

Documentation for Crucible 3.2

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# **Getting Started**

Atlassian Crucible is the on-premises code review solution for enterprise teams. It allows your development teams to catch major defects, improve code architecture, or discuss desired improvements, without the need for meetings.

This section describes how to install, set up and get started with Crucible.

#### Related pages:

- Using Crucible
- Administering Crucible
- Crucible FAQ
- Crucible upgrade guide

#### System requirements

• Crucible is a Java web application, that works with all modern browsers. See our Supported platforms pag e to find out about system requirements.

#### **Download and install Crucible**

- Windows
- Mac
- Linux

#### Work with projects

Crucible integrates with Subversion, Git, Mercurial, CVS and Perforce. FInd out how to connect to repositories, set up projects and create reviews.

#### Integrate Crucible with other Atlassian applications

As a first step, see JIRA integration in Crucible.

#### Read more about using Crucible

You are looking at the Crucible documentation. Browse using the tree in the panel on the left, or use the search at the top right.

## Supported platforms

This page shows the supported platforms for **Crucible 3.2.x** and its minor releases.

**Key**: **⊘** = Supported **X** = Not Supported

Java Version	
Oracle JRE / JDK 1.6	Crucible requires the <b>Java Runtime</b> (JDK or JRE), version as noted. Pre-release/Early access versions of the Java Runtime are <i>not supported</i> .
	You can download an Oracle Java Runtime for Windows/Linux/Solaris. On Mac OS X, the JDK is bundled with the operating system.
	For the OpenJDK, download and install instructions for Linux flavours are at http://openjdk. java.net/install/.
	We highly recommend that you use the Oracle JVM or OpenJDK (for Linux only), or use the default Mac OS X JVM. Other implementations have not been tested.
	Please note:
	<ul> <li>Once you have installed the JDK, you need to set the JAVA_HOME environment variable.</li> <li>See Installing Crucible on Windows or Installin g Crucible on Linux and Mac for details.</li> </ul>

OpenJDK	2 1.7 (Linux only)	<ul> <li>If you are using a 64-bit JVM, please ensure that you've set your max heap size (Xmx) to a reasonable value, considering the RAM requirements of your system.</li> </ul>	
Operating Systems			
Microsoft Windows	•	<ul> <li>Crucible is a pure Java application and should run on any platform provided the requirements</li> </ul>	
Linux	•	for the JRE or JDK are satisfied.	
Apple Mac OS X		<ul> <li>Although Crucible can be run in virtualised environments, Atlassian is not yet able to provide technical support for performance-related problems in a virtualised environment. If you do chose to run Crucible i a VM, please ensure that you choose a VM with good IO throughput.</li> <li>On OS X Java 7 performs significantly better than Java 6</li> </ul>	
Databases			
MySQL	MySQL Enterprise Server 5.x MySQL Community Server 5.x	Crucible supports a number of external databases, as listed. See the Crucible Database documentation for further details.	
PostgreSQL	<b>2</b> 8.2, 8.3, 8.4	⚠ For MySQL:	
Oracle	<b>⊘</b> 11g	<ul> <li>For 5.0, version must be 5.0.21 or later</li> <li>For 5.1, version must be 5.1.10 or later</li> </ul>	
SQL Server	2005, 2008, 2008 R2, 2012	<ul> <li>For 5.6, version must be 5.1.10 or later</li> <li>As of Crucible 3.2, support for MySQL 5.0 is <i>d</i> eprecated and will be removed in Crucible 3.3. See End of Support Announcements for Crucible.</li> </ul>	
		♠ For PostgreSQL:	
		As of Crucible 3.2, support for PostgreSQL 8.2 is <i>d eprecated</i> , and will be removed in Crucible 3.3. See End of Support Announcements for Crucible.	
		⚠ For SQL Server:	
		As of Crucible 3.2, support for SQL Server 2005 is <i>deprecated</i> , and will be removed in Crucible 3.3. See End of Support Announcements for Crucible.	
HSQLDB (3)	Bundled; for evaluation use only	The Crucible built-in database, running HSQLDB, i s somewhat susceptible to data loss during system crashes.	
		We recommend that you do not use HSQLDB for production systems.	
		External databases are generally more resistant to data loss during a system crash and are more suited for production use.	
Web Browsers			
Microsoft Internet Explorer	8.0, 9.0, 10.0 6.0 and 7.0 are not supported	Minimum screen resolution of 1024x768. Recommended screen resolution of 1280x768 or	

Mozilla Firefox	✓ Latest stable version supported ✓ 3.6, 4.0	above.  As of Crucible 3.2, support for Internet Explorer 8 is deprecated. Crucible 3.3+ will require Internet
Safari	Latest stable version supported 4, 5	Explorer 9+. See End of Support Announcements for Crucible.
Chrome	Latest stable version supported	
Version Control Systems		
Subversion (SVN)	Server: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7	FishEye 3.1, and later, supports SVN 1.7.x with the native JavaHL 1.7 client.
	Client: SVNKit (bundled & the	FishEye 3.1, and later, <b>do not</b> support SVN 1.7.x with the native JavaHL 1.6 client.
	default)  Native JavaHL 1.7	See Native support for SVN 1.7 for discussion.
	Native JavaHL 1.6	Subversion 1.8 support is currently being assessed. FishEye does not yet work for file:// access to repositories created with Subversion 1.8.
CVS (and CVSNT)	All versions	
Perforce (P4)	Client version 2007.3 or later Server version 2005.1 or later	The Server must support the ztag tagged protocol.
Git	✓ 1.7.1.1 or later	
Mercurial (Hg)	2 1.5.1, 1.5.4, 1.6.4, 1.7.5, 1.8.4, 1.9.3	Mercurial 2.1 has a bug that makes it incompatible with Crucible. Please use Mercurial 2.1.1 or later. Mercurial 2.6.x is currently not compatible.
	2.0.2, 2.1.2, 2.2.3, 2.3.2, 2.4, 2.5.2 2.6.x and higher	You should restart Crucible after upgrading Mercurial.
Atlassian applications		
Crowd	✓ Crowd server 2.4.x ✓ Crowd client library: 2.4.1	From version 2.8.x, Crucible bundles the Crowd 2.4.1 client library, and supports the Crowd 2.4.x server.
JIRA	✓ JIRA FishEye Plugin 6.1.0+	The JIRA FishEye Plugin is bundled with JIRA. If you are using earlier versions of JIRA you can upgrade the plugin in JIRA to get support for Crucible.

#### **Deployment Notes for Source Code Repositories**

Crucible can also store uploaded files in its own database, removing the need for any kind of repository. A number of external databases are supported when Crucible is used with FishEye. See the FishEye Supported Platforms.

#### **End of Support Announcements for Crucible**

This page contains announcements of the end of support for various platforms and browsers when used with Crucible. This is summarised in the table below. Please see the sections following for the full announcements.

End of support matrix for upcoming versions of Crucible

Platform	Announcement Date	Crucible End of Support
MySQL 5.0	27 November 2013	As of Crucible 3.3
PostgreSQL 8.2	27 November 2013	As of Crucible 3.3
SQL Server 2005	27 November 2013	As of Crucible 3.3
Internet Explorer 8	27 November 2013	As of Crucible 3.3
JIRA versions earlier than 5.0	27 August 2013	As of Crucible 3.2

The table above summarises information regarding the end of support announcements for upcoming Crucible releases. If a platform (version) has already reached its end of support date, it is not listed in the table.

#### Why is Atlassian ending support for these platforms?

Atlassian is committed to delivering improvements and bug fixes as fast as possible. We are also committed to providing world class support for all the platforms our customers run our software on. However, as new versions of databases, web browsers etc. are released, the cost of supporting multiple platforms grows exponentially, making it harder to provide the level of support our customers have come to expect from us. Therefore, we no longer support platform versions marked as end-of-life by the vendor, or very old versions that are no longer widely used.

#### On this page (most recent announcements first):

- Deprecated Crucible support for MySQL 5.0 (announced 27 November 2013)
- Deprecated Crucible support for PostgreSQL 8.2 (announced 27 November 2013)
- Deprecated Crucible support for SQL Server 2005 (announced 27 November 2013)
- Deprecated Crucible support for Internet Explorer 8 (announced 27 November 2013)
- Deprecated Crucible 3.2 support for older versions of JIRA (announced 27 August 2013)
- Deprecated database support for Crucible (announced 4 October 2011)
- Deprecated web browsers for Crucible (announced 21 March 2011)
- Deprecated Java platforms for Crucible (announced 21 March 2011)
- Deprecated SCM repository support for Crucible (announced 4 April 2011)

Deprecated Crucible support for MySQL 5.0 (announced 27 November 2013)

Atlassian announces the deprecation of Crucible support for MySQL 5.0. We will no longer support MySQL 5.0 in Crucible 3.3. Crucible 3.3 is expected to be released in the first half of 2014.

If you have questions or concerns regarding this announcement, please email eol-announcement at atlassian dot com.

Deprecated Crucible support for PostgreSQL 8.2 (announced 27 November 2013)

Atlassian announces the deprecation of Crucible support for PostgreSQL 8.2. We will no longer support PostgreSQL 8.2 in Crucible 3.3. Crucible 3.3 is expected to be released in the first half of 2014.

If you have questions or concerns regarding this announcement, please email eol-announcement at atlassian dot com.

Deprecated Crucible support for SQL Server 2005 (announced 27 November 2013)

Atlassian announces the deprecation of Crucible support for SQL Server 2005. We will no longer support SQL Server 2005 in Crucible 3.3. Crucible 3.3 is expected to be released in the first half of 2014.

If you have questions or concerns regarding this announcement, please email eol-announcement at atlassian dot com.

Deprecated Crucible support for Internet Explorer 8 (announced 27 November 2013)

Atlassian announces the deprecation of Crucible support for IE8. We will no longer support IE8 in Crucible 3.3.

Crucible 3.3 is expected to be released in the first half of 2014.

If you have questions or concerns regarding this announcement, please email eol-announcement at atlassian dot com.

Deprecated Crucible 3.2 support for older versions of JIRA (announced 27 August 2013)

Atlassian announces the deprecation of support for Crucible communication with older versions of Atlassian JIRA. We will stop supporting older versions of JIRA as follows:

From Crucible 3.2, support for Crucible to JIRA communication for versions of JIRA earlier than 5.0, will
end. Please note that communication from JIRA to Crucible will continue to work as it currently does.
Crucible 3.2 is expected to be released late in 2013.

If you have questions or concerns regarding this announcement, please email eol-announcement at atlassian dot com.

