the first  Closed  FIXED
CONF-2193  Mail archive graphic and description should be placed in initial Content pane in Space Summary  Closed  FIXED
CONF-2209  Ensure that setup UI is consistent  Resolved  FIXED
CONF-2046  Exclude attachments from backup  Closed  FIXED
CONF-2194  Index macro to display excerpts  Closed  FIXED
CONF-1261  Simplify the setup wizard  Closed  FIXED
CONF-2114  Sort home-page drop down in edit space alphabetically  Closed  FIXED
CONF-1237  Hide unsupported databases in setup pick-list  Closed  FIXED
CONF-2125  Search performance improvements  Resolved  FIXED
CONF-2172  Remove "pool size" setting from database setup  Closed  FIXED
CONF-1435  Allow attachments to be backed up separately  Resolved  FIXED
CONF-1700  Calendar L&F not integrated with the rest of Confluence  Resolved  FIXED
CONF-2160  Speed up spaces list page  Closed  FIXED
CONF-2050  Improve Mail for DR4  Resolved  FIXED
CONF-2000  Make all of "Create a new blog post" url-ified  Closed  FIXED
CONF-2044  Hook email address hiding preference into mail display  Resolved  FIXED
CONF-2109  Display relative times in "recent updates" lists  Closed  FIXED
CONF-2004  Change "Remove Blog Post" icon to trashcan icon used for "Remove Page" jiraissue macro now takes a cache='on' or 'off' argument  Resolved  FIXED
CONF-2019  Long Blog titles dont wrap very well  Closed  FIXED
CONF-1605  Make help icon point  Resolved  FIXED
<table>
<thead>
<tr>
<th>Ticket</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-1330</td>
<td>Make blog-posting a separate permission</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1865</td>
<td>Provide navigation options for screen after creating a new template</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1764</td>
<td>Improve UI for permissions editing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1674</td>
<td>Add JIRA-style user-picker component</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1891</td>
<td>Permissions Screen suggestion</td>
<td>Resolved</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-1928</td>
<td>Only list a referring page once</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1864</td>
<td>Don't escape shortcut links if no parameters</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1562</td>
<td>Separate Space Summary and Space Administration</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1551</td>
<td>Editing a blog post is a little difficult to find. Not intuitive.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1513</td>
<td>Help for user macros in interface</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1862</td>
<td>Add the (?) emoticon</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1858</td>
<td>Noisy dashboard</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1720</td>
<td>Blog calendar has no Next/Previous month links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1661</td>
<td>NPE using TaskList Macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2756</td>
<td>The backup that doesn't!</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1481</td>
<td>NPE calling Search function on conf.atlas.com</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2297</td>
<td>Test permission being carried through by the demo space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2186</td>
<td>&amp;s break links in Confluence</td>
<td>Closed</td>
<td>INVALID</td>
</tr>
<tr>
<td>CONF-1941</td>
<td>Site homepage setting not being honoured / not available</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1198</td>
<td>Search is not working with non-ascii characters</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1687</td>
<td>(blog-posts) wrong</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-2216  sort order when using "time" parameter
friendly meg size is not being set in velocity var. (admin - backup and restore)

CONF-2170  Upgrade from DR3 to DR4 broke shortcut links on confluence.atlassian.com

CONF-1853  Gallery macro error when previewing create page

CONF-1895  Please upgrade Tomcat used for building standalone distribution

CONF-1787  embedded tab characters break \{code\} filter

CONF-1947  cannot remove myself from list

CONF-1919  Tasklist Macro renders as null in preview mode

CONF-1766  Backup not saving to absolute location

CONF-2047  NullPointerException when viewing "New or Updated Pages Since Last Login" report when session has timed out

CONF-2020  Confluence won't allow Groups with upper case letter names

CONF-1966  export 32 pixel gif missing on Space

CONF-1789  {content-by-user} Macro shows items in Restricted Spaces

CONF-1828  When emoticon used as link text, outgoing link section is garbled

CONF-1887  NullPointerException on Global Admin View Templates link

CONF-1849  OgniException setting property
<table>
<thead>
<tr>
<th>CONF-ID</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-1838</td>
<td>'style' After creating user, go to user details page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2311</td>
<td>Atlassian stops getting mail if it can't parse one message</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2165</td>
<td>Single-page XML exports can be imported without a space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2306</td>
<td>xerces-2.1.1.jar is corrupt</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1996</td>
<td>Junit Macro not rendering</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1803</td>
<td>MethodInvocationException when clicking on a linked page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1287</td>
<td>&quot;400 Bad Request&quot; response when viewing page with quotes in title on Orion</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2198</td>
<td>Thumbnail size settings lost on 1.2.3 -&gt; 1.3-DR5 upgrade</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2124</td>
<td>PDF Space Export includes deleted page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2074</td>
<td>Can create duplicate user by appending space to an existing username</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1933</td>
<td>NullPointerException when removing attachment</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1886</td>
<td>Browse templates breaks space colour scheme</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1555</td>
<td>Edit My Profile alignment is off</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1827</td>
<td>Javascript errors on unknown page links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2171</td>
<td>Incoming Links vanished from page-operations</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1970</td>
<td>bucket.search.lucene.OperationException: Cannot update index</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1415</td>
<td>jiraissues macro custom icons break</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2112</td>
<td>Newlines in user macros are removed when Confluence is</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue Number</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-2169</td>
<td>Need to patch the &quot;duplicate page&quot; bug</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2157</td>
<td>Character encoding issues in archiving Mail messages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2106</td>
<td>junitreport macro doesn't work, you need to add 'fatcow'</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1543</td>
<td>Accented characters treated as line break</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1935</td>
<td>External URLs in links over max length cause exception on save</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2196</td>
<td>Search macro does not search mail</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1438</td>
<td>Not supported RSS feeds</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-766</td>
<td>Search for orphaned pages shows spaces' home pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2161</td>
<td>Export page HTML has both upper &amp; lower case space id</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1354</td>
<td>rename doesn't find &quot;include&quot; references</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2173</td>
<td>Backup restore breaks mail</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2176</td>
<td>Email footers have errors</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1667</td>
<td>Headers that contain international characters and numbered bullets cannot be linked to wrong title when comparing page revisions</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1875</td>
<td>Confluence doesn't allow creating pages, which have the name of one of the blog posts</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2092</td>
<td>POP mail box not being automatically polled</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2102</td>
<td>Setting 'User email visibility' doesn't restored from backup</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1557</td>
<td>Wrong URL causes IllegalStateException</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2082</td>
<td>History: View</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-2083</td>
<td>Deleting a version of an attachment deletes all versions</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1552</td>
<td>Wonky alignment in edit blog post if post is very short</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1854</td>
<td>The new space permissions page doesn't use my colors</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1824</td>
<td>Leading space returned from excerpt macro search index of attachments breaks when editing page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1899</td>
<td>Repair setup process - demo content &amp;&amp; installed successful links to demo content homepage</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-2363</td>
<td>Rebuild Index run forever</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2236</td>
<td>Unable to build search query: null</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2150</td>
<td>Next and previous links in mail broken when context path is /</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2199</td>
<td>Errors upgrading from 1.2 -&gt; 1.3 under MySQL: net.sf.hibernate.PropertyAccessException: exception setting property value with CGLIB</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2133</td>
<td>User data not wiped out after delete</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1973</td>
<td>Setup Step 6... admin creation possible with incorrect db configuration</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1425</td>
<td>On upgrade 1.1 -&gt; 1.1.1 Confluence freezes on some time.</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-1672</td>
<td>jira-issues macro fails for URLs containing brackets</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2045</td>
<td>Help tip on</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-948  permissions editing page inaccurate
Internal links don't work if a page is included using the
#includePage macro
Closed  FIXED

CONF-2143  Thread comments pref lost on
DR3->DR4 upgrade
Closed  CANNOT REPRODUCE

CONF-2163  Greek Support for
Quick Search
Closed  FIXED

CONF-2192  Password field for
creating a mail account is plain textfield
Closed  FIXED

CONF-1873  Database error when
using embedded HSQL database on
Tomcat 5
Closed  FIXED

CONF-2141  Graceful error message upon
reaching attachment filesize limit.
Closed  FIXED

CONF-2009  "Create Space"
should have "Finish"
button instead of
"Next>>"
Closed  FIXED

CONF-1251  $baseurl showing up in notification emails
Closed  FIXED

CONF-1618  Pages are exported in creation, not
alphabetical order
Resolved  FIXED

CONF-2084  Restore Page Results in Listing of Every Version
Closed  FIXED

CONF-2158  Restore setup step does not validate existence of file
Closed  FIXED

CONF-925  Create admin account step in Setup dies with an ungraceful
DuplicateEntityException
Resolved  FIXED

CONF-1868  Nullpointer when clicking "Global Templates" from
Administration
Closed  FIXED

CONF-1019  Signup fails if server is not restarted after
upgrade and restore
Resolved  FIXED

CONF-2159  Fix merge comment in setupdbchoice.vm
Closed  FIXED

CONF-2147  Installation of Demo content does not
Resolved  FIXED
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2036</td>
<td>Task list macro bug</td>
</tr>
<tr>
<td>CONF-1826</td>
<td>Cannot add new spaces or update existing ones</td>
</tr>
<tr>
<td>CONF-2002</td>
<td>&quot;Deleted&quot; pages still show up in &quot;Undefined Pages&quot; Report</td>
</tr>
<tr>
<td>CONF-2037</td>
<td>Removing a space doesn't unindex all its content</td>
</tr>
<tr>
<td>CONF-1758</td>
<td>Page store should still succeed even if indexing fails</td>
</tr>
<tr>
<td>CONF-1980</td>
<td>Sometimes, we get the wrong thing back from HibernatePageDao.getPageById()</td>
</tr>
<tr>
<td>CONF-2111</td>
<td>Upgrade task dies if confluence-mail.cfg.xml not found</td>
</tr>
<tr>
<td>CONF-1090</td>
<td>Backup doesn't save configuration</td>
</tr>
<tr>
<td>CONF-1713</td>
<td>PDF Document not closed during re-index</td>
</tr>
<tr>
<td>CONF-1641</td>
<td>Error viewing decorator includes view default decorator broken</td>
</tr>
<tr>
<td>CONF-2207</td>
<td>Repair setup process - demo content &amp; installed successful links to demo content homepage</td>
</tr>
<tr>
<td>CONF-1814</td>
<td>Still need confluence-admin group to access /admin pages</td>
</tr>
<tr>
<td>CONF-2042</td>
<td>When export page to PDF, it opens in the browser, not download</td>
</tr>
<tr>
<td>CONF-1889</td>
<td>Breadcrumbs and titles in the Space Summary region are inconsistent</td>
</tr>
<tr>
<td>CONF-1977</td>
<td>Unable to edit Global Templates with administrate</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CONF-2235</td>
<td>Could not initialize proxy - the owning Session was closed</td>
</tr>
<tr>
<td>CONF-1834</td>
<td>Space summary does not show new comments</td>
</tr>
<tr>
<td>CONF-2043</td>
<td>Properties text not appearing in notification email (html)</td>
</tr>
<tr>
<td>CONF-1761</td>
<td>Going to a short URL for page in non-public space gives internal error without login</td>
</tr>
<tr>
<td>CONF-1857</td>
<td>Rename Page doesn't update (include) macros</td>
</tr>
<tr>
<td>CONF-2081</td>
<td>Simple display url: spaceKey/ fails</td>
</tr>
<tr>
<td>CONF-1823</td>
<td>Excluded External Referrer Prefixes</td>
</tr>
<tr>
<td>CONF-1872</td>
<td>Fix default list pages view</td>
</tr>
<tr>
<td>CONF-1892</td>
<td>Setup is complete - bad URL linking to new instance of Confluence improper encoding in confluence.cfg.xml</td>
</tr>
<tr>
<td>CONF-1867</td>
<td>New global template reports 'Undefined Space' in breadcrumb</td>
</tr>
<tr>
<td>CONF-1888</td>
<td>ResourceNotFoundException when viewing Site Decorator for a Space</td>
</tr>
<tr>
<td>CONF-1537</td>
<td>Restore doesn't restore space colours</td>
</tr>
<tr>
<td>CONF-1409</td>
<td></td>
</tr>
</tbody>
</table>
What's New in 1.3

This page last changed on Dec 01, 2004 by cmiller.

Many of the changes between Confluence 1.2 and 1.3 are really of interest only to Confluence administrators. Here we detail the changes that will be important to all Confluence users.

Cannot resolve external resource into attachment. The Trash

Previously, when you deleted a page or blog post, it was unrecoverable. In 1.3, deleting a page moves it to the Trash. Space administrators can retrieve pages from the trash, or purge them forever. If a page has been deleted (or you have deleted a page by mistake), contact a space administrator to get it back.

Cannot resolve external resource into attachment. Note Macros

There are new macros for inserting coloured notes into a page:

{note}:

⚠️ This is a note

A note tells you about something that may be important to you.

{tip}:

✅ This is a tip

A tip tells you something you might not have thought of yourself.

{info}:

ℹ️ This is informative

Info was an excuse to have a blue note.

{warning}:

⚠️ Beware!

Warnings can be dangerous if overused, because people start ignoring them.

For more information, check out the notation guide.
Confluence now includes the capability to store email. This allows you to store mailing-list archives, or records of conversations amongst your team inside Confluence. Mail archiving must be set up by a space administrator.

Have a look at [an individual mail], or the view of an entire mail thread (We are using confluence.atlassian.com to keep archives of the confluence-user mailing list).

All mail is indexed, but by default we exclude it from search results because the volume of email can often overwhelm the content of the Confluence site. When you do a search, you might see this reminder that there could be an answer to your question in the email archives:

To link to an email from a Confluence page, you must find the numeric ID of that mail from the end of its URL, and put that in your link like so: [$12572], which Confluence will draw like this: [$12572]

**Cannot resolve external resource into attachment. Improved JIRA Macros**

The {jiraissues} macro has two new optional parameters:

- `count=true` makes the macro only return the number of issues matched by your filter, not the whole list of issues
- `cache=off` makes the macro retrieve the filter results from JIRA every time the page is loaded, ensuring the results are accurate. (Be careful if the filter returns a lot of results, though, you don't want to overload your servers)

There is a new {jiraportlet} macro that allows you to retrieve any portlet from a server running JIRA 3, and display it in a Confluence page, like so:

**Lead:**

Reports: [Open Issues](#) | [Road Map](#) | [Change Log](#) | [Popular Issues](#) | [Calendar](#) | [Labels](#)

Open Issues: (By Priority)

| | | | | |
| ||||

Filter Issues:

- [All](#) | [Resolved recently](#)
- [Outstanding](#) | [Added recently](#)
- [Unscheduled](#) | [Updated recently](#)
- [Most important](#)

For more information, check the [notation guide](#)

**Cannot resolve external resource into attachment. Easy Column Layout**
You can use the \{section\} and \{column\} macros to organise your page into columns. This is especially useful when you combine it with the \{jiraportlet\} macro: you can arrange a Confluence page just like a JIRA dashboard!

Here's a simple two-column layout:

| --- |

For more information, check the notation guide

**Cannot resolve external resource into attachment. Other Things**

- Take a look at how the space summary page has been reorganised
- If you hit alt-E on any wiki page or blog post (ctrl-E if you're using a Mac), you'll be taken to the edit page.
- If you start a link with three slashes, you can link to something relative to the root of the Confluence installation. This is useful for creating links to pages that are part of Confluence, such as the dashboard ([///]), or the space list ([///spaces/listspaces.action]).
- The {excerpt} macro can take a hidden=true parameter to hide the contents of the excerpt within the page
- The {excerpt-include} macro can take a nopanel=true parameter to display the excerpt without any decoration or tables
Release Notes 1.3.1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3.1 is a maintenance release that fixes some bugs that users may have encountered using Confluence 1.3.

1.3.1 is a free upgrade for all existing Confluence customers.

Who should upgrade?

Confluence 1.3.1 fixes a number of bugs that were found in Confluence 1.3. However, none of the bugs that were fixed were considered critical or likely to cause data-loss. Administrators should only upgrade Confluence if they are affected by (or feel they would be affected by) one of the issues resolved by this release.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Changes in 1.3.1

See also: Issues Resolved for 1.3.1

- Preferences for hiding or masking email addresses are no longer ignored on some screens – CONF-2352
- The plugin manager will no longer fail with an error when trying to return a plugin to its default state after activating or deactivating it – CONF-2396
- Disabling hot referrers in the referrer manager screen now works as expected – CONF-2397
- The save option has been restored to the comment preview screen – CONF-2321
- Deleting a blog post or a page no longer leaves possible orphaned comments in recent changes lists – CONF-2323
- Also, some edge cases in the setup wizard were fixed, the demonstration content was tidied up, and a few minor UI issues were resolved.
Issues Resolved for 1.3.1

This page last changed on Dec 19, 2004 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-2390</td>
<td>Demo space needs to be prepared (again) for point and dev. releases</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2277</td>
<td>Put API docs online</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2319</td>
<td>Add cache=true or false details for jiraissues macro to notation guide</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2380</td>
<td>Sort user group names alphabetically in 'Edit Groups' screen</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1987</td>
<td>remove cvs author tags from source build</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2302</td>
<td>Viewing email is disallowed if POP boxes aren't configured</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-2391</td>
<td>Remove mail should remove associated attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2397</td>
<td>Hot referrers switch not working</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2396</td>
<td>Error activating macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2361</td>
<td>Email hiding preferences ignored demonstration space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2389</td>
<td>Wording: &quot;Your password successfully changed&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5460</td>
<td>CLONE -Wording: &quot;Your password successfully changed&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2314</td>
<td>demo-site exportDescriptor.properties contains @BUILD_DATE@ note/warning/info/tip macro icons not showing up in</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2317</td>
<td></td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2321</td>
<td>notation help Comment preview no longer lets you submit comment</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2334</td>
<td>Long &quot;word&quot; in post can make summary too wide in dashboard</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2386</td>
<td>External user management flag does not disble user management links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2323</td>
<td>Deleting a blog post doesn't delete its comment</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2304</td>
<td>Imported email is logged into catalina.out</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2400</td>
<td>investigate reported problem when restoring data during the setup</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2320</td>
<td>Restore backup option in setup is represented incorrectly in setup step menu</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2362</td>
<td>Preview shouldn't jump you down to the edit area</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2310</td>
<td>Erraticity in state of applicationConfig</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.3.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3.2 is a maintenance release which includes 30 bug fixes and improvements that users may have requested using Confluence 1.3.

1.3.2 is a free upgrade for all existing Confluence customers.

Who should upgrade?

We recommend that all 1.3.x users upgrade to Confluence 1.3.2. It includes, among other things, the fix of a memory leak which had been occuring in our error monitoring (see below or CONF-2540); if you have been encountering performance issues within Confluence, this could be of benefit.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or 1.3.1, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Changes in 1.3.2

See also: Issues Resolved for 1.3.2

We've closed 30 issues, so we will not name them all. Among the most prominant in the list are:

- A memory leak in our collection of logging events as a threadlocal, see CONF-2540.
- Consistent UI handling for editing and previewing blogs and comments, see CONF-2479 and CONF-2470
- Improved IO handling when building exports, see CONF-2510
- Better cleaning up attachments when pages are removed, see CONF-2567
- etc ...
## Issues Resolved for 1.3.2

This page last changed on Jan 21, 2005 by nick@atlassian.com.

### Atlassian JIRA (25 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-2308</td>
<td>Verify oracle upgrade from 1.2 -&gt; 1.3</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2355</td>
<td>Bandana upgrade error 1.2 -&gt; 1.3</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-2536</td>
<td>Markers around variable content of each page.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2566</td>
<td>Import from disk should have a browse filesystem button</td>
<td>Closed</td>
<td>INVALID</td>
</tr>
<tr>
<td></td>
<td>CONF-2479</td>
<td>Comment preview should mirror Page preview</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2540</td>
<td>Ensure limit on ThreadLocalAppender for Log4j</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2490</td>
<td>Error while trying to draw the last-n pages!</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-2567</td>
<td>Removing a page should remove its attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2495</td>
<td>editmyprofile.action should blow up if you're not logged in</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2414</td>
<td>XML-RPC methods are not allowed to return void</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2484</td>
<td>html renders in recently updated</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2470</td>
<td>Blog title with illegal character looses blog entry</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2413</td>
<td>display the user friendly alias for the system link in page summary</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2420</td>
<td>disable change password link in profile</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1771</td>
<td>Shortcut links containing an '@' do not work</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2426</td>
<td>There is no</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-2507</td>
<td>rss macro creates bad links when feed doesn't contain links</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2552</td>
<td>Check for existence of attachments before trying to delete attachments</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2442</td>
<td>attachments names with spaces get messed up</td>
<td>Resolved</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-2458</td>
<td>MS SQL Server connection string wrong</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2449</td>
<td>Unsupported Database setup option does not let you pick a hibernate dialect</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2488</td>
<td>Import/Restore fails: truncation error</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2418</td>
<td>Creating a blog post with bad characters in the title loses page content</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2324</td>
<td>Limit length of traceback links on blog pages</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2441</td>
<td>Notation guide error</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.3.4

Confluence 1.3.4 is a maintenance release which includes a few important bug fixes for anyone running Confluence. These release-notes include information about the (briefly available) 1.3.3 version of Confluence, which 1.3.4 has superseded.

1.3.4 is a free upgrade for all existing Confluence customers.

Who should upgrade?

We recommend that all 1.3.x users upgrade to Confluence 1.3.4. For customers running 1.3.2 and earlier, it includes a fix to the security issue described in Confluence Security Advisory 2005-02-09, and it thus an important upgrade for anyone who is still running an un-patched system.

For customers running 1.3.3, the upgrade is also recommended as this version fixes CONF-2740, a regression in 1.3.3 which could cause referrer and trackback data to disappear.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 or 1.3.1, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Changes in 1.3.4

See also: Issues Resolved for 1.3.4

Since only five bug-fixes were made for this release, here is a quick run-down.

- The patch for the security issue described in Confluence Security Advisory 2005-02-09 has been applied to 1.3.4
- A regression in 1.3.3 that caused trackback and referrer data to be lost has been fixed – CONF-2731
- An intermittent ClassCastException when viewing blog-posts has been fixed – CONF-1671
- The image cache for Apache FOP is now cleared between exports, preventing a case where the wrong version of an attachment may end up in a PDF export – CONF-2647
- A spurious "Connection already closed" log message in the JIRA user management bridge no longer occurs CONF-2656
## Issues Resolved for 1.3.4

This page last changed on Feb 14, 2005 by cmiller.

### Issues resolved for 1.3.3

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2438</td>
<td>Do not send daily update email if no updates have taken place</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-2554</td>
<td>Jira integration database connection issue</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-2550</td>
<td>Missing resourcebundle, fails long running task</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2656</td>
<td>FATAL [user.providers.jira.JiraJdbcProfileProvider]</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>Unable to close connection: Connection is closed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2647</td>
<td>PDF Export does not pick up image updates</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2624</td>
<td>Exception occurred inside setter of com.atlassian.confluence.links.OutgoingLink.destinationPageTitle during import</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>

### Issues resolved for 1.3.4

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2740</td>
<td>Referrers not showing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2731</td>
<td>Trackbacks display error $generalUtil.wordwrap($tl.title, 32)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1671</td>
<td>Possible ClassCastException in Blog.getDatePath</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 1.3.5

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3.5 is a maintenance release which fixes a number of bugs found in earlier 1.3.x Confluence releases. Some areas improved in this release are space export/import, search and LDAP user management. 1.3.5 is also the first Confluence version to be successfully tested against Resin 3.0: see below for the special steps you need to take to get it running.

1.3.5 is a free upgrade for all existing Confluence customers.

Who should upgrade?

We recommend that all 1.3.x users upgrade to Confluence 1.3.5. For customers running 1.3.2 and earlier, it includes a fix to the security issue described in Confluence Security Advisory 2005-02-09, and it thus an important upgrade for anyone who is still running an un-patched system.

For customers running 1.3.4, the upgrade is also recommended as this version fixes CONF-2750, a regression in 1.3.4 that made it impossible to page through search results.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 – 1.3.4, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.2.3 or earlier, be sure to read the upgrade instructions in the Confluence 1.3 release notes.

Changes in 1.3.5

Resin 3.0 Compatibility

Confluence 1.3.5 is the first Confluence version to be successfully tested against Resin 3.0.12. Customers wishing to run Confluence under Resin 3 should read the special instructions at Known Issues for Resin 3.x

Issues Resolved

- Paging through search results no longer results in an error. CONF-2750
- Space export and import now performs much more reliably. CONF-2678
- Setup wizard no longer complains about an incomplete setup if you restore a backup from disk. CONF-2637
- Special characters in search no longer cause parser to explode. CONF-2527, CONF-2532, CONF-2728, CONF-2735...
- Attachment filenames containing spaces are no longer truncated when downloading using Firefox. CONF-2739
• For the full list of fixes, see [Issues Resolved for 1.3.5](#)
# Issues Resolved for 1.3.5

This page last changed on Mar 01, 2005 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>CONF-1000</td>
<td>Get Confluence working on Resin 3.x</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2781</td>
<td>Backups and Restore MUST WORK</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2318</td>
<td>Space Summary - Admin main page should have icons and explanations as per Content</td>
<td>Resolved</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>☰</td>
<td>CONF-2788</td>
<td>Preview doesn't show page title</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2527</td>
<td>Searching for ***... BANG!</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2739</td>
<td>File names are truncated when accessing attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2769</td>
<td>returning a null if referring content is not a space and walking into a NPE</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2750</td>
<td>Error viewing Next &gt;&gt;&gt; search results</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2728</td>
<td>Leading Wildcard &quot;**searchterm&quot; leads to exception in search</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2764</td>
<td>Database Dialect always shows up as N/A in system dump</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2532</td>
<td>&quot;System Error&quot; when searching for ~username</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2086</td>
<td>Problem deploying on Jboss under SuSe or FreeBSD</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2678</td>
<td>Demo Space import fails</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2837</td>
<td>Broken mail configuration makes admin console inaccessible</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2415</td>
<td>Pages with long titles are inaccessible</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-2634</td>
<td>Confluence import creates two velocity</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Conf</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>--------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-2751</td>
<td>Exported space fails import</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2737</td>
<td>LDAP and non LDAP user login at Confluence</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2779</td>
<td>RemoteSpaceSummary has NPE if key is not set</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2768</td>
<td>User management with LDAP ignores users registered only in Confluence</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2819</td>
<td>Linked pages in &quot;Move Page&quot; screen contains bogus spaces ($content.space.name)</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2762</td>
<td>Content link dies if target is a comment.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1509</td>
<td>All '/display/' links redirect to login page for Resin 3.0.8</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2561</td>
<td>LazyInitializationException deleting a user</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2655</td>
<td>Special characters break search</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2637</td>
<td>Tried to finish setup but had not run through the whole wizard?</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2322</td>
<td>NPE in jiraissues macro</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2387</td>
<td>quick search breaks when the [] character is used</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1511</td>
<td>Confluence forces login on every page view (Resin 3.0 incompatibility)</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2627</td>
<td>Can't thumbnail a file called attachments.png</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2735</td>
<td>Search error on confluence.atlassian.com</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2771</td>
<td>MappingException in ReferralTaskQueue</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2820</td>
<td>Error when paging through search results</td>
<td>Resolved</td>
<td>DUPLICATE</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.3.6

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.3.6 is a special maintenance release for customers who are using Confluence with an Oracle database. It contains a number of fixes, originally developed for Confluence 1.4, to Confluence’s behaviour against Oracle databases.

1.3.6 is available as a free upgrade for all existing Confluence customers from the archive download page.

Who should upgrade?

We recommend that customers skip Confluence 1.3.6 and upgrade to Confluence 1.4. Confluence 1.4 includes a great many new features and bug-fixes that are not included in 1.3.6. We do, however, recognise that 1.4 is a significant upgrade and some customers wish to continue with Confluence 1.3 for the time being.

Confluence 1.3.6 is recommended only for Confluence customers who:

- are not yet ready to upgrade to Confluence 1.4, and
- are running Confluence with an Oracle database

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.3 – 1.3.4, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Changes in 1.3.6

Confluence 1.3.6 addresses a number of situations in which Confluence could lock up, consume additional resources, or fail to perform backup or restore operations against an Oracle database.
Release Notes 1.4

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Atlassian Software is proud to present Confluence 1.4 (otherwise known as Hunter). Existing customers who wish to upgrade, or new users who wish to try out Confluence for 30 days can download either the standalone or WAR distributions from the Atlassian website: http://www.atlassian.com/software/confluence

Hunter is the fourth major update to Confluence, and the biggest yet in terms of new features and improvements both visible to the user or hidden "under the hood". Between 1.3.5 and 1.4, we resolved a massive 480 issues.

A big thanks to everyone who reported bugs, and offered suggestions over the last few months, especially everyone who helped by trying out our Development Releases.

See also: Issues Resolved for 1.4

Contents

- Upgrading
- Migration
- New Features
- Notable Bug Fixes
- Outstanding Bugs

Upgrading From a Previous Version of Confluence

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from 1.3.5

Because of the significant UI changes between 1.3 and 1.4 (see below), we highly recommend disabling any themes or UI customisations before upgrading Confluence.

After upgrading to 1.4, administrators will need to rebuild the site’s search-index to ensure all the new search features are enabled. Do this from the Content Indexing section of the global administration menu.

⚠️ Upgrade Migration
The database migration tasks that must be run to upgrade Confluence from 1.3 to 1.4 may take several minutes to run. During this time, Confluence will be unavailable.

⚠️ Confluence License Expiration
A commercial Confluence license entitles you to a year of free upgrades. As such, Confluence 1.4 is the first release of Confluence to which some customers may not be able to upgrade.
If you were issued your Confluence license before May 24th 2004, you will not be able to upgrade to Confluence 1.4. Confluence 1.4 will refuse to run with any license issued before this date, and you will be required to downgrade to a previous Confluence version.

Upgrading from 1.2.3 or Earlier

Users upgrading from an earlier version of Confluence should check the release-notes of the other major Confluence releases:

- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Migration

The best place to find out about the new features available in Confluence 1.4 is by checking out our What's New in Confluence 1.4 pages. However, there are a few features of specific interest to Confluence administrators that will be mentioned here:

v2Renderer

The engine by which Confluence converts wiki-text to HTML has been rewritten from scratch for Confluence 1.4. This was necessary, as the complexity of Confluence's markup was overwhelming the capabilities of the previous engine and leading to an increasing number of bugs, some of which had the potential to bring down the entire server.

v2Renderer is in every way more powerful (and better, more predictable) than the previous engine, and has undergone a lot of testing to make sure that it renders wiki pages the same way as its predecessor. However, pages that made use of bugs or undocumented features in the original engine may no longer render the same in 1.4 as they did in 1.3. If you come across something that is a bug or a missing feature in the new renderer, please file an issue in JIRA.

One side-effect of the new renderer is that custom Java macros written for Confluence 1.3 and earlier may not be compatible with Confluence 1.4 (although most should continue to function). For more information, macro authors should read this document

New User Interface

In response to a lot of feedback from customers and users of Confluence, the User Interface has undergone a major overhaul between Confluence 1.3 and 1.4. While the changes are mostly self-explanatory, and we believe the new interface is significantly easier for everyone to use and understand than its predecessor, it may be a good idea to make the following resource available to your users as part of the transition: 1.4 Interface - Where Did Everything Go?

Because of the substantial changes to the interface, themes and UI customisations made for Confluence
1.3 and earlier are not compatible with Confluence 1.4, and should be disabled before you upgrade.

**Blogs have become News**

Also in response to a lot of feedback, blogs in Confluence have now been renamed to news. We feel this makes it a lot easier to explain them to new and non-technical Confluence users. None of the functionality of blogs has been changed, just the name. 😊

**New Features**

Confluence 1.4 has a lot of cool new stuff. Over the next week we'll be releasing a new section of the Confluence website that will examine the new features in detail. Stay tuned.

**Notable Bug Fixes**

We resolved a lot of issues between Confluence 1.3.5 and Confluence 1.4. The best way to see what we've fixed is to ask JIRA, the world's best issue-tracker: [Issues Resolved for 1.4](https://issues.confluence.net/issue/CONF-3168)

**Outstanding Bugs**

Some bugs were introduced during the Confluence 1.4 development cycle that we could not fix in time for the final release. Of note are:

- Index rebuilding may fail on multi-processor systems (for a workaround, see CONF-3168)
- You can not install an XWork plugin by uploading through the web interface, it must be copied into WEB-INF/lib (CONF-3184)
- Uploading a malformed plugin through the web interface may make other plugins cease to function (CONF-3183)
- Under certain circumstances, the mbox mail import may fail against Oracle databases (CONF-3284)
- The Insert Image and Insert Link popups jump the cursor to the top of the text input area on browsers other than Internet Explorer (CONF-3232)

Once again, if you find any bugs in Confluence, or have any feature suggestions, you can report them online in JIRA.
## Issues Resolved for 1.4

This page last changed on May 24, 2005 by cmiller.

### Atlassian JIRA (500 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>🗑</td>
<td>CONF-2722</td>
<td>Upgrade Confluence to atlassian-extras-0.6</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-1399</td>
<td>Clean up use of PageContext so it's consistent</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2669</td>
<td>merge 1.3.2 and HEAD</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-3152</td>
<td>Test Confluence with velocity template caching turned on</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2529</td>
<td>Tech Debt: document current list of macros in Notation guide</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2598</td>
<td>userlist for online reporting - documented and jarred</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2474</td>
<td>Put the 1.3 Conf. API back up on the website</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2456</td>
<td>Reinstall WebDay admin</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2365</td>
<td>clean up CVS tree - get rid of event2 OR event/types/admin</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2644</td>
<td>move src/etc/custommacro code to src/etc/plugins</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-2436</td>
<td>Move licensing private key from confluence-extras to atlassian-extras</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-3254</td>
<td>Plug in XML-RPC storeBlogEntry method</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-3263</td>
<td>Confluence 1.4 Release Bender</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-3116</td>
<td>Write documentation for page level permissions.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>🗑</td>
<td>CONF-1984</td>
<td>Enable load/performance testing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-3142  Check string size returned by Oracle.  Resolved  FIXED
CONF-2528  Tech Debt: port old event system to new event system  Resolved  FIXED
CONF-3047  Merge branch_1_3_stable  Closed  FIXED
CONF-2795  Check CaSe issues on attachaments  Closed  FIXED
CONF-3062  Restore edit tab to blogs  Closed  FIXED
CONF-2489  Allow direct JDBC connection to Oracle  Closed  FIXED
CONF-2962  WebDAV review - umbrella task  Resolved  FIXED
CONF-3040  AttachmentManyCreate Must Die!  Resolved  FIXED
CONF-2695  Investigate and fix PDF export errors  Closed  FIXED
CONF-3155  Ensure all new macros are in the notation guide  Resolved  FIXED
CONF-2388  Find a way to automate inclusion of clean demo-site.zip  Closed  FIXED
CONF-2556  Confluence needs a reminder that support and upgrades will elapse  Closed  FIXED
CONF-3000  Pluginize the remote API.  Resolved  FIXED
CONF-2976  Performance review  Resolved  FIXED
CONF-3048  Refactor spacedefault.vmd into space.vmd, using specific modes for what spacedefault.vmd wants to acheive  Resolved  FIXED
CONF-2987  Theme Brainstorming day  Resolved  FIXED
CONF-2993  Deal with upcoming license expirations  Closed  FIXED
CONF-2800  Change the logo and name on the dashboard  Resolved  FIXED
CONF-2402  Upgrade c3p0 to 0.8.5 pre9  Resolved  FIXED
CONF-1885  Confluence Detailed Feature List  Resolved  FIXED
CONF-2582  Moving tree of pages  Closed  HANDLED BY SUPPORT
<p>| CONF-2645 | Error Restoring Data after switching to SQL server db logs | Closed | FIXED  |
| CONF-3026 | Requesting Plugin for Remote API (SOAP) features | Closed | FIXED  |
| CONF-2705 | Add Interface to edit permissions | Resolved | FIXED  |
| CONF-2698 | Functional Tests | Resolved | FIXED  |
| CONF-2818 | create indexing upgrade task | Resolved | FIXED  |
| CONF-2984 | 'set to dials to ten' pages | Resolved | FIXED  |
| CONF-2983 | 'set to dials to ten' spaces | Resolved | FIXED  |
| CONF-2681 | Be able to add an archive from a local file path, rather than upload using a Browse button | Closed | FIXED  |
| CONF-2986 | 'set to dials to ten' comments toolbar theme | Resolved | WON'T FIX |
| CONF-2990 | 'set to dials to ten' testing - links in page | Resolved | FIXED  |
| CONF-2115 | Macros choose their render mode | Resolved | FIXED  |
| CONF-2714 | Create upgrade task to update ContentLock Table | Resolved | FIXED  |
| CONF-2465 | login message text macro | Closed | FIXED  |
| CONF-2467 | recently updated list macros | Resolved | FIXED  |
| CONF-2464 | welcome message macro | Closed | FIXED  |
| CONF-2469 | space details and space summary info to macro | Closed | FIXED  |
| CONF-2468 | create a space button macro | Closed | FIXED  |
| CONF-2463 | space list macro | Closed | FIXED  |
| CONF-2466 | global reports macros | Closed | FIXED  |
| CONF-2773 | Move all new UI presentation logic into decorators | Closed | FIXED  |
| CONF-2825 | add versioning information for blogposts in UI | Closed | FIXED  |</p>
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2981</td>
<td>ensure indexes are present where needed on Confluence db schema</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3216</td>
<td>Bulk delete of mail contains broken references</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3199</td>
<td>Fix download pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2782</td>
<td>Create page only themes for 'tabbed' and 'simple' themes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2704</td>
<td>Add icon for pages you can not view</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2776</td>
<td>Build task for themes in maven.xml (just as for macros/plugins)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2700</td>
<td>Hide search results for pages you can't see</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2699</td>
<td>All permissioning code must be updated</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3197</td>
<td>What's New in 1.4?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3201</td>
<td>Fix 'about' page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3203</td>
<td>Screenshots</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2457</td>
<td>Document the setup of WebDay</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2980</td>
<td>profile the performance of the new renderer</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2373</td>
<td>Remote API Feature Request</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2985</td>
<td>'set to dials to ten' users</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2978</td>
<td>analyse sql queries used by dashboard,</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2979</td>
<td>analyse sql used by view page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3200</td>
<td>Finish role-specific pages</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2988</td>
<td>Left Hand Nav.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3262</td>
<td>Check what happens when upgrading with out-of-date license</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3198</td>
<td>Personal License Information</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2203</td>
<td>Trigger backups via remote API</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2697</td>
<td>Page Level Permissions</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>JIRA Key</td>
<td>Summary</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>CONF-2676</td>
<td>Add support for Personal Licenses (2 user)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2889</td>
<td>XWork plugin type</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2572</td>
<td>addPermissionToSpace</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2573</td>
<td>deleteUser</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-800</td>
<td>Add Attachments to user profile page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2599</td>
<td>Delete all mail from a space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2622</td>
<td>Support rel=&quot;nofollow&quot; for external links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2454</td>
<td>Investigate space id rewriting</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-2977</td>
<td>Customize application title</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1474</td>
<td>Link to &quot;special&quot; pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-191</td>
<td>Allow macros to listen for system events</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2791</td>
<td>Instant Messaging presence indicators: Yahoo! ICQ and AIM</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2597</td>
<td>Who is on-line</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2462</td>
<td>System information macros</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2218</td>
<td>it would be great if you could move attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1351</td>
<td>Allow attaching multiple files from the same screen</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-2857</td>
<td>Add &quot;lastModified&quot; parameter to search macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2877</td>
<td>Search indexing plugins</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1998</td>
<td>Need to be able to attach files (images!) to blog posts</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2574</td>
<td>deleteUserFromGroup</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1145</td>
<td>Ability to add multiple files</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2299</td>
<td>Hot keys for 'add' and 'preview'</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2575</td>
<td>deleteGroup</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2772</td>
<td>Move everything into a decorator - fully customizable look</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-1538  Customisable Logo support
and feel  Closed  FIXED

CONF-2723  'Inform me of Pages that I am watching' option on Profile
Closed  FIXED

CONF-2890  Servlet plugin type
Resolved  FIXED

CONF-2453  spring-bean plugin module type
Closed  FIXED

CONF-520  "minor edit" button
Closed  FIXED

CONF-2631  List all attachments for a space
Closed  FIXED

CONF-3076  attachments macro
Resolved  FIXED

CONF-2571  getSpaceLevelPermissions
Resolved  FIXED

CONF-2943  attachments macro
Resolved  FIXED

CONF-661  Dynamically Load Macro without restarting Confluence
Resolved  FIXED

CONF-2347  Add auditing for Admin and basic space/page CUD operations
Closed  FIXED

CONF-832  Move page hierarchy
Closed  FIXED

CONF-2097  V2Renderer
Resolved  FIXED

CONF-7086  CLONE - Export Page Hierarchy
Resolved  DUPLICATE

CONF-1807  Add macro for pulling number of issues from JIRA rather than issue list
Resolved  FIXED

CONF-2367  Add gzip filter to response, configurable in Bandana settings
Closed  FIXED

CONF-2864  (y) thumbs up image needs a transparent background
Resolved  FIXED

CONF-2496  refactor action-centric UI mutating code to a UserInterfaceFacade
Closed  FIXED

CONF-988  Need a war build script like Jira
Closed  FIXED

CONF-2973  footer text should use the phrase 'enterprise wiki'
Resolved  FIXED

CONF-2329  Store daily report preference as a notification
Resolved  FIXED

CONF-2770  Ship standalone with
Closed  FIXED
<p>| CONF-1493 | Convert bare anchor links to remove hash sign | Resolved | FIXED |
| CONF-2315 | Make confluence logo transparent | Resolved | FIXED |
| CONF-2621 | viewing Blog Posts should always display a calendar | Closed | FIXED |
| CONF-1110 | have a free personal edition (localhost only)? | Resolved | FIXED |
| CONF-2641 | Better mail archive page | Closed | FIXED |
| CONF-2607 | Deactivate automatic polling of mail accounts | Closed | FIXED |
| CONF-3090 | Add exportSpace and backup option for SOAP and rpc | Closed | FIXED |
| CONF-3102 | Support wildcards on space-level attachment list filter | Resolved | FIXED |
| CONF-2520 | Page operations -&gt; Edit UI component | Resolved | FIXED |
| CONF-1195 | Add user permissions to the SpaceSummary | Closed | FIXED |
| CONF-2354 | Replace all PNG icons with gifs | Resolved | FIXED |
| CONF-1768 | Add new Blog Post's Content to Notification Email | Resolved | FIXED |
| CONF-2960 | Do not display space key in any list of pages within browse space | Closed | FIXED |
| CONF-1297 | Horizontally scalable layout | Resolved | FIXED |
| CONF-2949 | Refactor event hierarchy to avoid repetition of code in child classes | Resolved | FIXED |
| CONF-2632 | Do not import a mail message if it matches an existing message-id in the same space | Closed | FIXED |
| CONF-3008 | Add ability to uninstall plugins | Closed | FIXED |
| CONF-2623 | Improve file attachment email notifications | Resolved | FIXED |
| <strong>CONF-2944</strong> | Quick link to &quot;search in all spaces&quot; on a space-limited search | Closed | FIXED |
| <strong>CONF-2947</strong> | Add remoteIP and remoteHost info to SecurityEvent | Closed | FIXED |
| <strong>CONF-1960</strong> | Improve error message for an offline database | Closed | INVALID |
| <strong>CONF-2867</strong> | Macros can choose if they need a body or not | Resolved | FIXED |
| <strong>CONF-2969</strong> | Page info, reports pages' parent and children | Resolved | FIXED |
| <strong>CONF-2358</strong> | Rename &quot;blog post&quot; to &quot;News&quot; | Resolved | FIXED |
| <strong>CONF-2615</strong> | Usability issue: hard to move pages | Resolved | FIXED |
| <strong>CONF-2873</strong> | Links at end of sentences can include extra periods | Resolved | FIXED |
| <strong>CONF-2994</strong> | Email notifications improved | Resolved | FIXED |
| <strong>CONF-2497</strong> | Dashboard recently updated should use Excerpt tag | Closed | INVALID |
| <strong>CONF-2915</strong> | Confluence's directory structure is not versioned | Resolved | DUPLICATE |
| <strong>CONF-2968</strong> | Add html anchor in page preview | Closed | FIXED |
| <strong>CONF-2360</strong> | Tooltip for space-only links should use space title not space key | Closed | FIXED |
| <strong>CONF-791</strong> | Improve insertion of images when editing pages | Resolved | FIXED |
| <strong>CONF-2893</strong> | XMLRPC interfaces allow creation of invalid spaces | Closed | FIXED |
| <strong>CONF-1106</strong> | Provide a 'view as source' link when navigating wikis | Closed | FIXED |
| <strong>CONF-1772</strong> | Versioned attachment links are confusing to non-technical users the way of the link. | Closed | FIXED |
| <strong>CONF-1750</strong> | Clean up javascript usage | Closed | FIXED |
| <strong>CONF-2144</strong> | ConfluenceSetup | Closed | FIXED |
| <strong>CONF-1693</strong> | Better parent | Resolved | FIXED |</p>
<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2964</td>
<td>Include macro can now reference pages in other spaces.</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-2100</td>
<td>Add Creator to page byline</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-2404</td>
<td>System plugins that can not be disabled.</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-2970</td>
<td>Content tree should display in an expanded form</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-1565</td>
<td>Packaged distribution should expand to confluence-version</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-2357</td>
<td>Mark confluence daily backups and make date ISO compliant for sortability</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-2325</td>
<td>Indexing on Large Installations only show Hibernate's DDL output on stdout if log4j is set to DEBUG priority</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-2787</td>
<td>Reinstall webday configuration</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-2868</td>
<td>Watch page UI confusing if you are watching a space</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-1859</td>
<td>Noisy dashboard 2</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-2010</td>
<td>Noisy dashboard 3 - remove &quot;Create a Space&quot;</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-2113</td>
<td>Add the ability to add attachments from the edit screen.</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-862</td>
<td>Show Differences between Separate Versions</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-3099</td>
<td>Allow attachment upload from the &quot;Insert link&quot; and &quot;Insert image&quot; popups on page edit</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-3230</td>
<td>Clear old messages off mail error queue</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-2732</td>
<td>Remove EmailTemplate table</td>
<td>Closed</td>
</tr>
<tr>
<td>CONF-3037</td>
<td>Why the single attachment option for every &quot;Attach</td>
<td>Resolved</td>
</tr>
</tbody>
</table>
CONF-2881  more files” click?  Resolved  FIXED
What to do when upon a "Cancel" request
CONF-2926  Put permissions UI on "Create page" page  Resolved  FIXED
CONF-2583  Add getChildren() method to remote API  Closed  FIXED
CONF-2025  Blog Attachments  Closed  FIXED
CONF-2600  Add an insert image link next to "Insert Link" link  Closed  FIXED
CONF-2920  Upgrade c3p0  Closed  FIXED
CONF-3061  Let users select individual blogposts to watch  Closed  FIXED
CONF-1542  Show original user and last update by user for each page  Resolved  FIXED
CONF-2316  Can't create a new blog post from the recent blog posts page  Closed  FIXED
CONF-2995  Improve Conf. Documentation  Resolved  FIXED
CONF-2939  Back up plugins directory  Resolved  FIXED
CONF-3162  Plugin list should be ordered alphabetically  Closed  FIXED
CONF-3150  Paginate search results inside insert link popup  Closed  FIXED
CONF-3107  RPC test suite needs improving  Closed  FIXED
CONF-3236  Allow {children} macro to list the space’s root pages  Resolved  FIXED
CONF-3023  View all blog posts, not only most recent.  Resolved  FIXED
CONF-2967  Change pool size of multi-threaded indexer depending on queue size (lucene)  Resolved  FIXED
CONF-2619  Fix demo site ... bad link on Confluence Overview - features other wikis do not have  Closed  FIXED
<table>
<thead>
<tr>
<th>CONF-3098</th>
<th>Make content tree work for unsupported browsers</th>
<th>Closed</th>
<th>FIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2854</td>
<td>If LDAP provider fails to authenticate, do not fall back on local osuser auth</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2905</td>
<td>Investigate current indexes created on content table in Confluence</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2560</td>
<td>Repair/replace PropertySet's Hibernate provider / provide upgrade task in Confluence for text/string meta data</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3132</td>
<td>Thumbnailing should display image name</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2188</td>
<td>Customized Application Title</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3245</td>
<td>Ugly long path display</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3214</td>
<td>Make an object's default text content more easy to manipulate in search extractor chain</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2264</td>
<td>Edit comment on attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2514</td>
<td>Dogfood: Demonstrate Confluence theme plug-ins</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2937</td>
<td>Document all junitreport options</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2961</td>
<td>Page diff.s need to be fixed - follow J. Nolan's advice for best wiki diffing strategy</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1715</td>
<td>Move some page operations to page info</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2629</td>
<td>Moving a page to another space should move the children</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-938</td>
<td>Page level access permissions / security</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2668</td>
<td>Parent Page field</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-2688  Setup Administrator fails  Closed  FIXED
CONF-2687  Image attachments on an `{include}`'d page are broken  Closed  FIXED
CONF-1601  List rendering results in unexpected indenting  Resolved  INVALID
CONF-1482  More than one CamelCase link in a single line  Resolved  FIXED
CONF-1798  Can not supply arguments (i.e., thumbnail) to image in a list  Resolved  FIXED
CONF-2513  java.util.MissingResourceException: Can't find resource for bundle java.util.PropertyResourceBundle, key core.dateutils.minutes  CANNOT REPRODUCE
CONF-2181  Invalid character in new blog entry results in losing text entered  Closed  FIXED
CONF-3277  mail accounts always connect to server using port 110  Closed  FIXED
CONF-2613  PowerPoint indexing error  Closed  WON'T FIX
CONF-2626  The parent page picker allows you to choose illegal parents  Closed  FIXED
CONF-3052  Edit blog post link inconsistent  Closed  FIXED
CONF-2166  CamelCase not consistent  Resolved  FIXED
CONF-3053  Notifications not obeying page-level permissions  Resolved  FIXED
CONF-2792  AIM presence macro points to fishbowl.pastiche.org  Resolved  FIXED
CONF-3033  trackbacks broken - $generalUtil.wordWrap($tbl.title, 32)  Closed  FIXED
CONF-3156  Can not delete a blog post that has notifications  Resolved  FIXED
CONF-3195  Can't create child page with security  Closed  FIXED
CONF-3270  turned on Trashed pages have downloadable attachments
CONF-2897  Dashboard forgetting how many items in recently displayed
CONF-3114  anchor macro gives NPE
CONF-3044  Upgrade fails with Sybase
CONF-2693  space breaks include macro
CONF-3035  help docs not showing on edit-preview page
CONF-2824  Case-insensitive attachment filename fix breaks existing mixed-case attachments
CONF-2845  NullPointerException in ListNewOrUpdatedPagesAction
CONF-2214  [name]link^attachment gets broken if I move link to a new space
CONF-2822  Restore setup step will accept space-only imports
CONF-2473  HTML bug in preview page
CONF-2500  XML page hierarchy export not functioning correctly
CONF-2963  Page related macros should work with page permissions
CONF-2748  'View page in hierarchy' does not anchor on selected page in tree view
CONF-2724  Tasklist crashes when task item has link
CONF-3146  Regression: Robots exclusion tags (find more) mail search does not cater for null $address.personal
CONF-2379  Export space screen shows incorrect sort
CONF-3267  order Section / column macros still have borders  Resolved  FIXED
CONF-2942  Parent page blanking out (regression)  Closed  FIXED
CONF-3229  Authentication with LDAP password only  Closed  FIXED
CONF-2101  XML escape characters in space titles break PDF export  Resolved  FIXED
CONF-3194  The "breadcrumbs" demo is broken  Closed  FIXED
CONF-3228  Picture not showing properly on Profile page  Resolved  FIXED
CONF-3225  Illeagal chars allowed on attachment rename.  Closed  FIXED
CONF-3178  Search is broken - returning incorrect results via rpc and ridiculous results via the UI  Resolved  FIXED
CONF-2946  Space export doesn't show content tree  Resolved  FIXED
CONF-3133  LiveSearch macro - close link and esc, shortcut inconsistent  Closed  FIXED
CONF-2807  "«" and "»" (french "") breaks list rendering  Resolved  FIXED
CONF-2345  Sender not properly displayed when containing international characters  Resolved  FIXED
CONF-3209  bucket.core.Infras...Exception: java.lang.NoClassDefFoundError  Closed  FIXED
CONF-2660  verify that notifications are sent out when none are requested  Resolved  FIXED
CONF-2805  Space specific decorators, within themes, will not work as inline decorators  Closed  FIXED
CONF-2886  Searching for pages using the page pop-up fails  Resolved  CANNOT REPRODUCE
CONF-3289  Print page shows  Resolved  FIXED
CONF-3180  Rename of "Home" fails if new name contains umlaut characters  Closed  FIXED
CONF-3161  Anonymous user trying to edit page causes exception.  Resolved  FIXED
CONF-2916  Searching anonymously brings back no results  Resolved  FIXED
CONF-2928  Page Info screen does not display inherited restrictions  Resolved  FIXED
CONF-3093  View link points wrongly on diff page  Resolved  FIXED
CONF-2638  Indexing on attachments during install fails  Closed  FIXED
CONF-2892  Lock Page fails to present editing by other users  Resolved  HANDLED BY SUPPORT
CONF-2951  Can't update daily report setting  Resolved  FIXED
CONF-2894  Notifications list incorrect editors  Resolved  FIXED
CONF-3091  NPE importing attachments during initial setup  Resolved  FIXED
CONF-2749  Content tree is greedy for resources  Closed  FIXED
CONF-3279  Add attachment anchor link shouldn't show if you can't add attachments  Resolved  FIXED
CONF-2903  nullpointer on Demo Site in DOC space - clicking on Info  Resolved  CANNOT REPRODUCE
CONF-3029  Restoring a single Space from 1.3.1 to 1.4-DR6 fails  Closed  FIXED
CONF-2759  Loading "Spaces" page really slow  Closed  WON'T FIX
CONF-2628  User macros are listed in random order  Closed  FIXED
CONF-2941  Weird unrendered comments  Resolved  FIXED
CONF-3223  Can not deleteAll mail when attachment exists.  Resolved  FIXED
CONF-2674  Import of space - data integrity violated and user's  Closed  FIXED
CONF-2950 locked out Page diffs are broken Closed FIXED
CONF-3051 Edit pop account page has no $i18n help Resolved FIXED
CONF-3159 View space attachments can break Resolved DUPLICATE
CONF-3151 \{children\:depth=2\} is listing the same page twice Resolved WON'T FIX
CONF-3143 i18n bug on notifications page Resolved FIXED
CONF-3218 file inaccessible: incorrect message key in mail import Resolved FIXED
CONF-3217 Email with no subject can not be viewed Resolved FIXED
CONF-3163 Cant add files to users profile although I belong to a group that has Global permission to attach files Closed FIXED
CONF-3257 gallery macro is page-specific Closed FIXED
CONF-3244 HTML tag in page - Invalid XML export Resolved FIXED
CONF-3252 Disabled pop account should remain disabled after editing Resolved FIXED
CONF-3311 Restore fails Closed FIXED
CONF-3491 Table and List Syntax Don't Co-operate Closed FIXED
CONF-3160 Invalid plugins can be uploaded Closed FIXED
CONF-2518 Strange Lucene exception during reindex Closed FIXED
CONF-1680 Page Referencing [...] in tasklist doesn't work Resolved FIXED
CONF-2733 attachment with 'action' in the name results in PermissionCheckDispatcher error Closed FIXED
CONF-3278 Borders not displayed for tables in wiki preview Resolved FIXED
CONF-2902  Space search is broken  Closed  FIXED
CONF-2811  Blog comments appear in global summary, but not in space summary  Resolved  FIXED
CONF-3117  Images don't render in PDF exports of pages  Resolved  FIXED
CONF-3222  Userpicker on Edit Space Permissions does not work  Closed  FIXED
CONF-3158  NullPointerException on space attachments list  Resolved  DUPLICATE
CONF-3112  C.A.C. page crashes on view  Resolved  FIXED
CONF-3213  trim whitespace when editing page titles  Closed  FIXED
CONF-3077  No error text when you choose a dud parent page  Resolved  FIXED
CONF-3068  java.lang.ClassCastException on Page Info page  Resolved  FIXED
CONF-3015  Page restrictions/permissions not honoured by remote API  Resolved  FIXED
CONF-2883  Contents of the temp directory (i.e., backups/exports) not sufficiently protected  Closed  FIXED
CONF-3172  Cannot upgrade on existing ORACLE Database  Resolved  FIXED
CONF-2935  New comment notifications don't contain the new comment  Resolved  FIXED
CONF-3219  Import local mbox without specifying a file results in NPE.  Resolved  FIXED
CONF-3273  wiki content styles override styles in included html unrelated symbols (instead of space between words and symbols like "&" generated in h1, attachment link in...
search results follows a non-existent anchor

CONF-2837 Broken mail configuration makes admin console inaccessible

Resolved FIXED

CONF-1633 Formatting characters in shortlinks are processed leading to rendering errors

Resolved FIXED

CONF-3276 Change password tab should be hidden if external user management is enabled

Resolved FIXED

CONF-1390 Images with HTML attributes don't render correctly in numbered lists

Resolved FIXED

CONF-2620 Space list in 404 page broken

Resolved FIXED

CONF-2477 NPE in mail retrieval

Closed FIXED

CONF-1982 Exporting names with commas appears to break

Resolved FIXED

CONF-1968 Noformat macro should ignore backslashes

Resolved FIXED

CONF-1896 Template breaks table structure

Resolved FIXED

CONF-1604 Link Rendering is broken by markup in URL

Resolved FIXED

CONF-2570 stacktrace when Anonymous user hits attach file

Closed FIXED

CONF-2858 atlassian-mail.cfg.xml saves as wrong character set

Resolved FIXED

CONF-2034 Incorrect rendering of code tag after a bullet with ']' in the code

Resolved FIXED

CONF-1450 (noformat) macro doesn't work properly

Resolved FIXED

CONF-3010 URL with / in it confuses PermissionCheckDispatcher

Closed FIXED

CONF-2183 Move Page icon and Rename Page icon are identical

Closed FIXED
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2301</td>
<td>Trying to import non-mbox file as an mbox file causes mayhem</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3240</td>
<td>Insert image popup doesn't consider png files images</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2309</td>
<td>Wacky notifications when files are attached</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3063</td>
<td>find page notifications broken in notif. s manager</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3067</td>
<td>Adding a non-existent user to space should report error</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2504</td>
<td>confluence.atlassian.com</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1405</td>
<td>Mail getting Archived repeatedly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3113</td>
<td>Escaped square brackets show up in Undefined Pages Report</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2808</td>
<td>“Page Not Found” breadcrumbs</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2896</td>
<td>Excerpt macro does not hide text</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3057</td>
<td>Adding attachments that are empty causes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2804</td>
<td>Green highlighting for new attachments is wrong when multiple attachments are added</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1903</td>
<td>Exclude &quot;Index&quot; from &quot;Recently Changed Pages&quot; rss feed</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2763</td>
<td>Borders in note macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2747</td>
<td>PGP signatures or long unbroken text stalls Confluence</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-3147</td>
<td>Deleting comments leads to weird search result</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-3131</td>
<td>fix content indexing page UI</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-1833</td>
<td>Excerpts limited to 255 characters</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3111</td>
<td>Possible connection leakage when session.flush() fails</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3268</td>
<td>pages, comments, and attachments are not reindexed when page is restored from trash</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2719</td>
<td>The excerpt doesn't expand the tags inside</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3056</td>
<td>Helper.spaceName displayed on Historical Page view</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2332</td>
<td>mixed case usernames are resolved in a confusing manner after creation</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2633</td>
<td>Analysis script for Contegix</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-2901</td>
<td>Confluence can store null terminators ('\0')</td>
<td>Closed</td>
<td>RESOLVED LOCALLY</td>
</tr>
<tr>
<td>CONF-2777</td>
<td>missing property core.dateutils.minutes</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3006</td>
<td>Device out of space error is being hidden...</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2730</td>
<td>Table in a second list is not rendered</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2448</td>
<td>Search results shows same page twice</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-3022</td>
<td>Attaching image to blog post brings NPE</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-2972</td>
<td>Regression: Blog comments missing</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2342</td>
<td>Exception after Hot Referral purge</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3119</td>
<td>On page info, showall link should only appear if there are hidden links.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3188</td>
<td>Emoticons don't show up in exported PDFs</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2775</td>
<td>Database connection is not closed and transaction isn't ended</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3258</td>
<td>ImageRendererComponent</td>
<td>Closed</td>
<td>CANNOT</td>
</tr>
<tr>
<td>CONF-3251</td>
<td>is page-specific Editing pop account should hash out password.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3190</td>
<td>Mail archive not sorted correctly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3060</td>
<td>confluence progressively results in hung pages for certain pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1995</td>
<td>Confluence Changes in the last 24 hours is Empty</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3672</td>
<td>Certain keywords lead to weird search result, most produce duplicate results</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1478</td>
<td>Search of numbers yields no result</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2710</td>
<td>How do I edit a page in 1.4DR4</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2659</td>
<td>Restore export of a space causes HibernateException: Reading backup xml file failed. Repeat, bounce Tomcat and all <em>seems</em> OK</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2431</td>
<td>import macro incorrectly parses links to anchors</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1804</td>
<td>Broken HTML notification for certain email client due to extra &quot;//Confluence&quot; in base href</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1697</td>
<td><code>&lt;code&gt;:xml</code> formats some XML entities incorrectly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2606</td>
<td>Problem with URL encoded content within <code>{html}</code></td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1453</td>
<td>Corrupt table header after bulletins</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2364</td>
<td>The &quot;information&quot; emoticon is upside-down</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1525</td>
<td><code>hn_</code> corrupts line breaks</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1338</td>
<td>Page exports do not contain images</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1607</td>
<td>Pipe `&quot;</td>
<td>&quot;` character breaks rendering of</td>
<td>Resolved</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-1217</td>
<td>list URL containing asterisks is interpreted as bold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2348</td>
<td>Shortcut rendering errors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2682</td>
<td>Online help missing from global admin general config screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-1883</td>
<td>(noformat) issue with first line of text.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-1799</td>
<td>Second list in a table won't be rendered as a list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-1092</td>
<td>Wrong paragraph markup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2433</td>
<td>Setting email to hidden makes archived mail addresses MORE visible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2451</td>
<td>PDF export fails when HTML macro is used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2104</td>
<td>excerpt from included page used, not main one.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-1918</td>
<td>System error when changing the formatting from UTF-8 to UTF-32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-1570</td>
<td>Still trouble with non-ASCII characters in page names</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2383</td>
<td>atlassian-velocity needs upgrading, dependencies on atlassian-core broken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2450</td>
<td>Error deleting space - integrity constraint between NOTIFICATIONS and CONTENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2476</td>
<td>Null pointer on template creation (also a null without exception in 500 page on template edit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2762</td>
<td>Content link dies if target is a comment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>CONF-2344</td>
<td>ensure that German responses to email (AW:) are threaded</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2836</td>
<td>Auto-paragraph breaks not working due to &quot;heading&quot; tags</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2863</td>
<td>Template values cannot contain $</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2601</td>
<td>TokenMap can leak memory</td>
<td>Closed</td>
<td>INVALID</td>
</tr>
<tr>
<td>CONF-2832</td>
<td>Base URL warning points to obsolete path settings screen</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3274</td>
<td>Space Permissions Page unusable on narrow browser widths</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2823</td>
<td>'Undefined Pages' lists user profile links</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2924</td>
<td>Handling of &quot;~&quot; in anchor macro and links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3169</td>
<td>Search results include attachments of deleted pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2910</td>
<td>Regression: Recent Changes expansion state no longer remembered</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3210</td>
<td>Daily email status not displayed on user profile</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2485</td>
<td>Odd looking content hangs confluence</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2515</td>
<td>PDF Export: hyperlinking within an exported parent to child page is not internal</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3074</td>
<td>Error running scheduled backup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2134</td>
<td>No e-mail notifications are sent</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2472</td>
<td>eval license expiry time not displayed</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-2461</td>
<td>wrong URL encoding of non-ASCII chars when redirected to space homepage</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2671</td>
<td>Restore setup step doesn't list directory contents properly</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3101</td>
<td>Crash on list</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3177</td>
<td>Change color scheme throws exception</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3182</td>
<td>Template breadcrumb rendering issue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3007</td>
<td>Page Permissions do not extend to attachments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2635</td>
<td>Index key too long - os</td>
<td>propertyentry when MySQL</td>
<td></td>
</tr>
<tr>
<td>CONF-2516</td>
<td>Servlet context listeners not Websphere 5.1 compatible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2409</td>
<td>Unable to render Velocity Template</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3024</td>
<td>Move page and move page hierarchy should respect page level permissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3105</td>
<td>If cookies disabled, login fails but shows content page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3291</td>
<td>Ellipsis in (noformat) is formatted.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2375</td>
<td>Left navigation theme broken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2335</td>
<td>Error when using {include: } macro within a comment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2927</td>
<td>Template entry params can confuse tables.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2300</td>
<td>Restore/Backup Mask</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3175</td>
<td>SAXParseException when trying to export Confluence using 1.4 RC1 or RC2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2509</td>
<td>Checking off one tasklist item incorrectly checks off same item in other task lists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3174</td>
<td>Missing ViewDefaultDecorator resource in 1.4-RC2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3096</td>
<td>(code:none) gives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONF-3179  error in 1.4DR6
Ancestor table not built when importing data
Resolved  FIXED

CONF-3171  dashboard, not default site
homepage, as user homepage
Closed  INVALID

CONF-3189  NullPointerException
deleting mail from a space
Resolved  FIXED

CONF-3269  RemoveDocumentIndex
encounters NPE (entire document
built just to access
the doc. handle)
Closed  FIXED

CONF-2765  Growing Memory Usage leads to
Errors
Resolved  FIXED

CONF-2352  hardcoded column
names in the jira
bridge are incorrectly cased and
fail on Sybase
Closed  FIXED

CONF-840  Non-daemon threads prevent clean server
shutdown
Closed  FIXED

CONF-2539  Mail archiving & blogs not listed as
being enabled on list of spaces
Closed  FIXED

CONF-2564  {info}, {tip}, etc., break lists
Resolved  FIXED

CONF-1385  cannot create 2nd
bullet list inside the
Closed  FIXED
table cell

CONF-3013  No field error when
adding a blog post
with no title
Closed  FIXED

CONF-2557  Recently Updated list
doesn't escape html
tags
Closed  FIXED

CONF-2035  Ellipsis character
incorrectly inserted
when using code tag
Resolved  FIXED

CONF-2729  NullPointerException
when trying to view
attachments
Closed  FIXED

CONF-2189  If you preview a
page with a bad title,
there's no "back" and
you lose your work
Closed  FIXED

CONF-2475  Hot referrers bug in
building priority
Closed  FIXED
| CONF-3025 | order for display Visual layout problems with IE5.5 | Closed | RESOLVED LOCALLY |
| CONF-2721 | Attachments tab always fails. Can choose links on page to download OK. | Closed | FIXED |
| CONF-2793 | Log Levels on JBoss/Jetty seem screwed | Closed | WON'T FIX |
| CONF-1017 | Back button after preview destroys edits | Closed | FIXED |
| CONF-2498 | The tasklist macro does not work on a user profile page | Resolved | FIXED |
| CONF-3129 | template structured content breaking - [[|Description|@VAR|textarea(10x80)]]@| Resolved | INVALID |
| CONF-1842 | CamelCase link rendering regressions | Resolved | FIXED |
| CONF-2546 | Use of both style="..." in generated HTML breaks third-party CSS. | Resolved | FIXED |
| CONF-2483 | Table + macro inside bug! | Resolved | FIXED |
| CONF-3162 | Space permissions broken in search in 1.4 DR7 | Closed | FIXED |
| CONF-3196 | Printable HTML pages have many things they don't need | Closed | FIXED |
| CONF-2544 | Children macro bugs | Closed | WON'T FIX |
| CONF-3312 | restore 1.4RC4 -> 1.4 xml parsing error | Resolved | FIXED |
| CONF-2907 | Space look and feel options in space admin broken | Closed | FIXED |
| CONF-3069 | $helper object not available on Edit colour scheme settings page. | Closed | FIXED |
| CONF-2519 | Funky bug in diffing tables | Closed | FIXED |
| CONF-3085 | Error in search inside imported space | Closed | DUPLICATE |
| CONF-934 | Weblogic Authenticator is missing from | Closed | FIXED |
CONF-309  deployment Attachment links broken for mail  Closed  FIXED
CONF-2423  atlassian-core now uses resourcebundle for DateUtils - missing for LongRunningTask  Resolved  CANNOT REPRODUCE
CONF-3157  Backup imports complaining about PropertySetItem fields  Resolved  FIXED
CONF-2806  Theme specified resources are not associated with the decorator  Closed  FIXED
CONF-2643  NullPointerException on "More" of page with outgoing links  Closed  FIXED
CONF-3049  Multiple Page.keys in classpath  Resolved  FIXED
CONF-3226  Deleted pages still show up in Tree View  Resolved  FIXED
CONF-2685  header in {blog-post} macro  Resolved  FIXED
CONF-2934  No buildable plugins in 1.4DR6 releases!  Resolved  FIXED
CONF-3014  Blog calendar is not on the far right  Resolved  CANNOT REPRODUCE
CONF-2534  Exporting a subset of a space utilizes attachments from the whole space  Closed  FIXED
CONF-3241  Mail creation date should mirror the emails creation date.  Resolved  FIXED
CONF-2735  Search error on confluence.atlassian.com  Closed  FIXED
CONF-2752  Next button crashes on search results  Resolved  DUPLICATE
CONF-2918  VewSpacePermissions throws LazyInitializationException  Closed  CANNOT REPRODUCE
CONF-2834  Export to PDF reference to profile is wrong ("file://root-context/username")  Resolved  FIXED
CONF-2690  Export/Restore of space inserts blank lines in pages  Closed  FIXED
CONF-3108  Comment preview loses threading info  Resolved  FIXED
CONF-3173  Exception trying to  Closed  FIXED
<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-3012</td>
<td>Page properties are lost when upgrading to DR6</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-3215</td>
<td>Confluence's &quot;recently-updated&quot; macro is not sorted by date.</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-3148</td>
<td>attachments: could not be queried successfully</td>
<td>Closed</td>
</tr>
</tbody>
</table>
Release Notes 1.4.1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4.1 is a maintenance release that resolves some issues users may have encountered using Confluence 1.4. Issues include an occasional failure to display Confluence pages, Oracle and MySQL database issues, and a slow memory-leak.

