CRUCIBLE DOCUMENTATION

1. .bookmarks . . . 5
2. Crucible Documentation Home . . . 5
    2.1 Crucible 101 . . . 5
    2.2 About Crucible . . . 11
        2.2.1 Background Reading . . . 12
    2.3 Crucible User's Guide . . . 12
        2.3.1 Getting Started with Crucible . . . 13
        2.3.2 Using the Crucible Screens . . . 20
            2.3.2.1 Browsing Your Reviews . . . 21
            2.3.2.2 Browsing Source Files . . . 23
            2.3.2.3 Browsing Projects . . . 24
                2.3.2.3.1 Viewing Project Statistics . . . 25
            2.3.2.4 Viewing People's Statistics . . . 27
            2.3.2.5 Viewing Reports . . . 31
                2.3.2.5.1 Review Coverage Report . . . 32
            2.3.2.6 Searching in Crucible . . . 36
            2.3.2.7 Crucible Icons . . . 41
        2.3.3 Changing your User Profile . . . 41
        2.3.4 Roles and Status Classifications . . . 45
        2.3.5 Conducting a Review . . . 46
            2.3.5.1 Creating a Review . . . 46
                2.3.5.1.1 Creating a Review from FishEye . . . 46
                2.3.5.1.2 Creating a Review from JIRA . . . 48
                2.3.5.1.3 Creating a Review within Crucible . . . 49
                2.3.5.1.4 Creating a Review from a URL . . . 52
                2.3.5.1.5 Creating a Patch Review . . . 52
                2.3.5.1.6 Selecting the Files for the Review . . . 59
                2.3.5.1.7 Creating a Snippet Review . . . 66
            2.3.5.2 Adding Reviewers . . . 68
                2.3.5.2.1 Removing Reviewers From An Active Review . . . 70
            2.3.5.3 Issuing a Review . . . 71
            2.3.5.4 Performing the Review . . . 72
                2.3.5.4.1 Adding Comments . . . 74
                2.3.5.4.2 Flagging Defects . . . 76
                2.3.5.4.3 Completing your Review . . . 76
                2.3.5.4.4 Sending all of a Review's Comments via Email . . . 78

2.3.5.4.5 Using the Review History Dialog . . . 80
2.3.5.4.6 Tracking Crucible Review Metrics . . . 81
2.3.5.4.7 Using JIRA Integration in Crucible Reviews . . . 84
2.3.5.5 Summarising and Closing the Review . . . 87
2.3.5.6 Deleting an Abandoned Review . . . 89
2.3.5.7 Moving a Review to Another Project . . . 90
2.3.6 Using the Dashboard . . . 91
2.3.6.1 Using the Project Dashboard . . . 93
2.3.7 Defining your Workflow . . . 94
2.3.8 Using Favourites . . . 99
2.3.9 Using Keyboard Shortcuts in Crucible . . . 103
2.3.10 Using RSS Feeds in Crucible . . . 104
2.3.11 Using Wiki Markup in Crucible . . . 104
2.3.12 Using Gadgets in Crucible . . . 109
2.4 Crucible Administrator's Guide . . . 112
2.4.1 Backing Up and Restoring Crucible Data . . . 113
2.4.2 Creating a Permission Scheme . . . 119
2.4.2.1 Agile Permissions Schemes in Crucible . . . 122
2.4.2.2 Associating a Permission Scheme with a Project . . . 123
2.4.3 Creating a Project . . . 124
2.4.3.1 Setting Crucible to Store all Revisions . . . 126
2.4.4 Crucible and FishEye . . . 127
2.4.5 Customising Email Notifications . . . 127
2.4.5.1 Freemarker Data Model for Email Templates . . . 129
2.4.6 Customising the Defect Classifications . . . 129
2.4.7 Customising the Welcome Message . . . 131
2.4.8 Deleting a Project . . . 132
2.4.9 Editing a Project . . . 133
2.4.9.1 Enabling the Moderator Role . . . 135
2.4.9.2 Setting Default Review Objectives . . . 137
2.4.9.3 Setting the Default Review Duration for a Project . . . 137
2.4.10 JIRA Integration in Crucible . . . 137
2.4.11 Migrating to an External Database . . . 142
2.4.12 Creating a User . . . 146
2.4.13 Trusted Applications . . . 147
2.4.14 Setting up Users and Security . . . 149
2.4.15 Enabling Access Logging in Crucible . . . 149
2.4.16 Configuring User Managed Mappings . . . 150
2.5 Crucible Installation and Upgrade Guide . . . 151
2.5.1 Crucible Installation Guide . . . 151
2.5.1.1 Supported Platforms . . . 151
2.5.1.2 Installing Crucible . . . 153
2.5.1.3 Configuring Crucible . . . 153
2.5.1.4 Configuring Repositories . . . 159
2.5.1.4.1 Enabling Reviews from the Server File System in Crucible . . . 159
2.5.1.4.2 Setting Up a Git Repository in Stand-Alone Crucible . . . 160
2.5.1.4.3 Setting Up a Perforce Repository in Stand-Alone Crucible . . . 161
2.5.1.4.4 Setting Up a Repository via FishEye . . . 161
2.5.1.4.5 Setting Up a Subversion Repository in Stand-Alone Crucible . . . 162
2.5.1.4.6 Setting Up Reviewing of Confluence Pages in Crucible . . . 163
2.5.1.5 Best Practices for Crucible Configuration . . . 164
2.5.2 Crucible Release Notes . . . 164
2.5.2.1 Crucible 2.3 Release Notes . . . 165
2.5.2.1.1 Crucible 2.3 Changelog . . . 170
2.5.2.2 Crucible 2.2 Release Notes . . . 171
2.5.2.2.1 Crucible 2.2 Changelog . . . 176
2.5.2.3 Crucible 2.1 Release Notes . . . 177
2.5.2.3.1 Crucible 2.1 Changelog . . . 184
2.5.2.4 Crucible 2.0 Release Notes . . . 187
2.5.2.4.1 Crucible 2.0 Changelog . . . 192
2.5.2.4.2 Crucible 2.0 Upgrade Notes . . . 206
2.5.2.5 Crucible 2.0 Beta Release Notes . . . 207
2.5.2.5.1 Crucible 2.0 Beta Upgrade Notes . . . 211
2.5.2.5.2 Crucible 2.0 Beta Reviewer's Guide . . . 212
2.5.2.5.3 JIRA Integration in Crucible 2.0 Beta . . . 213
2.5.2.6 Crucible 1.6 Release Notes . . . 218
2.5.2.6.1 Crucible 1.6 Changelog . . . 225
2.5.2.7 Crucible 1.5 Release Notes . . . 230
2.5.2.7.1 Crucible 1.5 Changelog . . . 234
2.5.2.8 Crucible 1.2 Release Notes . . . 236
2.5.2.8.1 Crucible 1.2 Changelog . . . 240
2.5.2.8.2 Crucible 1.2 Upgrade Guide . . . 242
2.5.2.9 Crucible 1.1 Release Notes . . . 242
2.5.2.9.1 Crucible 1.1 Changelog . . . 242
2.5.2.9.2 Crucible 1.1 Upgrade Guide . . . 243

2.5.2.10 Crucible Release Summary . . . 243
2.5.2.11 Security Advisories . . . 244
2.5.2.11.1 Crucible Security Advisory 2010-05-04 . . . 244
2.5.2.11.2 Crucible Security Advisory 2010-06-16 . . . 248
2.5.3 Crucible Upgrade Guide . . . 249
2.5.3.1 Upgrading to a New Version of Crucible . . . 249
2.5.3.2 Upgrading from FishEye to Crucible . . . 250
2.6 Crucible FAQ . . . 251
2.6.1 Troubleshooting . . . 252
2.6.1.1 Crucible freezes unexpectedly . . . 252
2.6.1.2 JIRA Integration Issues . . . 253
2.6.1.3 Problems with very long comments and MySQL migration . . . 253
2.6.2 Increasing the session timeout . . . 254
2.6.3 General FAQs . . . 254
2.6.3.1 Can Crucible be run as a Windows Service? . . . 254
2.6.3.2 Can I deploy Crucible or FishEye as a WAR? . . . 255
2.6.3.3 How to Automate Daily Crucible Backups . . . 255
2.6.4 Licensing FAQ . . . 255
2.6.4.1 What happens if I decide to stop using FishEye with Crucible? . . . 255
2.6.4.2 Do I need a FishEye licence to run Crucible? . . . 256
2.6.5 Support Policies . . . 256
2.6.5.1 Bug Fixing Policy . . . 256
2.6.5.2 How to Report a Security Issue . . . 257
2.6.5.3 New Features Policy . . . 257
2.6.5.4 Patch Policy . . . 258
2.6.5.5 Security Advisory Publishing Policy . . . 258
2.6.5.6 Security Patch Policy . . . 258
2.6.5.7 Severity Levels for Security Issues . . . 259
2.7 Crucible Development Hub . . . 260
2.7.1 Documentation for Crucible Development . . . 260
2.7.1.1 Crucible's URL Structure . . . 260
2.7.1.2 Crucible REST API . . . 262
2.7.1.2.1 Crucible REST API Usage Example . . . 262
2.7.1.2.2 Conditional Get . . . 267
2.7.1.2.3 Data Types . . . 267
2.7.1.2.4 Project Service . . . 274
2.7.1.2.5 Repository Service . . . 275
2.7.1.2.6 Review Service . . . 277
2.7.2 Crucible Plugin Types . . . 307
2.7.2.1 Crucible Web Items . . . 307
2.7.3 Live Code Examples for Crucible Development . . . 313
2.7.3.1 Bundled Plugins from Crucible . . . 313
2.7.3.1.1 Confluence SCM Plugin . . . 314
2.7.3.1.2 File System SCM Plugin . . . 314
2.7.3.1.3 Perforce SCM Plugin . . . 315
2.7.3.1.4 Subversion SCM Plugin . . . 316
2.7.3.2 SCM Plugin Examples . . . 316
2.7.3.2.1 Crucible Git Plugin . . . 316
2.7.3.2.2 Example Crucible SCM Plugin for JSR-170 (Apache JackRabbit) . . . 318
2.7.3.3 Servlet Examples . . . 321
2.7.3.3.1 Basic Servlet Example . . . 321
2.7.3.3.2 Crucible Reporting plugin . . . 322
2.7.4 Developing Crucible Plugins . . . 324
2.7.4.1 Crucible Event Listener Plugins . . . 325
2.7.4.2 Crucible SCM Plugins . . . 326
2.7.4.3 The Crucible API . . . 338
2.8 Crucible Resources . . . 339
2.9 Glossary . . . 340
2.9.1 approve . . . 341
2.9.2 author . . . 341
2.9.3 code review . . . 341
2.9.4 comment . . . 341
2.9.5 creator . . . 341
2.9.6 defect . . . 341
2.9.7 moderator . . . 341
2.9.8 participant . . . 341
2.9.9 permission . . . 341
2.9.10 permission scheme . . . 342
2.9.11 project . . . 342
2.9.12 review duration . . . 343
2.9.13 reviewer . . . 343
2.9.14 role . . . 343
2.9.15 state . . . 343
2.9.16 statement of objective . . . 343
2.9.17 user . . . 343

2.10 Contributing to the Crucible Documentation 344
2.10.1 Tips of the Trade 344
3. TreeNavigation 345
4. Changeset Discussions 345
5. TreeNavigationVersions 347

.bookmarks

Crucible 1.2 Bookmarks
This page is a container for all the bookmarks in this space. Do not delete or move it or you will lose all your bookmarks.
Bookmarks in Crucible 1.2 | Links for Crucible 1.2

The 15 most recent bookmarks in Crucible 2.3

There are no bookmarks to display.

Crucible Documentation Home

Crucible 2.3.x

User's Guide

The Crucible User's Guide is for developers, project managers, testers – anyone who uses Crucible. New to Crucible? Start by exploring the Crucible screens and creating a project, configuring repositories and refer to best practices for crucible configuration.

Administrator's Guide

The Crucible Administrator's Guide is for people with Crucible administration rights. It will help you set up Permission Schemes, email notifications , and JIRA integration. Admin tasks such as backup are also covered. You may also find the Knowledge Base, FAQ and Crucible Forum useful.

Installation Guide

The Crucible Installation Guide is for people who are installing Crucible for the first time. Check the supported platforms, then download and install Crucible. Where to next? If you are using other Atlassian products, take a look at the Integration Guide.

Upgrade Guide

The Crucible Upgrade Guide is for people who are upgrading their instance of Crucible. Start by reading the latest Release Notes and version-specific Upgrade Guide for the version to which you are upgrading, then download Crucible and follow the main Upgrade Guide.

Developer Resources

These resources are for software developers who want to create their own plugins for Crucible. Take a look at the Development Hub and the API Documentation. You may also find the Crucible Developers Forum useful.

Crucible 101

Welcome to Crucible 101, an introductory guide to Crucible and a tour of the most interesting Crucible features. Use this page to guide your evaluation process or quickly get up to speed with Crucible.

Crucible 101
Thanks for taking the time to try Crucible. To help you make the most of your time, try these easy instructions for configuring and using Crucible. Software developers are the intended audience for this document. **Getting Crucible up and running**

Carry out these steps to setup Crucible and you will be ready for your first code review in no time. **Setting up Crucible takes less than half an hour.**

Install

Basic installation is a breeze. (click to expand)

First things first, if you haven't already got Crucible up and running carry out the following steps:

1. Download Crucible from the Atlassian Download Center
2. Unzip the downloaded package to the desired installation directory.
3. Launch Crucible from the command line, typing `run.bat` (under Windows) or `./run.sh` (under Linux). A Crucible console window will appear, listing the startup progress. Give it a few minutes to complete its process.
4. On the same machine go to `http://localhost:8060/` (or use the hostname or IP address in place of localhost from another machine). You will be prompted to enter a license key and set the admin password.

There are a lot of installation options. To learn more, see the complete documentation.

It should only take you a few minutes to have a running instance of Crucible. If you are still struggling after twenty minutes please contact our support team for assistance. They're ready to help at any time.

Connect to Your Repository

Crucible standalone supports SCM repository systems. (click to expand)

Once installed, you need to connect Crucible to a Source Code Management (SCM) repository, so that you can get reviewing right away. You can instantly connect to the following SCMs:

- Subversion
- Perforce

Using standalone Crucible, your repositories will be accessed only on-demand. However if using Crucible with FishEye you get much deeper SCM integration for Subversion , Git, Perforce IBM ClearCase and CVS. FishEye allows advanced searching and rapid access to repository contents (it also requires pre-scanning your repositories). Note that your Crucible evaluation license enables FishEye.

See the configuration documentation for more.

Set Up Your Crucible Project(s)

Work streams in Crucible are organised into projects. (click to expand)

Your Crucible instance must have at least one project, in a fresh install this is imaginatively named "Default Project". It is a good idea to rename this to something more personal. If you plan on having multiple projects, you might also want to change the review key when renaming the Default Project (it defaults to CR), this should **not** be the same as any other keys (e.g. JIRA project, Bamboo plan) that you use. At Atlassian we prefix our JIRA project keys with CR-, e.g. the FishEye project's key is CR-FE, but you can use whatever you like.

Obviously Crucible projects let you organise your reviews into logical groups, but they serve several other purposes.

- Access control - is set at the project level
- Permission schemes - which roles can do what
- Default participants - e.g. auto add the team lead to every review
- Default length - set the number of week days to set the due date for a new review

You can also associate JIRA issue tracker(s) with your project, by configuring JIRA Integration in Crucible.

Configure Mail (optional)

Email notifications are a great way to keep up with Crucible activity. (click to expand)

Crucible can deliver email feeds based on user configured parameters. For example, you can watch the contributions of a specific colleague or changes to a branch of code you're working on. To take advantage of this feature, you will need to tell Crucible about your SMTP server.

You can also configure custom templates for notification email messages and fine-tune the frequency of email delivery, for example, choosing a daily digest.

Move onto the next step to learn about Crucible's integration with JIRA, Atlassian's award-winning issue tracker.

Configure JIRA (optional)

Crucible integrates with JIRA, Atlassian's enterprise issue tracker. (click to expand)

1. If you already have a JIRA server set up, you can go ahead and set up integration between the two. Once established, activity on relevant JIRA issues will appear in the Crucible activity stream. JIRA issue keys will also be hyperlinked, also a small information window will load when you mouse-over JIRA issue keys.
2. Visit the Crucible documentation for instructions on how to set up JIRA integration in Crucible.

Setup Complete!

Your Crucible instance is now established. (click to expand)

Congratulations! Our support records indicate that over 80% of support calls happen during this installation phase. Once you have made it this far, the rest of the evaluation ought to flow smoothly.

There are heaps of tweaks and configuration options that you can experiment with. Check out the Crucible Administrator's Guide for more information.

Otherwise, move on to the next step and launch right into lightweight code reviews.

Learning the Basics

Now that you've got Crucible set up, you can start using Crucible's code review features in earnest. Creating reviews, pre-commit and post-commit reviews, notifications, and much more.

Creating Reviews

Reviewing Quick Start

Jump into code reviews instantly with Crucible. (click to expand)

> If you are getting familiar with Crucibles structure - roles, workflow and parts of a code review please refer to the following document before moving forward.

Using Crucible is easy and lightweight, facilitating rapid and effective reviews. Jump right in and create your first review now .

There are many carry out reviews with Crucible. In some form or another you need to go through the following steps. Each step is linked to documentation, but you probably won't need it.

- Create the review - Select "Create Review" from the "Tools" menu in the top right of any page.
- Add content to the review - Choose some stuff to review, either from a repository you have configured or by uploading something.
- Choose reviewers - if you haven't added users or [configured ldap] you won't be able to do this, you'll get a warning when you try to start the review, but you can ignore that
- Start the review - click the start button in the create dialog or in the top right hand corner of the review page
- Add some comments - use one of the many "add a comment" links or simply click on the lines of source your want to comment on
- Summarise and close the review - when you are finished with a review, it needs to be closed. Summarise is the state between "under review" and "closed", most of the time you will summarise and close at the same time. Alternatively you can abandon a review, which effectively moves it to the trash.

Now that you've got a feeling for the basic review concepts, its worthwhile taking a moment to customise your instance.

Pre and Post Commit Reviews

Create reviews before or after you check-in. (Click to expand)

Pre commit
Crucible allows you to review a change before it has been committed. To do this, you upload a patch file to the '**Patch**' tab (or paste it in as text) when creating a review. You must first generate this patch file from your repository, using either commands built into your IDE, or via the repository command-line tools.

- Create a new review. From the '**Tools**' menu in Crucible, select '**Create Review**'.
- Click '**Pre-Commit - Upload a patch file to be reviewed**'. The '**patch upload**' dialog appears. Click '**Browse**', locate your file, then click '**Upload**'. Crucible will now search for matches in the files in its database. Crucible will analyse all the paths in the patch, find the branches containing all those paths, then anchor the patch to the trunk or the branch with the most recent commit activity.

Learn more about pre-commit (patch) reviews here.

Post commit

- Create a new review. From the '**Tools**' menu in Crucible, select '**Create Review**'.
- To add files to a review, click the 'Files' option on the left navigation bar of the Manage Files dialog. The Files view opens.

Learn more about post commit reviews here.

Creating Reviews Fields

▷ Fill in the fields that are relevant for your review. (click to expand)

- When adding reviewers, Crucible will suggest reviewers who have worked on the relevant files, but also don't have a big review backlog.
- You can set a specific due date for each review as you create them, or set a default duration for each review under a project.
- You can easily link to JIRA issues in reviews and associate reviews with JIRA issues.

Working with Reviews

Comments turned into defects

▷ Identify defects in your code and tag them in Crucible. (click to expand)

- You can easily highlight defects in the code under review by click on the 'Defect' checkbox when commenting.
- All 'Defects' can be classified with a priority
- Crucible tracks the time you have spent on each file in a review and also your progress through the review.

Context Windows

▷ A number of context windows appear when hovering your mouse over links. (click to expand)

Try hovering your mouse over the following links in Crucible to see the context windows:

- Crucible usernames,
- JIRA Issue Keys (when using JIRA; see the documentation).
- CSIDs (when using FishEye; see the documentation).

Activity & People

Crucible adds a modern social web dimension to the usually impersonal data stored in your Source Code Management (SCM) repository.

Activity Streams

▷ You can see commits and updates from the users in Crucible rolling by. (click to expand)

This information appears as a stream on the Dashboard and oher index pages, sorted chronologically showing you the latest changes. Updates can be viewed as an inline stream or RSS feed. See the documentation for more.

People Lists

▷ In Crucible, you can view useful updates and statistics from your team. (click to expand)

On the People index page, you can see the commit history in global lines of code (LOC) that each person has contributed (expressed as a line graph) and their total number of commits. Also, the most recent piece of activity is shown as a clickable item. See the documentation for more.

People Pages

Each person who makes code changes has a page. (click to expand)

You can click on a person's name to see detailed information about their code reviews, showing details of their work and summaries of their activity. Additionally, you can see their work on tracked issues and additions to the repository if using Crucible with FishEye and JIRA integration is set up. See the documentation for more.

Your Personal Dashboard

See your own work at a glance and a stream of work items that are relevant to you. (click to expand)

Click the 'Dashboard' tab to see a stream of all your own activity; your reviews; your personal code commits (if you are using FishEye); and your tracked issue updates (if you are using JIRA). See the documentation for more.

Favourites as Bookmarks

Everything in Crucible can be bookmarked. (click to expand)

In Crucible, you can add the following items as favourites:

- Reviews,
- Review Comment Threads,
- Projects,
- People,
- Changesets,
- Files or Folders,
- Repositories.

Once items are added to your favourites, a list is created. You can then view it or see a stream of all activity relating to your favourites.

See the documentation for more.

Subscribe to Crucible Updates

Keep track of Crucible activity when your Crucible session is closed. (click to expand)

- Configure your Email preferences.
- Check out the handy Blocker report and JIRA Blocker Reports. Every now and then, someone in the team can become a bottleneck in the review process. The review blocker reports help by identifying team members that have a lot of reviews waiting in their inbox.
- Configure your personal dashboard and set up RSS feeds.

Search

Search Options

Find a specific review or all of them with easy search options. (click to expand)

Searching for Reviews:

- Using the Filters Navigation Bar
  - 'Everyone's Reviews' Filters
  - Custom Filters
  - Review State Filter
  - Comment Search

See the documentation for more.

Searching for comments:
Crucible give you the ability to search and filter review comments. Search or filter by comment content, defect classification, specific role(s), date and much more. Learn more here.

Quick Nav

When you type in the search box, matches are instantly shown below. (click to expand)

You can quickly find what you are looking for by typing one word or part of the name of what you are looking for. Crucible's Quick Nav feature will immediately show matches and suggestions below, before you've even pressed Enter or activated a proper search. Try typing a review's issue ID to go directly to that page.

Advanced Features

Crucible will allow you to go beyond commenting on source code. Iterative reviews, reports and auditing, plugins, JIRA integration, IDE integration, and much more.

Iterative Reviews

Files are always up to date

Crucible allows you to review iteratively, so you can keep focused on the most recent file. (click to expand)

- When files in a review become outdated, Crucible informs you with the File Outdated Menu. You can then easily update the file with one click (Iterative Review).

Review Multiple Revisions

Select the files that you want to review

- When adding files to a review, you can also review multiple revisions of a file.

Reporting

Plugin Reports

Crucible is extensible, allowing you to create your own reports and sent info to other systems. (click to expand)

You can create your own report as a plugin and have it appear in the menu. For example, the '**Review Blockers**' report that appears in the user interface is actually a plugin, added in to Crucible. You can use this plugin as a basis to create your own custom reports and add them in to Crucible. See the Crucible developer documentation for more.

Using the REST API

Extend Crucible. (click to expand)

With its own API (Application Programming Interface), Crucible is extensible. If you need Crucible to do more than it ships with and you've got programming chops of your own, the API allows you to build extensions to the application to suit your needs.

See the API documentation for more.

Integrate with other systems

Integrate with JIRA issue Tracker

Link your code reviews directly to your JIRA issues

There are several aspects to the JIRA and Crucible integration. Each link below will take you into the details of each.

Create Reviews from inside of JIRA:
Learn how to create reviews from JIRA here

Associate and create JIRA issues for your reviews:

- 1. Create a JIRA Issue for your Review
- 2. Create Your Review and Link it to a JIRA Issue
- 3. Make a Comment or Defect on the Review
- 4. Click to create a JIRA Sub-Task
- 5. Resolve the JIRA issue through Crucible

Integrate with your IDE

Create and work with reviews in Eclipse and Intellij

Using the free Atlassian IDE connector you can create, work with, manage, and monitor all your Crucible reviews directly from Eclipse and Intellj.

Some highlights include (this is a sample from the Eclipse Connector):

Below are the highlights of viewing and acting upon Crucible reviews within Eclipse.

- Receive notification of new and updated reviews.
- View the review details in an Eclipse editor.
- Open the file under review, at the commented source code line.
- Create a post-commit review, a patch review or a pre-commit review.
- Summarise and close the review and perform other workflow actions.

Tips and Suggestions

Get reviewing quicker with these suggestions

- Wiki markup in your review comments - this is a way to make your comments stand out.
- Keyboard shortcuts - Keyboard shortcuts can help save some time on creating, editing, and working with reviews.

Configuration Tips

Unleash the flexibility of Crucible by configuring it exactly to your needs. (click to expand)

- In Crucible, you can set configure defaults per-project for review duration, review objectives and reviewers.
- Crucible allows you to customise your own permission schemes.
- Crucible lets you disable the moderator role, for lightweight, faster peer-to-peer reviews.

Thanks for taking the time to evaluate Crucible using this guide. To help continue your journey, our support staff are always ready to answer your questions in the Crucible Forum, or solve specific problems at our support portal http://support.atlassian.com.

About Crucible

Crucible is a powerful addition to FishEye, making it easy to review code changes, make comments, and record outcomes in an efficient, distributed, and process-neutral way.

Introduction

Crucible is a tool that facilitates code review. It can be as valuable to organisations that already have a formal inspection process as it is to teams that don't review at all.

Regular peer review is a proven process with demonstrable return on investment (ROI). The benefits vary from team to team but commonly include:

- Identifying bugs and defects early.
- Sharing expertise and encouraging knowledge transfer.
- Improving system-wide knowledge.
- Encouraging adherence to internal standards and style conventions.
- Identifying individual strengths and weaknesses.

One of the less apparent, but nonetheless important, benefits that comes from a transparent code review process is that quality improves simply from the knowledge that code may be critically reviewed. Developers take more care with style, readability, comments, and commit-messages because their peers are going to see them.

Despite these and many other clear benefits, code review is often seen as 'impractical on time sensitive projects', 'only valuable in large teams working on mission critical applications', or at worst 'a total waste of time foisted on developers by management'. Formal code review can *feel* like an expensive use of time, because the review process can:

- Be burdened by excessive paperwork and other administration.

- Interrupt your current task and make you less productive.
- Include meetings where participants fail to prepare, so that the meeting becomes a walkthrough rather than a critical review.
- Become an ego battle or point-scoring exercise dominated by a vocal minority.

These issues do not affect the immense potential value of code review. They are simply problems with some review processes.

Crucible's mission is to streamline the *process* aspects so development teams can access the benefits. Crucible achieves this by:

- Making reviews asynchronous.
- Bringing reviewing to your desk (wherever that might be).
- Eliminating most of the administration.
- Limiting the ability for individuals to dominate the dialogue.
- Providing an archival record of reviews.

Crucible increases the quality, quantity, and frequency of code reviews thereby reducing bugs, helping knowledge sharing and fundamentally improving system quality.

Starting Points

Visit the Crucible Feature Tour to understand how Crucible can benefit you.

You can run Crucible with a FishEye-compatible source code repository set up, such as CVS, Subversion, or Perforce. For more information, please read the FishEye documentation.

Read the Installation Guide to get started quickly.

For Crucible troubleshooting, see the FAQ.

Background Reading

The following resources are recommended for background reading on peer code reviews:

- White paper on effective code review by Karl Wiegers.
- Book, Peer Reviews in Software: A Practical Guide by Karl Weigers.
- Software Engineering Institute web page: Software Inspections.
- NASA Software Assurance Technology Center web page: Software Formal Inspections.

Crucible User's Guide

This page is an index of the content in the Crucible User's Guide. Click on a link below to see the desired page.

- Getting Started with Crucible
- Using the Crucible Screens
  - Browsing Your Reviews
  - Browsing Source Files
  - Browsing Projects
    - Viewing Project Statistics
  - Viewing People's Statistics
  - Viewing Reports
    - Review Coverage Report
  - Searching in Crucible
  - Crucible Icons
- Changing your User Profile
- Roles and Status Classifications
- Conducting a Review
  - Creating a Review
    - Creating a Review from FishEye
    - Creating a Review from JIRA
    - Creating a Review within Crucible
    - Creating a Review from a URL
    - Creating a Patch Review
    - Selecting the Files for the Review
      - Iterative Reviews
    - Creating a Snippet Review
  - Adding Reviewers
    - Removing Reviewers From An Active Review
  - Issuing a Review
  - Performing the Review
    - Adding Comments

- Flagging Defects
- Completing your Review
- Sending all of a Review's Comments via Email
- Using the Review History Dialog
- Tracking Crucible Review Metrics
  - Using Progress Tracking
  - Using Time Tracking
- Using JIRA Integration in Crucible Reviews
- Summarising and Closing the Review
- Deleting an Abandoned Review
- Moving a Review to Another Project
- Using the Dashboard
  - Using the Project Dashboard
- Defining your Workflow
- Using Favourites
- Using Keyboard Shortcuts in Crucible
- Using RSS Feeds in Crucible
- Using Wiki Markup in Crucible
- Using Gadgets in Crucible

Manage your Crucible reviews inside your IDE
Use the Atlassian Connector for Eclipse or the Atlassian Connector for IntelliJ IDEA to work with your Crucible code reviews right there in your development environment.

Getting Started with Crucible

This page contains a basic overview of Crucible workflows, followed by a simple example showing a code review between two people.

Crucible is a flexible application that caters for a wide range team sizes and work styles. You will need to know about the basic roles used in Crucible.

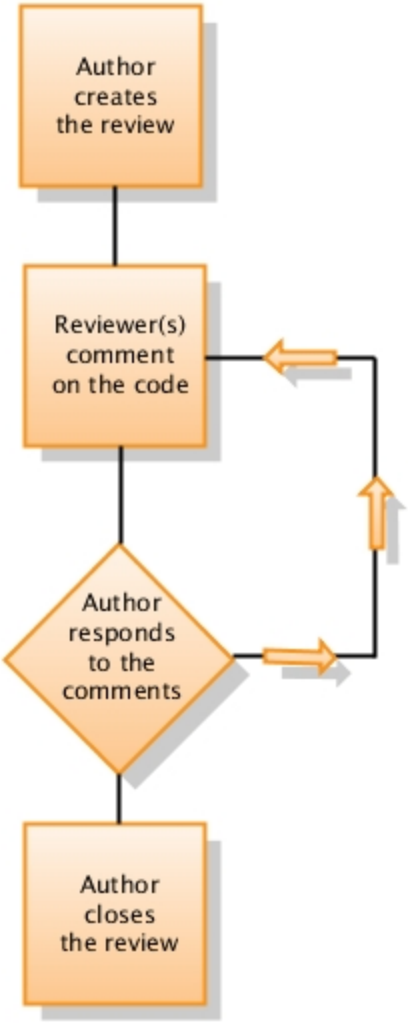
Roles:
There are several roles that review participants can take up:

- Author: Usually the creator of the code; the person who will act on the review's outcome.
- Reviewer: A participant that will comment on the source files in the review, raising points and discussion on the work that was done.
- Moderator: Usually the person who starts the review and is responsible for deciding the outcomes and closing it.

You will also need to understand how workflow is conducted in Crucible. This is configurable, but the most basic example follows.

Crucible Workflow:
There are a number of different ways in which you can use Crucible for code reviews. The following diagram shows the basic workflow that applies to most Crucible code reviews.

Diagram: Workflow for One-to-One Reviews



Need more information? Read more about the different forms of workflow in Crucible.

Next, we explore the workflow in a two-person code review in Crucible.

Example Workflow: Two Participant Code Review

This is a simplified set of instructions for executing a one-to-one review involving two people. In this example, the code author wears "three hats", acting as review creator, moderator and code author, managing the review process as well as taking final responsibility for closing the review. The second person is the reviewer.

- Example Workflow: Two Participant Code Review
  - 1. The Author Starts the Review
  - 2. The Reviewer Comments on the Code
  - 3. The Author Responds to the Comments
  - 4. The Author Closes the Review

For instructions on Crucible workflow with more than two people, see this page.

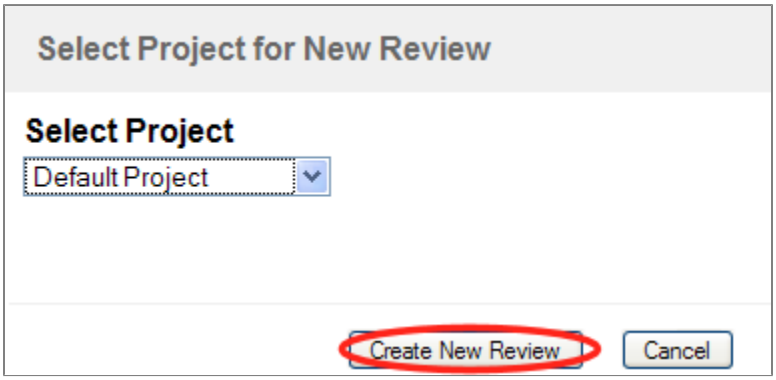
1. The Author Starts the Review

To begin, the code author sets up the review. There are a number of ways to do this, but for this example, the author starts from the FishEye Source view of the file he wants to review:

Screenshot: Opening a review from the FishEye Source view

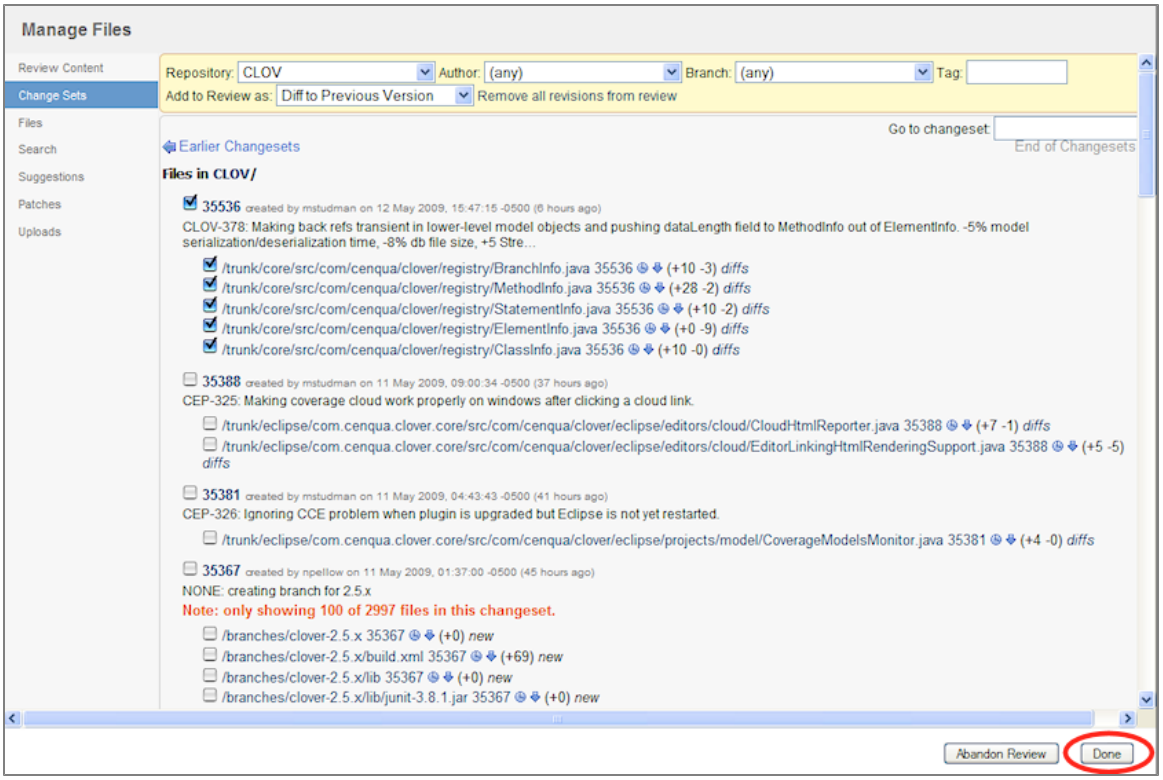
From the FishEye Source view, the author clicks the '**Reviews**' drop-down menu above the source view, then selects '**Create New Review**'. If there are multiple projects, the Project Selection dialog opens.

Screenshot: The Project Selection dialog



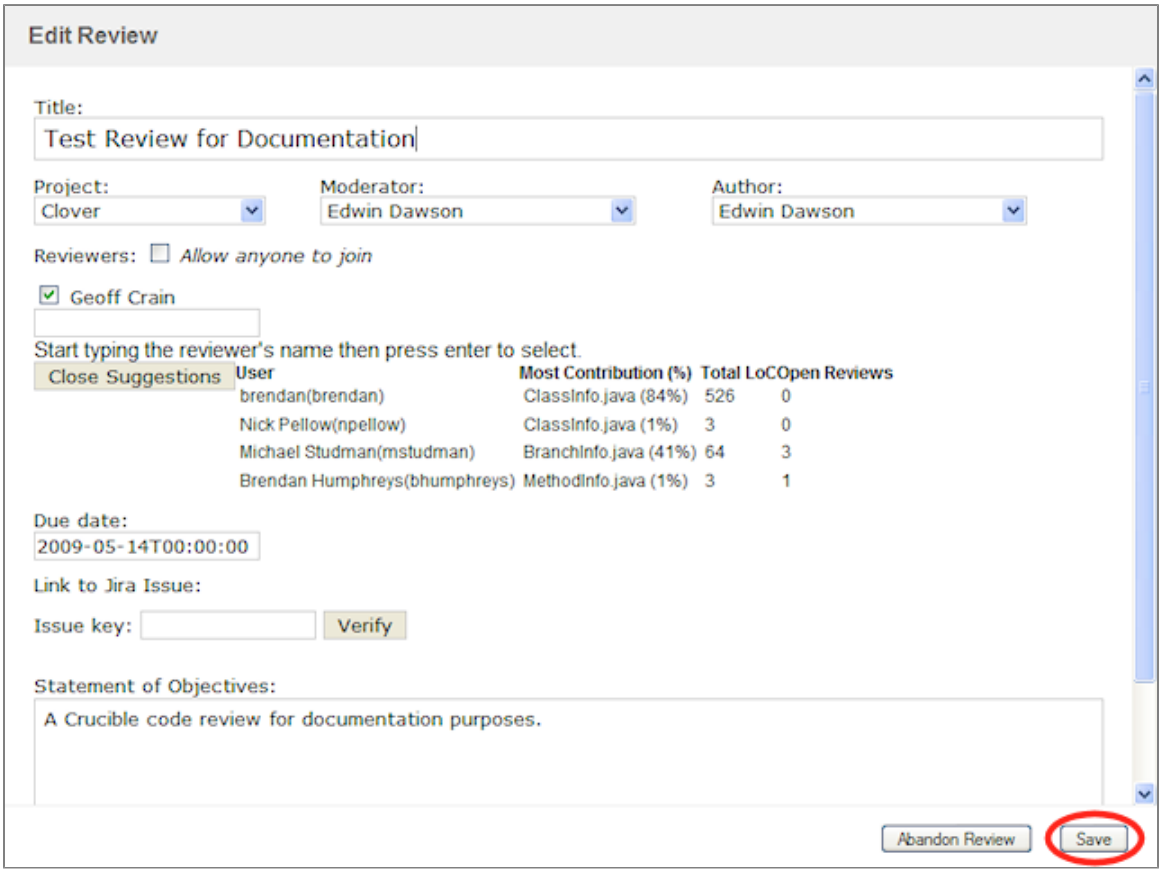
In the Project Selection dialog, you are prompted to choose a project for this review from the drop-down list. Once the selection is made, the author clicks the '**Create New Review**' button. The Manage Files dialog opens.

Screenshot: The Crucible Manage Files dialog



In the Manage Files dialog, the author selects the source files they want to include in the review, by clicking the checkboxes next to the desired files. Once finished, the author clicks '**Done**'. The Edit Review dialog appears, where the author can create and issue the review.

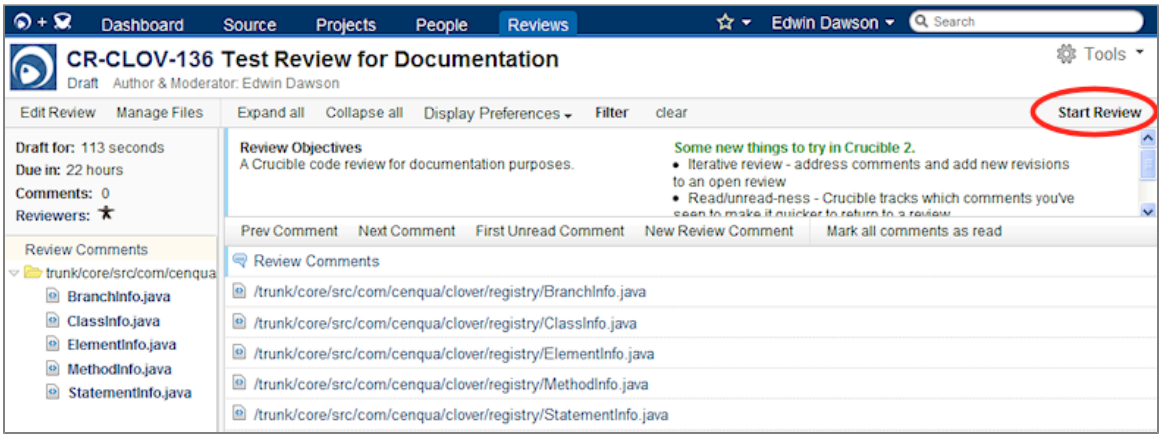
Screenshot: Creating a review in the Edit Review dialog



In the Edit Review dialog, the author enters information needed for the review. This includes entering a title and description for the review,

selecting reviewers, a due date and the key for a related JIRA issue (if any). The project, moderator and author are pre-selected (for this example, the author should select himself as a moderator. When finished, the author clicks '**Save**'. The review will now be created in a draft form.

Screenshot: A newly created Crucible review



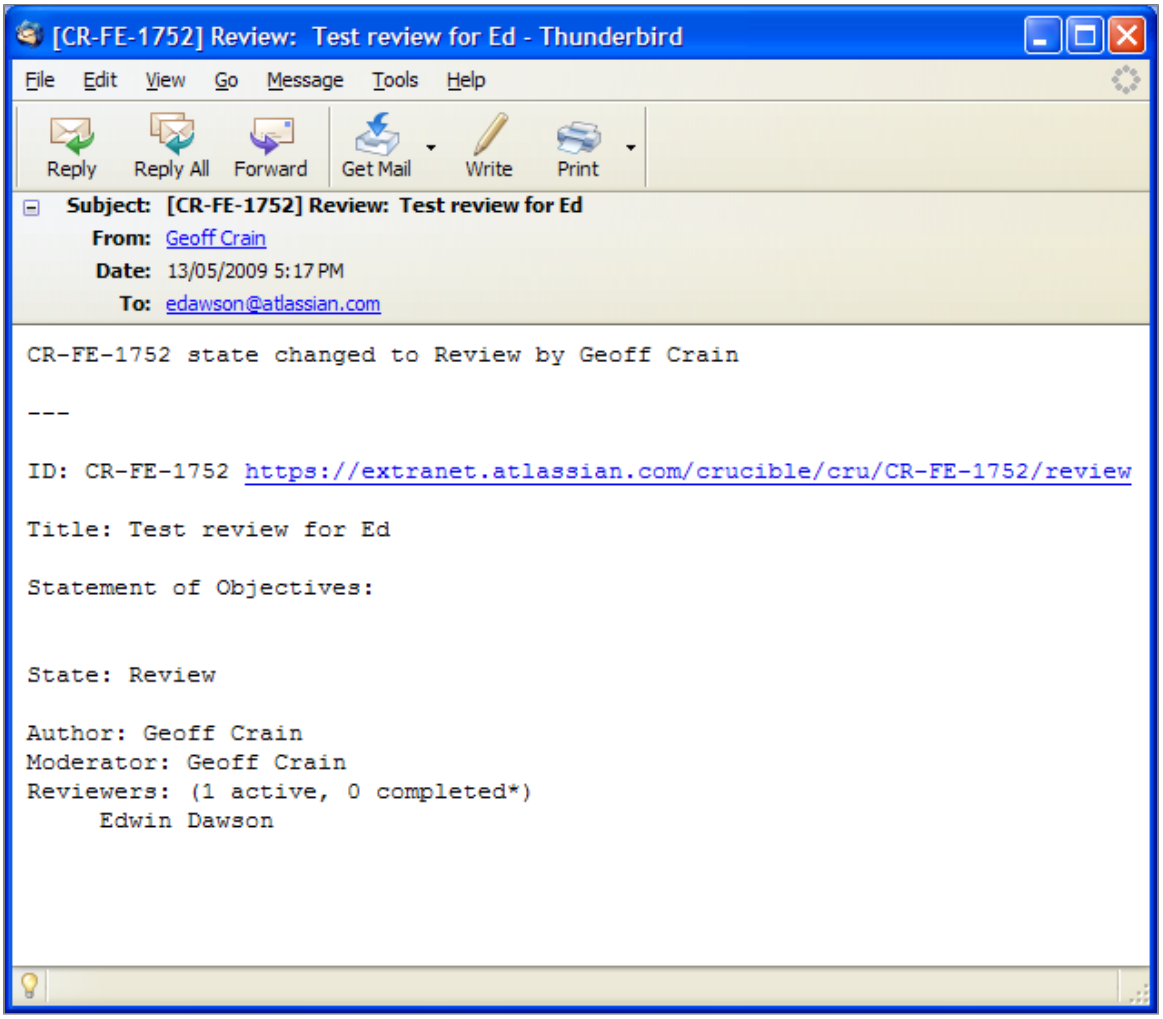
The draft review opens. In the draft stage, the author can check the contents of the review files to ensure they are correct and put in any notes for reviewers as comments. During the draft phase, no notification email is sent out to reviewers. Once the author is finished with the draft phase, he clicks '**Start Review**'.

The review will now be started and notification email will go out to all participants. Crucible will now send out an email notification to all the participants. This lets them know that the review is under way and prompts them to take action, providing a URL for direct access to the review. (You can also subscribe to an RSS feed.)

2. The Reviewer Comments on the Code

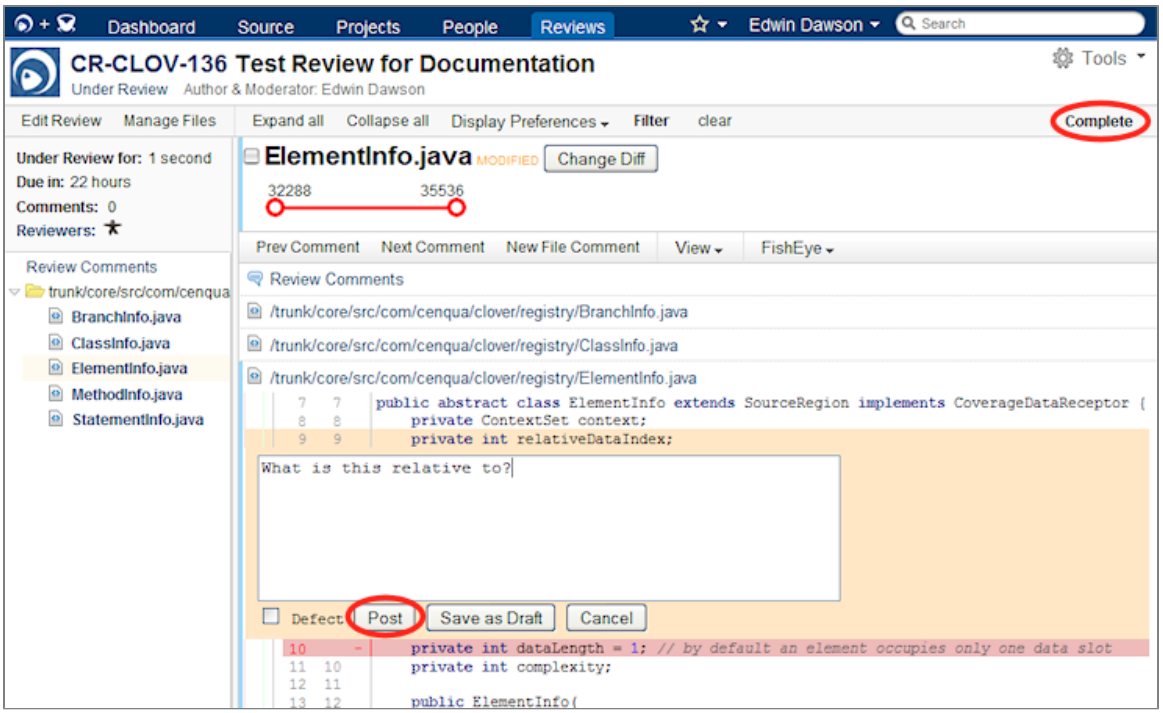
The reviewer will receive an email from Crucible (or an RSS feed update) with a link that they can follow to the review.

Screenshot: A Crucible review notification email



When the reviewer clicks the link in the notification email, the Crucible Review screen opens.

Screenshot: The Crucible Review screen



On the Crucible Review screen, the code changes under review are displayed. The reviewer clicks filenames to expand the code for in-line reviewing. As the reviewer reads the changes, they can simply click on any line to enter a comment there (multiple lines can be selected by clicking and dragging).

The reviewer clicks the '**Post**' button when each comment is finished.
The reviewer repeats this process for all files in the review. Reviewers can leave the session and resume it later; their work is automatically saved.

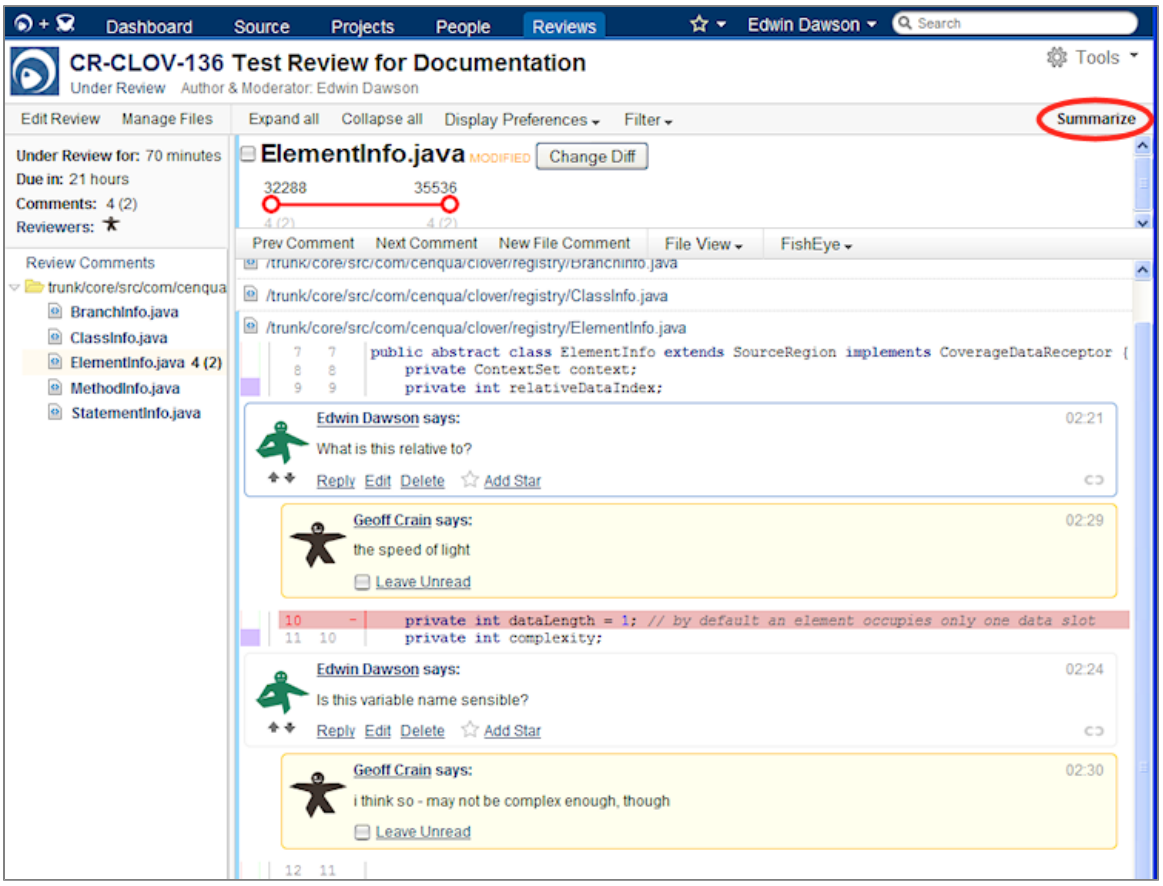
When the reviewer has finished their code review work, they click the Complete button.

> By default, an email is sent to participants every time a comment is posted. This is an individual setting. Each reviewer can configure their own profiles to adjust the list of events that will trigger email notifications.

3. The Author Responds to the Comments

During the review process, the author/moderator can also make contributions, responding to reviewer comments and making corrections.

Screenshot: Comment threads in Crucible

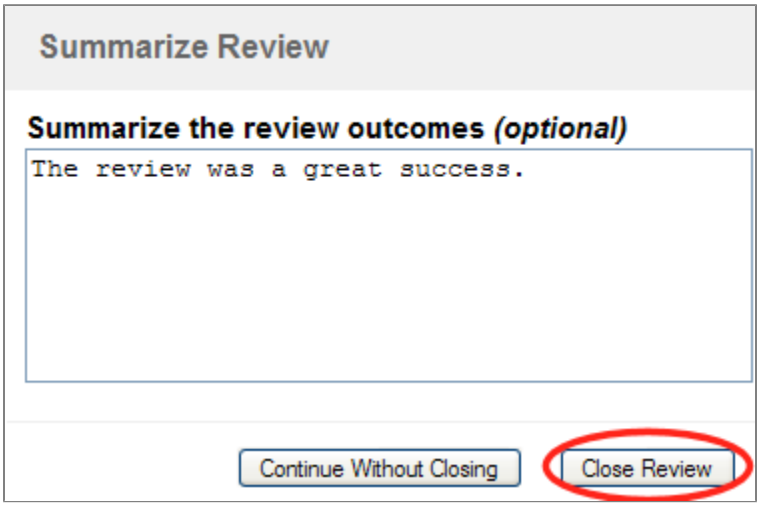


4. The Author Closes the Review

When all reviewers have *Completed* their reviews, the author/moderator is notified via email. The author/moderator clicks the link in the notification email, returning to the Review screen.

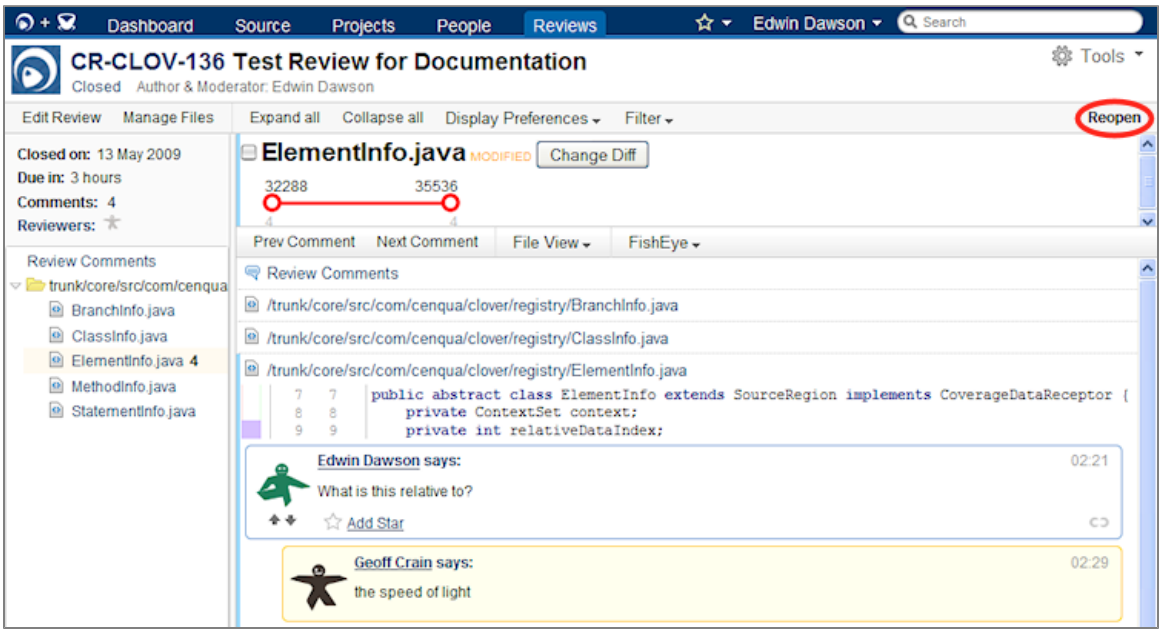
The author/moderator will then add any final comments, then click the Summarize button when finished. The Crucible Summarize Review screen opens.

Screenshot: Summarizing a review in Crucible



On the Crucible Summarize Review screen, the author/moderator enters an optional summary of the review's results, then clicks Close Review. This closes the review, signalling the end of work. A final email notification will be sent to the review participants, informing them that the review is now closed. The closed review screen will load, displaying the summary and archiving the completed review as read-only.

Screenshot: Viewing a closed review



If the author/moderator ever needs to resume work on the closed review, they can simply click Reopen when viewing this screen. Doing this will return the review's status to "open".

For more information on workflow in Crucible and best practices for code reviews, see Requesting and Conducting a Review.

Using the Crucible Screens

This page contains an overview of the Crucible interface and the actions that can be carried out in the application.

On this page:

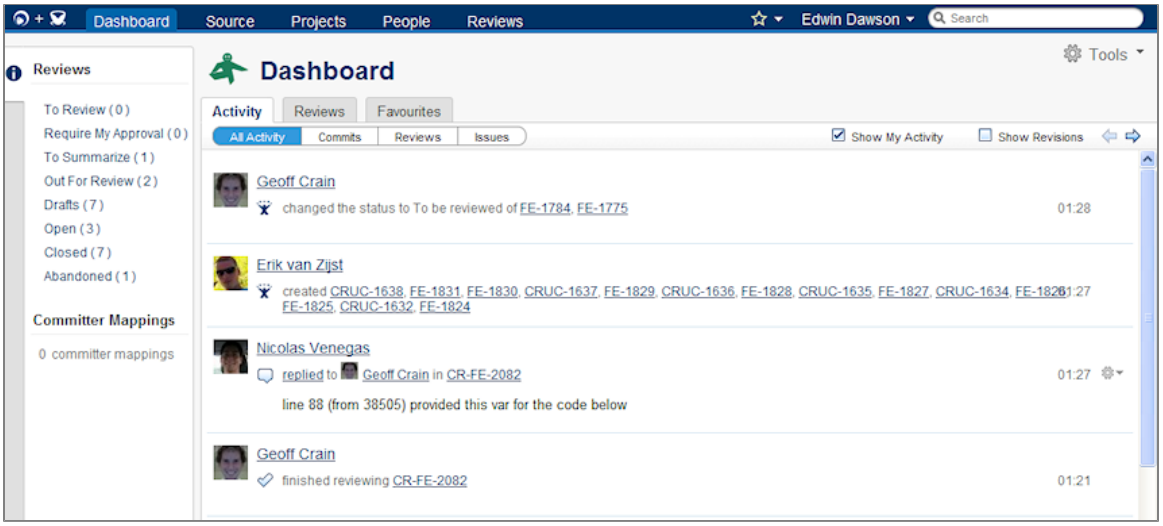
- Tour of the Crucible Interface

- Left Navigation Sidebar
- Related Links

Tour of the Crucible Interface

When you first log in to Crucible, the Dashboard Screen opens, as shown in the screenshot below. This view shows recent general activity in Crucible.

Screenshot: The Dashboard Screen in Crucible



The table below explain the top-level tabs in the Crucible User Interface. Click on the name of a tab for more information.

Element name	Function	Appears
Dashboard Tab	Displays reviews and system activity related to you.	All screens.
Source Tab	Displays contents of connected source repositories.	Only when FishEye is used with Crucible.
Projects Tab	Displays reviews and content from specific projects.	All screens.
People Tab	Displays metrics on the users of the Crucible instance.	All screens.
Reviews Tab	Allows you to search and report on reviews.	All screens.

Left Navigation Sidebar

The navigation bar at the left of the screen applies specific filters to what is shown in the centre pane. See the page on Browsing Your Reviews for more information.

The left navigation sidebar can be hidden or displayed by clicking the blue 'information' icon at the top left of the sidebar.

Related Links

Browsing Your Reviews
Browsing Source Files
Browsing Projects
Viewing People's Statistics
Viewing Reports
Searching in Crucible
Using RSS Feeds in Crucible
Changing your User Profile

Browsing Your Reviews

This page contains information on browsing reviews in Crucible.

On this page:

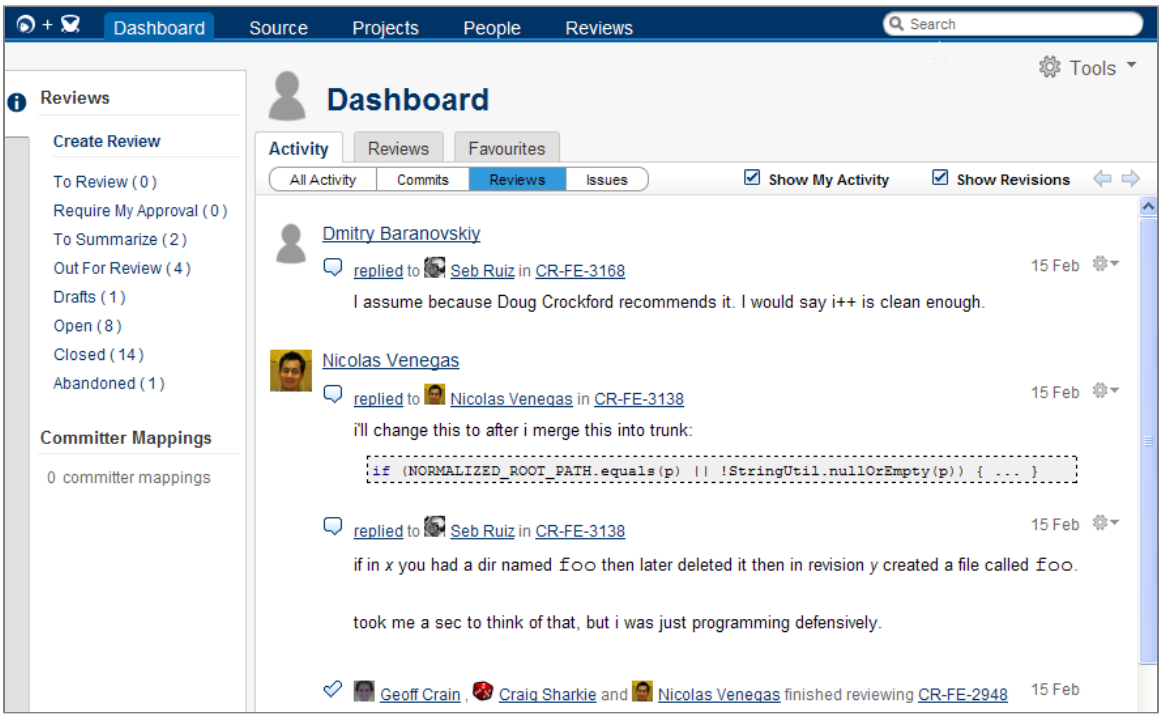
- Dashboard Screen Overview

- Filtering Your View

Dashboard Screen Overview

To browse all your reviews (reviews you are participating in), use the **Dashboard** tab at the top of the page. The Dashboard Screen opens, as shown in the screenshot below.

Screenshot: The Dashboard Screen in Crucible



By default, the Activity Stream is shown. This is a mix of all activity that is occurring related to Crucible, such as people making review comments, reviews opening and closing, files being committed to a linked repository, or updates to linked JIRA issues.

Filtering Your View

To filter your view, use the constraint options in the sub-nav and the side panel.

Activity Stream filters

You can also filter the items shown in the Activity Stream. To do this, click one of the options in second layer of tabs, as listed in the table below.

Tab Name	Sub-Nav Options
Activity Tab	Sub-Nav Options: • **All Activity** — Shows all activity with no filtering. • **Commits** — Shows commits. • **Reviews** — Shows reviews. • **Issues** — Shows JIRA issues. • **Show/Hide My Activity** — Show/hide your own activity. • **Show/Hide Revisions** — Show/hide activity from other users. • Earlier / Later Activity (arrow buttons) — Pages through activity items, stepping backward or forward through the results.
Reviews Tab (Shows the result of the filter clicked in the left side panel)	Sub-Nav Options: **RSS** — Opens a page with the RSS feed for the current selection.
Favourites Tab (Shows all items you have marked as a 'favourite'.)	Sub-Nav Options: None.

Side Panel

The left navigation panel of the Dashboard shows the number of reviews in different states. Click on any of these states to show the list of reviews in the left-hand panel.

To Review	Reviews where the user still needs to complete their work.
Require My Approval	The user has been assigned the role of moderator for these reviews and needs to approve them.
To Summarize	The user has been assigned the role of moderator for these reviews and needs to summarise and close them.
Out For Review	Reviews created by the user that are currently in progress.
Drafts	These are reviews created by the user that have not yet been moved to the 'Approval' or the 'Require Approval' states.
Open	All open reviews that the user is participating in.
Closed	These are reviews that the user has been involved in and are now closed.
Abandoned	Reviews that are no longer relevant and can be deleted.

The '**All Activity**' tab only shows your activity until you start adding respositories, directories or users to your favourites.

Browsing Source Files

When FishEye is installed with Crucible, you have the additional **'Source'** tab available in the navigation tabs at the top of the screen.

To view source files, click the '**Source**' tab. The '**Repositories**' view opens, showing summary information if you have multiple repositories set up. Click on the desired repository to view its contents.

The file explorer mode of the source view will open. Here, you can navigate through the repository by selecting files and folders on the tree in the left navigation bar. When you reach a source file, a summary page is shown, displaying recent revisions to the file.

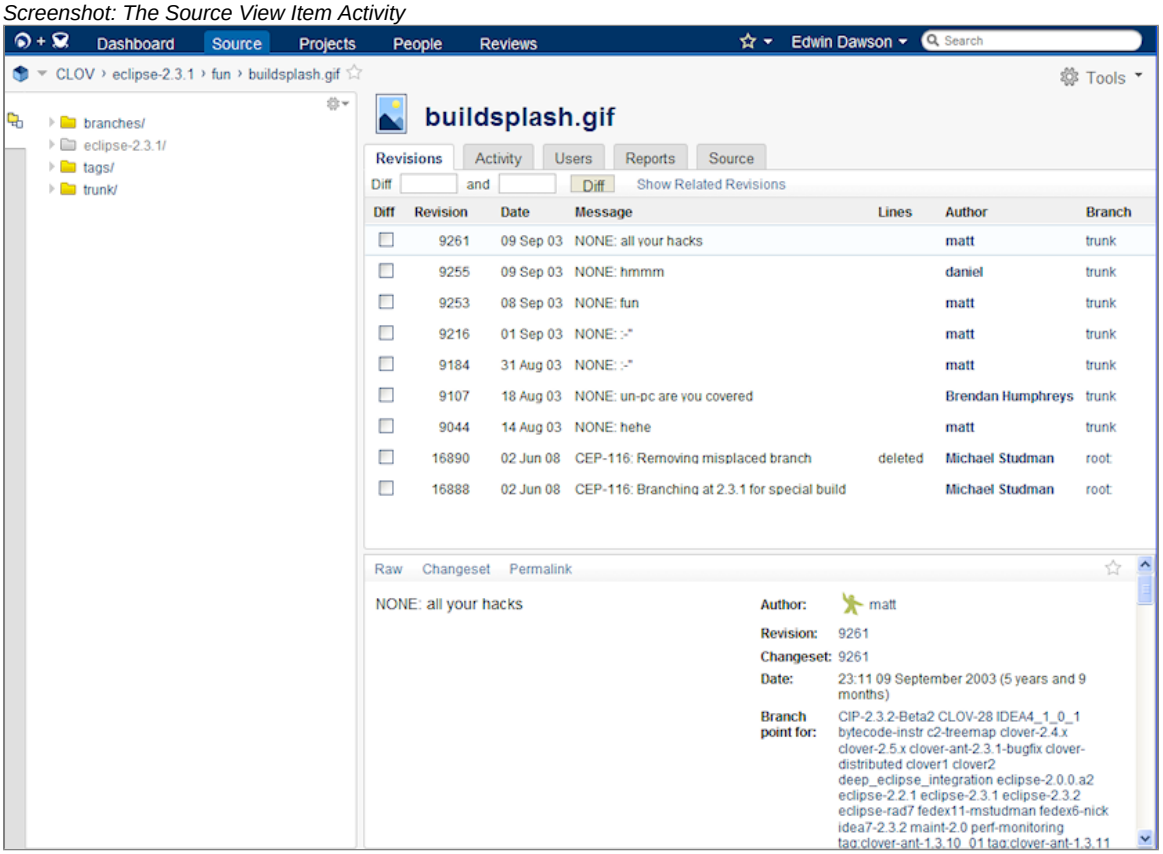
At this file level, there are five sub-tabs you can select. Their functions are outlined in the following table.

Sub-Tab Name	Description
Revisions	When viewing a file, shows the latest revisions of the file.
Files	When viewing a folder, shows the contents of the directory.
Activity	Shows recent activity on the item. There are a number of sub-options here: • All Activity — The default view, showing commits, reviews and JIRA issues. • Commits — Shows commits in the activity stream. • Reviews — Shows review activity in the activity stream. • Scroll to Changeset — Opens the changeset ID specified in the text field (press Enter to carry out the action). • Filter — Applies constraints to the current activity stream. • Show Revisions — If this is selected, then changeset items are automatically expanded to show modified files. • Earlier Activity (Left Arrow icon) — Loads a page of earlier activity. • Later Activity (Right Arrow icon) — Loads a page of later activity.
Users	Shows the commit history of the different users that have committed changes on the item.
Reports	Shows activity charts for the item. Various chart options can be selected in the left navigation bar.
Source	Shows the contents of the file.
Query	Allows you to run an advanced search.

To download files, firstly click through the desired file. From there, you will see a control bar directly above the code content which contains the '**FishEye**' item. Clicking this leads to a drop-down menu where '**Download Raw File**' is available. You can use this to download the file in context only.

Screenshot: The Repositories View

Screenshot: The Source View Item Activity



Browsing Projects

To browse the content in a project, click the **Projects** tab at the top of the page. The '**Projects**' view opens.

A list of projects will be shown if there is more than one. Click the name of the desired project to open it. The '**Project Activity**' page opens. In the left navigation bar, charts showing overall project statistics are displayed.

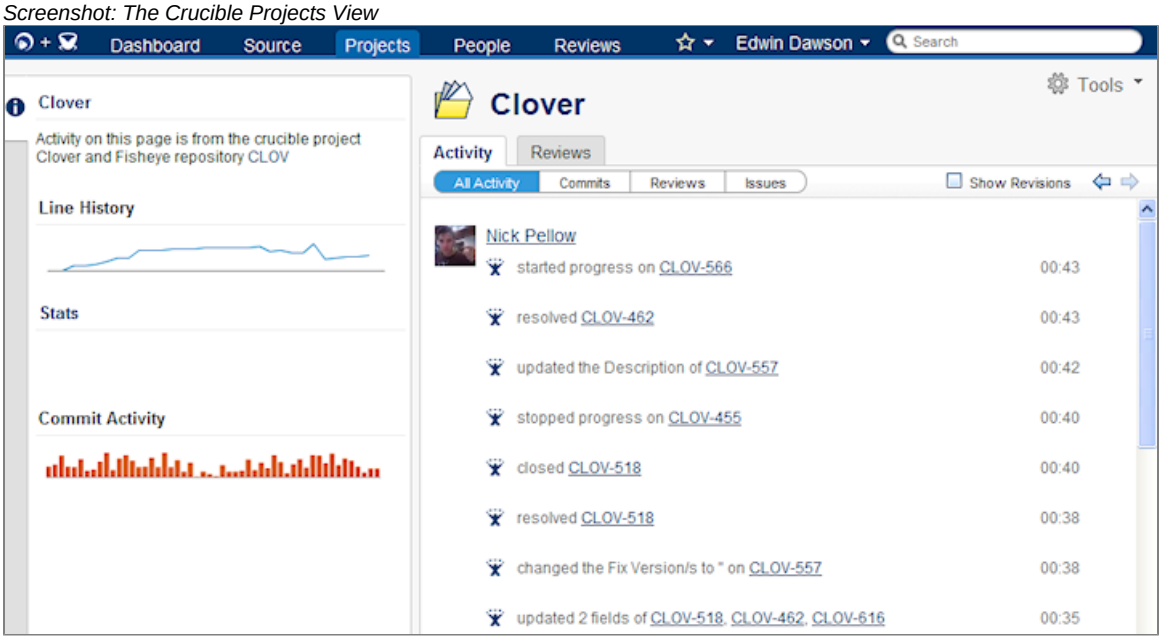
There are a number of sub-tabs on this page, listed in the table below.

Sub-Tab Name	Description

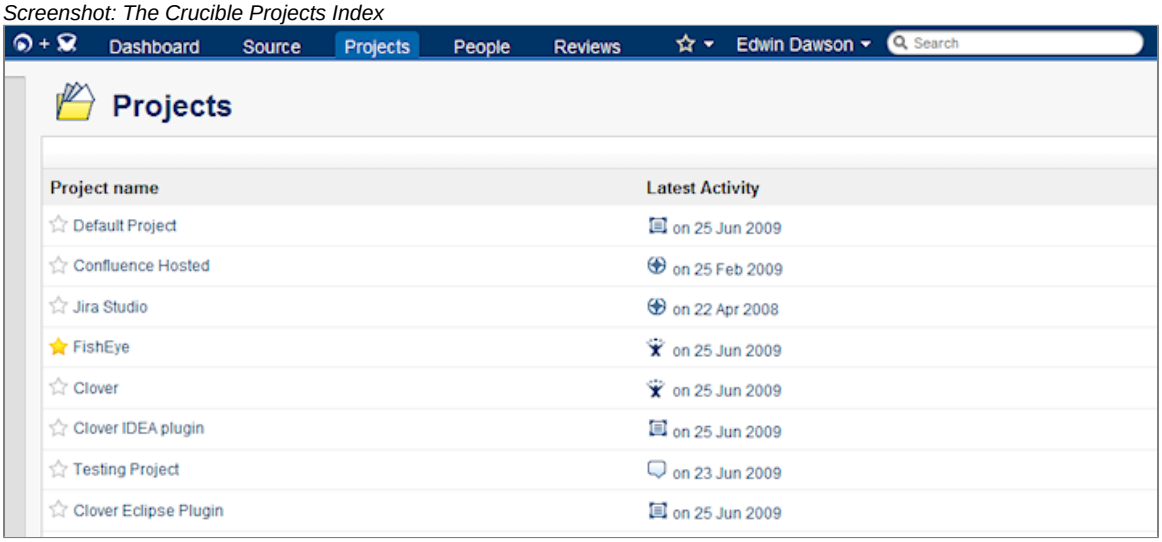
Activity	• All Activity — The default view. • Commits — Shows commits in the project (visible when using FishEye). • Reviews — Shows reviews in the project. • Issues — Shows JIRA issues related to this project. Only visible if you have set up JIRA Integration in Crucible. • Show Revisions — Shows or hides revisions in the project (visible when using FishEye). • Earlier Activity (Left Arrow icon) — Loads a page of earlier project activity. • Later Activity (Right Arrow icon) — Loads a page of later project activity.
Reviews	Shows recent reviews in the project.

The Projects tab is only visible in Crucible. Read more about the definition of a project.

Screenshot: The Crucible Projects View



Screenshot: The Crucible Projects Index



Viewing Project Statistics

This page explains the layout of the Project Summary page.

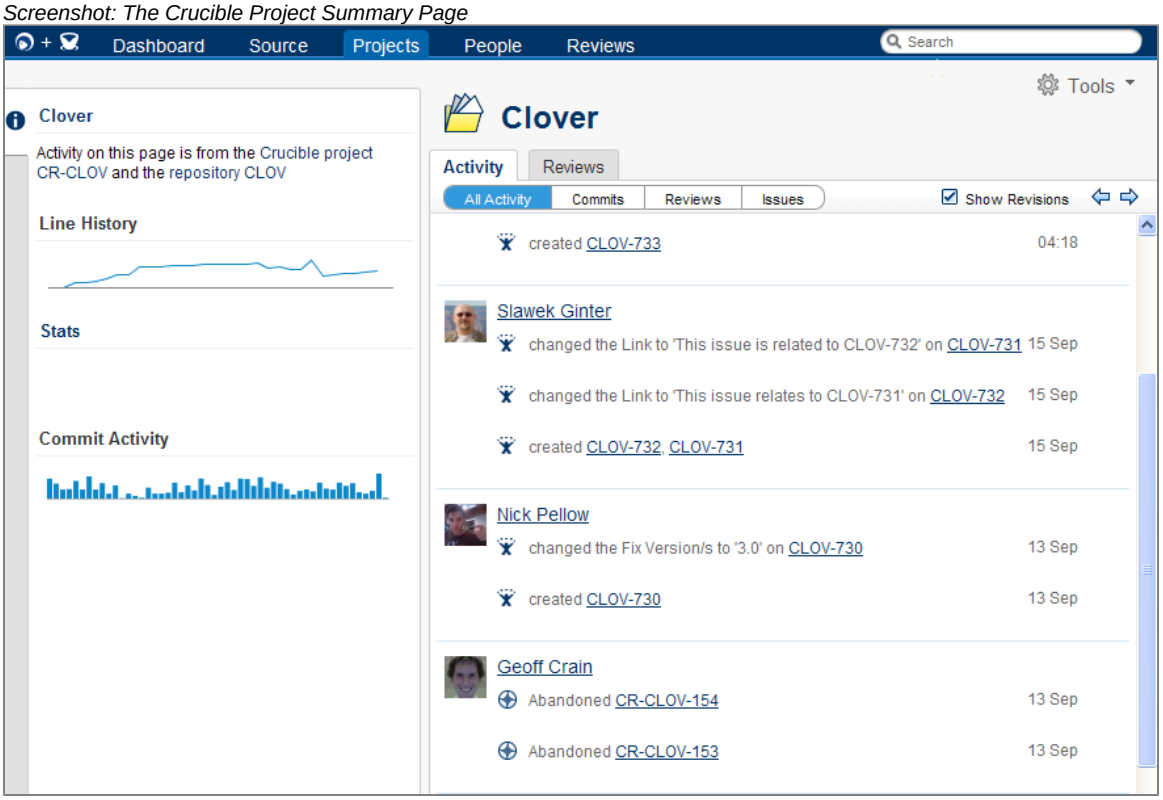
On this page:

- Project Name Panel
- Project Line History Panel
- Project Stats Panel

- Project Commit Activity Chart

When you click through to a Crucible Project from the Projects Tab, the '**Project Summary**' screen opens.

Screenshot: The Crucible Project Summary Page



In the right hand pane, you can see an activity stream relating to this project. In the left hand pane, you can see various statistics charts relating to the project in context. These appear in a reduced size until you click them, when they will expand to show more information.

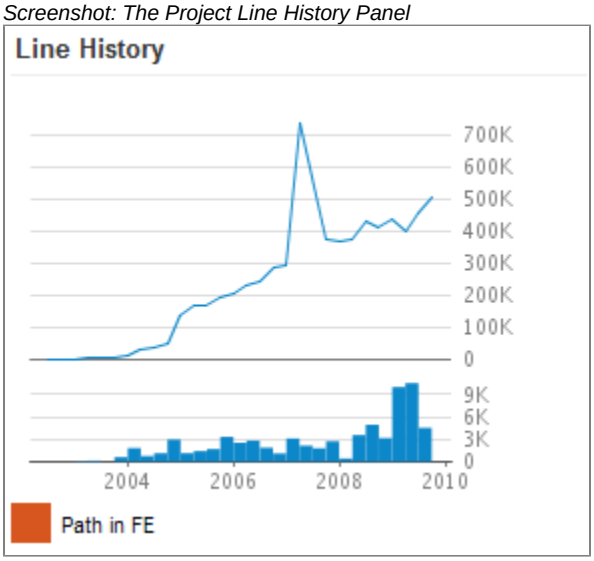
Project Name Panel

This contains a short message explaining which Crucible Project and FishEye repositories are being accessed to show the activity stream on the page.

Project Line History Panel

This panel contains a chart showing the lines of code added to the repository, graphed over time.

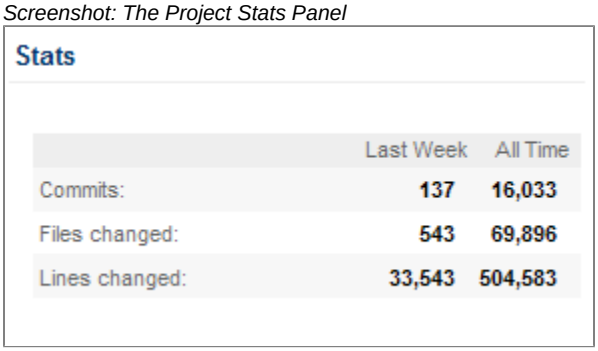
Screenshot: The Project Line History Panel



Project Stats Panel

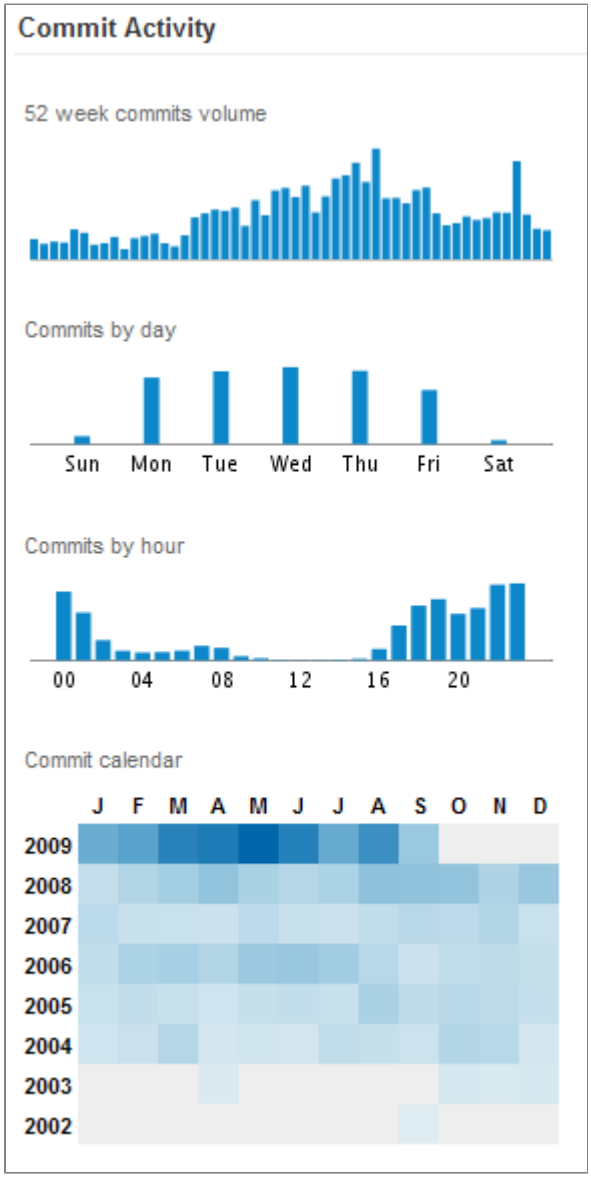
This panel contains a chart showing numerical data for commits, files changed and lines change, graphed over time.

Screenshot: The Project Stats Panel



Project Commit Activity Chart

This panel contains a number of charts:

Chart	Description
	**52 week commits volume** This chart shows the amount of commits, shown by week over a one year period. **Commits by day** This chart shows the amount of commits, graphed by day over the past week. **Commits by hour** This chart shows the amount of commits, graphed by hours over the past day. **Commit calendar** This chart shows the amount of commits (shown as darker colours to indicate more commits) graphed by month, over years that the repository has been running.

Viewing People's Statistics

This page contains instructions on how to use the People tab in Crucible to see charts and activity from people with accounts on the system.

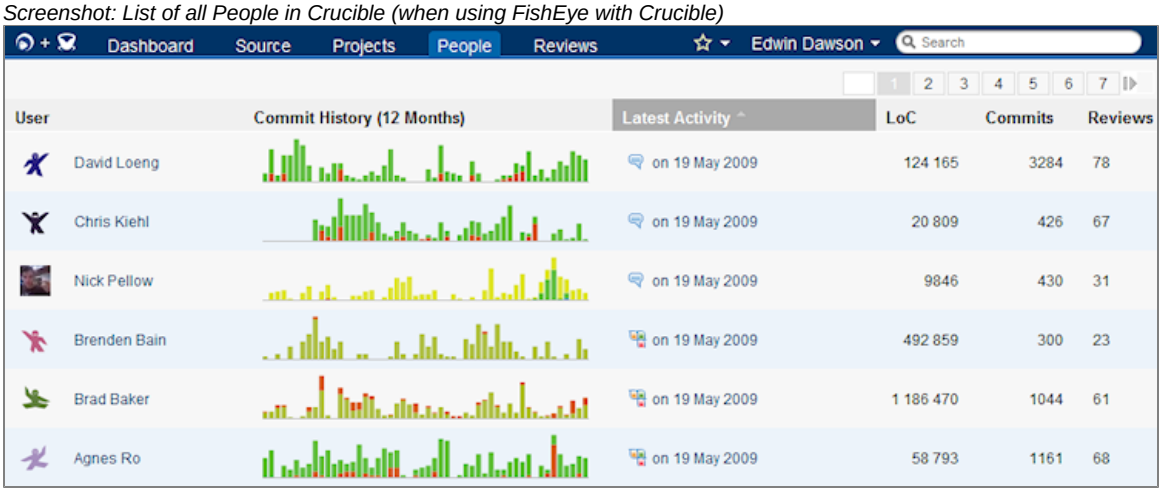
On this page:

- Opening the List of People
- Viewing a Person's Activity Screen
- Viewing Charts on a Person's Activity

Opening the List of People

To view statistics on People in Crucible, (that is, code authors, committers and reviewers) click the **People** tab at the top of the page. The list of all People appears.

Screenshot: List of all People in Crucible (when using FishEye with Crucible)

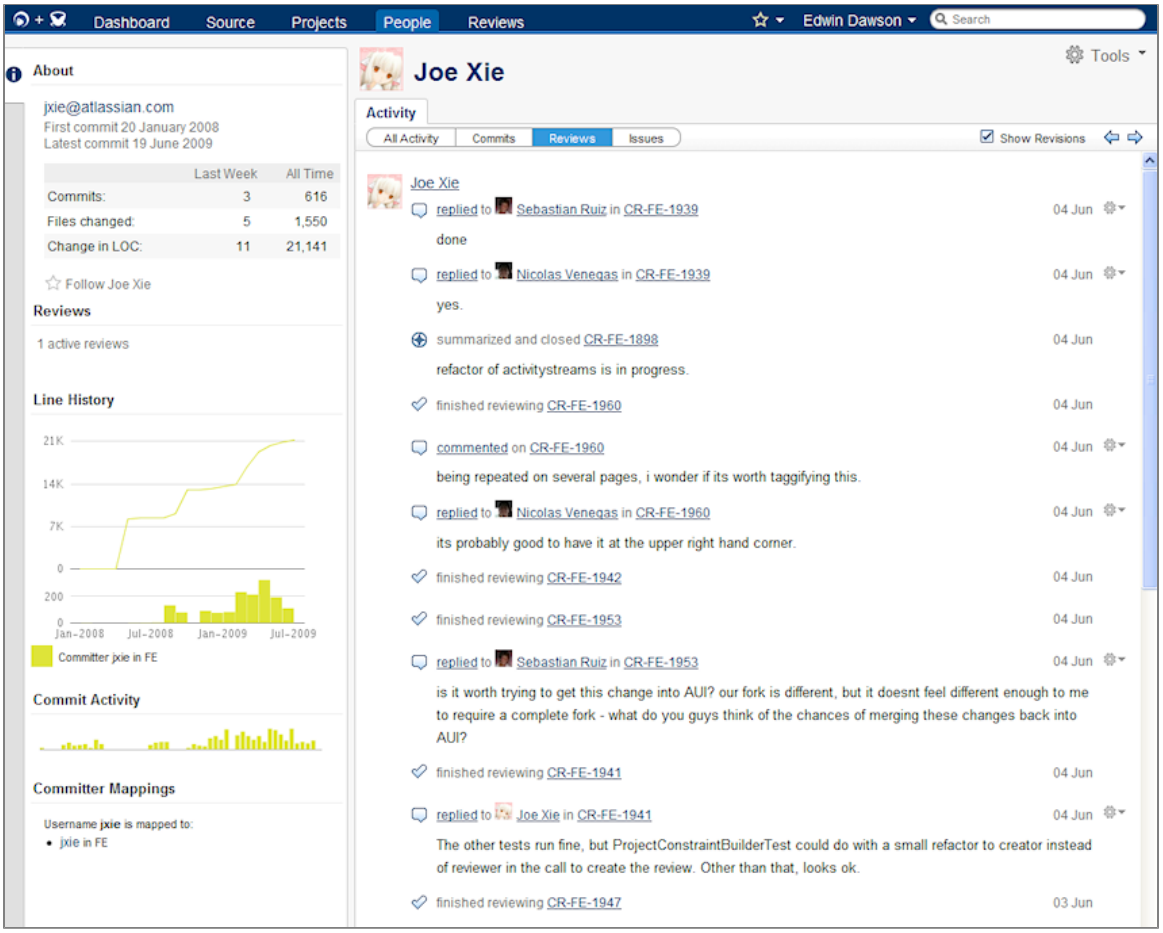


The list of all people shows all users that have accounts on the system. By default, each user has a unique avatar that is randomly formed from the text in their email address. Users can choose to upload their own avatar image by uploading an image to an external service such as Gravatar, which Crucible supports. See the page on Changing your User Profile.

Viewing a Person's Activity Screen

Click on a user to see a listing of activity from them as well as charts showing statistics for their activity. The People Activity screen opens.

Screenshot: The People Activity Screen in Crucible



In the right hand pane, we can see a list of all activity that relates to this user. You can click the icons to view full commit information in FishEye, click JIRA issue names to open the work ticket on an item, click the long button to see the list of files in context or click the star icon to add an item to your favourites.

In the left hand pane, we can see charts around this activity, such as the following: number of active reviews; charted history of lines of code; code committing activity and general statistics.

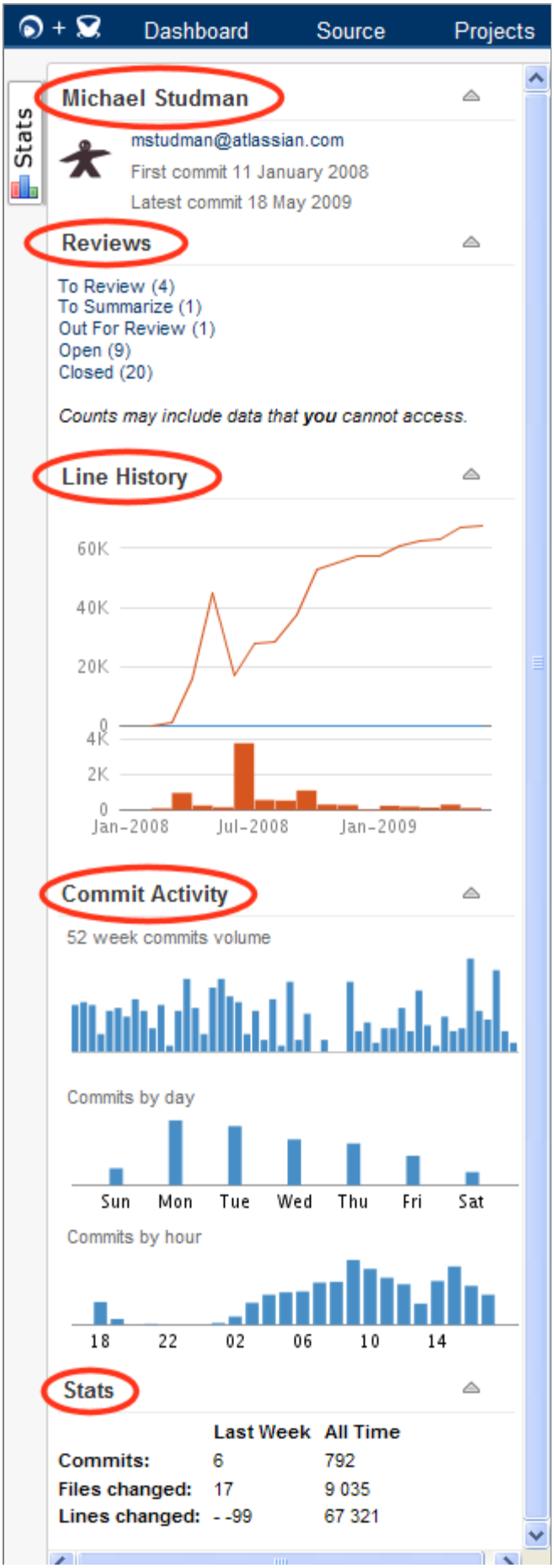
> Some users may not appear to have the correct number of Files Changed or LOC, despite regularly committing. In this situation, if they have committed to a directory which is not covered by the regexes in your symbolic definition (i.e. they have committed to a directory that is neither trunk, branches or tags) then that directory will be counted as part of trunk. Also note that creating tags and branches themselves does not count toward the totals.

Viewing Charts on a Person's Activity

To see information on a person's activity charted in detail, click the headings in the left-hand pane. Each heading will show more information on demand, when clicked. The information available and what it means is listed below.

The Charts in this section are only available when using FishEye.

Screenshot: People Activity Charts in Crucible



- **Username** heading:
  The username section shows the email address, then the first and latest commit dates for the person in context. It also shows username mappings from various systems if they have several usernames in play.

- **Reviews** heading:
  The Reviews section shows several filters that you can click to constrain the review items shown in the right-hand pane. The options are **To Review**, **To Summarize**, **Out For Review**, **Open** and **Closed**.

- **Line History** heading:
  The Line History section shows a graph with the number of lines committed to the repository, charted over time.

- **Commit Activity** heading:
  The Commit Activity section shows three smaller charts; the first showing the volume of commits over a 52 week period; the second showing the relative number of commits on days of the week; the third showing the relative number of commits by the hour of the day when they were lodged.

- **Stats** heading:
  The Stats section shows data points for the previous week and all-time. It shows number of commits, number of files changed and number of lines changed.

Viewing Reports

This page contains instructions on how to use the Reports tab in Crucible to see lists of people whose action is required on open reviews. These are known as 'blockers'.

FishEye Reports:

- Viewing the 'Review Blockers' report
- Viewing the 'JIRA Review Blockers' report
- Viewing the Review Coverage Report

Viewing the 'Review Blockers' report

To view a list of people who have open reviews assigned to them, click the '**Reports**' tab at the top of the page. The 'Review Blockers' report will appear.

Screenshot: 'Review Blockers' Report

User	To Complete	To Summarize
Anna Buttfield	-	13
Brendan Humphreys	-	10
Tim Pettersen	-	6
Edwin Dawson	-	3
James Roper	-	3
Edwin Wong	-	2
Erik van Zijst	-	2
Conor MacNeill	-	2
Alex Wei	-	2
Rosie Jameson	-	1
Peter Moore	-	1
Janusz Gorycki	-	1
Anna Lyons	-	1
Nicolas Venegas	-	1
Don Brown	-	1
Matt Quail	-	1
Ross Rowe	-	1
Marek Went	-	1
Nicholas Muldoon	-	1

You can:

- click a **user's name** to go to their 'Activity' screen.
- click a number in the '**To Complete**' or '**To Summarize**' column to go to the list of reviews waiting to be completed/summarized by the

user.

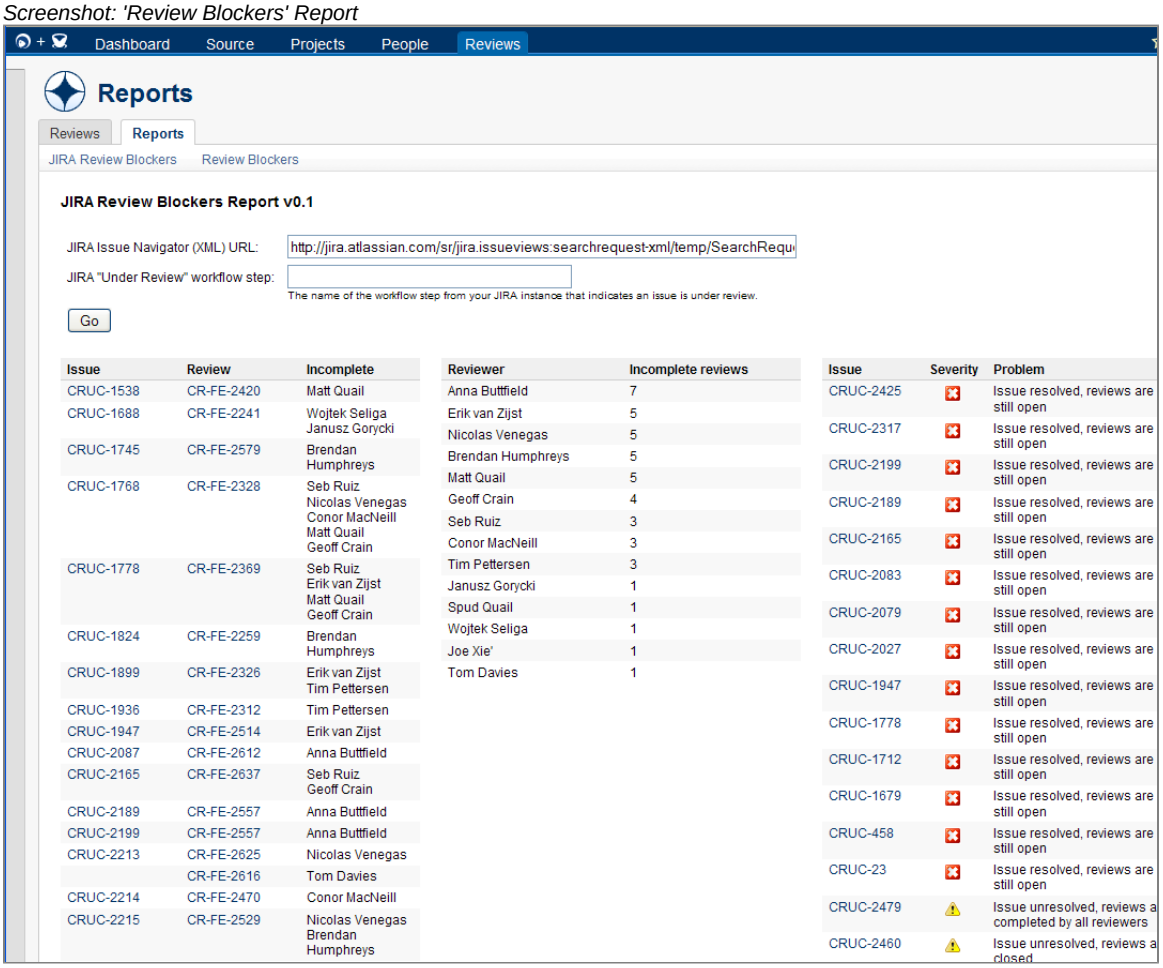
Viewing the 'JIRA Review Blockers' report

The 'JIRA Review Blockers' report shows you a list of users whose action is required on open reviews, for a particular set of JIRA issues. The reviews must be explicitly linked to a JIRA issue or mention a JIRA issue key in the summary or the objectives.

To view the 'JIRA Review Blockers' report:

1. In JIRA,
   a. Click the '**Issues**' tab to search for the issues in which you are interested.
      For more information, see the JIRA documentation on Searching for Issues and Advanced Searching.
   b. On the JIRA '**Issue Navigator**' screen, with your search results displayed, click the '**Views**' menu and select '**XML**'.
      For more information, see the JIRA documentation on Displaying Search Results in XML.
   c. When the XML appears on the screen, copy the URL.
2. In Crucible,
   a. Click the '**Reports**' tab at the top of the page. The 'Review Blockers' report will appear.
   b. Click the '**JIRA Review Blockers**' tab at the top of the report. The 'JIRA Review Blockers' report will appear.
   c. In the '**JIRA Issue Navigator (XML) URL**' field, paste the URL you copied previously.
   d. *(Optional)* If your practice is to set your JIRA issue to a particular Status while its Crucible review is in progress, type the name of the Status in the '**JIRA "Under Review" workflow step**' field.
   e. Click the '**Go**' button. The 'JIRA Review Blockers' report will appear.
      If the report doesn't contain the data you expected, you may need to authenticate (i.e. login) to the JIRA server. For more information, please see the JIRA documentation on Accessing protected data.

Screenshot: 'Review Blockers' Report



The columns in the 'JIRA Review Blockers' report show the following, for the given set of JIRA issues:

- A list of JIRA issues for which one or more Crucible reviewers has not completed their review.
- A list of users who have an incomplete Crucible review that relates to a JIRA issue.
- A list of open JIRA issues for which a Crucible review is closed, and vice versa.

Review Coverage Report

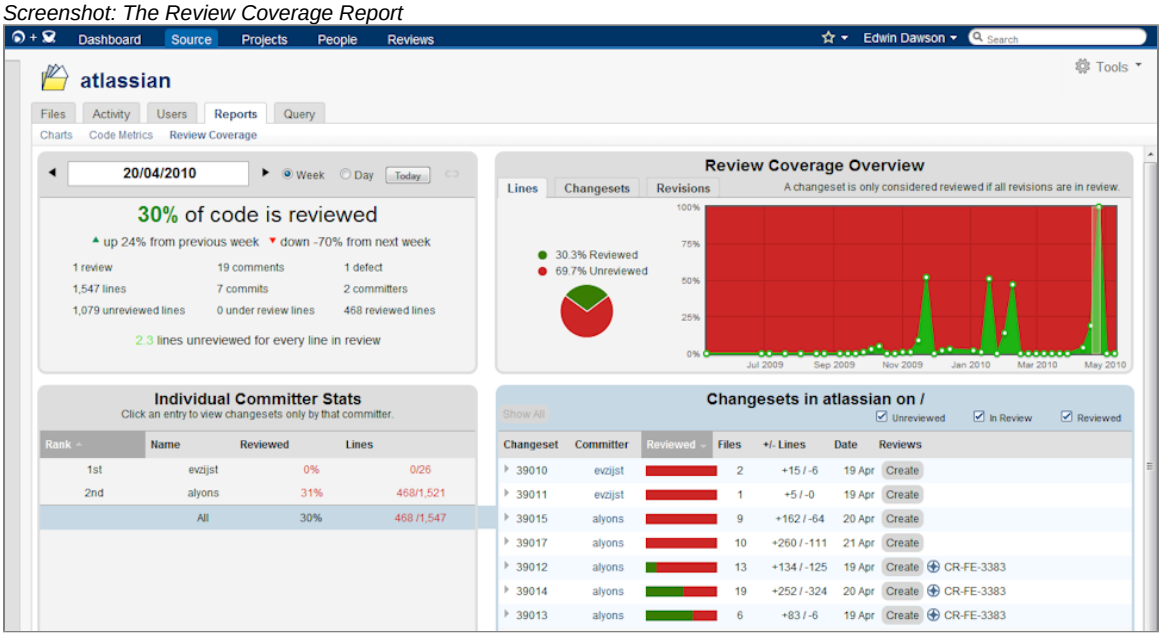
Crucible has useful reports that show you detailed statistics on review activity. The '**review coverage**' report allows you to see how much of the code in your repository has been reviewed, which files and when. You can also access the reviews.

This feature requires FishEye combined with Crucible.

On this page:

- Opening the Review Coverage Report
- Using the Summary Panel
- Using the Review Coverage Overview
- Using the Individual Committer Statistics Panel
- Using the Changesets Coverage Panel

Screenshot: The Review Coverage Report



Opening the Review Coverage Report

To open the Review Coverage Report:

1. Click the Source tab.
2. Select your repository. The repository you've chosen will set the scope for the Coverage Coverage report.
3. If desired, navigate down the tree to the desired path you want to view coverage on.
4. Click the Reports tab in the secondary toolbar.
5. Select '**Review Coverage Report**' from the list of reports in the upper panel.

You can view coverage of any path by navigate down the tree to the desired path you want to view coverage on, before clicking on the '**Reports**' tab.

Using the Summary Panel

The summary panel shows some choice metrics from your Crucible instance. The following information from your repository is arrayed:

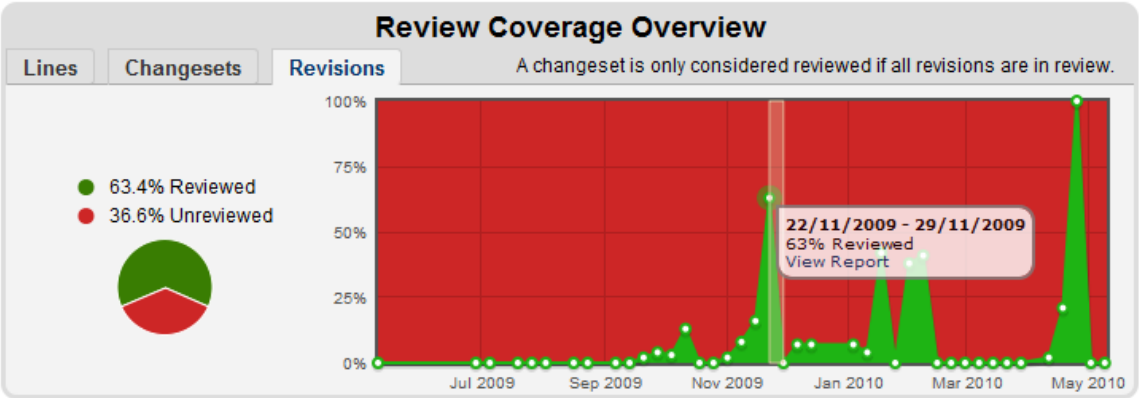
- Overall review coverage percentage.
- Change in review coverage percentage since the last reporting period.
- Total number of reviews.
- Total number of comments.
- Total number of reported defects.
- Total number of Lines of Code (LOC).
- Total number of commits.
- Total number of committers.
- Total number of unreviewed lines.
- Total number of lines under review.
- Total number of reviewed lines.
- A ratio of the number of lines unreviewed against reviewed Lines of Code (LOC).

Screenshot: Summary Panel in the Review Coverage Report

Using the Review Coverage Overview

The Review Coverage Overview shows a timeline of reviews, compared against their percentage of coverage. Hover your mouse cursor over the data points on the graph to see granular information and click through to a detailed weekly report.
You can click the tabs to view the coverage expressed as a percentage of lines of code, changesets or revisions.

Screenshot: Overview Panel in the Review Coverage Report



Using the Individual Committer Statistics Panel

The Individual Committer Statistics window lets you choose a user from your Crucible instance and see all the changesets by that committer.

Screenshot: Individual Committer Statistics in the Review Coverage Report

Individual Committer Stats

Click an entry to view changesets only by that committer.

Rank	Name	Reviewed	Lines
1st	mwatson	100%	84/84
2nd	alyons	100%	67/67
3rd	amyers	100%	2/2
4th	sruiz	97%	1,140/1,178
5th	nvenegas	82%	266/326
6th	ahempel	61%	94/155
7th	csharkie	91%	664/731
8th	mquail	0%	0/154
9th	abuttfield	79%	659/833
10th	cmacneill	1%	2/187
11th	gcrain	58%	408/706
12th	tdavies	26%	306/1,182
	All	66%	3,692/5,605

Using the Changesets Coverage Panel

The Changesets Coverage Panel lets you see changesets from your Crucible instance (for the time period of the report), and their level of review coverage. This information can be sorted by the columns in this view and uses colour coding to denote review coverage (listed in the table below).

Colour Key

Colour	State
dark green	reviewed
light green	in review
red	not reviewed

Screenshot: Changesets Coverage panel in the Review Coverage Report

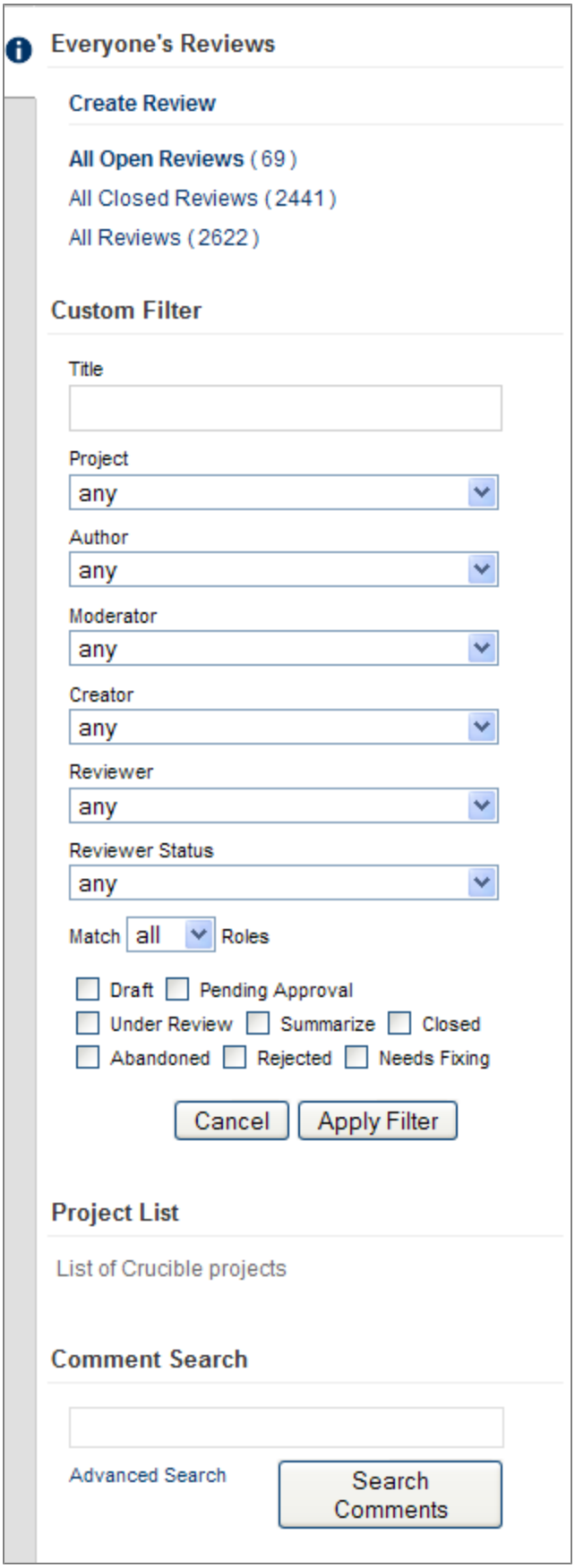
Searching in Crucible

This page contains instructions on how to use the **Reviews** tab in Crucible to perform searches.

On this page:

- Using the Filters Navigation Bar
  - 'Everyone's Reviews' Filters
  - Custom Filters
  - Review State Filter
  - Comment Search
- Viewing Search Results
  - Review Search
  - Comment Search

Screenshot: Search Filter Options



Using the Filters Navigation Bar

'Everyone's Reviews' Filters

Any reviews (even if the user has not participated in them) that have been created can be viewed, under the '**Everyone's Reviews**' section. The following options are available:

- All open reviews.
- All closed reviews.
- All reviews.

Custom Filters

To find a specific review, use the '**Custom Filter**':

Title	Find reviews by searching for words within the title.
Project	Find reviews under a particular project.
Author	Find reviews moderated by a particular authors.
Moderator	Find reviews moderated by a particular moderators.
Creator	Find reviews created by a particular creator.
Reviewer	Find reviews that are reviewed by a particular reviewer. This will default to the user logged in.
Reviewer Status	This is reliant on the above filter and is used to show reviews that have either been completed by the reviewer, not completed or all reviews.
Match Roles	To use all the above filters, choose '**all**'. To use any of the filters, choose '**any**'.

Review State Filter

You can use the checkboxes below with the above filters or on their own.

Draft	Reviews that are still in 'Draft' state.
Pending Approval	Reviews that have been moved out of 'Draft' state and are now waiting for the moderator to approve.
Under Review	The review is now 'Under Review'.
Summarize	The review is now in 'Summarize' state.
Closed	Reviews that are now 'Closed'.
Abandoned	Any reviews that are no longer relevant and can be deleted.
Rejected	Any reviews that a moderator has rejected.
Review needs fixing	A review will match this filter if the review enters into an undefined state because something went wrong with storing the review state. A moderator can use this filter to find the review and then change the state to something sensible.

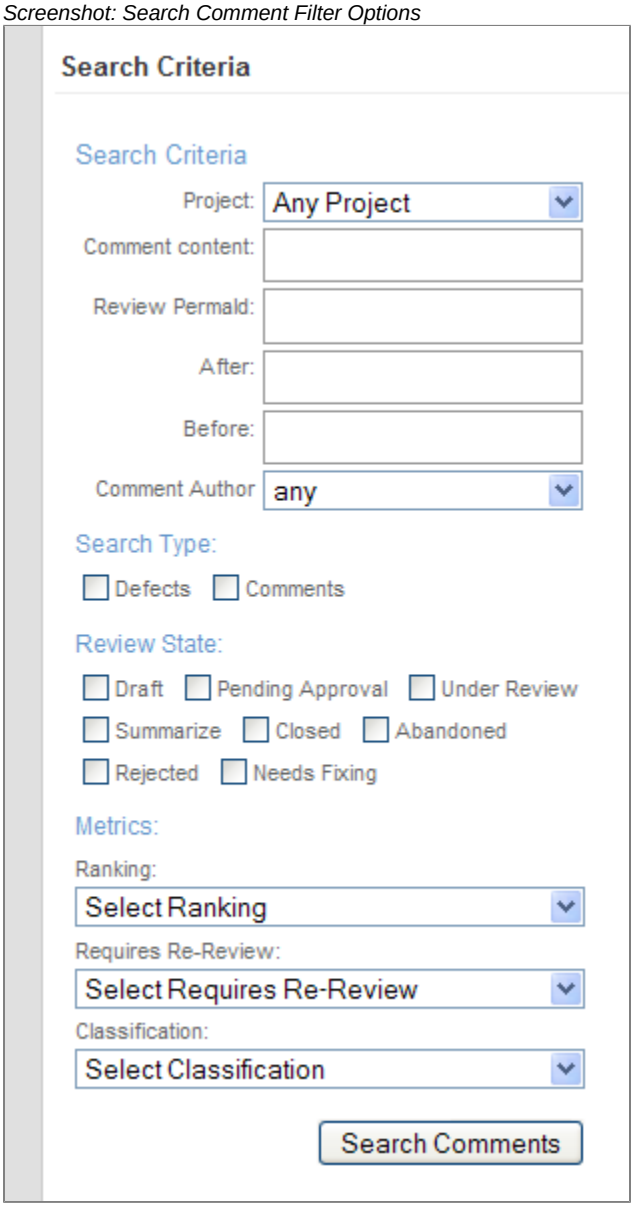
Comment Search

To find review comments that contain particular text, use the '**Comment Search**' box at the bottom of the filters bar. You can also click the '**Advanced Search**' link to display the following comment-filtering options:

Project	Find comments on reviews under a particular project.
Comment content	Find comments that contains the specified text.
Review PermaId	Find comments made on the specified review.
After	Find comments made after after a particular date.
Before	Find comments made after before a particular date.
Comment Author	Find comments made by a particular user.

Search Type	You can: • Tick the '**Defects**' check-box to find comments that are flagged as Defects. • Tick the '**Comments**' check-box to find comments that are not flagged as Defects. • Tick neither check-box (or both of them) to find all .
Review State	Find comments on reviews that are in a particular state. See *Review State Filter* (above).
Ranking	Find defects have been given a particular ranking (e.g. 'Major', 'Minor').
Requires Re-Review	Find defects that have been marked as requiring re-review (or not).
Classification	Find defects that have been given a particular classification (e.g. 'Missing', 'Ambiguous').