Deprecated database support for Crucible (announced 4 October 2011)

This section announces the end of Atlassian support for certain databases for Crucible.

We will stop supporting older versions of databases as follows:

For the next major version of Crucible, in January 2012, support for MySQL 5.0, PostgreSQL 8.0 and 8.1 will end.

Please refer to the Supported platforms for more details regarding platform support for Crucible. If you have questions or concerns regarding these announcements, please email eol-announcement at atlassian dot com.

Database	Support End Date
MySQL 5.0	January 2012
PostgreSQL 8.0 and 8.1	January 2012

#### End of Support Notes for MySQL 5.0 and PostgreSQL 8.0 and 8.1:

- Atlassian intends to end of life support for MySQL 5.0, PostgreSQL 8.0 and 8.1 in January 2012. The
  release of Crucible after January 2012 will not support MySQL 5.0, PostgreSQL 8.0 or 8.1.
- As mentioned above, the releases of Crucible before January 2012 will contain support for MySQL 5.0 and PostgreSQL 8.0 and 8.1.

Deprecated web browsers for Crucible (announced 21 March 2011)

This section announces the end of Atlassian support for certain web browsers for Crucible.

We will stop supporting older versions of web browsers as follows:

• From Crucible 2.6, due in May 2011, support for Internet Explorer 7 will end.

The details are below. Please refer to the Supported platforms for more details regarding platform support for Crucible. If you have questions or concerns regarding this announcement, please email eol-announcement at atlassian dot com.

#### End of Life Announcement for Web Browser Support

Web Browsers	Support End Date
Internet Explorer 7	When Crucible 2.6 releases (target May 2011)

#### **Internet Explorer 7 Notes:**

- Crucible 2.5 is the last version to officially support Internet Explorer 7.
- Crucible 2.6 is currently targeted to release in May 2011 and will not be tested with Internet Explorer 7.
   After the Crucible 2.6 release, Atlassian will not provide fixes in older versions of Crucible for bugs affecting Internet Explorer 7.

Deprecated Java platforms for Crucible (announced 21 March 2011)

This section announces the end of Atlassian support for certain Java Platforms for Crucible.

#### We will stop supporting the following Java Platforms:

From Crucible 2.6, due in May 2011, support for Java Platform 5 (JDK/JRE 1.5) will end.

We are ending support for Java Platform 5, in line with Sun's Java SE Support Road Map (i.e. "End of Service Life" for Java Platform 5 dated October 30, 2009). We are committed to helping our customers understand this decision and assist them in updating to Java Platform 6, our supported Java Platform.

The details are below. Please refer to the Supported platforms for more details regarding platform support for Crucible. If you have questions or concerns regarding this announcement, please email eol-announcement at atlassian dot com.

#### End of Life Announcement for Java Platform Support

Java Platform	Support End Date
Java Platform 5 (JDK/JRE 1.5)	When Crucible 2.6 releases, due May 2011

#### **Java Platform 5 End of Support Notes:**

- Crucible 2.5 is the last version to officially support Java Platform 5 (JDK/JRE 1.5).
- Crucible 2.6 is currently targeted to release in May 2011 and will not be tested with Java Platform 5 (JDK/JRE 1.5). After the Crucible 2.6 release, Atlassian will not provide fixes in older versions of Crucible for bugs affecting Java Platform 5 (JDK/JRE 1.5).

Deprecated SCM repository support for Crucible (announced 4 April 2011)

This section announces the end of Atlassian support for certain SCM repositories for Crucible. End of support means that Atlassian will remove all functionality related to certain SCM repositories past the specified date. Releases before that date will contain the functionality that supports the SCM, however, Atlassian will fix only critical bugs that affect functionality for that SCM, and will not add any new features for that SCM. After the specified date, Atlassian will not support the functionality in any version of Crucible.

Please refer to the Supported platforms for more details regarding platform support for Crucible. If you have questions or concerns regarding these announcements, please email eol-announcement at atlassian dot com.

SCM Repository	Support End Date
IBM ClearCase (all versions)	4 April 2012

#### **IBM ClearCase End of Support Notes:**

- Atlassian intends to end of life IBM ClearCase functionality on 4 April 2012. The release of Crucible after 4 April 2012 will not contain any IBM ClearCase functionality.
- As mentioned above, the releases of Crucible before 4 April 2012 will contain support for IBM ClearCase. However, we will only be fixing critical bugs related to IBM ClearCase and will not be adding any features.
- After 4 April 2012, Atlassian will not support IBM ClearCase functionality in any version of Crucible
   End of Support Announcement for IBM ClearCase

Support in Crucible for IBM ClearCase ended on **April 4th 2012**. Crucible 2.8, and later versions, do not have support for ClearCase.

We have made these decisions to reduce the testing time required for each release and to help us to deliver

market-driven features faster.

You can stay on older versions of Crucible to support your existing installations with ClearCase. However, Atlassian will not be providing any ClearCase-related support for any Crucible version after 4 April 2012, and has removed all functionality related to ClearCase from Crucible versions released after April 4th 2012. We are committed to helping our customers understand this decision and to assist you in migrating to a different SCM, if needed.

For more details about the announcement, please refer to this page: End of Support Announcements for Crucible.

### **Installing Crucible on Windows**

Hey! We're going to perform a clean install of Crucible on Windows. There are a few steps involved, but we think you'll find it easy to follow along.

If you already have FishEye installed, you should read Upgrading from FishEye to Crucible instead.

#### 1. Check supported platforms

Better check the Supported platforms page first; it lists the application servers, databases, operating systems, web browsers and JDKs that we have tested Crucible with, and that we recommend.

Atlassian only officially supports Crucible running on x86 hardware and 64-bit derivatives of x86 hardware.

#### Related pages:

- Running Crucible as a Windows service
- Upgrading from FishEye to Crucible
- Installing Crucible on Linux and Mac
- Starting to use Crucible
- Supported platforms

#### 2. Check your version of Java

In a command prompt, run this:

```
java -version
```

The version of Java should be **1.6.0** or higher. If you intend to Running Crucible as a Windows service, using the Java Service Wrapper, you should use 32-bit Java (even on a 64-bit machine), and the JDK rather than the JRE (so as to take advantage of the -server parameter).

✓ If you don't see Java 1.6.0 or higher, then get Java...

Download and install the Java Platform JDK from Oracle's website.

⚠ The Java install path should not contain spaces, so don't install into C:\Program Files\Java\. Instead, use a path like C:\Java.

Now try running 'java -version' again to check the installation. The version of Java should be **1.6.0** or higher.

#### 3. Check that Windows can find Java

Windows uses the JAVA\_HOME environment variable to find Java. To check that, in a new command prompt, run:

```
echo %JAVA_HOME%
```

You should see a path to the Java install location that does *not* contain spaces. We recommend that JAVA\_HOME should point to the Java executable in your PATH.

If you don't see a path without spaces...

- If you see a path with spaces, like C:\Program Files\Java\, then sorry, but go back to 2. and reinstall Java to a location that doesn't have spaces.
- If you don't see a path at all, or if you just see %JAVA\_HOME%, then set JAVA\_HOME as follows:

#### For Windows 7:

- 1. Go to Start, search for "sys env" and choose Edit the system environment variables.
- 2. Click **Environment Variables**, and then **New** under 'System variables'.
- 3. Enter "JAVA\_HOME" as the **Variable name**, and the absolute path to where you installed Java as the **Variable value**, that is, something like C:\Java\bin. Don't use a trailing backslash. We recommend that JAVA\_HOME should point to the Java executable specified in your PATH.
- 4. Now, in a new command prompt, try running '%JAVA\_HOME%\java -version'. You should see the same version of Java as you saw above.

#### 4. Create a dedicated Crucible user (recommended)

For production installations, we recommend that you create a new dedicated Windows user that will run Crucible on your system. This user:

- Should *not* have admin privileges.
- Should be a non-privileged user with read, write and execute access on the Crucible home (install) directory and instance (data) directory. These directories are described below.
- Should only have read access to your repositories.

If you created a dedicated Crucible user, ensure you are logged in as this user to complete the remaining instructions.

#### 5. Now it's time to get Crucible

Download Crucible from the Atlassian download site.

Extract the downloaded file to an install location:

- Folder names in the path to your Crucible executable should not have spaces in them. The path to the extracted directory is referred to as the <Crucible home directory> in these instructions. If you use FishEye and Crucible together, they run as one instance see Crucible and FishEye.
- If you expect to have a large number of users for this Crucible installation, and Crucible will be connected to an external database, consider installing Crucible on a different server from the one running the external database, for improved performance.

#### 6. Tell Crucible where to store your data

The Crucible instance directory is where your Crucible data is stored.

⚠ You should not locate your Crucible instance directory inside the <Crucible home directory> — these should be entirely separate locations. If you do put the instance directory in the <Crucible home directory> it will be overwritten, and lost, when Crucible gets upgraded. And by the way, you'll need separate Crucible instance directories if you want to run multiple copies of Crucible.

Create your Crucible instance directory, and then tell Crucible where you created it by setting a FISHEYE\_INST environment variable, as follows:

#### For Windows 7:

- 1. Go to Start, search for "sys eny" and choose Edit the system environment variables.
- 2. Click Environment Variables, and then New under 'System variables'.
- 3. Enter "FISHEYE\_INST" as the **Variable name**, and the absolute path to your new Crucible instance directory as the **Variable value**. Don't use a trailing backslash.
- 4. Now copy the newly extracted <Crucible home directory>\config.xml file to the root of your new Crucible instance directory.

1 Note that if Crucible is run as a Windows service using the Java Service Wrapper, Crucible-specific environment variables such as FISHEYE\_INST are ignored – these must be set in the wrapper.conf file. See Ru

#### nning Crucible as a Windows service.

If you have a large number of repositories, we recommend you increase the default number of files that Crucible is allowed to open. See the following knowledge base article for more info: Subversion Indexer Paused with "Too many open files" Error.

#### 7. Start Crucible!

In a command prompt, change directory to <Crucible home directory> and run this:

```
bin\start.bat
```

After a few moments, in a web browser on the same machine, go to http://localhost:8060/ (or, from another machine, type http://hostname:8060/, where hostname is the name of the machine where you extracted Crucible).

Enter your license, then an admin password, to finish the setup.

You can postpone setting up JIRA integration until later if you wish; see Configuring JIRA integration in the Setup Wizard.

#### 8. Connect to an external database (recommended)

If you intend to use this Crucible installation in a production environment, it is highly recommended that you use one of the supported external databases. See Migrating to an external database.

If you are evaluating Crucible, or don't wish to do this now, Crucible will happily use its embedded database, and you can easily migrate later.