1.4.1 is a free upgrade for all customers who purchased their Confluence license after June 2nd, 2004.

Who should upgrade?

Confluence 1.4.1 is a recommended upgrade for all users of Confluence 1.4, as it addresses a memory-leak which, while slow, would progressively degrade Confluence's performance and ultimately cause the server to exhaust available memory.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.4, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.3.6 or earlier, be sure to read the upgrade instructions in the Confluence 1.4 release notes.

Changes in 1.4.1

See also: Issues Resolved for 1.4.1

- A slow memory leak has been fixed. (CONF-3347)
- An issue where Confluence pages would intermittently only display their header when loading has been resolved. (CONF-3295)
- Confluence will now deploy reliably on MySQL 4.1 with UTF-8 encoding. (CONF-3306)
- Several issues regarding Confluence's use of the Oracle database have been resolved.
- A recurring bug preventing PNG images from being exported to PDF on some application servers has been fixed. (CONF-731)
- Inconsistencies with custom colour-schemes have been resolved (CONF-3314)
# Issues Resolved for 1.4.1

This page last changed on Jun 02, 2005 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-3306</td>
<td>Update <code>os-propertyset key</code> size to ensure that it works with mysql</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2720</td>
<td>Tasklist should allow for unnamed list</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3128</td>
<td>Links to Attachment disappeared in exported HTML page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3255</td>
<td>Links in the <code>{children}.macro</code> are mis-rendered in exported PDFs</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td></td>
<td>CONF-3400</td>
<td>Pages with <code>edit-permissions are indexed as if they have view permissions</code></td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-731</td>
<td>PNG images (as well as some of the emoticons which are PNG) can not be exported as PDF!</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3314</td>
<td>Custom color scheme not applied to spacelist</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3315</td>
<td><code>RemoveOldCommentsFromParentComment</code> upgrade task fails on MySQL (and other case sensitive databases)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1478</td>
<td>Search of numbers yields no result</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2672</td>
<td>Error while generating PDF</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3347</td>
<td>Memory leak caused by registering Webwork actions with Spring</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3284</td>
<td>Mail import failing on oracle.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3304</td>
<td>Non-profit footer too long</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3303</td>
<td>NPE in link macro?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-783</td>
<td>Icons and images don't get exported in</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-3295

PDFs
Page mysteriously fails to load, sometimes

Resolved
FIXED
Release Notes 1.4.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4.2 is a maintenance release that resolves some issues users may have encountered using previous Confluence 1.4 releases. 1.4.2 introduces Websphere and DB2 compatibility, and fixes issues related to content indexing and the mail queue.

1.4.2 is a free upgrade for all customers who purchased their Confluence license after June 30th, 2004.

Who should upgrade?

Confluence 1.4.2 is a bugfix release. Customers should consult the list of issues resolved for this release to decide whether it is worth their while upgrading. Since this release includes a number of important performance and reliability fixes for content indexing, anyone who relies on Confluence's search functionality should consider upgrading.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.4 or 1.4.1, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.3.6 or earlier, be sure to read the upgrade instructions in the Confluence 1.4 release notes.

Database Connection Pool Changes

Dependent on the size of your Confluence installation, the new re-indexing task may use up to 10 database connections simultaneously. As such, you may need to increase the size of your database connection pool in order to allow Confluence to continue to operate during and after rebuilding the search index.

If Confluence has been set up to use direct JDBC connections, then you will find the setting for Confluence's connection pool size in confluence.cfg.xml in your confluence home directory. Confluence should update this value automatically when you upgrade, so after starting up Confluence 1.4.2 for the first time, you should check to make sure it has been updated to 15 connections, as seen below:

```xml
<property name="hibernate.c3p0.max_size">15</property>
```

If Confluence has been configured to use a datasource supplied by the application server, you should ensure the application server is configured to supply Confluence with sufficient connections to run.

Changes in 1.4.2

See also: Issues Resolved for 1.4.2

Document generated by Confluence on May 01, 2007 00:44
• Confluence has now been tested on Websphere 5.1.1.3 (see Known Issues for Websphere)
• Confluence has now been tested against DB2 8.1 (Linux and Windows)
• The mechanism by which Confluence rebuilds its full-text search index has been rewritten to be significantly less memory-intensive (but may be 10-15% slower). CONF-3340
• An issue that could cause comments or attachments to be removed from the search index when a page was edited has been resolved. CONF-3489
• An issue that could cause index rebuilding to fail (especially on multi-processor systems) has been resolved. CONF-3168
• Issues related to the size and reliability of the mail queue were resolved. CONF-3334 CONF-3474
• An exception when creating global templates was fixed. CONF-3386
• Some Javascript errors that were being flagged on Internet Explorer no longer occur. CONF-3422, CONF-3482
• Exporting a space to HTML via XML-RPC now succeeds. CONF-3401
• Creating a blog post via XML-RPC now succeeds. CONF-3412
• ALL CAPS WORDS are no longer linked when CamelCase linking is activated. CONF-3361
• The display of user attachments does not break when the user has not yet set a profile. CONF-3420
## Issues Resolved for 1.4.2

This page last changed on Jun 29, 2005 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CONF-3001</td>
<td>Website improvements</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3474</td>
<td>THE Mail Queues Error Queue gets Filled with Mail Exceptions</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3204</td>
<td>Proof-read, clear and deploy</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3294</td>
<td>Make Navigation Consistent</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3202</td>
<td>Make front page spiffy</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3341</td>
<td>Support DB2 (Windows/Linux)</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3705</td>
<td>Don't show comments text area in print view</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3354</td>
<td>Turn off logging when exporting to PDF</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3340</td>
<td>Reindexing shouldn't load all objects into memory at once</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3413</td>
<td>Incomplete i18n properties for core.dateutils,DateUtils</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3386</td>
<td>Creating global template throws null pointer exception in getSpaceName</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3473</td>
<td>Cannot un-check &quot;Macro has a body&quot; flag</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3361</td>
<td>CamelCase behaves much differently in 1.4.1 than 1.3.5</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3348</td>
<td>Blogpost preview shows Dashboard &gt; Undefined Space &gt; $helper.getText(&quot;action.name&quot;)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3489</td>
<td>Indexing a page removes the indexes for the comments on attachments belonging to the page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-1467</td>
<td>PDF Export of page with large image breaks</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3405</td>
<td>Servlet plugins not covered by standard confluence servlet filters</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3412</td>
<td>storeBlogEntry() fails with NullPointerException if a publishDate is not set</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3422</td>
<td>JavaScript error when creating a page from link in undefined pages list</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2568</td>
<td>Unable to create blog post - bad sql grammar exception (DB2)</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3482</td>
<td>Javascript error in IE when clicking on non-existant page link</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1478</td>
<td>Search of numbers yields no result</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1738</td>
<td>Problem sending email notification can cause email flooding</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-3334</td>
<td>Default email MIME type is not valid</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3420</td>
<td>Attachments tab sometimes shows a macro instead of (0)</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3410</td>
<td>Mail stops sending, MailExceptions in stdout.log, all mail moves to Error Queue</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-3375</td>
<td>Livesearch macro rendering (breaks panels for one)</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3379</td>
<td>Typo on no permissions page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3401</td>
<td>Exporting a space to HTML via XML-RPC results in a ClassCastException Upgrade issue from 1.3 to 1.4.1 with DB2</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3377</td>
<td>WebSphere 5.1 installation problems</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-3680</td>
<td>Problem with turkish characters, New line starts while it is not supposed to be with turkish characters.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3443</td>
<td>Upgrade bug on Sybase: Column not NULL by default</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3381</td>
<td>$body always defined for user macros</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3391</td>
<td>Invalid formatting in space.vmd of URL links to blog comments in News Items page if non-ascii characters present in blog title</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 1.4.3

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4.3 is a maintenance release that resolves some issues users may have encountered using previous Confluence 1.4 releases. 1.4.3 introduces a new SOAP service provider, and fixes issues related to incoming link tracking, notifications management, serving resources from dynamically loaded plugins, and much more.

1.4.3 is a free upgrade for all customers who purchased their Confluence license after August 17th, 2004.

Who should upgrade?

Confluence 1.4.3 is a bugfix release. While Atlassian recommends customers always run the most recently available stable Confluence release, customers should consult the list of issues resolved to decide whether it is worth their while upgrading.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.4 to 1.4.2, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.3.6 or earlier, be sure to read the upgrade instructions in the Confluence 1.4 release notes.

Changes in 1.4.3

See also: Issues Resolved for 1.4.3

Remote API Changes

Confluence now ships with an second SOAP provider running Apache Axis, alongside the existing Glue SOAP provider. This is the first step towards migrating entirely to Axis as our sole SOAP provider over the next few major Confluence releases. If you use Confluence's SOAP API, you should read this document for information about the migration process and timeframe.

⚠️ All SOAP clients that worked with Confluence 1.4.2 will continue to work with Confluence 1.4.3 with no change.

Other changes made to the remote API:

- A condition under which SOAP faults could be masked by HTML error pages on some application servers was resolved. (CONF-3043)
- Deleting a page via the remote API now places that page in the trash. (CONF-3403)
- Adding space level permissions to a user through the remote API now works as expected. (CONF-3596)
Other Changes and Fixes

- A bug that would cause a page's most recent editor to change when the page was previewed has been fixed (CONF-3424)
- A bug that could cause a page's incoming links not to be displayed has been fixed (CONF-3509)
- A bug that could cause "Watch this space" not to function has been fixed (CONF-3510)
- A bug that could cause Confluence to run out of available file descriptors when exporting a space has been fixed (CONF-3517)
- A bug that could cause an email notification to be sent regarding a page that was restricted by page-level permissions has been fixed (CONF-3573)
- The attachment upload form in the "Insert Image" is more robust against error (CONF-3677, CONF-3676)
- Searching for a page in the Parent Page Picker Popup now functions as expected (CONF-3364)
- Deleting a user now correctly deletes their email notifications (CONF-3619)
- Restoring a page from the trash now re-adds that page's comments to the search index (CONF-3564)
- Attachment links are now not rendered if the user can not view the attachment due to page level permissions (CONF-3553)
- The list of recently edited pages in a user's profile is now more accurate (CONF-2430)
- Plugins uploaded through the web interface can now correctly serve downloadable resources (CONF-3387)
- The \{recently-updated\} macro and recent blogs pages now work under JDK 1.5 (CONF-3528, CONF-3601)
- The \{section\} macro's "border" property now works correctly (CONF-3736, CONF-3433)
- The \{noformat\} macro now has a "nopanel" parameter that will suppress drawing a background or border (CONF-3656)
- Several issues regarding the \{tasklist\} macro were fixed (CONF-3622, CONF-3633, CONF-3632)
- The \{dynamictasklist\} macro no longer breaks PDF exports (CONF-3513)
- The informational macros no longer center their text when viewed in Internet Explorer (CONF-3537)
- Links are now parsed in the title of a \{panel\} macro (CONF-3560)
- The string ?!?! is no longer interpreted by the Wiki/HTML renderer as a broken image

See also: Issues Resolved for 1.4.3
### Issues Resolved for 1.4.3

This page last changed on Aug 17, 2005 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>![image]</td>
<td>CONF-3658</td>
<td>Create axis soap service alongside glue service</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3670</td>
<td>Restrict the number of top level pages shown in the {children} macro.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-801</td>
<td>Support different sorts of page children</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3656</td>
<td>Add option to suppress panel in noformat macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3654</td>
<td>Edit panel and buttons disappear when previewing a global template</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3424</td>
<td>Canceling edit after preview changes last editor</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3601</td>
<td>Ognl exception while getting property blogPosts</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3505</td>
<td>ClassCastException in Recently Updated Macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-1843</td>
<td>Confluence doesn't reconnect to database after MySQL is restarted</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3736</td>
<td>SectionMacro:border not responding.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3676</td>
<td>insert image popup shows upload form even though the user does not have permissions.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3620</td>
<td>Bad action - after send forgot password</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3619</td>
<td>Deleting user does not delete there notifications.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![image]</td>
<td>CONF-3577</td>
<td>Need to handle multiple &quot;watches&quot; / &quot;notifications&quot;</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>JIRA Key</td>
<td>Description</td>
<td>Status</td>
<td>Priority</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>CONF-3632</td>
<td>Duplicate tasklist macro items cause SQL duplicate key exception on restore</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3564</td>
<td>Comments are not re-indexed when a page is restored from the trash</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3575</td>
<td>The actual order of pages in a PDF Space export does not follow the same order of the index</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1324</td>
<td>Username can't have uppercase characters</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3633</td>
<td>Tasklist macro allows duplicate items if items contain trailing spaces</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3711</td>
<td>Page Picker search results are always empty</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3403</td>
<td>Delete page via SOAP api doesn't put it in the Trash</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3507</td>
<td>Creating a page containing the RSS macro may cause the server to hang against DB2</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2430</td>
<td>User Profile's 'Recently Edited' items list is wrong.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1749</td>
<td>lotus notes emails screwy</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3677</td>
<td>500 Internal Server Error wehn submitting empty upload form in insert image popup</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3612</td>
<td>Incoming links went south?</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3560</td>
<td>Links are not parsed in title of panel macro</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3513</td>
<td>Error while exporting space in PDF (Possibly due to dynamicityasklist macro)</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3553</td>
<td>Link to attachment on restricted page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
CONF-3227  displays "401 Unauthorized" error Cannot type "?!?!" characters without 404 image renderings  ▶ Resolved  FIXED

CONF-1478  Search of numbers yields no result  ▶ Closed  FIXED

CONF-3510  Watch this space link doesn't toggle, adds multiple subscriptions  ▶ Resolved  FIXED

CONF-3572  confluence:docs maven target does not create javadoc for the com.atlassian.renderer packages.  ▶ Resolved  FIXED

CONF-3596  Adding space permissions for a user via XML-RPC instead adds permissions for a group  ▶ Resolved  FIXED

CONF-3503  If an attachment is created with a null (rather than empty) comment, setting a new one causes an NPE  ▶ Resolved  FIXED

CONF-3530  Information Macros center content text when rendered in 1E  ▶ Resolved  FIXED

CONF-3641  Administration link: closing a tag typo  ▶ Closed  FIXED

CONF-3433  border=true attribute in {section} tag turns on or off borders of tables in section but does not put border around section  ▶ Resolved  FIXED

CONF-3428  Using {recently-updated} macro under JDK 1.5.0  ▶ Resolved  DUPLICATE

CONF-3364  When adding a page and designating its parent, searching for a page does not work.  ▶ Resolved  FIXED

CONF-2287  RPC: removing a non-existent space results in a 'No
<table>
<thead>
<tr>
<th>Issue ID</th>
<th>Description</th>
<th>Resolution</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-3537</td>
<td>Info macros have centered text on IE6.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3608</td>
<td>Remove all uses of EqualsBuilder.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3538</td>
<td>(panel) macro does not respond to properties unless a title is specified.</td>
<td>Resolved</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-3509</td>
<td>Incoming links are broken.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3492</td>
<td>Granting a user/group export space permission actually grants &quot;admin space&quot; permission</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-3506</td>
<td>Daily backup date format and prefix being set after bandana has been saved</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3387</td>
<td>Plugin resources not served when plugin installed in ${confluence.home}/plugins</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3573</td>
<td>Security issue with 'watching'</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3517</td>
<td>Unclosed file handles.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 1.4.4

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 1.4.4 is a maintenance release that resolves some issues users may have encountered using previous Confluence 1.4 releases. 1.4.4 fixes a number of issues, including many related to the reliability of uploaded plugins.

1.4.4 is a free upgrade for all customers who purchased their Confluence license after September 23rd, 2004.

Who should upgrade?

Confluence 1.4.4 is a bugfix release. While Atlassian recommends customers always run the most recently available stable Confluence release, customers should consult the list of issues resolved to decide whether it is worth their while upgrading.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence versions between 1.4 and 1.4.3, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.3.6 or earlier, be sure to read the upgrade instructions in the Confluence 1.4 release notes.

Changes in 1.4.4

Uploaded Plugin Fixes

Prior to Confluence 1.4.4, plugins containing Spring components, XWork actions or velocity templates could not be uploaded through the web interface, and needed to be installed manually in WEB-INF/lib. Confluence 1.4.4 fixes these issues.

Database Indexes

Confluence 1.4.4 now correctly creates database indexes on a clean installation. If you are upgrading an existing Confluence instance, you should consult Performance Tuning for information on indexes that can improve Confluence's performance significantly.

Other Changes and Fixes

See: Issues Resolved for 1.4.4
<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-3980</td>
<td>Spelling error &quot;hierarchy: on moving/renaming pages between spaces&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3220</td>
<td>Document the dangers of turning external user management off</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4793</td>
<td>Link to news item</td>
<td>Closed</td>
<td>ANSWERED</td>
</tr>
<tr>
<td></td>
<td>CONF-3658</td>
<td>Create axis soap service alongside glue service</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3989</td>
<td>Attachment View Event</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3411</td>
<td>login page should display alternative content if user is already logged in</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-2132</td>
<td>Include recent changes as a macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2999</td>
<td>Fix release process</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3973</td>
<td>Logo doesn't link to user's &quot;home&quot; - instead hard-links to dashboard</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3895</td>
<td>When editing an existing page, clicking the Choose Page image to select a Parent Page causes a Javascript error in both IE and Mozilla</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4015</td>
<td>Component plugins are not removed from the spring context when disabled.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3995</td>
<td>Colour of Breadcrumb text cannot be configured</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3988</td>
<td>Missing #comments and #addcomment anchors when viewing page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3664</td>
<td>Deactivate user link does not display when viewing a user's profile</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3838</td>
<td>Export Space to XML may produce &quot;Too many open files&quot; error</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4107</td>
<td>Page titles containing ? may not be linked to on some application servers</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3969</td>
<td>Welcome greeting color not using colour scheme colours</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3184</td>
<td>XWork actions in uploaded plugins do not work</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4000</td>
<td>View system info shows &quot;1 hour, 55 minutes, 53 seconds&quot; as the system uptime.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3610</td>
<td>Exported space (pdf or html) always has blank 'Available Pages' section</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3971</td>
<td>Layout off on Themes page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3800</td>
<td>Start watching this space</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3843</td>
<td>UseLine macro does not work when called from an inline decorator</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4782</td>
<td>Missing Apostrophe in Page Permission Error Message</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-3059</td>
<td>User Management Delegated to JIRA</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3567</td>
<td>Umlauts and page-titles - few work, many don't.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3855</td>
<td>DuplicateNotifications breaks on MySQL 3</td>
<td>Resolved</td>
<td>tradeTask FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3970</td>
<td>wrong icon on Plain Website theme</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3884</td>
<td>Could not execute action</td>
<td>Closed</td>
<td>ANSWERED</td>
<td></td>
</tr>
<tr>
<td>CONF-3383</td>
<td>[file:// links break with \</td>
<td>Resolved</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-3878</td>
<td>Uploading macros via web interface is</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Issue Description</td>
<td>Resolution</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>CONF-3288</td>
<td>JavaScript error in IE when re-editing a blog post</td>
<td></td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3805</td>
<td>MAILTO Links on PDF export are broken</td>
<td>Closed</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-3758</td>
<td>%span% markup should be removed from notation guide.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3781</td>
<td>HTTPS Links on PDF export are broken</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3860</td>
<td>Broken &quot;attached&quot; link in Confluence demo space</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3997</td>
<td>Job DEFAULT.indexQueueFlushJob threw an unhandled Exception</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3790</td>
<td>Broken links to pages with non-ASCII titles</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3797</td>
<td>Resources not loading for plug-ins</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3803</td>
<td>News and Comments</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3858</td>
<td>Unnecessary db hits in ViewPageAction</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4024</td>
<td>SQL run by DuplicateNotificationsCleanupUpgradeTask gives syntax error on MySQL</td>
<td>Resolved</td>
<td>DUPLICATE</td>
<td></td>
</tr>
<tr>
<td>CONF-2780</td>
<td>Missing database indexes and slow performance</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3886</td>
<td>XMLRPC API storePage ignores parentPageId=0</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3849</td>
<td>Email and News updated</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3893</td>
<td>Email containing nobody generates exception.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3325</td>
<td>Attachment and Anchor links appear on undefined pages list</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.0

Atlassian Software is proud to present Confluence 2.0 (otherwise known as Yarra). Yarra is the result of five months of solid work by the Confluence team, and we’re really glad to be able, finally, to share it with the world. Existing customers who wish to upgrade, or new users who wish to try out Confluence for 30 days, can download Confluence from the Atlassian website: http://www.atlassian.com/software/confluence

Yarra is the fifth major update to Confluence. Among the improvements in Confluence 2.0 are an easy-to-use WYSIWYG editor for writing pages, labels for categorising them, and a powerful RSS builder for keeping track of what's new.

Confluence 2.0 is a free upgrade for any customer who purchased their Confluence license after November 16th, 2004. If the maintenance period of your license has expired, or is about to expire, why not contact our friendly sales staff and get it renewed? It’s the only way to keep up with all the great new features we're adding.

A big thanks to everyone who reported bugs and offered suggestions over the last few months, especially everyone who helped by trying out our Development Releases. Also, congratulations to the Socceroos for getting Australia into the World Cup for the first time in 32 years. It almost makes up for losing the Ashes.

See also: Issues Resolved for 2.0

Contents

- Upgrading
- Migration
- New Features
- Notable Bug Fixes
- Outstanding Bugs

Upgrading From a Previous Version of Confluence

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

⚠️ Upgrades from 1.4.2 and earlier

If you are upgrading from Confluence 1.4.2 or earlier, you may experience problems with some space-related functionality (see CONF-4765), such as adding a space as a favourite. To work around this, please restart the Confluence instance after the upgrade. This will be fixed in Confluence 2.0.2.

Important Migration Notes
Macro/Plugin Compatibility

Necessary changes were made to the Confluence rendering subsystem during the development of Confluence 2.0 that may render some third-party plugins (especially macros) inoperable. If you upgrade Confluence and find that macros or plugins are not operating correctly, try removing all files from [confluence-home]/plugins and restarting Confluence.

HSQL 1.8 Upgrade

If you are using the embedded HSQL database, it is possible that Confluence will not be able to automatically upgrade your data. If this happens, Confluence 2.0 will refuse to start, and you will be directed to the following Confluence page which contains instructions on how to upgrade the database manually: Upgrading From HSQL 1.7.1 to 1.8

SSO update

If you are using some third-party Seraph authenticator with Confluence, or have written your own, you should read CONF-4581 before upgrading. Confluence now uses the Seraph defined login.link.url property to define its login link urls, which may cause issues with authenticators that relied on Confluence's previous, incorrect behaviour.

Weblogic Performance

Confluence 2.0 may perform very badly under Weblogic. There is a workaround for this problem described in CONF-4634, and a full fix IS included in 2.0.1.

JDK 1.5

If you are running Confluence 2.0 on the JDK 1.5, you will need to download some additional dependencies as described in CONF-4643. A full fix is included in a 2.0.1.

MySQL 5

If you are running Confluence 2.0 on the MySQL 5 database, you may encounter some problems. One fix is described here.

Upgrading from 1.4.4

After upgrading to 2.0, administrators will need to rebuild the site's search-index to ensure all the new search features are enabled. Do this from the Content Indexing section of the global administration menu.

Upgrading from 1.3.5 or Earlier

Users upgrading from an earlier version of Confluence should check the release-notes of the other major Confluence releases:
• Release Notes 1.4
• Release Notes 1.3
• Release Notes 1.2
• Release Notes 1.1

New Features

The four major new features in Confluence 2.0 are:

• Rich Text Editing
• Labels for content
• New Dashboard Features for managing sites with large numbers of spaces.
• A dynamic RSS Builder

..but there's a lot more on top of that.

Rich Text Editing

⚠ Browser Compatibility

The Confluence Rich Text editor is currently only compatible with Internet Explorer 6 on Windows, plus Mozilla and Firefox across platforms. Javascript must be enabled in the browser for the editor to function. Support for Safari under Mac OS X is currently not available. To track Safari compatibility, please follow this JIRA issue: CONF-3864

It almost goes without saying that the most highly requested feature in Confluence has been the ability to create pages without having to learn wiki markup. We're glad we can finally offer a powerful "what you see is (pretty much) what you get" rich text editor built into Confluence, making it easier for anyone to contribute to the site.

The WYSIWYG editor is enabled when you install or upgrade to Confluence 2.0. Global Administrators can disable the editor if they want to stick with pure wiki markup, and can also choose which editor users should be presented with by default. (The setting is under "General Configuration" in the administrative console). Users can also choose which editor they prefer simply by clicking on the "Make this my default editor" link that appears on the edit screen.

For the "feature mad" amongst us, here are some neat things you can do with the WYSIWYG editor:
• Full screen view - really useful for editing large pages. Click Cannot resolve external resource into attachment. in the menu bar.
• Quickly switch between WYSIWYG and Wiki markup without a page refresh
• Change the size of your editing window to suit your browser. Your size preference is remembered across sessions. To change it, drag the handle in the bottom right hand corner of the editor.
• Undo and redo!

Labels

Another highly requested feature was the ability to categorise content within Confluence beyond the rigid hierarchy allowed by spaces and parent-child relationships between pages. To this end we have introduced labels: simple one-word 'tags' that can be added to any page or blog-post the user has permission to edit. Labels can be used to categorise content, bookmark it, flag it for attention, or anything else you can think of.

A Tag By Any Other Name

Picking a name for labels wasn't easy. Google's Gmail service calls them labels, while other collaborative categorisation systems such as del.icio.us and Flickr call them tags. We decided that 'label' was a more natural description. For more information about our choice, see Labels vs Keywords on our new Developer Blog and for more on the overall philosophy behind labels and tags, check out the Folksonomy page on Wikipedia.

Labels can be added to any page from the edit screen, or through a dynamic interface right when you're viewing a page.

Once a page is labeled, then clicking on the label's name allows you to browse other pages with the same label, or view related labels that commonly occur on the same pages.

You can also view the space's most popular labels from the space browser, to get an idea of the most popular topics within the space.
Personal Labels

If you prepend `my:` to a label (for example, `my:todo` or `my:favourite`), then the label is a personal label - only visible to you. Personal labels allow you to tag content for your own purposes: for example to keep track of pages you feel need your attention, or that contain information you refer to frequently. You can browse your personal labels from your user profile. Any user can add their personal labels to any page, even when they don't have editing permission.

Favourites

Favourites are a special personal label: `my:favourite` or `my:favorite`. Whenever you see the Cannot resolve external resource into attachment. icon, it means you can label this content as being your favourite, and whenever you see the Cannot resolve external resource into attachment. icon, it means that the content is currently in your list of favourites. You can view your favourites from the Labels tab of your user profile, or keep track of them on your dashboard.

Label-Aware Macros

Many existing macros have been improved to allow you to filter content based on labels: including the `{recent-pages}`, `{recently-updated}` and `{blog-posts}` macros. We've also added macros that provide more information about labels and labelled content:

- `{related-labels}` gives a list of labels that might be related to a page
- `{listlabels}` lists all the labels in a space
- `{contentbylabel}` lists content that has a particular label
- `{recently-used-labels}` lists labels that have been recently added or applied
- `{navmap}` draws a nice-looking table of links to pages with a particular label

Dashboard Features

The Confluence dashboard has been improved to make it easier for you to keep track of only those spaces you are interested in: a big improvement for Confluence sites with large numbers of spaces. The list of spaces is now divided into four tabs (although all four may not be visible):

- All shows you all spaces
- My shows you all spaces you have marked as your favourites (you can mark a space as your favourite from the All tab by clicking on the Cannot resolve external resource into attachment. icon)
- Team shows you all the available 'teams', and the spaces that have been assigned to them
- New shows you any space that has been added in the last week

The recently updated content list on the dashboard will reflect the spaces in your chosen tab. So if you're
looking at the My tab, the dashboard will only be showing you the recent updates in your favourite spaces.

*Teams*

Spaces:  My  Team  All

A team label is used to group together a list of spaces relevant to a project team. You can display a team's spaces by selecting a label from below:

View Spaces for Team: jira

JIRA (JIRA)
JIRA Community Space (JIRACOM)
JIRA Extensions (JIRAEXT)

Teams are a simple, and very wiki-like way to group spaces together. Space administrators can add "team labels" to a space, which are then used to group those spaces under the team tab on the dashboard. So if your wiki has 100 spaces, but only five of them are of any interest to your sales team, just add a "sales" team label to those five spaces. That will group those spaces together on the dashboard under the 'team' tab, and your sales team need never look at the other 95 spaces.

RSS Builder

Confluence has always provided a brace of useful RSS feeds, but the problem is that for every feed we provided, users asked for half a dozen more. The obvious answer is to let users build RSS feeds based on their own chosen criteria. You can access the RSS builder from the Confluence dashboard.

Once in the builder, you can choose

- Which spaces to include in the feed
- Which types of content should be tracked
- Which labels, if any, you are interested in
- How many items to include in the feed
- Whether you want a single RSS entry per page or one for each time the page is edited
- Whether you want an RSS 2.0 or Atom 0.3 feed
- Whether Confluence should require authentication to view the feed

Once you have decided what you want, Confluence will give you a URL to paste into your RSS reader. These URLs can be shared with other Confluence users, although they will only ever be allowed to see content that they have permission to view. If you have asked to authenticate, Confluence will require HTTP Basic Authentication, which is supported by most RSS readers.

We've also taken the opportunity to improve the presentation of our RSS feeds - including a lot more information in each feed so you can follow your Confluence site entirely from your newsreader.
Other New Features

Record "Change Comments" When Editing a Page

There is now a field on the edit screen for recording a "change comment" when you edit a page. These comments are stored in the page history, and can be used to keep a more complete history of why a page has been edited.

Embed Flash and Movies

You can now embed Flash content or movies (Quicktime or Windows Media) into a page as easily as you can an image: just attach the Flash or movie file to the page, then include it as you would include an image (!filename.mov!).

Export Pages as Word Documents

You can now export pages straight into Word from the Info tab. This is extremely useful for emailing around content to non-Confluence users, printing a document or just creating a backup in Word.

Copy Pages

Also on the Info tab is a "Copy" link that allows you to clone a page in a single click - including making copies of any attachments.

Improved Search Interface

Results returned from Confluence's search engine now have:

- Improved contextual results, showing the most important text around where your query was matched in the page
- Contextual results for any attachment: see where a search was matched even inside PDF, Word, PowerPoint or Excel documents!
- Search results for attachments give you more (and clearer) information about what the attachment is, and where it's from!search-result-fragments.png|align=center!

Chart Plugin
The **Chart Macro** is now shipped with Confluence, allowing you to dynamically generate neat looking charts like this:

![Fish Sold Chart](chart.png)

**Wiki Source**

```wiki
{chart:title=Fish Sold|type=bar|width=400|height=350|legend=true}
<table>
<thead>
<tr>
<th>Fish Type</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herring</td>
<td>9,500</td>
<td>8,300</td>
</tr>
<tr>
<td>Salmon</td>
<td>2,900</td>
<td>4,200</td>
</tr>
<tr>
<td>Tuna</td>
<td>1,500</td>
<td>1,500</td>
</tr>
</tbody>
</table>
{chart}
```

### Improved Gallery Macro

The gallery macro has been spruced up, and now has a slideshow view:

![Confluence 2.0 Screenshots](screenshots.png)

- Popular labels for a given space.
- Alphabetically organised labels for a given space.
- Some release notes exported to Word (even on a Mac!) - great for printing too.
- The new A very Screenshot
Dashboard space
tabs, here
showing
the "jira"
team tab
and one
favourite
space.

basic
(quite
boring -
sorry, it's
late)
example
of change
summaries.

of the new
2.0 rich
text editor

Improved
search
showing
fragments
from
attachments,
file sizes
and types.

The new
RSS
builder
lets you
construct
RSS feeds
of exactly
the
content
you want.

View page
label
interface
showing
autocomplete.

My
personal
labels!
Only for
me!

Additions to the Remote API

Additions to the **Confluence Remote API** include:

- Comment manipulation
- Label manipulation
- Attachment uploading and editing
- Improved user- and permissions management
Confluence now uses version 2.0 of the Apache XML-RPC library. Java XML-RPC clients using earlier versions of the Apache XML-RPC libraries (i.e. 1.3 or earlier) may experience problems with responses containing non-ASCII data.

Also...

- You can download all the attachments on a page in a single zip-file
- Import and restore now have progress indicators
- Backup and restore use significantly less memory
- The embedded database has been upgraded to HSQL 1.8, which should be significantly more reliable
- Collapsed breadcrumbs now expand with a single mouse click

Notable Bug Fixes

We resolved a lot of issues between Confluence 1.4.4 and Confluence 2.0. The best way to see what we’ve fixed is to ask JIRA, the world’s best issue-tracker: [Issues Resolved for 2.0](#)

Outstanding Bugs

Some bugs were introduced during the Confluence 2.0 development cycle that we could not fix in time for the final release. Of note are:

- Some pernicious Javascript errors when changing styles in the rich text editor under Internet Explorer
- The rich text editor may not perfectly handle complex pages with structural macros
- Attachments containing high-bit characters in their filenames may not be correctly retrieved by Confluence

Once again, if you find any bugs in Confluence, or have any feature suggestions, you can report them online in [JIRA](#).

The Confluence 2.0 Team

<table>
<thead>
<tr>
<th>Development</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
<td>Vidya Madabushi</td>
</tr>
<tr>
<td>Jeremy Higgs</td>
<td>Oversight &amp; Management</td>
</tr>
<tr>
<td>David Loeng</td>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td>Charles Miller</td>
<td>Scott Farquhar</td>
</tr>
<tr>
<td>Daniel Ostermeier</td>
<td>Nerf Target-Practice</td>
</tr>
<tr>
<td>Jens Schumacher</td>
<td>Nick Faiz</td>
</tr>
</tbody>
</table>

Document generated by Confluence on May 01, 2007 00:44
Well that's all folks - if you're still reading - thank you for getting this far!

To keep up with all the latest developments in the next 2.1 release (codenamed: Bogan) - subscribe to our developer blog.
## Atlassian JIRA (493 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-3595</td>
<td>Evaluate usage of second level caches</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3787</td>
<td>Document changes to (children) macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4030</td>
<td>Make #labelLink velocity macro handle personal labels properly</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3627</td>
<td>Release-notes warning about Atom 0.3</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3233</td>
<td>Fix unit test resources</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2958</td>
<td>Improve RSS – see sub-tasks</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4210</td>
<td>Javadoc for bucket and renderer needs to be published alongside Confluence</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3176</td>
<td>Javadoc create app.server/database specific file(s) to be included</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3817</td>
<td>Ensure 1.5 is compatible with 1.4 macros</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3667</td>
<td>Package OSUser source with source release</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4025</td>
<td>New model for labels</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4062</td>
<td>Get the nightly build running on 05</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4558</td>
<td>Include new chart plugin for Conf 2.0</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4385</td>
<td>Backport user management performance fixes to Conf 1.4.4</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4103</td>
<td>Remove modify layout functionality from space administrators</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3535</td>
<td>userlist macro plugin code supplied by Scott Frederick</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-4154</td>
<td>Can't figure out how to detect whether users exists from remote API</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4393</td>
<td>Unable to create new child pages after upgrading from 1.4.3 to 2.0-RC1</td>
<td>Resolved</td>
<td>RESOLVED LOCALLY</td>
<td></td>
</tr>
<tr>
<td>CONF-4471</td>
<td>Move Page Fail!!!</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3750</td>
<td>fix broken i18n text properties</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3738</td>
<td>fix broken i18n text properties</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3740</td>
<td>rename listlabels-heatmap action to something more appropriate</td>
<td>Resolved</td>
<td>INVALID</td>
<td></td>
</tr>
<tr>
<td>CONF-3476</td>
<td>Give different channels different titles</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3739</td>
<td>review the content on the page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2998</td>
<td>Create an ‘uber’ feed for content in Confluence</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3120</td>
<td>Add the entry date to the rss feed</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-2996</td>
<td>Configure an RSS feed</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4138</td>
<td>Upgrade task to add column for versioned comments to the database</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3481</td>
<td>Cleanly handle invalid requests</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4052</td>
<td>Notify users that using versions of Apache XML-RPC earlier than 2.0 may cause issues with UTF-8 characters</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3742</td>
<td>check i18N support for label servlet</td>
<td>Resolved</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-3766</td>
<td>support space limiting</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3751</td>
<td>review the content on the page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3833</td>
<td>permissions update</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3786</td>
<td>Editor info. is not</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
CONF-3741  cached by the browser
update classification of labels in heatmap. Resolved FIXED

CONF-4283  Create database upgrade task to remove existing “Create Space” and “Administrate” global permissions for anonymous users Resolved FIXED

CONF-2974  Backup creation should iterate through requires objects, not load them all into Hibernate session Resolved FIXED

CONF-2975  Divide & Conquer on import Resolved FIXED

CONF-3693  WYSIWYG - insert wiki markup into wsiwyg view Closed FIXED

CONF-3958  all-labels macro Closed FIXED

CONF-3776  User labels Resolved FIXED

CONF-4090  Preview tab instead of button, move update and cancel buttons Closed FIXED

CONF-3768  Add label functionality to blog posts, the same as for pages. Resolved FIXED

CONF-3769  Personal label browser Resolved FIXED

CONF-3891  Add by-label filtering to the {recent-pages} macro Closed FIXED

CONF-1936  WYSIWYG Editor! Resolved FIXED

CONF-1498  RSS feeds of updated pages do not say who updated the page Resolved FIXED

CONF-4089  Intra-word character formatting in wiki markup Resolved FIXED

CONF-3954  List labels in search results for labelled content Resolved FIXED

CONF-331  Insert table wizard Resolved FIXED

CONF-3684  Manipulate labels through the remote API Closed FIXED
<table>
<thead>
<tr>
<th>Issue Key</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-2537</td>
<td>RSS feed for everything in a given space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4017</td>
<td>Configurable dashboard space list</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3515</td>
<td>please add storeAttachment() or addAttachment() functionality to xml-rpc</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4205</td>
<td>Sort Children in List Pages - Tree View (by title)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3763</td>
<td>Search results should list the labels exactly matched in the search query.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3721</td>
<td>New macro: (labelled-content) to show the content labelled by the a specified label or set of labels.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3499</td>
<td>List labels within a space</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4088</td>
<td>Support quote, noformat, panel and code macros as drop-down styles</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3909</td>
<td>Add multiple space permissions in a single remote call</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3947</td>
<td>All labels view for label browser</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-521</td>
<td>Change summary input box on edit page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3951</td>
<td>Fix personal labels tab UI</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-593</td>
<td>Use HTTP authentication for RSS feeds</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-3587</td>
<td>Support Atom 0.3</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3625</td>
<td>RSS Auto-discovery</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3523</td>
<td>Record when a label is applied</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3522</td>
<td>Label servlet</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3479</td>
<td>Add activateUsers(), deactivate/activateUser() remote API methods</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3949</td>
<td>Give global label browser same UI as</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-2899: Comment manipulation methods
Resolved  FIXED

CONF-3912: Slap a progress indicator onto import/restore
Resolved  FIXED

CONF-3753: Support adding / removing user labels from the UI
Closed  FIXED

CONF-3957: Related-labels macro
Resolved  FIXED

CONF-168: Favourite pages
Closed  FIXED

CONF-4332: Limit dashboard recent changes by team
Resolved  FIXED

CONF-3996: Macro to create navigation map from labeled pages
Closed  FIXED

CONF-2727: Add tags for pages, like del.icio.us and Technorati
Resolved  FIXED

CONF-991: Embedded Flash Movies (similar to embedded images)
Resolved  FIXED

CONF-3955: List related labels in search results if search terms match a label
Closed  FIXED

CONF-3722: Update the Remote API to support labels.
Resolved  FIXED

CONF-4106: Add userExists( ) method to remote API
Closed  DUPLICATE

CONF-4124: Include labels in space export
Resolved  FIXED

CONF-3956: Recent-labels macro
Resolved  FIXED

CONF-3084: Allow Same Flexibility for Images as for Links
Resolved  DUPLICATE

CONF-1295: Clone page
Closed  FIXED

CONF-2339: No "Navigate Out" Warning When Editing Pages
Closed  FIXED

CONF-4630: Microsoft Word Export
Resolved  FIXED

CONF-1227: Single Click "Changes"
Resolved  FIXED

CONF-1746: Exclude spaces from "recently updated"
Resolved  FIXED
| CONF-3890 | Add by-label filtering to the `blog-posts` macro | Resolved | FIXED |
| CONF-2931 | Copy page | Closed | FIXED |
| CONF-3720 | New macro: `{popular-labels}` to display the most popular labels | Resolved | FIXED |
| CONF-3836 | Need content for the What are Labels info panel. | Resolved | FIXED |
| CONF-4245 | Implement some level of conflict detection and resolution when concurrent page edits are detected. | Resolved | FIXED |
| CONF-3950 | Give user profile tabs consistent look and feel | Closed | FIXED |
| CONF-4309 | Index attachments last. | Resolved | FIXED |
| CONF-604 | Provide page diffs in RSS feed | Resolved | FIXED |
| CONF-4238 | Reduce the restriction on permitted characters in page titles | Resolved | FIXED |
| CONF-3728 | Related labels to be displayed on the view labels page. | Resolved | FIXED |
| CONF-3940 | Add "slideshow" mode to gallery macro | Closed | FIXED |
| CONF-3965 | Change the trashcan icon to the unlock icon for removing permission restrictions from pages. | Resolved | FIXED |
| CONF-3944 | Improve space label browser | Closed | FIXED |
| CONF-1518 | Login for reading RSS feeds | Closed | FIXED |
| CONF-3508 | Allow anonymous users to post news items | Resolved | DUPLICATE |
| CONF-4037 | Implement image map support for the graphviz macro | Resolved | FIXED |
| CONF-4235 | Add content status to RemotePage bean | Resolved | FIXED |
| CONF-3984 | Create servlet version of | Resolved | FIXED |
CONF-3372  Make SpaceCommentRssFeedAction work efficiently
Resolved FIXED

CONF-3937  Change email notification subject lines
Closed FIXED

CONF-3939  Improve look of gallery macro
Closed FIXED

CONF-1940  Add SpaceAware interface
Resolved FIXED

CONF-4013  Properly package HSQL cleaner and write docs
Resolved FIXED

CONF-3961  Fix notifications UI
Closed FIXED

CONF-3941  Improve add label UI on view page
Closed FIXED

CONF-4190  Move version comment in notification emails
Resolved FIXED

CONF-3943  Improve label display on "page info" page
Resolved FIXED

CONF-3770  Displaying labelled content needs to support blogposts and spaces (space descriptions).
Resolved FIXED

CONF-864  Including a missing page should work like missing links
Resolved FIXED

CONF-4189  Include change summary in RSS feed.
Closed INVALID

CONF-3668  Upgrade to HSQL 1.8
Resolved FIXED

CONF-4129  Add method to get BlogPosts without the use of an ID
Resolved FIXED

CONF-3832  Support sticky spaces when viewing labels.
Closed FIXED

CONF-638  Option to make space homepage the recent blogposts page
Resolved FIXED

CONF-4208  Limit recent updates list "since" dates to one level of precision
Resolved FIXED

CONF-2501  Backup export memory requirements shouldn't scale linearly with the DB
Resolved FIXED
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-3946</td>
<td>Make popular labels heatmap scale down to small number of labels</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4163</td>
<td>Label Usability Improvements</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4299</td>
<td>Lazy-load label-modification Javascript</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3338</td>
<td>Introduce new Link for embedded images</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4244</td>
<td>Change the &quot;Watch this space&quot; icon on a page to a three-state button</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2482</td>
<td>globalcommentrss.action</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2481</td>
<td>globalrss.action feed does not include comments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3712</td>
<td>Use whitespace to delimit labels.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3637</td>
<td>Login redirects are sometimes confusing</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4139</td>
<td>Create a link to the Plugin Library on the plugin page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3752</td>
<td>Update the UI for adding/removing labels from content</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3960</td>
<td>List labels in news summaries</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4142</td>
<td>Update version comment.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3818</td>
<td>Lowercase all labels.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3777</td>
<td>clean up the concept of labelName.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4117</td>
<td>Support conditional get for attachments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3710</td>
<td>Support 'suggested labels'</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3581</td>
<td>Provide direct undelete link on deleted page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4016</td>
<td>Add labels to the space export</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3086</td>
<td>Hyperlink other protocols (e.g. notes://) automatically</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3926</td>
<td>XML-RPC/SOAP interface needs a</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Summary</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-4070</td>
<td>Make search return summaried excerpts matching query</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3548</td>
<td>Remove the quick search default to search only in the current space</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3748</td>
<td>Dashboard customization using labels.</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-3450</td>
<td>Make breadcrumb depth configurable</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3806</td>
<td>Add a &quot;showid=false&quot; option to the IM presence macros.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4289</td>
<td>Version comments should be indexed for inclusion in searches</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3945</td>
<td>Redesign popular labels page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3959</td>
<td>Label-enable spaces-list macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3952</td>
<td>Strip my: prefix from labels in the personal label in the browser</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3948</td>
<td>Improve label drill-down view</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3953</td>
<td>Improve Confluence search UI</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4143</td>
<td>Set WYSIWYG editing on by default for new installations.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3942</td>
<td>Improve label UI on edit page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4240</td>
<td>RSS feed needs be version 2.0 instead of 0.92</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4202</td>
<td>News post calendar shouldn't link to before or after the first/last news post</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4278</td>
<td>Page history change comments render with extraneous paragraphs</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4050</td>
<td>Make right hand column of label views do something useful</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>CONF-4203</td>
<td>Tell search engines not to index printable version of pages</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3990</td>
<td>Introduce whitespace into wiki text for readability where possible</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3975</td>
<td>No way to set &quot;No Logo&quot; at space level</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4053</td>
<td>Update left navigation theme to be up to standard</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4379</td>
<td>Label incorrect when editing Attachment Maximum Size (KB) in General</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>Configuration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4362</td>
<td>Create page does not look anything like the edit page.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3193</td>
<td>Consolidate recently-updated handling</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4302</td>
<td>Provide user feedback when lucene query results</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>inaccurate because a full re-index is in progress.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4327</td>
<td>Add a &quot;view most recent change&quot; link to current version of the page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4118</td>
<td>Sort groups alphabetically on Manage Groups page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3981</td>
<td>Database performance tuning required</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2904</td>
<td>Recently updated feeds should include new attachments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4382</td>
<td>Add getOutputType() method to RenderContext</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4390</td>
<td>Add &quot;Show Titles Only&quot; parameter to the RSS macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4581</td>
<td>Improve SSO support; use seraph correctly to aid SSO modifications.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1625</td>
<td>Allow Adding an</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-3541</td>
<td>Add adding attachments to the RemoteAPI.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4629</td>
<td>Ability to download all attachments on a page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2131</td>
<td>Associate blog post with category or page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3910</td>
<td>Sort attachments by name.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3972</td>
<td>Left Navigation Theme,... ugly ugly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3552</td>
<td>Add edit user functionality to the RemoteAPI.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3055</td>
<td>Make attachment name searchable</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4092</td>
<td>Setting site title - shown in browser title bar</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3871</td>
<td>Add Update, Preview, Cancel buttons to top of page being edited.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4869</td>
<td>Disable Trackback by default</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3666</td>
<td>Comment creation times should include AM/PM</td>
<td>Resolved</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-4516</td>
<td>Meta tagging and improved indexing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2569</td>
<td>Support RSS 2.0</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3247</td>
<td>Extend breadcrumbs, remove ellipse</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-630</td>
<td>Put a direct &quot;unsubscribe&quot; link in notification emails.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4426</td>
<td>Recently-updated: Display full names instead of usernames</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4180</td>
<td>Logo management page tries to download the logo over http rather than access filesystem.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4342</td>
<td>Mailto: links with aliases do not work</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4056</td>
<td>Unable to re-enable daily backups</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-3845</td>
<td>Adding a label that contains a '%' results in the error message &quot;Please enter a label.&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2313</td>
<td>Recently added RSS feed is returning incorrect results</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3686</td>
<td>Viewing the space labels page for an undefined space throws an exception</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3685</td>
<td>Viewing the space labels page when there are no labels defined throws an exception</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3518</td>
<td>Upgrade from 1.3.5 on postgres fails with the property upgrade task.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4422</td>
<td>Viewing content of a label results in overlap of recent/popular labels panels.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3571</td>
<td>WYSIWYG seems to add a bunch of crud to the browser history</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4423</td>
<td>Labels do not show up under Page &quot;Info&quot; tab</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4131</td>
<td>Insert Link and Insert Image Wysiwyg Popups fail under IE</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3328</td>
<td>Images not exported as part of PDF?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3299</td>
<td>User macros no longer acknowledge $param1-N</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-3115</td>
<td>RSS feed is not compatible with Mozilla Thunderbird 1.0.2</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3442</td>
<td>JTIdy 4aug2000r7-dev doesn't handle some entities correctly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4498</td>
<td>Unsaved changes popup does not appear in Firefox 1.5b2</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-4253</td>
<td>Rich Text editor should not interpret text as Wiki code</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3882</td>
<td>Exposed velocity markup on 404 possible redirects page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4132</td>
<td>RSS Feed for 'new page' has extra heading line</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3831</td>
<td>Add getPermTypes to each of the actions as appropriate.</td>
<td>Resolved</td>
<td>INVALID</td>
</tr>
<tr>
<td>CONF-4209</td>
<td>Space &quot;recent news&quot; is in wrong order</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3932</td>
<td>After deleting a plugin, $selectedPlugin.name appears as the plugin title.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3565</td>
<td>Searching for attachments with uppercase characters in the name returns no results</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4492</td>
<td>Anchor links inside included pages are broken</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3988</td>
<td>Missing #comments and #addcomment anchors when viewing page periodic tasks can have multiple concurrent instances, when they should have only one</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4051</td>
<td>Apache XML-RPC has issues encoding and decoding UTF-8 characters sent via the XML-RPC interface</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4032</td>
<td>Incorrect username when reactivating user with UTF-8 characters</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4438</td>
<td>NullPointerException with recently-updated macro in preview</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3838</td>
<td>Export Space to XML</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
someones profile, you see the RSSBuilder tab.