Screenshot: Search Comment Filter Options

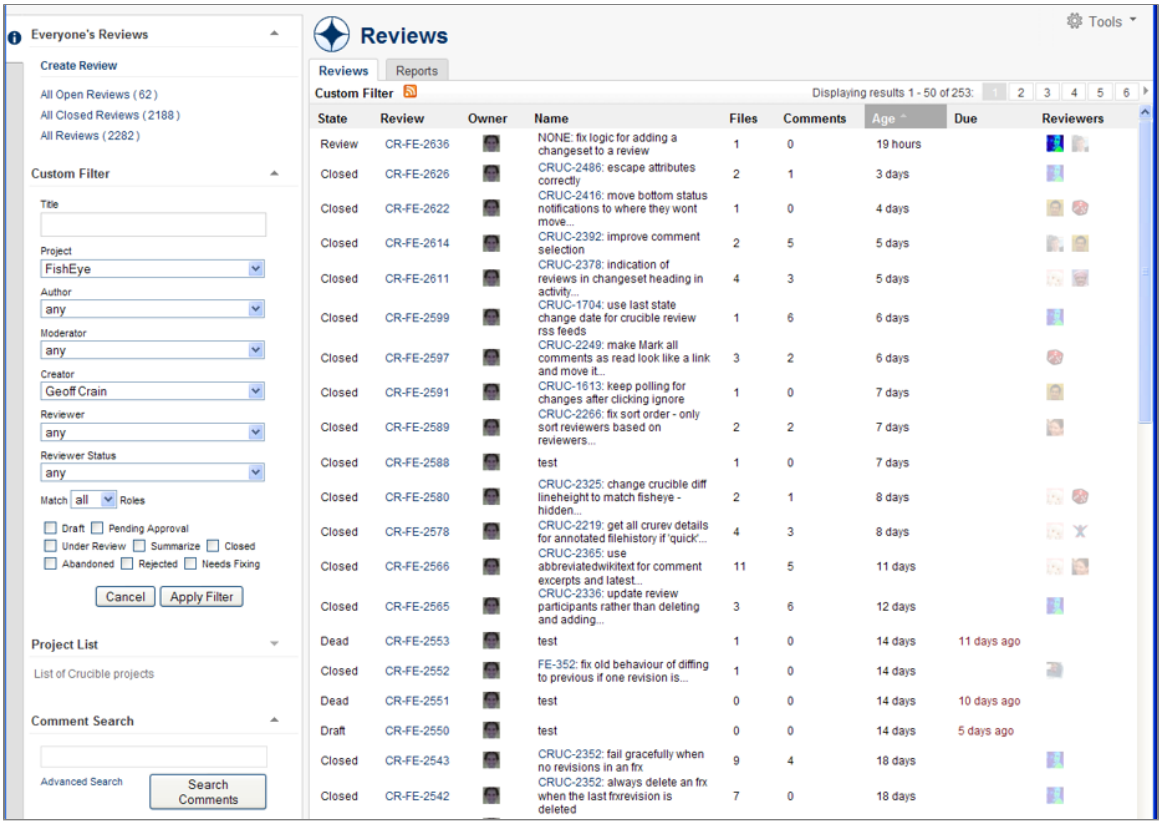


Viewing Search Results

Review Search

The reviews are displayed in descending order of age. You can click any column heading to re-sort the search results.

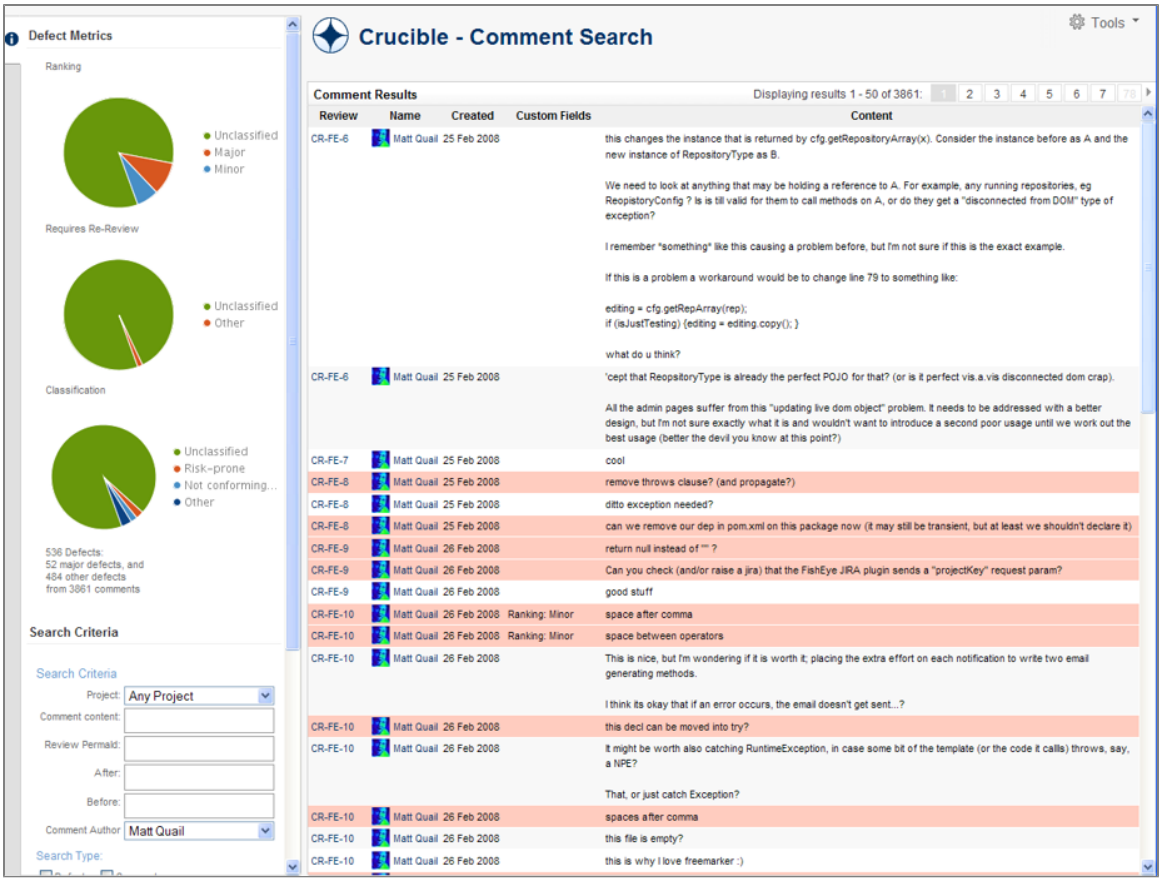
Screenshot: Search Results



Comment Search

The comment rearch results include defect classification charts in the left navigation pane.

Screenshot: Comment Search Results



Crucible Icons

This page contains a list of Crucible icons and an explanation what each one represents in the user interface.

Icon	Description
	View review-level comments
	Go to the previous comment
	Go to the next comment
	Add a comment
	Go to the previous file in this review
	Go to the next file in this review
	Expand all files
	Collapse all files
	A file included in this review
	A directory included in this review

Changing your User Profile

This page contains instructions on user profile settings.

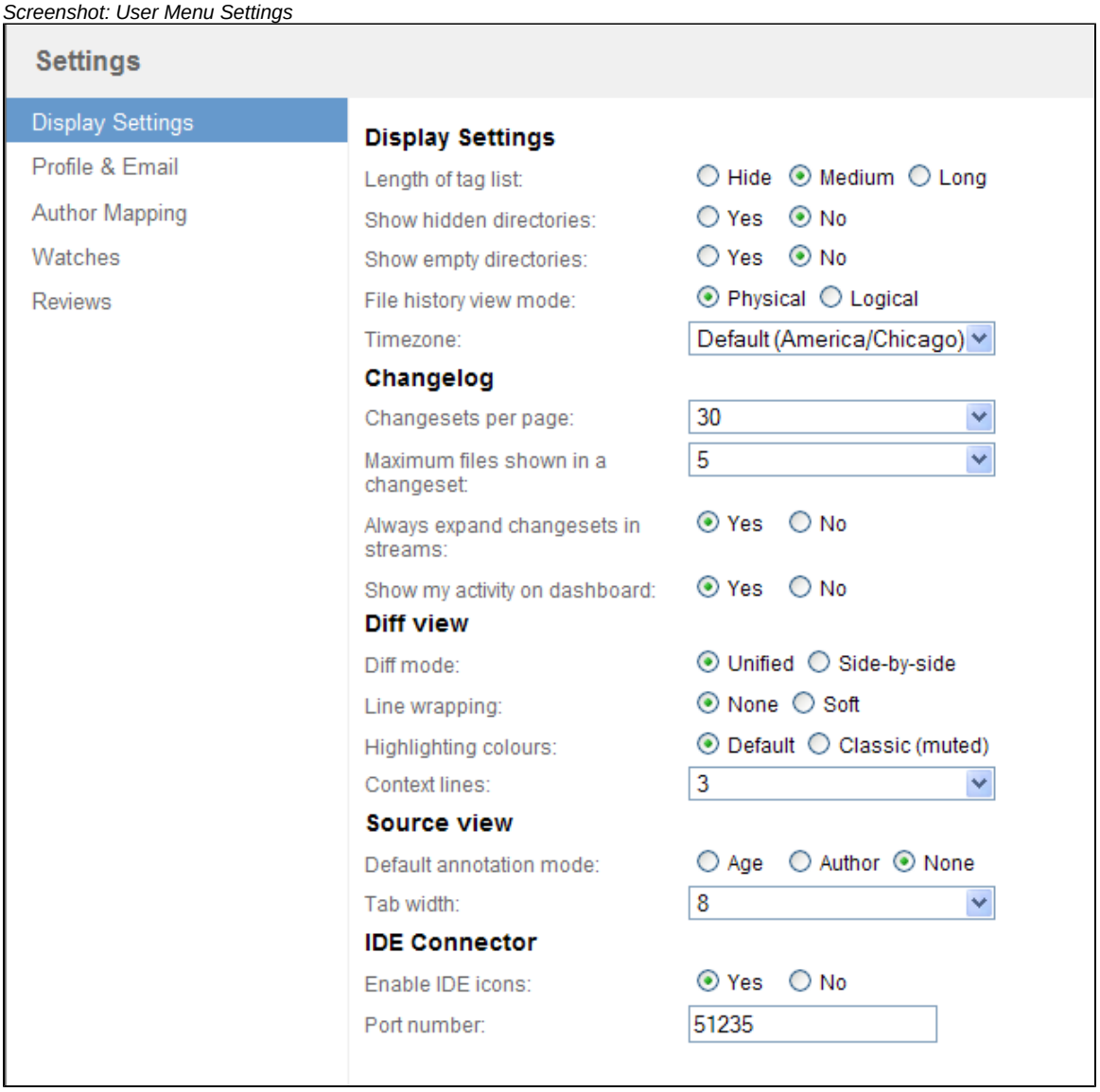
On this page:

- Display Settings Tab
  - Changelog
  - Diff View
  - Source View
  - IDE Connector
- Profile and Email Tab
- Change Password Tab
- Author Mapping Tab
- Watches Tab
- Reviews Tab
  - Reviews Page View
  - Auto-mark files as 'read'
  - Review Notifications Events
- Customising Your User Avatar

Users can change their own account settings such as passwords, watches, email and display settings. These include the user avatar and profile image.

To view your user profile, log into Crucible, and click the User Menu (labelled with your username) at the top of the screen, then select '**Settings**'.

Screenshot: User Menu Settings



Click 'Save'
Always click the 'Save' button after making any changes.

You can change Crucible settings such as password, notifications and display settings.

To change these settings, log into Crucible and click the User Menu (labelled with your username) at the top of the screen, then select '**Settings**'.

Display Settings Tab

The options in this tab allow you to amend the display settings.

Length of tag list	Default is 'Medium'. The option to show the list of tags for a file. This can be changed to show none ('Hide') or all ('Long').
Show hidden directories	Default is 'No'. Do not show the hidden directories within any folder lists.
Show empty directories	Default is 'Yes'. The option to see any empty directories within any folder lists.
File History View Mode	Default is 'Logical'. In Subversion repositories, Crucible is able to show all operations on a single logical file spread across a number of physical paths - i.e. operations in different branches. When this is set to 'Logical', Crucible will show all the operations across all branches. In 'Physical' mode, only the operations related to the physical path whose history is being viewed are shown.
Timezone	Default is the time zone of the Crucible server.

Changelog

Changesets per page	The default is 30 per page. You can also choose 5; 10; 50; or 100.
Maximum files shown in a changeset	Default is 5. You can also choose 10; 20; or 'Show All'.
Always expand changesets in streams	Default is 'Yes'. If you choose 'No', then changesets in streams will be contracted.
Show my activity on dashboard	Default is 'Yes'. If you choose 'No', then your activity will not appear on the dashboard.

Diff View

Diff mode	Default is 'Unified'. Can be changed to 'Side-by-side' to change the way diffs are viewed.
Line wrapping	Default is 'None' i.e. long lines will never word-wrap. 'Soft' is when long lines will word-wrap.
Highlighting Colours	The default colour scheme uses bright colours for highlighting diffs in the code. If you prefer more muted colours, select '**Classic (muted)**'.
Context lines	Default is '3'. You can also choose 'No Context'; 20; 100; or 'Full Context'.

Source View

Default annotation mode	Default is 'Age'. You can also select 'Author' or 'None'.
Tab width	Default is '8'. Can be changed to any value between one and ten.

IDE Connector

Enable IDE icons	Description.
Port Number	Description.

Profile and Email Tab

The settings in this tab allow you to change your email address and your display name.

Display Name	Name displayed for the user currently logged in.
Email Address	The address all email notifications will be sent to.

Email Format	Default is text. Can be changed to be sent as HTML.
Send Watch Emails	Default is 'Immediately'. Can be changed to 'Daily' to receive a digest.

Change Password Tab

Option to be able to change your password if required.

> The passwords are case sensitive.

Author Mapping Tab

The 'Author mapping' tab allows you to make an association between you (as a logged-in user in Crucible) and an author in each repository.

This is only necessary if the name of the user within Crucible is different to the name within the repository. Crucible will by default check to see whether the usernames match.

Watches Tab

> **Add a 'watch' on the Browse, File History or Changelog page**
>
> By adding a 'watch', you can ask to receive emails about changes made to the repository. To add a watch, click on the icon at the top right of any Browse, File History or Changelog page.

The '**Watches**' tab in your Profile allows you to change the frequency at which the 'watch' emails are sent.

- 'Immediately' - the email is sent every time a change is made.
- 'Daily' - you will receive a daily email detailing these changes.

The default is 'Immediately'.

The option to add a watch may only be available if the administrator has enabled watches for the repository.

Reviews Tab

If the SMTP server is set up, then you will receive emails when different actions occur within Crucible.

You can change the options described below, to specify the stages at which emails will be sent.

Reviews Page View

Reviews page view	Default is 'One file visible'. Can also be set to 'All files visible'.

Auto-mark files as 'read'

Auto-mark files as read	Default is 'Yes'. Can also be set to 'No'.

Review Notifications Events

The following options can be set to 'Immediate', 'Batch', or 'No':

State change	Default is 'Immediate'. A Crucible review moves through different states e.g: 'Draft', 'Under Review'. An email is sent when the state changes.
Comment added	Default is 'Immediate'. An email is sent when a comment is added to a review.
Participant finished	Default is 'Immediate'. An email is sent (to the Moderator only) when any reviewer has completed their review.
General message	Default is 'Immediate'. An email is sent when a reviewer is added or removed from a review, after it has gone into the 'Under Review' state.

File revision added	Default is 'Immediate'.

The following options can be set to 'Yes' or 'No':

Uncomplete review if defect is raised	Default is 'Yes'. This allows reviews to be resurrected automatically to deal with new code or defects. Can also be set to 'No'.
Uncomplete review if revision is added	Default is 'Yes'. This allows reviews to be resurrected automatically to deal with new code or defects. Can also be set to 'No'.
My actions	Default is 'No'. If set to 'Yes', an email is sent every time you perform an action on a review.

Customising Your User Avatar

If your administrator has enabled an external avatar server (e.g. Gravatar), you can upload an avatar image of your choice. Note that your login name to the external server must be the email address that is specified in your user profile.

Roles and Status Classifications

This page explains the roles & status classifications in Crucible.

- Roles in Crucible
  - Author
  - Creator/Moderator
  - Reviewer
  - User
- Status Classifications in Crucible
  - Draft
  - Under Review
  - Summarized
  - Closed
  - Abandoned

Roles in Crucible

Author

The *author* is the person primarily responsible for acting on the outcomes of the review. In the vast majority of cases the author will be the person who made the code change under review.

Creator/Moderator

The *creator* is the person who creates the review. In most cases this person will also act as moderator.
The *moderator* is the person responsible for creating the review, approving the review, determining when reviewing is finished, summarising the outcomes and closing the review. By default, the moderator is the creator.

Reviewer

A *reviewer* is a person assigned to review the change. Reviewers can make comments and indicate when they have completed their review. The moderator and author are implicitly considered reviewers.

User

A *user* is a person using Crucible.

Status Classifications in Crucible

Draft

Draft Reviews are not yet completed or released to the reviewers.

Under Review

Reviews Under Review are either waiting for attention by reviewers or waiting to be summarized.

Summarized

Summarized reviews are past the reviewing phase. The moderator can still add conclusions or comments.

Closed

Closed reviews are complete.

Abandoned

Abandoned reviews are 'in the trash'. Reviews must be Abandoned before they can be deleted.

See also the *Glossary of terms* used in Crucible.

Conducting a Review

This page contains links to instructions how to create a review and manage the workflow through its various states to completion. Click on the desired topic to see more information.

- Creating a Review
- Adding Reviewers
- Issuing a Review
- Performing the Review
- Summarising and Closing the Review
- Deleting an Abandoned Review
- Moving a Review to Another Project

For an overview of how to apply a workflow to Crucible, see Defining your Workflow.

For an explanation of the different roles that people play in a review, see Roles and Status Classifications.

Creating a Review

This page explains how to create a Crucible review.

There are a number of ways to create a review. Choose from the list below:

- Creating a Review from FishEye
- Creating a Review from JIRA
- Creating a Review within Crucible
- Creating a Review from a URL
- Creating a Patch Review
- Selecting the Files for the Review
- Creating a Snippet Review

Note that only people with the '**Create**' permission can create a review.

Creating a Review from FishEye

This page explains how to create a Crucible review from FishEye.

On this page:

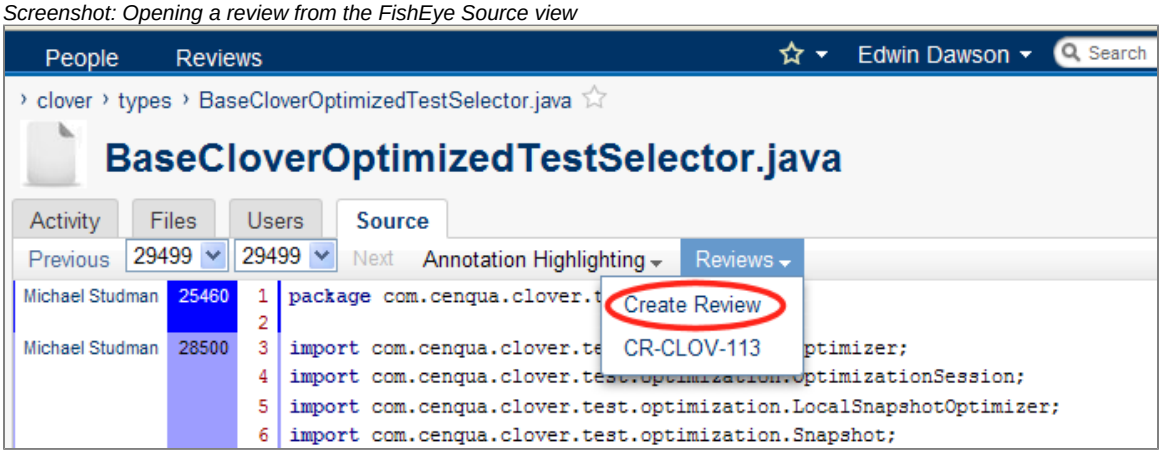
- Opening the FishEye Source View
- Starting the Review
- Choosing a Project
- Selecting Files for Review

Opening the FishEye Source View

To create a review from within FishEye,

To begin, the code author sets up the review. There are a number of ways to do this, but for this example, the author starts from the FishEye Source view of the file he wants to review:

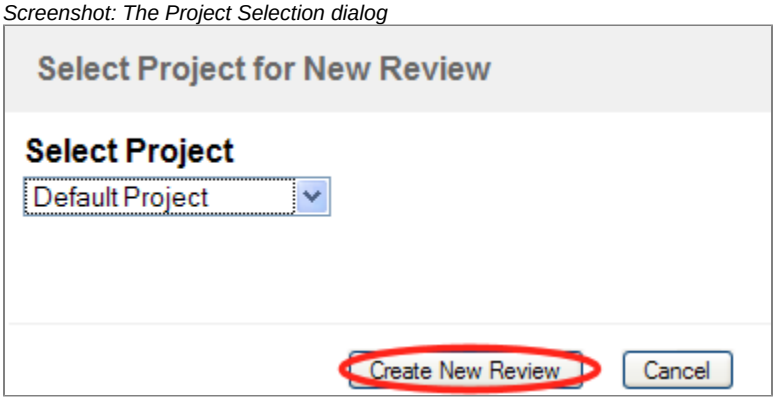
Screenshot: Opening a review from the FishEye Source view



Starting the Review

From the FishEye Source view, the author clicks the '**Reviews**' drop-down menu above the source view, then selects '**Create New Review**'. If there are multiple projects, the Project Selection dialog opens.

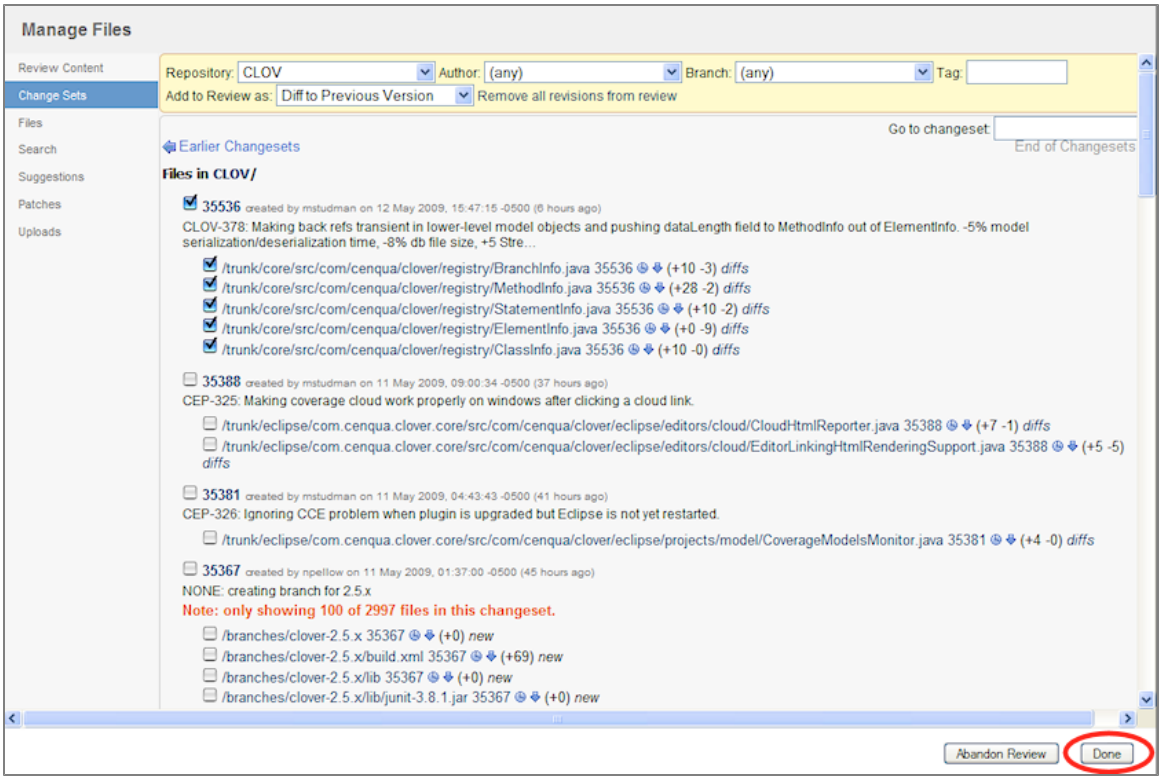
Screenshot: The Project Selection dialog



Choosing a Project

In the Project Selection dialog, you are prompted to choose a project for this review from the drop-down list. Once the selection is made, the author clicks the '**Create New Review**' button. The Manage Files dialog opens.

Screenshot: The Crucible Manage Files dialog



Selecting Files for Review

In the Manage Files dialog, the author selects the source files they want to include in the review, by clicking the checkboxes next to the desired files. Once finished, the author clicks '**Done**'. The Edit Review dialog appears, where the author can create and issue the review.

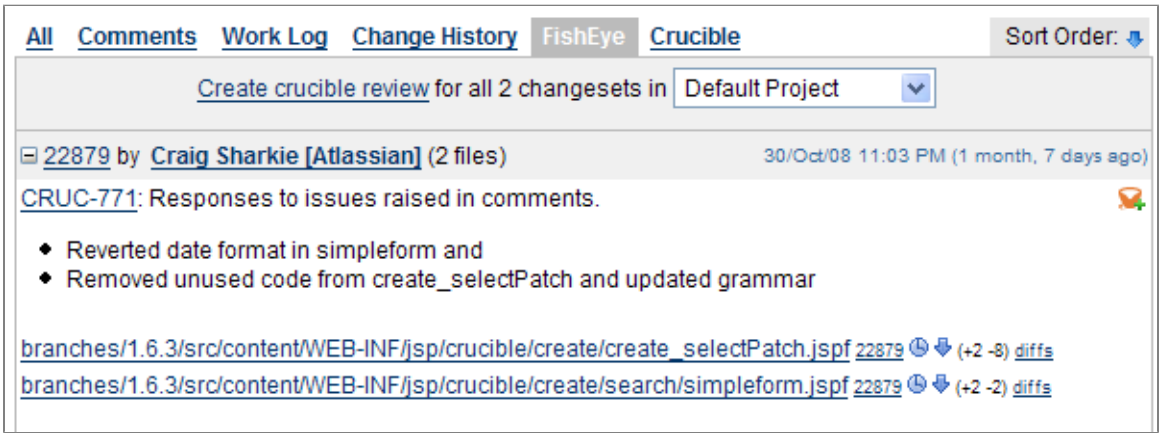
The next step is to add reviewers.

Creating a Review from JIRA

This page explains how to create a Crucible review directly from JIRA, the Atlassian issue-tracker application.

To create a review from within JIRA, click the small Crucible icon next to the required changeset on the '**FishEye**' tab.

Screenshot: Adding a Review from within JIRA



When you click the icon, you will be prompted to select the relevant project(if more than one project exists) in which to create your review. A new draft review will then be created, including the following information pre-filled:

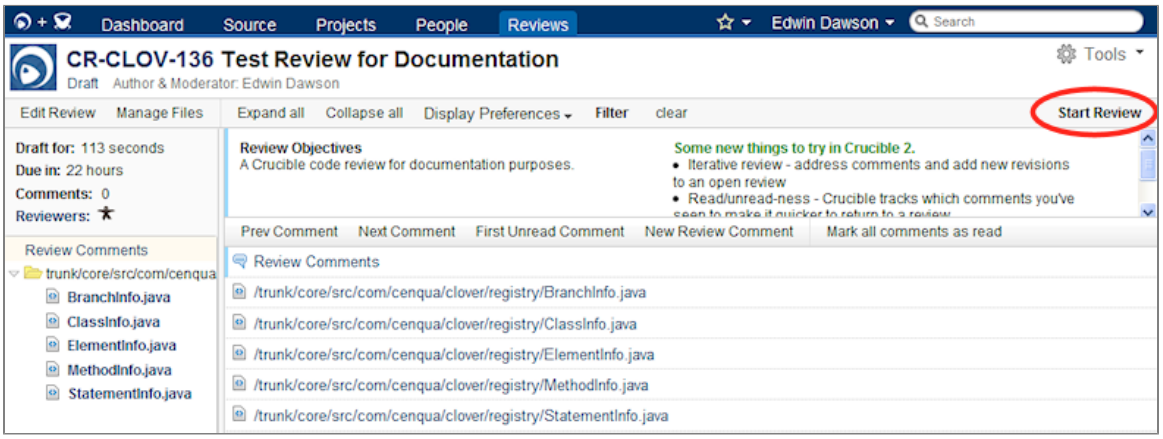
- The content of the changeset becomes the content (i.e. files) to be reviewed.
- The author of the changeset becomes the author of the review, if Crucible is aware of this user. Otherwise the creator of the review becomes the author.
- The creator of the review becomes the moderator.

- The commit log message is used as both the Title and Statement of Objective.

All aspects of the review can be changed. To edit any of the above settings, click the title to see the '**Edit details**' screen. Or you can click the Manage Files tab.

If you click the Crucible icon, you will see the '**Review**' screen below:

Screenshot: Review Screen in Crucible



The next step is to add reviewers.

Creating a Review within Crucible

This page explains how to create a review from the Crucible interface.

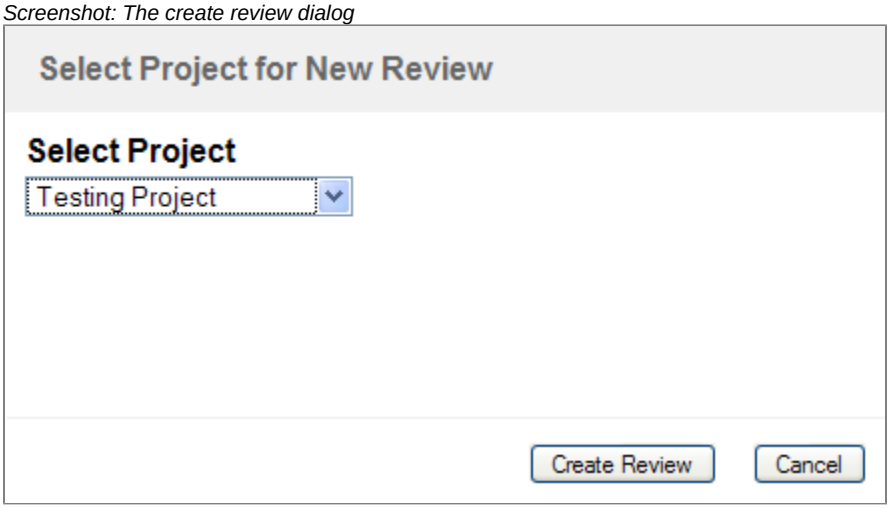
On this page:

- Create a new review
- Choose where your review files will come from
- Add content to the review
- Edit the review details
- Adding an entire directory's contents to a Crucible review

Create a new review

Within Crucible, create a review by opening the **Tools** menu at the top right of the Reviews screen, then clicking **Create Review**. You will be prompted to select the Project for the review (if you have multiple projects). Choose a project and click '**Create Review**'.

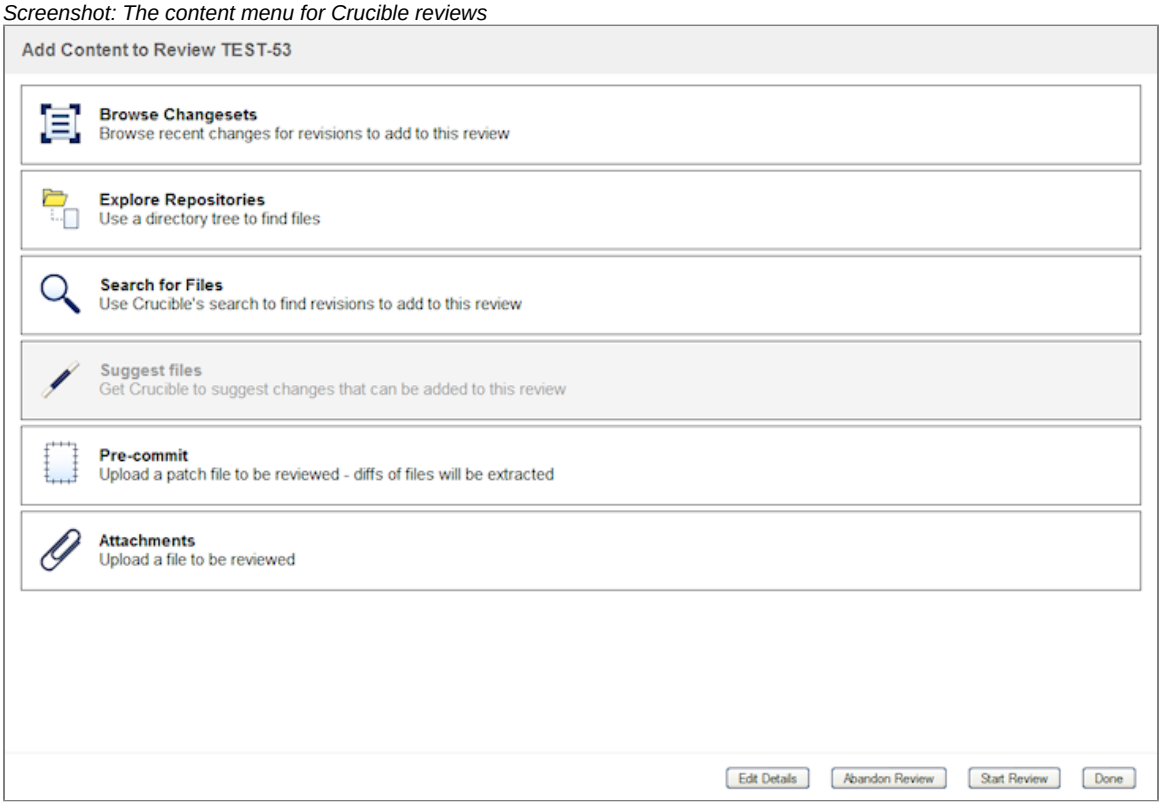
Screenshot: The create review dialog



Choose where your review files will come from

The '**Add Content to Review**' screen appears, where you will now be prompted to choose where your review files will come from. Choose one of the options by clicking.

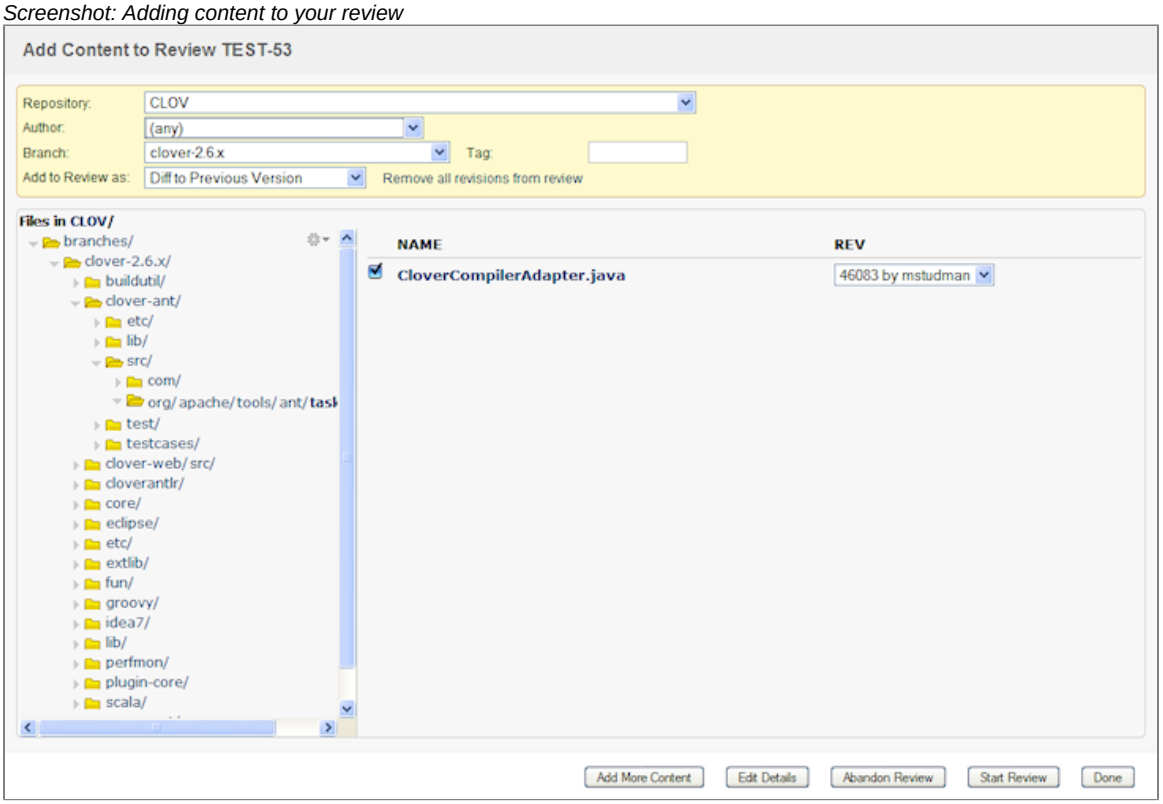
Screenshot: The content menu for Crucible reviews



Add content to the review

Once you select where your review files are coming from, you are prompted to select the files to be reviewed. Check the boxes next to any files you want to add.

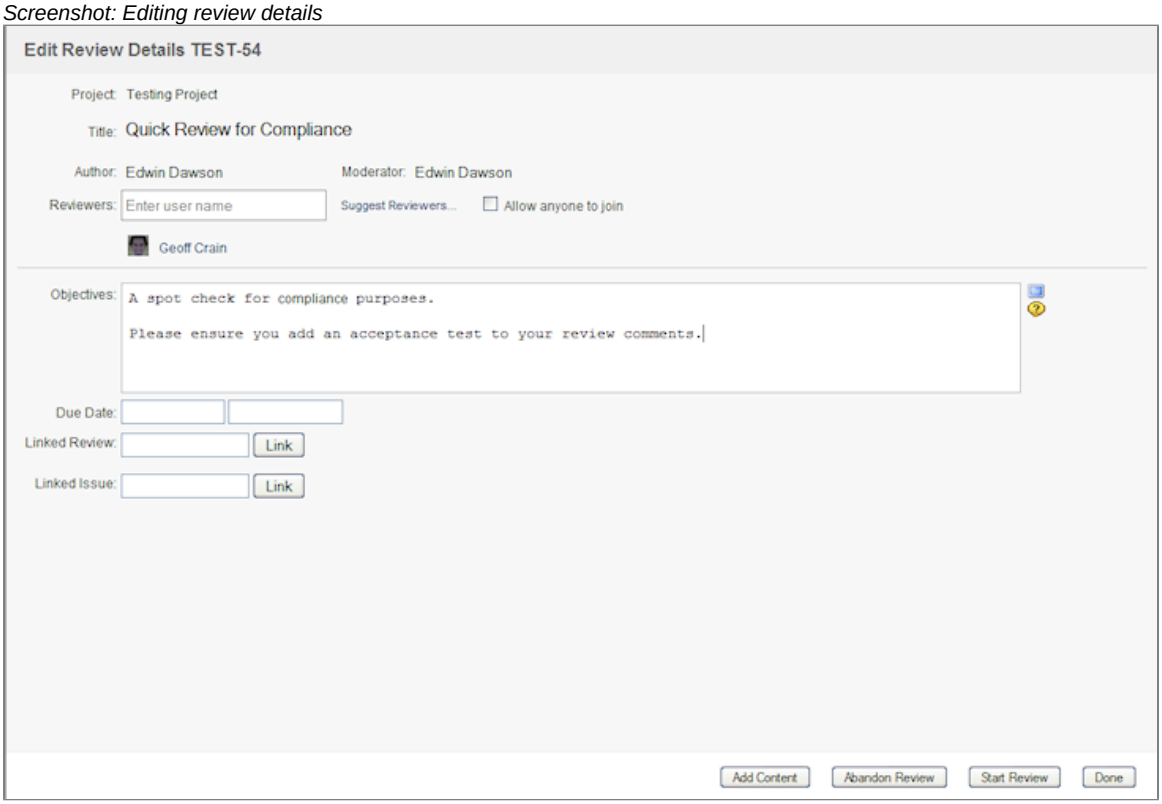
Screenshot: Adding content to your review



Edit the review details

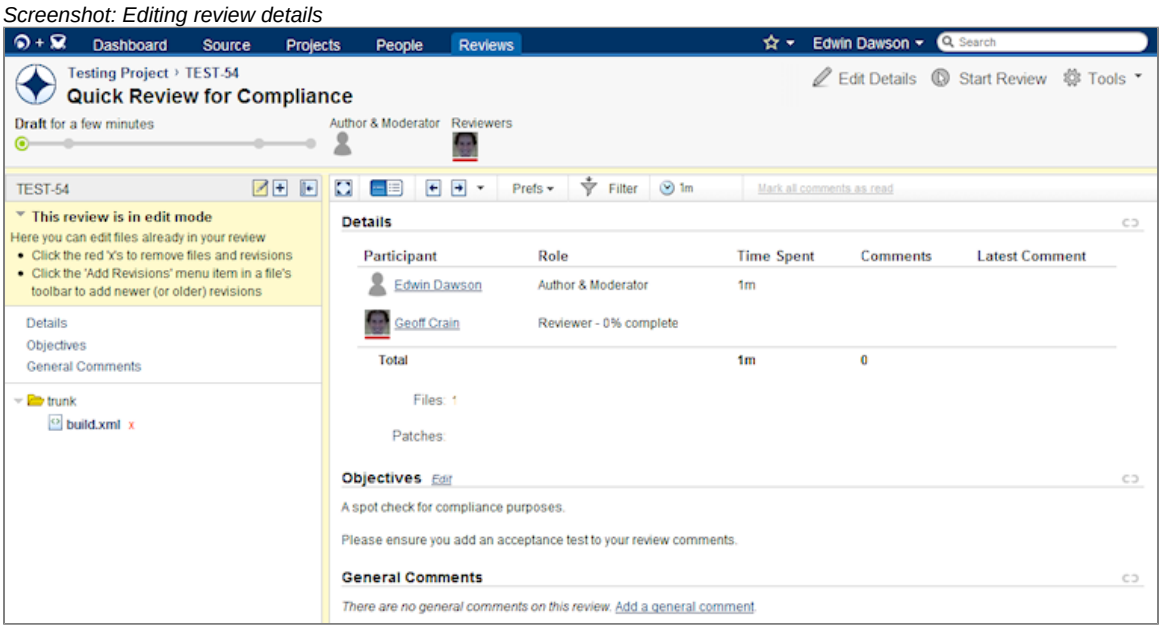
Once you have selected the files, click **Done** to go to the **Edit Review Details** screen, as shown below.

Screenshot: Editing review details



On the **Edit Review Details** screen, you can choose a title, reviewers, objectives, due date, linked reviews and issues. Once you're finished, click '**Done**'.

Screenshot: Editing review details



The review will open in a preview form. Here, you can check all the details and click to edit any that aren't correct. Once you click **Start Review**, the review is live.

Adding an entire directory's contents to a Crucible review

To add an entire directory's contents to a Crucible review, you will need to search to find all the files. For example, using "select revisions from dir /some/dir where is head", or similar logic.

It is currently not possible in Crucible to add all the contents of a directory to a review with one click.

Creating a Review from a URL

You can set up a URL which you can then click to create a Crucible review.

The format of your URL is as follows:

```
http://localhost:8060/cru/create?csid=%2F%2F&repo=a%2F1234&csid=%2F%2Frepob%2F7583
```

The parameters are as follows:

Parameter	Description	Required?
csid	The changeset ID. You can specify one or more, of the form //repo/csid (where '%2F' is the URL-encoded form of is '/')	Yes
repo	The name of your repository.	Yes (unless supplied in the csid)
title	The title of your new Crucible review.	No
description	The description of your new Crucible review.	No

When you click the URL, you will be prompted to select the relevant project(if more than one project exists) in which to create your review. A new draft review will then be created, including the following information:

- The content of the changeset becomes the content (i.e. files) to be reviewed.
- The author of the changeset becomes the author of the review, if Crucible is aware of this user. Otherwise the creator of the review becomes the author.
- The creator of the review becomes the moderator.
- The commit log message is used as both the Title (unless you have explicitly defined a title in your URL) and Statement of Objective.

All aspects of the review can be changed. To edit any of the above settings, click the title to see the '**Edit details**' screen. Or you can click the Manage Files tab.

The next step is to add reviewers.

Creating a Patch Review

This page includes instructions on uploading patch files from your repository, how to load them into Crucible to be reviewed and use Crucible's Patch Anchoring to retrieve more lines of context from the original file.

On this page:

- Using Crucible Patch Anchoring to Automatically Add Full Context
- Creating a Patch File From Your IDE
  - Creating a Patch File in IntelliJ IDEA 7.0
    - If You Do Not Have the Create Patch Command Available Under IDEA
  - Creating a Patch File in Eclipse 3.3.1.1
- Creating a Basic Patch File From The Repository Command Line
  - CVS Patch Creation On The Command Line
  - Subversion Patch Creation Via The Command Line
  - Perforce Patch Creation Via The Command Line
- Creating Patches That Include All Lines of Code
  - Creating a Patch in CVS With All Lines of code
  - Creating a Patch in Subversion With All Lines of Code
  - Creating a Patch in Perforce With All Lines of Code

Crucible allows you to review a change before it has been committed. To do this, you upload a patch file to the '**Patch**' tab (or paste it in as text) when creating a review. You must first generate this patch file from your repository, using either commands built into your IDE, or via the repository command-line tools.

To create a patch in Perforce, you must ensure you have set P4DIFF to point to a GNU-compatible diff program.

By default, patch files will only show a few lines of code surrounding each change, rather than the entire file and its changes. Crucible's patch anchoring feature overcomes this limitation.

Using Crucible Patch Anchoring to Automatically Add Full Context

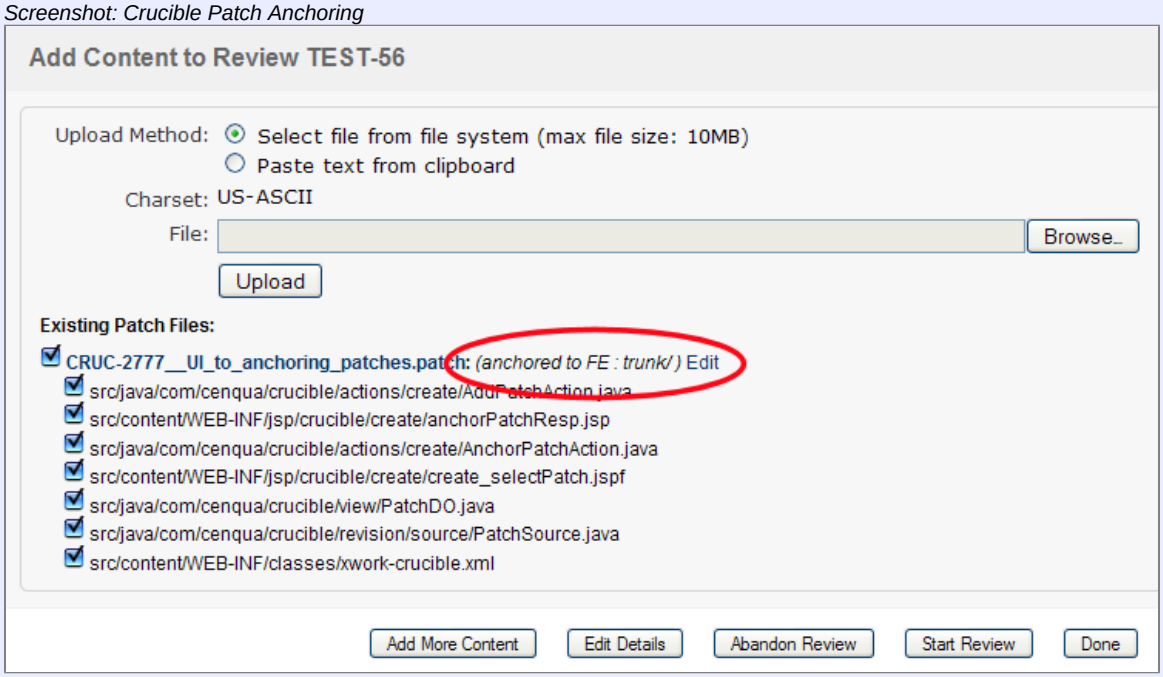
Crucible's Patch Anchoring feature allows you to add a regular patch to a review (showing only a few lines of context. Then, Crucible will automatically search for the relevant file content in the connected repositories. When it finds the files, it will seamlessly add in more context from the file so that you can view all of the lines of code (greatly enhancing the review process).

To use patch anchoring:

1. Create a new review. From the '**Tools**' menu in Crucible, select '**Create Review**'.
2. Click '**Pre-Commit - Upload a patch file to be reviewed**'. The '**patch upload**' dialog appears. Click '**Browse**', locate your file, then click '**Upload**'. Crucible will now search for matches in the files in its database. Crucible will analyse all the paths in the patch, find the branches containing all those paths, then anchor the patch to the trunk or the branch with the most recent commit activity.

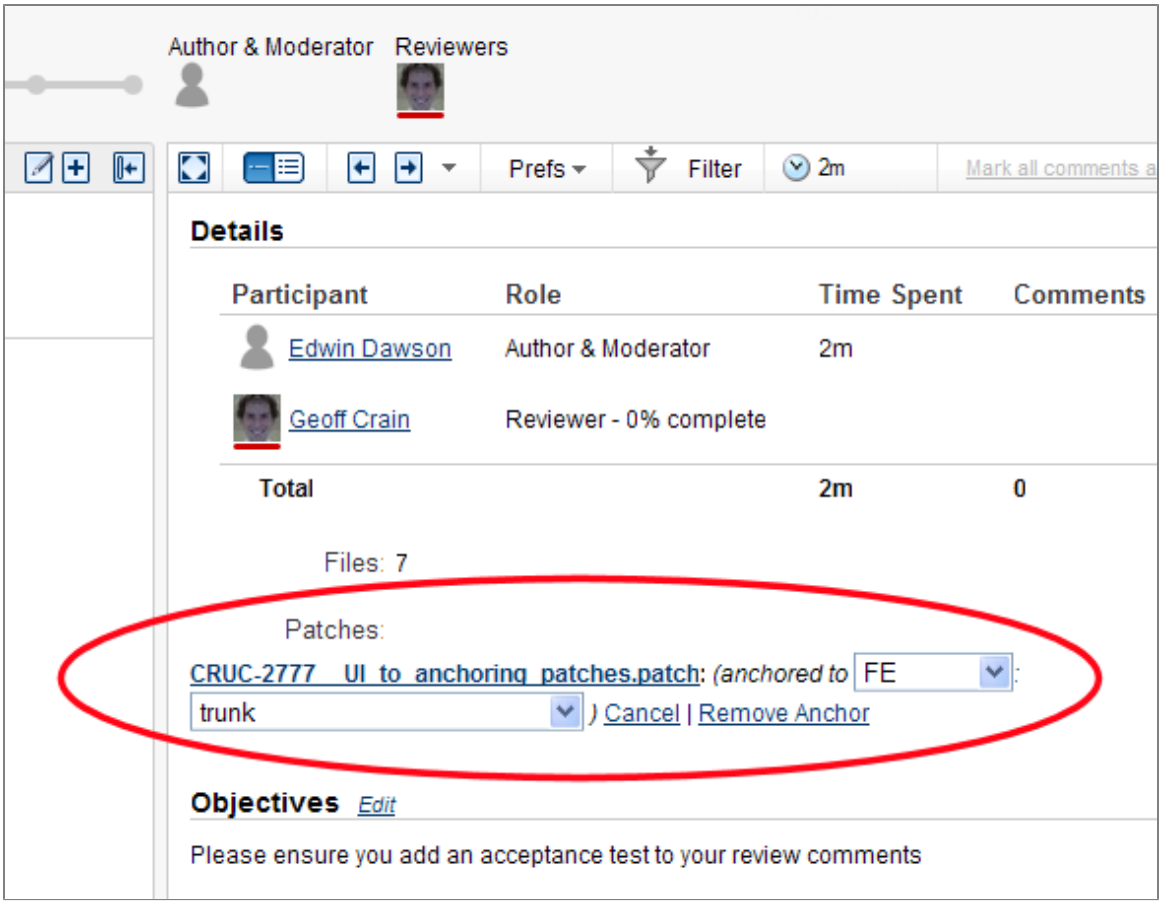
Crucible makes a 'best guess' in its processing – you should check that it has anchored the patch to the correct location in your repository.

Screenshot: Crucible Patch Anchoring

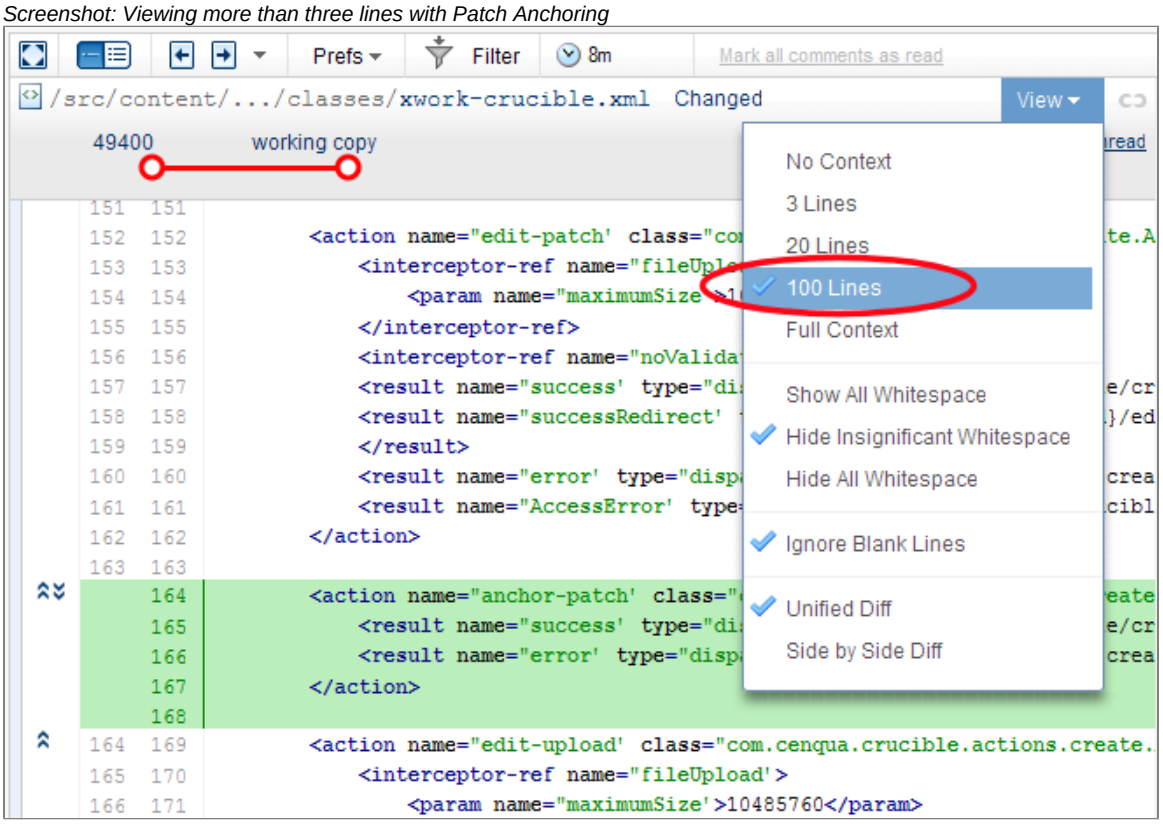


1. You can click '**Edit**' to change the anchoring, by choosing a new match or removing the anchor. You can change the anchoring later, after the review is live.
2. Start the review. When viewing the diffs, you will be able to choose more than three lines of context from the '**View**' menu.

Screenshot: Editing Patch Anchoring Settings



Screenshot: Viewing more than three lines with Patch Anchoring



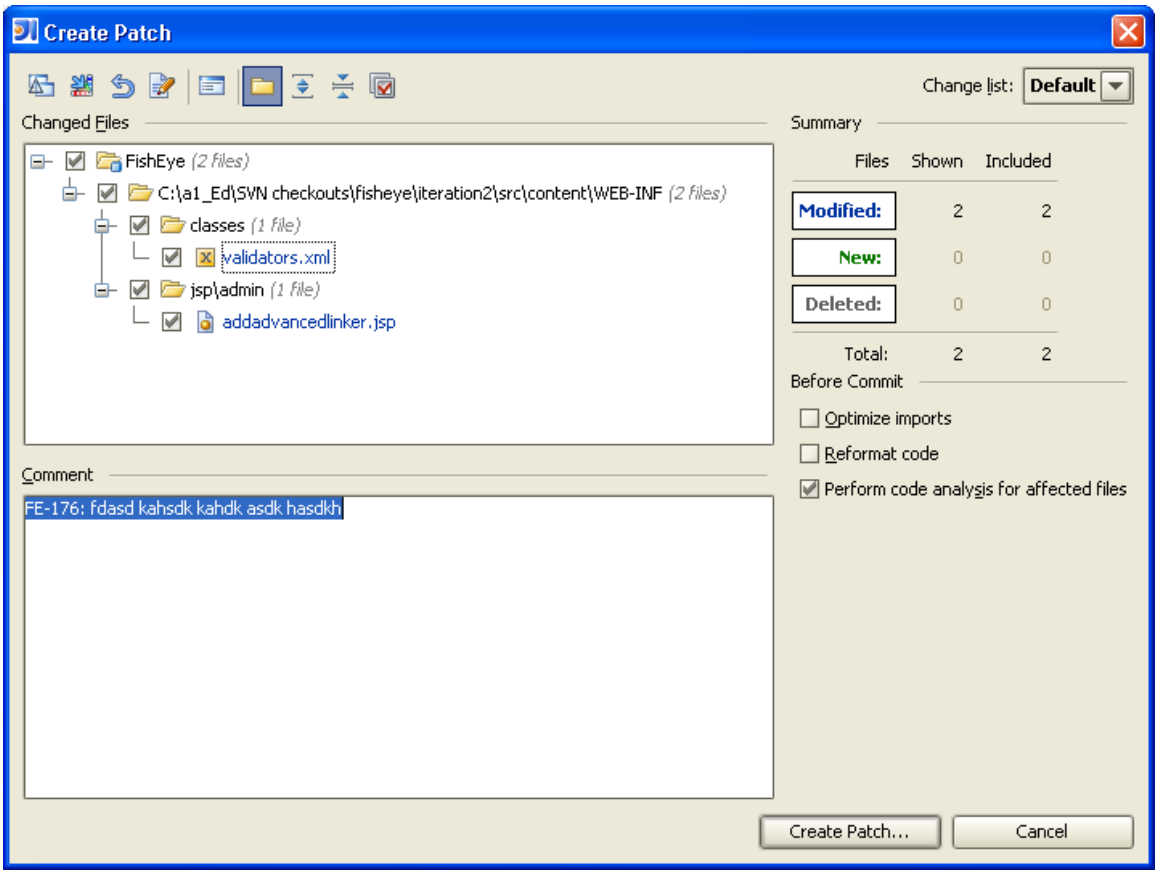
Creating a Patch File From Your IDE

Creating a Patch File in IntelliJ IDEA 7.0

To create a Patch File under IntelliJ IDEA, do the following:

Select a parent folder, sub-folder or file that you have altered in the Project tool window. Select '**Version Control**' > '**Create Patch**'. The following window appears:

Screenshot: The IDEA Create Patch window



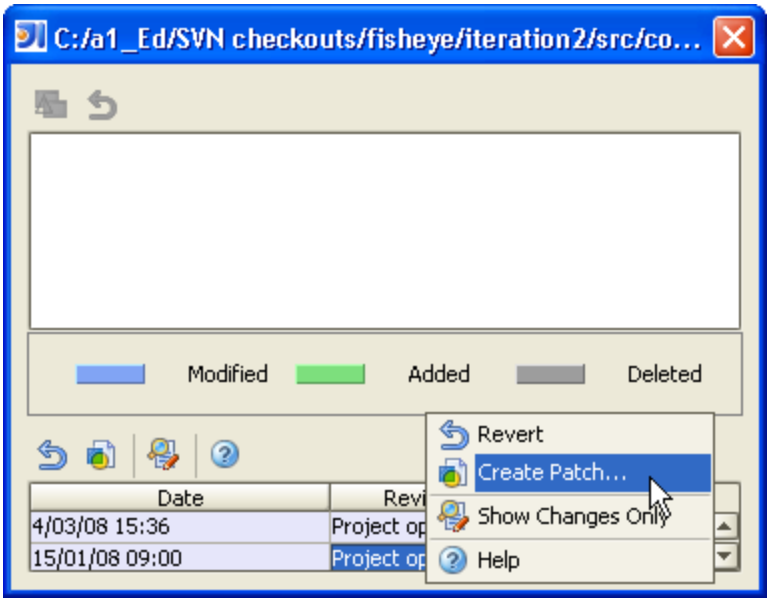
Click '**Create Patch**'. Choose a location to save the patch file and click '**Ok**'.

If You Do Not Have the Create Patch Command Available Under IDEA

If you have not configured version control in IDEA, you may not have the '**Create Patch**' option available. If so, use the following steps to create a patch file in IDEA:

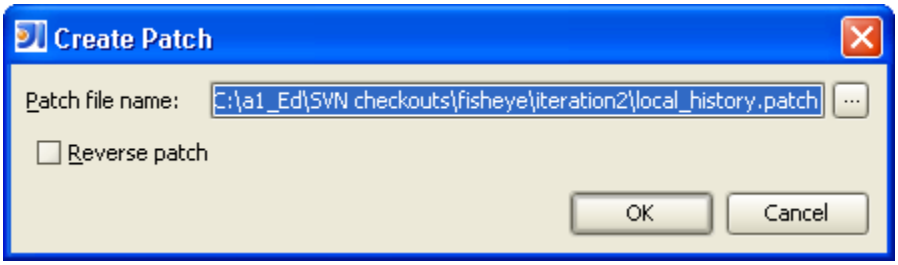
1. Select a parent folder, sub-folder or file that you have altered in the Project tool window, right-click it and choose '**Local History**' > '**Show History**'.

Screenshot: The IDEA Show History dialog



2. In the Local History view, right-click the revision number, and choose '**Create Patch**'.

Screenshot: The IDEA Create Patch dialog



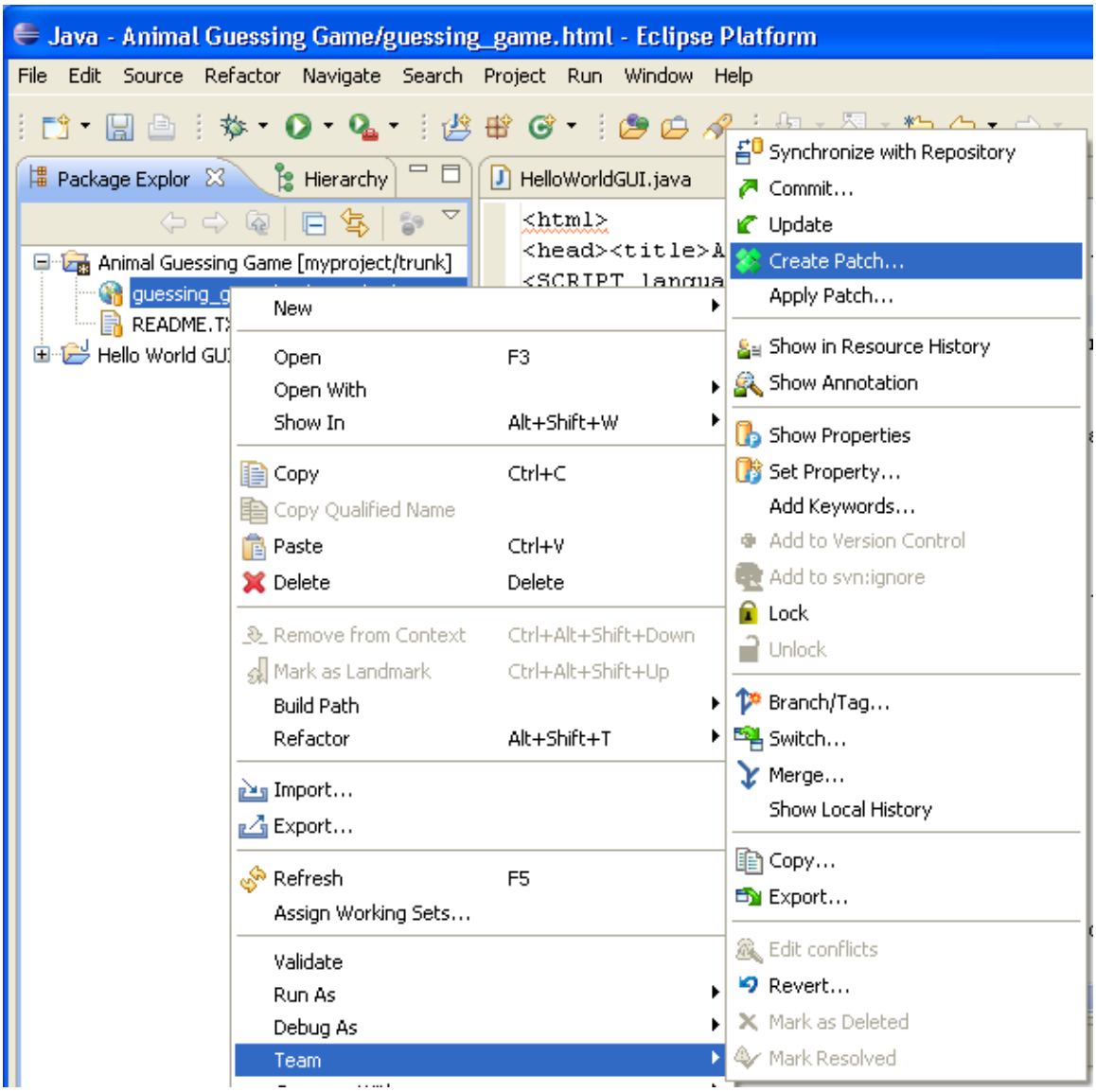
3. In the Create Patch dialog, choose a location for the patch file and a file name, then click '**OK**'.

Creating a Patch File in Eclipse 3.3.1.1

To create a patch file under Eclipse, do the following:

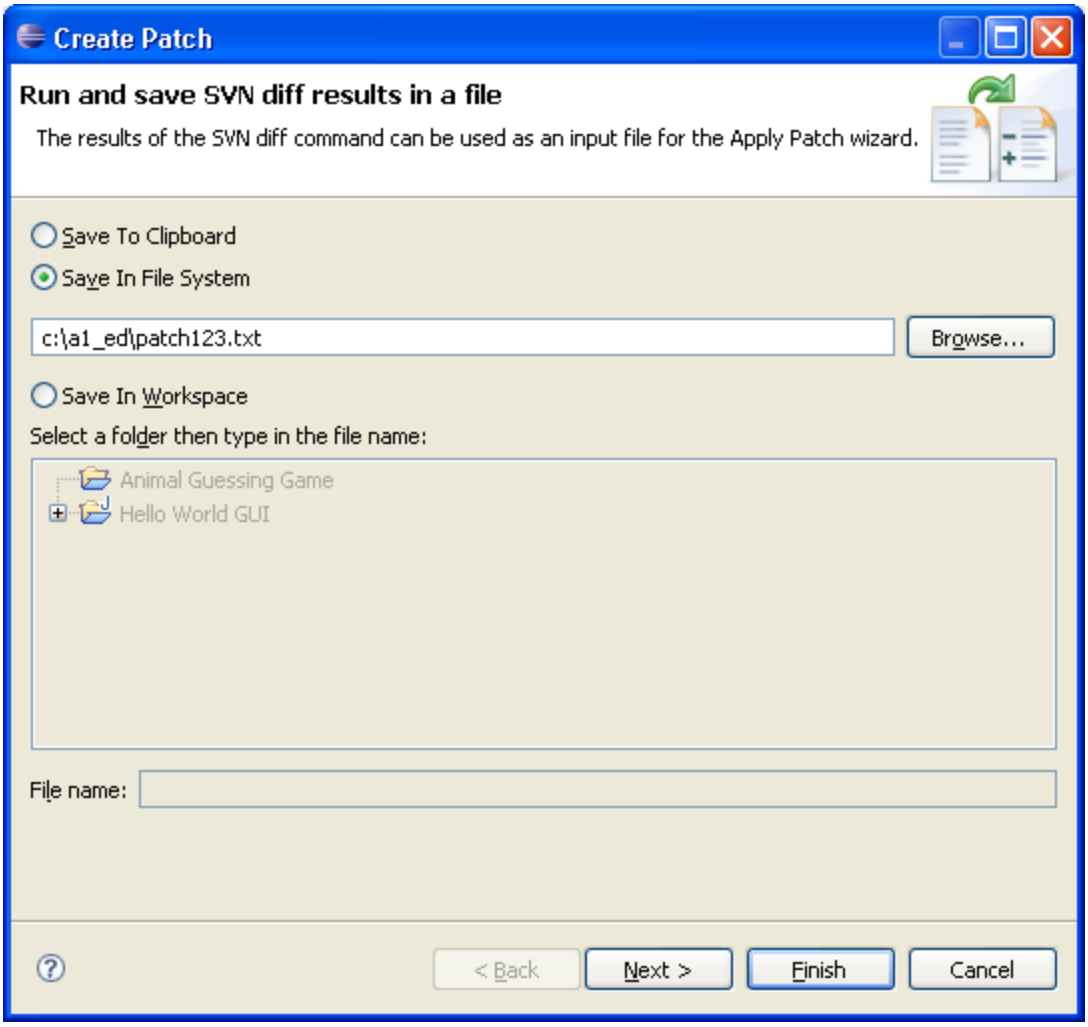
Find the parent folder, sub-folder or file that you have altered, right-click it and choose '**Team**' > '**Create Patch**'.

Screenshot: Instigating a Patch in Eclipse



In the Create Patch window, choose a location on your computer and type an appropriate file name (the file format is plain text).

Screenshot: The Eclipse Create Patch dialog



Creating a Basic Patch File From The Repository Command Line

CVS Patch Creation On The Command Line

To create a patch in CVS, use the `cvs diff -Nu` command from your workspace. For example:

```
cvs diff -Nu > patch.txt
```

Note that patch files created with this command will only include around three lines of code, before and after each change.

Subversion Patch Creation Via The Command Line

To create a patch in Subversion, use the `svn diff` command from your workspace. For example:

```
svn diff > patch.txt
```

`svn diff` does not print any information about files copied in the workspace.

Note that patch files created with this command will only include around three lines of code, before and after each change.

Perforce Patch Creation Via The Command Line

To create a patch in Perforce, you must ensure you have set P4DIFF to point to a GNU-compatible diff program.

Then use `p4 diff -du` to generate a patch for changed files. For example:

```
p4 diff -du > patch.txt
```

Since Perforce diffs do not include added and deleted files so you should then do a `p4 opened` to find such files. For added files, append them individually to the patch using GNU diff:

```
diff -u path_to_added_file /dev/null >> patch.txt
```

In the example above, replace `path_to_added_file` with the actual path of your added file. You can follow a similar procedure with deleted files using `p4 print` to extract the previous version of the file.

Note that patch files created with this command will only include around three lines of code, before and after each change.

Creating Patches That Include All Lines of Code

To create a patch file that shows all lines of code as well as the changes, use the following commands from your repository command-line tools.

Creating a Patch in CVS With All Lines of code

To create a CVS patch that shows all code (not just the changes and surrounding code), use this command:

```
cvs diff -N -U 10000 > patch.txt
```

The '10000' number refers to the number of code lines included in the patch, before and after each change. '**Patch.txt**' represents your desired name for the new patch file.

Creating a Patch in Subversion With All Lines of Code

To create a patch in Subversion that shows all code (not just the changes and surrounding code), use this command:

```
svn diff --diff-cmd diff -x "-U 10000" > patch.txt
```

- The in-built diff feature in `svn diff` does not support specifying lines of context, so you must tell Subversion to use an external diff command.
- The second "diff" in the command above needs to be the name of your external diff command. You might need to specify the full path to that command, such as `/usr/bin/diff`.
- On the Windows platform, you may need a Unix-like emulator such as Cygwin, and install the optional diff command for that.

Creating a Patch in Perforce With All Lines of Code

Unfortunately, Perforce does not directly support creating patches that include all lines of code. A workaround is to checkout 'before' and 'after' versions of the file, and use GNU Diff to create a patch between the two files. That file could then be loaded into a Crucible review.

Selecting the Files for the Review

This page explains how to select files that will be included in a Crucible review.

The **Manage Files** dialog allows you to select and modify which files make up the review. In the Manage Files dialog, the author selects the source files they want to include in the review, by clicking the checkboxes next to the desired files. Once finished, the author clicks '**Done**'.

On this page:

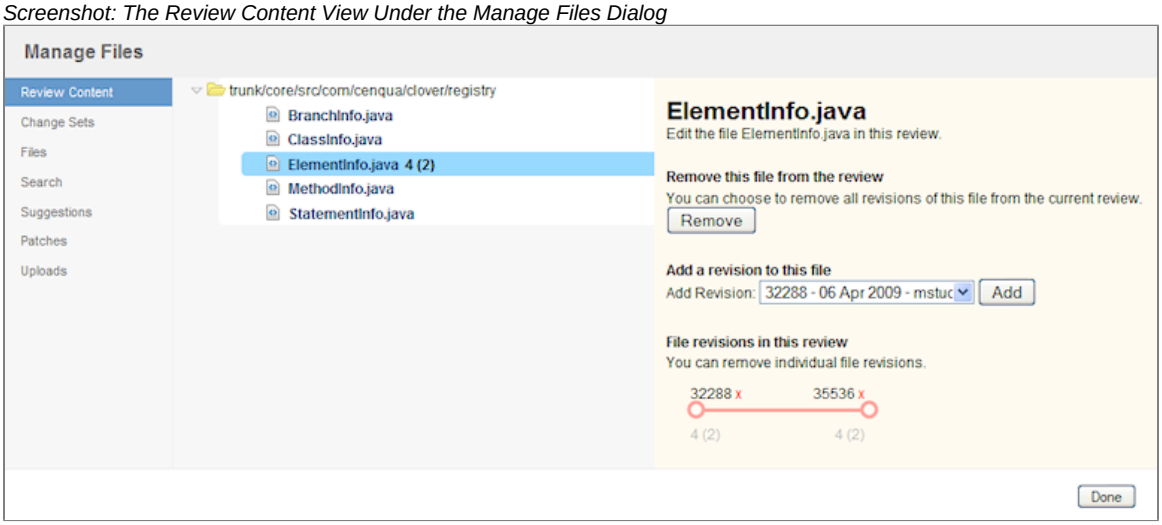
- Overview of the Manage Files Dialog
  - Left Navigation Bar Links In The Manage Files Dialog
- Selecting Changesets for Review
  - Options for Adding Changesets
  - Understanding the Icons Shown with Changesets
- Selecting Files for Review
- Searching in the Manage Files View
- Viewing the Content Selected for Review
- Using the Suggestions Feature When Adding Files to a Review
- Adding Patch Files to a Review
- Uploading Files to a Review
- Choosing the Form of the Review

Overview of the Manage Files Dialog

The '**Manage Files**' dialog is first displayed when you are creating a review. Once a review has started, (as the creator or moderator) you can reopen the dialog by clicking the **Manage Files** button on the Review toolbar.

The left navigation bar allows you to select and locate different files for the review including files from repositories, patch files and uploaded files. The screenshot below shows the view shown when checking the list of currently selected files; the **'Review Content'** view.

Screenshot: The Review Content View Under the Manage Files Dialog



See the table below for detailed instructions on the various links on the left navigation bar of the Manage Files dialog.

Left Navigation Bar Links In The Manage Files Dialog

Left Nav Title	Explanation	Special Conditions
Review Content	Shows the list of files selected for review and allows you to manage them.	
Change Sets	Allows you to choose change sets from a Source Code Management (SCM) repository and add them to a review.	Only appears when FishEye is installed.
Files	Allows you to choose files from a Source Code Management (SCM) repository and add them to a review.	
Search	Allows you to search a Source Code Management (SCM) repository for files or change sets and add them to a review.	Only appears when FishEye is installed.
Suggestions	Analyses the list of files in the current review and makes suggestions based on certain logic (for example, suggesting a newer version of a file if one exists).	
Patches	Allows you to upload patch files to a review.	
Uploads	Allows you to upload any file to a review, including binary files and files outside of a Source Code Management (SCM) repository.	

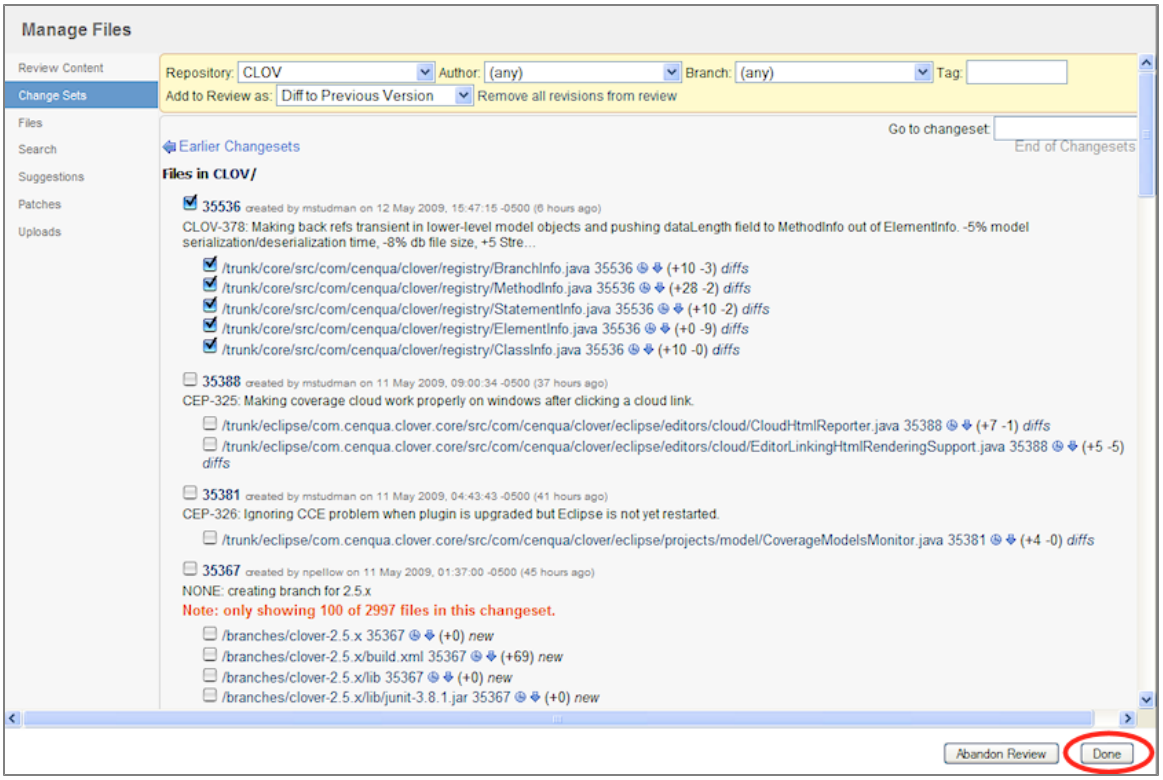
When a red dot is shown next to a file name or changeset name, it indicates that for the file you have selected, a newer version exists. When a number is shown next to the file or changeset name, it indicates the number of comments that have been made. Numbers in brackets show unread comments.

Screenshot: Red Dot and Comment Counter in the Manage Files Dialog

Selecting Changesets for Review

To add changesets to a review, open the **'Changesets'** view by clicking the "Changesets" option on the left navigation bar in the Manage Files dialog. The Changesets view opens.

Screenshot: The Changesets View in the Manage Files Dialog



By default, Crucible presents a list of the author's changesets in reverse chronological order. You can see other changesets by changing the options at the top of the screen.

Click the checkbox next to a changeset ID to add the entire changeset, or the checkboxes next to file names to add or remove individual files. Clicking the checkbox of a parent item will select or de-select all of its children. Click '**Remove all revisions from review**' to remove all.

Options for Adding Changesets

Repository	This is a list of the repositories that contain the files that can be reviewed. If the repository you require is not in the list then it has not been added to FishEye. Please contact your Crucible/FishEye administrator.
Author	This contains a list of all the authors who have made changes within the repository. When creating a review, this will default if possible to the username of the user authoring this review and will therefore show their changesets.
Branch	This will only show files and recent changes on that branch from the repository set above.
Tag	This will only show files and recent changes tagged.
Add to Review As	Choose the form of the review; see full details.
Go to Changeset	Allows you to jump to a particular change set by entering its title and pressing Enter.

Understanding the Icons Shown with Changesets

To help decide what files are to be placed under review, you can click the icons next to the files to gain further information about them before they go out for review:

Clock icon or the file URL	A view detailing the history of this particular file.
Changeset ID next to the file URL	A view of the complete file. Amended lines are highlighted on the left in yellow.
Down arrow icon	Option to download the file.
Change Indicator (+n -n)	This shows how many lines have been amended (e.g. +3 -2) and also what type of change has been made. If it says '*diffs*' then you can click this to see the differences in the file between the revisions.

After you have chosen the files, click the '**Review Content**' option on the left navigation bar to view the files that are included in the review.

Selecting Files for Review

To add files to a review, click the **'Files'** option on the left navigation bar of the Manage Files dialog. The Files view opens.

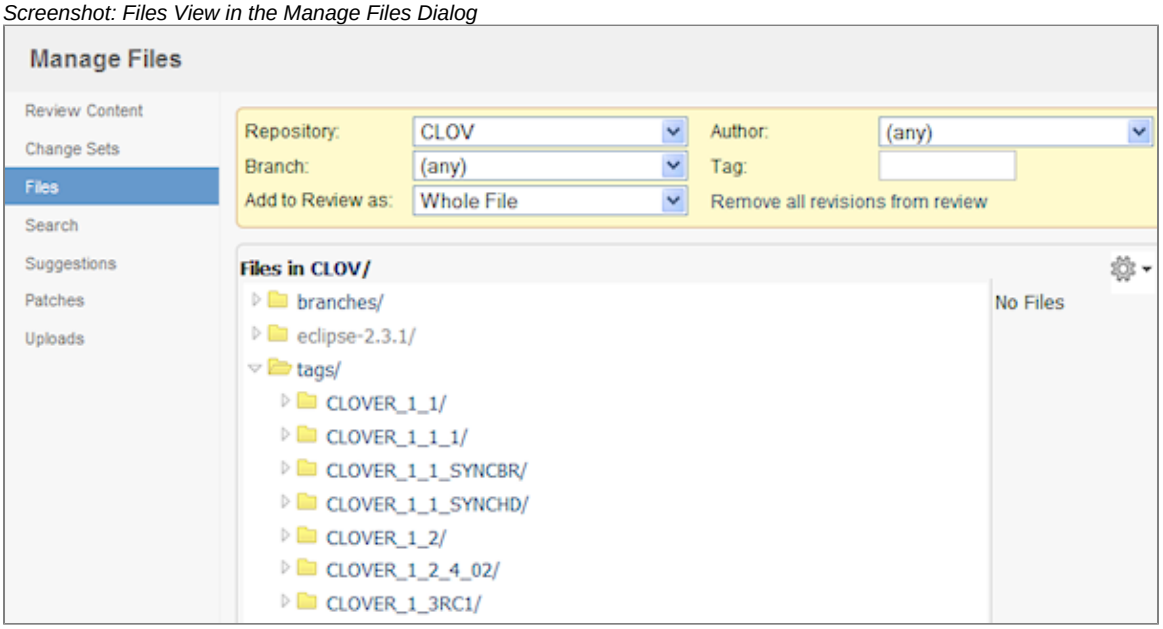
To find a file, browse the folders by clicking the relevant folder. The folders by default are sorted by path name but can sorted by last-commit or first-commit. To choose a file for reviewing, click the checkbox to the left of the filename and if required the revision number. To select a particular revision of a file, open the revision number list and select the option "Load Full History...". This will refresh the available options in the list.

Caveats:

- Empty folders will be greyed out.
- If the folders contain empty folders then a toggle option called '**Hide Empty**' will appear under the 'Sort' options.
- To see or ignore **deleted** files, you can click the '**Hide**' and '**Show**' options located above the file names on the left.

After you have chosen the files, click the '**Review Content**' view to see the files that are included in the review.

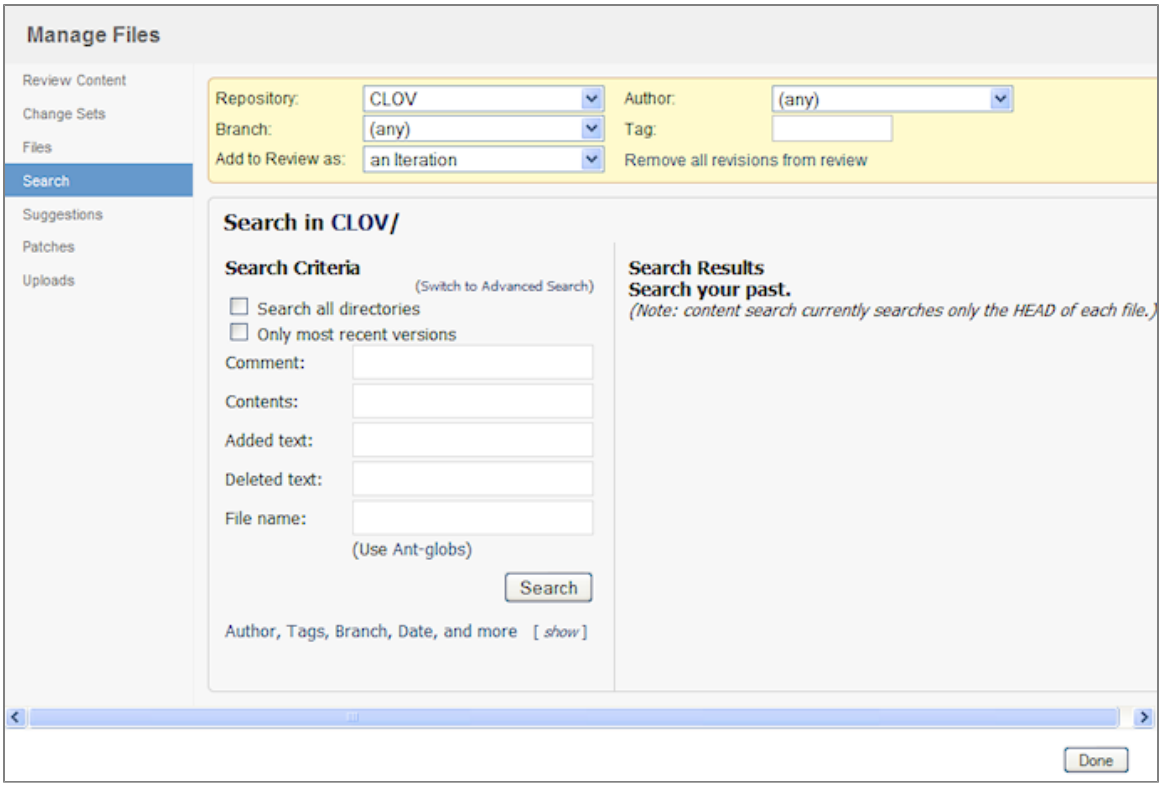
Screenshot: Files View in the Manage Files Dialog



Searching in the Manage Files View

The 'Search' view is available when using FishEye with Crucible.

Screenshot: The Search View in the Manage Files Dialog



If you are not certain about which changesets/revisions/files to include in a review, use the Search view to find them.

Adjust the search filters to find the files you need. If the simple filters are not enough, read about EyeQL queries in the FishEye documentation.

After you have chosen the files, click the '**Review Content**' view to see the files that are included in the review.

Read the FishEye documentation for more information about the searching your repository.

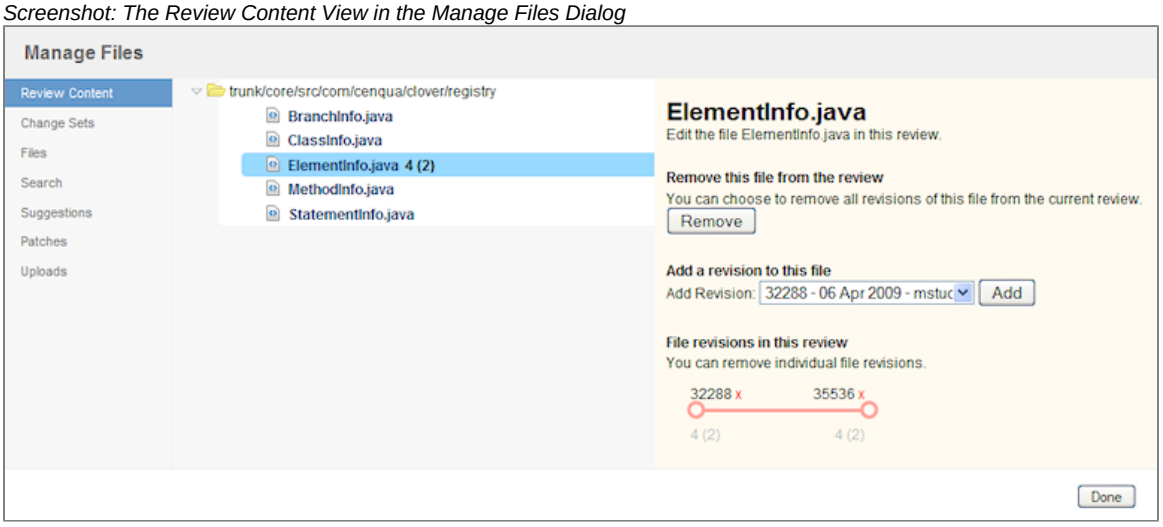
Viewing the Content Selected for Review

To look at the list of content selected for the review, click the **'Review Content'** option on the left navigation bar. The Review Content view opens.

In this view, you can look over the list of items selected for review. For each item, you can click its name to see which revisions are included in the review. In that view, you can also remove individual files or content items completely (by clicking the small red '**X**' icons over each item), as well as adding or removing individual revisions.

Note that you cannot removed items when they already have comments added to them.

Screenshot: The Review Content View in the Manage Files Dialog



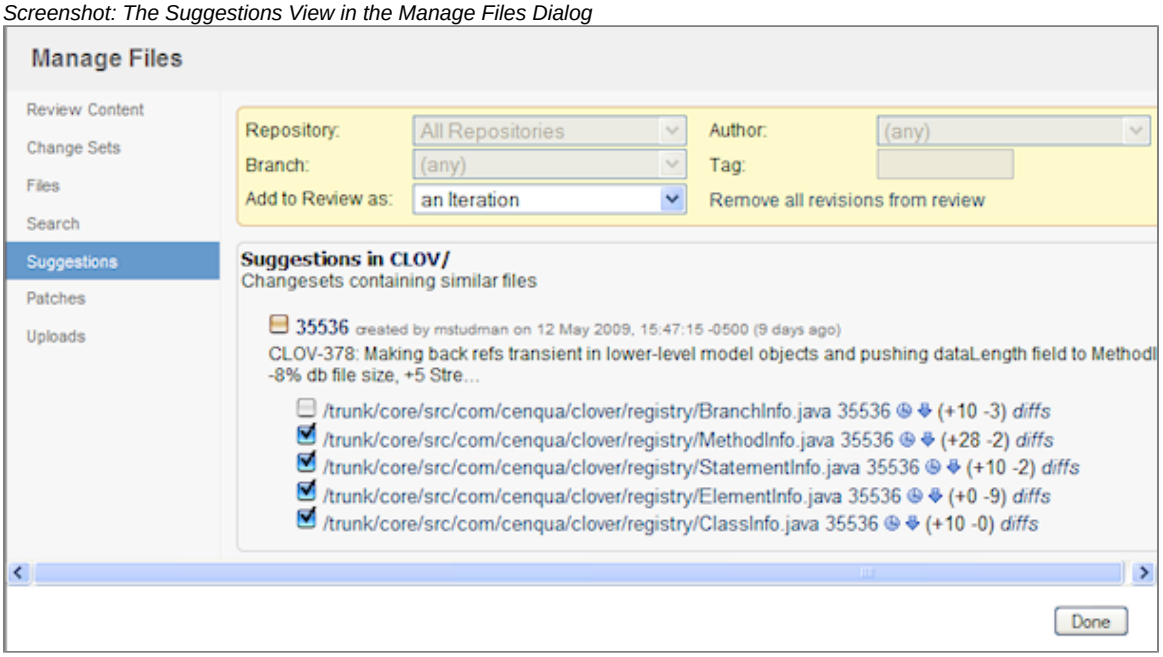
Using the Suggestions Feature When Adding Files to a Review

Crucible can make intelligent suggestions when you are creating a review. Once you have selected some files, click '**Suggestions**' in the left navigation bar to let Crucible analyse your selection and make some recommendations to you.

The Suggestions feature logic is based around the following:

- Most recent versions: If a newer version of a file exists, Crucible will suggest that you add it to the review.
- Similar files: Files with a similar filename may be of relevance to your review; Crucible will show them to you.

Screenshot: The Suggestions View in the Manage Files Dialog



Adding Patch Files to a Review

For a full explanation of the '**Patch View**' functions, read about creating a patch review.

Uploading Files to a Review

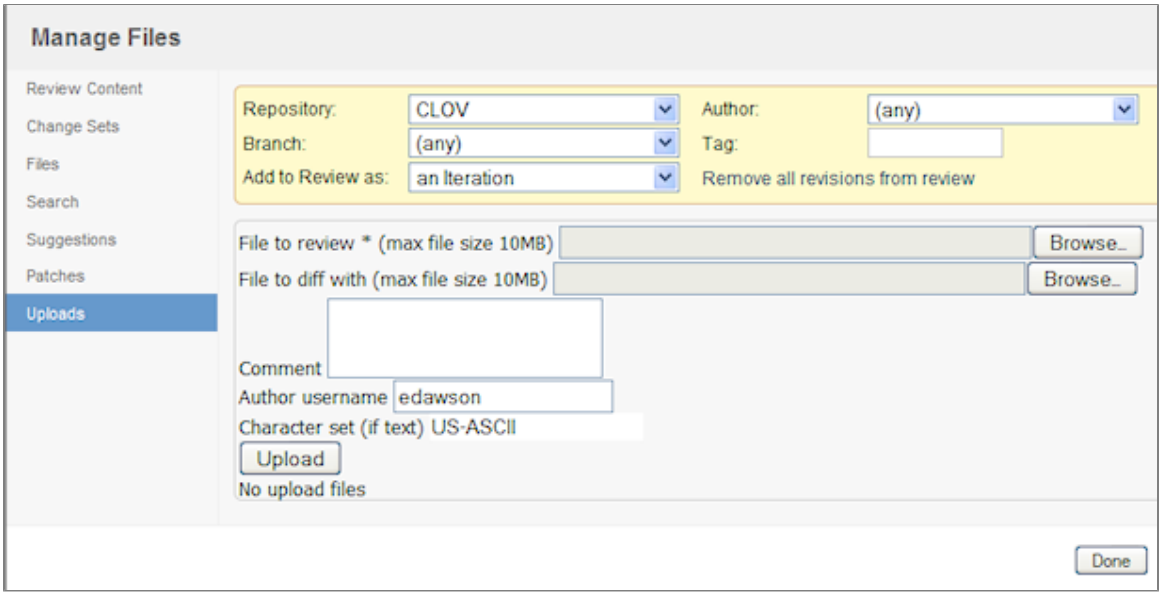
You can upload additional files to be used in the review, including binary files, images or code files that are not stored in a version control repository.

The '**Upload**' view contains various controls to help you do this. These are listed in the table below.

File to review	By clicking '**Browse**', you can find the file you want to review.
File to diff with	By clicking '**Browse**', you can find the file you want to compare against the first file.
Comment	Here, you can put in an identifying comment about this particular piece of work.
Author username	Enter the author username into this field.
Character Set (if any)	In the drop-down list, you can choose the character set being used. '**US-ASCII**' is the default.

When you've made your selection, simply click the '**Upload**' button. Once complete, a list of uploaded files is displayed at the bottom of the screen.

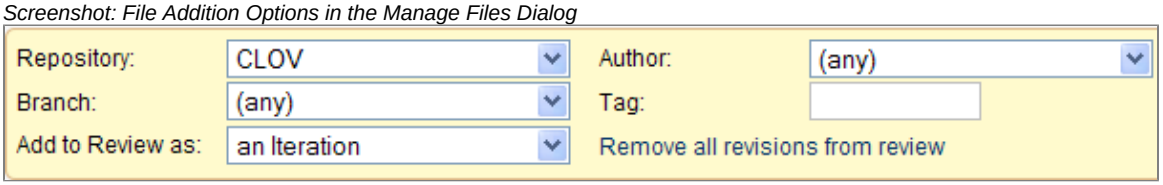
Screenshot: Upload View in the Manage Files Dialog



Choosing the Form of the Review

When adding files to a review, you can set the form of review taking place. Several options are listed along the top of the 'Manage Files' dialog, in the **Add to Review as:** drop-down menu:

Screenshot: File Addition Options in the Manage Files Dialog

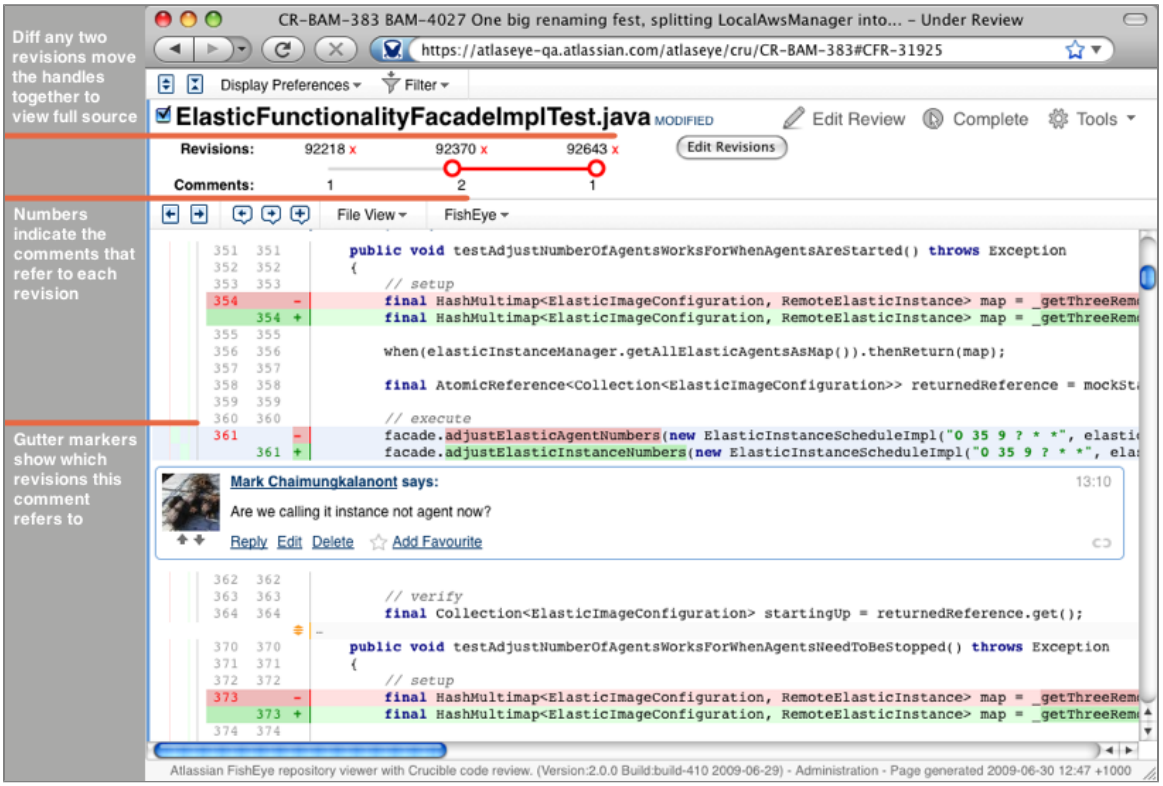


Whole File	Adds the entire file with all content, rather than just a diff with context.
Diff to Previous Version	This is the default behaviour, and how previous versions of Crucible worked by default.
An Iteration	This allows you to add multiple revisions of a file to one review and compare them in-review, in context with the change history.
Diff to Last Reviewed Version	This creates a review with a diff to the last reviewed changeset.
Diff to... (a particular revision)	This allows you to specify the review to show the differences between two specific versions of a file. This is useful in various situations. For example, you may want to review all changes since you branched your project.
Whole file	The review content is not limited by changesets, showing the entire file contents.

Iterative Reviews

Crucible allows you to review several revisions of a file within one review, seamlessly switching between them. Comments are linked and relative to a specific revision. This allows you to review every change that has occurred on a code file within a given period of time. This lets you see the evolution of the file through various revisions (within one Crucible review).

Screenshot: Iterative Reviews



Creating a Snippet Review

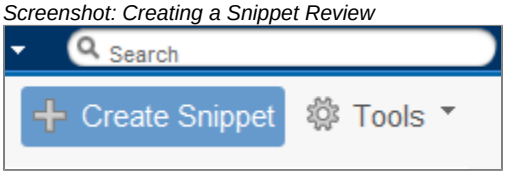
This page explains how to create a simple code review using the Crucible '**Snippet Review**' feature. Snippet Reviews are designed to be lightweight, ad-hoc code reviews with zero configuration, process or ceremony required.

On this page:

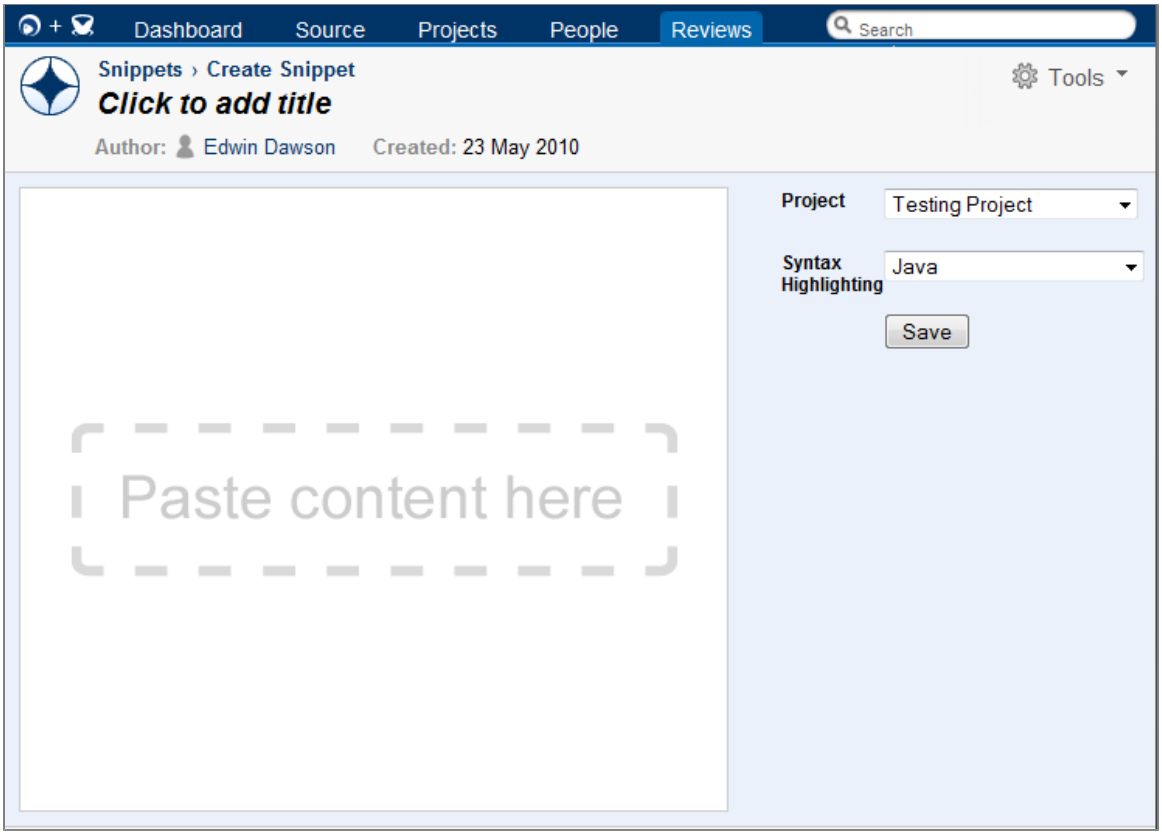
1. Copy the desired code to your system clipboard from the source.
2. Next to the '**Tools**' button, click the '**Create Snippet**' button in Crucible.
3. Paste the code from the system clipboard into the page, click to enter a title, then select a default project and the programming language (for syntax highlighting) from the drop-down menus. Click '**Create**'.
4. The review will be instantly launched, you can now contact any colleagues you would like to specifically take part. Everyone can see snippet reviews, anyone can comment on the review, and anyone can close it. If you don't specify a title, one will be automatically created for you.
5. Repond to the review comments, then close the review. Anyone can re-open, re-review or close snippet reviews.
6. Review complete.

Snippet reviews can only contain one discrete file, or code snippet. Only the creator of a review can delete it.

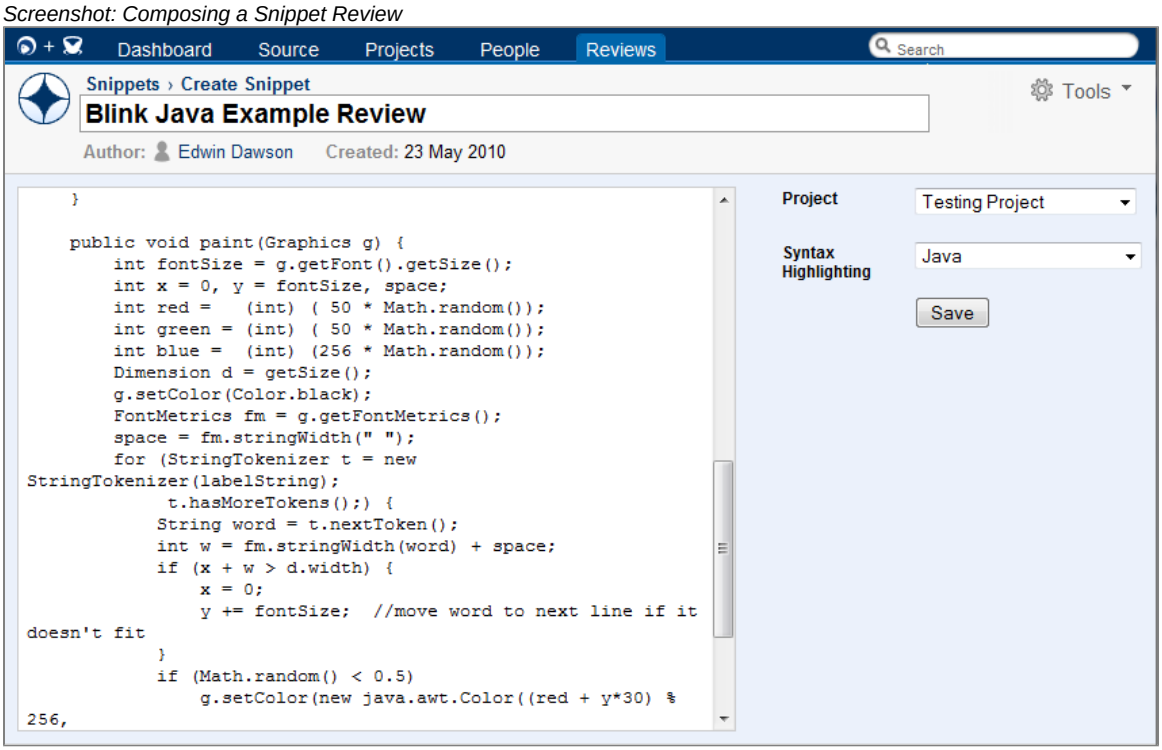
Screenshot: Creating a Snippet Review



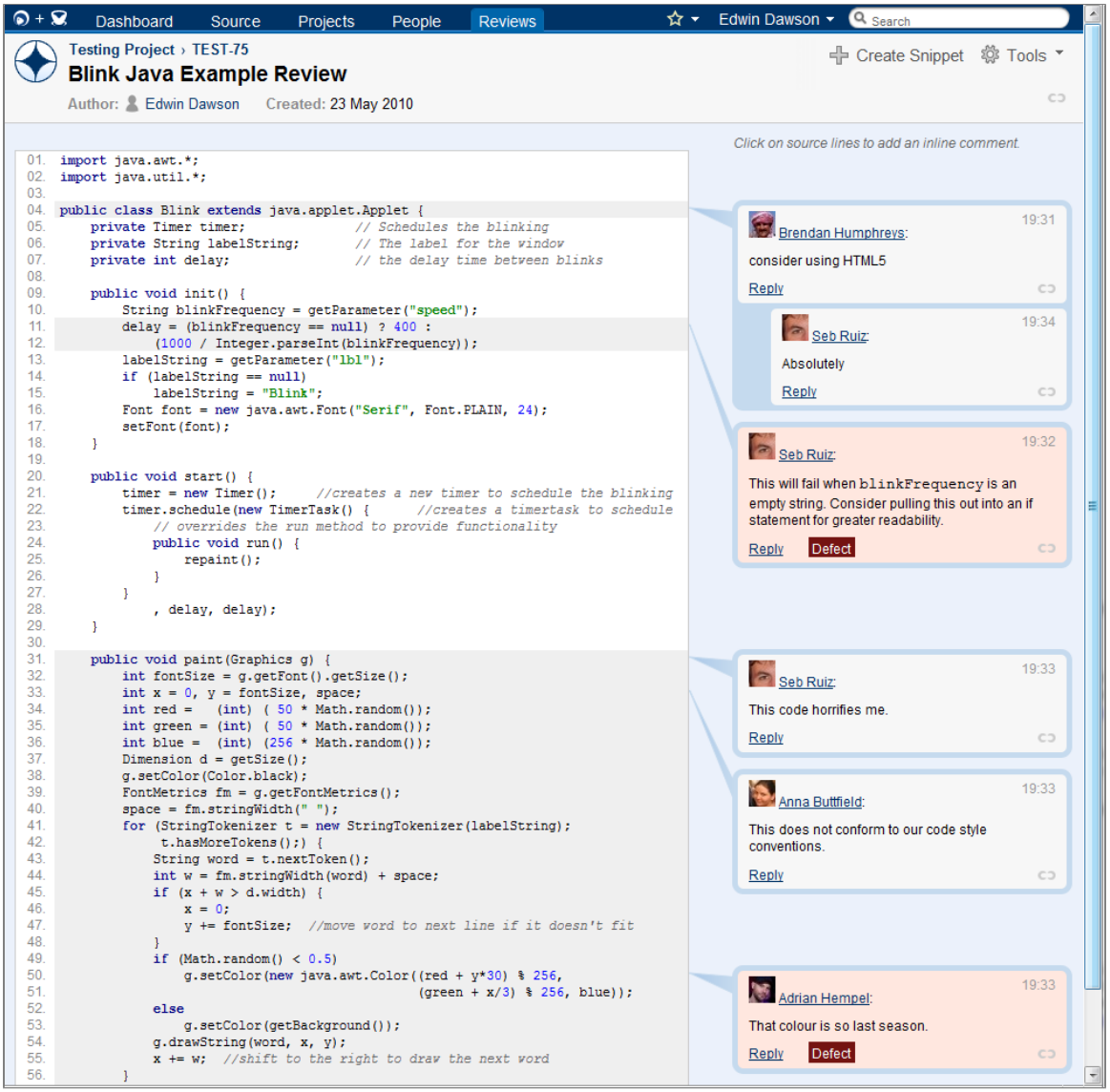
Screenshot: The Snippet Creation Screen



Screenshot: Composing a Snippet Review



Screenshot: Snippet Review with Comments



Adding Reviewers

This page explains how to add reviewers to a new review, after it has been created.
See Creating a Review for information about creating reviews.

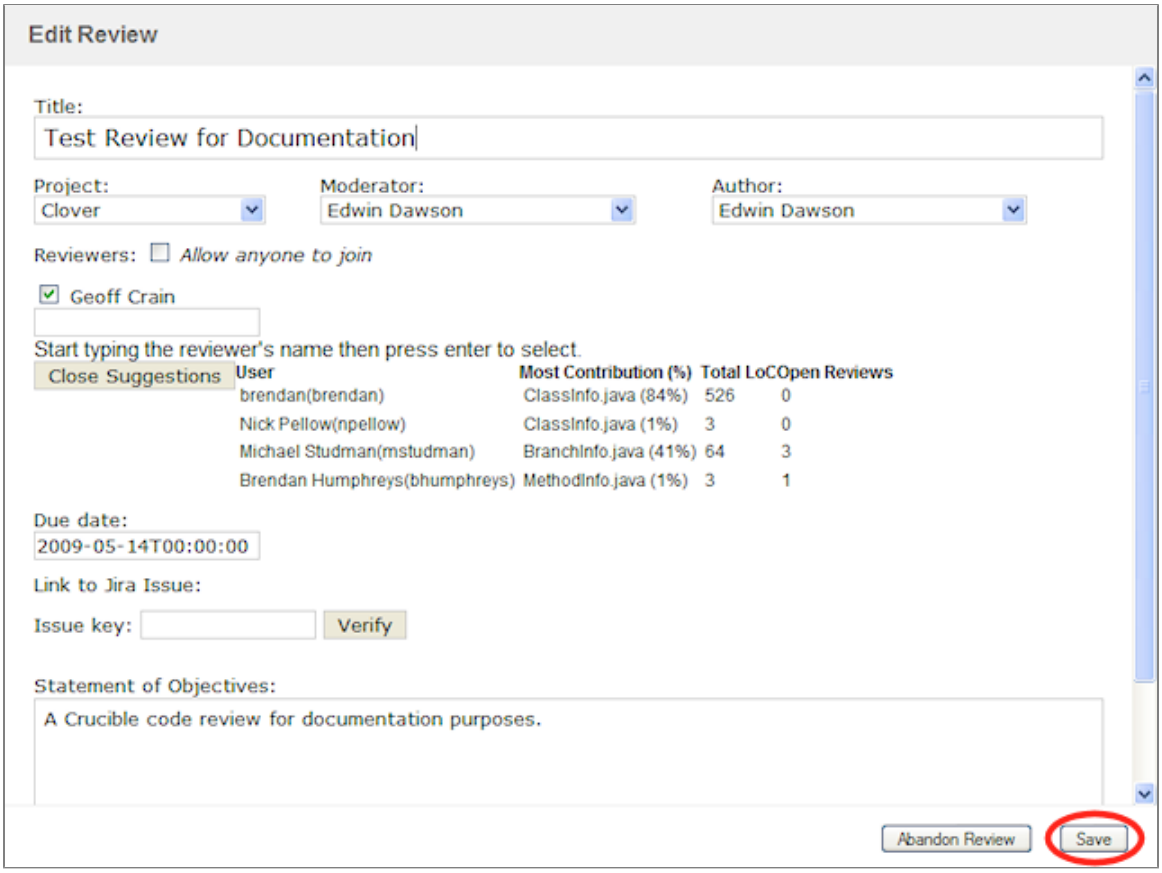
On this page:

- Entering Basic Information
- Adding Reviewers
  - Adding Users to a Review
  - Crucible Suggests Reviewers
  - Inviting Non-Registered Users to the Review
  - Checking the Draft and Starting the Review
- Next Steps

Entering Basic Information

Once a review has been created, the Edit Review dialog opens.

Screenshot: The Edit Review dialog



In the Edit Review dialog, the author enters information needed for the review. This includes entering a title and description for the review, a due date and the key for a related JIRA issue (if any). The project, moderator and author are pre-selected (for this example, the author should select himself as a moderator.

You must also select reviewers.

Adding Reviewers

Before a review can be issued to reviewers, you must decide who can review it. When adding reviewers, you can add registered users immediately. The usernames will auto-complete, showing partial matches before you finish typing. You can quickly select one of the matches shown with the keyboard arrow keys, pressing Enter or Tab to add them to the review.

In addition, you can easily invite external users who do not yet have accounts in Crucible to take part by typing their email address into the **Reviewers** field.

Adding Users to a Review

Select users by typing names into the text field under **Reviewers**. Crucible will show a list of matches. Press Enter to select one after each entry.

Clicking the 'Save' button will save the review as a draft for later issue.

You can also decide to allow any registered user to add themselves as a reviewer in the review. To enable this option, put a check next to 'Allow anyone to join'.

Crucible Suggests Reviewers

Crucible will automatically suggest reviewers, by analysing the users that have contributed to the files you've selected and also don't have a lot of open reviews. You can easily pick reviewers from the list of suggestions by clicking.

Inviting Non-Registered Users to the Review

You can invite users who don't have a Crucible account to join a review.

There are two prerequisites:

1. FishEye's SMTP server must be configured and capable of sending email.
2. The setting '**Built-in Public Sign-up**' must be set to '**ON**'. This setting can be accessed by opening the '**Admin Menu**', then clicking '

Security' under '**Global Settings**' on the left navigation bar.

To invite an external user to a review,

a. i.
1. Create a new review.
2. On the '**Create New Review**' screen, simply type the user's email address into the '**Reviewers**' field, then press Enter to select.
3. Click Save to save the draft review. The users are not sent any information at this time.
4. When you click '**Start Review**', this is when all email invites and notifications are sent out.
5. The external user will receive an email address from the Crucible server, containing a special URL that they can visit.
6. When the user loads the URL they received via email, they are taken to a special Crucible log in screen. On this screen, the user can create a new account that will be linked to the current email address. (If they already have a Crucible account under another address, they can simply sign-in with that username and password.)
7. When the user has successfully created a Crucible account, they will be able to access the review(s) associated with their email address and take part.

You can enter multiple addresses separated by commas, allowing you to paste in a list of email addresses from your favourite email application.

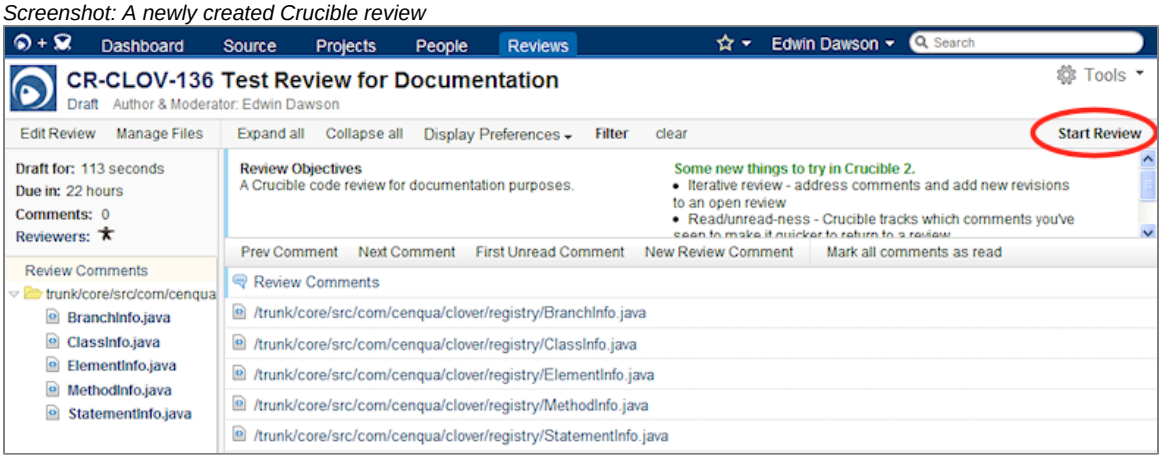
When finished, the author clicks '**Save**'. The review will now be created in a draft form.