#### 9. Set up your mail server

Configure the Crucible email server so that users can get notifications from Crucible. See Configuring SMTP.

#### 10. Add users and repositories

Now is the time to set up your users in Crucible, and to tell Crucible about any existing repositories you have. Please read Starting to use Crucible for the details.

Crucible will perform an initial index of your repositories, during which it accesses, indexes and organises a view of your repositories (including all historical items) back to the earliest commits. If you are evaluating Crucible, we suggest that you index a single project, so you can use Crucible as soon as possible. If you choose to index your entire repository, be aware that this can take a long time (possibly days) for massive or complex repositories and can be more complex to set up (especially for Subversion). The basic process is slightly different for each SCM type.

#### 11. Stop Crucible (optional)

In a command prompt, change directory to <Crucible home directory> and run this:

```
bin\stop.bat
```

#### Running Crucible as a Windows service

Crucible can be run as a service under Microsoft Windows using a Java Service Wrapper.

The service wrapper provides the following benefits:

- Allows Crucible, which is a Java application, to be run as a Windows Service.
- No need for a user to be logged on to the system at all times, or for a command prompt to be open and running on the desktop to be able to run Crucible.
- The ability to run Crucible in the background as a service, for improved convenience, system performance and security.
- Crucible is launched automatically on system startup and does not require that a user be logged in.

- Users are not able to stop, start, or otherwise tamper with Crucible unless they are an administrator.
- Provides advanced failover, error recovery, and analysis features to make sure that Crucible has the maximum possible uptime.

#### A Please note that:

- This page should be read in conjunction with Installing Crucible on Windows.
- You should use 32-bit Java to run the service wrapper provided via the link in the install instructions below, even on a 64-bit machine.
- You should use the Java JDK, rather than the JRE, to take advantage of the -server parameter, provided in the Wrapper configuration of wrapper.zip, which enables the Java HotSpot(TM) Server VM. See the note below for details.

#### On this page:

- Installing the Java Service Wrapper
- Setting Crucible environment variables for Windows Services
- Troubleshooting
  - Extracting files from wrapper.zip
  - Warning when using 64-bit Java JDK
  - Wrapper configuration and "-server" parameter

#### Related pages:

Installing Crucible on Windows

Installing the Java Service Wrapper

#### To install the Java Service Wrapper on Windows:

- 1. Download wrapper.zip from here .
- 2. Unzip the wrapper zip file into your <Crucible home directory> (that is, the directory into which Crucible was originally installed). Note, the resulting folder structure should be similar to <Crucible home directory>\wrapper or <Crucible home directory>\wrapper\bin, etc and NOT <Crucible home directory>\wrapper\wrapper\wrapper or <Crucible home directory>\wrapper\bin. The location of the wrapper directory is important.
- 3. Tell the wrapper where to find the Java JDK by editing the <Crucible home directory>\wrapper\conf\wrapper.conf file, replacing this:

```
# Java Application
wrapper.java.command=java
```

#### with the following, and comment out the option you don't wish to use:

```
# Java Application
# Option 1: If you have JAVA_HOME defined in your Windows system environment
variables, then you can use:
wrapper.java.command=%JAVA_HOME%/bin/java

# Option 2: If you have multiple JDKs installed, and you don't want to use a
Windows environment variable to specify which one to use, provide the absolute
path to where the JDK is installed (e.g. C:/Java/jdk1.7.0_05/bin/java):
wrapper.java.command=C:/<path to Java location>/bin/java
```

To get confirmation in the wrapper log that the wrapper is using the correct Java JDK, add the following lines to the wrapper.conf file:

```
# Tell the Wrapper to log the full generated Java command line. wrapper.java.command.loglevel=INF
```

You can find the logs at <Crucible home directory>\var\log\wrapper.log.

- 4. Set the FISHEYE\_INST environment variable (and other Crucible-specific environment variables) in the < Crucible home directory>\wrapper\conf\wrapper.conf file, following the instructions below.
- 5. Install Crucible as a service as follows:
  - a. Open an Administrator command prompt by searching for 'Command prompt' in the Windows Start menu, right-clicking on **Command Prompt** and then choosing **Run as administrator**.
  - b. Change directory to <Crucible home directory>\wrapper and run bin\Fisheye-Instal l-NTService.bat. If you run into any problems starting the wrapper, you'll find its logs in <Cruc ible home directory>\var\log\wrapper.log.
- 6. Start the Crucible service (which has the name 'Fisheye') from the Windows Control Panel; you can search in the Start menu for 'services', and in the list of services, right-click on the 'Fisheye' item and choose **Start**. You can also stop the Crucible service in this way.
- Please note that:
  - If you make changes to the wrapper.conf file, having already started the service, you need to stop and then restart the service for it to make use of the changed configuration.
  - If in future you move the Crucible home directory, you will need to uninstall (using Fisheye-Uninstall -NTService.bat) and then reinstall the Crucible service.

Setting Crucible environment variables for Windows Services

Please note, that if you run Crucible as a Windows service, any Crucible-specific environment variables must be set in your <Crucible home directory>\wrapper\conf\wrapper.conf file.

If you run into any problems starting the wrapper, you'll find its logs in <Crucible home directory>\var\log\wrapper.log.

If there are other Java parameters you wish to add, then you will need to add them under the additional parameters section, e.g.

```
# JDK 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=fa
lse
wrapper.java.additional.7=-Dcom.sun.management.jmxremote.ssl=false
wrapper.java.additional.8=-Dcom.sun.management.jmxremote.authenticate=fa
lse
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"
```

To add the FISHEYE\_INST environment variable, the Java MaxPermSize parameter, or the -Xrs options, use the following:

```
wrapper.java.additional.11=-Dfisheye.inst="c:/path/to/FISHEYE_INST"
wrapper.java.additional.12=-XX:MaxPermSize=128m
wrapper.java.additional.13=-Xrs
```

Note that the the -Xrs options should be used when running Crucible as a service under Windows to prevent the JVM closing when an interactive user logs out.

Your memory settings can also be found in this file:

```
# Initial Java Heap Size (in MB)
wrapper.java.initmemory=256

# Maximum Java Heap Size (in MB)
wrapper.java.maxmemory=1024
```

Increase these values if you have a large repository or expect to use more memory (init of 256, and a max of 1024 are the default values).

In Fisheye/Crucible 1.6.4 and higher, you can check the JVM input arguments by clicking **System info**, under 'System Settings' in the admin area.

**Troubleshooting** 

#### Extracting files from wrapper.zip

Some customers have reported trouble running the wrapper. These can be avoided by:

- Uncompressing wrapper.zip with Winzip or WinRar rather than using the **Extract All** command in the Windows right-click contextual menu.
- If the wrapper.zip filename appears green instead of black in Windows Explorer, decrypt it, prior to unzipping its contents, by right-clicking on the file, choose **Properties**, click the **Advanced** button, then clear the **Encrypt contents to secure data** checkbox.

#### Warning when using 64-bit Java JDK

When using a 64-bit Java JDK with the wrapper obtained via the link in the install instructions above, you may see the following in the wrapper.log file:

WARNING - Unable to load the Wrapper's native library 'wrapper.dll'. The file is located on the path at the following location but could not be loaded:

C:\installs\service\fisheye28\wrapper\lib\wrapper.dll.

Please verify that the file is readable by the current user and that the file has not been corrupted in any way. System signals will not be handled correctly.

This is caused by using a 64-bit JDK (even on a 64-bit machine). Changing to a 32-bit version of the JDK will prevent this warning. Community Edition versions of the 64-bit Windows Java Service Wrapper are not currently available.

#### Wrapper configuration and "-server" parameter

Please note that the wrapper configuration provided above uses the <code>-server</code> parameter to enable the Java HotSpot(TM) Server VM. This feature is only available if you use the JDK. If you use the JRE you will likely get the following error in your logs:

INFO | jvm 1 | 2010/12/20 18:19:28 | Error: missing `server' JVM at `C:\Program Files\Java\jre6\bin\server\jvm.dll'.

A common issue is that customers remove the <code>-server</code> parameter from the <code>wrapper.conf</code> file. Please note that if you do this, the wrapper script will ignore any of the following JVM parameters in the file unless you change the sequence to be in order, starting from <code>wrapper.java.additional.1</code>. This is an issue with the Wrapper application.

In this situation it's best to install and run Fisheye/Crucible with the JDK to get all the advantages of the <code>-server</code> functionality. You also need to force the wrapper to use the JDK by specifying the path to the Java JDK in the <code>wrapper.conf</code> file, as described in the installation instructions above.

# **Installing Crucible on Linux and Mac**

Hey! We're going to install Crucible on a Linux box, or a Mac. There are a few steps involved, but we think you'll find it easy to follow along. If you already have FishEye installed, you should read Upgrading from FishEye to Crucible instead.

#### 1. Check supported platforms

Better check the Supported platforms page first; it lists the application servers, databases, operating systems, web browsers and JDKs that we have tested Crucible with, and that we recommend.

Atlassian only officially supports Crucible running on x86 hardware and 64-bit derivatives of x86 hardware.

#### Related pages:

- Installing Crucible on Windows
- Starting to use Crucible
- Supported platforms

#### 2. Check your version of Java

In a terminal, run this:

```
java -version
```

The version of Java should be **1.6.0** or later (**1.7.0** or later for OpenJDK).

If you don't see a supported version of Java, then get Java...

Download and install the Oracle Java Platform JDK, or OpenJDK.

Now try running 'java -version' again to check the installation. The version of Java should be **1.6.0** or later (**1.7.0** or later for OpenJDK).

#### 3. Check that the system can find Java

In a terminal, run this:

```
echo $JAVA_HOME
```

You should see a path something like:

OSX	/System/Library/Frameworks/JavaVM.frame work/Versions/CurrentJDK/Home/
Linux	/usr/lib/jvm/default-java

If you don't see a path to the Java location, then set JAVA\_HOME...

Linux	Mac	
• If JAVA_HOME is not set, log in with 'root' level permissions and run:	Insert the following in your ~/.profile file:  JAVA_HOME="path/to/JAVA_HOME" export JAVA_HOME  where path/to/JAVA_HOME may be like:  /System/Library/Frameworks/JavaVM. framework/Versions/CurrentJDK/Home /  Refresh your ~/.profile in the terminal and confirm that JAVA_HOME is set:	
echo JAVA_HOME="path/to/JAVA_HOME" >> /etc/environment		
<ul> <li>where path/to/JAVA_HOME may be like: / usr/lib/jvm/default-java</li> <li>If JAVA_HOME needs to be changed, open the /etc/environment file in a text editor and modify the value for JAVA_HO</li> </ul>		
ME to:  JAVA HOME="path/to/JAVA HOME"	source ~/.profile \$JAVA_HOME/bin/java -version	
It should look like:	You should see a version of Java that is <b>1.6.0</b> or higher, like this: java version "1.6.0_24"	
JAVA_HOME=/usr/lib/jvm/default- java		

#### 4. Create a dedicated Crucible user (recommended)

For production installations, we recommend that you create a new dedicated user that will run Crucible on your system. This user:

- Should not have admin privileges.
- Should be a non-privileged user with read, write and execute access on the Crucible home (install) directory and instance (data) directory. These directories are described below.
- Should only have read access to your repositories.