CONF-3083  Trackback incoming pings ignored
Resolved  FIXED

CONF-2517  Many, many HandleLockExpiry warnings during backup
Closed  FIXED

CONF-4336  In PDF exported documents, links to pages with spaces in their names don't work
Resolved  FIXED

CONF-4352  WYSIWYG styles broken.
Resolved  FIXED

CONF-4461  Error when setting default to rich text format
Closed  FIXED

CONF-4339  page not exported unless parent is exported
Resolved  FIXED

CONF-4191  CLONE -NullPointerException in threading -clone properly report date on message
Closed  FIXED

CONF-2691  NPE when renaming pages due to a conflict
Resolved  FIXED

CONF-3919  Remote API can not handle permissions for anonymous users
Resolved  FIXED

CONF-3692  Table broken after switching between wiki markup and rich text
Resolved  FIXED

CONF-4148  Can't create a template
Resolved  DUPLICATE

CONF-4077  Version in page change notification email are incorrect.
Closed  FIXED

CONF-3966  Backup Admin config / ui borked after upgrade
Resolved  FIXED

CONF-4185  Add Label XHR does not work on Safari
Resolved  FIXED

CONF-4114  Recent Changes view ignores page-level permissions for attachments
Closed  FIXED

CONF-4170  View Profile borked "Fatal exception
Closed  FIXED
caught while processing tag, com.opensymphony.webwork.views.jsp.ui.ComponentTag"

CONF-3457 Confluence should prompt user to login on create page
Resolved FIXED

CONF-4115 No space links in labels returned by XHR in add UI
Closed FIXED

CONF-4007 DuplicateNotifications sql statement fails on HSQL
Resolved tradeTask FIXED

CONF-4215 Trying to embed an attachment of type .ico asks for a plugin
Resolved FIXED

CONF-4159 Undefined error when using the insert link popup but not setting a link value.
Resolved FIXED

CONF-4164 Link popup does not take selection into account
Resolved FIXED

CONF-4237 RSS does not show diffs if you subscribe to see all updates
Resolved INVALID

CONF-4448 Insert link popup does not highlight current tab
Resolved FIXED

CONF-4188 Adding a New Page after navigating (history) diffs - results in an uncaught NPE (500 error)
Resolved FIXED

CONF-4286 Cannot export Confluence 1.4 User Guide to PDF
Resolved FIXED

CONF-4443 Safari crashes frequently while browsing site
Resolved INVALID

CONF-4319 \{children:first=X\} breaks if the number of children is less than X
Resolved FIXED

CONF-4269 Word curly quotes / high characters not corrected
Resolved FIXED

CONF-4179 build.bat in war distribution is broken
Resolved FIXED

CONF-4277 Bandana dies and brings Confluence down with it when defrosting bad
Resolved FIXED
<table>
<thead>
<tr>
<th>Conf number</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-4381</td>
<td>&quot;View Change&quot; link is wrong</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4386</td>
<td>contentbylabel macro doesn't display any results when there are no content types defined</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4363</td>
<td>Missing error message when adding a page with a parent that is in the trash.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4394</td>
<td>The link to populate a page from a template is missing on c.a.c.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4396</td>
<td>Setting colours in Firefox doesn't work well</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4397</td>
<td>Orphaned pages query does not work when there is no space home page defined</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3030</td>
<td>All emails sent to Confluence have their formatting completely stripped.</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4361</td>
<td>RSS Feed created using new Feed Builder not working</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4508</td>
<td>Insert Image on New Page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4439</td>
<td>Recently updated content macro shouldn't show space names for one space</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4501</td>
<td>[object Error] occurred</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4415</td>
<td>[object. ext] disappears in editor</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4590</td>
<td>Syntax error on declaration of .successBox in main-action.css</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4511</td>
<td>Dynamic tasklist fails when added to a user profile with ClassCastException.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4603</td>
<td>Browse space should remember when the</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-4604</td>
<td>Exporting a page to word that contains a non-ascii character results in a page title exportword.action</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4484</td>
<td>Rich text editing fails on tomcat 5.5</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4593</td>
<td>Pages imported from in batch from text files do not show up in alphabetical listing</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4627</td>
<td>Switching from rich text to preview to markup mode results in loss of data</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4626</td>
<td>Switching from wiki markup to rich text mode results in loss of data</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4440</td>
<td>Recently updated list with wrong mail-attachment links</td>
<td>Resolved</td>
<td>ANSWERED</td>
</tr>
<tr>
<td>CONF-1835</td>
<td>i18n broken for user names</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4404</td>
<td>NPE Permission Check Dispatcher</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3986</td>
<td>NPE Error determining permissions for url/users/removeattachmentonprofile.action</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4940</td>
<td>Page can be set as its own parent page, resulting in data corruption</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4544</td>
<td>Missing escaping on link's</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4619</td>
<td>Reproducable System error during Export Page as PDF</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3839</td>
<td>Printable page is showing content that we do not want.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3600</td>
<td>Table loses borders when inside a section</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3567</td>
<td>Umlauts and page-titles - few work, many don't.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3350</td>
<td>Can't link to attachments from news items</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Id</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4564</td>
<td>jiraissues macro bug in img src</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3362</td>
<td>Anonymous user cannot create blog posts in a space despite being granted the proper permissions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4343</td>
<td>View Mail Archive page does not render 'from addresses' with unicode characters correctly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5588</td>
<td>RSS items have incorrect title for added comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4080</td>
<td>Space favourites button dies if space has no SpaceDescription</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3414</td>
<td>FileServerServlet IllegalStateException</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-2305</td>
<td>Velocity logs to confluence main directory, not logs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4194</td>
<td>Livesearch renders with $webwork directives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4453</td>
<td>Failed to import from 1.5-DR2 to 2.0-RC1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3835</td>
<td>Having wiki markup as a user's default when Wysiwyg is enabled dies horribly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3885</td>
<td>Lists in tables break wysiwyg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4331</td>
<td>Lazy-loaded Javascript crashes Safari</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3696</td>
<td>ClassCastException when hitting the insert/edit link on the wysiwyg editor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3927</td>
<td>CSS Servlet does not work on Orion 2.0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3288</td>
<td>JavaScript error in IE when re-editing a blog post</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4239</td>
<td>Embedded images fail to resolve correctly when using the (include) macro.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-3792</td>
<td>HTML in junitreport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>CONF-3704</td>
<td>Link inserter does not correctly insert mail links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3494</td>
<td>Problems in ConfluenceLoginInterceptor</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4029</td>
<td>Label links returned through XMR editing are linked to global label page, not space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3749</td>
<td>Indexing of labels</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4344</td>
<td>NPE in getSuggestedLabels()</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3103</td>
<td>Encoding issue - Norwegian char in user name</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4212</td>
<td>Notation Guide off screen</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3846</td>
<td>Cannot preview comments on blog posts</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4437</td>
<td>Saving from preview doesn't update content</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4026</td>
<td>Creating a user with UTF-8 characters does not redirect to user page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3764</td>
<td>Label breadcrumbs should read Dashboard &gt; Labels &gt; &lt;labelname&gt;</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2816</td>
<td>An item was expired by the cache while it was locked error during restore</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4384</td>
<td>Page info &quot;Label&quot; panel should indicate that the page has not been labelled if there are no labels</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4375</td>
<td>Jira issues macro: inconsistent display of issues count</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4057</td>
<td>Bug Comments a blogpost</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4377</td>
<td>Page loading STILL pauses at labels area</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4149</td>
<td>500 internal server error after clicking link on JIRA</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4048</td>
<td>community space Cancellating setting the password of a user with UTF8 characters in the username results in an invalid username error</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4374</td>
<td>Comments: Textarea disappears in IE</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3879</td>
<td>Adding a label containing # will truncate the label with no error message</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4043</td>
<td>Cancellating a user deactivation when there are UTF8 characters in the name results in an error</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4376</td>
<td>There is no Action mapped for namespace /labels and action name autocompletelabelslist</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4126</td>
<td>When applying a style, the cursor needs to be repositioned at the end of the text WITHIN the style.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3683</td>
<td>Viewing a label that no longer exists throws an exception instead of an error page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4301</td>
<td>Error rendering macro: java.lang.RuntimeException: no terms in field modified - cannot determine sort type</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4270</td>
<td>Links to mail attachments in recently-updated list are broken</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4398</td>
<td>View/Edit page problems 2.0rc1</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3104</td>
<td>Mail display removes important blanks</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4246</td>
<td>Wysiwyg selection -- there are many places you can't get</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4425</td>
<td>Search does not find a page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4395</td>
<td>A link to automatically create a page with a template no longer works</td>
<td>Closed</td>
<td>ANSWERED</td>
</tr>
<tr>
<td>CONF-3897</td>
<td>Links to attachments not working in pdf exports</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4001</td>
<td>Nullpointer exception on removeattachmentonprofile.action</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4259</td>
<td>Viewing emails with unwrapped text forces page background to go wonky</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3868</td>
<td>Editing News attachments causes error about non-existing page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4069</td>
<td>Parent page popup dies if only one visible space</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-3968</td>
<td>Add/edit page fails with JTidy error</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3873</td>
<td>'Insert Link' to a page with quotes</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3778</td>
<td>License expiry warning can not be disabled (link doesn't work)</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4368</td>
<td>PDF export icon vanishes on page view on conf.at.com</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3316</td>
<td>CLONE - Escaped square brackets show up in Undefined Pages Report</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4098</td>
<td>Users without appropriate permissions should not see Delete attachment button on user's profile page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3392</td>
<td>Errors deploying Confluence on Oracle 8i - INNER JOIN hardcoded in Confluence classes</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Id</td>
<td>Summary</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-3928</td>
<td>Space template names should be unique to the space, not globally unique.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3994</td>
<td>User profile links are incorrectly prefixed with the old space name when a page is moved.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4168</td>
<td>SECURITY BUG - Watching a space / page gives you notification (inc. content) even if you do not have view rights</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3501</td>
<td>MySQL OS PROPERTYENTRY fix breaks upgrade for users with existing values in the &quot;entity_key&quot; column exceeding 200 characters in length</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4165</td>
<td>Remove the popup menu in WYSIWYG</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4155</td>
<td>Spaces created anonymously are not accessible by anonymous users</td>
<td>Closed</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>CONF-1931</td>
<td>Unable to edit user profile</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4310</td>
<td>Notation guide on edit page leaves whitespace on the right</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2510</td>
<td>PDF and HTML export fails due to 'too many open files' exception</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4311</td>
<td>Deleting a user doesn't unindex PersonalInformation</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4479</td>
<td>Comment Error in Rich Text</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4412</td>
<td>There is no Action mapped for namespace /conf/pages and action name diffpages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3614</td>
<td>Licensing needs to be dependant on release date, not</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Conf-4242 Using form field markup page template causes exception
Conf-4409 CSS code broken, adding space label reveals issue with body color
Conf-4464 Error in RSS Feed
Conf-4444 ClassCastException on RSS feeds
Conf-4490 Formatting lost with {code} element
Conf-4547 Text colour does not change existing colour of text
Conf-4605 News calender navigation broken
Conf-4566 Remote API call "getServerInfo" call requires admin permission
Conf-3979 DB2 clob columns default to 255.
Conf-4555 No Navigation on Left Navigation Theme
Conf-4568 Tables inside {section:border=false} has no border
Conf-4588 "Download All" function doesn't work
Conf-4601 Update the use of webwork.i18n.encoding to use the value of settingsManager.getDefaultEncoding()
Conf-4509 user profile can't have attachment
Conf-4562 Usernames are duplicated when switching between wysiwyg and wiki markup.
Conf-4530 User macro expands into text after changing from rich text to wiki markup
Conf-4628 No result defined for action com.atlassian.confluence.pages.actions.PageNotFoundAction
<table>
<thead>
<tr>
<th>Issue ID</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-4145</td>
<td>Link images at the end of lines are moved to the next line when created</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3470</td>
<td>Dynamic Tasklist throws ClassCastException on profile page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3456</td>
<td>Javascript problem. In IE, when editing / creating a page, the first active field is not focused.</td>
<td>Resolved</td>
<td>OBsolete</td>
</tr>
<tr>
<td>CONF-4465</td>
<td>User profile picture bugs</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4297</td>
<td>Macros depending on a page do not work when you preview before the page has been created</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3824</td>
<td>Label edit button crashes Safari</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2525</td>
<td>JSPWiki import throws ClassNotFoundException</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3819</td>
<td>Text formatting breaks when formatted text includes smart quotes</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4300</td>
<td>Demo site needs to be indexed.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4280</td>
<td>Regression: user must use correct case when inlining image attachments</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4045</td>
<td>Editing a user with UTF8 characters in the username results in an invalid username error</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4146</td>
<td>Installation does not index demonstration space</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4046</td>
<td>Cancelling the edit user details form with UTF8 characters in the username results in an invalid username error</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4218</td>
<td>Info, Warning, Hint, etc panels no longer process wiki markup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>ID</td>
<td>Description</td>
<td>Resolution</td>
<td>Status</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>CONF-4223</td>
<td>Grid on table not visible inside a panel</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4054</td>
<td>Make servlet context available to determine location of home directory</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4031</td>
<td>Incorrect username when deactivating user with UTF-8 characters support</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4006</td>
<td>-Dhttp_nonProxyHost setting</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3635</td>
<td>Timed Resource Pool caused Confluence to crash</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-4019</td>
<td>Moving a page, then moving it back doesn't update links properly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3860</td>
<td>Broken &quot;attached&quot; link in Confluence demo space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4468</td>
<td>Legacy RSS feeds have no titles</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4355</td>
<td>Page name truncation is too severe</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4298</td>
<td>Subscribe to daily updates preference cannot be saved</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3830</td>
<td>Exception when deleting a space after deleting a user with granted view space permissions</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3333</td>
<td>OutOfMemoryError</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4162</td>
<td>Viewing pages info page causes Lazy loading exception for parent page with page permissions</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4350</td>
<td>Can not create blank page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3785</td>
<td>Page in space without view permissions returns Page Permissions error page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3875</td>
<td>Creating multiple lines in a table cell in Rich Text doesn't convert to Markup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Ticket</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-3709</td>
<td>Recently Updated in space doesn't work</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4406</td>
<td>XML-RPC Search appears to be broken.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4534</td>
<td>Creating blog-posts with the same name on the same day - you can't edit or delete them</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3867</td>
<td>Previous page lost when redirected to login page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3309</td>
<td>Radeox compatibility (table) macro broken</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4018</td>
<td>HandleProfileAttachment does not handle UTF-8 encoded usernames correctly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4161</td>
<td>NullPointerExeption in threading</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4021</td>
<td>Restricted page attachments when logged out gives page not found not login required</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4341</td>
<td>Info page incorrectly shows inherited edit permissions</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4457</td>
<td>Profile attachments tab does not show up for other users</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3329</td>
<td>Image not correctly linked in html export.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4338</td>
<td>Search macro explodes if you specify a max # of results, but there are fewer than that</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-1832</td>
<td>Creator in RSS not present?</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4424</td>
<td>image tag broken for attached images in page comments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2578</td>
<td>UserAccessor.getGroup will return non-null whenever a user exists with name foo</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4047</td>
<td>Changing the password of a user</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
with UTF8 characters in the username results in an invalid username error

CONF-3617 Attachment links in search results point to non-existent pages

CONF-4028 ConcurrentModificationException adding a lot of labels through the XMR interface

CONF-4254 On Safari, the page jumps around when you click one of the edit tabs

CONF-3880 Labels queries do not run on DB2.

CONF-4272 Personal info attachments have visible $velocity junk in search results

CONF-4285 Version comments have surrounding paragraph tags when not necessary

CONF-3570 Clicking on preview in WYSIWYG mode causes NPE

CONF-3825 Label delete UI non-functional

CONF-4262 Uploading attachments to certain pages causes "Attachment links can only be added to page and news items" error

CONF-4445 Spaces drop-down is empty

CONF-4431 inserting images in wysiwyg broken

CONF-4496 When editing, the base of the confluence page is included in the WYSIWYG editor pane.

CONF-3139 Validate space restore request before proceeding

CONF-4524 Security flaw in labeling

CONF-4169 Export to word link
<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-4261</td>
<td>Links to emoticon images on the insert emoticon popup are broken</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4166</td>
<td>WYSIWYG editor doesn't find links inside macros</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4195</td>
<td>Nesting in search results is unclear</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4172</td>
<td>Team tab doesn't show any spaces if it's defaulting to a tag</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3066</td>
<td>Editing a page's content and title creates 2 new versions.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4171</td>
<td>Fix wording when there's only one new space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3821</td>
<td>DefaultLabelManager's getMostPopularLabels does not put labels in correct order</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3834</td>
<td>Errors swapping between markup and wysiwyg for large pages</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4354</td>
<td>Can't create blank pages on c.a.com</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3976</td>
<td>Missing image in Full Notation Guide</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2888</td>
<td>Recent changes information incorrect</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4119</td>
<td>Content properties are not exported and/or restored in XML backup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4167</td>
<td>Link editor doesn't insert remote links properly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4391</td>
<td>View change link redirects to an invalid page</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4200</td>
<td>Export Page alignment problem</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4436</td>
<td>PDF export fails on pageid &gt; 999</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4351</td>
<td>Need to cleanup logs before releasing.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4158</td>
<td>Error message for missing images isn't</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-4201</td>
<td>When expanded the breadcrumbs ellipsis, the browser jumps down the page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4474</td>
<td>Accessing user profile picture from Dashboard results in a &quot;Not Permitted&quot; page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3307</td>
<td>Recently updated macro doesn't show comments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4127</td>
<td>Make this my default link for editor doesn't recognise unset preference</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4476</td>
<td>Rich text editor scrambles tables with line breaks</td>
<td>Closed</td>
<td>ANSWERED</td>
</tr>
<tr>
<td>CONF-4181</td>
<td>Re-indexing causes &quot;maximum open cursors exceeded&quot;</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4506</td>
<td>View changes and URL</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-4523</td>
<td>WYSIWYG underline lost in comment</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4480</td>
<td>Original text disappears in Modify News</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4549</td>
<td>RenamePositionUpgrade broken</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4477</td>
<td>Confluence 2.0RC1 causes constant reloading in firefox 1.5 beta 2</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4606</td>
<td>Dashboard RSS feed autodiscovery the wrong way around</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4552</td>
<td>Comment delete protection spams logs</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4467</td>
<td>Tabs in &quot;Administration</td>
<td>Content Indexing&quot; do not remember state.</td>
<td>Resolved</td>
</tr>
<tr>
<td>CONF-4512</td>
<td>DynamicTasklist macro in page causes formatting macros to not work</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4035</td>
<td>Removing a label causes a JS error if a page has a dynamic</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-4525  Viewing mail with a parameter causes an error on Orion 2.0.2  Resolved  FIXED

CONF-3931  Listing pages with a label shows trashed items  Closed  CANNOT REPRODUCE

CONF-4481  "SyntaxError: unterminated string literal" When change to wiki markup  Closed  FIXED
Release Notes 2.0.1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.0.1 is a maintenance release that resolves some issues users may have encountered using Confluence 2.0. In particular, this includes issues relating to failures to upgrade and javascript problems.

2.0.1 is a free upgrade for all customers who purchased their Confluence license after November 28th, 2004.

Who should upgrade?

Confluence 2.0.1 is a recommended upgrade for all users who have not yet upgraded to 2.x and for those users of 2.0 that are encountering issues fixed in this release.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 1.4, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.4.4 or earlier of Confluence, please check the release-notes of the other major Confluence releases:

- [Release Notes 2.0](#)
- [Release Notes 1.4](#)
- [Release Notes 1.3](#)
- [Release Notes 1.2](#)
- [Release Notes 1.1](#)

Changes in 2.0.1

See also: Issues resolved for 2.0.1

- Javascript failing with a class not found. ([CONF-4643](#))
- Confluence 2.0 hangs on weblogic. ([CONF-4634](#))
- Disabling WYSIWYG editor causes AJAX error in Preview mode. ([CONF-4745](#))
- Ancestors table hangs on to foreign key relationships if it can't be deleted. ([CONF-4700](#))
## Issues resolved for 2.0.1

This page last changed on Nov 27, 2005 by daniel@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4612</td>
<td>Add RSS Autodiscovery to the results pages of the feed builder</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4598</td>
<td>replace PermissionCheckDispatcher with PermissionHelper</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4292</td>
<td>Sort page tree pages alphabetically</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4678</td>
<td>Provide users with license screen to enter a new license if their existing one has expired</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4748</td>
<td>Mail importer should strip out illegal characters in attachment filenames</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4642</td>
<td>Login page shows 'You do not have permission to access null'. null??</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4653</td>
<td>{blog-posts: x} returns Error while trying to draw the last-n pages!</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4646</td>
<td>global-reports macro doesn't render properly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4659</td>
<td>No body macros are duplicated when switching between WIKI and WYSIWYG editing.</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4665</td>
<td>Space list drop down listbox in Link selector has empty string options</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4680</td>
<td>Cycling between WIKI and WYSIWYG shows out of date data.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-4682</td>
<td>NullPointer Exception when saving a page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-4689  with content pasted from MS Word storeBlogEntry method via XML-RPC throws invalid argument exception

CONF-4699  Remove WYSIWYG checkbox from the user profile.

CONF-4654  Exception while getting property calendarForThisMonth

CONF-4749  Line breaks missing for the display of code macros in exported pdf pages

CONF-4533  Macros with forms interfere with "Save" and "Cancel" buttons in WYSIWYG editor

CONF-4578  blog-posts macro only shows news items from current month

CONF-4639  Image popup window wrong size?

CONF-4634  Confluence 2.x hangs on weblogic.

CONF-4737  Newlines being stored as version comments

CONF-4668  Switching between Rich Text and Wiki Markup tabs sucks links that follow tables into the table itself

CONF-4661  blog-posts macro time parameter doesn't work as expected

CONF-4526  Do not remove blank lines after headings when switching between WYSIWYG and RichText.

CONF-4700  Ancestors table hangs on to foreign key relationships if it can't be deleted

CONF-4561  RSS feed for pages marked "favourite"

CONF-4666  viewrecentblogposts and no longer displays
<table>
<thead>
<tr>
<th>Issue ID</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-4702</td>
<td>Anonymous users are offered link to edit 'Space Labels' in space where permissions for this space are restricted to 'view' only. Clicking the 'edit' link throws exception {blog-posts:x} macro displays only news items that were created or edited after upgrading to v2.0</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4667</td>
<td>1.3.5 backup can't be restored to 2.0 at config time, but can be restored later.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4719</td>
<td>Disabling WYSIWYG editor causes AJAX error in Preview mode</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4745</td>
<td>Confluence claims that a restore has been completed even though the restore is still running in the background.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4643</td>
<td>Basic functions not working on JDK 1.5</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4631</td>
<td>Ampersand not handled correctly when switch between renderers</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4650</td>
<td>WYSIWYG bug with inner phrases</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4487</td>
<td>Dynamic search and dynamic tasks macros don't work well placed together</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4388</td>
<td>Empty headings should contain a half space, so they can be selected</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4641</td>
<td>Strange screen if you delete a comment twice</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4714</td>
<td>Sync SOAP/ XML-RPC API for addAttachment.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue ID</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-4720</td>
<td>Duplicate Notification upgrade task is failing.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4649</td>
<td>Update the chart macro to the latest version (1.2)</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4768</td>
<td>Exception thrown while accessing “News”</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
</tbody>
</table>
Release Notes 2.0.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.0.2 is a maintenance release that resolves a security issue, along with various issues users may have encountered using Confluence 2.0.1.

A security flaw as described by the Confluence Security Advisory 2005-12-05 has been identified to exist in Confluence 1.4.x and 2.0.x. This has been fixed in 2.0.2. We recommend to all customers that they either upgrade to 2.0.2 or follow the instructions provided on the Confluence Security Advisory 2005-12-05 to patch there installation.

The release of Firefox 1.5 resulted in new bugs and issues with the Rich Text editor. Therefore every version of Confluence up to 2.0.2 isn't very compatible with this browser in terms of Rich Text editing.

Confluence 2.0.3 will feature an updated version of the editor which will solve most of the problems with Firefox 1.5 (CONF-4809).

2.0.2 is a free upgrade for all customers who purchased their Confluence license after December 5th, 2004.

Who should upgrade?

Confluence 2.0.2 is a recommended upgrade for all users as it contains a security patch for the Confluence Security Advisory 2005-12-05. If you are unable to upgrade to 2.0.2, then please see Confluence Security Advisory 2005-12-05 for details on how to patch your installation.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.0, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.4.4 or earlier of Confluence, please check the release-notes of the other major Confluence releases:

- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3

Changes in 2.0.2

See also: Issues resolved for 2.0.2
• Search results page needs to XML encode the query string provided by the user (CONF-4825).
• Recently updated does not list any items (CONF-4770).
• CamelCase linking interferes with rendering of attachment link (CONF-3447).
• Umlaute in links are causing encoding problems with the Rich Text editor (CONF-4775).
• Disabled accounts still receive (blank) daily reports (CONF-4802).
## Issues resolved for 2.0.2

This page last changed on Dec 04, 2005 by daniel@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-4672</td>
<td>NullPointerException when adding space as favourite</td>
<td>Resolved</td>
<td>ANSWERED</td>
</tr>
<tr>
<td></td>
<td>CONF-4810</td>
<td>Make a note in the 2.0.2 release notes about problems with WYSIWYG editor on Firefox 1.5 for the Mac</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4151</td>
<td>Allow sorting of attachments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3272</td>
<td>Allow attachments to be ordered by date, size and name in the attachments macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4786</td>
<td>Need to support UNICODE characters in MSSQL server</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2790</td>
<td>Images in historical versions of pages are not rendered recently updated does not list any items</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4770</td>
<td>Closed</td>
<td></td>
<td>RESOLVED LOCALLY</td>
</tr>
<tr>
<td></td>
<td>CONF-3447</td>
<td>CamelCase linking interferes with rendering of attachment link</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3923</td>
<td>CamelCase linking breaking image rendering if image titled &quot;ThisIsAnImage.jpg&quot; editor does not work in firefox 1.5</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4775</td>
<td>Umlaute in links are causing encoding problems with the Rich Text editor</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4750</td>
<td>Contentbylabel macro does not work if there is no space separating label names</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4804</td>
<td>Contentbylabel macro separates</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-4799 Extra "<" in labels-include.vm causes problems with page loading
Resolved FIXED

CONF-4802 Disabled accounts still receive (blank) daily reports
Closed FIXED

CONF-4469 Favorites Pages shows only 5 page!!
Resolved FIXED

CONF-4807 Cannot sort attachments by name
Resolved FIXED

CONF-4825 Search results page needs to XML encode the query string provided by the user.
Resolved FIXED

CONF-4765 Space Descriptions may not have their Space ID set, causing problems when the space is referenced
Resolved FIXED

CONF-4766 LazyInitializationException in ResourceUpgradeTask
Closed FIXED

CONF-4776 Upgrade tasks do not flush the cache after updating content
Resolved FIXED
Release Notes 2.0.3

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.0.3 is a maintenance release. It contains a upgrade of the WYSIWYG editor and numerous bug fixes.

2.0.3 is a free upgrade for all customers who purchased their Confluence license after December 12th, 2004.

Who should upgrade?

Confluence 2.0.3 is a recommended upgrade for all users who are having problems with the WYSIWYG editor. This release contains an upgrade to the WYSIWYG module that contains numerous bug fixes.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.0, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 1.4.4 or earlier of Confluence, please check the release-notes of the other major Confluence releases:

- [Release Notes 2.0](#)
- [Release Notes 1.4](#)
- [Release Notes 1.3](#)

Changes in 2.0.3

See also: [Issues resolved for 2.0.3](#)

- Upgrade to TinyMCE 2.0.1 ([CONF-4808](#))
- Backup restore progress monitor does not refresh during restore, making it look like the backup is hanging ([CONF-4895](#))
- Information leak when accessing url directly ([CONF-4794](#))
- Personal labels showing up on the \{contentbylabel\} macro ([CONF-4894](#))
## Issues resolved for 2.0.3

This page last changed on Dec 11, 2005 by daniel@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-4880</td>
<td>Wrong SQL-Statement in JiraJdbcProfileProvider?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4875</td>
<td>Modify Standalone Tomcat configuration to stop NotSerializableException</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4819</td>
<td>Increase size of search box</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4893</td>
<td>Hide &quot;Add Content&quot; Links in Left Navigation Theme if user does not have permissions to add any kind of content.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4846</td>
<td>Update jfreechart to 1.0.0</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4843</td>
<td>Object and Embed tag parameters for embedded objects in a page are missing quotes.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4752</td>
<td>Parent page lost when creating page with template</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4837</td>
<td>RSS feedbuilder link hidden when Tableless Theme selected</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4835</td>
<td>Warn if page exists even when user lacks view/edit page permission</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4808</td>
<td>Upgrade to TinyMCE 2.0.1</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4894</td>
<td>Personal labels showing up on the {contentbylabel} macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4510</td>
<td>Selecting text colour in WYSIWYG causes previous text to change colour</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4889</td>
<td>&quot;Citation&quot; markup is not converted between Rich Text and Markup modes</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4895</td>
<td>Backup restore progress monitor does not refresh during restore, making it look like the backup is hanging.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4822</td>
<td>{navmap} doesn't respect server base url</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4891</td>
<td>Remove duplicate results from the {contentbylabel} macro.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4849</td>
<td>Image Resource Problems - working in 1.4.4 and broken in 2.0.2</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4809</td>
<td>Rich Text editor doesn't display the WYSIWYG content the first time the edit page is loaded (Firefox 1.5 MAC)</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4824</td>
<td>Switching quickly between Rich Text and WikiMarkup / Preview causes content to disappear</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4820</td>
<td>Cannot apply strikethrough to links in rich text editor</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4685</td>
<td>Fullscreen button freezes IE and reports error in Firefox</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3604</td>
<td>java.io.NotSerializableException</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4794</td>
<td>Information leak when accessing url directly</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.1

This page last changed on Nov 30, 2006 by dave@atlassian.com.

Atlassian is happy to offer our customers an early Christmas present: Confluence 2.1 (otherwise known as Bogan). Existing customers who wish to upgrade, or new users who wish to try out Confluence for 30 days, can download Confluence from the Atlassian website: http://www.atlassian.com/software/confluence

Bogan is the Sixth major update to Confluence, offering vastly improved LDAP integration through our new atlassian-user library, as well as introducing the much-requested autosave feature to protect you from losing your precious edits.

Upgrading from 2.0

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confuence.home directory and database before upgrading!

- Plugin Compatibility
  Any plugin written for Confluence 2.0 and earlier that interfaces with the User system will need to be updated for Confluence 2.1. Plugin developers can find more information on the Atlassian developer blog

- LDAP Integration Configuration Changes
  Customers who have already integrated Confluence with LDAP through the OSUser LDAP providers will need to make changes to their osuser.xml file before upgrading. You can find full details here: Special LDAP Integration Note for users upgrading to Confluence version 2.1.x or higher

- OSUSer or Seraph Customisations
  Customers who have performed their own customisations on OSUser or Seraph within Confluence must be sure to test their changes with Confluence 2.1 before upgrading any production system. While we have tried to maintain backwards compatibility, the integration of atlassian-user may adversely affect existing customisations.

Upgrading from 1.4 and earlier

Users upgrading directly from 1.4 or earlier should also read the 2.0 Release Notes for caveats regarding the 1.4 -> 2.0 upgrade.

Contents

1. New Features
2. Improvements
3. Notable Bug-fixes

See also: DOC:Issues Resolved for 2.1
New Features

Autosave

If you've used wikis for long enough, you know the pain of losing a long, involved editing session to a browser crash, session timeout, or just not thinking and clicking on a link to another page. As of Confluence 2.1, this is no longer a problem: the most you'll lose is half a minute of your work.

Every thirty seconds (this interval is configurable by the global administrator), the browser will save your unfinished edit to the server. This autosave will hang around until you either hit the "Save" or "Cancel" button yourself, even if the server is restarted. So if you lose your changes, all you have to do is navigate back to the edit page, and will be given the chance to begin editing again where you left off.

You can view your outstanding autosaved documents from your profile under the "Drafts" tab.

This page lists all your drafts. A draft is created when you make changes to a page. Should you be prevented from saving your changes, you can resume editing the draft version here.

<table>
<thead>
<tr>
<th>Title</th>
<th>Last Saved Date</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuring a Large Confluence Installaion</td>
<td>2005-12-19 23:16:04.962</td>
<td>Resume editing</td>
</tr>
</tbody>
</table>

Concurrent Edit Warnings

A useful side-effect of autosave is that now Confluence has an accurate way of measuring who is editing which page. If two people start editing the same page at the same time, Confluence will display a warning message telling you who else is editing the page. You can then negotiate between yourselves who gets to save first.
Even better, Confluence will let you know how long it was since the other editor made any changes to the page, so if somebody has just left their browser open on the edit page for a couple of hours, you'll know you can sneak your changes in while they're asleep.

User Management

Confluence 2.1 sees the landing of our new atlassian-user user management library. Most Confluence customers will not see any significant change from this move, but for anyone looking to integrate Confluence with an external user-base (especially LDAP), atlassian-user is a big step forward.

Confluence can now integrate fully with an LDAP directory server, without the previously annoying practice of having to mirror the users and groups locally on Confluence: DEV:Confluence LDAP Documentation Index

Improvements

Performance

A lot of work was done improving the performance of the Confluence dashboard and edit pages, especially for customers who may have thousands of spaces and hundreds of thousands of pages in their Confluence installation. Both of these pages should now respond significantly faster.

Other

- You can now manually set the MIME type under which embedded objects should be served – CONF-4906
- The system info and error pages include more information about your database configuration – CONF-4957
- Email attachments no longer show up on the recently updated list (this seems to have regressed in the final release) – CONF-4684
- Added an icon mapping for sub-tasks in the jiraissues macro – CONF-4921
- Allow attached Windows Bitmap files to be displayed as embedded resources – CONF-4922

Notable Bug-fixes

Confluence 2.1 includes all bug-fixes that were made up to Confluence 2.0.3, and also includes fixes for the following issues:

- Preview now works correctly when rich text editor is disabled – CONF-4935
- Info tab no longer shows incoming links from pages in the trash – CONF-4815
- Trying to set a page as its own parent now presents a validation error instead of a system error – CONF-4941
- Confluence no longer removes every second character from the filenames of email attachments – CONF-4938
- JiraJdbcProfileProvider problems reliably accessing profile information from JIRA resolved – CONF-4933
- Unresolved images now replaced with placeholders in WYSIWYG editor – [CONF-4929](#)
- Removing the `{excerpt}` macro from a page now deletes the excerpt – [CONF-4918](#)

## The Confluence 2.1 Team

<table>
<thead>
<tr>
<th>Development 😊</th>
<th>Atlassian-User 😎</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
<td>Nick Faiz</td>
</tr>
<tr>
<td>Jeremy Higgs</td>
<td></td>
</tr>
<tr>
<td>David Loeng</td>
<td>Documentation</td>
</tr>
<tr>
<td>Charles Miller</td>
<td>Vidya Madabushi</td>
</tr>
<tr>
<td>Daniel Ostermeier</td>
<td></td>
</tr>
<tr>
<td>Jens Schumacher</td>
<td>Oversight &amp; Management 😊</td>
</tr>
<tr>
<td></td>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td></td>
<td>Scott Farquhar</td>
</tr>
</tbody>
</table>
## Issues Resolved for 2.1

This page last changed on Dec 19, 2005 by cmiller.

### Atlassian JIRA (42 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>CONF-4335</td>
<td>Upgrade task - osuser2hibernate</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4227</td>
<td>Replace group select menus with a GroupPicker</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4692</td>
<td>Grouppicker should replace select menus of groups</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4711</td>
<td>Formalize set up procedure r.e. existing users and existing groups in a delegation</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4859</td>
<td>Broken page table structure in Edit mode after upgrade from 1.4.4 to 2.0.1</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4693</td>
<td>GroupPicker in edit space perms</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4696</td>
<td>GroupPicker in global admin permissions</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4694</td>
<td>GroupPicker in page permissions form</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4232</td>
<td>Create new rdbms structure for a Hibernate implementation of Atlassian User</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-1193</td>
<td>Warn when page is concurrently edited by multiple users</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4233</td>
<td>Create utility to move Entities from OSUUser tables into Atlassian User tables.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-973</td>
<td>Autosave of editing box</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4217</td>
<td>Add GMail style auto-save when editing new or existing pages</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4499</td>
<td>SmartListManager performance degrades as the number of groups</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-4234  Global Export should only export users in Confluence's database.  Closed  FIXED

CONF-1806  Merge Feature for Pages that Were Edited at the Same Time  Resolved  FIXED

CONF-4688  PagerPaginationSupport must retrieve more results for build more pages  Closed  FIXED

CONF-4229  UserPicker should use the new query system and the PagingIterator  Closed  FIXED

CONF-4906  Allow syntax to override the file MIME type in embedded objects  Resolved  FIXED

CONF-4236  Activate/deactive user now manipulates the user's relation to USE_CONFLUENCE permission  Closed  FIXED

CONF-4957  Include Database driver information on the "System Info" and error pages  Resolved  FIXED

CONF-4965  Improve dashboard performance  Resolved  FIXED

CONF-4966  Improve edit page performance  Resolved  FIXED

CONF-4735  All spaces a user can see should be retrieved with one query  Resolved  FIXED

CONF-4763  add a user picker to global perms page  Closed  FIXED

CONF-4230  PermissionDelegates are stored via keys based on class names  Closed  FIXED

CONF-4921  Jira/issues does not have an icon mapping for subtasks  Resolved  FIXED

CONF-4922  Windows bitmap files not recognised by the embedded resource renderer  Resolved  FIXED

CONF-4760  Edit groups for user  Closed  FIXED
CONF-4932  Image Linking Broken
CONF-4933  JiraJdbcProfileProvider incorrectly accesses user profile information.
CONF-4941  IllegalArgumentException when setting page as its own parent page
CONF-4929  Unresolved Image Links are replaced in WYSIWYG mode
CONF-4935  Preview is not working when richereditor is disabled.
CONF-4947  Unsaved changes in the rich text editor should disregard whitespace
CONF-4967  JIRA + LDAP OSUser integration not supported
CONF-3396  AJAX doesn't work with Safari v2 on mac
CONF-3629  Format tags in to word
CONF-4504  Unable to embed resource
CONF-4918  excerpt in page, still shows in children even after the excerpt macro was removed
CONF-4815  Info tab of a page displays incoming links from deleted pages
CONF-4938  Names of mail attachments are wrong
Release Notes 2.1.1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.1.1 is a maintenance release that resolves some issues users may have encountered using Confluence 2.1, including issues related to user management, the editing UI and email notifications.

2.1.1 is a free upgrade for all customers who purchased their Confluence license after December 24th, 2004.

Who should upgrade?

Due to the severity of the issues that it resolves, Confluence 2.1.1 is a recommended upgrade for all Confluence customers.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.1, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.0.3 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.1.1

See also: Issues resolved for 2.1.1

- Users can not change their passwords CONF-5005
- Cursor jumps to the beginning of the rich text editor periodically CONF-4993
- Change comments not being displayed correctly CONF-4979
- Email notifications do not correctly report the user who made the change CONF-4973
- Pages can not be created or saved in some custom atlassian-user or OSUser configurations CONF-4978
# Issues resolved for 2.1.1

This page last changed on Dec 27, 2005 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-4984</td>
<td>Children macro gives bad error message when page not found</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4973</td>
<td>Some notifications are not reporting the user</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4979</td>
<td>Comments are being rendered literally as $page.renderedVersionComment</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4978</td>
<td>Useraccounts are read-only when using LDAP user management</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4988</td>
<td>Jira3dbcPropertySet is read only</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4980</td>
<td>Autosave in rich text resets cursor</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4993</td>
<td>The cursor jump to beginning of first line when you stop typing a few seconds in the wysiwyg editor</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5005</td>
<td>Users can not change there passwords.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4974</td>
<td>Concurrent modification exception in SimpleDisplayServlet</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 2.1.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.1.2 is a maintenance release that resolves some issues users may have encountered using Confluence 2.1.1 or earlier, including issues related to page editing, Javascript errors in Firefox and Safari and PDF exports.

2.1.2 is a free upgrade for all customers who purchased their Confluence license after January 12th, 2005.

Who should upgrade?

Confluence 2.1.2 fixes a number of bugs found in Confluence 2.1.1 and earlier. Customers are recommended to upgrade if they are experiencing any of the issues fixed in this release.

Upgrade Procedure

⚠️ If you are using MySQL, please apply the patch detailed in this bug report [http://jira.atlassian.com/browse/CONF-5153](http://jira.atlassian.com/browse/CONF-5153). That is, please download 2.1.2, extract it, and copy the above mentioned patch into the unpacked 2.1.2 distribution and then go about your upgrade. We will be releasing a version with this patch bundled soon.

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.1 or 2.1.1, you can find instructions here. We strongly recommend that you backup your `confluence.home` directory and database before upgrading!

If you are upgrading from Confluence 2.0.3 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.1.2

See also: Issues resolved for 2.1.2

Improvements

- JiraPortlet macro now has an optional "baseUrl" parameter for when Confluence accesses JIRA from a different URL to regular users – [CONF-4897](http://jira.atlassian.com/browse/CONF-4897)
- Children listed at the bottom of pages are now sorted alphabetically – [CONF-4878](http://jira.atlassian.com/browse/CONF-4878)
• Confluence warns space administrators when they permit anonymous access to a space, but global anonymous access is disabled – CONF-4898

Bugs Fixed

• NS_ERROR_NOT_AVAILABLE popup no longer appears when editing certain pages in Firefox – CONF-5038
• "Error converting parameters" popup no longer appears when editing certain pages in Safari – CONF-4976
• Edit page no longer returns NoSuchElementException error under some circumstances – CONF-5007
• "Last week" and "Last month" searches no longer fail when time period spans the new year – CONF-5056
• News items marked as favourites are now listed on the dashboard – CONF-4998
• Mail attachments no longer show up in recent changes on dashboard – CONF-4684
• PDF Export no longer fails with error parsing background-color attributes – CONF-5026
• Anonymous users do not cause a crash when exporting a space – CONF-5129
• Disabling a servlet plugin no longer causes a NullPointerException – CONF-5021
• Notification emails no longer prepend the site's context path twice to certain URLs – CONF-5024
• It is now possible to move a page between spaces and change its parent in the same operation – CONF-5103
• Dashboard favourite selection now works in Opera 8.5 – CONF-5012
• Username links no longer cause a NullPointerException in certain configurations – CONF-5028
## Issues resolved for 2.1.2

This page last changed on Jan 13, 2006 by cmiller.

### Atlassian JIRA (38 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CONF-5090</td>
<td>Change landing URL for 'get license' link during setup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5017</td>
<td>Add the file.encoding system property to the system info page.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5020</td>
<td>List of child pages should be sorted alphabetically</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-4878</td>
<td>the children listing on the bottom of the page should sort the child pages alphabetically</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4898</td>
<td>Warn users when granting anonymous users space access without granting then user-confluence access</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4897</td>
<td>Using JIRA base-URL for JIRAPORTLET and JIRAISSUES links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4971</td>
<td>export space returns zip file with Space Details only</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5008</td>
<td>NPE getChangesSinceLastEdit Error getting changes since last edit;</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5059</td>
<td>Link to 'discard' draft does not discard draft unless clicked twice.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5026</td>
<td>Crash generating PDF from the online documentation</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5046</td>
<td>Line separating drafts under 'User Profile' breaking up when draft is without a title</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4998</td>
<td>News items don't appear in favorite</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue ID</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5012</td>
<td>Dashboard favourite space selection dies in Opera 8.5 (and perhaps other versions too)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5028</td>
<td>Linked user name Wiki tag crashes Confluence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5024</td>
<td>Notification emails are adding an additional confluence directory (contextPath) in certain URL's</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5089</td>
<td>System info page is showing $action.getDatabaseDriverName()</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5087</td>
<td>Confusing alert message when you have a draft on page create</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5100</td>
<td>Anonymous comment warning image does not respect the context path</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5109</td>
<td>UserSessionExpiryList is incompatible with certain application servers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5082</td>
<td>Changes to the length of &quot;Recently Updated&quot; list on dashboard,action page is lost immediately after visiting another page</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5126</td>
<td>Warning icon in the concurrent editing message does not respect the context path</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5118</td>
<td>Drafts tab is not visible in the user profile when external user management is enabled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-4996</td>
<td>NullPointerException when searching for users via the Manage User Administration screen</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONF-5141  Upgrade stalls on AdditionalIndexes1UpgradeTask
Resolved  FIXED
CONF-5129  IllegalArgumentException when exporting a space as the anonymous user
Resolved  FIXED
CONF-5154  User picker in Edit Space Permissions page is only accessible by super users
Closed  FIXED
CONF-4976  Drafts JavaScript error when editing page on Safari
Resolved  FIXED
CONF-5011  Javascript error on AJAX heartbeat
Resolved  DUPLICATE
CONF-5103  When moving a page, you can't change space and parent in same step
Resolved  FIXED
CONF-5021  NullPointerException when disabling a servlet plugin
Resolved  FIXED
CONF-5056  Search by "Last Week" and "Last Month" fail in the new year.
Resolved  FIXED
CONF-5119  Email format in Profile and notifications pages should be consistent
Resolved  FIXED
CONF-5052  Explicit background colours break PDF export
Resolved  FIXED
CONF-4829  Pop-up page for inserting links doesn't size properly
Closed  FIXED
CONF-5007  Edit Page returns System Error
Resolved  FIXED
CONF-5038  wysiwyg-javascript exception
Resolved  FIXED
CONF-6194  Editing space layouts edits the main layout instead
Closed  DUPLICATE
CONF-4684  I don't want email attachments (e.g. digital signs) to show up in the 'recently updated' list
Resolved  FIXED
Release Notes 2.1.3

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.1.3 is a maintenance release that resolves some issues users may have encountered using Confluence 2.1.2 or earlier, including issues related to Rich Text editing, LDAP user management, restoring to MySQL, and Unicode on MS SQL Server

2.1.3 is a free upgrade for all customers who purchased their Confluence license after January 23rd, 2005.

Who should upgrade?

Confluence 2.1.3 fixes a number of bugs found in Confluence 2.1.2 and earlier. Customers are recommended to upgrade if they are experiencing any of the issues fixed in this release.

Confluence is a recommended upgrade for all customers using Confluence's new atlassian-user LDAP user management with dynamic group mappings. For more information see USER-95

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.1 to 2.1.2, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.0.3 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.1.3

See also: Issues resolved for 2.1.3

Improvements

- You can now suppress camel-case linking with `{nl:CamelCaseWord} – `CONF-3700`
- Confluence RSS macro is now compatible with Google News RSS – `CONF-4892`
- The `{contentbylabel}` macro supports a wider range of options – `CONF-5137`

Bugs Fixed
• Many fixes related to Rich Text editing, and switching between Rich Text and Wiki Markup editing.
• Further PDF export fixes – CONF-4930
• The upload option in the attachments macro works – CONF-5127
• Fixed a bug where Word exports would open in the wrong application – CONF-5163
• Handling of situation where site exceeds its licensed user limit and then removes users is improved – CONF-5208
• Restoring a site to MySQL now properly removes and re-creates database tables – CONF-5153
• Confluence now uses correct NVARCHAR type for multibyte text in MS SQL Server – CONF-5204
# Issues resolved for 2.1.3

This page last changed on Jan 22, 2006 by cmiller.

## Atlassian JIRA (37 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>CONF-5173</td>
<td>Add License ID to View License Page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-5204</td>
<td>Merge SQLServerIntIDialect from confluence_2.0_stable branch to HEAD and confluence_2.1_stable</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-3783</td>
<td>Strike through does not work for links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-3700</td>
<td>Suppression of CamelCase link generation for certain words</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-5380</td>
<td>Allow Editing mode to be a preference</td>
<td>Resolved</td>
<td>ANSWERED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-4892</td>
<td>Google News RSS requires a user agent for access</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-5212</td>
<td>Display database connection URL/datasource information on the system info page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-5211</td>
<td>Handle datasource driver exceptions on the system info page gracefully</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-5208</td>
<td>You have exceeded the maximum number of users for your license error</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-5190</td>
<td>Catch all errors that may be thrown from a macro</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-5137</td>
<td>Add more options to contentbylabel macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-5127</td>
<td>Option 'upload' does not work for the attachment macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-5169</td>
<td>SearchEntitiesAction displays $user.name, $user.fullName, $user.email instead</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-5167  Links with an apostrophe fails to render  Resolved  FIXED
CONF-4260  JTidy removes empty divs, spans  Resolved  FIXED
CONF-4960  Mixing ordered and unordered lists confuses WYSIWYG at times  Resolved  FIXED
CONF-5077  JTidy error message when saving edited page  Resolved  FIXED
CONF-5153  Error restoring on MySQL  Resolved  FIXED
CONF-4251  User management has design flaw !!  Resolved  FIXED
CONF-5342  User Picker throws X WORK ConfigurationException  Resolved  FIXED
CONF-5165  Ampersands and backslashes multiply...  Resolved  FIXED
CONF-4681  Daily notification email displays wrong date.  Resolved  FIXED
CONF-4915  WYSIWYG editor not accepting certain edits on Save  Resolved  FIXED
CONF-4624  Losing html macro contents in Rich Text editor  Closed  DUPLICATE
CONF-4865  Rich Text editor can mangle horizontal rule tag ('--')  Resolved  FIXED
CONF-4896  Table containing heading is broken by WYSIWYG editor.  Resolved  FIXED
CONF-4847  Using header notation and the children macro on the same line brings up a JavaScript alert  Resolved  FIXED
CONF-5042  Link contents not changed when a link is edited directly  Resolved  FIXED
CONF-4493  (code) element produces syntax errors when trying to preview  Closed  CANNOT REPRODUCE
CONF-5049  Bad behaviour of the Wysiwyg editor with  Resolved  FIXED
CONF-5201  HTML produced when newline typed in table cell doesn't produce correct markup
Resolved  FIXED

CONF-3351  Sign-up takes 20 minutes to load
Resolved  FIXED

CONF-4930  Error trying to export confluence 2.0 documentation to PDF
Resolved  DUPLICATE

CONF-5163  Export a page as a word document opens exportword.action in IE instead of pagename.doc
Closed  FIXED

CONF-5233  Cross-site scripting vulnerability in the full name user profile field
Closed  FIXED

CONF-5182  Switching between Rich Text and Wiki Markup loses content between \{html\} macro tags
Resolved  FIXED

CONF-4874  Image popup shows ${lang_conf_ok} and ${lang_conf_cancel} after you have attached an image.
Release Notes 2.1.4

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.1.4 is a maintenance release that resolves some issues users may have encountered using Confluence 2.1.3 or earlier. Confluence 2.1.4 fixes more than 55 issues, including bugs related to space import/export, the WYSIWYG editor, page breadcrumbs, and many more.

2.1.4 is a free upgrade for all customers who purchased their Confluence license after February 16th, 2005.

Who should upgrade?

Confluence 2.1.4 fixes a number of bugs found in Confluence 2.1.3 and earlier. Customers are recommended to upgrade if they are experiencing any of the issues fixed in this release.

Confluence is a recommended upgrade for all customers using Confluence's new atlassian-user LDAP user management, as it fixes important issues related to user login validation.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from an earlier Confluence 2.1 release, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are running a Sybase or Microsoft SQL Server database, please replace confluence/WEB-INF/classes/com/atlassian/confluence/upgrade/UpgradeUtils.class with this version before upgrading.

You should also install this if your upgrade fails with the message: Session is currently disconnected

If you are upgrading from Confluence 2.0.3 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.1.4

More than 55 issues were resolved between 2.1.3 and 2.1.4. For the complete list, see: Issues resolved for 2.1.4
Note about markup for embedded content

A bug was fixed in 2.1.4 that previously allowed spaces as attribute separators in embedded content wiki markup (CONF-5406). This means !image.jpg|alt=Great pic! now works correctly, but !image.jpg|border=1 alt=test! doesn't. The correct and documented way to write the latter continues to be !image.jpg|border=1,alt=test!.

Improvements

- `{livesearch}` macro results can now be limited to a particular space – CONF-3432
- A setting was added to General Configuration to control the maximum number of attachments that can be uploaded at once – CONF-5447
- A setting was added to General Configuration to enable or disable GZip content encoding – CONF-5257
- "Insert Link" and "Insert Image" now work correctly on Safari in OS X 10.4.4 and later – CONF-5435
- A draft is automatically saved when moving from 'Edit' to 'Preview' – CONF-5366
- A getPermissionsForUser method was added to the remote API to allow administrators to retrieve the permissions of particular users – CONF-5439

Notable Bugs Fixed

- Many fixes related to the maintenance of the ancestors table while moving or renaming pages, which may have resulted in the misplacing of page breadcrumbs or inherited page-level permissions – CONF-5104, CONF-5243, CONF-5244
- Many fixes related to Rich Text editing, including the handling of tables and whitespace – CONF-5299, CONF-5231, CONF-5492, CONF-5294, CONF-5324, CONF-5247, CONF-5362, CONF-5265
- Space import no longer overwrites part of global configuration – CONF-5370
- Confluence no longer tries to create indexes with names bigger than DB2 can handle – CONF-5316
- "Insert Link" and "Insert Image" no longer erase contents of edit field in Safari on OS X 10.4.4 and later – CONF-5329
- Links from the `{labels}` macro are now space-relative – CONF-5346
-⚠️ emoticons no longer mistaken for embedded image markup – CONF-3369
- "Profile:" no longer mistaken as the start of a file: URL
## Issues resolved for 2.1.4

This page last changed on Feb 16, 2006 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-5263</td>
<td>Modify encoding test to UPPER and LOWER results in the database</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5403</td>
<td>Slow edit page load time</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5401</td>
<td>Slow dashboard due to getPermittedEntities()</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4546</td>
<td>Modifying liveSearch plugin-in to search by space, pages, documents.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5257</td>
<td>Add gzip response encoding to general configuration</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5290</td>
<td>Display enabled plugins in the error page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5366</td>
<td>Ensure a draft is saved when flipping between Edit and Preview</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4353</td>
<td>Open source the standard Confluence plugins and macros</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5382</td>
<td>Remove hand-coded 'style' attributes from generated HTML</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5435</td>
<td>Support 'insert link' and 'insert image' on Safari</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5439</td>
<td>New getPermissions method for remote API to return permissions for a given user to a space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3282</td>
<td>Confluence needs hasPermission RPC</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5303</td>
<td>Using JIRA base-URL for JIRA-ISSUES links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5447</td>
<td>Create UI for maxAttachmentsInUI setting</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-3432 Allow option in livesearch to limit search to a specific space Resolved FIXED

CONF-5770 Allow enabling/disabling the WYSIWYG-Editor per User Resolved FIXED

CONF-5250 rich text editor corrupts tables with bullets and newlines Resolved FIXED

CONF-5249 Bug in HandleProfileAttachmentsAction.isPermitted() ? Closed FIXED

CONF-5244 Page breadcrumbs get out of sync when moving pages between spaces Resolved FIXED

CONF-5265 Weird modifications done by the Rich Text editor Resolved FIXED

CONF-5266 Type the word *Profile:* it gets messed up Resolved FIXED

CONF-5294 Existing anchor links are converted to page links by Rich Text editor Resolved FIXED

CONF-5262 Nullpointerexception when include macro references an invalid space Resolved FIXED

CONF-5241 Getting ClassCastException when using seraph-paths.xml to secure additional directories in confluence webapp Closed FIXED

CONF-5304 Space Index always shows even restricted pages Resolved FIXED

CONF-5326 breadcrumb for when you view the "drafts" tab from your profile is wrong Resolved FIXED

CONF-5349 In the plain website theme, users with edit permission should see the standard Confluence interface. Closed FIXED

CONF-5327  (spaces) tag Resolved FIXED
<table>
<thead>
<tr>
<th>CONF</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-5331</td>
<td>rss: Error parsing RSS feed after editing General Configuration</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5293</td>
<td>Embedded images do not contain full URL in Word exports</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5235</td>
<td>Blog/News headings style setting forces color to black</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5299</td>
<td>WYSIWYG space-adding errors</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5321</td>
<td>WYSIWYG editor is introducing spaces</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5247</td>
<td>WYSIWYG editor replaces &quot;src&quot; with &quot;xsrc&quot; in code snippets</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-4687</td>
<td>System error clicking on view change</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5200</td>
<td>Anchor Link deleted when using WYSIWYG editor</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5406</td>
<td>Embedded content properties split on spaces as well as commas</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5399</td>
<td>Alt tags on images are broken</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5329</td>
<td>&quot;Insert Link&quot; feature clears whole edit area in Safari</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5434</td>
<td>Remote calls to getPermissions() fail if user is not superuser</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5387</td>
<td>When a Site Homepage is set to a Space in General Config, user profiles set to Dashboard don't go to the dashboard but to the</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5474</td>
<td>Site Homepage Unable to edit page with html markup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5346</td>
<td>Labels macro links aren't space relative</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5487</td>
<td>NullPointException listing users of LDAP group</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5492</td>
<td>table mangled by rich text editor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5503</td>
<td>exporting a space from a test server and importing to a live system replaced the site welcome message on the live system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5370</td>
<td>Space Export/Import transfer global bandana and conf/*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5448</td>
<td>page version numbers off by 1 in &quot;page edited&quot; HTML email</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5521</td>
<td>Failed to upgrade from 2.1.3 to 2.1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5316</td>
<td>On upgrade from 2.0 to 2.1.3 failed to create two indexes since names longer than 18 chars.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5464</td>
<td>Group Picker only shows first 49 groups with no option for paging</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5243</td>
<td>Ancestors table gets out of sync when moving pages to another space</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5340</td>
<td>Change URL has wrong version number in update email</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5252</td>
<td>Group search shows 10 groups, but no page controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5498</td>
<td>Breadcrumbs showing wrong path after page with children moved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5659</td>
<td>attachment link is incorrect...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5681</td>
<td>Links to attachments break when page re-edited</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5104</td>
<td>Page level permissions set on a page are not updated on page move</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-5313</td>
<td>Watch Mail View Changes link</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JIRA Key</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>CONF-5352</td>
<td>Class Cast Exception on Blog versioning</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5324</td>
<td>loosing anchor links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5410</td>
<td>Text-only notification email of new blog post does contain unresolved velocity variable</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3369</td>
<td>(!) emoticon sometimes interpreted as image link</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5362</td>
<td>Anonymous user Edit &amp; immediate Cancel produces NullableException</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5355</td>
<td>Cannot store unicode characters in Site Welcome Message</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6162</td>
<td>Crashed editing a page, (initially nothing special happening from my point of view, repeatable every time I edit this page now)</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5107</td>
<td>NullableException on edit page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5210</td>
<td>Adding lines in bullet lists breaks things</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 2.1.5

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.1.5 is a maintenance release that resolves some issues users may have encountered using Confluence 2.1.4 or earlier. Confluence 2.1.5 fixes around 50 issues, including a number of fixes for LDAP support, the WYSIWYG editor, and other areas. 2.1.5 is a free upgrade for all customers who purchased their Confluence license after March 16th, 2005.

⚠️ Confluence 2.1.5 has a problem which disables the rich text editor link dialog. Please replace the file WEB-INF/classes/com/atlassian/confluence/user/actions/PagePickerAction.properties with this file: PagePickerAction.properties

This is fixed in 2.1.5a.

Known Issues in 2.1.5a

Anonymous users may get a Javascript error under some circumstances. See CONF-5765 for details and a patch.

When using LDAP user management, changing passwords for local users won't work. See CONF-5775 for details and a patch.

Who should upgrade?

Confluence 2.1.5 fixes a number of bugs found in Confluence 2.1.4 and earlier. Customers are recommended to upgrade if they are experiencing any of the issues fixed in this release.

Confluence is a recommended upgrade for all customers using Confluence's new atlassian-user LDAP user management, as it fixes important issues related to LDAP integration.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from an earlier Confluence 2.1 release, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.0.3 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
Release Notes 1.1

Changes in 2.1.5

More than 48 issues were resolved between 2.1.4 and 2.1.5. For the complete list, see: [Issues resolved for 2.1.5](#)

Improvements

- LDAP queries are cached to improve performance - [CONF-5288](#)
- Administrators can insert custom HTML on every Confluence page, see Administration, Custom HTML - [CONF-5350](#)
- Tables created in the rich text editor don't have non-breaking spaces added to each cell - [CONF-5044](#)
- News improvements - Info tab available including list of version, News can be exported as PDF - [CONF-1989](#), [CONF-5582](#), [CONF-5594](#)

Notable Bugs Fixed

- Anchor, user profile and attachment links now round-trip properly in the rich text editor - [CONF-5678](#)
- Paging of LDAP users works properly - [CONF-5438](#)
- Servlet plugins can be disabled - [CONF-5598](#)
- Forgotten username emails work again - [CONF-5530](#)
- User profiles fixes with LDAP - [CONF-5225](#), [CONF-5549](#)
## Issues resolved for 2.1.5

This page last changed on Mar 15, 2006 by tom@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CONF-5549</td>
<td>The facility to operate on the LDAP profile (based on AtlassianUser) not only in the ReadOnly mode</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5350</td>
<td>Ability to add stuff to every page on Confluence (e.g., omnitute tracking)</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-1989</td>
<td>No blog entry versioning?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5582</td>
<td>Display &quot;Info&quot; tab for News/Blog posts</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5594</td>
<td>Export of news as PDF</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5044</td>
<td>Do we need   in table cells?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5621</td>
<td>Include latest release of chart macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5513</td>
<td>Unserializable objects in the session: bucket,search.lucene,SearchWordsLister</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4791</td>
<td>Error generating PDF when the title contains a '&amp;'.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5488</td>
<td>Site Welcome Message (unicode) changed to question marks after restarting server</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5517</td>
<td>Confluence 2.1.4 fails to compile due to missing maven dependencies</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5511</td>
<td>Upgrade from 2.0.3 to 2.1.4 fails on ReduceIndexNameLengthUpgradeTask for index sp_permusername_idx</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5530</td>
<td>Forgotten username doesn't work</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5497</td>
<td>NPE ErrorQueuedTaskQueue</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5584</td>
<td>Page restrictions UI doesn't update correctly</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5591</td>
<td>Breadcrumb expansion does not work on left-nav theme</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5601</td>
<td>Merge performance is incredibly bad on long pages</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5598</td>
<td>Servlet plugins do not disable or uninstall</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5225</td>
<td>User profiles not editable with LDAP user management</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5609</td>
<td>ClassCastException on Membership Check</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5605</td>
<td>Users with no groups still receive daily update emails</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5651</td>
<td>Gallery macro thumbnails height and width attributes are sometimes -1</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5561</td>
<td>DWREngine failure in IE and</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5654</td>
<td>Page titles with a period '.' breaks</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5547</td>
<td>The error by adding new group when using LDAP (based on AtlassianUser)</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5662</td>
<td>make ALT+s submit the comment form</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5630</td>
<td>Advanced page is not displaying Space Labels</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5658</td>
<td>Typist's error: missing single quote</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5664</td>
<td>Can't create multiple space labels on space admin</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5673</td>
<td>Demonstration space has broken link on Thumbnail page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5679</td>
<td>Local user accounts cannot login if LDAP or Active Directory server is down</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5687</td>
<td>Jira Issues macro seems to a 4 issues when using the</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>Issue Key</td>
<td>Description</td>
<td>Resolution Status</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>-------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>CONF-5525</td>
<td>'count' argument Error formatting macro: navmap; java.lang.ClassCastException</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5693</td>
<td>Unknown Group error on setting page level permission</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5695</td>
<td>NullPointerException thrown from MergedPager</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5438</td>
<td>Pagination of users is buggy beyond the 10th paged result</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5699</td>
<td>Missing image button in rich text editor when adding a new comment</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5709</td>
<td>ClassCastException when trying to fetch members</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5562</td>
<td>Name of file downloads doesn't work for non-ASCII characters</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5675</td>
<td>Fetching Mail leads into exception</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5730</td>
<td>Create external link in WYSIWYG does not work</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5746</td>
<td>System error when trying to set permissions for a space</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4614</td>
<td>When downloading Multi-byte named attachments, Its character is broken.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5777</td>
<td>WYSIWYG Linking Pop-up Does Not Work - specifying link and clicking OK results in nothing</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3645</td>
<td>Malformed links in Daily Change Email</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5578</td>
<td>Mail Import FAIL</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5105</td>
<td>When using LDAP, In &quot;Manage Users&quot; fullname is incorrectly displayed sometimes..</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5288</td>
<td>LDAP user and group queries need to cache</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-5537</td>
<td>Breadcrumbs in wrong order</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5545</td>
<td>Edit Profile tab missing for ldap users</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5678</td>
<td>Corrupted anchor link on round trip in create or copy page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6151</td>
<td>Link Properties in Rich Text Mode Not Working</td>
<td>Closed</td>
<td>HANDLED BY SUPPORT</td>
<td></td>
</tr>
<tr>
<td>CONF-5500</td>
<td>Cancelling of the Copy page function returns users to a blank page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5437</td>
<td>Text +like this+ should use the semantic &lt;ins&gt; rather than &lt;u&gt;.</td>
<td>Closed</td>
<td>WON'T FIX</td>
<td></td>
</tr>
<tr>
<td>CONF-6571</td>
<td>CLONE - Page titles with a period '.' breaks</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
<td></td>
</tr>
<tr>
<td>CONF-5533</td>
<td>Access denied on URL returned by remote API exportSpace()</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.2

This page last changed on Sep 07, 2006 by david.soul@atlassian.com.

Atlassian is proud to announce the release of Confluence 2.2, otherwise known as Shoalhaven. Existing customers who wish to upgrade, or new users who wish to try out Confluence for 30 days, can download Confluence from the Atlassian website: http://www.atlassian.com/software/confluence

Shoalhaven is the seventh major update to Confluence (in two years!). It introduces 'personal spaces', support for localisation/internationlisation, CAPTCHA spam protection, a multitude of new extension points for plugin developers, a simpler LDAP configuration syntax, and more.

Upgrading from 2.1

Upgrading Confluence should be pretty easy: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

MySQL Driver Support
For users using MySQL with Confluence 2.2 (or higher), please ensure that you are using the latest (3.1.12) MySQL Java Connector. Earlier versions of the MySQL connector have a bug which may prevent Confluence from upgrading successfully. (more information below)

LDAP Authentication
If you are currently using LDAP authentication through OSUser (that is, you adjusted your osuser.xml file), please do not upgrade to 2.2. This feature is currently unavailable and an issue has been filed for it here. This issue has been resolved in Confluence 2.2.1.

User Management Bug
You must apply the patch attached on this bug report to be able to create users in this version. This issue has been resolved in Confluence 2.2.1.

Index Rebuilding
Upgrading to 2.2 will trigger a rebuild of Confluence's search index. This will cause certain features such as search, the dashboard and RSS feeds to behave unpredictably for up to a few minutes after upgrading.

LDAP Integration Configuration Changes
The configuration file syntax for atlassian-user has changed. Customers who configured Confluence 2.1 to use AtlassianUser LDAP integration must follow the instructions on this page.

Anonymous Permission Changes
The way that anonymous permissions are applied to users who have logged in has changed. Administrators should understand how they have changed below before upgrading.

Plugin Loading Changes
Prior to Confluence 2.2, it was possible for an outdated plugin, or a plugin with unsatisfied dependencies, to break the entire plugin subsystem. Confluence 2.2 is much more careful about loading plugins, and isolating them if they break. This may, however, cause Confluence to refuse to load an entire plugin, simply because one of its contained plugin modules will not load.
Upgrading from 2.0 and earlier

Users upgrading directly from 2.0 or earlier should also read the 2.1 Release Notes for caveats regarding the 2.0 -> 2.1 upgrade.

Contents

1. New Features
2. Improvements
3. Notable Bug-fixes
4. Important note for MySQL users

See also: DOC:Issues Resolved for 2.2

New Features

Personal Spaces

Two of the most frequent questions we get from Confluence customers have been: "How do I give my users their own wiki?" and "How do I give my users their own blog?" It seems everybody needs a little Personal Space.

Personal spaces belong to particular users, and rather than being listed on the dashboard, are available from the user's profile. (Future versions of Confluence will feature a 'people browser' to make it easier to discover the interesting personal spaces on your server). They can contain pages and news items like any other space, be searched and browsed. They can be kept private, or opened up so the whole world can view and edit them, just like global spaces.
Your **personal space** is your own private workspace within Confluence. You can optionally let other people **view** or **contribute** to it.

### Who can contribute to your personal space?

You can customize these permissions once the space is created.

Choose who can **view** content:

- Me
- Registered users - anyone logged into Confluence
- Anonymous - anyone, logged in or not

Choose who can **contribute** (create and edit) content:

- Me
- Registered users - anyone logged into Confluence
- Anonymous - anyone, logged in or not

### Choose Theme

To change the theme of this space, select one below.

- **Default Theme**
  
  Use the globally configured look and feel. You can customise colour schemes and layouts manually.

- **Left Navigation Theme**
  
  Provides a navigation bar on the left hand side of the screen.

Confluence's search and RSS builder interfaces have been updated to make it easy to choose whether you're interested in personal spaces or not.

#### SEARCH:

- cheese

- **All Spaces**
- **Favourite Spaces**
- **Global Spaces**
- **Personal Spaces**

**Favourite Spaces**

- Confluence
- Confluence Community
- Documentation Staging
- Javablogs News and Updates
- Atlassian News
- Confluence Extensions

Oh, and if you create a personal space, don't forget to upload (or choose) your own profile picture, so people can see who you are.
Edit Profile | Labels | Watches | Drafts

Your profile picture is used as the icon for your personal space, and to represent your choice from one of our standard icons.

**Choose a Profile Picture:** These are the profile pictures you have uploaded.

![Profile Picture]

**Upload a Profile Picture:** Upload your own profile picture. Profile pictures will be automatically resized to 40 x 40 pixels.

- [Choose File]
  - no file selected
- [Upload]

**Default Icons:** You can also select a profile picture from one of these default icons.

Localisation/Internationalisation

Confluence now supports drop-in **language packs** to change the language of the user interface. The global administrator can select a default language for the entire site, while individual users can set their preferred language in their preferences.

No language packs are currently available, but we are currently working with our global partners so we can begin to provide translations. If you are interested in translating Confluence into another language, you can find instructions on building a language pack here: [Language Pack Plugins](#).

CAPTCHA Support

![CAPTCHA Image] Please type the word appearing in the picture.