Checking the Draft and Starting the Review

The draft review opens. In the draft stage, the author can check the contents of the review files to ensure they are correct and put in any notes for reviewers as comments. During the draft phase, no notification email is sent out to reviewers. Once the author is finished with the draft phase, he clicks '**Start Review**'.

The review will now be started and notification email will go out to all participants. Crucible will now send out an email notification to all the participants. This lets them know that the review is under way and prompts them to take action, providing a URL for direct access to the review. (You can also subscribe to an RSS feed.)

Screenshot: A newly created Crucible review



Next Steps

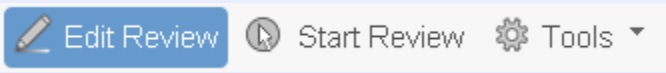
You can now begin Performing the Review.
If you have a moderator controlling your review process, you can move onto Issuing a Review.

Removing Reviewers From An Active Review

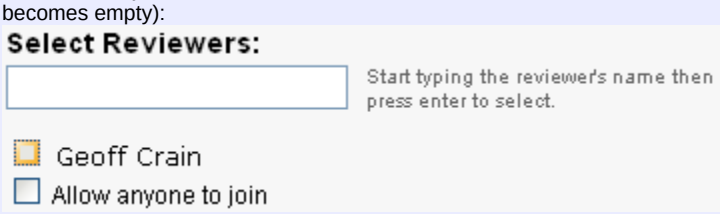
Reviewers can be removed from an active review at any time.

To remove a reviewer from an active review,

1. Log in to Crucible as the review creator or moderator.
2. Open the review in question.
3. Click the '**Edit Review**' button:



4. Find the user you want to remove and click the checkbox next to their name to remove them (so that the checkbox becomes empty):



5. Click '**Save**'.
6. The user will be removed from the review and notified by email.

Reviewers can be only removed by the review creator or moderator.

You cannot remove the review creator or moderator from the review.

Issuing a Review

This page contains information about starting a review in Crucible.

On this page:

- Starting a review
- Editing review details once started

Starting a review

Issuing a review simply means formally starting it and inviting people to take part.

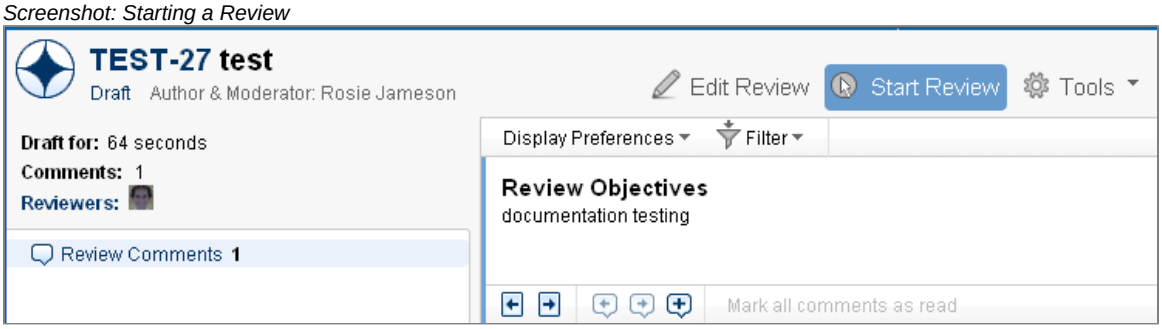
Once you have selected the reviewers, the next stage is to notify the reviewers and the author (if different to the moderator) that they can start reviewing. The review has been in 'Draft' state until this point. Only the moderator has the permission to start a review.

To start the review:

- If you are the moderator of the review, click the '**Start Review**' button. Or;
- If you are not the moderator of your review, click '**Send to Moderator**'. This changes the state to 'Require Approval' and notifies the moderator. The moderator can change any aspect of the review before starting it.

Once the review has been started, the review state becomes '**Under Review**'.

Screenshot: Starting a Review

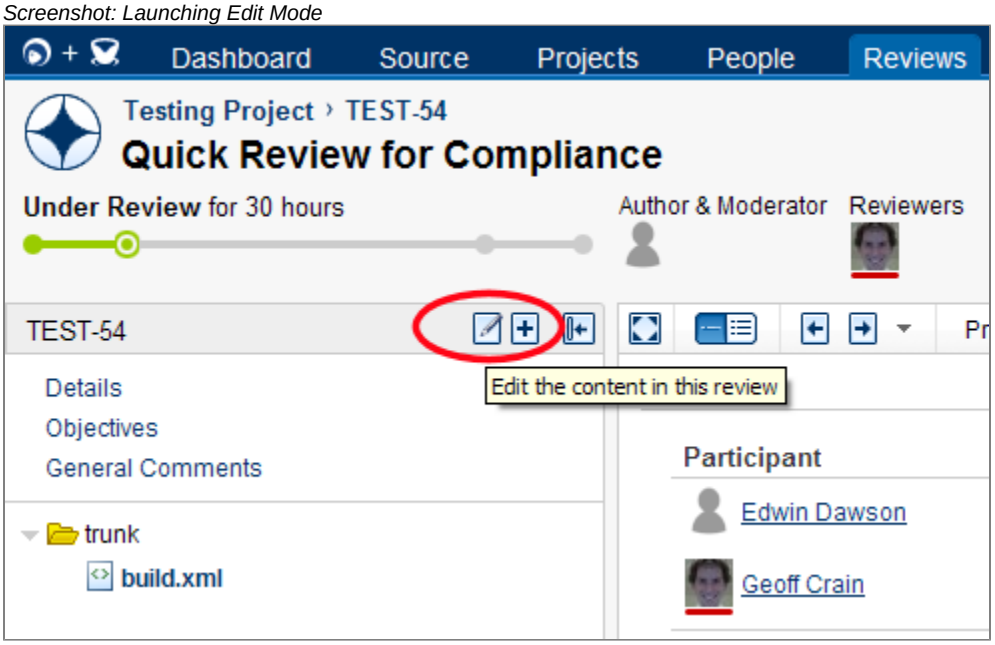


Note that only people with the '**Approve**' permission can start a review.

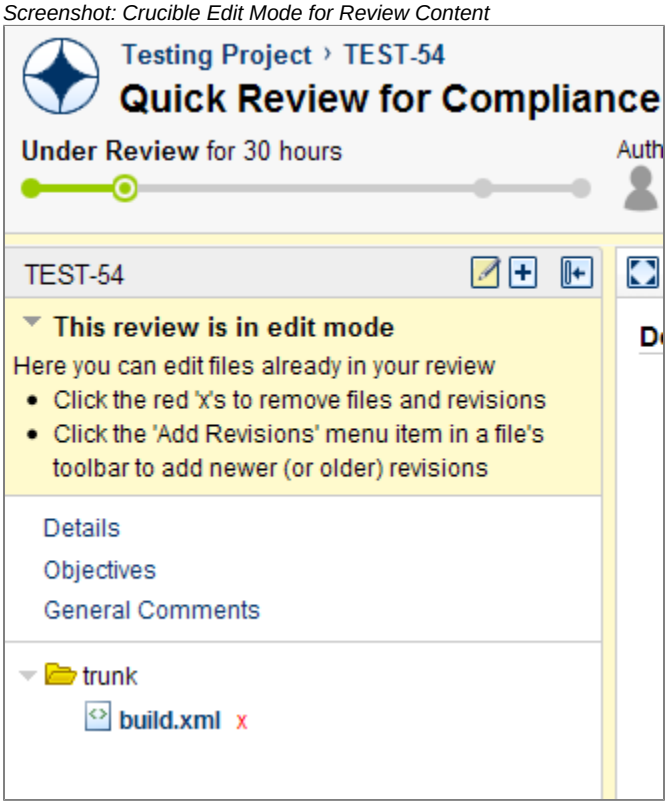
Editing review details once started

You can edit the details of a review at any time by simply clicking the '**Edit Review**' button in the left navigation bar to launch '**Edit Mode**'. In Edit mode, you can quickly click red cross icons to remove files from the review. A single click returns you to regular Crucible functions, so you can more easily tune the content inside your reviews. Another button opens a dialog for rapidly adding more content to the review.

Screenshot: Launching Edit Mode



Screenshot: Crucible Edit Mode for Review Content



Performing the Review

This page describes how to find and manage the Crucible reviews that relate to you.

On this page:

- Browse Your Reviews Under the 'Dashboard' Tab
- Browse All Reviews Under the 'Reviews' Tab
- When Files Change During a Review
- Next Steps

> **Deciding what needs to be reviewed**
> The '**Statement of Objective**' is a brief description of what the review is intended to achieve. Crucible does not dictate how or what to review. It simply provides a mechanism to record comments.

Browse Your Reviews Under the 'Dashboard' Tab

When you first load Crucible, the '**Dashboard**' screen will load, which shows your current reviews and other activity related to you.

Use the Crucible '**Dashboard**' to manage your reviews. Read the overview on filtering your view.

Active reviews are listed on each reviewer's dashboard under the default '**To Review**' filter. Reviews are listed under '**Out for Review**' until all reviewers indicate they are complete. Then the reviews move to the '**To Summarize**' list.

Read more about using the Dashboard tab.

Browse All Reviews Under the 'Reviews' Tab

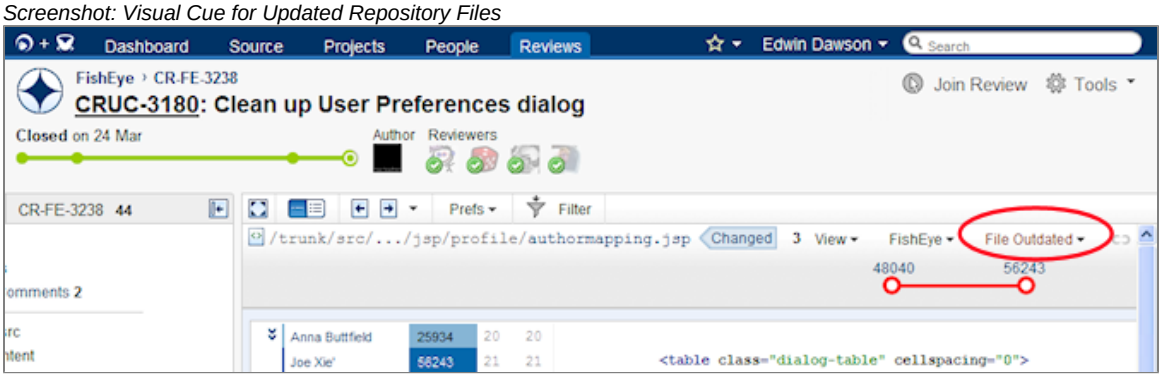
All reviews that involve you in any role are listed when you click '**Open**' or '**Closed**' in the left navigation bar. For instance, use the 'My Reviews' --> 'Open' filter to locate a review that doesn't require further action from you, but is still under way.

If email notifications are enabled (see SMTP settings in the FishEye documentation), reviewers will receive an email with information about the review. Click the link within the email to go directly to the review.

When Files Change During a Review

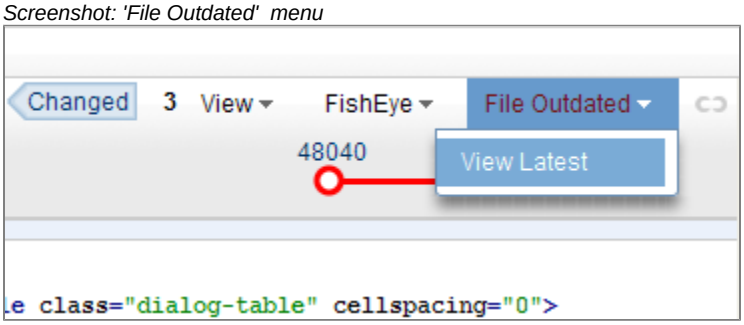
If a file in the repository changes during a review, Crucible will visually alert you by showing the '**File Outdated**' menu:

Screenshot: Visual Cue for Updated Repository Files



From the '**File Outdated**' menu, you can choose to view the latest revision of the updated file, or add the latest revision to the review:

Screenshot: 'File Outdated' menu



Next Steps

- Adding Comments
- Flagging Defects
- Completing your Review
- Sending all of a Review's Comments via Email
- Using the Review History Dialog
- Tracking Crucible Review Metrics

- Using JIRA Integration in Crucible Reviews

Adding Comments

Comments can be added at the level of a review, revision, or line. You can also reply to a comment.

On this page:

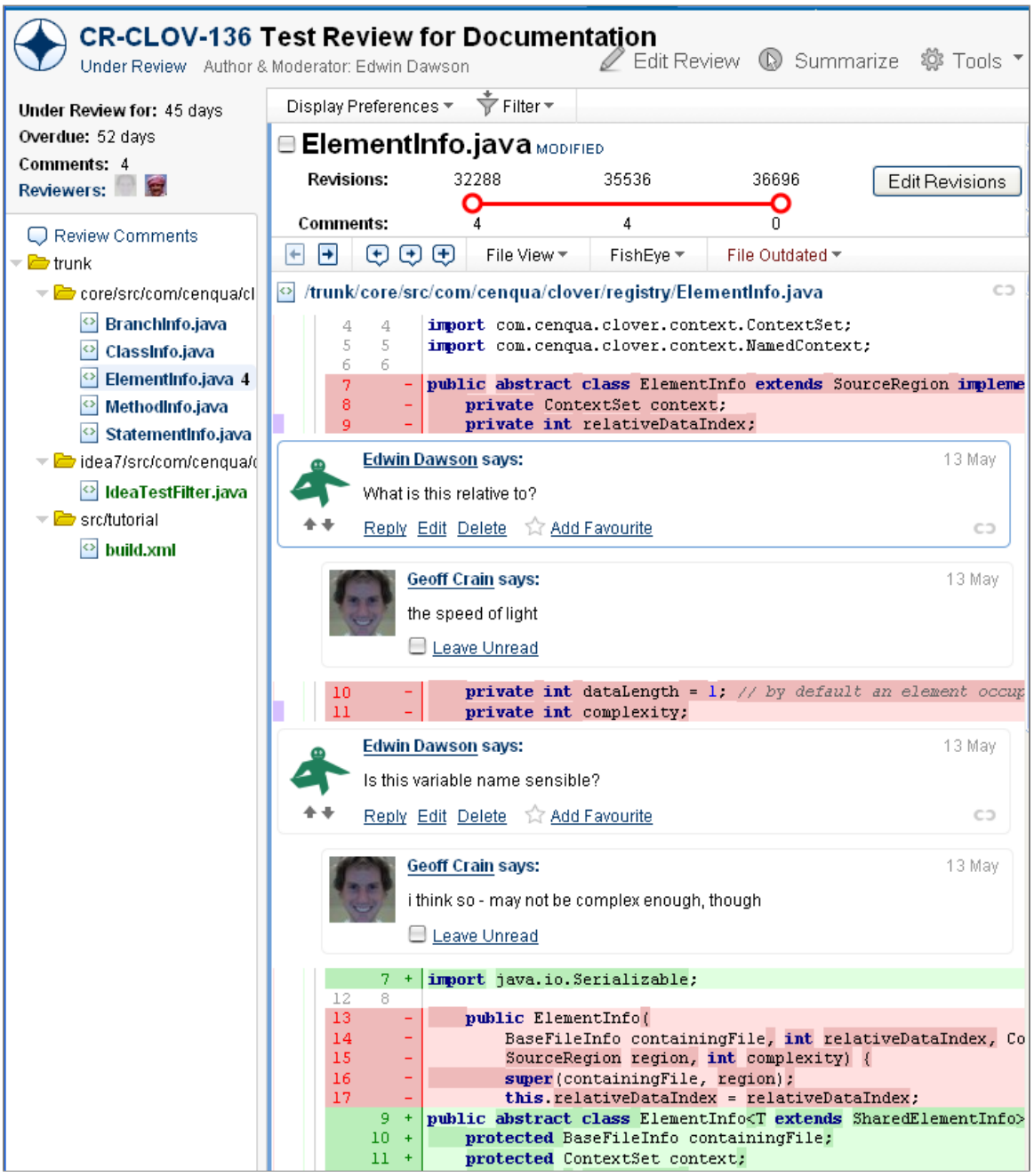
- Locating existing comments
- Adding a Comment
- Draft Comments

Locating existing comments

The number shown next to a filename, in the left-hand column of the screen, indicates the number of comments that apply to that file.

(The number of unread comments, if there are any, is shown in brackets.)

Screenshot: Comments



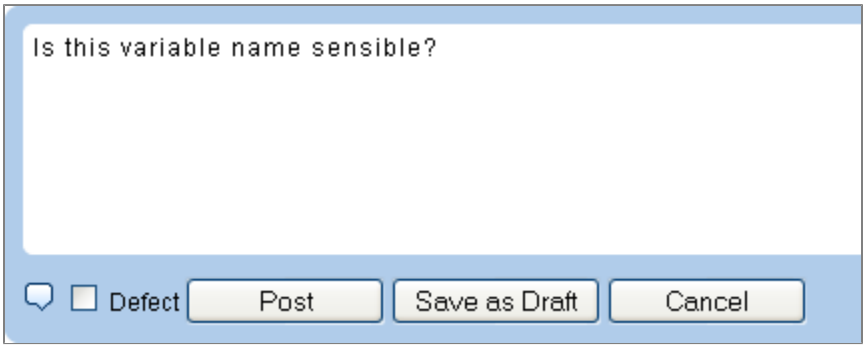
Adding a Comment

- To add a comment that applies to the whole review, select the '**Review Comments**' line in the left-hand navigation panel, then click the following icon:
- To add a comment that applies to a revision/change, select the filename in the left-hand navigation panel, then click the following icon:
- To add a source-level comment, expand the source view then click a line of code. You can click and drag to select multiple lines from one revision or diff, or click individual lines to select/deselect them. The comment will appear in the source at the last line selected. Hover over the comment to highlight the selected lines.
    - To select text on the page without adding a comment, hold down the **Alt** button while dragging the cursor.
- To reply to a comment, click the '**Reply**' link at the bottom of the comment.

Only people with the '**Comment**' permission can add comments.

Read about flagging defects too.

Screenshot: Adding a Comment



Draft Comments

You can save your comment as a draft and then edit it later. When you complete the review , you will be prompted to post, discard or edit any remaining draft comments.

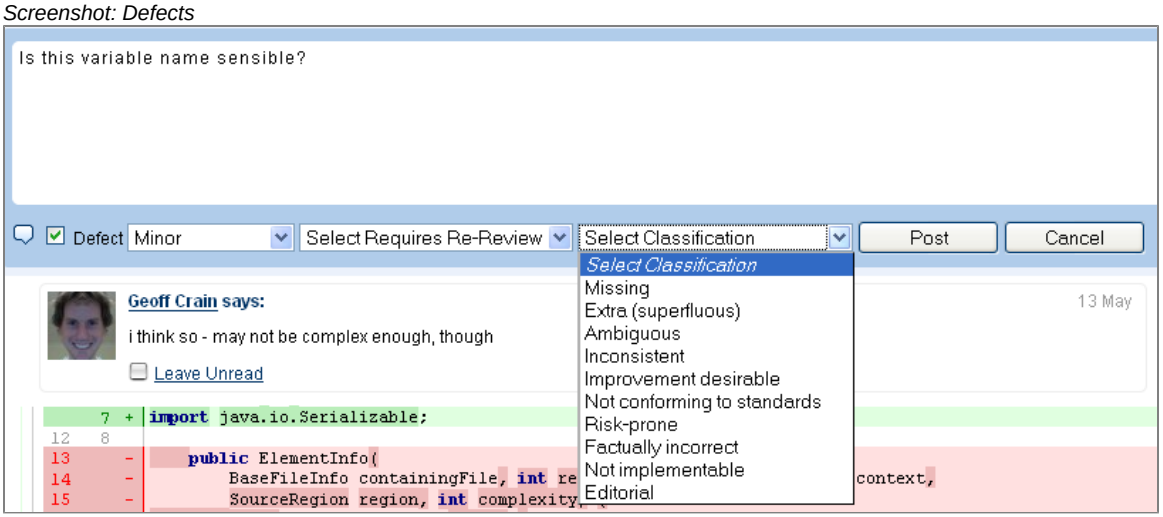
Screenshot: Draft comments

Flagging Defects

Comments in Crucible can be used to flag a **defect** in the code under review.

to do this, simply tick the '**Defect**' box when adding a comment and select a category from the drop-down list.

Screenshot: Defects



You may want to mark comments as defects to associate defect classifications, or simply to highlight to the author or moderator that the issue you raised in your comment requires attention.

Crucible intentionally does not mandate how defects are to be used. The Crucible administrator can customise the defect classifications.

You can only use the defect classifications on comments that are not a reply to an existing comment.

Completing your Review

Once each reviewer has added comments to the review and has nothing further to add, the next step is to **Complete** their individual review.

To complete your individual review, go to the review and click the '**Complete**' button at the right of the screen, next to the '**Tools**' menu:

Screenshot: The Complete Button

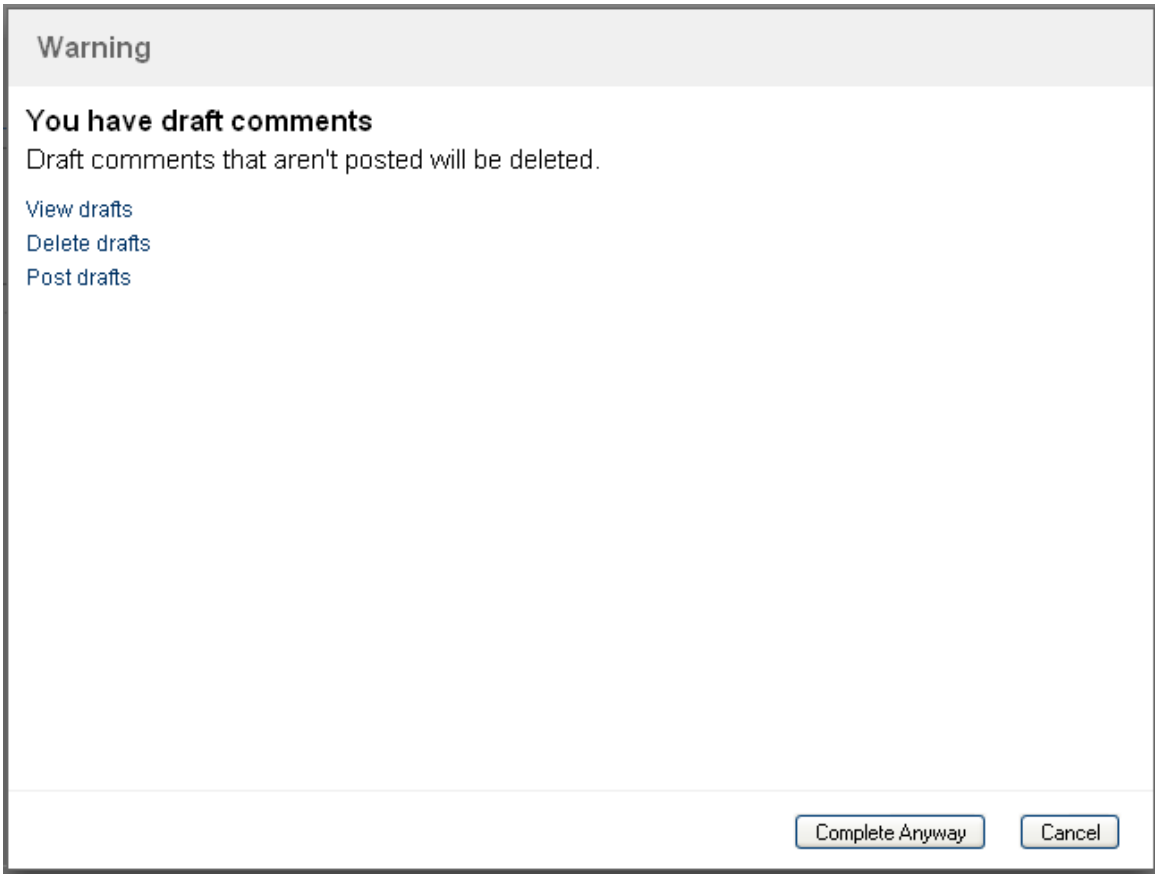
Only people with the '**Complete**' permission can complete a review.

This notifies the moderator (via email if configured) that you have completed your review.

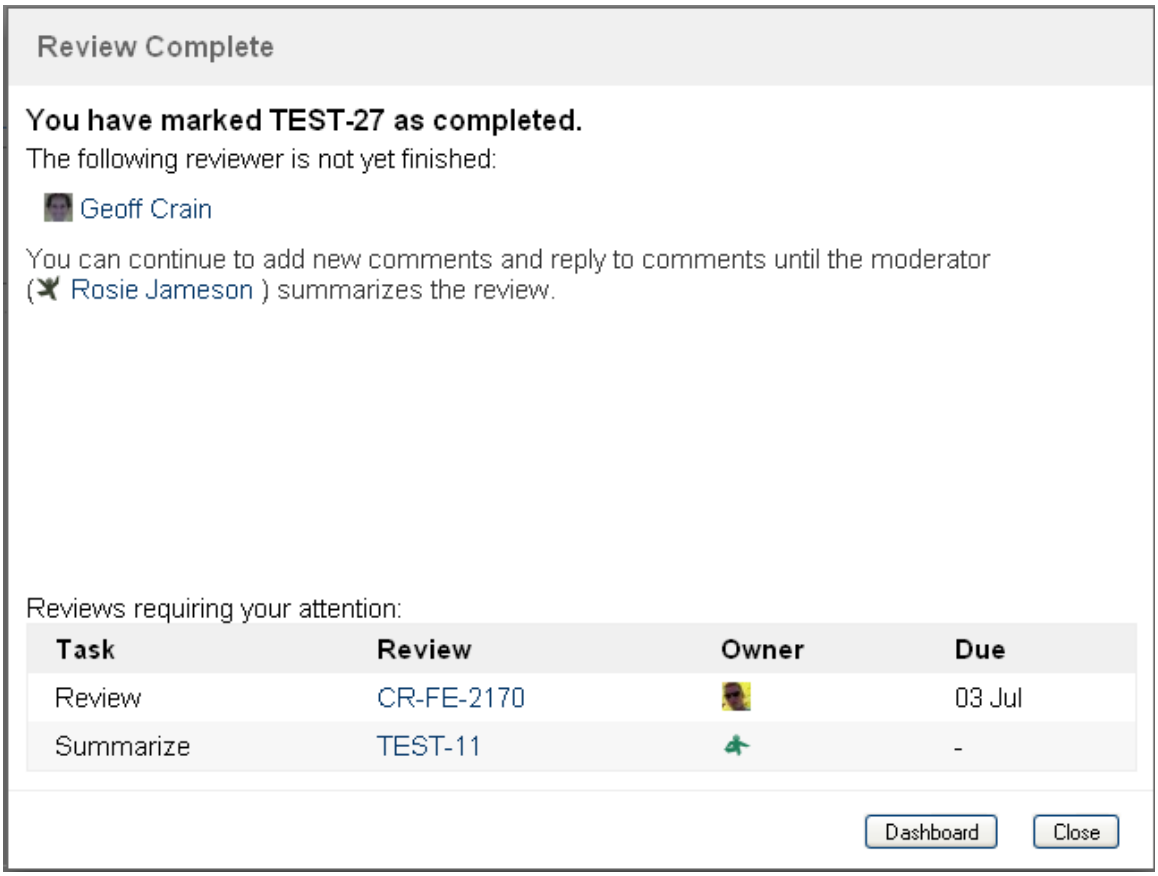
Reviewers can still continue to add comments until the moderator summarises the review. The moderator does **not** have to wait for all reviewers to complete their individual reviews before summarising.

If you have any draft comments, you will be prompted to post/discard/edit any comments before completing the review.

Screenshot: Draft comments



Screenshot: Review complete



Sending all of a Review's Comments via Email

You can send all of the comments from a review to anyone you want via email. You may wish to do this to allow a person outside the review to quickly scan the content of the comments, or oversee the review activity. Alternatively, you may wish to send all participants this information to let them read the current status of the review and its comments in full.

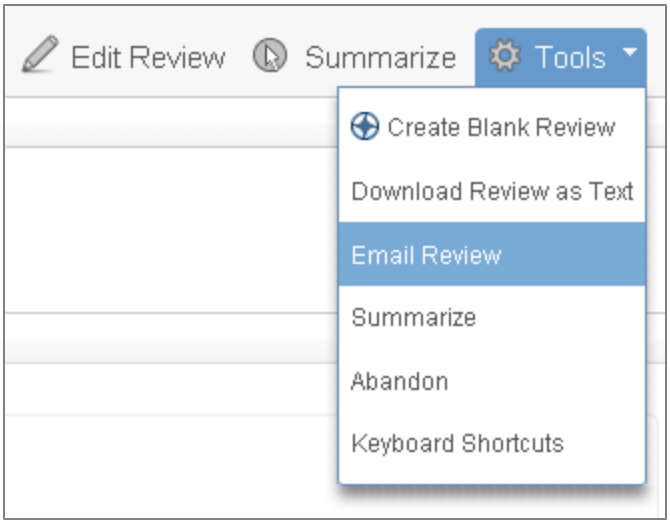
Sending a Review's Comments via Email

To send all of a review's comments via email,

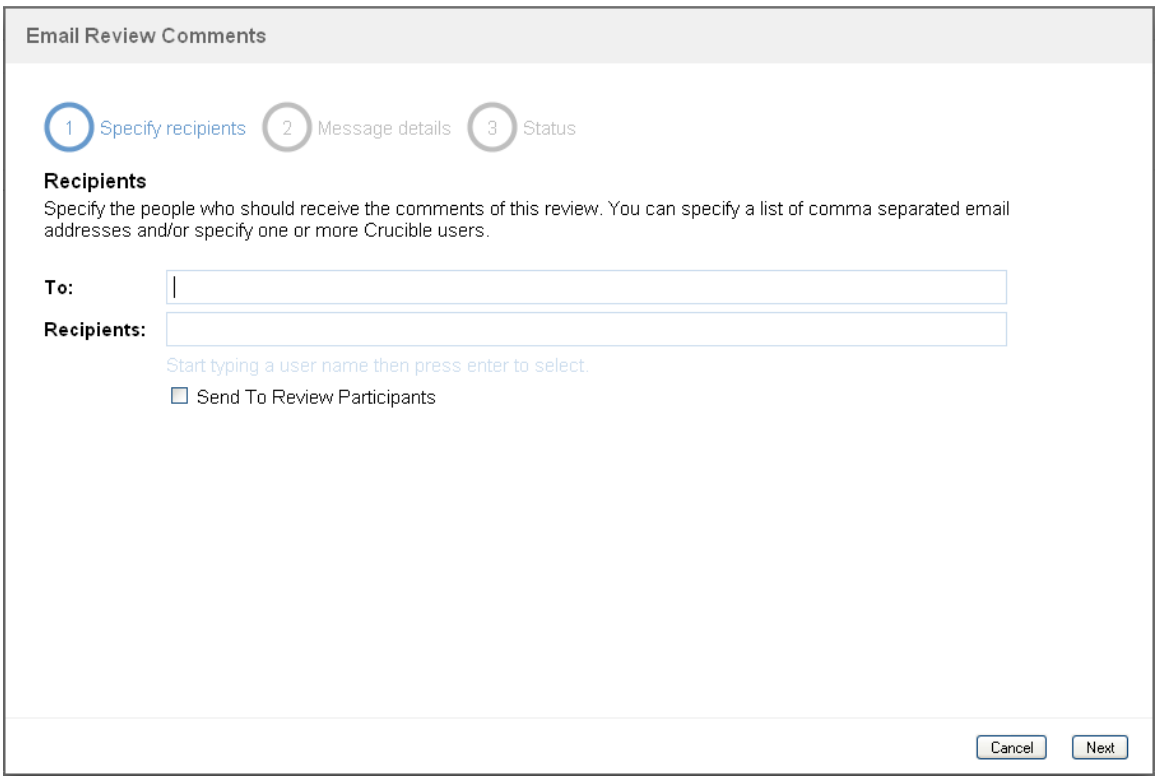
1. In Crucible, navigate to the review in question.
2. From the '**Tools**' menu, select '**Email Review'** (see *Screenshot 1* below).
3. The '**Recipients**' page appears (see *Screenshot 2* below). On that page:
4. In the '**To:**' field you can enter multiple email addresses, separated by commas.
5. In the '**Recipients:**' field, you can type usernames from your Crucible instance to add them to the distribution list. You can also simply tick the '**Send to Review Participants**' check-box to include all of the review's reviewers.
6. When you have finished the distribution list, click the '**Next**' button.
7. The '**Recipients**' page appears (see *Screenshot 3* below). On that page:
8. In the '**To:**' field you can enter multiple email addresses, separated by commas.
9. When you have finished your message, click the '**Send**' button.
10. The '**Status**' page appears (see *Screenshot 4* below), confirming that your email has been sent

Users that are not logged in cannot send email, but instead can view the text content of the review's comments by clicking the '**View Text**' option which will appear instead of '**Email Review**'.

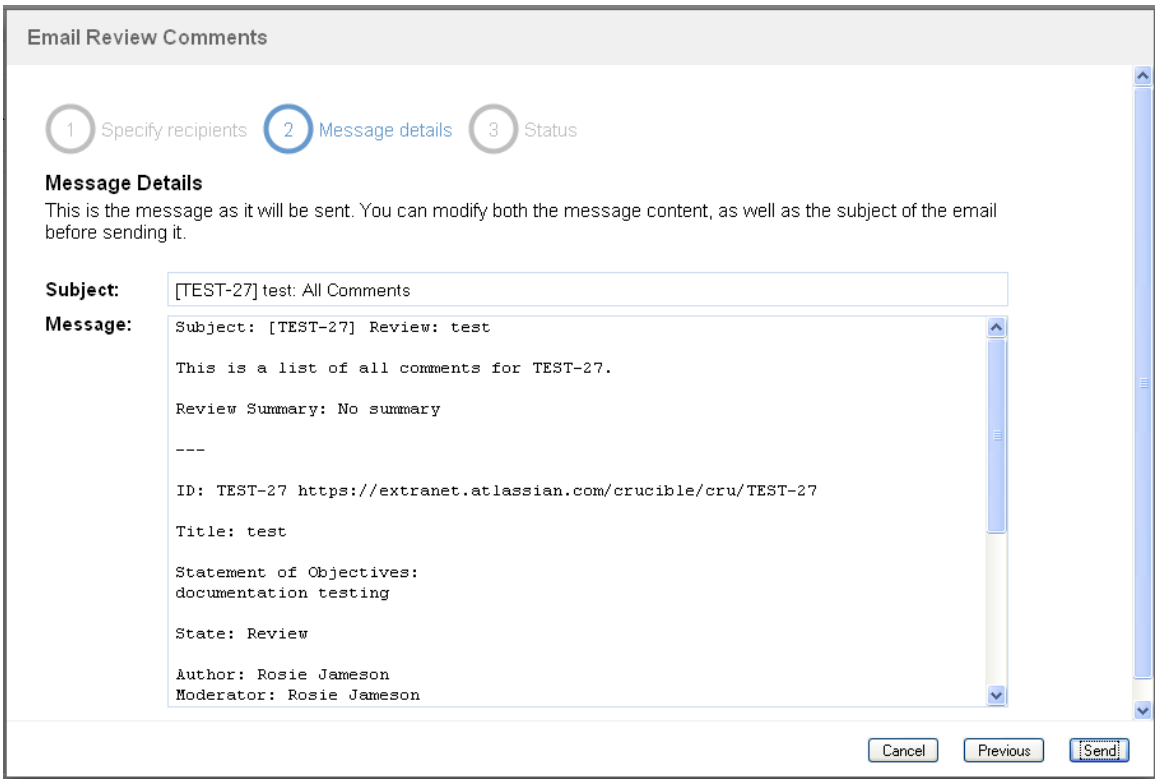
Screenshot 1: The 'Email Review' option in Crucible



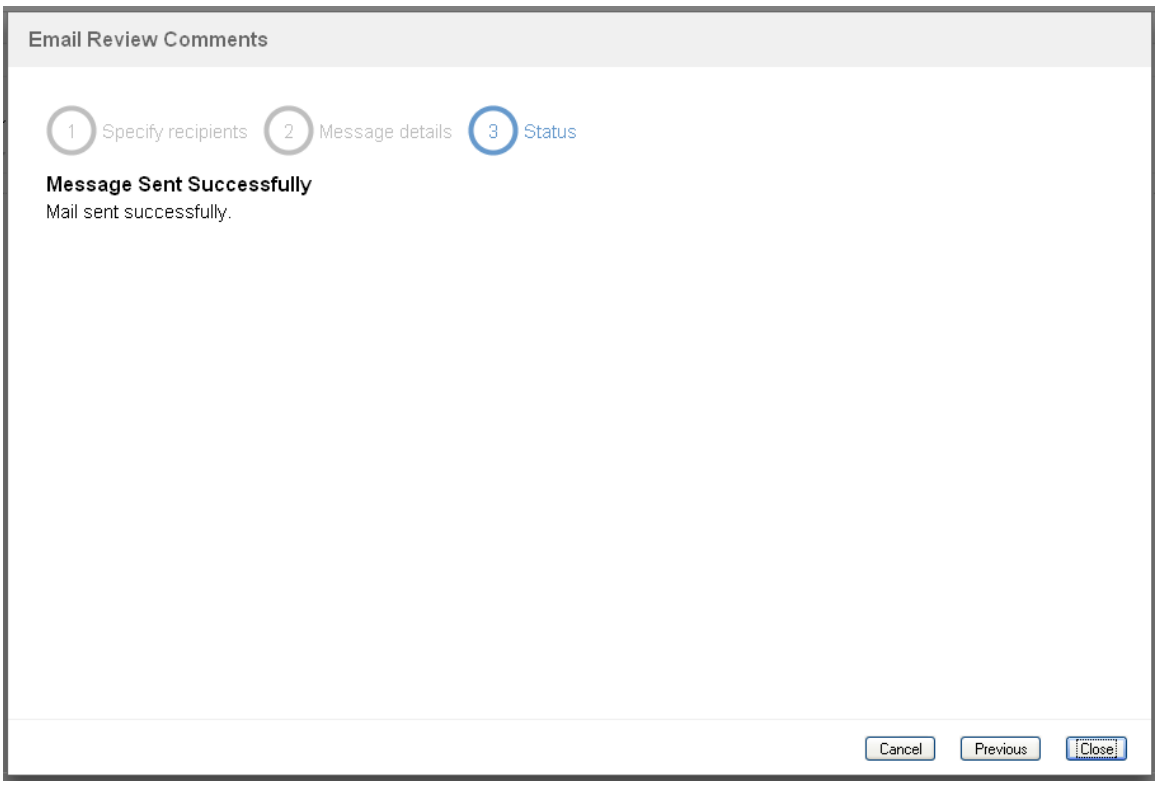
Screenshot 2: The 'Recipients' Screen in Crucible



Screenshot 3: The 'Message' Screen in Crucible



Screenshot 4: The Email Confirmation Screen in Crucible



Using the Review History Dialog

The Review History dialog shows a chronological list of interactions within a review. You can see rich information about those interactions and control their display. You can sort the information by date, actor, or action.

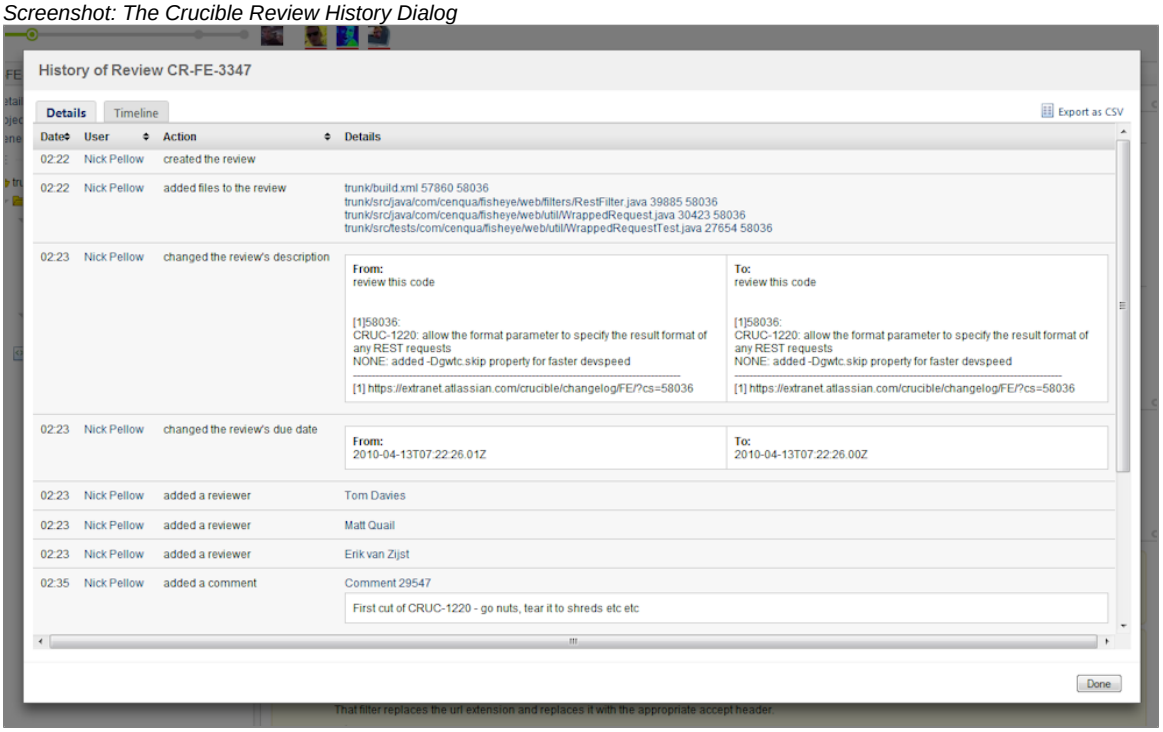
To open the Review History dialog,

1. Open a review in Crucible.
2. Click '**Tools**' > '**Review History**' at the toolbar at the top right corner of the screen.
3. The Review History dialog opens.

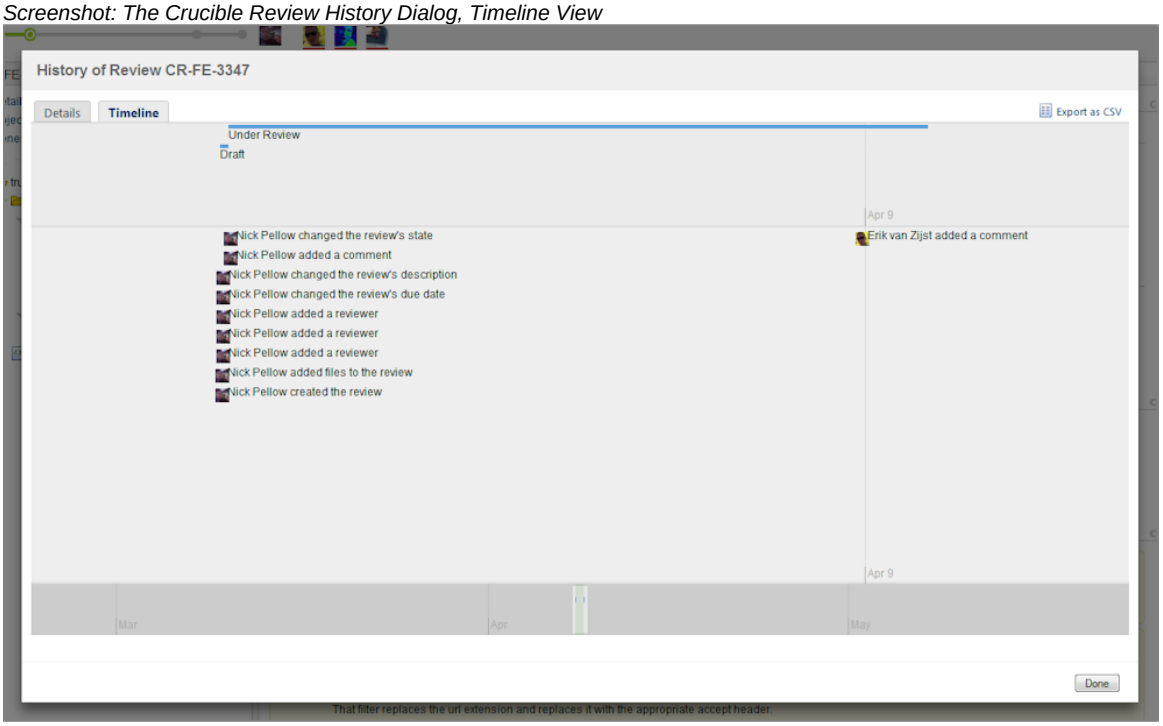
This information can also be displayed in the new timeline mode, a graphical visualisation that shows events on a horizontal graph over time (click the '**Timeline**' tab at the top of the dialog to switch from '**Details**' to timeline view). Click and drag inside the timeline view to scroll the graph left and right. You can also click on the section showing months to scroll over a greater time scale.

Additionally, you can get access to the entire review history through the '**CSV export**' link in the upper right hand corner, allowing for easy data import into a spreadsheet or other application.

Screenshot: The Crucible Review History Dialog



Screenshot: The Crucible Review History Dialog, Timeline View



Tracking Crucible Review Metrics

Crucible tracks each participant's percentage completion through each review and the total time they have spent.

To learn about these features, see the following pages:

- Using Progress Tracking
- Using Time Tracking

Using Progress Tracking

This page contains instruction on how to use progress tracking in Crucible.

On this page:

- How progress tracking works in Crucible
- Viewing the progress tracking totals
- How to adjust progress tracking on a review
- Adjusting settings for progress tracking
- Further reading

How progress tracking works in Crucible

As you work your way through the files in a review, Crucible tracks the ones you have viewed. Whenever you open a file for review, Crucible will automatically mark it as read.

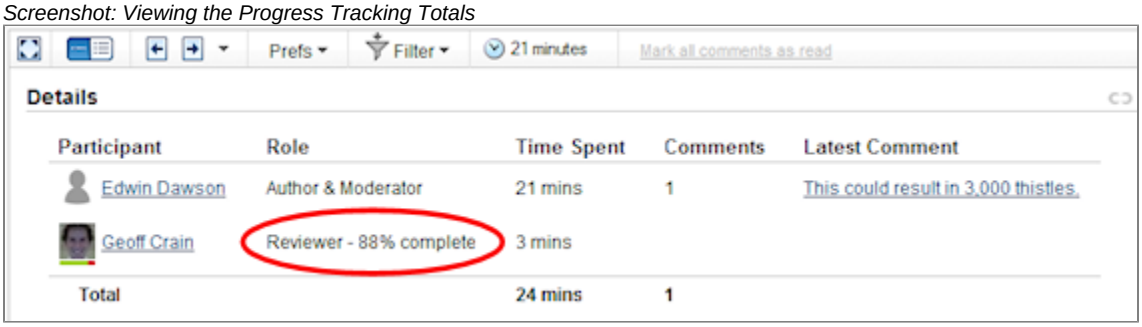
When participating in iterative reviews, progress tracking also takes lines of code and revisions into account.

Viewing the progress tracking totals

The '**Details**' view shows a summary of the progress of each participant through the files in the review.

If there is only one file in the review, then the progress tracked will either show 0% or 100%.

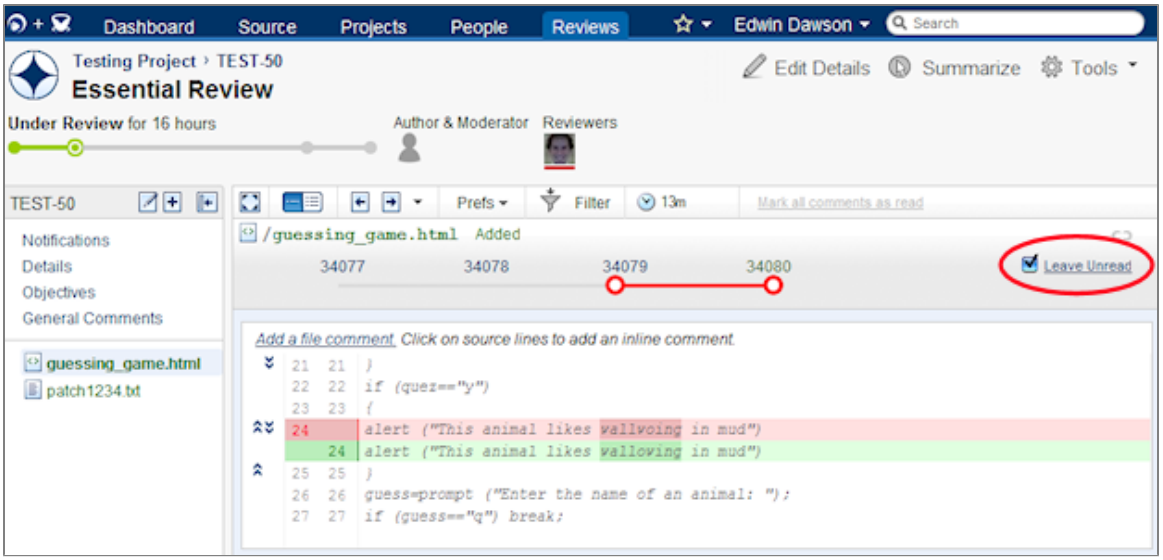
Screenshot: Viewing the Progress Tracking Totals



How to adjust progress tracking on a review

You can mark a file as unread by clicking on its name to view the file's contents. In the source view, you have an option at the top left of the screen, '**Leave Unread**'. If you select that, then the file you are looking at will not be added to your progress percentage.

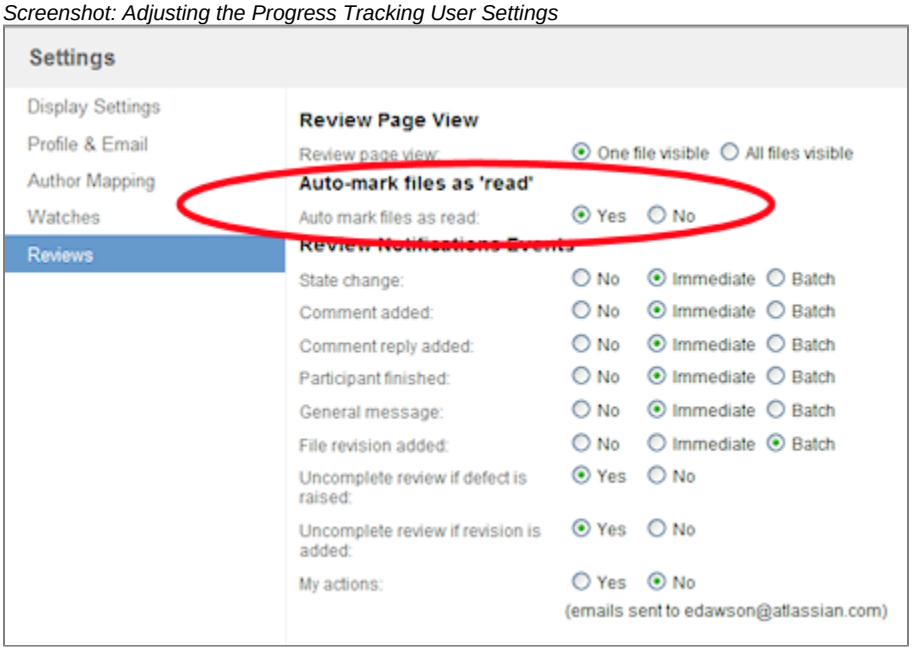
Screenshot: Marking a File as Unread



Adjusting settings for progress tracking

Progress tracking is a configurable user preference that can be changed in the '**User Settings**' menu, in the '**Reviews**' sub-section. '**Auto-mark files as read**' is on by default. When '**Auto-mark files as read**' is set to '**No**', marking files as read or unread is left to the user to manually manage.

Screenshot: Adjusting the Progress Tracking User Settings



Further reading

You may also want to learn about Crucible's Time Tracking feature.

Using Time Tracking

This page contains instruction on how to use time tracking in Crucible.

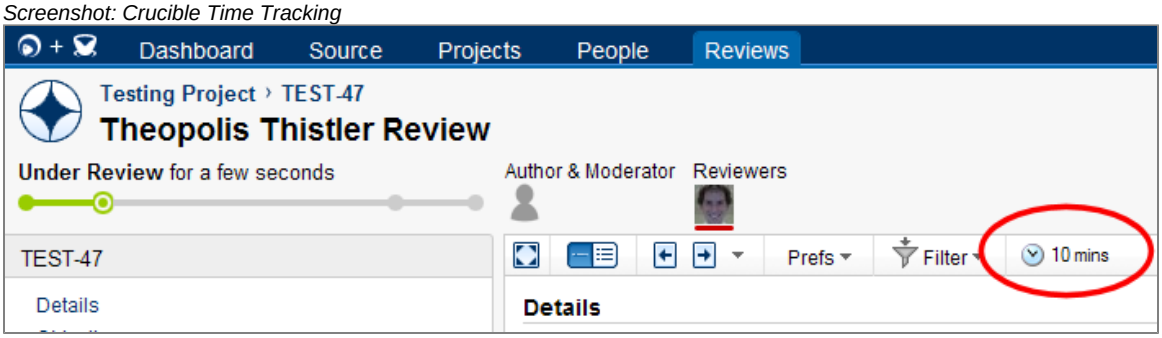
On this page:

- How time tracking works in Crucible
- How to adjust the time tracked on a review
- Viewing the time tracking totals
- JIRA integration
- Further reading

How time tracking works in Crucible

Crucible will automatically track the time you spend in a Crucible review. When you open a file for review, a counter in the Review Details panel starts. The time is added to your total when you leave the review screen.

Screenshot: Crucible Time Tracking



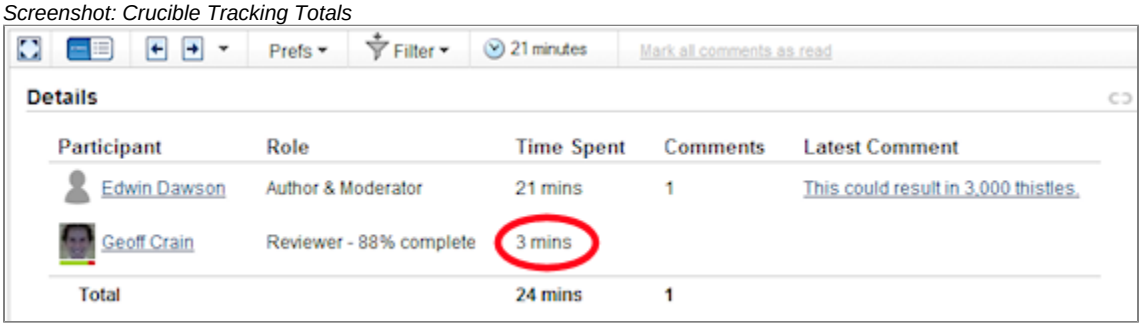
How to adjust the time tracked on a review

You can click and type in the time tracking control to adjust the time you have spent during the session.

Viewing the time tracking totals

The '**Details**' view shows a summary of the progress and time tracked on each file.

Screenshot: Crucible Tracking Totals

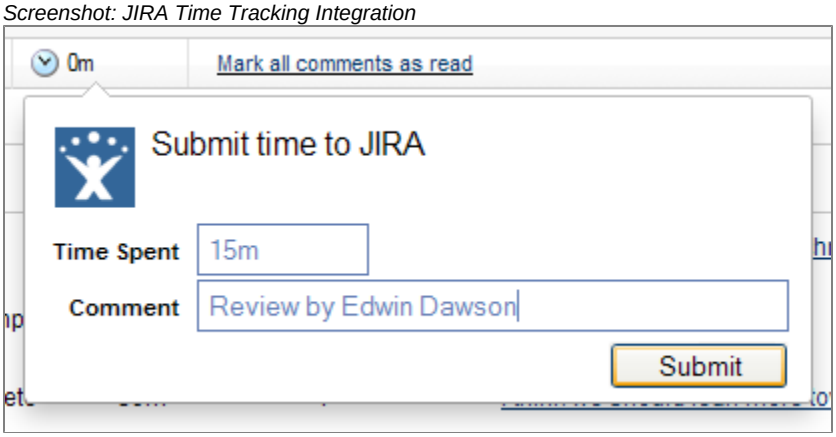


JIRA integration

Using Crucible when integrated with JIRA, you can update time tracking from the following locations:

- The confirmation dialog for a reviewer completing a review,
- The confirmation dialog on closing a review,
- The regular toolbar location in Crucible.

Screenshot: JIRA Time Tracking Integration



Further reading

You may also want to learn about Crucible's Progress Tracking feature.

Using JIRA Integration in Crucible Reviews

This page contains information on how to use JIRA integration with Crucible reviews.

On this page:

- 1. Create a JIRA Issue for your Review
- 2. Create Your Review and Link it to a JIRA Issue
- 3. Make a Comment or Defect on the Review
- 4. Click to create a JIRA Sub-Task
- 5. Resolve the JIRA issue through Crucible

Before you begin, both your Crucible and JIRA instances must be configured to use make use of these JIRA integration features. Read more.

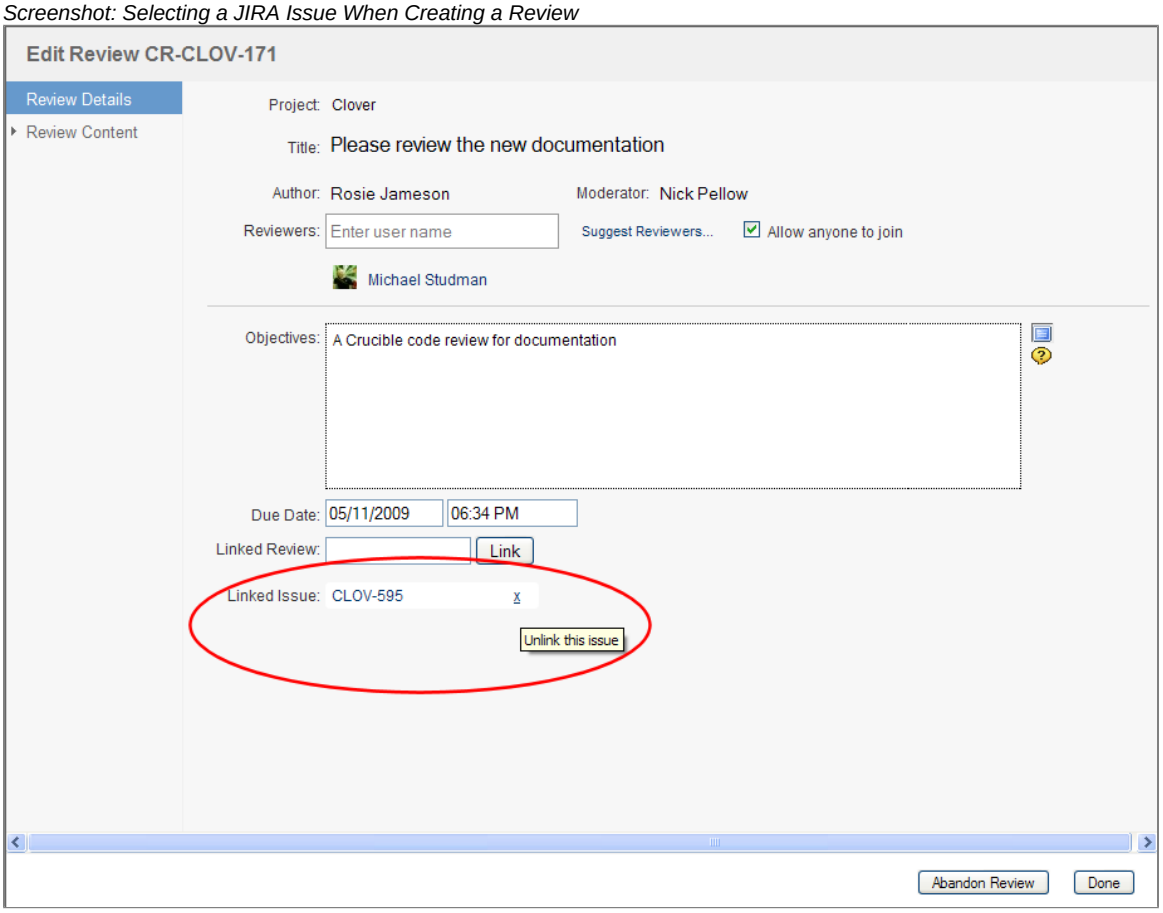
1. Create a JIRA Issue for your Review

To use JIRA integration, you must begin with a JIRA issue that you will use as the parent issue for the review. Crucible will create and resolve sub-tasks belonging to this parent issue. Once your parent issue is created, make a note of its issue key, e.g. `FE-1968`.

2. Create Your Review and Link it to a JIRA Issue

When creating your review, you have an option called '**Linked Issue**'. Crucible may put a suggested JIRA issue key into this field automatically. You can specify a different issue key and click '**Link**' to save it. You can also click the 'x' to clear the field and load a different issue key.

Screenshot: Selecting a JIRA Issue When Creating a Review

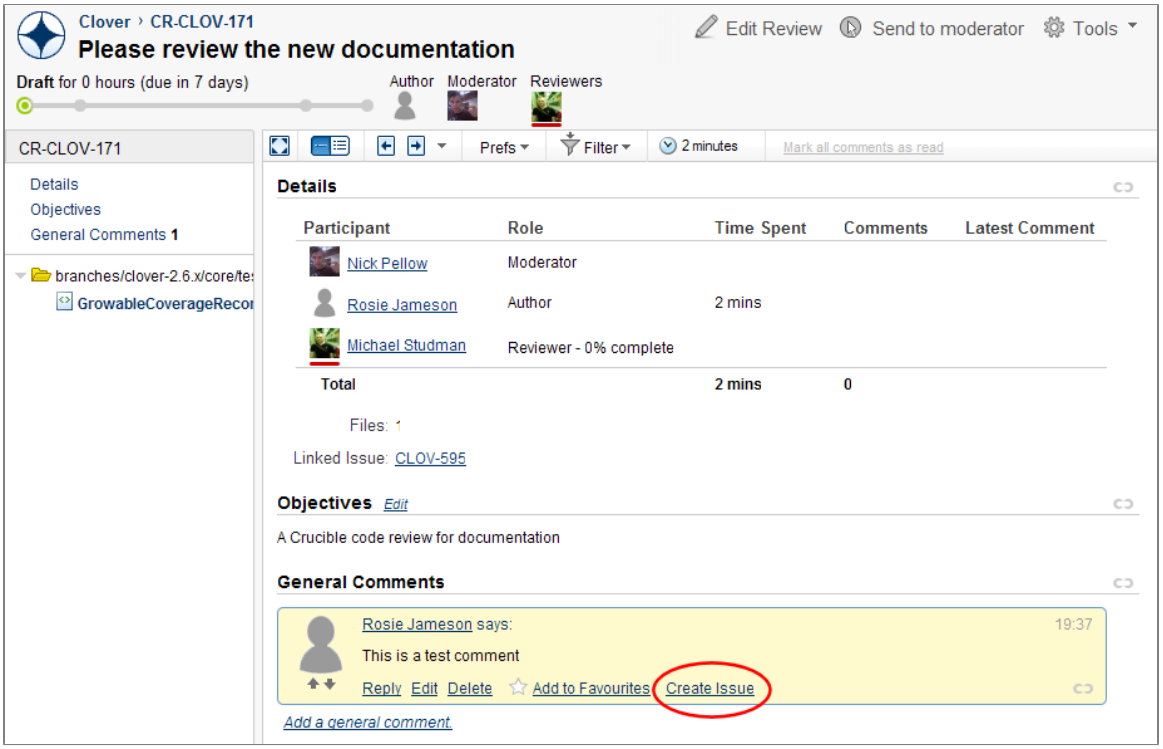


You can also link a JIRA issue to the review after the review is created. When viewing a review, the top-left hand corner of the screen shows meta-information. One of the links in this area is titled '**Linked JIRA Issue:**' and then a suggested JIRA issue key. Click this link to associate that JIRA issue with this review.

3. Make a Comment or Defect on the Review

Once your review has a linked JIRA issue, create a comment or defect comment anywhere on the review. Once created, the comment actions will show a link titled '**Create Issue**' (note that this link does not appear on replies — only on new comments). You can click that to instantly create a sub-task under the parent JIRA, which will take the content of the comment as its summary.

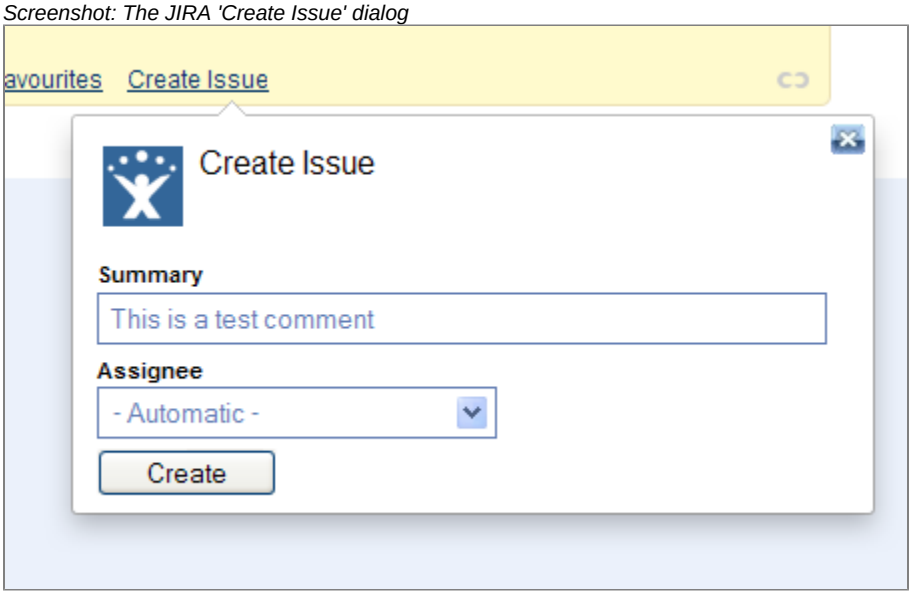
Screenshot: Selecting a JIRA Issue From a Comment



4. Click to create a JIRA Sub-Task

Clicking the '**Create Issue**' link will allow you to create a JIRA sub-task under the parent JIRA issue, e.g.:

Screenshot: The JIRA 'Create Issue' dialog

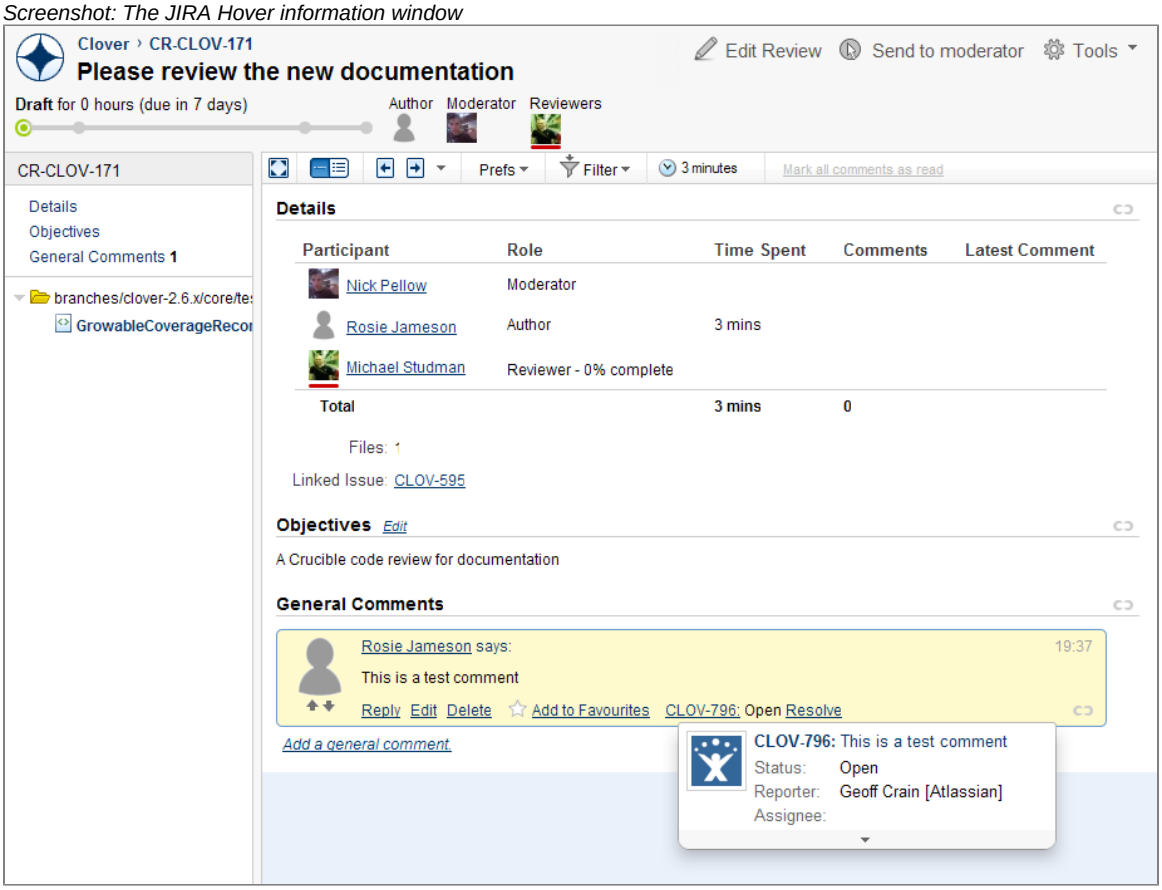


The list of possible assignees will include:

- 'Automatic' (i.e. the default assignee for that JIRA project)
- the assignee of the subtask's parent issue
- the reporter of the subtask's parent issue
- 'Unassigned' (if your JIRA administrator has enabled **Allow Unassigned**)
- plus, if Trusted Applications have been configured between JIRA and Crucible,
    - the review author
    - the review moderator
    - the comment/defect author
    - yourself

Once created, the sub-task JIRA issue key, status and default action (i.e. '**Resolve**') will be shown. If you hover your mouse over the JIRA issue key, an information window will show more information and controls relating to that JIRA issue.

Screenshot: The JIRA Hover information window



Users are mapped to their own accounts when using Trusted Applications. If you don't have the permissions to carry out the default action ('**Resolve**', in this case), an error will occur.

5. Resolve the JIRA issue through Crucible

Once the work required on your sub-task is completed, simply click the action link provided to signal that this has occurred (e.g. '**Resolve**'). The JIRA issue will be closed.

> If you encounter problems or have trouble using JIRA integration, please read the FAQ page on this topic.

Summarising and Closing the Review

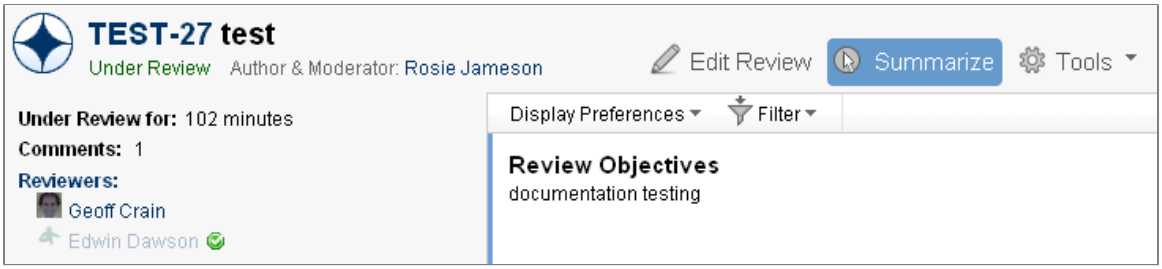
As the moderator, you can choose to **summarize a review** at any time.

Normally, we recommend that you wait for all reviewers to complete their reviews.
The reviews that the reviewers have completed will be in your '**To Summarize**' menu on the Dashboard.

To summarize a review,

- Click the '**Summarize**' button at the right of the screen.
- Optionally enter a summary of the review.
- If you have no further comments to add, click the '**Close Review**' button; otherwise, click '**Continue Without Closing**'.

Screenshot: 'Summarize' button



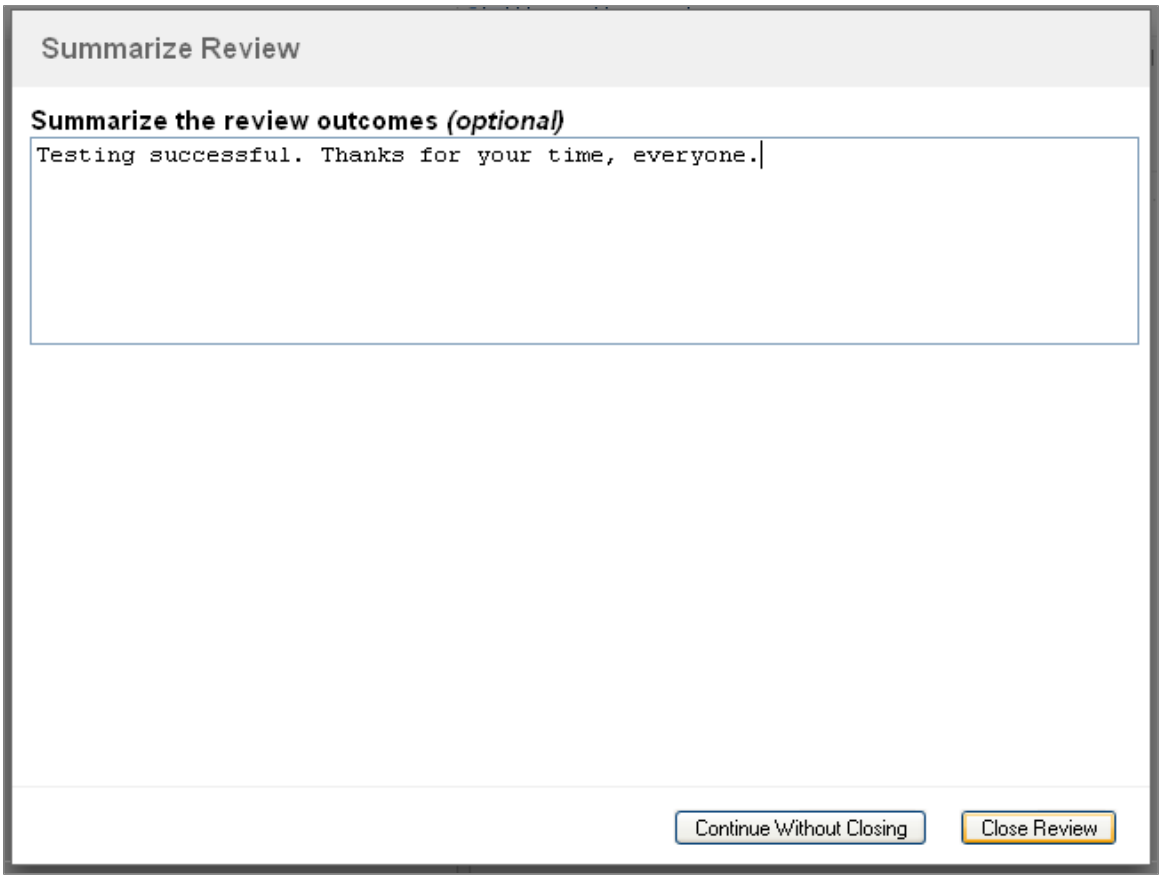
The above review is not yet complete
We can see that Geoff Crain has still not finished reviewing, because there is no green tick next to his name.

On clicking 'Summarize', the moderator may be prompted to confirm the action if there are incomplete reviews or draft comments in the review.

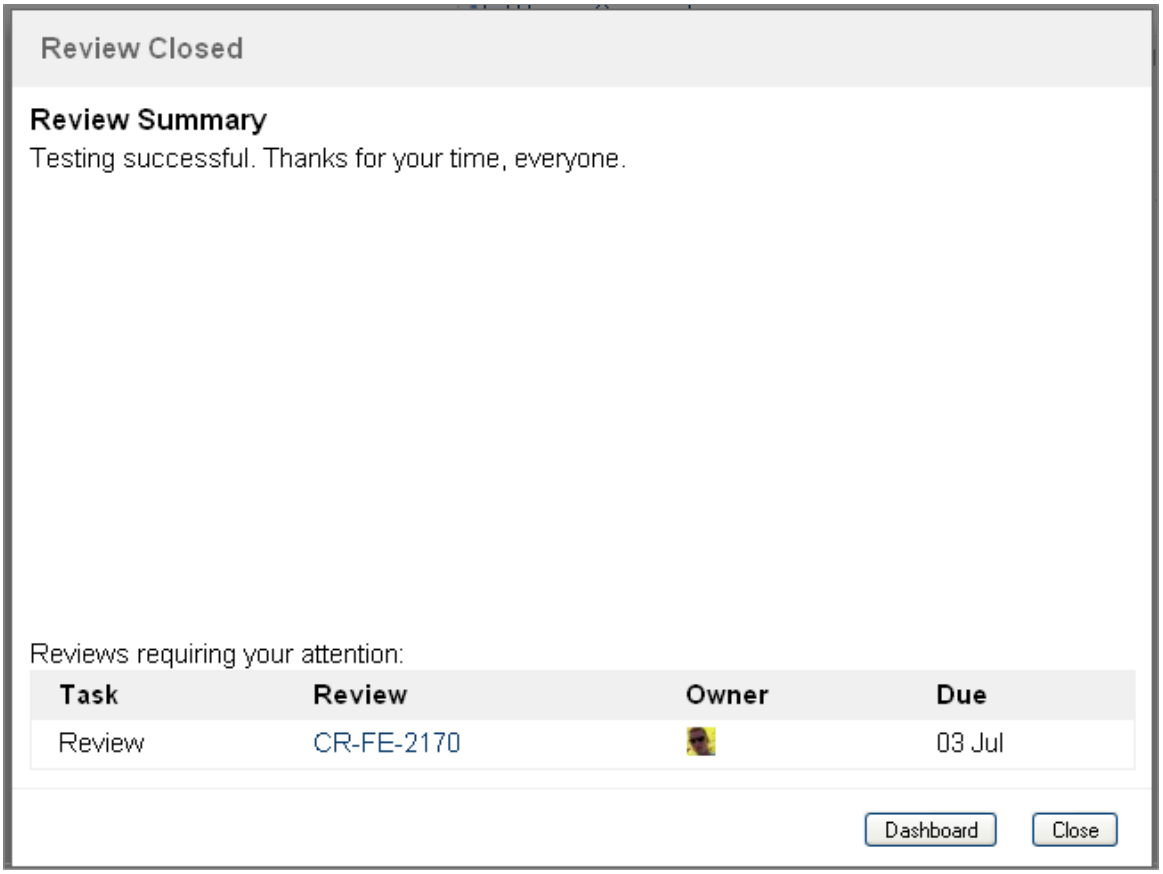
The requests for confirmation are warnings only
The review can still be summarized and closed.

Once the review is in the 'Summarize' state, the moderator can optionally add a review summary, i.e. describe the outcomes/tasks/etc.

Screenshot: Summarize Review



Screenshot: Review Closed



The summary is sent to all participants and displayed at the top of the closed review.

- The moderator is the only participant who can add comments in 'Summarize' state. This gives the moderator the responsibility of the 'last word'.
- Reviews in the 'Summarize' state can be closed.
- Reviews in the 'Summarize' or 'Closed' state can be re-opened. Re-opening changes the review's state back to 'Under Review', allowing all participants to add comments.

> Re-opening a review is not the recommended way to 're-review'. You should create a new review with the reworked changes and link it to its parent review (create a hyperlink back to the original review in the new Review's Objectives field).

Note that you need the '**Summarize**', '**Close**' or '**Re-Open**' permission to summarize, close or re-open a review.

Deleting an Abandoned Review

You can delete reviews that have been abandoned. To do this, follow the instructions below.

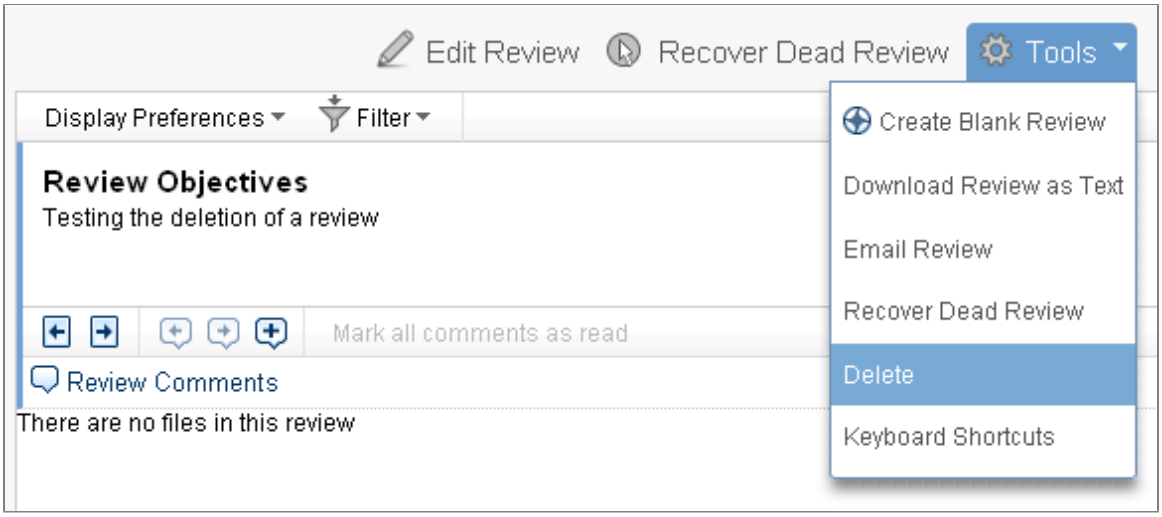
> Deleted reviews cannot be retrieved.

Deleting Reviews from the 'Abandoned' list

To delete a review from the 'Abandoned' list;

1. From the '**Crucible Dashboard**', click '**My Abandoned Reviews**' in the left-hand navigation bar.
2. A list of abandoned reviews appears. Click the name of the review you wish to remove.
3. Once the review details are displaying, select '**Delete**' from the '**Tools**' menu. The review will be instantly deleted.

Screenshot: Deleting a Review in Crucible



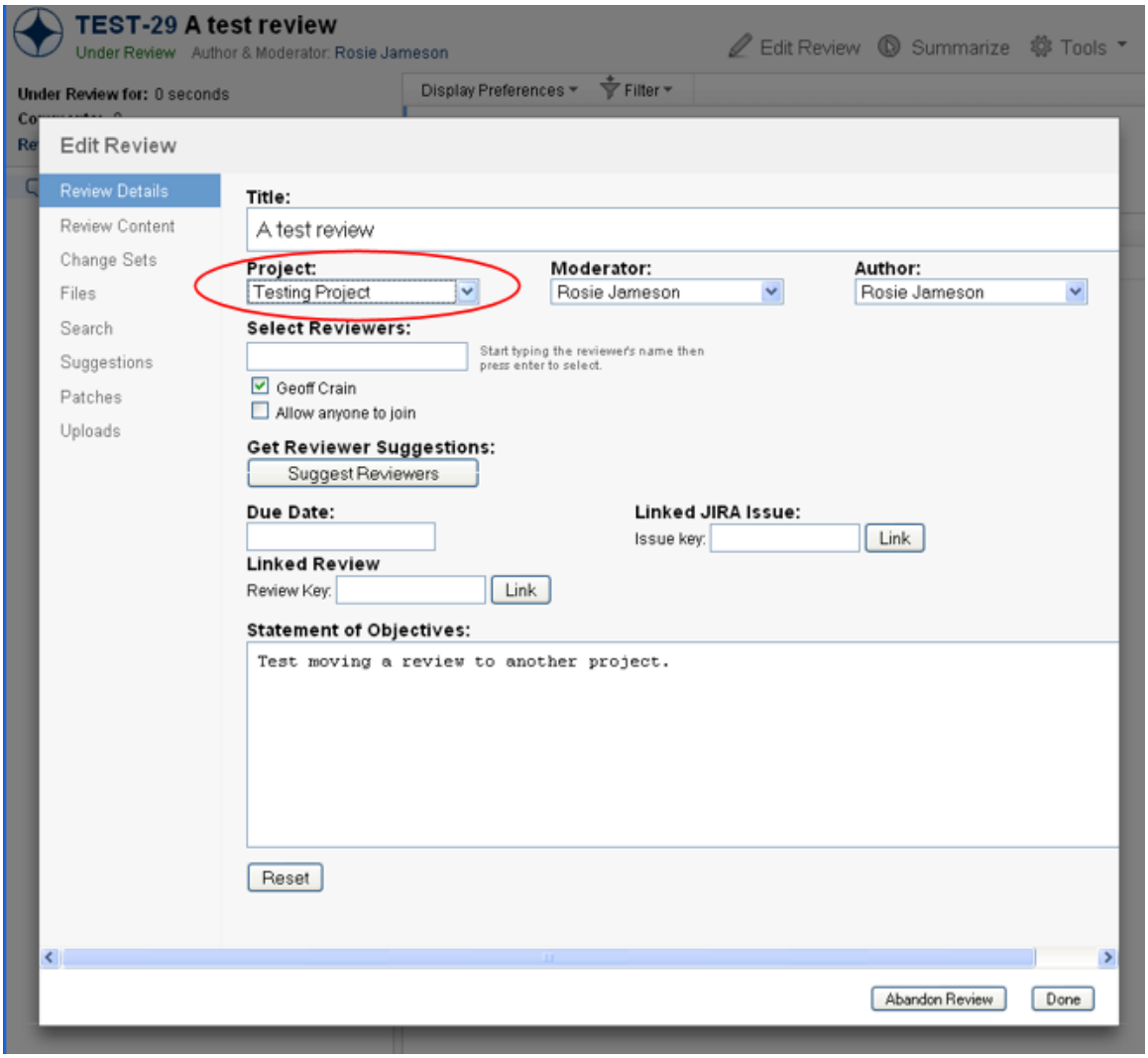
Moving a Review to Another Project

You can move reviews between projects once they have been created.

To move a review between projects,

1. Open the review. Click the '**Edit Review**' button at the top of the screen.
2. The '**Edit Review**' window will open, allowing you to change various aspects of the review.
3. Under '**Project**' click the drop-down menu. This will allow you to select a new parent project for the review.
4. Click the '**Done**' button at the bottom of the screen.

Screenshot: Changing a Review's Parent Project



Using the Dashboard

This page contains information on browsing reviews in Crucible.

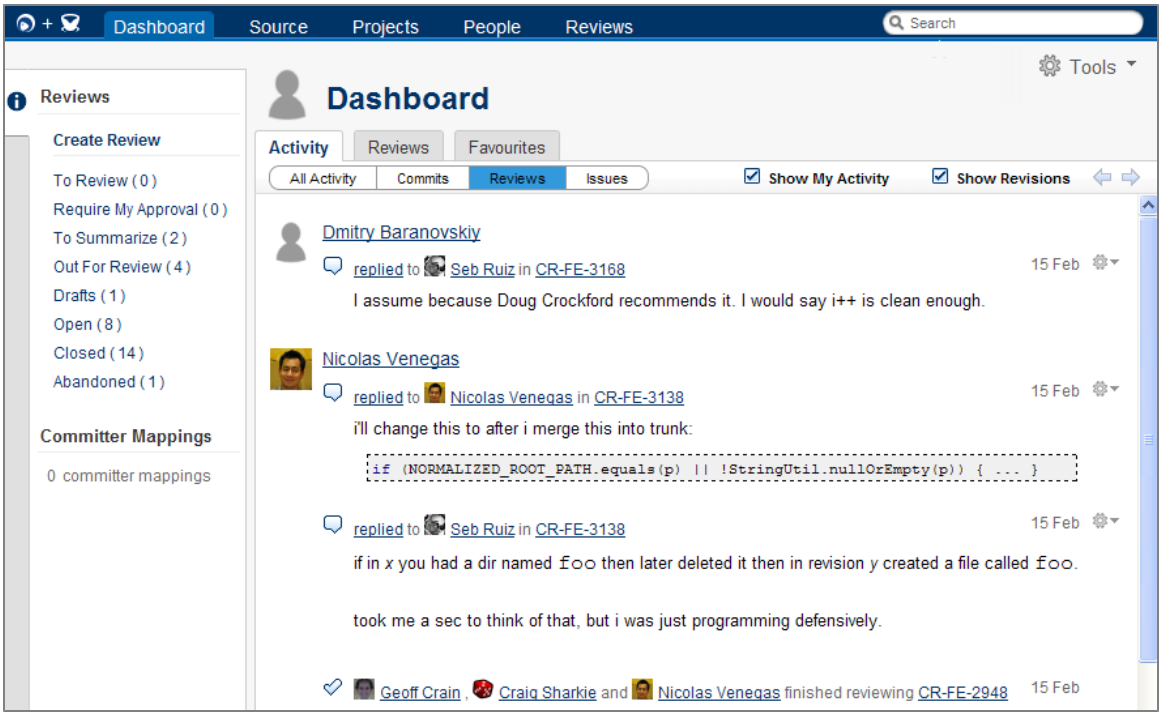
On this page:

- Dashboard Screen Overview
  - Filtering Your View

Dashboard Screen Overview

To browse all your reviews (reviews you are participating in), use the **Dashboard** tab at the top of the page. The Dashboard Screen opens, as shown in the screenshot below.

Screenshot: The Dashboard Screen in Crucible



By default, the Activity Stream is shown. This is a mix of all activity that is occurring related to Crucible, such as people making review comments, reviews opening and closing, files being committed to a linked repository, or updates to linked JIRA issues.

Filtering Your View

To filter your view, use the constraint options in the sub-nav and the side panel.

Activity Stream filters

You can also filter the items shown in the Activity Stream. To do this, click one of the options in second layer of tabs, as listed in the table below.

Tab Name	Sub-Nav Options
Activity Tab	Sub-Nav Options: • **All Activity** — Shows all activity with no filtering. • **Commits** — Shows commits. • **Reviews** — Shows reviews. • **Issues** — Shows JIRA issues. • **Show/Hide My Activity** — Show/hide your own activity. • **Show/Hide Revisions** — Show/hide activity from other users. • Earlier / Later Activity (arrow buttons) — Pages through activity items, stepping backward or forward through the results.
Reviews Tab (Shows the result of the filter clicked in the left side panel)	Sub-Nav Options: **RSS** — Opens a page with the RSS feed for the current selection.
Favourites Tab (Shows all items you have marked as a 'favourite'.)	Sub-Nav Options: None.

Side Panel

The left navigation panel of the Dashboard shows the number of reviews in different states. Click on any of these states to show the list of reviews in the left-hand panel.

To Review	Reviews where the user still needs to complete their work.
Require My Approval	The user has been assigned the role of moderator for these reviews and needs to approve them.

To Summarize	The user has been assigned the role of moderator for these reviews and needs to summarise and close them.
Out For Review	Reviews created by the user that are currently in progress.
Drafts	These are reviews created by the user that have not yet been moved to the 'Approval' or the 'Require Approval' states.
Open	All open reviews that the user is participating in.
Closed	These are reviews that the user has been involved in and are now closed.
Abandoned	Reviews that are no longer relevant and can be deleted.

The '**All Activity**' tab only shows your activity until you start adding respositories, directories or users to your favourites.

Using the Project Dashboard

To browse the content in a project, click the **Projects** tab at the top of the page. The '**Projects**' view opens.

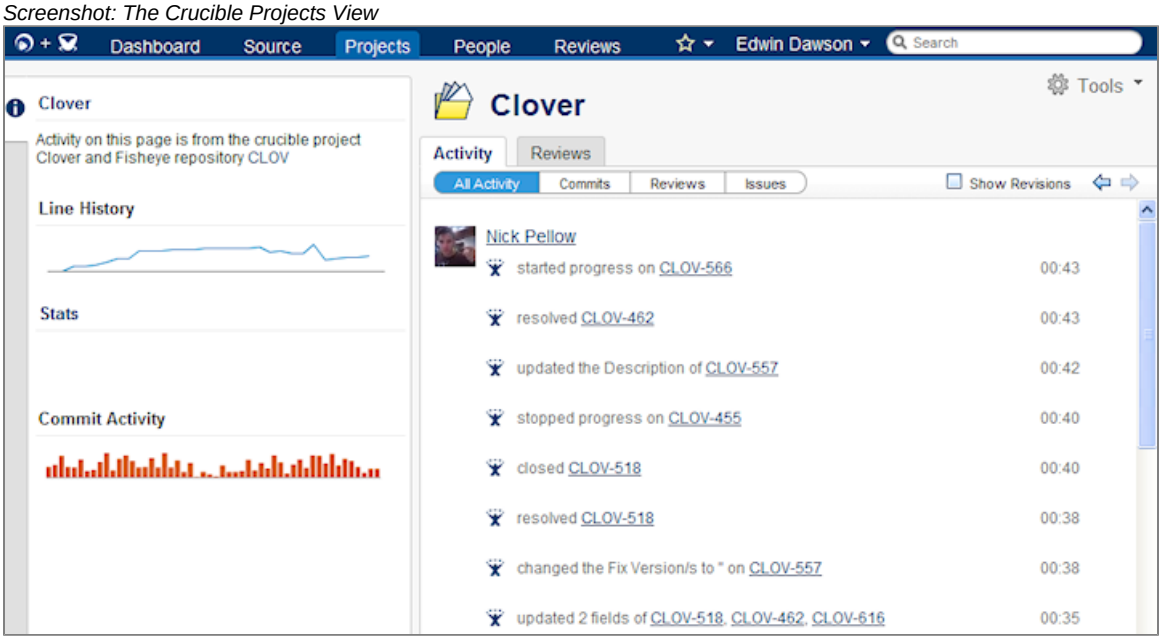
A list of projects will be shown if there is more than one. Click the name of the desired project to open it. The '**Project Activity**' page opens. In the left navigation bar, charts showing overall project statistics are displayed.

There are a number of sub-tabs on this page, listed in the table below.

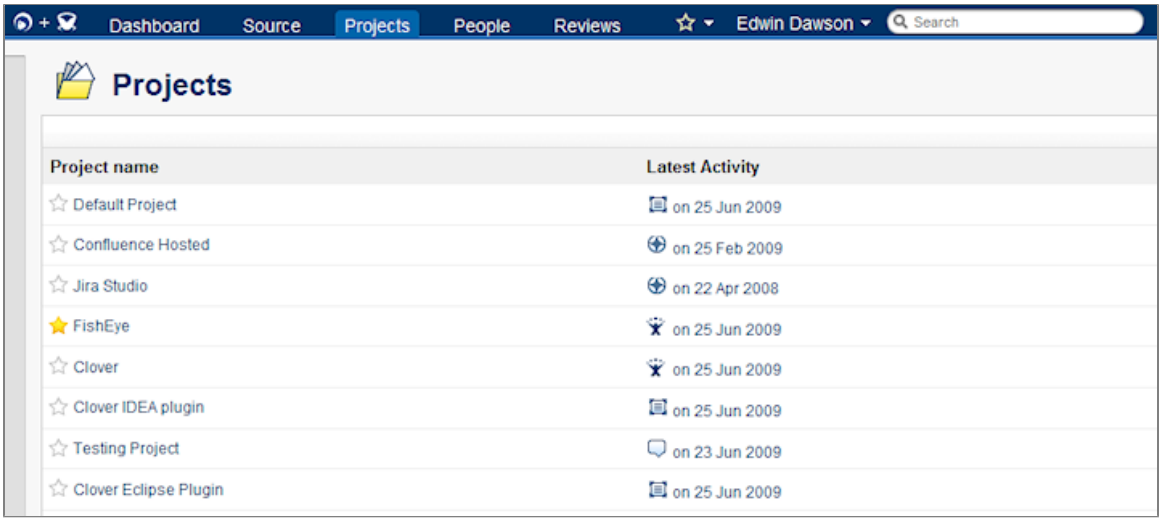
Sub-Tab Name	Description
Activity	• All Activity — The default view. • Commits — Shows commits in the project (visible when using FishEye). • Reviews — Shows reviews in the project. • Issues — Shows JIRA issues related to this project. Only visible if you have set up JIRA Integration in Crucible. • Show Revisions — Shows or hides revisions in the project (visible when using FishEye). • Earlier Activity (Left Arrow icon) — Loads a page of earlier project activity. • Later Activity (Right Arrow icon) — Loads a page of later project activity.
Reviews	Shows recent reviews in the project.

The Projects tab is only visible in Crucible. Read more about the definition of a project.

Screenshot: The Crucible Projects View



Screenshot: The Crucible Projects Index



Defining your Workflow

This document describes several forms of Crucible Workflow in detail. Depending on the size of your team, there are four different ways that a development team could use Crucible for code reviews. Choose the workflow which suits your team.

- Lightweight Code Commenting with Crucible (individual)
- One-to-One Reviews (Agile Pair)
- One-to-Many Reviews Without a Moderator (Agile Team)
- Formal Group Reviews (CMM Team)

Lightweight Code Commenting with Crucible (individual)

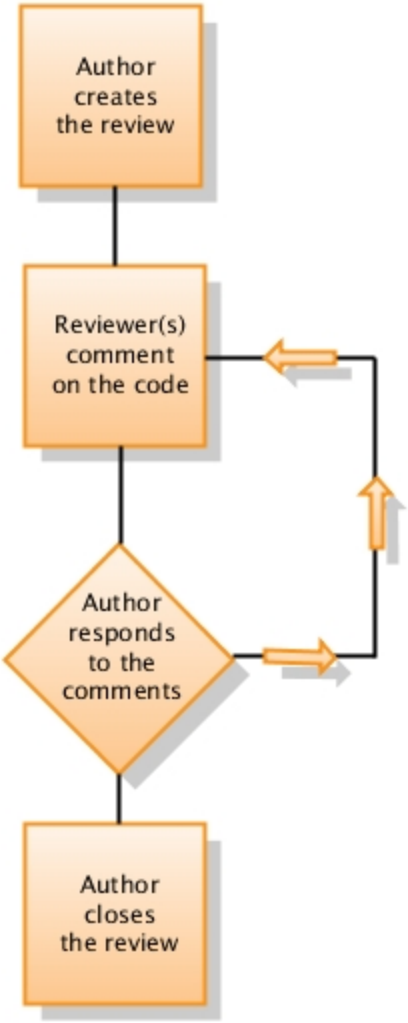
1. Author commits new work.
2. Author creates the review, and adds comments using the easy web interface.
3. Author summarizes and closes the review, saving the code comments in Crucible's database, which is stored outside the repository.

   Diagram: Workflow for Lightweight Code Commenting

One-to-One Reviews (Agile Pair)

1. Author creates the review.
2. Author invites reviewer to take part in the review.
3. Reviewer creates comments on the code.
4. Author responds to reviewer comments.
5. Follow-up comments are made if necessary.
6. Reviewer finishes own review process.
7. Author summarizes and closes the review.

Diagram: Workflow for One-to-One Reviews

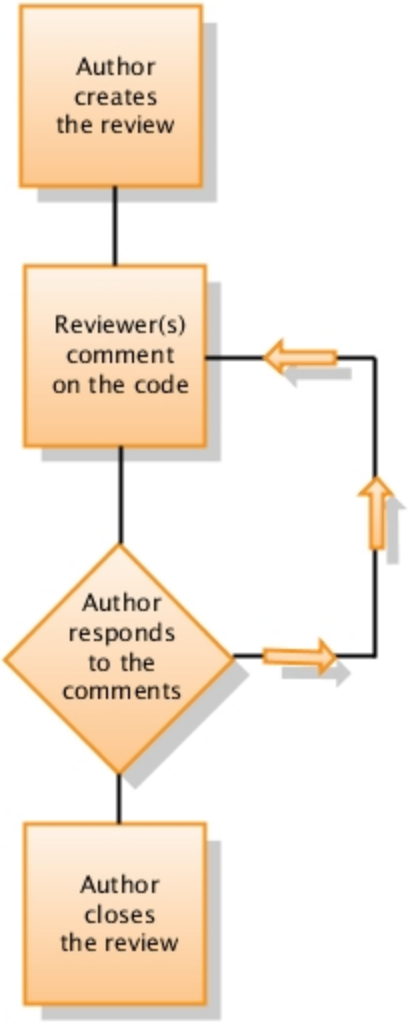


For more information on one-to-one reviews, see Getting Started with Crucible. The workflow process in Crucible is covered in detail within this document.

One-to-Many Reviews Without a Moderator (Agile Team)

1. Author creates the review.
2. Author invites reviewers to take part in the review.
3. Reviewers make comments on the code.
4. Author responds to reviewer comments, follow-up comments are made if necessary.
5. Reviewers complete their reviews.
6. Author summarizes and closes the review.

Diagram: Workflow for One-to-Many Reviews



Formal Group Reviews (CMM Team)

1. Author creates the review.
2. Moderator invites reviewers to take part the review.
3. Reviewers make comments on the code.
4. Author responds to reviewer comments.
5. Follow-up comments are made if necessary.
6. Each discussion point is settled by the Moderator.
7. Moderator summarizes and closes the review.

Diagram: Workflow for Formal Group Reviews

To see a simple example of how to use Crucible with two people, see Getting Started with Crucible.

Using Favourites

This page contains instructions on using the '**Favourites**' feature in Crucible to select, view and manage items of interest.

On this page:

- Favourites Overview
- Adding Items to Your Favourites
  - Adding a Review to Your Favourites
  - Adding a Review Comment Thread to Your Favourites
  - Adding a Project to Your Favourites
  - Adding a Person to Your Favourites
  - Adding a Changeset to Your Favourites
  - Adding a File or Folder to Your Favourites
  - Adding a Repository to Your Favourites
- Viewing Your Favourite Items
- Renaming an Item In Your Favourites
- Removing an Item From Your Favourites

Favourites Overview

Crucible allows you to tag certain items as your favourites. You can select code reviews, changesets, files, people and repositories to be added to your favourites. Once your favourites list is created, you can view it or see a stream of all activity relating to your favourite items. We suggest you select items that you are currently working on as favourites, to create a more relevant personalised view.

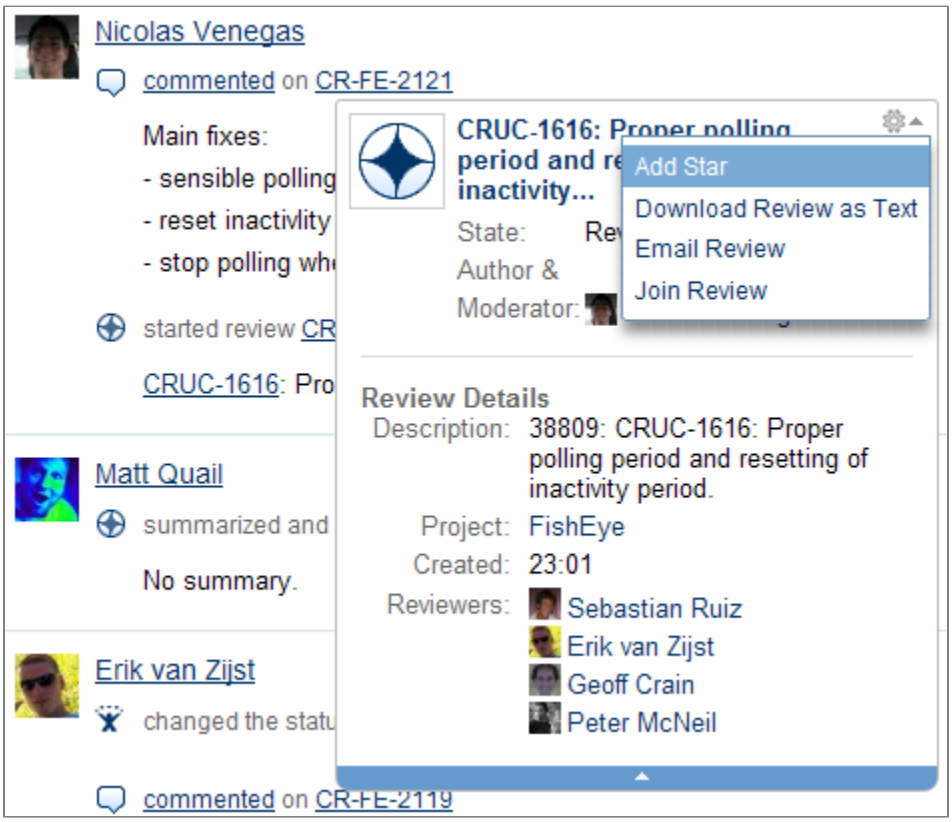
Adding Items to Your Favourites

To add an item to your favourites, follow one of the steps below.

Adding a Review to Your Favourites

To add a review to your favourites, hold the mouse cursor over the review name when it appears in a menu screen. The Review Hover menu appears. At the top right of the Review Hover menu, click the small grey cog icon that indicates the '**Tools**' menu. The Tools menu opens. In the Tools menu, click '**Add Star**'. This will add it to your favourites.

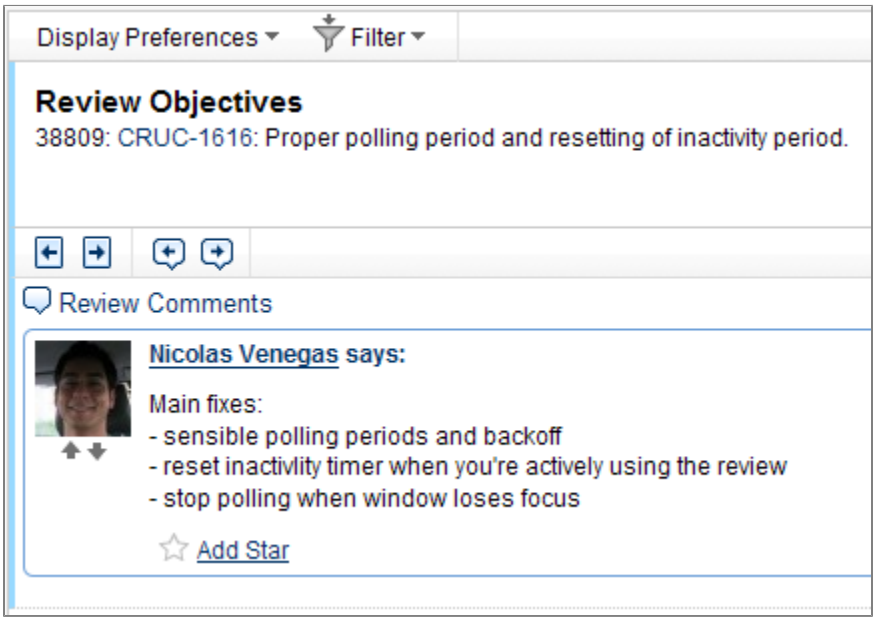
Screenshot: Adding a Review To Your Favourites



Adding a Review Comment Thread to Your Favourites

To add a review comment thread to your favourites, click the link '**Add Star**' next to the grey star icon at the bottom of the first comment of the thread. From then on, new comments will be shown in your favourites activity stream.

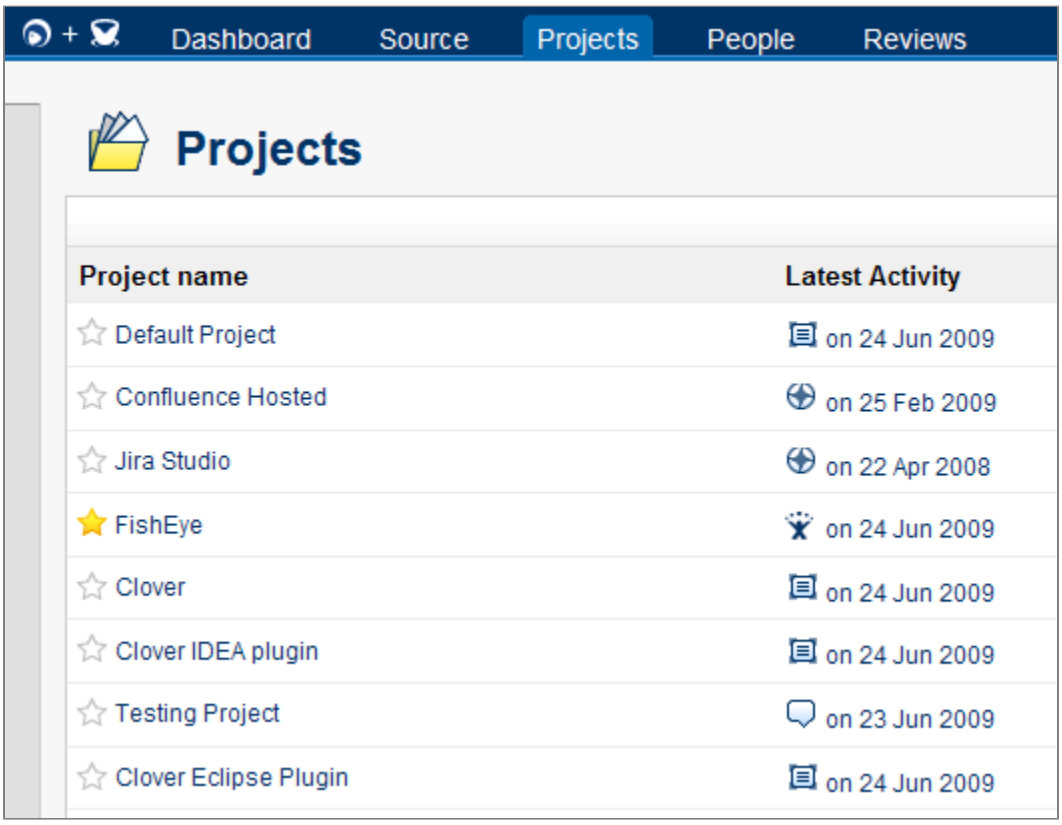
Screenshot: Adding a Review Comment Thread to Your Favourites



Adding a Project to Your Favourites

To add a project to your favourites, click the '**Projects**' tab. The Projects view appears. Here, simply click the grey star icon that appears next to the desired project name. The star icon will turn yellow, showing that it is selected as a favourite.

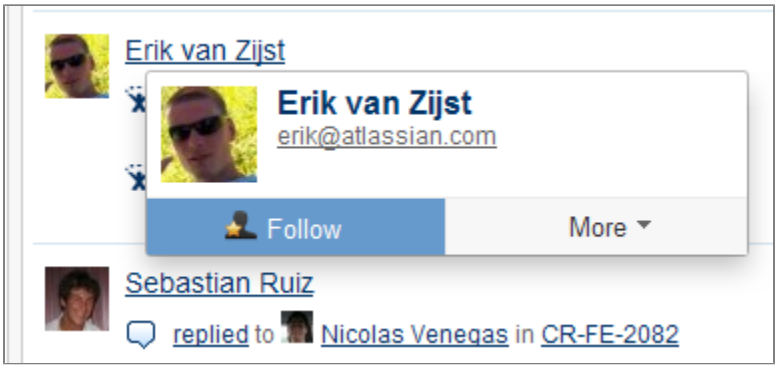
Screenshot: Adding a Project to your Favourites



Adding a Person to Your Favourites

To add a person to your favourites, simply hold the mouse cursor over their username wherever it appears. The User Hover menu will appear. In the User Hover menu, click '**Follow**'. This will add the person to your favourites.

Screenshot: Adding a Person to Your Favourites



Adding a Changeset to Your Favourites

To add a changeset to your favourites, firstly open the changeset desired from the '**Source**' tab. Once the changeset is open in Crucible, simply click the grey star icon that appears next to its name. The name appears in the breadcrumb links at the top of the screen.

Screenshot: Adding a Changeset to Your Favourites

Adding a File or Folder to Your Favourites

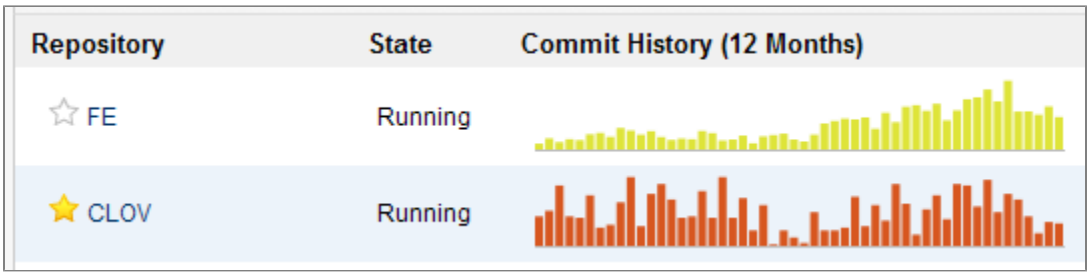
To add a file to your favourites, firstly open the file or folder desired, from the '**Source**' tab. Once the file or folder is open in Crucible, simply click the grey star icon that appears next to its name. The name appears in the breadcrumb links at the top of the screen.

Screenshot: Adding a File or Folder to Your Favourites

Adding a Repository to Your Favourites

Adding a repository to your favourites (requires FishEye), click the '**Source**' tab. The the '**Source**' view appears. Here, simply click the grey star icon that appears next to the name of the desired repository. The star icon will turn yellow, showing that it is selected.

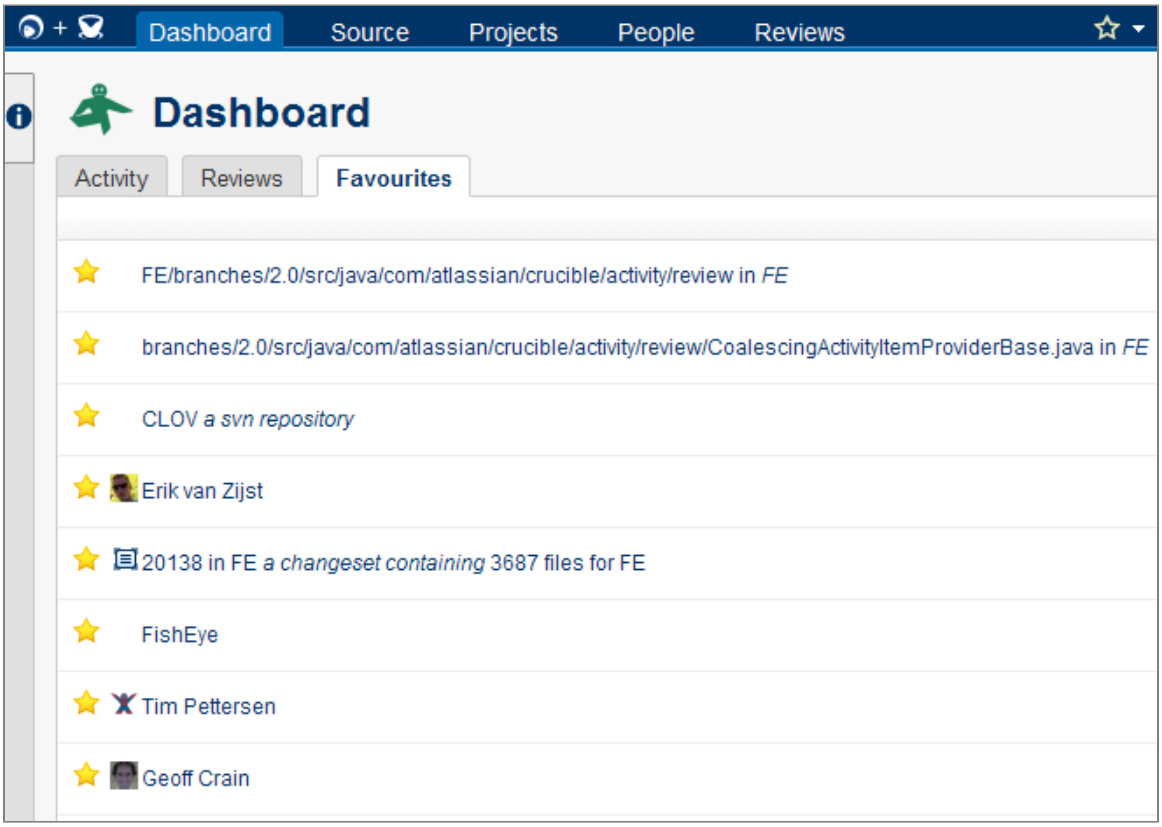
Screenshot: Adding a Repository to Your Favourites



Viewing Your Favourite Items

To view your favourite items, click '**Dashboard**' tab at the top left of the page and then the '**Favourites**' second level tab, beneath that.

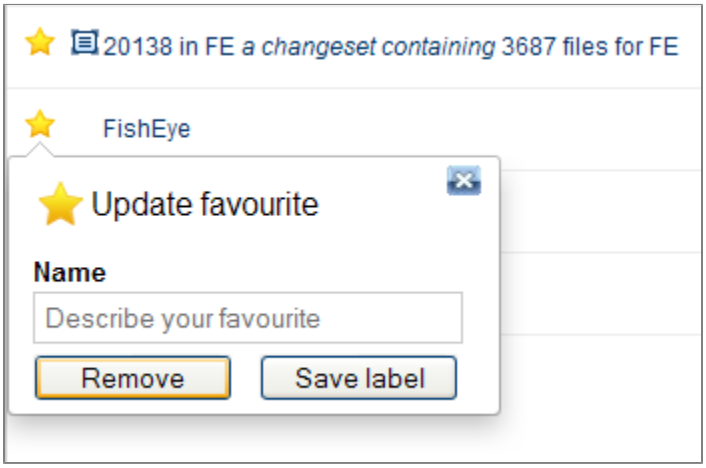
Screenshot: Viewing Your Favourites



Renaming an Item In Your Favourites

To rename an item in your favourites, open the Favourites drop-down menu (the gold star icon located at the top centre of the Crucible screen, next to your user menu). Select the option called '**Manage favourites**'. The Dashboard favourites page opens, showing all of your favourites in the system. To rename any item (changing its favourite display name only — not the name of item itself), simply click the yellow star to the left of its name. A small pop-up menu will appear, the '**Update Favourites**' menu. Type the desired name into the '**Name**' field and click the '**Save label**' button. The label will be updated for the favourites view.