If you created a dedicated Crucible user, ensure you are logged in as this user to complete the remaining instructions.

#### 5. Now it's time to get Crucible

Download Crucible from the Atlassian download site.

Extract the downloaded file to an install location:

- Folder names in the path to your Crucible executable should not have spaces in them. The path to the extracted directory is referred to as the <Crucible home directory> in these instructions. If you use FishEye and Crucible together, they run as one instance, and use the same home directory see Crucible and FishEye.
- If you expect to have a large number of users for this Crucible installation, and Crucible will be connected to an external database, consider installing Crucible on a different server from the one running the external database, for improved performance.

#### 6. Tell Crucible where to store your data

The Crucible instance directory is where your Crucible data is stored.

- 1. Create your Crucible instance directory.
- 2. Tell Crucible where you created it by adding a FISHEYE\_INST environment variable as follows:

Linux	Мас
Open the /etc/environment file in a text editor and insert :	Open the ~/.profile file for the current user in a text editor and insert:
<pre>FISHEYE_INST="path/to/<crucible directory="" instance="">"</crucible></pre>	FISHEYE_INST="path/to/ <crucible directory="" instance="">" export FISHEYE_INST</crucible>

Now copy the newly extracted <Crucible home directory>\config.xml file to the root of your new Crucible instance directory.

A You should not locate your Crucible instance directory inside the <Crucible home directory> — they should be entirely separate locations. If you do put the instance directory in the <Crucible home directory> it will be overwritten, and lost, when Crucible gets upgraded. And by the way, you'll need separate Crucible instance directories if you want to run multiple copies of Crucible.

If you have a large number of repositories, we recommend you increase the default number of files that FishEye is allowed to open. See the following knowledge base article for more info: Subversion Indexer Paused with "Too many open files" Error.

#### 7. Start Crucible!

In a terminal, change directory to <Crucible home directory> and run this:

bin/start.sh

After a few moments, in a web browser on the same machine, go to http://localhost:8060/ (or, from another machine, type http://hostname:8060/ , where hostname is the name of the machine where you extracted Crucible).

Enter your license, then an admin password, to finish the setup.

You can postpone setting up JIRA integration until later if you wish; see Configuring JIRA integration in the Setup Wizard.

#### 8. Connect to an external database (recommended)

If you intend to use this Crucible installation in a production environment, it is highly recommended that you use one of the supported external databases. See Migrating to an external database.

If you are evaluating Crucible, or don't wish to do this now, Crucible will happily use its embedded database, and you can easily migrate later.

#### 9. Set up your mail server

Configure the Crucible email server so that users can get notifications from Crucible. See Configuring SMTP.

#### 10. Add users and repositories

Now is the time to set up your users in Crucible, and to tell Crucible about any existing repositories you have. Please read Starting to use Crucible for the details.

Crucible will perform an initial index of your repositories, during which it accesses, indexes and organizes a view of your repositories (including all historical items) back to the earliest commits. If you are evaluating Crucible, we suggest that you index a single project, so you can use Crucible as soon as possible. If you choose to index your entire repository, be aware that this can take a long time (possibly days) for massive or complex repositories and can be more complex to set up (especially for Subversion). The basic process is slightly different for each SCM type.

#### 11. Stop Crucible (optional)

In a terminal, change directory to <Crucible home directory> and run this:

```
bin/stop.sh
```

### Configuring JIRA Integration in the Setup Wizard

This page describes the 'Connect to JIRA' screen of the Crucible setup wizard.

You can connect your application to a JIRA server, to manage your users via JIRA and share information with JIRA. When you are installing the application, the setup wizard gives you the opportunity to configure the JIRA connection automatically. This is a quick way of setting up your JIRA integration with the most common options.

You can also configure the JIRA connections via the application administration screens. In that case, you will need to set up connections individually. There are two parts to the integration process:

- A peer-to-peer link between JIRA and the application for sharing information and facilitating integration features. This link is set up via Application Links.
- A client-server link between the application and JIRA for delegating user and group management to your JIRA server.

Requirements: You need JIRA 4.3 or later.

#### On this page:

- · Connecting to JIRA in the Setup Wizard
- Troubleshooting
- Notes

#### Related pages:

- Linking Crucible to JIRA
- User management limitations and recommendations
- JIRA integration in Crucible

Connecting to JIRA in the Setup Wizard

#### To configure JIRA integration while running the Crucible setup wizard:

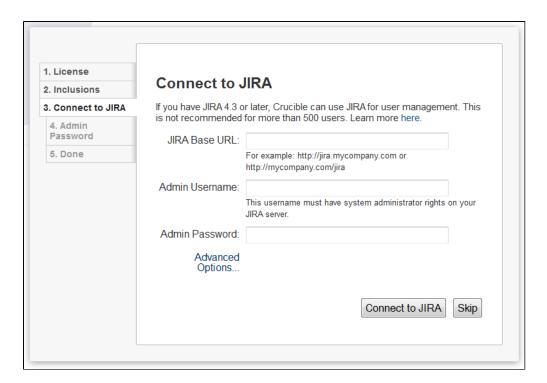
- 1. Enter the following information on the 'Connect to JIRA' step of the setup wizard:
  - JIRA Base URL

     The web address of your JIRA server. Examples:

```
http://www.example.com:8080/jira/
http://jira.example.com
```

- Admin Username and Admin Password The credentials of a user with the 'JIRA System Administrators' global permission in JIRA.
- FishEye/Crucible Base URL Click 'Advanced Options' to see this field. JIRA will use this URL to access your FishEye/Crucible server. The URL you give here will override the base URL specified in your FishEye/Crucible administration console, for the purposes of the JIRA connection.
- Groups to synchronize Click 'Advanced Options' to see this field. Select at least one JIRA group to synchronize. The default group is jira-users. JIRA will synchronize all changes in the user information on a regular basis. The default synchronization interval is 1 hour.
- Admin Groups Click 'Advanced Options' to see this field. Specify a JIRA group whose members should have administrative access to FishEye/Crucible. The default group is jira-administrat ors.
- 2. Click the 'Connect to JIRA' button.
- 3. Finish the setup process.
- 4. Configure the following setting in JIRA: Allow remote API access.

Screenshot: Connecting to JIRA in the FishEye/Crucible setup wizard



#### **Troubleshooting**

Click to see troubleshooting information...

This section describes the possible problems that may occur when integrating your application with JIRA via the setup wizard, and the solutions for each problem.

Symptom	Cause	Solution
<ul> <li>The setup wizard displays one of the following error messages:</li> <li>Failed to create application link from JIRA server at <url> to this <application> server at <url>.</url></application></url></li> <li>Failed to create application link from this <application> server at <url> to JIRA server at <url>.</url></url></application></li> <li>Failed to authenticate application link from JIRA server at <url> to this <application> server at <url>.</url></application></url></li> <li>Failed to authenticate application&gt; server at <url>.</url></li> <li>Failed to authenticate application&gt; server at <url>.</url></li> <li>URL&gt;.</li> <li>Failed to authenticate application link from <application> server at <url> to this JIRA server at <url> to this JIRA server at <url>.</url></url></url></application></li> </ul>	The setup wizard failed to complete registration of the peer-to-peer application link with JIRA. JIRA integration is only partially configured.	Remove the partial configuration if it exists, try the 'Connect to JIRA' step again, and then continue with the setup. Detailed instructions are below.

The setup wizard displays one of The setup wizard failed to Remove the partial configuration the following error messages: complete registration of the if it exists, try the 'Connect to client-server link with JIRA for JIRA' step again, and then Failed to register user management. The continue with the setup. Detailed <application> configuration in peer-to-peer link was instructions are below. JIRA for shared user successfully created, but management. Received integration is only partially invalid response from JIRA: configured. <response> · Failed to register <application> configuration in JIRA for shared user management. Received: <response> The setup wizard displays the The setup wizard successfully Please investigate and fix the following error message: problem that prevented the established the peer-to-peer link with JIRA, but could not persist application from saving the Error setting Crowd the client-server link for user configuration file to disk. Then authentication management in your config.xm remove the partial configuration if it exists, try the 'Connect to JIRA' 1 file. This may be caused by a step again, and then continue problem in your environment, such as a full disk. with the setup. Detailed instructions are below. The setup wizard displays the Restart your application. You The setup wizard has completed the integration of your application should then be able to continue following error message: with JIRA, but is unable to start with the setup wizard. If this Error reloading Crowd synchronizing the JIRA users solution does not work, please authentication with your application. contact Atlassian Support. The setup wizard displays the The setup wizard has not Remove the partial configuration following error message: completed the integration of your if it exists, try the 'Connect to application with JIRA. The links JIRA' step again, and then An error occurred: are only partially configured. The continue with the setup. Detailed java.lang.lllegalStateExceptio problem occurred because there instructions are below. n: Could not create the is already a user management application in JIRA/Crowd configuration in JIRA for this (code: 500). Please refer to <application> URL. the logs for details. Go to JIRA and add some No users can log in after you Possible causes: have set up the application with usernames to the group. There are no users in the JIRA integration. group that you specified on For FishEye: Go to the the 'Connect to JIRA' screen. FishEye administration For FishEye: There are no screens and specify at least groups specified in the one group to synchronize. 'groups to synchronize' The default is 'jira-users'. section of your administration For Stash: Grant the Stash console. User permission to the For Stash: You may not have relevant JIRA groups on the granted any JIRA groups or Stash Global permissions pag users permissions to log in to Stash. If this solution does not work, please contact Atlassian Support.

Solution 1: Removing a Partial Configuration – The Easiest Way

If the application's setup wizard fails part-way through setting up the JIRA integration, you may need to remove the partial configuration from JIRA before continuing with your application setup. Please follow the steps below.