Many of the more public Confluence wikis have been suffering at the hands of spammers. CAPTCHA support adds the familiar 'type in this word' question to signup, edit and comment forms, to defeat...
automated spamming bots. You can turn on CAPTCHA from the global administrative console, and also choose which users will, or will not be subject to the spam check.

Captcha: ON | OFF

Exclusions
By default, captchas are shown to only anonymous users. This streamlines the editing process for trusted, signed in users.

Exclude from captchas:
- No one (everyone will see captchas)
- Signed in users
- Members of the following groups

Save

Plugin Improvements
Each version of Confluence is more customiseable than the last. One of the most exciting things to come from our recent plugin competition was learning just how creative our plugin developers are, and discovering more ways we can help them add features to Confluence.

- Job Plugins and Trigger Plugins allow you to schedule periodic tasks to run within Confluence
- Web UI Plugins allow plugin developers to add new links, buttons and tabs to the Confluence interface, and make it easier for theme developers to stay up to date with changes to the Confluence UI.
- Code Formatting Plugins allow you to plug support for new languages into the {code} macro (or override the existing language support with something better).

We've also made a number of improvements to the plugin system, including:

- Making sure that a single 'rogue' plugin can't bring down the whole plugin subsystem.
- Enabling 'conditional get' for plugin resources, so browsers don't download them again and again.
- Fixing problems that may occur when a servlet or component plugin is reloaded or upgraded. (With many thanks to Dan Hardiker of Adaptavist.)

New atlassian-user Configuration Syntax
As promised, we have cleaned up the configuration file syntax for our atlassian-user user management library. This should make it much easier to configure Confluence to use external user repositories such as LDAP. You can find details of the new configuration file format here: Add LDAP Integration With Group Management

Improvements
Permissions Changes

In Confluence 2.1 and earlier, permissions that were assigned to Anonymous users were not automatically assigned to logged-in users, leading to the confusing situation where you could view a page when not logged in, but not view it when you were logged in.

In Confluence 2.2 and later, permissions that are assigned to the Anonymous user are also assigned to all logged in users. The sole exception to this rule is the global Use Confluence permission, which must still be explicitly granted to any user who wishes to log in. (This exception is necessary due to licensing restrictions).

Search

With help from Kelvin Tan, we've overhauled much of the underlying infrastructure of Confluence's search engine. Search in Confluence should now be more efficient, and some searches that were problematic before (such as wildcard* searches) now work as you would expect them to.

LDAP Performance

Confluence's performance against external LDAP user repositories should now be significantly faster.

Other

- The General Configuration screen is much better organised
- You can choose a space's initial permissions and theme when you create it
- The left-navigation theme has improved
- Themes may now be packaged with icons that will be displayed in the theme selector (see the screenshot of the "create personal space" screen above for an example)
- Confluence Standalone is now packaged with Tomcat 5.5
- Atom feeds are now generated to the Atom 1.0 standard
- The back-end storage of attachment files has been changed to resolve a number of problems that were caused when the underlying filesystem did not support the character-set of the attachment filename

Important note for MySQL users

For users using MySQL with Confluence 2.2 (or higher), please ensure that you are using the latest (3.1.12) MySQL Java Connector. Earlier versions of the MySQL connector have a bug which is triggered by improvements in Confluence 2.2. These earlier connector versions will result in an error being recorded in your logs on upgrade (and will result in unstable operation of Confluence)

ERROR [hibernate.tool.hbm2ddl.SchemaUpdate] execute could not complete schema update

You can download the latest MySQL connector from the MySQL Java Connector 3.1 download page. Please be sure that you remove any older versions of the connector from your application server.
<table>
<thead>
<tr>
<th>Development and Support 😊</th>
<th>Oversight &amp; Mis-management 😞</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td>Jeremy Higgs</td>
<td>Scott Farquhar</td>
</tr>
<tr>
<td>David Loeng</td>
<td></td>
</tr>
<tr>
<td>Charles Miller</td>
<td></td>
</tr>
<tr>
<td>Daniel Ostermeier</td>
<td></td>
</tr>
<tr>
<td>Christopher Owen</td>
<td></td>
</tr>
<tr>
<td>Matt Ryall</td>
<td></td>
</tr>
<tr>
<td>Jens Schumacher</td>
<td></td>
</tr>
</tbody>
</table>
# Issues Resolved for 2.2

This page last changed on Apr 27, 2006 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>CONF-1470</td>
<td>Add Tomcat HTTPS connector commented out in Standalone</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-5351</td>
<td>Upgrade Confluence Standalone to use Tomcat 5.5</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-5843</td>
<td>Disable Glue servlet on JRockit</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-5209</td>
<td>Review the 2.2 Release Impact document</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>X</td>
<td>CONF-5155</td>
<td>move bucket cache manager into its own package</td>
<td>Resolved</td>
<td>WON'T FIX</td>
</tr>
<tr>
<td>+</td>
<td>CONF-3725</td>
<td>Plugin Package and Module Configurations</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-193</td>
<td>Confluence services</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-3724</td>
<td>Pluggable Menus</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-1315</td>
<td>Internationalization</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-577</td>
<td>Tie blogs in with user profiles</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-1080</td>
<td>Personal Space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-5477</td>
<td>Add support for localisation of help tips sidebar</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-6002</td>
<td>Throw an event on user searches</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-4273</td>
<td>Plugins hooking into the admin UI</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-4861</td>
<td>Review the writing/export of files to disk using content IDs, instead of filenames</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-5057</td>
<td>Allow for manually flushing the Confluence caches.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-5172</td>
<td>Change object id generation to be cluster friendly.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>+</td>
<td>CONF-5470</td>
<td>RSS feeds don't honour page</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
</tbody>
</table>
CONF-4399  Make Plugins configurable from the admin interface  Closed  DUPLICATE

CONF-5613  Add new plugin events  Closed  FIXED

CONF-5834  Clean up General Configuration  Resolved  FIXED

CONF-5847  Add authentication to discoverable RSS feeds when user is logged in  Resolved  FIXED

CONF-5846  Add feed icon to pages with discoverable RSS  Closed  FIXED

CONF-5854  Move Atom feeds to Atom 1.0  Resolved  FIXED

CONF-5780  Make /admin/ redirect to /admin/console.action  Closed  FIXED

CONF-5739  Create personal spaces via remote API  Resolved  FIXED

CONF-5738  Add ability to upload profile photos via the remote API  Resolved  FIXED

CONF-5741  Convert space to personal space via Remote API  Resolved  FIXED

CONF-5022  Remove EHCache specific implementations from Confluence.  Resolved  FIXED

CONF-5903  Logged in users should inherit access rights of anonymous users.  Closed  DUPLICATE

CONF-5917  Add pluggable formatters to the code macro  Closed  FIXED

CONF-5905  Confluence 2.2 - feedback  Resolved  FIXED

CONF-5977  Parent Page field in page Edit screen is clearly too small for comfortable editing  Resolved  FIXED

CONF-3208  Allow attachments to be stored in the database  Resolved  FIXED

CONF-3613  Problem installing on Oracle schema when other schemas in the same database have one or more tables  Closed  FIXED
<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-4860</td>
<td>Use an attachment's content ID instead of filename when writing to disk</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-2471</td>
<td>Unix backup fails to restore on windows when attachment filenames contain accented characters</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-4974</td>
<td>Concurrent modification exception in SimpleDisplayServlet</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-5205</td>
<td>Admin license details link hangs</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-5214</td>
<td>Searching for multiple user using the user-filter is currently not possible</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-3183</td>
<td>Broken Plug-ins are fatal</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-5529</td>
<td>User profile attachments are not deleted when the user is removed</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-5528</td>
<td>User profile pictures are stored twice in the one upload</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-4953</td>
<td>Giving Anonymous Access does not give logged in user permission</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-5422</td>
<td>Anonymous access permissions are not inherited - logged in users don't even share anonymous access privileges</td>
<td>Closed DUPLICATE</td>
</tr>
<tr>
<td>CONF-5598</td>
<td>Servlet plugins do not disable or uninstall</td>
<td>Resolved FIXED</td>
</tr>
<tr>
<td>CONF-3326</td>
<td>Uploading a modified plugin with the same name does not update velocity template</td>
<td>Closed FIXED</td>
</tr>
<tr>
<td>CONF-4903</td>
<td>Plugin keys must be lowercase</td>
<td>Closed FIXED</td>
</tr>
<tr>
<td>CONF-4478</td>
<td>plugins cannot use capitalization in their</td>
<td>Closed FIXED</td>
</tr>
<tr>
<td>No.</td>
<td>Issue Description</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>CONF-5724</td>
<td>Create page doesn't use space logo</td>
<td></td>
</tr>
<tr>
<td>CONF-5418</td>
<td>Plugin resource servlet does not provide headers necessary for caching</td>
<td></td>
</tr>
<tr>
<td>CONF-5868</td>
<td>XML import adds leading newline to CDATA fields</td>
<td></td>
</tr>
<tr>
<td>CONF-5116</td>
<td>Non-breaking space html entities showing up in search result page</td>
<td></td>
</tr>
<tr>
<td>CONF-2948</td>
<td>Attachments unreliable due to file-names</td>
<td></td>
</tr>
<tr>
<td>CONF-5580</td>
<td>Searching by username and full name fails</td>
<td></td>
</tr>
<tr>
<td>CONF-5653</td>
<td>Space import doesn't set mail 'From' address</td>
<td></td>
</tr>
<tr>
<td>CONF-5918</td>
<td>Standalone package has apps in the webapp directory</td>
<td></td>
</tr>
<tr>
<td>CONF-5912</td>
<td>Xwork actions fail due to being unable to load the class from the plugin</td>
<td></td>
</tr>
<tr>
<td>CONF-5943</td>
<td>Livesearch results print out (searchresultwithexcerpt)</td>
<td></td>
</tr>
<tr>
<td>CONF-5710</td>
<td>When inserting image onto a page via WYSIWYG Editor -&gt; &quot;Insert/Edit Image&quot; icon, the &quot;ok&quot; and &quot;cancel&quot; buttons are no longer visible when there are too many image attachments</td>
<td></td>
</tr>
<tr>
<td>CONF-5526</td>
<td>Favourites (spaces and pages) are lost on site restore</td>
<td></td>
</tr>
<tr>
<td>CONF-5989</td>
<td>Layout all screwed up on Preview</td>
<td></td>
</tr>
<tr>
<td>CONF-5995</td>
<td>Attachments show up as anonymous on dashboard</td>
<td></td>
</tr>
<tr>
<td>CONF-6046</td>
<td>Switching between rich text editor and</td>
<td></td>
</tr>
</tbody>
</table>

Note: The status of the issues is marked as 'Resolved' or 'Closed', and the fixes are marked as 'FIXED' or 'OBSOLETE'.
CONF-5951  wiki editor breaks markup
Attachment file names can be set to an empty string
Resolved  FIXED

CONF-5909  japanese character search input does not send correct query
Resolved  FIXED

CONF-5056  Search by "Last Week" and "Last Month" fail in the new year.
Resolved  FIXED

CONF-5585  Moving a page should also move children pages
Resolved  FIXED

CONF-5915  The Space dropdown in the Move Page box on Edit view is not alphabetical
Resolved  FIXED

CONF-5761  Manage groups reports only 100 members per group for LDAP groups
Resolved  FIXED

CONF-5754  Accessing an unauthorized download directly returns a "401 Unauthorized" page, rather than "Page Not Found"
Resolved  FIXED

CONF-5987  Entering a task with a % in {dynamictasklist} will make the page unusable
Resolved  OBSOLETE

CONF-4879  Navigation map macro throws NullPointerException when there are no labels
Closed  DUPLICATE

CONF-4777  Login does not redirect to last page location
Resolved  FIXED

CONF-3168  Lucene reindexing fails and goes to 100% CPU on multi-processor systems
Resolved  ANSWERED

CONF-7025  Add Page with no title gives no error and does not save
Resolved  FIXED

CONF-4503  Problems with special characters in
file names
Release Notes 2.2.1

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.2.1 is a maintenance release that resolves some issues users may have encountered using Confluence 2.2, including issues related to LDAP user management, i18n, personal spaces and drafts.

2.2.1 is a free upgrade for all customers who purchased their Confluence license after May 18th, 2004.

Who should upgrade?

Confluence is a recommended upgrade for all customers using Confluence with external LDAP user management. All other customers should consult the list of issues resolved, and determine if this release is necessary for their own deployments.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

⚠ Draft Table Upgrade
Upgrading Confluence to 2.2.1 will cause all autosaved 'drafts' to be deleted from the database. Be sure everyone has saved their work before upgrading!

⚠ Confluence 2.2.1 and 2.2.1a
The current version available for download is 2.2.1a. 2.2.1 was originally released with an old version of the atlassian-plugins library, which caused the plugin fixes listed below not to be included in the release. Confluence 2.2.1a resolves that problem.

⚠ PageChildrenMacro IndexOutOfBoundsException error
Customers who downloaded 2.2.1 or 2.2.1a before the official announcement may encounter an error when using the {children} macro to view the children of other pages in the same space. There is a patch for this issue attached to CONF-6197

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.1
For a complete list, see: Issues resolved for 2.2.1

External User Management

- Creating a new user will no longer cause a primary key violation on some Confluence installations. CONF-6092
- Fixed a regression where authentication against an external LDAP server via the old OSUser integration layer did not function. CONF-6052
- Fixed a possible ClassCastException on viewing a user's profile. CONF-6021

Plugins

Note: Due to a scheduling error, these fixes were not included in Confluence 2.2.1, but are in the supplementary 2.2.1a release.

- Component plugins are now correctly unregistered when they are removed. CONF-4041
- Plugins may now contain and reference dependent jar files. Thanks to Dan Hardiker of Adaptavist for the patch. PLUG-8
- Installing an older version of an already-installed plugin no longer causes an error. PLUG-12
- Removing an uploaded plugin no longer causes it to be deactivated the next time it is installed. PLUG-13

General Stability

- Confluence can now store drafts for spaces with long (>20 character) keys. CONF-6010
- Attachments stored in MySQL databases will no longer be silently truncated to 64KB. CONF-6120
- Global language setting is now saved correctly. CONF-6027
- Missing attachment data no longer causes PDF export to crash. CONF-6063
- Misleading “attachment missing” errors are no longer logged after a space import. CONF-6026

Improvements

- A Javascript alert warns users if they have left the CAPTCHA field blank. CONF-5984
- A link to the logged-in user’s personal space is included on every page (from their full name). CONF-6056
- The {children} macro can now show the children of pages in another space. CONF-5986
### Issues resolved for 2.2.1

This page last changed on May 17, 2006 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-5986</td>
<td>Show children of a page from another space</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6056</td>
<td>Link personal spaces from a user's name on the top right hand side</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6096</td>
<td>Don't placeFocus() on edit pages</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5984</td>
<td>Javascript warning if captcha is not filled in</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6018</td>
<td>NullPointerException in recently updated macro for anonymous use when profiling is enabled</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6019</td>
<td>Language pack plugin directory not included - no build.xml file</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6024</td>
<td>&quot;No more results&quot; error when running atlassian-user migration JSP</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6021</td>
<td>View User Profile throws ClassCastException</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6022</td>
<td>Unique Index Violations</td>
<td>Closed</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-6026</td>
<td>Attachment filename fixer on space import attempts to fix filenames of attachments from other spaces</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6027</td>
<td>Global language setting not honoured</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Ticket</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-5966</td>
<td><code>uploadspace:logo.action</code> throws exception</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6039</td>
<td>NullPointerException in <code>PermittedPagesScope</code></td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6040</td>
<td>ClassCastException when viewing page information</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6013</td>
<td>Unable to specify the <code>publishDate</code> of a blog entry using the SOAP API</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6023</td>
<td>Error starting up Confluence 2.2</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6025</td>
<td>NullPointerException in <code>HibernateProfileProvider.getPropertySet</code></td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6061</td>
<td>Spaces or international characters in usernames causes a 404 page when trying to view the preferences page</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6063</td>
<td>PDF export throws error when attachment data is missing</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6075</td>
<td>Cannot create personal space if username contains international characters</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5407</td>
<td>Entering a value containing a `'$' dollar sign for a page template variable throws IllegalArgumentException</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6081</td>
<td>'Add comment' link is startlingly close to page body text at times - may confuse some users</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6087</td>
<td>Templates throw error when variables contain certain strings</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6048</td>
<td>Repeating italic and bold markers (<code>, </code>) in the same line makes the view gets confused (display some text as bold,</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
CONF-6107 Attachments are not included in backup when stored in database
Resolved FIXED

CONF-6065 Duplicated versions in page version history
Resolved WON'T FIX

CONF-6010 Drafts spacekey column length restricted to 20 causing BatchUpdateException
Resolved FIXED

CONF-6110 CLONE - LDAP Authentication via OSUser is broken
Closed FIXED

CONF-6050 System error clicking next on manage users
Resolved FIXED

CONF-6092 Cannot create new user due to primary key violation or unique constraint error
Closed FIXED

CONF-6120 Attachments truncated to 64k in MySQL database storage
Resolved FIXED

CONF-6176 Servlet Plugins don't unload
Resolved FIXED

CONF-4676 Can't disable "Script executing and show flash macro" plugin, (children): macro fails with IndexOutOfBoundsException when viewing children of another page in the same space.
Resolved FIXED

CONF-6197 LDAP Authentication via OSUser is broken
Closed FIXED

CONF-4041 Uploaded component plugins aren't unregistered when the plugin is uninstalled
dynamictasklist tasks cannot be in Japanese (and presumably can't contain any multi-byte
Resolved FIXED

CONF-5283
CONF-6125  Spaces in Login Name cause the User preferences Link to break.  Closed  FIXED
CONF-6123  Invalid user search term throws NPE  Resolved  FIXED
CONF-6028  upgrade from 2.1 -> 2.2 fails  Closed  FIXED
CONF-6124  Changing the main decorator within a space updates the global main decorator as well  Closed  FIXED
CONF-6083  Active directory users cannot login to Confluence after a certain time  Resolved  FIXED
CONF-6045  Can not create new users after importing Confluence 2.1.5 full-export into 2.2  Resolved  DUPLICATE
CONF-6268  Edit page with code macro displays error instead of code text  Resolved  FIXED
CONF-6073  Attachments can be renamed to an already existing attachment name  Resolved  FIXED
CONF-6293  'Undefined Pages' shows link tips  Resolved  FIXED
Release Notes 2.2.10

Confluence 2.2.10 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.2. 2.2.10 resolves an assortment of issues that were reported by customers.

2.2.10 is a free upgrade for all customers who purchased their Confluence license after November 30th, 2005.

Who should upgrade?

Confluence 2.2.10 is a minor bugfix release. Customers should consult the list of issues resolved in this release to determine if it is worth their while upgrading.

If you are running Confluence 2.2.8, but do not wish to upgrade to 2.2.10, we strongly recommend installing the patch attached to CONF-6908 to resolve an issue related to re-indexing performance.

Customers still running Confluence 2.2.2 or earlier are recommended to upgrade, as a significant security vulnerability was resolved in Confluence 2.2.3

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from another Confluence 2.2.x version, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.10

2.2.10 resolves over 40 issues. All these issues are listed below:
<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-5489</td>
<td>Trackbacks are broken</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7092</td>
<td>Section/Column is broken for fixed-width columns</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6853</td>
<td>Page and Space decorators need a catch all mode for $context and $mode</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7387</td>
<td>Possible to create user from XML RPC with null fullname</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7181</td>
<td>The link table can have rows with spurious space keys inserted</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7163</td>
<td>SQL problem with deleting users</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6741</td>
<td>BucketPropertySetItem belonging to deleted page breaks space import</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6913</td>
<td>Images don't export to PDF if capitalization is wrong</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-2921</td>
<td>Daily emails list user login names not full names</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6995</td>
<td>Rich text editor inserts images with no space between text and '!'</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7035</td>
<td>Draft form can be submitted with multiple space keys</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7038</td>
<td>User with null email address breaks daily report job</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7050</td>
<td>labelString attribute doesn't restrict RSS feeds</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7061</td>
<td>Some digest notification links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7034</td>
<td>don't include the base URL problem with embedding mpeg and mp4 within page contentbylabel macro throws Java errors when used in BLOG or COMMENT objects</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7030</td>
<td></td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4801</td>
<td>include cancel button for comments</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7134</td>
<td>groupSearchAllDepths and userSearchAllDepths not respected</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7132</td>
<td>Clicking 'add' on the permissions administration screen when there is nothing to add should result in a validation error</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7282</td>
<td>&quot;Create Personal Space&quot; can create Space with NULL name</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7305</td>
<td>For comments, first CAPTCHA word fails</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7285</td>
<td>Moving attachment to another page clobbers authors of previous versions</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7322</td>
<td>Jiraissues macro doesn't show icons or timestamps</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7189</td>
<td>Export to PDF &amp; broken {attachment} macro links</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6835</td>
<td>wrong mouse tool tip text</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6936</td>
<td>ConfigureSpaceLogo in affected by attachment size</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6950</td>
<td>Export to PDF using icon=false in templates results in PDF with each word on it's own line</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6969</td>
<td>Favorites listing on Personal Labels page -- paging broken</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6991</td>
<td>Can't link to image</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Resolution</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>CONF-7000</td>
<td>Mail sender shows as null in RSS feeds</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7006</td>
<td>After un-installing plugin notification is incorrect</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7058</td>
<td><code>{dynamictasklist}</code> macro: Problem deleting last item</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7016</td>
<td>Restricting a page to an invalid group shows misleading error</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7085</td>
<td>Editing lists in tables with WYSIWYG adds extra indent asterisk (*) to list</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7101</td>
<td>Draft merge failure logging is too verbose</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6983</td>
<td>Global Statistics Plugin - incorrect SQL statement</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7145</td>
<td>Pagination of user labels fails when context path is used</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7249</td>
<td>DefaultMailAccountManager.getClosedStore error throws object reference instead of useful toString</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7178</td>
<td>&quot;Recently Updated&quot; list size on dashboard resets to 10 on each visit to dashboard</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7270</td>
<td>Update blog post remotely doesn't save history</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7366</td>
<td>Cancelling create page workflow</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8272</td>
<td>Confluence - What's This? link near page restrictions note brings up error</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6833</td>
<td>hardcoded http request in <code>{dynamictasklist}</code> macro</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.2.2

This page last changed on Jun 29, 2006 by david.soul@atlassian.com.

Confluence 2.2.2 is a maintenance release that resolves some issues users may have encountered using Confluence 2.2, including issues related to PDF generation, internationalisation, backup/restore and more.

2.2.2 is a free upgrade for all customers who purchased their Confluence license after May 31st, 2005.

Who should upgrade?

Confluence 2.2.2 resolves CONF-6237, a bug related to the backup and restore of personal spaces. As such it is a recommended upgrade for customers wishing to restore or import data containing personal spaces. Other users should consult the list of resolved issues, and determine if the upgrade is necessary for their installation.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2 or 2.2.1, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.2

Over 25 issues were resolved between Confluence 2.2.1 and 2.2.2. For a complete list, see: Issues resolved for 2.2.2

Backup/Restore

- An issue was resolved that could cause personal spaces to be imported incorrectly from backups. Existing backup files are still valid, the error was only during the re-importing process – CONF-6237

PDF Export

- PDF exports can now be generated for pages containing non-latin characters. To enable these
exports you will need to provide Confluence with the correct font – CONF-1457
• PDF exports created in Confluence are now properly searchable, both in Confluence (CONF-1360) and in Adobe Acrobat (CONF-4529)

Other

• (UI) Fixed a Javascript error when saving a page with CAPTCHA disabled – CONF-6221
• (User management) Resolved an error when deleting a non-empty group – CONF-6082
• (i18n) Resolved issues with hard-coded English text in various places – CONF-6202
• (i18n) Resolved issues with internationalisation keys showing up in the permissions guide – CONF-6053
## Issues resolved for 2.2.2

This page last changed on Jun 01, 2006 by cmiller.

### Atlassian JIRA (26 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>CONF-5910</td>
<td>Allow support for Japanese license keys in 2.2.1.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-1457</td>
<td>PDF export of unicode pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6119</td>
<td>Default embedded rendering to <code>&lt;img&gt;</code> if we can't determine the mime type</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-1360</td>
<td>Generated PDF is not searchable</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6260</td>
<td>Dashboard favourites should link to <code>/label/my:favourite</code></td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6064</td>
<td>Hide PDF export link when viewing historical page version</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6203</td>
<td>Missing Linked Pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6202</td>
<td>More Missing Strings (&lt;Notation Guide&gt;)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6118</td>
<td>IllegalStateException when creating a space that already exists</td>
<td>Closed</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6211</td>
<td>Including a slash at the end of the personal space URL does not work.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6219</td>
<td>Spelling error in &quot;page conflict&quot; messages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>x</td>
<td>CONF-6221</td>
<td>Javascript error &quot;captchaTextField has no properties&quot; when saving edits and CAPTCHA is</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF</td>
<td>Issue Description</td>
<td>Status</td>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------------------</td>
<td>---------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>6132</td>
<td>Editing a page with the Rich Text Editor breaks picturized links.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>5979</td>
<td>CAPTCHA gets confused when you're editing two pages at once.</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>6082</td>
<td>Exception when deleting group with members</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>6116</td>
<td>Single page PDF export fails</td>
<td>Resolved</td>
<td>NOT A BUG</td>
<td></td>
</tr>
<tr>
<td>6158</td>
<td>Personal spaces appear on recently updated, even when the personal space is not accessible</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>6237</td>
<td>Restore loses defaults to &quot;global&quot; in the field &quot;spacetype&quot; in the &quot;space&quot; table</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>6251</td>
<td>Error thrown user email value is not set</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>6185</td>
<td>$item in daily summary mail as author of anonymous comment</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>2547</td>
<td>Paths to internal images are incorrect on export.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>5631</td>
<td>SMTP is broken in the stand-alone config</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>6262</td>
<td>License partner not checked on upgrade</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>4529</td>
<td>Generated PDFs are not searchable</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>6053</td>
<td>Permission guide link gives garbage screen</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.2.3

Confluence 2.2.3 is a maintenance release that resolves some issues users may have encountered using Confluence 2.2, including issues related to LDAP user management, installation, backup/restore and more. This release also includes a patch for a serious security issue regarding global permissions.

2.2.3 is a free upgrade for all customers who purchased their Confluence license after June 8th, 2005.

Who should upgrade?

Confluence 2.2.3 resolves a security bug related to unauthorised modification of global permissions. As such this release is a recommended upgrade for all customers.

For users of older versions of Confluence who do not wish to upgrade, a patch for this issue will be available shortly.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2, 2.2.1 or 2.2.2, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.3

As part of a new process for pushing out bug fix releases more quickly, this release follows just a week after the release of 2.2.2. Six issues were resolved between Confluence 2.2.2 and 2.2.3. For a complete list, see: Issues resolved for 2.2.3

Global Permissions

- A security problem was identified where unauthorised users could modify global permissions. For more information, including details on how to patch previous Confluence versions, please see the security advisory.
Backup/Restore

- An issue was resolved where attachments were not imported from space exports. Existing backup files are still valid, the error was only during the re-importing process – CONF-6286

External user management

- Queries to LDAP repositories are now correctly escaped, so user and group names may contain commas – USER-106

Other

- (UI) Fixed parent link in preview of new page – CONF-6275
- (authentication) Fixed incorrect redirect from login when base URL contained an extra slash – CONF-6261
- (installation) Improved error handling during Confluence setup – CONF-6276
## Issues resolved for 2.2.3

This page last changed on Jun 08, 2006 by mryall.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-6286</td>
<td>Importing post-2.2 space export does not correctly import attachments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6070</td>
<td>sAMAccountName vs display names in confluence LDAP integration</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6558</td>
<td>LDAP queries do not escape special characters correctly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6276</td>
<td>Setup ignores exceptions thrown by LDAP group manager getGroup()</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6275</td>
<td>Links in preview mode do not work when creating a page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6261</td>
<td>LoginAction does not generate correct original URL from Referer if base URL ends with a slash</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6288</td>
<td>Welcome text not displayed on homepage</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6350</td>
<td>Welcome message resetting to default</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td></td>
<td>CONF-6331</td>
<td>Security problem in permission editing</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 2.2.4

This page last changed on Jun 22, 2006 by cmiller.

Confluence 2.2.4 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.2.

2.2.4 is a free upgrade for all customers who purchased their Confluence license after June 22nd, 2005.

Who should upgrade?

Confluence 2.2.4 is a minor bugfix release. Customers should consult the list of issues resolved in this release to determine if it is worth their while upgrading.

Customers still running Confluence 2.2.2 or earlier are recommended to upgrade, as a significant security vulnerability was resolved in Confluence 2.2.3

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2 - 2.2.3, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.4

We are currently trialling a process of more frequent bugfix releases, to make fixes available as soon as possible to those people who want them. 2.2.4 resolves six issues:

See also: Issues Resolved for 2.2.4

User Interface

- The "Space Admin" tab is no longer displayed to non-administrators. (Even though the tab was visible, non-administrators could still not access any of the administrative functions) CONF-6385
- Personal spaces are no longer listed in the space picker in the feed builder CONF-6830
- Attempts to create news items with invalid characters now fail with the correct error message
CONF-6358

Performance

- The velocity manager is no longer loaded twice, saving memory. CONF-6355
- The velocity cache now expires templates that have not been recently used, potentially saving memory. CONF-6339

Developer API

- Putting pages into, and removing them from the trash now trigger the correct events within Confluence CONF-6353
## Issues Resolved for 2.2.4

This page last changed on Jun 22, 2006 by cmiller.

### Atlassian JIRA (9 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Logo]</td>
<td>CONF-6353</td>
<td>Add trashed and restore events for pages and news</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-6355</td>
<td>Wasting memory - Velocity is loaded twice</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-6380</td>
<td>Personal spaces appear in space picker (feed builder)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-6385</td>
<td>Space admin tab is visible to non-space admins</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-6358</td>
<td>Error creating news</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-6339</td>
<td>Velocity cache never gets cleared</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-6449</td>
<td>No email address in LDAP causes page editing/movement to fail if user is watching</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Logo]</td>
<td>CONF-6879</td>
<td>An error occurs when creating an RSS Feed,</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
## Issues Resolved

<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Assignee</th>
<th>Reporter</th>
<th>Pr</th>
<th>Status</th>
<th>Res</th>
<th>Created</th>
<th>Updated</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-68</td>
<td>Removing permission to upload attachments still leaves ability to upload attachments form the Page Editor Area.</td>
<td>Don Brown</td>
<td>Brendan Patterson</td>
<td></td>
<td>Closed</td>
<td>DUPLICATE</td>
<td>Aug 24, 2006</td>
<td>Sep 07, 2006</td>
<td></td>
</tr>
<tr>
<td>CONF-64</td>
<td>Exception when attaching new image in rich text editor insert image popup</td>
<td>Dave Loeng</td>
<td>Matt Ryall</td>
<td></td>
<td>FIXED</td>
<td>Resolved</td>
<td>Jun 30, 2006</td>
<td>Sep 07, 2006</td>
<td></td>
</tr>
<tr>
<td>CONF-64</td>
<td>Base URL derived from request includes unnecessary port 443</td>
<td>Unassigned</td>
<td>Matt Ryall</td>
<td></td>
<td>FIXED</td>
<td>Resolved</td>
<td>Jun 22, 2006</td>
<td>Jun 22, 2006</td>
<td></td>
</tr>
<tr>
<td>CONF-64</td>
<td>Report URL munging doesn't work</td>
<td>Unassigned</td>
<td>Matt Ryall</td>
<td></td>
<td>FIXED</td>
<td>Resolved</td>
<td>Jun 21, 2006</td>
<td>Jun 21, 2006</td>
<td></td>
</tr>
</tbody>
</table>
properly for links with single quotes

CONF-648 mail count no longer works
Unassigned Tom Davies FIXED Jun 20, 2006  Jun 21, 2006

CONF-639 Make more indexing language options available in General Configuration
Unassigned Charles Miller FIXED Jun 18, 2006  Jul 24, 2006

CONF-634 Search for Japanese strings should not include partial matches
Unassignedeeraj Jhanji FIXED Jun 18, 2006  Jun 22, 2006

CONF-630 Add Attachment link shows without permission
Matt Yokell Mike Cannon-Brookes FIXED Jun 05, 2006  Jun 22, 2006

CONF-622 Global custom color scheme is not used by spaces
Unassignedns Schumacher FIXED May 23, 2006  Jul 20, 2006

CONF-618 Trying to navigate past the 10th page in Manager Users throws an exception
Christopher Dave Owen Loeng FIXED May 17, 2006  Jun 27, 2006

CONF-617 Delete Icon (trash)
Unassigned Dam Field FIXED May 16, 2006  Sep 06, 2006
can) functionality not immediately obvious to end users

CONF-61 System error viewing drafts
Unassigned Bob Swift FIXED Resolved May 12, 2006 Jul 11, 2006

CONF-584 Blog-post + label that doesn't exist results in all news shown
Unassigned Agnes Ro Paul Pavlidis FIXED Resolved Apr 03, 2006 Jul 05, 2006

CONF-543 Text + like this: should use the semantic <ins> rather than <u>
Unassigned Matt Ryall WON'T FIX Closed Feb 07, 2006 Jun 25, 2006

CONF-449 MAP/Exchange support in mail archive
Unassigned Robert Christenson FIXED Closed Oct 27, 2005 Nov 16, 2006

CONF-396 Support accessing the POP account via SSL
Unassigned Daniel Ostermeier FIXED Closed Sep 01, 2005 Jul 10, 2006

CONF-366 Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as
Unassigned Dave Loeng FIXED Closed Jul 21, 2005 Jan 11, 2007
<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Status</th>
<th>Assigned To</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-22</td>
<td>IMAPS/POPS</td>
<td>Unassigned</td>
<td>Mike Cannon-Brookes</td>
<td>Nov 25, Nov 16, 2004 2006</td>
</tr>
</tbody>
</table>

any of Confluence's tables
Release Notes 2.2.6a

This page last changed on Jul 13, 2006 by dhardiker@adaptavist.com.

Confluence 2.2.6a is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.2.

2.2.6a is a free upgrade for all customers who purchased their Confluence license after June 22nd, 2005.

Who should upgrade?

Confluence 2.2.6a is a minor bugfix release. Customers should consult the list of issues resolved in this release to determine if it is worth their while upgrading. Customers running Confluence 2.2.5 should upgrade, as 2.2.6a fixes a security problem which could allow an unauthorised user to modify space mail box configuration. Only version 2.2.5 is affected by this vulnerability. Customers running 2.2.5 who don't wish to upgrade can follow these instructions to patch the vulnerability.

Customers still running Confluence 2.2.2 or earlier are recommended to upgrade, as a significant security vulnerability was resolved in Confluence 2.2.3

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2 - 2.2.3, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.6a

We are currently trialling a process of more frequent bugfix releases, to make fixes available as soon as possible to those people who want them. 2.2.6a resolves 20 issues.

A few of the issues are noted below, see Issues Resolved for 2.2.6a for a complete list.

User Interface

- The rich text editor allows underlining to be removed, and lists in tables are better behaved.
CONF-6450, CONF-6508
- Users with capital letters in their names can watch pages and spaces. CONF-6489

LDAP

- LDAP users can be removed from local Confluence groups. CONF-6131
- The 'Change Password' link is no longer shown when LDAP is enabled. CONF-6360

Performance

- Indexing performance has been improved. CONF-6465
2.2.5 Security Patch

This page last changed on Jul 12, 2006 by tom@atlassian.com.

This patch fixes a minor security vulnerability regarding the administration of space mail accounts. It affects only Confluence 2.2.5.

To install this patch please download the three files attached to this page, stop Confluence and copy them to your WEB-INF/classes/com/atlassian/confluence/mail/actions directory, where they will replace the existing files. Then start Confluence.

<table>
<thead>
<tr>
<th>Name</th>
<th>Size</th>
<th>Creator</th>
<th>Date</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>RemoveMailAccount</td>
<td></td>
<td>Tom Davies</td>
<td>Jul 12, 2006</td>
<td>Edit</td>
</tr>
<tr>
<td>EditMailAccount</td>
<td></td>
<td>Tom Davies</td>
<td>Jul 12, 2006</td>
<td>Edit</td>
</tr>
<tr>
<td>AddMailAccount</td>
<td></td>
<td>Tom Davies</td>
<td>Jul 12, 2006</td>
<td>Edit</td>
</tr>
</tbody>
</table>
## Issues Resolved for 2.2.6a

This page last changed on Jul 12, 2006 by tom@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Icon]</td>
<td>CONF-6493</td>
<td>Invalid keyword or missing delimiter error</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-5548</td>
<td>Concurrent use of inner groups and group based on LDAP (based on AtlassianUser)</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-6200</td>
<td>Please allow editing of links and email addresses included in the ConfluenceActionSupport.properties file</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-6562</td>
<td>Increase the number of groups shown on the Manage Groups screen</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-3034</td>
<td>Confluence renderer should render markup within words (w_o_rds)</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-4721</td>
<td>Image and link insertion dialogs are fixed size and don't scroll</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-6519</td>
<td>google maps plugin fails in IE</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-6563</td>
<td>Referrers not showing on info page, even when referrers turned on</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-6489</td>
<td>User is not marked as watching a page or space if their username contains capital letters</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>![Icon]</td>
<td>CONF-6515</td>
<td>plugin manager</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6518</td>
<td>Space list macro does not update user interface state when requested tab is not available</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6497</td>
<td>BeanInfo introspection cache not being cleared on webapp shutdown</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6499</td>
<td>Site Homepage Default incorrectly set</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6292</td>
<td>Cannot login when a user belongs to more than 100 groups</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6450</td>
<td>Unable to remove underlining via the Rich text editor</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6465</td>
<td>Major reindexing performance regression</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6475</td>
<td>Confluence should upgrade to the latest version of the CombinedCachingServlet once JRA-10504 has been resolved</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6473</td>
<td>Redirect to default homepage of a space after signup</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6476</td>
<td>Decimal Number Format in General Config cannot be updated</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6131</td>
<td>Cannot remove LDAP user from local confluence group</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6508</td>
<td>WYSIWYG Editor problem when editing bulleted list within a table cell</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5333</td>
<td>Export to Word doesn't work with Japanese attachment</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6616</td>
<td>Error in Linking Window using Insert/Edit Link button while edit page</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6709</td>
<td>Character is not shown...</td>
<td>Resolved</td>
<td>DUPLICATE</td>
<td></td>
</tr>
</tbody>
</table>
CONF-7093  EmbeddedRenderer incorrectly Resolved  FIXED
Release Notes 2.2.7

This page last changed on Jul 28, 2006 by christopher.owen@atlassian.com.

Confluence 2.2.7 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.2.

2.2.7 is a free upgrade for all customers who purchased their Confluence license after July 28th, 2005.

Who should upgrade?

Confluence 2.2.7 is a minor bugfix release. Customers should consult the list of issues resolved in this release to determine if it is worth their while upgrading.

Customers still running Confluence 2.2.2 or earlier are recommended to upgrade, as a significant security vulnerability was resolved in Confluence 2.2.3

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2 - 2.2.3, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- [Release Notes 2.2](#)
- [Release Notes 2.1](#)
- [Release Notes 2.0](#)
- [Release Notes 1.4](#)
- [Release Notes 1.3](#)
- [Release Notes 1.2](#)
- [Release Notes 1.1](#)

Changes in 2.2.7

We are currently trialling a process of more frequent bugfix releases, to make fixes available as soon as possible to those people who want them. 2.2.7 resolves 23 issues.

A few of the issues are noted below, see [Issues Resolved for 2.2.7](#) for a complete list.

Task List Macro

- Tasks with the same name in different lists are now distinguished. [CONF-5809](#)

User Management
• The manage groups page can now display an unlimited number of groups. [CONF-6458]
• Users that belong to more than 100 groups are now always able to login. [CONF-6292]

PDF Export

• Exporting pages to PDF which include other pages will now have correct links and not lose images. [CONF-1155]

Internationalisation

• Tree view of page hierarchy will not be truncated when using multi-byte character sets. [CONF-5872]
## Issues Resolved for 2.2.7

This page last changed on Jul 28, 2006 by christopher.owen@atlassian.com.

<p>| T  | Key   | Summary                                                                 | Status | Res |
|----|-------|--------------------------------------------------------------------------|--------|-----|---|
| ![icon] | CONF-6458 | MAX_USERGROUPS_ACTION in EditUserGroupsAction Class is bad | Resolved | FIXED |   |
| ![icon] | CONF-5809 | Tasks with same name in different lists aren't distinguished | Resolved | FIXED |   |
| ![icon] | CONF-6610 | The personal / favourite labels paging actions are broken (or missing) | Resolved | FIXED |   |
| ![icon] | CONF-5815 | Jiraissues mappings don't support status with umlaut (internationalised text) | Resolved | FIXED |   |
| ![icon] | CONF-6580 | Curly-brace tags with nothing between them get mangled when switching to WYSIWYG editing | Closed | FIXED |   |
| ![icon] | CONF-6573 | Group names should be URL-encoded when used in links... | Closed | FIXED |   |
| ![icon] | CONF-6365 | Postgres error in alphabetical page views on confluence.atlassian.com | Resolved | FIXED |   |
| ![icon] | CONF-6598 | Empty profiles in search results repeat the previous search excerpt | Resolved | FIXED |   |
| ![icon] | CONF-6601 | German Umlauts in page titles | Resolved | FIXED |   |
| ![icon] | CONF-6607 | DB2 error when BLOB data too large (Confluence page) | Closed | FIXED |   |
| ![icon] | CONF-6596 | Posting comments with new images fails silently without permission to upload files | Resolved | FIXED |   |
| ![icon] | CONF-6632 | Display labels in search results | Closed | FIXED |   |
| ![icon] | CONF-6615 | Plus (+) in page | Resolved | FIXED |   |</p>
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Status</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-5872</td>
<td>In Tree View of List Pages, page name is not displayed when we use Korean characters.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6650</td>
<td>Attachments Tab in Browse Space only displays first 100 attachments to a space</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7093</td>
<td>EmbeddedRenderer incorrectly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6569</td>
<td>Users with view page permission but not edit page permission can remove view page restriction of a page</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6590</td>
<td>Max attachment size affects uploadplugin.action</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6641</td>
<td>Edit Space Permissions footer layout broken</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6644</td>
<td>Page renaming should only trigger minor edits in referring pages</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6031</td>
<td>Following the &quot;Include these Matches&quot; link in a Site Search displays a page which includes &quot;Searched for blah in $inSpace&quot;</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6599</td>
<td>Blog/news posts should show labels</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
Release Notes 2.2.8

Confluence 2.2.8 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.2.

⚠️ Confluence 2.2.8 has slower indexing than previous versions. There is a fix for that regression here: CONF-6908

2.2.8 is a free upgrade for all customers who purchased their Confluence license after August 8th, 2005.

Who should upgrade?

Confluence 2.2.8 is a minor bugfix release. Customers should consult the list of issues resolved in this release to determine if it is worth their while upgrading.

Customers still running Confluence 2.2.2 or earlier are recommended to upgrade, as a significant security vulnerability was resolved in Confluence 2.2.3

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2 - 2.2.3, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.8

We are currently trialling a process of more frequent bugfix releases, to make fixes available as soon as possible to those people who want them. 2.2.8 resolves 22 issues.

A few of the issues are noted below, see Issues Resolved for 2.2.8 for a complete list.

- Exporting a space as HTML now creates an index page which includes all the pages in the export. CONF-6670
- Timeouts can be set for HTTP requests made from Confluence to RSS feeds and JIRA instances.
CONF-6697
- RSS Autodiscovery works in Safari. CONF-4607
- When a group is deleted, space permissions for the group are now correctly removed. CONF-6733
- Change default background colour from grey to white. CONF-6733
- Non-breaking spaces are handled correctly when indexing. CONF-6685
- Rich text editor respects leading spaces in noformat macro. CONF-6527
## Issues Resolved for 2.2.8

This page last changed on Aug 08, 2006 by tom@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-6689</td>
<td>Broken link in View License Page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6697</td>
<td>Allow configuration of timeouts for any http request made by Confluence</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6733</td>
<td>Error when editing permissions for a space</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6527</td>
<td>Rich text editor loses leading spaces in first line after 'noformat' tag.</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4697</td>
<td>RSS Autodiscovery doesn't show up on Safari RSS</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6688</td>
<td>Contact administrators page broken $getText(&quot;no.admin&quot;) instead of message appears</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6685</td>
<td>Index Tokenizer should treat '  ' as space</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6686</td>
<td>User not redirected to restricted page they were trying to view</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6690</td>
<td>Blog calendar for July 2006 doesn't show enough rows</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6699</td>
<td>Improve 'Too many users' message on License page</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6694</td>
<td>RSS feed macro doesn't show date/time on its</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>Ticket</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-6701</td>
<td>Quotes around image parameters produce invalid HTML</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6700</td>
<td>Javascript errors on global permissions and space permissions pages</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6740</td>
<td>LDAP user with CN equal to user name hides following group members in group display</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6741</td>
<td>BucketPropertySetItem belonging to deleted page breaks space import</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6731</td>
<td>Dashes in links incorrectly rendered</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6675</td>
<td>Deadlock during user creation</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7093</td>
<td>EmbeddedRenderer incorrectly</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6776</td>
<td>Viewing LDAP groups in Manage Groups</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6727</td>
<td>Site has grey background</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6122</td>
<td>When turning on atlassian-user logging Passwords get logged in plaintext</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6649</td>
<td>When moving an entire tree of pages to another space, links with different case than linked pages have old space's name prefixed to them</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6730</td>
<td>Breadcrumb wrapping disrupts left navigation layout in small windows</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7054</td>
<td>Use of Draft results in Configuration Exception - &quot;There is no Action mapped for namespace /pages and action name edit$parameters.draftType&quot;</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.2.9

This page last changed on Sep 14, 2006 by david.soul@atlassian.com.

Confluence 2.2.9 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.2. 2.2.9 resolves an indexing performance regression introduced in 2.2.8, and includes fixes for external user management, and MaxDB and Sybase compatibility.

2.2.8 is a free upgrade for all customers who purchased their Confluence license after September 9th, 2005.

Who should upgrade?

Confluence 2.2.9 is a minor bugfix release. Customers should consult the list of issues resolved in this release to determine if it is worth their while upgrading.

If you are running Confluence 2.2.8, but do not wish to upgrade to 2.2.9, we strongly recommend installing the patch attached to CONF-6908 instead to resolve an issue related to re-indexing performance.

Customers still running Confluence 2.2.2 or earlier are recommended to upgrade, as a significant security vulnerability was resolved in Confluence 2.2.3

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from Confluence 2.2 - 2.2.3, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

If you are upgrading from Confluence 2.1.5 or earlier, please check the release-notes of the other major Confluence releases:

- Release Notes 2.2
- Release Notes 2.1
- Release Notes 2.0
- Release Notes 1.4
- Release Notes 1.3
- Release Notes 1.2
- Release Notes 1.1

Changes in 2.2.9

2.2.8 resolves approximately 25 issues. See Issues Resolved for 2.2.9 for a complete list. A few of the issues are noted below.

External user management:
• LDAP users are no longer given the option to change their passwords in Confluence – CONF-6144
• External users belonging to more than 100 groups can log in successfully – CONF-6292
• External users can be removed from local groups – CONF-6832

Database Compatibility

• 'Review restricted pages' report now succeeds on MaxDB – CONF-6849
• Fixed Sybase error when removing a space – CONF-6715

Indexing

• A re-indexing performance regression introduced in 2.2.8 has been resolved – CONF-6908
• Advanced search queries for specific index fields now work as expected – CONF-6714
• Errors in text extractors no longer cause index queue flushing to fail – CONF-6857
## Issues Resolved for 2.2.9

This page last changed on Sep 11, 2006 by cmiller.

### Atlassian JIRA (25 issues)

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-6773</td>
<td>Improve validation of character encoding</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6820</td>
<td>Reindexing fails if temp directory doesn't exist</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6908</td>
<td>Rebuilding index gets progressively slower or fails</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5852</td>
<td>Can't select a page as a link via the search</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-5869</td>
<td>Search result paging is broken for 'Add Link' dialog in Rich Text editor</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6881</td>
<td>Possible deadlock in DefaultDraftManager</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6292</td>
<td>Cannot login when a user belongs to more than 100 groups</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6144</td>
<td>Change password screen should be disabled for LDAP users (or read only users)</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6889</td>
<td>Changing permissions on the page changes last modifier</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6844</td>
<td>Cannot resume editing of news posts</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6874</td>
<td>Content author without matching user record throws NullPointerException in DefaultFeedBuilder</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-3613</td>
<td>Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>JIRA Key</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-6496</td>
<td>Null Pointer Exception when uploading images</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6921</td>
<td>Velocity macro not expanded</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6914</td>
<td>Catch the zip-too-large-for-VM error and explain it</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6741</td>
<td>BucketPropertySetter belonging to deleted page breaks space import</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6783</td>
<td>BODYCONTENT clob column creation fails in DB2</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6695</td>
<td>RSS feed for non-existing space throws exceptions</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6832</td>
<td>Cannot remove LDAP user from local confluence group</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6715</td>
<td>Sybase error when removing space</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6714</td>
<td>Confluence Lucence Search Terms broken</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6963</td>
<td>Cannot start Confluence after configuring LDAPDynamicGroupAdaptor</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7093</td>
<td>EmbeddedRenderer incorrectly</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6717</td>
<td>Column widths specified without % render as pixel length in IE but percent in Firefox</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-6779</td>
<td>Blog navigation calendar malfunctions on date with more than one post</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.3

This page last changed on Apr 19, 2007 by ivan@atlassian.com.

After much hard toil from the Confluence developers we are happy, nay ecstatic, to announce the availability of Confluence 2.3 (known affectionately as Snowy). Snowy is the eighth major update to Confluence. It supports clustered deployment as 'Confluence Massive', and introduces a people directory, activity statistics plugin, personal timezone preferences, and the ability to access Confluence via the Metaweblog and WebDAV APIs. Confluence 2.3 is a free upgrade for any customer who purchased Confluence after January 4th, 2006.

Upgrading from Confluence 2.2.x

Upgrading Confluence should be fairly straightforward: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Installation Notes

Known Issues and Patches

Please read the Known Issues and Patches section of the release-notes before installing Confluence 2.3.

These issues were resolved with a new maintenance release of Confluence 2.3.1

Contents

1. New Features
2. Improvements

See also: Issues Resolved for 2.3

New Features

Confluence Massive

Confluence is now a clusterable application. This means that it is possible to run multiple Confluence servers behind a load-balancer, to provide high availability, and to scale Confluence beyond the capacity of a single server.

Confluence Massive uses Tangosol Coherence to share data between nodes (and many other things
besides).

If you are thinking of running Confluence in a cluster, and need to know what is required and how it works, you can read Clustering in Confluence.

You can find instructions for installing a Confluence cluster here: Confluence cluster installation.

⚠️ Cluster Licensing
Confluence Massive clustering is only enabled if you have a clustered licence. For information on purchasing clustered Confluence licences, please check our pricing page, or contact our friendly sales team.

The People Directory

In version 2.2 (Shoalhaven), we added personal spaces to Confluence. Because of the potential for the proliferation of personal spaces we kept them off the Dashboard and search results by default, but this made it quite hard to find people in a Confluence site.

The People Directory, which you can find linked from the bottom of the Dashboard, gives you a way to browse through the other people who use a Confluence instance, their profiles and personal spaces.

If you find people whose personal spaces you want to follow, you can mark them as favourites from the people directory. This will add their personal spaces to your 'My' tab on the Dashboard, and will also make sure they're included when you search or make RSS feeds from your favourite spaces.
Activity Tracking

The activity plugin lets you know what’s happening in Confluence: how many pages are being visited or edited in each space or across the whole site, which spaces or pages are the busiest, who are the most prolific editors.

Activity for week starting 31 December 2006

Viewing

This graph shows how many times pages and news posts have been viewed over the current time period.

You can view activity statistics for a space in Browse Space, or globally from the administration console.
The plugin also provides macros that allow you to embed usage data into a Confluence page: `{usage}`, `{popular}` and `{topusers}`.

**Most popular content (Views)**

1. Confluence Documentation Home (2262)
2. Set JAVA_HOME variable in Windows (1180)
3. Confluence Installation Guide (687)
4. Remote API Specification (467)
5. User Macros (436)
6. Installing Confluence Standalone (385)
7. JIRA Issue Macro (370)
8. Administrators Guide (353)
9. Dynamic Tasklist Macro (335)
10. Frequently Asked Questions (320)

⚠️ Activity tracking does not work in a cluster, and will be disabled for clustered deployments. We're working on making the activity tracker clusterable in a future release. You can follow this issue in JIRA: CONF-7520

**Blogger and MetaWeblog API Support**

Confluence 2.3 bundles the Blogging RPC Plugin. This allows users to manage their News in Confluence using one of the many available blogger-compatible desktop clients.

---

**infinity Minus One**

Thanks to herculean efforts from Agnes and Sam, we have reduced the scope of the current Confluence iteration, and thus the time until the 2.3 release by one infinity! Just one and a half infinities (plus two and a half days) to go. (Runner-up candidate title for this blog post: "Split Infinitive")
You can read more about this plugin, including instructions for setting up various blogging clients for use with Confluence, on the plugin information page.

WebDAV Client Support

The Confluence WebDAV plugin allows users to mount Confluence as a shared drive, using the WebDAV protocol.

This provides a familiar interface for anyone who uses Confluence as a repository for files: you can browse your wiki straight from Windows Explorer or the Mac Finder; view Word or PDF versions of pages; upload attachments and edit attachments in place; create, edit and move pages.

For more information on the WebDAV plugin, check out: WebDAV Plugin

WebDAV is supported natively in Windows XP (as "Web Folders") and Mac OS X, although there are third-party clients that may provide different functionality or compatibility. We have a compatibility matrix if you're interested.

⚠️ Experimental
WebDAV client support is currently experimental, and is disabled by default. You can turn it on from the Plugin management page in the global administration console.

Improvements
Plugins

- Adapтивist's fantastic Plugin Repository Client is bundled with Confluence.
- User Macro Plugins allow you to share user macros more easily.
- Lifecycle Plugins allow you to hook into Confluence startup and shutdown.
- Events are now produced when themes are applied, or colour-schemes modified.
- Confluence now ships with 'bundled' plugins that are installed when Confluence is installed, but are not hard-coded into the application (so they can be upgraded without upgrading Confluence).
- Plugin resources now set Last-Modified and ETag headers properly, so they can be conditionally retrieved by browsers.
- Confluence is now built entirely using Maven 2. More on this soon.

Other Changes

- Users can now choose to have dates and times displayed in their own timezone instead of the server's - CONF-1026.
- Most Confluence configuration data has been moved from the filesystem into the database.
- The Clickr Theme is bundled with Confluence.
- HTML exports are more reliable for sites with non-ASCII page titles - CONF-4862.
- You can now get users from multiple LDAP repositories at the same time (or different search paths in the same LDAP repository) - CONF-6034.
- Shortcut links can now have the substitution string in the middle of the URL (CONF-3246), and have custom display text and titles (CONF-514).
- User macros are more flexible: you can configure how macro bodies are pre-rendered (CONF-2293), and you can also specify that a user macro generates wiki markup instead of HTML (CONF-3780).
- Pages with large numbers of attached images no longer eat up too many database connections - CONF-6393.
- When creating an RSS feed with the feed builder, you can choose whether to see full content, diffs, or both - CONF-6321.
- Searches now default to AND rather than OR for combining search terms - CONF-5874.
- The login page no longer prompts you to log in when you're already logged in. - CONF-6843.
- Support for the Nintendo Wii.
- Various improvements to performance that should result in a faster display of pages, and fewer problems for servers with large numbers of space permissions.
- Many static resources in Confluence are cached more effectively, so browsers have to retrieve CSS and Javascript files significantly less often - CONF-7212.

Known Issues and Patches

- Confluence 2.3 was originally accidentally shipped with three testing-only language packs. Since Sunday January 14th, the language packs have been removed from the distribution, but if you downloaded Confluence before that date they will be present. These language packs are machine translations, and are not intended for use on production systems (unless you're a native German speaker and really want a good laugh). If you downloaded an affected copy of Confluence and want to remove these packs, delete de_DE-1.0.jar, ja_JP-1.0.jar and ru_RU-1.0.jar from confluence/WEB-INF/lib.
- You need to apply this patch to enable LDAP user integration: CONF-7585
- If you have problems restoring backups please apply the patch included in this issue: CONF-7584
- Due to class name changes, if you're upgrading from an existing system running: 1. MySQL - you need to edit confluence.home/confluence.cfg.xml and replace
2. DB2 - you need to edit confluence.home/confluence.cfg.xml and replace bucket.dialect.DB2Dialect with com.atlassian.hibernate.dialect.DB2Dialect. More information in this issue: CONF-7690
• Log file atlassian-confluence.log is not presently generated. Please see these instructions for enabling it.

The Confluence 2.3 Team

<table>
<thead>
<tr>
<th>Development</th>
<th>Maven Mavens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
<td>Michael Mekaail</td>
</tr>
<tr>
<td>Samuel Le Berrigaud</td>
<td>Tony Truong</td>
</tr>
<tr>
<td>David Loeng</td>
<td>Oversight &amp; His management</td>
</tr>
<tr>
<td>Charles Miller</td>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td>Christopher Owen</td>
<td>Scott Farquhar</td>
</tr>
<tr>
<td>Agnes Ro</td>
<td></td>
</tr>
<tr>
<td>Matt Ryall</td>
<td></td>
</tr>
<tr>
<td>Jens Schumacher</td>
<td></td>
</tr>
<tr>
<td>Don Willis</td>
<td></td>
</tr>
</tbody>
</table>

And one was there, a stripling on a small and weedy beast,
   He was something like a racehorse undersized,
With a touch of Timor pony — three parts thoroughbred at least —
   And such as are by mountain horsemen prized.
He was hard and tough and wiry — just the sort that won't say die —
   There was courage in his quick impatient tread;
And he bore the badge of gameness in his bright and fiery eye,
   And the proud and lofty carriage of his head.

- The Man from Snowy River, A. B. 'Banjo' Paterson
**FileAppender log4j.properties**

This page last changed on Jan 22, 2007 by ivan@atlassian.com.

The 2.3 log4j.properties file doesn't specify a file for the FileAppender (because the necessary lines haven't been uncommented). Hence the log files normally generated via the file appender, logs/atlassian-confluence.log, is presently missing?