Screenshot: Renaming an Item in Your Favourites

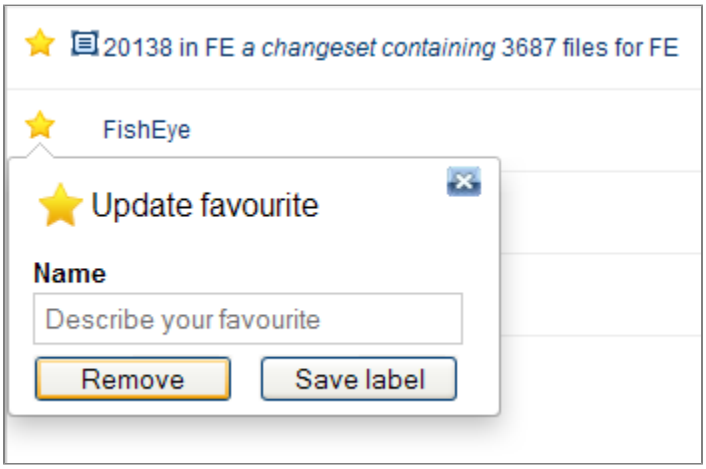


Removing an Item From Your Favourites

To remove an item from your favourites, open the Favourites drop-down menu (the gold star icon located at the top centre of the Crucible screen,

next to your user menu). Select the option called '**Manage favourites**'. The Dashboard favourites page opens, showing all of your favourites in the system. To remove any item, simply click the yellow star to the left of its name. A small pop-up menu will appear, the '**Update Favourites**' menu. Click the '**Remove**' button. The star will turn grey, showing that it has been removed from your favourites.

Screenshot: Removing an Item From Your Favourites



Using Keyboard Shortcuts in Crucible

Crucible provides a number of keyboard shortcuts, allowing you to quickly carry out certain actions without the mouse. Keyboard shortcuts are available for most of the commonly-used functions in Crucible.

To see a list of available shortcuts, firstly navigate to a review in Crucible. Now open the '**Tools**' drop-down menu at the top right corner of the screen, and select the '**Keyboard Shortcuts**' option.

See the tables below for full details:

General Shortcuts

Key	Function
?	Opens reference list of keyboard shortcuts.
escape	Closes reference list of keyboard shortcuts.
alt	Hold down then click and drag to select source line contents.
shift + f	Toggle full screen review mode.

Comment Navigation Shortcuts

Key	Function
n	Go to next review comment.
p	Go to previous review comment.
shift + p	Go to first review comment.
shift + n	Go to last review comment.
l	Go to next thread (skips replies).
h	Go to previous thread (skips replies).
]	Go to next unread comment.
[	Go to previous unread comment.
r	Reply to a comment.
m	Toggle comment read/unread status.

File Navigation Shortcuts

Key	Function
j	Go to next file.
k	Go to previous file.
shift + k	Go to first file.
shift + j	Go to last file.
u	Go to next unreviewed file.
i	Go to previous unreviewed file.
y	Set file reviewed and go to next unreviewed file.
shift + y	Toggle file reviewed/unreviewed status.
e	Expand current file.
c	Collapse current file.
shift + e	Expand all files.
shift + c	Collapse all files.

Using RSS Feeds in Crucible

Subscribing to an RSS Feed

In Crucible, all pages with an activity stream and any page which has a list of reviews will have an RSS option.

To access the RSS feed for a page, open the '**Tools**' drop-down menu at the top right corner of the screen, then click the '**RSS**' option.

This will open a page with the RSS feed displayed; you can also paste the URL from that page into your RSS reader of choice.

Using Wiki Markup in Crucible

Crucible supports Wiki Markup text formatting in comments and review descriptions.

The text markup notation on this page is a reference showing the available formatting commands.

When using FishEye, you can also render Wiki Markup in commit messages.

Headings

Notation	Description
h1.Biggest heading	Turns text into a heading at size 1. **Biggest Text**
h2.Bigger heading	Turns text into a heading at size 2. **Bigger heading**
h3.Big heading	Turns text into a heading at size 3. **Big heading**

h4.Normal heading	Turns text into a heading at size 4. ***Normal heading***
h5.Small heading	Turns text into a heading at size 5. **Small heading**
h6.Smallest heading	Turns text into a heading at size 6. ***Smallest heading***

Text Effects

Text effects are used to change the formatting of words and sentences.

Notation	Description
bold	Makes text appear **bold**.
italic	Makes text appear in *italics*.
+underline+	Makes text appear <u>underlined</u>.
??citation??	Makes text appear in *citation* form.
-strikethrough-	Makes text appear ~~struck through~~.
^superscript^	Makes text appear in ^{superscript}.
~subscript~	Makes text appear in $_{\text{subscript}}$.
`{{monospaced}}`	Placing double curly-brackets around text makes it appear `monospaced`.
bq. Block Quote	To make an entire paragraph into a block quotation, place "bq. " before it. Example: > *Some block quoted text*
{quote} here is quoteable content to be quoted {quote}	Quote a block of text that's longer than one paragraph. Example: > *here is quoteable* > *content to be quoted*
{color:red} look ma, red text! {color}	Changes the color of a block of text. Example: look ma, red text!

Text Breaks

Wiki Markup allows you to insert breaks or different kinds of hyphens and dashes.

Notation	Description
(empty line)	Produces a new paragraph

\\	Creates a line break.
- - - -	Creates a horizontal ruler.
- - -	Produces em dash — symbol.
- -	Produces en dash – symbol.

Links

Creating links is easy with Wiki Markup.

Notation	Description
[Crucible Review CR-FE-100|CR-FE-100]	Creates a link to a Crucible review or FishEye artifact using the internal key reference for the item.
[Atlassian Crucible|http://atlassian.com]	Creates a link to an external resource, special characters that come after the URL and are not part of it must be separated with a space. External links are denoted with an arrow icon. Examples: • http://www.atlassian.com/crucible • Atlassian Crucible Note: The square brackets [,], around external links are optional in the case you do not want to use any alternate text for the link (i.e. just display the raw URL).
[mailto:mail@example.com]	Creates a link to an email address. Example: mail@example.com
[file:///c:/temp/foo.txt] [file:///z:/file/on/network/share.txt]	Creates a download link to a file on your computer or on a network share that you have mapped to a drive. To access the file, you must right click on the link and choose "Save Target As".
{anchor:anchorname}	Creates a bookmark anchor inside the page. You can then create links directly to that anchor. So a link like this: [My Page#here] will link to wherever in "My Page" there is an {anchor:here} macro, and the link [#there] will link to wherever in the current page there is an {anchor:there} macro.

Lists

Lists allow you to present information as a series of ordered items. Use asterisks * for bulleted lists and hash symbols # for numbered lists.

Notation	Description

* A bulleted list
* Second item
** indented item 1
** indented item 2
 	
# A numbered list 	
# Second item 	
## indented item 1 	
## indented item 2 	
	Examples:
	
	• A bulleted list
	• Second item
	  • indented item 1
	  • indented item 2
	
	1. A numbered list
	2. Second item
	  a. indented item 1
	  b. indented item 2

Images

Images can be referenced from remote sources only.

Notation	Description
!http://www.host.com/image.gif!	The image will be displayed from the remote source.
!http://www.host.com/image.gif|align=right, vspace=4!	For any image, you can also specify attributes of the image tag as a comma separated list of name=value pairs as shown in this example.

Tables

Tables allow you to organise content in a rows and columns, with a header row if required.

Notation	Description
||heading 1||heading 2||heading 3|| |col A1|col A2|col A3| |col B1|col B2|col B3|	Makes a table. Use double bars for a table heading row.

The code above produces a table that looks like this:

heading 1	heading 2	heading 3
col A1	col A2	col A3
col B1	col B2	col B3

Advanced Formatting

This section covers panels, code windows and showing plain text with no formatting.

Notation	Description

{noformat}	Makes a preformatted block of text with no syntax highlighting. All the optional parameters of the {noformat} macro are valid for the {panel} macro as well.
	Example:
	
	`This is a no-formatted piece of text,`
	`so *no* _formatting_ is done here.`

{panel}	Embraces a block of text within a fully customizable panel. The optional parameters you can define are as follows. • title: Title of the panel • borderStyle: The style of the border this panel uses (solid, dashed and other valid CSS border styles) • borderColor: The color of the border this panel uses • borderWidth: The width of the border this panel uses • bgColor: The background color of this panel • titleBGColor: The background color of the title section of this panel Examples: Some text in a basic panel **My Title** Some text with a title **My Title** a block of text surrounded with a **panel** yet *another* line

{code}code goes here{code}
 	
{code:title=Bar.java|borderStyle=solid}
// Some comments here
public String getFoo()
{
return foo;
}
{code}
 	
{code:xml}
<test>
<another tag="attribute"/>
</test>
{code}
	The code macro displays a preformatted block for showing code with syntax highlighting. All the optional parameters of the {panel} macro are valid for {code}. The default language is Java but you can specify JavaScript, ActionScript, XML or SQL.
	
	Examples:
	
	Java with a title bar:
	
	Bar.java
	`// Some comments here`
	`public String getFoo()`
	`{`
	`  return foo;`
	`}`
	
	A basic display with XML code:
	
	`<test>`
	`  <another tag="attribute"/>`
	`</test>`

Miscellaneous Markup Features

Emoticons and often-used images can be easily embedded with the following Wiki Markup Syntax:

Notation	Description
\X	Escape special character X (i.e. {)

:), :(	Graphical emoticons (smileys): , .

Notation	:)	:(	:P	:D	;)	(y)	(n)	(i)	(/)	(x)	(!)
Image											

Notation	(+)	(-)	(?)	(on)	(off)	(*)	(*r)	(*g)	(*b)	(*y)
Image										

Using Gadgets in Crucible

This page explains how to use the bundled gadgets in Crucible.

On this page:

- Overview of Crucible Gadgets
- Gadget Configuration 1: Add JIRA to FishEye as an OAuth consumer
- Gadget Configuration 2: Add Gadget to your Application's Gadget Directory
- Gadget Configuration 3: Add Gadget to the Application's Dashboard

Overview of Crucible Gadgets

As of the release of Crucible 2.3, you can show Crucible data in other Atlassian applications such as JIRA and Confluence by way of special gadgets.

Crucible has three gadgets bundled with it by default:

Gadget Name	Description and Gadget URL
'**To Do Gadget**'	This gadget is a list of Crucible to-do items including reviews to do, comments to read or reviews to summarise. The URL for this gadget is as follows: `http://HOSTNAME:8060/rest/gadgets/1.0/g/com.atlassian.fecru.fecru-gadgets-plugin:overdueReviews/gadgets/todo.xml` In this example, `HOSTNAME:8060` is the hostname of your Crucible instance.
'**Hassle Gadget**'	This gadget shows you who you are still waiting on, in other words which reviewers haven't completed your reviews. The URL for this gadget is as follows: `http://HOSTNAME:8060/rest/gadgets/1.0/g/com.atlassian.fecru.fecru-gadgets-plugin:overdueReviews/gadgets/hassle.xml` In this example, `HOSTNAME:8060` is the hostname of your Crucible instance.
'**Overdue Reviews Gadget**'	This gadget shows you reviews that are yet to be completed in the project, across all authors. This is useful for managers or team lea The URL for this gadget is as follows: `http://HOSTNAME:8060/rest/gadgets/1.0/g/com.atlassian.fecru.fecru-gadgets-plugin:overdueReviews/gadgets/overdueReviews.xml` In this example, `HOSTNAME:8060` is the hostname of your Crucible instance.

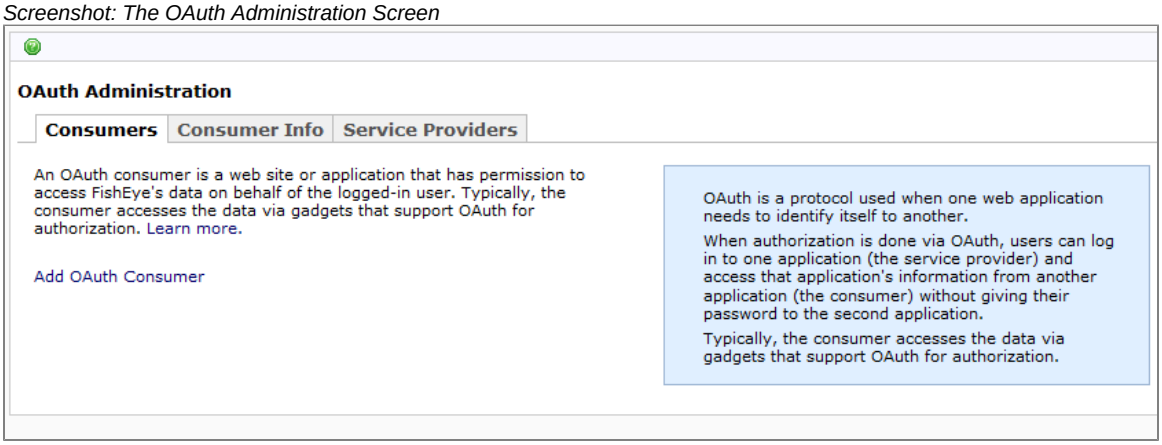
Review Coverage	This gadget shows content from the innovative Review Coverage report, letting you investigate how much of your codebase has bee under code review. The URL for this gadget is as follows: `http://HOSTNAME:8060/rest/gadgets/1.0/g/com.atlassian.fisheye.review-coverage-report/gadget/recent-changesets.xml` In this example, `HOSTNAME:8060` is the hostname of your Crucible instance.

Configuring gadgets is a three phase process. Firstly, you add your JIRA instance as an OAuth consumer. Secondly, you'll add the gadget to the destination application, then finally you add the gadget to the application's dashboard. In our example, we will show how to configure the Crucible gadgets for use in JIRA.

Gadget Configuration 1: Add JIRA to FishEye as an OAuth consumer

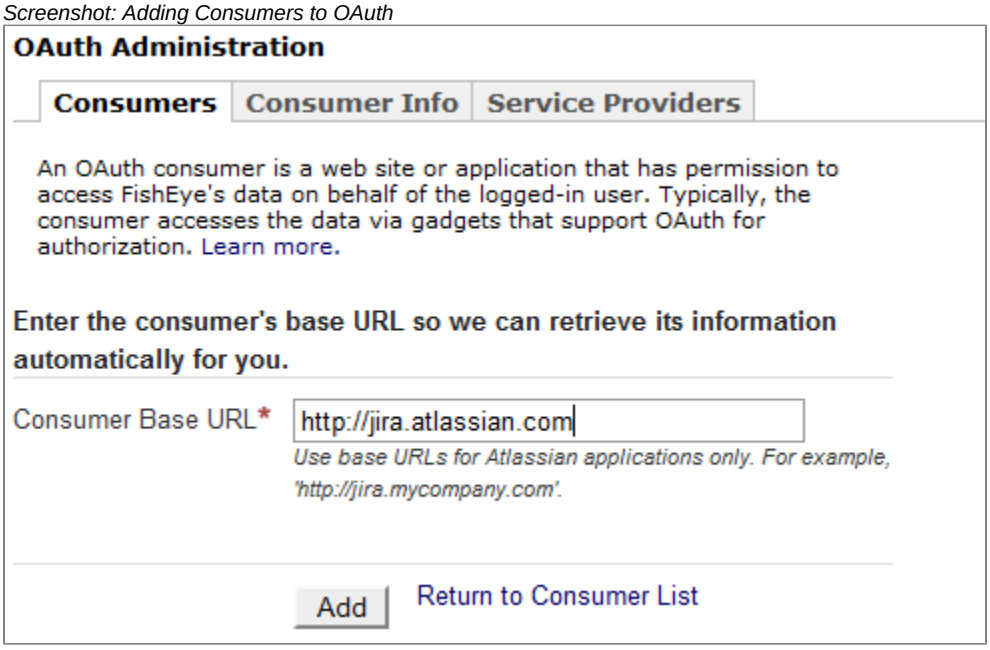
Firstly, you need to add JIRA to FishEye as an OAuth consumer. To do this, open the Admin Screen, then click '**Open Authentication (OAuth)**' under '**Global Settings**' in the left navigation bar. The OAuth configuration screen opens. Click '**Add OAuth Consumer**'.

Screenshot: The OAuth Administration Screen



Now, copy the URL for your JIRA instance into the field labelled '**Consumer Base URL**' then click '**Add**'. The application in use (JIRA or Confluence) will be auto-detected.

Screenshot: Adding Consumers to OAuth



Once the instance is added correctly, it will appear in the list of consumers. From here, you're ready to move onto step two.

Screenshot: List of OAuth Consumers

Add OAuth Consumer

Name	Description	Actions
Atlassian JIRA	Atlassian JIRA at http://jira.atlassian.com	Edit | Remove

Gadget Configuration 2: Add Gadget to your Application's Gadget Directory

As a JIRA administrator you allow the use of these gadgets by adding them to the Gadget Directory. For each gadget, you will need to complete and enter the URL listed in the table above.

See the JIRA documentation for details on this process.

Gadget Configuration 3: Add Gadget to the Application's Dashboard

Finally, as a JIRA user, you need to add the gadget to your dashboard:

See the JIRA documentation for details on this process.

Once complete, the gadget will appear on your JIRA dashboard and display information drawn from Crucible and FishEye.

Confluence also allows gadgets to be added to its dashboard. See the General Gadgets Documentation for more information.

Screenshot: The 'To Do' Gadget

Crucible: To Do

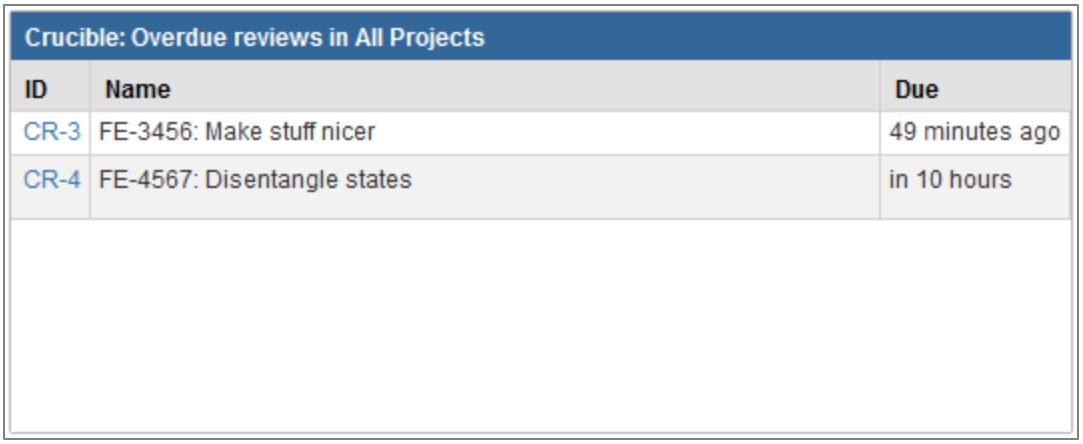
state	ID	Name	Due
Summarize	CR-3	FE-3456: Make stuff nicer	35 minutes ago
Respond	CR-1	FE-1234: fix Widget stamping (1 unread comment)	in 6 days
Review	CR-2	FE-2345: Repair Things	in 6 days

Screenshot: The Hassle Gadget

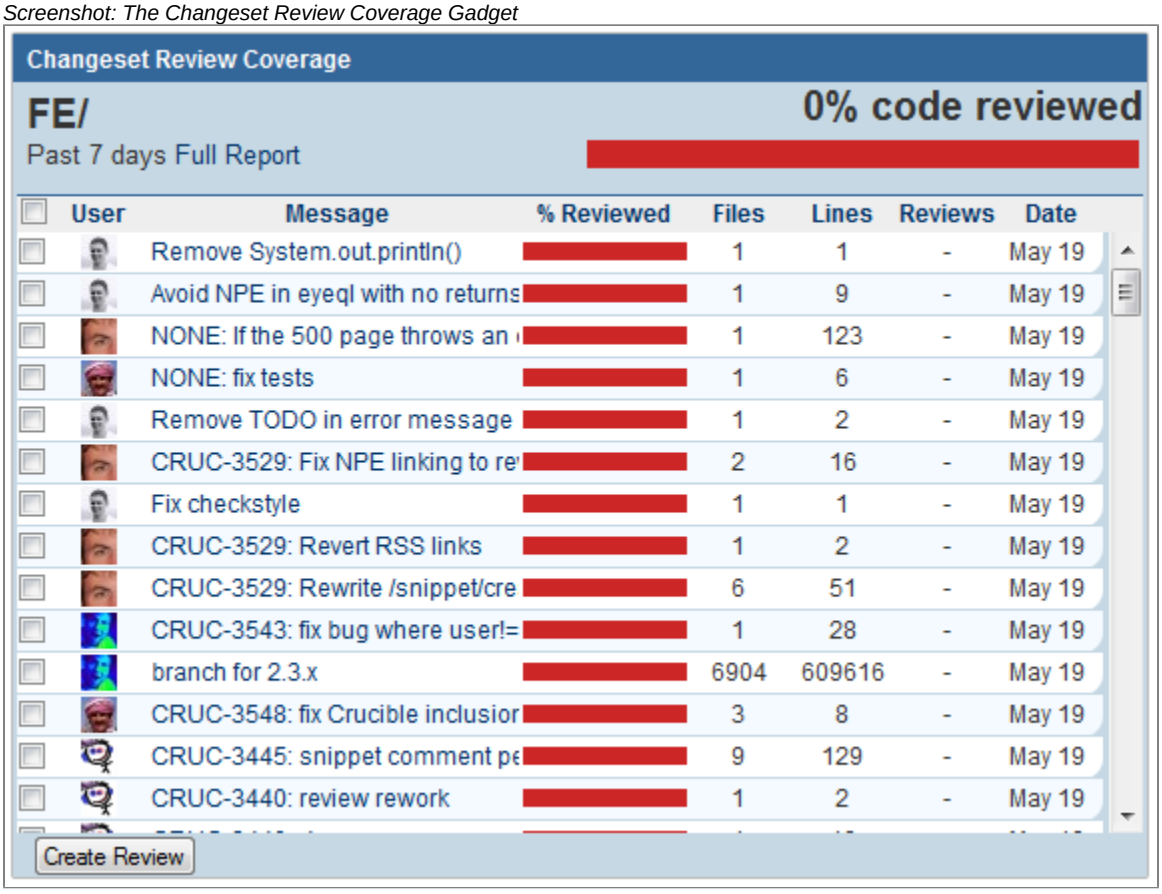
Crucible: Hassle

reviewer	ID	Name	Due
	CR-1	FE-1234: fix Widget stamping (1 unread comment)	in 6 days
	CR-1	FE-1234: fix Widget stamping (1 unread comment)	in 6 days
	CR-4	FE-4567: Disentangle states	in 10 hours

Screenshot: The Overdue Reviews Gadget



Screenshot: The Changeset Review Coverage Gadget



Crucible Administrator's Guide

Once you have installed and configured Crucible, you can access the **Administration** pages at the following address (where 'HOSTNAME' is the name of the server where you installed Crucible).

```
http://HOSTNAME:8060/admin/
```

The '**Admin Menu**' allows you to administer your Crucible instance and manage your repositories, users and back-end settings.

For information on administering FishEye, please refer to the FishEye documentation.

Information in the *Crucible Administrator's Guide*:

- Backing Up and Restoring Crucible Data
- Creating a Permission Scheme

- Creating a Project
- Crucible and FishEye
- Customising Email Notifications
- Customising the Defect Classifications
- Customising the Welcome Message
- Deleting a Project
- Editing a Project
- JIRA Integration in Crucible
- Migrating to an External Database
- Creating a User
- Trusted Applications
- Setting up Users and Security
- Enabling Access Logging in Crucible
- Configuring User Managed Mappings

Backing Up and Restoring Crucible Data

Crucible data can be backed up from the admin interface or command line. This page contains the command syntax, options and the required procedure to backup and restore your Crucible instance.

On this page:

- Backing Up Crucible Data
  - The Crucible Admin Interface Backup Process
  - The Crucible Command Line Backup Process
  - Components of a Crucible Backup
  - Backup Command Line Options
    - Command Line Examples
    - Advanced Backup Command Line Settings
    - Known Limitations
  - Scheduling Crucible Backups
- Restoring Crucible Data
  - The Crucible Data Command Line Restoration Process
  - Restore Command Line Options
  - Advanced Command Line Restore Settings
    - Notes on Migrating Backup Data
    - Command Line Example: Migrating Backup Data to MySQL

Backing Up Crucible Data

The Crucible Admin Interface Backup Process

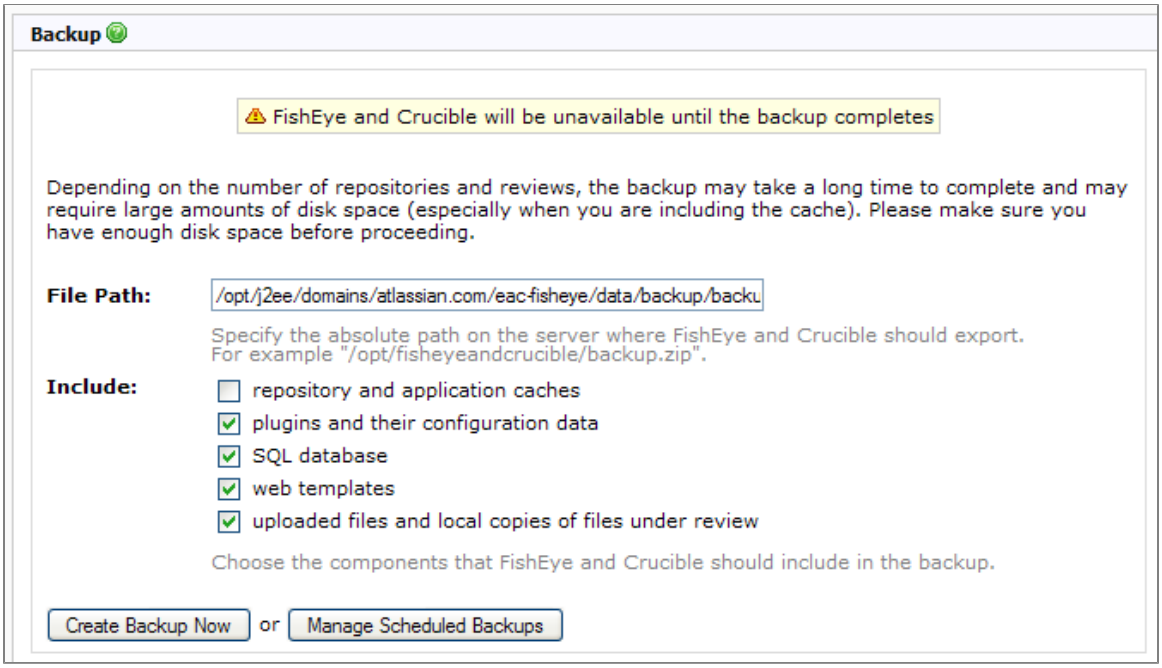
1. Navigate to the Crucible '**Admin**' screen (click the '**Administration**' link in the footer of any Crucible page).
2. On the Admin screen, click '**Backup**' under the '**System**' heading in the left navigation bar. The Backup screen opens.
3. On the Backup screen, the '**File Path**' field indicates where the backup file (in .zip format) will be stored. You can manually edit this path to change it. Under the heading '**Include'**, a list of checkboxes is shown, with the following items:

- Plugins and their configuration data
- SQL database
- Web templates
- Uploaded files and local copies of files under review.
- Repository and application caches.

  Repository and application caches contain temporary data stored from repository scans and library caches that improve startup time. Both will be recreated automatically by re-scanning the source repositories, so the backup files can be reduced by a significant amount by excluding these (if the cost of re-scanning is acceptable).

4. Once you have chosen your options, click '**Create Backup Now**'.

Screenshot: The Crucible Backup Screen



The Crucible Command Line Backup Process

Your Crucible instance must be running during the backup.

1. Open a command line interface on the Crucible server computer.
2. Navigate to the `FISHEYE_HOME/bin/` directory.
3. Run the backup command on the command line with the desired options.
4. The backup is created as a new Zip archive file and placed in the `FISHEYE_INST/backup/` directory.

   Note that if your Crucible instance uses a custom `FISHEYE_INST` directory, make sure the environment variable is properly set when running the backup command.

Components of a Crucible Backup

The Crucible backup is highly configurable and allows for many different configurations. This table shows the various components of the backup, what they are for and how they can be used.

Component	Purpose	Defaults
SQL Database	Refers to the SQL content database (used by both FishEye and Crucible and containing all user profile data, reviews and their comments).	Backed up by default.
Cache	The cache contains data that reflects the state of FishEye's repositories. Without it, FishEye must re-scan its repositories after a backup is restored. The cache also contains OSGI library data that increases startup time. These too can be excluded and will be generated automatically when the application is started.	The cache is not backed up by default as it tends to be large (running a risk of pushing the maximum file size for Java backups), whilst also representing replaceable data.
Plugins	Plugins are 3rd-party extensions that you may have installed, and configuration for all plugins (this includes configuration for Crucible's set of standard plugins).	Configuration data for all plugins are backed up by default, as well as all plugins installed in `FISHEYE_INST/var/plugins/user`.
Templates	In this context, these are custom freemarker templates that you or your users have created. They live in `FISHEYE_INST/template`.	Templates are backed up by default. You can choose to exclude them from the backup if your templates directory is covered by some other backup mechanism.
Uploads	In this context, uploads refers to files which are added to Crucible via the web interface (such as patch file reviews). It also includes each repository-backed file that went under review, when Crucible is configured to make a local copy of every reviewed file.	Uploads are backed up by default. You can choose not to back them up for example when the `FISHEYE_INST/var/data/uploads` directory is already covered by some other backup mechanism.

Note that the backup will always include the configuration data (`config.xml`), your license file and the FishEye user data.

Backup Command Line Options

These examples are for use in a Linux-like operating system. When using these commands on Windows, use the filename `fisheyectl.bat` and use the correct slashes. Run the command from the `FISHEYE_HOME/bin/` directory.

The basic syntax of the backup command is as follows:

```
$ ./fisheyectl.sh backup [OPTIONS]
```

To see inline help for all backup options, run the following command in the `FISHEYE_HOME/bin/` directory:

```
$ ./fisheyectl.sh backup --help
```

|| Option || Switch || Description || Default setting ||

Quiet mode	-q OR --quiet	Suppresses output	No
Output filename	-f OR --file	Specify a different path and filename to the `FISHEYE_INST/backup/backup_YYYY-DD-MM_HHmm.zip` file. When filename is omitted, the backup filename contains the date and time.	`FISHEYE_INST/backup/` is the default directory.
Compression level	--compression OR -c	Sets the Zip compression level, from 1-9. Runs at level 6 if no argument is passed.	Yes (6)
Anonymise	-a OR --anonymise	Anonymises the SQL database by replacing all text with 'x'. This is only useful when sending a backup to Atlassian as part of a support case. **Please do not anonymise data unless the Support Engineer handling your support case has specifically requested the data anonymised (as often anonymised data will not help reproduce the issue).**	No
Cache Backup	--cache	Include the repository caching files in the backup. These hold information gained from scanning the repositories and can be quite large (many gigabytes). However, it can shorten the time needed to re-scan the repositories after data is restored.	No. By default, the cache data is excluded from backups.

Command Line Examples

These examples are for use in a Linux-like operating system. When using these commands on Windows, use the filename `fisheyectl.bat` and use the correct slashes. Run the command from the `FISHEYE_HOME/bin/` directory.

Backing up with compression of 9, quiet mode and setting an output location

```
$ ./fisheyectl.sh backup --compression 9 -q -f /application_backups/fisheye/20090215.zip
```

Backup including cache data (also includes all default components)

```
$ ./fisheyectl.sh backup --cache
```

Restoring a backup with cache data (also restores all default components)

```
$ ./fisheyectl.sh restore --cache
```

Advanced Backup Command Line Settings

In some cases it might be preferable to only backup a limited set of items. This could be useful when your instance uses an external database such as MySQL or PostgreSQL and your DBA has already configured automatic backups in the database. The commands below allow this.

Option	Switch	Description	Default
Exclude Plugins	--no-plugins	Excludes plugins from the backup.	No. By default, plugins are included in every backup.

Exclude Templates	--no-templates	Excludes templates from the backup.	No. By default, templates are included in every backup.
Exclude Uploads	--no-uploads	Excludes uploaded files (such as patch reviews, stored in Crucible's internal database) from the backup.	No. By default, uploads are included in every backup.
Exclude SQL Database	--no-sql	Excludes the SQL content database used by both FishEye and Crucible.	No. By default, this data is included in every backup.
Show help	--help OR -h	Shows inline help on the command line.	No

Known Limitations

Please note that the below limitations are common for any Java based backup tool.

Archives Containing Over 65535 Files
Versions of Java earlier than v1.6 (b25) are incapable of handling zip files that contain more than 65,535 files. The solution for this problem is to either upgrade to a version of Java later than v1.6 (b25), or ensure that the archive does not exceed the threshold (contains less than 65,535 files). The FishEye cache (not included in backups by default) can be a contributor of many small files. Hence, exclude the cache from backups if this is likely to be a concern.

Archives Larger Than 4GB
Java has trouble reading and writing zip files that are larger than 4GB. As of release 1.5 Java appears capable of reliably creating archives that are over 4GB, but remains unable to extract them. For details see Sun's bug report. Also be aware of the fact that some file systems (including FAT32) have trouble with files larger than 4GB.

As a workaround, make sure you do not create archives that are larger than 4GB. The FishEye cache (not included in backups by default) can be a contributor of a lot of small files (although these tend to compress very well). If you still want to archive everything and end up with an achive that is too large, consider creating separate backups for the FishEye cache and uploaded files respectively.

Scheduling Crucible Backups

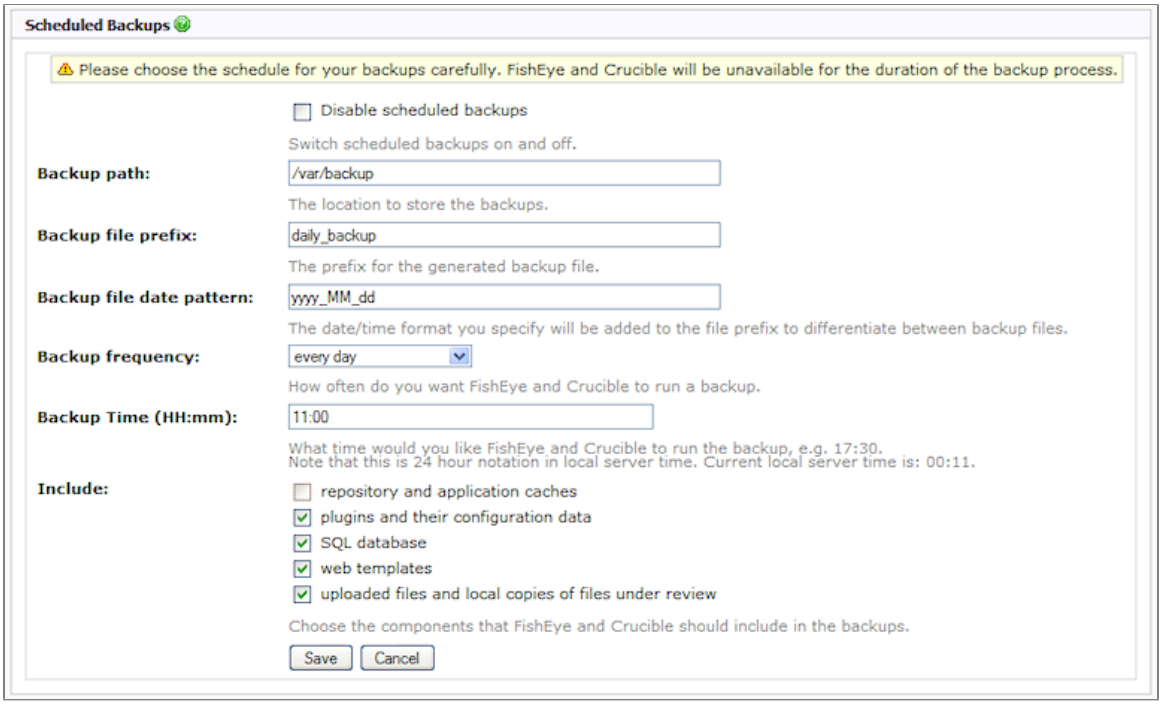
To set a schedule for automatic backups, open the administration screen and click '**Backup**' under '**System**' on the left navigation bar. The 'Backup' page opens. Now, click the link '**Manage Scheduled Backups**' at the bottom of the page. The 'Scheduled Backups' page opens.

On the 'Scheduled Backups' page, click '**Edit**' to adjust the backup schedule. Set the desired options and click '**Save**'.

The options for scheduled backups are detailed in the table below.

Option name	Description	Allowed Values
Disable Scheduled Backups	Stops regular backups from taking place.	On (disabled) or Off (enabled)
Backup path	The path where the backup .zip file will be stored.	Any system or network path that FishEye or Crucible can access.
Backup file prefix	Characters that will be added to the beginning of the backup file name.	Any string of characters that can be used as part of a filename on the local operating system.
Backup file date pattern	Sets a date for the next (or initial) backup to take place.	Any valid date in the format `yyyy_MM_dd` (year, month, day of the month).
Backup frequency	Sets how often the backup will take place.	Can be set to '**every day**', '**every Sunday**', '**Monday to Friday**' and '**first day of the month**'.
Backup time (HH:mm)	The time when the backup will take place.	Any valid 24-hour time in the format `HH:mm` (hours, minutes).
Include	Specifies which items must be included in the backups (these components are explained at the top of this page).	As per the options for regular on-demand backup (These components are explained at the top of this page).

Screenshot: Scheduling Backups in FishEye and Crucible



Be aware that scheduled backups can fill up disks unless you regularly move or delete old archives.

Restoring Crucible Data

The Crucible Data Command Line Restoration Process

There is currently no way to restore a backup from the web interface because Crucible must be shut down during a data restore.

> Restoring a backup will irreversibly overwrite the data of your installation with the data from the backup archive.
> **If you made a backup from production which connected to an external database, and restore this backup to a test server without specifying another database to restore too, you will drop and restore to your production database**. Thus when restoring to a test server, always ensure you specify the correct database to restore to (or restore to an in-built database).

1. Install Crucible into a new, empty directory (this must be the same version that the backup was created from, or later).
   Note that you cannot restore data into versions of Crucible which are older than the version that created the backup.
2. Make sure the Crucible instance is not running.
3. Open a command line interface on the Crucible server computer.
4. Run the restore command on the command line with the desired options.
5. The specified elements will be restored.
6. Start the Crucible instance.
7. When using FishEye integrated with Crucible, you will need to re-index your repositories after restoring data, unless the backup archive was created with the `--cache` option.

Restore Command Line Options

These examples are for use in a Linux-like operating system. When using these commands on Windows, use the filename `fisheyectl.bat` and use the correct slashes. Run the command from the `FISHEYE_HOME/bin/` directory.

The basic syntax of the restore command is as follows:

```
$ ./fisheyectl.sh restore -f /path/to/backup_2009-10-02_1138.zip [OPTIONS]
```

To see inline help for all backup options, run the following command in the `FISHEYE_HOME/bin/` directory:

```
$ ./fisheyectl.sh restore --help
```

Restores a FishEye/Crucible backup instance.
If you are using an external database (as opposed to the default built-in database), make sure the JDBC driver file is present in the `FISHEYE_INST/lib` directory when running restore.

Option	Switch	Description	Default
Suppress output	--quiet OR -q	Suppress the output messages from the restore program on the command line.	No
Choose file to restore from	--file PATH/FILENAME OR -f PATH/FILENAME	Restore the backup from PATH/FILENAME.	Yes (required)
Show inline help	--help OR -h	Displays help for options on the command line.	No

Advanced Command Line Restore Settings

By default, the restore program will restore all items found in the backup archive (so if you included the caches using the `--cache` option, these will automatically be restored). However, it is possible to only restore a subset of items from the backup, by explicitly specifying the item names on the command line and only those will be restored.

Option	Switch	Description
Restore FishEye cache	--cache	Restore the repository cache backup.
Restore plugins	--plugins	Restore 3rd-party plugins and their configuration data.
Restore templates	--templates	Restore freemarker templates from the backup (the restored instance will use the built-in templates).
Restore uploads	--uploads	Restore uploads (e.g. patch files uploaded into Crucible and contents of files under review).
Restore Crucible reviews	--sql	Restore the SQL database containing user profiles, reviews and review comments.
Set database type	--dbtype OR -t	SQL database type ('mysql', 'postgresql' or 'built-in'). Only required when restoring to a database location different to that used at used at backup time.
Set JDBC URL	--jdbcurl OR -j	JDBC URL of the SQL database. Only required when restoring to a database location different to that used at used at backup time (not applicable for 'built-in').
Set JDBC username	--username OR -u	JDBC username of the SQL database. Only required when restoring to a database location different to that used at used at backup time (not applicable for 'built-in').
JDBC password	--password OR -p	JDBC password of the SQL database. Only required when restoring to a database location different to that used at used at backup time (not applicable for 'built-in').
JDBC class	--driver OR -d	Specifies the JDBC driver class name needed to access the SQL database. Only required when restoring to a database location different to that used at used at backup time and when using a different JDBC driver than the standard driver associated with the database specified through `--dbtype`. (Not applicable for 'built-in'.)

Notes on Migrating Backup Data

When the process restores a SQL database, it looks at the configuration data (`config.xml`) included in the backup archive to learn which database product was used and how to connect to it. When Crucible uses the built-in HSQLDB database (which is the default), the restored instance will also use that.
However, when the restored instance will use a different database than the backed up instance (for instance, HSQLDB was used at the time the backup was created, but it needs to be restored on MySQL), use the command line options to point the process to the new database.

Command Line Example: Migrating Backup Data to MySQL

These examples are for use in a Linux-like operating system. When using these commands on Windows, use the filename `fisheyectl.bat` and use the correct slashes. Run the command from the `FISHEYE_HOME/bin/` directory.

Restoring to a Crucible instance that uses a different database (ensure the mysql driver jar file is present in the `FISHEYE_INST/lib` directory)

```
$ ./fisheyectl.sh restore \
--username john \
--password smith \
--jdbcurl jdbc:mysql://localhost:3306/crucible \
--dbtype mysql \
--file /path/to/backup_2009-10-02_1138.zip
```

Creating a Permission Scheme

This page contains information on how to create a permission scheme in Crucible.

On this page:

- Introduction to Crucible Permissions
- Creating a Permission Scheme
- Editing a Permission Scheme
- List of Crucible Permissions
- Further Reading

Introduction to Crucible Permissions

A *permission* is the ability to perform a particular action in Crucible, e.g. 'Create Review'.

A *permission scheme* assigns particular permissions to any or all of the following:

- Particular Users.
- Particular Groups.
- All logged-in users.
- Anonymous Users
- People in particular Review Roles, such as:
  - 'Author';
  - 'Reviewer';
  - 'Creator';
  - 'Moderator'.

The scheme's permissions will apply to all reviews belonging to the project(s) with which the scheme is associated.

You can create as many permission schemes as you wish. Each permission scheme can be associated with many projects or just one project, allowing you to tailor appropriate permissions for individual projects as required.

Creating a Permission Scheme

To create a permission scheme,

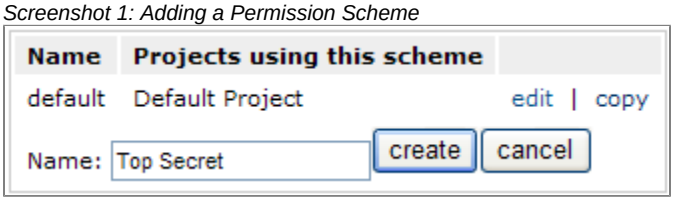
1. From the '**Admin Menu**', click '**Permission Schemes**'.
2. The '**Permission Schemes**' page will be displayed, showing a list of existing permission schemes. Click the '**Create a New Permission Scheme**' link, which appears below the list.
3. In the '**Name**' field, type a short phrase to uniquely identify your project (see screenshot 1 below).
4. Click the '**Create**' button to create your new permission scheme. The '**Edit Permission Scheme**' page will be displayed for your new permission scheme (see screenshot two, below).

   Your new permission scheme will have the default assignees shown in the table above.
5. To edit the assignees for a permission, click the '**Edit**' link corresponding to the permission. The '**Edit Permission Scheme**' page will be displayed.
6. Choose the appropriate assignee(s) for this permission:

   Note: for ongoing ease of management, it is recommended that you grant permissions to groups or participants rather than to individual users.
   - To assign this permission to anonymous users, select the '**Allow Anonymous users**' check-box.
   - To assign this permission to all logged-in users, select the '**Allow All logged in users**' check-box.
   - To assign this permission to a particular user, type their username into the '**Individual users**' field (hint: you can type just part of the name, then press <Enter> to select from a list of matching usernames).
   - To assign this permission to a particular group of users, type the group name into the '**Groups**' field (hint: you can type just part of the group name, then press <Enter> to select from a list of matching groups).
   - To assign this permission to users who belong to a particular participant ('**Reviewer**' / '**Moderator**' / '**Author**' / ' **Creator'**), select the corresponding check-box.
7. Click the '**Save**' button.

Next step: see Associating a Permission Scheme with a Project.

Screenshot 1: Adding a Permission Scheme

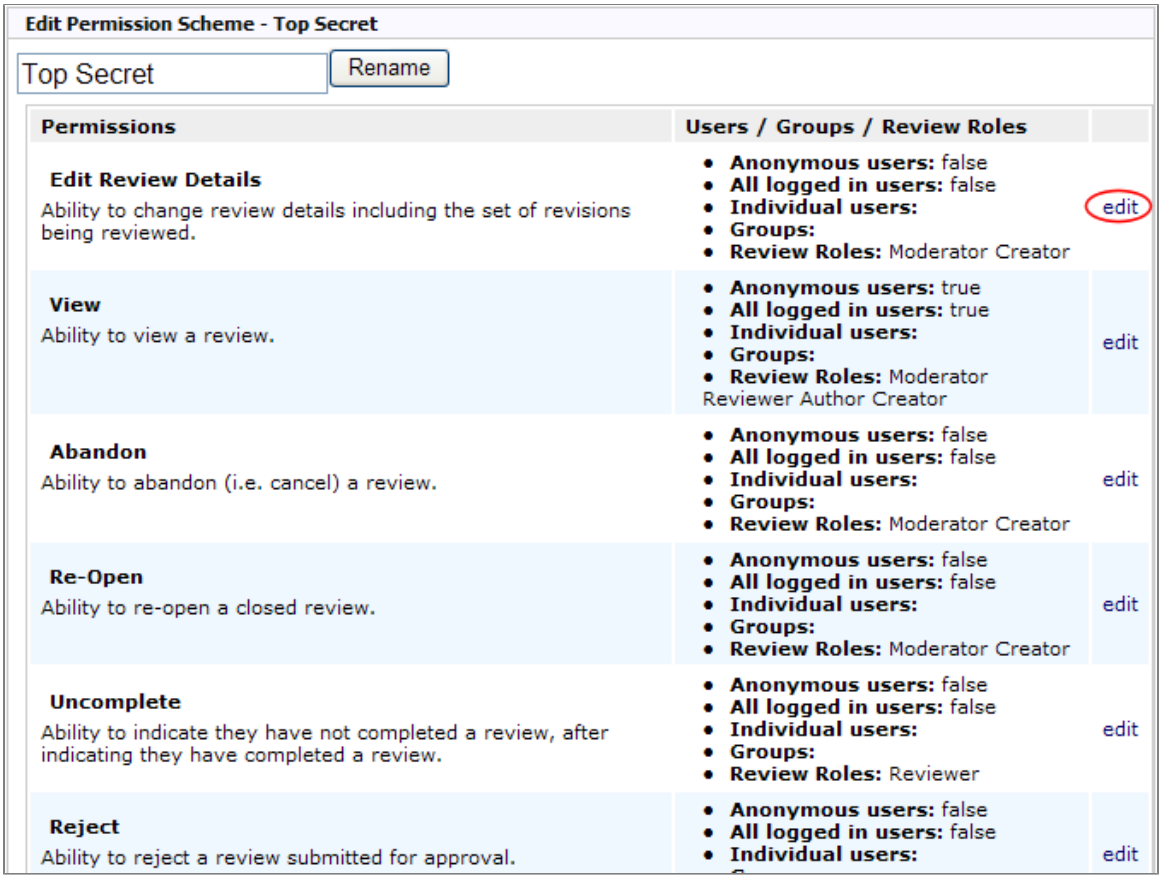


Editing a Permission Scheme

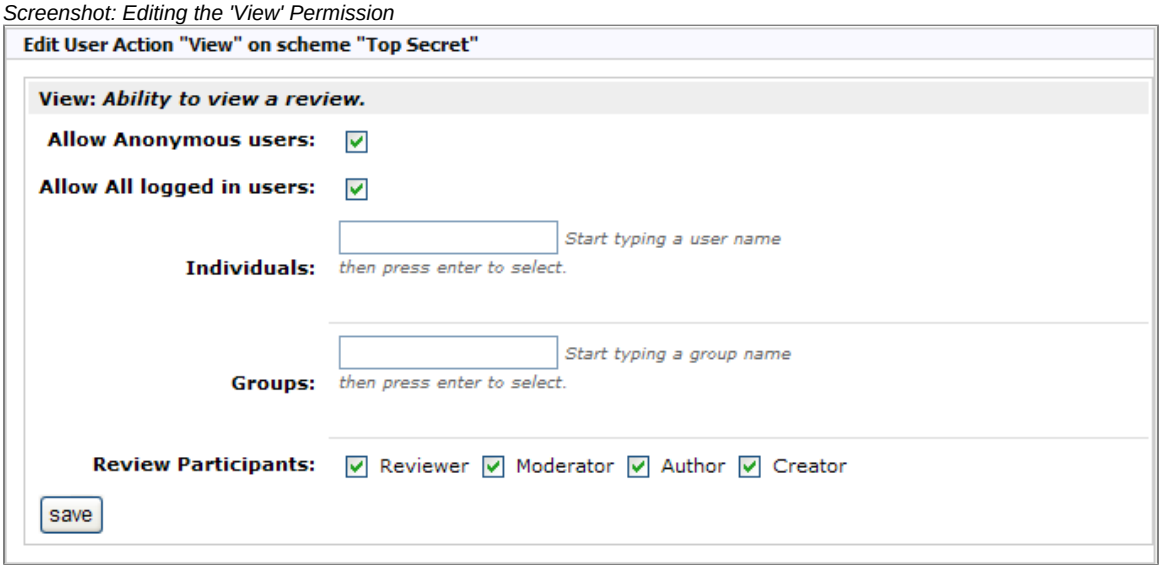
To edit a permission scheme,

1. From the '**Admin Menu**', click '**Permission Schemes**'.
2. Click '**edit**' next to the scheme you wish to change. The '**Edit Permission Scheme**' page will be displayed.
3. On the '**Edit Permission Scheme**' page, you can change the groups or users that are allowed individual permissions by clicking '**edit**' next to the permission in question.
4. When you have finished editing, click the '**Save**' button.

Screenshot: Edit a Permission Scheme



Screenshot: Editing the 'View' Permission



List of Crucible Permissions

The following permissions are available:

Permission	Description	Default Assignees
'**Edit**'	Ability to edit a review's details and change the set of revisions being reviewed.	'Creator' 'Moderator'

'**View**'	Ability to view a review. (People without this permission will not know that the review exists.)	Anonymous users All logged-in users 'Creator' 'Author' 'Reviewer' 'Moderator'
'**Abandon**'	Ability to abandon (i.e. cancel) a review.	'Moderator' 'Creator'
'**Re-Open**'	Ability to re-open a closed or abandoned review.	'Creator' 'Moderator'
'**Uncomplete**'	Ability of a reviewer to change their individual review status from 'Complete' to 'Uncomplete'.	'Reviewer'
'**Reject**'	Ability to reject a review submitted for approval (i.e. prevent it from being issued to reviewers).	'Moderator'
'**Complete**'	Ability of a reviewer to change their individual review status to 'Complete'.	'Reviewer'
'**Comment**'	Ability to add or remove a comment to or from a review.	'Creator' 'Author' 'Reviewer' 'Moderator'
'**Approve**'	Ability to approve a review (i.e. issue it to the reviewers).	'Moderator'
'**Submit**'	Ability to submit a review for approval (i.e. request that the review be issued to the reviewers).	'Creator' 'Author'
'**Close**'	Ability to close a review once it has been summarised.	'Moderator'
'**Delete**'	Ability to delete a review.	'Creator' 'Moderator'
'**Summarise**'	Ability to summarise a review. (Normally this would be done after all reviewers have completed their review.)	'Moderator'
'**Create**'	Ability to create a review.	All logged-in users
'**Recover**'	Ability to resurrect an abandoned (i.e. cancelled) review.	'Creator' 'Moderator'

Further Reading

For more information on permissions schemes in Crucible, see the following documentation pages:

- Agile Permissions Schemes in Crucible
- Associating a Permission Scheme with a Project

Agile Permissions Schemes in Crucible

This page contains information about using and editing Agile permission schemes in Crucible.

Understanding the Agile Permissions Scheme

Agile development teams may not want to use the default Crucible permission schemes that require one person to approve or summarise reviews. Crucible ships with a pre-defined Agile permission scheme. By Agile, we mean permission schemes that have no moderator and very liberal permissions, suited to Agile or self-organising teams.

To use the Agile permissions scheme when creating a project, simply select '**agile**' from the drop down list under '**Project Permissions Scheme**' on the '**Edit Project**' screen.

Considerations

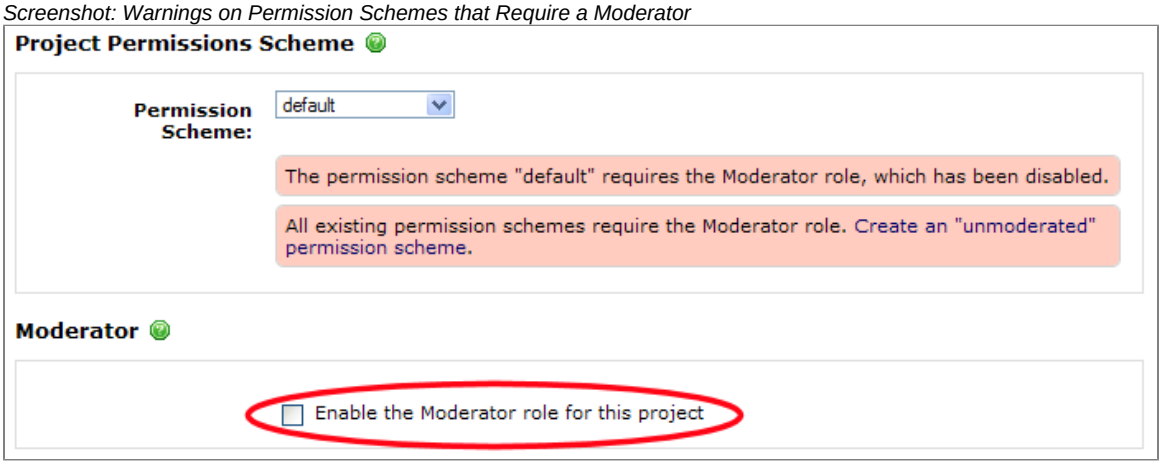
If you began your installation of Crucible with Crucible 2.1 or later, then this permission scheme will appear in the list of permission schemes in the administration menu.

If you have upgraded from an earlier version of Crucible (pre Crucible 2.0), then the Agile permission may not appear by default. However, you can still create the equivalent by disabling the moderator when creating projects, allowing freer access to summarising, closing and generally

tending to Crucible reviews.

If you disable the moderator role on the Edit Project screen, then Crucible will check the current permission scheme. If the current permission scheme requires a moderator, a warning will be shown and you will be prompted to create a new permission scheme which will be called '**Agile**' (or Agile-X if the name Agile already exists, where X is a number appended to the scheme name). The new permissions scheme will not require a moderator to carry out any actions.

Screenshot: Warnings on Permission Schemes that Require a Moderator



Associating a Permission Scheme with a Project

This page explains how to associate a permission scheme with a Crucible project and show details of the default permission schemes included with Crucible.

On this page:

- Associating a Permission Scheme with a Crucible Project
- Overview of the Permission Schemes Bundled with Crucible
  - Default Permission Scheme Settings
  - Agile Permission Scheme Settings
- Related Links

Associating a Permission Scheme with a Crucible Project

To associate a permission scheme with a project,

1. From the '**Admin Menu**', click '**Project List**'.
2. The '**Projects List**' page will be displayed. Find the project you wish to associate with your permission scheme, and click its '**Edit**' link.
3. The '**Edit Project'** page will be displayed.
4. Under the heading '**Project Permissions Scheme**', click the '**Permission Scheme**' drop-down list to select your permission scheme.
   You will be shown a list of the schemes that have been created in Crucible. You can create a new permission scheme if necessary.
5. Click the '**Save**' button.

Overview of the Permission Schemes Bundled with Crucible

Crucible comes with two permission schemes. '**Default**' and '**Agile**'. The following tables show the default settings in detail; note that these can be easily edited by admin users to suit your needs.

Default Permission Scheme Settings

This table shows the various permissions and which user groups have them by default.

Permission	Anonymous	All Logged In	Individuals	Groups	Review Roles
Abandon	false	false	None	None	Creator, Moderator

Approve	false	false	None	None	Moderator
Close	false	false	None	None	Moderator
Comment	false	false	None	None	Reviewer, Creator, Author, Moderator
Complete	false	false	None	None	Reviewer
Create	false	true	None	None	None
Delete	false	false	None	None	Creator, Moderator
Edit Review Details	false	false	None	None	Creator, Moderator
Recover	false	false	None	None	Creator, Moderator
Reject	false	false	None	None	Moderator
Re-Open	false	false	None	None	Moderator
Submit	false	false	None	None	Creator
Summarize	false	false	None	None	Moderator
Uncomplete	false	false	None	None	Reviewer
View	false	true	None	None	Reviewer, Creator, Author, Moderator

The default permission scheme has changed since Crucible 1.6.

Agile Permission Scheme Settings

This table shows the various permissions and which user groups have them by default.

Permission	Anonymous	All Logged In	Individuals	Groups	Review Roles
Abandon	false	false	None	None	Creator, Author, Moderator
Approve	false	false	None	None	Creator, Author, Moderator
Close	false	false	None	None	Reviewer, Creator, Author, Moderator
Comment	false	false	None	None	Reviewer, Creator, Author, Moderator
Complete	false	false	None	None	Reviewer
Create	false	true	None	None	None
Delete	false	false	None	None	Creator, Author, Moderator
Edit Review Details	false	false	None	None	Reviewer, Creator, Author, Moderator
Recover	false	false	None	None	Reviewer, Creator, Author, Moderator
Reject	false	false	None	None	Creator, Author, Moderator
Re-Open	false	false	None	None	Reviewer, Creator, Author, Moderator
Submit	false	false	None	None	Creator, Author, Moderator
Summarize	false	false	None	None	Reviewer, Creator, Author, Moderator
Uncomplete	false	false	None	None	Reviewer
View	true	true	None	None	Reviewer, Creator, Author, Moderator

Related Links

- Creating a Permission Scheme

Creating a Project

A Crucible *project* is a collection of reviews, typically reviews that all relate to the same application. In addition to providing a logical way of

grouping reviews together, a project allows you to

- define default moderators, authors and reviewers for the reviews in that project.
- define which people are eligible to be reviewers for the reviews in that project.
- use permission schemes to restrict who can perform particular actions (e.g. 'Create Review') in that project.

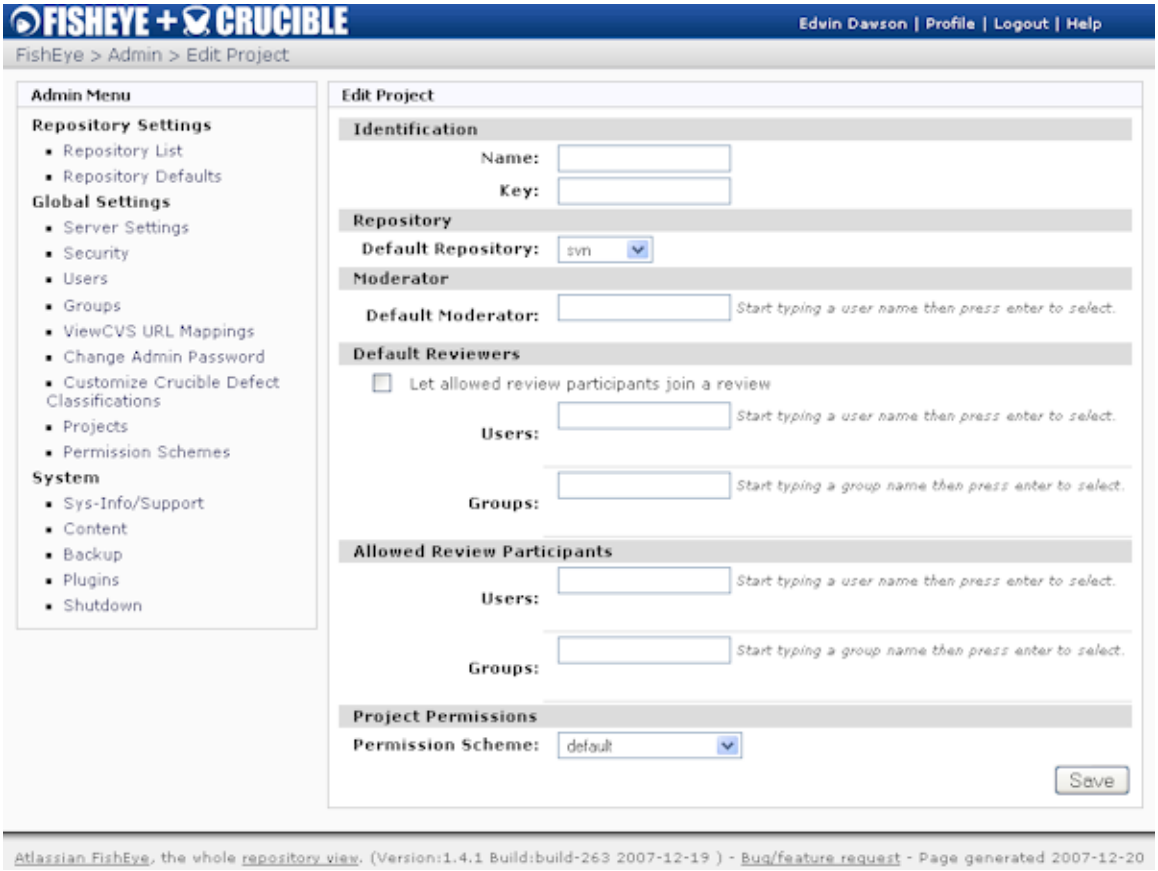
Every Crucible review belongs to a project. Each project has a *name* (e.g. **ACME Development**) and a *key* (e.g. **ACME**). The project key becomes the first part of that project's *review keys*, e.g. **ACME-101**, **ACME-102**, etc:

By default, Crucible contains one project. This default project has the key '**CR**' and the name '**Default Project**'.

To create a new project,

1. From the '**Admin Menu**', click '**Project List**'.
2. The '**Projects List**' page will be displayed. Click the '**Create a New Project**' link, which appears at the bottom of the list of existing projects.
3. The '**Create Project'** page will be displayed.
4. In the '**Name**' field, type a short phrase that describes your project.
5. In the '**Key**' field, type a few characters to uniquely identify your project. This key must consist of alphabetic and/or numeric characters and hyphens only.
6. In the '**Default Repository**' field, select the repository which contains source code relating to this project.
   This repository is the one that will be searched by default when you add files to a review.
7. In the '**Default Moderator**' field, type the name of the person who will appear by default in the 'Moderator' field when you create a new review; or leave this field blank to force the review's creator to choose a moderator.
8. *(Optional)* Under '**Default Reviewers**', select the people to whom new reviews in this project will be assigned by default:
   - Select the '**Let allowed review participants join a review**' check-box if you wish to determine the default for the '**Allow anyone to join**' option on the 'Adding Reviewers' screen.
   - In the '**Users**' field, type the name(s) of individual users to whom new reviews will be assigned by default.
   - In the '**Groups**' field, type the name(s) of groups to whose members new reviews will be assigned by default.
9. *(Optional)* Under **Allowed Review Participants**', select who will be allowed to have a role (i.e. be an author/creator/moderator/reviewer) in this project's reviews:
   - In the '**Users**' field, type the name(s) of individual users who will be eligible to be authors/creators/moderators/reviewers for reviews in this project*.
   - In the '**Groups**' field, type the name(s) of groups whose members will be eligible to be authors/creators/moderators/reviewers for reviews in this project*.
     * These users will be the only ones whose names appear when a review is assigned.
10. In the '**Permission Scheme**' drop-down list, select the relevant permission scheme for this project. (A permission scheme controls who can perform particular actions, e.g. 'Create Review'.)
11. In the **Review Duration** section, you can enter a value for the number of working days that you want the review to run for. Simply type the number of days into the text entry field marked '**Default duration in week days**' and click '**Save**'.

Screenshot: The Create/Edit Project Screen



Setting Crucible to Store all Revisions

When creating a project or editing a project's properties, you can set Crucible to save all revisions that are associated with a review to Crucible's database. This allows you to be able to view that file content whether or not the repository is online or accessible to Crucible. It also creates an enhanced audit trail should you require it, saving the review content regardless of whether or not it is deleted or lost from the repository.

Note that the storage of revisions must be set per-project. Also, the storage only applies to reviews created after Revision Storage is enabled. This means that for existing projects, pre-existing reviews will not be stored unless you look at them again after Revision Storage is enabled.

Enabling Revision Storage on a new project

To enable Revision Storing on a new project,

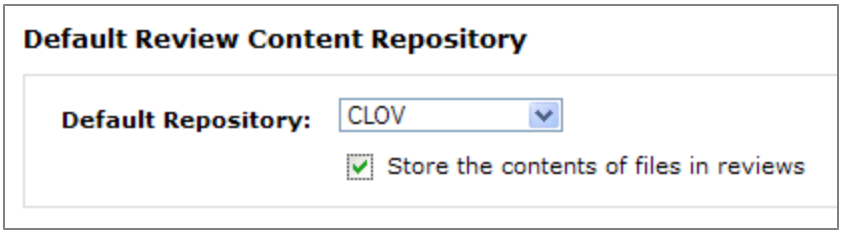
1. When creating a new project, you have the option to turn on revision storing on the '**Create New Project**' page.
2. Under '**Default Content Review Repository**', Click the checkbox labelled '*Store the contents of files in reviews*'.
3. Click '**Save**' to finish.

Enabling Revision Storage on an existing project

To enable Revision Storing on an existing project,

1. From the '**Admin**' screen, click '**Projects**' from the left navigation bar.
2. Click '**Edit**' next to the desired project.
3. Under '**Default Content Review Repository**', Click the checkbox labelled '*Store the contents of files in reviews*'.
4. Click '**Save**' to finish.

Screenshot: Enabling Revision Storage



Crucible and FishEye

This page gives an overview of the joint installation of Crucible and FishEye. Both Crucible and FishEye are Atlassian products.

- **FishEye** allows you to extract information from your source code repository and display it in sophisticated reports.
- **Crucible** allows you to request, perform and manage code reviews.
- Both of these products can run in isolation. However if you are using CVS, Subversion or Perforce you can significantly enhance your Crucible experience by also using FishEye.

> **Your Crucible installation package includes the files required for FishEye**
> If you use FishEye and Crucible together, they run as one instance.

Purchasing and Installing Crucible/FishEye

- If you install Crucible, there is no need to do a separate installation of FishEye.
- Upgrading Crucible to also use FishEye requires only a simple licence change in the admin screens.
- When upgrading to Crucible when you have an existing FishEye installation, you can either keep the original FishEye installation or install Crucible and FishEye as a fresh install. Refer to the guide on upgrading from FishEye to Crucible.

FISHEYE_HOME and FISHEYE_INST

Throughout the Crucible documentation, references are made to `FISHEYE_HOME`, which refers to the location of the FishEye application. Because most Crucible users also run FishEye, we use a single value for the sake of simplicity.

Crucible also makes use of this FishEye environment variable:

- `FISHEYE_INST` – the location of the FishEye data.

Refer to the FishEye documentation for more about the environment variables and how they are used in the FishEye installation.

Detailed Documentation

You can find more information in:

- Crucible Installation Guide
- FishEye Installation Guide

Customising Email Notifications

Email notifications in Crucible can be customised to change their formatting, by editing template files. This page contains instructions for this process.

Editing Crucible Email Templates

Template files for Crucible are stored in the `FISHEYE_HOME/templates/` folder.

For Crucible, the set of templates is for plain-text email only. Note that these templates do not support embedding full diffs into notifications. They are only for changing the appearance and order of certain content inside the messages.

> If you edit the templates of an operational Crucible instance, you may disrupt notifications that are being sent at that time. To avoid this, shut Crucible down during template editing.

Editing the Subject Line

1. Open the '**crucible-notification-subject.ftl**' template file from `FISHEYE_HOME/templates/` in a text editor.
2. Type in your new text for the email subject, ensuring that all of the content is contained within line 1 of the template. '**crucible-notification-subject.ftl**' is used as the subject template for all Crucible email notifications.
3. Save and close the file.
4. Restarting Crucible will activate the new templates.

Editing the Header

Header information will be included at the beginning of the email body text.

1. Open the '**crucible-notification-header.ftl**' template file from `FISHEYE_HOME/templates/` in a text editor.
2. Add your new header content. '**crucible-notification-header.ftl**' is used as the header template for all Crucible email notifications.
3. Save and close the file.
4. Restarting Crucible will activate the new templates.

Editing the Footer

Footer information will be included at the end of the email body text.

1. Open the '**crucible-notification-footer.ftl**' template file from `FISHEYE_HOME/templates/` in a text editor. '**crucible-notification-footer.ftl**' is used as the footer template for all Crucible email notifications.
2. Add your new footer content.
3. Save and close the file.
4. Restarting Crucible will activate the new templates.

After an edit, the change to the email template will take place immediately. No restart is required.

> Try and avoid editing the live template file, as Crucible may try to use it while you are editing. This could have unpredictable results. Instead, back up the template file (it's wise to keep original versions of all these files), edit a copy you have made, then overwrite the 'live' template once you have finished.

Advanced Editing of Crucible Email Templates

The email notification templates use the Freemarker format. Freemarker is a general templating engine enabling automated content.

If you are familiar with Freemarker, more advanced customisations can be made to the email notification templates. However, you make such adjustments at your own risk.

Note: In Crucible, email notifications are limited to plain-text format only.

Crucible Email Template File List

The following template files for Crucible notification are stored in the `FISHEYE_HOME/templates/` folder.

Template filename	Purpose
crucible-notification-subject.ftl	Subject template
crucible-notification-header.ftl	Header template
crucible-notification-footer.ftl	Footer template
state-closed-notification.ftl	State Closed template
all-completed-notification.ftl	All Completed template
state-changed-notification.ftl	State Changed template
completed-notification.ftl	Completed template
general-notification.ftl	General notification template
uncompleted-notification.ftl	'Uncompleted' template
all-no-longer-completed-notification.ftl	All-No-Longer-Completed template
comment-notification.ftl	Comment template
reply-notification.ftl	Reply template

review-precis-plain.ftl	Precis template

See also Customising FishEye Email Notifications.

Freemarker Data Model for Email Templates

Customising Crucible email templates with Freemarker

See the Freemarker documentation for instructions on Freemarker syntax. Use the templates that ship with Crucible as a guide to the properties available on each object.

Specific email types will have extra data associated with them, and this data will be available in that particular template (but not in others).

Example

The syntax to access the data-model, using the data model object '**link**' as an example, place this code into the email at the desired position.

```
${notification.link}
```

Customising the Defect Classifications

This page explains how to customise defects and their classifications in Crucible.

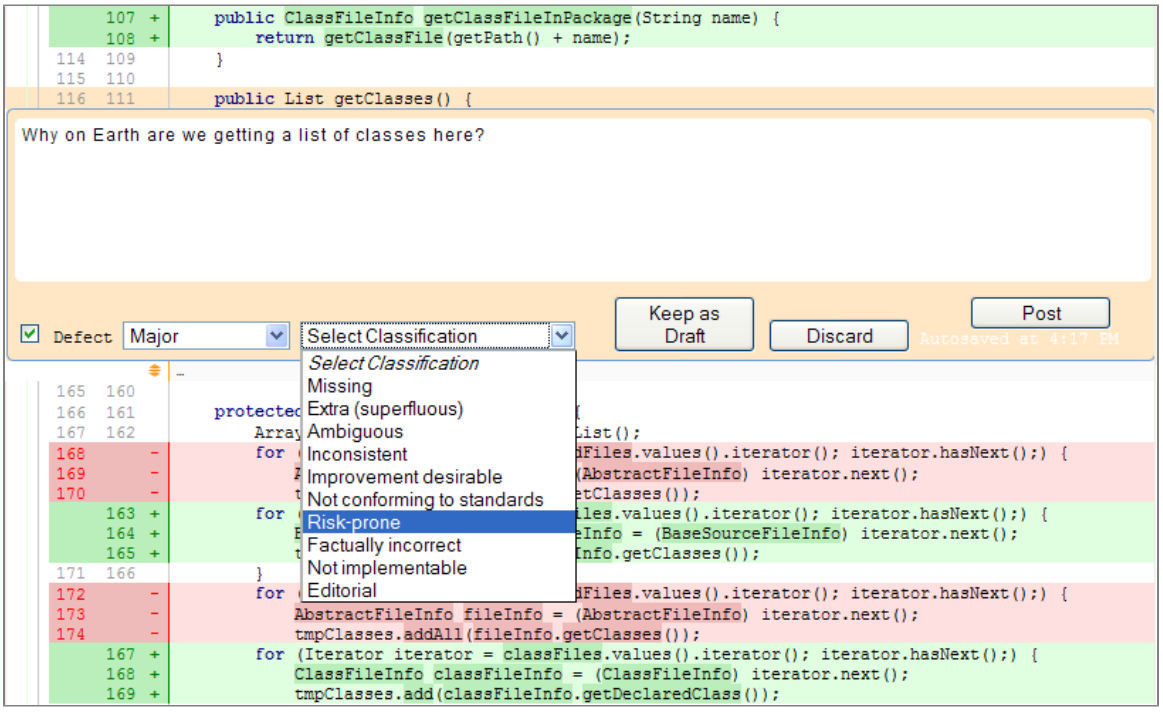
On this page:

- Defects in Crucible Comments
- Changing Classification Settings
- Default Crucible Classifications
  - Ranking
  - Classification

Defects in Crucible Comments

Defects are comments made by reviewers that indicate a problem in a review. Defects can be classified by rank and type, custom classifications can also be defined. The default classifications are shown in the screenshot below.

Screenshot: The List of Defect Classifications



Changing Classification Settings

To change the default classifications:

1. Open the Crucible Admin screen. The '**Admin Menu**' opens.
2. Click '**Customize Crucible Defect Classifications**' under '**Global Settings**' in the Admin Menu.

Only Crucible Admin users have access to this screen.
Any changes made within 'Customize crucible defect classifications' will only affect reviews created after the setting is changed.

Default Crucible Classifications

There are two default defect classifications that are preset in Crucible; ranking and classification. These settings (and their sub-categories) can be edited or removed; other custom classifications can be added.

Ranking

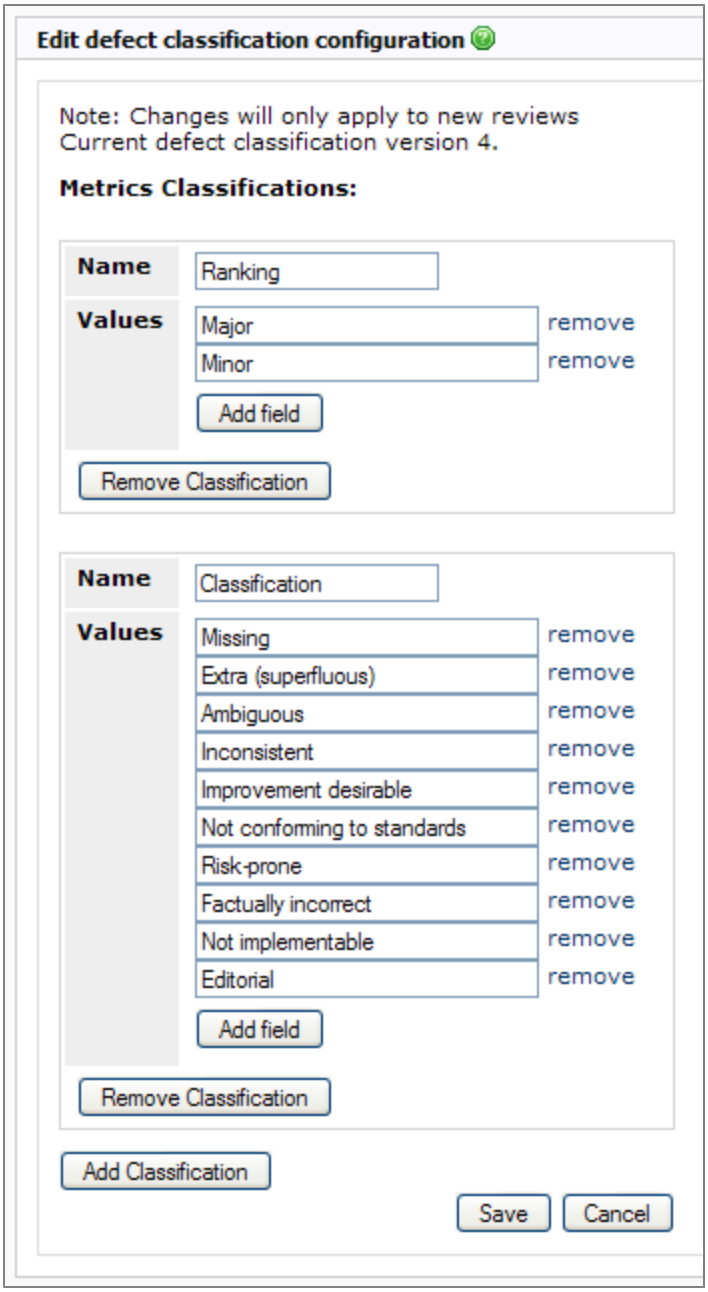
This classification can be set to **'Major'** or **'Minor'**, indicating the importance of the defect.

Classification

This setting helps to define the nature of the defect in particular detail. This classification can be set to one of the options in the following table; the meaning of these is detailed in the table below.

Value	Description
Missing	The defect applies to code or information that is missing (absent).
Extra (superfluous)	The defect applies to code or information that should be removed.
Ambiguous	The defect applies to code or information that is not clear or easy to understand.
Inconsistent	The defect applies to code or information that is applied in several different ways.
Improvement desirable	The defect applies to code or information that needs to be revised.
Not conforming to standards	The defect applies to code or information that breaks established conventions.
Risk-prone	The defect applies to code or information that takes unacceptable risks.
Factually incorrect	The defect applies to code or information that is wrong.
Not implementable	The defect applies to code or information that may be impossible to create.
Editorial	The defect applies to code or information where the classification as a defect may be subject to personal opinion.

Screenshot: Editing Defect Classifications in Crucible



Customising the Welcome Message

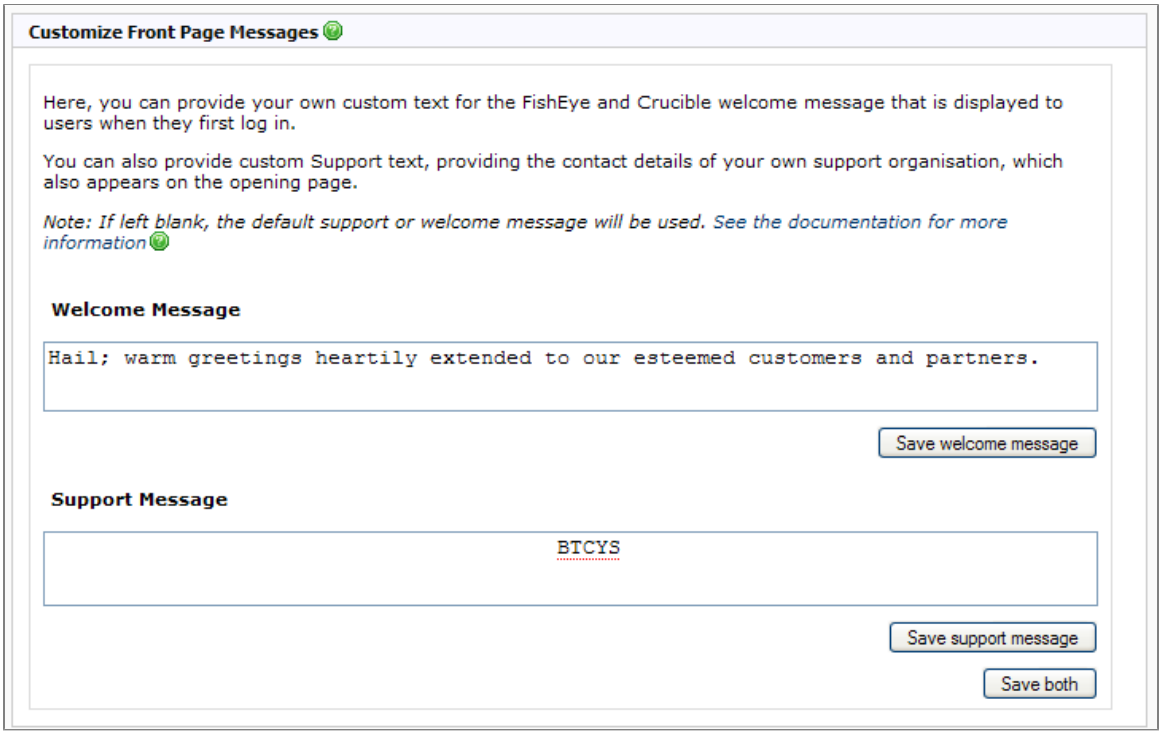
To customise the welcome message which is shown when Crucible opens, access the administration page and click '**Customize Front Page**' under '**Global Settings**' on the left navigation bar.

The '**Customize Front Page Messages**' page opens.

On this page, you can provide your own custom text for the Cruciblee welcome message that is displayed to users when they first log in. You can also provide custom Support text, providing the contact details of your own support organisation, which also appears on the opening page.

You can enter text into the boxes provided for either message and click the small '**Save Welcome Message**' or '**Save Support Message**' button to save it, or enter text for both messages and click '**Save All**'. The changes are made immediately.

Screenshot: Crucible Customize Welcome and Support Messages



Using HTML

The content in the welcome screen can be arranged using basic HTML tables, image references or anchor tags such as the following:

```
<a href="http://www.atlassian.com">Link to Atlassian Home Page</a>
```

Restoring the default messages

To revert to the default Welcome or Support messages, simply delete all text shown in the text box and click the corresponding '**Save**' button.

Manually editing the opening screen

You can also directly edit the XML file that contains the welcome and support messages. This file is called `config.xml`, located in your installation folder.

To do this, simply add the following XML tags to `config.xml`:

```
<content>
  <front-page-message>Example welcome message here</front-page-message>
  <support-message>Example support message here</support-message>
</content>
```

Deleting a Project

Admin users can delete projects under Crucible. To do this, follow the instructions below.

> ⚠ Deleted projects cannot be recovered.

Deleting Projects from the Project List

To delete a project from the Project List;

1. From the '**Admin Menu**', click '**Project List**'.
2. A list of projects appears. With care, click the '**Delete**' link situated to the right of the project you wish to remove. If empty, the project instantly disappears.
3. If the project contains reviews, you will be prompted to either delete all reviews in the project, or move them into the default project.

Screenshot: The Crucible Project Listing

Projects List

A project is a set of Crucible content combined with a set of customisable FishEye content.

Key	Name	Default Repository	Default Moderator	Default Reviewer Users	Default Reviewer Groups	Default Review Time	Edit Crucible Settings	Edit Fisheye Content
CR	Default Project	CLOV				No time restriction	edit	view/edit
CR-CH	Confluence Hosted	CH				No time restriction	edit delete	view/edit
CR-JST	Jira Studio	JST	Don Brown			No time restriction	edit delete	view/edit

Editing a Project

Once projects are created, you can return to the project settings page to change the defaults such as repository, moderator, allowed reviewers, allowed groups and permissions.

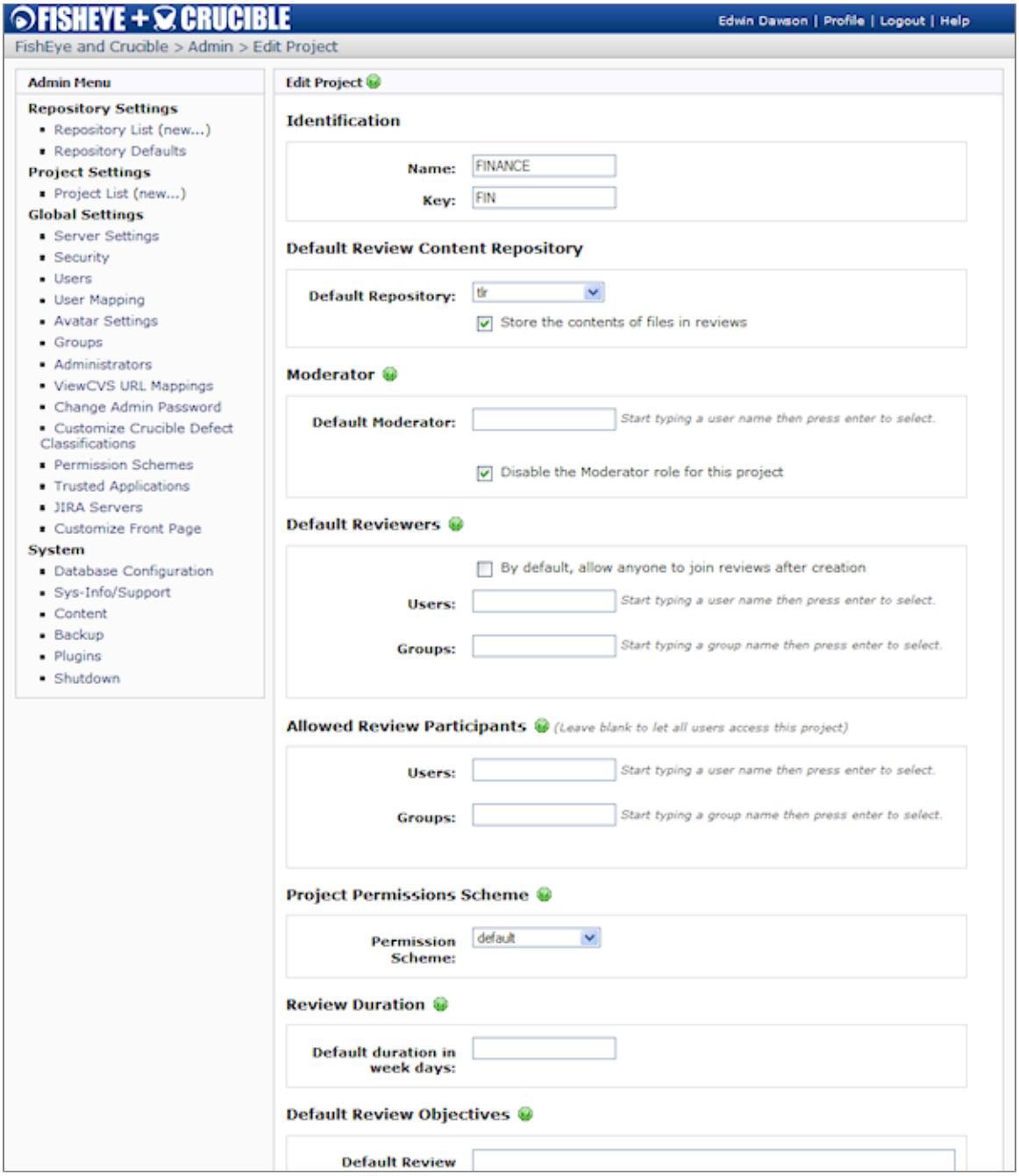
To edit project settings,

1. From the '**Admin Menu**', click '**Project List**'.
2. The list of projects will be displayed. Click the '**Edit**' link for the desired project, which appears to the right of the existing project name.
3. The '**Edit Project'** page will be displayed. You can now adjust any of the given settings as desired.
4. In the '**Identification**' section, you can change the the plain language name (as displayed in the Crucible interface) and the project key (used when giving reviews their unique code names).
5. In the '**Default Review Content Repository**' field, you can adjust the repository which contains source code relating to this project.

   This repository is the one that will be searched by default when you add files to a review.
   The check box here labelled '**Store the contents of files in reviews**' will cause the source files under review to be stored in the Crucible database along with the comments and review data. This will retain a copy of all the source files that go under review even in the event of disconnecting the repository from Crucible.
6. In the '**Default Moderator**' field, you can adjust the name of the person who will appear by default in the 'Moderator' field when you create a new review; or leave this field blank to force the review's creator to choose a moderator.

   You can also tick the option '**Disable Moderator**' to have reviews run by the author only. See Enabling the Moderator Role for more information.
7. *(Optional)* Under '**Default Reviewers**', you can adjust the people to whom new reviews in this project will be assigned by default:
   - Select the '**Let allowed review participants join a review**' check-box if you wish to determine the default for the '**Allow anyone to join**' option on the 'Adding Reviewers' screen.
   - In the '**Users**' field, you can adjust the name(s) of individual users to whom new reviews will be assigned by default.
   - In the '**Groups**' field, you can adjust the name(s) of groups to whose members new reviews will be assigned by default.
8. *(Optional)* Under **Allowed Review Participants**', you can adjust who will be allowed to have a role (i.e. be an author/creator/moderator/reviewer) in this project's reviews:
   - In the '**Users**' field, you can adjust the list of individual users who will be eligible to be authors/creators/moderators/reviewers for reviews in this project*.
   - In the '**Groups**' field, you can adjust the list of groups whose members will be eligible to be authors/creators/moderators/reviewers for reviews in this project*.
     * These users will be the only ones whose names appear when a review is assigned.
9. In the '**Permission Scheme**' drop-down list, you can adjust the relevant permission scheme for this project. (A permission scheme controls who can perform particular actions, e.g. 'Create Review'.)
10. In the '**Review Duration**' section, you can define the default length of time (in week days) for reviews in this project.
11. In the '**Default Review Objectives Section**', you can define some text that will appear by default in the Review Objectives field of each new review. This text can be edited, as any text contained in the Review Objectives text box can.

Screenshot: The Edit Project screen in Crucible



Enabling the Moderator Role

This page contains instructions on how to enable or disable the moderator role for all reviews under a given Crucible project.

On this page:

- Introduction
- Enabling the Moderator Role
- Removing the Moderator from an Existing Project

- Adding the Moderator to an Existing Project

Introduction

By default, Crucible projects do not have a moderator. This allows for a streamlined review handling process, where the review author is the sole person who starts and stops the review. Projects in Crucible can have the moderator role enabled or disabled.

The setting for enabling moderators can only be set by a Crucible user with admin privileges.

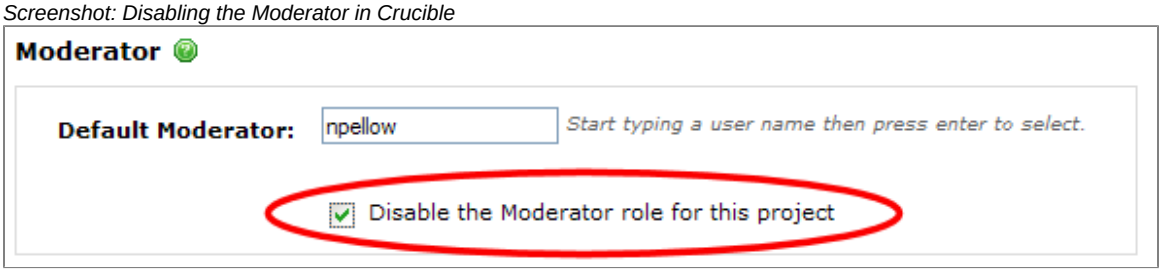
Enabling the Moderator Role

The moderator role is configurable in Crucible as a per-project setting. By default, all reviews have an author and a moderator. However, the moderator role can be disabled.

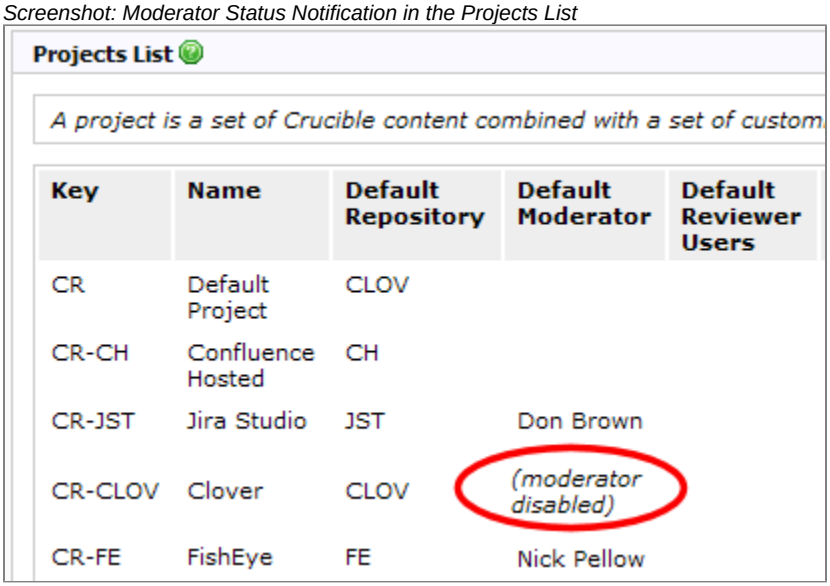
To enable or disable the moderator role on a project:

1. Open the Crucible Admin screen, by clicking the '**Administration**' link at the bottom of any Crucible page.
2. The Crucible Admin screen opens. Click '**Project List**' under '**Project Settings**' in the left navigation bar.
3. The Projects List screen opens. Click the '**Edit**' link in the 'Edit Crucible Settings' column.
4. The '**Edit Project**' screen opens.

Screenshot: Disabling the Moderator in Crucible



Screenshot: Moderator Status Notification in the Projects List



Removing the Moderator from an Existing Project

When you remove the moderator role from an existing project, be aware of the following points:

- Reviews created after the setting change will have the moderator role removed.
- Reviews created prior to the change will still retain the moderator they were assigned.
- If the removal of the moderator conflicts with other Crucible project settings, a warning will be shown on the Project List page.

If in doubt about the impact of adding or removing the moderator, you can create a new project (and set the moderator status during the project's creation).

Adding the Moderator to an Existing Project

If you add the moderator role back in to an existing project, be aware of the following points:

- Reviews created after the setting change will have the moderator role added.
- Reviews created prior to the change will still have no moderator.
- If the addition of the moderator conflicts with other Crucible project settings, a warning will be shown on the Project List page.

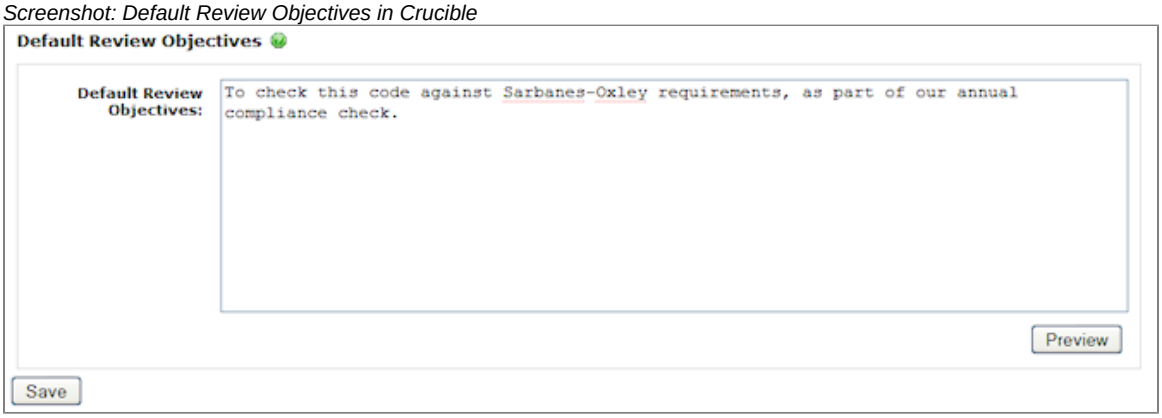
If in doubt about the impact of adding the moderator, you can create a new project (and set the moderator status during the project's creation).

Setting Default Review Objectives

To set default review objectives for all the reviews in a given project, carry out the following steps:

1. Open the '**Administration**' page, '**Project List**', then click '**Edit**' to open the Edit Project screen.
2. In the '**Default Review Objectives Section**', you can define some text that will appear by default in the '**Review Objectives**' field of each new review. Click '**Done**' to save your changes. This text can be edited, as any text contained in the Review Objectives text box can.

Screenshot: Default Review Objectives in Crucible



Setting the Default Review Duration for a Project

You can set a default time period (duration) that all reviews under a given project will run for. Reviews that are overdue will show up in red on the reviewer's dashboards.

To set a default duration for all reviews in a project,

1. From the '**Admin Menu**', click '**Project List**'.
2. The list of projects will be displayed. Click the '**Edit**' link for the desired project, which appears to the right of the existing project name.
3. The '**Edit Project'** page will be displayed. You can now adjust any of the given settings as desired.
4. In the '**Review Duration**' section, you can define the default length of time (in week days) for reviews in this project. If you leave the field blank, then no time restriction is applied.

Note that the 'Review Duration' only affects the default due date that appears when creating a review . The review's creator or moderator can specify a different date if they wish.

To see instructions for the other items on this page, see the documentation for Editing a Project.

JIRA Integration in Crucible

This page contains instructions for setting up JIRA integration.

JIRA is Atlassian's issue tracking product, which can be used to manage projects and associated work.

Before you begin: Your JIRA instance will require configuration to support the following respective features:

- All JIRA integration features require Remote API access to be allowed on your JIRA instance.
- JIRA Hover and JIRA issues being automatically turned into hyperlinks requires Remote API access to be allowed on your JIRA instance.
- Creating JIRA subtasks from Crucible comments requires enabling sub-tasks in JIRA. It is also recommended that you enable unassigned issues in JIRA.
- Enabling Trusted Application support (where each user can use their own JIRA account) requires enabling Trusted Applications on your JIRA server and entering the details of your FishEye server there.

> The instructions on this page have been tested with JIRA 4.0.0.

JIRA issues can be viewed in the main Dashboard view. This requires you to enter details on the required JIRA server(s) via the administration screens.

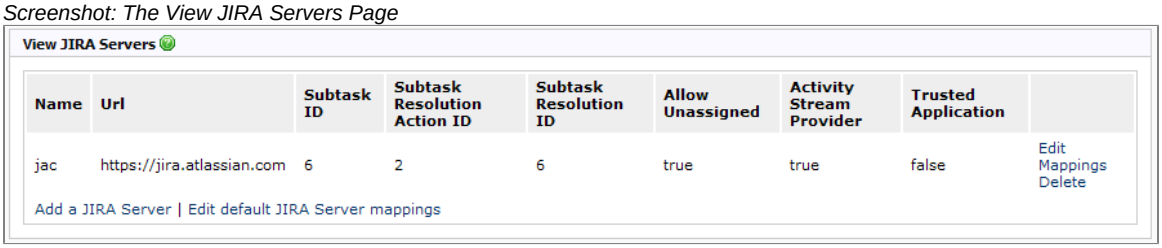
On this page:

- Opening the Administration Screen for JIRA Integration
- Adding a New JIRA Server
- Editing Default JIRA Server Mappings
- Operations on Existing Servers
  - Edit settings for an existing JIRA server
  - Edit mappings for an existing JIRA server
  - Delete an existing JIRA server
- Obtaining Subtask Values for Crucible Configuration
  - Obtaining the Subtask ID Values
- Known Issues
- See Also

Opening the Administration Screen for JIRA Integration

To set up JIRA integration, open the Administration screen and then click '**JIRA Servers**' under the '**Global Settings**' sub-menu on the left navigation bar. The '**View JIRA Servers**' administration page opens.

Screenshot: The View JIRA Servers Page



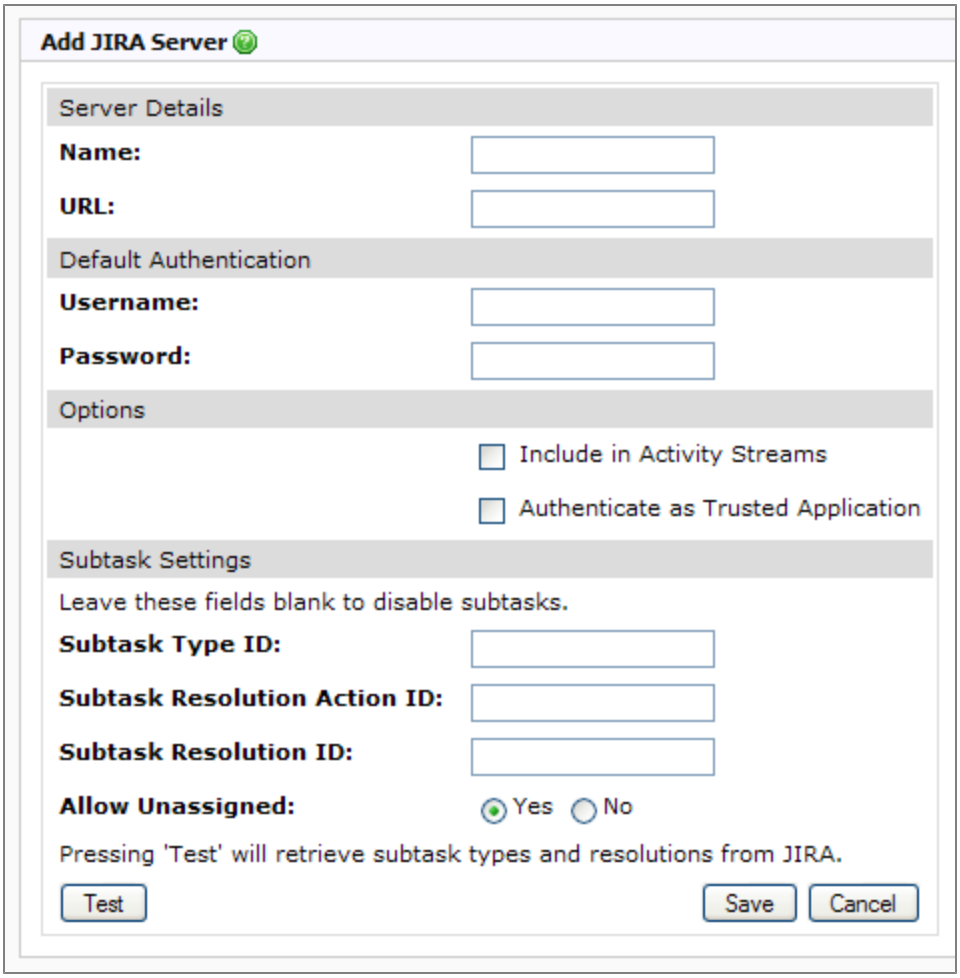
On the View JIRA Servers page, you can carry out a number of operations as described below.

Adding a New JIRA Server

To add a new JIRA server from the View JIRA Servers page, click '**Add JIRA Server**'.

The '**Add JIRA Server**' page opens.

Screenshot: The Add JIRA Server Page



A number of fields and options must be filled out or selected on this page. See the table below for information on each field.

Option	Type	Description	Required
Name	Text Field	A descriptive name for the JIRA server.	Yes
URL	Text Field	The base URL of the JIRA server, e.g. http://jira.atlassian.com	Yes
Username	Text Field	The username of an account on the JIRA instance. (All activity that takes place will be attributed to this user, unless using the Trusted Application setting).	Yes
Password	Text Field	The password for the account on the JIRA instance.	Yes
Include in Activity Streams	Check Box	Allows JIRA information to appear in the Activity Streams.	No
Authenticate as Trusted Application	Check Box	Allows the system to interface with JIRA, letting users log on with their own accounts (and use their own accounts on the JIRA server). If you enable subtasks using a trusted JIRA instance, you will also need to add FishEye as a trusted application to your JIRA instance, and then add the root path (denoted by '**/**') to the **URL Paths to Allow** field on the trusted applications screen in the administration interface of your JIRA instance. For more information, see the FishEye documentation and JIRA documentation about trusted applications. Also see the Known Issues.	No
Subtask Type ID	Number	This is required to enable creating issues from a Crucible comment (not required for standalone FishEye). See the instructions on obtaining this number.	No
Subtask Resolution Action ID	Number	This is required to enable creating issues from a Crucible comment (not required for standalone FishEye). See the instructions on obtaining this number (not required for standalone FishEye).	No
Subtask Resolution ID	Number	This is required to enable creating issues from a Crucible comment (not required for standalone FishEye). See the instructions on obtaining this number (not required for standalone FishEye).	No

Allow Unassigned	True/False Button	Allow unassigned sub-tasks. This setting must match your 'Allow Unassigned Issues ' setting in JIRA. .	No

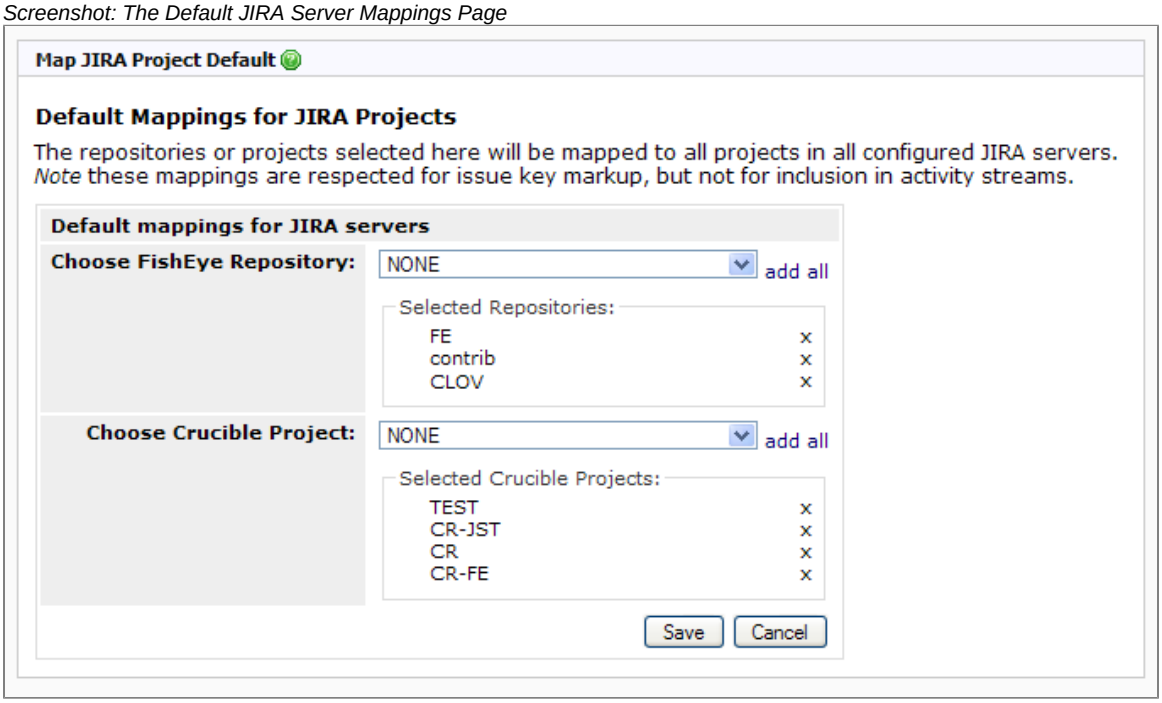
Once you've filled out the necessary fields, click '**Test**' to ensure that your details are correct. If you have a positive message return from the test, click '**Save**'.

Editing Default JIRA Server Mappings

This setting has two effects; it enables the feature that shows JIRA information in a dynamic window when you hover the mouse over a JIRA issue key; it will also turn every issue key into a hyperlink to that issue.

To enable this feature, click '**Edit Default JIRA Server Mappings**' from the View JIRA Servers page. The '**Map JIRA Project Default**' page opens.

Screenshot: The Default JIRA Server Mappings Page



On this page, select the FishEye Repositories or Crucible Projects that you wish to associate with all the JIRA servers that you have configured for use in FishEye/Crucible. You can click '**add all**' to quickly include them all in this category. You can remove individual items by clicking the small 'X' marks.

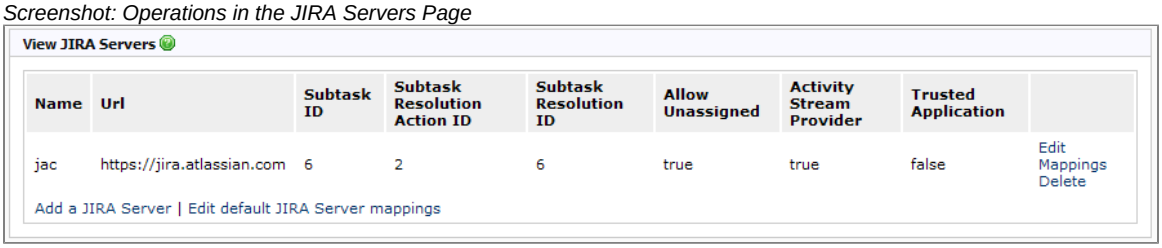
Once you've finished, click '**Save**'.

You should disable any existing Crucible linkers you have set up for JIRA, as they will override this feature and prevent the dynamic dialog box from appearing when you mouse over an issue.

Operations on Existing Servers

Once you have configured an existing JIRA server, there are three main operations you can carry out on it: '**Edit**', '**Mappings**' and '**Delete**'. These options appear on the far right of the screen.

Screenshot: Operations in the JIRA Servers Page



Edit settings for an existing JIRA server

When you click '**Edit**', you can adjust any of the general settings you configured when you first added the server.

Edit mappings for an existing JIRA server

When you click '**Mappings**', a page is loaded that is almost identical to the '**Default Mapping**' screen, but allows you to choose mappings only for that specific JIRA server.

Delete an existing JIRA server

Clicking '**Delete**' will remove the server from the list.

Obtaining Subtask Values for Crucible Configuration

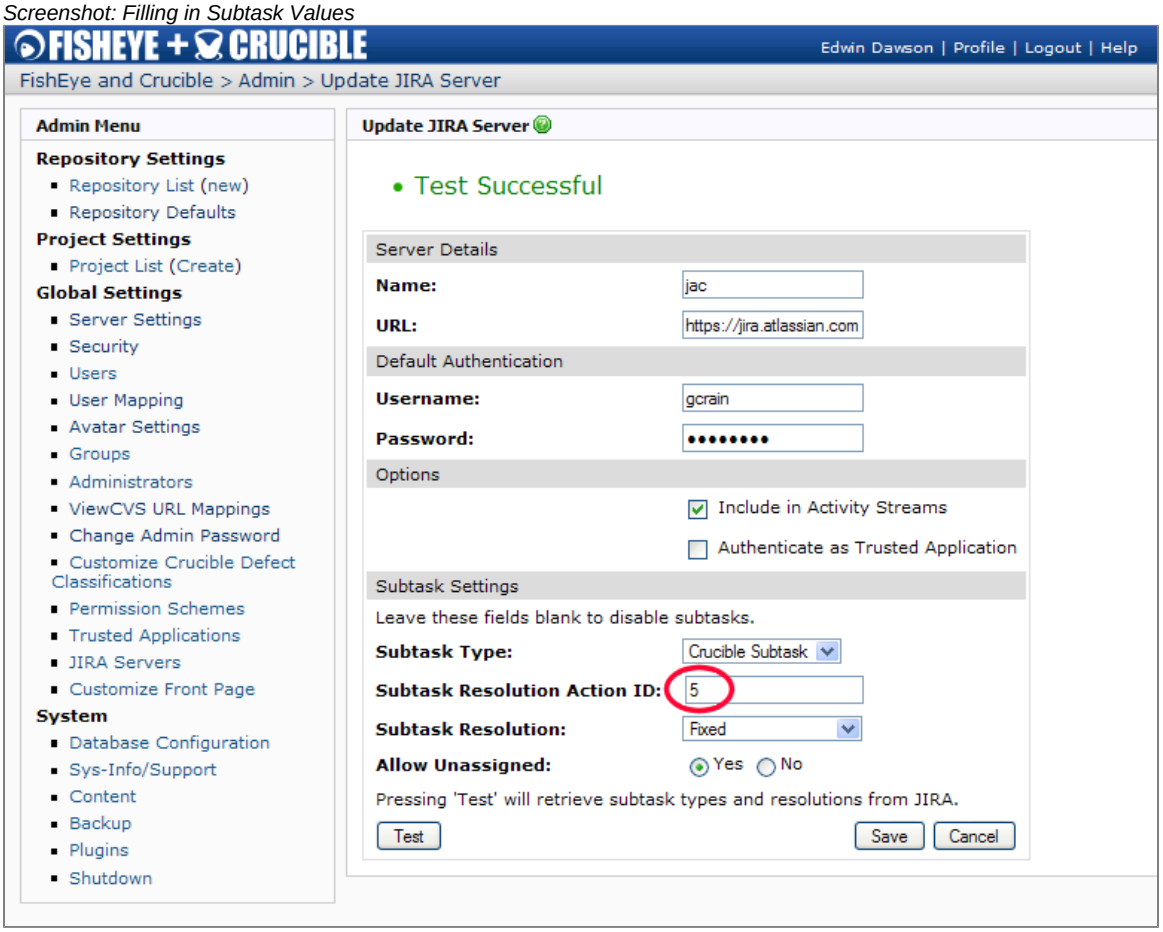
Obtaining the Subtask ID Values

This value is required (along with the Subtask Resolution ID and Subtask Resolution Action ID) to enable creating issues from a Crucible comment. This is the subtask type that will be created when you create a JIRA subtask in Crucible.

To set this up in Crucible, carry out the following steps.

1. Enable sub-tasks on your JIRA instance from the '**JIRA Administration**' > '**Sub-Tasks**' page. See the JIRA documentation for details on this step.
2. Return to the Crucible Administration screen and then click '**JIRA Servers**' under the '**Global Settings**' sub-menu on the left navigation bar. Click '**Edit**' next to the JIRA server you have configured.
3. Your JIRA server's basic details should appear. Click '**Test**' once again. The field for '**Subtask Type ID**' will change to a drop-down menu, showing the available subtask types. Choose the correct one. The field for '**Subtask Resolution**' will also turn into a drop-down menu. Select the desired item from this menu as well.
4. Save your Crucible configuration settings.

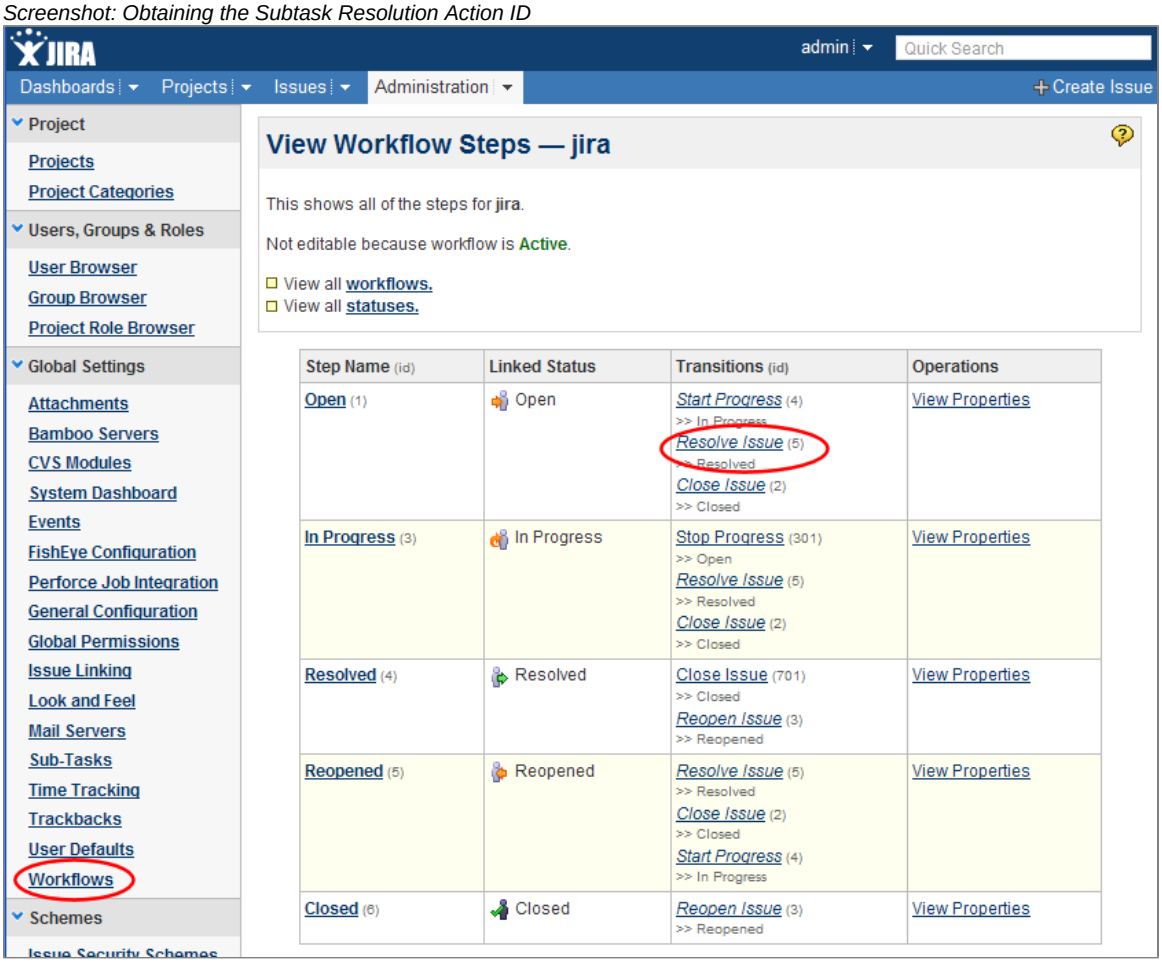
Screenshot: Filling in Subtask Values



5. Open your JIRA instance and go to '**Administration**' > '**Workflows**'. The '**Workflows**' screen opens. By default, the '**JIRA**' workflow is shown on screen in a table.
6. Click the '**Steps**' link in the far right table cell. The '**View Workflow Steps — JIRA**' page opens.