Remove the partial configuration if it exists, try the 'Connect to JIRA' step again, and then continue with the setup wizard:

- 1. Log in to JIRA as a user with the 'JIRA System Administrators' global permission.
- 2. Click the 'Administration' link on the JIRA top navigation bar.
- 3. Remove the application link from JIRA, if it exists:
  - a. Click 'Application Links' in the JIRA administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
  - b. Look for a link to your application. It will have a base URL of the application linked to JIRA. For example:
    - If you want to remove a link between JIRA and FishEye, look for the one where the 'Application URL' matches the base URL of your FishEye server.
    - If you want to remove a link between JIRA and Confluence, look for the one where the 'A pplication URL' matches the base URL of your Confluence server.
    - If you want to remove a link between JIRA and Stash, look for the one where the 'Applic ation URL' matches the base URL of your Stash server.
  - c. Click the 'Delete' link next to the application link that you want to delete.
  - d. A confirmation screen will appear. Click the 'Confirm' button to delete the application link.
- 4. Remove the user management configuration from JIRA, if it exists:
  - a. Go to the JIRA administration screen for configuring the applications that have been set up to use JIRA for user management:
    - In JIRA 4.3: Click 'Other Applications' in the 'Users, Groups & Roles' section of the JIRA administration screen.
    - In JIRA 4.4: Select 'Administration' > 'Users' > 'JIRA User Server'.
  - b. Look for a link to your application. It will have a name matching this format:

```
<Type> - <HostName> - <Application ID>
```

#### For example:

```
FishEye / Crucible - localhost - 92004b08-5657-3048-b5dc-f886e662ba15
```

#### Or:

```
Confluence - localhost -
92004b08-5657-3048-b5dc-f886e662ba15
```

If you have multiple servers of the same type running on the same host, you will need to match the application ID of your application with the one shown in JIRA. To find the application ID:

Go to the following URL in your browser:

```
<baseUrl>/rest/applinks/1.0/manifest
```

Replace <baseUrl> with the base URL of your application. For example:

```
http://localhost:8060/rest/applinks/1.0/manifest
```

- The application links manifest will appear. Check the application ID in the <id> element.
- c. In JIRA, click '**Delete**' next to the application that you want to remove.
- 5. Go back to the setup wizard and try the 'Connect to JIRA' step again.

Solution 2: Removing a Partial Configuration – The Longer Way

If solution 1 above does not work, you may need to remove the partial configruration and then add the full integration manually. Please follow these steps:

- 1. Skip the 'Connect to JIRA' step and continue with the setup wizard, to complete the initial configuration of the application.
- 2. Log in to JIRA as a user with the 'JIRA System Administrators' global permission.
- 3. Click the 'Administration' link on the JIRA top navigation bar.
- 4. Remove the application link from JIRA, if it exists:
  - a. Click 'Application Links' in the JIRA administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
  - b. Look for a link to your application. It will have a base URL of the application linked to JIRA. For example:
    - If you want to remove a link between JIRA and FishEye, look for the one where the 'Application URL' matches the base URL of your FishEye server.
    - If you want to remove a link between JIRA and Confluence, look for the one where the 'A
      pplication URL' matches the base URL of your Confluence server.
    - If you want to remove a link between JIRA and Stash, look for the one where the 'Applic ation URL' matches the base URL of your Stash server.
  - c. Click the 'Delete' link next to the application link that you want to delete.
  - d. A confirmation screen will appear. Click the 'Confirm' button to delete the application link.
- 5. Remove the user management configuration from JIRA, if it exists:
  - a. Go to the JIRA administration screen for configuring the applications that have been set up to use JIRA for user management:
    - In JIRA 4.3: Click 'Other Applications' in the 'Users, Groups & Roles' section of the JIRA administration screen.
    - In JIRA 4.4: Select 'Administration' > 'Users' > 'JIRA User Server'.
  - b. Look for a link to your application. It will have a name matching this format:

```
<Type> - <HostName> - <Application ID>
```

#### For example:

```
FishEye / Crucible - localhost - 92004b08-5657-3048-b5dc-f886e662ba15
```

Or:

```
Confluence - localhost - 92004b08-5657-3048-b5dc-f886e662ba15
```

If you have multiple servers of the same type running on the same host, you will need to match the application ID of your application with the one shown in JIRA. To find the application ID:

• Go to the following URL in your browser:

```
<baseUrl>/rest/applinks/1.0/manifest
```

Replace <baseUrl> with the base URL of your application. For example:

```
http://localhost:8060/rest/applinks/1.0/manifest
```

- The application links manifest will appear. Check the application ID in the <id> element.
- c. In JIRA, click 'Delete' next to the application that you want to remove.
- 6. Add the application link in JIRA again, so that you now have a two-way trusted link between JIRA and your application:

- a. Click 'Add Application Link'. Step 1 of the link wizard will appear.
- b. Enter the server URL of the application that you want to link to (the 'remote application').
- c. Click the 'Next' button.
- d. Enter the following information:
  - 'Create a link back to this server' Tick this check box to add a two-way link between the two applications.
  - 'Username' and 'Password' Enter the credentials for a username that has administrator access to the remote application.
    - *Note:* These credentials are only used to authenticate you to the remote application, so that Application Links can make the changes required for the new link. The credentials are not saved.
  - 'Reciprocal Link URL' The URL you give here will override the base URL specified in your remote application's administration console, for the purposes of the application links connection. Application Links will use this URL to access the remote application.
- e. Click the 'Next' button.
- f. Enter the information required to configure authentication for your application link:
  - 'The servers have the same set of users' Tick this check box, because the users are the same in both applications.
  - 'These servers fully trust each other' Tick this check box, because you trust the
    code in both applications and are sure both applications will maintain the security of their
    private keys.

For more information about configuring authentication, see Configuring Authentication for an Application Link.

- g. Click the 'Create' button to create the application link.
- 7. Configure a new connection for user management in JIRA:
  - a. Go to the JIRA administration screen for configuring the applications that have been set up to use JIRA for user management:
    - In JIRA 4.3: Click 'Other Applications' in the 'Users, Groups & Roles' section of the JIRA administration screen.
    - In JIRA 4.4: Select 'Administration' > 'Users' > 'JIRA User Server'.
  - b. Add an application.
  - c. Enter the application name and password that your application will use when accessing JIRA.
  - d. Enter the **IP address** or addresses of your application. Valid values are:
    - A full IP address, e.g. 192.168.10.12.
    - A wildcard IP range, using CIDR notation, e.g. 192.168.10.1/16. For more information, see the introduction to CIDR notation on Wikipedia and RFC 4632.
    - Save the new application.
- 8. Set up the JIRA user directory in the application.
  - For Confluence:
    - a. Go to the Confluence Administration Console.
    - b. Click 'User Directories' in the left-hand panel.
    - c. Add a directory and select type 'Atlassian JIRA'.
    - d. Enter the following information:
      - Name Enter the name of your JIRA server.
      - Server URL Enter web address of your JIRA server. Examples:

```
http://www.example.com:8080/jira/
http://jira.example.com
```

- Application name and Application password Enter the values that you
  defined for Confluence in the settings on JIRA.
- e. Save the directory settings.
- f. Define the **directory order** by clicking the blue up- and down-arrows next to each directory on the '**User Directories**' screen.

For details see Connecting to Crowd or JIRA for User Management.

- For FishEye/Crucible:
  - a. Click Authentication (under 'Security Settings').
  - b. Click **Setup JIRA/Crowd authentication**. Note, if LDAP authentication has already been set up, you will need to remove that before connecting to JIRA for user management.
  - c. Make the following settings:

Authenticate against	Select a JIRA instance	
Application name and password	Enter the values that you defined for your application in the settings on JIRA.	
JIRA URL	The web address of your JIRA server. Examples:	
	http://www.example.c om:8080/jira/ http://jira.example. com	
Auto-add	Select Create a FishEye user on successful login so that your JIRA users will be automatically added as a FishEye user when they first log in.	
Periodically synchronise users with JIRA	Select <b>Yes</b> to ensure that JIRA will synchronize all changes in the user information on a regular basis. Change the value for <b>Synchronise Period</b> if required.	
When Synchronisation Happens	Select an option depending on whether you want to allow changes to user attributes from within FishEye.	
Single Sign On	Select <b>Disabled</b> . SSO is not available when using JIRA for user management and if enabled will make the integration fail.	

- d. Click **Next** and select at least one user group to be synchronised from JIRA. If necessary, you could create a new group in JIRA, such as 'fisheye-users', and select this group here.
- e. Click Save.
- For Stash:
  - a. Go to the Stash administration area.
  - b. Click **User Directories** in the left-hand panel.
  - c. Add a directory and select type Atlassian JIRA.
  - d. Enter the following information:
    - Name Enter the name of your JIRA server.
    - Server URL- Enter web address of your JIRA server. Examples:

```
http://www.example.com:8080/jira/
http://jira.example.com
```

- Application name and Application password Enter the values that you
  defined for Stash in the settings on JIRA.
- e. Save the directory settings.
- f. Define the directory order by clicking the blue up- and down-arrows next to each directory on the 'User Directories' screen.

For details see Connecting Stash to JIRA for user management.

**Notes** 

When you connect to JIRA in the setup wizard, the setup procedure will configure **Trusted Applications authentication** for your application. Please be aware of the following security implications:

Trusted applications are a potential security risk. When you configure Trusted Applications
authentication, you are allowing one application to access another as any user. This allows all of the
built-in security measures to be bypassed. Do not configure a trusted application unless you know that all
code in the application you are trusting will behave itself at all times, and you are sure that the application
will maintain the security of its private key.

### Starting to use Crucible

This page introduces the basics of using Crucible. By the end, you'll know how to:

- Add a repository
- Create a project
- · Create and perform reviews

For more information, see the Crucible user's guide.

#### **Assumptions**

We're assuming that:

- You have installed and started the latest version of Crucible. See the details at Installing Crucible on Windows or Installing Crucible on Linux and Mac.
- You are using a supported browser.
- You have admin permission in Crucible.

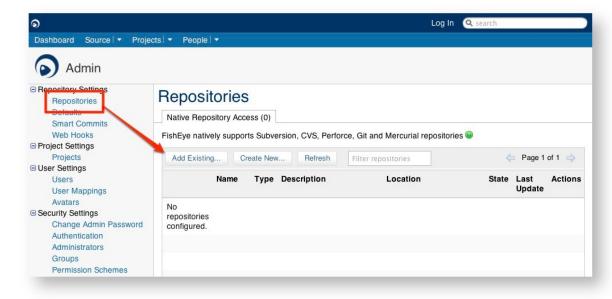
#### Add a repository

First up we're going to add a repository to Crucible.