If you experience this situation and see errors in the logs such as:

```
log4j:WARN File option not set for appender [confluencelog].
log4j:WARN Are you using FileAppender instead of ConsoleAppender?
log4j:ERROR No output stream or file set for the appender named [confluencelog].
```

- Please uncomment the following lines in the `log4j.properties` file located under confluence/WEB-INF/classes and restart Confluence
  (ie remove the #’s)

```properties
#log4j.appender.confluencelog.File=${catalina.home}/logs/atlassian-confluence.log
#log4j.appender.confluencelog.MaxFileSize=20480KB
#log4j.appender.confluencelog.MaxBackupIndex=5
```

**Relevant resources**

[Confluence 2.3 Release Notes](#)
## Issues Resolved for 2.3

This page last changed on Dec 28, 2006 by cmiller.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗</td>
<td>CONF-6106</td>
<td>Document cluster configuration</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6406</td>
<td>Ensure upgrade tasks for decorators are working.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6595</td>
<td>Update CGLIB to 2.0.2</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6035</td>
<td>User and Group caches need to be aware of the repository they are caching for excerpt-include doesn't work with news pages</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-7488</td>
<td>Make upgrade system work properly in a cluster</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6102</td>
<td>Cluster admin screen</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6104</td>
<td>Create new plugin bundling system that will allow for user upgrades</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6271</td>
<td>Centralised blogs page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-1540</td>
<td>Confluence Usage Statistics?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-1033</td>
<td>Allow Feedbuilder to choose to see content, diff, both, or none.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6321</td>
<td>Make Confluence clusterable</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-1554</td>
<td>Add events for look and feel changes</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-7196</td>
<td>User macro plugin module type</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-6710</td>
<td>AccessLogFilter should log remote host</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-7083</td>
<td>Display times in user's timezone</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-1026</td>
<td>Confluence as a WebDay Server</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>✗</td>
<td>CONF-3431</td>
<td>Conditional-get for plugin resources</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-3780  User macros should be able to call macro plugins and user macros
Resolved  FIXED

CONF-847  Error Pages should refer to SITE ADMINISTRATORS
Resolved  FIXED

CONF-5354  Left hand menu should remember what's open
Resolved  FIXED

CONF-6564  Referral queue holding on to Hibernate sessions
Resolved  FIXED

CONF-4862  Use a page's content ID as the filename when exporting as HTML
Resolved  FIXED

CONF-7702  Leftnav theme should not add background colours to headers h2 to h4
Resolved  FIXED

CONF-6034  Multiple LDAP repositories
Closed  FIXED

CONF-6503  Improve and simplify cache statistics page
Closed  FIXED

CONF-3337  Allow configuration of default search
Resolved  DUPLICATE

CONF-4638  Uploaded plugin classes are inaccessible from other plugins
Resolved  FIXED

CONF-3519  Support "Edit attachment via WebDAV"
Closed  FIXED

CONF-6100  Add caching to database-backed Bandana
Resolved  FIXED

CONF-6103  Move all non-bootstrap configuration out of confluence.cfg.xml
Resolved  FIXED

CONF-514  Shortcut Links should have title & display values
Resolved  FIXED

CONF-7528  Error page should ask users to contact Confluence administrator
Resolved  FIXED

CONF-6323  Add warning to Setup Wizard's "Create Empty Database" when there's existing data
Resolved  FIXED

CONF-4565  Add overflow control
Closed  FIXED
CONF-6375  Remove usernames from people directory  Resolved  FIXED
CONF-6420  Uninstall bad plugins, enforce module load order, enable/disable modules themselves  Closed  FIXED
CONF-5874  Search should use AND logic by default  Resolved  FIXED
CONF-4955  Confluence users should inherit permissions from the anonymous user  Resolved  FIXED
CONF-6319  Make sure Change Comment is shown in RSS view, Blog post macro: add support for showing blog posts from multiple spaces.  Resolved  FIXED
CONF-3888  Blog post macro: add support for showing blog posts from multiple spaces.  Resolved  FIXED
CONF-6588  css: auto overflow for .preformatted  Closed  DUPLICATE
CONF-3613  Problem installing on Oracle schema when other schemas in the same database have one or more tables sharing the same name as any of Confluence's tables  Closed  FIXED
CONF-7212  Improve caching of static resources  Resolved  FIXED
CONF-7552  typo in RSS feed screen - 'Attachmends' should be 'Attachments'  Resolved  FIXED
CONF-6688  Bundle the Confluence Repo Client created by Dan Hardiker to offer a plugin download/install interface  Resolved  FIXED
CONF-6726  Move default-formatting.properties from filesystem to database  Resolved  FIXED
CONF-6805  Increase Standalone performance with  Resolved  WON'T FIX
platform-specific
Apache Tomcat
Portable Runtime
Project library

CONF-6968  Add tab for personal spaces to dashboard
Resolved  FIXED

CONF-7101  Draft merge failure logging is too verbose
Resolved  FIXED

CONF-7097  Rename permission Administrate Confluence to Administer Confluence
Resolved  FIXED

CONF-6663  Make the "Visit page outside Confluence” tooltip more user customisable
Resolved  FIXED

CONF-7251  Plugins need to link stylesheet manually if space-specific colour scheme is to be used
Resolved  FIXED

CONF-3246  Shortcut links, append-only limitation
Resolved  FIXED

CONF-6678  Tab from comment writing should go to Post button
Resolved  FIXED

CONF-7314  Error page (500page.jsp) should suggest Confluence admin to create support case
Resolved  FIXED

CONF-6393  Attachment loading scalability improvement
Resolved  FIXED

CONF-3281  HTML export of a space - links on pages always resolve locally, even if the linked page was not exported
Resolved  FIXED

CONF-4322  Icons missing in HTML-Export of space
Resolved  FIXED

CONF-5556  Can not add groups with commas in the name to space permissions
Resolved  FIXED

CONF-7386  LoginFilter does not redirect to absolute destinations correctly
Resolved  FIXED
CONF-6517  NullPointerException in AbstractUserProfileAction.getPersonalSpaceKey
Resolved     FIXED

CONF-6527  Rich text editor loses leading spaces in first line after 'noformat' tag.
Resolved     FIXED

CONF-5496  Rich text link edit dialog has problems with links where the link text is different to the link markup when there is no alias.
Resolved     FIXED

CONF-7392  Non labelable content inherits labels from previous hit in search results.
Resolved     FIXED

CONF-7381  CLONE - Export of page which includes other pages loses images.
Resolved     FIXED

CONF-5781  Certain PNG images in pages cause corrupt PDF exports for pre Java 1.5.
Closed       DUPLICATE

CONF-1881  Default search behaviour should be “AND” for multi-term search.
Resolved     FIXED

CONF-7407  System Error: Confluence cannot be started on Vista with Java 6 RC.
Resolved     FIXED

CONF-7408  Personal spaces listed under "global spaces" in search space drop-down.
Closed       FIXED

CONF-5930  Restore a backup from the filesystem: bucket.core.InfrastuctureException: java.lang.OutOfMemoryError
Resolved     FIXED

CONF-7358  Plugin resource downloads fail if they use a plugin key in the URL.
Resolved     FIXED

CONF-5489  Trackbacks are broken.
Resolved     FIXED

CONF-1155  Export of page which includes other pages loses images.
Resolved     FIXED

CONF-7419  Daily notification emails from confluence.atlassian.com.
Resolved     FIXED
<table>
<thead>
<tr>
<th>Issue Number</th>
<th>Description</th>
<th>Resolution</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-6059</td>
<td>Confluence breaks with cglib error on JDK 1.6</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7420</td>
<td>Livesearch doesn’t work any more and throws exception</td>
<td>Resolved</td>
<td>DUPLICATE</td>
</tr>
<tr>
<td>CONF-6105</td>
<td>Fix import/export of database-backed Bandana settings</td>
<td>Resolved</td>
<td>CANNOT REPRODUCE</td>
</tr>
<tr>
<td>CONF-5919</td>
<td>Setup should display error when database user does not have permissions to create tables</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7424</td>
<td>Typos on excerpt macro in Notation Guide</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7413</td>
<td>Popular labels macro shows empty bulleted list</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5964</td>
<td>Thumbnail etags and last modified data derived from related image</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6133</td>
<td>WYSIWYG mode is turnig space:page link like test:Döner to emoticon and a corrupted link</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-2293</td>
<td>Markup disallowed in macros?</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6926</td>
<td>SQL Macro does not work on the extranet</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7428</td>
<td>Livesearch macro throws exception when spacekey not specified</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6366</td>
<td>People with personal spaces do not appear in people directory search</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6345</td>
<td>Seemingly random people listed as favourites in the people directory search</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-5642</td>
<td>Incorrect html links in Export Space</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6385</td>
<td>Space admin tab is visible to non-space admins</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6402</td>
<td>Thumbnails are not regenerated when attachments change</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-6408</td>
<td>Make plugin modules</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-3331  state aware Export process is not able to export thumbnails. Resolved FIXED
CONF-7433  Indenting does not work for bullet lists in rich text editor Resolved DUPLICATE
CONF-6339  Velocity cache never gets cleared Resolved FIXED
CONF-6431  Tree view in browse space fails with NPE Resolved FIXED
CONF-6418  People Directory number of found users does not match the number of actual users displayed Closed FIXED
CONF-6432  Dynamic tasklist atlassian-plugin.xml lists components in the wrong order Closed FIXED
CONF-5955  Old version of cglib 2.0 creates problems with Java 2 security in WebSphere 5.1 Resolved FIXED
CONF-1852  We don't index user details Resolved FIXED
CONF-6317  WebUI plugins are unable to properly display the I18N-value of the link name Resolved FIXED
CONF-6891  Formatting Content on Confluence demonstration space gramer mistake Resolved FIXED
CONF-6876  Temp directory cleanup job should be separate to BackupJob Resolved FIXED
CONF-6657  HTML Export: Duplicate attached images Resolved FIXED
CONF-6665  Sort order broken on space attachments page Resolved FIXED
CONF-4773  Long running task view should display a red bar when the task fails, not green bar Resolved FIXED
CONF-7181  The link table can have rows with spurious space keys Resolved FIXED
CONF-7189  Export to PDF & inserted
   \{attachment\} macro
   links
Resolved  FIXED

CONF-7195  CAPTCHA uses a
   predictable temp file
Resolved  FIXED

CONF-7363  Clicking on a news
   attachment from a recently updated list
takes you to an incorrect page
Resolved  FIXED

CONF-4219  Can not render wiki
   content as inline text
   using user macros
Resolved  FIXED

CONF-6701  Quotes around
   image parameters
   produce invalid
   HTML
Resolved  FIXED

CONF-6728  Confluence app
   server restart throws
   away Date/Time
   format settings
Resolved  FIXED

CONF-6773  Improve validation
   of character
   encoding
Resolved  FIXED

CONF-6675  Deadlock during user
   creation
Resolved  FIXED

CONF-6695  RSS feed for
   non-existing space
   throws exceptions
Resolved  FIXED

CONF-6655  Cannot serialise
   custom objects
   defined in plugins
   using Bandana
Resolved  FIXED

CONF-6843  Login page should
   tell you clearly if
   you're already
   logged in
Resolved  FIXED

CONF-6935  Remote API method
   getPermissions()
   only returns
   "modify" for space
   admins
Resolved  FIXED

CONF-5143  Html Export doesn't
   include images when
   the image isn't
   stored within the
   page itself
Resolved  FIXED

CONF-6973  Thumbnail does not
   get downloaded on
   the first time it is
   viewed
Resolved  FIXED

CONF-1956  Umlaut in space title
Resolved  FIXED
<p>| CONF-2416 | breaks PDF export Content Sorting in exported space PDF | Resolved | FIXED |
| CONF-5336 | HTML Export fails to redirect URL attachments to the &quot;locally&quot; exported directory structure | Resolved | FIXED |
| CONF-7005 | Flush All Caches link broken | Resolved | FIXED |
| CONF-6995 | Rich text editor inserts images with no space between text and '!' | Resolved | FIXED |
| CONF-6999 | Search not finding specific page | Closed | DUPLICATE |
| CONF-7035 | Draft form can be submitted with multiple space keys | Closed | FIXED |
| CONF-7038 | User with null email address breaks daily report job | Resolved | FIXED |
| CONF-7014 | XStream introspection cache not cleared when plugin upgraded | Resolved | FIXED |
| CONF-7050 | labelString attribute doesn't restrict RSS feeds | Resolved | FIXED |
| CONF-6998 | Related matches in other spaces displaying illogical count | Resolved | FIXED |
| CONF-7061 | Some digest notification links don't include the base URL | Resolved | FIXED |
| CONF-7059 | If you install a plugin compiled against the wrong java version, you can't uninstall it. | Resolved | FIXED |
| CONF-7015 | Bandana table not found on upgrade to Confluence 2.3-dev | Resolved | FIXED |
| CONF-7060 | Plugin Repo doesn't place nicely with clustering | Resolved | FIXED |
| CONF-7126 | Oops on EAC staff home info page | Resolved | FIXED |
| CONF-6084 | Captcha is not shown on reply-to comment form | Resolved | FIXED |
| CONF-7134 | groupSearchAllDepths | Resolved | FIXED |</p>
<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-7218</td>
<td>&quot;View Conflict&quot; link on drafts page results in ClassCastException</td>
</tr>
<tr>
<td>CONF-7467</td>
<td>Confluence slow - looking up space permissions</td>
</tr>
<tr>
<td>CONF-7305</td>
<td>For comments, first CAPTCHA word fails</td>
</tr>
<tr>
<td>CONF-7319</td>
<td>Cannot cancel space removal</td>
</tr>
<tr>
<td>CONF-7323</td>
<td>Content properties not removed when associated content is deleted</td>
</tr>
<tr>
<td>CONF-7336</td>
<td>Space import fails on content properties without associated content</td>
</tr>
<tr>
<td>CONF-7322</td>
<td>Jira issues macro doesn't show icons or timestamps</td>
</tr>
<tr>
<td>CONF-7337</td>
<td>Clickr plugin: ClassCastException changing tabs from attachments to edit on a blog post.</td>
</tr>
<tr>
<td>CONF-7341</td>
<td>BaseAttachmentContent missing or moved in 2.3-dr2</td>
</tr>
<tr>
<td>CONF-7197</td>
<td>No difference between modified and created RSS feed status</td>
</tr>
<tr>
<td>CONF-7286</td>
<td>RSS Feeds listed under the Advanced &gt; RSS Feeds section don't work</td>
</tr>
<tr>
<td>CONF-7373</td>
<td>Cannot rename a page with a link to itself</td>
</tr>
<tr>
<td>CONF-7018</td>
<td>Cannot delete space mysql</td>
</tr>
<tr>
<td>CONF-7117</td>
<td>Not all LDAP groups shown</td>
</tr>
<tr>
<td>CONF-7352</td>
<td>Attachment versions not working</td>
</tr>
<tr>
<td>CONF-4671</td>
<td>web.xml 2.4/Resin 3.x Schema Violation</td>
</tr>
<tr>
<td>CONF-4679</td>
<td>Scheduled tasks should not be started before or</td>
</tr>
<tr>
<td>Issue ID</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>CONF-6817</td>
<td>Missing localization strings for Notation Guide</td>
</tr>
<tr>
<td>CONF-4958</td>
<td>HTML export fails to include all attachments</td>
</tr>
</tbody>
</table>
Release Notes 2.3.1

This page last changed on Jan 22, 2007 by mryall.

Confluence 2.3.1 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.3.

2.3.1 is a free upgrade for all customers who purchased their Confluence license after January 23rd, 2006.

Who should upgrade?

Confluence 2.3.1 is a bugfix release which resolves some significant issues in Confluence 2.3. Customers running Confluence 2.3 should review the list of resolved issues below, and upgrade if this release fixes any problems with their current Confluence installation.

Customers running releases older than 2.3 and wishing to upgrade should use this version also.

Significant issues for customers upgrading to Confluence 2.3

- LDAP integration: Confluence 2.3 shipped with a broken user migration script for customers wishing to integrate LDAP servers with their Confluence installation. 2.3.1 ships with a fixed version of this script which can also be obtained from CONF-7585
- Upgrading with MySQL: Customers using Confluence with MySQL may have had difficulty upgrading their instances to Confluence 2.3. This issue has been resolved in 2.3.1.

Significant issues for existing Confluence 2.3 users

- Backup import: Confluence 2.3 users wishing to import backups into their Confluence instance should upgrade to 2.3.1 or apply the patch listed against CONF-7584

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from another Confluence 2.2.x or Confluence 2.3 version, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Changes in 2.3.1
2.3.1 resolves 20 issues. All these issues are listed below:

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-1643</td>
<td>Comments to pages should be wrapper to make sure they fit in the page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7222</td>
<td>Create user does not trim() usernames</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7483</td>
<td>Mail notification templates contain un-internationalised text</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7489</td>
<td>Uninstalling a bundled plugins causes stack trace</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7534</td>
<td>Cluster setup workflow could be improved</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7546</td>
<td>Page Comparison information shown is wrong / missing</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7556</td>
<td>Javascript in create space page disables checkbox without un-checking it</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7562</td>
<td>Login link on forgot password page redirects to an error after logging in</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7573</td>
<td>Dashboard Exception with Space List macro</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7574</td>
<td>User Preferences results in an empty screen</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7575</td>
<td>Confluence 2.3 - &quot;Vor kurzem Aktualisiert&quot; instead of &quot;Recently Updated&quot;</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7578</td>
<td>Missing text ${generalUtil.buildDateString}</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7580</td>
<td>Testing language packs made it into the final build... again.</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7581</td>
<td>Missing Europe/London timezone causes runtime errors</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-7584  |  Restore backup fails with "Import failed, null" error  |  Closed  |  FIXED
CONF-7585  |  osuser2atuser.jsp throws JasperException  |  Closed  |  FIXED
CONF-7589  |  Upgrade to 2.3 with MySQL causes error - Dialect class not found: bucket.dialect.MySQLDialect  |  Resolved  |  FIXED
CONF-7597  |  View changes not showing on 2.3  |  Resolved  |  FIXED
CONF-7611  |  Send a notification to any page / space watchers when an attachment, blogpost, comment, page is removed  |  Resolved  |  FIXED
CONF-7630  |  Cannot edit layout decorators more than once  |  Resolved  |  FIXED
CONF-7679  |  Jiraissues macro does not display dates  |  Resolved  |  FIXED
Release Notes 2.3.2

This page last changed on Feb 20, 2007 by sleberrigaud.

Confluence 2.3.2 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.3.1

Warning for LDAP users
Confluence 2.3.2 has a serious bug that prevents it from working with LDAP servers. Please use Confluence 2.3.3 instead.

2.3.2 is a free upgrade for all customers who purchased their Confluence license after February 12th, 2006.

Who should upgrade?

Confluence 2.3.2 is a bugfix release which resolves some significant issues in Confluence 2.3.1 Customers running Confluence 2.3.1 and 2.3 should review the list of resolved issues below, and upgrade if this release fixes any problems with their current Confluence installation.

Customers running releases older than 2.3 and wishing to upgrade should use this version also.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from another Confluence 2.2.x or Confluence 2.3 version, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Changes in 2.3.2

2.3.2 resolves 22 issues. All these issues are listed below:

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-6371</td>
<td>New line not persistent between Rich Text and Wiki Markup</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6494</td>
<td>Comment display</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Ticket</td>
<td>Description</td>
<td>Resolution</td>
<td>Status</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>CONF-7335</td>
<td>with the ` (apostrophe) when adding an attachment. livesearch macro spaceKey parameter value is case sensitive</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7410</td>
<td>Calendar plugin doesn't work in Clickr theme</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7608</td>
<td>Can't 'upgrade' bundled plugins with the Plugin Repository</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7654</td>
<td>Custom colour scheme for spaces will not apply</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7658</td>
<td>Updates to global colour scheme are not shown in spaces until restart</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7663</td>
<td>Searches return no results after initial index of upgraded data, until content is updated</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7688</td>
<td>Confluence should handle users without full names (from external user management)</td>
<td>Closed</td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7690</td>
<td>Upgrade fails for DB2 due to incorrect dialect</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7751</td>
<td>Url Encode spacekey</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7753</td>
<td>Duplication of invalid links while saving a page in Rich Text Editor</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7798</td>
<td>More non-internationalized text on blogposts macro</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7799</td>
<td>Page restrictions don't always show up in browse space, page permissions.</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7802</td>
<td>LDAP support doesn't work in cluster</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7807</td>
<td><code>{code}</code> macro sometimes loses whitespace in Wysiwyg</td>
<td></td>
<td>Fixed</td>
<td></td>
</tr>
<tr>
<td>CONF-7808</td>
<td>Threads getting stuck in HitTrackingLocalCache, possible synchronisation problem</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>CONF-7813</td>
<td>People Directory throws NullPointerException</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7815</td>
<td>Some DBs incorrectly use Postgres lower casing</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7834</td>
<td>Remove the people directory link from dashboard when share mode is on</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7843</td>
<td>Restoring a site backup can set cluster nodes to use file system attachment storage</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7858</td>
<td>LDAP pooling defaults are not appropriate</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.3.3

This page last changed on Feb 14, 2007 by ivan@atlassian.com.

Confluence 2.3.3 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.3.2

2.3.3 is a free upgrade for all customers who purchased their Confluence license after February 14th, 2006.

Who should upgrade?

Confluence 2.3.3 is a bugfix release which resolves some significant issues in Confluence 2.3.2 Customers running Confluence 2.3.2, 2.3.1 and 2.3 should review the list of resolved issues below, and upgrade if this release fixes any problems with their current Confluence installation.

Customers running releases older than 2.3 and wishing to upgrade should use this version also.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from another Confluence 2.2.x or Confluence 2.3 version, you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Changes in 2.3.3

2.3.3 resolves 4 issues. All these issues are listed below:

<table>
<thead>
<tr>
<th></th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-5701</td>
<td>RSS macro ignores 'nonProxyHosts' JVM property</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6986</td>
<td>Most Plugin Themes require name and description i18n</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7855</td>
<td>Previewing a copied page (before saving) doesn't work</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-7862  Illegal value for java.naming.referral property  Closed  FIXED
Release Notes 2.4

This page last changed on Mar 13, 2007 by christopher.owen@atlassian.com.

The Atlassian Confluence team is proud to present to you Confluence 2.4.2! What happened to 2.4 and 2.4.1? Let's just say we gave them a good workout.

Confluence 2.4 is the ninth release of Confluence. It introduces much awaited support for editable comments, the ability to mail a page to groups of users and includes the usual slew of fixes since the last stable release.

Confluence 2.4 is the first in a series of frequent, small releases planned for the first half or 2007, that will help us get the functionality you want from Confluence, faster. For more information on our new release schedule, you might want to read this blog post.

Confluence 2.4.2 is a free upgrade for any customer who purchased Confluence after March 13th, 2006.

Upgrading from Confluence 2.2.x and 2.3.x

Upgrading Confluence should be fairly straightforward: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Contents

1. New Features
2. Improvements

See also: Issues Resolved for 2.4.2

New Features

Editable Comments

Say so long! to those annoying typos and ill-structured sentences as comments in Confluence are now editable. Comments may be edited by the original author or the administrator for the space in which the comment was posted.
Confluence has a ten minute grace period after the comment is posted in which updates will not be flagged in the user interface. This is in acknowledgment of the fact that most edits within this period are for correcting minor typos and formatting which will not impact the flow of conversation.

For more information, see the Confluence user guide: [Editing a Comment](#)

**Page Mailing**

Confluence 2.4 ships with the Mail Page plugin allowing users to conveniently send the contents of a Confluence page to other interested parties. You can easily specify who you want the page mailed to by using a combination of:

- Email addresses
- Confluence user names
- Confluence group names

For security reasons, the Mail Page plugin is disabled by default. If you want to use this feature, an administrator will have to [enable it](#). There must also be a mail server configured in the Confluence instance for this operation to be available.
This operation is reached via a page's Info tab.

**Tiny Link**: (useful for email)  [http://localhost:8080/x/Ed](http://localhost:8080/x/Ed)

**Export As**: PDF | Word

**Operations**: E-mail | Copy

For more information, see the Confluence user guide: [E-mailing a Page](#)

**Improvements**

- The People Directory no longer shows inactive users ([CONF-7771](#))
- Log messages now have more context such as the URL of the page being displayed and the name of the logged in user ([CONF-7878](#))

**The Confluence 2.4 Team**

<table>
<thead>
<tr>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
</tr>
<tr>
<td>Matthew Jensen</td>
</tr>
<tr>
<td>Samuel Le Berrigaud</td>
</tr>
<tr>
<td>David Loeng</td>
</tr>
<tr>
<td>Charles Miller</td>
</tr>
<tr>
<td>Christopher Owen</td>
</tr>
<tr>
<td>Agnes Ro</td>
</tr>
<tr>
<td>Matt Ryall</td>
</tr>
<tr>
<td>Don Willis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oversight &amp; Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td>Scott Farquhar</td>
</tr>
</tbody>
</table>
Release Notes 2.4.1

The Atlassian Confluence team is proud to present to you Confluence 2.4.2! What happened to 2.4 and 2.4.1? Let's just say we gave them a good workout.

Confluence 2.4 is the ninth release of Confluence. It introduces much awaited support for editable comments, the ability to mail a page to groups of users and includes the usual slew of fixes since the last stable release.

Confluence 2.4 is the first in a series of frequent, small releases planned for the first half or 2007, that will help us get the functionality you want from Confluence, faster. For more information on our new release schedule, you might want to read this blog post.

Confluence 2.4.2 is a free upgrade for any customer who purchased Confluence after March 13th, 2006.

Upgrading from Confluence 2.2.x and 2.3.x

Upgrading Confluence should be fairly straightforward: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Contents

1. New Features
2. Improvements

See also: Issues Resolved for 2.4.2

New Features

Editable Comments

Say so long! to those annoying typos and ill-structured sentences as comments in Confluence are now editable. Comments may be edited by the original author or the administrator for the space in which the comment was posted.
Confluence has a ten minute grace period after the comment is posted in which updates will not be flagged in the user interface. This is in acknowledgment of the fact that most edits within this period are for correcting minor typos and formatting which will not impact the flow of conversation.

For more information, see the Confluence user guide: Editing a Comment

Page Mailing

Confluence 2.4 ships with the Mail Page plugin allowing users to conveniently send the contents of a Confluence page to other interested parties. You can easily specify who you want the page mailed to by using a combination of:

- Email addresses
- Confluence user names
- Confluence group names

For security reasons, the Mail Page plugin is disabled by default. If you want to use this feature, an administrator will have to enable it. There must also be a mail server configured in the Confluence instance for this operation to be available.
This operation is reached via a page's Info tab.

**Tiny Link:** (useful for email)  [http://localhost:8080/x/Ed](http://localhost:8080/x/Ed)

**Export As:**  PDF | Word

**Operations:**  E-mail | Copy

For more information, see the Confluence user guide: [E-mailing a Page](#)

**Improvements**

- The People Directory no longer shows inactive users (CONF-7771)
- Log messages now have more context such as the URL of the page being displayed and the name of the logged in user (CONF-7878)

**The Confluence 2.4 Team**

<table>
<thead>
<tr>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
</tr>
<tr>
<td>Matthew Jensen</td>
</tr>
<tr>
<td>Samuel Le Berrigaud</td>
</tr>
<tr>
<td>David Loeng</td>
</tr>
<tr>
<td>Charles Miller</td>
</tr>
<tr>
<td>Christopher Owen</td>
</tr>
<tr>
<td>Agnes Ro</td>
</tr>
<tr>
<td>Matt Ryall</td>
</tr>
<tr>
<td>Don Willis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oversight &amp; Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td>Scott Farquhar</td>
</tr>
</tbody>
</table>
Release Notes 2.4.2

The Atlassian Confluence team is proud to present to you Confluence 2.4.2! What happened to 2.4 and 2.4.1? Let's just say we gave them a good workout.

Confluence 2.4 is the ninth release of Confluence. It introduces much awaited support for editable comments, the ability to mail a page to groups of users and includes the usual slew of fixes since the last stable release.

Confluence 2.4 is the first in a series of frequent, small releases planned for the first half of 2007, that will help us get the functionality you want from Confluence, faster. For more information on our new release schedule, you might want to read this blog post.

Confluence 2.4.2 is a free upgrade for any customer who purchased Confluence after March 13th, 2006.

Upgrading from Confluence 2.2.x and 2.3.x

Upgrading Confluence should be fairly straightforward: you can find instructions here. We strongly recommend that you backup your $confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Contents

1. New Features
2. Improvements

See also: Issues Resolved for 2.4.2

New Features

Editable Comments

Say so long! to those annoying typos and ill-structured sentences as comments in Confluence are now editable. Comments may be edited by the original author or the administrator for the space in which the comment was posted.
Confluence has a ten minute grace period after the comment is posted in which updates will not be flagged in the user interface. This is in acknowledgment of the fact that most edits within this period are for correcting minor typos and formatting which will not impact the flow of conversation.

For more information, see the Confluence user guide: Editing a Comment

Page Mailing

Confluence 2.4 ships with the Mail Page plugin allowing users to conveniently send the contents of a Confluence page to other interested parties. You can easily specify who you want the page mailed to by using a combination of:

- Email addresses
- Confluence user names
- Confluence group names

For security reasons, the Mail Page plugin is disabled by default. If you want to use this feature, an administrator will have to enable it. There must also be a mail server configured in the Confluence instance for this operation to be available.
This operation is reached via a page's Info tab.

Tiny Link: (useful for email)  http://localhost:8080/x/Ed

Export As:  PDF  |  Word

Operations:  E-mail  Copy

For more information, see the Confluence user guide:  E-mailing a Page

Improvements

- The People Directory no longer shows inactive users (CONF-7771)
- Log messages now have more context such as the URL of the page being displayed and the name of the logged in user (CONF-7878)

The Confluence 2.4 Team

<table>
<thead>
<tr>
<th>Development</th>
<th>Oversight &amp; MS management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td>Matthew Jensen</td>
<td>Scott Farquhar</td>
</tr>
<tr>
<td>Samuel Le Berrigaud</td>
<td></td>
</tr>
<tr>
<td>David Loeng</td>
<td></td>
</tr>
<tr>
<td>Charles Miller</td>
<td></td>
</tr>
<tr>
<td>Christopher Owen</td>
<td></td>
</tr>
<tr>
<td>Agnes Ro</td>
<td></td>
</tr>
<tr>
<td>Matt Ryall</td>
<td></td>
</tr>
<tr>
<td>Don Willis</td>
<td></td>
</tr>
</tbody>
</table>
# Issues Resolved for 2.4.2

This page last changed on Mar 13, 2007 by christopher.owen@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-7925</td>
<td>SQLException on Sybase and SQL Server - Invalid column name 'creationDate'</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7815</td>
<td>Some DBs incorrectly use Postgres lower casing</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7788</td>
<td>Insert link dialog doesn't search properly</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8045</td>
<td>Can't delete template with previous version</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8014</td>
<td>To provide easier configuration between Crowd and Confluence the attached crowd-ehcache.xml file will need to be added to the confluence release</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7953</td>
<td>CSS and Javascript not loaded in Websphere 6.1.0.5</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7939</td>
<td>Confluence atlassian-user.xml has typo for Crowd integration.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7895</td>
<td>Feed builder only builds private feeds</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7878</td>
<td>Add RenderContext information to exceptions that filter through the Wiki Renderer</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7843</td>
<td>Restoring a site backup can set cluster nodes to use file system attachment storage</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-7770</td>
<td>Add ability to select a space group in the create space form</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7768</td>
<td>Add &quot;Groups&quot; tab in space list macro on dashboard for Space Groups</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7757</td>
<td>Add importSpace method to RPC interfaces</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7690</td>
<td>Upgrade fails for DB2 due to incorrect dialect</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7663</td>
<td>Searches return no results after initial index of upgraded data, until content is updated</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7608</td>
<td>Can't 'upgrade' bundled plugins with the Plugin Repository</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5391</td>
<td>Links in news items to attachments in normal pages do not work</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5194</td>
<td>Provide a way to mail to User Groups or Individual from a wiki page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-1062</td>
<td>Email page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-830</td>
<td>Editable comments</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8018</td>
<td>Page list template renders broken page title when greater than 64 characters</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7989</td>
<td>Fix display for my favourite labels - $webwork.htmlEncode($textUtils.trimToEndingChar($page.realTitle, 60))</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7926</td>
<td>Template Lists Fail with Non-English Characters</td>
<td>Closed</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7854</td>
<td>Error deleting template that has been edited</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7786</td>
<td>Exclude space group from space export</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7783</td>
<td>Don't include user profiles in daily changed reports in shared mode</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7771</td>
<td>People directory should not display inactive users</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7769</td>
<td>Update atlassian-extras</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
dependency to 0.7.32

CONF-7661 README files in confluence-2.3 have URLs that refer to non-existent pages

CONF-4550 Macro that can render Mathematical Formulae

CONF-8032 Use HTML id instead of empty named anchors in headings

CONF-8029 Outdated event listener interface warning should be logged at a lower priority

CONF-7095 Text for the key "licenseexpired, explanation" not being displayed
Release Notes 2.4.3

This page last changed on Mar 21, 2007 by mjensen.

Confluence 2.4.3 is a maintenance release that resolves an assortment of issues users may have encountered using Confluence 2.4.2

2.4.3 is a free upgrade for all customers who purchased their Confluence license after March 22nd 2006.

Who should upgrade?

Confluence 2.4.3 is a recommended upgrade release which resolves some significant issues in Confluence 2.4.2. Customers running older versions of Confluence should review the list of resolved issues below, and upgrade if this release fixes any problems with their current Confluence installation.

Customers running releases older than 2.4 and wishing to upgrade should use this version also.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from another Confluence 2.2.x or Confluence 2.3 version, you can find instructions here.

We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Changes in 2.4.3

2.4.3 resolves 15 issues. All these issues are listed below:

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-6058</td>
<td>Group picker for page restrictions silently hides non-member groups, may need clarifying sentence added</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-6505</td>
<td>Comment index entries do not inherit</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-6907</td>
<td>New license types footers</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-7416</td>
<td>LazyInitializationException on page create preview when page contains un-resolveable embedded image</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-7564</td>
<td>'Advanced' space tab should show 'personal space' icon instead of 'user profile' icon</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-7717</td>
<td>Rich text editor breaks shortcut links with custom titles</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-7725</td>
<td>IllegalStateException &quot;zip file closed&quot; occurring in plugins</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-7898</td>
<td>AttachmentsSoapService.getAttachmentData doesn't close inputStream</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-7922</td>
<td>Personal Edition - &quot;Evaluate Confluence&quot; Link Broken At Bottom Of All Pages</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-8001</td>
<td>When using LDAP with a cluster, a user cannot log into the second node if they previously logged into the first node</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-8039</td>
<td>Create Space form gives option of anonymous access, even when not enabled globally</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-8048</td>
<td>REGRESSION: &quot;View Change&quot; link missing</td>
<td>Closed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-8050</td>
<td>zip_src from tiny mce served without caching headers on extranet</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-8056</td>
<td>Disabled upgraded bundled plugins are reenabled on startup</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONF-8077</td>
<td>Attachment file names not HTML encoded in attachment list</td>
<td>Resolved</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.4.4

This page last changed on Apr 01, 2007 by mjensen.

Confluence 2.4.4 is a recommended upgrade release that resolves issues users may have encountered using Confluence 2.4.3 or earlier.

2.4.4 is a free upgrade for all customers who purchased their Confluence license after March 30th 2006.

Who should upgrade?

Confluence 2.4.4 is a recommended upgrade release that resolves issues users may have encountered using Confluence 2.4.3 or earlier. Customers running older versions of Confluence should review the list of resolved issues below, and upgrade if this release fixes any problems with their current Confluence installation.

Customers running releases older than 2.4 and wishing to upgrade should upgrade directly to 2.4.4.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from another Confluence 2.2.x or Confluence 2.3 version, you can find instructions here.

We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Source Release

Please note that the source release for 2.4.4 is currently unavailable. We have scheduled a fix for this which should be included in 2.4.5. Please see CONF-8007 for more details.

Changes in 2.4.4

2.4.4 resolves 17 issues. All these issues are listed below:
<table>
<thead>
<tr>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONF-6490</td>
<td>PDF export breaks with angle brackets inside comments</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-7711</td>
<td>Only latest page history comment is shown in page history</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-774</td>
<td>Global Activity link on Space Activity page is not correct</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-775</td>
<td>Cross site scripting - action name not escaped in group picker</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-776</td>
<td>Cross site scripting - space key not escaped in listpages-alphview</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-777</td>
<td>Cross site scripting - destination not escaped on login page error message</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-778</td>
<td>Cross site scripting - on POST, title not escaped in createpage-entervariables</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8065</td>
<td>Cross Site Scripting issue when integration RSS feeds</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8101</td>
<td>XSS on &quot;Site Search&quot;</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8108</td>
<td>Attempted Space Removal caused a database exception.</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8124</td>
<td>“Space Activity” XSS hole and Exception throwing</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8143</td>
<td>Avatar upload - no HTML tags encoding in filenames</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8144</td>
<td>XSS on User Search</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8145</td>
<td>View mail thread icon link navigates to blank page</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8159</td>
<td>Enable comment content layout to be editable in admin</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8162</td>
<td>Rich text editor fails to load because ConfluenceTinyMCEServlet doesn't notice base</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
</tbody>
</table>
CONF-8167 | URL changes
Previous page versions view lists current revision twice
Resolved | FIXED

CONF-8178 | Download links broken for Confluence 2.4.4
Closed | FIXED
Release Notes 2.4.5

This page last changed on Apr 13, 2007 by christopher.owen@atlassian.com.

Confluence 2.4.5 is a maintenance release that resolves issues users may have encountered using Confluence 2.4.4 or earlier.

2.4.5 is a free upgrade for all customers who purchased their Confluence license after April 12th 2006.

Who should upgrade?

Confluence 2.4.5 is a recommended upgrade release which resolves some significant issues in Confluence 2.4.4. Customers running older versions of Confluence should review the list of resolved issues below, and upgrade if this release fixes any problems with their current Confluence installation.

Customers running releases older than 2.4 and wishing to upgrade should upgrade directly to 2.4.5.

Upgrade Procedure

Upgrading Confluence should be pretty easy. If you are upgrading from another Confluence 2.2.x or Confluence 2.3 version, you can find instructions here.

We strongly recommend that you backup your `confluence.home` directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Changes in 2.4.5

2.4.5 resolves these issues:

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-5756</td>
<td>After moving a page with attachments to a new Space, the attachments are listed in the old Space not on the new Space</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td><img src="" alt=" " /></td>
<td>CONF-6461</td>
<td>Can see other Users</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>Issue Key</td>
<td>Description</td>
<td>Status</td>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>CONF-7606</td>
<td>Incorrect associated <code>&lt;label&gt;</code> tags on administration page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7832</td>
<td>Documentation on adding a template to a space is not up to date for 2.3</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8007</td>
<td>Fix confluence source release</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8078</td>
<td>Error page if new password doesn't match Crowd password validation</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8125</td>
<td>References to scriptacular files are wrong</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8185</td>
<td>Cached TinyMCE Servlet doesn't handle BaseURL Changes or Multi-homed environment</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8228</td>
<td>On/off list components have inappropriate HTML IDs</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8393</td>
<td>Plugin repository client 2.0.2 fails to update plugins</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes 2.5

This page last changed on Apr 29, 2007 by christopher.owen@atlassian.com.

The Atlassian Confluence team is proud to present Confluence 2.5. Confluence 2.5 is the tenth release of Confluence. It introduces more flexible page restrictions, and also includes a number of minor fixes.

Confluence 2.5 is a free upgrade for any customer who purchased Confluence after April 27th, 2006.

Upgrading from Confluence 2.2 and later

Upgrading Confluence should be fairly straightforward: you can find instructions here. We strongly recommend that you backup your confluence.home directory and database before upgrading!

Upgrading from Confluence 2.1 and earlier

Users upgrading directly from 2.1 or earlier should also read the 2.2 Release Notes for caveats regarding the 2.1 -> 2.2 upgrade.

Introducing flexible page restrictions

Page restrictions give you the ability to choose who may read and/or edit any given page.

By popular request, page restrictions have been enhanced and can now be assigned to multiple people and/or groups:

Restrictions: your

- Restrict viewing of this page
- Restrict editing of this page

Choose me | Choose username | Choose groups | Enter user/group name(s): [Add]

No viewing restrictions set on this page

Editing restricted to:

- anton
- adrian
- agnes
- anthony

Other significant issues resolved

Dynamic task list JRE incompatibilities
Many customers have been prevented from upgrading the Java runtime hosting their Confluence instance due to [CONF-4082](#), an issue which would prevent existing dynamic task lists from working with the new JRE. This issue has been resolved in Confluence 2.5 allowing dynamic task list users to upgrade and downgrade between Java versions without experiencing conversion exceptions.

**contentbylabel** macro supports AND condition

You may now use the operator=AND parameter with the **contentbylabel** macro to select pages that have all of the supplied labels. ([CONF-4969](#))

The Confluence 2.5 Team

<table>
<thead>
<tr>
<th>Development</th>
<th>Oversight &amp; Misc management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Davies</td>
<td>Mike Cannon-Brookes</td>
</tr>
<tr>
<td>Matthew Jensen</td>
<td>Scott Farquhar</td>
</tr>
<tr>
<td>Samuel Le Berrigaud</td>
<td></td>
</tr>
<tr>
<td>David Loeng</td>
<td></td>
</tr>
<tr>
<td>Charles Miller</td>
<td></td>
</tr>
<tr>
<td>Christopher Owen</td>
<td></td>
</tr>
<tr>
<td>Agnes Ro</td>
<td></td>
</tr>
<tr>
<td>Matt Ryall</td>
<td></td>
</tr>
<tr>
<td>Don Willis</td>
<td></td>
</tr>
</tbody>
</table>
# Issues Resolved for 2.5

This page last changed on Apr 25, 2007 by christopher.owen@atlassian.com.

<table>
<thead>
<tr>
<th>T</th>
<th>Key</th>
<th>Summary</th>
<th>Status</th>
<th>Res</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONF-5159</td>
<td>Draft saving incorrectly encodes characters in Safari</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-4082</td>
<td>ConversionException on dynamic tasklist after JDK version change</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8393</td>
<td>Plugin repository client 2.0.2 fails to update plugins</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8321</td>
<td>Implement setting page permissions thru XML-RPC and SOAP recently-updated throws NullPointerException when no pages with label found</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8301</td>
<td>Newline collapsing between horizontal rule and the following element screws things up</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8282</td>
<td>Info macros help not internationalized</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8275</td>
<td>Anonymous user should not be allowed to set page permissions</td>
<td>Closed</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8259</td>
<td>Links of PDF export from Confluence Space are all web links instead of local links</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8255</td>
<td>create-space-button macro throws NPE when using preview</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8242</td>
<td>Using page mailing, page link is not ok for news</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8221</td>
<td>Confluence jar shipped in standalone lib directory</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td></td>
<td>CONF-8206</td>
<td>Custom SQL query</td>
<td>Resolved</td>
<td>FIXED</td>
</tr>
<tr>
<td>CONF-8111</td>
<td>LiveSearch throws exception if search term contains spaces</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8043</td>
<td>Better Crowd Integration (from a user's perspective)</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7974</td>
<td>Anonymous additons are attributed to $page.creatorName in text update notifications</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7893</td>
<td>Link to Plugin Repository is 'plugin.repository.link'</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7333</td>
<td>Blank line between bullets is lost</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5783</td>
<td>Markup with emoticon should have whitespace around it</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5080</td>
<td>Administrators cannot restrict View/Edit of a page to a group that the administrator does not belong</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-4969</td>
<td>contentbylabel macro should support AND condition</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-3701</td>
<td>Allow selection of multiple users and multiple groups (or both) for page level permissions</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8403</td>
<td>The code macro inserts a new line at its end</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8330</td>
<td>user X moving a page created by user Y triggers a notification for each child in heirarchy, attributed to user Y</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8297</td>
<td>Attachments macro doesn't list previous versions of attachments when 'old' property is set to true</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8285</td>
<td>HTML Blogpost navigation have a</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8283</td>
<td>trailing 'Y' in the space link. remove comment notification wrongly claims that the comment author is the comment remover</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8278</td>
<td>Create Space Button disables embedded images</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-8271</td>
<td>Confluence tries to index non text files as text, e.g., .wnk files crunch search JIRA issues macro should use nofollow for refresh and main title link</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7966</td>
<td>'add comment' and 'remove comment' notification do not link to the page that the comment was attached to</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-7912</td>
<td>Rich Text Editor: Bullets and text in a table cell</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5799</td>
<td>Hide trash when user can't remove page</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5334</td>
<td>Hovering over the tabs in the editor view causes page to scroll on IE</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
<tr>
<td>CONF-5134</td>
<td>Blogpost macro - order by created date only</td>
<td>Resolved</td>
<td>FIXED</td>
<td></td>
</tr>
</tbody>
</table>
Release Notes_1.0.1

This page last changed on Apr 06, 2004 by jnolen.

Confluence 1.0.1

Over the course of the last month of supporting Confluence 1.0, there are a number of patches that we have been distributing to fix specific problems our users have encountered. Confluence 1.0.1 is a maintenance release into which all these patches have been integrated.

Who Should Upgrade?

All the issues that were resolved for this release are listed below. We have not snuck in any other changes: what you see here in the release notes is precisely what you will get. If you find something on the list that directly affects you, or that you feel justifies the effort of an upgrade, then do so. Otherwise, feel free to stick with 1.0.

Upgrade Procedure

If You Have Customised osuser.xml

If you have customised Confluence's user-management, for example to integrate it with LDAP or JIRA, you will have to integrate your changes to account for the caching OSUser providers we introduced in Confluence 1.0.1. See this document for more details: Confluence Caching OSUser Provider. Updated instructions for integrating with JIRA user management are here: Delegate user management to use JIRA logins

Otherwise

To avoid the possibility of data-loss, you should back up your ConfluenceHome directory and your database before upgrading, and perform a full backup from within the application.

Changes in 1.0.1

See also Issues Resolved for 1.0.1

Direct Attachment Links

In response to a loud demand from users, links to attachments using the [^attachment.jpg] syntax will download the attachment file directly, instead of linking to an anchor in the destination page.

Sybase ASE Support

Confluence 1.0.1 resolves the following problems that were causing Confluence not to work with Sybase ASE 12.5.1:
ORDER-BY mappings failing on Sybase (CONF-1021)
Can't add users under Sybase (CONF-1022)
Weird datatpe error under Sybase (CONF-1024)
Sybase doesn't like complicated distinct selects (404 page fails) (CONF-1025)
Backup import fails under Sybase (CONF-1063)

These bug-fixes may also improve Confluence's compatibility with other untested databases. They will not, however, have any effect on Confluence's operation against PostgreSQL, MySQL or HSQL.

Microsoft SQL Server Dialect in Setup Page

The Microsoft SQL Server database dialect was missing from the database setup page. It has now been added to the list. Confluence has not yet been tested on Microsoft SQL Server, and the usefulness of this option is not yet guaranteed. However, since the Sybase issues above are now resolved and SQL Server belongs to the same family as Sybase, it would be well worth a try.

JIRA User Provider Caching

Users who were linking their user management to JIRA's using the supplied provider were experiencing significant performance problems as a result. 1.0.1 introduces caching to the user provider, which should speed up these installations significantly.

Global Reports Visibility

Under Confluence 1.0, the global "undefined pages" and "orphaned pages" reports did not properly filter out pages that the user could not see. The user could not see the content of any page they did not have access to, but they could learn of the existence of (and names of) pages and spaces they were not permitted to see. This bug is fixed in 1.0.1

Locale-Independent Dates in Backup/Restore

In Confluence 1.0, dates were written into backup files using a localised representation of the month. As such, if you exported Confluence data from a server in one locale it might not import successfully into a server with a different Locale setting. Confluence 1.0.1 still recognises the 1.0 export format, but its own exports will write out dates in a locale-independent format.

As noted above, this means that data exported from Confluence 1.0.1 can not be imported successfully into Confluence 1.0.

Fix Browser Crash on Viewing Some Templates

Previously, if you created a template containing no variables, then anyone attempting to preview or use that template would have their browser hang in an infinite Javascript loop. Confluence 1.0.1 fixes this bug.

Typo Fixed on User Group Editing Page

A single-character change from "privilage" to "privilege".
Confluence Setup Guide

This page last changed on Jan 01, 2007 by david.soul@atlassian.com.

Users should complete the Confluence Installation Guide before continuing.

<table>
<thead>
<tr>
<th>Standalone Setup Wizard</th>
<th>Custom Installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Standard Installation is recommended if you are:</td>
<td>The Custom Installation is recommended if you want to to combine one or more of the following options:</td>
</tr>
<tr>
<td>- a new Confluence user</td>
<td>- store data in your own database, rather than the embedded HSQL database</td>
</tr>
<tr>
<td>- evaluating Confluence</td>
<td>- install Confluence without the demonstration content</td>
</tr>
<tr>
<td>The Standard Installation installs Confluence with an embedded database, and some demonstration content that will get you working with Confluence as quickly and easily as possible. You may upgrade to another type of database later on.</td>
<td>- restore a previous Confluence instance (using a backup)</td>
</tr>
<tr>
<td></td>
<td>The Custom Installation provides you with more options during setup, allowing you to connect to an external database, restore content from a previous Confluence backup, or choose not to load the demonstration content.</td>
</tr>
</tbody>
</table>

Security Warning

Disable external access to your Confluence server temporarily while installing Confluence. Until Confluence is completely set up, it is not secured and anyone can configure it. You should set up Confluence in a secure environment, and only open it up to external access once setup is completed.

Licensing

Don't have a licence yet?

- New users can get a free multi-user Evaluation licence or two-user Personal licence immediately
- For enterprise, non-profit, open source and educational licences, see Confluence Licencing and Pricing
- Existing users can retrieve their key from the Licence Viewer
- If you can't find your key or are having problems, contact sales@atlassian.com

NEXT

Perform Standalone Setup Wizard or Custom Installation
License will not validate.
Documentation Home
Custom Installation

This page last changed on Aug 11, 2006 by david.soul@atlassian.com.

Custom Installation - Choosing a Database Configuration

Step One:
Copy and paste the license key and click 'Custom Installation'

Step Two:
Select one of these two options:

- Embedded database: Confluence will use an embedded database (Hypersonic SQL). This is recommended only for evaluation or demonstration. To ensure your data is kept safe and consistent, we recommend production deployments of Confluence using an external database. You can however, migrate to another database later on, if you wish.

If you select this option, you are now ready to start using Confluence:

- External Database: Deploy Confluence against one of these compatible databases. Select it from the drop-down menu and click 'External Database'.
  - PostgreSQL
  - MySQL
  - Oracle 8i
  - Oracle 9i/10g
  - Microsoft SQL Server
  - Sybase Ase
  - DB2
  - Unsupported Database

Proceed with an external database
Choose a Database Configuration

Choose where Confluence should store its data

**Embedded Database**

The embedded database will allow Confluence to operate without an external database. This is recommended for evaluating and demonstrating Confluence, but production systems should consider an external database for improved scalability and reliability. (This option will create an HSQL database in the Confluence Home directory).

**External Database**

If you wish to store your Confluence data in an external database, choose it from the list of supported databases. This is recommended for production systems.

If your database is not listed in the menu, you may configure an "Unsupported Database", but be aware that Confluence may not run reliably.

Proceed with an [External Database](#)

**RELATED TOPICS**

- [Standalone Setup Wizard](#)
- [Configuration Guide](#)
- [Documentation Home](#)
External Database

This page last changed on Jan 14, 2007 by ivan@atlassian.com.

Character Encoding

We strongly recommend character encoding to be consistent among participating entities in your system: the database, application server and web application. Before setting up your database, please ensure that you read about configuring character encoding.

Custom Installation - Connecting to your database.

Select one of these options:

- Standard Database Connection
- Datasource Connection

1. Standard Database Connection:

This uses a standard JDBC database connection. Connection pooling is handled within Confluence. You will need to know:

- The Java class name for the appropriate database driver.
- The JDBC URL for the database you will be connecting to.
- A valid username and password for that database.
- The size of the connection pool Confluence should maintain (If in doubt, just go with the default provided)
- What kind of database you're connecting to (so you can tell Confluence which "dialect" it needs to speak)

The first two will depend on the JDBC driver, and will be found in the documentation for your database.

You will also need to put the appropriate database driver "jar" file in the server's classpath. For the standalone version, this means copying the jar file into the common/lib directory.

Setup Standard Database

<table>
<thead>
<tr>
<th>Driver Class Name</th>
<th>com.mysql.jdbc.Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database URL</td>
<td>jdbc:mysql://localhost/confluence?autoReconnect=true</td>
</tr>
<tr>
<td>User Name</td>
<td></td>
</tr>
<tr>
<td>Password</td>
<td></td>
</tr>
</tbody>
</table>

Next >>
2. Datasource Connection

This asks the Java application server for a database connection. You will need to have configured a datasource into your application server, and know:

- The JNDI name of the datasource, as configured in the application server. Note, some servers will have JNDI names like jdbc/datasourcename, others will be of the form java:comp/env/jdbc/datasourcename. Consult your application-server documentation.
- What kind of database you're connecting to (so you can tell Confluence which "dialect" it needs to speak)

**Setup Datasource Connection**

If "java:comp/env/jdbc/DataSourceName" doesn't work, try "jdbc/DataSourceName" (or vice versa)

| Datasource Name: [jdbc/env/jdbc/] | Next >> |

NEXT:

Load Content for the Site

RELATED TOPICS

- Custom Installation
- Confluence Setup Guide
- Confluence 2.0 User Guide
- Documentation Home
Load Content

If you are evaluating or demonstrating Confluence, or are introducing Confluence to users who are new to the idea of a Wiki, we recommend the example site as the best way to become acquainted with what Confluence can do for you. More experienced users will want to start with an empty site, or restore a backup of their own.

- **Example Site**
  Recommended: Load the Demonstration Space to begin working with Confluence immediately.

- **Empty Site**
  Start with an empty site. After finishing the setup you will need to create at least one space before you can add any content of your own.

- **Restore From Backup**
  Use data from a previous installation of Confluence. If you are upgrading or replicating Confluence you will probably want to select this option.

Please select one of the options:

- Example site : This option will load Confluence's Demonstration site. Select this if you are a new user as a way of familiarising yourself with Confluence and what it can do for you.
- Empty site : Select this option if you are already familiar with Confluence. You will need to create at least one space before you can starting adding content to the site.
- Restore from Backup : Select this option if you want to use data from a previous installation

NEXT:

Start Using Confluence

RELATED TOPICS

- Importing from JSPwiki
- Confluence 2.0 User Guide
- Documentation Home
Restoring from Backup During Setup

This page last changed on Oct 16, 2006 by ivan@atlassian.com.

Use this option to restore data into a new instance of Confluence.

There are two ways to restore data from a backup file during setup:

Administration > Backup & Restore option

1. To restore data from a zipped backup,

   1. Browse for the relevant daily backup file.
   2. Check 'Build Index' to build data index (for search).
   3. Click 'Upload and Restore'.

2. To restore a backup from the file system

   This is recommended if you have:

   - a very large daily backup file (greater than 100MB) OR
   - a daily backup file that is already on the server and doesn't require uploading

   1. Copy the backup file into the restore directory inside your confluence home folder and then refresh the page. You should now see your backup file appear in the box underneath the heading Restore a backup from the filesystem.
   2. Click 'Restore'.

Screenshot : Restoring Data
Restore Data

There are two ways you can restore a backup:

- **Upload a zipped backup to Confluence**

  To be able to search your data an index needs to be built. You can postpone this for later by unchecking the box below.

  - [ ] Build Index

  ![Upload and restore button]

  OR

- **Restore a backup from the filesystem**:

  Recommended if you have a large backup file.

  Backups must be copied into the C:\data\vidahl\restore directory.

  ![No files in directory]

  There are currently no files in the restore directory. You will need to copy your backup here first.

  - [ ] Build Index

  ![Restore button]

NEXT:

Start Using Confluence

RELATED TOPICS

- Custom Installation
- Documentation Home
Standalone Setup Wizard

This guide is intended for users who have already installed Confluence standalone.

Stage One. Insert Licence Key

You will need to retrieve your licence key. You can get the key from the email address you registered for your evaluation, or through the Licence Viewer.

Copy and paste your license key and click 'Standard Installation'. The Standard Installation is recommended for evaluating users. It uses an embedded database.

Stage Two. Create Confluence Administrator

You must create an administrator to add more users, create spaces, and setup Confluence further. For more information on users, groups and permissions, see the Security Overview.

Setup Confluence Administrator

Please configure the administrator account for this Confluence installation.

Configure Account

| Username: | admin |
| Password: |   |
| Confirm: |   |
| Name: |   |
| Email: |   |

In the form displayed, enter a username, password, and email address for an administrator account, then click Next.

The next screen will show your Dashboard with demonstration content for you to browse. Congratulations, you are now ready to start adding content and users to Confluence!

Next

Browse the Confluence User Guide

Related Topics
Content Anonymiser for Data Backups

This page last changed on Dec 28, 2006 by david.soul@atlassian.com.

A [Jira data anonymiser](https://docs.atlassian.com) is also available.

Atlassian may request a copy of entities.xml file from a customer’s exported zip file, in order to diagnose database corruption, or find a bug in Confluence.

If your data is confidential, you can run this program over your entities.xml file, removing all your data, leaving only the structure of the export.

To do this:

1. Download the two files attached to this page.
2. Extract the entities.xml file from your zipped backup file to the same directory as the two files.
3. Use the command prompt to go to the directory where all three files are located
4. To create cleaned.xml, Linux users should run the command

   ```
   java -cp dom4j-1.4-full.jar:exportcleaner.jar com.atlassian.confluence.util.ExportCleaner entities.xml cleaned.xml
   ```

   Windows users should use

   ```
   java -cp dom4j-1.4-full.jar;exportcleaner.jar com.atlassian.confluence.util.ExportCleaner entities.xml cleaned.xml
   ```

5. Attach cleaned.xml to the [support ticket](https://confluence.atlassian.com/pages/overview)
Database Configuration

This page last changed on Jan 05, 2007 by david.soul@atlassian.com.

This document provides information on configuring an external database.

Database Selection

Production instances of Confluence should use an external database. The default hSQL database has a risk of unrecoverable data loss due to not being transaction-safe.

Corruption is occasionally encountered after sudden power loss and can usually be corrected using this data recovery procedure. hSQL is still suitable for evaluation purposes, but the risk can only be eliminated by switching databases. External databases may also provide superior speed and scalability. Below is more information on selecting an external database.

- List Of Supported Databases
- Known Issues For Supported Databases

Database Setup

Setup instructions are shown below; click on a database to review the setup guide and any known issues.

MySQL

Database Setup For mySQL
Known Issues for MySQL

PostgreSQL

Database Setup For Any External Database
Known Issues for PostgreSQL

Oracle

Database Setup for Oracle
Known Issues For Oracle

SQL Server

Database Setup for SQL Server
Known Issues For SQL Server

DB2

Known Issues for DB2

Sybase Database
Known Issues for Sybase Database

Other databases should use Database Setup For Any External Database.

Optimise Database Performance

To improve database responsiveness:

- Improving Database Performance
- Known Issues For Supported Databases

Database Troubleshooting

For solving database-related problems:

- Troubleshooting External Database Connections
- Troubleshooting the Embedded Database (hSQL DB)
- Interpreting DB2 Error Codes
- Known Issues For Supported Databases

Obtain technical support from Troubleshooting & Technical Support
Database Setup Guides

This page last changed on Jan 05, 2007 by david.soul@atlassian.com.

- Database Setup For Any External Database
- Database Setup For mySQL
- Database Setup for Oracle
- Database Setup for SQL Server
Database Setup For Any External Database

This page last changed on Mar 27, 2007 by ivan@atlassian.com.

If you are using Confluence in a production environment, data should be stored in an external database. The embedded database is bundled for evaluation purposes and does not offer full transactional integrity in the event of sudden power loss.

This document outlines migrating your Confluence data from the embedded database to a more robust database such as Postgres or SQL Server. The following databases have their own guides:

- MySQL Guide
- Oracle Guide
- SQL Server

Migration Instructions

Install Confluence if you have not done so already. You also need to install the following on the Confluence server:

- Database administration tool, for example DBVisualizer
- JDBC database drivers
- The database server (unless accessed remotely)

The instructions refer to two particular directories:

- The `<Confluence Installation Directory>` is the directory where you unpacked the Standalone Confluence download.
- The `<Confluence Home Directory>` is the directory where Confluence stores its data, which you set by editing the `confluence-init.properties` file in `Confluence Installation Directory/confluence/WEB-INF/classes`

Stage 1 - Database Setup

Create the schema and setup permissions:

1. Visit the Database Configuration page to review any known issues and database setup for your database.
2. Create a new schema using the correct database encoding.
3. Create a user with full access to read/write access to the Confluence schema, including the ability to create tables.
4. If the database only permits users to login from approved hosts (eg localhost), grant database access permission for the Confluence server.
5. If the database is hosted remotely to the Confluence server, setup any firewall permissions.
6. Test the connection by using the database administration tool installed on the Confluence server to login to the database.
### Stage 2 - Create Backups

To keep any existing Confluence content:

1. If you are already using an external database, use your database administration tool to create a full database backup.
2. Manually create an XML backup of Confluence under Administration -> Backup & Restore. If you have less than 100MB of attachments, check 'Backup attachments' when creating the backup. If you have over 100MB of attachments, you should not check the 'Backup attachments' and instead you should manually copy the /attachments directory in your Confluence home to a backup location. This attachments directory will later be copied into the new home directory.
3. Download the backup file to a backup location.

### Stage 3 - Database Connection Setup

Setup Confluence's database connection:

1. Stop Confluence
2. The JDBC database drivers for your database must be available to the application server. You can skip this step if the drivers are already loaded
   a. Copy the database driver JAR file into the `lib` directory. In Confluence Standalone this directory is `/confluence/WEB-INF/lib` other application servers will use a different path
   b. If the application server does not support dynamic library loading, stop your application server
3. Create a new Confluence home directory
4. Open WEB-INF/classes/confluence-init.properties file in your Confluence installation and change the `confluence.home` property to point to this new Confluence home directory.
5. Start up Confluence. You should be presented with the Confluence setup wizard. Enter your licence information
6. Select custom install
7. Select a database from the drop down list
8. Select Direct JDBC and then enter the username, password and database driver of the new database
9. If you created a Confluence backup earlier and wish to restore it, import it into Confluence
10. Once the wizard is complete, if you did not check the 'Backup attachments', copy the backed up /attachments directory into the new Confluence home

Done! Your old Confluence data should now be imported to your new database.
Database Setup For mySQL

This page last changed on Apr 04, 2007 by tom@atlassian.com.

Confluence should use an external database for production usage, as the embedded database does not offer full transactional integrity in the event of sudden power loss. Confluence Standalone with mySQL is well-tested and easily configured for production.

This document outlines setting up Confluence with the open-source MySQL database on Microsoft Windows, migrating across any existing content. To migrate to another database such as Oracle, follow this guide instead.

Migration Instructions

 Install the following software:

1. Install Confluence if you have not done so already.
2. Install the mySQL MySQL 'Community' Database Server, version 4.1.x, from the mySQL download page. This install includes mySQL Administrator. We don't currently support mySQL 5.
3. Download the latest mySQL Connector/J driver, version 3.1 or newer.

The instructions refer to two particular directories:

- The Confluence Installation Directory is the directory where you unzipped the Confluence install download.
- The Confluence Home Directory is the directory where Confluence stores its data, which you set by editing the confluence-init.properties file in Confluence Installation Directory/confluence/WEB-INF/classes

Stage 1 - mySQL Database Setup

To create the database and user privileges:

1. Start the MySQL Administrator and use it connect to the mySQL database server. If you are running mySQL for the first time and are unsure of the login settings, just click OK to connect using the defaults.
2. Go to User Administration and click the 'New User' button at the bottom of the window.
3. Call the user 'confluenceuser' and give them a password, click 'Apply Changes'.
4. Right click on the name 'confluenceuser' and choose 'Add Host From Which The User Can Connect' from the pop-up menu. Enter the host 'localhost'.
5. Go to Catalogs, right click in the schema list at the bottom of the left hand column of the window, and select 'Create New Schema' from the pop-up menu. Call the new Schema 'confluencedb'.
6. Go back to User Administration, click on 'confluenceuser' text, not the icon. Then select the 'localhost' which appears under 'confluenceuser'. Now go to the Schema Privileges tab located on the RHS of the window. Here select confluencedb, and make sure the user has all privileges assigned to them by clicking the '<<>' button to move the priviledges from the 'Available' to the 'Assigned' list. Click "Apply Changes".
Stage 2 - For Users With Existing Data Only

This stage is only required if you have existing Confluence content you wish to transfer:

1. Manually create an XML backup of Confluence under Administration -> Backup & Restore. If you have less than 100MB of attachments, check 'Backup attachments' when creating the backup. If you have over 100MB of attachments, you should not check the 'Backup attachments' and instead you should manually copy the /attachments directory in your Confluence home to another location. This attachments directory can then be copied into the new home directory as describe later
2. Download the backup file to a backups folder
3. Stop Confluence
4. Open your Confluence home directory and copy the plugins subdirectory to the backups folder

Stage 3 - Database Connection Setup

To switch to using the external database:

1. Stop Confluence
2. Edit Confluence Installation Directory/WEB-INF/classes/confluence-init.properties and change the confluence.home property to point to a new directory. e.g. if you had

   confluence.home=c:/confluencedata

You could change it to:

   confluence.home=c:/confluencedata_mysql

This is your new Confluence Home Directory. (The name doesn't have to end in _.mysql – that's just an example)

3. Copy the file mysql-connector-java-3.1.xx-bin.jar from the directory where you unpacked Connector/J to Confluence Installation Directory/WEB-INF/lib. (the xx depends on exactly which version you download – MySQL updates the version number from time to time)

4. Start Confluence and set up the new configuration
   a. You'll be asked for your licence key again. Enter it, and click the 'Custom Installation' button.
   b. Under the 'External Database' heading, choose MySQL from the dropdown list and click the 'External Database' button.
   c. On the next page, click the 'Direct JDBC' button.
   d. Change the database URL by changing the database name 'confluence' to 'confluencedb', so the URL looks like this: jdbc:mysql://localhost/confluencedb?autoReconnect=true
   e. Enter confluenceuser in the User Name field, and the password you chose earlier in the Password field
   f. Click the Next button. If you get the error message Could not successfully test your database: : Server connection failure during transaction. Due to underlying exception: 'java.sql.SQLException: Access denied for user 'confluenceuser'@'localhost' (using password: YES)' verify that you have properly given the confluenceuser user all the right permissions when connecting from localhost
Stage 4 - For Users With Existing Data Only

To re-import your backup and plugins:

1. At the 'Load Content' page, choose 'Restore From Backup', browse for the backup you created and restore it. Otherwise choose either the example or empty site as you wish.
2. Stop Confluence
3. Open your backups folder and copy the plugins subdirectory to the new Confluence home directory

Done!

Related Documents

Configuring Database Character Encoding
Known Issues for MySQL
Database Setup for Oracle

This page last changed on Apr 15, 2007 by ivan@atlassian.com.

This guide covers deploying Confluence standalone 2.2 or later against an Oracle database, and is also applicable to the WAR version. For older Confluence versions, please follow these instructions.

This database can only be setup by an Oracle database administrator. If you are not a DBA, you should not attempt this guide.

Oracle has a history of being extremely difficult to setup. If you do not have access to an experienced Oracle DBA in your organisation, you are recommended to select any free, scalable and easy-to-install alternative rather than proceeding with Oracle. Users evaluating Confluence are recommended to start with an alternative database and only consider migrating to Oracle after approval from their DBA. Atlassian's technical support for Oracle setup difficulties will also reflect the high minimum skill requirements for attempting an Oracle setup.

Database Setup Information

This setup guide must be used in conjunction with the list of Known Issues For Oracle. Please review that page before continuing.

Schema Requirements

Confluence must be deployed to a schema in it's own, separate Oracle instance. This avoids a Hibernate bug triggered by the existence of duplicate tablennames in other schemas, outlined here.

Database Incompatibilities

Oracle 9i and later are supported, please upgrade any older versions prior to installing Confluence.

⚠️ Database driver update may be required
For all versions of Oracle, you must upgrade to the latest 10g drivers. Check the latest compatible version here. We highly recommend to use the thin drivers.

Please check that your version of Oracle does not have any known issues:

<table>
<thead>
<tr>
<th>Oracle Version</th>
<th>Oracle Driver</th>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>Pre 10g</td>
<td>Driver incompatibilities</td>
<td>Upgrade to latest 10g drivers if compatible</td>
</tr>
<tr>
<td>Pre 9</td>
<td>Any</td>
<td>Earlier DBs not compatible</td>
<td>Upgrade DB to 9.x or later</td>
</tr>
<tr>
<td>9.0.1.0</td>
<td>Any</td>
<td>DB not compatible</td>
<td>Upgrade DB to 9.0.2.6 or later</td>
</tr>
<tr>
<td>10g</td>
<td>10.1.0.3.0</td>
<td>Drivers not compatible</td>
<td>Upgrade drivers to</td>
</tr>
</tbody>
</table>
Deploying Against Oracle

Complete the instructions for installing Confluence standalone, then return to this document instead of proceeding to the Confluence Setup Guide.