7. The '**Subtask Resolution Action ID**' is in the '**Open**' row, under the '**Transitions**' column. Look at the link in that cell named '**Resolve Issue**'. The ID number is shown in brackets next to that heading '**Resolve Issue**' (shown in the screenshot below as 5).
8. Enter the number into the field in Crucible.
9. Save your Crucible configuration settings.
10. Your Crucible JIRA integration should now be complete.

Screenshot: Obtaining the Subtask Resolution Action ID



Known Issues

If you decide to use Trusted Applications for authentication with your JIRA server, activity streams and subtasks created from review defects will be generated using the currently logged in user. However JIRA project mapping and issue key linking (including the associated 'hovering' content) will be retrieved using the user specified on the JIRA Server configuration page in the FishEye administration section.

We are working towards supporting Trusted Applications for issue key linking and project mapping. If this issue is important to you, please vote for CRUC-1910.

See Also

- The JIRA documentation on Integrating JIRA with FishEye, which enables you to view FishEye data from within JIRA.
- The FishEye documentation on JIRA Integration in FishEye, which enables you to view JIRA data from within FishEye.

Migrating to an External Database

This page contains instructions on migrating your Crucible database from its default embedded form to an external database. This may be useful for the following reasons:

- **Improved Protection Against Data Loss**: The Crucible built-in database, running HSQLDB is somewhat susceptible to data loss during system crashes. External databases are generally more resistant to data loss during a system crash.
- **Performance & Scalability**: if you have many users on your Crucible instance, running the database on the same server as FishEye may slow it down. When using the embedded database, the database will always be hosted and run on the same server as Crucible.
- **Data Stored in the Crucible Database**: The Crucible database stores all information besides the cache for repository scans. This means all reviews, comments, review states, user data and user preferences information.

On this page:

- Overview
- Migrating to MySQL Enterprise Server
- Migrating to PostgreSQL
- Support for other Databases

Overview

Crucible and FishEye offer alternatives to the built-in HSQLDB database for storing its relational data. At the time of writing, MySQL Enterprise Server and PostgreSQL are supported (see Supported Platforms for version numbers). This page outlines the steps required for switching to an external database.

Migrating to MySQL Enterprise Server

To switch from the built-in HSQLDB database to MySQL Enterprise Server, install MySQL Enterprise Server and follow the steps below.

1. The JDBC drivers for MySQL Enterprise Server are bundled with FishEye. Skip to step 2 if this meets your needs. If you want to install a specific, different version of the bundled JDBC driver, download the MySQL Enterprise Server JDBC driver .JAR file from the download website and copy the .JAR to your `FISHEYE_INST/lib` directory (create the `lib/` directory if it doesn't already exist). Move the existing JDBC .JAR file to another location (and back it up). Restart FishEye or Crucible to have it pick up the new driver.

2. Create a UTF-8 Database:
Note that the DB must be **case-sensitive**, i.e. it must use the `utf8_bin` collation sequence.

```
CREATE DATABASE crucible CHARACTER SET utf8 COLLATE utf8_bin;
```

3. You will also need to set the `Server Characterset` to `utf8`. This can be done by adding the following in `my.ini` for Windows or `my.cnf` for other OS. It has to be declared in the Server section, which is the section after `[mysqld]`:

```
[mysqld]
default-character-set=utf8
```

Also set the value here:

```
[mysql]
default-character-set=utf8
```

4. Use the **`status`** command to verify database character encoding information:

Screenshot: Using the MySQL Enterprise Server Status Command

```
mysql> status
--------------
/Applications/xampp/xamppfiles/bin/mysql  Ver 14.12 Distrib 5.0.67, for apple-da
rwin8.11.1 (i686) using  EditLine wrapper

Connection id:          5764
Current database:
Current user:           root@localhost
SSL:                    Not in use
Current pager:          stdout
Using outfile:          ''
Using delimiter:        ;
Server version:         5.0.67 Source distribution
Protocol version:       10
Connection:             Localhost via UNIX socket
Server characterset:    utf8
Db     characterset:    utf8
Client characterset:    latin1
Conn.  characterset:    latin1
UNIX socket:            /Applications/xampp/xamppfiles/var/mysql/mysql.sock
Uptime:                 29 days 1 hour 34 min 56 sec

Threads: 6  Questions: 49238134  Slow queries: 0  Opens: 460445  Flush tables: 1
  Open tables: 4  Queries per second avg: 19.607
--------------

mysql>
```

5. Create a user that can log in from the host that Crucible or FishEye is running on and make sure that the user has full access to the newly created database. In particular, the user should be allowed to create and drop tables, indexes and other constraints.

For instance, when Crucible and MySQL Enterprise Server run on the same machine (accessible through `localhost`), issue the following commands (replacing username and password with the appropriate values):

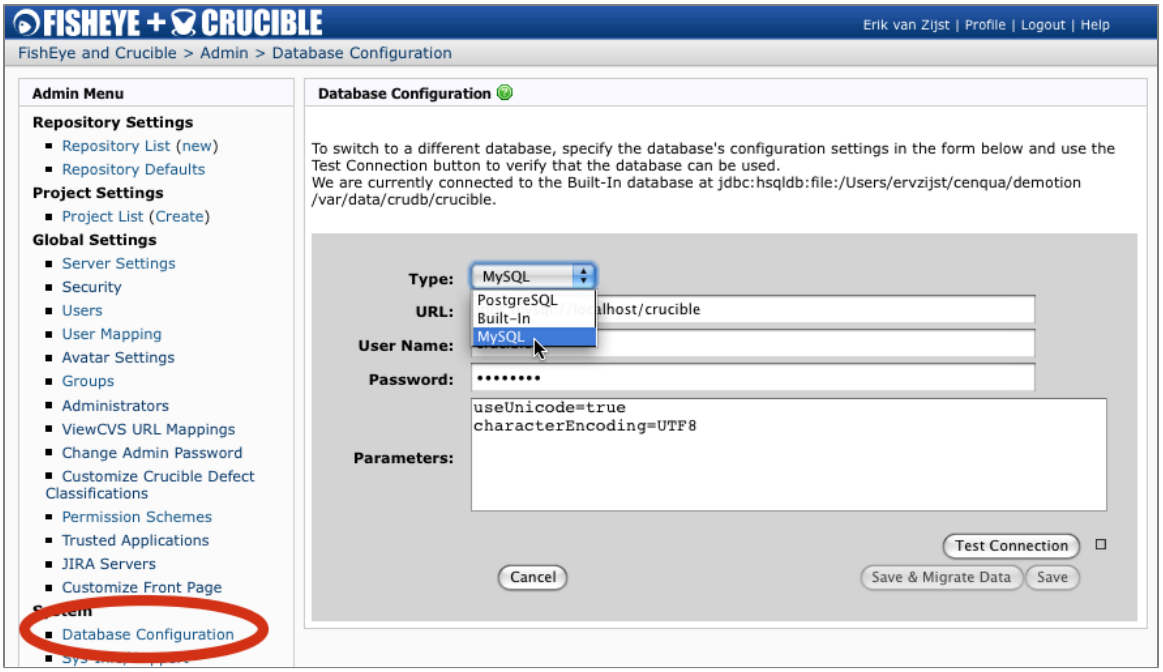
```
mysql> grant all on crucible.* to 'username'@'localhost' identified by 'password';
Query OK, 0 rows affected (0.00 sec)

mysql> flush privileges;
Query OK, 0 rows affected (0.01 sec)
```

6. With the database prepared, navigate to the '**Database Configuration**' section in the admin interface, select MySQL Enterprise Server from the drop down and fill out the database URL, username and password.

Then click '**Test Connection**' to verify that Crucible or FishEye can log in to the database:

Screenshot: Testing the Connection

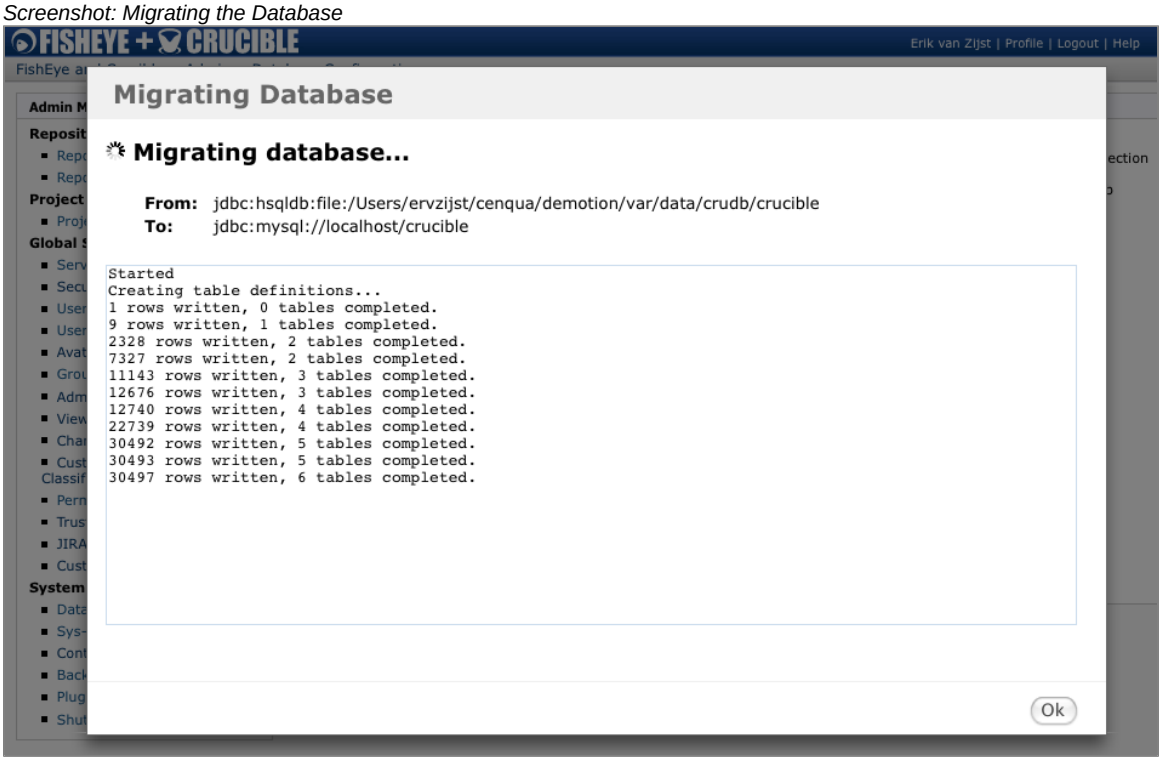


If this fails, verify that you have the MySQL Enterprise Server JDBC driver .JAR file in the classpath (by placing the .JAR file in `FISHEYE_INST/lib`). Also, ensure that the database user can log in to the database from the machine that Crucible or FishEye is running on and that all the required privileges are present.

7. Click '**Save & Migrate Data**' to start the migration process.

During the migration process (which will take several minutes, depending on the size of your database and network throughput), the product will be inaccessible to users and external API clients. Users will see a maintenance screen that informs them of the process. Should the migration fail for any reason, Crucible will not switch to the new database and report on the encountered problems. Because the destination database may now contain some, but not yet all data, drop all tables, indexes and constraints before attempting a new migration.

Screenshot: Migrating the Database



Migrating to PostgreSQL

To switch from the built-in HSQLDB database to PostgreSQL, install PostgreSQL and follow the steps below.

1. The JDBC drivers for PostgreSQL are bundled with FishEye. Skip to step 2 if this meets your needs. If you want to install a specific, different version of the bundled JDBC driver, download the PostgreSQL JDBC driver .JAR file from the PostgreSQL website and copy the .JAR to your `FISHEYE_INST/lib` directory (create the `lib/` directory if it doesn't already exist). Move the existing JDBC .JAR file to another location (and back it up). Restart FishEye or Crucible to have it pick up the new driver.

2. Create a new database user (replacing 'username' and 'password' with the appropriate values):

```
$ psql
> create user username password 'password';
```

3. Create a UTF-8 database and make the newly created user the owner:

```
> create database crucible ENCODING 'UTF-8' OWNER username;
```

4. Make sure the user has full access to the database:

```
> grant all on database crucible to username;
```

During the migration process (which will take several minutes, depending on the size of your database and network throughput), the product will be inaccessible to users and external API clients. Users will see a maintenance screen that informs them of the process. Should the migration fail for any reason, Crucible will not switch to the new database and report on the encountered problems. Because the destination database may now contain some, but not yet all data, drop all tables, indexes and constraints before attempting a new migration.

Support for other Databases

Crucible and FishEye currently ship with support for MySQL Enterprise Server and PostgreSQL as external databases (see Supported Platforms for version numbers).

If you are looking for support for Oracle or Microsoft SQL Server, please vote for the issues below. Your vote will help us prioritise them.

- **Request Oracle Support**: CRUC-1489
- **Request MS-SQL Support**: CRUC-1407

If you are using another database product that you would like to see supported, please create a JIRA issue for it under the Crucible project.

Creating a User

> Some user management functions are identical between Crucible and FishEye, Crucible's sister application. See more user management documentation in the FishEye documentation.

There are two types of user accounts:

- 'Built-in' user accounts — these are stored in the application's local database.
- 'External' user accounts — these are stored in an external directory (e.g. LDAP), if any are configured. See Configuring External Authentication Sources.

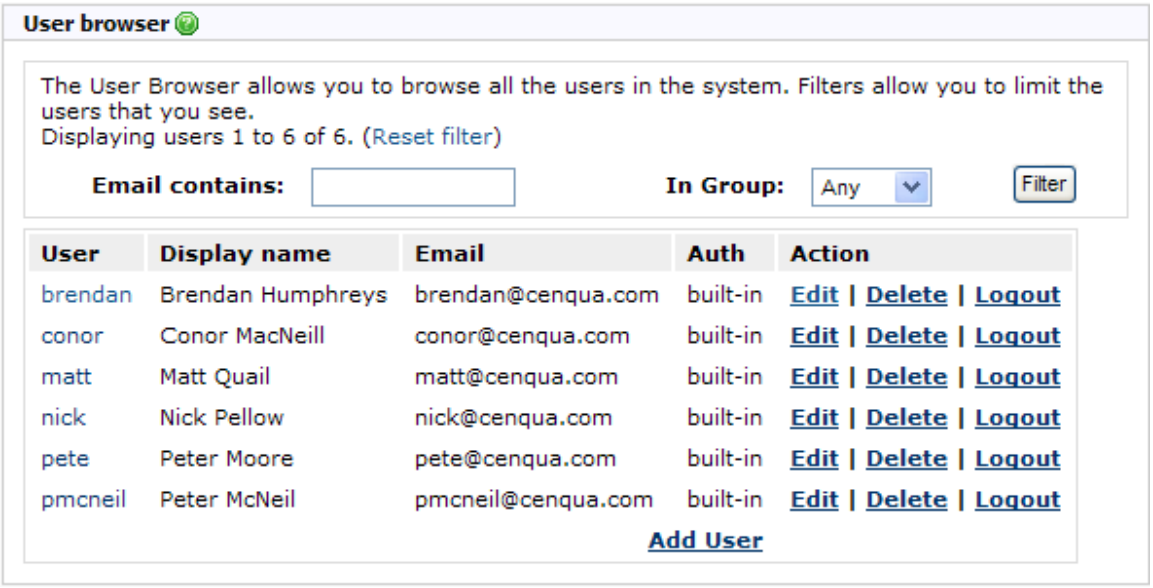
> **Note re external directories:**
> - New users can only be added if they already exist in the external directory. Your external directory will not be modified.
> - If you have enabled 'auto-add' for your external directory, users who don't exist locally will be automatically added the first time they log in.

To add a new user,

1. Click '**Users**' on the '**Admin Menu**'.
2. The '**User Browser**' screen will be displayed (see screenshot below). Click the '**Add User**' button at the bottom of the screen.
3. The '**Add new user**' screen will be displayed.
4. In the '**Username**' field, type the user's login name. You can use the following characters:
    - letters and numbers
    - hyphen ('-')
    - underscore ('_')
    - 'at' sign ('@')
5. In the '**Display name**' field, type the user's display-name.
6. *(Optional)* In the '**Email**' field, type the user's email address. This address is where the user will receive notifications.
7. In the '**Auth Type**' field, select either '**Built-in**' or the name of the appropriate external directory where the user will be stored.
8. *(For built-in users only)* In the '**Password**' and '**Confirm Password**' fields, type the user's password.

   The user can easily change their own password later.
9. Click the '**Add**' button.

Screenshot: User Browser



Trusted Applications

This page contains information about trusted application support in Crucible and how you can configure a trusted application relationship between Crucible and JIRA or Confluence.

On this page:

- Adding a Trusted Application
    - Configuring Identification Settings
        - URL field
        - Id field
    - Configuring Access Permissions
        - URL Patterns field
        - IP Address Patterns field
        - Certificate Timeout field
- Editing Trusted Application Settings

A 'trusted application' is an application that can access specific functions in Crucible, on behalf of any user — without the user logging in to Crucible.

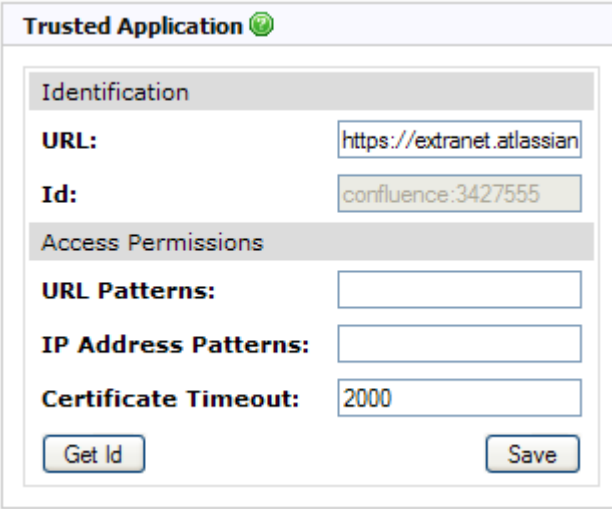
Crucible and FishEye share the same trusted applications; an application trusted by FishEye is also trusted by Crucible. At this time, JIRA 3.12 and Confluence 2.7 onwards can be configured as trusted applications.

> Before you begin, note that configuring a trusted application requires the transmission of sensitive data. To prevent ' man-in-the-middle attacks', it is recommended that you use an encrypted SSL connection while configuring a trusted application.

Adding a Trusted Application

To add a trusted application to Crucible:

1. Access the '**Administration Screen**'.
2. Click '**Trusted Applications**' under '**Global Settings**' on the left navigation bar.
3. Click '**Add a Trusted Application**'. The '**Trusted Application**' screen opens.



Screenshot: Configuring Trusted Applications

On this page, there are two areas, the '**Identification**' area and the '**Access Permissions**' area.

Configuring Identification Settings

Under the '**Identification**' heading, there are two fields, '**URL**' and '**Id**'.

URL field

In this field is where you will enter the Trusted Application Public Key URL of the application you wish to trust. For example, if your application's base URL is;

```
'http://www.mycompany/jira/'
```

you would enter that into the URL field. Once you've done this, click the '**Get ID**' button. Crucible will then retrieve the Trust Certificate Id from the other application and display it in the Id field. If this step fails, you may not have not entered the correct URL for the other application.

Id field

This field contains the **Trust Certificate ID**, once you have filled out the URL field correctly (see above) and clicked the '**Get ID**' button. The contents of this field are not editable.

Configuring Access Permissions

Under the **Access Permissions** heading, there are three fields, **URL Patterns**, **IP Address Patterns** and **Certificate Timeout**. These allow you to further restrict requests from a trusted application.

URL Patterns field

With this field, you can limit the access a trusted application has to Crucible. It it not necessary to specify anything for this field; in fact a blank value is a sensible default. The default behaviour is no restriction.

The text that you specify should not include your hostname, IP address or port number, rather it relates to folders on the server, that start with the text you provide.

For example, if you use this setting:

```
/foo
```

then Crucible will trust only the requests to Crucible URLs starting with `/foo`, e.g. `/foo/bar`, `/foobar` and `/foo/bar/baz/x`. You can specify multiple URLs by separating them with a comma.

> URL Patterns do not support wildcard characters or regular expressions in Crucible.

IP Address Patterns field

With this field, you can limit the trusted network addresses for other applications. You can use wildcards to specify a number range, and multiple addresses can be separated with commas. For example, if you use this setting:

```
192.168.*.*,127.0.0.0
```

then Crucible will only trust requests from machines with the IP addresses 192.168.*anything.anything*(a group of network addresses) and 127.0.0.0 (a single host). The default is no restriction.

Certificate Timeout field

With this field, you can set the number of milliseconds before the certificate times out. This feature's purpose is to prevent 'replay attacks'. For example, if an attacker intercepts a request, they may attempt to extract the certificate and send it again independently. With the certificate timeout, the application will be able to tell that this is no longer a valid request. The default value is 1000 (one second).

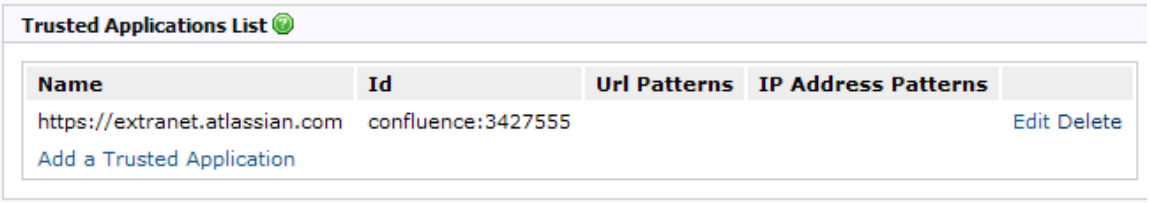
> A shorter time out is more secure, but if set too short, it may cause valid requests to be rejected on slower networks.

Once you've finished entering the settings for the Trusted Application, click the '**Save**' button to confirm and activate the trust relationship.

Editing Trusted Application Settings

Once you have configured your trusted application(s), you can view the settings on the main **'Trusted Applications'** page.

Screenshot: Trusted Applications list



From this screen, you can click **'Edit'** to make changes to the trusted application settings, or click **'Delete'** to remove the trust relationship for that application.

Setting up Users and Security

User management and security settings are covered in the FishEye documentation.

Enabling Access Logging in Crucible

Stop Fisheye/Crucible then create the file `FISHEYE_HOME/content/WEB-INF/jetty-web.xml` with the following content:

```
<?xml version="1.0"  encoding="ISO-8859-1"?>
<!DOCTYPE Configure PUBLIC "-//Mort Bay Consulting//DTD Configure//EN"
"http://www.eclipse.org/jetty/configure.dtd">

<Configure class="org.mortbay.jetty.webapp.WebAppContext">
 <Call name="addHandler">
  <Arg>
   <New class="org.mortbay.jetty.handler.RequestLogHandler">
   <Set name="requestLog">
    <New id="RequestLogImpl" class="org.mortbay.jetty.NCSARequestLog">
     <Arg><SystemProperty name="jetty.logs" default="./var/log"/>/fisheye-access.log.yyyy_mm_dd</Arg>
     <Set name="retainDays">90</Set>
     <Set name="append">true</Set>
     <Set name="extended">false</Set>
     <Set name="LogTimeZone">GMT</Set>
    </New>
   </Set>
   </New>
  </Arg>
 </Call>
</Configure>
```

Restart Fisheye/Crucible and that will create an access log in `FISHEYE_HOME/var/log/fisheye-access.log.yyyy_mm_dd` format (e.g. fisheye-access.log.2010_03_17). If you want to change the path to you `FISHEYE_INST` directory, change the `default="./var/log"` to the path to the log folder in `FISHEYE_INST`.

The logs are written in NCSA format:

```
172.20.5.186 -  -  [17/Mar/2010:22:50:21 +0000] "GET
/fe/commitSparkline.do?w=280&h=48&context=repository&repname=TestRepo&outputtype=image HTTP/1.1" 200
256
172.20.5.186 -  -  [17/Mar/2010:22:50:21 +0000] "GET
/fe/commitSparkline.do?w=280&h=48&context=repository&repname=npanday&outputtype=image HTTP/1.1" 200
177
172.20.5.186 -  -  [17/Mar/2010:22:50:21 +0000] "GET
/fe/commitSparkline.do?w=280&h=48&context=repository&repname=jutils&outputtype=image HTTP/1.1" 200 775
172.20.5.186 -  -  [17/Mar/2010:22:50:21 +0000] "GET
/fe/commitSparkline.do?w=280&h=48&context=repository&repname=P4&outputtype=image HTTP/1.1" 200 177
172.20.5.186 -  -  [17/Mar/2010:22:50:21 +0000] "GET
/fe/commitSparkline.do?w=280&h=48&context=repository&repname=Rails&outputtype=image HTTP/1.1" 200 1311
172.20.5.186 -  -  [17/Mar/2010:22:50:22 +0000] "GET
/fe/commitSparkline.do?w=280&h=48&context=repository&repname=FE-2363&outputtype=image HTTP/1.1" 200
128
```

Please refer to the Jetty documentation for more configuration options.

Configuring User Managed Mappings

In Crucible, Administrators can control whether users can use the Author Mapping setting to map their own Crucible usernames to repository committer accounts or not. By default, the setting allows users to set their own mappings.

If you wish to lock down the mappings for security or audit reasons, this setting lets you restrict all management of mappings to Crucible administrators only.

To do this, click '**Administration**' in the footer of the Crucible interface and then '**Security**' in the left navigation bar. The '**Authentication Settings**' page opens. You can click to set User Managed Mappings '**On**' or '**Off**'. The setting is applied immediately.

Screenshot: User Managed Mappings

Crucible Installation and Upgrade Guide

- Crucible Installation Guide
  - Supported Platforms
  - Installing Crucible
  - Configuring Crucible
  - Configuring Repositories
  - Best Practices for Crucible Configuration
- Crucible Release Notes
  - Crucible 2.3 Release Notes
  - Crucible 2.2 Release Notes
  - Crucible 2.1 Release Notes
  - Crucible 2.0 Release Notes
  - Crucible 2.0 Beta Release Notes
  - Crucible 1.6 Release Notes
  - Crucible 1.5 Release Notes
  - Crucible 1.2 Release Notes
  - Crucible 1.1 Release Notes
  - Crucible Release Summary
  - Security Advisories
- Crucible Upgrade Guide
  - Upgrading to a New Version of Crucible
  - Upgrading from FishEye to Crucible

Crucible Installation Guide

This guide explains how to get Crucible installed and running as easily as possible. Many references are made to the FishEye documentation.

This document will refer to the location where you have extracted Crucible (a directory) as `/FISHEYE_HOME/`.

Refer to our explanation of how Crucible works with FishEye.

> Evaluating Crucible for the first time? See the Crucible 101 page.

- Supported Platforms
- Installing Crucible
- Configuring Crucible
- Configuring Repositories
- Best Practices for Crucible Configuration

Supported Platforms

This page shows the supported platforms for **Crucible 2.3.x** and its minor releases.

Key: = Supported; = Not Supported

Java Version	
JRE / JDK (1)	1.5 or later

Operating Systems	
Microsoft Windows [2]	✅
Linux [2]	✅
Apple Mac OS X [2]	✅
Databases	
MySQL	✅ MySQL Enterprise Server 5.0.21 or later ✅ MySQL Community Server 5.0.21 or later
PostgreSQL	✅ 8.0 or later
HSQLDB [3]	✅ (bundled; default)
Web Browsers	
Microsoft Internet Explorer	✅ 7.0 or later, ❌ IE6 is not supported
Mozilla Firefox	✅ 3 or later
Safari	✅ 4 or later
Version Control Systems	
Subversion	✅ Server 1.1 or later, via an SCM plugin or with FishEye. The client uses SVNkit or native JavaHL.
CVS (and CVSNT)	✅ All versions (requires FishEye)
Perforce	✅ Client version 2007.3 or later, via an SCM plugin or with FishEye.
Git	✅ 1.6 or later (requires FishEye)
IBM ClearCase	✅ 2003.06.10 or later (requires FishEye)

> ℹ Crucible also supports the use of Confluence (v2.9.1 through v2.10.4, via an SCM plugin) or the server file system (via an SCM plugin) as a repository.

Supported Platform Notes

1. Crucible requires **Java Runtime** (JDK or JRE) version **1.5** or later (Solaris requires **1.5.0_15** as a minimum).

You can download a Java Runtime for Windows/Linux/Solaris. On Mac OS X, the JDK is bundled with the operating system.

ℹ Once you have installed the JDK, you need to set the JAVA_HOME environment variable.

⚠ We strongly recommend the use of a 32-bit JDK/JRE rather than a 64-bit JDK/JRE. 64-bit JDK/JREs will consume the available RAM more rapidly, and this may result in poor performance.

2. Crucible is a pure Java application and should run on any platform provided the requirements for the JRE or JDK are satisfied.

3. The Crucible built-in database, running HSQLDB is somewhat susceptible to data loss during system crashes. External databases are generally more resistant to data loss during a system crash.

At this time, Crucible supports the following external databases:

- MySQL Enterprise Server 5.0.21 onwards and MySQL Community Server 5.0.21 onwards (see the Crucible Database documentation).
- PostGreSQL 8.x onwards (see the Crucible Database documentation).

Deployment Notes for Source Code Repositories

> Crucible also supports the use of Confluence (v2.9.1 through v2.10.4, via an SCM plugin) or the server file system (via an SCM plugin) as a repository.

Crucible can also store uploaded files in its own database, removing the need for any kind of repository. Subversion, CVS, Perforce, Git and IBM ClearCase are supported when Crucible is used with FishEye. See the FishEye Supported Platforms.

> **Font size tips**
> (Especially for Linux users.) For best results you may want to tweak your default monospace font and font-size. The default browser font is usually Courier New which can be hard to read in some browsers. We recommend choosing the same font you use in your IDE and selecting a font size approximately 2 points larger than your variable width font. Firefox 3, Internet Explorer 7 and Safari all have excellent font rendering. It is worth taking some time to tweak your fonts for the best experience.

Installing Crucible

This page contains instructions for the initial installation of Crucible.

On this page:

- Installing the Crucible Binary Files
- Setting up a Repository for use with Stand-alone Crucible
- Setting up a Repository for use with FishEye and Crucible
- Next: Configuration

Installing the Crucible Binary Files

Follow these steps to install Crucible:

1. Download the Crucible zip file and extract it. This document assumes you have extracted your Crucible zip file into a directory called `/FISHEYE_HOME/`.
2. Ensure you have installed an appropriate Java runtime - see System Requirements. Ensure that `java` is in the `PATH`, or that the `JAVA_HOME` environment variable is set.

Setting up a Repository for use with Stand-alone Crucible

When accessing repositories from stand-alone Crucible, the SCM client interface will access the repositories on demand. This requires that you configure the plugin.

For complete instructions, see Configuring Repositories.

Setting up a Repository for use with FishEye and Crucible

- If you intend to use Crucible and FishEye with Subversion, please ensure you read the System Requirements, Subversion client setup, and granting permission to FishEye to scan your repository.
- If you intend to use Crucible and FishEye with Git, please ensure you read the System Requirements and Git Client setup.
- If you intend to use Crucible and FishEye with Perforce, please ensure you read the System Requirements and Perforce Client setup.
- If you intend to use Crucible and FishEye with CVS, please ensure you read the System Requirements and CVS Client setup.

Next: Configuration

To go on with configuration, see the page configuring Crucible.

Configuring Crucible

On this page:

- Running Crucible
- Supplying Administration Password and License Key
- Accessing the Administration Pages
- Setting Up a Perforce Repository in Stand-Alone Crucible
- Setting Up a Subversion Repository in Stand-Alone Crucible
- Setting Up Reviewing of Confluence Pages in Crucible
- Setting Up the File System as a Code Repository For Crucible
- Setting Up a Repository via FishEye
- Setting Up Users
- Setting Up SMTP
- Using Crucible
- Stopping Crucible
- Information on FishEye integration

Running Crucible

This document assumes you have extracted your Crucible zip file into a directory called `/FISHEYE_HOME/`.

To run Crucible for the first time, simply do the following:

- On Windows:

```
C:\> cd FISHEYE_HOME\bin
C:\FISHEYE_HOME\bin> run.bat
```

- On Unix-based systems:

```
$ cd /FISHEYE_HOME/bin
$ ./run.sh
```

Once started, Crucible will run its own HTTP web server on port `8060`. You can access Crucible immediately by going to `http://HOSTNAME:8060/` in a browser.

> By default, Crucible will listen on port `8060` for HTTP requests. It also listens on `127.0.0.1:8059` as a control port. You can configure both of these in the Administration screens, or by editing `/FISHEYE_HOME/config.xml` and restarting Crucible.

Supplying Administration Password and License Key

The first time you access the Crucible web server (`http://HOSTNAME:8060/`) you will see a screen like this, and here you will be asked for two things:

1. An administrator password. This password controls access to the Administration screens.
2. A license key. Please note your server ID. You can then get a Crucible evaluation license key here.

Accessing the Administration Pages

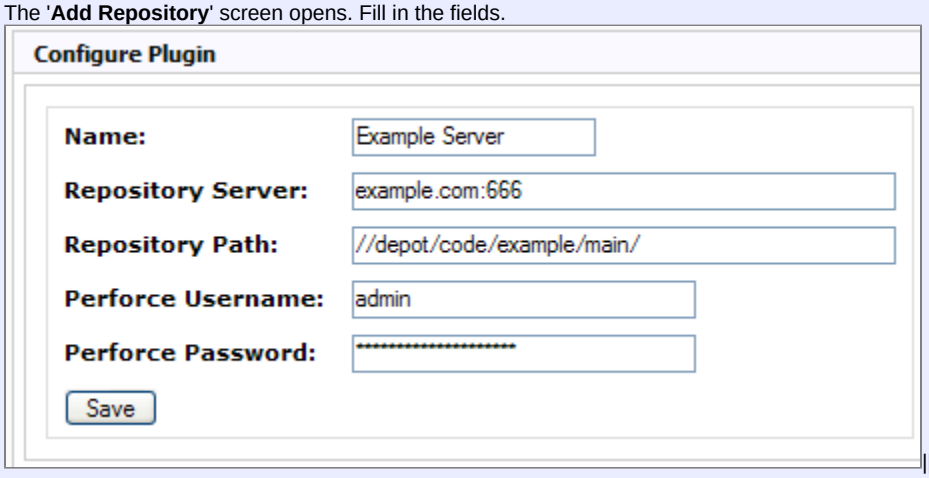
Once you have set up an administrator password (as described above), you can access the Administration screens at `http://HOSTNAME:8060/admin/`.

One of your first steps will be to set up access to a source-control repository, or an alternative form of code storage such as the Local File System or Atlassian Confluence.

Setting Up a Perforce Repository in Stand-Alone Crucible

To set up Perforce in stand-alone Crucible,

1. Ensure that the Perforce executable file is on the system path, in the Crucible server's Environment Variables
2. Start Crucible then open the '**Admin**' menu by clicking the *Administration* link in the footer of the page.
3. Under the '**Repository Settings**' heading, click '**Repository List**' in the left-hand navigation bar.
4. The '**Repository List**' screen opens.
5. Find the **Perforce** repository plugin and click its **Configure Plugin** link.
6. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
7. The '**Add Repository**' screen opens. Fill in the fields.



|| Field || What to enter ||

Name	Choose a unique name for the repository.
Repository Server	Enter the base URL and port for the repository, for example: `example.com:666`.
Repository Path	Add the path to your Perforce repository. For example: `//depot/code/example/main`.
Perforce Username	Enter the username of the Perforce account that Crucible will use. (optional) Note that this account should only have read-only access to the repository.
Perforce Password	Enter the password of the Perforce account that Crucible will use. (optional)

8. Click '**Save**'. The view will return to the list of repositories.
9. Your Perforce repository is now set up for Crucible. You will be able to select changesets from it when creating reviews.

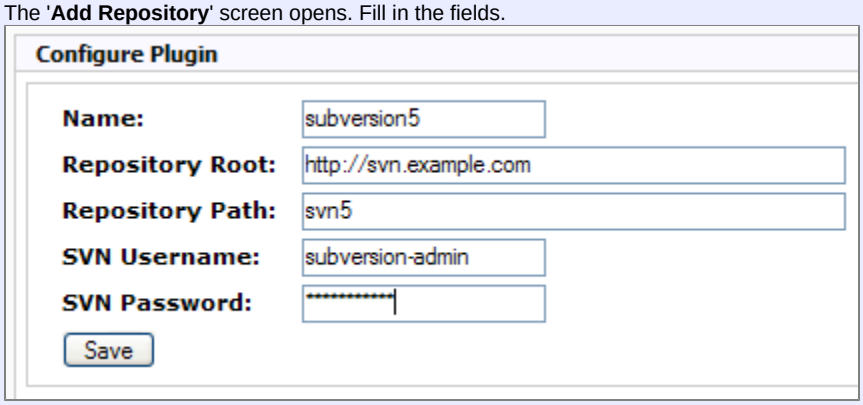
There is no 'initial scanning' required in this process, as stand-alone Crucible's access to Perforce is strictly on-demand. Data is not indexed, hence there is no scanning.

For those who may be interested, Crucible executes the Perforce command-line tool to enable this functionality.

Setting Up a Subversion Repository in Stand-Alone Crucible

To set up Subversion in stand-alone Crucible,

1. Start Crucible then open the '**Admin**' menu by clicking the *Administration* link in the footer of the page.
2. Under the '**Repository Settings**' heading, click '**Repository List**' in the left-hand navigation bar.
3. The '**Repository List**' screen opens.
4. Find the **SVN** repository plugin and click its **Configure Plugin** link.
5. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
6. The '**Add Repository**' screen opens. Fill in the fields.



Field	What to enter
Name	Choose a unique name for the repository.
Repository Root	Enter the repository root URL for the repository. If you are not sure what the repository root is, please see the instructions below under "Finding your Repository Root".
Repository Path	Add the path on the base URL where your repository. For example, if you used the root URL above, and the full path to your Subversion instance is 'http://svn.example.com/svn5/', you would enter 'svn5' into this field.
SVN Username	Enter the username of the Subversion account that Crucible will use. Note that this account should only have read-only access to the repository.
SVN Password	Enter the password of the Subversion account that Crucible will use.

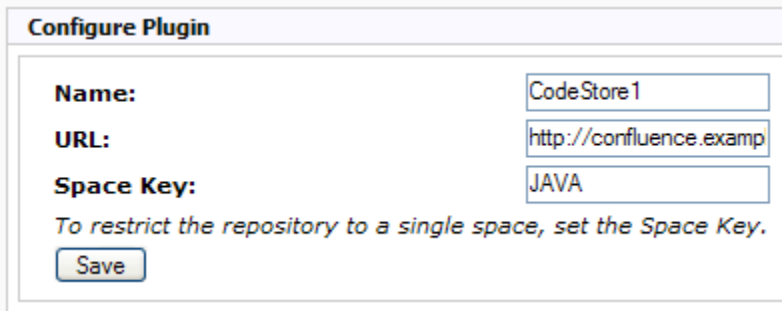
7. Click '**Save**'. The view will return to the list of repositories.
8. Your Subversion repository is now set up for Crucible. You will be able to select changesets from it when creating reviews.

There is no 'initial scanning' required in this process, as stand-alone Crucible's access to Subversion is strictly on-demand. Data is not cached, hence scanning is not required.

Setting Up Reviewing of Confluence Pages in Crucible

To set up Confluence as a Code Repository in Crucible,

1. Start Crucible then open the '**Admin**' menu by clicking the *Administration* link in the footer of the page.
2. Under the '**Repository Settings**' heading, click '**Repository List**' in the left-hand navigation bar.
3. The '**Repository List**' screen opens.
4. Find the **Confluence** repository plugin and click its **Configure Plugin** link.
5. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
6. The '**Add Repository**' screen opens. Fill in the fields.



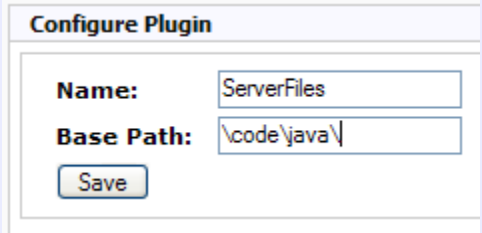
Field	What to enter
Name	Choose a unique name for the repository.
URL	Enter the URL of your Confluence instance.
Space Key	You may optionally enter a space key here to restrict Crucible's view to that key only. If there are many spaces in your Confluence instance you will find that this improves performance. You can set up several Confluence repositories in Crucible, each using the same Confluence instance but covering a different Space.

7. Click '**Save**'. The view will return to the list of repositories.
8. Now, access your Confluence instance. Open the '**Confluence Administration Console**', then select '**Trusted Applications**'. The Confluence '**Trusted Applications Details**' dialog opens.
9. In the '**Trusted Applications Details**' dialog, enter the URL of your Crucible instance into the '**Name**' field and click '**Send Request**'. The '**Application Alias**' will be automatically retrieved from Crucible. Save your changes.
10. Confluence is now set up as a code repository for Crucible. You will be able to select your Confluence from the list of repositories, then select files from the Confluence wiki and add them to reviews.

Setting Up the File System as a Code Repository For Crucible

To set up the File System as a Code Repository in stand-alone Crucible,

1. Start Crucible then open the '**Admin**' menu.
2. Under the '**System**' heading, click '**Plugins**' in the left-hand navigation bar.
3. The '**Plugins**' screen opens.
4. Next to '**File System SCM**', click '**Enable**'.
5. New options appear next to '**File System SCM**': '**Disable**' and '**Configure**'. Click '**Configure**'.
6. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
7. The '**Add Repository**' screen opens. Fill in the fields.



Field	What to enter
Name	Choose a unique name for the repository.
Base Path	Choose the lowest level of directory that Crucible will access.

8. Click '**Save**'. The view will return to the list of repositories.
9. The server file system is now set up as a code repository for Crucible. You will be able to select files from it when creating reviews, with the ability to browse the files and directories on the hard drive.

Setting Up a Repository via FishEye

This section requires a working FishEye installation as well as Crucible.

To use FishEye to access the source control repositories CVS, Subversion or Perforce for Crucible, see the FishEye documentation for how to add a repository.

Once you have added a repository, you can view it through FishEye at `http://HOSTNAME:8060/`.

Building index and cache
FishEye needs to build an index and cache of the contents of your repository, so some information will not appear in FishEye until this is complete. This may take some time to complete, depending on the size of the repositories.

We recommend you access the repository with a user that has only **read** access to the repository.

Crucible has full support for Git and Clearcase when used with FishEye.

Setting Up Users

On initial setup of Crucible, there are no users. Adding user accounts is done via the Administration screens or by configuring Crucible/FishEye to use external authentication.

To add users:

1. Open the FishEye Administration screens at `http://HOSTNAME:8060/admin/`.
2. Click '**Users/Security**' under '**Global Settings**' in the '**Admin Menu**'.

Read more details about the different ways of creating users.

Setting Up SMTP

Crucible can email each review participant on a range of changes. Each user can then set up their own preferences. This is described in the User Profile guide.

First, you must set up the SMTP Server.

Using Crucible

You can access Crucible immediately by going to `http://HOSTNAME:8060/` in a browser

Or you can go directly into the Crucible homepage at `http://HOSTNAME:8060/cru`

Stopping Crucible

To stop the Crucible server:

- On Windows:

```
C:\> cd FISHEYE_HOME\bin
C:\FISHEYE_HOME\bin> stop.bat
```

- On Unix-based systems:

```
$ cd /FISHEYE_HOME/bin
$ ./stop.sh
```

Information on FishEye integration

If you want to know more about how Crucible and FishEye interact, refer to our explanation of how Crucible works with FishEye.

Configuring Repositories

This page contains links to the instructions for configuring the different kinds of repositories that Crucible supports. Click one of the links below to see the desired page.

- Enabling Reviews from the Server File System in Crucible
- Setting Up a Git Repository in Stand-Alone Crucible
- Setting Up a Perforce Repository in Stand-Alone Crucible
- Setting Up a Repository via FishEye
- Setting Up a Subversion Repository in Stand-Alone Crucible
- Setting Up Reviewing of Confluence Pages in Crucible

> Crucible has full support for Git and Clearcase when used with FishEye.

Related Links

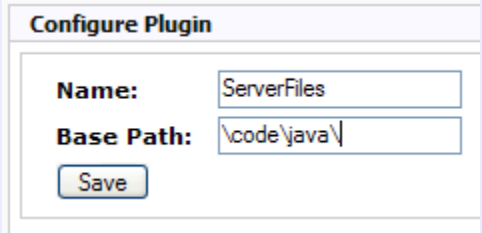
- ClearCase Configuration
- Git Configuration
- Crucible Repository Configuration

Enabling Reviews from the Server File System in Crucible

Enabling Reviews from the Server File System in Crucible

To set up the File System as a Code Repository in stand-alone Crucible,

1. Start Crucible then open the '**Admin**' menu.
2. Under the '**System**' heading, click '**Plugins**' in the left-hand navigation bar.
3. The '**Plugins**' screen opens.
4. Next to '**File System SCM**', click '**Enable**'.
5. New options appear next to '**File System SCM**': '**Disable**' and '**Configure**'. Click '**Configure**'.
6. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
7. The '**Add Repository**' screen opens. Fill in the fields.



Field	What to enter
Name	Choose a unique name for the repository.
Base Path	Choose the lowest level of directory that Crucible will access.

8. Click '**Save**'. The view will return to the list of repositories.
9. The server file system is now set up as a code repository for Crucible. You will be able to select files from it when creating reviews, with the ability to browse the files and directories on the hard drive.

Setting Up a Git Repository in Stand-Alone Crucible

This page contains instructions on how to configure the Crucible Git plugin to access Git repositories.

Usage

The Git plugin is an early-access implementation of a Crucible SCM plugin for Git. It allows users to perform code reviews on a local Git repository (local to the Crucible server). The plugin does not 'pull' updates from a remote master repository. Synchronising with the master repository needs to be executed manually (via the command line), for the changes to appear in the plugin.

Installation

Firstly, download the plugin `.JAR` file to your local computer.

The plugin is installed by placing the .JAR file in the `FISHEYE_INST/var/plugins/user` directory of your Crucible install. Once installed, you need to enable the plugin in the Crucible Admin interface. Detailed instructions on the plugin installation steps can be found at the Managing Plugins page.

The plugin requires the Git command to be available in the system path when starting Crucible.

Configuring the plugin

Once the plugin has been installed, under the '**Administration**' - '**Repository List**' option, there should be a '**Plugin Repository List: Git**' entry. Select '**Configure Plugin**', then '**Add a repository**'. The fields required are:

Field	Description
Name	The name for the repository eg. *Project*
Repository Path	The location of the local Git repository clone

Once configured, the Git repository can be selected as the review source when creating a new review, whereupon reviews can be created either using changesets or by selecting files in the repository view.

Feedback

If you have any feedback on this plugin and its operation, we would appreciate users posting feedback in the Crucible Forums.

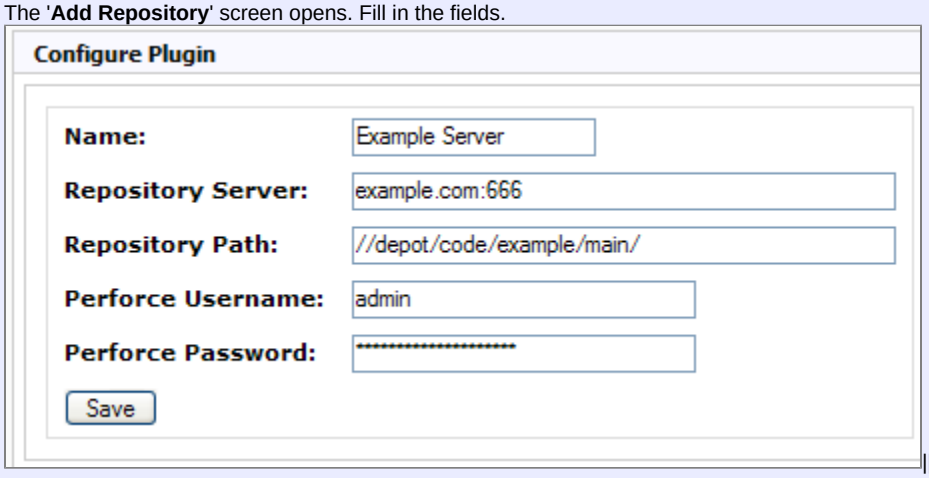
For more information, see the page on the Crucible Git Plugin.

Setting Up a Perforce Repository in Stand-Alone Crucible

Setting Up a Perforce Repository in Stand-Alone Crucible

To set up Perforce in stand-alone Crucible,

1. Ensure that the Perforce executable file is on the system path, in the Crucible server's Environment Variables
2. Start Crucible then open the '**Admin**' menu by clicking the *Administration* link in the footer of the page.
3. Under the '**Repository Settings**' heading, click '**Repository List**' in the left-hand navigation bar.
4. The '**Repository List**' screen opens.
5. Find the **Perforce** repository plugin and click its **Configure Plugin** link.
6. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
7. The '**Add Repository**' screen opens. Fill in the fields.



|| Field || What to enter ||

Name	Choose a unique name for the repository.
Repository Server	Enter the base URL and port for the repository, for example: `example.com:666`.
Repository Path	Add the path to your Perforce repository. For example: `//depot/code/example/main`.
Perforce Username	Enter the username of the Perforce account that Crucible will use. (optional) Note that this account should only have read-only access to the repository.
Perforce Password	Enter the password of the Perforce account that Crucible will use. (optional)

8. Click '**Save**'. The view will return to the list of repositories.
9. Your Perforce repository is now set up for Crucible. You will be able to select changesets from it when creating reviews.

There is no 'initial scanning' required in this process, as stand-alone Crucible's access to Perforce is strictly on-demand. Data is not indexed, hence there is no scanning.

For those who may be interested, Crucible executes the Perforce command-line tool to enable this functionality.

Setting Up a Repository via FishEye

Setting Up a Repository in Crucible via FishEye

This section requires a working FishEye installation as well as Crucible.

To use FishEye to access the source control repositories CVS, Subversion or Perforce for Crucible, see the FishEye documentation for how to add a repository.

Once you have added a repository, you can view it through FishEye at `http://HOSTNAME:8060/`.

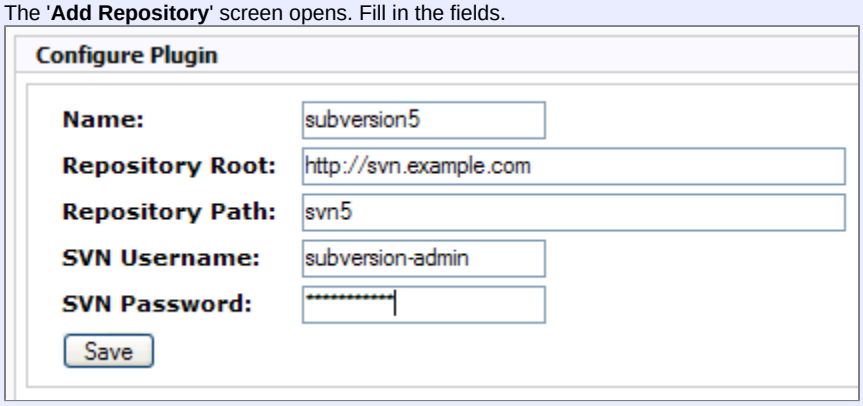
> **Building index and cache**
> FishEye needs to build an index and cache of the contents of your repository, so some information will not appear in FishEye until this is complete. This may take some time to complete, depending on the size of the repositories.
>
> We recommend you access the repository with a user that has only **read** access to the repository.

Setting Up a Subversion Repository in Stand-Alone Crucible

Setting Up a Subversion Repository in Stand-Alone Crucible

To set up Subversion in stand-alone Crucible,

1. Start Crucible then open the '**Admin**' menu by clicking the *Administration* link in the footer of the page.
2. Under the '**Repository Settings**' heading, click '**Repository List**' in the left-hand navigation bar.
3. The '**Repository List**' screen opens.
4. Find the **SVN** repository plugin and click its **Configure Plugin** link.
5. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
6. The '**Add Repository**' screen opens. Fill in the fields.



Field	What to enter
Name	Choose a unique name for the repository.
Repository Root	Enter the repository root URL for the repository. If you are not sure what the repository root is, please see the instructions below under "Finding your Repository Root".
Repository Path	Add the path on the base URL where your repository. For example, if you used the root URL above, and the full path to your Subversion instance is 'http://svn.example.com/svn5/', you would enter 'svn5' into this field.
SVN Username	Enter the username of the Subversion account that Crucible will use. Note that this account should only have read-only access to the repository.
SVN Password	Enter the password of the Subversion account that Crucible will use.

7. Click '**Save**'. The view will return to the list of repositories.
8. Your Subversion repository is now set up for Crucible. You will be able to select changesets from it when creating reviews.

There is no 'initial scanning' required in this process, as stand-alone Crucible's access to Subversion is strictly on-demand. Data is not cached, hence scanning is not required.

Finding your Repository Root.

Run the following command:

```
svn info SVN_URL
```

Where SVN_URL is the complete URL of the repository you want to add.

You will get something like the following:

```
>svn info http://svn.example.com/svn5/

Path: svn5
URL: http://svn.example.com/svn5/
Repository Root: http://svn.example.com/
Repository UUID: ce062a09-193b-427a-a7b3-a85007076e5d
Revision: 83
Node Kind: directory
Last Changed Author: ryan
Last Changed Rev: 83
Last Changed Date: 2009-05-07 10:48:41 +1000 (Thu, 07 May 2009)
```

Next to "Repository Root" is the URL you should define as your repository root. The path will be whatever is remaining.

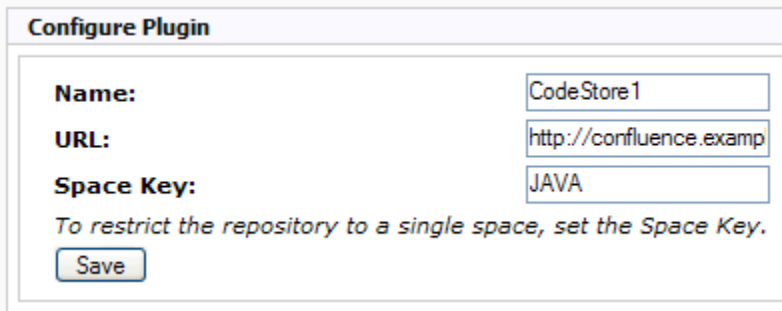
Setting Up Reviewing of Confluence Pages in Crucible

Setting Up Reviewing of Confluence Pages in Crucible

You need to first install the Confluence Crucible Plugin in the Confluence instance (see instructions on installing Confluence plugins), and you must set up a trust relationship so that your Crucible instance trusts your Confluence instance.

To set up Confluence as a Code Repository in Crucible,

1. Start Crucible then open the '**Admin**' menu by clicking the *Administration* link in the footer of the page.
2. Under the '**Repository Settings**' heading, click '**Repository List**' in the left-hand navigation bar.
3. The '**Repository List**' screen opens.
4. Find the **Confluence** repository plugin and click its **Configure Plugin** link.
5. The '**Configure Plugin**' screen opens. Click '**Add Repository**'.
6. The '**Add Repository**' screen opens. Fill in the fields.



Field	What to enter
Name	Choose a unique name for the repository.
URL	Enter the URL of your Confluence instance.
Space Key	You may optionally enter a space key here to restrict Crucible's view to that key only. If there are many spaces in your Confluence instance you will find that this improves performance. You can set up several Confluence repositories in Crucible, each using the same Confluence instance but covering a different Space.

7. Click '**Save**'. The view will return to the list of repositories.
8. Now, access your Confluence instance. Open the '**Confluence Administration Console**', then select '**Trusted Applications**'. The Confluence '**Trusted Applications Details**' dialog opens.
9. In the '**Trusted Applications Details**' dialog, enter the URL of your Crucible instance into the '**Name**' field and click '**Send Request**'. The '**Application Alias**' will be automatically retrieved from Crucible. Save your changes.
10. Confluence is now set up as a code repository for Crucible. You will be able to select your Confluence from the list of repositories, then select files from the Confluence wiki and add them to reviews.

Best Practices for Crucible Configuration

1. Set up a separate FISHEYE_INST folder location on the same system for Crucible's data.

This will allow for easy upgrades of the core program and neatly separated data backup.

2. Run Crucible on a dedicated machine, accessing its data on the local file system.

This is the best environment for swift Crucible performance. Avoid running Crucible in a virtual environment.

3. Do not give Crucible projects the same key as your JIRA projects.

When naming projects, take care to ensure that the key you assign to them is not the same as any of your JIRA projects. The reason for this is, if one of your Crucible projects has the same key as one of your projects in JIRA, then all links with that key will lead back to Crucible, rather than leading to JIRA, removing the ability to navigate between the two applications.

To avoid this, name your Crucible project keys differently. For example, you could place the following text at the beginning of each project key: `CR-` to distinguish it. So, for this case, if you have an existing JIRA key of '`RHUBARB`', you would create a Crucible key called '`CR-RHUBARB`' so that they do not conflict.

Crucible Release Notes

Crucible 2.3 has now been released. Read the Release Notes.

Crucible Release Notes and Changelogs

- Security Advisories
  - Crucible Security Advisory 2010-06-16
  - Crucible Security Advisory 2010-05-04
- Crucible Release Summary
- Crucible 2.3 Release Notes
  - Crucible 2.3 Changelog
- Crucible 2.2 Release Notes
  - Crucible 2.2 Changelog
- Crucible 2.1 Release Notes
  - Crucible 2.1 Changelog
- Crucible 2.0 Release Notes
  - Crucible 2.0 Upgrade Notes
  - Crucible 2.0 Changelog
- Crucible 2.0 Beta Release Notes
  - JIRA Integration in Crucible 2.0 Beta
  - Crucible 2.0 Beta Upgrade Notes
  - Crucible 2.0 Beta Reviewer's Guide
- Crucible 1.6 Release Notes
  - Crucible 1.6 Changelog
    - Crucible 1.6.3 Upgrade Guide
- Crucible 1.5 Release Notes
  - Crucible 1.5 Changelog
- Crucible 1.2 Release Notes
  - Crucible 1.2 Upgrade Guide
  - Crucible 1.2 Changelog
- Crucible 1.1 Release Notes
  - Crucible 1.1 Upgrade Guide
  - Crucible 1.1 Changelog

- For changes prior to 1.1, see the 1.0.x Changelog

Installation

You can download Crucible from here. Information on installing Crucible can be found here.

If upgrading from a previous version, please follow the Upgrade Guide.

- As of version 1.0, Crucible now requires a JVM version 1.5 or later. Previously, 1.4+ was required.
- Crucible 1.1.4 includes FishEye 1.3.8.
- Upgrading from 1.0.4 (or earlier) will force a complete re-index of P4 repositories.

Crucible 2.3 Release Notes

26 May 2010

Atlassian presents Crucible 2.3

Crucible 2.3 is focused on the all-new lightweight Snippet Reviews and the innovative Review Coverage report, along with an enhanced installation wizard.

Highlights of this release:

- Snippet Reviews
- Changeset Discussions
- Mercurial SCM Alpha
- Review Coverage report
- Revamped Installation Process
- Gadgets
- Plus numerous improvements and bug fixes

Thank you for your interest in Crucible 2.3.

DOWNLOAD latest version

See the documentation on Upgrading to this version.

Installing Crucible 2.3
Download Crucible 2.3 now. See the documentation on Upgrading to this version.

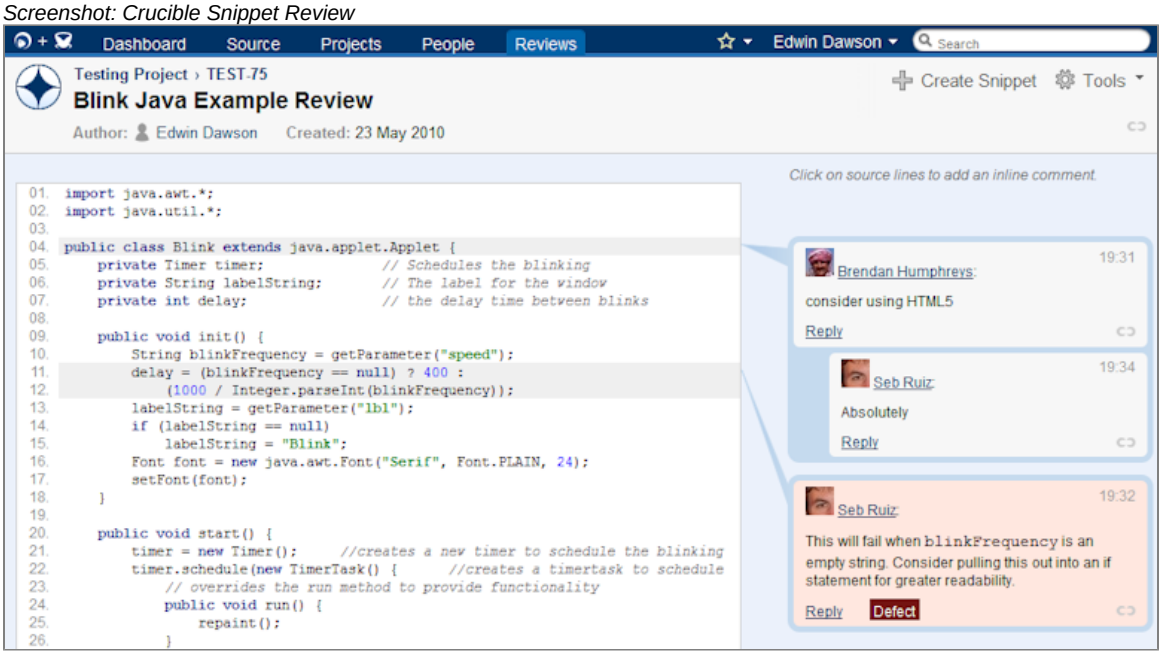
Highlights of Crucible 2.3

1

Snippet Reviews

Snippet Reviews are a new feature of Crucible, providing ultra-lightweight, ad-hoc code reviews with zero configuration. Atlassian is listening, and some customers asked for reviews with no ceremony, permissions or red tape. Snippet Reviews are instant to create, require no SCM repository and can be reviewed by anyone.

Screenshot: Crucible Snippet Review



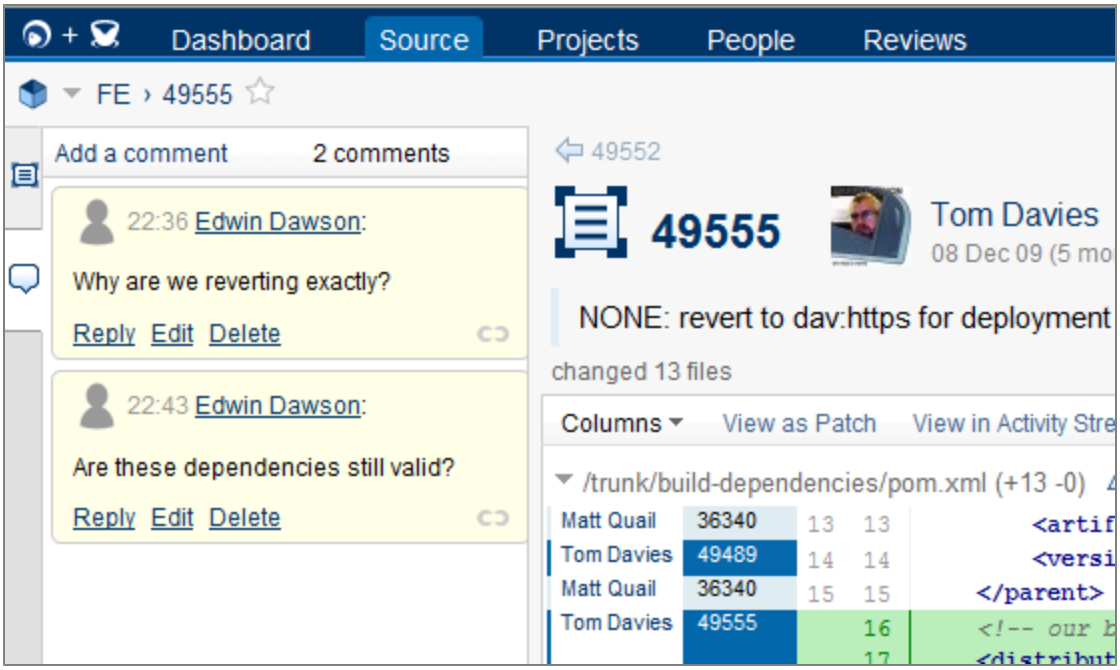
See the documentation for more.

2

Changeset Discussions

When using Crucible with FishEye, you can now leave comments on a changeset. Your colleagues will be able to read your comments and respond to them, creating a threaded discussion.

Screenshot: A Changeset Discussion



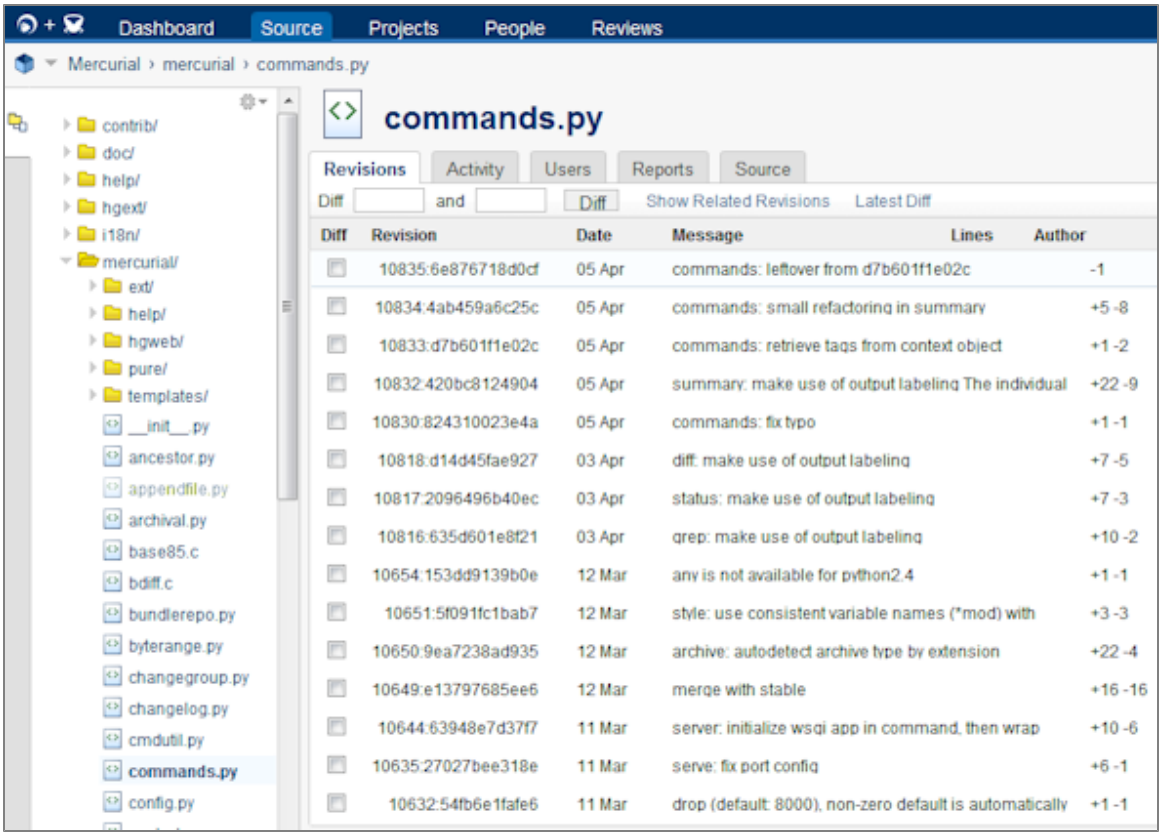
See the documentation for more.

3

Mercurial SCM Alpha

When using Crucible with FishEye, the Mercurial SCM can now be used. This release adds alpha support for Mercurial repositories. Atlassian is providing early access to the functionality for our customers; there are still a few kinks to be worked out, but it provides full access to FishEye.

Screenshot: A Mercurial Repository in Action

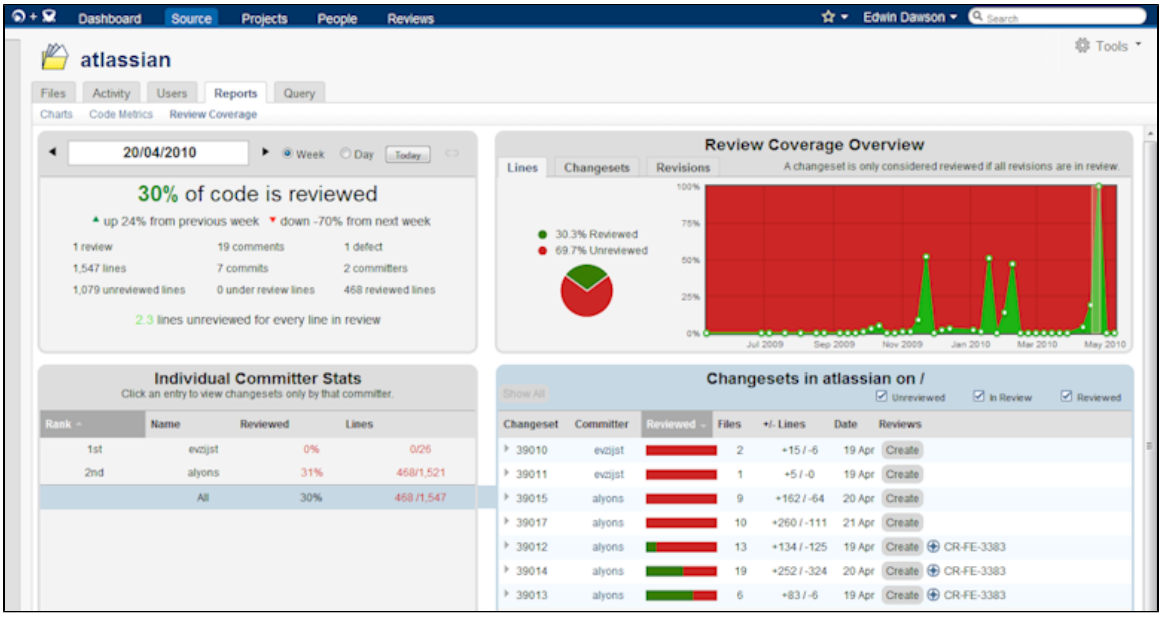


See the documentation for more details.

Review Coverage report

When using Crucible with FishEye, a new Review Coverage Report is now available. A new paradigm that shows you the percentage of code that has been peer-reviewed, this report lets you easily see what parts of your codebase haven't had many eyes scanning them for a sanity check. This forms another kind of quality check for your software projects, along with unit testing and code coverage analysis.

Screenshot: Crucible Review Coverage Report

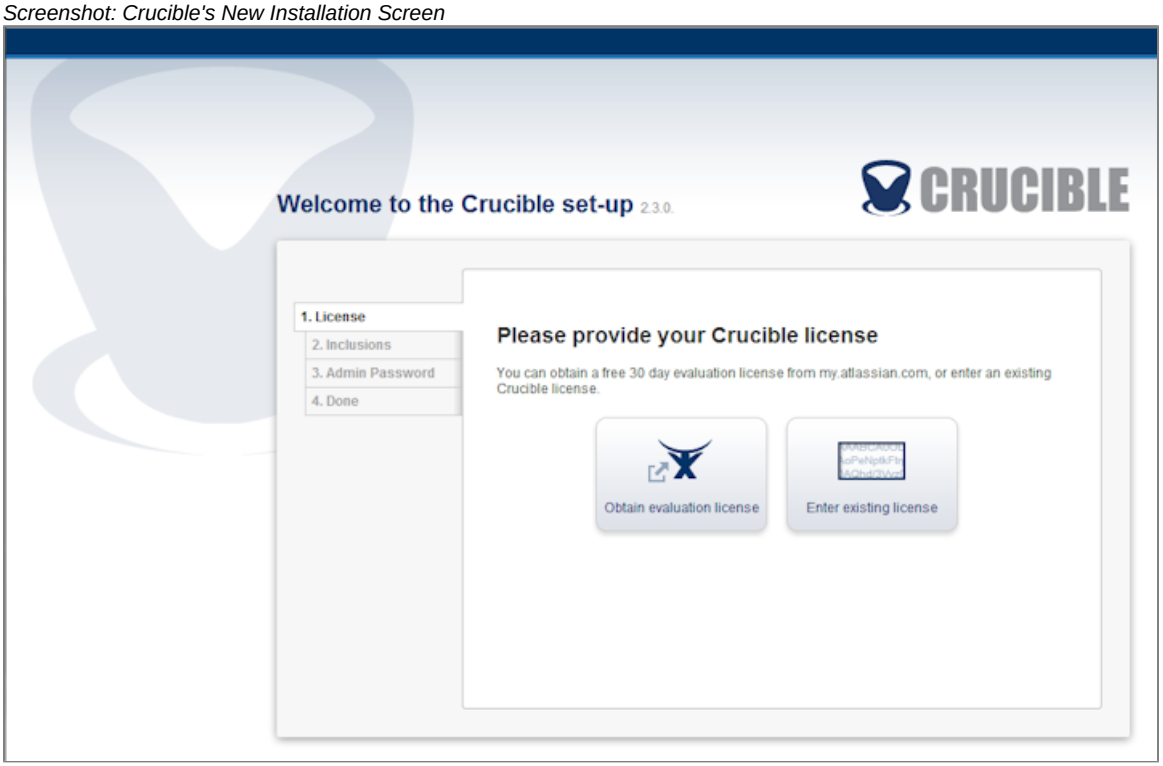


See the documentation for more.

Revamped Installation Process

Crucible's installation process has been given a thorough revision and a visual facelift. It's now smoother, faster and provides a better experience.

Screenshot: Crucible's New Installation Screen



See the documentation for more.

6

Gadgets

Crucible 2.3 includes a cluster of handy gadgets. These allow you to see Crucible data in other locations such as the JIRA or Confluence Dashboards.

These gadgets include the following:

- **To Do Gadget**
  This gadget is a list of Crucible to-do items including reviews to do, comments to read or reviews to summarise.
- **Hassle Gadget**
  This gadget shows you who you are still waiting on, in other words which reviewers haven't completed your reviews.
- **Overdue Reviews Gadget**
  This gadget shows you reviews that are yet to be completed in the project, across all authors. This is useful for managers or team leads.
- **Review Coverage Gadget**
  This gadget shows you information from the innovative Review Coverage Report, showing how much of your codebase has been subjected to code review.

These gadgets are published by default, and can be configured to appear on your JIRA or Confluence Dashboards.

Screenshot: The Hassle Gadget

Crucible: Hassle

reviewer	ID	Name	Due
	CR-1	FE-1234: fix Widget stamping (1 unread comment)	in 6 days
	CR-1	FE-1234: fix Widget stamping (1 unread comment)	in 6 days
	CR-4	FE-4567: Disentangle states	in 10 hours

See the documentation for more.

7

Plus numerous improvements and bug fixes

Visit our issue tracker to see the full list of improvements and bug fixes.

Crucible 2.3 Changelog

On this page:

- From 2.3.2 to 2.3.3
- From 2.3.1 to 2.3.2
- From 2.3.0 to 2.3.1

From 2.3.2 to 2.3.3

16th June 2010

This is a bug fix release that addresses security issues. Please see the Security Advisory for more information.

JIRA Issues (3 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-3635	Cannot add review comments on ipad		Closed
CRUC-3289	Crucible creates sub tasks of sub tasks, which is not supported by JIRA		Closed
CRUC-3630	use safe parameter interceptor		Closed

From 2.3.1 to 2.3.2

3rd June 2010

This is a bug fix release. The complete list of issues follows below.

JIRA Issues (9 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-3613	HG: Error on windows for files starting with "."		Closed
CRUC-3610	Can't navigate to older activity stream items		Closed
CRUC-3609	HG: Support http/s authentication for repos by placing username/password into URL		Closed
CRUC-3581	Missing snippet is called a review		Closed
CRUC-3580	'Add Latest' is greyed out when it shouldn't be		Closed
CRUC-3568	Plugin api should expose Crucible project -> Jira {server,project} mappings		Closed
CRUC-3553	Creating a review identical to an existing review doesn't suggest adding files to the existing review		Closed
CRUC-3547	Snippet: editing comment hides the edit link		Closed
CRUC-3499	Snippet: can't copy paste text		Closed

From 2.3.0 to 2.3.1

27th May 2010

This is a bug fix release, addressing an issue that occurs when upgrading Crucible with an expired license.

Complete list of issues follows below.

JIRA Issues (3 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-3596	Startup is broken for upgrades with licenses that have expired maintenance.		Closed
CRUC-3595	Rest login method is ambigous for CAPTCHA		Closed
CRUC-3584	When changeset comments are disabled for a repo, the changeset pane tells you to log in, even though you are already logged in.		Closed

Crucible 2.2 Release Notes

Crucible 2.3 has now been released. Read the Release Notes.

18 February 2010

Atlassian presents Crucible 2.2

Crucible 2.2 is focused on improving the user experience, with its innovative pre-commit support, wizard-like review creation and JIRA time tracking integration.

Highlights of this release:

- Smart Pre-Commit (Patch) Support
- 'No Moderator' Reviews
- Wizard-Like Review Creation
- Integrated Timetracking Between Crucible and JIRA
- Edit Mode for Reviews
- Plus numerous improvements and bug fixes

Thank you for your interest in Crucible 2.2.

DOWNLOAD latest version

See the documentation on Upgrading to this version.

Installing Crucible 2.2
Download Crucible 2.2 now. See the documentation on Upgrading to this version.

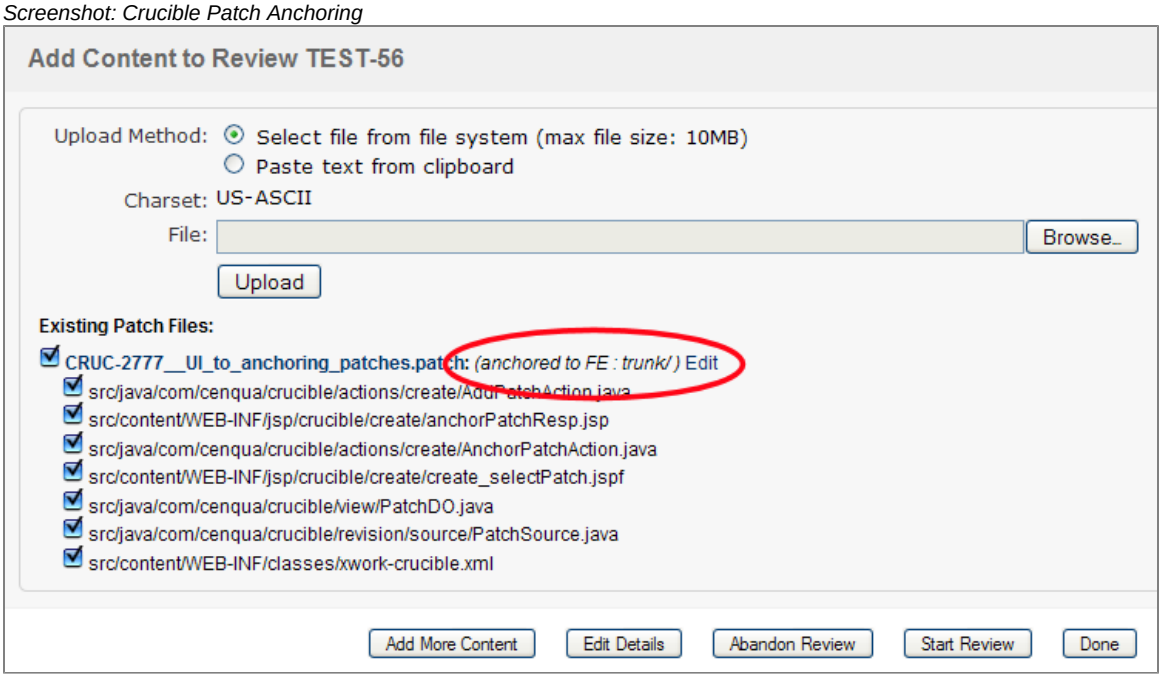
Highlights of Crucible 2.2

1

Smart Pre-Commit (Patch) Support

Previously, when viewing a patch in FishEye you could only see three lines of code around your code diffs (three *lines of context*). Sometimes, three lines is not enough. From Crucible 2.2, when creating a review from a patch file you can anchor it to revisions in your FishEye repository. FishEye will then automatically fetch more lines of code from the repository (beyond the default of three) and add them to the diff view. This gives reviewers direct access to the file's history and enables full context diffs, improving the review experience.

Screenshot: Crucible Patch Anchoring



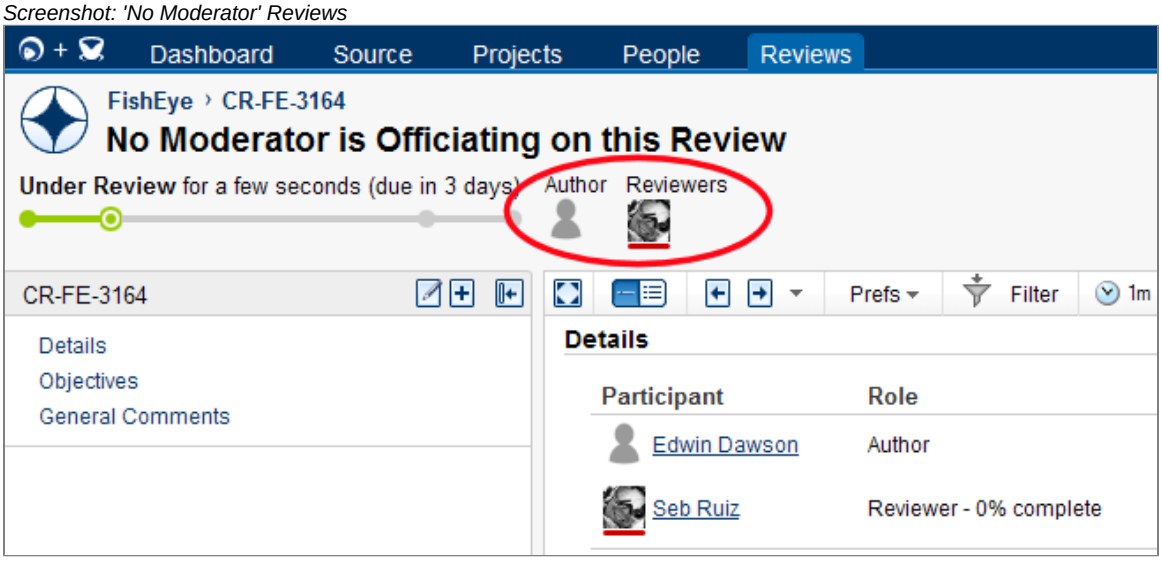
See the documentation for more.

2

'No Moderator' Reviews

Crucible is a lightweight code review tool, so the Crucible developers are always working to make it lighter. In Crucible 2.2, they've removed the requirement for a moderator, or a single person as the judge on each review. Moderators are a part of the 1970's Fagan Inspection doctrine for code reviews (which Crucible fully supports), but may not be right for your code development processes in 2010. Now, reviews can be freely opened, closed, re-opened, summarised, joined, quit or abandoned by any of the participants involved. These free-form reviews especially suit Agile or self-organising teams.

Screenshot: 'No Moderator' Reviews



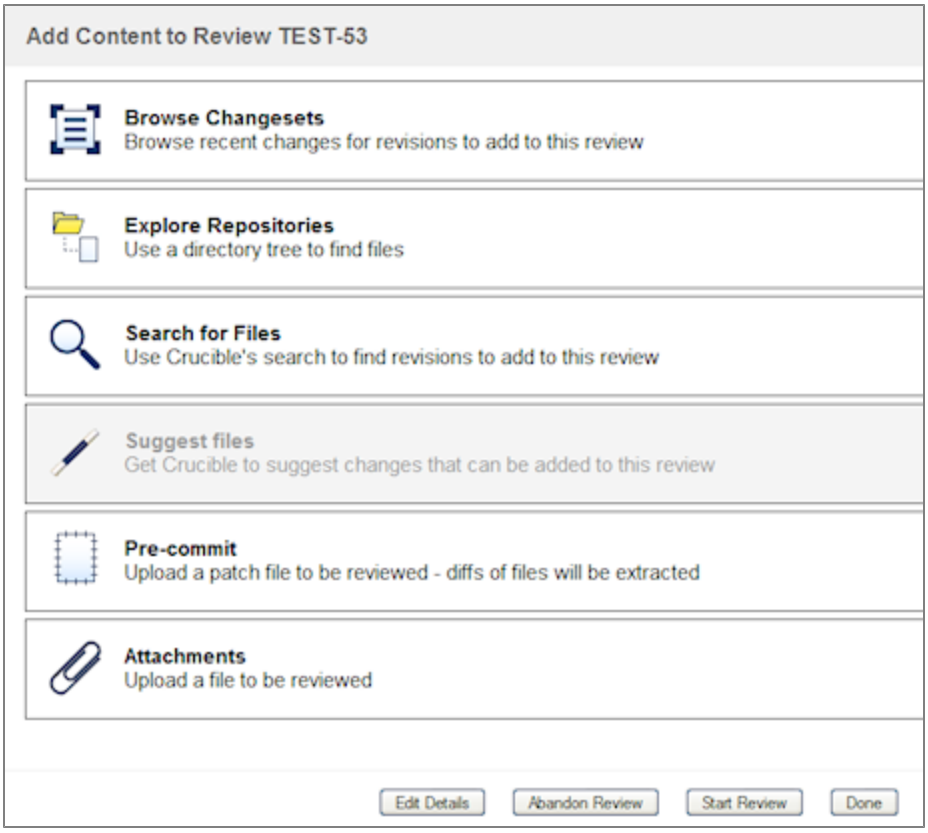
See the documentation for more.

3

Wizard-Like Review Creation

Creating a review now follows a simple, wizard-like process where you make your content selections from a series of relevant sub-menus, allowing you to jump back and forth between steps, and edit any details right up until the review is launched.

Screenshot: Wizard-Like Review Creation



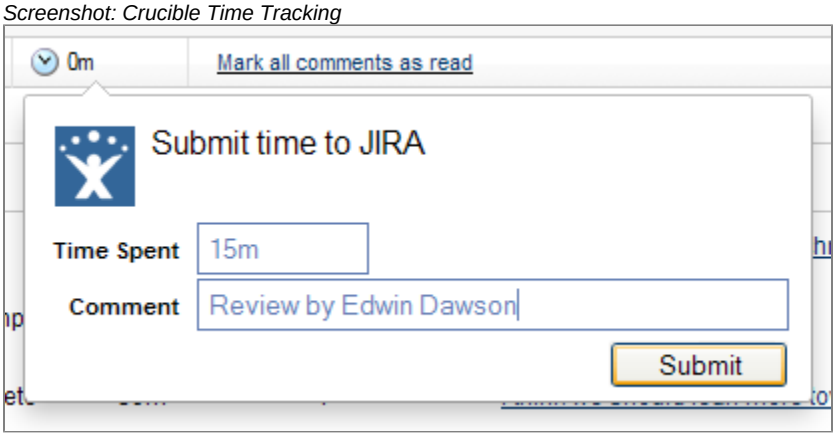
See the documentation for more.

4

Integrated Timetracking Between Crucible and JIRA

Crucible already has time tracking as an inline feature, but now you can also submit time worked in Crucible to your JIRA issues. When you hover your mouse over the time tracking control in the Crucible top navigation bar, a special window appears that allows you to instantly fire off time estimates to JIRA, with a single click.

Screenshot: Crucible Time Tracking



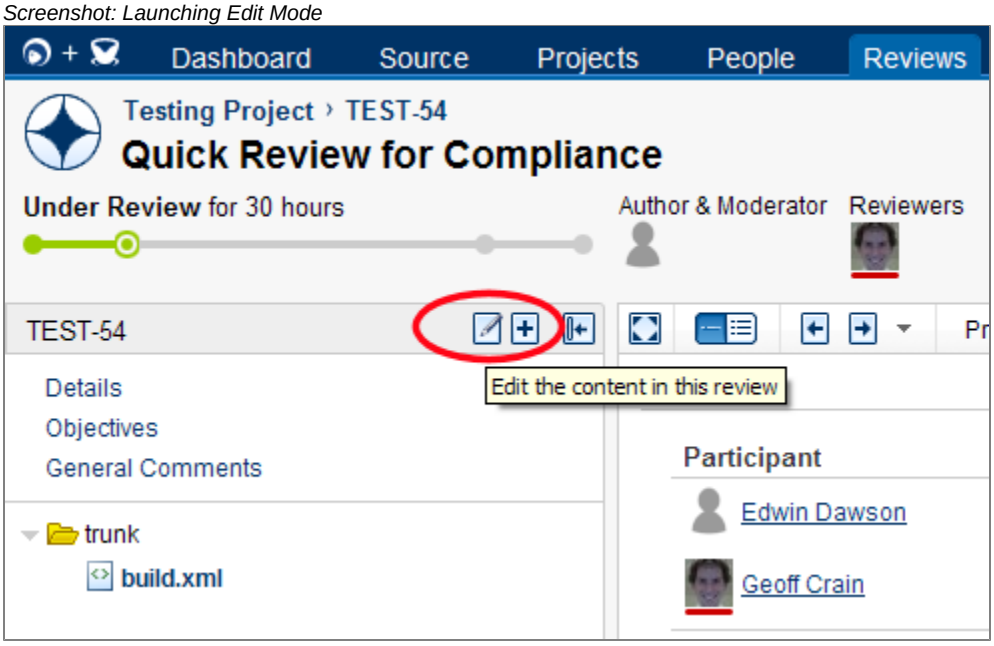
See the documentation for more.

5

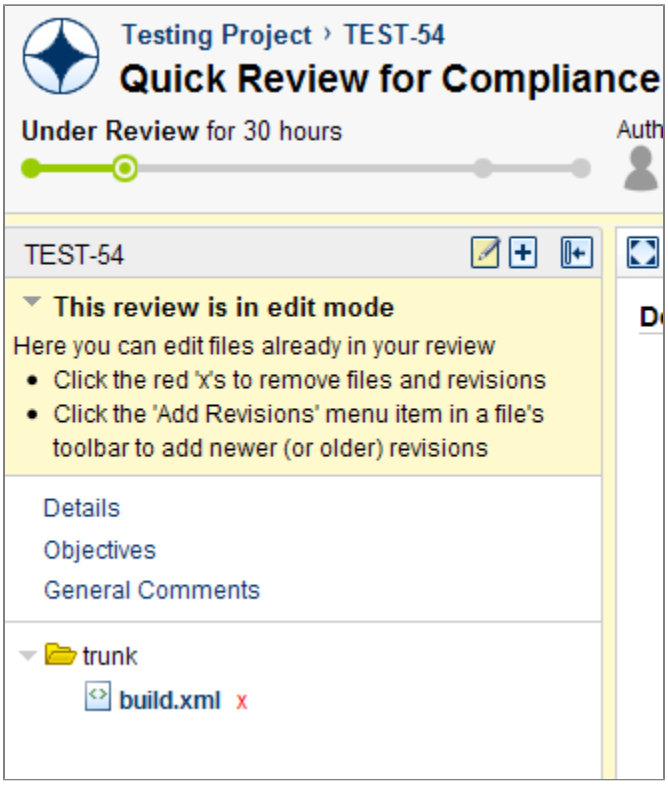
Edit Mode for Reviews

With the new Edit Mode feature, you can now easily remove content from a review that has been started. You simply click the the '**Edit Review**' button in the left nav to launch Edit Mode. In Edit mode, you can quickly click red cross icons to remove files from the review. A single click returns you to regular Crucible functions, so you can more easily tune the content inside your reviews. Another button opens a dialog for rapidly adding more content to the review.

Screenshot: Launching Edit Mode



Screenshot: Crucible Edit Mode for Review Content



See the documentation for more.

6

Plus numerous improvements and bug fixes

Visit our issue tracker to see the full list of improvements and bug fixes.

Crucible 2.2 Changelog

On this page:

- From 2.2.1 to 2.2.3
- From 2.2.0 to 2.2.1

From 2.2.1 to 2.2.3

4th May 2010

> This release addresses critical security issues. Atlassian strongly recommends that you upgrade to the latest version. Please read the Security Advisory for details.

This is a security and bug fix release, addressing the issues listed below. See the Security Advisory for specific information about the fixes and patches which are available.

JIRA Issues (7 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-3395	java.lang.NumberFormatException: For input string: "leading directories"		Closed
CRUC-3244	Subtask creation fails when talking to JIRA 4.1		Closed
CRUC-3240	CrucibleRevisions created in a transaction are not visible (via a query on source, path and revision) later in that tx, because of the query cache		Closed
CRUC-3212	NumberFormatException when creating a patch review that uses a relative directory with more than 1 level of ../		Closed
CRUC-3144	Reviewer not uncompleted when upload is added to review		Closed
CRUC-3123	The warning message about case sensitivity is not refreshed when migrating databases.		Closed
CRUC-3082	toggling "show deleted files" in git repo doesn't hide deleted files in content pane		Closed

Crucible version 2.2.2 was an internal release.

From 2.2.0 to 2.2.1

9th March 2010

This is a bugfix release, addressing the following issues:

JIRA Issues (15 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-3232	Files in Review keep going missing		Closed
CRUC-3202	Add option to restict user mappings to the admin UI		

			Closed
CRUC-3199	Clear filter doesn't work		Closed
CRUC-3187	cant set due time in a review		Closed
CRUC-3143	"org.hibernate.HibernateException: Could not acquire unique-row lock, timeout" exceptions under load		Closed
CRUC-3141	Excessive memory usage caused by some quicknav queries		Closed
CRUC-3139	Password recovery email link is broken		Closed
CRUC-3116	issue keys and review keys are not rendered properly inside wiki tables		Closed
CRUC-3113	filerevision linecount is incorrect for new files if it is merged from outside the fe repo		Closed
CRUC-3105	Optimize rendering of side-by-side segments		Closed
CRUC-3101	Add loading spinners to side-by-side diff		Closed
CRUC-3079	Change appearance of side-by-side diff permalinks.		Closed
CRUC-2983	Update the JIRA FishEye plugin to comply with the new JIRA 4.1 View Issue look and feel		Closed
CRUC-2911	FileRevisionManager.createRevisions may hold unique row lock for a long time		Closed
CRUC-1100	Deleting the default permission scheme while having another scheme called default will cause the Crucible to not start up		Closed

Crucible 2.1 Release Notes

12 November 2009

For details on minor releases since Crucible 2.1, see the Crucible Changelog.

Atlassian presents Crucible 2.1

Crucible 2.1 adds Wiki Markup rendering, a new review history dialog, new review blockers report, and runs significantly faster.

Highlights of this release:

- Wiki Markup Rendering
- Progress Tracking
- Usability and Productivity Updates
- Streamlined JIRA Integration
- Review Time Tracking
- Review History Dialog
- "Blockers" Reports
- Threaded Comments
- Plugin Developer Tools
- Plus numerous improvements and bug fixes

Thank you for your interest in Crucible 2.1.

DOWNLOAD latest version

See the documentation on Upgrading to this version.

Installing Crucible 2.1
You can now download Crucible 2.1 from here. See the documentation on Upgrading to this version.

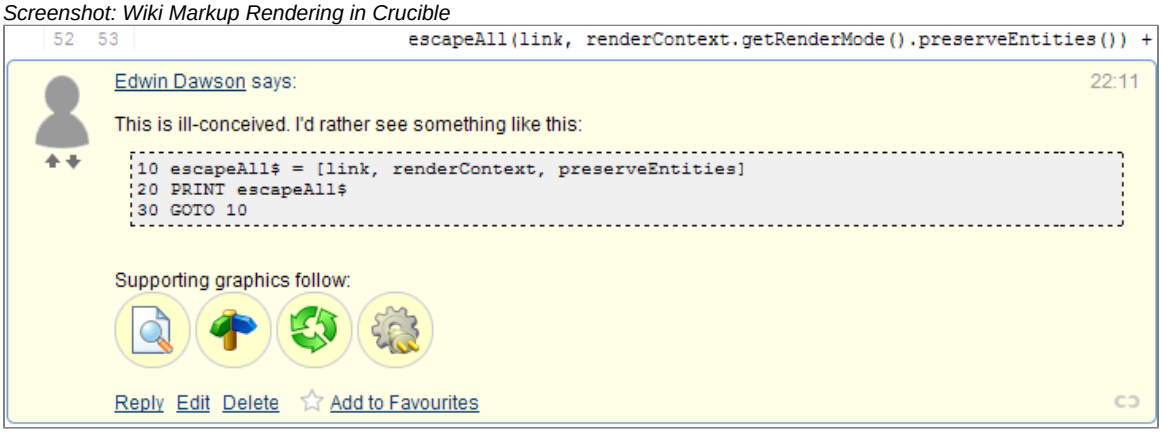
Highlights of Crucible 2.1

1

Wiki Markup Rendering

The Wiki Markup language that's used in Confluence and JIRA can now be rendered by Crucible. Review comments, review descriptions and commit messages will now be shown rendering Wiki Markup code, allowing insertion of images, diagrams and text formatting. See the documentation for more.

Screenshot: Wiki Markup Rendering in Crucible

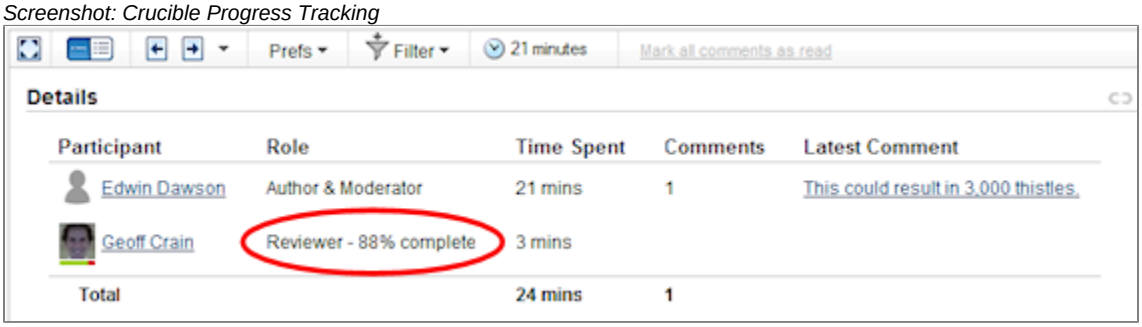


2

Progress Tracking

While reviewing, Crucible will now automatically remember which files you've read and show this as a percentage in the Review Details panel. you no longer have to explicitly click a checkbox to mark a file as reviewed. If you've only skimmed the page and plan to revisit it, you can select that a file's status be left unread.

Screenshot: Crucible Progress Tracking

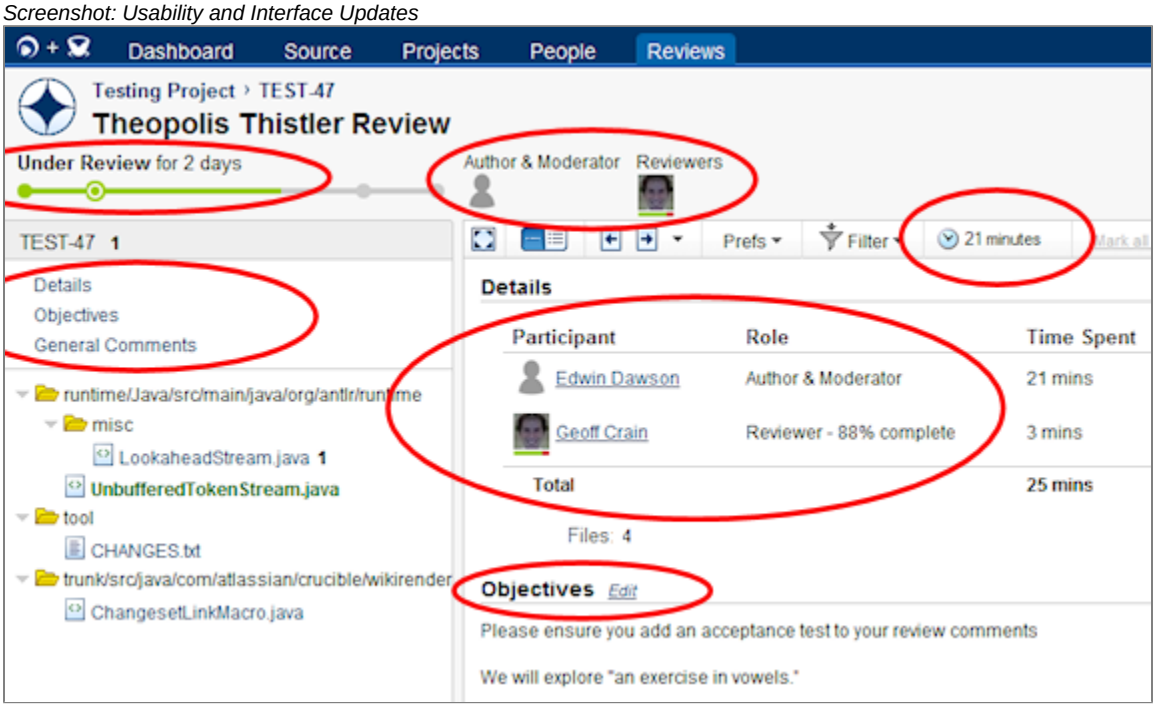


3

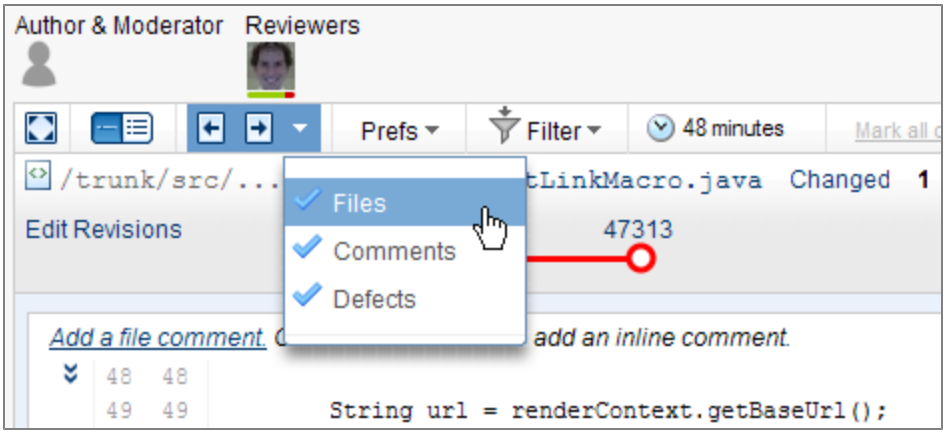
Usability and Productivity Updates

- **User Interface Update**
  The user interface has also been improved, consolidating items from the left navigation bar into the centre, freeing up space for the directory tree and other menus.
- **Floating File Mastheads**
  When viewing a review, you now have a floating masthead that contains information about the file in context. This gives you access to more meta-data about the file, you'll also have more control of the file and how it interacts with its peers. Additionally, more relevant data can be kept in focus.
- **Inline Editing for Review Details**
  Sometimes you just want to tweak a review's title, objective or summary – you can now edit these inline. The title will give you a cue that its editable by turning yellow when you hover over it. Click it to start editing and save your changes. The other areas have an edit link for you to use, come with a preview and are Wiki Markup ready as you'd expect.
- **Default Review Objectives**
  You can pre-populate reviews with default text so that you can avoid manually entering the same objectives for many reviews, where the goals for each one are similar.
- **JIRA auto-linker**
  When you create a review now, the title and objectives are scanned, looking for a JIRA reference. And when we find one, that JIRA is automatically associated with the Review.
- **Performance**
  Performance was also enhanced. The team focused on the main review page, the users page and FishEye pages that display large changesets.
- **Simplified navigation**
  In reviews, you can now choose to navigate at comment, defect or file level. You can easily jump between these items using a new, universal navigation control.

Screenshot: Usability and Interface Updates



Screenshot: Simplified Review Navigation

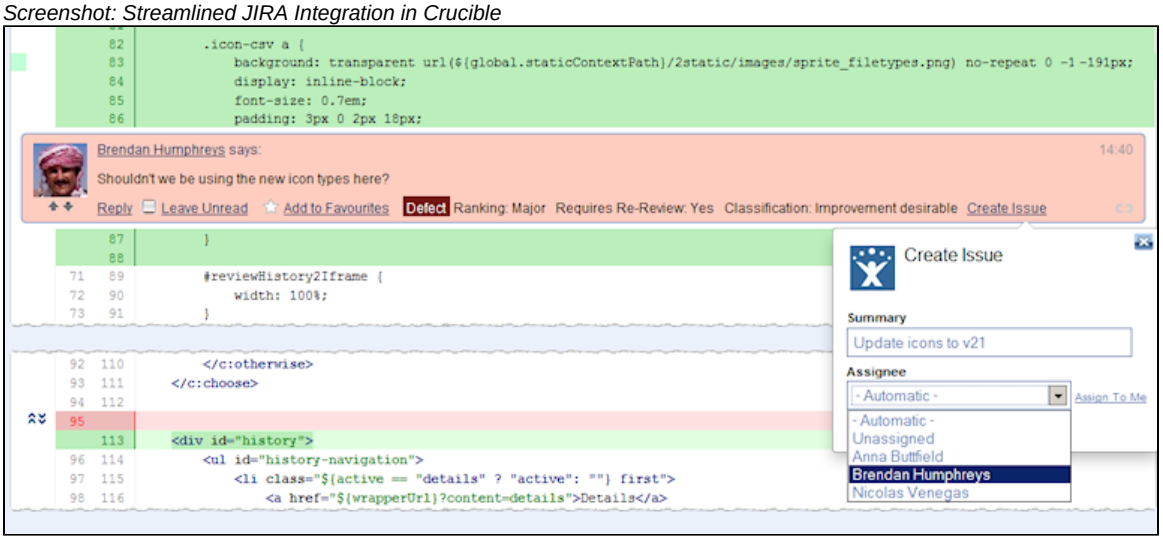


4

Streamlined JIRA Integration

When you create a review, the title and objectives are now parsed in the hunt for a JIRA reference. When we find one, that JIRA issue is automatically associated with the review. And if we've been a little over eager in sourcing a reference, simply click to remove it. Creating JIRA issues from within Crucible has also been enhanced, with an 'Assignee' drop-down being added:

Screenshot: Streamlined JIRA Integration in Crucible

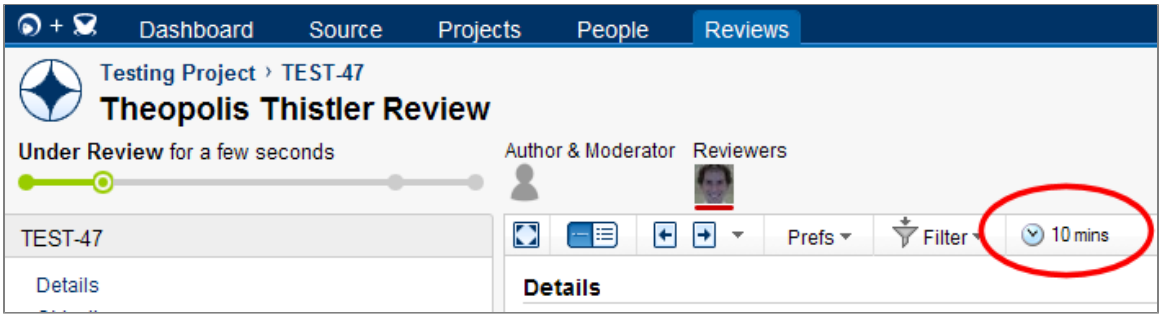


5

Review Time Tracking

Crucible now has time tracking for review participants. When you've got a review open in your browser, Crucible will track the time you have spent on that particular review. You can also click to change the amount of time recorded. Totals are displayed in the Review Details panel.

Screenshot: Crucible Time Tracking



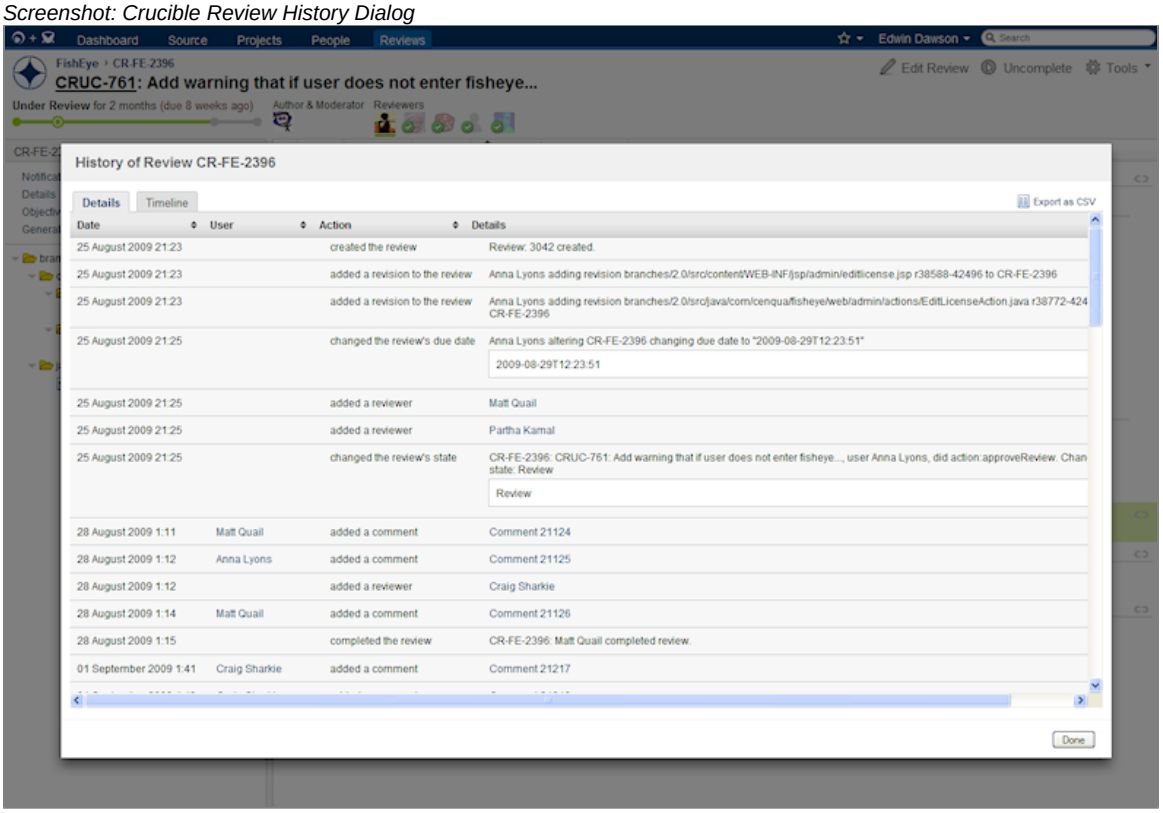
6

Review History Dialog

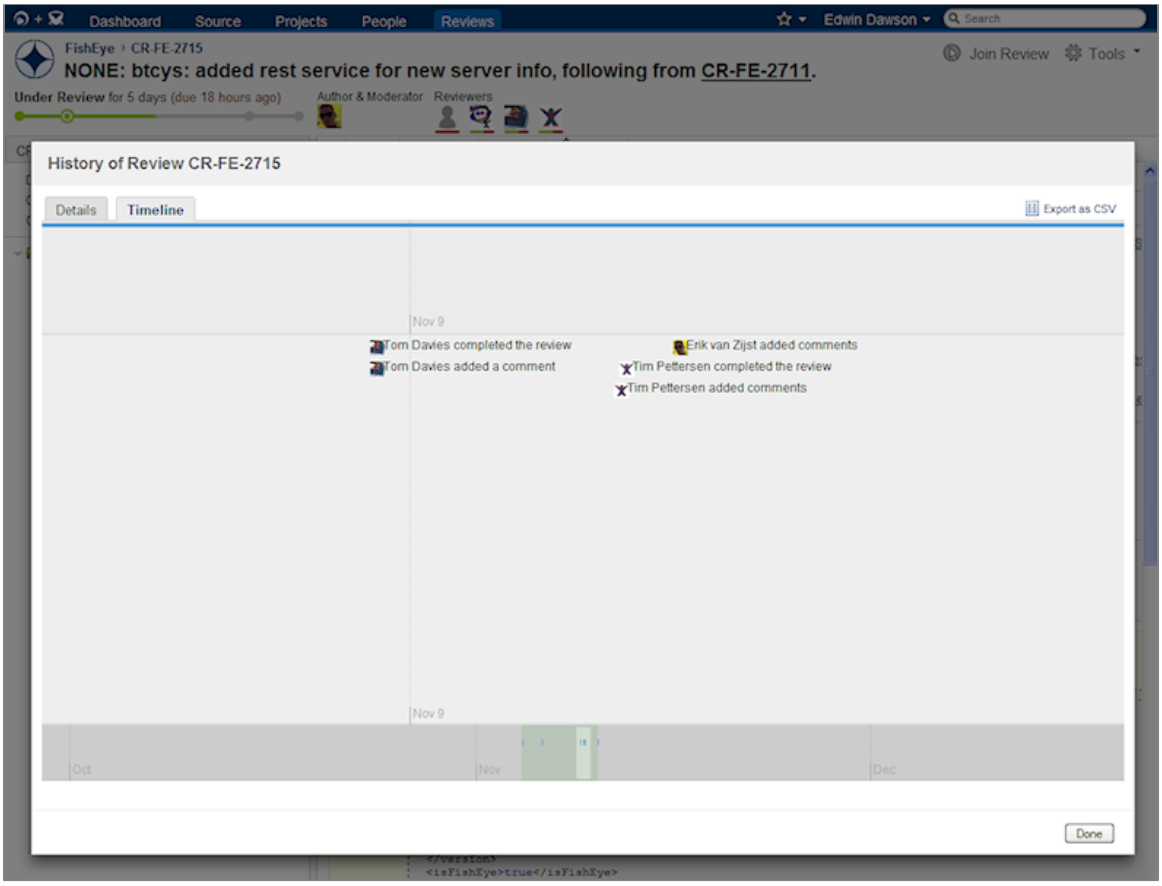
The new History Dialog differentiates old and new states of your interactions with a review. The result is that now you get richer information about those interactions and more control. You can sort the information by date, actor, or action. This information can also be displayed in the new timeline mode.

Additionally, you can get access to the entire Review history through the CSV download link in the upper right corner, allowing for easy data import into a spreadsheet or other application.