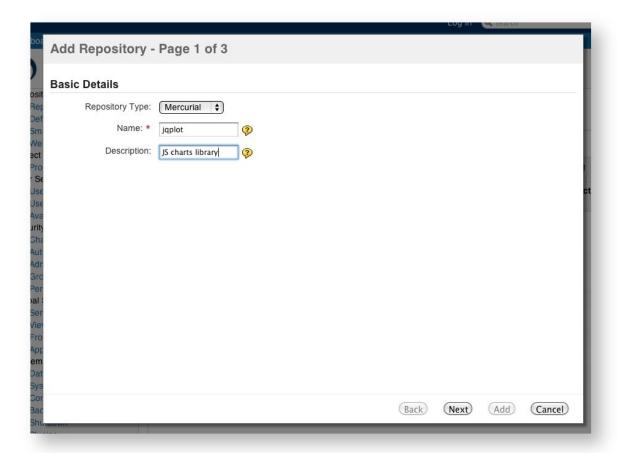
Go to the Admin area by clicking on the 'cog' at the top right and choosing Administration:



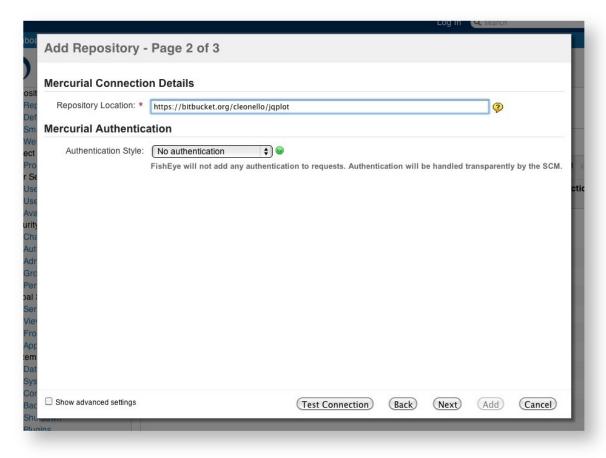
Click on Add Existing... in the Repositories listing of the Administration area.



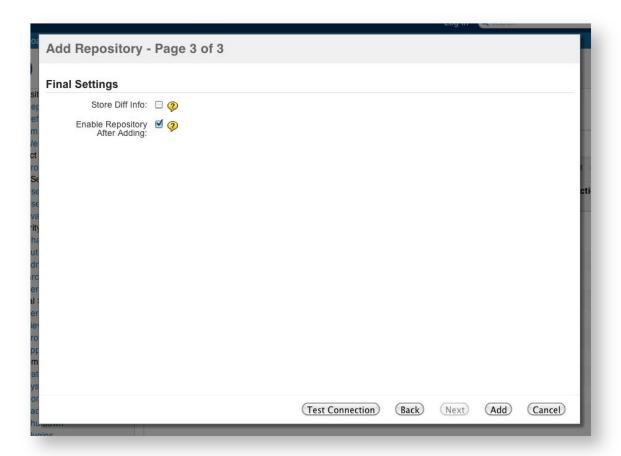
Choose the repository type and fill in the name and description.



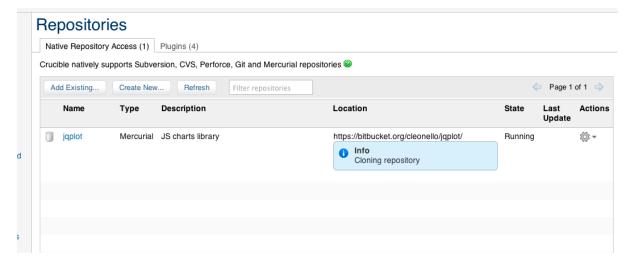
In the repository configuration put the location of your repository. Fill in the authentication details if necessary.



Finally indicate whether or not you would like diff indexing should be turned on and if the repository should not be indexed right away then click **Add** to finish the process.



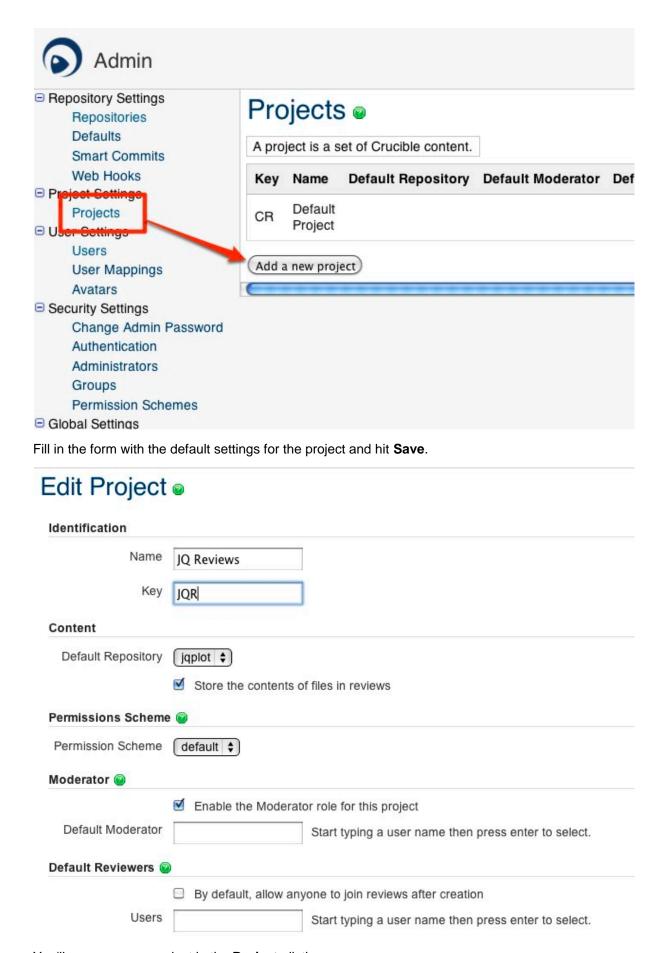
Your repository is now created in **Crucible** and the indexing should have started.



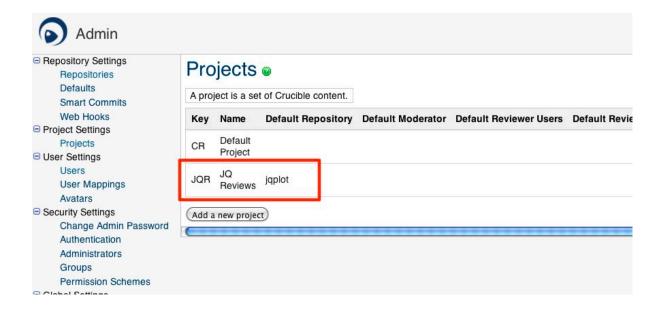
#### Create a project in Crucible

Crucible comes with a default project, with the key CR, but you will will probably want to create your own projects to contain your reviews. This is achieved in a couple of steps.

Click on Add a new project in the Projects listing of the Administration area.



You'll see your new project in the Projects listing.

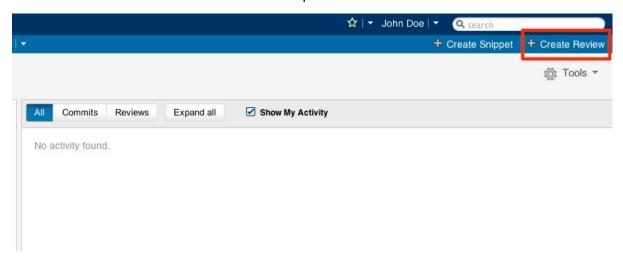


#### Create a review

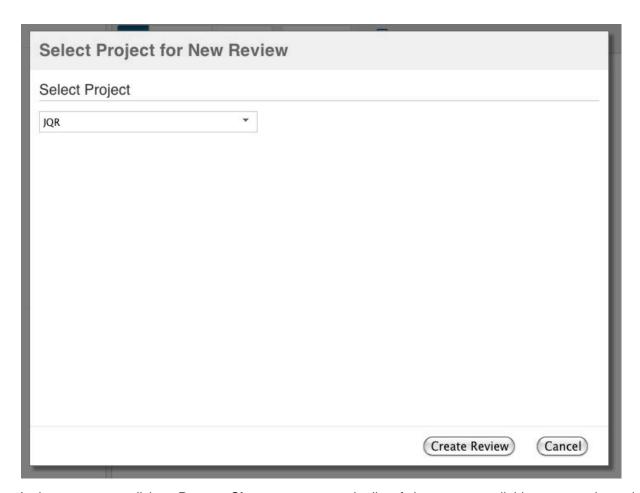
Now that you have your own project you can create reviews in it.



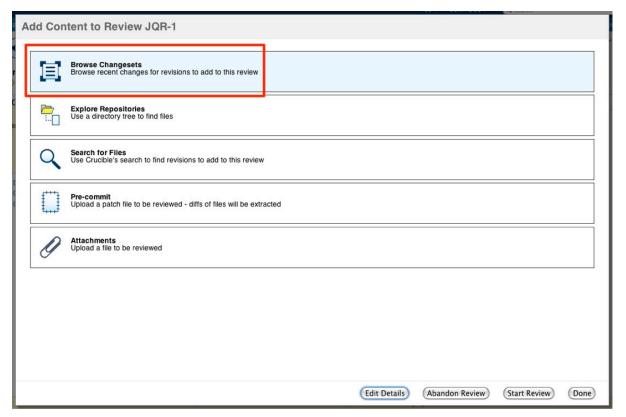
From the **Dashboard** click on **Create review** to open the review creation form.



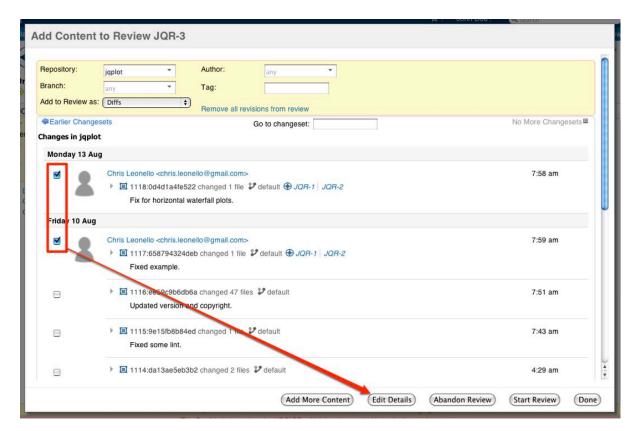
Choose the project in which you want to create the review.