Database Preparation

Tailor these instructions to your particular database version:

1. Perform any necessary database or driver upgrades. Download the latest compatible database drivers
2. Create a separate instance of Oracle and apply any configuration tasks.
3. Create a Confluence user configuration and grant access permissions.

Adding a DataSource to Tomcat

1. Open `<INSTALL>/conf/server.xml` for editing.
2. Locate the section `<Host -> Context`

   ```xml
   <Host name="localhost" debug="0" appBase="webapps" unpackWARs="true" autoDeploy="false">
     <Context path="" docBase="..\confluence" debug="0" reloadable="true">
       <!-- Logger is deprecated in Tomcat 5.5. Logging configuration for Confluence is specified in confluence/WEB-INF/classes/log4j.properties -->
       <Manager className="org.apache.catalina.session.PersistentManager" saveOnRestart="false"/>
     </Context>
   </Host>
   ```
3. Paste in the Resource section provided, prior to Manager as shown

   ```xml
   <Host name="localhost" debug="0" appBase="webapps" unpackWARs="true" autoDeploy="false">
     <Context path="" docBase="..\confluence" debug="0" reloadable="true">
       <!-- Logger is deprecated in Tomcat 5.5. Logging configuration for Confluence is specified in confluence/WEB-INF/classes/log4j.properties -->
       <Resource name="jdbc/confluence" auth="Container" type="javax.sql.DataSource"
           driverClassName="oracle.jdbc.driver.OracleDriver"
           url="jdbc:oracle:thin:@hostname:port:sid"
           username="<username>"
           password="<password>"
           connectionProperties="SetBigStringTryClob=true"
           maxActive="25"
           maxIdle="5"
           maxWait="10000"
           />
       <Manager className="org.apache.catalina.session.PersistentManager" saveOnRestart="false"/>
     </Context>
   </Host>
   ```
4. Change the `username` and `password` to match the Oracle login.
5. Change `url` to match `hostname`, `port` and `sid` of the Oracle server. `Sid` stands for the schema
name. For example:

jdbc:oracle:thin:@example.atlassian.com:1521:confluencedb

6. If required, choose different maxActive and maxIdle values. These set how many total database connections will be allowed at one time, and how many will be kept open even when there is no database activity.

Configure Confluence Datasource Access

Confluence must be configured to use this datasource:

1. Edit the file <INSTALL>/confluence/WEB-INF/web.xml
2. Go to the end of the file and just before </web-app>, insert the following:

```xml
<resource-ref>
  <description>Connection Pool</description>
  <res-ref-name>jdbc/confluence</res-ref-name>
  <res-type>javax.sql.DataSource</res-type>
  <res-auth>Container</res-auth>
</resource-ref>
```

3. Locate the Oracle JDBC database drivers for JDK 1.4, which comes bundled with your database. We recommend using the thin drivers only. Copy ojdbc14.jar to the <INSTALL>/common/lib directory.

Confluence Setup Wizard

Now Confluence is ready to attempt to connect to Oracle:

1. Startup Confluence using <INSTALL>/bin/startup.bat or <INSTALL>/bin/startup.sh
2. Insert your licence and select External Database.
3. Select Datasource Connection using your Oracle version.
4. Enter java:comp/env/jdbc/confluence for the name of the datasource.

Confluence should now deploy using the Oracle database specified. Please read this [comment](#) on Oracle database optimisation.

Generic Oracle Configuration Tips

Websphere and Oracle

If you are planning to run Confluence on a Websphere application server and Oracle database, you should read the information on [Known Issues for Websphere](#).

24-hour time format with Oracle 8i

We have received a report from a user that when an Oracle 8i database is configured to use 24-hour time as the default format, an exception like this may occur:
One symptom of this problem is that Confluence may refuse to start after midday.

The workaround is to go to ‘General Configuration’ and set the default time format to "HH:mm".
Database Setup for Oracle (Pre Confluence 2.2)

This page last changed on Jun 26, 2006 by david.soul@atlassian.com.

⚠️ This document is out of date

This documentation applies to Confluence 2.1.x or older. If you have Confluence 2.2.x or newer, please refer to [Database Setup for Oracle](#).

⚠️ Please note, we strongly recommend you install Confluence on a schema in a brand new database on your Oracle server. If this cannot be accommodated, be aware that Confluence may not install or operate properly. For more details on this limitation please see the issue filed [here](#).

This installation assumes you are using the standalone version of Confluence and Oracle 9i. We have not tested against older versions of Oracle, but have been told that it should work against Oracle 8i provided you use the latest 9i drivers.

⚠️ Note that some users have found that 9.0.1.0 does not work, while 9.0.2.6 does.

If you are using 10g you should use the 10.1.0.4.0 drivers – the 10.1.0.3.0 drivers don’t work when using a Tomcat 5.5 datasource, as the connection returned is a T4CConnection instead of the OracleConnection which Spring is expecting.

1. Adding a datasource to Tomcat

Versions before 5.5

- Edit the `conf/server.xml` file in your Tomcat installation
- Find the following lines:

```xml
<Context path="" docBase="../confluence" debug="0" reloadable="true">
  <Logger className="org.apache.catalina.logger.FileLogger" prefix="atlassian-confluence." suffix=".log" timestamp="true"/>
</Context>
```
- Directly after the `<Logger.../>` line, (before the next `</Context>` line), insert the following:

```xml
<Resource name="jdbc/Confluence" auth="Container" type="javax.sql.DataSource"/>
<ResourceParams name="jdbc/Confluence">
  <parameter>
    <name>factory</name>
    <value>org.apache.commons.dbcp.BasicDataSourceFactory</value>
  </parameter>
  <parameter>
    <name>maxActive</name>
    <value>20</value>
  </parameter>
  <parameter>
    <name>maxIdle</name>
    <value>10</value>
  </parameter>
  <parameter>
    <name>maxWait</name>
    <value>10000</value>
  </parameter>
  <parameter>
    <name>username</name>
  </parameter>
</ResourceParams>
```
You may want to choose different maxActive and maxIdle values: these are how many total database connections will be allowed at one time, and how many will be kept open even when there is no database activity.

- Replace the username and password parameters with the correct values for your database.
- In the url parameter, replace the word 'oracle-sid' with the name of the database your confluence data will be stored in. Obviously also change the hostname and port.

### Versions 5.5 and later

In Tomcat 5.5 the configuration format has changed. The data source resource should be defined like this:

```xml
<Resource name="jdbc/Confluence" auth="Container" type="javax.sql.DataSource" driverClassName="oracle.jdbc.driver.OracleDriver" url="jdbc:oracle:thin:@<hostname>:<port>:<sid>" username="<username>" password="<password>" connectionProperties="SetBigStringTryClob=true" maxActive="25" maxIdle="5" maxWait="10000"/>
```

### 2. Configure the Confluence to be aware of this datasource

- Edit `confluence/WEB-INF/web.xml` in your confluence installation
- Go to the end of the file and just before `</web-app>`, insert the following:

```xml
<resource-ref>
  <description>Connection Pool</description>
  <res-ref-name>jdbc/confluence</res-ref-name>
  <res-type>javax.sql.DataSource</res-type>
  <res-auth>Container</res-auth>
</resource-ref>
```

- Copy the ojdbc14.jar to the `common/lib` directory (this jar is the oracle jdbc thin driver for JDK 1.4. It comes bundled with your Oracle 9i database). We recommend using the thin drivers only.

### 3. Confluence setup wizard
- Startup confluence using bin/startup.bat or startup.sh
- Run through the setup process and when asked to choose a database type: choose Datasource Connection
- Enter in java:comp/env/jdbc/confluence for the name of the datasource and select the oracle 9 dialect.
- Complete the setup and that's it!
Database Setup for SQL Server

To run Confluence using the SQL Server, you must create a database table and user, download the database drivers and insert the connection details.

1. **Review Known Issues For SQL Server**
2. **Identify Character Encoding**
   To identify which character encoding to use, check the encoding used by your application server and Confluence now. All three must use compatible encoding. For example, the default SQL Server encoding of USC-2 is compatible with UTF-8.
3. **Create Database Table**
   As an SQL administrator, create a new table. If you set your application server and Confluence to use an encoding incompatible with USC-2, specify that character encoding for the table.
4. **Create SQL User Account**
   As an SQL administrator, create a new user account for Confluence. Provide full create, read and write permissions for the table. Note that Confluence must be able to create its own schema.
5. **Install Database Drivers**
   SQL Server users are strongly recommended to install the JTDS JDBC drivers. Copy the driver file jtds-<version>.jar into your standalone's common/lib directory. If you are configuring a datasource to connect to your MS SQL server database, you may find this page helpful: http://jtds.sourceforge.net/faq.html
6. **Start Confluence and visit the home URL (eg http://localhost:8080)** to start the Confluence Setup Wizard and select a Custom Install, insert the relevant connection information.
7. **When prompted for a driver class name in the database setup step enter:**

   net.sourceforge.jtds.jdbc.Driver

8. **When prompted for the jdbc url, the format to use is:**

   jdbc:jtds:sqlserver://<server>:<port>/<database>
Improving Database Performance

Configuring Database Indexing

This was done specifically for Oracle 9i but the indexing should work with all other DB's if you remove 'bitmap' from the indexes which use it, and remove the parallel clauses.

The work request is followed here: http://jira.atlassian.com/browse/CONF-2780

Thanks to Michael Thorpe for this work

Confluence performance can be improved by adding the following indexes:

Create Indexes

create index CONTENTIDX1 on CONTENT( SPACEID );
create index CONTENTIDX2 on CONTENT( MAILSPACEID ); Confluence 1.4.x only
create index CONTENTIDX3 on CONTENT( BLOGSPACEID ); Confluence 1.4.x only
create bitmap index CONTENTIDX4 on CONTENT( CONTENTTYPE );
create index CONTENTIDX5 on CONTENT( PARENTID );
create index CONTENTIDX6 on CONTENT( TITLE );
create index INKSIDX1 on LINKS( CONTENTID );
create index LINKSIDX2 on LINKS( DESTSPACEKEY );

Also, ensure that all statistics are up to date for the Confluence schema (Hibernate does not ensure that stats are gathered) by using

DBMS_STATS.GATHER_SCHEMA_STATS

And yet more indexes (These reduced physical IO by 80% on our database):

Create Indexes

CREATE INDEX CONTENTIDX7 ON CONTENT (PREVVER)
PARALLEL (DEGREE 4 INSTANCES 1);

CREATE BITMAP INDEX CONTENTIDX9 ON CONTENT (CONTENT_STATUS);

CREATE INDEX CONTENTIDX8 ON CONTENT (PAGEID)
PARALLEL (DEGREE 4 INSTANCES 1);

CREATE INDEX EXTRNLNKSIDX1 ON EXTRNLNKS (CONTENTID)
PARALLEL (DEGREE 4 INSTANCES 1);
CREATE INDEX ATTACHMENTS_IDX1 ON ATTACHMENTS (PAGEID)
PARALLEL ( DEGREE 4 INSTANCES 1 );

CREATE INDEX SPACEPERMISSIONS_IDX1 ON SPACEPERMISSIONS (SPACEID)
PARALLEL ( DEGREE 2 INSTANCES 1 );

And one more

1 Create Indexes

CREATE INDEX CONTENT_IDX10 ON CONTENT (USERNAME)

This one may also help (from Charles Miller)

1 Create Indexes

CREATE INDEX PROPERTY_IDX1 ON OSPROPERTYENTRY (ENTITY_ID)

Also, if your database supports function-based indexes (more about Oracle function based indexes here),
this might help:

1 Create Indexes

create index CONTENT_IDX11 on CONTENT( lower(TITLE) );
Known Issues For Supported Databases

This page last changed on Sep 18, 2006 by david.soul@atlassian.com.

Configuring Database Character Encoding
Known Issues for DB2
Known Issues for MySQL
Known Issues For Oracle
Known Issues for PostgreSQL
Known Issues For SQL Server
Known Issues for Sybase Database
Configuring Database Character Encoding

The database used with Confluence should be configured to use the same character encoding as Confluence. The recommended encoding is Unicode UTF-8.

There are two places where character encoding may need to be configured:

- when creating the database
- when connecting to the database (JDBC connection URL or properties).

The configuration details for each type of database are different. Some examples are below.

### JDBC connection settings

MySQL

Append "useUnicode=true to your JDBC URL:

```
jdbc:mysql://hostname:port/database?autoReconnect=true&useUnicode=true
```

### Creating a UTF-8 database

MySQL

```
CREATE DATABASE confluence CHARACTER SET utf8 COLLATE utf8_general_ci;
```

Use the status command to obtain database character encoding information.
CREATE DATABASE confluence CHARACTER SET utf8 COLLATE utf8_general_ci;

QUERY OK. 1 row affected (0.03 sec)

mysql> show databases;
+----------------+
| Database       |
+----------------+
| confluence     |
| confluencedb   |
| mysql          |
| test           |
+----------------+
4 rows in set (0.00 sec)

mysql> use confluence;
Database changed
mysql> status;

mysql Ver 4.1.21 Distrib 4.1.21, for Win32 (ia32)
Connection id: 10
Current database: confluence
Current user: root@localhost
SSL: Not in use
Using delimiter: ;
Server version: 4.1.21-community-nt
Protocol version: 10
Connection: localhost via TCP/IP
Server characterset: utf8
Db. characterset: utf8
Client characterset: latin1
Conn. characterset: latin1
TCP port: 3306
Uptime: 5 hours 21 min 44 sec

For more information see the MySQL documentation.

PostgreSQL

CREATE DATABASE confluence WITH ENCODING 'UNICODE';

Or from the command-line:

$ createdb -E UNICODE confluence

For more information see the PostgreSQL documentation.

For PostgreSQL running under Windows

Please note that international characters sets are only fully supported and functional when using PostgreSQL 8.1 and above under Microsoft Windows.

For PostgreSQL running under Linux

⚠️ Please make sure you check the following to ensure proper handling of international characters in your database
When PostgreSQL creates an initial database cluster, it sets certain important configuration options based on the host environment. The command responsible for creating the PostgreSQL environment `initdb` will check environment variables such as `LC_CTYPE` and `LC_COLLATE` (or the more general `LC_ALL`) for settings to use as database defaults related to international string handling. As such it is important to make sure that your PostgreSQL environment is configured correctly before you install Confluence.

To do this, connect to your PostgreSQL instance using `psql` and issue the following command:

```
SHOW LC_CTYPE;
```

If `LC_CTYPE` is set to either "C" or "POSIX" then certain string functions such as converting to and from upper and lower case will not work correctly with international characters. Correct settings for this value take the form `<LOCALE>.<ENCODING>` (for example `en_AU.UTF8`).

If your LC_CTYPE is incorrect please check the PostgreSQL documentation for information on configuring database localisation. It is not easy to change these settings with a database that already contains data.

**Updating existing database to UTF-8**

MySQL database with existing data

⚠️ Before proceeding with the following changes, please backup your database.

This example shows how to change your database from latin1 to utf8.

1. Dump the database to a text file using `mysqldump` tool from the command-line:

   ```
   mysqldump -p --default_character-set=latin1 -u <username> --skip-set-charset confluence > confluence_database.sql
   ```

2. Open the SQL file in a text editor and change all character sets from 'latin1' to 'utf8'

3. `cp confluence_database.sql confluence_utf8.sql`

4. Encode all the latin1 characters as UTF-8:

   ```
   recode latin1..utf8 confluence_utf8.sql
   ```

   (Recode utility available from http://directory.fsf.org/recode.html)

In MySQL:

1. DROP DATABASE confluence;

2. CREATE DATABASE confluence CHARACTER SET utf8 COLLATE utf8_general_ci;

Finally, reimport the UTF-8 text file:

1. `mysql -p --default-character-set=utf8 --max_allowed_packet=64M confluence < /home/confluence/confluence_utf8.sql`

To support large imports, the parameter `--max_allowed_packet=64M` used above sets the maximum
size of an SQL statement to be very large. In some circumstances, you may need to increase it further, especially if attachments are stored in the database.

Testing database encoding

See Troubleshooting Character Encodings for a number of tests you can run to ensure your database encoding is correct.

Related Documentation

Known Issues for MySQL
Known Issues for DB2

This page last changed on Sep 18, 2006 by david.soul@atlassian.com.

DB2 Does Not Support Unicode Character By Default

To support the Unicode character set, create your database like this:
For 8.2.2 or later:

```
  db2 create database <name> using codeset utf-8 territory us pagesize 8 k
```

Before 8.2.2:

```
  db2 create database <name> using codeset utf-8 territory us
  db2 drop tablespace userspace1
  db2 create bufferpool bufpool8k <number of pages> pagesize 8 k
  db2 create tablespace userspace1 pagesize 8 k managed by database using \\file \\<location>\\
  <number of pages>\\) bufferpool bufpool8k
```

The territory may not be important when using UTF-8, but it must be included.

DB2 Does Not Support Transaction Logging Of BLOBs Larger Than 1GB


"With their potentially large size, LOBs can slow down the performance of your database system significantly when moved into or out of a database. Even though DB2 does not allow logging of a LOB value greater than 1 GB, LOB values with sizes approaching 1 GB can quickly push the database log to near capacity. An error, SQLCODE -355 (SQLSTATE 42993), results from attempting to log a LOB greater than 1 GB in size. The lob-options-clause in the CREATE TABLE and ALTER TABLE statements allows users to turn off logging for a particular LOB column. Although setting the option to NOT LOGGED will improve performance, changes to the LOB values after the most recent backup are lost during roll-forward recovery."

Although one could set the length for the CustomClobType in BodyContent.hbm.xml field length to larger sizes, say 2^31 to allow storing of BLOBs up to the size of 2 Gb, DB2 maximum length can only be set to 2^30, 1GB.

```
<property name="body" type="com.atlassian.confluence.core.persistence.hibernate.CustomClobType"
    update="true" insert="true"
    column="BODY" length="1073741824" />
```

Configuring Database Character Encoding
Refer to Configuring Database Character Encoding.

Related Links

Interpreting DB2 error codes
Interpreting DB2 error codes

When DB2 dies, it'll dump its error codes out in the SQL Exception:

```
DB2 SQL error: SQLCODE: -803, SQLSTATE: 23505
```

You can find the meaning of the error code from the db2 command prompt with `db2 ? sqlxxxx` where `xxxx` is the SQLCODE from the error message:

```
$db2inst1@matilda db2inst1$ db2 ? sql-803
SQL0803N One or more values in the INSERT statement, UPDATE statement, or foreign key update caused by a DELETE statement are not valid because the primary key, unique constraint or unique index identified by "<index-id>" constrains table "<table-name>" from having duplicate rows for those columns.
Explanation:
The INSERT or UPDATE object table "<table-name>" is constrained by one or more UNIQUE indexes to have unique values in certain columns or groups of columns. Alternatively, a DELETE statement on a parent table caused the update of a foreign key in a...
(and so on for about three more pages of text...)
```

You may also like to use the SQL Message Finder to find information about iSeries SQL messages. You can search by message ID, SQLCODE, or SQLSTATE value. You can also select an SQLSTATE class code.

There is also an online reference for SQL Messages and Codes which is quite useful.
Known Issues for MySQL

Configuring Database Character Encoding

To prevent problems with character encoding, for consistency, we recommend to use Unicode character encoding UTF-8 among all the entities of your system. See Configuring Database Character Encoding for more details.

MySQL Storage Engine

The Default storage engine for MySQL is MyISAM. This storage engine does not support Foreign Key constraints. This may cause data corruption and is not recommended for use.

You can set the default Storage Engine for MySQL by passing the '--default-storage-engine=InnoDB' option when starting mysql.


MySQL JDBC Drivers

For users using MySQL with Confluence 2.2 (or higher), please ensure that you are using the latest (3.1.14) MySQL Java Connector. Earlier versions of the MySQL connector have a bug which is triggered by improvements in Confluence 2.2. These earlier connector versions will result in an error being recorded in your logs on upgrade (and will result in unstable operation of Confluence)

```
ERROR [hibernate.tool.hbm2ddl.SchemaUpdate] execute could not complete schema update
```

You can download the latest MySQL connector from the MySQL Java Connector 3.1 download page. Please be sure that you remove any older versions of the connector from your application server.

Don't use the debug version of these drivers (the jar file ending in '-g.jar'). This requires extra configuration, see Installing the Driver and Configuring the CLASSPATH

If you get a connection error: Access denied for user 'confluenceuser'@'localhost.localdomain' this may be because 127.0.0.1 resolves to 'localhost.localdomain' in your environment. Create a user 'confluenceuser@localhost%' to match any domain starting with localhost.

MySQL and Character encoding:

When specifying a character encoding as part of your mysql connection url (eg: &characterEncoding=utf8), it is important to ensure that the specified encoding is compatible with the
default encoding used by your database. Note: if you do not specify a characterEncoding on the connection url, the connection will default to the servers default character set.

Full details of MySQLs character support is available here: http://dev.mysql.com/doc/mysql/en/charset.html

⚠️ There are known issues with MySQL 3.x and Unicode characters. Please see MySQL 3.x Character Encoding Problems

Confluence installation Hangs

If the confluence installation hangs after creating the mysql jdbc connection, try setting the jdbc property useServerPrepStmts to false.

Example:

jdbc:mysql://localhost/confluence?autoReconnect=true&useServerPrepStmts=false

This issue is known to happen on Ubuntu and Mysql 4.1.x.

Find a list of MySQL related configuration hints below:

MySQL Connector-J 3.1.10 bug.

If you are wondering why a large number of '!' marks are appearing in your log files, it is likely to be caused by http://bugs.mysql.com/bug.php?id=11629.

BadSqlGrammarException and character encoding exceptions using MySQL Connector-J 3.1.10

User reports that adding a "useOldUTF8Behavior=true" parameter to the JDBC URL allowed Confluence to work with this driver.

DataIntegrityViolationException when running MySQL 5

Running MySQL 5 as the database for Confluence is currently not a supported configuration. However, if it is used, the following exception may occur in the logs:
A temporary fix for this is to manually modify the boolean_val column in the OS_PROPERTENTRY table, so that it is of type bit(8). Note that this won’t allow you to restore a backup, as the first thing the restore does is rebuild the DB.

java.sql.SQLException: Invalid authorization specification

Some users reported problems getting MySQL running under Tomcat, throwing an exception similar to the following:

Connection failed to open on the JDBC URL: java.sql.SQLException: Invalid authorization specification, message from server: "Access denied for user: 'your_username@localhost.localdomain' (Using password: YES)"

However, it is still possible to easily connect to MySQL from the shell and from PhpMyAdmin.

The problem seems to be a known bug and seems to be related to the hostname portion in mysql:users.

I figured out the problem. Changing "host" in mysql:users to "127.0.0.1" enabled Confluence to access the database.

Therefore instead of granting permissions using the following command:

```
GRANT ALL PRIVILEGES ON .\* to 'example'@'localhost.localdomain' identified by '<the password>';
FLUSH PRIVILEGES;
```

you should use:

```
GRANT ALL PRIVILEGES ON .\* to 'example'@'127.0.0.1' identified by '<the password>';
FLUSH PRIVILEGES;
```

You can do it this way, but it seems you should ensure that the canonical host name is the first item in the /etc/hosts line for 127.0.0.1. Make sure it's not localhost.localdomain but localhost. e.g.:

```
127.0.0.1   localhost localhost.localdomain myfunkyboxname anotheralias.foobar.com
```

And then make sure you use the same thing, i.e. localhost in the GRANT line and the JDBC URL. Inconsistency across these things is the root problem (and perhaps we can blame the JDBC Driver?)

⚠️ This information is just as useful for JIRA as Confluence.
Max Allowed Packet Size Exceeded

If you are using MySQL 4 and prior, you may come across a problem with `max_allowed_packet` size.

```java
ERROR [sf.hibernate.util.JDBCExceptionReporter] logExceptions Packet for query is too large (1259485 > 1048576). You can change this value on the server by setting the max_allowed_packet' variable.
```

⚠️ In MySQL 3.23, the largest possible packet is 16MB, due to limits in the client/server protocol. In MySQL 4.0.1 and up, the limit is 1GB.

To resolve this problem, you need to increase the value for `max_allowed_packet`

Prior MySQL 4.0, use this syntax instead:

```bash
shell> mysqlid --set-variable=max_allowed_packet=16M
```

From MySQL 4.0, use this syntax:

```bash
shell> mysql --max_allowed_packet=32M
```

For more information, please refer to MySQL manual:


Duplicate Key Exception During Import

When upgrading to MySQL from another database, such as HSQL, importing the site backup often fails with an error like this:

```java
Duplicate key or integrity constraint violation message from server:
```

Such errors occur because usually MySQL evaluates unique key constraints and primary key constraints in a case insensitive way. So if you have a space with the key "sp" and another with the key "SP", MySQL will refuse to add the second one.

This problem is avoidable by setting the `collation` on the database to be case sensitive.

**Setting the MySQL Collation to be case insensitive**

MySQL uses collations for sorting data and for evaluating uniqueness.
To set the collation to case insensitive when using utf8, use this command:

```
CREATE DATABASE confluence CHARACTER SET utf8 COLLATE utf8_bin;
```

Note: The collation must be compatible with the character set. The name of the database in the example is confluence.

To alter the collation on an existing database using utf8, use this command:

```
ALTER DATABASE confluence CHARACTER SET utf8 COLLATE utf8_bin;
```

Note: The collation must be compatible with the character set. The name of the database in the example is confluence.

For further information see the MySQL documentation on character sets on collations.
Known Issues For Oracle

This page last changed on Sep 18, 2006 by david.soul@atlassian.com.

Use Oracle with thin Oracle 10g JDBC drivers

We recommend you to use the following configuration to run Confluence with Oracle:

- Regardless of what version of the Oracle database you are using, you should use the Oracle 10g JDBC drivers. (Note: Oracle 10g JDBC drivers will not work with Oracle 8.1.6 see Oracle FAQ)
- We highly recommend to use the thin drivers.

Also see:

Websphere and Oracle

If you are planning to run Confluence on a Websphere application server and Oracle database, you should read the information on Known Issues for Websphere.

24-hour time format with Oracle 8i

We have received a report from a user that when an Oracle 8i database is configured to use 24-hour time as the default format, an exception like this may occur:

```
005-12-06 13:23:20 Loading root WebApplicationContext

2005-12-06 13:24:34 StandardContext[]: Exception sending context initialized event to listener instance of class com.atlassian.confluence.util.ConfluenceContextLoaderListener
org.springframework.beans.factory.BeanCreationException: Error creating bean with name 'userAccessor' defined in class path resource [applicationContext.xml]: Can't resolve reference to bean 'userAccessorTarget' while setting property 'target'; nested exception is org.springframework.beans.factory.BeanCreationException: Error creating bean with name 'userAccessorTarget' defined in class path resource [applicationContext.xml]: Can't resolve reference to bean 'spacePermissionManagerTarget' defined in class path resource [securityContext.xml]: Initialization of bean failed; nested exception is org.springframework.jdbc.UncategorizedSQLException: (Hibernate operation): encountered SQLException [Cannot create PoolableConnectionFactory]; nested exception is org.apache.commons.dbcp.SQLNestedException: Cannot create PoolableConnectionFactory
... org.apache.commons.dbcp.SQLNestedException: Cannot create PoolableConnectionFactory, cause:
java.sql.SQLException: ORA-00604: error occurred at recursive SQL level 1
```
ORA-12705: invalid or unknown NLS parameter value specified

One symptom of this problem is that Confluence may refuse to start after midday.

The workaround is to go to 'General Configuration' and set the default time format to "HH:mm".

Configuring Database Character Encoding

Refer to Configuring Database Character Encoding.
Known Issues for PostgreSQL

This page last changed on Sep 18, 2006 by david.soul@atlassian.com.

Database Performance Issue on PostgreSQL 7

There is an issue in versions of PostgreSQL prior to 8.0 that causes the database to do a full table scan rather than an index lookup for many of the database queries performed by Confluence. This will cause Confluence to slow significantly the more data it has stored.

While we fully support Confluence on PostgreSQL 7, we highly recommend upgrading to version 8.0 or higher for this reason.

Configuring Database Character Encoding

Refer to Configuring Database Character Encoding.
Known Issues For SQL Server

This page last changed on Sep 18, 2006 by david.soul@atlassian.com.

Unicode Characters Not Supported By Default

Problem
Non-ASCII characters will not be displayed by Confluence.

Reason
The default SQL Server dialect uses column types that do not support Unicode, specifically the char, varchar and text column types. See CONF-4786 for details.

Solution
To add Unicode support, use the Unicode SQL Server dialect which uses nchar, nvarchar and ntext column types. Unicode SQL Server dialect has the downside of halving the maximum length of each column from 8000 characters to 4000, as every char is stored in two bytes.

Enable Unicode SQL Server dialect on a new setup, perform these steps prior to 'Stage 3 - Database Connection Setup' of the Database Setup For Any External Database:

1. Open the mssql.properties file within your Confluence installation folder
2. Comment the line: dialect=net.sf.hibernate.dialect.SQLServerDialect
3. Uncomment the line: #dialect=net.sf.hibernate.dialect.SQLServerInt1Dialect
4. Start the Confluence Setup Wizard

For existing SQL Server instances wishing to enable Unicode support:

1. From Confluence, create an XML site backup
2. From your DBA tool, create a full backup of the Confluence schema contents
3. Stop Confluence
4. Move your home directory
5. Drop all tables from the Confluence schema
6. Change the dialect to Unicode using the above instructions
7. Follow the 'Stage 3 - Database Connection Setup' of Database Setup For Any External Database to setup the connection again and import the XML backup
8. Once the Setup Wizard is complete, stop Confluence
9. Copy any customised content and plugins from your old home directory into the new home directory
10. Start Confluence

This will not restore previously stored Unicode characters.

Use jTDS Driver 1.0.3 Or Later For JDBC Connection - Reason 1

Problem
When using jTDS driver 1.0.2 or earlier, Confluence may freeze when performing certain functions, and you see a warning like the one displayed below:
This can occur with jTDS driver 1.0.2 but is fixed in 1.0.3 - see the [jTDS homepage](http://jakarta.apache.org/jtds/) . It will prevent backups from succeeding and lock access to the database when viewing certain pages.

### Solution

Upgrade to jTDS driver 1.0.3 or later from the [jTDS download page](http://jakarta.apache.org/jtds/).

### Use jTDS Driver 1.0.3 Or Later For JDBC Connection - Reason 2

#### Problem

When using MS SQL Server without the jTDS drivers, you may receive an error similar to:

```java
net.sf.hibernate.LazyInitializationException: Exception initializing proxy:
 at com.microsoft.jdbc.base.BaseException.createException(Unknown Source)
 at com.microsoft.jdbc.base.BaseException.getException(Unknown Source)
 at com.microsoft.jdbc.base.BaseResultSet.validateColumnIndex(Unknown Source)
 at com.microsoft.jdbc.base.BaseResultSet.getLong(Unknown Source)
 at org.jboss.resource.adapter.jdbc.WrappedResultSet.getLong(WrappedResultSet.java:338)
 at net.sf.hibernate.type.LongType.get(LongType.java:18)
 at net.sf.hibernate.type.NullableType.nullSafeGet(NullableType.java:62)
 at net.sf.hibernate.type.NullableType.nullSafeGet(NullableType.java:53)
 at net.sf.hibernate.type.ManyToOneType.hydrate(ManyToOneType.java:61)
 at net.sf.hibernate.loader.Loader.loadEntity(Loader.java:911)
 at net.sf.hibernate.loader.EntityLoader.load(EntityLoader.java:59)
 at net.sf.hibernate.persister.EntityPersister.load(EntityPersister.java:419)
```

We use a component in Confluence called Hibernate. According to [Hibernate Documentation](http://hibernate.org/), there may be issues with the Microsoft JDBC drivers resulting in the error you are seeing.

#### Solution

Upgrade to jTDS driver 1.0.3 or later from the [jTDS download page](http://jakarta.apache.org/jtds/). You may also consider alternative SQL Server drivers listed on the [Hibernate page](http://hibernate.org/).

### Configuring Database Character Encoding

When creating the database schema, the database character encoding must be compatible with the
application and Confluence character encoding as described in Configuring Database Character Encoding. If setting MS SQL to use UTF-8 is not an option, you can create a schema that uses UCS-2 encoding, and have the application and Confluence use UTF-8 encoding.
Known Issues for Sybase Database

This page last changed on Mar 20, 2007 by don.willis@atlassian.com.

Find below a list of tips relating to using Sybase with Confluence

Confluence and JIRA shared user base management fails due to wrong casing of database columns and names.

- See Override properties in JIRA to Confluence Bridge

Configuring Database Character Encoding

Refer to Configuring Database Character Encoding

Case sensitivity issues

All versions of Confluence 2.3 require a patch in order to work with Sybase. This is downloadable from http://jira.atlassian.com/browse/CONF-7925.
List Of Supported Databases

This page last changed on Apr 17, 2007 by ktran.

⚠️ Confluence is bundled with a pre-configured HSQL database for evaluation purposes only.

For safe production use, it must be configured to use one of the following databases:

Fully Supported

- PostgreSQL 8+
- MySQL 4.1+ (MySQL 5 is unsupported)
- Oracle 10g+
- DB2 8.2+

Supported With Minor Workarounds

- PostgreSQL 7.1+
- Oracle 8i, 9i or later
- Microsoft SQL Server 2000+
- Sybase ASE 12.5.1+

If you have no preference, PostgreSQL is scalable, free and easy to setup. For database setup information, see Database Configuration.
Migrate to an External Database

This page last changed on Mar 21, 2007 by dave@atlassian.com.

This document outlines how to migrate your data from your existing database to another database.

You should only use this method when moving from the embedded DB to an external DB, or from one type of external DB to another (e.g. Oracle to Postgres). If you are simply moving your DB from one server to another you can just change the JDBC URL in <confluence.home>/confluence.cfg.xml (if you are using a direct JDBC connection) or in the definition of your datasource (if you are connecting via a datasource).

Step One : Backing up your data

1. Create a backup of your existing data. This is done from the Administration Console. Instructions on how to create a backup can be found here.
2. Shut down and backup the Confluence Home Directory.
3. If you are already using an external database, please make a backup of it using the utilities that were installed with it.

Step Two : Configuring the Confluence Home Directory

1. Create a new Confluence Home Directory. You can place this directory anywhere you like and give it a name of your choice.
2. Open WEB-INF/classes/confluence-init.properties file in your Confluence installation and change the confluence.home property to point to this new Confluence Home Directory.

Step Three : Setting up Confluence with the new database.

If your databases are not already configured for Confluence, refer to Database Configuration to setup your database access.

1. Make sure that the JDBC drivers for your database are available to the application server. If you don't already have the JDBC driver, please download one from here.
2. Make sure that your database is using a case-sensitive collation. Please see this issue for more details: http://jira.atlassian.com/browse/CONF-7917
3. If you are running the standalone version of Confluence, copy your JDBC database driver (a .jar file), into the confluence-install/common/lib folder.
4. Start up Confluence. You will see the Confluence Setup Wizard.
5. Select 'Custom Install'.
6. Select your database from the drop down list.
7. Select 'Direct JDBC' and then enter the details of the new database you want to migrate to.
   ✠ Read the documentation on Custom Installation for more detailed explanation.
8. When prompted, restore the contents of the backup you made in Step One into the new Confluence site

You old Confluence data will now be imported to your new database.
Database JDBC drivers

This page last changed on Jan 01, 2007 by david.soul@atlassian.com.

Below you can find a link to the JDBC drivers for all currently supported databases. You will need to make the driver available to your application server.

JDBC driver download links -

- PostgreSQL - Download the JDBC 3 driver version specific to your PostgreSQL version
- MySQL
- Oracle
- DB2
- Microsoft SQL Server 2000 - Link goes to recommended jTDS JDBC drivers
- Sybase ASE
Troubleshooting External Database Connections

This page last changed on Jan 10, 2007 by david.soul@atlassian.com.

The Atlassian Database Check Utility

A common administration issue when configuring Confluence is identifying database connectivity problems. The helper JSP can isolate database connectivity issues. It simply checks whether you can connect to a database with your application server. If your application server cannot connect to the database, Confluence certainly will not.

Purpose:

- Check that your application server can successfully query your database (either via immediate JDBC connectivity or a Datasource in the context of your application server).
- Pinpoint problems in your configuration which may occur if the above is failing.

Functionality:

- Check that a JDBC Driver can be loaded into memory and view what is already loaded.
- Connect to a JDBC URL and do a 'select 1' from the database.
- Find a DataSource in the JNDI environment and do the above.
- View the System classpath (to ensure that the JDBC jar file is there).

Using the Utility

If you have already setup Confluence completely

1. Download testdatabase.jsp to 'MY-CONF-INSTALL-PATH\confluence'
2. Restart Confluence
4. Check that your database driver is loaded into memory. If not, check the system classpath for the JDBC driver file, and that the driver is in the confluence-install/common/lib folder as per the instructions
5. Enter the DB settings Confluence is using and test the database. If an error appears, check that the db service is running, the location matches, and that any users specified actually exist with the right login and permissions. You may be able to find a workaround by googling the error.

If you cannot setup Confluence because of an error in 'Configuring Database'

1. Record the DB settings you are using for your direct JDBC or datasource connection in the 'Configure Database' step of your setup
2. Download testdatabase.jsp to 'MY-CONF-INSTALL-PATH\confluence'
3. Rename 'MY-CONF-INSTALL-PATH\confluence\WEB-INF\web.xml' to 'backup web.xml' (This disables redirection)
4. Restart Confluence
5. Go to http://MY-CONF-SERVER:MY-CONF-PORT/testdatabase.jsp
6. Check that your database driver is loaded into memory. If not, check the system classpath for the JDBC driver file, and that the driver is in the confluence-install/common/lib folder as per the instructions.

7. Enter the DB settings you recorded and test the database. If an error appears, check that the db service is running, the location matches, and that any users specified actually exist with the right login and permissions. You may be able to find a workaround by googling the error.

8. After correcting the error, rename 'MY-CONF-INSTALL-PATH\confluence\WEB-INF\backup web.xml' back to 'web.xml'

Notes

This JSP is bundled in Confluence 1.2.4 and onwards. It can be used with earlier versions quite easily. If you use this utility, please let us know ways in which we could improve it or leave helpful hints for others here.
Troubleshooting the Embedded Database (hSQL DB)

This page last changed on Jul 06, 2006 by ivan@atlassian.com.

java.sql.SQLException: User not found: SA

Also see http://hsqldb.sourceforge.net/doc/guide/ch01.html#N101C2.

HSQLDB periodically must update its files to represent changes made in the database. In doing so, it must delete the current conflucedb.data file on the filesystem (beneath conf.home/database) and replace it with a new one.

If an administrator issues a shutdown on Confluence in this period, data can be lost, and is typically noticed by the error message, when starting Confluence up again, of 'User not found: SA'.

Users encountering this problem should seek to restore backups, contained in the backup directory beneath confluence.home. If daily backups have been turned off, and no other copy of data remains, the data is lost.

HSQLDB should not be used as a production database. It is included for evaluation purposes only.

Hibernate logging

It can be useful to enable detailed Hibernate logging when debugging problems with HSQL.
Upgrading From HSQL 1.7.1 to 1.8

This page last changed on Feb 21, 2007 by rosie@atlassian.com.

If you have received an error message while upgrading Confluence which said "HSQL Database needs to be cleaned. Please run HSQL17To18PreUpgradeCleaner.", and referred you to this page, you need to do the following:

1. Shut down Confluence
2. Open a command window.
3. Change your directory to the directory you set as your confluence.home directory.
4. Execute the following command: java -jar <confluence install directory>/hsqlcleaner/hsqlcleaner.jar
5. Start Confluence -- the upgrade will now work.

⚠️ Don't run this unless asked to by Confluence - it won't work
Guide to using Apache Tomcat’s Virtual Hosts

This page last changed on Nov 26, 2006 by mryall.

Introduction

Sometimes it is necessary to have Tomcat serve different applications on the same context path, but different host names. Most commonly, this is when trying to use a simple mod_proxy configuration with Apache.

Tomcat configuration

Tomcat allows name-based virtual hosting, where the hostname of the request determines which application processes it. The following configuration shows how two virtual hosts can be configured for Jira and Confluence on the same Tomcat instance:

<table>
<thead>
<tr>
<th>Confluence application server URL</th>
<th><a href="http://confluence-app-server.internal.example.com:8080/">http://confluence-app-server.internal.example.com:8080/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>JIRA application server URL</td>
<td><a href="http://jira-app-server.internal.example.com:8080/">http://jira-app-server.internal.example.com:8080/</a></td>
</tr>
</tbody>
</table>

Below is a minimal configuration of Tomcat's server.xml which configures separate hosts for JIRA and Confluence on the URLs above.

```xml
<Server port="8005" shutdown="SHUTDOWN">
  <Service name="Catalina">
    <Connector port="8080" />
    <Engine name="Catalina" defaultHost="confluence-app-server.internal.example.com">
      <Host name="confluence-app-server.internal.example.com" appBase="/opt/webapps/confluence-2.2/confluence">
        <Context path="" docBase="/opt/webapps/confluence-2.2/confluence"/>
        <Logger className="org.apache.catalina.logger.FileLogger"/>
      </Host>
      <Host name="jira-app-server.internal.example.com" appBase="/opt/webapps/jira-3.6.1/jira.war">
        <Context path="" docBase="/opt/webapps/jira-3.6.1/jira.war"/>
        <Logger className="org.apache.catalina.logger.FileLogger"/>
      </Host>
    </Engine>
  </Service>
</Server>
```

Points to note:

- the HTTP connector is accessible on port 8080, as per the URLs above
- the AJP connector is not included in this minimal configuration. If you want to mod_jk with this configuration, you need to ensure you add it.
- in the Engine, the Confluence host is configured as the default host. The default host is used if the request doesn't contain a Host header, or is accessed by a name the server doesn't recognise.
- because the above configuration uses name-based virtual hosting, you need to have entries in your DNS server for "confluence-app-server" and "jira-app-server" that point to the application server.

More information
After doing this, you can configure Apache virtual hosts to map subdomains like jira.example.com and confluence.example.com to your application.
How to dump Active Directory data to a file

This page last changed on Jun 05, 2006 by jnolen.

You can extract all the data present in your Active Directory onto a file using the following command (please ensure you are logged in with sufficient rights to do this)

```
csvde -f test.csv
```

This command will perform a CSV dump of every entry in your Active Directory server. You should be able to see the full DN's of users and groups.
Known Issues with Enterprise or Webhosting environments

This page last changed on May 23, 2006 by david.soul@atlassian.com.

When you attempt to run Confluence, you may get the following error:

```
java.security.AccessControlException: access denied (java.lang.RuntimePermission
accessDeclaredMembers)
    at java.security.AccessControlContext.checkPermission(AccessControlContext.java(Compiled Code))
    at java.security.AccessController.checkPermission(AccessController.java(Compiled Code))
    at java.lang.SecurityManager.checkPermission(SecurityManager.java(Compiled Code))
```

Some of the libraries Confluence relies on to function make use of features of the Java language that may be restricted by Java security policies. This does not normally cause any problems: the default security configuration of most application servers will happily run Confluence. However, in some shared-hosting or enterprise environments, security settings may be such that Confluence can not function.

The permissions required by Confluence to run are detailed in the sample policy file below. You may need to give this information to your systems administrator so that they can be deployed with the Confluence application.

```
grant codeBase "file:${catalina.home}/webapps/confluence/-" {  
   permission java.security.AllPermission;
};

grant {  
   permission java.lang.RuntimePermission "accessDeclaredMembers";
   permission java.lang.reflect.ReflectPermission "suppressAccessChecks";
   permission java.lang.RuntimePermission "defineCGLIBClassInJavaPackage";
};
```
List Of Supported Operating Systems

This page last changed on Mar 05, 2007 by ivan@atlassian.com.

Supported

- Windows
- Linux
- Mac OS X
- Solaris
- AIX
- Unix

Any OS that support J2EE 1.4
Managing Application Server Memory Settings

The minimum and maximum JVM heap space allocated to the application server affects performance. Confluence administrators may wish to modify this value from the defaults depending on their server load. This document only provides guidelines rather than rules, so administrators optimising for performance should use this document as a starting point only.

Testing For Optimum Memory Settings

Bigger is not always better for heap size. When optimising memory settings, consider starting by setting the maximum heap size to 1/4 the available physical memory on the server and setting the minimum to 1/2 of the maximum heap. Avoid setting the minimum and maximum to be the same since server load is normally variable. Being able to use less memory under low load results in slightly improved performance as garbage collections can be made smaller.

Testing Resources

- Enable the verbosegc JVM parameter to assist in determining the memory size that minimises overall garbage collection
- Use Page Request Profiling to gauge end-user performance

Determine Minimum Memory

Experiment with setting a lower minimum such as 1/10 of the maximum heap. Identify how much memory is required while under minimum load and set the minimum to that value. It is important to have Confluence use the minimum memory necessary, because garbage collection performance is dependent on the memory usage. Having an unnecessarily high minimum memory setting will degrade performance during GC operations.

Determine Maximum Memory

Experiment with different maximum memory settings with the verbosegc JVM parameter enabled to determine GC performance. Memory usage is most likely to be maximised under peak load, and when creating a site XML backup, Confluence memory may visibly increase while it is generating an XML backup.

- If you normally perform manual XML site backups on your server, test your maximum memory requirements by performing a site XML backup while the server is under maximum load
- If you do not create manual XML site backups, simply monitor the server while under maximum load

The maximum memory should be the total memory while in this state plus a buffer of at least 15%, taking into account how your garbage collection performs. Never set maximum memory to a value above 85-90% of the available physical server memory as this results in disk paging. Always leave 10-15% of available physical server memory unallocated to allow for OS background processes.

Applying Memory Settings

Users of the EAR/WAR version set their memory in their application server. For Confluence Standalone,
the heap space is set in the Confluence install directory.

- Windows users edit .../bin/setenv.bat
- Other OS users edit .../bin/setenv.sh

The relevant parameter is

```
JAVA_OPTS="-Xms128m -Xmx256m ...
```

Where -Xms is the minimum and -Xmx is the maximum memory available to Apache Tomcat.

**Related Topics**

- Fix 'Out of Memory' errors by increasing available memory
- Server Hardware Requirements Guide
- Performance Tuning
- Troubleshooting Slow Performance Using Page Request Profiling
Modify Confluence Interface Text

This page last changed on Nov 08, 2006 by jnolen.

All Confluence UI text is contained in a single Java properties file. This file can be modified to change the default text, and also to translate Confluence into other languages than English.

The UI text file is ConfluenceActionSupport.properties. From your Confluence install directory:

```
/confluence/WEB-INF/classes/com/atlassian/confluence/core/ConfluenceActionSupport.properties
```

The file contains name=value strings, and supports variable insertion such as

```
user.greeting=Welcome, {0}
```

For more information on replacing values, check out Translating ConfluenceActionSupport Content. Note that plugins store their text internally, so you must modify plugin text individually.

Steps For Modification

1. Stop Confluence
2. Under your install directory, open
   
   ```
   /confluence/WEB-INF/classes/com/atlassian/confluence/core/ConfluenceActionSupport.properties
   ```
3. Search for the text you wish to modify, replace it and save
4. Start Confluence

Common Modifications

- Rename 'Dashboard' by searching for Dashboard. To change "Dashboard" to "My Portal", change dashboard.name=Dashboard to dashboard.name=My Portal
Paddle

This page last changed on Jan 10, 2007 by ivan@atlassian.com.

Paddle is a tool that will test the LDAP or Active Directory settings in your `atlassian-user.xml`.

from a customer

Really, REALLY glad you had the paddle tool so I didn't spend too much time beating my head on that one, BTW

You will not need to have Confluence running to run this tool. The steps are:

1. Download into a directory where you have permissions to create files
2. Copy your `atlassian-user.xml` into that directory
3. Run

   ```
   java -jar paddle-<insert version>.jar
   ```

This is an example of a successful run:

```
#LDAP Support Tool version 1.1
# Connection to LDAP/Active Directory Server at ldap://192.168.0.86:389 SUCCESSFUL.
# TEST 1: Search and list 10 users
#-----------------------------------------------------

User: CN=Administrator
Member of:
   (1) CN=Schema Admins
   (2) CN=Enterprise Admins
   (3) CN=Domain Admins
   (4) CN=Group Policy Creator Owners

User: CN=Guest
Does not belong to any LDAP groups.

User: CN=SUPPORT_388945a0
Member of:
   (1) CN=HelpServicesGroup

User: CN=IUSR_MALTSHOVEL
Does not belong to any LDAP groups.

User: CN=IWAM_MALTSHOVEL
Member of:
   (1) CN=IIS_WPG

User: CN=ASPNET
Does not belong to any LDAP groups.

User: CN=krbtgt
```
Does not belong to any LDAP groups.

User: CN=John\, Smith
Member of:
  (1) CN=Domain Users
  (2) CN=Sales and Marketing

User: CN=Matt Ryall
Member of:
  (1) CN=Enterprise Admins
  (2) CN=Domain Admins

User: CN=Justin Koke
Member of:
  (1) CN=Domain Controllers
  (2) CN=Enterprise Admins

Found more than 10 results.

-----------------------------------------------------------------
TEST 2: Search and list 10 groups
-----------------------------------------------------------------
Group: CN=HelpServicesGroup
Members:
  (1) CN=SUPPORT_388945a0,CN=Users,DC=ad,DC=atlassian,DC=com

Group: CN=TelnetClients
No members in this group.

Group: CN=IIS_WPG
Members:
  (1) CN=S-1-5-20,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com
  (2) CN=S-1-5-6,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com
  (3) CN=S-1-5-18,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com
  (4) CN=IWAM_MALTSHOVEL,CN=Users,DC=ad,DC=atlassian,DC=com

Group: CN=SQLServer2005SQLBrowserUser$MALTSHOVEL
Members:
  (1) CN=S-1-5-18,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com

Group: CN=SQLServer2005MSSQLServerADHelperUser$MALTSHOVEL
Members:
  (1) CN=S-1-5-20,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com

Group: CN=SQLServer2005SQLAgentUser$MALTSHOVEL$MSSQLSERVER
Members:
  (1) CN=S-1-5-18,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com

Group: CN=SQLServer2005MSSQLUser$MALTSHOVEL$MSSQLSERVER
Members:
  (1) CN=S-1-5-18,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com

Group: CN=SQLServer2005MSFTEUser$MALTSHOVEL$MSSQLSERVER
Members:
  (1) CN=S-1-5-18,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com

Group: CN=SQLServer2005MSOLAPUser$MALTSHOVEL$MSSQLSERVER
Members:
  (1) CN=S-1-5-18,CN=ForeignSecurityPrincipals,DC=ad,DC=atlassian,DC=com

Group: CN=SQLServer2005NotificationServicesUser$MALTSHOVEL
No members in this group.

Found more than 10 results.
Pull down RSS Feeds through a Proxy

To make Confluence aware of your proxy, you need to start it up with a system parameter.

If you are using Tomcat, you can add this to the catalina.bat/sh file:

```
JAVA_OPTS=-Dhttp.proxyHost=yourProxyHostAddressHere
```
Running Confluence behind Apache

This page last changed on Apr 03, 2007 by rosie@atlassian.com.

Introduction

Running Confluence behind a web server should be done for performance reasons in high-load environments. In general, web server caching and thread management is far superior to that provided by your application server's HTTP interface.

To run Confluence behind the Apache httpd web server, there are two main configuration options: mod_jk or mod_proxy.

<table>
<thead>
<tr>
<th>Connection type</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>mod_proxy (also known as reverse proxy)</td>
<td>• recommended connection method</td>
</tr>
<tr>
<td></td>
<td>• simple HTTP proxy to application server</td>
</tr>
<tr>
<td></td>
<td>• works with all application servers</td>
</tr>
<tr>
<td></td>
<td>• if application paths are consistent, there is minimal load on the web server</td>
</tr>
<tr>
<td>mod_jk (also known as AJP)</td>
<td>• uses the AJP binary protocol</td>
</tr>
<tr>
<td></td>
<td>• provides failover (and load balancing, which Confluence doesn't support)</td>
</tr>
<tr>
<td></td>
<td>• only works with some application servers (typically Tomcat)</td>
</tr>
<tr>
<td></td>
<td>• if application paths are consistent, there is some load on the web server to translate requests to AJP</td>
</tr>
</tbody>
</table>

Features common to both mod_proxy and mod_jk

• application paths must be consistent to avoid complex and slow URL rewriting
• works with name-based virtual hosting, both on web server and app server
• web server keeps a pool of connections to application server

Mod_proxy documentation

• Using Apache with mod_proxy is the main documentation for this configuration.
• If you want to set up the common configuration of JIRA and Confluence virtual hosts, you can use Apache's virtual hosts with separate application servers, then Tomcat's virtual hosts to run both applications on a single instance of Tomcat.

Mod_jk documentation

• Using Apache with mod_jk is the main documentation for this configuration.
You can follow a similar method to the mod_proxy documentation above for setting up virtual hosts in Apache and Tomcat, if required.

**Mod_jk2 not supported**

The misleadingly-named mod_jk2 is an older method of connecting to Tomcat from Apache. Since mod_jk2 is no longer supported by the Apache Foundation, we do not support this configuration, and are not updating our mod_jk2 documentation. Mod_jk2 also has unresolved problems with Unicode URLs; you need to use either mod_proxy or mod_jk for international characters to work correctly in Confluence.

**Other related documentation**

- [Apache and Apache Connector Tips](#)
- [Using the (older) mod_jk2 connector](#)
- [Configuring Tomcat’s URI encoding](#)
- [Adding SSL for Secure Logins and Page Security](#)
Using Apache with mod_jk

This page last changed on May 24, 2006 by mryall.

Introduction

The Apache web server is often used in front of an application server to improve performance in high-load environments. Mod_jk allows request forwarding to an application via a protocol called AJP. Configuration of this involves enabling mod_jk in Apache, configuring a AJP connector in your application server, and directing Apache to forward certain paths to the application server via mod_jk.

Mod_jk is sometimes preferred to mod_proxy because AJP is a binary protocol, and mod_jk supports fallback and load balancing (although Confluence does not yet work in a load-balanced environment).

The scope of this documentation is limited to configuring the AJP connector in Tomcat 5.x. Other application servers may support AJP connectors; please consult your application server documentation for instructions on how to configure it.

The configuration below assumes your Confluence instance is accessible on the same path on the application server and the web server. For example:

<table>
<thead>
<tr>
<th>Externally accessible (web server) URL</th>
<th><a href="http://www.example.com/confluence/">http://www.example.com/confluence/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Application server URL (HTTP)</td>
<td><a href="http://app-server.internal.example.com:8080/confluence/">http://app-server.internal.example.com:8080/confluence/</a></td>
</tr>
</tbody>
</table>

The AJP connection of the application server is set to: app-server.internal.example.com:8009.

Configuring mod_jk in Apache

The standard distribution of Apache does not include mod_jk. You need to download it from the JK homepage and put the mod_jk.so file in your Apache modules directory.

```sh
# Put this after the other LoadModule directives
LoadModule jk_module modules/mod_jk.so

# Put this in the main section of your configuration (or desired virtual host, if using Apache virtual hosts)
JkWorkersFile conf/workers.properties
JkLogFile logs/mod_jk.log
JkLogLevel info

JkMount /confluence worker1
JkMount /confluence/* worker1
```

Configuring workers.properties

Create a new file called 'workers.properties', and put it in your Apache conf directory. (The path for workers.properties was one of the configuration settings above.)
worker.list=worker1
worker.worker1.host=app-server.internal.example.com
worker.worker1.port=8009
worker.worker1.type=ajp13

**Tomcat 5.x configuration**

In Tomcat 5, the AJP connector is enabled by default on port 8009. An absolutely minimal Tomcat server.xml is below for comparison. The relevant line is the Connector with port 8009 – make sure this is uncommented in your server.xml.

```xml
<Server port="8005" shutdown="SHUTDOWN">
  <Service name="Catalina">
    <!-- Define a HTTP/1.1 Connector on port 8080 -->
    <Connector port="8080" />
    <!-- Define an AJP 1.3 Connector on port 8009 -->
    <Connector port="8009" protocol="AJP/1.3" />
    <Engine name="Catalina" defaultHost="localhost">
      <Host name="localhost" appBase="webapps">
        <Context path="/confluence" docBase="/opt/webapps/confluence-2.2/confluence"/>
        <Logger className="org.apache.catalina.logger.FileLogger"/>
      </Host>
    </Engine>
  </Service>
</Server>
```

**Points to note:**

- the Connector on port 8009 has protocol of "AJP/1.3". This is critical.
- the Context path of the Confluence application is "/confluence". This must match the path used to access Confluence on the web server.
- we recommend keeping your application Contexts outside the server.xml in Tomcat 5.x. The above example includes them for demonstration only.

**Improving the performance of the mod_jk connector**

The most important setting in high-load environments is the number of processor threads used by the Tomcat AJP connector. By default, this is only 15, and you should increase it to match Apache’s maxThreads setting (256 by default):

```xml
<Connector port="8009" minProcessors="5" maxProcessors="256" protocol="AJP/1.3" /> 
```

**Ensuring UTF-8 compatibility**

If you have problems downloading attachments with non-ASCII characters in the filename, add the following to your Apache configuration:
And specify UTF-8 as the URIEncoding in the AJP connector configuration:

```xml
<Connector port="8009" protocol="AJP/1.3" URIEncoding="UTF-8"/>
```

These settings are discussed further on [Configuring Tomcat's URI encoding](#).

More information

The [Tomcat JK website](#) has complete documentation on workers.properties and Apache configuration. You can also find information there on how to use mod_jk with IIS.

Alternatives

If you're not happy with mod_jk, or find it too difficult to configure, you can:

- use [mod_proxy](#), which works with any application server, and together with mod_proxy_html allows complex URL rewriting to deal with different application paths on the web server and the application server.
Using Apache with mod_proxy

This page last changed on Mar 23, 2007 by ktran.

This page describes how to integrate Confluence into an Apache website, using mod_proxy. There are some common situations where you might do this:

- You have an existing Apache-based website, and want to add Confluence to the mix (eg. http://www.example.com/confluence).
- You have two or more Java applications, each running in their own application server on different ports, eg. http://localhost:8080/confluence and http://localhost:8081/jira. By setting up Apache with mod_proxy, you can have both available on the regular HTTP port (80), eg. at http://www.example.com/confluence and http://www.example.com/jira. If you are running JIRA and Confluence, we recommend this setup. It allows each app to be restarted, managed and debugged separately.

This page describes how to configure mod_proxy. We describe two options:

- If you want a URL like http://www.example.com/confluence/, go to the simple configuration.
- If you want a URL like http://confluence.example.com/, go to the complex configuration.

Simple configuration

Set the context path

First, set your Confluence application path (the part after hostname and port) correctly. Say you want Confluence available at http://www.example.com/confluence/, and you currently have it running at http://localhost:8080/. The first step is to get Confluence available at http://localhost:8080/confluence/.

To do this in Tomcat (bundled with Confluence), edit conf/server.xml, locate the "Context" definition:

```
<Context path="" docBase="/confluence" debug="0" reloadable="true"/>
```

and change it to:

```
<Context path="/confluence" docBase="/confluence" debug="0" reloadable="true"/>
```

Then restart Confluence, and ensure you can access it at http://localhost:8080/confluence/

Configure mod_proxy

Now enable mod_proxy in Apache, and proxy requests to the application server by adding the example below to your Apache httpd.conf (note: the files may be different on your system; the JIRA docs describe the process for Ubuntu/Debian layout):
Put this after the other LoadModule directives:

```bash
LoadModule proxy_module /usr/lib/apache2/modules/mod_proxy.so
LoadModule proxy_http_module /usr/lib/apache2/modules/mod_proxy_http.so
```

Put this in the main section of your configuration (or desired virtual host, if using Apache virtual hosts):

```bash
ProxyRequests Off
ProxyPreserveHost On
```

```xml
<Proxy *>
  Order deny,allow
  Allow from all
</Proxy>
```

```bash
ProxyPass /confluence http://localhost:8080/confluence
ProxyPassReverse /confluence http://localhost:8080/confluence
```

```bash
<Location /confluence>
  Order allow,deny
  Allow from all
</Location>
```

Note to Windows Users

It is recommended that you specify the absolute path to the `mod_proxy.so` and `mod_proxy_http.so` files.

Set the URL for redirection

You will need to modify the `server.xml` file in your tomcat's conf directory and set the URL for redirection.

Locate this code segment

```xml
<Connector port="8080" maxHttpHeaderSize="8192"
    maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
    enableLookups="false" redirectPort="8443" acceptCount="100"
    connectionTimeout="20000" disableUploadTimeout="true" />
```

And append the following segment:

```xml
<Connector port="8080" maxHttpHeaderSize="8192"
    maxThreads="150" minSpareThreads="25" maxSpareThreads="75"
    enableLookups="false" redirectPort="8443" acceptCount="100"
    connectionTimeout="20000" disableUploadTimeout="true"
    proxyName="www.example.com" proxyPort="80" />
```

Replace `www.example.com` with the URL you wish to be redirected to.

Complex configuration

A complex configuration involves using the `mod_proxy_html` filter to modify the proxied content en-route. This is required if the Confluence path differs between Apache and the application server. For example:

| Externally accessible (Apache) URL | http://confluence.example.com/ |
Notice that the application path in the URL is different in each. On Apache, the path is /, and on the application server the path is /confluence.

For this configuration, you need to install the mod_proxy_html module, which is not included in the standard Apache distribution.

Alternative solutions are discussed below.

```xml
<VirtualHost *>
    ServerName confluence.example.com
    # Put this in the main section of your configuration (or desired virtual host, if using Apache virtual hosts)
    ProxyRequests Off
    ProxyPreserveHost On
    <Proxy *>
        Order deny,allow
        Allow from all
    </Proxy>
    ProxyPass / http://app-server.internal.example.com:8080/confluence
    ProxyPassReverse / http://app-server.internal.example.com:8080/confluence
    ProxyHTMLURLMap /confluence/ /
    <Location />
        Order allow,deny
        Allow from all
    </Location>
</VirtualHost>
```

The ProxyHTMLURLMap configuration can become more complex if you have multiple applications running under this configuration. The mapping should also be placed in a Location block if the web server URL is a subdirectory and not on a virtual host. The Apache Week tutorial has more information how to do this.

More information

- The mod_proxy_html site has documentation and examples on the use of this module in the complex configuration.
- Apache Week has a tutorial that deals with a complex situation involving two applications and ProxyHTMLURLMap.
- Using Apache with virtual hosts and mod_proxy shows how to configure the special case where you want JIRA and Confluence running on separate application servers on virtual host subdomains.

Alternatives

If Tomcat is your application server, you have two options:
• use `mod_jk` to send the requests to Tomcat
• use Tomcat's virtual hosts to make your Confluence application directory the same on the app server and the web server, removing the need for the URL mapping.

If your application server has an AJP connector, you can:

• use `mod_jk` to send the requests to your application server.
Using Apache with virtual hosts and mod_proxy

This page last changed on May 23, 2006 by david.soul@atlassian.com.

Introduction

The Apache web server is often used in front of an application server to improve performance in high-load environments. Mod_proxy simply redirects requests for certain URLs to another web server, so it typically requires no additional configuration on the application server.

This page documents a very common configuration request: configuring JIRA and Confluence on two Apache virtual hosts, running on different application servers. This is just a special case of mod_proxy configuration.

You can use virtual hosts in your application server if you want to run JIRA and Confluence on the same application server. There is a sample configuration for Tomcat you can use after configuring Apache.

Apache configuration

For this configuration to work properly, the application paths must be the same on both the application servers and the web server. For both JIRA and Confluence below, this is /.