Screenshot: Crucible Review History Dialog



Screenshot: Timeline Mode in the Crucible Review History Dialog

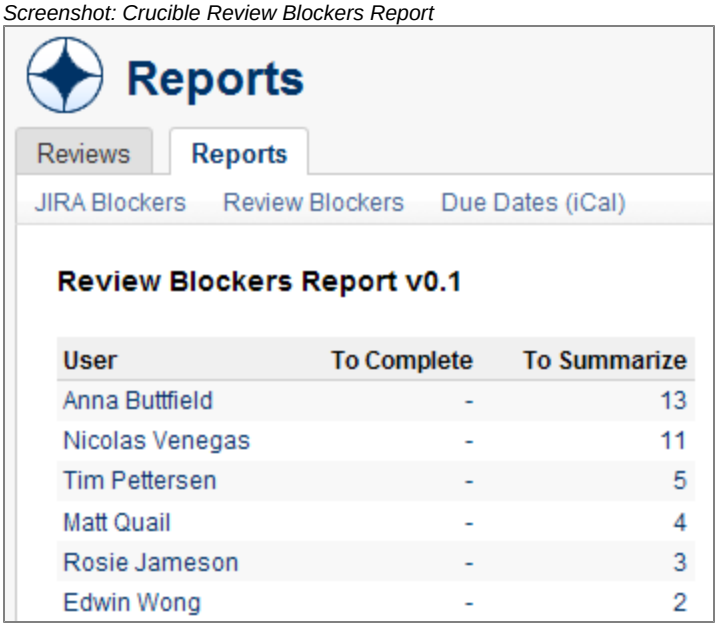


7

"Blockers" Reports

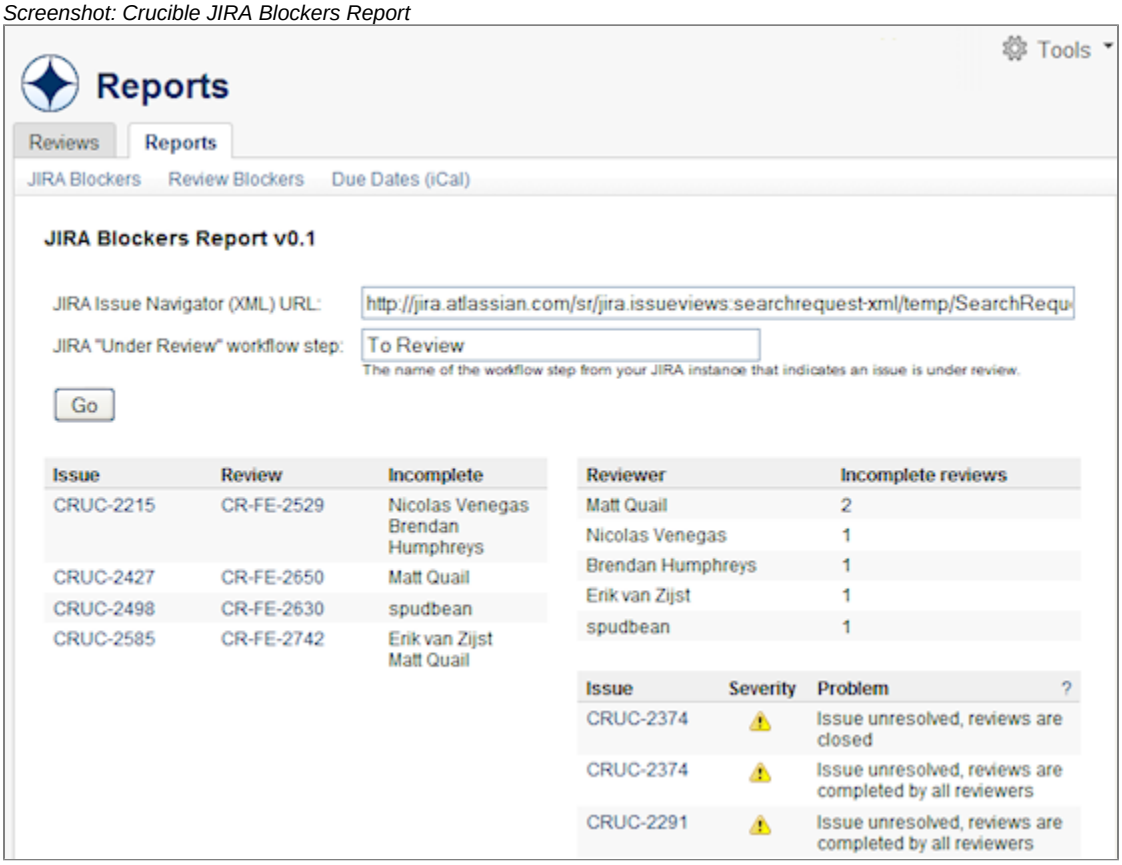
Every now and then, someone in the team can become a bottleneck in the review process. The new review blockers report helps by identifying team members that have a lot of reviews waiting in their inbox. Additionally, the JIRA blockers report accepts a JIRA feed, which you can find under the 'View' drop-down on your JIRA 4 Issue Navigator page. Add the URL to the report and you get an insight to which issues and participants you need to follow up. Both these reports are plugins that come bundled with Crucible.

Screenshot: Crucible Review Blockers Report



User	To Complete	To Summarize
Anna Buttfield	-	13
Nicolas Venegas	-	11
Tim Pettersen	-	5
Matt Quail	-	4
Rosie Jameson	-	3
Edwin Wong	-	2

Screenshot: Crucible JIRA Blockers Report

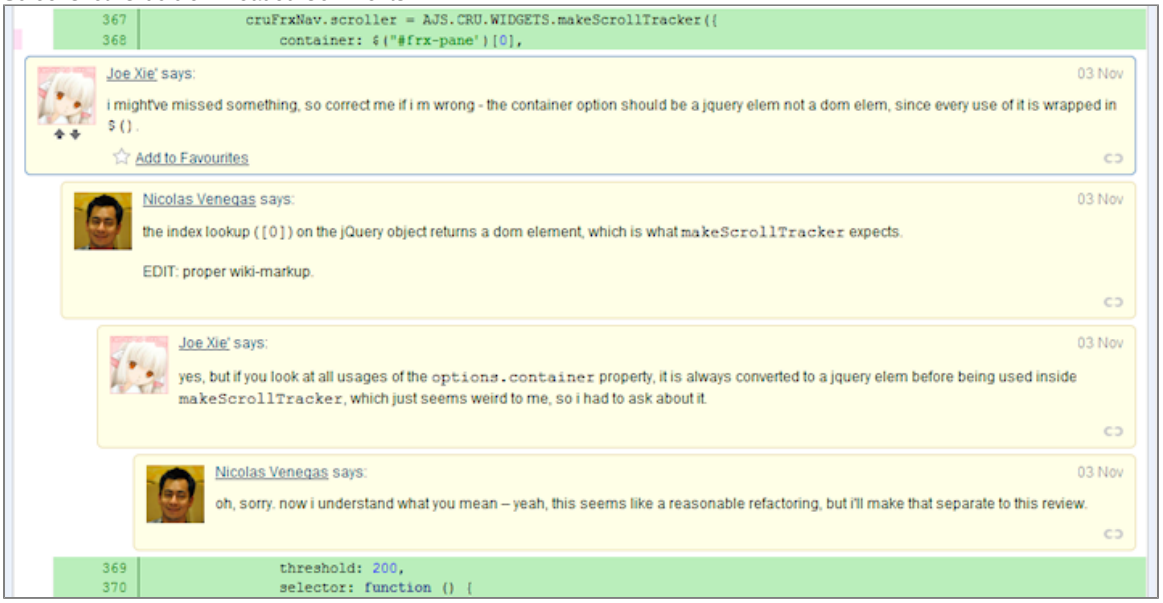


8

Threaded Comments

Crucible comments now support fully threaded discussions. Threads can also be collapsed.

Screenshot: Crucible Threaded Comments

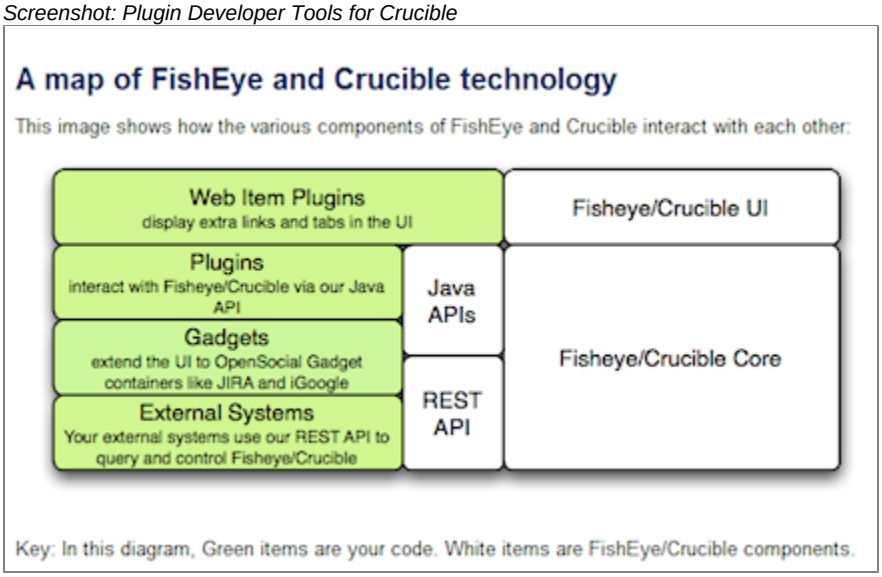


9

Plugin Developer Tools

This release adds Atlassian Plugin SDK support to Crucible and FishEye, simplifying build management for plugin developers. The developer documentation for FishEye and Crucible has been co-located into a new documentation space as well.

Screenshot: Plugin Developer Tools for Crucible



10

Plus numerous improvements and bug fixes

Visit our issue tracker to see the full list of improvements and bug fixes.

Crucible 2.1 Changelog

On this page:

- From 2.1.3 to 2.1.4
- From 2.1.2 to 2.1.3
- From 2.1.1 to 2.1.2
- From 2.1.0 to 2.1.1

From 2.1.3 to 2.1.4

27th January 2010

This is a bugfix release, addressing the following issues:

JIRA Issues (3 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2994	CLONE -Cannot create notes:// hyperlinks using WIKI renderer		Closed
CRUC-2973	relax url validation in the linker		Closed
CRUC-2790	Searching does not return correct result		Closed

From 2.1.2 to 2.1.3

13th January 2010

This is a bugfix release, addressing a number of ClearCase bugs and performance problems.

The following issues are addressed by this release:

JIRA Issues (12 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2802	NPE when accessing to the people tab		Closed
CRUC-2759	FisheyePluginManagerFactory does not export com.atlassian.event		Closed
CRUC-2739	comment nav doesnt work if there is only 1 comment and it is already selected		Closed
CRUC-2710	NPE when setting up instance and only entering a fisheye license		Closed
CRUC-2706	Upgrading to 2.1 doesn't work with MySQL 4.x		Closed
CRUC-2697	Ghosting appears when sticky header is pushed above review toolbar		Closed
CRUC-2689	the todate= param doesn't work in changelog when clicked from the commit activity graph		Closed
CRUC-2278	Comments not showing if they are on out of context lines		Closed
CRUC-2216	Permission error when creating sub task from Crucible comment		Closed
CRUC-2166	the go-to-changeset input textbox cannot be clicked		Closed
CRUC-2129	Go to changeset field lacks feedback if cs doesn't exist		Closed
CRUC-1917	File link in the review is broken		Closed

From 2.1.1 to 2.1.2

19th November 2009

This is a bugfix release.

The following issues are addressed by this release:

JIRA Issues (5 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2738	Getting java.lang.NoClassDefFoundError: Could not initialize class com.cenqua.fisheye.web.themer.BriefCheckinCommentTag		Closed
CRUC-2713	Caused by: org.osgi.framework.BundleException: Unresolved constraint in bundle 32: package; (&(package=org.apache.commons.collections)(version>=3.2.0)(!(version>=4.0.0)))		Closed
CRUC-2620	HSQLDB floods its sql log with AUTOCOMMIT TRUE/FALSE		Closed
CRUC-2421	(IE7): scrolling in multi frx view puts cpu at 99% for a while		Closed
CRUC-2412	frx menus overlap slider when window narrow		Closed

From 2.1.0 to 2.1.1

17th November 2009

This is a bugfix release.

The following issues are addressed by this release:

JIRA Issues (24 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2707	Paging of commit-only activity stream can be very slow		Closed
CRUC-2705	Document Supported Database server versions		Closed
CRUC-2704	Upgrading to 2.1 doesn't work with Postgresql 7.x		Closed
CRUC-2703	Changeset Navigation in manage files is broken		Closed
CRUC-2702	Plugins can't be enabled because of apache commons version constraints		Closed
CRUC-2700	Don't try to create a revisions drop down on the review contents tab when the revision is in a light scm repo which doesn't implement DirectoryBrowser		Closed
CRUC-2698	Lucene Index for Review State Changes		Closed
CRUC-2645	something wrong with python syntax highlighting		Closed
CRUC-2191	Document supported database versions		Closed
CRUC-2118	Defect properties on comments are being lost		Closed
CRUC-2095	Activity stream says "finished" instead of "uncompleted"		Closed
CRUC-2085	FE PERF - fixing the people page. Based on above perf data. Goal, all cases < 10s, ideally < 2s		Resolved
CRUC-1818	Double slashes appended incorrectly at the end of the SVN URL		Closed
CRUC-1687	upgrade to latest jquery		Closed
CRUC-1673	GenericJDBCException thrown on atlaseye		Closed
CRUC-1603	Due date display is too exact.		Closed
CRUC-1601	find out the css differences between the review dir tree and the existing content dir tree		Closed
CRUC-1599	display settings for reviews arent intuitive and arent sticky		Closed
CRUC-1597	Need Performance Benchmarks for Crucible and Fisheye		Closed
CRUC-1449	Largish review beachballs on resize and when expanding FRXs		Closed
CRUC-1432	Page refreshes when preferences pane is closed, even if there has been no change		Closed
CRUC-1385	Add "Change Diff" button for file revision chosen from Light SCM plugins similar to files chosen from Fisheye Repositories		Closed

CRUC-1334	Hot Deployment of Plugin does not work		Closed
CRUC-874	Documentation for Web Fragment Plugin Points		Closed

Crucible 2.0 Release Notes

Crucible 2.3 has now been released. Read the Release Notes.

30 June 2009

Atlassian presents Crucible 2.0

Crucible 2.0 adds the all-new Iterative Reviews feature, enhanced JIRA integration and a brand new user interface.

Highlights of this release:

- Iterative Reviews
- New User Interface
- Read/Unread comments
- Enhanced JIRA Integration
- Keyboard Shortcuts
- Review Activity
- External Databases and Backup
- Plus numerous improvements and bug fixes

Thank you for your interest in Crucible 2.0.

DOWNLOAD latest version

See the documentation on Upgrading to this version.

Installing Crucible 2.0
You can now download the Crucible 2.0 from here. See the documentation on Upgrading to this version.

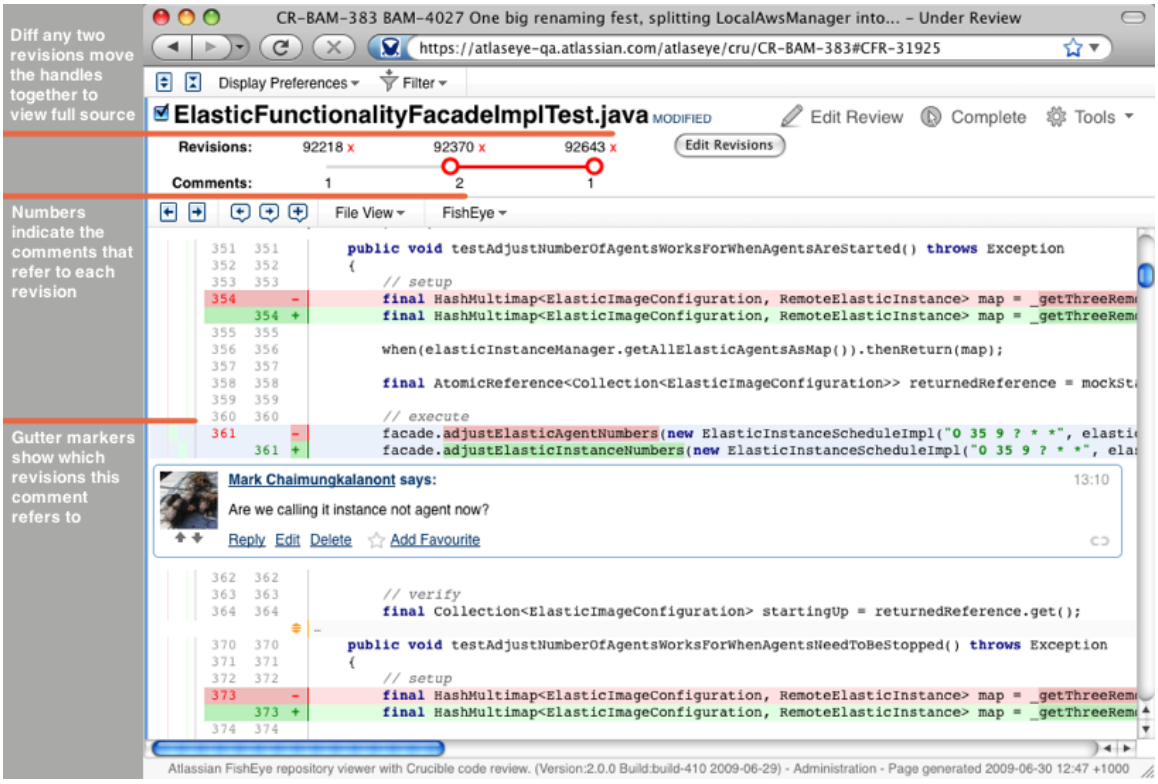
Highlights of Crucible 2.0

1

Iterative Reviews

Crucible now allows you to review several revisions of a file within one review, seamlessly switching between them. Comments are linked and relative to a specific revision. This allows you to review every change that has occurred on a code file within a given period of time and hence visualise its evolution in the context of the review.

Screenshot: Iterative Reviews

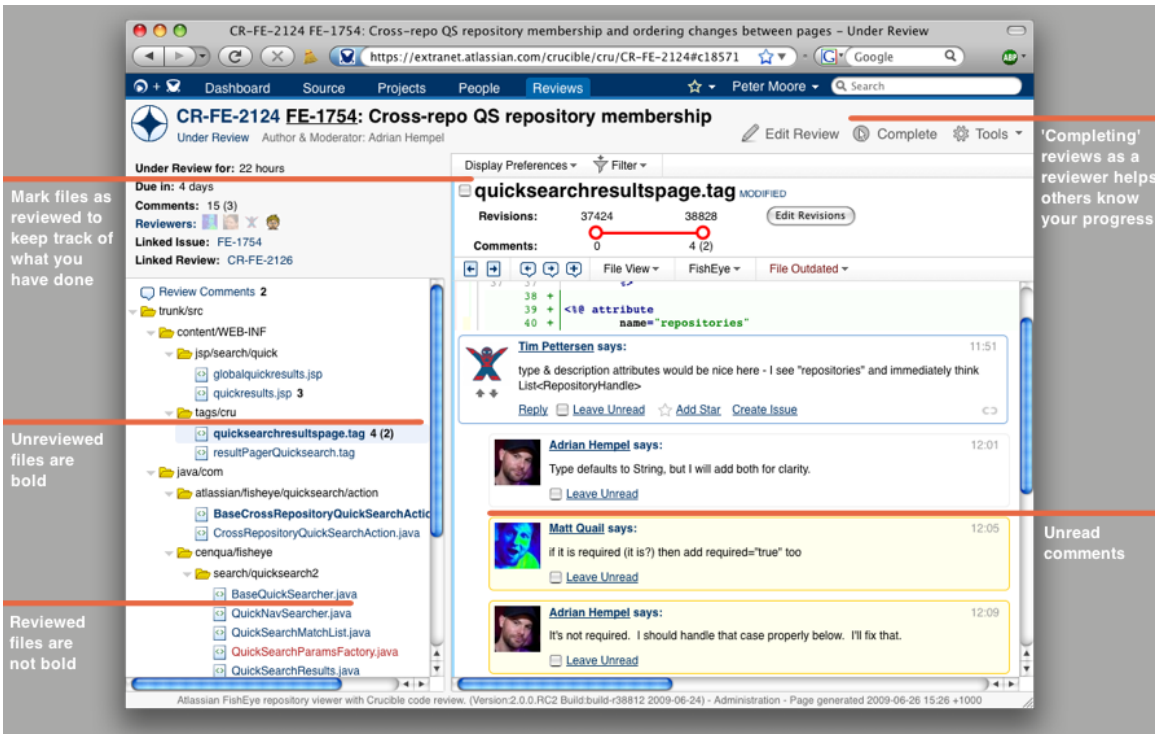


2

New User Interface

Taking on board wide-ranging feedback from customers, the Crucible team has completely revamped the user interface of the product, adding more views on your work and allowing you to access controls from multiple locations and allowing for different work styles. Files in review are arranged in a tree for easy navigation. New viewing modes for reviews support full screen view, side-by-side diff view and single or multiple file views.

Screenshot: Reviewed files

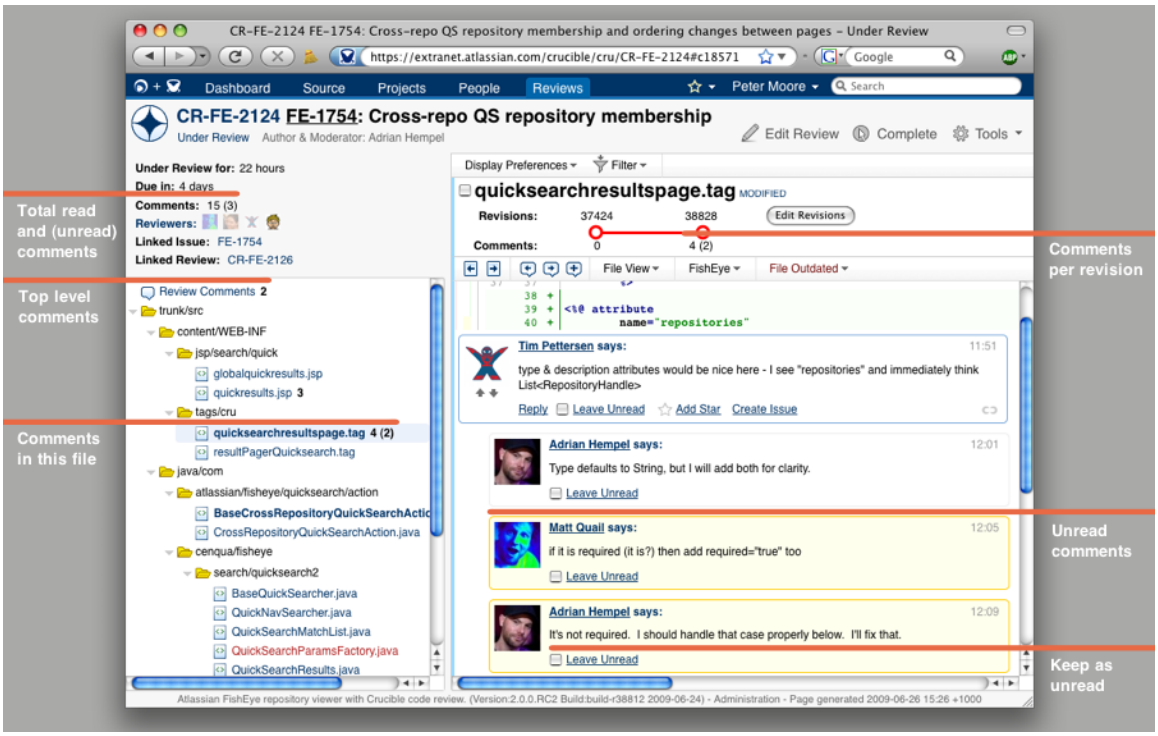


3

Read/Unread comments

As you move around a review, Crucible keeps track of which comments you've seen and marks them as read. When you see a comment that you want to come back to, check the 'leave as unread' box so you don't forget it. Unlike an email thread, new comments are rarely at the bottom. That's why its especially useful to filter and highlight just the new comments when you come back to a review that's underway.

Screenshot: Unread comments

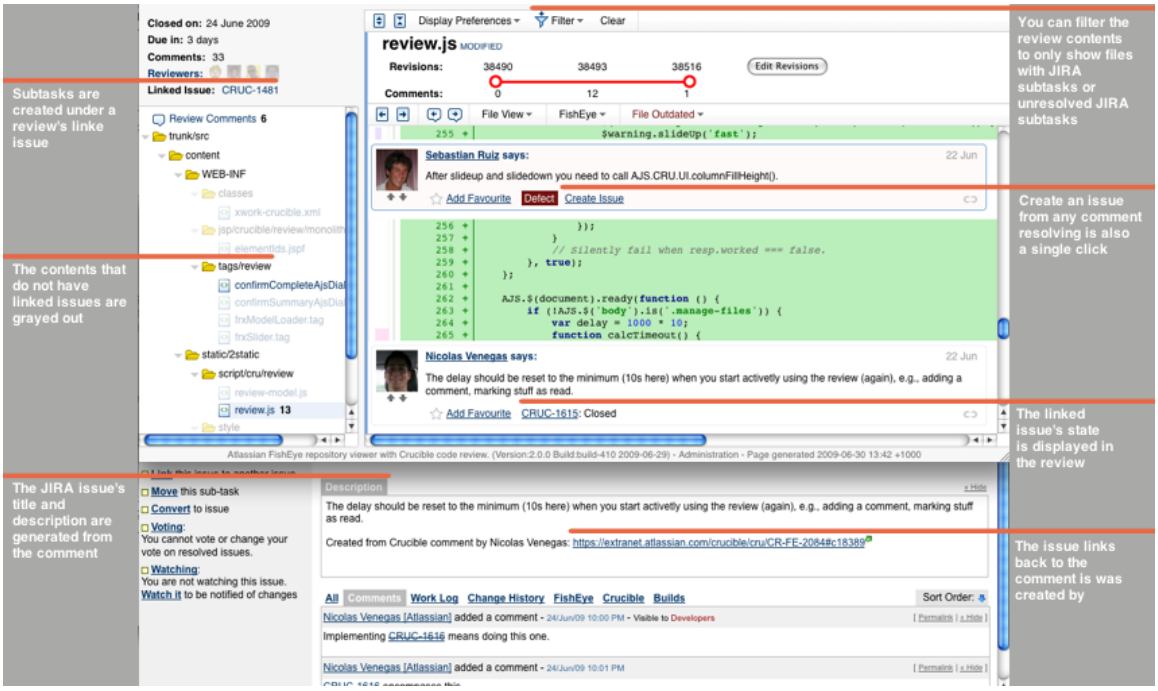


4

Enhanced JIRA Integration

Crucible now has better JIRA integration, allowing you to see regular JIRA updates in your Crucible dashboard and create JIRA sub-tasks inline, without leaving the Crucible interface. You can still click on issue names to visit the JIRA instance they belong to, also. See instructions for JIRA configuration.

Screenshot: Enhanced JIRA Integration

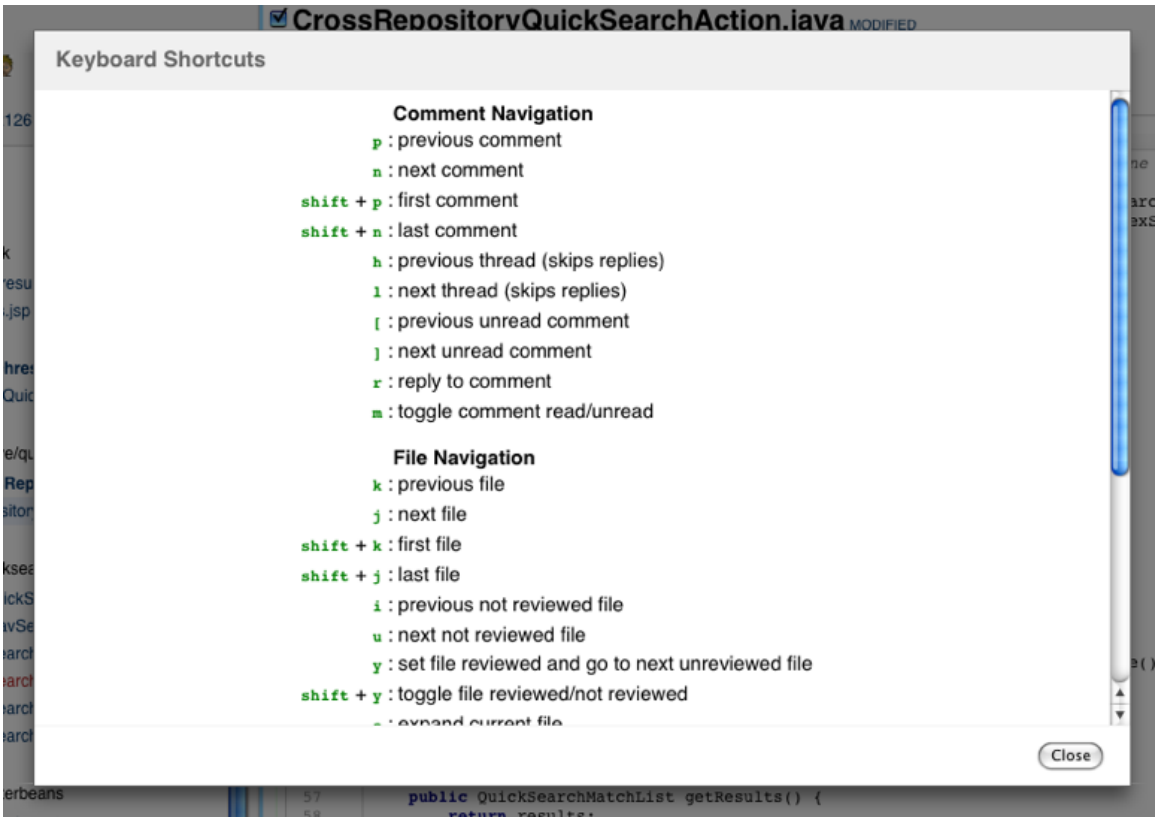


5

Keyboard Shortcuts

Crucible now has keyboard shortcuts for navigating around your reviews efficiently. No more repetitive strain injury from that mouse wheel.

Screenshot: Keyboard shortcuts

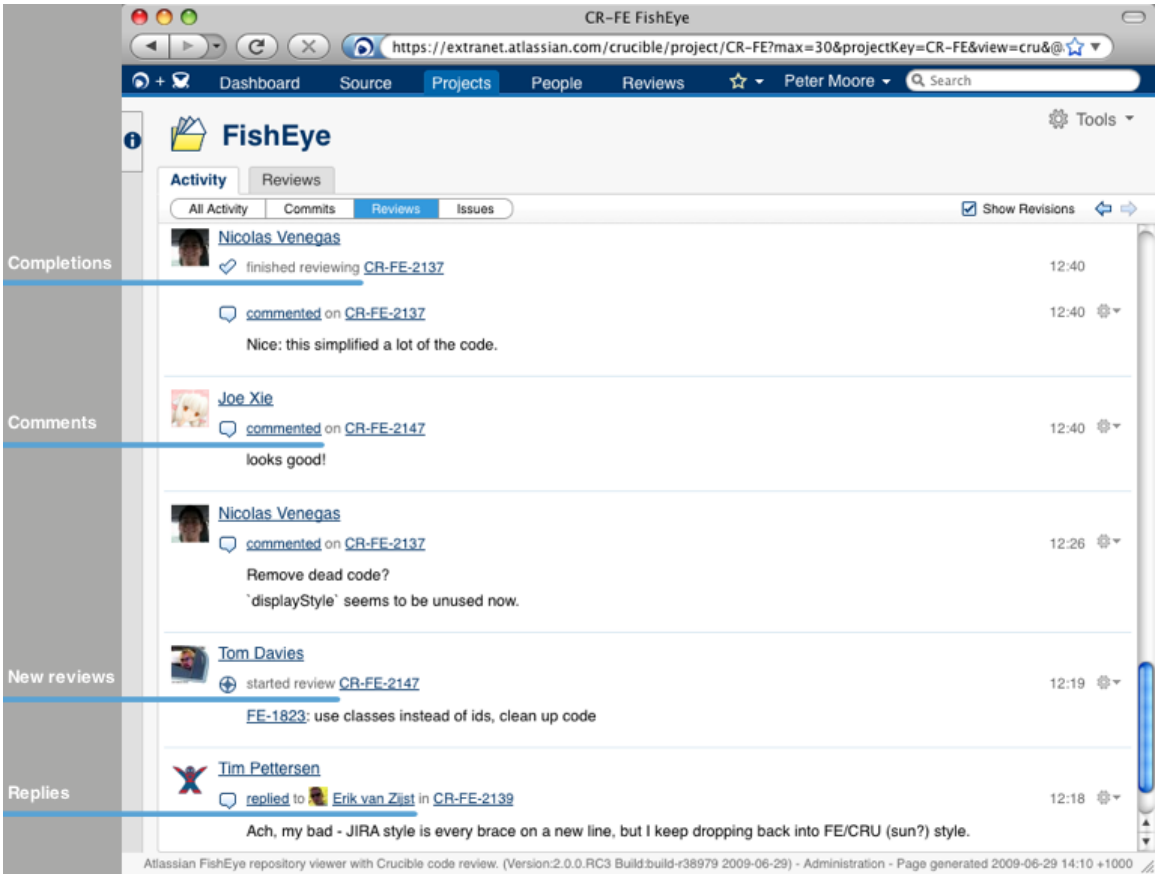


6

Review Activity

All the activity that happens in Crucible is available as an activity stream. Streams can be accessed per project as well as a personal stream that includes the activity from people, projects, reviews and even comments you favorite or are involved in.

Screenshot: Project review activity stream



7

External Databases and Backup

Crucible now supports MySQL and Postgress in addition to the embeded HSQL database. Backup and restore capabilities have also been greatly enhanced.

8

Plus numerous improvements and bug fixes

Visit our issue tracker to see the full list of improvements and bug fixes.

Crucible 2.0 Changelog

On this page:

- From 2.0.5 to 2.0.6
- From 2.0.4 to 2.0.5
- From 2.0.3 to 2.0.4
- From 2.0.2 to 2.0.3
- From 2.0.1 to 2.0.2
- From 2.0 to 2.0.1
- From 2.0 Beta3 to 2.0
- From 2.0 Beta2 to 2.0 Beta3
- From 1.6.6 to 2.0 Beta2

From 2.0.5 to 2.0.6

8th October 2009

This is a bugfix release.

This release fixes a bug that affected Crucible-only installations.

From 2.0.4 to 2.0.5

6th October 2009

This is a bugfix and improvement release.

The following issues are addressed by this release:

JIRA Issues (9 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2317	Linking to JIRA issues doesn't work when you customise the JIRA issue key format		Closed
CRUC-2295	"Open in Crucible" link always leads to EAC/CRU		Closed
CRUC-2214	Transactions don't nest		Closed
CRUC-2203	Allow detailed logging of requests to SCM plugins		Closed
CRUC-2135	Upgrade to Licensing 2.0		Resolved
CRUC-1856	Page title is doubly escaped		Closed
CRUC-1742	NPE when trying to load FRX		Closed
CRUC-1734	Doesn't pick up the changes made for the "Statement of Objectives" field in IE 7		Closed
CRUC-269	ctempobj not well-handled (+S flag on perforce files)		Closed

From 2.0.3 to 2.0.4

8th September 2009

This is a bugfix and improvement release.

- **Crucible Light SCM Issues with Deleted Files**: See the JIRA issue for details.

The following issues are addressed by this release:

JIRA Issues (14 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2160	add some reviewers in the dialog, hit 'start review' --> "This review has no reviewers"		Closed
CRUC-2128	NPE when trying to create a review		Closed
CRUC-2112	NullPointerException when posting/updating comments through the SPI		Closed
CRUC-2105	"java.lang.RuntimeException: org.tigris.subversion.javahl.ClientException: svn: File not found:" thrown when adding a changeset that contains deleted files in light svn plugin		Closed
CRUC-2104	Crucible is still creating ghost draft comments		Closed
CRUC-2101	binary deleted revisions in reviews are being diffed as text in Cru		Closed
CRUC-1952	Iterative reviews with uploaded files is broken		Closed
CRUC-1919	NonUniqueResultException: query did not return a unique result		Closed

CRUC-1907	Warn before dropping database in restore		Closed
CRUC-1402	NPE When using eclipse plugin		Closed
CRUC-1256	Crucible does not handle incomplete record data (via REST API) properly		Closed
CRUC-859	NPE when loading full history for file in lightSVN		Closed
CRUC-794	SVN LightSCM plugin tries to get revision which don't exist when copies are made		Closed
CRUC-761	Add warning that if user does not enter fisheye license they will not have access to fisheye capabilites		Closed

From 2.0.2 to 2.0.3

18th August 2009

This is a bugfix release which includes the following issues:

JIRA Issues (14 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2051	ie7: can't view draft reviews		Closed
CRUC-2050	java.util.ConcurrentModificationException thrown during when removing participants		Closed
CRUC-2015	RSS should have absolute URLs, not relative		Closed
CRUC-1940	Frequent Error When Starting A Review : error.unauthorized.stateChange.description		Closed
CRUC-1927	The copied reviewed file should be shown in orange color		Closed
CRUC-1911	Case sensitivity in username		Closed
CRUC-1906	[git] annotation view skips chunks		Closed
CRUC-1899	Review updated ajax calls should be chained		Closed
CRUC-1845	Cannot delete abandoned review		Closed
CRUC-1833	NPE thrown in getIcDOFromComment		Closed
CRUC-1828	Make the number of connections to a db easily configurable		Closed
CRUC-1814	Review Deletion is not working		Closed
CRUC-1094	Strange problems while trying to use SCM plugin for SVN with multiple repositories		Closed
CRUC-854	Author Mapping doesn't always work		Closed

From 2.0.1 to 2.0.2

24th July 2009

This is a bugfix release which includes the following issues:

JIRA Issues (15 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-1886	UTF-8 encoding of forms not being handled		Closed
CRUC-1831	various misc wording improvements in Crucible		Closed
CRUC-1791	when creating a review from a changeset in the activity stream, don't add the revision number to the objectives		Resolved

CRUC-1781	[Security Vulnerability] - REST API is working even if Remote API is OFF		Closed
CRUC-1780	Invalid filter parameter could lead to security issues		Closed
CRUC-1779	stored paths can be invalid when creating reviews at the same time		Closed
CRUC-1771	Switching between single file and multi-file should be hoisted to the tool bar		Resolved
CRUC-1770	Switching to fullscreen should be hoisted to an icon on the tool bar		Resolved
CRUC-1747	NPE in atlaseye for lauchlan		Closed
CRUC-1746	Adding revisions iteratively breaks in litesvn		Resolved
CRUC-1739	change 'summarise' to 'summarize' on review age chart		Closed
CRUC-1729	bad wording of comment activity tool menu 'add favourites'		Closed
CRUC-1720	Error logging in if the project or repository added as a favourite has been deleted		Closed
CRUC-1715	links to review inline comments dont work properly		Closed
CRUC-1384	Review comments and replies added via REST API do not trigger e-mail notifications		Closed

From 2.0 to 2.0.1

14th July 2009

This is a bugfix release which includes the following issues:

JIRA Issues (29 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-1743	Select Reviewers textbox on the Edit Review->Review Details screen will not add user to a review if the username contains "." or"@" symbols		Closed
CRUC-1716	[Regression] Suggested reviewers are not appearing in the list of reviewers when they are added from the pop-up		Closed
CRUC-1703	Arrow "Previous Comment Thread" in Crucible Review throws script exception "CRUCOMMENT is undefined"		Closed
CRUC-1701	Fail to add user as reviewer in Crucible if the user's username contains dot (.)		Closed
CRUC-1691	Poll for state changes		Closed
CRUC-1690	User and Crucible links don't have hovers in Review Comment search results		Closed
CRUC-1686	Editing Permission Schemes throws javax.el.PropertyNotFoundException		Closed
CRUC-1683	Non-empty folder doesn't have comment count in tree		Closed
CRUC-1682	Opening a review with a 2mb patch causes the review to take 1 minute to open		Closed
CRUC-1676	Empty folders are incorrectly ordered		Closed
CRUC-1672	"Create Review" on browse page does not add-to-review, but always creates a new review		Closed
CRUC-1671	Empty folder doesn't have folder icon in tree		Closed

CRUC-1670	FRXs with the same path are collapsed in the navigation tree		Closed
CRUC-1669	Patch reviews shouldn't allow deletion of frxrevisions		Closed
CRUC-1664	Backup admin page includes all items when de-selecting all		Closed
CRUC-1657	draft comments are shown as unread from the reviews list		Closed
CRUC-1655	inline comments need revisiting in side-by-side diff mode		Closed
CRUC-1654	Restore user to previous position in review when reloading from a review update		Closed
CRUC-1653	Show "reviews to do" table when closing a review		Closed
CRUC-1650	edit revisions allows you to try and add a revision already in the review, then complains		Closed
CRUC-1638	terminology - should use "unreviewed" or "not reviewed"		Closed
CRUC-1636	inconsistent state names		Closed
CRUC-1630	Grey out menu items when not applicable		Closed
CRUC-1619	due dates arent updated when new revisions are added		Closed
CRUC-1606	Sort indicator on "Age" column of reviews dashboard points in the wrong direction		Closed
CRUC-1598	Add linked reviews to the review sidebar.		Closed
CRUC-1579	Editing a User in crucible standalone will render an sterisk next to their name		Closed
CRUC-1567	Comment hovers only on text in IE8		Closed
CRUC-1443	Safari issue - Tools dropdown causes 'invisible scrollbars'		Closed

From 2.0 Beta3 to 2.0

30th June 2009

Full list of issues in this release:

JIRA Issues (200 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-1749	XSS issue in filter parameter		Closed
CRUC-1661	File marked as unreviewed for defect author		Closed
CRUC-1656	RC3 - NPE when trying to create first project on empty CRU install		Closed
CRUC-1651	clicking [add] branch in SVN admin symbolic screen causes page-pop and 404		Closed

CRUC-1649	toggling Display Preferences > Show Source in a review does nothing		Closed
CRUC-1644	Some display preferences don't update when clicked		Closed
CRUC-1641	error mapping JIRA servers		Closed
CRUC-1623	Admin: Default reviewers are not re-saved		Closed
CRUC-1616	Tune polling period.		Closed
CRUC-1615	Reset the delay when activetly using the review		Closed
CRUC-1612	Move the warning to a Gmail-style overlay		Closed
CRUC-1611	Commenting doesn't work in Safari 4		Closed
CRUC-1609	CAC documentation for iterative review info from CRUC-1536		Closed
CRUC-1481	Warning dialogs and polling when new stuff added since last refresh		Closed
CRUC-1445	STUPID: old style error page when trying to access fisheye pages		Closed
CRUC-1442	Crucible Standalone - Logout screen has FishEye icon & link		Closed
CRUC-1413	Adding all changesets for new files with multiple commits should show file as "Added", not "Modified"		Closed
CRUC-1412	"Earlier changeset" and "Later changeset" links should be grayed out when earliest/latest already listed.		Closed
CRUC-1408	Images in review blend in to crucible		Closed
CRUC-1404	Review throws 500 error NPE		Closed
CRUC-1403	Rename "crucibledb" to "sql"		Closed
CRUC-1399	Default Reviewer for project is not exposed through the SPI		Closed
CRUC-1398	overdue but review has not been started. Setting a due date in the past causes this.		Closed
CRUC-1393	Refactor Email Comments Page into a Dialog		Resolved
CRUC-1392	fix remove file behaviour of current content panel		Closed
CRUC-1391	Use newDirTreeBox in the files pane		Closed
CRUC-1390	Fix Uploads		Closed
CRUC-1388	Missing css files on Send Email page / Layout needs love		Closed

CRUC-1386	fix suggest reviewer ui		Closed
CRUC-1383	suggest reviewers - turn blame calculation back on		Closed
CRUC-1382	defect metrics charts are broken		Closed
CRUC-1381	.png file not detected as binary		Closed
CRUC-1380	Email Review button from the dashboard doesnt work / Email review in tols menu gives a 404 - permaid is undefined		Closed
CRUC-1379	clicking HELP opens help twice / Help in Tools menu will open a new window and change your window		Closed
CRUC-1378	page load error "The requested URL /atlaseye/static/kidi0j/2static/script/fe/fisheye-profile.js was not found on this server."		Closed
CRUC-1377	wrong review actions (comments.txt and Email Review) are visible		Closed
CRUC-1376	we need to handle multiple errors in a smarter way		Closed
CRUC-1375	There is no jira quick link in the edit review dialog		Closed
CRUC-1374	Review info popup on the dashboard shouldn't show when clicking on a link such as the review permaId		Closed
CRUC-1373	Page load error "The requested URL /atlaseye/static/kidi0j/2static/images/sprite_arrows.png was not found on this server"		Closed
CRUC-1371	External dialog 'View ...' links need to redirect to review and trigger filter		Closed
CRUC-1370	Show current content panel in manage files		Closed
CRUC-1369	make the side filters like the fisheye tabs		Closed
CRUC-1368	bring back the custom filter		Closed
CRUC-1367	make the pages consistent		Closed
CRUC-1366	Add warnings for incomplete FRXs and unresolved JIRAs to dialogs		Closed
CRUC-1365	Move review summary form into a dialog.		Closed
CRUC-1364	Move creation-time review suggestions into a dialog		Closed
CRUC-1363	Convert project selection screen to a dialog		Closed
CRUC-1362	Backup broke Crucible Blitz		Closed
CRUC-1361	General Issues		Resolved
CRUC-1360	Manage Files		Resolved
CRUC-1359	Edit review form		Resolved

CRUC-1358	Interstitials/dialogs		Resolved
CRUC-1357	Dashboard Fixes		Resolved
CRUC-1356	Remove driver url parameter from Restore and use new DBInfo properties		Closed
CRUC-1354	Refactor programatic frx filtering to not invoke click events		Resolved
CRUC-1351	Add path and base filename to backup UI		Resolved
CRUC-1345	Extend QuartzManager to support persistent configuration data per job		Closed
CRUC-1344	Rest Api returns the wrong URL for download Patch		Closed
CRUC-1332	Going to full context doesn't work		Closed
CRUC-1330	Put custom quartz job scheduling in a separate tab		Closed
CRUC-1329	Dynamically update general comment counts		Closed
CRUC-1328	Add general comments to the tree		Closed
CRUC-1327	Add the BackupItem selection to the scheduled backup		Closed
CRUC-1325	Add file type css place holders		Closed
CRUC-1324	FishEye only indicate Crucible review for a file with latest revision		Closed
CRUC-1319	Update doco for admin backup page		Resolved
CRUC-1317	Dynamically update comment counts		Closed
CRUC-1316	Add comment counts to the frx tree		Closed
CRUC-1305	Springify Backup Manager		Closed
CRUC-1303	Write unit test		Closed
CRUC-1294	Check start/stop no longer needed in restore		Closed
CRUC-1293	Render maintenance page for non-admin pages when a backup is being made		Closed
CRUC-1291	Add "Change Diff" dropdown to manipulate both fromRev and toRev independently		Resolved
CRUC-1290	Collapse common directories		Closed
CRUC-1289	Apply tree html structure and css styling to list		Closed

CRUC-1288	Treeify FRX list pane		Resolved
CRUC-1286	add other filters		Closed
CRUC-1285	add filter - with comments		Closed
CRUC-1284	add UI for dropdown and expand/collapse		Closed
CRUC-1283	Drop-down filter for frx tree		Resolved
CRUC-1275	Convert stored dates to long		Closed
CRUC-1274	Create FRX anchors and adjust the browser location as you navigate		Resolved
CRUC-1273	FRXs should start expanded and maintain position when loading frxs above		Closed
CRUC-1272	Told that other participants have drafts, but also that all other participants have zero drafts		Closed
CRUC-1271	Move edit review box into AJS.Dialog		Closed
CRUC-1270	Integrate the summarise and close pages		Closed
CRUC-1254	Rearrange content		Closed
CRUC-1253	Review meta information sub pane		Closed
CRUC-1252	Move manage files tabs into AJS.Dialog		Closed
CRUC-1251	scroll frx pane when clicking on frx list item		Closed
CRUC-1250	create floating frx info subpane which updates on scroll		Closed
CRUC-1248	Modify overview header		Closed
CRUC-1247	3 Pane UI		Resolved
CRUC-1242	Delete the old backup mechanism		Resolved
CRUC-1241	Rewire the quartz job		Closed
CRUC-1235	Revision slider hardening/tweaking		Resolved
CRUC-1233	Wrap option		Closed
CRUC-1232	Delete comment refactor		Closed
CRUC-1215	Quartz backup job must invoke the new xml-based backup		Resolved
CRUC-1208	reorganise contents of static directory		Closed

CRUC-1206	add new preference for new frxrevisions		Closed
CRUC-1205	add new notification for adding frxRevisions		Closed
CRUC-1201	displaying frxs does not take into account showAsDiff flag		Closed
CRUC-1179	Sort FRX - alpha server side sort		Resolved
CRUC-1174	Add banner warning "you have unresolved jiras" to page		Closed
CRUC-1173	Add resolve all JIRAs button & action to summarize page		Closed
CRUC-1171	XML-RPC bollocks		Closed
CRUC-1170	Delete a defect's linked JIRA subtask when deleting the defect		Resolved
CRUC-1169	ui & action		Closed
CRUC-1168	XML-RPC bollocks		Closed
CRUC-1167	Resolve a defect's linked JIRA subtask from Crucible		Resolved
CRUC-1166	XML-RPC bollocks		Closed
CRUC-1165	UI display of jira link and status + post error creating		Closed
CRUC-1164	schema		Closed
CRUC-1163	Automatically add defects as subtasks to JIRA & link to them		Resolved
CRUC-1162	guessing + jira validation		Closed
CRUC-1161	edit details ui + actions		Closed
CRUC-1160	schema		Closed
CRUC-1159	Link a review to a single JIRA and enable auto defect creation		Resolved
CRUC-1158	just do it		Closed
CRUC-1157	Configure a JIRA instance for use by Crucible		Resolved
CRUC-1156	admin UI + create review		Closed
CRUC-1155	schema		Closed
CRUC-1154	Configure a default review duration for a project in week days so the due date can be pre-populated		Resolved

CRUC-1153	highlighting overdue		Closed
CRUC-1152	sorting in the lists		Closed
CRUC-1151	Order any list of reviews by due date & highlight any that are overdue		Resolved
CRUC-1150	due date field in UI		Closed
CRUC-1149	schema		Closed
CRUC-1148	Set or change a due date on a review		Resolved
CRUC-1143	just do it		Closed
CRUC-1142	Combine diff and annotation views		Resolved
CRUC-1141	just do it		Closed
CRUC-1140	show the reviews you can't update without buttons		Resolved
CRUC-1139	Author colours		Closed
CRUC-1138	Invisible markers (between lines)		Closed
CRUC-1137	Mouseover		Closed
CRUC-1136	Improve comment marker behaviour (tetris bar)		Resolved
CRUC-1134	replace yahoo shite if we can		Closed
CRUC-1133	event binding		Closed
CRUC-1132	error handling		Closed
CRUC-1131	namespacing & multiple files		Closed
CRUC-1130	remove prototype		Closed
CRUC-1129	client side js model		Closed
CRUC-1128	refactor commentator.js and friends		Resolved
CRUC-1127	just do it		Closed
CRUC-1126	handle modifier keypress		Resolved
CRUC-1125	just do it		Closed
CRUC-1124	Popup a keyboard shortcut help overlay when i press '?'		Resolved

CRUC-1123	add user pref		Closed
CRUC-1122	add complete status resetter to the defect notification		Closed
CRUC-1121	Reset my complete status when new defects are added to a review		Resolved
CRUC-1119	Tweak comment scroll tracker behaviour		Resolved
CRUC-1118	Improve revision slider behaviour		Resolved
CRUC-1117	add unread comment counts per revision		Closed
CRUC-1114	fix rendering/script issue in IE		Closed
CRUC-1113	make the slider handles move in unison		Closed
CRUC-1108	Mark comment read when it hits top of the viewport		Closed
CRUC-1105	adding to review doesnt work properly when you add the first file after a branch		Closed
CRUC-1097	Remove the use of half closed TCP connections		Resolved
CRUC-1096	Change SPI to support multiple revisions per FRX		Closed
CRUC-1092	Show user's lastname and firstname when selecting a reviewer		Closed
CRUC-1089	Crucible Project should move from Global Settings to own Section		Closed
CRUC-1083	render author + participant results		Resolved
CRUC-1062	api changes for multi-revisions and revision comments		Closed
CRUC-1060	Comment-counts displayed are not taking replies into consideration		Closed
CRUC-1057	Expand Review Summary Email		Closed
CRUC-1048	Change the admin backup page to use the new backup/restore implementation		Resolved
CRUC-1044	When upgrading from fisheye to crucible, the UI does not allow you to enter the Crucible license		Closed
CRUC-977	issues comments added on changed and unchanged code don't show up none or less context		Closed
CRUC-971	CRU Defect-> JIRA Subtask creation		Closed
CRUC-940	Comments made on a line not in the diff is not shown		Closed
CRUC-927	Add a warning in the product that re-sync in large LDAP servers can cause performance issue		Closed

CRUC-922	Admin screens with config.xml write and create/migrate workflow		Closed
CRUC-921	Set up maintenance Mode		Closed
CRUC-920	set up tests to compare upgrades of each database type		Closed
CRUC-918	Write tests to determine/compare expected results from database tables		Closed
CRUC-915	Usage Documentation for web-based backup/restore feature		Closed
CRUC-912	Integration Tests		Closed
CRUC-910	Admin Backup Page		Closed
CRUC-909	Backup Status Page		Closed
CRUC-907	Online Backup/Restore		Closed
CRUC-882	REST API return other people's drafts		Closed
CRUC-861	Allow soft wrap on diff and annotated display		Closed
CRUC-860	Autosave has issues		Closed
CRUC-858	"Lines are missing" divider graphics are no longer there		Closed
CRUC-845	Describe this in the CAC docs.		Closed
CRUC-825	remove abandon button from edit details section		Closed
CRUC-824	If we haven't already we should automatically create a backup of our CRUDB (and other configuration files) before upgrading		Closed
CRUC-823	Add an Expand Unchecked Files option		Closed
CRUC-813	Side-by-side diff mode is too wide		Closed
CRUC-770	Support file upload via REST		Closed
CRUC-745	Setup page doesn't warn of invalid fe licence when valid cru licence is provided		Closed
CRUC-741	Change moderator via REST		Closed
CRUC-734	"Side-by-side" Diffs option does not update upon refreshing the Firefox browser		Closed
CRUC-603	Support Anonymous Users Properly		Closed
CRUC-581	Include Light SCM Repos in information returned by REST API		Closed
CRUC-537	Summary Report & Searching by File		Closed

From 2.0 Beta2 to 2.0 Beta3

5th June 2009

Full list of issues in this release:

JIRA Issues (35 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-1524	review actions from hovers sometimes aren't bound and dont work.		Closed
CRUC-1515	File time stamps are not preserved in the backup		Closed
CRUC-1513	Permalinks to hidden comments are broken		Closed
CRUC-1512	Crucible user preferences should be saved automatically when changed		Closed
CRUC-1508	Pressing 'y' in fullscreen mode skips an frx		Closed
CRUC-1507	Next/Prev FRX buttons		Closed
CRUC-1506	Pressing 'y' in review comments doesn't do anything.		Closed
CRUC-1505	Marking a file as reviewed should mark all frx comments as read		Closed
CRUC-1504	Error dialog box background css shows entire sprite		Closed
CRUC-1503	Defect subtasks have their assignee set to default assignee when resolved from Crucible		Closed
CRUC-1501	1.6 -> 2.0 beta upgrade truncates timestamps		Closed
CRUC-1499	IDEA direct link port changed from 6666 to 51234		Closed
CRUC-1496	FRX reloads cause review model sort problems		Closed
CRUC-1493	Show a message in the frx pane when all files are filtered		Closed
CRUC-1492	Files from different repos breaks Manage Files		Closed
CRUC-1491	I think it should be sticky. i.e. set your preference each time you toggle it.		Closed
CRUC-1487	Need to show initial sort order on the Review dashboard		Closed
CRUC-1486	Adding a changeset to a review results in duplicate FRXs		Closed
CRUC-1484	Linked subtask in comment doesn't have a JIRA hover		Closed
CRUC-1480	Revision slider doesn't resize properly when you edit revisions		Closed
CRUC-1477	Clicking on a source line when creating a file comment kills the file comment		Closed
CRUC-1475	Moving slider on image diff causes NPE		Closed
CRUC-1474	Suggested reviews dialog uses old style inline review dialog		Closed
CRUC-1473	Review actions missing from inline review dialog		Closed
CRUC-1469	"You do not have permission to see all the search results." Looks crap.		Closed
CRUC-1461	Unable to add source file to review		Closed
CRUC-1460	fix styling of crucible project side bar		Closed
CRUC-1446	FishEye activity in activity stream when in CruOnly mode		Closed
CRUC-1438	Review Layout Issues		Closed
CRUC-1434	Toolbar buttons don't hover and they dont show a cursor		Closed
CRUC-1429	Tooltip over the top of Review hover		Closed

CRUC-1425	Folders show in review file list		Closed
CRUC-1323	Bug in adding iterative revisions		Closed
CRUC-1315	Suggestions are not accurate		Closed
CRUC-1224	keep slider visible during frx reload		Closed

From 1.6.6 to 2.0 Beta2

Full list of issues in this release:

JIRA Issues (13 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-1488	Improve user interface in the frx tree		Closed
CRUC-1478	Single frx visible mode		Closed
CRUC-1476	File revision comments aren't autosaved		Closed
CRUC-1465	Synchronise comment buttons when states are changed		Closed
CRUC-1464	Fix rev slider labels so that slider can snap		Closed
CRUC-1463	User has no display name		Closed
CRUC-1462	Selecting changeset in Manage Files fails		Closed
CRUC-1458	Account signup pages still use old styles		Closed
CRUC-1454	Timezone problem in review popup		Closed
CRUC-1439	Crucible Standalone - Manage Files links to FishEye		Closed
CRUC-1427	Old error page for disabled FishEye Urls		Closed
CRUC-1396	Empty reviews cannnot be abandoned/closed/viewed		Closed
CRUC-1116	No notifications sent for comments created through REST		Closed

Crucible 2.0 Upgrade Notes

This page contains information about upgrading to Crucible 2.0.

On this page:

- Browsers
- Known Issues
  - MySQL Database Issues
  - Problems with Crucible Freezing Unexpectedly

Browsers

Crucible 2.0 now supports the following browsers:

- Safari 3 (or later)
- FireFox 3 (or later)
- Internet Explorer 7 (or later)

Internet Explorer 6 is no longer supported.

Known Issues

MySQL Database Issues

When migrating your database to MySQL, you may encounter problems with very long comments in MySQL.

Problems with Crucible Freezing Unexpectedly

A known issue may cause Crucible 2.0 to freeze unexpectedly.

Crucible 2.0 Beta Release Notes

Crucible 2.0 Beta is a public development release leading up to **Crucible 2.0**. For all production use and testing of Crucible, please use the latest official release.

This page refers to an updated version of the Beta (Beta 3). We strongly recommend all beta users upgrade to this release.

> Do not use in production.
> Beta releases should not be used in production environments.

> Please also take note of the following information:
>
> - Beta releases are not safe — Beta releases are snapshots of the ongoing Crucible 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, may change or be removed before the next full release.
> - FireFox 3 and Safari are the only browsers supported.

5 June 2009

Atlassian presents Crucible 2.0 Beta

Crucible 2.0 adds the all-new Iterative Reviews feature, enhanced JIRA integration and a brand new user interface.

Highlights of this release:

- Iterative Reviews
- Enhanced JIRA Integration
- Stars Feature
- Unique Avatars
- People View
- New User Interface
- Plus numerous improvements and bug fixes

Thank you for your interest in Crucible 2.0 Beta.

DOWNLOAD latest version

See the documentation on Upgrading to this version.

Installing Crucible 2.0 Beta
You can now download the Crucible 2.0 Beta from here. See the documentation on Upgrading to this version.

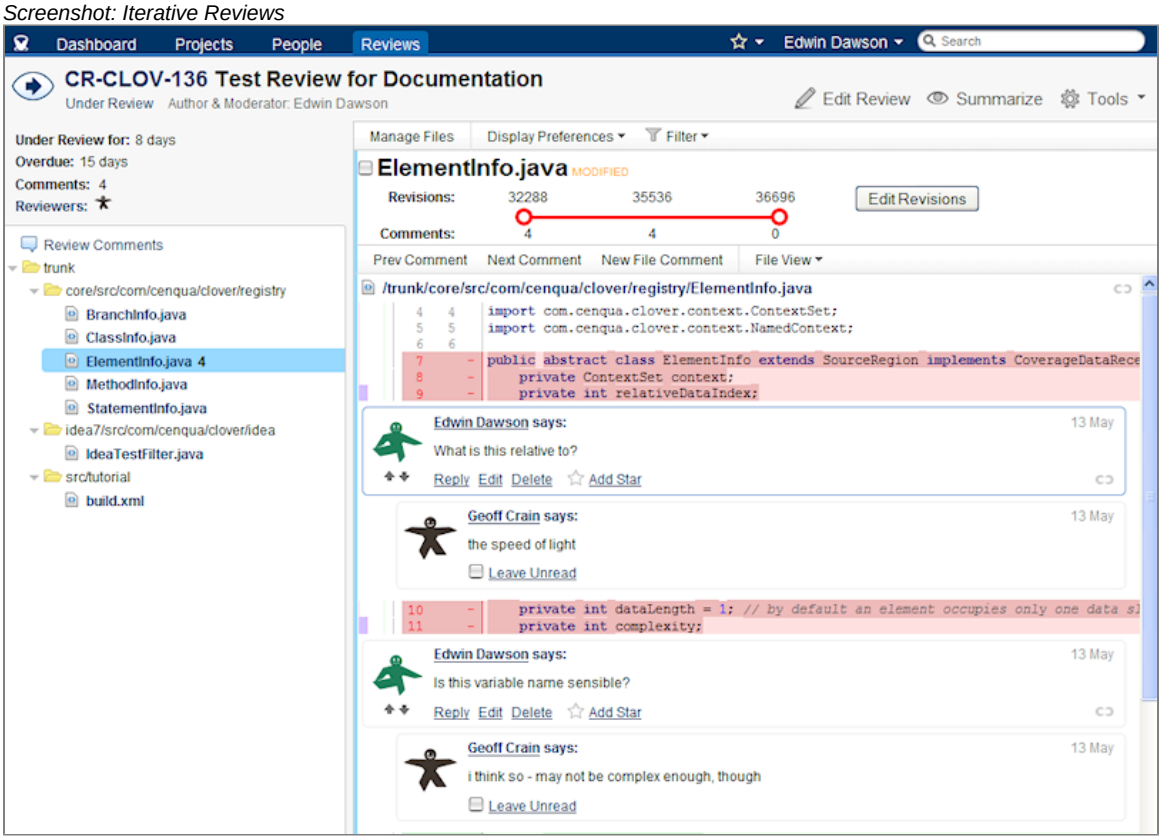
Highlights of Crucible 2.0 Beta

1

Iterative Reviews

Crucible now allows you to review several revisions of a file within one review, seamlessly switching between them. Comments are persistent and relative to a specific revision. This allows you to review every change that has occurred on a code file within a given period of time and hence visualise its evolution in the context of the review.

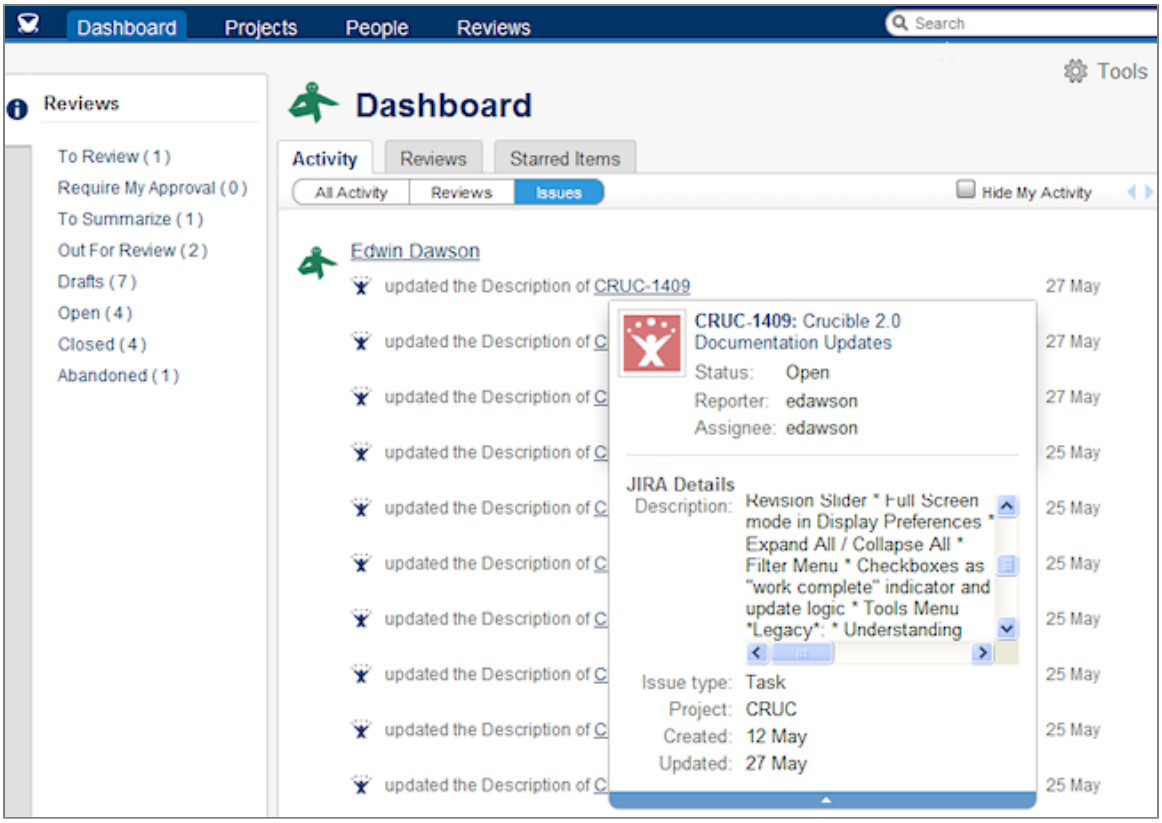
Screenshot: Iterative Reviews



Enhanced JIRA Integration

Crucible now has better JIRA integration, allowing you to see regular JIRA updates in your Crucible dashboard and create JIRA sub-tasks inline, without leaving the Crucible interface. You can still click on issue names to visit the JIRA instance they belong to, also. See instructions for JIRA configuration.

Screenshot: Enhanced JIRA Integration

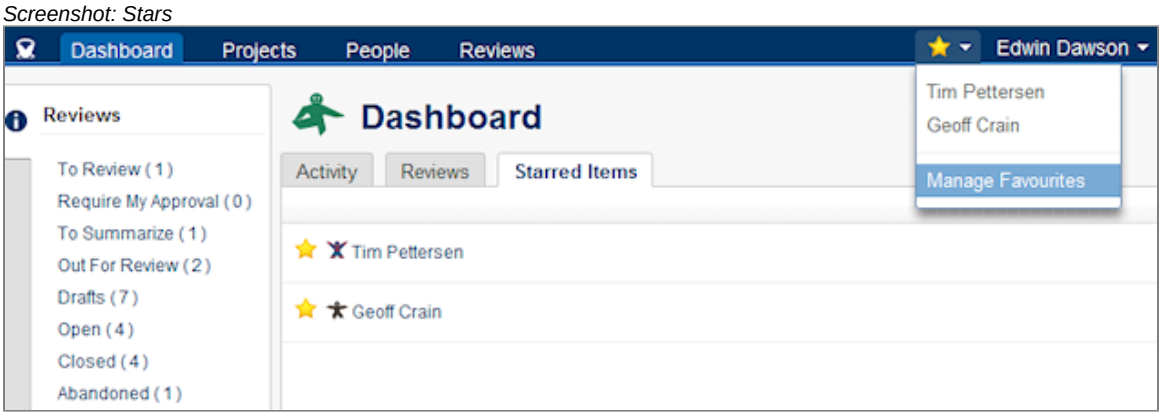


3

Stars Feature

Crucible now allows you to create a list of "Starred" favourite items that includes reviews, JIRA issues, colleagues and more. These favourites can be viewed together in aggregate as a stream of active work you are doing.

Screenshot: Stars

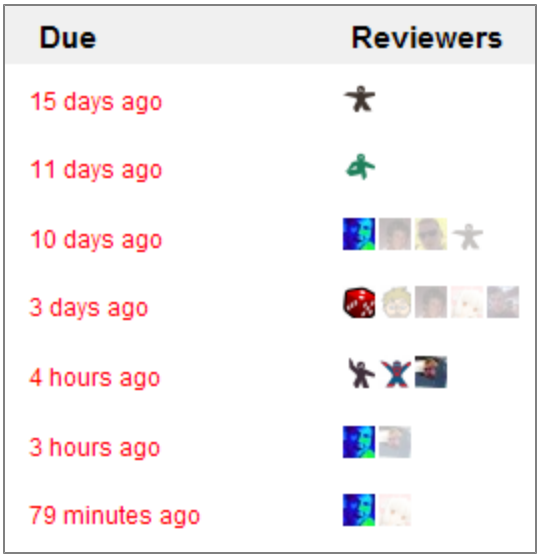


4

Unique Avatars

Crucible will now generate a unique "Charlie" image that will be used as your avatar in the system. These avatars create a new visual linkage to the personalities working on various items and are used as a visual shorthand to show user involvement on items in menu screens and dialogs.

Screenshot: Unique Avatars

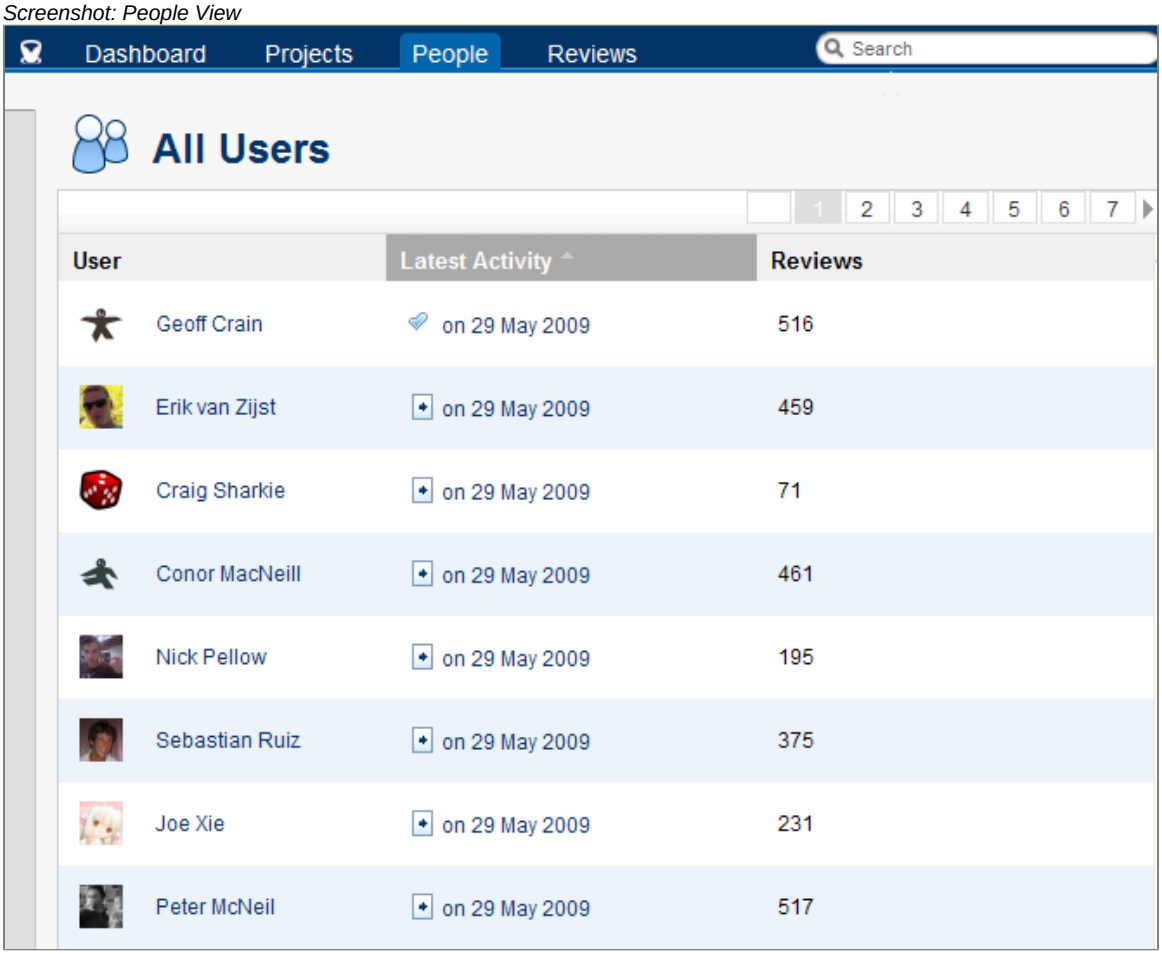


5

People View

You can now view detailed charts and activity statistics people who use your Crucible instance. You can compare number of reviews complete and other metrics charted over time.

Screenshot: People View

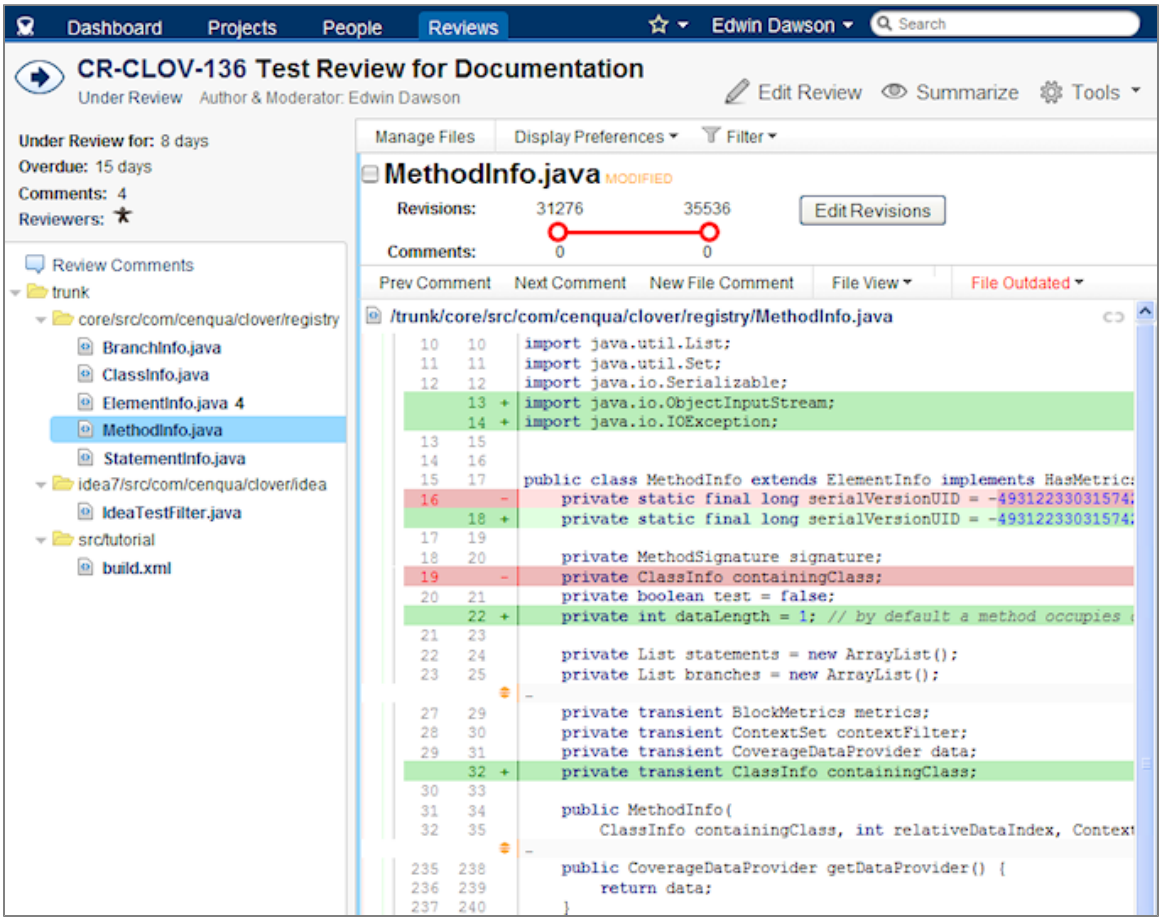


6

New User Interface

Taking on board wide-ranging feedback from customers, the Crucible team has completely revamped the user interface of the product, adding more views on your work and allowing you to access controls from multiple locations and allowing for different work styles. Files in review are arranged in a tree for easy navigation. New viewing modes for reviews support full screen view, side-by-side diff view and single or multiple file views.

Screenshot: New User Interface



7

Plus numerous improvements and bug fixes

Visit our issue tracker to see to see the full list of improvements and bug fixes between Beta 2 and Beta 3. We strongly recommend all beta users upgrade to the latest beta release.

See the Beta Reviewer's Guide for a list of known issues and guidance on the beta experience.

Crucible 2.0 Beta Upgrade Notes

Crucible 2.0 Beta is a public development release leading up to **Crucible 2.0**. For all production use and testing of Crucible, please use the latest official release.

> Do not use in production.
> Beta releases should not be used in production environments.

Please also take note of the following information:

- Beta releases are not safe — Beta releases are snapshots of the ongoing Crucible 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.
  - There will be an upgrade path from the 2.0 Beta to the final release.

This page contains instructions on how to upgrade your Crucible instance to the Crucible 2.0 Beta.

Read about how your Crucible installation works with FishEye.

Before you Start

- Before upgrading you should always read the Release Notes for the version you are upgrading to, as well as any versions you are skipping.
- **We strongly recommend you make a backup of your data before upgrading Crucible**. Simply make a copy of your `crucible_install_dir/var/data/` directory.
- Download the Crucible zip file.

Upgrade Procedure

Method 1 - Using a FISHEYE_INST Directory

If you have Crucible configured to use a `FISHEYE_INST` directory, then simply:

1. Shutdown your existing fisheye server
2. Make a backup of your FISHEYE_INST directory
3. Extract the new Crucible version to a directory.
4. Leave your `FISHEYE_INST` environment variable set to its existing location.
5. Start Crucible from the new installation.
6. Follow any version-specific instructions found in the Release Notes.

Read more about the `FISHEYE_INST` environment variable.

Method 2 - Without a FISHEYE_INST Directory

If you are not using `FISHEYE_INST`, you will need to copy some files from your old Crucible installation to your new one.

1. Extract the new Crucible archive into a directory such as `/NEW_FISHEYE/`.
2. Delete the `/NEW_FISHEYE/var` directory.
3. Shut down the old Crucible instance if it is running.
4. Copy `/OLD_FISHEYE/config.xml` to `/NEW_FISHEYE/`.
5. Copy (or move) the `/OLD_FISHEYE/var` directory to `/NEW_FISHEYE/var`.
6. If you have a Cenqua-issued Crucible license, copy all `/OLD_FISHEYE/*.license` files to `/NEW_FISHEYE/`. (Atlassian-issued licenses are included within `config.xml`.)
7. Follow any version-specific instructions found in the Release Notes.

Method 3 - Without a FISHEYE_INST Directory, but would like to set one up

1. Shut down the old FishEye instance if it is running.
2. Set up the `FISHEYE_INST` environment variable, then create the FISHEYE_INST directory on your filesystem.
3. Copy the `/OLD_FISHEYE/config.xml` to `/FISHEYE_INST`.
4. Copy the `/OLD_FISHEYE/var` directory to `/FISHEYE_INST`.
5. Download Crucible.
6. Extract the new Crucible archive into a directory such as `/NEW_FISHEYE/`.
7. Start Crucible from the new installation by running `NEW_FISHEYE/bin/run.sh`. (Use `run.bat` on Windows).
8. Follow the initial configuration steps outlined below.
9. If you configuration is not automatically picked up and you cannot see your existing repositories, check your Administration > Sys-Info page, where you will see information about FISHEYE_HOME and FISHEYE_INST. Check your FISHEYE_INST is pointing to the right directory.

Crucible 2.0 Beta Reviewer's Guide

Crucible 2.0 Beta is a public development release leading up to **Crucible 2.0**. For all production use and testing of Crucible, please use the latest official release.

Do not use in production.
Beta releases should not be used in production environments.

Please also take note of the following information:

- Beta releases are not safe — Beta releases are snapshots of the ongoing Crucible 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.
  - FireFox 3 and Safari are the only browsers supported.

Thank you for your interest in the Crucible 2.0 Beta. This page contains some direction on what is ready for testing, what the known issues are and how you can submit feedback.

Known Issues

This is a list of known issues with the Crucible 2.0 Beta; please do not raise requests related to these as solutions for them are already under way.

- REST API updates are not fully functional; you can't access various features from the IDE Connectors or other technology that depends on REST. The features affected include marking comments as read, Iterative Reviews and Activity Streams. Also, JSON support is alpha at this stage.
- JIRA sub-tasks integration will not work on JIRA instances where the JIRA General Setting "allow unassigned issues" is set to 'OFF'.
- Sorting functionality is only partially functional; when you are trying to sort content — such as review lists on the reviews page, content on the dashboard and project dashboard — the sorting of content by name, date and so on only applies to the current page of results. To mitigate this, narrow down your searches so that you only have one page of results. This will be revised to have server-side sorting.
- You can't create reviews with files or changesets from multiple repositories.

Features Ready For Testing

The following features in the Crucible 2.0 Beta are relatively hardened and using these thoroughly will help contribute to the final product.

- Iterative Reviews; create a review on multiple revisions of a changeset, to see the history and evolution of the code in-line.
- Activity Streams; see review activity, code commits and JIRA activity (when properly configured) on the Dashboard.
- External Database Support; You can now store Crucible's internal data in a MySQL or PostgreSQL database, as an alternative to the built-in HSQLDB.
- Crucible can assist you in updating reviews by suggesting changesets that are likely related to your reviews.
- Reviews can now have a Due Date. Reviews that are overdue will show up in red on the reviewer's dashboards to minimise the chance of reviews getting stale.
- Stars; add colleagues, reviews and files to your favourites list, then view updates related to them as a feed.
- Charlietars; the automatically generated Crucible avatars should work smoothly. Also, you can sign up to Globally Recognised Avatars (http://www.gravatar.com) to upload a profile image and use that instead of the Charlie image.
- Scheduled Backups; you can now easily set Crucible to backup data periodically using a simple calendar function in the user interface.

Submitting feedback

To submit feedback on the Crucible 2.0 Beta, please use the Crucible Forums.

JIRA Integration in Crucible 2.0 Beta

Crucible 2.0 Beta is a public development release leading up to **Crucible 2.0**. For all production use and testing of Crucible, please use the latest official release.

Do not use in production.
Beta releases should not be used in production environments.

Please also take note of the following information:

- Beta releases are not safe — Beta releases are snapshots of the ongoing Crucible development process. As such:
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  - Features in development releases may be incomplete, or may change or be removed before the next full release.

This page contains instructions for setting up JIRA integration in Crucible.

JIRA is Atlassian's issue tracking product, which can be used to manage projects and associated work.

Before you begin: Ensure that you configure your JIRA instance to enable sub-tasks, enable unassigned issues and allow Remote API access . The instructions on this page have been tested with JIRA 3.13.4.

On this page:

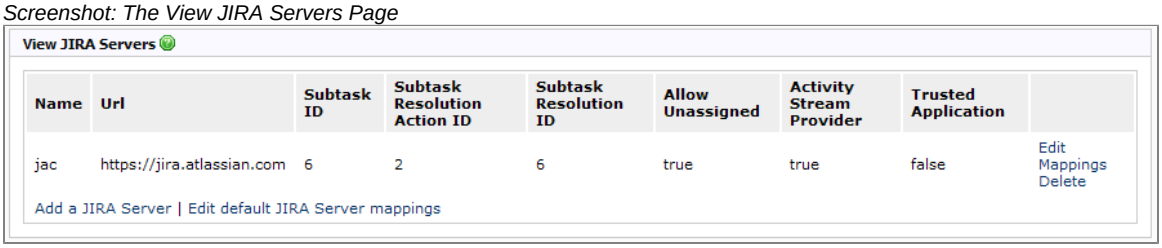
- Opening the Administration Screen for JIRA Integration
- Adding a New JIRA Server
  - Obtaining the Subtask Type ID
  - Obtaining the Subtask Resolution ID and Subtask Resolution Action ID
- Editing Default JIRA Server Mappings
- Operations on Existing Servers
  - Edit settings for an existing JIRA server
  - Edit mappings for an existing JIRA server
  - Delete an existing JIRA server

JIRA issues can be viewed in the main Dashboard view in Crucible. This requires you to enter details on the required JIRA server(s) via the Crucible administration screens.

Opening the Administration Screen for JIRA Integration

To set up JIRA integration, open the Administration screen and then click '**JIRA Servers**' under the '**Global Settings**' sub-menu on the left navigation bar. The '**View JIRA Servers**' administration page opens.

Screenshot: The View JIRA Servers Page



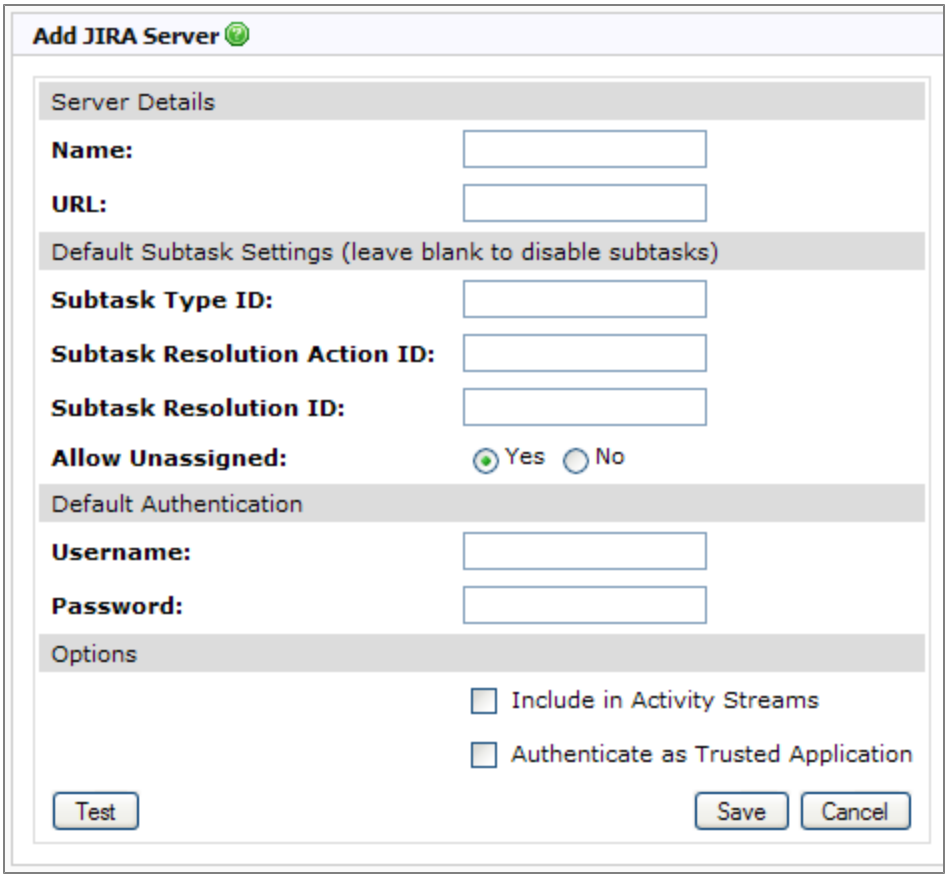
On the View JIRA Servers page, you can carry out a number of operations as listed on this page.

Adding a New JIRA Server

To add a new JIRA server from the View JIRA Servers page, click '**Add JIRA Server**'.

The '**Add JIRA Server**' page opens.

Screenshot: The Add JIRA Server Page



A number of fields and options must be filled out or selected on this page. See the table below for information on each field.

Option	Type	Description	Required
Name	Text Field	A descriptive name for the JIRA server.	Yes
URL	Text Field	The Internet address of the JIRA server.	Yes
Subtask Type ID	Number	This is required to enable creating issues from a Crucible comment.	No
Subtask Resolution Action ID	Number	This is required to enable creating issues from a Crucible comment. See below for instructions on obtaining this number.	No
Subtask Resolution ID	Number	This is required to enable creating issues from a Crucible comment. See below for instructions on obtaining this number.	No
Allow Unassigned	True/False Button	Allow unassigned sub-tasks.	No
Username	Text Field	The username of an account on the JIRA instance (All activity that takes place will be attributed to this user, unless using the Trusted Application setting).	Yes
Password	Text Field	The password for the account on the JIRA instance.	Yes
Include in Activity Streams	Check Box	Allows JIRA information to appear on the Dashboard.	No
Authenticate as Trusted Application	Check Box	Allows the system to interface with JIRA and let users log on with their own accounts (and use their own accounts on the JIRA server. See complete FishEye documentation and complete JIRA documentation.	No

Once you've filled out the necessary fields, click '**Test**' to ensure that your details are correct. If you have a positive message return from the test, click '**Save**'.

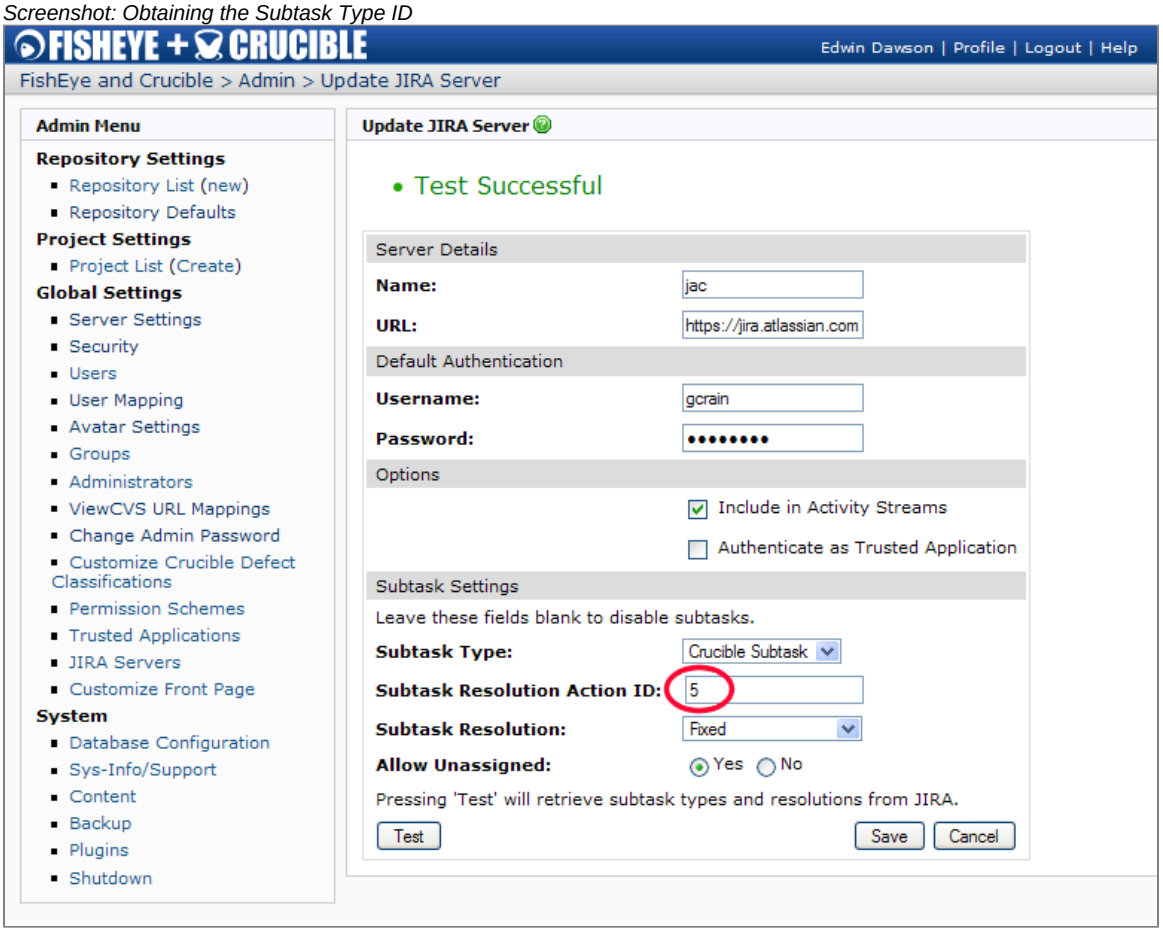
Obtaining the Subtask Type ID

This value is required (along with the Subtask Resolution ID and Subtask Resolution Action ID) to enable creating issues from a Crucible comment. This is the subtask type that will be created when you create a JIRA subtask in Crucible.

To obtain this value, carry out the following steps.

1. Enable sub-tasks on your JIRA instance from the '**JIRA Administration' > '*Sub-Tasks**' page. See the JIRA documentation for details on this step.
2. Return to the FishEye Administration screen and then click '**JIRA Servers**' under the '**Global Settings**' sub-menu on the left navigation bar. Click '**Edit**' next to the JIRA server you have configured.
3. Your JIRA server's basic details should appear. Click '**Test**' once again. The field for Subtask Type ID will change to a drop-down menu, showing the available subtask types. Choose the correct one.
4. Save your Crucible configuration settings.

Screenshot: Obtaining the Subtask Type ID



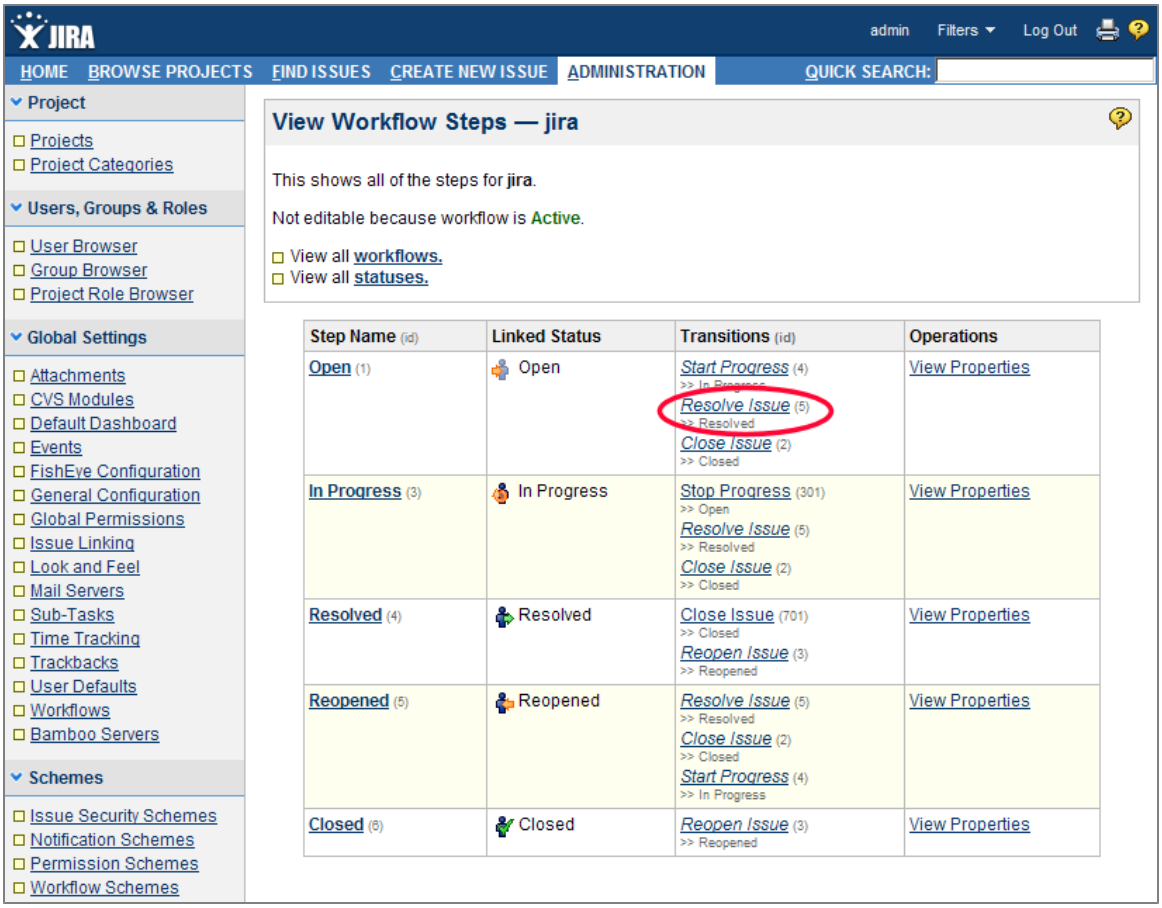
Obtaining the Subtask Resolution ID and Subtask Resolution Action ID

These values are required (along with the Subtask Type ID) to enable creating issues from a Crucible comment.

To obtain these values, carry out the following steps.

1. Open your JIRA instance and go to '**Administration**' > '**Workflows**'. The '**Workflows**' screen opens. By default, the '**JIRA**' workflow is shown on screen in a table.
2. Click the '**Steps**' link in the far right table cell. The '**View Workflow Steps — JIRA**' page opens.
3. The '**Subtask Resolution Action ID**' is in the '**Open**' row, under the '**Transitions**' column. Look at the link in that cell named '**Resolve Issue**'. The ID number is shown in brackets next to that heading '**Resolve Issue**' (shown in the screenshot below as 5).
4. Save your Crucible configuration settings.
5. The '**Subtask Resolution ID**' is the '**Resolved ID**' on this page. The ID number is shown in brackets next to the heading '**Resolved**' (shown in the screenshot below as '4'). Note it down and enter it into the Crucible configuration screen.
6. Save your Crucible configuration settings.

Screenshot: Obtaining the Subtask Resolution ID & Subtask Resolution Action ID

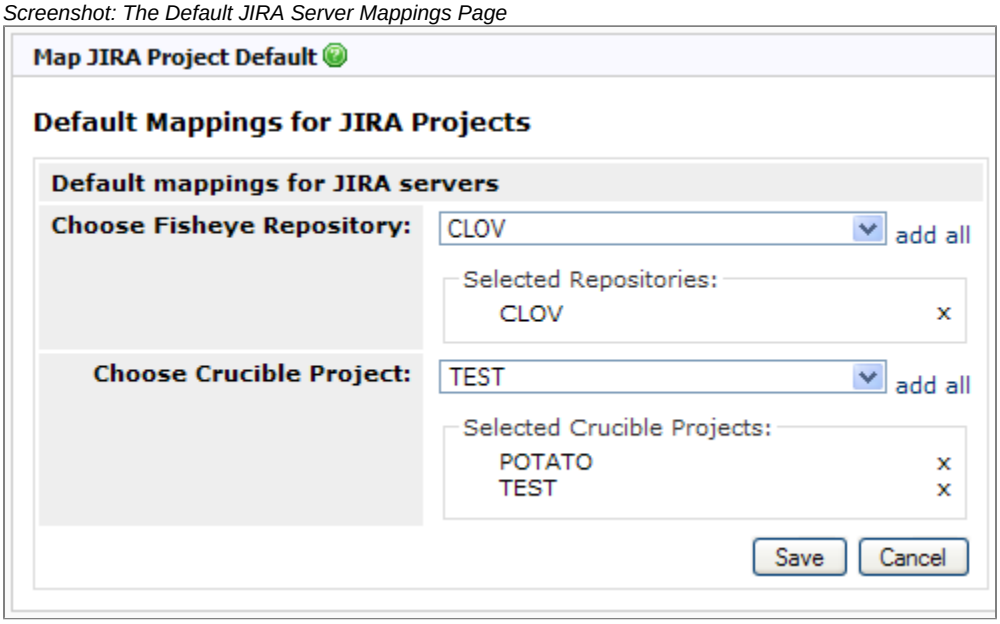


Editing Default JIRA Server Mappings

This setting enables the Crucible feature that shows JIRA information in a dynamic window when you hover the mouse over a JIRA issue key in Crucible. It will also turn every issue key into a hyperlink to that issue in Crucible.

To enable this feature, click '**Edit Default JIRA Server Mappings**' from the View JIRA Servers page. The '**Map JIRA Project Default**' page opens.

Screenshot: The Default JIRA Server Mappings Page



On this page, select the FishEye repositories or Crucible Projects that you wish to associate with all the JIRA servers you have configured for use in Crucible. You can click '**add all**' to quickly include them all in this category. You can remove individual items by clicking the small 'X' marks.

Once you've finished, click '**Save**'.

You should disable any existing Crucible linkers you have set up for JIRA, as they will override this feature and prevent the dynamic dialog box from appearing when you mouse over an issue.

Operations on Existing Servers

Once you have configured an existing JIRA server, there are three main operations you can carry out on it: '**Edit**', '**Mappings**' and '**Delete**'. These options appear on the far right of the screen.

Screenshot: Operations in the JIRA Servers Page

View JIRA Servers

Name	Url	Subtask ID	Subtask Resolution Action ID	Subtask Resolution ID	Allow Unassigned	Activity Stream Provider	Trusted Application	
jac	https://jira.atlassian.com	6	2	6	true	true	false	Edit Mappings Delete

Add a JIRA Server | Edit default JIRA Server mappings

Edit settings for an existing JIRA server

When you click '**Edit**', you can adjust any of the general settings you configured when you first added the server.

Edit mappings for an existing JIRA server

When you click '**Mappings**', a page is loaded that is almost identical to the '**Default Mapping**' screen, but allows you to choose mappings only for that specific JIRA server.

Delete an existing JIRA server

Clicking '**Delete**' will remove the server from the list.

Crucible 1.6 Release Notes

23 September 2008

Atlassian presents Crucible 1.6

Crucible release 1.6 makes it easier to review content that is not in FishEye. Furthermore, Crucible 1.6 can be deployed without FishEye for the first time. Through Crucible's new 'Light SCM' plugins, you can include content in reviews that are not associated with FishEye or even a source control repository. For example, you can review pages directly from Confluence, files on any file system connected to the machine FishEye is running on, and Subversion repositories not connected to FishEye. Crucible now has better support for uploading files for pre-commit review, in addition to the existing support for patches.

Highlights of this release:

- Support for Non-FishEye Repositories
- Confluence Page Reviews
- Shared File System Repositories
- Enhanced Pre-commit Reviews & Image Support
- Multiple Admin Users
- Expanded API
- Plus numerous improvements and bug fixes

DOWNLOAD latest version

Upgrading to Crucible 1.6
You can now download Crucible from here. If upgrading from a previous version, please follow the Upgrade Guide.

Highlights of Crucible 1.6

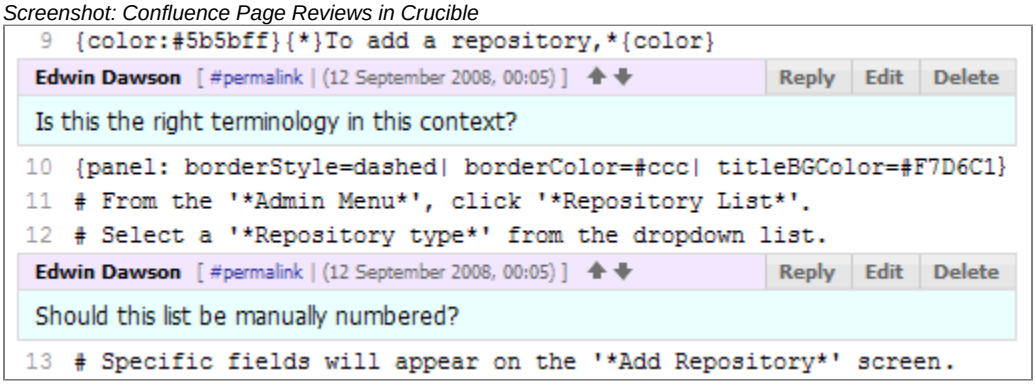
Support for Non-FishEye Repositories

Crucible can now be deployed as a stand-alone application for the first time. With Crucible 1.6, you no longer need a FishEye license or even a source-control repository. Crucible's new *Light SCM plugin* infrastructure already supports Confluence, server file systems, and Subversion repository types. We will be adding GIT and ClearCase in the near future. The Light SCM interface is public and the shipped plugins are open source. As a result, you can extend these plugins or even write your own — great news for plugin developers.

Confluence Page Reviews

Crucible 1.6 allows you to select Atlassian Confluence as a source of material for reviews. In this way, you can use Crucible to easily review the Wiki Markup of pages created in Confluence. Read more.

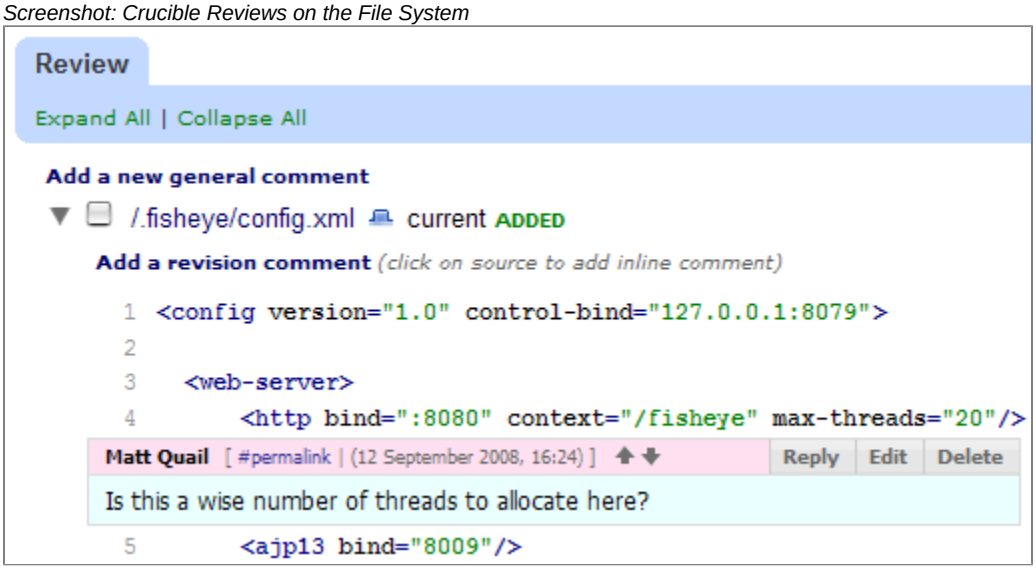
Screenshot: Confluence Page Reviews in Crucible



Shared File System Repositories

You can create a 'repository' for a local or remote directory on the server file system. Teams that are managing documents through a shared file system instead of a source control system can still benefit from peer reviews. Read more.

Screenshot: Crucible Reviews on the File System



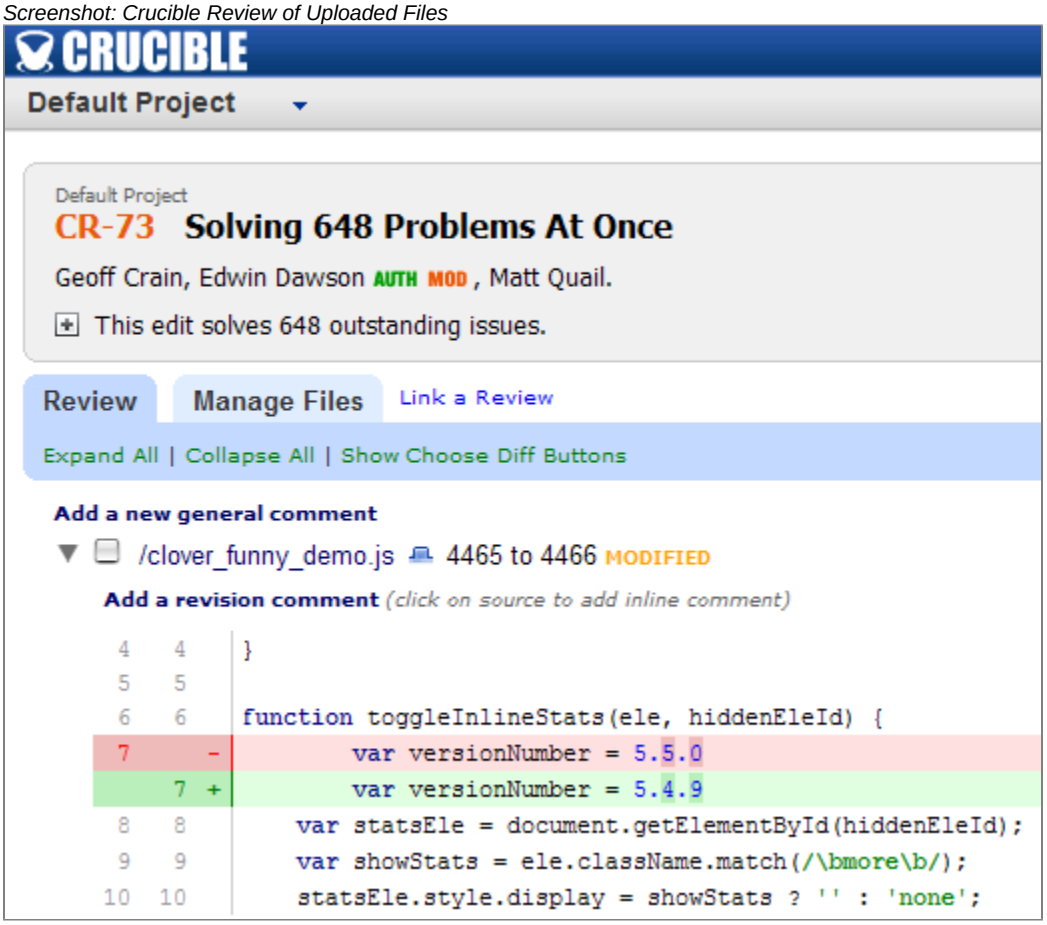
4

Enhanced Pre-commit Reviews & Image Support

In addition to Crucible's patch support, 1.6 enables any file to be uploaded for review. The new upload functionality enables two files to be uploaded and compared in the review window, with diff highlighting. Read more.

Crucible now supports before and after inline image previews.

Screenshot: Crucible Review of Uploaded Files



5

Multiple Admin Users

Crucible now allows the Administrator to grant other users administration privileges. Admin Users can be individually assigned or given privileges through local or remote directory groups. Read more.

6

Expanded API

The Crucible API now allows programmable review creation, along with a host of other additions. Read more.

7

Plus numerous improvements and bug fixes

JIRA Issues (110 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-2348	Recognize URLs and make them clickable		Closed
CRUC-668	We don't update lite SCM revision details if the project does not store revisions		Closed
CRUC-664	remove unecessary transactions from read-only REST requests		Closed
CRUC-663	blank page when a non creator/author/moderator tries to preview a draft review		Closed
CRUC-662	Updating general comments in the REST api has a permission flaw		Closed
CRUC-661	On the Crucible/Fisheye dashboard Projects are displayed even if the user has no access to enter those projects (e.g. anonymous users).		Closed
CRUC-659	Email notifications should be more easily threaded by mail clients		Closed
CRUC-654	improve webwork/jsp error handling		Closed
CRUC-647	improve ReviewManager.countStatesOn query		Closed
CRUC-646	Disabling and reenabling a plugin gives 'javax.el.ELException: org.springframework.osgi.service.importer.ServiceProxyDestroyedException: service proxy has been destroyed'		Closed
CRUC-645	Optimise DB queries		Closed
CRUC-640	Shutdown server documentation		Closed
CRUC-639	Admin password documentation		Closed
CRUC-635	Can't save changes to statement of objectives when at .../{id}/confirmApprove		Closed
CRUC-634	ReviewData should not include repoName		Closed
CRUC-632	Help text not updated after saving a review...		Closed
CRUC-626	Debug Logging Documentation		Closed
CRUC-623	SvnChangeLogBrowser.listChanges() in LiteSVN fails when processing revisions that are above the repo's configured base path		Closed
CRUC-622	Improve performance of querying for review details		Closed
CRUC-615	Make sure everything has a help link		Closed
CRUC-610	Removing revisions from review that have draft comments fails without an explanation		Closed

CRUC-608	Show a list of LightSCM repositories in admin		Closed
CRUC-602	Improve the efficiency of checking whether a review has been completed by all reviewers		Closed
CRUC-600	REST API should return error when non-existent filter used		Closed
CRUC-598	Emails always include a "Summary" section		Closed
CRUC-597	Extend the Remote API to allows reviews to be deleted		Closed
CRUC-594	Review description preview on dashboard swallows new lines from the review description		Closed
CRUC-592	Filter names used in Cru do not match the menus		Closed
CRUC-591	renaming a confluence repository adds a new one instead of editing		Closed
CRUC-589	Change revisionData getAdded/Removed lines an Integer		Closed
CRUC-588	Search Subtab in Review->Manage Files throws PropertyNotFoundException for all searches		Closed
CRUC-586	Remove Delete option from project drop down		Closed
CRUC-579	Changing repository when certain review tabs are selected causes NPE/bad redirect		Closed
CRUC-574	Allowed Review Participants left blank means what?		Closed
CRUC-566	lightscm package should not be "fisheye"		Closed
CRUC-565	need get bulk version of getRevisionData() in SCMRepository		Closed
CRUC-563	Toggle side-by-side and show per frx diff options on review page		Closed
CRUC-562	REST API: createReview does not set Moderator and author correctly		Closed
CRUC-561	anchors to some comment types don't work		Closed
CRUC-560	REST-API: provide comit type information - esp. deleted file status		Closed
CRUC-556	Next/previous comment arrows do not jump between file and general comments		Closed
CRUC-554	Upgrade to non-beta atlassian-plugins		Closed
CRUC-551	Confluence Light SCM plugin dependencies belong in plugin		Closed
CRUC-549	Adjust IFRAME size when the admin page is resized		Closed
CRUC-548	REST API: Handle allowReviewersToJoin flag on review		Closed
CRUC-547	Make Repository source check if the engine is available.		Closed

CRUC-545	NPE Closing Review		Closed
CRUC-542	Use content manager to retrieve detailed file revisions		Closed
CRUC-540	make metrics-config.xsd available online		Closed
CRUC-539	Serious: "Next comment" does not always work right		Closed
CRUC-526	Space character in installation path to Crucible disables remote API		Closed
CRUC-519	Added files display "no change"		Closed
CRUC-518	Crucible does not seem to be incrementally updating the FishEye cache		Closed
CRUC-516	REST API: Return detailed information on review in one call - items, comments, reviewers, available actions		Closed
CRUC-511	Added files when stored show "No Change"		Closed
CRUC-507	Confluence: implement change set paging		Closed
CRUC-505	Add "Search for Review" functionality to Crucible remote API		Closed
CRUC-504	Confluence: get revision comments		Closed
CRUC-499	Create separate API jar		Closed
CRUC-496	Document store revisions with review		Closed
CRUC-494	Don't make source type visible in URLs or elsewhere		Closed
CRUC-488	clicking summarise without clicking close makes the review 'disappear' from the workflow		Closed
CRUC-487	Page title says "dead" for a review that has been abandoned		Closed
CRUC-484	you can link a review to itself		Closed
CRUC-479	A comment which was a defect, but is no longer, still shows the defect attributes		Closed
CRUC-478	Ability to specify that Branches are not supported		Closed
CRUC-472	Changing tab while editing review deletes details		Closed
CRUC-469	Sort list of repositories alphabetically on "Add project" page		Closed
CRUC-461	Line comments are sometimes rendered twice		Closed
CRUC-457	show authorname next to revision in revision dropdowns		Closed
CRUC-456	crucible doesn't create default permission scheme when creating a blank db		Closed

CRUC-455	creating a review from a changeset with a non-existent repo keeps redirecting to the login screen		Closed
CRUC-453	Allow adding a screenshot as an attachment to a review		Closed
CRUC-439	Invite to review		Closed
CRUC-438	Not sending email notifications after Crucible and Fisheye upgrade		Closed
CRUC-436	create 'remove all revision' link for all tabs under 'manage files'		Closed
CRUC-433	REST API: Get review list based on predefined and custom filters		Closed
CRUC-422	Create Schema Upgrade to remove foreign key constraint as reqd. by delete project work		Closed
CRUC-419	Typo in email "reviewers are now complete"		Closed
CRUC-407	Minimal OSGi Infrastructure		Closed
CRUC-404	Turn FE Off When only Crucible licence is present		Closed
CRUC-402	Provide Plugin Authors with somewhere to store properties		Closed
CRUC-401	Real Admin Users		Closed
CRUC-400	Add Configuration UI to SVN Plugin, and Polish		Closed
CRUC-399	Optionally Store Files for all FileRevisions		Closed
CRUC-397	Stored FRX Create UI		Closed
CRUC-396	Stored FRX Data Impl		Closed
CRUC-394	Add Light SCM Revisions to Reviews		Closed
CRUC-392	Filesystem Light SCM Plugin		Closed
CRUC-391	Default Repository for a Project can be a Light SCM repo		Closed
CRUC-389	Light SCM Plugin instances appear in source/repository dropdowns		Closed
CRUC-388	Subversion LSCM plugin		Closed
CRUC-387	Confluence LSCM Plugin		Closed
CRUC-386	Modify File Browser to Use Light SCM Plugins		Closed
CRUC-385	Modify Changeset Browser to use Light SCM Plugins		Closed
CRUC-384	Create Light SCM Module Type		Closed

CRUC-381	Admin Pages for Plugins		Closed
CRUC-373	Add General Comment via REST API		Closed
CRUC-362	Return replies to comments via API		Closed
CRUC-361	Project RSS feed		Closed
CRUC-349	REST method /rest-service/reviews-v1/CR-1/comments returns HTTP 500 error		Closed
CRUC-303	Add REST method to retrieve all reviews which involve a given file		Closed
CRUC-302	Add REST methods to allow review creation		Closed
CRUC-297	Upload files for review (not patches)		Closed
CRUC-292	javax.xml.bind.JAXBException generated when invoking the getGeneralComments web service method		Closed
CRUC-244	Add revisions not diffs to a review		Closed
CRUC-227	Cannot delete projects		Closed
CRUC-186	Allow an abandoned review to be deleted		Closed
CRUC-150	Allow the email address in the from section of the notification emails to be the user's actual email address		Closed
CRUC-18	Load All Users from Crowd/LDAP/etc		Closed

Crucible 1.6 Changelog

On this page:

- From 1.6.5.a to 1.6.6
- From 1.6.4 to 1.6.5.a
- From 1.6.3 to 1.6.4
- From 1.6.2.1 to 1.6.3
- From 1.6.2 to 1.6.2.1
- From 1.6.1 to 1.6.2
- From 1.6.0 to 1.6.1

From 1.6.5.a to 1.6.6

10 February 2009

This release updates the supporting libraries for Crucible plugins. This change enables the use of the new Git Crucible plugin for performing code reviews against a Git repository.

The Git plugin is not currently bundled with Crucible but may be downloaded from the Atlassian Maven repository here: https://maven.atlassian.com/browse/com.atlassian.crucible.plugins/crucible-git-scm-plugin/1.0

The Git plugin should be considered an early access release. It allows reviews to be performed against a local Git repository clone. Note that the plugin does not update the cloned repository automatically. For more information on the Git plugin, please see the documentation.