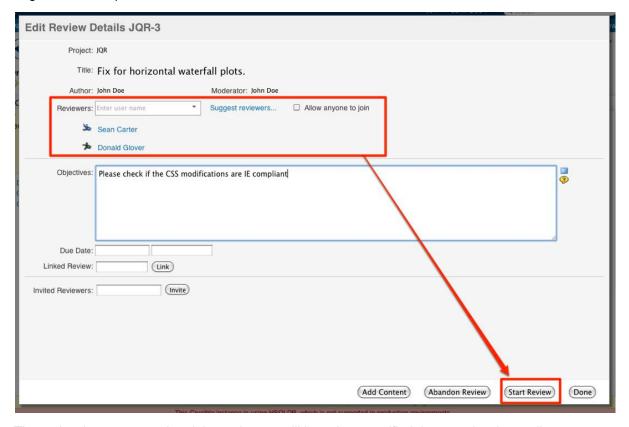
In the next screen click on **Browse Changesets** to see the list of changesets available to create the review.



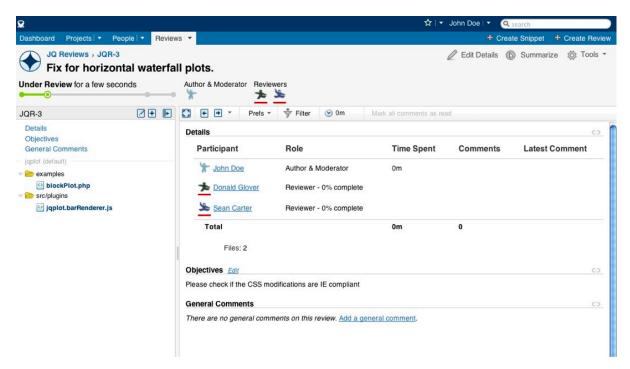
Select the changesets that you would like to be reviewed and then click on Edit Details to add reviewers.



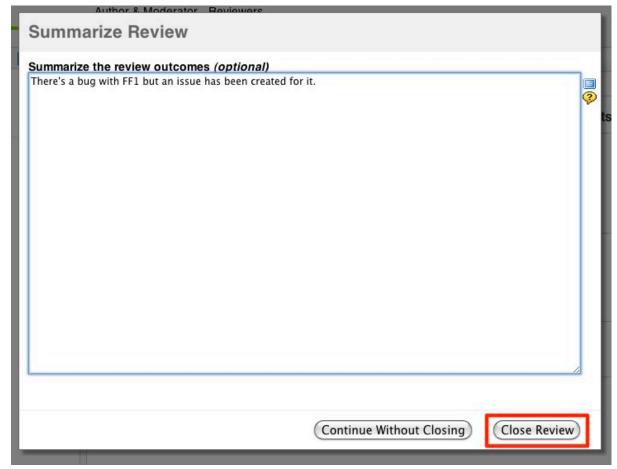
Once you have chosen your reviewers and updated the review information you can click on **Start Review** to begin the review process.



The review is now created and the reviewers will have been notified that a review is pending.



In order to close a review where you are the moderator you need to click on **Summarize** in the top right and then close the review from the modal window.



# **Using Crucible**

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

- Using the Crucible screens
  - Using the Review Dashboard
  - Browsing all reviews
  - Browsing source files

- Crucible Icons
- Searching Crucible
- Viewing people's statistics in Crucible
- Browsing Projects
  - Viewing Project Statistics
- Changing your User Profile
- Viewing Your Favourites
  - Using favourites
- Using Keyboard Shortcuts in Crucible
- The Crucible workflow
  - Defining your workflow
  - Roles and Status Classifications
- Creating a review
  - Creating a review from FishEye
  - Creating a review from JIRA
  - Creating a review from a URL
  - Creating a Snippet Review
  - Creating reviews from the command line
- · Adding content to the review
  - Iterative reviews
  - · Creating patch files for pre-commit reviews
- Choosing reviewers
- Performing the review
  - Starting a review
  - Adding comments
  - Changeset discussions
  - Flagging defects
  - · Creating JIRA issues from the review
  - Viewing reports
    - Review Coverage report
  - Completing your review
  - Using the Review History Dialog
  - Using RSS feeds in Crucible
  - Using Wiki Markup in Crucible
  - Tracking Crucible Review Metrics
    - Using Progress Tracking
    - Using Time Tracking
- JIRA integration in Crucible
- · Summarising and closing the review
- Managing your reviews
  - Using Review Reminders
  - Sending a review's comments via email
  - Moving a Review to Another Project
  - Deleting a review
- Transitioning JIRA issues

# **Using the Crucible screens**

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

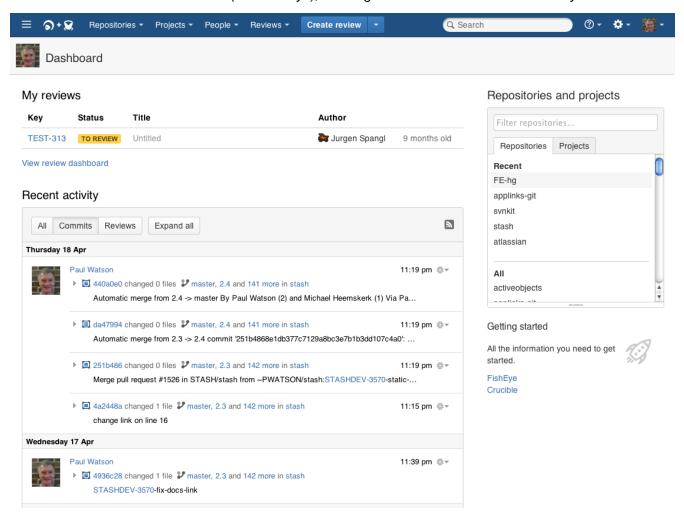
## On this page:

- Dashboard
- Header
- Recent activity
- Related pages

### Dashboard

Click View review dashboard to see more information about your reviews.

Screenshot: The Crucible dashboard (with FishEye), showing current reviews and recent activity



### Header



The table below explains the tabs in the Crucible header:

Tab	Function	Appears
Repositories	Displays contents of connected source repositories.  The dropdown menu has links to r ecently visited repositories.	Only when FishEye is used with Crucible.  Only when FishEye is used with Crucible for logged-in users.
Projects	Displays reviews and content from specific projects.  The dropdown menu has links to recently visited projects.	All screens for logged-in users.
People	Displays metrics on the users of the Crucible instance.  The dropdown menu has links to recently visited user pages.	All screens for logged-in users.

Reviews	Allows you to search and report on reviews.  The dropdown menu has links to recently visited reviews, as well as links to the Crucible Inbox and Outbox.	All screens for logged-in users
	Choose Reviews > Review dashboard to see the Review Dashboard that has more information about your reviews.	

### Recent activity

The dashboard has an activity stream that displays recent commit activity and reviews activity. The activity stream will display your own activity as well as information from projects, reviews, people, repositories, etc, that you have selected as favourites. For more information on favourites, see Using favourites.

## Browsing commit activity

Commit activity includes files commits to repositories that you have selected as favourites.

Click the **Commits** tab to filter the activity stream to display only source activity.

#### Browsing reviews activity

Reviews activity includes updates to reviews in all projects that you have selected as favourites. See Browsing all reviews for more information about browsing reviews.

Click the **Reviews** tab to filter the activity stream to display only reviews activity (see screenshot below).

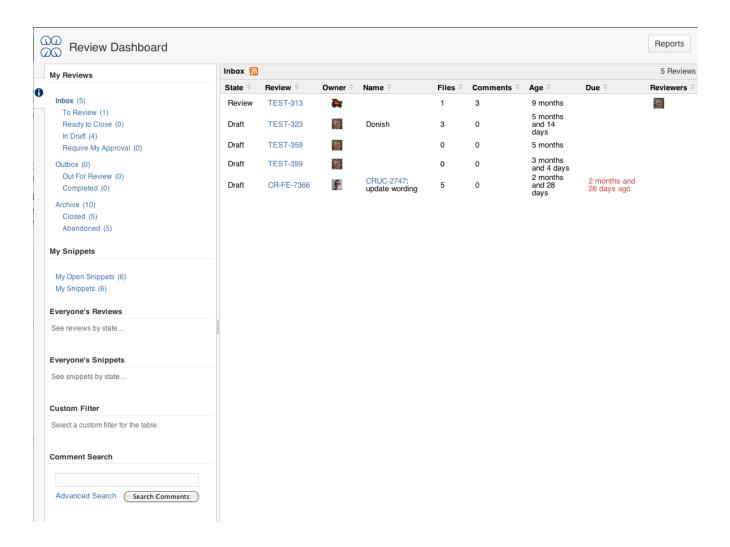
### Related pages

Browsing source files
Browsing Projects
Viewing People's Statistics in Crucible
Viewing reports
Searching Crucible
Using RSS feeds in Crucible
Changing your User Profile

## **Using the Review Dashboard**

Choose Reviews > Review dashboard from the header to see more information about your reviews.

Screenshot: The Review Dashboard



Using the 'My Reviews' sidebar

The 'My Reviews' sidebar contains information about reviews and snippets that you are involved with, for example how many reviews need your approval. Read more about the sidebar in Browsing all reviews.

- Click on any of the links in the sidebar to navigate to that information in the 'Reviews' tab of the Dashboard.
- Hover your mouse over the sidebar and click the collapse icon (♠) to hide any of the sections. Click the expand icon (▼) to expand any collapsed sections.
- Click the 'information' icon 1 to hide/show the sidebar.

Inbox	Click <b>Inbox</b> to show all reviews in these states:
	<b>To Review</b> — Click to show all reviews where you are a reviewer and haven't yet completed your review work.
	<b>Ready to Close</b> — Click to show all reviews where you are a moderator and haven't yet summarised and closed the review.
	In Draft — Click to show all reviews that you have created but have not yet been moved to the 'Approval' state or the 'Require Approval' state.
	<b>Require My Approval</b> — Click to show all reviews where you are a moderator and need to approve the review.

Outbox	Click <b>Outbox</b> to show all reviews in these states: <b>Out for Review</b> — Click to show all reviews that you are a participant of, that have review work that is yet to be completed by other reviewers. <b>Completed</b> — Click to show all reviews that you are a participant of, and have been completed.
Archive	Click <b>Archive</b> to show all reviews in these states:  Closed — Click to show all reviews that you are a participant of, that have been summarised and closed.  Abandoned — Click to show all reviews that you are a participant of, that have been abandoned. You may wish to delete these reviews.
My Open Snippets	Click to show all open snippets created by you.
My Snippets	Click to show all snippets created by you.

**Related topics** 

Browsing all reviews
Using favourites
Changing your User Profile

## Browsing all reviews

The instructions on this page describe how to browse all reviews on the 'Reviews' screen, by people or for projects that you have selected as favourites. This includes reviews that you are involved with. You can also gen erate reports on review blockers for all people.