<table>
<thead>
<tr>
<th>JIRA external URL</th>
<th><a href="http://jira.example.com/">http://jira.example.com/</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>JIRA application server URL</td>
<td><a href="http://jira-app-server.internal.example.com:8080/">http://jira-app-server.internal.example.com:8080/</a></td>
</tr>
<tr>
<td>Confluence external URL</td>
<td><a href="http://confluence.example.com/">http://confluence.example.com/</a></td>
</tr>
<tr>
<td>Confluence application server URL</td>
<td><a href="http://confluence-app-server.internal.example.com:8080/">http://confluence-app-server.internal.example.com:8080/</a></td>
</tr>
</tbody>
</table>

Add the following to your Apache httpd.conf:

```bash
# Put this after the other LoadModule directives
LoadModule proxy_module /usr/lib/apache2/modules/mod_proxy.so
LoadModule proxy_http_module /usr/lib/apache2/modules/mod_proxy_http.so

# Put this with your other VirtualHosts, or at the bottom of the file
NameVirtualHost *
<VirtualHost *>
    ServerName confluence.example.com
    ProxyRequests Off
    <Proxy *
        Order deny,allow
        Allow from all
    </Proxy>
    ProxyPass / http://confluence-app-server.internal.example.com:8080/
    ProxyPassReverse / http://confluence-app-server.internal.example.com:8080/
    <Location />
        Order allow,deny
        Allow from all
    </Location>
</VirtualHost>
<VirtualHost *>
    ServerName jira.example.com
    ProxyRequests Off
```

Document generated by Confluence on May 01, 2007 00:44
Points to note:

- **ProxyPass** and **ProxyPassReverse** directives send traffic from the web server to your application server.
- The application path is the same on the application server and on the web server (both are `/`).
- Because the above configuration uses name-based virtual hosting, you must configure your DNS server to point both names (jira.example.com, confluence.example.com) to your web server.

**More information**

For different ways to configure mod_proxy, see Using Apache with mod_proxy.

If you use Tomcat, mod_jk provides a different way of connecting Apache via AJP. You can also use the above configuration with just one application server if you use Tomcat's virtual hosts.
Set JAVA_HOME variable in Windows

This page last changed on Nov 20, 2006 by david.soul@atlassian.com.

After you install the Java Development Kit in Windows, you must set the JAVA_HOME variable to the install directory.

⚠️ Common Problem

Some users have only installed the Java Runtime Environment (JRE). You need either a Java Development Kit (JDK) or J2SE Software Development Kit (SDK). If you would like to confirm that you have the right version, you can check the Java install path. Unless you changed the path during installation, Java will be installed to a subdirectory under C:\Program Files\Java, for example C:\Program Files\Java\jdk1.5.0_02

Open C:\Program Files\Java and confirm the install path is for a JDK or SDK. JRE installs are not suitable, and have an install directory beginning with jre. The numbers after the jre are not relevant. Example JREs are:

- jre1.3.0_02
- jre1.4.0_02

SDK and JDK installs are suitable. Their install directory begins with jdk or j2sdk, the numbers after are not relevant. Example JDK and SDKs are:

- jdk1.5.0_02
- j2sdk1.5.0_09

Any install directory starting with jdk or j2sdk is valid. If you cannot see an installed JDK or SDK, install the JDK now from the JDK download site

Stage 1. Locate Install Directory

If you already know the install path for the Java or Software Development Kit, go to Stage 2. Otherwise, find the install path by following these instructions:

1. Unless you changed the install path for the Java Development Kit during installation, it will be in a directory under C:\Program Files\Java. Using Explorer, open the directory C:\Program Files\Java

2. Inside that path will be one or more subdirectories such as jdk1.5.0_08. If you just installed the Java Development Kit, it will be installed to the newest directory, which you can find by sorting by date. For example, it may be installed in C:\Program Files\Java\jdk1.5.0_08. This is the install path.

Stage 2. Apply Setting

Once you have identified the JDK install path:

1. Right click on the My Computer icon on your desktop and select properties
2. Click the Advanced Tab
3. Click the Environment Variables button
4. Under System Variable, click New
5. Enter the variable name as JAVA_HOME
6. Enter the variable value as the install path for the Development Kit
7. Click OK
8. Click Apply Changes
9. If you are running Confluence as a EAR/WAR rather than the Standalone, you may need to restart your application server

This diagram shows setting the JAVA_HOME variable to an install path of c:/j2sdk1.4.2

If you came here from Implementing Confluence Standalone, go back and begin Stage 3.

RELATED PAGES

- Implementing Confluence Standalone
- Start Tomcat as a Windows Service
- To set JAVA_HOME on Linux - Implementing Confluence in Linux
Setting up Confluence with IIS

This page describes how to install Confluence stand-alone with IIS using the Apache jk connector.

Install IIS

Follow these instructions for installing IIS

After installation is complete you should be able to go to http://localhost/iishelp/iis/misc/default.asp in your browser and see the IIS getting started page.

Install Confluence Standalone

Do a normal Confluence install, after which you should be able to use confluence normally through the URL http://localhost:8080

Configure Tomcat

Add another connector to your server.xml file, directly after the existing Connector tag

```xml
<Connector port="8009" enableLookups="false" redirectPort="8443" protocol="AJP/1.3" /> 
```

Then start Confluence, in the logs/catalina.YYYY-MM-DD.log file you should see:

INFO: Starting Coyote HTTP/1.1 on http-8080
INFO: JK: ajp13 listening on /0.0.0.0:8009
7/09/2006 14:40:04 org.apache.jk.server.JkMain start
INFO: Jk running ID=0 time=0/31 config=null

Configure the Tomcat Connector

These instructions are based on the Tomcat Connector, IIS Configuration documentation.

1. Download the isapi_redirect.dll from here: http://www.apache.org/dist/tomcat/tomcat-connectors/jk/binaries/win32/jk-1.2.21/isapi_redirect.dll and put it in a directory c:/ajp_iis (the name of the directory isn't important, but if you use a different one make sure to take account of this in the instructions which follow)
2. Create a isapi_redirect.properties file in the same directory as you put the DLL. You can use this sample isapi_redirect.properties file if you have used ajp_iis as the directory name.
3. Create workers.properties and uriworkermap.properties files. You can use the sample workers.properties file and the sample uriworkermap.properties file.
4. Create an empty file named rewrites.properties in c:/ajp_iis
5. Enable the plugin within IIS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Using the IIS management console (Internet Services Manager in Administrative Tools), add a new virtual directory to your IIS web site. The name of the virtual directory must be jakarta, as it must correspond with the first part of the extension_uri setting specified in the registry. Its physical path should be the directory where you placed isapi_redirect.dll (in the example it is c:\iis_ajp). When creating this new virtual directory, give it execute access.</td>
</tr>
<tr>
<td>2</td>
<td>Using the IIS management console, add isapi_redirect.dll as a filter to your IIS web site. To do this, right click on the Web Sites icon from the left hand pane of the Internet Services Manager (or IIS management console), select Properties and then the ISAPI Filters tab. The name of the filter should reflect its task, for example confluence, and its executable must be the full path to the ajp isapi redirector DLL, that is c:\iis_ajp\isapi_redirect.dll</td>
</tr>
<tr>
<td>3</td>
<td>Restart IIS (stop and start the IIS service - not just the web server -- do this by right-clicking on 'Local Computer' in the IIS Manager and choosing All Tasks, Restart IIS...). Ensure that the confluence filter is marked with a green up arrow verifying that it is loaded and initialized correctly. If the ajp redirector did not initialize properly, check the log file for errors messages (C:\ajp_iis\ajp_plugin.log).</td>
</tr>
</tbody>
</table>

You can now go to [http://localhost](http://localhost) and see the Confluence Dashboard.

**Other Configuration**

If you want to run Confluence on a named context, rather than the root context (i.e. acces it via [http://host/confluence/](http://host/confluence/) instead of just [http://host/](http://host)) you need to:

1. Change the path attribute of the Context tag in server.xml from "" to "/confluence".  
2. Change the line '/=ajp13w' in uriworkermap.properties to '/confluence/*=ajp13w'

Note that 'http://host/confluence' gives a 404 error, but 'http://host/confluence/' works

**Troubleshooting**

If you have problems, look in the System Event Log, the c:\iis_ajp\ajp_plugin.log and your confluence
logs.

When requesting support for IIS configuration problems, please include:

1. A zip of your logs directory
2. A zip of your c:\is_ap directory
3. Your conf/server.xml file
5. A screen shot of the ISAPI Filters tab of the Properties window of your 'Web Sites' icon.
Setting Up Public Access

Granting of permissions to use Confluence can be done on the basis of membership of a group, to a particular user, or to the "Anonymous" user. There is not an actual user named "Anonymous", it is just a name for a category of granted permissions.

In the security administration of Confluence, the "Anonymous" user includes all logged-in users, and anonymous users who have not logged in. That is, if you allow the "Anonymous" user to do something, you are allowing all users to do it.

To enable public access to a confluence space, you must give Anonymous the following permissions:

- The global "Use Confluence" permission. This permission determines if a user can access the Confluence installation at all, and is set by the site administrator in Administration->Global Permissions
- The relevant permissions in any space that is to be made public. The "Anonymous" user must have at least the "View Space" permission for a space to be publicly accessible. You set these permissions in the Space Summary Cannot resolve external resource into attachment. -> Permissions Cannot resolve external resource into attachment.

While these two permissions are the bare minimum necessary for public access to a space, you may wish to give "Anonymous" additional permissions if you want a space to allow anonymous comments, or anonymous editing.

We severely warn against giving the "Anonymous" user any administrative privileges, either within a space, or especially globally over the Confluence instance. Giving administrative privileges to untrusted users may lead to a serious security compromise of your site.
Setup a mail session in standalone version

1. Add the following to your web.xml file (insert it just before </web-app>):

```xml
<resource-ref>
  <description>Test description</description>
  <res-ref-name>mail/Session</res-ref-name>
  <res-type>javax.mail.Session</res-type>
  <res-auth>Container</res-auth>
</resource-ref>
```

2. Add the following to your server.xml file (anywhere inside the <context ...> tags)

```xml
<Resource name="mail/Session" auth="Container" type="javax.mail.Session"/>
<ResourceParams name="mail/Session">
  <parameter>
    <name>mail.smtp.host</name>
    <value>mail.example.com</value>
  </parameter>
  <parameter>
    <name>mail.smtp.port</name>
    <value>25</value>
  </parameter>
</ResourceParams>
```

You only need to specify the mail.smtp.port parameter if you are using a non-standard port for SMTP.

3. Restart the server. Go to create SMTP mail server screen. For JNDI location, enter:

```
java:comp/env/mail/Session
```
Start Confluence automatically on system startup

This page last changed on Oct 17, 2006 by david.soul@atlassian.com.

Confluence can be configured to start automatically on system startup, allowing it to recover automatically after a reboot.

- Start Confluence automatically on Linux & Unix
- Start Confluence automatically on OS X using launchd
- Start Confluence automatically on Windows as a Service
Start Confluence automatically on Linux & Unix

This page last changed on Oct 29, 2006 by mryall.

If your Unix machine uses init.d to start server processes you can use this script to start Tomcat.

```bash
#!/bin/sh
# chkconfig: 3 60 30
# description: Starts and stops Tomcat (running as root)
mode=$1
export TOMCAT_HOME=/usr/local/java/tomcat
export CATALINA_HOME=/usr/local/java/tomcat
export JAVA_HOME=/usr/local/java/jdk1.4

case "$mode" in
  'start')
    # Start daemon
    su -c "$TOMCAT_HOME/bin/catalina.sh $mode" root
    ;;
  'stop')
    # Stop daemon. We use a signal here to avoid having to know the
    # root password.
    $TOMCAT_HOME/bin/catalina.sh $mode
    ;;
  *)
    # usage
    echo "usage: $0 start|stop"
    exit 1
    ;;
esac
```

You will need to modify TOMCAT_HOME, CATALINA_HOME and JAVA_HOME to match your configuration. CATALINA_HOME and TOMCAT_HOME should be set to the same path – TOMCAT_HOME was the Confluence 2.1 variable, and CATALINA_HOME is for Confluence 2.2.

Related Topics

Start Confluence automatically on system startup
Start Confluence automatically on OS X using launchd

This page last changed on Oct 17, 2006 by david.soul@atlassian.com.

launchd is the OS X component which manages long running processes - daemons or services.

Apple has an introduction to launchd.

There's a mismatch between how launchd expects a daemon to behave, and how the default startup scripts for Tomcat (the application server used by the stand-alone Confluence distribution) operate. Launchd expects the process it starts to run forever, but 'catalina.sh start' starts the JVM to run Tomcat and then exits. Tomcat provides 'catalina.sh stop' to cleanly shut down Tomcat by connecting to a socket which Tomcat listens on, but launchd stops daemons by sending them a signal, which simply kills the process immediately if no specific handling is included.

To match Tomcat to launchd we need to write a wrapper shell script, which we add to `$CATALINA_HOME/bin/bin:

```bash
#!/bin/bash
function shutdown()
{
    date
echo "Shutting down Confluence"
    $CATALINA_HOME/bin/catalina.sh stop
}
date
echo "Starting Confluence"
export CATALINA_PID=/tmp/$$
# uncomment to increase Tomcat's maximum heap allocation
# export JAVA_OPTS=-Xmx512M $JAVA_OPTS
. $CATALINA_HOME/bin/catalina.sh start
# allow any signal which would kill a process to stop Tomcat
trap shutdown HUP INT QUIT ABRT KILL ALRM TERM TSTP
echo "Waiting for `cat $CATALINA_PID`"
wait `cat $CATALINA_PID`
```

This shell script starts Tomcat, and then waits for the process to complete, so launchd is happy that Tomcat is still running. It also installs a signal handler, which calls the shutdown() function to cleanly shut down Tomcat when launchd signals the script.

You can try this script manually - start it, watch Confluence start, and then type ctrl-C, and see Confluence shut down cleanly (note that it won't shut down cleanly if Tomcat hasn't started yet - it takes a few seconds for Tomcat to start listening on the shutdown socket).

We also need a launchd .plist, to tell launchd how to start Tomcat:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN"
```
This file needs to be placed in /Library/LaunchDaemons, which is the location for system-wide services which are not part of base OS X.

There are a number of things to note about this plist:

1. The path to your Confluence installation has to be explicitly specified in four places. I don't know if there's a better solution to this.
2. JAVA_HOME is set to use the default JDK. On 10.4.4 this is 1.4.2, if you want to use 1.5 you would need to change JAVA_HOME to /System/Library/Frameworks/JavaVM.framework/Versions/1.5.
3. You need to change the UserName to the user you want Tomcat to run as.

To start and stop Confluence manually you use the commands:

cd /Library/LaunchDaemons
sudo launchctl load -w confluence.plist
and
sudo launchctl unload -w confluence.plist

I confess that I don't understand the semantics of launchctl start/stop - stopping a daemon seems to kill the process, but then launchd immediately restarts it.

Related Topics

Start Confluence automatically on system startup
Start Confluence automatically on Windows as a Service

This page last changed on Oct 18, 2006 by ivan@atlassian.com.

Reasons For Hosting Confluence As A Service

If you are hosting Confluence on a Windows-based server, installation as a Windows Service offers these advantages:

- Automated Confluence recovery after server restart
- Improved troubleshooting through logging server output to file

The guide below applies only to Confluence 2.2.0 onwards on Windows. Windows users running older versions should use the Start Confluence automatically on Windows as a Service (Pre 2.2) guide.

Installing Confluence Standalone As A Service

From your Windows-based server running Confluence 2.2 standalone or later:

1. Open a command prompt in the <CONFLUENCE-INSTALL>/bin directory
2. Confirm that the JAVA_HOME variable is set to the JDK base directory with the command
   
   echo %JAVA_HOME%

   Note that any directory in the path with spaces (eg. C:\Program Files must be converted to its eight-character equivalent (eg. C:\Progra~1)
3. Install the service with default settings with the command
   
   service.bat install Confluence

4. In addition, to have the service start automatically when the server starts, run
   
   tomcat5 //US//Confluence --Startup auto

5. If you have a less than a 512 meg of memory, skip this step. For users with large Confluence installs, you can increase the maximum memory Confluence can use (default will already be 256MB). For example, you can set the maximum memory to 512 megs using
   
   tomcat5 //US//Confluence --JvmMx 512

6. If you do not have any JVM parameters you pass to your freestanding version of Confluence, you can skip this step. If you do, add them to the service using
   
   tomcat5 //US//Confluence --JvmOptions="-Djust.an.example=True"

7. For any further configuration, check out the Tomcat Windows Service How-To guide
8. Go to Control Panel -> Administrative Tools -> Services -> Apache Tomcat Confluence and right click on Properties to verify the settings are correct
9. If you wish to run the service a non-administrator user for security, or if you are using network drives for backups, attachments or indexes, you can run the service as another user. To change users, open the Apache Tomcat Confluence properties, go to the "Log On" tab and enter their
username and password. Go to Control Panel -> User Accounts and confirm that the user has write permissions for the $CATALINA_HOME$, index and database directories. Note that any network drives must be specified by UNC and not letter mappings (eg. \backupserver\jira not z:\jira)

10. Start the Confluence service with the command

```
net start Confluence
```

### Controlling Confluence As A Service

The Confluence service can be controlled from the command prompt

- **Stop Confluence with**

```
net stop Confluence
```

- **Uninstall the Confluence service with**

```
service.bat remove Confluence
```

### Troubleshooting Confluence While Running As A Service

When investigating memory issues or bugs, it may be useful to view Confluence's Garbage Collection information. To turn on the verbose garbage collection, use the command

```
tomcat5 //US//Confluence ++JvmOptions="-Xloggc:<CONFLUENCE-INSTALL>\logs\atlassian-gc.log"
```

### Related Topics

- [Start Confluence automatically on system startup](#)
Start Confluence automatically on Windows as a Service (Pre 2.2)

This page last changed on Oct 17, 2006 by david.soul@atlassian.com.

Reasons For Hosting Confluence As A Service

If you are hosting Confluence on a Windows-based server, installation as a Windows Service offers these advantages:

- Automated Confluence recovery after server restart
- Improved troubleshooting through logging server output to file

⚠️ The guide below applies only to versions of Confluence earlier than version 2.2.0. Users of 2.2.0 or newer should use the Start Confluence automatically on Windows as a Service guide.

Installing Confluence Standalone As A Service

From your Windows-based server running Confluence 1.5 or earlier:

1. Open a DOS prompt
2. Set the CATALINA_HOME variable to the Confluence Standalone root directory (that containing the bin and confluence director):

```cmd
C:\> set CATALINA_HOME=c:\progra~1\confluence-1.3.5-standalone
```

If a directory in the path has spaces (eg. 'C:\Program Files\..'), please convert it to its eight-character equivalent.

3. Ensure the JAVA_HOME variable is set to the JDK base directory, with echo %JAVA_HOME%.
4. Run the following command, all on one line (or download it):

```cmd
C:\> %CATALINA_HOME%\bin\tomcat.exe" -install Confluence
"%JAVA_HOME%\jre\bin\server\jvm.dll"
"-Djava.class.path=%CATALINA_HOME%\bin\bootstrap.jar;%JAVA_HOME%\lib\tools.jar"
"-Dcatalina.home=%CATALINA_HOME% -Xms128m -Xmx256m -start org.apache.catalina.startup.BootstrapService -params start -stop org.apache.catalina.startup.BootstrapService -params stop -out "%CATALINA_HOME%\logs\stdout.log" -err "%CATALINA_HOME%\logs\stderr.log"
```

Once you’ve run this command successfully, you can start Confluence by running the following command

```cmd
C:\> net start Confluence
```

Alternatively you can pull up the Windows Services page and start the service from there.

⚠️ You will need to ensure that the %CATALINA_HOME%*, index and database directories are all writeable by the user the service is running as.
Confluence should now be installed as a service, but will not automatically start up until the next server reboot.

The Confluence service can be uninstalled with:

```
"%CATALINA_HOME%\bin\tomcat.exe" -uninstall Confluence
```
Troubleshooting SQL Exceptions

This page last changed on Jul 21, 2006 by jnoien.

If you get an exception similar to one of the following:

```
org.springframework.dao.DataIntegrityViolationException: (HibernateTemplate): data integrity violated by SQL ''; nested exception is java.sql.BatchUpdateException: Duplicate entry '1234' for key 1
      at org.springframework.jdbc.support.SQLStateSQLExceptionTranslator.translate(SQLStateSQLExceptionTranslator.java:88)
  caused by: java.sql.BatchUpdateException: Duplicate entry '1234' for key 1
```

or

```
(HibernateTemplate): data integrity violated by SQL ''; nested exception is java.sql.BatchUpdateException: ORA-00001: unique constraint (CONFLUENCE.SYS_C0012345) violated
```

This document will outline the steps to take to increasing logging on your system. This additional logging will help us work out the cause of this error.

To enable this additional logging:

1. open confluence/WEB-INF/classes/log4j.properties and uncomment the following lines. The double ## lines are comments, leave them intact.

```
## log hibernate prepared statements/SQL queries (equivalent to setting 'hibernate.show_sql' to 'true')
log4j.logger.net.sf.hibernate.SQL=DEBUG, confluencelog
log4j.additivity.net.sf.hibernate.SQL=false

## log hibernate prepared statement parameter values
log4j.logger.net.sf.hibernate.type=DEBUG, confluencelog
log4j.additivity.net.sf.hibernate.type=false
```

⚠️ If you can not locate these lines in your log4j.properties file, please add them to the end of it.

2. restart Confluence
3. redo the steps that led to error
4. zip up your logs directory and attach it your support ticket
5. if you are using Oracle and got a constraint error, please ask your DBA what table and column that constraint (that is, CONFLUENCE.SYS_C0012345) refers to and add that information to your support ticket.
6. open confluence/WEB-INF/classes/log4j.properties again and remove the 4 lines you added in step 1 (the additional logging will impact performance and should be disabled once you have completed this procedure.
Upgrading Confluence

This page last changed on Apr 04, 2007 by ganand.

This document outlines the procedures you need to follow to upgrade from one version of Confluence to another. You can download the latest version of Confluence from here.

⚠️ Before you begin
Always check the release notes for the version of Confluence you are installing for upgrade instructions specific to that version.

ℹ️ Only users with valid licence may perform the upgrade.

Step One: 1. Backing up

⚠️ We strongly recommend that you backup your Confluence home and install directories. If you are using an external database, you should perform a manual database backup before proceeding.

Things you need to backup

- Confluence Home Directory
- Your database - If you are not using the embedded database
- osuser.xml - If you running Confluence 2.0 or earlier and have your user management delegated to JIRA or any other user management system.
The osuser.xml file is located in the WEB-INF/classes directory.
- server.xml - If you are running Confluence Standalone, and have modified your server.xml file (for example to add a datasource).
The server.xml file is located in the Conf directory.
- WEB-INF/lib directory - If you have deployed any themes, macros or other plugins.

Step Two: Things you need to check ...

- Check out the Configuration Guide for your application server and database, to make sure there isn't anything extra you need to do to get Confluence running
- Especially, Resin 3 users should remember they need to update web.xml

Step Three: Performing the upgrade

⚠️ Please note, if you are upgrading from a 1.x version to a 2.x version of Confluence, you must use Method Two.
There are two ways to perform the upgrade:

Method One

<table>
<thead>
<tr>
<th>Pointing the new webapp to existing Confluence home</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. unzip the new release into a new directory (e.g. 'confluence-2.4.3-std').</td>
</tr>
<tr>
<td>If you have downloaded the WAR version and are using Tomcat, you need to update either your confluence.xml or server.xml to point to the location of the new version. Else, if you have deployed Confluence by copying it to your Tomcat webapps directory, please do not copy the new version over your existing install, as this may cause old files from previous versions to be left behind causing unpredictable problems. Instead, remove the old version first from webapps and then copy the new one in.</td>
</tr>
<tr>
<td>2. change the confluence-init.properties file to point to your existing confluence home directory (make sure you've already backed this up)</td>
</tr>
<tr>
<td>3. if you are not using the embedded database, remember to copy over the jdbc driver jar. In a stand-alone configuration, it needs to go in confluence-X.Y.Z-std/common/lib.</td>
</tr>
<tr>
<td>4. restart the application server</td>
</tr>
<tr>
<td>This method is the most convenient and will allow you to reuse your existing Confluence home directory and database.</td>
</tr>
</tbody>
</table>

Method Two

<table>
<thead>
<tr>
<th>Exporting and Restoring to a Brand New Instance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. From Confluence, go to Administration -&gt; Backup &amp; Restore and create a manual backup that includes attachments.</td>
</tr>
<tr>
<td>2. Create the new, separate install directory. We recommend including the version number in the install directory ie ..\confluence&lt;VERSION&gt; and that users avoid putting spaces in the install path. Windows users may wish to use C:\confluence\conf2.2.0 (set it to the version you downloaded).</td>
</tr>
<tr>
<td>3. Download the Confluence standalone version and setup a new installation of Confluence, create a new clean database and proceed with setup wizard.</td>
</tr>
<tr>
<td>4. when asked to restore existing data, specify the backup created in step 1</td>
</tr>
<tr>
<td>5. if you have made modifications to your osuser.xml file, this is the time to shutdown your confluence instance, copy the osuser.xml file into the WEB-INF/classes directory and start up Confluence.</td>
</tr>
<tr>
<td>- If you are unsuccessful with upgrading using the first method outlined above, you may give this approach a go. Occasionally, starting afresh will fix the problem.</td>
</tr>
<tr>
<td>- If you are upgrading from a version older than 2.0, we recommend using this method to obtain significant performance improvements from indexes we added in the 2.0 release (these indexes will not get added if you upgrade using the first method)</td>
</tr>
</tbody>
</table>

Post-install Notes
If you're happy with the new version, you can remove the old Confluence directory.
If you have delegated user management to JIRA and are running Confluence 2.0 or earlier, read the release notes to see if osuser.xml has been updated. If it has, you will have to move your changes over from your old osuser.xml to the new one or copy your old osuser.xml into the WEB-INF/classes directory and just override the one there.
Remember to restore the server.xml or plugin jar files you backed up earlier.
If you have previously installed Confluence/Tomcat as a Windows service, you may have to uninstall and reinstall the service, as described here.
If you're using AtlassianUser LDAP integration, remember to copy over your old atlassianUserContext.xml file over to the confluence/WEB-INF/classes in the new version.
You should re-download the latest version of each plugin you are using from the Confluence Extension space.

RELATED TOPICS

- If you are planning to upgrade Confluence and would like to use a different application server, please review the Application Server Configuration guide
- If you running Confluence on a cluster, please see Upgrading a Confluence Cluster

Administrators Guide Home Confluence Documentation Home
Weblogic - Troubleshooting

This page last changed on May 23, 2006 by jnolen.

Confluence sends its log output to standard out, so by default Weblogic does not record it.

To redirect Confluence's log output to a file follow these instructions Redirecting System.out and System.err to a File

Document generated by Confluence on May 01, 2007 00:44  Page 1232
Webserver Configuration

This page last changed on Feb 01, 2006 by vidya.

- Apache and Apache Connector Tips
- Configure Web Proxy Support for Confluence
Apache and Apache Connector Tips

The speed of downloading attachments is extremely slow. We are experiencing the following speeds

Large file served directly through Apache: 15000 KB/sec
Large file served directly from Tomcat HTTP connector: 14500 KB/sec
Large file served from Confluence (using Apache/mod_jk/Tomcat): 84 KB/sec

You can see that the file served from Confluence is ~176 times slower!

Solution

We upgraded mod_jk from version 1.2.8 to 1.2.10 and the download speed improved significantly to ~12000 KB/sec.
Configure Web Proxy Support for Confluence

This page last changed on Mar 20, 2007 by don.willis@atlassian.com.

**Overview**

Some of Confluence's macros, such as `{rss}` and `{jiraissues}` need to make web requests to remote servers in order to retrieve data. If Confluence is deployed within a datacentre or DMZ, it may not be able to access the Internet directly to make these requests. If you find that the `{rss}` macro does not work, ask your network administrator if Confluence needs to access the Internet through a web proxy.

**Configuring Proxy Support**

Proxy support is configured by passing certain system properties to the Java Virtual Machine on startup. These properties are defined by Sun here:  
[http://java.sun.com/j2se/1.4.2/docs/guide/net/properties.html](http://java.sun.com/j2se/1.4.2/docs/guide/net/properties.html)

- `http.proxyHost` (default: `<none>`)  
- `http.proxyPort` (default: 80 if `http.proxyHost` specified)  
- `http.nonProxyHosts` (default: `<none>`)  

`http.proxyHost` and `http.proxyPort` indicate the proxy server and port that the http protocol handler will use.

`http.nonProxyHosts` indicates the hosts which should be connected too directly and not through the proxy server. The value can be a list of hosts, each separated by a `,`, and in addition a wildcard character (*) can be used for matching. For example: `-Dhttp.nonProxyHosts="*.foo.com|localhost"`.

**Configure HTTP proxy with authentication**

- `http.proxyUser = username`  
- `http.proxyPassword = secret`

Reference: [source](#)

Please consult your application server documentation for how to provide system properties to the Java runtime, or to a particular application server. Some examples of how to start up different application servers with these system properties set are:

<table>
<thead>
<tr>
<th>AppServer</th>
<th>Startup script</th>
<th>Variable to edit</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orion</td>
<td>n/a</td>
<td>n/a</td>
<td>java</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Dhttp.proxyHost=proxy.example.com</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Dhttp.proxyPort=3128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>orion.jar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-userThreads</td>
</tr>
</tbody>
</table>

Document generated by Confluence on May 01, 2007 00:44
<table>
<thead>
<tr>
<th>Tomcat</th>
<th>bin/catalina.sh, bin\catalina.bat</th>
<th>JAVA_OPTS</th>
<th>set JAVA_OPTS=&quot;-Dhttp.proxyHost=proxy.example.com -Dhttp.proxyPort=3128&quot; (Windows), or export JAVA_OPTS=&quot;-Dhttp.proxyHost=proxy.example.com -Dhttp.proxyPort=3128&quot; (Unix)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomcat Service</td>
<td>n/a</td>
<td>n/a</td>
<td>When using a service to start tomcat, JVM parameters must be set using special syntax. See <a href="#">Start Confluence automatically on Windows as a Service</a>.</td>
</tr>
<tr>
<td>Weblogic</td>
<td>$BEA_HOME/domain/&lt;domain&gt;/bin/ntlmLogic.sh</td>
<td>JAVA_OPTIONS</td>
<td>export JAVA_OPTIONS=&quot;$JAVA_OPTIONS -Dhttp.proxyHost=proxy.example.com -Dhttp.proxyPort=3128&quot;</td>
</tr>
<tr>
<td>JBoss 3.2.x</td>
<td>bin/run.sh</td>
<td>JAVA_OPTS</td>
<td>export JAVA_OPTS=&quot;-Dhttp.proxyHost=proxy.example.com -Dhttp.proxyPort=3128&quot;</td>
</tr>
</tbody>
</table>

**NTLM Authentication**

Confluence does not currently support NTLM authentication, and cannot identify itself to a proxy server in this way.
Confluence Main FAQ

This page last changed on Jan 14, 2007 by david.soul@atlassian.com.

Questions By Topic

LDAP
JIRA User Integration
Plugin Development
RSS Feeds
Site Backup & Restore
JIRA Issues Macro

Installation Troubleshooting

Solutions to common issues with installing Confluence. Review your logs by opening the Confluence install directory and checking the /logs/catalina.out and /logs/catalina.out files for errors described below. Click on a problem to show the solution.

Confluence window closes immediately when started

An error is preventing Confluence from starting.

1. Open a command prompt. On Windows, do this by clicking on your Start menu, then click Run. In the Run box, type cmd and press OK
2. From the command prompt, go to your Confluence install directory
3. Go into the bin subdirectory
4. Run startup.bat and read the error message
5. Find the solution to that error below

Confluence won’t start - java.lang.NoClassDefFoundError IntraHibernateAttachmentCopier

If you are seeing "java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/hibernate/AbstractHibernateAttachmentDao$IntraHibernateAttachmentCopier" you have unzipped Confluence using a program that cannot handle long filenames. You must delete your install directory and go back to the point in the instructions that covers unzipping Confluence using a third-party unzip program.

Confluence won’t start - Exception in thread "main" java.lang.NoClassDefFoundError: ...

If http://localhost:8080 goes to an error page when you run Confluence, go to the install directory and find the /logs/catalina.out. If this file contains a single line error starting with "Exception in thread "main" java.lang.NoClassDefFoundError", your install path may contain spaces. The solution is to rename your install directory path so that there are no spaces, then restart Confluence.
Confluence won't start - Error creating Confluence Home directory

The confluence.home variable specified in confluence-init.properties cannot be created. To fix this, edit /confluence/WEB-INF/classes/confluence-init.properties and check the path specified exists. Make sure all the directory slashes use / and that the # has been removed. If you're stuck, try using confluence.home=c:/confluence/data

Confluence won't start - JAVA_HOME environment variable is not defined correctly

You have not installed the Java Development Kit, or not set the %JAVA_HOME% to the directory of the JDK. You should re-check your steps in Stage 2.

Confluence won't start - Port 8080 is in use

If you have another Tomcat running on the same machine, you must edit <INSTALL>/conf/server.xml and change both 8080 and 8005 to ports that do not conflict with your other Tomcat instance according to these instructions.

Confluence won't start - Error creating bean with name 'scheduler'

You will need to adjust your system time.

Confluence won't start - Error registering bean with name 'FileSystemAttachmentDataDao'

If you did not use one of the recommended unzipping tools, and happened to use for instance the default Windows XP extractor, one of the classes required for starting up Confluence may not be located due to the lengthy file-path. This is due to the reason that the default Windows tool silently fails to extract files with long names. We suggest you to use other tools such as WinZIP and 7zip and redo the deployment process.

Cause:
org.springframework.beans.factory.BeanDefinitionStoreException: Error registering bean with name 'FileSystemAttachmentDataDao' defined in class path resource applicationContext.xml: Class that bean class com.atlassian.confluence.pages.persistence.dao.FileSystemAttachmentDataDao depends on not found; nested exception is java.lang.NoClassDefFoundError:
com/atlassian/confluence/pages/persistence/dao/FileSystemAttachmentDataDao$FileSystemAttachmentNamingStrategy
at org.springframework.beans.factory.xml.DefaultXmlBeanDefinitionParser.parseBeanDefinition(DefaultXmlBeanDefinitionParser)
caused by: java.lang.NoClassDefFoundError:
com/atlassian/confluence/pages/persistence/dao/FileSystemAttachmentDataDao$FileSystemAttachmentNamingStrategy
at java.lang.Class.forName0(Native Method)

Confluence starts but localhost:8080 times out
Check the server logs for errors. If you are running Confluence Standalone on Windows, error messages will be printed to the console window that opened when you ran `startup.bat`. On Unix systems, Confluence will log messages to `logs/catalina.out`.

Confucius starts but localhost:8080 goes to Tomcat start homepage

The CATALINA_HOME environment variable is set to another instance of Tomcat. You should run `shutdown.sh`, remove the CATALINA_HOME reference to the other Tomcat version, and run `startup.sh` again.

Confucius starts but logins fail at login screen

If you try to login with the correct username and password but are always returned to the login screen without any error messages, and you are running `Zone Alarm`, please check that it is not blocking the Confluence server.

Post-Install Troubleshooting

If your problem is in an area covered in Questions by Topic, please check there instead.

- Cannot install Confluence due to 'NullPointerException in DefaultPluginManager' error
- Cannot register Confluence due to 'License you entered was not valid' error
- Cannot send email due to 'javax.mail.NoSuchProviderException' SMTP error
- Confluence content or attachments are randomly lost
- Confluence starts but logins fail at login screen
- Confluence stops responding after some time
- Confluence Unix and X11 Dependencies
- Confluence will not start - CommandBridge ClassNotFoundException
- Confluence won't start with "Error creating Home directory"
- Custom HTML broken in Look and Feel after saving invalid HTML
- Dynamic tasklist macro edits fail with ConversionException after JDK upgrade
- Edit page fails with 'Dataintegrityviolationexception... Violation of PRIMARY KEY constraint'
- Fix '404' errors in Space view
- Fix 'Error using thumbnails - No image support in Java runtime'
- Fix 'java.lang.UnsupportedClassVersionError... Unsupported major.minor version 49.0'
- Fix 'Out of Memory' errors by increasing available memory
- Fix 'Page Not Found' errors for pages with spaces in the title
- Fix 'Too many open files' error on Linux by increasing filehandles
- Fix JavaScript browser errors
- PDF export fails on Linux with UnsatisfiedLinkError
- Search is not finding my data AND the indexing process does not appear to be completing
- Troubleshooting Character Encodings
- Troubleshooting HTTPS or SSL-related problems
- View page containing Chart macro throws 'NoClassDefFoundError'
- What browsers are supported? I cannot see the Rich Text Editor in my browser

General Questions
Add Spell Checking To Confluence
Can Confluence retrieve search results from other sites?
Can I use CamelCaseLinks like they do on WardsWiki?
Can Users Edit Individual Sections Within a Page?
Change default font size in Confluence
Change listen port for Confluence Standalone
Copy Or Rename A Space
Disable public account signups
Enable public anonymous access
Enable user access logging
How do I change the space key?
How does Confluence differ from a wiki?
Installing Confluence Standalone
Redirect users to a page on login
Retrieve file attachments from a backup
Setup email notifications of page updates
Share users and groups between Confluence and JIRA
Start Confluence automatically on system startup
Where does Confluence store all its data?

Is your question unanswered? Try searching using the Search box in the top right corner of the page. If you can't find your answer, visit Confluence Support and 'Create New Issue' for a support ticket. You may need to sign up for a free account first.
Copy Or Rename A Space

This page last changed on Apr 19, 2007 by david.soul@atlassian.com.

Currently Confluence does not support renaming or copying spaces through the user interface. You may wish to vote towards these feature requests:

- **Clone an entire space** will enable duplication of every page, news and comment plus space themes and colour schemes
- **Copy a page hierarchy between existing spaces**

Manually Clone Or Rename A Space

It is possible to manually clone or rename a space by modifying an XML backup of the target space.

Notes

- May require manually updating external links to that space
- The instructions have been confirmed for Confluence 2.2 onwards. Users running older versions are recommended to upgrade Confluence before continuing
- Where examples are given, they involve changing `oldkey:Old Space Name` into `newkey:New Space Name`
- When importing a space export for a space that already exists, the previous space content will be overwritten
- Read the process in full before beginning

Stage 1: Rename Space

1. Select a new, unique space key and name for the second space. Space keys may only consist of ASCII letters or numbers (A-Z, a-z, 0-9) and no empty spaces are allowed in the key
2. Clone your production Confluence instance to a test server on another computer now. You should now have a production server and test server both containing the same data and can avoid the risk of corrupting your production Confluence instance
3. On the test server, login as an administrator
4. Go to Browse Space -> Advanced -> Export Space and export the target space as XML including attachments.
5. Save the space backup
6. Open the space backup file with a zip file editor and find the file *entities.xml*
7. Edit *entities.xml* in a text editor
8. Do a 'Search & Replace' on the old space name as shown below. Swap out Old Space Name and New Space Name for the actual names

<table>
<thead>
<tr>
<th>Search For</th>
<th>Replace With</th>
</tr>
</thead>
<tbody>
<tr>
<td>[CDATA[Old Space Name]]</td>
<td>[CDATA[New Space Name]]</td>
</tr>
</tbody>
</table>

9. Do a 'Search' for any occurrences of the old space name that occur in user content. You may wish to replace some or all of these references with the new space name. Replace Old Space Name and New Space Name with the actual names

<table>
<thead>
<tr>
<th>Search For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Space Name</td>
</tr>
</tbody>
</table>

10. Do four 'Search & Replaces' on each of the references to the old space key as shown below. Swap out oldkey and newkey for the actual keys

<table>
<thead>
<tr>
<th>Search For</th>
<th>Replace With</th>
</tr>
</thead>
<tbody>
<tr>
<td>[oldkey]</td>
<td>[newkey]</td>
</tr>
<tr>
<td>spaceKey=oldkey</td>
<td>spaceKey=newkey</td>
</tr>
<tr>
<td>[oldkey:]</td>
<td>[newkey:]</td>
</tr>
<tr>
<td>key=oldkey]</td>
<td>key=newkey]</td>
</tr>
</tbody>
</table>

11. Save the modified *entities.xml*
12. Overwrite the original *entities.xml* in the space backup with the modified version
13. Login to the test instance as a Confluence administrator
14. Go to Administration -> Backup & Restore. Under 'Upload a zipped backup to Confluence', browse to select to the modified space backup. Check the 'Build index' option and select 'Upload & Restore'
15. Once the restore process has completed, access the new space and test that you can access pages, embedded links and attachments. Any error in this step indicates that your search and replace was performed incorrectly and you should to retry from step 2

Stage 2: Restore On Production

1. Backup your production instance now
2. Login to the production instance as a Confluence administrator
3. Go to Administration -> Backup & Restore. Under 'Upload a zipped backup to Confluence', browse to select the modified space backup. Check the 'Build index' option and select 'Upload & Restore'. If any data loss occurs as a result of using this workaround, immediately revert to the backup
4. Once the restore process has completed, access the new space and test that you can access pages, embedded links and attachments. If any error occurs during this step, revert to the site backup
5. If renaming a space, you can delete the old space by going to Browse Space -> Space Admin -> Remove Space. Click OK to remove the old space

Stage 3: Rename Space References

Links in other spaces to the old space will remain unchanged. If you are renaming a space, you will need to change these links to point to the new space. Users who are copying a space can leave the links pointing to the original space by skipping this stage.

Changing these links depends on if you want to change every link, or only some. If not all links must be changed or you are unwilling to stop your production instance, this must be done by editing each page individually. If all links must be changed, follow the instructions below.

1. Create a site XML backup including attachments from Administration -> Backup & Restore
2. Save the site XML backup file
3. Stop the production instance
4. Create two copies of the site backup. Keep one copy as the original, unmodified backup, the other will be modified. Rename the backups so that it is clear which is being modified.
5. Open the copy for modification and edit entities.xml
6. Do four 'Search & Replaces' on each of the references to the old space key as shown below. Swap out oldkey and newkey for the actual keys

<table>
<thead>
<tr>
<th>Search For</th>
<th>Replace With</th>
</tr>
</thead>
<tbody>
<tr>
<td>[oldkey]</td>
<td>[newkey]</td>
</tr>
<tr>
<td>spaceKey=oldkey</td>
<td>spaceKey=newkey</td>
</tr>
<tr>
<td>[oldkey:]</td>
<td>[newkey:]</td>
</tr>
<tr>
<td>key=oldkey]</td>
<td>key=newkey]</td>
</tr>
</tbody>
</table>

7. Save the updated entities.xml back into the modified site XML backup file
8. Start the production instance
9. Import the modified site XML backup from Administration -> Backup & Restore. If you have any problems, revert to the original unmodified backup and redo the links manually instead

Done.
How do I change the space key?

This page last changed on Mar 11, 2007 by david.soul@atlassian.com.

See Copy Or Rename A Space.
How Do I?

This page last changed on Feb 02, 2006 by vidya.

Add Spell Checking To Confluence
Can Confluence retrieve search results from other sites?
Change default font size in Confluence
Change listen port for Confluence Standalone
Copy Or Rename A Space
Add Spell Checking To Confluence

This page last changed on Apr 26, 2007 by david.soul@atlassian.com.

Confluence has no inbuilt support for spell checking. You may wish to vote for Confluence to add it's own spell checking or add spell checking to your browser instead:

- Add spell checking to Internet Explorer
- Install the Firefox browser with inbuilt spell checking
Backup FAQ

This page last changed on Feb 15, 2007 by david.soul@atlassian.com.

For answers on Site Backup and Restore, click a query below.

Backup will not import
Can XML backups be deleted automatically?
Does running a daily XML backup slow performance?
How can I reduce the space taken up by automatic backups
Can Confluence be restored from a backup minus attachments?
Are there any scripts for backup creation and restore?

Backup will not import

See Troubleshooting failed XML site backups

Can XML backups be deleted automatically?

Windows users must manually delete any backup files. Linux users can insert a nightly or weekly automation script or cron similar to the following:

```
is -t <path to your backup dir>/* | tail +6 | xargs -i rm {}
```

Does running a daily XML backup slow performance?

There is a minor slowdown every time the backup is performed, usually nightly between 2am and about 2.10am. If the performance hit is significant, you can switch to an external backup process for large instances.

How can I reduce the space taken up by automatic backups

Switch to a manual backup process according to the 'Backups For Large Instances' section of Site Backup and Restore, which will give you more control over disk usage.

Can Confluence be restored from a backup minus attachments?

Yes, as long as the attachments have been backed up are the same time. Refer to Site Backup and Restore.
<table>
<thead>
<tr>
<th>Are there any scripts for backup creation and restore?</th>
</tr>
</thead>
</table>

Check out [User Submitted Backup & Restore Scripts](#)
Change default font size in Confluence

This page last changed on Nov 20, 2006 by david.soul@atlassian.com.

There is no way to modify the default font size from the user interface, so you will need to customise Confluence's CSS manually. This can be modified in your Confluence install directory under \confluence\WEB-INF\classes\styles\site-css.vm

The first entry is:

```css
body, p, td, table, tr, .bodytext, .stepfield {
  font-family: Verdana, arial, sans-serif;
  font-size: 11px;
  line-height: 16px;
  color: #000000;
  font-weight: normal;
}
```

By changing the value of the `font-size` field, you will be able to increase or decrease the base font size shown in the browser.
Disable public account signups

This page last changed on Oct 03, 2006 by david.soul@atlassian.com.

How do I prevent just anyone from being able to sign up for new accounts?

Confluence gives you the option to enable or disable "public signup". If you want to restrict your site to a particular set of users, you can easily disable public signup from the 'General Configuration' section of the Administration Console.

See Enabling or Disabling Public Signup.

RELATED TOPICS

1.1 Concepts (Crowd)
2. Managing Directories (Crowd)

FAQ Home
Enable public anonymous access

This page last changed on Oct 03, 2006 by david.soul@atlassian.com.

How do I configure Confluence for public-anonymous access?

There are two different permissions that need to be set to allow anonymous access to a Confluence site. First, the 'Anonymous' user needs the global "Use Confluence" permission, secondly you need to give 'Anonymous' permissions in each space you want to make public. Full instructions can be found here.

RELATED TOPICS

Security Overview
Users and Groups
Confluence Main FAQ
Enable user access logging

This page last changed on Nov 27, 2006 by ivan@atlassian.com.

Generate a basic log indicating which users are accessing which pages in Confluence. Application servers are able to log the requested URL, but they cannot determine the currently logged in user. This log is not currently formatted to be accessible to web log analysis tools such as AwStats as it lacks a host and get method, so must be viewed manually.

Similar to JIRA, Confluence has a built-in access logging mechanism, which shows the user and URL invoked. To enable it, you need to modify a couple of configuration files and restart Confluence.

Configuring the AccessLogFilter

There is a simple AccessLogFilter in Confluence than can be enabled via log4j.properties and web.xml.

You need to uncomment these lines in log4j.properties:

```
log4j.category.com.atlassian.confluence.util.AccessLogFilter=INFO, confluencelog
log4j.additivity.com.atlassian.confluence.util.AccessLogFilter=false
```

And enable the filter in web.xml by removing the comments around these lines:

```
<filter-mapping>
  <filter-name>AccessLogFilter</filter-name>
  <url-pattern>/display/*</url-pattern>
</filter-mapping>
```

Enabling this AccessLogFilter will result in logging information being stored in the standard confluence log files.

Advanced configuration

After this is working, you could redirect the access log to a different file by adding a new RollingFileAppender at the top of log4j.properties:

```
log4j.appender.accesslog=org.apache.log4j.RollingFileAppender
log4j.appender.accesslog.Threshold=DEBUG
log4j.appender.accesslog.File=${catalina.home}/logs/atlassian-confluence-access.log
log4j.appender.accesslog.MaxFileSize=20480KB
log4j.appender.accesslog.MaxBackupIndex=5
log4j.appender.accesslog.layout=com.atlassian.confluence.util.PatternLayoutWithStackTrace
log4j.appender.accesslog.layout.ConversionPattern=%d %p [%c{4}] %M %m%n
```

To enable this logger, you need to add 'accesslog' to the log4j.rootLogger property, and change the
AccessLogFilter logger line from 'confluencelog' to 'accesslog'.

The web.xml url-pattern given above only matches page views (/display/*). You could change the
url-pattern, or duplicate the entire filter-mapping to log access for different kinds of access (/admin/* for
admin functions, /pages/* for edits and creates, etc. Note that /pages/editpage.action* doesn't work).

What is logged

The format produced is the following values separated by spaces:

1. Username or '-' if no user
2. URL
3. VM free memory at start of request (in KB)
4. Change in free memory after request is finished (in KB)
5. Time taken for request (in ms).

The above may be preceded by additional log4j-generated text, depending on the log4j pattern which is
configured.

Another option: Google Analytics

Google Analytics can be easily integrated with Confluence for access tracking.

After signing up, copy the Javascript and paste it into the 'Before end of <body>' section of
Administration, Custom HTML. This will put the Javascript on every page generated by Confluence.

This might not work correctly if your users are behind a firewall or authenticated proxy.
I can not find the "Rich Text" editor. Is the editor part of Confluence 1.4.3?

This page last changed on Feb 02, 2006 by vidya.

I can not find the "Rich Text" editor. Does Confluence 1.4.3. contain the Editor?

The Rich Text Editor (aka WYSIWYG editor) is available in Confluence 2.0 and upwards. Rich Text editing is enabled by default.

If you wish to upgrade your Confluence installation, instructions can be found here.

RELATED TOPICS

Enabling Rich Text Editing Option (Confluence)
Making Rich Text Editing default (Confluence)

FAQ Home
Migrate Confluence from one database to another

How do I migrate Confluence from one database to another?

First perform an XML backup of your Confluence site. You can do this from the Administration > Backup and Restore page.

Once you’ve made the backup file, you can set up a new Confluence instance from scratch against your new database and restore the backup that you just created. Detailed instructions can be found here.

RELATED TOPICS

[Configuration Guide](Confluence) (Confluence)
[Migrate to an External Database](Confluence) (Confluence)

FAQ Home
Redirect users to a page on login

This page last changed on Oct 06, 2006 by david.soul@atlassian.com.

Can I set Confluence to redirect users to a space homepage immediately after login?

Yes. You can direct users to any of the space homepages when they login to the site This is configured by a site administrator from the Administration Console. Instructions on how to do this can be found here.

RELATED TOPICS

Administration Guide
Customising Space Homepage
FAQ Home
Setup email notifications of page updates

This page last changed on Oct 06, 2006 by david.soul@atlassian.com.

Confluence sends notifications of changes to spaces or pages to users who are watching pages. Users choose to watch pages or spaces, an administrator does not force notifications upon them.

✔ There is one way to automatically have users watch a given page or news item. The Autowatch Plugin can be set up to have anyone who contributes to a space watch the content they have contributed to. Eg. if they comment on a page, they will be set to watch that page for further updates. This should be used with care.

For Users

As a user, to set up a watch on a specific page or space, follow CONF20::Watching a Page or CONF20::Watching a Space

For Administrators

As an administrator, if you want to configure confluence to send notifications and test that it is working, follow these instructions:

1. Set up a mail server at Administration -> Mail servers. See DOC::Configuring a Server for Outgoing Mail.
   - Make sure you use "Send Test Email" to check that the server is working. Check that you get the test email in your inbox.
2. Go to your profile (using the Preferences link) and click Edit Profile -> Email Preferences, then enable Notify On My Action. (Otherwise you'll have to use multiple users. By default confluence does not send you notifications for your own changes.) See CONF20::Managing Watches
3. While editing your profile, make sure you have an email address configured. See DOC::Configuring a Server for Outgoing Mail
4. Go to a page you wish to get notifications about.
5. Click the Envelope icon in the top right corner to "watch" that page. See CONF20::Watching a Page.
7. Either wait a while or: Go to Administration -> Mail Queue. Click "Flush Mail Queue". See DOC::The Mail Queue.
8. Check your email.
Share users and groups between Confluence and JIRA

This page last changed on Oct 06, 2006 by david.soul@atlassian.com.

How do I share users and groups between Confluence and JIRA?

To save your having to enter users into both JIRA and Confluence, you can configure Confluence to use JIRA's user database.

Instructions on how to do this can be found here.

RELATED TOPICS

Delegate user management to use JIRA logins (Confluence)
Migrating users from Confluence to JIRA (Confluence)
Where does Confluence store all its data?

Attachments, extensions and configuration files are stored in the Confluence Home Directory that is configured when Confluence is first installed. All remaining data resides in the configured database.

See Important directories and files for more information.

**RELATED TOPICS**

- Important Directories and Files (Confluence)
- FAQ Home
Installation Troubleshooting FAQ

This page last changed on Mar 25, 2007 by david.soul@atlassian.com.

Solutions to common issues with installing Confluence. Review your logs by opening the Confluence install directory and checking the /logs/catalina.out and /logs/catalina.out files for errors described below. Click on a problem to show the solution.

Confluence window closes immediately when started

An error is preventing Confluence from starting.

1. Open a command prompt. On Windows, do this by clicking on your Start menu, then click Run. In the Run box, type cmd and press OK
2. From the command prompt, go to your Confluence install directory
3. Go into the bin subdirectory
4. Run startup.bat and read the error message
5. Find the solution to that error below

Confluence won’t start - java.lang.NoClassDefFoundError IntraHibernateAttachmentCopier

If you are seeing "java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/hibernate/AbstractHibernateAttachmentDao$IntraHibernateAttachmentCopier" you have unzipped Confluence using a program that cannot handle long filenames. You must delete your install directory and go back to the point in the instructions that covers unzipping Confluence using a third-party unzip program.

Confluence won’t start - Exception in thread "main" java.lang.NoClassDefFoundError: ...

If http://localhost:8080 goes to an error page when you run Confluence, go to the install directory and find the /logs/catalina.out. If this file contains a single line error starting with "Exception in thread "main" java.lang.NoClassDefFoundError", your install path may contain spaces. The solution is to rename your install directory path so that there are no spaces, then restart Confluence.

Confluence won’t start - Error creating Confluence Home directory

The confluence.home variable specified in confluence-init.properties cannot be created. To fix this, edit /confluence/WEB-INF/classes/confluence-init.properties and check the path specified exists. Make sure all the directory slashes use / and that the # has been removed. If you’re stuck, try using confluence.home=c:/confluence/data

Confluence won’t start - JAVA_HOME environment variable is not defined correctly
You have not installed the Java Development Kit, or not set the %JAVA_HOME% to the directory of the JDK. You should re-check your steps in Stage 2.

Confluence won't start - Port 8080 is in use

If you have another Tomcat running on the same machine, you must edit <INSTALL>/conf/server.xml and change both 8080 and 8005 to ports that do not conflict with your other Tomcat instance according to these instructions.

Confluence won't start - Error creating bean with name 'scheduler'

You will need to adjust your system time.

Confluence won't start - Error registering bean with name 'fileSystemAttachmentDataDao'

If you did not use one of the recommended unzipping tools, and happened to use for instance the default Windows XP extractor, one of the classes required for starting up Confluence may not be located due to the lengthy file-path. This is due to the reason that the default Windows tool silently fails to extract files with long names. We suggest you to use other tools such as WinZIP and 7zip and redo the deployment process.

Cause:
org.springframework.beans.factory.BeanDefinitionStoreException: Error registering bean with name 'fileSystemAttachmentDataDao' defined in class path resource applicationContext.xml: Class that bean class com.atlassian.confluence.pages.persistence.dao.FileSystemAttachmentDataDao depends on not found; nested exception is java.lang.NoClassDefFoundError: com/atlassian/confluence/pages/persistence/dao/FileSystemAttachmentDataDao$FileSystemAttachmentNamingStrategy at org.springframework.beans.factory.xml.DefaultXmlBeanDefinitionParser.parseBeanDefinition(DefaultXmlBeanDefinitionParser) at com/atlassian/confluence/pages/persistence/dao/FileSystemAttachmentDataDao$FileSystemAttachmentNamingStrategy at java.lang.Class.forName0(Native Method)

Confluence starts but localhost:8080 times out

Check the server logs for errors. If you are running Confluence Standalone on Windows, error messages will be printed to the console window that opened when you ran startup.bat. On Unix systems, Confluence will log messages to logs/catalina.out.

Confluence starts but localhost:8080 goes to Tomcat start homepage
The CATALINA_HOME environment variable is set to another instance of Tomcat. You should run shutdown.sh, remove the CATALINA_HOME reference to the other Tomcat version, and run startup.sh again.

Confluence starts but logins fail at login screen

If you try to login with the correct username and password but are always returned to the login screen without any error messages, and you are running Zone Alarm, please check that it is not blocking the Confluence server.
JIRA Issues Macro FAQ

This page last changed on Jan 04, 2007 by david.soul@atlassian.com.

For problems relating to the JIRA Issues Macro, click on your query below for the solution.

Issues Appear Out Of Date
Using cache with this macro it can be that you have stale data in you table. You can force a refresh of the table by clicking the Refresh button in the top-right hand corner of the table.

Cannot Access Issues When JIRA Uses HTTPS
Check out Troubleshooting HTTPS or SSL-related Problems.

'Error Rendering Macro' or No Issues Are Displayed or Not All Issues Are Displayed
You must append a JIRA username and password to your JIRA issues filter URL. That JIRA user must also have permission to view the all issues returned by the filter, otherwise they will be omitted. Please append the os_username and os_password as described below so that
jiraissues:url=http://host.com/secure/IssueNavigator.jspa?... becomes
jiraissues:url=http://host.com/secure/IssueNavigator.jspa?...&os_username=MYUSERNAME&os_password=MYPASSWORD
where MYUSERNAME and MYPASSWORD are a JIRA login.

'Error rendering macro: java.io.IOException: Could not download'
You may need to configure Confluence to acknowledge your proxy server before it is able to download the feed.

'Error rendering macro: java.io.IOException: Error on line -1: Premature end of file'
Did you select an existing JIRA filter? If you did, your issues filter URL will end with
.../12345/SearchRequest-12345.xml where 12345 is any number. You should retry using a new and unsaved filter.

Issue icons are not displayed
Check that you are using the correct macro version for JIRA.
New User FAQ

This page last changed on Oct 03, 2006 by david.soul@atlassian.com.

The main FAQ is Confluence Main FAQ. For new users:

Can I use CamelCaseLinks like they do on WardsWiki?
Can Users Edit Individual Sections Within a Page?
How does Confluence differ from a wiki?
Where does Confluence store all its data?
Can Confluence retrieve search results from other sites?

This page last changed on Feb 21, 2007 by david.soul@atlassian.com.

Confluence cannot easily index external sites due to technical reasons, but there are two alternatives:

1. Embed External Pages Into Confluence
2. Replace Confluence Search

Technical Reasons

Confluence indexes pages using a customised Lucene search engine that returns matching pages, mail and blog posts for which the searcher has view permission. It would require significant source code modifications to enable Confluence to process search results from external pages, as the indexing process has been customised to utilise internal Confluence metadata. Note that users can still index content from new attachment filetypes.

Embed External Pages Into Confluence

If you only have a small number of external sites to index, you may prefer to enable the HTML-include Macro and use it embed the external content inside normal Confluence pages.

Replace Confluence Search

Use your own programmer resources to replace Confluence's internal search with a crawler that indexes both Confluence and external sites. This advanced option is easier than modifying the internal search engine. It requires removing Confluence internal search from all pages and replacing the internal results page with your own crawler front-end.

1. Setup a replacement federated search engine to index the Confluence site, as well as your other sites, and provide the results that way. You would need to host a web crawler, such as these open-source crawlers. Note that you can perform a search in Confluence via the remote API
2. Replace references to the internal search by modifying the site layout so that it links to your search front-end
3. Host another site containing the search front-end. You may wish to insert it into a suitable context path in your application server so that it appears to be from a path under Confluence. Tomcat sets Confluence's paths from the Confluence install\confluence\WEBINF\web.xml file.
Can I use CamelCaseLinks like they do on WardsWiki?

This page last changed on Feb 02, 2006 by vidya.

Can I use CamelCaseLinks like they do on WardsWiki?

Yes you can. Camelcasing is not enabled by default but a site administrator can easily enable it from the administration screens.

See [Enabling CamelCase linking](#).

### RELATED TOPICS

[CamelCase linking](#)

FAQ Home
Can Users Edit Individual Sections Within a Page?

This page last changed on Nov 19, 2006 by cmiller.

Some wiki software allows the editing of sections within a page (sectional editing). This functionality is currently not available in Confluence, but we are looking to include it in a future release. This issue is being tracked on the Confluence JIRA project: CONF-5913.

In the meantime, for pages that are getting long enough to be hard to edit in a single block, you can get an approximation of sectional editing by using the {include} macro. For example:

```html
h3. [Section One] {edit://pages/editpage.action?spaceKey=SPACE&pageTitle=Section One}
{include:Section One}
h3. [Section Two] {edit://pages/editpage.action?spaceKey=SPACE&pageTitle=Section Two}
{include:Section Two}
```

The links to the edit pages can be simplified by using the {link-to:page edit} macro available in David Peterson's Linking Plugin.

Technical Stuff

The problem lies in the complexity of Confluence's wiki markup. We made a couple of proof-of-concept implementations of sectional editing as part of our "Fedex Day" program, and while it's quite easy to come up with a solution that works with 90% of pages, there are a lot of edge-cases where it's actually quite hard to determine precisely where a given section starts and finishes.

Next time we perform a significant overhaul of our wiki markup processing engine, we'll be looking specifically to add functionality that will make sectional editing work properly.
How does Confluence differ from a wiki?

Essentially, Confluence is a wiki. Our aim was to build an application that was built to the requirements of an enterprise knowledge management system, without losing the essential, powerful simplicity of the wiki in the process.

From the wiki, we took the following lessons:

- It should be easy for anyone to create and edit pages
- It should be easy for anyone to link pages together
- It should be easy to see what has changed recently
- The site should be searchable
- Users should have the tools to organise and group pages without having any particular structure imposed upon them

On top of that, we added professional features, such as the partitioning of content into separately managed spaces, user- and group-based access control, automated refactoring, PDF exporting, searchable attachments, a comprehensive remote API, easy installation and a professional and easy-to-use presentation; all wrapped up in Atlassian's "Legendary Service".

RELATED TOPICS

More about Confluence on Atlassian's website
More about wikis

FAQ Home
Troubleshooting FAQ

This page last changed on Oct 03, 2006 by david.soul@atlassian.com.

The main FAQ is Confluence Main FAQ. For troubleshooting:

Cannot install Confluence due to 'NullPointer Exception in DefaultPluginManager' error
Cannot register Confluence due to 'License you entered was not valid' error
Cannot send email due to 'javax.mail.NoSuchProviderException' SMTP error
Confluence content or attachments are randomly lost
Confluence stops responding after some time
Confluence Unix and X11 Dependencies
Confluence won't start - CommandBridge ClassNotFound Exception
Dynamic tasklist macro edits fail with ConversionException after JDK upgrade
Edit page fails with 'Data IntegrityViolationException... Violation of PRIMARY KEY constraint'
Fix '404' errors in Space tree view
Fix 'Error using thumbnails - No image support in Java runtime'
Fix 'java.lang.UnsupportedClassVersionError... Unsupported major.minor version 49.0'
Fix 'Out of Memory' errors by increasing available memory
Fix 'Page Not Found' errors for pages with spaces in the title
Fix 'Too many open files' error on Linux by increasing filehandles
Fix JavaScript browser errors
PDF export fails on Linux with UnsatisfiedLinkError
Search is not finding my data AND the indexing process does not appear to be completing
Troubleshooting Character Encodings
Troubleshooting HTTPS or SSL-related problems
View page containing Chart macro throws 'NoClassDefFoundError'
What browsers are supported? I cannot see the Rich Text Editor in my browser
Cannot install Confluence due to 'NullPointerException in DefaultPluginManager' error

This page last changed on Oct 30, 2006 by david.soul@atlassian.com.

Identifying The Error

If Confluence will not start due to an error:

```java
java.lang.NullPointerException
at com.atlassian.plugin.DefaultPluginManager.getEnabledModuleDescriptorsByClass(DefaultPluginManager.java:495)
...
```

Check your Confluence log files for a database listener error reporting that the SID is unknown. On standalone, the log file to check is atlassian-confluence.log in the logs directory of your Confluence install, for example C:\confluence-2.2.9-std\logs\atlassian-confluence.log. Scroll to the bottom of the file and search or browse for a "Listener refused" error such as:

```java
Caused by: java.sql.SQLException: Listener refused the connection with the following error: ORA-12505, TNS:listener does not currently know of SID given in connect descriptor
The Connection descriptor used by the client was:
my.dbserver.com:1522:myschema
```

This example was thrown on an Oracle database, where my.dbserver.com was the database server, and myschema was the Oracle SID. Your error may be different.

Fixing The Error

You will need to modify your database connection URL specified in the Resource for your database. On standalone, this is in the server.xml file in the conf directory of your confluence install, for example C:\confluence-2.2.9-std\conf\server.xml. An example connection URL is:

```java
jdbc:oracle:thin:@my.dbserver.com:1521:myschema
```

This example has a server hostname of my.dbserver.com and a schema ID of myschema.

If your connection URL is missing the @ symbol before the server hostname, add it and restart. If the @ symbol is present, check that the schema ID is correct. Oracle users can check the SID of their database in the Oracle tnsnames file.
Cannot install Confluence due to missing demo-site.zip

This page last changed on Oct 18, 2006 by david.soul@atlassian.com.

I am trying to install Confluence but the demo-site.zip is missing?

There are some cases where the unzip utility used to unzip the Confluence download will recursively unzip all contained zip files. The demo-site.zip should be located in the WEB-INF/classes/com/atlassian/confluence/setup directory. If it has been extracted, you will see an entities.xml file in this directory instead.

RELATED TOPICS

Confluence Setup Guide
FAQ Home
Cannot register Confluence due to 'License you entered was not valid' error

This page last changed on Oct 18, 2006 by david.soul@atlassian.com.

If this happens, please check your logs. The following message may appear:

```
2006-03-19 16:32:05,969 ERROR [atlassian.license.decoder.LicenseDecoder] String) Exception looking up public key: null
java.security.spec.InvalidKeySpecException
    at gnu.java.security.provider.DSAKeyFactory.engineGeneratePublic(java.security.spec.KeySpec)
        (/usr/lib/libgcj.so.6.0.0)
    at java.security.KeyFactory.generatePublic(java.security.spec.KeySpec)
        (/usr/lib/libgcj.so.6.0.0)
    at com.atlassian.license.decoder.LicenseDecoder.getPublicKey(java.lang.String) (Unknown Source)
    at com.atlassian.licensedecoder.LicenseDecoder.getLicense(com.atlassian.license.LicensePair, java.lang.String) (Unknown Source)
    at com.atlassian.license.LicenseManager.setLicense(java.lang.String, java.lang.String) (Unknown Source)
    at com.atlassian.confluence.setup.actions.SetupLicenseAction.validateLicense() (Unknown Source)
    at com.atlassian.confluence.setup.actions.SetupLicenseAction.validate() (Unknown Source)
```

If you see this, you are most likely using GCJ/Kaffe, which sometimes has problems running Confluence. Please try using the Sun JDK.
Cannot send email due to 'javax.mail.NoSuchProviderException' SMTP error

This page last changed on Oct 18, 2006 by david.soul@atlassian.com.

When Confluence tries to send mail, I get a "javax.mail.NoSuchProviderException: smtp" error.

The technical explanation is that you have two different versions of Sun's Javamail libraries in your application classpath. When Confluence tries to send an email, Java gets confused as to which version of the library it should be using, and falls over. If (and only if) you are encountering this error, try removing the Javamail-1.3.jar and activation-1.0.1.jar files from the confluence/WEB-INF/lib directory of your Confluence installation, and restarting the server. The problem should go away.

RELATED LINKS

This issue at Atlassian's forum

FAQ Home
Confluence content or attachments are randomly lost

This page last changed on Jan 03, 2007 by david.soul@atlassian.com.

Problem

Attachments, pages or attachments have been deleted from a Confluence instance, possibly over an extended period of time.

Probable Cause

A user has experienced this problem when downloading an offline copy of their Confluence instance using Webcopier.

WebCopier follows every link in Confluence using an aggressive spidering strategy that includes automatic posting of confirmation forms. When WebCopier is run over a page, it follows the remove attachment or page link and performs the equivalent of clicking the OK button on the 'Are you sure you want to remove...?' dialog. If Webcopier has authenticated itself as a user with delete permission for that content, it will then be removed.

Detection

Enable user access logging and identify the username deleting content by searching the access log for suspicious requests to doreremoveattachmentonpage.action or removepage.action

Notes

Webcopier must be used on a Confluence site by an authorised Confluence user for the above problem to occur. For a spider to delete content, it must be provided with the credentials of a Confluence user with the delete privilege and set to blindly post confirmation prompts.

Confluence protects against against updates from automated spiders, such as those that would trawl a public instance of Confluence, by requiring that updates to Confluence content are posted via a form. Search spiders and other crawlers avoid populating and submitting forms for precisely this reason and at present, Webcopier is the only spider reported to submit confirmation forms by default.
Confluence stops responding after some time

This page last changed on Oct 18, 2006 by david.soul@atlassian.com.

I am using MySQL, and after a while Confluence stops working with database errors.

MySQL's JDBC drivers have an annoying default behaviour where if a connection is idle for a certain amount of time (by default, eight hours), it is closed. Since Confluence uses a connection pool, this means that pooled connections die if they are not used within a certain time period.

The solution is to append ?autoReconnect=true to the end of your database's JDBC URL.

- If you are using JNDI data-sources, you will do this in your application server's configuration files.
- If you have configured Confluence to access the database directly, you will need to manually edit the hibernate.connection.url property in the confluence.cfg.xml file in your confluence.home directory. After you have changed the URL in this file, restart Confluence.

<table>
<thead>
<tr>
<th>! Note</th>
</tr>
</thead>
</table>

In Confluence versions 1.0RC5 and before, there was a bug that manifested when you used Confluence to connect directly to a MySQL database instead of going through a datasource configured in the application-server under which Confluence runs. Unfortunately the symptoms of the bug were identical to the much more common problem above, so it took us a little longer to find the problem than we should have.

So long as you specify autoReconnect=true, Confluence 1.0RC6 and later should remain connected to your MySQL database indefinitely.

RELATED TOPICS

Configuration Guide
FAQ Home
Confluence will not start - CommandBridge ClassNotFoundException

This page last changed on Jan 10, 2007 by ivan@atlassian.com.

Problem

While running Confluence under an application server such as JBoss or Jetty, Confluence fails on startup with the exception below.

2007-01-01 12:00:00,000 ERROR [org.jboss.deployment.MainDeployer] Could not create deployment: file:/opt/.../deploy/confluence.war/
org.jboss.ws.WSException: java.lang.ClassNotFoundException:
com.thoughtworks.selenium.outbedded.CommandBridge
at org.jboss.ws.server.WebServiceDeployerJSE.isWebserviceDeployment(WebServiceDeployerJSE.java:161)
at org.jboss.ws.server.WebServiceDeployer.create(WebServiceDeployer.java:101)
at org.jboss.ws.server.WebServiceDeployerJSE.create(WebServiceDeployerJSE.java:66)
at org.jboss.deployment.SubDeployerInterceptorSupport$XMBeanInterceptor.create(SubDeployerInterceptorSupport.java)
at org.jboss.deployment.SubDeployerInterceptor.invoke(SubDeployerInterceptor.java:91)
at org.jboss.mx.server.Invocation.invoke(Invocation.java:88)
at org.jboss.mx.server.AbstractMBeanInvoker.invoke(AbstractMBeanInvoker.java:264)
at org.jboss.mx.server.MBeanServerImpl.invoke(MBeanServerImpl.java:659)
at org.jboss.mx.util.MBeanProxyExt.invoke(MBeanProxyExt.java:210)
at $Proxy40.create(Unknown Source)

Solution

Comment out the Selenium servlet.

1. Stop the application server
2. Open web.xml and remove the tags below

```xml
<servlet>
  <servlet-name>SeleneseServletSpike</servlet-name>
  <servlet-class>com.thoughtworks.selenium.outbedded.CommandBridge</servlet-class>
</servlet>
<servlet-mapping>
  <servlet-name>SeleneseServletSpike</servlet-name>
  <url-pattern>/selenium-driver/driver</url-pattern>
</servlet-mapping>
```

Related

- Known Issues for JBoss
- Known Issues for Jetty
Confluence won't start with "Error creating Home directory"

To fix this issue that prevents Confluence from starting up, open the file
/confluence/WEB-INF/classes/confluence-init.properties and check that at the bottom, confluence.home is
specified to an empty, valid directory. Use the backslash (eg c:/data) and ensure there is write access to
the directory. When changing the directory, save the file and restart the application server.
Custom HTML broken in Look and Feel after saving invalid HTML

This page last changed on Jan 02, 2007 by david.soul@atlassian.com.

In the Administration->Look and Feel->Custom HTML, I've edited the Custom HTML and due to some broken tags I wasn't able to 'Save' the customization when I try editing it again. The save button no longer show up in edit mode.

You will need to remove all the customized HTML and run /admin/doeditcustomhtml.action on your Confluence instance. Please note that this operation will permanently remove the previous custom HTML.
Dynamic tasklist macro edits fail with ConversionException after JDK upgrade

This page last changed on Jan 03, 2007 by david.soul@atlassian.com.

Problem Description

If you are using the Dynamic Tasklist Macro and have upgraded the Confluence server to JDK 1.5 or later, editing any tasklist content throws an exception with error cause:

```
com.thoughtworks.xstream.converters.ConversionException: Cannot construct java.util.Collections$SynchronizedRandomAccessList:
```

Cause

A change to the Java API in version 1.5, specifically the Collections.SynchronizedRandomAccessList method, makes old dynamic tasklist data inaccessible after upgrading.

Full details at CONF-4082.

Workarounds

Choice 1 - Revert To JDK 1.4

Until CONF-4082 can be patched, reverting to JDK 1.4 will re-enable all tasklist content.

1. Stop Confluence
2. Revert the Confluence server to the JDK version on which the tasklist content was created. The JDK used is the version set by your JAVA_HOME parameter, so users can change this value to the old JDK path to use that JDK again. (Guide to changing the JAVA_HOME parameter on Windows)

Choice 2 - Migrate To JDK 1.5

If users wish to move to JDK 1.5 before CONF-4082 is patched, they must manually transfer the tasklist content across.

1. Backup your Confluence instance
2. Stop Confluence
3. Revert the Confluence server to the JDK version on which the tasklist content was created. The JDK used is the version set by your JAVA_HOME parameter, so users can change this value to the old JDK path to use that JDK again. (Guide to changing the JAVA_HOME parameter on Windows)
4. Start Confluence
5. From your browser, visit the dynamic tasklist page
6. Manually copy and paste the text of each task and that task status to an external text editor
7. From the external text editor, save the list of task text and status
8. From your browser, delete the dynamic tasklist from the page
9. Repeat for each dynamic tasklist in your Confluence instance until all tasklist content has been
stored and the macros deleted
10. Stop Confluence
11. Revert to the newer JDK by altering the JAVA_HOME parameter
12. Start Confluence
13. Restore each dynamic tasklist
Edit page fails with 'DataIntegrityViolationException... Violation of PRIMARY KEY constraint'

This page last changed on Jan 02, 2007 by david.soul@atlassian.com.

Error

When trying to edit or save a page, an error screen is shown and the page is not updated.

```
org.springframework.dao.DataIntegrityViolationException: (HibernateTemplate): data integrity violated by SQL '';
nested exception is java.sql.SQLException: Violation of PRIMARY KEY constraint 'PK__CONTENT__5DCAEF64'. Cannot insert duplicate key in object 'CONTENT'...
```

Cause

Confluence is deployed twice in the application server. The Confluence install should only be manually deployed via confluence.xml or server.xml. If the Confluence install directory is under an application server directory which is being auto-deployed, such as under the Tomcat webapps directory, Confluence will be deployed a second time.

Solution

The Confluence install directory referenced by confluence.xml or server.xml must be moved to a directory outside of the application server, so that is it no longer auto-deployed. See the instructions for installing the Confluence EAR WAR edition.
Fix '404' errors in Space tree view

This page last changed on Oct 18, 2006 by david.soul@atlassian.com.

I am getting "404" errors in the Space tree view

If you are browsing a space and looking at the "tree view", 404 errors may appear (or it will display "Loading...") if the base url of your Confluence instance is not set (or is set incorrectly).

You can fix this by going to Administration -> General Configuration, and making sure that the "Base URL" setting is set to the correct address/domain name and path.

If you allow multiple domains or sub-domains to be used to access a Confluence installation, you should ideally have them redirect to a single domain or sub-domain that matches the settings in General Configuration.

RELATED TOPICS

Configuring the Server Base URL
FAQ Home
**Fix 'Error using thumbnails - No image support in Java runtime'**

This page last changed on Jan 07, 2007 by ivan@atlassian.com.

I am trying to use thumbnails, and I get the message: "This Confluence installation can not generate thumbnails: no image support in Java runtime"

On some Java installations (i.e. Unix without X11), you need to pass an additional parameter to Java when you are starting up to tell it how to use its image-manipulation libraries - to run in a headless mode, thus appending -Djava.awt.headless=true option. Getting thumbnail support working in this configuration depends on your application server.

### Confluence Standalone or Apache Tomcat

**As a Windows Service:**

1. Open a command prompt in the `Confluence install\bin` directory
2. Execute `tomcat5 //US//Confluence ++JvmOptions="-Djava.awt.headless=true"

**On Windows:**

1. Edit the file `Confluence install\bin\setenv.bat`
2. Modify the line `set JAVA_OPTS` line by appending `-Djava.awt.headless=true`, for example `set JAVA_OPTS=%JAVA_OPTS% -Xms128m -Xmx256m -Djava.awt.headless=true`

**On Linux:**

1. Edit `Confluence install\bin\setenv.sh` and add the `-Djava.awt.headless=true` parameter. For example `JAVA_OPTS="-Xms128m -Xmx256m $JAVA_OPTS -Djava.awt.headless=true "`
2. If you are using Fedora Linux, you will also need to install the `xorg-x11-deprecated-libs` package. (See: [https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=130239](https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=130239))

### Other Application Servers

For other application servers, you will need to append the `java.awt.headless=true` parameter to the `JAVA_OPTS`. If you need help with a particular server, please [lodge a support request](#).

**RELATED TOPICS**

- [Configuration Guide](#)
- [FAQ Home](#)
Fix 'java.lang.UnsupportedClassVersionError... Unsupported major.minor version 49.0'

On starting Confluence, do you see an UnsupportedClassVersionError error that causes Confluence to close, similar to the one below?

```
Cause:
some.plugin.class.here: java.lang.UnsupportedClassVersionError: some/plugin/class/her
(Unsupported major.minor version 49.0)
```

This is caused by installing a plugin that requires a newer version of Java than the version you have currently installed. You can either install the latest JDK, or uninstall the plugin:

### Install The Latest JDK

2. Locate JDK 5.0 Update 8, the option without NetBeans or Java EE, and select 'Download'
3. Check the 'Accept' box for the License Agreement
4. Under the Windows Platform, select the 'Windows Offline Installation, Multi-language' version
5. Begin downloading the executable
6. Once downloaded, run the installer. You will need to remember the directory you install the JDK in.
7. Windows users follow the instructions to Set JAVA_HOME variable in Windows. This will set your JAVA_HOME environment variable to the directory you just installed the JDK in. The default directory is under `C:\Program Files\Java`.

### Uninstall Problem Plugin

One of the plugins you just installed will be the cause of the problem. Plugins are installed as JAR files, which you can manually remove. Your error message contains a plugin class that indicates which plugin is causing the problem. Known plugins are:

<table>
<thead>
<tr>
<th>Plugin Class</th>
<th>Plugin</th>
</tr>
</thead>
<tbody>
<tr>
<td>org/swift/confluence/table/CsvMacro</td>
<td>Table Plugin</td>
</tr>
</tbody>
</table>

The plugin JAR file will be in one of the following Confluence plugin directories:
Confluence Home/plugins
Confluence Install/confluence/WEB-INF/lib

To locate the plugin JAR and remove it:

1. Visit the plugin page and locate the Download section
2. Find the filename of the JAR file by checking the download URL for the plugin
3. Locate the JAR file in one of the Confluence plugin directories
4. Remove the plugin JAR file
5. Start Confluence
Fix 'Out of Memory' errors by increasing available memory

This page last changed on Apr 20, 2007 by ganand.

I am getting Out of Memory errors, how can I allocate more memory to Tomcat?

Since the default memory setting usually is around 64 or 128MB (256MB in Confluence 2.2 and later), you might have to adjust the settings to run a bigger Confluence instance with sufficient memory. Users running Confluence as a service please refer to the Start Confluence automatically on Windows as a Service page. For users running Tomcat standalone, you will have to change the following settings:

Confluence 2.2 or later (Tomcat 5.5)

Do not set your memory using CATALINA_OPTS this is overridden by JAVA_OPTS.

On Linux

- In the unpacked Confluence standalone directory, edit the file bin/setenv.sh
- Edit the line beginning with JAVA_OPTS= substituting new values for -Xms (starting memory) and -Xmx (maximum memory)
- Leave the rest of the options in that line unchanged

An example of a minimal setting for a large system - max heap size is set to 1Gb :

```
JAVA_OPTS="-Xmx1024m $JAVA_OPTS -Djava.awt.headless=true "
```

On Windows

- In the unpacked Confluence standalone directory, edit the file bin/setenv.bat
- Edit the line beginning with set JAVA_OPTS= substituting new values for -Xms (starting memory) and -Xmx (maximum memory)
- Leave the rest of the options in that line unchanged

Confluence 2.1 and earlier (Tomcat 4.0)

On Linux

Edit the file $TOMCAT_HOME/bin/ startup.sh and insert the following line, substituting for the desired value, eg. Bash Shell:

```
export CATALINA_OPTS="-Xms(min heap)m -Xmx(max heap)m"
```

The line you add should go just before the line starting exec "$PRGDIR..."

On Windows

Edit the file $TOMCAT_HOME\bin\ startup.bat and insert or alter the following line, substituting for the desired values:

```
set CATALINA_OPTS=-Xms(min heap)m -Xmx(max heap)m
```
For example if you want to allocate a minimum heap size of 256MB and a max heap size of 512MB you will have to write the following on Windows:
set CATALINA_OPTS=-Xms256m -Xmx512m

The line you add should go just before the line starting call "%EXECUTABLE%"...

If you are running tomcat 5.5 via tomcat.exe, you can update the heap size by running tomcatw.exe and setting the required values via the Java tab.

Other Notes

On OS X
If you are using the 'serveradmin start appserver' to start and stop tomcat, then you will need to update /usr/share/servermgrd/bundles/servermgr_appserver.bundle/Contents/Resources/run.sh

Permanent Generation Size

If you get the error message: java.lang.OutOfMemoryError: PermGen space this means that you have exceeded Java's fixed 64Mb block for loading class files. You will need to add the argument -XX:MaxPermSize=128m to CATALINA_OPTS, in addition to any argument you use to set the heap size.

Please refer to this link for more information.

RELATED TOPICS

Managing Application Server Memory Settings
Application Server Configuration
FAQ Home
Tomcat JVM options and Modify the Default JVM Settings
Logging A Thread Dump
Fix 'Page Not Found' errors for pages with spaces in the title

This page last changed on Oct 18, 2006 by david.soul@atlassian.com.

If you are getting "Page Not Found" errors when trying to view pages with spaces in the titles, and are using WebSphere, we recommend updating your WebSphere instance to 5.1.1 (with fixpack 3) or above. This is a bug in prior versions, and is fixed in fixpack 3.

See IBM's list of fixes for Websphere 5.1.
Fix 'Too many open files' error on Linux by increasing filehandles

When system performance on Linux is affected by using too many file descriptors, usually an error can be seen in the log file 'Too many open files'. Although this affects the entire system, it is a fairly common problem.

**Confluence 2.3** was released and the issue with using too many file handles was resolved via utilisation of compound indexing.

To obtain the current maximum number of file descriptors, use `cat /proc/sys/fs/file-max`. For comparison, an out-the-box ubuntu system has file-max set to 205290.

### Increase Total File Descriptors For System

To prevent Confluence from running out of filehandles you need to make sure that there are enough file handles available at the system level, and that the user you are running Confluence as is allowed to use enough file handles:

Run the command `sysctl -a`. If this is less than 200000, increase the number of file handles by editing `/etc/sysctl.conf` and changing the property `fs.file-max` to 200000. If there isn’t a value set already for this property, you need to add the line `fs.file-max=200000`.

Then run `sysctl -p` to apply your changes to your system.

### Increase Total File Descriptors For User

Linux also limits the number of files that can be open per login shell. To change this limit for the user that runs the Confluence service you will need to adjust the user limit configuration.

For **PAM enabled systems**

For **Linux systems running PAM** you will need to adjust `/etc/security/limits.conf`

The format of this file is `<username> <limit type> <item> <value>`.

For example to set the limit for the user `confservice` the following line would be used:

```bash
confservice hard nofile 5000
```

### Other systems
For other Linux systems the file responsible for setting limits is `/etc/limits`

To replicate the setting given in the previous example the line would be:

```
confservice N 5000
```

**To Count Total File Descriptors Used By Confluence**

To get the total number of handles that are used by Confluence:

1. Locate the Confluence ProcId by identifying the Java process with `{ps axwwu | grep java}`
2. Either run `ls -la /proc/<pid>/fd`, or use the `lsof` (LiSt Open Files) command `lsof -p <pid of Confluence process>`. For a Confluence ProcID of 460, use:

```
$ lsof -p 460 | wc -l
```

**When getting support for this error**

If you are encountering the **Too many open files** error within Confluence and this advice does not help, please accompany any support request with the output of `lsof -p <PID of Confluence process>`, taken at the time of the error, so that the support engineer can determine precisely which file descriptors are being held open.

To address this issue we have modified the `bonnie.jar` to switch the indexing to use compound index that uses less file handles. Please see [CONF-7401](#) for details. To use this patched jar please follow the following steps:

1. Download the patched jar file `bonnie-2006.03.30-patched.jar`
2. Shut down your server.
3. Copy the jar file into your `<Confluence-Install>/WEB-INF/lib` directory. Note: Ensure that there is only one bonnie jar in this directory.
4. Delete the `<Confluence-Home>/index` directory.
5. Restart your server
6. **Rebuild the index** manually

Alternatively, please upgrade your instance to Confluence 2.3 via following [these instructions](#).
Fix JavaScript browser errors

This page last changed on Dec 12, 2006 by don.willis@atlassian.com.

If your web browser is complaining about JavaScript errors or functions not being defined, then it is possible that you are not retrieving the latest versions of pages from your Confluence instance.

To fix this, you need to clear your browser cache. Follow the instructions for your particular browser:

- Internet Explorer
- Firefox - Open the Preferences -> Privacy -> Click on the "Clear Cache" button
- Safari - Go to the Safari menu -> Clear Cache

If the errors mention "NS_ERROR_NOT_AVAILABLE" then it is most likely due to CONF-5091. Unfortunately there is no fix for that issue at this stage.

Another possible cause of javascript errors is interference by antivirus software. For example, it has been reported that NOD32 antivirus software can attempt sanitation of some confluence javascript when that javascript is served by IIS.

If you are still having problems, please create a support request.
PDF export fails on Linux with UnsatisfiedLinkError

PDF exports fails on Linux with an UnsatisfiedLinkError

You need to install the X11 libraries for your Linux distribution. See Confluence Unix and X11 Dependencies.

RELATED TOPICS

Configuration Guide
FAQ Home
Resolve Missing Attachments in Confluence

This page last changed on Dec 12, 2006 by david.soul@atlassian.com.

If users find that some attachments are missing for pages, they should:

1. Right click on findattachments.jsp and save it to the Confluence server’s installation directory under /confluence/admin/
2. Restart Confluence
3. Visit http://MYINSTANCE/admin/findattachments.jsp where MYINSTANCE is your Confluence base URL
4. Request the 'Missing attachment report'
5. Attach the result to a new support ticket
RSS Feed FAQ

This page last changed on Mar 01, 2007 by david.soul@atlassian.com.

Solutions to common issues with RSS Feeds and the RSS Feed Macro. Click a query below for the solution.

Force authentication for public feeds

For instances with anonymous access enabled, you can force user authentication when creating the feed by checking 'Authorised'. If anonymous access is disabled, all feeds will require user authentication.

Fix "Could not retrieve - Not Permitted"

You must append a valid login to Private Feeds as described in the Usage section of the RSS Feed Macro.

Fix "Unable to retrieve - Connection refused: connect"

The URL is invalid. If the link appears correct, confirm that you can access Confluence. Paste the feed into a third-party RSS feed reader and confirm that it can access it. If it cannot, your firewall settings may be blocking access to Confluence. For example, your server may be configured to block outgoing requests.

Fix "Could not download: - Connection timed out (errno:238)"

The feed source may be offline, or the firewall may be blocking access either between the Confluence server any your computer. Confirm that you can access the feed URL from your browser. If it cannot, your firewall settings may be blocking access to Confluence. For example, your server may be configured to block outgoing requests.

Fix "Error formatting macro: rss: java.lang.NullPointerException"

The link is not a valid feed, so check your URL. If stuck, you can recreate internal Confluence feeds Using the RSS Feed Builder.

Create an RSS feed for mail from only specified mail accounts

This is not possible, but you can vote towards tagging incoming mail with labels on arrival. Once tagged, feeds could monitor all new mail with that label.

Is it possible to delete a feed?
No, as RSS feeds are based on the view permissions for pages and spaces. RSS is an extension of normal page viewing functionality, so if you can view a page, you can receive an RSS feed for it. The only way to remove the an RSS feed is to prevent all access to a page for that user, so no content will be delivered.
Search is not finding my data AND the indexing process does not appear to be completing

Search is not finding my data AND the indexing process does not appear to be completing. What's happening?

If you are not seeing pages returned by the search that you expect to be returned, it's most likely that the indexing is not running correctly (either not running or failing). You can check the status of the index processing via the Administration Console > Content Indexing link.

Why could indexing be failing? The indexing process is multi-threaded and therefore has a tendency to consume a lot of resources when running an initial index or reindexing the entire site. So, what can do wrong?

- Some systems do not like the multi-threaded index process. You can set the index process to use only a single thread by setting bucket.indexing.threads.fixed=1
- The index process may also block if there are insufficient available database connections. Increasing the number of connections from 15 to 30 will help in this situation.

See the Content Index Administration page.

RELATED TOPICS

8.1 Locating Important Directories and Files
FAQ Home
I am getting an error message about NoClassDefFoundError when using the Chart macro.

The following error may appear when viewing certain pages where the Chart Macro is used:

```
Caused by: java.lang.NoClassDefFoundError
  at org.jfree.chart.ChartFactory.createAreaChart(ChartFactory.java:874)
  at com.atlassian.confluence.extra.chart.ChartMacro.getChart(ChartMacro.java:217)
  at com.atlassian.confluence.extra.chart.ChartMacro.execute(ChartMacro.java:102)
```

This is indicative of an out-of-date version of the Chart macro. Make sure you have the latest version and have removed any old versions or dependencies. If you are using Confluence 1.4, it may be a symptom of not having the jfreechart and jcommon JARs in your installation, which are required.

RELATED TOPICS

Working with Macros
FAQ Home
Other

Changes to the Page Permission API in Confluence 2.4 — Confluence 2.4 contains changes to the Confluence API that will affect any plugins that modify Page Permissions (aka ContentPermissions). Some methods have been deprecated, some new methods have been created, and one method now behaves differently from before.

- Confluence Presentation
- Confluence SOAP Provider Migration
- Demonstration Site
  - Exported Docs
- Enabling the html-include Macro
- Feature List
- Gallery Macro Themes
- GZipping a HTTP Response within Confluence
- Keyboard Shortcuts
- Mail Archiving FAQ
- Redirect users straight to space home page after successful login
- RSS Feeds Summary
- Running Confluence Behind a Caching Proxy Server
- Thumbnail and Gallery Example
Changes to the Page Permission API in Confluence 2.4

This page last changed on Mar 01, 2007 by don.willis@atlassian.com.

Confluence 2.4 contains changes to the Confluence API that will affect any plugins that modify Page Permissions (aka ContentPermissions). Some methods have been deprecated, some new methods have been created, and one method now behaves differently from before.

⚠️ Confluence 2.4 does not support having multiple view and edit permissions on a page. The Content Permission API allows such a state, but it should be avoided. For example, if a Page has multiple permissions set on it, these permissions will not be displayed properly via the user interface, and the pages may not be returned appropriately in a search.

Summary of Changes

<table>
<thead>
<tr>
<th>Deprecated methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ContentPermissionManager.getInheritedViewContentPermissions(Page)</code></td>
</tr>
<tr>
<td><code>ContentPermissionManager.getInheritedContentPermissions(ContentEntityObject contentEntityObject)</code></td>
</tr>
<tr>
<td><code>ContentEntityObject.getPermissions()</code></td>
</tr>
<tr>
<td><code>ContentEntityObject.getContentPermission(String permissionType)</code></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Changed methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ContentPermissionManager.addContentPermission(ContentPermission permission, ContentEntityObject content)</code></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Added methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ContentPermissionManager.setContentPermissions(List contentPermissions, ContentEntityObject content, String type)</code></td>
</tr>
<tr>
<td><code>ContentPermissionManager.getInheritedContentPermissionSets(ContentEntityObject contentEntityObject)</code></td>
</tr>
<tr>
<td><code>ContentEntityObject.getContentPermissionSet(String type)</code></td>
</tr>
<tr>
<td><code>ContentEntityObject.hasPermissions(String type)</code></td>
</tr>
<tr>
<td><code>ContentEntityObject.removeContentPermissionSet(ContentPermissionSet set)</code></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Removed methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ContentPermissionManager.saveContentPermission(ContentPermission permission)</code></td>
</tr>
</tbody>
</table>
ContentPermissionManager.getContentUserPermission(ContentEntityObject contentEntityObject)
ContentPermissionManager.onContentContextChanged(ContentEntityObject contentEntityObject)
ContentEntityObject.setPermissions(List permissions)
ContentEntityObject.clearPermissions(ContentPermissionManager permissionManager)

The change most likely to cause problems is:

ContentPermissionManager.addContentPermission(ContentPermission permission,
ContentEntityObject content)

This method now adds a ContentPermission to the ContentEntityObject as one would expect. Previously if a ContentPermission already existed on the ContentEntityObject, then any existing ContentPermission would be removed. That is, the method really behaved as one would expect "setContentPermission" to behave. As a result, any code that used addContentPermission in Confluence 2.3 or earlier, should now use setContentPermissions with a single entry list.

<table>
<thead>
<tr>
<th>replace</th>
</tr>
</thead>
<tbody>
<tr>
<td>ContentPermissionManager.addContentPermission(p, c)</td>
</tr>
<tr>
<td>with</td>
</tr>
<tr>
<td>ContentPermissionManager.setContentPermissions(java.util.Collections.singletonList(p), c, p.getType())</td>
</tr>
</tbody>
</table>

Most methods that used to return a ContentPermission have been replaced with methods that return a ContentPermissionSet. In some places we have used deprecation to point to the new method and reimplemented the old method to extract the first ContentPermission from the ContentPermissionSet.

As usual, the methods on the ContentPermissionManager should be used rather than those on the ContentEntityObject. The only ContentEntityObject method that should be used is getContentPermissionSet. Even that method should be used only to display the existing Permissions. All writes to the ContentPermissionSets should be performed via the ContentPermissionManager.

The onContentContextChanged method of the ContentPermissionManager was previously used to notify a ContentPermissionManager that cached permissions on a ContentEntityObject may be invalid. This is now accomplished by publishing a ContentPermissionEvent. That event is published automatically when changing ContentPermissions via the ContentPermissionManager.

No changes have been made yet to the the XML RPC API. It does not currently allow modification of ContentPermissions.
The attached slideshow presentation was written by Atlassian to be delivered to a customer who had recently purchased Confluence, and wanted a quick tutorial on the major concepts involved in using the product. While the content of the is now somewhat out of date (it refers to Confluence 1.3), it may still be useful for organisations who have recently adopted Confluence, or who want another weapon in convincing management that Confluence is just what they need. 😊

You may also be interested in our Confluence flyer (140k PDF)
Confluence SOAP Provider Migration

This page last changed on Dec 28, 2005 by vidya.

Starting with the release of Confluence 1.4.3, and stretching through the next three major releases, Confluence will be transitioning from using the Glue library to provide a SOAP remote API, to using Apache Axis. Unfortunately, while the SOAP services will stay the same, the WSDL that these libraries generate to interact with the same services will change, so SOAP applications that interact with Confluence will need to migrate with us.

The migration should be relatively painless. Since the underlying objects represented by the WSDL are still the same, the process should involve regenerating your SOAP stubs, and a few cosmetic code changes.

The XML-RPC API is unaffected by this change.

Current Status

<table>
<thead>
<tr>
<th>Version</th>
<th>Description</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4.3 and 1.5/2.0</td>
<td>Deploy Axis SOAP service alongside Glue</td>
<td>Completed</td>
</tr>
<tr>
<td>(unscheduled)</td>
<td>Allow configuration of default SOAP provider, the default at installation being Axis</td>
<td>Incomplete</td>
</tr>
<tr>
<td>(unscheduled)</td>
<td>Remove Glue SOAP provider</td>
<td>Incomplete</td>
</tr>
</tbody>
</table>

Progress on these issues can also be tracked via [CONF-3141](CONF-3141)

The Plan

As of version 1.4.3, Confluence ships with three SOAP endpoints:

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>WSDL URL</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>/rpc/soap/confluencesoapservice-v1</td>
<td>/rpc/soap/confluenceservice-v1.wsdl</td>
<td>Glue</td>
</tr>
<tr>
<td>/rpc/soap-glue/confluencesoapservice-v1</td>
<td>/rpc/soap-glue/confluenceservice-v1.wsdl</td>
<td>Glue</td>
</tr>
<tr>
<td>/rpc/soap-axis/confluencesoapservice-v1</td>
<td>/rpc/soap-axis/confluenceservice-v1?wsdl</td>
<td>Axis</td>
</tr>
</tbody>
</table>

⚠️ The Axis and Glue providers produce slightly different WSDL URLs

💡 Third-party SOAP [RPC Plugins](RPC Plugins) deployed in Confluence will be similarly deployed in three locations

Over the next three major Confluence releases we will:

1. Make the provider of /rpc/soap/confluenceservice-v1 configurable, then
2. Change the default provider to Axis (but leave it configurable), then finally
3. Remove the Glue provider entirely
What This Means for SOAP Clients

Confluence major releases occur every three or four months. Thus, authors of SOAP clients should keep in mind this timeline, starting with the release of Confluence 2.0 (November 2005)

| 0-3 months | • All existing SOAP clients written against the Glue provider will continue to function normally.  
|            | • New clients should be written to the Axis provider in /rpc/soap-axis  
|            | • Existing clients should change their SOAP endpoints to point to /rpc/soap-glue (or, better still, move directly to Axis) |
| 3-6 months | • Confluence will require configuration to work with any client of the Glue provider that has not changed its endpoint  
|            | • New clients should be written to the Axis provider in /rpc/soap-axis  
|            | • Existing clients will need to migrate to the Axis provider |
| 6+ months  | • Confluence will no longer work with clients written against the Glue provider  
|            | • Both /rpc/soap and /rpc/soap-axis endpoints will continue to be served by the Axis provider |
Demonstration Site

This page last changed on Aug 03, 2005 by vidya.

Atlassian have set up a demonstration space on this site so that you can try out Confluence for yourself. The space has been configured so that anyone can create or edit pages within it. When using it, you should keep the following in mind:

- This server may not be running exactly the same version of Confluence as is available for purchase. While we try to keep the two in sync, there may be differences between the demo site and the downloadable version of Confluence. The version that the site is running can be found at the bottom of each page.
- Because the space is open for anyone to edit, Atlassian cannot be responsible for the content on it. Do not rely on anything you read in the test space.
- The contents of the test space may be edited or deleted at any time. Periodically, Atlassian may restore the test space from backup, deleting everything that has been added to it by visitors.
- For a full demonstration of Confluence, including its administrative features, you should download an evaluation instead.
- If you have any questions, contact us and we’ll be happy to answer them.

⚠️ Want to try Confluence yourself? Experiment with Confluence in our demonstration space >>
Here's some of our documentation exported as XML and zipped
Enabling the html-include Macro

This page last changed on Aug 08, 2006 by ivan@atlassian.com.

The `{html-include}` macro allows you to include the contents of an HTML file in a Confluence page. The `{html}` macro allows you to include snippets of HTML within an existing page.

Why are they disabled?

Including unknown HTML inside a webpage is dangerous. Because HTML can contain active scripting components, it would be possible for a malicious attacker to present a user of your site with script that their web browser would believe came from you. Such code could be used, for example, to steal a user's authentication cookie and give the attacker their Confluence login password.

You should only turn on these macros if you trust all your users not to attempt to exploit them.

How do I enable them?

You will need:

- Confluence 1.1 or later
  - Instructions for 1.0 are included below
- Global "Administrate Confluence" permissions

Instructions:

1. Go to the Administrative Console and click on the Plugins section
2. Select the "HTML Macros" library
3. Click the "Enable Library" link
4. If they are not now automatically enabled, enable the specific macros you wish to use

If you are using Confluence 1.0.3a or earlier

You should consider upgrading. It's a free upgrade and there are hundreds of things that we have added, fixed or improved since then.

⚠️ The instructions below are historical documentation that applies only to Confluence 1.0.3a and earlier. If you are using Confluence 1.1. or later, use the instructions above.

Find the file `wikiSubsystemContext.xml`. It will be in the application's `WEB-INF` directory. You will find the following lines commented out.

```xml
<!-- <entry key="html-include"><ref local="htmlIncludeMacro"/></entry>-->  
<!-- <entry key="html"><ref local="html"/></entry>-->  
```
Remove the XML comments as shown below, and restart Confluence. The macros should now be available.

```
<entry key="html-include"><ref local="htmlIncludeMacro"/></entry>
<entry key="html"><ref local="html"/></entry>
```

Confluence 1.1 will allow the site administrator to enable and disable macros from within Confluence without editing any files.

**Usage**

**Example - To embed an external page**

```
{html-include:url=http://www.example.com}
```
Feature List

This page last changed on Aug 22, 2006 by noam@atlassian.com.

The features listed on this page refer to Confluence version 1.0 beta1.

Content Management

- Content is organised into discrete spaces in which users can create and edit pages.
- Easy-to-learn, easy-to-read but powerful notation for designing pages and linking between them, based on the popular textile markup.
- Arbitrary files can be attached to pages.
- Comments can be left on pages.
- Page templating allows rapid creation of boiler-plate pages.
- Pages can be organised into hierarchies.

Update Tracking

- Each page has a full change history, accessible as coloured diffs highlighting each change made.
- Simple Reports which pages have been updated since you last logged in.
- Email subscription informs you of pages that have been added or updated, or comments left.
- RSS feeds available for new and updated pages across the site, or in individual spaces.

Searching

- Full-text searching of all content, including pages, comments and space descriptions

Site Management

- Smart page-renaming updates links across the entire site, even in comments or space descriptions.
- Pages or spaces can be imported from plain text files, or exported to PDF or HTML.
- Simple backup and restore to XML files.
- Automatic daily backup feature.
- Reports of "orphaned" pages that exist but are not linked to, and of links that point to pages that do not yet exist.

User Management and Security

- Flexible security, from a public site, to a personal space.
- User- and group-based permissions.
- Separate viewing, commenting, editing and administration permissions for each space.

Deployment and Compatibility

- Available on a wide variety of platforms, either as a stand-alone server, or as a web-archive
deployable into a compatible Java application server.

- Compatible with a large number of databases
- See Requirements for more information

Support

- Confluence is under full-time development, with licensees entitled to a year of free updates.
- Atlassian's Legendary Service.
Gallery Macro Themes

This page last changed on Aug 24, 2004 by jnolen.

⚠️ This page describes an unfinished feature of Confluence, for technical users who wish to play with it. The features and modifications described in this page are not officially supported.

The GalleryMacro that is used to draw image galleries in a Confluence page has an undocumented "theme" parameter that allows you to specify a different Velocity template from which to draw the gallery. This allows enterprising Confluence administrators to come up with their own photo-album themes.

You will need:

- A basic knowledge of Velocity markup
- Access to put files in Confluence's installation directory
- Access to restart the server, since getting Java to reload resources it has pulled from the classpath is really hacky. 😜

Instructions:

The Velocity template used to draw image galleries is in WEB-INF/classes/templates/macros/gallery-default.vm, and as it stands it's 22 lines long and very basic.

However, you can change this with the undocumented "theme" parameter in the gallery macro. {gallery:theme=fish} will attempt to draw the gallery with /templates/macros/gallery-fish.vm from anywhere in the application's CLASSPATH. So all you need to do is write the velocity file, dump it in the right directory and restart the server.

If the gallery macro turns out to be something people really use, we'll probably make gallery themes a supported feature with a user interface, a way to drop in theme packs, and so on. For now it's a back-door hack.

Objects Passed to the Template:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$galleryTitle</td>
<td>is the gallery titled specified for the macro. It may be null.</td>
</tr>
<tr>
<td>$thumbnails</td>
<td>the container for all the pictures in the gallery (Defined as an inner class in GalleryMacro.java, if you've got the source and want a look)</td>
</tr>
<tr>
<td>$thumbnails.size</td>
<td>total number of thumbnails in the gallery</td>
</tr>
<tr>
<td>$thumbnails.thumbnails</td>
<td>a list of all thumbnails in the gallery</td>
</tr>
<tr>
<td>$thumbnails.rows</td>
<td>a list of lists: each representing one row in the</td>
</tr>
<tr>
<td><strong>$thumbnails.maxHeight</strong></td>
<td>the height, in pixels, of the tallest thumbnail in the gallery</td>
</tr>
<tr>
<td><strong>$thumbnails.maxWidth</strong></td>
<td>the width, in pixels, of the widest thumbnail in the gallery</td>
</tr>
<tr>
<td><strong>$thumbnails.columns</strong></td>
<td>the number of columns that the gallery should be drawn with</td>
</tr>
</tbody>
</table>

NOTE: The last row of the thumbnail gallery may contain empty cells. In this case, because Velocity is really broken with regards to its handling of nulls, the final list in $thumbnails.rows may be padded to its full width with the string "BLANK". Be sure to check for this.

The ThumbnailInfo objects themselves that you get out of $thumbnails (Defined in ThumbnailInfo.java if you've got the source and want a look):

| **$thumbnail.originalWidth** | width in pixels of the full-sized image |
| **$thumbnail.originalHeight** | height in pixels of the full-sized image |
| **$thumbnail.thumbWidth** | width in pixels of the thumbnail |
| **$thumbnail.thumbHeight** | height in pixels of the thumbnail |
| **$thumbnail.thumbUrlPath** | the path to download the thumbnail image, relative to the application's context path ($req.contextPath) |
| **$thumbnail.getPopupLink(imageParameters)** | returns the HTML to draw the thumbnail image as a popup link for the full-sized image attachment. imageParameters is a string that can contain HTML attributes for the image tag so for example you could call $thumbnail.getPopupLink("border='1' align='right'"). If you don't want any parameters, just pass in null or the empty string. |
| **$thumbnail.attachment.downloadPath** | the path to download the full-sized image, relative to the application's context path. |
| **$thumbnail.attachment.comment** | the image's attachment comment |
GZipping a HTTP Response within Confluence

This page last changed on Jan 24, 2006 by cmiller.

Confluence supports HTTP gzip transfer encoding. What this means is that if a user's web browser supports it, Confluence will compress the data it sends to the user. This will speed up Confluence over slow or congested Internet links, and reduce the amount of bandwidth consumed by a Confluence server.

You should turn on Confluence's GZip encoding if:

- Users are accessing Confluence over the Internet, or a WAN connection with limited bandwidth
- You wish to reduce the amount of data transfer between the Confluence server and client

If you are accessing Confluence over a Local Area Network or over a particularly fast WAN, you may wish to leave GZip encoding disabled. If the network is fast enough that transferring data from Confluence to the user isn’t a limiting factor, the additional CPU load caused by having to compress each HTTP response may in fact slow Confluence down.

💡 Gzipping the HTTP Response is available in Confluence 1.4 and later.

### Instructions (Confluence 2.1.4 and later)

1. Go to Administration -> General Configuration
2. Enable 'Compress HTTP Responses'
3. (There is no step 3)

### Instructions (Confluence 2.1.3 and earlier)

1. Find your Confluence Home directory and look in the config subdirectory. Your Confluence Home directory is the one you specified in confluence-init.properties when you originally installed Confluence.
2. Find the Confluence configuration directory, at `<Confluence Home>/config`. Note that this directory will only exist if you have edited the Confluence configuration. To ensure that it has been created, go to the Administration page, click the General Configuration link, then click the Edit and Update buttons (you don’t actually need to change anything).
3. Edit the file `<Confluence Home>/config/confluence-global.bandana.xml` with a text editor and then set the element called gzippingResponse to 'true'. There will already be a value for this in the file, but it will be false. Make sure that you change the existing value rather than adding a new one.

```xml
<confluence-config-map>
  <context/>
  <values>
    <entry>
      <string>atlassian.confluence.settings</string>
      <settings>
        <allowCamelCase>false</allowCamelCase>
        <allowTrackbacks>false</allowTrackbacks>
        <allowThreadedComments>false</allowThreadedComments>
        <gzippingResponse>true</gzippingResponse>
      </settings>
    </entry>
  </values>
</confluence-config-map>
```
<viewSpaceGoesToSpaceSummary>false</viewSpaceGoesToSpaceSummary>
<externalUserManagement>false</externalUserManagement>
<denyPublicSignup>false</denyPublicSignup>
<emailAdminMessageOff>false</emailAdminMessageOff>
<baseUrlAdminMessageOff>false</baseUrlAdminMessageOff>
<allowRemoteApi>true</allowRemoteApi>
<allowRemoteApiAnonymous>false</allowRemoteApiAnonymous>
<gzippingResponse>true</gzippingResponse>
## Keyboard Shortcuts

This page last changed on Aug 09, 2006 by david.soul@atlassian.com.

Confluence provides the following keyboard shortcuts. Not all are compatible with Internet Explorer:

<table>
<thead>
<tr>
<th>Screen</th>
<th>Keystroke</th>
<th>Action</th>
<th>Firefox</th>
<th>Internet Explorer</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Alt-S</td>
<td>Search field</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Login</td>
<td>Alt-U</td>
<td>Username field</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>Alt-P</td>
<td>Password field</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>Alt-R</td>
<td>Check ’Remember Me’</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Page View</td>
<td>Alt-V</td>
<td>View Page Tab</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>Alt-E</td>
<td>Edit Tab</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>Alt-A</td>
<td>Attachments Tab</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td></td>
<td>Alt-I</td>
<td>Information Tab</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Add Page</td>
<td>Alt-A</td>
<td>Add Page</td>
<td>✔️</td>
<td>✗</td>
</tr>
</tbody>
</table>
Mail Archiving FAQ

This page last changed on Apr 13, 2005 by vidya.

This document is an FAQ for the mail archiving feature that was introduced in Confluence 1.3. Versions of Confluence before 1.3 do not have this feature.

Since this document was written before we released Confluence's mail archiving features, these are more "frequently anticipated questions" than "frequently asked questions". Hopefully I have anticipated correctly. 😊

Q. Can Confluence replace my regular mail client?

A. No.

Confluence's mail archive is designed to supplement the way you currently handle email, not replace it. This is why Confluence deliberately does not come with features common in email clients. You can not mark emails as read or unread, you can not reply to emails from within Confluence, and so on.

Q. So how would you use the mail archive?

A. Here are two scenarios that were suggested during our planning meetings:

Project-related conversations

Say you are using a Confluence space to organise some project. The project lead and the customer have a long conversation (via email) clarifying the project's goals and requirements. Rather than have that conversation lost in their individual mailboxes, they CC: their mail to a POP box being monitored by Confluence, and all that information is archived alongside the rest of the project's documentation.

Customer Support Tracking

All incoming and outgoing sales and support email is diverted (at the mail-server) to be read by Confluence. Staff can then use Confluence's features to find all previous communications with particular customers.

And?

Of course, the real fun will come from seeing what uses people put this feature to that we didn't even think of.

Q. How do I get mail into Confluence?

A. All mail messages belong to a particular space. Space administrators can, from the space administration screen:
• configure Confluence to poll a POP mailbox for incoming mail
  ° Go to Space Admin
  ° Choose "Mail Accounts"
  ° Add Pop Account
• import mail from an mbox-format mail file

Warning: Confluence will delete mail from a POP box as it reads it. Do not point Confluence to an account unless you are happy with it removing all the mail you have stored there.

Q. OK, I've imported the mail. Where is it?

A. Because of the typically overwhelming volume of email, especially compared to the more sedate pace of wiki updates, we do not notify you of recently arrived mail in the same places we notify you of changed Confluence content.

Mail will not appear in the recent changes list on the dashboard or space summary pages. Similarly, mail will not appear by default in search results.

You can view mail in order of arrival from the Mail Archive section, found under the Content tab of the Space Summary screen. You can also explicitly select Mail (or All Content) in the search page to include mail in your search results.

Q. I want it to do...

A. Chances are, so do we. We just haven't got there yet. The emphasis for the DR3 release was to be able to:

• import email into Confluence
• have Confluence monitor POP mailboxes
• view email
• search email

We have a lot more planned, from threading email through to allowing you to write your own custom pre- and post- processors for incoming mail.

Your suggestions are, of course, welcome. File an issue in JIRA, comment on the forum, or just drop us an email.
Redirect users straight to space home page after successful login

You can set the page that a user gets sent to after a successful login on a site-wide or per-user basis.

**Site-wide**

1. Go to Administration > General Configuration
2. Click Edit
3. Set Site Homepage to your desired home page

The spaces available to be set as your home page depends on the access permissions of the space and your site.

- If your site allows anonymous access, the site homepage must also be anonymously accessible.
- If your site does not allow anonymous access, the site homepage must be accessible to the "confluence-users" group.

Unknown macro: {yellow-note}

In Confluence 1.2 and earlier, the site homepage has to be anonymously accessible, regardless of site permissions.

Note: please ensure that the View Space Goes to Space Summary setting is set to OFF if you want users to be sent to space homepage instead of the summary page

**Per User**

1. View your profile via the profile link on the top right
2. Click the Edit My Profile on the right
3. Set Site Homepage to your desired home page
## RSS Feeds Summary

Due to some users having problems with Confluence RSS Feeds, some research was done with several RSS Feed Readers. RSS Feeds have been created through the feed builder and tested on a Windows machine. For each feed reader they have been tested with both authentication and public access, checking for the visibility of content, icons and images. The results are in the tables below:

### Feeds with authentication

<table>
<thead>
<tr>
<th>RSS Feed Reader</th>
<th>Content</th>
<th>Icons</th>
<th>Images</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RssReader 1.0.880</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✗ Shows the entire page (including the header panel &amp; view, edit tabs)</td>
</tr>
<tr>
<td>JetBrains Omea Reader 2.1.6</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✗ Shows the changes between revisions in the nice red/green colours of Confluence</td>
</tr>
<tr>
<td>IE 7.0</td>
<td>✗</td>
<td>✔️</td>
<td>✔️</td>
<td>✗ Content is all there however not all html is rendered correctly (for example .tag {font-style:italic;} is shown in the content as raw text)</td>
</tr>
<tr>
<td>Thunderbird 1.5.0.7</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✗ Shows the entire page</td>
</tr>
</tbody>
</table>
Bloglines  ✔  ✔  ✔  ● Simple online feed reader
                   ● Shows the changes between revisions, but with arrows

Feeds with public access

<table>
<thead>
<tr>
<th>RSS Feed Reader</th>
<th>Content</th>
<th>Icons</th>
<th>Images</th>
</tr>
</thead>
<tbody>
<tr>
<td>RssReader 1.0.880</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>JetBrains Omea Reader 2.1.6</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>IE 7.0</td>
<td>❌</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Thunderbird 1.5.0.7</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Bloglines</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
Running Confluence Behind a Caching Proxy Server

This page last changed on Jan 22, 2006 by cmiller.

One major concern is Confluence's ability to withstand a Slashdot, and someone told us that Atlassian had basically said that Confluence could not handle the load of such an event/attack.

Ideally I would want to put a Squid cache directly infront of Confluence, set the default policy to cache content of normal pages for ~5 minutes (at least) and then pass-through more of the dynamic pages (like the editor & such).

This is, in fact, the case. We don't have any deployed Confluence sites that have the requirement of being Slashdot-proof, but this is probably one of those chicken-and-egg things.

The problem is not one of simple scaleability. We're currently working on "Confluence Massive", a clusterable Confluence that will scale to handle whatever load you feel like throwing at it. But if your aim is to protect the server against sudden, transient loads, throwing a cluster at the problem that will then spend 99% of its time not being utilised is probably a waste. Thus, the best solution is to have some kind of caching reverse-proxy that will divert load away from Confluence itself.

The main problem with the reverse-proxy solution is that every Confluence page is built dynamically for whichever user is currently accessing it. This affects obvious stuff like the "You are logged in as username" notice, less obvious stuff like the "edit" and "attachments" links that appear or disappear based on whether the user has permission to perform the action on the other end of the link, and even less obvious stuff like wiki-links to spaces the user can't see, or in-page macros that output their content based on the user's identity.

To run Confluence behind a caching reverse-proxy, you'd need one of:

1. A proxy that understood the user's identity, or
2. A Confluence site that removed all the personalised content for cacheable pages.

If you had (1), you could tell the proxy to cache content only for anonymous users (since all anon content is the same, and to survive a slashdotting you only really have to worry about the sudden influx of non-logged-in users). That said, (1) is quite tricky, as it relies on the existence of some SSO mechanism that both Confluence and Squid can be hooked into. If such a mechanism existed, though, it'd be a really neat solution.

In the absence of SSO, you've got (2), which involves.

- Theme Confluence so that the 'view page' 'view blog post' and 'view mail' pages contain no personalised content: no profile link or user identity, and all links to other functions available whether the user has permission to access them or not.
- Ensure that all wiki pages on the server are meant to be visible to anonymous users
- Disable (or avoid the use of) macros that deliver different content based on user identity
- Introduce an interceptor into Confluence that would provide If-Modified-Since/Last-Modified conditional get support for wiki pages
- Configure Confluence so the site root URL points to a page, rather than the dashboard.
- Configure Squid to cache the 'view page' URLs (/display/* /pages/viewpage.action

Document generated by Confluence on May 01, 2007 00:44 Page 1319
This is assuming that only the site root or a regular wiki page would ever be the victim of a direct slashdotting, but I figure this is a reasonable enough assumption to make.

With conditional get supported, you could have Squid configured to query the server to see if a page has changed, and just put in some kind of sensible defaults for the maximum time to cache any page (5 minutes or so would be fine, since pages could contain dynamic content), and the minimum gap between if-modified queries (15 seconds would easily prevent the server from being overloaded, while making sure that in regular use you wouldn't get many situations where you edited a page, but couldn't see your own changes).
Thumbnail and Gallery Example

This page last changed on Aug 20, 2004 by vidya.

Thumbnail

You can have Confluence automatically make a thumbnail of any inline image that is attached to a page. Clicking on the image will pop up a window containing the full-size image.

!waterfall.jpg|thumbnail!

![waterfall.jpg](attachment://waterfall.jpg)

Image Gallery

The \{gallery\} macro creates a gallery of thumbnails from all of the images that are attached to a page, titling each with the appropriate attachment comment.

\{gallery:title=Some Confluence Features, and a Waterfall\}

Some Confluence Features, and a Waterfall

(view as slideshow)

A waterfall just off Highway 1, California.

Interface for deleting unwanted referrer statistics

New user interface for global permissions

New Confluence search interface
| New Space Permissions user interface | Space-local search page | Tree-view for pages in a space |
Troubleshooting & Technical Support

This page last changed on Apr 19, 2007 by jnolen.

This document covers troubleshooting problems and obtaining technical support. For related information, check out:

- General Support Enquiries
- Feature Requests

Troubleshooting Problems

If you have a problem with Confluence, follow these steps:

1. If you are not a Confluence administrator, report your problem to the person in charge of your Confluence and ask them to follow up on the issue.
2. Check that your problem is not solved in Frequently Asked Questions
3. If you cannot get a feature configured, you should check out any appropriate guides:
   - Confluence Setup Guide
   - Administrators Guide
   - Configuration Guide
   - Database Troubleshooting
4. If your issue is related to your database or application server, check out Confluence Configuration Tips.

If the issue cannot be resolved by referring to the above documentation, you should create a Support Request. If you believe you are experiencing a bug, you may wish to create a Bug Report instead. Instructions for both are shown below.

Support Requests

To request support for Confluence follow the steps below. If you have a plugin-related issue, visit the Extension Space and check that Atlassian is the plugin author. Atlassian does not provide support for third-party plugins, so you will need to contact the author directly.

To create a support ticket:

1. Create a zip of your Confluence logs to attach to the ticket. On Standalone, go to the install directory and zip /logs.
2. If appropriate, check out Requesting External User Management Support or Requesting Performance Support.
3. If you do not already have a free Atlassian Support account, create one here.
4. Login to http://support.atlassian.com and select "Create New Issue".
5. Lodge a detailed description of your problem in a new support ticket.
6. Fill out all applicable information your system such as application server, database etc.
7. If Confluence is running, go to the Confluence Administration -> System Information screen and copy your system information text into the ticket.
8. Once your ticket is lodged, wait to be notified by email of updates. If your production instance of Confluence is experiencing a critical problem, jump on Live Support and ask to have your issue
Bug Reports

If you have found a bug, the easiest way to report it is to:

- Create numbered instructions on how to reproduce the bug
- Log them as a Support Request.

Support will confirm your bug and lodge a Bug Report. Alternatively, you can log a Bug Report directly by confirming it according to these instructions:

1. Check Bug Is Undiscovered

1. Visit the Confluence Bug Tracker.
2. On the left under Text Search, type keywords for your problem into the Query field.
3. Click View and browse the summaries of the unresolved bugs. If any summary appears to describe your problem, check that the bug is not a match. If it is the same, you may wish to set a watch to be notified of updates or apply your vote towards having it resolved. If the problem does not already appear to have been logged, the next step is to confirm that the problem is a bug.

2. Confirm The Bug

If any of the descriptions below match your problem, click to view the appropriate instructions for confirming it. If the problem does not fall under any category, follow the general bug confirmation instead:

Bug Affects Page Rendering Or Content
If you are having issues with markup or page content not being shown as expected:
1. Create a new page on our Test Space and try to duplicate the issue there.
2. If the problem reoccurs, log the new bug here, paste the Test Space page link along with the process you used to duplicate it. If the issue does not occur, this is may not be a bug and you should log the problem as a Support Request instead.

Bug Prevents Confluence From Starting
Please lodge a Support Request with your configuration and numbered instructions on how to reproduce the issue.

Bug With External User Management
Please lodge a Support Request with your user management configuration and numbered instructions on how to reproduce the bug.

General Bug Confirmation
1. If Confluence will not run, please log the problem as a Support Request instead.
2. Attempt to replicate the bug - download the latest version of Confluence standalone.
3. Install the standalone with the appropriate database and the demonstration site. If possible, try to duplicate on the default setup with the demonstration data.
4. Try to duplicate on the default setup with the demonstration data. If the issue does not occur, you
should open a support ticket. If it does, log the new bug here along with the information you used to duplicate it.

5. Once your issue is lodged, wait to be notified by email of updates. If your production instance of Confluence is experiencing a critical problem, jump on Live Support and ask to have your issue reviewed immediately.
Enabling detailed Hibernate logging

These instructions increase Confluence’s logging to report individual requests being sent to the database by Hibernate. It is useful for troubleshooting:

- XML site backups that fail to import
- Exceptions caused by an illegal database operation

To do this in Confluence, you need to modify `log4j.properties`, located in `confluence/WEB-INF/classes`.  

⚠️ If you require support assistance with a database related problem, it is advisable to enable hibernate logging prior sending us the log files. It will assist us determining what SQL queries were running during the reported problem.

To log SQL queries

Stop Confluence, then uncomment the following lines in `log4j.properties`:

```properties
## log hibernate prepared statements/SQL queries (equivalent to setting 'hibernate.show_sql' to 'true')
log4j.logger.net.sf.hibernate.SQL=DEBUG, confluencelog
log4j.additivity.net.sf.hibernate.SQL=false
```

To log SQL queries with parameters

Stop Confluence, then uncomment the following lines in `log4j.properties`:

```properties
## log hibernate prepared statement parameter values
log4j.logger.net.sf.hibernate.type=DEBUG, confluencelog
log4j.additivity.net.sf.hibernate.type=false
```

To disable batched updates (for simpler debugging)

Stop Confluence, then edit `confluence/WEB-INF/classes/databaseSubsystemContext.xml` and uncomment the following `<prop>` line:

```xml
<!-- it can be useful to disable batching during debugging, as HSQLDB doesn't report the exact statement which fails in batch mode -->
<prop key="hibernate.jdbc.batch_size">0</prop>
```
General Support Enquiries

This page last changed on Dec 05, 2006 by jed.

For information on Confluence features and configuration.

Online Documentation

- Confluence Setup Guide
- Administrators Guide
- Configuration Guide
- Online Forum. For general discussion, plugin development, customisation, new features and issues.
- Subscribe to the Mailing List. Mailing list posts are archived on the Online Forum and posts to the forum online are sent to the Mailing List, so you can use either method.

Support Requests

Check out Troubleshooting & Technical Support

Feature Requests

View Creating a Feature Request

Live Support

Live Support is available during US, Malaysian and Australian business hours, 19 hours a day, Monday to Friday. Downtime is 9am to 2pm GMT. Click to see 9am and 2pm GMT in your local time. Live Support is unavailable on weekends.

If you are experiencing a problem, you should always create a support request before using Live Support.

Phone Support

To speak to a support member about critical support issues, contact us during Sydney or San Fransisco business hours.
Logging A Thread Dump

This page last changed on Apr 16, 2007 by ivan@atlassian.com.

If Confluence stops responding, or is performing poorly, you should create a thread dump to help Atlassian determine the cause of the problem.

This will show the state of each thread in the JVM, including a stack trace and information about what locks that thread is holding and waiting for.

Windows Users

To take a thread dump from Windows:

2. Click Run for any security warnings
3. Select Process -> Thread Dump
4. Under Process Id, select the '...' button.
5. From the drop-down list, select the Confluence process. Users running Confluence Standalone, select the 'Java (Tomcat) ...' option. Users running Confluence WAR should select their application server process.
6. Click OK to capture the thread dump.
7. Save the output to a file, eg 'threaddump.log'
8. If you were asked by Atlassian technical support to create the thread dump, attach the logfile to the support ticket.

Linux (and Solaris and other Unices) Users

Find the process id of the JVM and issue the command:

Use the ps command to get list of all processes.

```
kill -3 <pid>
```

The thread dump will be printed to standard output.

Thread Dump Analyzer TDA

A free handy thread dump analyzer TDA 1.0 Final can be obtained from the java.net