We are very interested in any feedback users have on the Git Crucible plugin. Please post feedback in the Crucible forums.

Full list of issues fixed in this release:

JIRA Issues (2 issues)			
Key	**Summary**	**Priority**	**Status**

CRUC-1406	test		Closed
CRUC-900	GIT SCM Module		Closed

From 1.6.4 to 1.6.5.a

22 December 2008

This release contains a number of improvements and bug fixes.

Full list of issues fixed in this release:

JIRA Issues (6 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-947	Patch context displays Index Out of bounds exception		Closed
CRUC-938	doco that we require jdk 1.5.x and 1.6.0u4+		Closed
CRUC-928	Crucible 1.6.4 REST API fails under JavaSE 6		Closed
CRUC-886	Context lines can be duplicated with Patch diff options		Closed
CRUC-867	file names with "--" in their name will not be rendered properly in crucible reviews		Closed
CRUC-683	Add a "expand all unchecked" option to top of review screen		Closed

From 1.6.3 to 1.6.4

20 November 2008

This release contains bug fixes and minor improvements, and includes the new plugin points developed for AtlasCamp 2008.

Full list of issues fixed in this release:

JIRA Issues (27 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-926	GET /reviews-v1/<review id>/reviewitems/X fail to return reviewitems of certain types		Closed
CRUC-862	Crucible 1.6.4 documentation updates		Closed
CRUC-846	Publish new CAC pages on 1.6.4 release		Closed
CRUC-844	Cant update versions of new files with comments		Closed
CRUC-837	P4 Lite SCM plugin does not repect paths when listing changesets		Closed
CRUC-835	Reviews created in 1.6.2 with revisions of unknown content type (text) show as binary in 1.6.3 and never updated		Closed
CRUC-834	Different background color for user comments		Closed
CRUC-832	Can't add new revision of a file already under review if commented on - even if comment is deleted		Closed
CRUC-827	upgrade to hsql 1.8.0.10		Closed
CRUC-826	error when sending review to moderator		Closed
CRUC-821	change all references of 'summary' to 'all comments'		Closed

CRUC-820	Create JSR-170 (JackRabbit) SCM Plugin as Code Example		Closed
CRUC-809	File upload of a single text file gives ava.lang.Exception: Not enough revisions to diff		Closed
CRUC-802	File Upload from the Manage Files area drops the path info on submit		Closed
CRUC-793	File in Review shows up as "Updating" and does not show source due to a Runtime Exception thrown by the SVNlite plugin		Closed
CRUC-788	add REVISION_LINK and CHANGESET attributes to light scm plugins		Closed
CRUC-787	No authentication required to retrieve user list in API		Closed
CRUC-778	rework for CR-FE-696 FE-703 - making quicksearch respect quoted queries		Closed
CRUC-765	When in Crucible, a AJAX timeout destroys the Crucible page		Closed
CRUC-753	Deadlock in HSQL?		Closed
CRUC-748	Add inline diff option bar to patch reviews		Closed
CRUC-727	Configuring a plugin causes IE to hit 100% CPU and crashes the browser		Closed
CRUC-582	Provide detailed information for cvs and light SCM repos via REST		Closed
CRUC-568	Auto Suggest Reviewer		Closed
CRUC-398	Stored FRX REST API		Closed
CRUC-328	Reviewer Auto Suggest		Closed
CRUC-255	Users lists unsorted when Allowed Participants restricted by Group		Closed

From 1.6.2.1 to 1.6.3

5 November 2008

This release rolls together several improvements and bug fixes.

- Auto-save draft comments.
- Performance improvements when using Light SCM repositories.
- Bundle a Perforce Light SCM implementation.
- Various REST API improvements, including Conditional-Get support, improved error handling and revised review searching, which now allows any criteria to be omitted.
- JSON serialization has been added to the REST API, allowing the use of JSON in REST API calls. This feature is in an experimental state at present. Please report any issues discovered.

Please be aware of the upgrade notes regarding Light SCM repositories (this does not impact FishEye repositories):

- The configuration storage for the bundled File-system, Confluence and Subversion Light SCM plugins changed. Once you have upgraded to 1.6.3 you will need to re-add those repositories. Please read the Crucible 1.6.3 Upgrade Guide.
- The Light SCM plugin API was changed in this release. Light SCM plugins compiled against the old API will not work in this release of Crucible.

Full list of issues fixed in this release:

JIRA Issues (78 issues)			

Key	Summary	Priority	Status
CRUC-785	any screenshots of scroll to changeset for doco		Closed
CRUC-784	filesystem lightscm plugin should not use "current" as the revision name		Closed
CRUC-777	rework for CR-FE-697 CRUC-728		Closed
CRUC-776	rework for CR-FE-702 CRUC-624		Closed
CRUC-775	Create unit tests that verify JSON serialization		Closed
CRUC-773	Add JSON support to Release Notes		Closed
CRUC-772	Add documentation on how to use JSON to Confluence		Closed
CRUC-771	Improve the l&f of manage files		Closed
CRUC-769	Add JSON support to REST		Closed
CRUC-768	Upgrade to Jersey 1.0, and include jersey-spring for possible future springification		Closed
CRUC-767	Autosave race condition		Closed
CRUC-764	Add this change to the release notes		Closed
CRUC-763	DELETE operations in Crucible REST should return status 204 "No Content" to be more RESTful		Closed
CRUC-759	Improve Confluence Light SCM Performance		Closed
CRUC-758	make scroll to changeset look better		Closed
CRUC-757	Custom filter object in Crucible REST should not use primitive values		Closed
CRUC-752	[crucible] in the closed review email subject		Closed
CRUC-750	Plugin config change will affect user configs		Closed
CRUC-749	Get Selenium Tests working		Closed
CRUC-747	Auto save draft comment needs to delete the draft on cancel		Closed
CRUC-744	summary email includes deleted comments		Closed
CRUC-742	Images in patches don't work		Closed
CRUC-739	Getting error popup on review due to confusion about a directory.		Closed
CRUC-736	Automatically save draft comments (autosave)		Closed
CRUC-735	Error message in Crucible file management is misplaced		Closed
CRUC-733	Crucible without FishEye still says FishEye in titles		Closed
CRUC-729	Can't review binary file becoming textual		Closed
CRUC-728	add CSID and SOURCE_URL to lightSCM details		Closed
CRUC-725	Light SCM allows creation of repos with the same name as Fisheye repos		Closed
CRUC-724	Implement Light SCM plugin for Perforce		Closed
CRUC-723	Converting Crucible reviews from FishEye repo to LightSCM SVN fails to load revisions		Closed
CRUC-722	Remove the use of deprecated CrucibleRevision.getSource()		Closed
CRUC-713	Change REST return code from 200 to 201 "Created" for several POST actions		Closed
CRUC-712	Create unit tests for REST		Closed
CRUC-711	document Alt+Click for selecting review text		Closed
CRUC-710	You do not have permission to see all the search results, seen in (my) to summarise and out for review		Closed

CRUC-709	Refactor exception handling issues		Closed
CRUC-708	Change REST filter retrieval from POST to GET		Closed
CRUC-706	Retrieving non-existing metrics version in REST gives 500 "Internal Server Error", should be 404		Closed
CRUC-705	Create RestXxxServices via Spring		Closed
CRUC-702	summary email documentation		Closed
CRUC-701	Support Perforce repositories in RepositoryService		Closed
CRUC-700	add maybe-details and maybe-filehistory to FileSummary		Closed
CRUC-699	Revision Details should be a map		Closed
CRUC-698	maybe-details provided by SCMs are not used		Closed
CRUC-697	Change ManageFiles tab so that it does not require so much information from the SCM		Closed
CRUC-696	Address performance problems in LightSCM plugin API		Closed
CRUC-695	Crucible REST should throw an exception when adding changesets to reviews that already have comments		Closed
CRUC-694	Adding changesets on open reviews messes up the in-line comments		Closed
CRUC-693	Still cannot delete projects		Closed
CRUC-691	Implement Conditional Get in REST API		Closed
CRUC-689	Revision details missing from choose diff dropdown		Closed
CRUC-688	FR_EXTRA.FRX_ORDER needs a unique constraint		Closed
CRUC-687	no comment commit message tooltip		Closed
CRUC-680	Changeset dates are wrong		Closed
CRUC-679	Add xwork action that returns the text summary (for copying and pasting).		Closed
CRUC-678	Add send summary button and form		Closed
CRUC-677	Update summary template to include comments		Closed
CRUC-671	Create review from changeset gives HTTP 500		Closed
CRUC-670	Improve REST error reporting (HTTP return codes)		Closed
CRUC-667	re address update of revision details		Closed
CRUC-665	Correct documentation for REST API for getting file information		Closed
CRUC-658	Scroll To: box for changelogs		Closed
CRUC-656	Previously deleted files show as having an old version in a review when they are added again		Closed
CRUC-655	Downloaded files do not have the correct file name		Closed
CRUC-653	[admin] adding a "default reviewer" incorrectly adds an "allowed reviewer" in some cases		Closed
CRUC-627	make stored reviews viewable when the source isn't available		Closed
CRUC-624	XML Parsing Error from Crucible Review Service using allReviews filter		Closed
CRUC-536	Improper code colorization for C++		Closed
CRUC-529	Have a way to select text in source windows		Closed
CRUC-509	Add info about IDE integration in Web UI		Closed
CRUC-486	Invalid rendering of Search Comments report (table part)		Closed

CRUC-475	Create documentation on creating reviews using remote API		Closed
CRUC-470	Summary Email Improvements		Closed
CRUC-395	Stored FRX		Closed
CRUC-383	Maven Archetype for plugin developers		Closed
CRUC-380	Light SCM		Closed
CRUC-327	Copy and paste is not working		Closed

From 1.6.2 to 1.6.2.1

24 October 2008

This release fixes a problem in 1.6.2 when running Crucible on Windows. Due to a file-lock issue, the upgrade script in 1.6.2 could not start.

- CRUC-781 Upgrade from 1.6 to 1.6.2 fails for windows machines.

From 1.6.1 to 1.6.2

21 October 2008

This release fixes a bug in the way Crucible stores review data. This bug was introduced in Crucible 1.6.0. **We strongly recommend all 1.6.0, 1.6.0-beta and 1.6.1 users immediately upgrade to this release.**

If this bug occurs in your Crucible instance, you will find that review data created after that point will be corrupt. If you find that is the case please contact Crucible support for assistance.

- CRUC-743 Switch from CACHED tables mode back to memory table.

From 1.6.0 to 1.6.1

24 September 2008

This is a bug fix release.

- Crowd 1.3 users will need to upgrade to Crowd 1.4.4 or later due to an incompatibility with this version of Crucible.
- CRUC-673 NPE when viewing a review.
- CRUC-674 NPE when closing a review.

Crucible 1.6.3 Upgrade Guide

Upgrade Notes

- The configuration storage for the bundled File-system, Confluence and Subversion Light SCM plugins changed. Please follow the procedure below.
- The Light SCM plugin API was changed in this release. Light SCM plugins compiled against the old API will not work in this release of Crucible.

Upgrade Procedure

Due to a configuration change, you will need to delete and re-add your LightSCM repositories.

1. Before you shut down Crucible, take a note of your Light SCM configuration. You can view this configuration in the **Repository List** Admin page, in the **LightSVN**, **Confluence** and **File System** sections.
2. Follow the general instructions on upgrading Crucible.
3. While Crucible is shut down, delete the `confluence`, `svn` and `filesystem` config files in `FISHEYE_INST/var/plugins/user`.
4. Once Crucible has been restarted, re-add the Light SCM repositories from step 1.

Crucible 1.5 Release Notes

14 April 2008

Atlassian presents Crucible 1.5

Crucible release 1.5 brings new enhancements that make your code review activities quicker and easier. The all-new per-project page consolidates the display of work done on a particular goal or product, while filtered search for defects and comments provides rapid access to Crucible content that you need to see, now.

Highlights of this release:

- Project Dashboard
- Filtered comments & defects search, with statistical summary
- Customisable email templates
- Improvements to Crucible Plugin API beta
- Plus numerous improvements and bug-fixes

DOWNLOAD latest version

Upgrading to Crucible 1.5
You can now download Crucible from here. If upgrading from a previous version, please follow the Upgrade Guide.

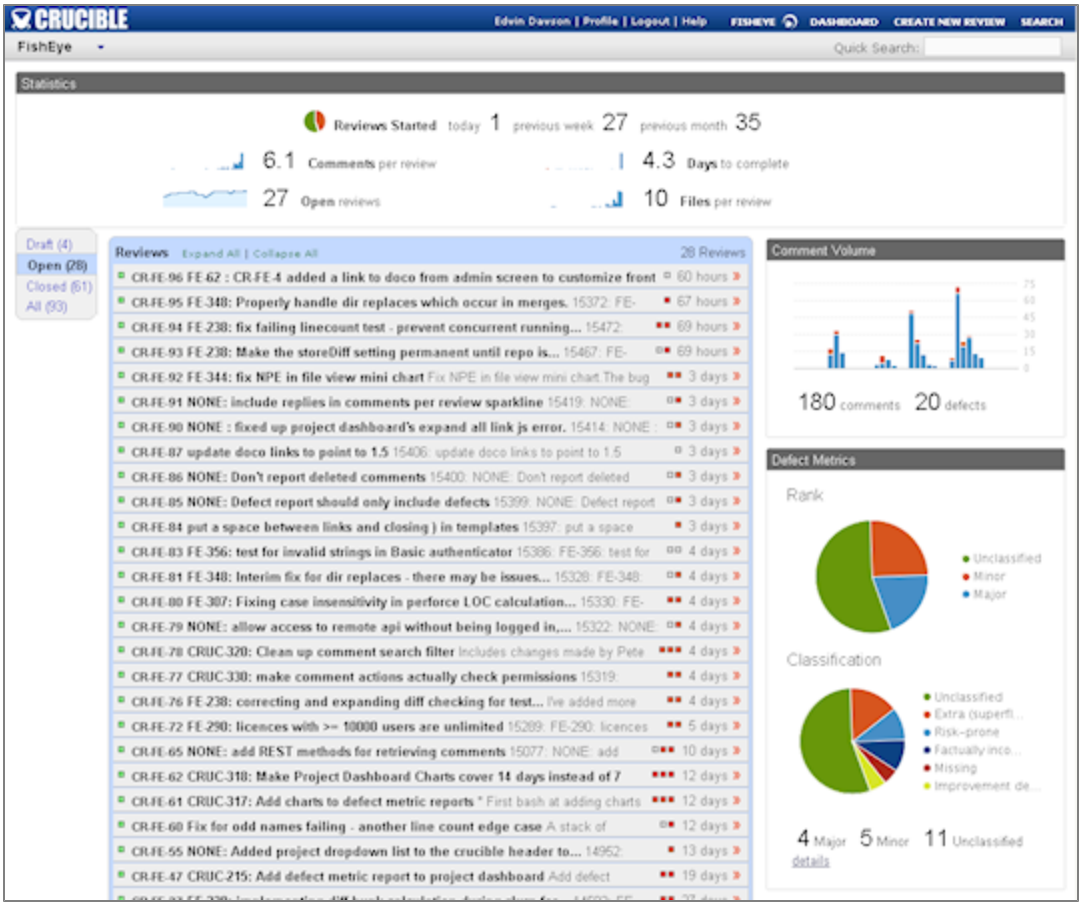
Highlights of Crucible 1.5

1

Project Dashboard

Crucible 1.5 introduces the Project Dashboard, which allows you to see open reviews that belong to a given project, presented with additional project-related data and graphs.

Screenshot: Crucible Project Dashboard

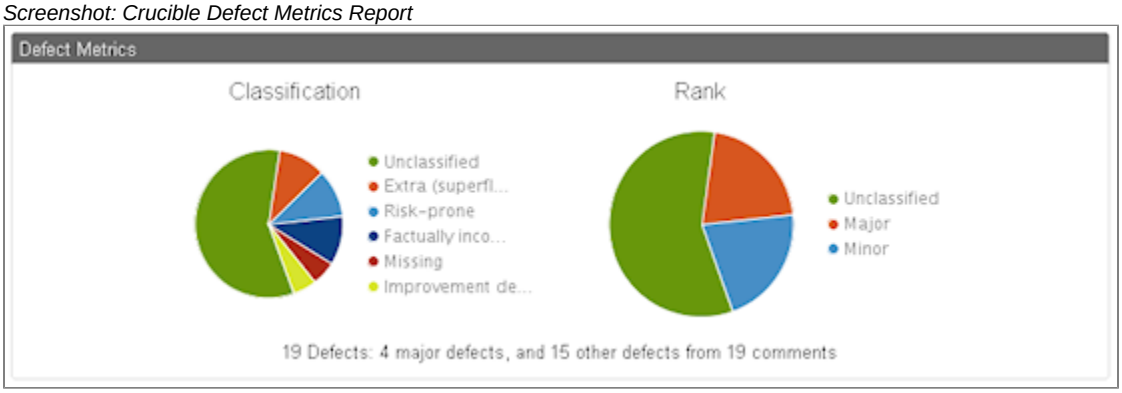


2

Filtered comments & defects search, with statistical summary

Defects and comments are now searchable, easing the difficulty of finding a particular piece of work or revision (and its relevant comments). These search results now also show a very useful statistical summary. Also, a new defect metrics report is available.

Screenshot: Crucible Defect Metrics Report



3

Customisable email templates

You can now customise the content and appearance of email notifications that get sent to Crucible users. For example you can append a legal

disclaimer, alter the subject line or provide custom header text for all messages.

4

Improvements to Crucible Plugin API beta

Now with REST support and the ability to upload patches, the Crucible Plugin API beta is for Crucible integrators who want to extend Crucible to interoperate with their enterprise infrastructure or processes.

Plus numerous improvements and bug-fixes

JIRA Issues (38 issues)

Key	Summary	Priority	Status
CRUC-344	Defect pie chart on comment search page includes non-defect comments.		Closed
CRUC-332	create a better looking indication icon		Closed
CRUC-324	Add Project Dropdown to Search Pages		Closed
CRUC-323	Create 'Reviews Started' Pie Chart for Project Dashboard		Closed
CRUC-318	Make Project Dashboard Charts cover 14 days instead of 7		Closed
CRUC-314	sidebyside diff line numbers must be aligned to the top		Closed
CRUC-307	Optimize chart queries		Closed
CRUC-299	link to project page		Closed
CRUC-290	Warnings during backup: File does not exist /data/crucible/inst/var/data/crudb/crucible.lck & File does not exist /data/crucible/inst/var/data/crudb/crucible.log		Closed
CRUC-289	permissions are not checked in rss feeds (but are in list html display)		Closed
CRUC-285	"project project" in Permission Screen in admin		Closed
CRUC-283	Escape HTML in Javascript properly		Closed
CRUC-282	Crucible fails to upload patch file with file information that contain blank spaces between file path and timestamp		Closed
CRUC-280	remove debug log from Process Notification		Closed
CRUC-266	let the subject of the email be modifiable via the notification template		Closed
CRUC-260	How to customize the email notification content		Closed
CRUC-248	Configurable email subject line		Closed
CRUC-247	Flag files which have been modified since a review was created		Closed
CRUC-246	Parentheses should be valid URL characters		Closed

CRUC-242	Add RPC call to create review from patch		Closed
CRUC-241	Incorrect dates in RSS feeds		Closed
CRUC-240	Checking box in "manage files" -> "changesets" spins forever		Closed
CRUC-238	Perforce unit tests do not work on Windows platform		Closed
CRUC-232	Address all issues outline here		Closed
CRUC-230	Crucible allows circular review linking and can't delete a review link		Closed
CRUC-226	Title wrong for post-approval in manage files tab		Closed
CRUC-220	permalink for a comment does not work when summarize mode is active		Closed
CRUC-212	Create Project Dashboard page		Closed
CRUC-206	URL recognition in Crucible comment does not always match whole string		Closed
CRUC-201	Allow project to be specified on create review URL		Closed
CRUC-194	Documentation: restoring Crucible backup data		Closed
CRUC-184	When Creating Review From FishEye, Default to Right Project		Closed
CRUC-172	Create 'Getting started with Crucible' document as part of User Guide revisions		Closed
CRUC-162	From field on emails is incorrect or a least deceiving		Closed
CRUC-147	Add Permissions Checks to All Operations on Reviews		Closed
CRUC-128	email notification of review closure prints literal "null" for absent field value		Closed
CRUC-85	Sometimes we need to see differences in UNICODE files.		Closed
CRUC-21	change icon for "View History In Fisheye"		Closed

Crucible 1.5 Changelog

On this page:

- From 1.5.3 to 1.5.4
- From 1.5.2 to 1.5.3
- From 1.5.1 to 1.5.2
- From 1.5.0 to 1.5.1

From 1.5.3 to 1.5.4

1 August 2008

This release contains minor improvements and bug fixes.

JIRA Issues (10 issues)			

Key	Summary	Priority	Status
CRUC-638	How to (easily) add specific changeset to a review		Closed
CRUC-633	How to remove a reviewer from a review		Closed
CRUC-538	Comments weirdly duplicated on occasion		Closed
CRUC-513	If we display no change on a revision, comments made are hidden by default.		Closed
CRUC-503	Upgrade to crowd-integration-client 1.4.4		Closed
CRUC-498	Draft comment replies are deleted when completing review		Closed
CRUC-454	two notifcation emails sent		Closed
CRUC-429	Prevent two projects with same key different case		Closed
CRUC-417	large var/data/crudb/crucible.log		Closed
CRUC-284	AnnotatorTag error: Could not get blame for file		Closed

From 1.5.2 to 1.5.3

23 June 2008

This release contains bug fixes.

JIRA Issues (1 issues)			
Key	Summary	Priority	Status
CRUC-462	"File closed: var\data\data0.bin" after backups		Closed

From 1.5.1 to 1.5.2

27 May 2008

This release contains bug fixes.

JIRA Issues (16 issues)			
Key	Summary	Priority	Status
CRUC-434	'Expand Commented' appears when there are general comments but no revision comments		Closed
CRUC-413	Crucible always creates a new default project after it is deleted		Closed
CRUC-406	Remove 'All Projects' from projects dropdown		Closed
CRUC-405	[Performance] AnnotatorTag can hang in sort loop for (perhaps) large diffs		Closed
CRUC-376	Prevent deletion of default project		Closed
CRUC-371	Comment volume chart reports confusion		Closed
CRUC-370	create action to remove all revisions from a review		Closed
CRUC-363	Remove all Revisions in manager files-> Changesets tab doesn't work		Closed
CRUC-358	Height not respected if less than 144 in defect chart		Closed
CRUC-355	Review Stats Wrong		Closed
CRUC-354	Personal dashboard stats don't match		Closed
CRUC-336	can't search for review keys in quicksearch		Closed

CRUC-335	[CSS] project list a little wonky in IE		Closed
CRUC-262	Urgent : SVNRepository methods are not reenterable		Closed
CRUC-233	Changing or expanding the term - 'Approve'		Closed
CRUC-185	Abandoned Reviews Still Show in FishEye		Closed

From 1.5.0 to 1.5.1

24 April 2008

This release contains bug fixes.

JIRA Issues (9 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-367	LOC exceptions filling Debug log to the tune of 3-6GB per day		Closed
CRUC-364	Starting Crucible 1.5 Spits Lots of Errors Out		Closed
CRUC-357	Sparklines have wrong content type		Closed
CRUC-353	Crucible seems not to be able to handle uploaded git patches		Closed
CRUC-350	javax.servlet.ServletException		Closed
CRUC-333	In IE, "view diff to latest" partially obscured		Closed
CRUC-304	Add REST method to retrieve review items for a given review		Closed
CRUC-291	NullPointerException thrown when invoking the getAllRevisionComments web service method		Closed
CRUC-161	Create document stating when a customer purchases Crucible that they do not need to have the latest version of FishEye		Closed

Crucible 1.2 Release Notes

December 5, 2007.

The Atlassian Crucible team is delighted to present Crucible 1.2.
Crucible release 1.2 brings you a host of popular new features. You can now group your reviews into projects (similar to JIRA projects) and authorise your users via project permission schemes.

New user management screens make the administrator's job a lot easier. The new built-in integration with Atlassian Crowd extends your authentication and authorisation capabilities. You can now include users and groups from one or more Crowd directories, and provide single sign-on (SSO) across Atlassian products plus any other applications that support SSO.

Crucible's integration with JIRA and FishEye is now closer than ever before. Read the details below.

Highlights of this release:

- Reviews grouped into projects
- Customisable permission schemes
- Plugin API
- Enhancements to user management
- JIRA integration
- Crucible 1.2 includes FishEye 1.4

- Plus over 20 improvements and bug-fixes

Responding to your feedback:

8 new feature requests/improvements implemented

9 votes satisfied

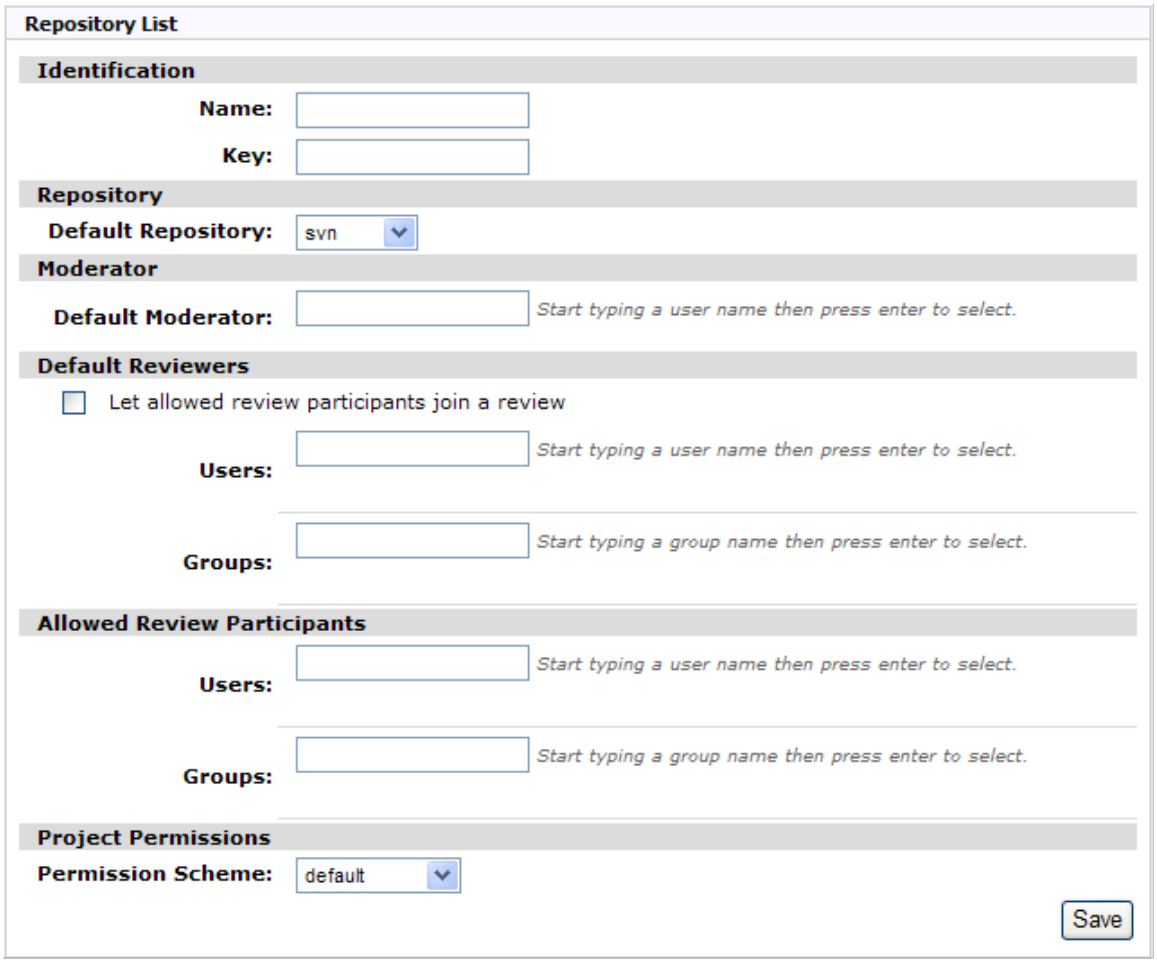
Your [votes and issues|http://jira.atlassian.com/browse/CRUC] help us keep improving our products, and are much appreciated.

Upgrading to Crucible 1.2
You can now download Crucible from here. If upgrading from a previous version, please follow the Upgrade Guide.

Highlights of Crucible 1.2

Reviews grouped into projects

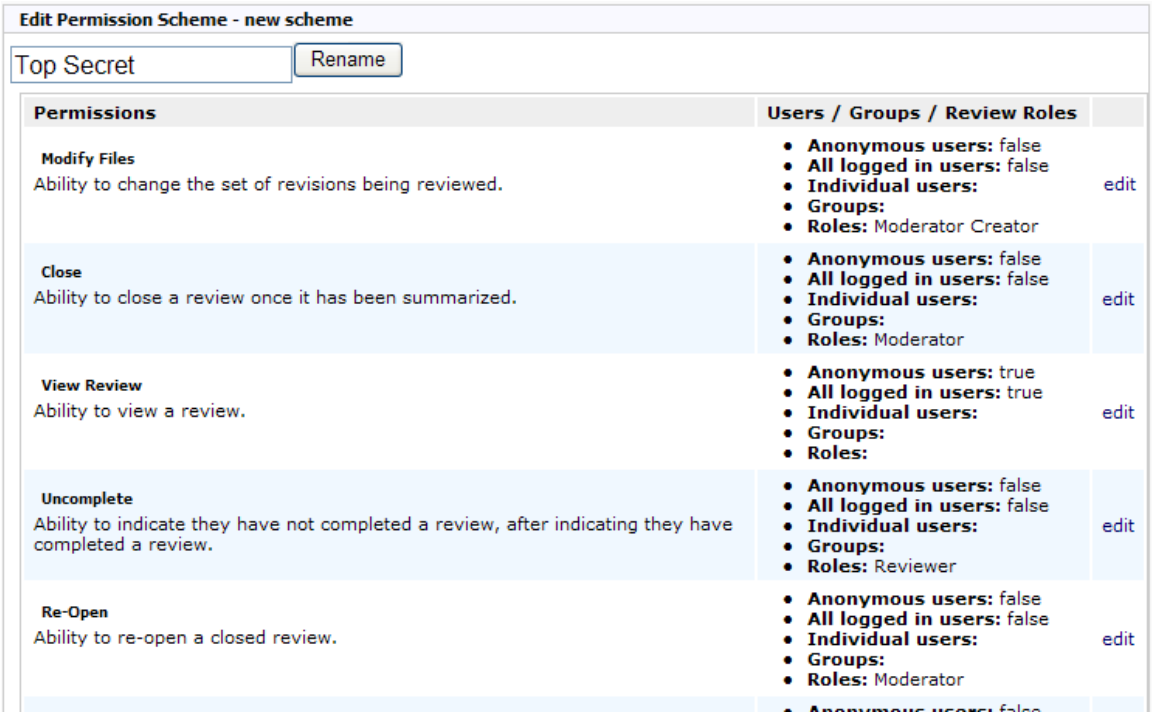
- Crucible now supports projects - every review will belong to a project.
- Each project has a unique key (prefix), modelled on JIRA keys.
- You can add your own projects via the new administration screens.
- You can specify review defaults per project, such as the default users for each role and a default repository.
- And you can restrict the users/groups who can perform a particular role, e.g. only team leaders can be moderators.
- Each project has its own permission scheme (see below).



2

Customisable permission schemes

- A permission scheme is a set of actions which a user can perform (e.g. create a review, approve a review, etc).
- Each project can have its own custom permission scheme — or you can use the same scheme for multiple projects.
- The permission scheme for a review is determined by the review's project.



3

Plugin API

- A new plugin Crucible programming interface (API), in **beta** for this release, supports the following functionality:
  - Create or modify reviews and comments.
  - Add files, patches, etc to reviews.
  - Invoke state transitions.
  - Add custom servlet handlers.
- More information.

4

Enhancements to user management

In Crucible 1.1.2, we introduced support for public signup (self-registration). Now in Crucible 1.2:

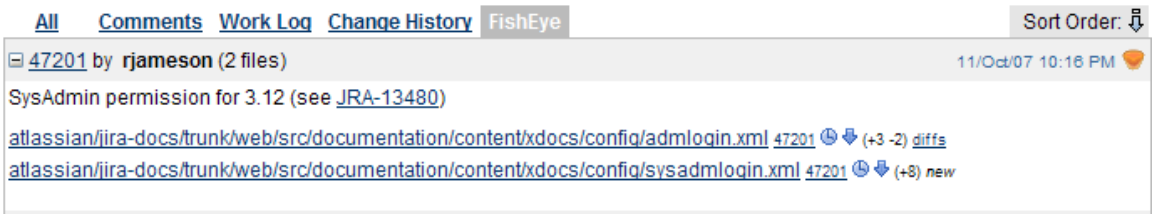
- Administrator can make the email address for self-signups optional.
- Improved user interface makes user administration easier.
- Groups are supported.
- Read the FishEye documentation.

5

JIRA integration

The new version 1.2 of the FishEye-for-JIRA plugin includes some useful improvments:

- new 'FishEye' tab for JIRA issues and projects
- improved ability to create a Crucible review from the 'FishEye' tab within a JIRA issue — just click the Crucible icon:



6

Crucible 1.2 includes FishEye 1.4

... and provides closer integration than ever before.

- FishEye screens include links to existing Crucible reviews. So you can see which files/changesets have been reviewed.
- EyeQL allows you to search for Crucible data. For example, you can search for files that have not yet been reviewed.
- Crucible now has built-in Crowd/SSO support.
- See the FishEye 1.4 Release Notes.

7

Plus over 20 improvements and bug-fixes

JIRA Issues (32 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-181	Old screenshot in 1.2 release notes		Closed
CRUC-175	LHS abandon button on Crucible review screen broken		Closed
CRUC-166	Some files not work		Closed
CRUC-152	sysinfo admin screen should show both CRU and FE license string		Closed
CRUC-146	Add review information to ALL search result pages		Closed
CRUC-143	add review-constraints in the EyeQL where clause		Closed
CRUC-140	ensure "linked" reviews are exported thru data in remote api		Closed
CRUC-122	Move review to another project		Closed
CRUC-121	EyeQL return clause: reviews		Closed
CRUC-115	Accept Patch Review From Clipboard		Closed
CRUC-113	Allow creation of reviews for multiple changesets through /cru/create URL		Closed
CRUC-109	Presented with Post/delete drafts buttons when no comments drafted made		Closed

CRUC-107	Ability to change username		Closed
CRUC-104	AnnotatorTag error reviewing patch		Closed
CRUC-102	Create Project Model object and Hibernate DB upgrade		Closed
CRUC-101	Add 'Projects'		Closed
CRUC-95	Change Diff Buttons Losing State		Closed
CRUC-94	Show Existing Reviews In Fisheye		Closed
CRUC-93	Crucible should preserve request params/URLs through login redirects		Closed
CRUC-90	More Administrator Options		Closed
CRUC-89	Add 'Default Reviewers'		Closed
CRUC-88	Review Groups		Closed
CRUC-86	add "allow anyone" as a per-project default		Closed
CRUC-80	Should be able to create a review when there are no configured repositories		Closed
CRUC-78	merge cru/fe src and content trees		Closed
CRUC-73	Generate HEAD review from directory		Closed
CRUC-68	Dragging to deselect source lines no longer works		Closed
CRUC-65	beta plugin api		Closed
CRUC-61	Author should be able to "complete"		Closed
CRUC-56	Self-registration		Closed
CRUC-43	Webservice API for Reviews		Closed
CRUC-36	Should my review status go back to incomplete if I start adding comments?		Closed

Crucible 1.2 Changelog

On this page:

- From 1.2.2 to 1.2.3
- From 1.2.1 to 1.2.2
- From 1.2 to 1.2.1

From 1.2.2 to 1.2.3

7 February 2008

This release contains bug fixes (including those in from FishEye 1.4.3).

JIRA Issues (26 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-274	Create IDE integration with IntelliJ IDEA		Closed
CRUC-273	Create IDE integration with Eclipse		Closed
CRUC-258	Allow all users to be able to a "Moderator" or "Author" in a review project		Closed
CRUC-256	Check boxes for checking off files reviewed in a review are lost if navigate to raw text by "download raw text" icon		Closed
CRUC-249	Accept review comments in Japanese (unicode characters)		Closed

CRUC-243	race condition between crucible backup and repository scan		Closed
CRUC-235	File tabs should be kept open		Closed
CRUC-210	Create JIRA issues from code reviews		Closed
CRUC-208	Nullpointer exception when creating new review		Closed
CRUC-202	update 'Repositories' screenshot		Closed
CRUC-196	Error on attempting to create a Review.		Closed
CRUC-180	'Show Full Source' should continue to highlight the diff		Closed
CRUC-177	Comments on reviews are being sent but don't appear in the review when viewed online		Closed
CRUC-165	Folder Issue		Closed
CRUC-139	Can't add new versions of the same file to a review		Closed
CRUC-127	Improperly stopping crucible causes data loss!		Closed
CRUC-112	Point online help links to new Crucible doc space		Closed
CRUC-106	Add content to new documentation page ' Crucible and FishEye'		Closed
CRUC-105	Upload PDF, XML and HTML versions of Crucible docs		Closed
CRUC-103	Create admin page for Projects		Closed
CRUC-100	Move Crucible docs to Confluence		Closed
CRUC-99	Feature request: I would like to see statistics about number of major and minor issues found per developer.		Closed
CRUC-92	Allow Anonymous Access Per Repository		Closed
CRUC-84	Ability to create a review directly from JIRA		Closed
CRUC-50	Allow review of entire file, not a particular diff		Closed
CRUC-28	After Crucible forums are moved, update all links in docs		Closed

From 1.2.1 to 1.2.2

This release contains some minor improvements and bug fixes.

- Trusted Application Support
  FishEye/Crucible now allows you to set up trusted communications with other Atlassian applications. At this point, the JIRA FishEye plugin supports Trusted Applications. The JIRA FishEye plugin can request information from FishEye on behalf of the currently logged-in user, and FishEye will not ask the user to log in again or to supply a password. Previously FishEye/Crucible would have used a single 'system' account to determine permissions. Now, FishEye/Crucible can apply the correct permission settings for the logged-in user.

- Hyphens are now allowed in project key names.

JIRA Issues (3 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-207	allow hyphens in Crucible project keys		Closed
CRUC-204	Add project to dashboard filter		Closed
CRUC-195	groups access control to repositories failed after configured External authentication (LDAP)		Closed

From 1.2 to 1.2.1

This is a small bug-fix release.

JIRA Issues (6 issues)			
Key	**Summary**	**Priority**	**Status**
CRUC-199	Top of project edit form says Repositories List		Closed
CRUC-198	multiple copies of revisions added to review if you add changesets in reverse chronological order		Closed
CRUC-182	Projects Don't Persist Through Pages		Closed
CRUC-179	Support addition of multiple revisions of the same file that appears in multiple changesets		Closed
CRUC-178	Hit NPE when perform backup		Closed
CRUC-40	Getting wrong changeset number causes diff to be missing		Closed

Crucible 1.2 Upgrade Guide

Upgrade Notes

- During the upgrade, a default project and default permission scheme will be created. All existing reviews will be assigned to the default project.

Upgrade Procedure

- Please read the Release Notes for the version you are upgrading to, as well as any versions you are skipping.
- Follow the instructions on upgrading Crucible.

Crucible 1.1 Release Notes

> Crucible 2.3 has now been released. Read the Release Notes.

Crucible 1.1 allows pre-commit (patch) reviews, side-by-side diff mode, syntax highlighting in diffs, and many other bug fixes and improvements.

Upgrading Crucible

You can now download Crucible from here. Information on installing Crucible can be found here. If upgrading from a previous version, please follow the Upgrade Guide.

Highlights of Crucible 1.1

- Pre-commit review (patch review).
- Progress tracking through a review by marking each file as 'done'.
- Side-by-side diff mode within the review display.
- Syntax highlighting when displaying a diff.
- Many small UI fixes and improvements. Refer to the changelog for more details.

Crucible 1.1 Changelog

On this page:

- From 1.1.3 to 1.1.4
- From 1.1.2 to 1.1.3
- From 1.1.1 to 1.1.2
- From 1.1 to 1.1.1

From 1.1.3 to 1.1.4

This release updates the included FishEye component and includes a number of performance improvements and bug fixes for Subversion and Perforce repository indexing.

From 1.1.2 to 1.1.3

This release fixes a bug CRUC-104 that prevented Crucible from correctly displaying large patches.

From 1.1.1 to 1.1.2

This release adds some new user-related functions and includes bug fixes.

New Features

- You can now allow users to create their own user accounts (sign-up).
- You can now allow anonymous browsing of reviews.
- Users can now add themselves as a reviewer ('Join a review'). This is an option that is configured per review.

Bug fixes

- Fix problem where Crucible would only display the top part of each diff in a patch.
- Fix various JavaScript and UI errors.
- Fix various IE6 and IE7 problems.
- Fix problem where some users where redirected to /uar/browser.css after login.

From 1.1 to 1.1.1

This is a small bug-fix release. It addresses a stack-overflow problem for some configurations.

Crucible 1.1 Upgrade Guide

Upgrade Notes

- As of version 1.0, Crucible now requires a JVM version 1.5 or later. Previously, 1.4+ was required.
- Crucible 1.1.4 includes FishEye 1.3.8.
- Upgrading from 1.0.4 (or earlier) will force a complete re-index of P4 repositories.

Upgrade Procedure

- Please read the Release Notes and Upgrade Guides for the version you are upgrading to, as well as any versions you are skipping.
- Follow the instructions on upgrading Crucible.

Crucible Release Summary

Crucible 2.3 (26-May-10)

- Snippet Reviews
- Changeset Discussions
- Mercurial SCM Alpha
- Review Coverage report
- Revamped Installation Process
- Gadgets
- More in release notes.

Crucible 2.2 (18-Feb-10)

- Smart Pre-Commit (Patch) Support
- 'No Moderator' Reviews
- Wizard-Like Review Creation
- Integrated Timetracking Between Crucible and JIRA
- Edit Mode for Reviews
- More in release notes.

Crucible 2.1 (12-Nov-09)

- Wiki Markup Rendering
- Progress Tracking
- Usability and Productivity Updates
- Streamlined JIRA Integration
- Review Time Tracking
- Review History Dialog
- "Blockers" Reports
- Threaded Comments
- Plugin Developer Tools
- More in release notes.

Crucible 2.0 (30-Jun-09)

- Support for iterative reviews
- New User Interface
- Indicators for read/unread comments
- Enhanced JIRA integration
- More in release notes.

Crucible 1.6 (23-Sep-08)

- Support for non-FishEye repositories
- Confluence page reviews
- Shared file system repositories
- Enhanced pre-commit reviews & image support
- Multiple admin users
- Expanded API
- More in release notes.

Crucible 1.5 (14-Apr-08)

- Project Dashboard
- Filtered comments & defects search, with statistical summary
- Customisable email templates
- Improvements to Crucible Plugin API beta
- More in release notes.

Crucible 1.2 (5-Dec-07)

- Reviews grouped into projects
- Customisable permission schemes
- Plugin API
- Enhancements to user management
- JIRA integration
- Crucible 1.2 includes FishEye 1.4
- More in release notes.

Crucible 1.1 (18-Sep-07)

- Pre-commit review (patch review)
- Review participants can keep track of their progress through a review by marking each file as "done"
- Side-by-side diff mode within the Review display
- Syntax highlighting when displaying a diff
- More in release notes.

Security Advisories

This page lists security advisories for Crucible.

- Crucible Security Advisory 2010-05-04
- Crucible Security Advisory 2010-06-16

Crucible Security Advisory 2010-05-04

> The 2.2.3 release of Crucible contains some security related fixes, which are part of the shared FishEye architecture. The following information for FishEye applies equally to Crucible.

The Crucible Download Centre has the updates for Crucible.

In this advisory:

- Admin Escalation Vulnerability
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix
- XSS Vulnerabilities in FishEye
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix
- Prevention of Brute Force Attacks
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix
- Changed Behaviour in FishEye
- Download Patches for Earlier FishEye / Crucible Versions
  - Patch for FishEye / Crucible 2.1.4
  - Patch for FishEye / Crucible 2.0.6
  - Patch for FishEye 1.6.6
  - Patch for Crucible 1.6.6

Admin Escalation Vulnerability

Severity

Atlassian rates this vulnerability as **critical**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank a vulnerability as critical, high, moderate or low.

Risk Assessment

We have identified and fixed an admin escalation vulnerability, which affects FishEye instances. This vulnerability has security implications and is especially important for anyone running publicly accessible instances of FishEye.

Vulnerability

This vulnerability allows a motivated attacker to perform admin actions.

All versions of FishEye from version 1.6.0-beta2 (including 1.6.0) through to 2.2.1 are affected by these admin escalation vulnerabilities.

Affected FishEye Versions	Fix Availability	More Details	Severity
All versions up to and including 2.2.1	2.2.3 update, also available as patches for certain versions, listed on this page.	This vulnerability allows a motivated attacker to perform admin actions.	Critical

Risk Mitigation

We strongly recommend either upgrading or patching your FishEye installation to fix this vulnerability. Please see the 'Fix' section below.

> Note: If you are an Atlassian JIRA Studio customer, we have assessed that your system is secure and implemented additional protections for it.

Fix

These issues have been fixed in FishEye 2.2.3 (see the changelog), which you can download from the download centre. Later versions will include protection from this vulnerability.

This fix is also provided as a patch for FishEye 2.1.4, 2.0.6 and 1.6.6, which you can download from this page. Customers on earlier point versions of FishEye will have to upgrade to version 2.1.4, 2.0.6 or 1.6.6 before applying the patch. We recommend you upgrade to FishEye 2.2.3.

XSS Vulnerabilities in FishEye

Severity

Atlassian rates these vulnerabilities as **critical**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank a vulnerability as critical, high, moderate or low.

Risk Assessment

We have identified and fixed several cross-site scripting (XSS) vulnerabilities in FishEye, which may affect FishEye instances. These vulnerabilities have security implications and are especially important for anyone running publicly accessible instances of FishEye.

- The attacker might take advantage of the vulnerability to steal other users' session cookies or other credentials, by sending the credentials back to the attacker's own web server.
- The attacker's text and script might be displayed to other people viewing a FishEye page. This is potentially damaging to your company's reputation.

You can read more about XSS attacks at cgisecurity, CERT and other places on the web.

Vulnerability

All versions of FishEye are affected by these XSS vulnerabilities.

Affected FishEye Versions	Fix Availability	More Details	Severity
All versions up to and including 2.2.1	2.2.3 only	An attacker could take advantage of this vulnerability to steal other users' session cookies or other credentials, or the attacker's text and script might be displayed to other people viewing a FishEye page.	Critical

Risk Mitigation

We strongly recommend upgrading your FishEye installation to fix these vulnerabilities. Please see the 'Fix' section below.

Fix

These issues have been fixed in FishEye 2.2.3 (see the changelog), which you can download from the download centre.

Prevention of Brute Force Attacks

Severity

Atlassian rates this vulnerability as **moderate**, according to the scale published in Severity Levels for Security Issues.

Risk Assessment

We have improved the security of the following areas in FishEye:

- Prevention of brute force attacks by requiring users to solve a CAPTCHA test after a maximum number of repeated login attempts.

Vulnerability

We have identified and fixed a problem where FishEye allows an unlimited number of repeated login attempts, potentially opening FishEye to a brute force attack. Details of this improvement are summarised below.

Affected FishEye Versions	Fix Availability	More Details	Severity
All versions up to and including 2.2.1	2.2.3 only	FishEye allows an unlimited number of login attempts. This makes FishEye vulnerable to a brute force attack.	Moderate

Risk Mitigation

We recommend that you upgrade your FishEye installation to fix these vulnerabilities. Please see the 'fix' section below.

You can also prevent brute force attacks by following our guidelines on using Fail2Ban to limit login attempts.

Fix

This issue has been fixed in FishEye 2.2.3 (see the changelog). Later versions will include protection from this vulnerability. You can download FishEye 2.2.3 from the download centre.

Changed Behaviour in FishEye

In order to fix these issues, we have changed FishEye's behaviour as follows:

- After three consecutive failed login attempts, FishEye will display a CAPTCHA form asking the user to enter a given word when attempting to log in again. This will prevent brute force attacks via the login screen. The number of failed attempts needed to trigger the CAPTCHA testing is configurable. For more information, see the documentation for Brute Force Login Protection.

> In addition, after three consecutive failed login attempts via the FishEye remote API, an error message will be returned. Human intervention will then be required to reset that login account, i.e. solve the CAPTCHA test via the login screen.

Download Patches for Earlier FishEye / Crucible Versions

> These patch releases contain security fixes, which apply to the shared FishEye architecture that is the basis of both FishEye and Crucible.

These patches fix the Admin Escalation vulnerability only. Please note that these patches are for specific older point versions of FishEye (2.1.4, 2.0.6 or 1.6.6). If you are running an earlier version than these, you will need to upgrade to a version specifically addressed by one of these patches. To update a more recent version of the product (2.1.5 through 2.2.1), please upgrade to FishEye 2.2.3 or later. Atlassian strongly recommends that you upgrade to FishEye 2.2.3 or later.

MD5 checksums are provided to allow verification of the downloaded files.

Patch for FishEye / Crucible 2.1.4

File	FishEye / Crucible Version	Release Date	MD5 Checksum
fisheye-crucible-2.1.4-patch1.zip	2.1.4	4th May, 2010	6062fa2e1ad93729527357fb97b0d2ea

Patch for FishEye / Crucible 2.0.6

File	FishEye / Crucible Version	Release Date	MD5 Checksum
fisheye-crucible-2.0.6-patch1.zip	2.0.6	4th May, 2010	6aae75e2a5308121887bf9532473cf75

Patch for FishEye 1.6.6

File	FishEye Version	Release Date	MD5 Checksum
fisheye-1.6.6-patch1.zip	1.6.6	4th May, 2010	210ef3358aff83861733f8f22d331d7e

Patch for Crucible 1.6.6

File	Crucible Version	Release Date	MD5 Checksum
crucible-1.6.6-patch1.zip	1.6.6	4th May, 2010	48e8e8ada0ddb3fc8671459051df1120

To acquire all of the fixes on this page, upgrade to FishEye 2.2.3, which you can download from the download centre.

Crucible Security Advisory 2010-06-16

> The 2.3.3 release of Crucible contains some security related fixes, which are part of the shared FishEye architecture. The following information for FishEye applies equally to Crucible.

The Crucible Download Centre has the updates for Crucible.

In this advisory:

- Remote Code Exploit Vulnerability
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix
- Download Patches for Earlier FishEye / Crucible Versions
  - Patch for FishEye / Crucible 2.3.2
  - Patch for FishEye / Crucible 2.2.3

Remote Code Exploit Vulnerability

Severity

Atlassian rates this vulnerability as **critical**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank a vulnerability as critical, high, moderate or low.

Risk Assessment

We have identified and fixed a remote code exploit vulnerability which affects FishEye and Crucible instances.

Vulnerability

This vulnerability allows a motivated attacker to call remote code on the host server.

All versions of FishEye/Crucible up to version 2.3.2 are affected by this vulnerability.

Affected FishEye Versions	Fix Availability	More Details	Severity
All versions up to and including 2.3.2.	2.3.3 update, also available as patches for 2.3.2 and 2.2.3.	This vulnerability allows a motivated attacker to call remote code on the host server.	Critical

This vulnerability has been discovered in XWork by OpenSymphony, a command pattern framework which is used by FishEye and Crucible.

About the XWork Framework:

- See the OpenSymphony XWork page for more information about XWork.

Risk Mitigation

We strongly recommend either upgrading or patching your FishEye/Crucible installation to fix this vulnerability. Please see the 'Fix' section below.

Fix

These issues have been fixed in FishEye 2.3.3 (see the changelog), which you can download from the download centre.

It has also been fixed in Crucible 2.3.3 (see the changelog), which you can download from the download centre.

Later versions will include protection from this vulnerability.

This fix is also provided as a patch for FishEye/Crucible 2.3.2 and 2.2.3, which you can download from links on this page. Customers on earlier point versions of FishEye/Crucible will have to upgrade to version 2.3.2 or 2.2.3 before applying the patch. Atlassian recommends you upgrade to FishEye/Crucible 2.3.3.

Download Patches for Earlier FishEye / Crucible Versions

> These patch releases contain security fixes, which apply to the shared FishEye architecture that is the basis of both FishEye and Crucible.

Please note that these patches are for specific point versions of FishEye (2.3.2 and 2.2.3). If you are running an earlier version than these, you will need to upgrade to a version specifically addressed by one of these patches. Atlassian strongly recommends that you upgrade to FishEye 2.3.3 / Crucible 2.3.3 or later.

MD5 checksums are provided to allow verification of the downloaded files.

Patch for FishEye / Crucible 2.3.2

File	FishEye / Crucible Version	Release Date	MD5 Checksum
fisheye-crucible-2.3.2-patch1.zip	2.3.2	16th June, 2010	6fe98db821a6d26f26907688af2ccd84

Patch for FishEye / Crucible 2.2.3

File	FishEye / Crucible Version	Release Date	MD5 Checksum
fisheye-crucible-2.2.3-patch1.zip	2.2.3	16th June, 2010	6fe98db821a6d26f26907688af2ccd84

> Our thanks to **Meder Kydyraliev** of the **Google Security Team** who discovered this vulnerability. Atlassian fully supports the reporting of vulnerabilities and appreciates it when people work with Atlassian to identify and solve the problem.

Crucible Upgrade Guide

- Upgrading to a New Version of Crucible
- Upgrading from FishEye to Crucible

- Upgrading from 1.6.x to 1.6.3.

Upgrading to a New Version of Crucible

Read about how your Crucible installation works with FishEye.

- Before you Start
- Crucible 2.0 Upgrade Notes
- Crucible 1.6 Upgrade Notes
- Upgrade Procedure
    - Method 1 - Using a FISHEYE_INST Directory
    - Method 2 - Without a FISHEYE_INST Directory
    - Method 3 - Without a FISHEYE_INST Directory, but would like to set one up

Before you Start

- Before upgrading you should always read the Release Notes for the version you are upgrading to, as well as any versions you are skipping.
- Check the Supported Platforms to ensure that your system meets the requirements for the new version.
- **We strongly recommend you make a backup of your data before upgrading Crucible**. Refer to the documentation on making a backup.

- Download the Crucible zip file.

Crucible 2.0 Upgrade Notes

- Supported browsers are: Safari 3+, FireFox 3+ and Internet Explorer 7+ (not IE6).

Crucible 1.6 Upgrade Notes

- Please see Crucible 1.6.3 Upgrade Guide

Upgrade Procedure

Method 1 - Using a FISHEYE_INST Directory

If you have Crucible configured to use a `FISHEYE_INST` directory, then simply:

1. Shutdown your existing FishEye server.
2. Make a backup of your FISHEYE_INST directory
3. Extract the new Crucible version to a directory.
4. Leave your `FISHEYE_INST` environment variable set to its existing location.
5. Start Crucible from the new installation.
6. Follow any version-specific instructions found in the Release Notes.

Read more about the `FISHEYE_INST` environment variable.

Method 2 - Without a FISHEYE_INST Directory

If you are using the `FISHEYE_HOME` directory, you will need to copy some files from your old Crucible installation to your new one.

1. Extract the new Crucible archive into a directory such as `/NEW_FISHEYE/`.
2. Delete the `/NEW_FISHEYE/var` directory.
3. Shut down the old Crucible instance if it is running.
4. Copy `/OLD_FISHEYE/config.xml` to `/NEW_FISHEYE/`.
5. Copy (or move) the `/OLD_FISHEYE/var` directory to `/NEW_FISHEYE/var`.
6. Copy your database drivers to your new lib directory under `NEW_FISHEYE/lib`.
7. Follow any version-specific instructions found in the Release Notes.

Method 3 - Without a FISHEYE_INST Directory, but would like to set one up

1. Shut down the old FishEye instance if it is running.
2. Set up the `FISHEYE_INST` environment variable, then create the FISHEYE_INST directory on your filesystem.
3. Copy the `/OLD_FISHEYE/config.xml` to `/FISHEYE_INST`.
4. Copy the `/OLD_FISHEYE/var` directory to `/FISHEYE_INST`.
5. Download Crucible.
6. Extract the new Crucible archive into a directory such as `/NEW_FISHEYE/`.
7. Start Crucible from the new installation by running `NEW_FISHEYE/bin/run.sh`. (Use `run.bat` on Windows).
8. Follow the initial configuration steps outlined below.
9. If your configuration is not automatically picked up and you cannot see your existing repositories, check your Administration > Sys-Info page, where you will see information about FISHEYE_HOME and FISHEYE_INST. Check your FISHEYE_INST is pointing to the right directory.

Upgrading from FishEye to Crucible

If you have been using FishEye and now want to move to Crucible, you can do this without losing your FishEye repositories.

Read about how your Crucible installation works with FishEye.

On this page:

- Before you Start
- Upgrade Procedure
  - Method 1 - Without a FISHEYE_INST Directory (default)
  - Method 2 - Using a FISHEYE_INST Directory
  - Method 3 - Without a FISHEYE_INST Directory, but intending to set one up
- Initial Crucible Configuration

Before you Start

We strongly recommend you make a backup of your data before following the steps below. Refer to the documentation on making a

backup.

Upgrade Procedure

- Follow **Method 1** if you have a default configuration and are not using a `FISHEYE_INST` directory (that is, your FishEye binaries and data are all stored under the same location, in the default `FISHEYE_HOME` directory).
- Follow **Method 2** below if you have FishEye configured to use a `FISHEYE_INST` directory (that is, your FishEye binaries are stored in the `FISHEYE_HOME` directory, separate from your FishEye data in the `FISHEYE_INST` directory).
- Follow **Method 3** if you are not using a `FISHEYE_INST` directory but would now like to start using one.

Read more about the `FISHEYE_INST` environment variable.

Method 1 - Without a FISHEYE_INST Directory (default)

1. Download Crucible.
2. Extract the new Crucible archive into a directory such as `/NEW_FISHEYE/`.
3. Delete the `/NEW_FISHEYE/var` directory.
4. Shut down the old FishEye instance if it is running.
5. Copy `/OLD_FISHEYE/config.xml` to `/NEW_FISHEYE/`.
6. Copy the `/OLD_FISHEYE/var` directory to `/NEW_FISHEYE/var`.
7. If you have a Cenqua-issued FishEye license, copy `/OLD_FISHEYE/fisheye.license` to `/NEW_FISHEYE/`. (Atlassian-issued licenses are included within `config.xml`.)
8. Follow any version-specific instructions found in the Release Notes.
9. Start Crucible from the new installation by running NEW_FISHEYE/bin/run.sh. (Use run.bat on Windows).
10. Follow the initial configuration steps outlined below.

Method 2 - Using a FISHEYE_INST Directory

1. Shutdown your existing fisheye server.
2. Make a backup of your FISHEYE_INST directory.
3. Download Crucible and unzip the archive into a folder. This document assumes you have extracted your Crucible zip file into a directory called `/NEW_FISHEYE/`.
4. Leave your `FISHEYE_INST` environment variable set to its existing location.
5. Start Crucible from the new installation by running `NEW_FISHEYE/bin/run.sh`. (Use `run.bat` on Windows).
6. Follow the initial configuration steps outlined below.

Method 3 - Without a FISHEYE_INST Directory, but intending to set one up

1. Shut down the old FishEye instance if it is running.
2. Set up the `FISHEYE_INST` environment variable, then create the FISHEYE_INST directory on your filesystem.
3. Copy the `/OLD_FISHEYE/config.xml` to `/FISHEYE_INST`.
4. Copy the `/OLD_FISHEYE/var` directory to `/FISHEYE_INST`.
5. Download Crucible.
6. Extract the new Crucible archive into a directory such as `/NEW_FISHEYE/`.
7. Start Crucible from the new installation by running `NEW_FISHEYE/bin/run.sh`. (Use `run.bat` on Windows).
8. Follow the initial configuration steps outlined below.
9. If you configuration is not automatically picked up and you cannot see your existing repositories, check your Administration > Sys-Info page, where you will see information about FISHEYE_HOME and FISHEYE_INST. Check your FISHEYE_INST is pointing to the right directory.

Initial Crucible Configuration

1. You can access FishEye immediately by going to `http://HOSTNAME:8060/` in a browser.
2. The first time you run FishEye, enter your Crucible license key. To do this, update your Crucible license by opening '**Administration**', then '**Sys-Info/Support**'. On this screen, you can enter your Crucible license key. You can view your license key here. The Crucible functionality will be instantly unlocked.
3. If you do not already have user accounts configured, you will need to do this via the Administration screens or by configuring Crucible/FishEye to use external authentication.
   To add users:
   - Open the FishEye Administration screens at `http://HOSTNAME:8060/admin/`.
   - Click '**Users/Security**' under '**Global Settings**' in the '**Admin Menu**'.
     Read more details about the different ways of creating users.
4. Crucible can email each review participant on a range of changes. Each user can then set up their own preferences. This is described in the User Profile guide. First, you must set up the SMTP Server.

Crucible FAQ

Crucible FAQ

Answers to frequently asked questions about configuring and using Crucible.

- Troubleshooting
  - Crucible freezes unexpectedly
  - JIRA Integration Issues
  - Problems with very long comments and MySQL migration
- Increasing the session timeout
- General FAQs
  - Can Crucible be run as a Windows Service?
  - Can I deploy Crucible or FishEye as a WAR?
  - How to Automate Daily Crucible Backups
- Licensing FAQ
  - What happens if I decide to stop using FishEye with Crucible?
  - Do I need a FishEye licence to run Crucible?
- Support Policies
  - Bug Fixing Policy
  - How to Report a Security Issue
  - New Features Policy
  - Patch Policy
  - Security Advisory Publishing Policy
  - Security Patch Policy
  - Severity Levels for Security Issues
- Fix 'Out of Memory' errors by increasing available memory

Most setup issues are likely to be related to the FishEye component of Crucible. Refer to the FishEye documentation:

- FishEye documentation
- FishEye FAQs

- Top Evaluator Questions
  - Can Crucible add support for new repositories?
  - Can I purchase Crucible on it's own?
  - Can I trial Crucible without FishEye?
  - How can I do reviews from the file system?
  - How does Crucible help enforce compliance and auditability?
  - How do I convince my team of the benefits of code review?
  - How do I do pre-commit reviews?
  - How do I raise defects in JIRA?
  - How do I review patch diffs?
  - What user permissions and review security is available?

Do you still have a question, or need help with Crucible? Please create a support request.

Troubleshooting

Crucible Troubleshooting

- Crucible freezes unexpectedly
- JIRA Integration Issues
- Problems with very long comments and MySQL migration — h3. {color:#000000}**Affects Version**{color}

Crucible Troubleshooting

The most common cause of FishEye/Crucible issues is an incorrect symbolic setup (trunk/branch/tag) for Subversion repositories. If you are using Subversion and your initial index is taking forever, double-check that your symbolic setup matches your repository.

FishEye runs with the default Java heap of 64 megabytes. This is sometimes problematic for FishEye, especially for Subversion repositories during the initial scan. You can give FishEye's JVM more memory by setting the FISHEYE_OPTS environment variable.

Starting Crucible with the command line options `--debug --debug-perf` will print a lot of information to Crucible's logs. This can give you an insight into what is happening and possibly where you are stuck. Attach these logs along with your `config.xml` to an Atlassian support ticket, to speed up your support request.

Crucible freezes unexpectedly

Issue Symptoms

If your Crucible 2.0 or 2.0.1 instance freezes unexpectedly, this could be caused by a known issue with Crucible and MySQL database technology.

This issue manifests itself in some Crucible pages returning a server timeout error. To identify the issue, check the Crucible error log. For this issue, the following output will appear in the error log:

```
2009-07-15 15:34:45,555 ERROR [btpool0-519] fisheye.app HibernateUtil-commitTransaction - Commit fail
msg-0:Could not execute JDBC batch update
2009-07-15 15:34:45,556 ERROR [btpool0-519] fisheye.app HibernateUtil-commitTransaction - Commit fail
msg-1:Lock wait timeout exceeded; try restarting transaction
2009-07-15 15:34:45,557 ERROR [btpool0-519] fisheye.app HibernateUtil-commitTransaction - Commit
failed rolling back.
...
...
Caused by: java.sql.BatchUpdateException: Lock wait timeout exceeded; try restarting transaction
 at com.mysql.jdbc.ServerPreparedStatement.executeBatch(ServerPreparedStatement.java:647)
 at
com.mchange.v2.c3p0.impl.NewProxyPreparedStatement.executeBatch(NewProxyPreparedStatement.java:1723)
 at org.hibernate.jdbc.BatchingBatcher.doExecuteBatch(BatchingBatcher.java:48)
 at org.hibernate.jdbc.AbstractBatcher.executeBatch(AbstractBatcher.java:246)
 ... 163 more
```

The Crucible error log can be found under `FISHEYE_INST/var/log/fisheye-error.log.YYYY-MM-DD` .

See the JIRA issue for more information.

Workaround

Until the issue is solved, the suggested course of action is to restart your Crucible instance. This will return Crucible to normal operation.

The Crucible development team is actively working on a solution and this be part of an upcoming point release of Crucible.

Requesting Support

If you require assistance in resolving the problem, please raise a support request under the Crucible project.

JIRA Integration Issues

Users are mapped to their own accounts when using Trusted Applications.

If you (or the general account used for JIRA access, if not using Trusted Applications) do not have the permissions to carry out the JIRA actions linked from Crucible, an error will occur. Depending on the error returned from JIRA, Crucible may not display the error correctly or display it at all, simply reporting that "An error has occurred". To investigate what the error was, you can access the Crucible debug log, named `fisheye-debug.log.YYYY-MM-DD` under the `dist.inst/var/log` folder of your Crucible installation. In the debug log, look for the date and time when your error took place. Here, you will be able to follow the links and see what error the JIRA instance was producing by clicking through to JIRA.

If you are using JIRA 4.0 you will not be able to create subtasks in versions of Crucible prior to 2.0.5. If you are affected by this bug, please upgrade to at least 2.0.6 (2.0.5 is affected by another bug CRUC-2471).

Problems with very long comments and MySQL migration

Affects Version

This issue was introduced in Crucible 2.0 and fixed in Crucible 2.1.

Issue Symptoms

There is a known issue with Crucible 2.0.x and very long comments when migrating your database to MySQL. In some circumstances, this might result in truncation of very long comments, causing data loss.

Depending on your MySQL configuration, you may see an error message like this while migrating to MySQL, causing the migration to fail:

```
2009-07-16 16:56:12,390 ERROR [ThreadPool1] fisheye.app
com.cenqua.crucible.actions.admin.database.DBEditHelper-doGet -
Database migration failed:
java.sql.BatchUpdateException: Data truncation: Data too long for column 'cru_message' at row 1
java.sql.BatchUpdateException: Data truncation: Data too long for column 'cru_message' at row 1
```

You may not see the message if you are running MySQL with default settings.

For more information, see the JIRA issue.

Workaround

If your data contains very long comments or review descriptions (longer than 21,845 multibyte unicode characters), consider avoiding use of MySQL until you can upgrade the product. Alternatively, use PostgreSQL or the default (built-in) HSQLDB database.

This issue is now resolved. This issue was introduced in Crucible 2.0 and fixed in Crucible 2.1.

Requesting Support

If you require assistance in resolving the problem, please raise a support request under the Crucible project.

Increasing the session timeout

Crucible comes with `remember me` functionality, i.e. so long as user hasn't logged out the computer will remember the user. So technically a user should not be logged out, unless the user has disabled the saving of cookies in their browser settings.

If the user has disabled cookies, and does not want to enable the saving of cookies, then, you can add:

```
<session-config>
  <session-timeout>120</session-timeout>
</session-config>
```

in your `WEB-INF/web.xml` file (see Jetty Documentation), which will increase the session timeout value to two hours.

General FAQs

Crucible General FAQs
• Can Crucible be run as a Windows Service? — To run Crucible as a service you can either use SRVANY and INSTSRV to run `java.exe` or create a Java Service Wrapper. A mechanism to run Crucible as a service will be incorporated at a later stage. In the meantime, example wrapper files written by users can be found here. • Can I deploy Crucible or FishEye as a WAR? — Unfortunately FishEye and Crucible cannot be deployed as a WAR. • How to Automate Daily Crucible Backups — Configuring Crucible backups is easy.

Can Crucible be run as a Windows Service?

To run Crucible as a service you can either use SRVANY and INSTSRV to run `java.exe` or create a Java Service Wrapper. A mechanism to run Crucible as a service will be incorporated at a later stage. In the meantime, example wrapper files written by users can be found here.

To install on Windows:

1. Unzip the wrapper zip file into your `FISHEYE_HOME` directory (Note, the end structure should be `FISHEYE_HOME/wrapper`, `FISHEYE_HOME/wrapper/bin`, etc and NOT `FISHEYE_HOME/wrapper/wrapper`, `FISHEYE_HOME/wrapper/wrapper/bin`. The location of the wrapper directory is important).
2. Run `Fisheye-Install-NTService.bat`, found in `FISHEYE_HOME/wrapper/bin`.
3. Start the Fisheye service under the Windows Control Panel.
4. Set your FISHEYE_INST within your `FISHEYE_HOME/wrapper/conf/wrapper.conf` as per the instructions below:

Please note, that if you do run as a service, then any Environment Variables that you want to set, need to be set in your `FISHEYE_HOME/wrapper/conf/wrapper.conf` file.

If there are other java parameters you wish to add, then you will need to add them under the additional parameters, e.g.

```
# JDK 1.5 Additional Parameters for jmx
wrapper.java.additional.4=-Dcom.sun.management.jmxremote
wrapper.java.additional.5=-Dcom.sun.management.jmxremote.port=4242
wrapper.java.additional.6=-Dcom.sun.management.jmxremote.authenticate=false
wrapper.java.additional.7=-Dcom.sun.management.jmxremote.ssl=false
wrapper.java.additional.8=-Dcom.sun.management.jmxremote.authenticate=false
wrapper.java.additional.9=-Dcom.sun.management.jmxremote.password.file=./wrapper/jmxremote.password
wrapper.java.additional.10=-Dwrapper.mbean.name="wrapper:type=Java Service Wrapper Control"
```

For example if you wish to add a FISHEYE_INST environment variable or add the java parameter "MaxPermSize", or the -Xrs options (should be used if running FishEye as a service under Windows, to prevent the JVM closing when an interactive user logs out) then it would be something like:

```
wrapper.java.additional.11=-Dfisheye.inst="c:/path/to/FISHEYE_INST"
wrapper.java.additional.12=-XX:MaxPermSize=128m
wrapper.java.additional.13=-Xrs
```

Your memory settings can also be found in this file:

```
# Initial Java Heap Size (in MB)
wrapper.java.initmemory=32

# Maximum Java Heap Size (in MB)
wrapper.java.maxmemory=256
```

Increase these values if you have a large repository or expect to use more memory (init of 256, and a max of 1024 would be reasonable).

Can I deploy Crucible or FishEye as a WAR?

Unfortunately FishEye and Crucible cannot be deployed as a WAR. FishEye has some special needs for performance reasons that are not easily supported on third-party containers. Whilst this is an often requested feature, there are no immediate plans to provide a WAR version of FishEye or FishEye+Crucible. However the upcoming separate edition of Crucible (i.e. without FishEye) may at some stage be available as a WAR.

How to Automate Daily Crucible Backups

Configuring Crucible backups is easy. To set daily Crucible backups, open the administration page, click the '**Backup**' link under '**System**' on the left navigation bar, and simply follow the instructions set out on the Backing Up and Restoring Crucible Data page.

Licensing FAQ

Crucible Licensing FAQ
• What happens if I decide to stop using FishEye with Crucible? — If you are using FishEye and Crucible together and decide to start using Crucible only, you will lose certain functionality that is unique to FishEye. • Do I need a FishEye licence to run Crucible? — FishEye and Crucible are separate products. They can be run separately, and they can also be run together.

What happens if I decide to stop using FishEye with Crucible?

If you are using FishEye and Crucible together and decide to start using Crucible only, you will lose certain functionality that is unique to FishEye. You will also need to make some configuration changes, as detailed below:

Considerations Before Removing FishEye:

1. CVS repositories are not supported in Crucible, only in FishEye.
2. Any repositories currently defined using FishEye's powerful scanning mechanism will will not be visible in Crucible after removing FishEye. You will need to reconnect these repositories using the Crucible Light SCM.
3. The Crucible Light SCM does not offer the same high performance experience that FishEye allows when accessing your repository. The Light SCM does not require time to scan the repository, but is slower to retrieve information from your repositories (as it always does it on demand rather than using caches).

4. When using Iterative Reviews in Crucible, you will not be prompted when a new version of a file is available (this is a feature that requires FishEye).
5. You will lose the ability to browse and search the repository, see the detailed history and charts showing commits and LOC information from your repository data that FishEye provides with its in-depth scanning functionality.
6. You will no longer be able to see commit activity from your repository in Activity Streams.
7. You will lose the ability to see your content roots and repositories associated with projects.
8. You will no longer be able to see repository lists and browse repositories using the '**Source**' tab.

Do I need a FishEye licence to run Crucible?

FishEye and Crucible are separate products. They can be run separately, and they can also be run together.

You can run Crucible standalone, but you will not have access to some of FishEye's advanced features, such as pre-caching repository content (for maximum performance), advanced searching and FishEye's activity graphs.

Crucible stand-alone can be used with Subversion, CVS, Perforce, Git and Clearcase via SCM plugins. In this situation, access to the repositories is strictly on-demand.

For the best combination of features and performance, run both Crucible and FishEye.

Support Policies

Welcome to the support policies index page. Here, you'll find information about how Atlassian Support can help you and how to get in touch with our helpful support engineers. Please choose the relevant page below to find out more.

- Bug Fixing Policy
- How to Report a Security Issue
- New Features Policy
- Patch Policy
- Security Advisory Publishing Policy
- Security Patch Policy
- Severity Levels for Security Issues

To request support from Atlassian, please raise a support issue in our online support system. To do this, visit support.atlassian.com, log in (creating an account if need be) and create an issue under Crucible. Our friendly support engineers will get right back to you with an answer.

Bug Fixing Policy

Summary

- Atlassian Support will help with workarounds and bug reporting.
- Critical bugs will generally be fixed in the next maintenance release.
- Non critical bugs will be scheduled according to a variety of considerations.

Raising a Bug Report

Atlassian Support is eager and happy to help verify bugs — we take pride in it! Please open a support request in our support system providing as much information as possible about how to replicate the problem you are experiencing. We will replicate the bug to verify, then lodge the report for you. We'll also try to construct workarounds if they're possible.

Customers and plugin developers are also welcome to open bug reports on our issue tracking systems directly. Use http://jira.atlassian.com for the stand-alone products and http://studio.atlassian.com for JIRA Studio.

When raising a new bug, you should rate the priority of a bug according to our JIRA usage guidelines. Customers should watch a filed bug in order to receive e-mail notification when a "Fix Version" is scheduled for release.

How Atlassian Approaches Bug Fixing

Maintenance (bug fix) releases come out more frequently than major releases and attempt to target the most critical bugs affecting our customers. The notation for a maintenance release is the final number in the version (ie the 1 in 3.0.1).

If a bug is critical (production application down or major malfunction causing business revenue loss or high numbers of staff unable to perform their normal functions) then it will be fixed in the next maintenance release provided that:

- The fix is technically feasible (i.e. it doesn't require a major architectural change).
- It does not impact the quality or integrity of a product.

For non-critical bugs, the developer assigned to fixing bugs prioritises the non-critical bug according to these factors:

- How many of our supported configurations are affected by the problem.
- Whether there is an effective workaround or patch.
- How difficult the issue is to fix.
- Whether many bugs in one area can be fixed at one time.

The developers responsible for bug fixing also monitor comments on existing bugs and new bugs submitted in JIRA, so you can provide feedback in this way. We give high priority consideration to security issues.

When considering the priority of a non-critical bug we try to determine a 'value' score for a bug which takes into account the severity of the bug from the customer's perspective, how prevalent the bug is and whether roadmap features may render the bug obsolete. We combine this with a complexity score (i.e. how difficult the bug is). These two dimensions are used when developers self serve from the bug pile.

Further reading

See How to Get Legendary Support from Atlassian for more support-related information.

How to Report a Security Issue

Finding and Reporting a Security Vulnerability

If you find a security bug in the product, please open an issue on http://jira.atlassian.com in the relevant project.

- Set the priority of the bug to 'Blocker'.
- Provide as much information on reproducing the bug as possible.
- Set the security level of the bug to 'Developer and Reporters only'.

All communication about the vulnerability should be performed through JIRA, so that Atlassian can keep track of the issue and get a patch out as soon as possible.

Further reading

See How to Get Legendary Support from Atlassian for more support-related information.

New Features Policy

Summary

- We encourage and display customer comments and votes openly in our issue tracking systems, http://jira.atlassian.com and http://studio.atlassian.com.
- We do not publish roadmaps.
- Product Managers review our most popular voted issues on a regular basis.
- We schedule features based on a variety of factors.
- Our Atlassian Bug Fixing Policy is distinct from our Feature Request process.
- Atlassian provides consistent updates on the top 20 feature/improvement requests (in our issue tracker systems).

How to Track what Features are Being Implemented

When a new feature or improvement is scheduled, the 'fix-for' version will be indicated in the JIRA issue. This happens for the upcoming release only. We maintain roadmaps for more distant releases internally, but because these roadmaps are often pre-empted by changing customer demands, we do not publish them.

How Atlassian Chooses What to Implement

In every major release we *aim* to implement highly requested features, but it is not the only determining factor. Other factors include:

- **Direct feedback** from face to face meetings with customers, and through our support and sales channels.
- **Availability of staff** to implement features.
- **Impact** of the proposed changes on the application and its underlying architecture.
- How **well defined** the requested feature is (some issues gain in popularity rapidly, allowing little time to plan their implementation).
- Our long-term **strategic vision** for the product.

How to Contribute to Feature Development

Influencing Atlassian's release cycle
We encourage our customers to vote on feature requests in JIRA. The current tally of votes is available online in our issue tracking systems, http://jira.atlassian.com and http://studio.atlassian.com. Find out if your improvement request already exists. If it does, please vote for it. If you do not find it, create a new feature or improvement request online.

Extending Atlassian Products
Atlassian products have powerful and flexible extension APIs. If you would like to see a particular feature implemented, it may be possible to develop the feature as a plugin. Documentation regarding the plugin APIs is available. Advice on extending either product may be available on the user mailing-lists, or at our community forums.

If you require significant customisations, you may wish to get in touch with our partners. They specialise in extending Atlassian products and can do this work for you. If you are interested, please contact us.

Further reading

See How to Get Legendary Support from Atlassian for more support-related information.

Patch Policy

Patch Policy

Atlassian will only provide software patches in extremely unusual circumstances. If a problem has been fixed in a newer release of the product, Atlassian will request that you upgrade your instance to fix the issue. If it is deemed necessary to provide a patch, a patch will be provided for the current release (e.g. JIRA 4.0) and the last maintenance release of the last major version (e.g. JIRA 3.13.5) only.

Patches are issued under the following conditions:

- The bug is critical (production application down or major malfunction causing business revenue loss or high numbers of staff unable to perform their normal functions).
- A patch is technically feasible (ie it doesn't require a major architectural change)
  OR
- The issue is a security issue, and falls under our Security Policy .

Atlassian does not provide patches for non-critical bugs.

Provided that a patch does not impact the quality or integrity of a product, Atlassian will ensure that patches supplied to customers are added to the next maintenance release. Customers should watch a filed bug in order to receive e-mail notification when a "Fix Version" is scheduled for release.

Patches are generally attached to the relevant http://jira.atlassian.com issue.

Further reading

See How to Get Legendary Support from Atlassian for more support-related information.

Security Advisory Publishing Policy

Publication of Security Advisories

When a security issue in an Atlassian product is discovered and resolved, Atlassian will inform customers through the following mechanisms:

- A security advisory will be posted in the documentation.
- A copy of the advisory will be sent to the product mailing-lists. These lists are mirrored on our forums.
- If the person who reported the issue wants to publish an advisory through some other agency (for example, CERT), Atlassian will assist in the production of that advisory, and link to it from our own.

Further reading

See How to Get Legendary Support from Atlassian for more support-related information.

Security Patch Policy

Our Security Patch Policy

When a security issue is discovered, Atlassian will endeavour to:

- Issue a new, fixed version as soon as possible,
- Issue a patch to the current release (e.g. JIRA 4.0) and the latest maintenance release for the last major version of a product (e.g. JIRA

3.13.5),
- Issue patches for older versions if feasible.

Patches will generally be attached to the relevant JIRA issue.

Visit our general Atlassian Patch Policy as well.

Further reading

See How to Get Legendary Support from Atlassian for more support-related information.

Severity Levels for Security Issues

Severity Levels

Atlassian security advisories include a severity level, rating the vulnerability as one of the following:

- Critical
- High
- Moderate
- Low

Below is a summary of the factors which we use to decide on the severity level, and the implications for your installation.

Severity Level: Critical

We classify a vulnerability as critical if most or all of the following are true:

- Exploitation of the vulnerability results in root-level compromise of servers or infrastructure devices.
- The information required in order to exploit the vulnerability, such as example code, is widely available to attackers.
- Exploitation is usually straightforward, in the sense that the attacker does not need any special authentication credentials or knowledge about individual victims, and does not need to persuade a target user, for example via social engineering, into performing any special functions.

Severity Level: High

We give a high severity level to those vulnerabilities which have the potential to become critical, but have one or more mitigating factors that make exploitation less attractive to attackers.

For example, given a vulnerability which has many characteristics of the critical severity level, we would give it a level of high if any of the following are true:

- The vulnerability is difficult to exploit.
- Exploitation does not result in elevated privileges.
- The pool of potential victims is very small.

Note: If the mitigating factor arises from a lack of technical details, the severity level would be elevated to critical if those details later became available. If your installation is mission-critical, you may want to treat this as a critical vulnerability.

Severity Level: Moderate

We give a moderate severity level to those vulnerabilities where the scales are slightly tipped in favour of the potential victim.

The following vulnerabilities are typically rated moderate:

- Denial of service vulnerabilities, since they do not result in compromise of a target.
- Exploits that require an attacker to reside on the same local network as the victim.
- Vulnerabilities that affect only nonstandard configurations or obscure applications.
- Vulnerabilities that require the attacker to manipulate individual victims via social engineering tactics.
- Vulnerabilities where exploitation provides only very limited access.

Severity Level: Low

We give a low severity level to those vulnerabilities which by themselves have typically very little impact on an organisation's infrastructure.

Exploitation of such vulnerabilities usually requires local or physical system access. Exploitation may result in client-side privacy or denial of service issues and leakage of information about organisational structure, system configuration and versions, or network topology.

Original ranking compiled by the SANS Institute
Our vulnerability ranking is based on a scale originally published by the SANS Institute.

Further reading

See How to Get Legendary Support from Atlassian for more support-related information.

Crucible Development Hub

This page is deprecated. Please see the new Developer Documentation Space.

Documentation for Crucible Development

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Here you'll find everything you need to code up a storm with Crucible. This includes guides for environment set-up, building a project, plugin creation, and real-world examples you can try.

How to Build a Crucible Plugin
How to Build a Crucible Plugin - start here to learn how to set up your development environment, create a plugin template and start coding. Development Platform for Crucible Crucible API Javadocs Crucible REST API

Crucible's URL Structure

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

This page contains information about the Crucible URL structure for plugin developers. Knowing the structure, you will be able to construct hyperlinks for use in plugins or gadgets and find API specifications for your version of Crucible.

On this page:

- Create Review
- Crucible Reviews
- Crucible Projects
- Search Crucible Reviews
- Search Crucible Review Comments

There is also a page about the FishEye structure.

Create Review

This creates a Crucible review on the specified changeset and repository.

In the example below, insert the desired changeset ID in place of "**MY_CSID**" and the desired repository name in place of "**REPNAME**".

Basic form

```
/cru/create?csid=MY_CSID&repo=REPNAME
```

Example with typical values

```
http://example.com/crucible/cru/create?csid=18905&repo=CLOV
```

Crucible Reviews

This opens a Crucible review page with the specified review key.

In the example below, insert the desired review key in place of "**MY_REVIEW_KEY**".

Basic form

```
/cru/REVIEW_KEY
```

Example with typical values

```
http://example.com/crucible/cru/CR-1
```

Crucible Projects

This opens a Crucible project page with the specified project key.

In the example below, insert the desired project key in place of "**MY_PROJECT_KEY**".

Basic form

```
/cru/browse/MY_PROJECT_KEY
```

Example with typical values

```
http://example.com/crucible/cru/browse/CR-CLOV
```

Search Crucible Reviews

This searches Crucible reviews with the specified search string.

In the example below, insert the desired string that you want to match against review titles in place of "**QUERYSTRING**".

Basic form

```
/cru/search?query=QUERYSTRING
```

Example with typical values

```
http://example.com/crucible/cru/search?query=november-audit
```

Search Crucible Review Comments

This searches comments on reviews in Crucible.

In the example below, you would insert your search string in place of the word "**TEST**".

Basic form

```
/cru/commentSearch?search.text=TEST
```

Example with typical values

```
http://example.com/crucible/cru/commentSearch?search.text=imho
```

Looking for a page on the FishEye URL structure? Click here.

Crucible REST API

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

These pages contain information relating to the REST API for Crucible.

A list of available services and a detailed example page are currently documented.

Crucible REST API documentation:

- Crucible REST API Usage Example
- Conditional Get — Conditional Get allows lightweight polling of resources.
- Data Types — Definitions of data types used by the REST API.
- Project Service — Provides access to the projects defined in a Crucible instance.
- Repository Service — Provides information about the repositories configured in a Crucible instance.
- Review Service — The Review Service allows you to list, examine, create and modify reviews.

Crucible REST API Usage Example

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

This page describes using the Crucible REST API to retrieve comments from reviews in Crucible. It's an overview of using the API, not a comprehensive reference.

The Crucible REST API provides a reference for all the REST operations supported by Crucible.

On this page:

- Authentication
- Retrieving Reviews
- Retrieving Reviews in a Specific State
- Retrieving Comments From a Review
- Retrieving Properties of a File Under Review
- Creating a New Review
- JSON
- Retrieving a Specific Review
- Making a JSON Request

The Crucible REST API lives under the URL `http://HOSTNAME:PORT/CONTEXT/rest-service/`, where `HOSTNAME:PORT` is the IP address and port of your FishEye instance and `CONTEXT` is the web application context it is deployed under.

This page doesn't assume any particular REST client is being used – it just discusses the URLs to use and the responses which they will give.

The information returned is in XML format.

This page assumes Crucible 1.6 – the examples (in particular JSON support) may not work with earlier versions.

Authentication

Requests to the REST API are simply HTTP requests, which can use any of the normal Crucible authentication methods. An unauthenticated request will execute as the anonymous user.

Authentication options are:

- **The normal Crucible login cookie.** A cookie named 'remember' in the request with the token returned by the REST authentication service on `http://HOSTNAME:PORT/rest-service/auth-v1/login?userName=jim&password=jimspassword`. This will return `<?xml version="1.0" encoding="UTF-8" standalone="yes"?><loginResult><token>jim:2:4455f9a4387298a83aae6902e8843f89</token></loginResult>`. The value of the cookie should be set to `jim:2:4455f9a4387298a83aae6902e8843f89`.
- **Trusted Applications.** If Crucible trusts the application which is making the request, the user logged in to the trusted application will be authenticated in Crucible.
- **Crowd.** If Crucible is configured to use Crowd, then a request containing Crowd authentication will authenticate the Crowd user in Crucible.
- **Basic Authentication.** An RFC 2617 Basic Authentication header.

Retrieving Reviews

This example will use the reviews service, at the URL `http://HOSTNAME:PORT/rest-service/reviews-v1`. A simple get on this URL will return every review in the system. The results will look like this:

```
<reviews>
  <reviewData>
    <author>pmcneil</author>
    <creator>pmcneil</creator>
    <description>14699: CRUC-230: allow links to be removed
14698: CRUC-230: don't allow linking cycles</description>
    <moderator>pmcneil</moderator>
    <name>CRUC-214: Generate  comment/defect and open review report graphs</name>
    <permaId>
      <id>CR-FE-1</id>
    </permaId>
    <projectKey>CR-FE</projectKey>
    <repoName>FE</repoName>
    <state>Review</state>
  </reviewData>
  ...
</reviews>
```

Retrieving Reviews in a Specific State

If you don't want to retrieve every review, you can specify a value for the `state` parameter: `http://HOSTNAME:PORT/rest-service/reviews-v1?state=Review,Summarize` to retrieve only those reviews in particular states.

The request only returns those reviews that the authenticated user is allowed to see.

Once you have the reviews you can use their `permaId` to get more details, so: `http://HOSTNAME:PORT/rest-service/reviews-v1/CR-FE-1` will return a single `reviewData` element, identical to the one shown above.

Retrieving Comments From a Review

URLs like `http://HOSTNAME:PORT/rest-service/reviews-v1/CR-FE-1/thing` will return information about `thing` records belonging to the review.

So `http://HOSTNAME:PORT/rest-service/reviews-v1/CR-FE-1/comments` returns all the comments in the review:

```
<comments>
  <versionedComment>
    <createDate>2008-03-03T22:22:00.920+11:00</createDate>
    <defectApproved>false</defectApproved>
    <defectRaised>false</defectRaised>
    <deleted>false</deleted>
    <draft>false</draft>
    <message>why use roll instead of add??</message>
    <permaId>
      <id>CMT:200</id>
    </permaId>
    <reviewItemId>
      <id>CFR-281</id>
    </reviewItemId>
    <user>mquail</user>
    <fromLineRange>196-199, 230-233</fromLineRange>
    <toLineRange>206-209, 240-251</toLineRange>
  </versionedComment>
  ... more versioned comments ...
  <generalComment>
    <createDate>2008-03-25T17:15:20.380+11:00</createDate>
    <defectApproved>false</defectApproved>
    <defectRaised>true</defectRaised>
    <deleted>false</deleted>
    <draft>false</draft>
    <message>when there are no comments in the last week the vertical axis shows -5 as the starting
point</message>
    <user>pmcneil</user>
  </generalComment>
  ... more general comments ...
</comments>
```

Retrieving Properties of a File Under Review

If you need more information about the file a versioned comment was on, the URL `http://HOSTNAME:PORT/rest-service/reviews-v1/CR-FE-1/reviewitems/CFR-281` gives more details:

```
<fisheyeReviewItemData>
  <permId>
    <id>CFR-281</id>
  </permId>
  <fromPath></fromPath>
  <fromRevision></fromRevision>
  <repositoryName>FE</repositoryName>

<toPath>branches/iteration03/src/java/com/cenqua/crucible/reports/CommentsDefects/CommentDatasetMaker.jav
<toRevision>13947</toRevision>
</fisheyeReviewItemData>
```

That particular review item is a new file, so the `fromPath` and `fromRevision` elements are empty.

Creating a New Review

To create a review, do a POST call to the reviews url (`http://HOSTNAME:PORT/rest-service/reviews-v1`) with the following XML document as request body (note that you need to be authenticated be be able to create a new review, so use Basic HTTP authentication for this call):

Request to Create a New Review

```
<?xml version="1.0"?>
<createReview>
  <reviewData>
    <author> <!-- required element -->
      <userName>joe</userName>
    </author>
    <creator> <!-- required element -->
      <userName>fred</userName>
    </creator>
    <moderator> <!-- required element -->
      <userName>erik</userName>
    </moderator>
    <description>These is the Statement of Objectives.</description>
    <name>Title of the new review</name> <!-- required element -->
    <projectKey>CR</projectKey> <!-- required element -->
    <allowReviewersToJoin>true</allowReviewersToJoin>
  </reviewData>
</createReview>
```

JSON

As of Crucible 1.6.3, JSON serialization is supported for REST requests and responses. Using the `Accept` request header, clients can specifiy whether the response document should be encoded in XML or JSON. Unless specified differently, Crucible will respond using XML and will interpret requests as XML. Crucible will always include the `Content-Type` header in the response to identify the encoding. Likewise, when a client sends a JSON request document, it must use the `Content-Type: application/json` header. It is possible to use a different encoding for the request and the response.

> **Note**
> JSON support is currently experimental.

Retrieving a Specific Review

To retrieve the contents of a specific review as a JSON document, rather than XML, include the `Accept: application/json` header in your HTTP request. The example below includes the HTTP headers of both the request and the response to illustrate this:

Request:

```
GET /rest-service/reviews-v1/CR-3/details HTTP/1.1
Host: localhost:8060
Authorization: Basic am9lOmpvZQ==
Accept: application/json
```

Response:

```
HTTP/1.1 200 OK
Cache-Control: private
Content-Type: application/json
Last-Modified: Sun, 26 Oct 2008 23:05:45 GMT
ETag: "1225062345005-140"

{"detailedReviewData": {
  "allowReviewersToJoin":false,
  "author":{"displayName":"Joe","userName":"joe"},
  "createDate":"2008-10-27T09:50:05.064+1100",
  "creator":{"displayName":"Joe","userName":"joe"},
  "description":"",
  "metricsVersion":1,
  "moderator":{"displayName":"Joe","userName":"joe"},
  "name":"readme ",
  "permaId":{"id":"CR-3"},
  "projectKey":"CR",
  "state":"Draft",
  "actions": {
    "actionData":[{"name":"action:deleteReview"},{"name":"action:rejectReview"},{"name":
"action:abandonReview"},{"name":"action:summarizeReview"},
      {"name":"action:modifyReviewFiles"},{"name":"action:approveReview"},{"name":
"action:recoverReview"},{"name":"action:commentOnReview"},
      {"name":"action:submitReview"},{"name":"action:createReview"},{"name":"action:viewReview"},{
"name":"action:reopenReview"},"name":"action:closeReview"}]
  },
  "generalComments":"",
  "reviewItems":"",
  "reviewers":"",
  "transitions": {
    "transitionData":[{"name":"action:approveReview"},{"name":"action:abandonReview"}]
  },
  "versionedComments":""
}}
```

Note that the response document above has been indented to increase readability in this example.

Making a JSON Request

When sending a request document using JSON, include the `Content-Type: application/json` header in the HTTP request. The example below creates a new review using JSON. Again, the relevant HTTP request and response headers are included:

Request:

```
POST /rest-service/reviews-v1 HTTP/1.1
Host: localhost:8060
Content-Length: 269
Authorization: Basic am9lOmpvZQ==
Accept: application/json
Content-Type: application/json

{"createReview":
 {"reviewData": {
  "allowReviewersToJoin":false,
  "author":{"userName":"joe"},
  "creator":{"userName":"joe"},
  "moderator":{"userName":"matt"},
  "description":"JSON Test Review",
  "metricsVersion":1,
  "name":"readme ",
  "projectKey":"CR"
 }}
}
```

Response:

```
HTTP/1.1 201 Created
Content-Type: application/json
Location: http://localhost:8060/rest-service/reviews-v1/CR-12

{"reviewData": {
  "allowReviewersToJoin":false,
  "author":{"displayName":"joe lowercase","userName":"joe"},
  "createDate":"2008-10-27T17:21:29.779+1100",
  "creator":{"displayName":"joe lowercase","userName":"joe"},
  "description":"JSON Test Review",
  "metricsVersion":1,
  "moderator":{"displayName":"Matt Quail","userName":"matt"},
  "name":"readme ",
  "permaId":{"id":"CR-12"},
  "projectKey":"CR",
  "state":"Draft"
}}
```

Conditional Get

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Conditional Get allows lightweight polling of resources.

The REST API makes Crucible available to remote applications. Depending on the type of application, it can be quite common to poll a certain resource periodically to be able to detect changes. For example, an application may request `/reviews-v1/filter/Review` at regular intervals and notify the user when a new review was added.

However, polling a server constantly for potential updates could cause undesired overhead, especially when the response is large. To better facilitate applications that need to poll frequently, Crucible implements HTTP Conditional Get.

Conditional Get

With Conditional Get, the server keeps track of when the last change was made to a resource and sends this timestamp along in each HTTP response ("`Last-Modified: Wed, 01 Oct 2008 03:37:58 GMT`"). At the same time, a client that understands Conditional Get and polls the same resource periodically, will in turn keep track of the `Last-Modified` timestamp of each resource it has requested and send it along as a request header at every request ("`If-Modified-Since: Mon, 29 Sep 2008 06:47:04 GMT`").

When the resource has not been modified since the last time the client requested it (`Last-Modified <= If-Modified-Since`), the server will not serve the request, but return status 204 "Not Modified" with an empty response body. If the resource was modified, the server will respond normally (200 with the resource in the body).

Note that Crucible also sends the `ETag` response header along with `Last-Modified`. The `ETag` header contains a checksum of the response document and allows the client to detect changes even when the `Last-Modified` time did not change. A client that implements Conditional Get should send the value of the `ETag` response header in the `If-None-Match` request header.

For more information on HTTP Conditional Get, please refer to the HTTP specification.

Compatibility

Servers implementing Conditional Get are completely compatible with clients that don't understand it and vice versa.

Data Types

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Definitions of data types used by the REST API.

- ReviewData
- ReviewItemData

- DetailedReviewData
- Error

ReviewData

Contains basic information about a review.

Sample XML:

```
<reviewData>
  <allowReviewersToJoin>false</allowReviewersToJoin>
  <author>
    <displayName>Matt Quail</displayName>
    <userName>matt</userName>
  </author>
  <createDate>2008-08-25T12:38:14.603+1000</createDate>
  <creator>
    <displayName>Matt Quail</displayName>
    <userName>matt</userName>
  </creator>
  <description>Review things and stuff</description>
  <metricsVersion>1</metricsVersion>
  <moderator>
    <displayName>Matt Quail</displayName>
    <userName>matt</userName>
  </moderator>
  <name>Test review 1</name><permaId>
  <id>CR-1</id></permaId>
  <projectKey>CR</projectKey>
  <state>Review</state>
</reviewData>
```

Sample JSON:

```
{"reviewData": {
 "allowReviewersToJoin":false,
 "author":{"displayName":"Matt Quail","userName":"matt"},
 "createDate":"2008-10-27T09:50:05.064+1100",
 "creator":{"displayName":"Matt Quail","userName":"matt"},
 "moderator":{"displayName":"Matt Quail","userName":"matt"},
 "description":"Review things and stuff",
 "metricsVersion":1,
 "name":"Test review 1",
 "permaId":{"id":"CR-3"},
 "projectKey":"CR",
 "state":"Draft"
}}
```

ReviewItemData

Describes a single item that is under review. An item can represent the changes between two or more revisions of a file in a source repository, a change that was uploaded to Crucible as a *unified diff* or patch file, or it can represent any arbitrary file uploaded and attached to a review. Below are three examples of `reviewItemData` in XML, followed by the same three in JSON:

Sample XML:

```
<!-- ReviewItemData representing a changes between two revisions: -->
  <reviewItem expand="revisions">
    <permId>
      <id>CFR-40</id>
    </permId>
    <authorName>evzijst</authorName>
    <commitDate>2008-10-14T15:25:08.755+1000</commitDate>
    <commitType>Modified</commitType>
    <fileType>File</fileType>
    <fromContentUrl>
/cru/CR-4/rawcontent/89/test2%2Ftrunk%2Fsrc%2Fmain%2Fjava%2Fcom%2Fatlassian%2FTest.java
</fromContentUrl>
    <fromPath>test2/trunk/src/main/java/com/atlassian/Test.java</fromPath>
    <fromRevision>9</fromRevision>
    <repositoryName>Local</repositoryName>
    <toContentUrl>
/cru/CR-4/rawcontent/80/test2%2Ftrunk%2Fsrc%2Fmain%2Fjava%2Fcom%2Fatlassian%2FTest.java</toContentUrl>
    <toPath>test2/trunk/src/main/java/com/atlassian/Test.java</toPath>
    <toRevision>10</toRevision>
    <revisions size="4"/>
  </reviewItem>

  <!-- ReviewItemData representing a file from an uploaded unified diff: -->
  <reviewItem expand="revisions">
    <permId>
      <id>CFR-38</id>
    </permId>
    <authorName>joe</authorName>
    <commitDate>2008-11-19T15:45:57.953+1100</commitDate>
    <commitType>Modified</commitType>
    <fileType>File</fileType>
    <fromPath>src/java/com/atlassian/crucible/spi/rpc/AbstractJAXBContextResolver.java</fromPath>
    <fromRevision>2:F</fromRevision>
    <patchUrl>/cru/CR-4/downloadPatch/4/CRUC-582.patch</patchUrl>
    <repositoryName>PATCH:4</repositoryName>
    <toPath>src/java/com/atlassian/crucible/spi/rpc/AbstractJAXBContextResolver.java</toPath>
    <toRevision>2:T</toRevision>
    <revisions size="2"/>
  </reviewItem>

  <!-- ReviewItemData representing an uploaded binary file: -->
  <reviewItem expand="revisions">
    <permId>
      <id>CFR-31</id>
    </permId>
    <authorName>joe</authorName>
    <commitDate>2008-11-13T10:15:05.510+1100</commitDate>
    <commitType>Added</commitType>
    <fileType>File</fileType>
    <fromPath/>
    <fromRevision/>
    <repositoryName>UPLOAD:4</repositoryName>
    <toContentUrl>/cru/CR-4/rawcontent/52/scm-plugin.tgz</toContentUrl>
    <toPath>jackrabbit-scm-plugin.tgz</toPath>
    <toRevision>34</toRevision>
    <revisions size="1"/>
  </reviewItem>
```


Sample JSON

```
{"reviewItem":
 {"@expand":"revisions",
 "permId":{"id":"CFR-40"},
 "authorName":"evzijst",
 "commitDate":"2008-10-14T15:25:08.755+1000",
 "commitType":"Modified",
 "fileType":"File",
 "fromContentUrl":
"\/cru\/CR-4\/rawcontent\/89\/test2%2Ftrunk%2Fsrc%2Fmain%2Fjava%2Fcom%2Fatlassian%2FTest.java",
 "fromPath":"test2\/trunk\/src\/main\/java\/com\/atlassian\/Test.java",
 "fromRevision":9,
 "repositoryName":"Local",
 "toContentUrl":
"\/cru\/CR-4\/rawcontent\/80\/test2%2Ftrunk%2Fsrc%2Fmain%2Fjava%2Fcom%2Fatlassian%2FTest.java",
 "toPath":"test2\/trunk\/src\/main\/java\/com\/atlassian\/Test.java",
 "toRevision":10,
 "revisions":{"@size":"4"}}
}

{"reviewItem":
 {"@expand":"revisions",
 "permId":{"id":"CFR-38"},
 "authorName":"joe",
 "commitDate":"2008-11-19T15:45:57.953+1100",
 "commitType":"Modified",
 "fileType":"File",
 "fromPath":"src\/java\/com\/atlassian\/crucible\/spi\/rpc\/AbstractJAXBContextResolver.java",
 "fromRevision":"2:F",
 "patchUrl":"\/cru\/CR-4\/downloadPatch\/4\/CRUC-582.patch",
 "repositoryName":"PATCH:4",
 "toPath":"src\/java\/com\/atlassian\/crucible\/spi\/rpc\/AbstractJAXBContextResolver.java",
 "toRevision":"2:T",
 "revisions":{"@size":"2"}}
}

{"reviewItem":
 {"@expand":"revisions",
 "permId": {"id":"CFR-31"},
 "authorName":"joe",
 "commitDate":"2008-11-13T10:15:05.510+1100",
 "commitType":"Added",
 "fileType":"File",
 "fromPath":"",
 "fromRevision":"",
 "repositoryName":"UPLOAD:4",
 "toContentUrl":"\/cru\/CR-4\/rawcontent\/52\/jackrabbit-scm-plugin.tgz",
 "toPath":"jackrabbit-scm-plugin.tgz",
 "toRevision":34,
 "revisions":{"@size":"1"}}
}
```


The above section contains three `reviewItemData` instances that illustrate the use of the individual elements. The main elements are the `<to../>` and `<from../>` elements. These describe the two revisions of a review item where the `to..` is the most recent and `from..` the oldest revision of the item that is under review.

When using *Iterative Reviewing*, an item can contains more than two file revisions. The `<revisions/>` element contains information on every revision under review, while `<to../>` and `<from../>` always point to the first and the last revisions (the cumulative changes). By default, the `<revisions/>` element is collapsed and contains the `size=` attribute that indicates the total number of file revisions in the review item. To expand this list, use the `?append=revisions` url parameter, e.g.:

```
http://localhost:6060/crucible/rest-service/reviews-v1/CR-FE-2033/reviewitems/CFR-23489?expand=revisions
```

Note that when a new file is added, it will not have the `from..` elements and likewise, when a file gets removed, it will lack the `to..` elements. The `<to../>` and `<from../>` elements also include urls that point to the file contents hosted in Crucible. These are the `<fromContentUrl/>` and `<toContentUrl/>` elements. These are relative URLs that come after the web application context, so for example to download the file from the third reviewItemData, access: `http://HOSTNAME:PORT/CONTEXT/cru/CR-4/rawcontent/52/scm-plugin.tgz`.

Note that `<fromContentUrl/>` and `<toContentUrl/>` only apply to either uploaded files or revisions on files in one of the Crucible repositories. Uploaded patch files lack these elements because a unified diff file usually only contains the sections of two files that were changed, but not the code that was unchanged. As a result, Crucible is unable to provide links for the individual files. Instead, the `<patchUrl/>` element contains a relative link to the original patch file that was uploaded by the creator of the review.

DetailedReviewData

Note that the `reviewItems` element is empty when multiple reviews are retrieved via REST. To include the `reviewItems` in a `detailedReviewData` structure you must retrieve a single review via the URL `/rest-service/reviews-v1/<review id>/details`.

Sample XML:

```
<detailedReviewData>
 <allowReviewersToJoin>false</allowReviewersToJoin>
 <author>
  <displayName>Matt Quail</displayName>
  <userName>matt</userName>
 </author>
 <createDate>2008-09-16T10:50:26.862+1000</createDate>
 <creator>
  <displayName>Matt Quail</displayName>
  <userName>matt</userName>
 </creator>
 <description/>
 <metricsVersion>1</metricsVersion>
 <moderator>
  <displayName>Matt Quail</displayName>
  <userName>matt</userName>
 </moderator>
 <name/>
 <permaId>
  <id>CR-1</id>
 </permaId>
 <projectKey>CR</projectKey>
 <state>Draft</state>
 <actions>
  <actionData>
   <name>action:abandonReview</name>
  </actionData>
  <actionData>
   <name>action:closeReview</name>
  </actionData>
  <actionData>
   <name>action:submitReview</name>
  </actionData>
  <actionData>
   <name>action:reopenReview</name>
  </actionData>
  <actionData>
   <name>action:summarizeReview</name>
  </actionData>
  <actionData>
   <name>action:rejectReview</name>
  </actionData>
  <actionData>
   <name>action:deleteReview</name>
  </actionData>
  <actionData>
   <name>action:approveReview</name>
  </actionData>
  <actionData>
   <name>action:modifyReviewFiles</name>
  </actionData>
  <actionData>
   <name>action:viewReview</name>
  </actionData>
  <actionData>
   <name>action:commentOnReview</name>
  </actionData>
```

```
  <actionData>
   <name>action:recoverReview</name>
  </actionData>
  <actionData>
   <name>action:createReview</name>
  </actionData>
 </actions>
 <generalComments/>
 <reviewItems>
  <reviewItem>
   <permId>
    <id>CFR-1</id>
   </permId>
   <authorName>admin</authorName>
   <commitDate>2008-08-27T10:19:17.000+1000</commitDate>
   <commitType>Modified</commitType>
   <fileType>File</fileType>
   <fromPath>ds/Home</fromPath>
   <fromRevision>1</fromRevision>
   <repositoryName>localhost</repositoryName>
   <toPath>ds/Home</toPath>
   <toRevision>2</toRevision>
  </reviewItem>
  <reviewItem>
   <permId>
    <id>CFR-2</id>
   </permId>
   <authorName>tomd</authorName>
   <commitDate>2008-09-09T16:42:28.786+1000</commitDate>
   <commitType>Added</commitType>
   <fileType>File</fileType>
   <fromPath/>
   <fromRevision/>
   <repositoryName>mylocalsvn</repositoryName>
   <toPath>aaa/bbb/qqq.txt</toPath>
   <toRevision>3</toRevision>
  </reviewItem>
 </reviewItems>
 <reviewers/>
 <transitions>
  <transitionData>
   <name>action:approveReview</name>
  </transitionData>
  <transitionData>
   <name>action:abandonReview</name>
  </transitionData>
 </transitions>
```

```
  <versionedComments/>
 </detailedReviewData>
```

Sample JSON:


```
{"detailedReviewData": {
 "allowReviewersToJoin":false,
 "author":{"displayName":"joe lowercase","userName":"joe"},
 "createDate":"2008-10-27T09:50:05.064+1100",
 "creator":{"displayName":"joe lowercase","userName":"joe"},
 "description":"",
 "metricsVersion":1,
 "moderator":{"displayName":"joe lowercase","userName":"joe"},
 "name":"readme ",
 "permaId":{"id":"CR-3"},
 "projectKey":"CR",
 "state":"Draft",
 "actions": {
  "actionData":[{"name":"action:rejectReview"},{"name":"action:closeReview"},
  {"name":"action:modifyReviewFiles"},{"name":"action:abandonReview"},
  {"name":"action:commentOnReview"},{"name":"action:reopenReview"},
  {"name":"action:createReview"},{"name":"action:recoverReview"},
  {"name":"action:deleteReview"},{"name":"action:approveReview"},
  {"name":"action:viewReview"},{"name":"action:submitReview"},
  {"name":"action:summarizeReview"}]
 },
 "generalComments":"",
 "reviewItems": {"reviewItem":[
  {"permId":{"id":"CFR-1"},
  "authorName":"evzijst",
  "commitDate":"2008-10-14T15:25:08.755+1000",
  "commitType":"Modified",
  "fileType":"File",
  "fromPath":"test2\/trunk\/src\/main\/java\/com\/atlassian\/Test.java",
  "fromRevision":9,
  "repositoryName":"Local",
  "toPath":"test2\/trunk\/src\/main\/java\/com\/atlassian\/Test.java",
  "toRevision":10},
  {"permId":{"id":"CFR-2"},
  "authorName":"evzijst",
  "commitDate":"2008-10-14T15:25:08.755+1000",
  "commitType":"Added",
  "fileType":"Directory",
  "fromPath":"",
  "fromRevision":"",
  "repositoryName":"Local",
  "toPath":"test2\/trunk\/src\/test\/java\/com",
  "toRevision":10}]
 },
 "reviewers":"",
 "transitions":{"transitionData":[
  {"name":"action:approveReview"},
  {"name":"action:abandonReview"}]
 },
 "versionedComments":""}}
```


|

Error

When a request cannot be serviced properly due to either a server-side problem, or invalid client input, Crucible will return an error document, combined with an HTTP status code other than 200. This XML document contains a number of elements that describe the problem. Note that the HTTP status code distinguishes between client- and server-side causes.
Below is the error that is returned when asking for a non existent resource. The status code for this response is 404 "Document Not Found". Other possible status codes for error responses include 400 "Bad Request" (for example when a request contains an invalid POST body) and 403 "Forbidden" (when accessing a resource without permission).

Sample XML:

```
<error>
 <code>NotFound</code>
 <message>Unknown metrics version: 45</message>
 <stacktrace>com.atlassian.crucible.spi.services.NotFoundException: Unknown metrics version: 45
 at com.atlassian.crucible.spi.impl.DefaultReviewService.getMetrics(DefaultReviewService.java:689)
 at com.atlassian.crucible.spi.rpc.RestReviewService$22.doGet(RestReviewService.java:645)
 at com.atlassian.crucible.spi.rpc.RestReviewService$22.doGet(RestReviewService.java:644)
 at com.atlassian.crucible.spi.rpc.ConditionalGet.doConditionalGet(ConditionalGet.java:46)
 at com.atlassian.crucible.spi.rpc.RestReviewService.getMetrics(RestReviewService.java:643)
 ...
 </stacktrace>
</error>
```

Sample JSON:

```
{
 "code":"NotFound",
 "message":"No review exists with permId 'CR-333'",
 "stacktrace":"com.atlassian.crucible.spi.services.NotFoundException: Unknown metrics version: 45
 at com.atlassian.crucible.spi.impl.DefaultReviewService.getMetrics(DefaultReviewService.java:689)
 at com.atlassian.crucible.spi.rpc.RestReviewService$22.doGet(RestReviewService.java:645)
 at com.atlassian.crucible.spi.rpc.RestReviewService$22.doGet(RestReviewService.java:644)
 at com.atlassian.crucible.spi.rpc.ConditionalGet.doConditionalGet(ConditionalGet.java:46)
 at com.atlassian.crucible.spi.rpc.RestReviewService.getMetrics(RestReviewService.java:643)
 ..."
}
```

Project Service

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Provides access to the projects defined in a Crucible instance. At present this interface is read-only.

Get Project List

Method: GET
URL:

```
/projects-v1
```

Description:
Returns a list of projects.
Status Code:
200 (OK) on success

Example XML:

```
<projects>
  <projectData>
    <allowReviewersToJoin>false</allowReviewersToJoin>
    <id>1</id>
    <key>CR</key>
    <name>Default Project</name>
    <permissionSchemeId>1</permissionSchemeId>
  </projectData>
  <projectData>
    ...
  </projectData>
</projects>
```

Example JSON:

```
{"projects":{"projectData":{
  "allowReviewersToJoin":false,
  "id":1,
  "key":"CR",
  "name":"Default Project",
  "permissionSchemeId":1}
}}
```

Repository Service

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Provides information about the repositories configured in a Crucible instance.

Get Repositories

Method: GET
URL:

```
/repositories-v1
```

Description:
Get a list of all the repositories.

Status Code:
200 (OK) on success.

Example XML:

```
<repositories>
  <repoData>
    <enabled>true</enabled>
    <name>local</name>
    <type>svn</type>
  </repoData>
  <repoData>
    <enabled>true</enabled>
    <name>test</name>
    <type>cvs</type>
  </repoData>
</repositories>
```

Example JSON:

```
{"repositories": {
  "repoData": [
    {"@type":"svnRepositoryData",
    "enabled":true,
    "name":"Local",
    "type":"svn",
    "path":"",
    "url":"file:\/\/\/Users\/erik\/var\/repo"},
    {"@type":"svnRepositoryData",
    "enabled":true,
    "name":"Local2",
    "type":"svn",
    "path":"",
    "url":"file:\/\/\/Users\/erik\/var\/repo"}]
}}
```

Get Repository By Name

Method: GET
URL:

```
/repositories-v1/<repositoryName>
```

Description:
Returns the repository of which the `name` attribute equals repositoryName.

Status Code:
200 (OK) on success

Example XML:

```
<svnRepositoryData>
  <enabled>true</enabled>
  <name>local</name>
  <type>svn</type>
  <path></path>
  <url>file:///Users/tomd/dev/svn/</url>
</svnRepositoryData>
```

Example JSON:

```
{"svnRepositoryData": {
  "enabled":true,
  "name":"Local",
  "type":"svn",
  "path":"",
  "url":"file:\/\/\/Users\/ervzijst\/var\/repo"
}}
```

Review Service

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

The Review Service allows you to list, examine, create and modify reviews.
See the Data Types Page for the structure of the `reviewData` and `detailedReviewData` tags.

Click an item in the list below to see full details, all options and example code.

- Review Service - Reviews
  - Add Changeset To Review
  - Add Patch Revisions To Review
  - Create Review
  - Delete Review
  - Get All Reviews
  - Get All Reviews (limited)
  - Get Allowed Review Actions
  - Get Allowed Review Transitions
  - Get Review
  - Get Review Details
  - Get Review Details by Path
  - Get Review Details through Custom Filter Criteria
  - Get Reviews by Filter
  - Get Reviews by Path
  - Get Reviews through Custom Filter Criteria
  - Get Single Review Details
  - Get Version Info
- Review Service - Reviewers
  - Add Reviewers
  - Get Finished Reviewers
  - Get Incomplete Reviewers
  - Get Reviewers
  - Remove Single Reviewer
- Review Service - Review Items
  - Add Revision to Review
  - Get Review Items
  - Get Single Revision Details
  - Remove Revision from Review
- Review Service - Workflow
  - Close a Review
  - Complete a Review
  - Move a Review to a New State
  - Uncomplete a Review
- Review Service - Comments
  - Add a Reply to a Comment
  - Add Comment to a Review Item
  - Add General Comment to a Review
  - Delete a Comment
  - Delete a Reply
  - Get a Comment
  - Get Comments on a Review Item
  - Get Comments on Files

- Get General Comments
- Get Review Comments
- Get the Replies to a Comment
- Mark a Comment as Read
- Mark a Comment as Leave Unread
- Mark All Comments as Read
- Publish a Draft Comment
- Publish All Draft Comments
- Update a Comment

- Review Service - Miscellaneous
  - Get Metrics

Review Service - Comments

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page:

- Comments
  - Add a Reply to a Comment
  - Add Comment to a Review Item
  - Add General Comment to a Review
  - Delete a Comment
  - Delete a Reply
  - Get a Comment
  - Get Comments on a Review Item
  - Get Comments on Files
  - Get General Comments
  - Get Review Comments
  - Mark a Comment as Read
  - Mark a Comment as Leave Unread
  - Mark all Comments as Read
  - Get the Replies to a Comment
  - Publish a Draft Comment
  - Publish All Draft Comments
  - Update a Comment

Comments

Add a Reply to a Comment

URL:

```
POST /reviews-v1/<review id>/comments/<comment id>/replies
```

Description:
Add a reply to an existing comment.

The POST data is a `generalCommentData` structure.
Status Code:
201 (Created) on success. The response will contain the `Location` response header with the URL of the newly created resource.

Add Comment to a Review Item

URL:

```
POST /reviews-v1/<review id>/reviewitems/<review item id>/comments
```

Description:
Add a comment to a review. Returns the completed `versionedLineCommentData` structure.

The POST data is a `versionedLineCommentData` structure.
Status Code:

201 (Created) on success. The response will contain the `Location` response header with the URL of the newly created resource.

Add General Comment to a Review

URL:

```
POST /reviews-v1/<review id>/comments
```

Description:
Add a general comment to a review. Returns the completed `generalCommentData` structure.

The POST data is a `generalCommentData` structure.
Status Code:
201 (Created) on success. The response will contain the `Location` response header with the URL of the newly created resource.

Delete a Comment

URL:

```
DELETE /reviews-v1/<review id>/comments/<comment id>
```

Description:
Remove an existing comment.
Status Code:
204 (No Content) on success.

Delete a Reply

URL:

```
DELETE /reviews-v1/<review id>/comments/<comment id>/replies/<reply id>
```

Description:
Delete a reply.
Status Code:
204 (No Content) on success.

Get a Comment

URL:

```
GET /reviews-v1/<review id>/comments/<comment id>
```

Description:
Retrieve an existing comment
Status Code:
200 (OK) on success.

Comment Read Status:
This attribute details the read status of the comment for the particular user that the request has been made for. There are three possible values:

- `UNREAD`: The comment has not been read.
- `READ`: The comment has been viewed.
- `LEAVE_UNREAD`: The comment has been read but marked by the user to be left for later referral.

Anonymous access requests and users who do not have permission to comment on a review always return the `READ` value.

Example XML Return Data:

```
<comments>
 <versionedLineCommentData>
  ...
 </versionedLineCommentData>
</comments>
```

Example JSON Return Data:

```
{"comments": [
 {"versionedCommentData": ...}
]}
```

Get Comments on a Review Item

URL:

```
GET /reviews-v1/<review id>/reviewitems/<review item id>/comments
```

Description:
Get all the comments made on a review item.
Status Code:
200 (OK) on success.

Example XML Return Data:

```
<comments>
 <versionedLineCommentData>
  ...
 </versionedLineCommentData>
 ...
</comments>
```

Example JSON Return Data:

```
{"comments": [
 {"versionedCommentData": ...}
 {"versionedCommentData": ...}
]}
```

Get Comments on Files

URL:

```
GET /reviews-v1/<review id>/comments/versioned
```

Description:
Get all the versioned comments made on a review – that is, comments which are on a particular file in the review.
Status Code:
200 (OK) on success.

Example XML Return Data:

```
<comments>
 <versionedLineCommentData>
  ...
 </versionedLineCommentData>
 ...
</comments>
```

Example JSON Return Data:

```
{"comments": [
 {"versionedCommentData": ...}
 {"versionedCommentData": ...}
]}
```

Get General Comments

URL:

```
GET /reviews-v1/<review id>/comments/general
```

Description:
Get all the general comments made on a review – that is, comments which are not attached to a particular file in the review.
Status Code:
200 (OK) on success.

Example XML Return Data:

```
<comments>
 <generalCommentData>
  ...
 </generalCommentData>
</comments>
```

Example JSON Return Data:

```
{"comments": [
 {"generalCommentData":{"createDate":"2008-10-30T16:32:51.032+1100",
 "defectApproved":false,
 "defectRaised":true,
 "deleted":false,
 "draft":false,
        "readStatus":"UNREAD",
 "message":"A general comment.",
 "metrics":[
  {"entry":{"key":"classification","value":[{"configVersion":1},"Not conforming to standards"]}},
  {"entry":{"key":"rank","value":[{"configVersion":1},"Minor"]}}],
 "permaIdAsString":"CMT:1",
 "replies":"",
 "user":{"displayName":"joe lowercase","userName":"joe"},"permId":{"id":"CMT:1"}},
 {"generalCommentData":{"createDate":"2008-11-03T10:26:50.951+1100",
 "defectApproved":false,
 "defectRaised":false,
 "deleted":false,
 "draft":false,
 "message":"Another general comment.",
 "metrics":"",
 "permaIdAsString":"CMT:4",
 "replies":"",
 "user":{"displayName":"joe lowercase","userName":"joe"},
 "permId":{"id":"CMT:4"}}
]}
```


Get Review Comments

URL:

```
GET /reviews-v1/<review id>/comments
```

Description:
Get all the comments made on a review. The `versionedLineCommentData` tag may contain `fromLineRange` and `toLineRange` tags, indicating that the comment was made against a specific range of lines.
Status Code:
200 (OK) on success.

Example XML Return Data:


```
<comments>
 <generalCommentData>
  <createDate>2008-09-16T16:28:02.833+1000</createDate>
  <defectApproved>false</defectApproved>
  <defectRaised>false</defectRaised>
  <deleted>false</deleted>
  <draft>false</draft>
                <readStatus>READ</readStatus>
  <message>This is a general comment.</message>
  <metrics/>
  <permaIdAsString>CMT:1</permaIdAsString>
  <replies/>
  <user>
   <displayName>Matt Quail</displayName>
   <userName>matt</userName>
  </user>
  <permId>
   <id>CMT:1</id>
  </permId>
 </generalCommentData>
 <versionedLineCommentData>
```

```
  <createDate>2008-09-16T16:28:26.432+1000</createDate>
  <defectApproved>false</defectApproved>
  <defectRaised>true</defectRaised>
  <deleted>false</deleted>
  <draft>false</draft>
                <readStatus>LEAVE_READ</readStatus>
  <message>This is a revision level defect.</message>
  <metrics>
   <entry>
    <key>classification</key>
    <value>
     <configVersion>1</configVersion>
     <value>Inconsistent</value>
    </value>
   </entry>
   <entry>
    <key>rank</key>
    <value>
     <configVersion>1</configVersion>
     <value>Major</value>
    </value>
   </entry>
  </metrics>
  <permaIdAsString>CMT:2</permaIdAsString>
  <replies/>
  <user>
   <displayName>Matt Quail</displayName>
   <userName>matt</userName>
  </user>
  <permaId>
   <id>CMT:2</id>
  </permaId>
  <reviewItemId>
   <id>CFR-4</id>
  </reviewItemId>
 </versionedLineCommentData>
 <versionedLineCommentData>
  <createDate>2008-09-16T16:28:54.604+1000</createDate>
  <defectApproved>false</defectApproved>
  <defectRaised>false</defectRaised>
  <deleted>false</deleted>
  <draft>false</draft>
                <readStatus>UNREAD</readStatus>
  <message>This is a comment covering two lines of a revision.</message>
  <metrics/>
  <permaIdAsString>CMT:3</permaIdAsString>
  <replies/>
  <user>
   <displayName>Matt Quail</displayName>
   <userName>matt</userName>
  </user>
  <permaId>
   <id>CMT:3</id>
  </permaId>
  <reviewItemId>
   <id>CFR-4</id>
  </reviewItemId>
  <fromLineRange>2-3</fromLineRange>
  <toLineRange>3-4</toLineRange>
```

```
 </versionedLineCommentData>
</comments>
```

Example JSON Return Data:


```
{"comments": {
 "generalCommentData":{
 "createDate":"2008-10-30T16:32:51.032+1100",
 "defectApproved":false,
 "defectRaised":true,
 "deleted":false,
 "draft":false,
        "readStatus":"READ",
 "message":"A general comment.",
 "metrics": [
  "entry":{"key":"classification","value":{"configVersion":1},"Not conforming to standards"},
  entry":{"key":"rank","value":{"configVersion":1},"Minor"}],
 "permaIdAsString":"CMT:1",
 "replies":"",
 "user":{"displayName":"joe lowercase","userName":"joe"},
 "permId":{"id":"CMT:1"},
 "versionedLineCommentData": [
  {"createDate":"2008-10-30T16:33:02.726+1100",
  "defectApproved":false,
  "defectRaised":false,
  "deleted":false,
  "draft":false,
                "readStatus":"LEAVE_READ",
  "message":"This is wrong",
  "metrics":"",
  "permaIdAsString":"CMT:2",
  "replies":"",
  "user":{"displayName":"joe lowercase","userName":"joe"},
  "permaId":{"id":"CMT:2"},
  "reviewItemId":{"id":"CFR-4"},
  "toLineRange":"1-2"},
 {"createDate":"2008-10-30T16:34:12.535+1100",
  "defectApproved":false,
  "defectRaised":false,
  "deleted":false,
  "draft":false,
                "readStatus":"UNREAD",
  "message":"This is a revision level defect.",
  "metrics":"",
  "permaIdAsString":"CMT:3",
  "replies":"",
  "user":{"displayName":"joe lowercase","userName":"joe"},
  "permaId":{"id":"CMT:3"},
  "reviewItemId":{"id":"CFR-5"}}
]}
```


Mark a Comment as Read

URL:

```
POST /reviews-v1/<review id>/comments/<comment id>/markAsRead
```

Description:
Marks a particular comment as read.

Status Code:
200 (OK) on success.

Mark a Comment as Leave Unread

URL:

```
POST /reviews-v1/<review id>/comments/<comment id>/markAsLeaveUnread
```

Description:
Marks a particular comment as leave unread.

Status Code:
200 (OK) on success.

Mark all Comments as Read

URL:

```
POST /reviews-v1/<review id>/comments/markAllAsRead
```

Description:
Marks all comments in the review which are in an *unread* state as *read*. Any comments which are in the *leave unread* state are not modified.

Status Code:
200 (OK) on success.

Get the Replies to a Comment

URL:

```
GET /reviews-v1/<review id>/comments/<comment id>/replies
```

Description:
Get the replies to an existing comment.
Status Code:
200 (OK) on success.

Example XML Return Data:

```
<comments>
 <generalCommentData>
  ...
 </generalCommentData>
 ...
</comments>
```

Example JSON Return Data:

```
{"comments": [
 {"generalCommentData": ...}
 {"generalCommentData": ...}
]}
```

Publish a Draft Comment

```
POST /reviews-v1/<review id>/publish/<comment id>
```

Description:
Publish a draft comments on the review.
Status Code:
200 (OK) on success.

Publish All Draft Comments

```
POST /reviews-v1/<review id>/publish
```

Description:
Publish all the user's draft comments on the review.
Status Code:
200 (OK) on success.

Update a Comment

URL:

```
POST /reviews-v1/<review id>/comments/<comment id>
```

Description:
Update an existing comment. The `readStatus` attribute is ignored when updating a comment.

The POST data is a `generalCommentData` structure.
Status Code:
200 (OK) on success.

Review Service - Miscellaneous

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page:

- Miscellaneous
  - Get Metrics

Miscellaneous

Get Metrics

URL:

```
GET /reviews-v1/metrics/<version>
```

Description:
Get the replies to an existing comment.
Status Code:
200 (OK) on success.

Example XML Return Data:

```
<?xml version="1.0"?>
<metrics>
 <metricsData>
  <configVersion>1</configVersion>
  <defaultValue>
```

```
    <name>Minor</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">0</value>
   </defaultValue>
   <label>Ranking</label>
   <name>rank</name>
   <type>INTEGER</type>
   <values>
    <name>Major</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">1</value>
   </values>
   <values>
    <name>Minor</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">0</value>
   </values>
  </metricsData>
  <metricsData>
   <configVersion>1</configVersion>
   <defaultValue>
    <name>Improvement desirable</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">5</value>
   </defaultValue>
   <label>Classification</label>
   <name>classification</name>
   <type>INTEGER</type>
   <values>
    <name>Missing</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">1</value>
   </values>
   <values>
    <name>Extra (superfluous)</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">2</value>
   </values>
   <values>
    <name>Ambiguous</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">3</value>
   </values>
   <values>
    <name>Inconsistent</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">4</value>
   </values>
   <values>
    <name>Improvement desirable</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">5</value>
   </values>
   <values>
    <name>Not conforming to standards</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">6</value>
   </values>
   <values>
    <name>Risk-prone</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">7</value>
   </values>
   <values>
    <name>Factually incorrect</name>
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">8</value>
   </values>
   <values>
    <name>Not implementable</name>
```

```
    <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">9</value>
  </values>
  <values>
   <name>Editorial</name>
   <value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs=
"http://www.w3.org/2001/XMLSchema" xsi:type="xs:int">10</value>
  </values>
```

```
  </metricsData>
 </metrics>
```

Example JSON Return Data:


```
{"metrics":{"metricsData": [
 {"configVersion":1,
 "defaultValue":{"name":"Minor","value":0},
 "label":"Ranking",
 "name":"rank",
 "type":"INTEGER",
 "values":[
  {"name":"Major","value":1},
  {"name":"Minor","value":0}
 ]},
 {"configVersion":1,
 "defaultValue":{"name":"Improvement desirable","value":5},
 "label":"Classification",
 "name":"classification",
 "type":"INTEGER",
 "values":[
  {"name":"Missing","value":1},
  {"name":"Extra (superfluous)","value":2},
  {"name":"Ambiguous","value":3},
  {"name":"Inconsistent","value":4},
  {"name":"Improvement desirable","value":5},
  {"name":"Not conforming to standards","value":6},
  {"name":"Risk-prone","value":7},
  {"name":"Factually incorrect","value":8},
  {"name":"Not implementable","value":9},
  {"name":"Editorial","value":10}
 ]}
]}}
```


Review Service - Reviewers

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page:

- Reviewers
  - Add Reviewers
  - Get Finished Reviewers
  - Get Incomplete Reviewers
  - Get Reviewers
  - Remove Single Reviewer

Reviewers

Add Reviewers

URL:

```
POST /reviews-v1/<review id>/reviewers
```

Description:
Add new reviewers to the review. Send a string of comma separated user names.

Status Code:
200 (OK) on success.

Get Finished Reviewers

URL:

```
GET /reviews-v1/<review id>/reviewers/completed
```

Description:
Return a list of the reviewers who have completed the review.

Status Code:
200 (OK) on success.

Example Return Data:
Return value as `/reviews-v1/<review id>/reviewers`, but only completed reviewers are included.

Get Incomplete Reviewers

URL:

```
GET /reviews-v1/<review id>/reviewers/uncompleted
```

Description:
Return a list of the reviewers who have not yet completed the review.

Status Code:
200 (OK) on success.

Example Return Data:
Return value as `/reviews-v1/<review id>/reviewers`, but only incomplete reviewers are included.

Get Reviewers

URL:

```
GET /reviews-v1/<review id>/reviewers
```

Description:
Return a list of the reviewers participating in the review.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviewers>
  <reviewer>
    <displayName>Conor MacNeill</displayName>
    <userName>conor</userName>
    <completed>false</completed>
  </reviewer>
  ... more reviewers ...
</reviewers>
```

Example JSON Return Data:

```
{"reviewers":{"reviewer":[
  {"displayName":"Peter Moore","userName":"pete","completed":false},
  {"displayName":"Brendan Humphreys","userName":"brendan","completed":false}]
}}
```

Remove Single Reviewer

URL:

```
DELETE /reviews-v1/<review id>/reviewers/<username>
```

Description:
Remove a reviewer from a review.

Status Code:
204 (No Content) on success.

Review Service - Review Items

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page:

- Review Items
  - Add Revision to Review
  - Get Review Items
  - Get Single Revision Details
  - Remove Revision from Review

Review Items

Add Revision to Review

URL:

```
POST /reviews-v1/<review id>/reviewitems
```

Description:
Add a revision to a review. Send a reviewItem with the repository name, and from and to paths and revisions specified. Other values can be omitted. This returns the completed `reviewItem` structure.

Status Code:
201 (Created) on success. The reponse will contain the `Location` response header with the URL of the newly created resoure and the `reviewItemData` document in the response body.

Get Review Items

URL:

```
GET /reviews-v1/<review id>/reviewitems
```

Description:

Get a list of the items in a review.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviewItems>
  <reviewItem>
    <permId>
      <id>CFR-1</id>
    </permId>
    <authorName>tomd</authorName>
    <commitDate>2008-01-29T14:41:43.202+1100</commitDate>
    <commitType>Modified</commitType>
    <fileType>File</fileType>
    <toContentUrl>/cru/CR-4/rawcontent/53/foo.txt</toContentUrl>
    <fromPath>foo.txt</fromPath>
    <fromRevision>21</fromRevision>
    <repositoryName>local</repositoryName>
    <toContentUrl>/cru/CR-4/rawcontent/51/foo.txt</toContentUrl>
    <toPath>foo.txt</toPath>
    <toRevision>22</toRevision>
  </reviewItem>
  ... more reviewItems ...
</reviewItems>
```

Example JSON Return Data:

```
{"reviewItems":{"reviewItem": [
  {"permId":{"id":"CFR-4"},
  "authorName":"ervzijst",
  "commitDate":"2008-10-16T17:19:52.119+1000",
  "commitType":"Modified",
  "fileType":"File",
  "fromContentUrl":"\/cru\/CR-4\/rawcontent\/53\/foo.txt",
  "fromPath":"path\/to\/file.txt",
  "fromRevision":"3",
  "repositoryName":"Local",
  "toContentUrl":"\/cru\/CR-4\/rawcontent\/51\/foo.txt",
  "toPath":"path\/to\/file.txt",
  "toRevision":"13"
  },
  ... more reviewItems ...
  ]
}}
```

Get Single Revision Details

URL:

```
GET /reviews-v1/<review id>/reviewitems/<review item id>
```

Description:
Get the details of a single revision in a review. Returns the `reviewItem` structure for the item.
Status Code:
200 (OK) on success.

Remove Revision from Review

URL:

```
DELETE /reviews-v1/<review id>/reviewitems/<review item id>
```

Description:
Remove a revision from a review.
Status Code:
204 (No Content) on success.

Review Service - Reviews

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page:

- Reviews
  - Add Changeset To Review
  - Add Patch Revisions To Review
  - Upload Files To Review
  - Create Review
  - Delete Review
  - Get All Reviews
  - Get All Reviews (limited)
  - Get Allowed Review Actions
  - Get Allowed Review Transitions
  - Get Review
  - Get Review Details
  - Get Review Details by Path
  - Get Review Details through Custom Filter Criteria
  - Get Reviews by Filter
  - Get Reviews by Path
  - Get Reviews through Custom Filter Criteria
  - Get Single Review Details
  - Get Version Info

Reviews

Add Changeset To Review

URL:

```
POST /reviews-v1/<review id>/addChangeset
```

Description:
Add the revisions in a set of changesets to an existing review.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<addChangeset>
  <repository>aRepositoryName</repository>
  <changesets>
    <changesetData>
      <id>...the id...</id>
    </changesetData>
    ... more change sets ...
  </changesets>
</addChangeset>
```

Example JSON Return Data:

```
{"addChangeset": {
  "repository":"Local",
  "changesets": {
    "changesetData":[
    {"id":234},{"id":237}, ...more change sets...]}
}}
```

The response is the `reviewData` structure of the review.

Add Patch Revisions To Review

URL:

```
POST /reviews-v1/<review id>/addPatch
```

Description:
Add the revisions in a patch to an existing review.

Status Code:
200 (OK) on success.

Example XML Request Data:

```
<addPatch>
  <repository>aRepositoryName</repository>
  <patch>
    <![CDATA[
... text of patch goes here ...
    ]]>
  </patch>
</addPatch>
```

Example JSON Request Data:

```
{"addPatch":{"repository":"aRepositoryName","patch":"... text of patch goes here ..."}}
```

The response is the `reviewData` structure of the review.

Upload Files To Review

URL:

```
POST /reviews-v1/<review id>/addFile
```

Description:
Uploads a local file to the review. In contrast to a patch, files can be either binary or text. Depending on the filetype, size and contents, Crucible may be able to display either parts, or the entire file in the review. It is possible to upload two versions of the file, in which case Crucible will display a diff and report that the file was modified. When only a single file is uploaded, Crucible treats the file as newly added.

This action returns the ReviewData document on success.

This resources uses multipart form-data to receive the file(s), character set indication and optional comments (it does not expect an XML document with embedded files, as that would require the client to first encode the files in Base64). Making a multipart form-data request can be done manually, but you will probably want to use a library. During testing it is inconvenient to let your browser generate the requests using the test html form below:

Example HTML Form for Testing REST-Based File Uploads

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
        "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head><title>Rest File Upload Test</title></head>
<body>
    <!-- Point the URL to the review you want to upload to. -->
    <form action="http://hostname:port/rest-service/reviews-v1/<review id>/addFile" enctype=
"multipart/form-data" method="POST">
        <table>
            <tr>
                <td>File (required):</td>
                <td><input name="file" type="file"/></td>
            </tr>
            <tr>
                <td>Diff to (optional):</td>
                <td><input name="diffFile" type="file"/></td>
            </tr>
            <tr>
                <td>Character Set (optional):</td>
                <td><input name="charset" type="text" value="UTF-8"/></td>
            </tr>
            <tr>
                <td>Comments (optional):</td>
                <td><input type="text" name="comments"/></td>
            </tr>
            <tr><td><input type="submit" value="Upload"/></td></tr>
        </table>
    </form>
</body>
</html>
```

The form requests understands the following 4 fields:

- `file` - the file to add to the review (required)
- `diffFile` - if supplied, Crucible will use this file as the base for a diff with `file`
- `charset` - if supplied, specifies the character set of the (text)file (when omitted, the server's default character set will be used)
- `comments` - optional user string that is stored along with the file

When uploading files, make sure you (or your http client library) supplies the proper `Content-Type` header. For text files, use "`text/plain`". Crucible will preserve the original file name.

Status Code:
201 (Created) on success.
The response is the `reviewItemData` structure describing the new item. Also, the `Location` response header is present and contains the PermId URL of the new item.

Create Review

URL:

```
POST /reviews-v1
```

Description:
Create a review. A review can be created in one of three ways(see examples).

Status Code:
201 (Created) on success. The reponse will contain the `Location` response header with the URL of the newly created resource.

Example XML Request Data:
1. An empty review, i.e. no revisions in the review. This uses the request below:

XML

```
<createReview>
  <reviewData>
    ...
  </reviewData>
</createReview>
```

JSON

```
{createReview: {"reviewData": {
 "allowReviewersToJoin":false,
 "author":{"userName":"joe"},
 "creator":{"userName":"joe"},
 "moderator":{"userName":"matt"},
 "description":"Review objectives",
 "metricsVersion":1,
 "name":"Stuff to review",
 "projectKey":"CR"
}}
```

2. A patch review, containing diffs from a patch file, e.g. created by `svn diff >patch.txt` (*note that the text of the patch must be properly escaped in the JSON object*):

XML

```
<createReview>
  <reviewData>
    ...
  </reviewData>
  <patch>
    <![CDATA[
... text of patch goes here ...
    ]]>
  </patch>
</createReview>
```

JSON

```
{createReview: {"reviewData": {
 "allowReviewersToJoin":false,
 "author":{"userName":"joe"},
 "creator":{"userName":"joe"},
 "moderator":{"userName":"matt"},
 "description":"",
 "metricsVersion":1,
 "name":"readme ",
 "projectKey":"CR"},
"patch":"... text of patch goes here ..."}
}
```

3. A review containing revisions from a set of changesets. XML/JSON:

XML

```
<createReview>
  <reviewData>
    ...
  </reviewData>
  <changesets>
    <changesetData>
      <id>...the id...</id>
    </changesetData>
    ... more changesets ...
  </changesets>
</createReview>
```

JSON

```
{createReview: {"reviewData": {
 "allowReviewersToJoin":false,
 "author":{"userName":"joe"},
 "creator":{"userName":"joe"},
 "moderator":{"userName":"matt"},
 "description":"",
 "metricsVersion":1,
 "name":"readme ",
 "projectKey":"CR"},
 "changesets": {
  "changesetData":[{"id":"234"},
  {"id":"237"}],"repository":"Local"}
}
```

In all these cases, the `reviewData` structure shouldn't have the `permaId` or `state` attributes set. The response is a `reviewData` structure fully populated.|

Delete Review

URL:

```
DELETE /reviews-v1/<id>
```

Description:
Delete a review. The review must have been abandoned.

Status Code:
204 (No Content) on success.

Get All Reviews

URL:

```
GET /reviews-v1?state=<states>
```

Description:
Get all reviews as a list of ReviewData structures. Note that this may return a lot of data, so using `/reviews-v1/filter/<filter>` (see below) is usually better. The `state` parameter is a comma separated list of state names from the set `Draft, Approval, Review, Summarize, Closed, Dead, Rejected, Unknown`.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviews>
  <reviewData>
    ...
  </reviewData>
  ...
</reviews>
```

Example JSON Return Data:

```
{"reviews": {
  "reviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get All Reviews (limited)

URL:

```
GET /reviews-v1/details?state=<states>
```

Description:
Get all reviews as a list of DetailedReviewData structures. The `state` parameter is a comma separated list of state names from the set `Draft, Approval, Review, Summarize, Closed, Dead, Rejected, Unknown`.

Note that the `reviewItems` list in the `detailedReviewData` elements will not appear because this URL retrieves multiple reviews.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<detailedReviews>
  <detailedReviewData>
    ...
  </detailedReviewData>
  ...
</detailedReviews>
```

Example JSON Return Data:

```
{"detailedReviews": {
  "detailedReviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get Allowed Review Actions

URL:

```
GET /reviews-v1/<id>/actions
```

Description:
Get a list of the actions which the current user is allowed to perform on the review. This shows actions the user has *permission* to perform - the review may not be in a suitable state for all these actions to be performed.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<actions>
    <actionData>
        <name>action:summarizeReview</name>
    </actionData>
    <actionData>
        <name>action:viewReview</name>
    </actionData>
    <actionData>
        <name>action:approveReview</name>
    </actionData>
    <actionData>
        <name>action:closeReview</name>
    </actionData>
    <actionData>
        <name>action:modifyReviewFiles</name>
    </actionData>
    <actionData>
        <name>action:rejectReview</name>
    </actionData>
    <actionData>
        <name>action:deleteReview</name>
    </actionData>
    <actionData>
        <name>action:createReview</name>
    </actionData>
    <actionData>
        <name>action:recoverReview</name>
    </actionData>
    <actionData>
        <name>action:commentOnReview</name>
    </actionData>
    <actionData>
        <name>action:reopenReview</name>
    </actionData>
    <actionData>
        <name>action:abandonReview</name>
    </actionData>
    <actionData>
        <name>action:submitReview</name>
    </actionData>
</actions>
```

Example JSON Return Data:

```
{"actions": {
  "actionData": [
    {"name":"action:modifyReviewFiles"},
    {"name":"action:recoverReview"},
    {"name":"action:createReview"},
    {"name":"action:rejectReview"},
    {"name":"action:deleteReview"},
    {"name":"action:abandonReview"},
    {"name":"action:closeReview"},
    {"name":"action:reopenReview"},
    {"name":"action:approveReview"},
    {"name":"action:submitReview"},
    {"name":"action:summarizeReview"},
    {"name":"action:viewReview"},
    {"name":"action:commentOnReview"}]
}}
```

Get Allowed Review Transitions

URL:

```
GET /reviews-v1/<id>/transitions
```

Description:
Get a list of the actions which the current user can perform on this review, given its current state and the user's permissions.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<transitions>
  <transitionData>
    <name>action:summarizeReview</name>
  </transitionData>
  <transitionData>
    <name>action:abandonReview</name>
  </transitionData>
</transitions>
```

Example JSON Return Data:

```
{"transitions": {
  "transitionData": [
    {"name":"action:approveReview"},
    {"name":"action:abandonReview"}]
}}
```

Get Review

URL:

```
GET /reviews-v1/<id>
```

Description:
Get a single review.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviewData>
  ...
</reviewData>
```

Example JSON Return Data:

```
{"reviewData": {
  "allowReviewersToJoin":false,
  ...
}}
```

Get Review Details

URL:

```
GET /reviews-v1/filter/<filter>/details
```

Description:
Get details of all the reviews which match the given filter. See above for filter names.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<detailedReviews>
  <detailedReviewData>
    ...
  </detailedReviewData>
  ...
</detailedReviews>
```

Example JSON Return Data:

```
{"detailedReviews": {
  "detailedReviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get Review Details by Path

URL:

```
GET /reviews-v1/search/<repository>/details?path=<path>
```

Description:
Return a list of Review details which include a particular file. The `path` parameter must be the full path name of a file in `repository`, with **no leading slash**.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<detailedReviews>
  <detailedReviewData>
    ...
  </detailedReviewData>
  ...
</detailedReviews>
```

Example JSON Return Data:

```
{"detailedReviews": {
  "detailedReviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get Review Details through Custom Filter Criteria

URL:

```
GET /reviews-v1/filter/details?title=..&author=..&moderator=..&creator=..&reviewer=..&orRoles=true|
false&complete=true|false&allReviewersComplete=true|false&project=..
```

Description:
Get details of all the reviews which match the specified filter criteria. Criteria are supplied as normal query parameters in the URL.
Filter criteria are:

- `title` - Reviews whose title contain this substring.
- `author` - Reviews authored by this user.
- `moderator` - Reviews moderated by this user.
- `creator` - Reviews created by this user.
- `reviewer` - Reviews reviewed by this user.
- `orRoles` - Whether to the value for `author`, `creator`, `moderator` and `reviewer` should be combined using OR (`orRoles=true`) or AND (`orRoles=false`).
- `complete` - Reviews that the specified `reviewer` has completed.
- `allReviewersComplete` - Reviews that all reviewers have completed.
- `project` - Reviews for the specified project.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviews>
  <reviewData>
    ...
  </reviewData>
  ...
</reviews>
```

Example JSON Return Data:

```
{"reviews": {
  "reviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get Reviews by Filter

URL:

```
GET /reviews-v1/filter/<filter>
```

Description:
Get all the reviews which match the given filter, for the current user.
Filter names are:

- `allReviews` - All reviews for everyone.
- `allOpenReviews` - Open reviews for everyone.
- `allClosedReviews` - Closed reviews for everyone.
- `draftReviews` - Draft reviews for everyone.
- `toReview` - Reviews on which the current user is an uncompleted reviewer.
- `requireMyApproval` - Reviews waiting to be approved by the current user.
- `toSummarize` - Completed reviews which are ready for the current user to summarize.
- `outForReview` - Reviews with uncompleted reviewers, on which the current reviewer is the moderator.
- `drafts` - Draft reviews created by the current user.
- `open` - Open reviews created by the current user.
- `closed` - Closed reviews created by the current user.
- `trash` - Abandoned reviews created by the current user.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviews>
  <reviewData>
    ...
  </reviewData>
  ...
</reviews>
```

Example JSON Return Data:

```
{"reviews": {
  "reviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get Reviews by Path

URL:

```
GET /reviews-v1/search/<repository>?path=<path>
```

Description:
Return a list of Reviews which include a particular file. The `path` parameter must be the full path name of a file in `repository`, with **no leading slash**.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviews>
  <reviewData>
    ...
  </reviewData>
  ...
</reviews>
```

Example JSON Return Data:

```
{"reviews": {
  "reviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get Reviews through Custom Filter Criteria

URL:

```
GET /reviews-v1/filter?title=..&author=..&moderator=..&creator=..&reviewer=..&orRoles=true|false
&complete=true|false&allReviewersComplete=true|false&project=..
```

Description:
Get all the reviews which match the specified filter criteria. Criteria are supplied as normal query parameters in the URL.
Filter criteria are:

- `title` - Reviews whose title contain this substring.
- `author` - Reviews authored by this user.
- `moderator` - Reviews moderated by this user.
- `creator` - Reviews created by this user.

- `reviewer` - Reviews reviewed by this user.
- `orRoles` - Whether to the value for `author`, `creator`, `moderator` and `reviewer` should be combined using OR (`orRoles=true`) or AND (`orRoles=false`).
- `complete` - Reviews that the specified `reviewer` has completed.
- `allReviewersComplete` - Reviews that all reviewers have completed.
- `project` - Reviews for the specified project.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<reviews>
  <reviewData>
    ...
  </reviewData>
  ...
</reviews>
```

Example JSON Return Data:

```
{"reviews": {
  "reviewData": [
    {"allowReviewersToJoin":true,
     ...
    }, ...]
  }
}
```

Get Single Review Details

URL:

```
GET /reviews-v1/<id>/details
```

Description:
Get details of a single review.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<detailedReviewData>
  ...
</detailedReviewData>
```

Example JSON Return Data:

```
{"detailedReviewData": {
  "allowReviewersToJoin":false,
  ...
}}
```

Get Version Info

URL:

```
GET /reviews-v1/versionInfo
```

Description:
Returns the release number and build date of Crucible.

Status Code:
200 (OK) on success.

Example XML Return Data:

```
<versionInfo>
  <buildDate>2008-10-28</buildDate>
  <releaseNumber>1.6.3</releaseNumber>
</versionInfo>
```

Example JSON Return Data:

```
{"versionInfo":{"buildDate":"2008-10-28","releaseNumber":"1.6.3"}}
```

Review Service - Workflow

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page:

- Workflow
  - Close a Review
  - Complete a Review
  - Move a Review to a New State
  - Uncomplete a Review

Workflow

Close a Review

```
POST /reviews-v1/<review id>/close
```

Description:
Close the review.
Status Code:
200 (OK) on success.

Complete a Review

```
POST /reviews-v1/<review id>/complete
```

Description:
Indicate that the current user has completed the review.
Status Code:

200 (OK) on success.

Move a Review to a New State

```
POST /reviews-v1/<review id>/transition?action=<action>
```

Description:
Change the state of the review.
Status Code:
200 (OK) on success.

Valid actions are:
`action:abandonReview`
`action:deleteReview`
`action:submitReview`
`action:approveReview`
`action:rejectReview`
`action:summarizeReview`
`action:closeReview`
`action:reopenReview`
`action:recoverReview`
`action:completeReview`
`action:uncompleteReview`

Uncomplete a Review

```
POST /reviews-v1/<review id>/uncomplete
```

Description:
Indicate that the current user has **not** completed the review.
Status Code:
200 (OK) on success.

Crucible Plugin Types

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Crucible plugins come in a variety of flavours, read on to see how the plugin technology interacts with the core of Crucible and what rules can be bent, or possibly *broken* in this world.

Source Code Management (SCM) Plugins
• **Crucible SCM Plugins**

Servlets
• **Servlet Modules**

Event Listeners
• **Event Listener Plugins**

Crucible Web Items

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Web UI plugin modules allow you to add links, interactive elements and page segments to the Crucible user interface. By adding a link to a servlet plugin you can add your own pages to the UI. Your pages will need to ask Crucible to provide standard headers and footers by specifying a Decorator. There are also FishEye Web Items.

On this page:

- Web Items Listing and Reference
- Web Item Conditions
  - Condition Parameters
  - Example of a Web Item Condition in Use
- Visual Locations of Crucible Web Items

For an example of the code syntax, see FishEye Web Items.

Web Items Listing and Reference

Key	Description	Helpers available
system.admin	Links on the admin menu. Sections: repositories, global, system.	application, user
system.crucible.dashboard	After 'My Dashboard' in the dropdown project/dashboard selector menu	application, user
system.crucible.review	Actions which can be performed on a review. These appear both as buttons on the review page and as links on an expanded review in a review list.	application, user, project, review
system.crucible.review.comment	Actions which can be performed on a review comment. These appear as buttons in the comment header bar, left of the reply, edit and delete buttons.	application, user, project, review, reviewItem, repository, comment
system.crucible.review.fileitem	Actions which can be performed on a revision in a review. Displayed next to the 'Remove', 'Change Diff' buttons.	application, user, project, review, reviewItem, repository
system.header.application	Links like 'Crucible' and 'Fisheye' in the header. Sections: fisheye, crucible (sections are shown when a particular application is selected)	application, user
system.header.item	Links in the header, separated by a pipe.	application, user
system.main	Links on the Crucible or Fisheye main page. These appear at the bottom of the Crucible or FishEye boxes on the main page. Sections: fisheye, crucible	application, user
system.userprofile.tab	The user profile tabs.	application, user

Web Item Conditions

Conditions control whether a given web item will be displayed.

com.atlassian.fisheye.plugin.web.conditions.HasCrucible
This condition measures whether the product runs with a Crucible license. This is useful to prevent a Crucible plugin from rendering in an instance that only has a FishEye license.

com.atlassian.fisheye.plugin.web.conditions.HasFishEye
This condition measures whether the product runs with a FishEye license.

com.atlassian.fisheye.plugin.web.conditions.HasProjectPermission
This condition measures whether the user has project permission. Takes parameters.

com.atlassian.fisheye.plugin.web.conditions.HasReviewPermission
This condition measures whether the user has review permission (i.e. is able to take part in the review). Takes parameters.

com.atlassian.fisheye.plugin.web.conditions.IsFile
This condition passes if there is a context repository and path, and that path references a repository file.

com.atlassian.fisheye.plugin.web.conditions.IsReviewInState
This condition measures whether the review is in a given state. Takes parameters.

com.atlassian.fisheye.plugin.web.conditions.IsRootOrDirectory
This condition passes if there is either: a context repository and no repository context path; or a repository path is present, and that path references a directory.

com.atlassian.fisheye.plugin.web.conditions.IsSystemAdministrator
This condition measures whether the user has system administrator permissions.

com.atlassian.fisheye.plugin.web.conditions.UserCanAccessCrucible
This condition measures whether the user can access Crucible.

com.atlassian.fisheye.plugin.web.conditions.UserLoggedInCondition
This condition measures whether the user is logged in.

Condition Parameters

The following conditions take parameters:

- HasProjectPermission
- HasReviewPermission
- IsReviewInState

The usage and conditions that these parameters apply to are tabled below.

Parameter Value	Parameter Name	Description	Applies to
action:abandonReview	actionName	Causes the current review to be abandoned.	HasProjectPermission, HasReviewPermission
action:approveReview	actionName	Causes the current review to be approved.	HasProjectPermission, HasReviewPermission
action:closeReview	actionName	Causes the current review to be closed.	HasProjectPermission, HasReviewPermission
action:recoverReview	actionName	Causes the current review to be recovered.	HasProjectPermission, HasReviewPermission
action:reopenReview	actionName	Causes the current review to be re-opened.	HasProjectPermission, HasReviewPermission
action:rejectReview	actionName	Causes the current review to be rejected.	HasProjectPermission, HasReviewPermission
action:submitReview	actionName	Causes the current review to be submitted.	HasProjectPermission, HasReviewPermission
action:summarizeReview	actionName	Causes the current review to be summarised.	HasProjectPermission, HasReviewPermission
Approval	stateName	Measures whether the current review is in the approval state.	IsReviewInState
Closed	stateName	Measures whether the current review is in the closed state.	IsReviewInState
Dead	stateName	Measures whether the current review is in the dead state.	IsReviewInState
Draft	stateName	Measures whether the current review is in the draft state.	IsReviewInState
Review	stateName	Measures whether the current review is in the review state.	IsReviewInState
Rejected	stateName	Measures whether the current review is in the rejected state.	IsReviewInState
Summarize	stateName	Measures whether the current review is in the summarize state.	IsReviewInState
Unknown	stateName	Measures whether the current review is in the unknown state.	IsReviewInState

Applying these values will cause the action to be enacted on the currently logged-in user.

Example of Condition Parameters in Use

```
<condition class="com.atlassian.fisheye.plugin.web.conditions.HasReviewPermission">
            <param name="actionName" value="action:approveReview"/>
        </condition>
```

Example of a Web Item Condition in Use

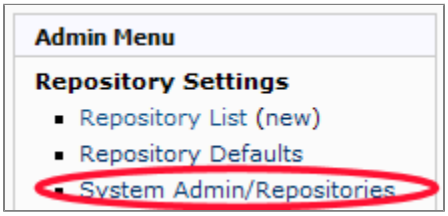
```
<web-item key="hello-file2" section="system.crucible.review.fileitem">
        <link>#set($x =
'test')/plugins/servlet/${x}-servlet?name=${helper.global.user.displayName}</link>
        <label key="Id: {0}">
            <param name="param0">${helper.review.permaId.id}</param>
        </label>
        <condition class="com.atlassian.fisheye.plugin.web.conditions.IsReviewInState">
            <param name="stateName" value="Draft"/>
        </condition>
</web-item>
```

Visual Locations of Crucible Web Items

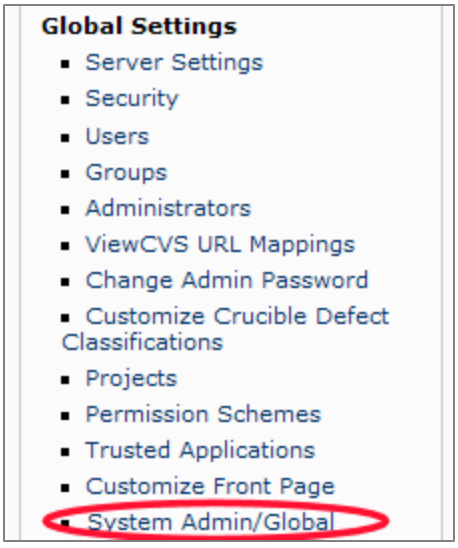
system.admin

This item relates to links in the left navigation bar, in the Crucible admin menu.

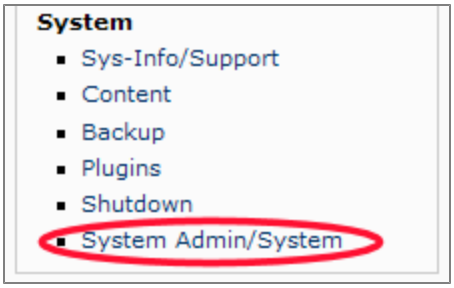
Screenshot: Crucible's system.admin/repositories Web Item



Screenshot: Crucible's system.admin/global Web Item



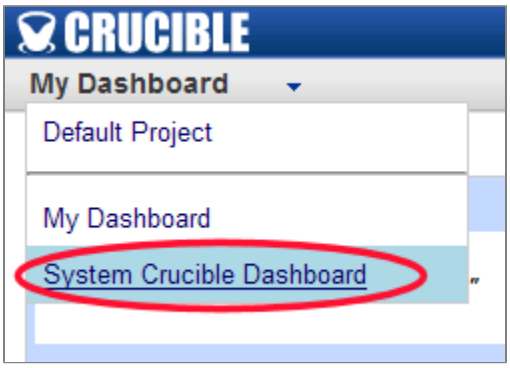
Screenshot: Crucible's system.admin/system Web Item



system.crucible.dashboard

This item relates to dashboard links in the Crucible dashboard/project drop-down menu.

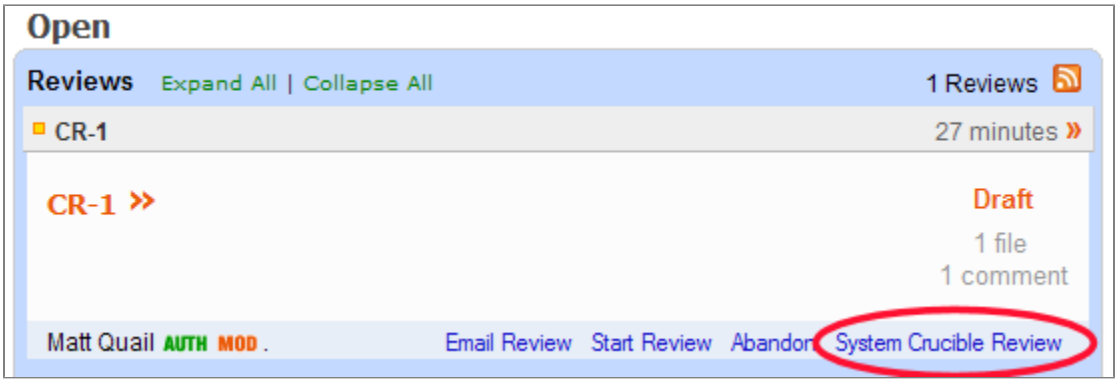
Screenshot: Crucible's system.crucible.dashboard Web Item



system.crucible.review

This item relates to actions that can be performed on a review, appearing in various places inside the Crucible UI.

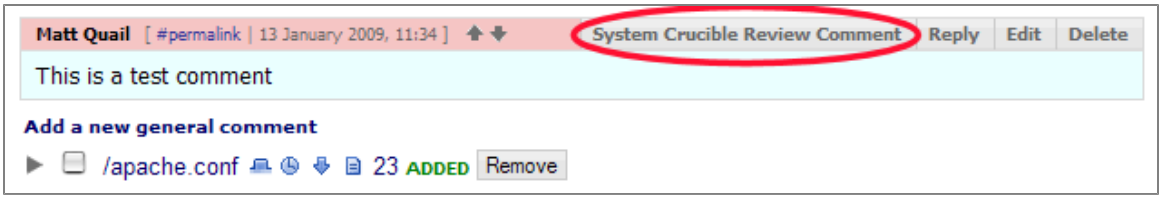
Screenshot: Crucible's system.crucible.review Web Item



system.crucible.review.comment

This item relates to actions that can be performed on a review, appearing in various places inside the Crucible UI.

Screenshot: Crucible's system.crucible.review.comment Web Item



system.crucible.review.fileitem

This item relates to actions which can be performed on a revision in a review, in the Crucible UI.

Screenshot: Crucible's system.crucible.review.fileitem Web Item

system.header.application

This item relates to product name links in the Crucible header.

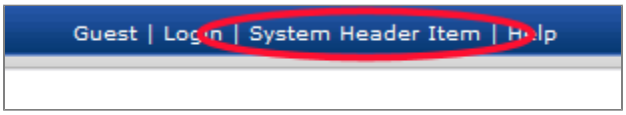
Note that a system.header.application item must go into a section of either Crucible or FishEye. In this case, we have put it into the Crucible section.

Screenshot: Crucible's system.header.application Web Item

system.header.item

This item relates to links in the Crucible header, at the top right of the Crucible screen.

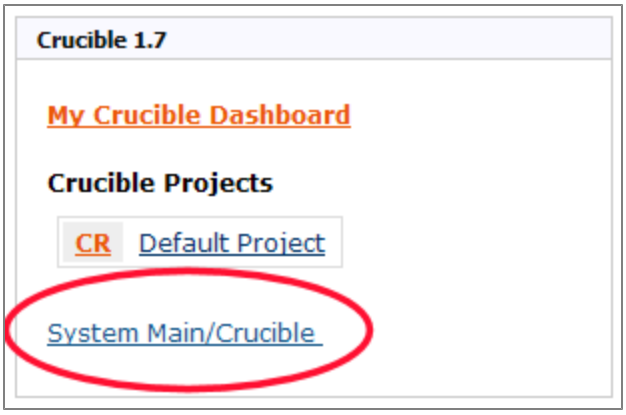
Screenshot: Crucible's system.header.item Web Item



system.main/crucible

This item relates to links at the bottom of the Crucible main page.

Screenshot: Crucible's system.main/crucible Web Item



system.userprofile.tab

This item relates to user profile tabs in the Crucible UI.

Screenshot: Crucible's system.userprofile.tab Web Item

Looking for the FishEye web items? Click here.

Live Code Examples for Crucible Development

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page is a list of real-world plugin examples that showcase the various sides of Crucible development. The following items are an excellent resource for the Atlassian developer community. Feel free to investigate these examples, hack them to pieces, or use them as inspiration to really innovate.

SCM Plugin Examples
• Example Crucible SCM Plugin for JSR-170 (Apache JackRabbit) • Crucible ClearCase plugin

Servlet Examples
• Basic Servlet Example • Crucible Reporting plugin

Bundled Plugins from Crucible

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

There are a number of Crucible features that ship as plugins with the product. See below for listings and more information.

- Confluence SCM Plugin

- File System SCM Plugin
- Perforce SCM Plugin
- Subversion SCM Plugin

Confluence SCM Plugin

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Crucible Confluence SCM plugin
Version	1.0-SNAPSHOT
Product Versions	1.6.2 and later
Author(s)	Atlassian
Homepage	http://confluence.atlassian.com/display/CRUCIBLE/
Price	Bundled with Crucible
License	BSD
JavaDocs	Not Applicable
IssueTracking	Jira
Subversion URL	Repository: https://svn.atlassian.com/svn/public/contrib/crucible/crucible-confluence-scm-plugin/trunk FishEye: http://svn.atlassian.com/fisheye/browse/public/contrib/crucible/crucible-confluence-scm-plugin
Download JAR	https://maven.atlassian.com/repository/public/com/atlassian/crucible/plugins/crucible-confluence-scm-plugin/1.0-SNAPSHOT/cr

Description/Features

This page provides links to resources for Crucible plugin developers. Access the source code and distributed packages from the links in the table above.

In conjunction with the Confluence Crucible Plugin this allows the creation of review of changes to Confluence pages.

Usage

To set up this plugin, see the documentation.

Installation

This plugin ships with the Crucible distribution.

Configuration

Follow the Crucible configuration documentation.

Related Links

- How to build a Crucible Plugin

File System SCM Plugin

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Crucible File System SCM plugin
Version	1.2

Product Versions	1.6.0+
Author(s)	Atlassian
Homepage	http://confluence.atlassian.com/display/CRUCIBLE/
Price	Bundled with Crucible
License	BSD
JavaDocs	Not Applicable
IssueTracking	http://developer.atlassian.com/jira/browse/CRU
Subversion URL	Repository: https://svn.atlassian.com/svn/public/contrib/crucible/crucible-filesystem-scm-plugin/trunk FishEye: http://svn.atlassian.com/fisheye/browse/public/contrib/crucible/crucible-filesystem-scm-plugin

Description/Features

This page provides links to resources for Crucible plugin developers. Access the source code from the links in the table above.

This plugin allows Crucible to review files directly on the server file system.

Usage

To use this plugin, see the documentation.

Installation

This plugin ships with the Crucible distribution.

Related Links

- How to build a Crucible Plugin

Perforce SCM Plugin

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Crucible Perforce SCM plugin
Version	1.2
Product Versions	1.6.4+
Author(s)	Atlassian
Homepage	http://confluence.atlassian.com/display/CRUCIBLE/
Price	Bundled with Crucible
License	BSD
JavaDocs	Not Applicable
IssueTracking	http://developer.atlassian.com/jira/browse/CRU
Subversion URL	Repository: https://svn.atlassian.com/svn/public/contrib/crucible/crucible-p4-scm-plugin/trunk FishEye: http://svn.atlassian.com/fisheye/browse/public/contrib/crucible/crucible-p4-scm-plugin

Description/Features

This page provides links to resources for Crucible plugin developers. Access the source code from the links in the table above.

This plugin allows Crucible to access Perforce repositories without requiring FishEye.

Usage

To use this plugin, see the documentation.

Installation

This plugin ships with the Crucible distribution.

Related Links

- How to build a Crucible Plugin

Subversion SCM Plugin

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Crucible Subversion SCM plugin
Version	1.2
Product Versions	1.6.0+
Author(s)	Atlassian
Homepage	http://confluence.atlassian.com/display/CRUCIBLE/
Price	Bundled with Crucible
License	BSD
JavaDocs	Not Applicable
IssueTracking	http://developer.atlassian.com/jira/browse/CRU
Subversion URL	Repository: https://svn.atlassian.com/svn/public/contrib/crucible/crucible-svn-scm-plugin/trunk FishEye: http://svn.atlassian.com/fisheye/browse/public/contrib/crucible/crucible-svn-scm-plugin

Description/Features

This page provides links to resources for Crucible plugin developers. Access the source code from the links in the table above.

This plugin allows Crucible to access Subversion repositories without requiring FishEye.

Usage

To use this plugin, see the documentation.

Installation

This plugin ships with the Crucible distribution.

Related Links

- How to build a Crucible Plugin

SCM Plugin Examples

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

This page contains examples of SCM plugins that can be added to Crucible.

Crucible SCM plugin listing:

- Crucible Git Plugin
- Example Crucible SCM Plugin for JSR-170 (Apache JackRabbit)

Crucible Git Plugin

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Crucible Git plugin
Version	1.0
Product Versions	1.6.6
Author(s)	Atlassian
Homepage	http://confluence.atlassian.com/display/CRUCIBLE/Crucible+Git+plugin
Price	Free
License	BSD
JavaDocs	TBA
IssueTracking	JIRA
Subversion URL	Subversion FishEye
Download JAR	Atlassian Maven Repository (supports Crucible 1.6.6)
Download Source	TBA

Description/Features

A plugin for Crucible that facilitates the usage of Git source code repositories.

Usage

The Git plugin is an early-access implementation of a Crucible SCM plugin for Git. It allows users to perform code reviews on a local Git repository (local to the Crucible server). The plugin does not 'pull' updates from a remote master repository. Synchronising with the master repository needs to be executed manually (via the command line), for the changes to appear in the plugin.

Installation

Firstly, download the plugin `.JAR` file to your local computer.

The plugin is installed by placing the .JAR file in the `FISHEYE_INST/var/plugins/user` directory of your Crucible install. Once installed, you need to enable the plugin in the Crucible Admin interface. Detailed instructions on the plugin installation steps can be found at the Managing Plugins page.

The plugin requires the Git command to be available in the system path when starting Crucible.

Configuring the plugin

Once the plugin has been installed, under the '**Administration**' - '**Repository List**' option, there should be a '**Plugin Repository List: Git**' entry. Select '**Configure Plugin**', then '**Add a repository**'. The fields required are:

Field	Description
Name	The name for the repository eg. *Project*
Repository Path	The location of the local Git repository clone

Once configured, the Git repository can be selected as the review source when creating a new review, whereupon reviews can be created either using changesets or by selecting files in the repository view.

Feedback

If you have any feedback on this plugin and its operation, we would appreciate users posting feedback in the Crucible Forums.

Version History

Version	Date	Description
1.0	10 Feb 2009	Early Access as part of Crucible 1.6.6

Example Crucible SCM Plugin for JSR-170 (Apache JackRabbit)

The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Example Crucible SCM Plugin for JSR-170 (Apache JackRabbit)
Version	1.0-SNAPSHOT
Product Versions	1.6.3
Author(s)	Erik van Zijst, Atlassian
Homepage	http://confluence.atlassian.com/display/CRUCIBLE/
Price	Free
License	BSD
JavaDocs	Crucible SCM API JavaDoc
Browse Source	FishEye
Download Source	Subversion

Description/Features

This plugin contains an implementation of Crucible SCM for Java Content Repositories (JSR-170), using the Apache JackRabbit implementation. Note that although this code can be used without modification, it is NOT supported and intended as example code only. It should not be used in a production environment, because of several known issues discussed below. Having said that, feel free to improve on this code

Usage

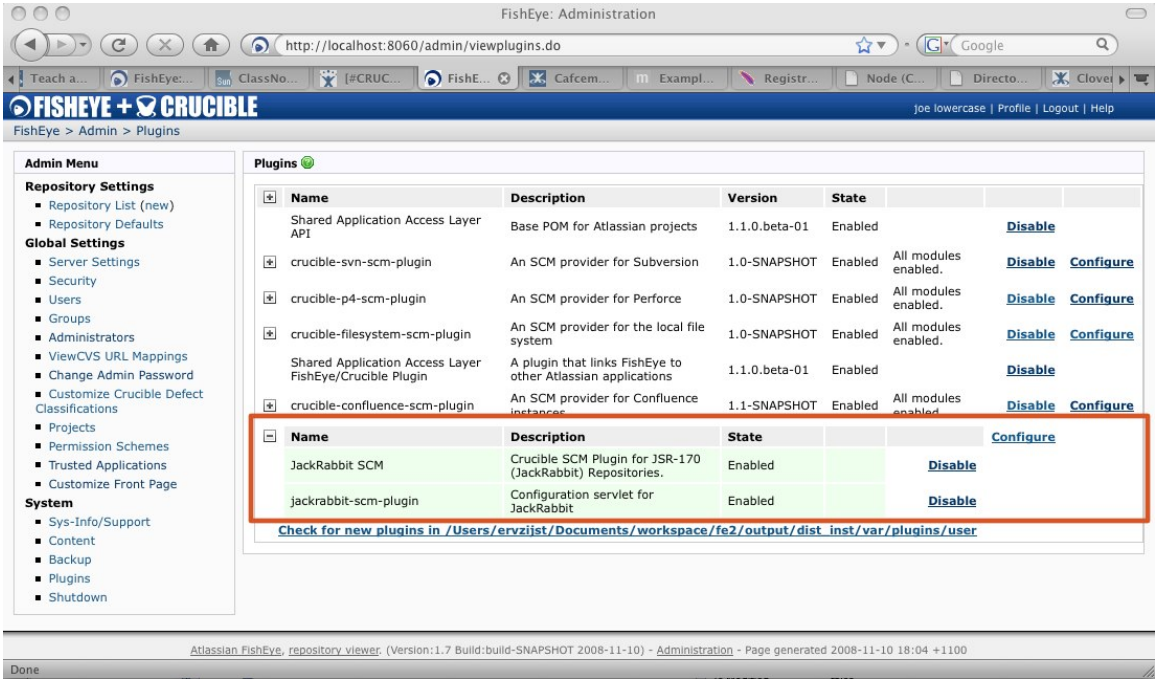
Check out the source and build the plugin jar file using `mvn package`. Note that this plugin depends on `com.sun.jdmk:jmxtools:1.2.1` and `com.sun.jmx:jmxrmi:1.2.1`. These libraries are provided by Sun, but may not be present in your maven repository, as Sun requires each user to agree to its license terms. If you get the following build error:

```
[INFO] ------------------------------------------------------------------------
[ERROR] BUILD ERROR
[INFO] ------------------------------------------------------------------------
[INFO] Failed to resolve artifact.

Missing:
----------
1) com.sun.jdmk:jmxtools:jar:1.2.1

  Try downloading the file manually from:
      http://java.sun.com/products/JavaManagement/download.html

  Then, install it using the command:
      mvn install:install-file -DgroupId=com.sun.jdmk -DartifactId=jmxtools -Dversion=1.2.1
-Dpackaging=jar -Dfile=/path/to/file

  Alternatively, if you host your own repository you can deploy the file there:
      mvn deploy:deploy-file -DgroupId=com.sun.jdmk -DartifactId=jmxtools -Dversion=1.2.1
-Dpackaging=jar -Dfile=/path/to/file -Durl=[url] -DrepositoryId=[id]

  Path to dependency:
   1) com.atlassian.crucible.example.scm:jackrabbit-scm-plugin:atlassian-plugin:1.0-SNAPSHOT
   2) com.sun.jdmk:jmxtools:jar:1.2.1

2) com.sun.jmx:jmxri:jar:1.2.1

  Try downloading the file manually from the project website.

  Then, install it using the command:
      mvn install:install-file -DgroupId=com.sun.jmx -DartifactId=jmxri -Dversion=1.2.1
-Dpackaging=jar -Dfile=/path/to/file

  Alternatively, if you host your own repository you can deploy the file there:
      mvn deploy:deploy-file -DgroupId=com.sun.jmx -DartifactId=jmxri -Dversion=1.2.1 -Dpackaging=jar
-Dfile=/path/to/file -Durl=[url] -DrepositoryId=[id]

  Path to dependency:
   1) com.atlassian.crucible.example.scm:jackrabbit-scm-plugin:atlassian-plugin:1.0-SNAPSHOT
   2) log4j:log4j:jar:1.2.15
   3) com.sun.jmx:jmxri:jar:1.2.1

----------
2 required artifacts are missing.
```

Then download the two libraries from Sun, extract the jar files from the zip files and follow the instructions above to manually install the artifact in your local repository. You should then be able to complete the build.

Installation

Copy the `jackrabbit-scm-plugin-1.0-SNAPSHOT.jar` file from the 'target/' directory to the var/plugins/user directory in your Crucible installation. Then login to the administration section, go to Plugins and click the link "Check for new plugins in...". This should detect your plugin:



Configuring the plugin

Next, click "Configure" and add a repository. The current version of this plugin can only read JackRabbit repositories directly from the local file system (as opposed to connecting to a remote JackRabbit server), so when configuring a repository, specify the location of the repository's XML file and the repository's home directory (the directory containing `workspaces/`, `repository/` and `version/`).

The plugin comes with a ready to use, pre-populated JackRabbit repository in `testrepo.zip` (the unit tests run against this repository). When trying things out, unzip this file somewhere on the file system and point the plugin to it.

Known Limitations

As this plugin is intended as example material for those interested in building Crucible SCM Plugins, readability of the source code is more important than features, flexibility or performance and as result there are quite a number of known limitations:

- Only file based JackRabbit 1.x repositories on the local file system are currently supported. This makes this plugin impossible to use with "active" repositories, because the JackRabbit acquires an exclusive lock on the repository.
- The plugin only recognizes nodes of JCR types "`nt:file`" and "`nt:folder`". All other nodes are ignored.
- All file and folder nodes must have the mixin type "`mix:versionable`".
- Every file or folder node must have at least one checked-in version (hence: at least one version of each resource must have been committed).
- JSR-170 does not support ChangeSets where a changeset represents a collection of related changes to multiple entities at once. As a consequence, the plugin represents every individual change as a ChangeSet containing one file. The UUID of the version node is used as the changeset ID.
- This plugin does not detect files that are deleted.
- Due to file locking issues in JackRabbit, the plugin uses a single JCR Session instance per repository. Access is synchronized.
- The implementation for listing a set of changesets traverses the entire repository and does not cache results, which kills scalability.

Version History

Version	Date	Description
1.0-SNAPSHOT	10-November-2008	Initial release

Screenshots

Screenshots

Servlet Examples

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

This page lists the Servlet code examples for Crucible plugin developers.

- Basic Servlet Example
- Crucible Reporting plugin

Basic Servlet Example

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Example FishEye Servlet Plugin
Version	0.1
Product Versions	1.7
Author(s)	Anna Buttfield, Atlassian
Homepage	http://confluence.atlassian.com/display/FISHEYE/
Price	Free
License	BSD
JavaDocs	Data Package Summary Services Package Summary
IssueTracking	N/A
Subversion URL	FishEye svn
Download JAR	Attached to this page: compiled jar sources jar
Download Source	svn

Description/Features

Basic plugin showing the use of the FishEye API in a servlet. This can be used as the basis for more advanced FishEye plugins.

Usage

If compiling from source, follow the instructions listed in the 'readme' file.

> Requires a version 1.7 (or later) FishEye development build, will not work with released versions.

Installation

1. Copy the plugin .jar file from the 'target' directory to the var/plugins/user directory in your FishEye installation.
2. Run FishEye and point your browser at this location:

```
FISHEYE_HOME/plugins/servlet/[servlet url]
```

to view the servlet (where the servlet url is set in '`url-pattern`' in **atlassian-plugin.xml** and is set to `example-servlet` by default).

Configuring the plugin

No configuration is required, just start FishEye and point a browser at this URL:

```
FISHEYE_HOME/plugins/servlet/example_servlet
```

Version History

Version	Date	Description
0.1	7-November-2008	Initial release

Screenshots

Screenshots

Crucible Reporting plugin

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Name	Crucible Reporting plugin
Version	2.0.0
Product Versions	1.5.x, 1.6.x
Author(s)	Ross Rowe
Homepage	http://confluence.atlassian.com/display/CODEGEIST/Crucible+Reporting+plugin
Price	Free
License	BSD

JavaDocs	crucible-export-plugin-javadoc.zip
IssueTracking	N/A
Subversion URL	https://svn.atlassian.com/svn/public/contrib/crucible/crucible-export-plugin or browse via fisheye
Download JAR	crucible-export-1.0.0.jar (for Crucible 1.5.x) /crucible-export-1.6.2.jar (for Crucible 1.6.x) /crucible-export-2.0.0.jar (for Crucible 2.x)
Download Source	crucible-export.zip

Description/Features

A plugin for Crucible that facilitates the generation of a consolidated report for a specific review. This is especially useful if you are required to keep hard copies of your code review (like in the case of an audit)

Usage

> This plugin requires Crucible 1.5 or higher

Crucible 1.5 installation

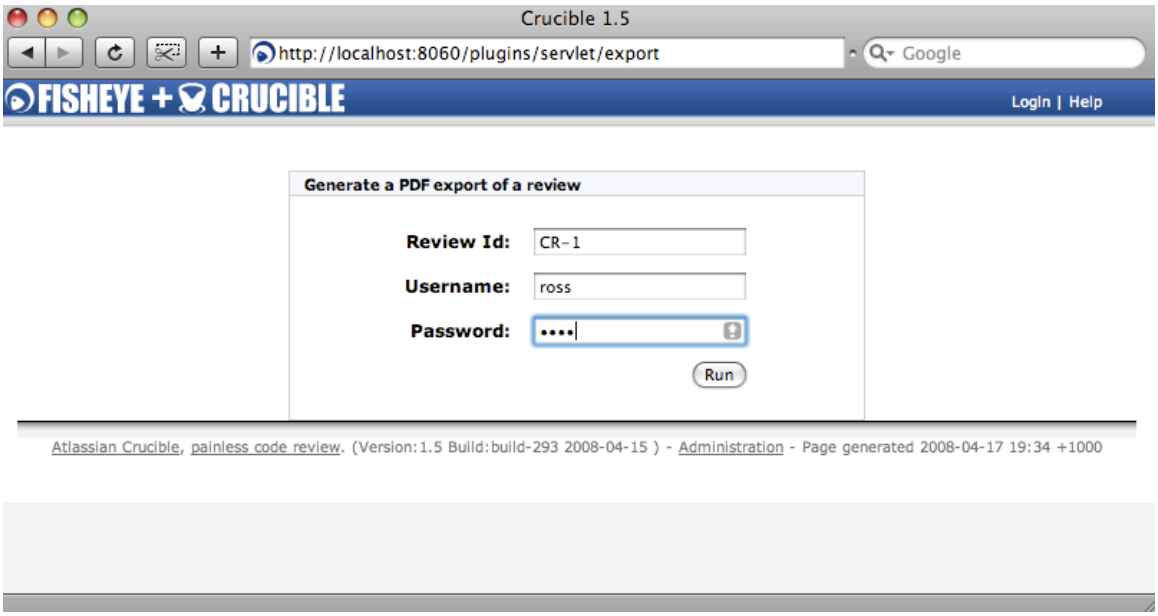
The plugin can be installed by copying the crucible-export-1.0.0.jar file into the CRUCIBLE_HOME/var/plugins directory. You will also need to copy the iText jar file (available from http://www.lowagie.com/iText/download.html) into the CRUCIBLE_HOME/lib directory.

Crucible 1.6 and higher installation

The plugin can be installed by copying the crucible-export-1.6.2.jar file into the CRUCIBLE_HOME/var/plugins/user directory.

Running the plugin

As Crucible does not currently have a mechanism to include user interface components via it's plugin api, the export mechanism can be opened by visiting http://YourCrucibleHost/plugins/servlet/export. From this page, the user must enter their username, password and the review id they wish to export.



Once the details are entered and the 'Run' button is clicked, a PDF including the Crucible Review details is generated. This report includes the summary information of the review, as well as any general and specific file comments.

Version History

Crucible 1.6 and higher support

Version	Date	Description
2.0.0	5 Aug 2009	Updated plugin to support Crucible 2.0
1.6.2	22 Mar 2009	CRPT-2 Sort versioned comments for a specific file (thanks Soren!)
1.6.1	10 Dec 2008	Added ability to include defect and revision information in report (thanks Soren!)
1.6.0	22 Sep 2008	Updated plugin to support Crucible 1.6.0 beta

Crucible 1.5 support

Version	Date	Description
1.0.0	9 May 2008	Updated plugin to support Crucible 1.5.1
0.0.4	4 May 2008	Added i18n support
0.0.3	29 April 2008	Updated unit tests
0.0.2	21 April 2008	Updated plugin to support Crucible 1.5
0.0.1	23 Mar 2008	Initial plugin version

Screenshots

Screenshots

Input page for the Crucible Export plugin
Sample report layout

Developing Crucible Plugins

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

Introduction

Crucible uses the standard Atlassian Plugins framework, so many of the tasks involved in developing a plugin for Crucible are the same as for other Atlassian products.

The differences are:

- The set of plugin types available.
- And, of course, the API available for plugins to interact with the Crucible application.

Building a Crucible Plugin

The simplest way to build a Crucible plugin is via Maven.

Atlassian provides an Archetype for Fisheye/Crucible plugins.

You can create a maven 2 project containing a sample Servlet Plugin Module with the following command:

```
mvn org.apache.maven.plugins:maven-archetype-plugin:1.0-alpha-7:create \
  -DarchetypeGroupId=com.atlassian.maven.archetypes \
  -DarchetypeArtifactId=crucible-plugin-archetype \
  -DarchetypeVersion=1-SNAPSHOT \
  -DremoteRepositories=https://maven.atlassian.com/repository/public/ \
-DgroupId=com.foo -DartifactId=foo-crucible-plugin
```

This will create your project in a subdirectory of your current directory named `foo-crucible-plugin`. Change into that directory (`cd foo-crucible-plugin`). You can create the plugin jar with the command `mvn package`, and install it in a running Fisheye or Crucible instance by copying `target/foo-crucible-plugin-1.0-SNAPSHOT.jar` to the `var/plugins/user` directory of your Fisheye/Crucible instance.

Crucible Plugin Module Types

Servlet Modules

Create a servlet which is deployed to the same web application context as Fisheye/Crucible. See Servlet Plugin Modules for more details.

Crucible SCM Plugins

An SCM plugin module lets Crucible create reviews based on files stored in another source code management system. See Crucible SCM Plugins for details.

Event Listener Plugins

An event listener plugin module will be called when certain events occur inside Crucible. See Crucible Event Listener Plugins for details.

The Crucible API

Your plugin will need to use The Crucible API to retrieve data from Crucible and to perform operations on it, such as changing the state of reviews.

Debugging your plugin

You can start Crucible in debug mode with the environment variable setting:

```
export FISHEYE_OPTS="-Xdebug -Xrunjdwp:transport=dt_socket,server=y,suspend=n,address=5005"
```

This allows you to connect your IDE to the debugger listening on port 5005.

Crucible Event Listener Plugins

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

An event listener plugin module is an object which is notified when certain internal Crucible or FishEye events occur.

To include an event listener module add a `listener` element to your `atlassian-plugins.xml` file:

```
    <listener key="example-listener" class=
"com.atlassian.crucible.example.plugin.spring.ExampleListener"/>
```

and create a class which implements `com.atlassian.event.EventListener`. See the FishEye event and Crucible event javadoc for specific event types. See the javadoc for EventListener to understand the general details regarding events.

For example, if we want to listen for all events, and print a message to standard output we would write:

```
public class ExampleListener implements EventListener {
    public void handleEvent(Event event) {
        System.out.println("Got event: " + event);
    }

    public Class[] getHandledEventClasses() {
        return new Class[0];
    }
}
```

Event listeners may implement `StateAware` if they need to be notified when the module is enabled or disabled.

A plugin containing an event listener module needs to declare a dependency on `atlassian-events` in its `pom.xml`:

```
<dependency>
    <groupId>com.atlassian.event</groupId>
    <artifactId>atlassian-event</artifactId>
    <version>0.5</version>
    <scope>provided</scope>
</dependency>
```

Note that this is a `provided` dependency – the plugin does not need to include the `atlassian-events` classes.

Crucible SCM Plugins

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

On this page:

- Crucible SCM Plugins
  - Creating a Project
  - Crucible SCM Plugin API
  - Servlet Based Administration Pane
  - Packaging, Deploying and Running

Crucible SCM Plugins

Crucible SCM modules are plugins that make version control systems accessible to Crucible. An SCM plugin can be used to give Crucible the ability to work with a custom version control system that is not supported out of the box. SCM plugins are independent from FishEye's version control integrations and allow Crucible to run standalone. Crucible ships with a number of built-in SCM plugins, including Subversion and Perforce.

In this section we will implement a new Crucible SCM Plugin and explore Crucible's public SCM API. The example builds a module that exposes the underlying file system as the "repository", so that users can perform reviews of files on the server file system.

Creating a Project

To start, we use the Crucible Plugin archetype to create a new empty Maven2 project:

```
mvn org.apache.maven.plugins:maven-archetype-plugin:1.0-alpha-7:create \
  -DarchetypeGroupId=com.atlassian.maven.archetypes \
  -DarchetypeArtifactId=crucible-plugin-archetype \
  -DarchetypeVersion=1-SNAPSHOT \
  -DremoteRepositories=https://maven.atlassian.com/repository/public/ \
  -DgroupId=com.atlassian.crucible.example.scm \-DartifactId=example-scm-plugin
```

This creates a new project that has a dependency on `atlassian-fisheye-api`. This library contains the basic API components required by plugins. However, as we are building an SCM plugin that can be configured through a servlet, we need to add a dependency on `atlassian-crucible-scmutils` as well as `atlassian-plugins-core` by editing the generated `pom.xml`:

pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
         xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/maven-v4_0_0.xsd">

    <parent>
        <groupId>com.atlassian.crucible.plugin.base</groupId>
        <artifactId>crucible-plugin-base</artifactId>
        <version>1-SNAPSHOT</version>
    </parent>

    <modelVersion>4.0.0</modelVersion>
    <groupId>com.atlassian.crucible.example.scm</groupId>
    <artifactId>example-scm-plugin</artifactId>
    <version>1.0-SNAPSHOT</version>

    <name>Example plugin that offers file system based repositories.</name>
    <packaging>atlassian-plugin</packaging>

    <properties>
        <atlassian.plugin.key>com.atlassian.crucible.example.scm.example-scm-plugin
</atlassian.plugin.key>
        <atlassian.pdk.server.url>${atlassian.product.url}</atlassian.pdk.server.url>
        <atlassian.product.version>1.6.3-SNAPSHOT</atlassian.product.version>
    </properties>

    <dependencies>
        <dependency>
            <groupId>com.atlassian.crucible</groupId>
            <artifactId>atlassian-crucible-scmutils</artifactId>
            <version>${atlassian.product.version}</version>
        </dependency>
        <dependency>
            <groupId>com.atlassian.plugins</groupId>
            <artifactId>atlassian-plugins-core</artifactId>
            <version>2.0.4</version>
        </dependency>
    </dependencies>
</project>
```

IDEA Users
If you are using IntelliJ for development, be sure to run `mvn idea:idea` to generate the project files. Opening the pom file directly is known to miss the parent dependencies.

Crucible SCM Plugin API

Crucible's public API can be browsed online and contains the functionality needed to develop a custom SCM plugin in the package `com.atlassian.crucible.scm`. It consists of a set of interfaces, some of which are optional, for browsing a repository, accessing its directories, retrieving file contents and exploring changes between revisions.

At the very least, your SCM plugin should implement the `com.atlassian.crucible.scm.SCMModule` interface that defines the new plugin. The module is then used to create one or more repository instances:

```
package com.atlassian.scm;

import com.atlassian.crucible.scm.SCMModule;
import com.atlassian.crucible.scm.SCMRepository;
import com.atlassian.plugin.ModuleDescriptor;

import java.util.Collection;
import java.util.Collections;

public class ExampleSCMModule implements SCMModule {

    private ModuleDescriptor moduleDescriptor;
    private List<SCMRepository> repos = Collections.emptyList();

    public String getName() {
        return "Example File System SCM.";
    }

    public Collection<? extends SCMRepository> getRepositories() {
        return repos;
    }

    public void setModuleDescriptor(ModuleDescriptor moduleDescriptor) {
        this.moduleDescriptor = moduleDescriptor;
    }

    public ModuleDescriptor getModuleDescriptor() {
        return moduleDescriptor;
    }
}
```

When your module is instantiated, Crucible passes a `ModuleDescriptor` instance to it containing information about the plugin. The `getRepositories()` method returns the repositories offered by this plugin. Currently we're returning an empty collection.

To be able to use the Crucible administration console to configure our plugin and specifiy the locations of the repositories we want to use, we will also implement the `Configurable` interface that allows for the injection of a custom configuration bean (by implementing `SimpleConfiguration`) whose properties can be manipulated through the administration interface for which we will write a small servlet. In our custom configuration bean we'll add a property for the base path or root directory of the file system based repositories we want to offer.

The plugin configuration is written to disk and fed to our `SCMModule` when Crucible starts up. Our plugin is responsible for generating and parsing that data, so we're free to choose the format. The `ModuleConfigurationStore` provides persistent storage and will automatically be injected into our plugin if we create a constructor that takes it as an argument. For the serialization, let's use simple XML serialization through XStream (using XStream is convenient as it is one of the dependencies for `atlassian-crucible-scmutils`):

```
package com.atlassian.scm;

import com.atlassian.fisheye.plugins.scm.utils.SimpleConfiguration;

public class ExampleConfiguration implements SimpleConfiguration {

    private String name;
    private String basePath;

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getBasePath() {
        return basePath;
    }

    public void setBasePath(String basePath) {
        this.basePath = basePath;
    }
}
```

Now we make the required changes to our SCMModule to read and write the configuration:

```
public class ExampleSCMModule implements SCMModule, Configurable<List<ExampleConfiguration>> {

    private ModuleDescriptor moduleDescriptor;
    private ModuleConfigurationStore store;

    public ExampleSCMModule(ModuleConfigurationStore store) {
        this.store = store;
    }

    [...]

    public List<ExampleConfiguration> getConfiguration() {
        byte[] configData = store.getConfiguration(moduleDescriptor);
        if (configData != null) {
            try {
                return (List<ExampleConfiguration>)getXStream().fromXML(new String(configData, "UTF8"
));
            } catch (Exception e) {
                throw new RuntimeException("Error reading configuration:" + configData, e);
            }
        }
        return new ArrayList<ExampleConfiguration>();
    }

    public void setConfiguration(List<ExampleConfiguration> config) {
        try {
            store.putConfiguration(moduleDescriptor, getXStream().toXML(config).getBytes("UTF8"));
        } catch (UnsupportedEncodingException e) {
            throw new RuntimeException("UTF8 encoding not supported", e);
        }
    }

    private XStream getXStream() {
        XStream xstream = new XStream();
        xstream.setClassLoader(moduleDescriptor.getPlugin().getClassLoader());
        return xstream;
    }
    [...]
```

Now that we have access to the configuration data, which describes the repositories, we can go ahead and implement our file system based repository class.

The `SCMRepository` interface offers basic functionality for retrieving file contents of specific file revisions. It is queried by Crucible when a user adds files to a review. Depending on the optional interfaces you implement in addition to `SCMRepository`, your implementation could also have the ability to browse the repository and to explore different versions of each file. Because a standard file system does not store version information, we'll only offer directory browsing in this example. As a revision key or version number we shall simply use the last modification date that is stored by the file system.

```
package com.atlassian.scm;

import com.atlassian.crucible.scm.SCMRepository;
import com.atlassian.crucible.scm.RevisionData;
import com.atlassian.crucible.scm.RevisionKey;
import com.atlassian.crucible.scm.DetailConstants;
import com.cenqua.crucible.model.Principal;

import java.io.OutputStream;
import java.io.IOException;
import java.io.File;
import java.io.FileInputStream;
import java.io.InputStream;
import java.util.Date;
import java.net.MalformedURLException;
import java.text.DateFormat;
import java.text.SimpleDateFormat;

import org.apache.commons.io.IOUtils;

public class ExampleSCMRepository implements SCMRepository {

    private final ExampleConfiguration config;

    public ExampleSCMRepository(ExampleConfiguration config) {
        this.config = config;
    }

    public boolean isAvailable(Principal principal) {
        return true;
    }

    public String getName() {
        return config.getName();
    }

    public String getDescription() {
        return getName() + " file system repo at: " + config.getBasePath();
    }

    public String getStateDescription() {
        return "Available";
    }

    public RevisionData getRevisionData(Principal principal,
        RevisionKey revisionKey) {
        if (revisionKey.equals(currentKey(revisionKey.getPath()))) {
            File f = getFile(revisionKey.getPath());

            RevisionData data = new RevisionData();
            data.setDetail(DetailConstants.COMMIT_DATE, new Date(f.lastModified()));
            data.setDetail(DetailConstants.FILE_TYPE, f.isDirectory() ? "dir" : "file");
            data.setDetail(DetailConstants.ADDED, true);
            data.setDetail(DetailConstants.DELETED, false);
            try {
                data.setDetail(DetailConstants.REVISION_LINK, f.toURL().toString());
            } catch (MalformedURLException e) {
            }
            return data;
        } else {
```

```
            throw new RuntimeException("Revision " + revisionKey.getRevision() + " of file " +
revisionKey.getPath() + " is no longer available.");
        }
    }

    public void streamContents(Principal principal, RevisionKey revisionKey,
        OutputStream outputStream) throws IOException {
        if (revisionKey.equals(currentKey(revisionKey.getPath()))) {
            InputStream is = new FileInputStream(getFile(revisionKey.getPath()));
            try {
                IOUtils.copy(is, outputStream);
            } finally {
                IOUtils.closeQuietly(is);
            }
        } else {
            throw new RuntimeException("Revision " + revisionKey.getRevision() + " of file " +
revisionKey.getPath() + " is no longer available.");
        }
    }

    public RevisionKey getDiffRevisionKey(Principal principal,
        RevisionKey revisionKey) {
        // diffs are not supported in this example
return null;
    }

    /**
     * Returns a {@link RevisionKey} instance for the specified file. Because we
     * do not support versioning, the revision string will be set to the file's
     * last modification date.
     *
     * @param path
     * @return
     */
    private RevisionKey currentKey(String path) {
        File f = getFile(path);
        return new RevisionKey(path, createDateFormat().format(new Date(f.lastModified())));
    }

    /**
     * Takes the name of a file in the repository and returns a file handle to the
     * file on disk.
     *
     * @param path
     * @return
     */
    private File getFile(String path) {
        return new File(config.getBasePath() + File.separator + path);
    }

    private DateFormat createDateFormat() {
        return new SimpleDateFormat("yyyy-MM-dd'T'HH:mm:ss.SSSZ");
```

```
    }
}
```

In the above code, the `getRevisionData()` method is used by Crucible to retrieve versioning properties for a specific revision of a file in the repository. Although the file system does not keep track of older versions, we can provide some of the properties. Most important are the predefined constants `DetailConstants.FILE_TYPE`, `DetailConstants.ADDED`, `DetailConstants.DELETED` (the last two indicate whether the file was newly created (ADDED), or has been removed from the repository (DELETED) as part of the revision) and `DetailConstants.REVISION_LINK`. In addition to the predefined constants, a repository implementation is free to add custom properties.

We are not able to implement `getDiffRevisionKey()` due to the lack of version information on the file system.

Before we continue to extend the functionality of the `ExampleSCMRepository`, we should go back to `ExampleSCMModule` and implement `getRepositories()`:

```
[...]

    // initialize at null to trigger loading from the configuration
private List<SCMRepository> repos = null;

    public synchronized Collection<SCMRepository> getRepositories() {
        if (repos == null) {
            repos = new ArrayList<SCMRepository>();
            for (ExampleConfiguration config : getConfiguration()) {
                repos.add(new ExampleSCMRepository(config));
            }
        }
        return repos;
    }

    public void setConfiguration(List<ExampleConfiguration> config) {
        try {
            store.putConfiguration(moduleDescriptor, xstream.toXML(config).getBytes("UTF8"));
            // we're given a new configuration, so reset our repositories:
repos = null;
        } catch (UnsupportedEncodingException e) {
            throw new RuntimeException("UTF8 encoding not supported", e);
        }
    }

    [...]
```

Our SCMModule now properly creates the repository instances according to the configuration.

The above code gives us a very simple Crucible SCM plugin. However you would normally also want to implement the `com.atlassian.crucible.scm.DirectoryBrowser` and `com.atlassian.crucible.scm.HasDirectoryBrowser` interfaces. The `DirectoryBrowser` gives Crucible the ability to let the user interactively browse the repository and select files to review. If you do not provide a `DirectoryBrowser`, the only way to create a review for files in your repository is when the required files and file revisions are known up front.

In this example, we'll implement `DirectoryBrowser`:

```
public class FileSystemSCMRepository implements HasDirectoryBrowser, DirectoryBrowser {

    [...]

    public DirectoryBrowser getDirectoryBrowser() {
        return this;
    }

    public List<FileSummary> listFiles(Principal principal, String path) {
        List<FileSummary> files = new ArrayList<FileSummary>();
        for (String p : list(path, true)) {
            files.add(new FileSummary(currentKey(p)));
        }
        return files;
    }

    public List<DirectorySummary> listDirectories(Principal principal, String path) {
        List<DirectorySummary> files = new ArrayList<DirectorySummary>();
        for (String p : list(path, false)) {
            files.add(new DirectorySummary(p));
        }
        return files;
    }

    public FileHistory getFileHistory(Principal principal, String path) {
        return new FileHistory(Collections.singletonList(currentKey(path)));
    }

    private List<String> list(String path, boolean returnFiles) {
        File parent = getFile(path);
        List<String> files = new ArrayList<String>();
        if (parent.isDirectory()) {
            File[] children = parent.listFiles();
            // this may be null if we can't read the directory, for instance.
if (children != null) {
                for (File f : children) {
                    if (f.isFile() && returnFiles || f.isDirectory() && !returnFiles) {
                        files.add(getPath(f));
                    }
                }
            }
        }
        return files;
    }

    /**
     * @return the path for a given File relative to the base configured for this
     *         repository -- the path doesn't include the base component.
     */
    private String getPath(File file) {
        String s = file.getAbsolutePath();
        if (!s.startsWith(config.getBasePath())) {
            throw new RuntimeException("Invalid file with path " + s + " is not under base " +
config.getBasePath());
        }
        return s.substring(config.getBasePath().length() + 1);
    }

    [...]
```

This is as far as we can go with the file system. In most cases you will be integrating version control systems that keep track of all previous revisions of the resources in the repository and you would expose this to Crucible by also implemening `HasChangelogBrowser` and `ChangelogBrowser`.

Servlet Based Administration Pane

With the code for the module and the repository in place, we can focus on our servlet that provide plugin administration in Crucible's administration section. The easiest way to do this is to subclass

`com.atlassian.fisheye.plugins.scm.utils.SimpleConfigurationServlet` and implement the three abstract methods:

```
package com.atlassian.crucible.example.scm;

import com.atlassian.fisheye.plugins.scm.utils.SimpleConfigurationServlet;
import com.atlassian.plugin.PluginAccessor;
import com.atlassian.crucible.spi.FisheyePluginUtilities;

public class ExampleSCMConfigServlet extends SimpleConfigurationServlet<ExampleConfiguration> {

    public ExampleSCMConfigServlet(PluginAccessor pluginAccessor,
        FisheyePluginUtilities fisheyePluginUtilities) {
        super(pluginAccessor, fisheyePluginUtilities);
    }

    protected ExampleConfiguration defaultConfig() {
        return new ExampleConfiguration();
    }

    protected String getProviderPluginModuleKey() {
        return "com.atlassian.crucible.example.scm.example-scm-plugin:scmprovider";
    }

    protected String getTemplatePackage() {
        return "/examplescm-templates";
    }
}
```

The `getTemplatePackage()` method returns the name of the resource directory that contains the velocity templates that determine how the configuration pane will be rendered. The template directory must be in `src/main/resources` so Crucible can find them. We'll create three different pages: one that lists the current configuration `list.vm`, one to edit a repository's configuration `edit.vm` and one that is displayed when the user tries to manipulate a non-existing repository instance (`nosuchrepo.vm`):

src/main/resource/examplescm-templates/list.vm

```
<html>
<head>
    <link rel="stylesheet" href="$request.contextPath/$STATICDIR/main.css" type="text/css" />
</head>
<body class="plugin">
<div class="box formPane">
<table class="adminTable">
#if ($configs.empty)
        <tr><td>No File System repositories are configured.</td></tr>
#else
    <tr>
        <th>Name</th>
        <th>Base Path</th>
        <th><!-- for edit link --></th>
        <th><!-- for delete link --></th>
    </tr>
    #foreach ($config in $configs)
    <tr>
        <td>$config.name</td>
        <td>$config.basePath</td>
        <td><a href="./examplescm?name=$config.name">Edit</a></td>
        <td><a href="./examplescm?name=$config.name&amp;delete=true">Delete</a></td>
    </tr>
    #end
#end
    <tr>
        <td class="verb"><a href="./examplescm?name=_new">Add a repository.</a></td>
    </tr>
</table>
</div>
</body>
</html>
```

src/main/resource/examplescm-templates/edit.vm

```
<html>
<head>
    <link rel="stylesheet" href="$request.contextPath/$STATICDIR/main.css" type="text/css" />
</head>
<body class="plugin">
<div class="box formPane">
<form action="./examplescm" method="POST">
    #if ($config.name)
    <input type="hidden" name="name" value="$!config.name"/>
    #end
    <table class="adminTable">
         #if ($errorMessage)
        <tr><td colspan="2"><span class="errorMessage">$errorMessage</span></td></tr>
        #end
        <tr>
            <td class="tdLabel"><label class="label">Name:</label></td> <td><input
            #if ($config.name)
                disabled="true"
            #else
                name="name"
            #end
            type="text"  value="$!config.name"/> </td>
        </tr>
        <tr>
            <td class="tdLabel"><label class="label">Base Path:</label></td> <td><input type="text"
name="basePath" value="$!config.basePath"/> </td>
        </tr>
        <tr>
            <td colspan="2">
                <input type="submit" value="Save"/>
            </td>
        </tr>
    </table>
</form>
</div>
</body>
</html>
```

src/main/resource/examplescm-templates/nosuchrepo.vm

```
<html>
<head>
    <link rel="stylesheet" href="$request.contextPath/$STATICDIR/main.css" type="text/css" />
</head>
<body class="plugin">
<p>
There is no repository named '$name'.
</p>
</body>
</html>
```

Finally we tie everything together in the mandatory `atlassian-plugin.xml` file that describes the new plugin, contains its name, location of the servlet and the classnames Crucible uses to instantiate the components. Because this is an SCM plugin, we must add the `<scm/>` element:

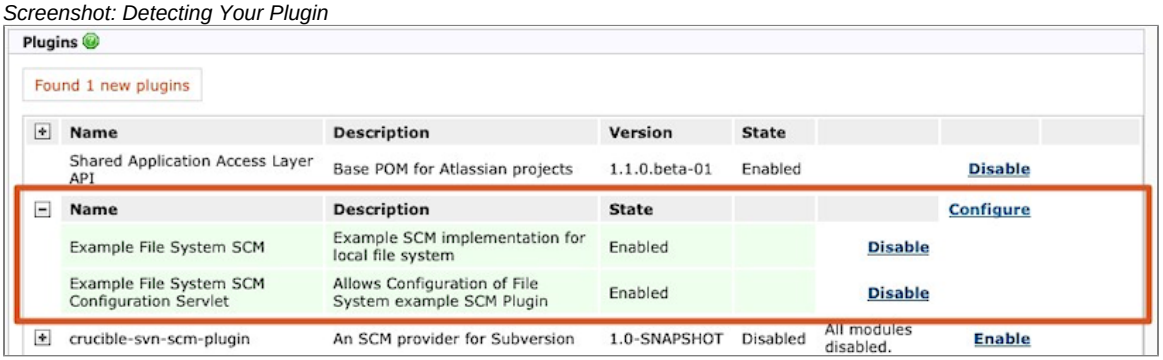
src/main/resources/atlassian-plugin.xml

```
<atlassian-plugin key="${atlassian.plugin.key}" name="example-scm-plugin" plugins-version="2">
    <plugin-info>
        <description>An example SCM provider for the local file system</description>
        <vendor name="Atlassian" url="http://www.atlassian.com"/>
        <version>1.0-SNAPSHOT</version>
        <param name="configure.url">/plugins/servlet/examplescm</param>
    </plugin-info>

    <scm name="Example File System SCM" key="scmprovider" class=
"com.atlassian.crucible.example.scm.ExampleSCMModule">
        <description>Example SCM implementation for local file system</description>
    </scm>

    <servlet name="Example File System SCM Configuration Servlet" key="configservlet" class=
"com.atlassian.crucible.example.scm.ExampleSCMConfigServlet" adminLevel="system">
        <description>Allows Configuration of File System example SCM Plugin</description>
        <url-pattern>/examplescm</url-pattern>
    </servlet>
</atlassian-plugin>
```

Packaging, Deploying and Running

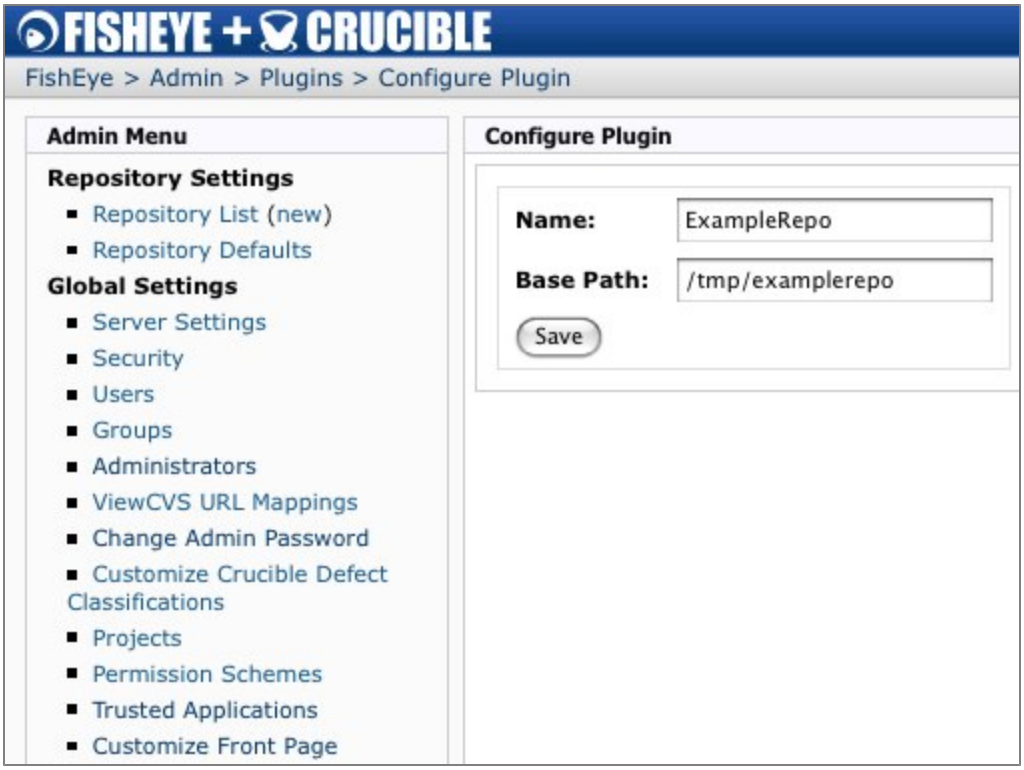
Now we can package everything up using `mvn package` and you should end up with `target/example-scm-plugin-1.0-SNAPSHOT.jar` that can be deployed in Crucible by copying the jar file to the `CRUCIBLE_HOME/var/plugins/user` directory. Then login to the administration section, go to `Plugins` and click the link "Check for new plugins in...". This should detect your plugin and add it to the list in "disabled" state as illustrated below:

Screenshot: Detecting Your Plugin



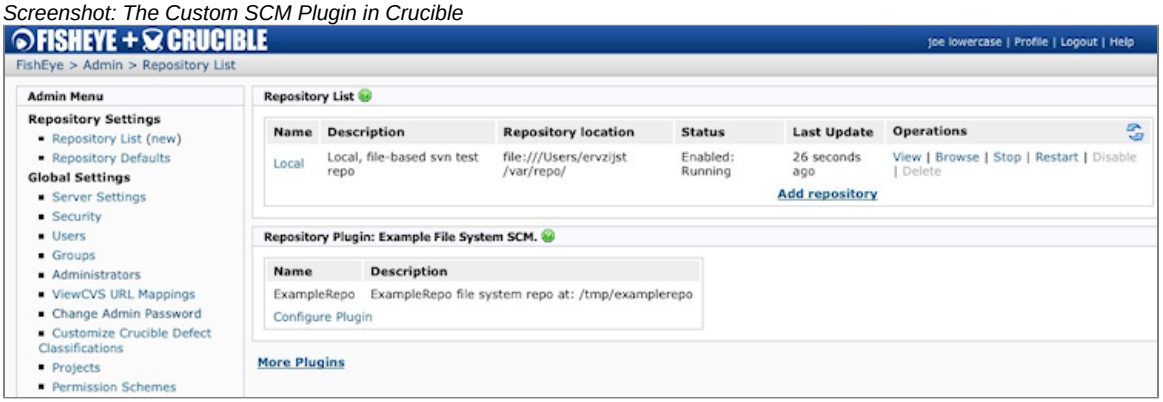
Next, click "Configure" to create a file system based repository:

Screenshot: Creating a File-System Based Repository



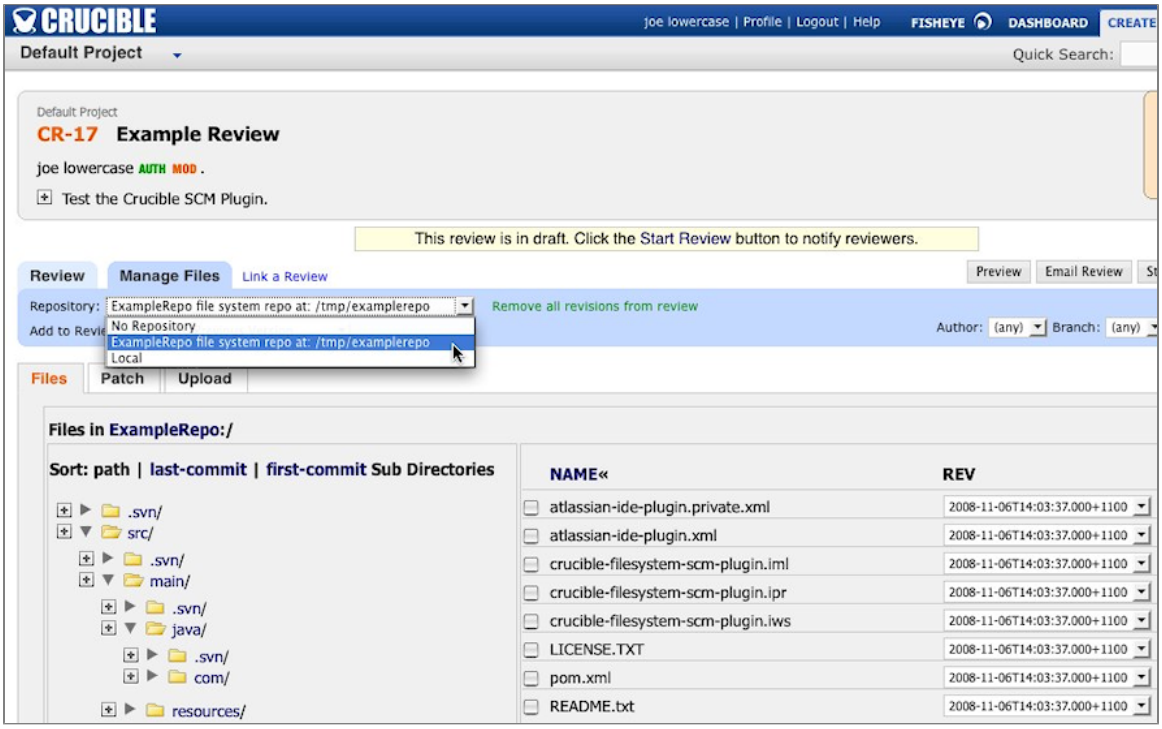
When the repository is created, navigate to "Repository List". Our custom Crucible SCM Plugin will now show up in the list and is ready to use:

Screenshot: The Custom SCM Plugin in Crucible



When reviewing files from the plugin repository, click on the "Manage Files" tab in a new or existing review and then select the repository from the pull down list and select the files and revisions you want to review:

Screenshot: Selecting Files and Revisions for Review



The Crucible API

> The content on this page is deprecated. Please see the separate documentation space for developer reference material about FishEye and Crucible.

This page covers the Crucible API and how you can use service interfaces that are exposed to plugins.

On this page:

- Services
  - Overview
  - Using a Service in your Plugin
  - Maven dependencies for Spring

Services

Crucible exposes a set of service interfaces to plugins. The parameters and return types of the methods on these interfaces are 'plain old Java objects'. Having an API specifically designed to be used by plugins protects plugins from internal changes in Crucible's implementation, and presents plugins with a simpler API.

Overview

The service interfaces are in the package `com.atlassian.crucible.spi.services`.

The types the use as parameters are in the package `com.atlassian.crucible.spi.data`.

Refer to the Crucible API javadoc for details of the services.

Using a Service in your Plugin

The services are all available in your plugin's Spring context.

We can inject a spring bean using constructor injection, e.g.:

```
public class ExampleServlet extends HttpServlet {
    private ProjectService projectService;

    @Autowired
    public ExampleServlet(ProjectService projectService) {
        this.projectService = projectService;
    }
...
}
```

You can also use setter injection on your plugin class:

```
 public void setReviewService(ReviewService reviewService) {
        this.reviewService = reviewService;
    }
```

Note that you **cannot** mix constructor and setter injection in the same class – if you mark a constructor with `@Autowired`, no setters will be used for injection.

All plugin module classes which are created by the plugin system are injected by Spring. That is, the `HttpServlet` subclass of a servlet plugin module, the `SCMModule` implementation of a Light SCM plugin module and the `EventListener` implementation of an event listener plugin module.

Maven dependencies for Spring

If you are using Spring annotations in your plugin you will need the following dependencies in your `pom.xml`:

```
<dependencies>
        <dependency>
            <groupId>org.springframework</groupId>
            <artifactId>spring</artifactId>
            <version>2.5.5</version>
            <scope>provided</scope>
        </dependency>
        <dependency>
            <groupId>com.sun.xml.bind</groupId>
            <artifactId>jaxb-impl</artifactId>
            <version>2.1</version>
            <scope>provided</scope>
        </dependency>
</dependencies>
```

Crucible Resources

Resources for Evaluators

- Free Trial
- Feature Tour

Resources for Administrators

- Crucible Knowledge Base
- Crucible FAQ
- Tips of the Trade
- Guide to Installing an Atlassian Integrated Suite
- The big list of Atlassian gadgets

Downloadable Documentation

- Crucible documentation in PDF, HTML or XML formats

Plugins

- Crucible Developer Documentation
- Atlassian Plugin Exchange

IDE Connectors

- Use the Atlassian Connector for Eclipse or the Atlassian Connector for IntelliJ IDEA to work with your Crucible code reviews right there in your development environment.

Support

- Atlassian Support
- Support Policies

Forums

- Crucible General Forum
- Crucible Developers Forum

Feature Requests

- Issue Tracker and Feature Requests for Crucible

Glossary

Code review terminology can be confusing as there are many different words for the concepts, roles and process. Crucible has adopted the following terms (click for definitions):

approve

author

code review

comment

creator

defect

moderator

participant

permission

permission scheme

project

review duration

reviewer

role

state

statement of objective

user

approve

Issuing a review to the reviewers is known as *approving* the review.

author

The *author* is the person primarily responsible for acting on the outcomes of the review. In the vast majority of cases the author will be the person who made the code change under review.

Note: to map your repository username to your FishEye/Crucible username, see Changing your User Profile.

code review

Without prejudice to 'code inspection', 'peer review' or a myriad of other terms, Crucible uses the phrase *code review* for simplicity.

See About Crucible and Background Reading.

comment

A *comment* is a short textual note that is linked to a review, revision/diff, source line, or to another comment.

See Adding Comments.

creator

The *creator* is the person who creates the review. In most cases this person will also act as moderator.

defect

A *defect* is a comment flagged as something that requires addressing and includes optional defect classifications.

See Flagging Defects and Customising the Defect Classifications.

moderator

The *moderator* is the person responsible for creating the review, approving the review, determining when reviewing is finished, summarising the outcomes and closing the review. By default, the moderator is the creator.

participant

Crucible uses the terms creator, author, moderator, and reviewer to describe the *roles* of review participants.

permission

A *permission* is the ability to perform a particular action in Crucible, e.g. 'Create Review'.
Permissions are assigned to particular users, groups or review roles by means of permission schemes.

The following permissions are available:

Permission	Description	Default Assignees

'**Edit**'	Ability to edit a review's details and change the set of revisions being reviewed.	'Creator' 'Moderator'
'**View**'	Ability to view a review. (People without this permission will not know that the review exists.)	Anonymous users All logged-in users 'Creator' 'Author' 'Reviewer' 'Moderator'
'**Abandon**'	Ability to abandon (i.e. cancel) a review.	'Moderator' 'Creator'
'**Re-Open**'	Ability to re-open a closed or abandoned review.	'Creator' 'Moderator'
'**Uncomplete**'	Ability of a reviewer to change their individual review status from 'Complete' to 'Uncomplete'.	'Reviewer'
'**Reject**'	Ability to reject a review submitted for approval (i.e. prevent it from being issued to reviewers).	'Moderator'
'**Complete**'	Ability of a reviewer to change their individual review status to 'Complete'.	'Reviewer'
'**Comment**'	Ability to add or remove a comment to or from a review.	'Creator' 'Author' 'Reviewer' 'Moderator'
'**Approve**'	Ability to approve a review (i.e. issue it to the reviewers).	'Moderator'
'**Submit**'	Ability to submit a review for approval (i.e. request that the review be issued to the reviewers).	'Creator' 'Author'
'**Close**'	Ability to close a review once it has been summarised.	'Moderator'
'**Delete**'	Ability to delete a review.	'Creator' 'Moderator'
'**Summarise**'	Ability to summarise a review. (Normally this would be done after all reviewers have completed their review.)	'Moderator'
'**Create**'	Ability to create a review.	All logged-in users
'**Recover**'	Ability to resurrect an abandoned (i.e. cancelled) review.	'Creator' 'Moderator'

permission scheme

A *permission scheme* assigns particular permissions to any or all of the following:

- Particular Users.
- Particular Groups.
- All logged-in users.
- Anonymous Users
- People in particular Review Roles, such as:
  - 'Author';
  - 'Reviewer';
  - 'Creator';
  - 'Moderator'.

The scheme's permissions will apply to all reviews belonging to the project(s) with which the scheme is associated.

You can create as many permission schemes as you wish. Each permission scheme can be associated with many projects or just one project, allowing you to tailor appropriate permissions for individual projects as required.

See Creating a Permission Scheme.

project

A Crucible *project* is a collection of reviews, typically reviews that all relate to the same application. In addition to providing a logical way of grouping reviews together, a project allows you to

- define default moderators, authors and reviewers for the reviews in that project.
- define which people are eligible to be reviewers for the reviews in that project.
- use permission schemes to restrict who can perform particular actions (e.g. 'Create Review') in that project.

Every Crucible review belongs to a project. Each project has a *name* (e.g. **ACME Development**) and a *key* (e.g. **ACME**). The project key becomes the first part of that project's *review keys*, e.g. **ACME-101**, **ACME-102**, etc:

By default, Crucible contains one project. This default project has the key '**CR**' and the name '**Default Project**'.

See Creating a Project.

review duration

The *review duration* is the period of time for which a review will run.

See Setting the Default Review Duration for a Project.

reviewer

A *reviewer* is a person assigned to review the change. Reviewers can make comments and indicate when they have completed their review. The moderator and author are implicitly considered reviewers.

role

See participant.

state

A Crucible review moves through the following states in the following sequence:

Draft	See Creating a Review.
Require Approval	Relevant only when the moderator is not the creator. See Issuing a Review.
Under Review	See Issuing a Review and Reviewing the Code.
Summarize	See Summarising and Closing the Review.
Closed	See Summarising and Closing the Review.

Reviews can be re-opened, i.e. moved from **Summarize** or **Closed** back to **Under Review**.

A review may also be in the following states:

Abandoned	This happens when a review is deleted.
Rejected	Any reviews that a moderator has rejected.

statement of objective

A *statement of objective* is an optional text description of the review and any specific areas the reviewers should focus on.

user

A *user* is a person using Crucible.

Contributing to the Crucible Documentation

Would you like to share your Crucible hints, tips and techniques with us and with other Crucible users? We welcome your contributions.

On this page:

- Blogging your Technical Tips and Guides - Tips of the Trade
- Updating the Documentation Itself
  - Getting Permission to Update the Documentation
  - Following our Style Guide
  - How we Manage Community Updates

Blogging your Technical Tips and Guides – Tips of the Trade

Have you written a blog post describing a specific configuration of Crucible or a neat trick that you have discovered? Let us know, and we will link to your blog from our documentation. More....

Updating the Documentation Itself

Have you found a mistake in the documentation, or do you have a small addition that would be so easy to add yourself rather than asking us to do it? You can update the documentation page directly.

Getting Permission to Update the Documentation

Our documentation wiki contains developer-focused documentation (such as API guides, plugin and gadget development guides and guides to other frameworks) as well as product documentation (user's guides, administrator's guides and installation guides). The wiki permissions are different for each type of documentation.

- If you want to update the Crucible developer documentation, the Developer Network or other developer-focused wiki spaces, just sign up for a wiki username then log in and make the change.
- If you want to update the Crucible product documentation, we ask you to sign the Atlassian Contributor License Agreement (ACLA) before we grant you wiki permissions to update the documentation space. Please read the ACLA to see the terms of the agreement and the documentation it covers. Then sign and submit the agreement as described on the form attached to that page.

Following our Style Guide

Please read our short guidelines for authors

How we Manage Community Updates

Unable to render {include} Couldn't find a page to include called: ALLDOC:_Managing Community Contributions

RELATED TOPICS

Tips of the Trade
Author Guidelines
Atlassian Contributor License Agreement

Tips of the Trade

Below are some links to external blog posts and articles containing technical tips and instructions on setting up and using Crucible. This page presents an opportunity for customers and community authors to share information and experiences.

The references here are specific to Crucible and are technical 'how to' guides written by bloggers who use Crucible. For more general information on code review solutions, best practices and business cases, please refer to the Atlassian website.

Please be aware that these are external blogs and articles.
Most of the links point to external sites, and some of the information is relevant to a specific release of Crucible. Atlassian provides these links because the information is useful and relevant at the time it was written. Please check carefully whether the information is still relevant when you read it, and whether it is relevant to your version of Crucible. Unless explicitly stated, Atlassian does not offer support for third-party extensions or plugins. The information in the linked blog posts has not been tested or reviewed by Atlassian. We recommend that you test all solutions on a **test** server before trying it on your production site.

On this page:

- Running Atlassian Crucible (or Fisheye) on Linux Startup
- Reviewing wiki documentation via Crucible

Administration

Running Atlassian Crucible (or Fisheye) on Linux Startup

- By: Jarrod, on blog 'The stupid people made me do it!'
- About: How to get Crucible to start automatically when the server boots, via an initialisation script that runs on RedHat-like Linux boxes
- Date and Crucible version: 9 March 2009; Crucible 1.6
- Related documentation: Auto Start on Windows via a Windows Service

Reviewing Confluence Pages

Reviewing wiki documentation via Crucible

- By: Sarah Maddox, on blog 'ffeathers'
- About: Setting up Crucible and Confluence so that you can use Crucible to review Confluence wiki pages
- Date and software versions: 17 January 2009; Crucible 1.6 and Confluence 2.10
- Related documentation:
  - Setting Up Reviewing of Confluence Pages in Crucible
  - Confluence SCM Plugin

Have you written a technical tip for Crucible?
Add a comment to this page, linking to your blog post or article. We will include it if the content fits the requirements of this page.

Feedback?
Your first port of call should be the author of the linked blog post. If you want to let us know how useful (or otherwise) a linked post is, please add a comment to this page.

Other Sources of Information

Crucible documentation
Atlassian website
Atlassian forums
Atlassian Blog
Crucible plugins

TreeNavigation

Index

Changeset Discussions

When using Crucible with FishEye, you can have threaded discussions with other users, on any changeset. To start a discussion, you simply start by adding a comment to a changeset.

You need to be logged in to create changeset comments.

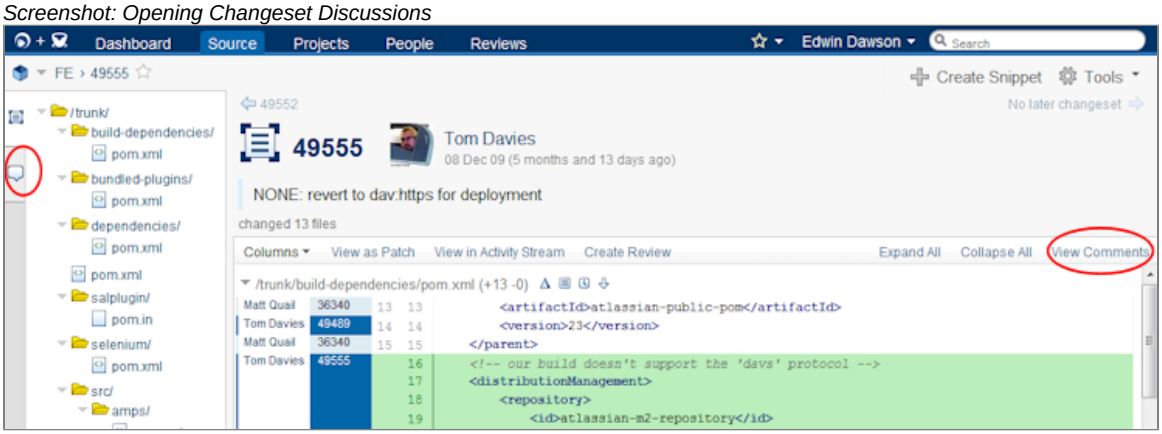
Adding Comments to Changesets

To add a comment to a changeset,

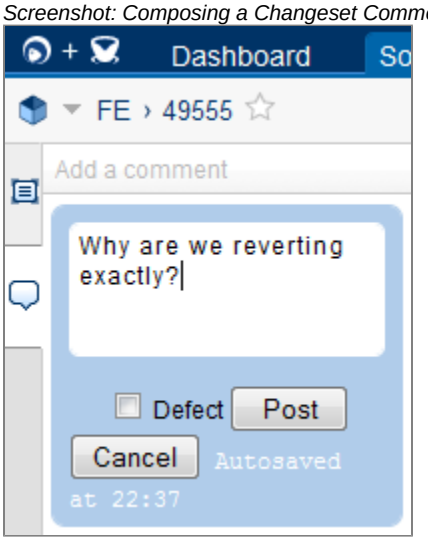
1. Open the changeset view for the desired code commit.
2. Display comments by clicking '**Discuss**' at the upper right corner, or the speech bubble icon beside the left navigation bar.
3. When the comment bar is visible, you can add a comment by clicking '**Add a Comment**'. Type your content and click '**Post**' to submit it.
4. You can tag your comment as a defect note by clicking the '**Defect**' tick box.
5. Once submitted, others can respond to your comment by clicking '**Reply**'. Replies are threaded as separate comment discussions. You can click on the link icon !! to save a permalink to that comment. The comment author can edit or delete their comments.
6. To hide the changeset comments, click the page icon . You can open the comments bar by clicking the speech bubble icon again.

As you compose a comment, it will auto-save periodically.

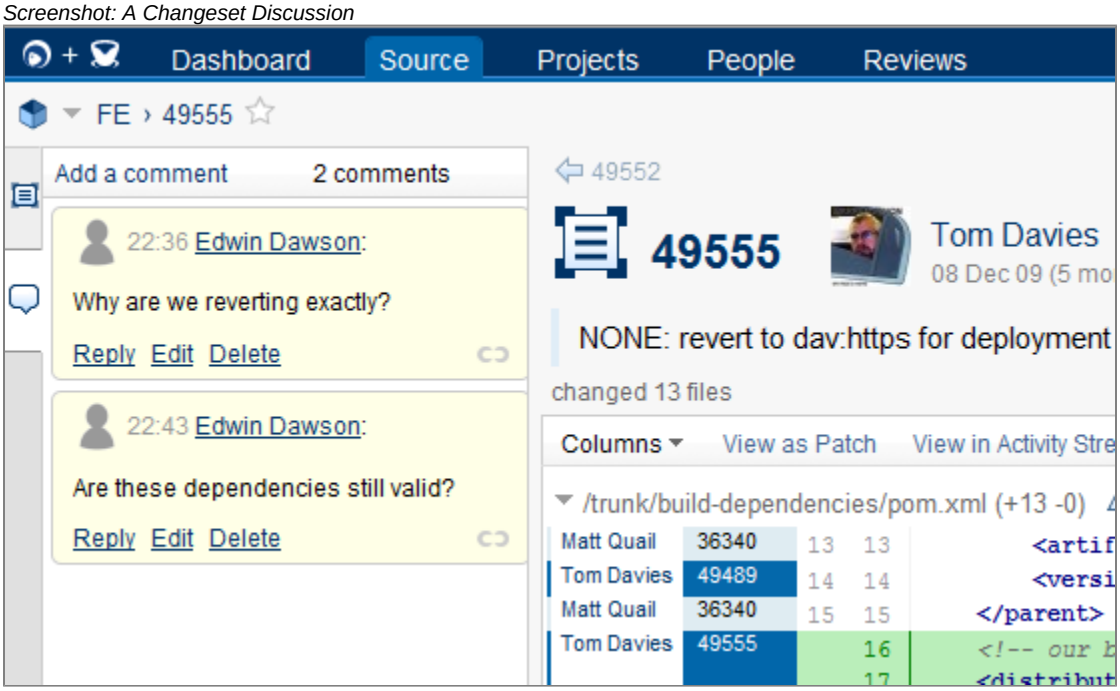
Screenshot: Opening Changeset Discussions



Screenshot: Composing a Changeset Comment



Screenshot: A Changeset Discussion



Turning Changeset Discussions On and Off

You can turn off changeset discussions in the Admin screens.

Go to the Admin screen, then choose '**Repository List**' from the left navigation bar. Find your repository from the list that appears, and click '**View** ' beside it to see the repository settings page. Scroll to the bottom of the list and find '**Changeset Discussions**'. Click '**Edit**' to change the value to true or false. If set to false, changeset discussions are disabled.

By default, changeset discussions are on.

Screenshot: Enabling Changeset Comments in the Admin Screens

Notifications

- Comments show up in the activity stream,
- The author of the changeset will get email notifications when comments are added,
- Comment authors will get email notifications when someone replies to their comments.

TreeNavigationVersions

Click for all versions

Crucible 2.3 Documentation
Crucible 2.2 Documentation
Crucible 2.1 Documentation
Crucible 2.0 Documentation
Crucible 1.6 Documentation
Crucible 1.5 Documentation
Crucible 1.2 Documentation
Crucible 1.1 Documentation
Crucible 1.0 Documentation