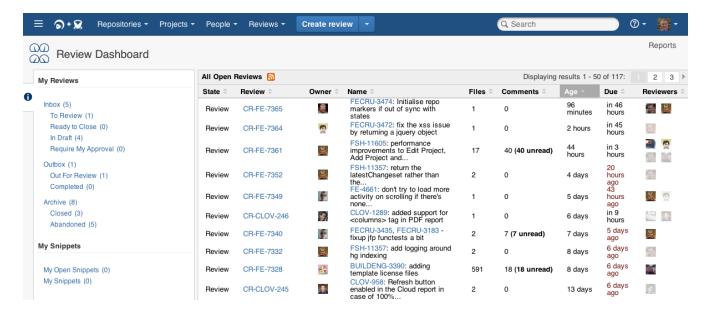
The 'Reviews' tab is essentially a shortcut to viewing your reviews (or a custom filtered list, if you have set up a filter). You can also filter reviews by status, e.g. Open, Closed.

#### To browse all reviews:

- 1. Choose **Reviews** > **Review dashboard**. The 'Reviews' page will display all open reviews, unless you have previously used a custom filter. See the screenshot below.
- 2. Browse your reviews, by clicking the links under 'My Reviews' and 'My Snippets' in the sidebar.
- 3. Browse reviews for all people by clicking the links under the 'Everyone's Reviews' and 'Everyone's Snippets' sections in the sidebar, as follows:

All Open Reviews	Reviews that have not been summarised and closed yet.
All Closed Reviews	Reviews that have been summarised and closed.
All Reviews	All reviews, including open reviews, closed reviews and draft reviews.
All Open Snippets	All open snippets.
All Snippets	All snippets, i.e. open and closed snippets.

Screenshot: Browsing all open reviews



**Related Topics** 

Using the Review Dashboard Viewing reports

## **Browsing source files**

(i) When FishEye is installed with Crucible, the **Repositories** tab is available in the header.

#### To browse source files:

- Choose Repositories > All repositories from the header. The 'Repositories' view will be displayed, showing summary information if you have multiple repositories set up. See the 'Viewing all repositories' screenshot below.
- 2. Click the name for a repository to view its contents. See the 'Viewing a repository' screenshot below.
- 3. Browse the repository for the desired source file using the directory tree in the left menu. See the 'Viewing a file' screenshot below.
- 4. You can view various information about the file:

Tab	Description
Activity	Shows recent activity for the item. There are a number of sub-options here:  All — The default view, showing commits, reviews and JIRA issues.  Commits — Shows commits in the activity stream.  Reviews — Shows review activity in the activity stream.  Filter commits — Applies constraints to the current activity stream.  Expand all — Shows more detail for all changesets.  Scroll to changeset — Displays the changeset ID specified
Revisions	When viewing a file, shows the latest revisions of the file.
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.

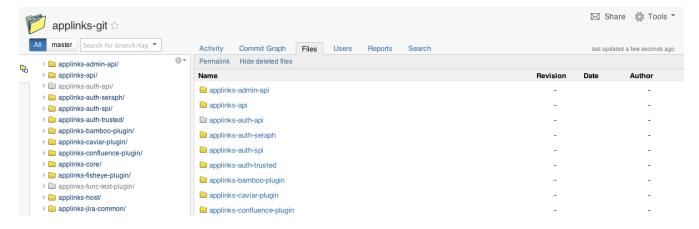
Source Shows the contents of the file.

1 To download files, click the **Source** tab for the desired file, then right-click **Raw**.

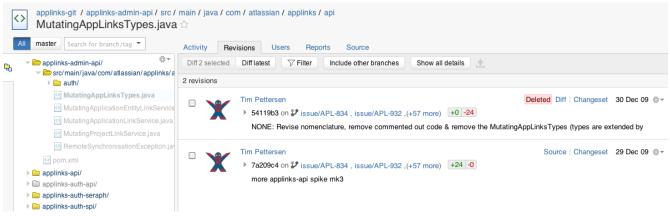
### Screenshot: Viewing all repositories



## Screenshot: Viewing a repository



### Screenshot: Viewing a file



### **Crucible Icons**

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

Icon	Description
$\Box$	View review-level comments

•	Go to the previous comment
•	Go to the next comment
<b>+</b>	Add a comment
•	Go to the previous file in this review
<b>→</b>	Go to the next file in this review
<b>‡</b>	Expand all files
I	Collapse all files
O	A file included in this review
	A directory included in this review

## **Searching Crucible**

Crucible has a powerful search engine that allows you to find reviews. There are two methods for searching in Crucible:

- Quick Search The Quick Search allows you search all Crucible projects by entering a single search string. This search is the default search and will suggest "quick nav" results (header search box only).
   Results are weighted by most recent edit date.
- Filtering Reviews An alternative method for searching for reviews is to display all reviews and apply a
  custom filter to the list. This is generally slower than searching, but allows you to specify filter criteria
  against a range of fields.
- Comment Search If you want to find specific review comments, Crucible provides a powerful comment search.

See also Searching FishEye.

#### On this page:

- Using the Quick Search
- Filtering reviews
- Searching for Review Comments

**Using the Quick Search** 

### Before you begin:

The Quick Search will also return changesets and files, if you are using FishEye with Crucible. For
information on searching FishEye, see Searching FishEye in the FishEye documentation.

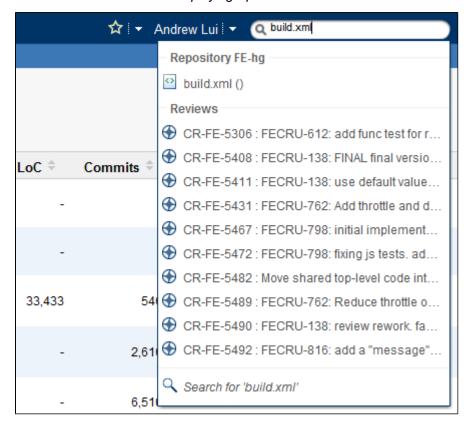
## To search Crucible using the Quick Search:

- 1. Enter your search terms in the search box in the Crucible header. Crucible offers a number of criteria that you can use to refine your results, see Refining your Quick Search Criteria below.
- 2. Results will appear in a dropdown, as you type. Results will attempt to be matched against the review name, project and user.
  - If you want to use a quick search result, use the up- and down-arrows on your keyboard and press enter or use your mouse to select the item.
  - If the quick search results don't have what you are looking for, press enter to run a search. Ensure that no items in the dropdown are selected when you press enter.
- 3. The Quick Search results page will be displayed. You can filter your results further, as described in Filtering Quick Search Results below.
  - Results are sorted by relevance and boosted if they were edited recently. A maximum of 10 results are displayed per page.
    - If you have integrated your Crucible instance with a JIRA instance, you can display a summary
      of any JIRA issues referenced in your search results by hovering over the issue key. For more
      details, see JIRA integration in Crucible.
- 4. If you want to run another search, enter your new criteria in the main search box or in the search box in

the header.

Note, only the search box in the header provides "quick nav" results.

Screenshot: Quick Search displaying "quick nav" matches



#### Refining your Quick Search Criteria

You can refine your search criteria before executing the search:

Search Tool	Description	Example
Field Handles	Use a field handle in your criteria to restrict your search to a particular field. Note, you cannot have multiple field handles in a query.	
	<ul> <li>detail — Search against title, objective, key, linked reviews and linked issues.</li> <li>reviewcomment — Search against review comments.</li> </ul>	
Searching for Discrete Strings	Enter a specific string within quotation marks and Crucible will match against the exact string.  Note, this search is not case-sensitive.	Enter "CR-2818" and Crucible will only return results that match that exact string, i.e. it will not return a result with CR-FE-2818 or CR-28 189.

### Filtering Quick Search Results

You can filter Quick Search results using the controls in the left panel of the Quick Search page:

Filter	Description

All repositories	Type a repository name into the field, or click the down arrow to seea list of repositories.
Source type	Click Files and directories, Commit messages, Dif fs, Content or Committers to restrict the search results to just that source type.
All projects	Select or enter the name of the project that you want to restrict your results to. For example, if you enter 'CR' then the search results page will refresh to display only reviews in the 'CR' project.  If you are using Fisheye with Crucible, there will be a repositories dropdown in the 'Source' section. Selecting a FishEye repository in this dropdown will not filter the Crucible search results. It is only used to filter files and changesets returned in the search results. See Searching FishEye.
Reviews	Click this link to restrict your results to reviews that have a title, objective, key, linked reviews or linked issues that match the search criteria.
Comments	Click this link to restrict your results to reviews that have comments that match the search criteria.
Last modified	Filter by the date of the last change.
Ву	Filter by author name.

### Filtering reviews

Crucible allows you to view all the reviews/snippets that you are involved with, as well as everybody's reviews/snippets. You can filter these lists to find reviews.

### To filter a list of reviews:

- 1. Click **Reviews** in the header.
- 2. Click the list of reviews that you want to start with, in the sidebar of the 'Review Dashboard', e.g. 'All Open Reviews'.
- 3. Click **Custom Filter** in the reviews sidebar.
- 4. Update the filters with your search criteria (see table below) and then click **Apply Filter**.

Filter	Description
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 moderator s.
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.
Туре	Choose either Review or Snippet.

Match Roles	To use all the above filters, choose <b>all</b> . To use any of the filters, choose <b>any</b> .
Review state checkboxes	Check any of the review state checkboxes (e.g. <b>D</b> raft, Pending Approval) to filter for reviews in those states.

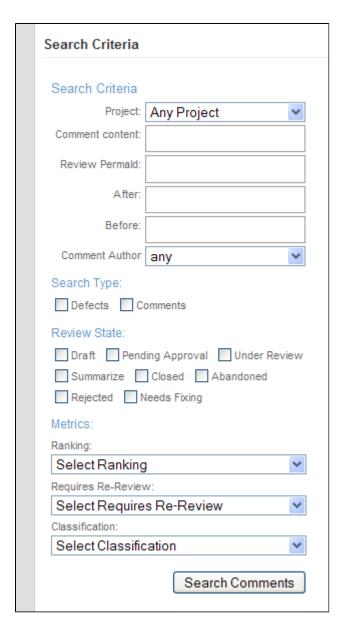
**Searching for Review Comments** 

### To search for review comments:

- 1. Click **Reviews** in the header.
- 2. Enter your search string in the 'Comment Search' section at the bottom of the reviews sidebar.
- 3. Click Search Comments.
- 4. The 'Comment Search' page will display your results. You can refine your search using the search criteria on the page:

Project	Find comments on reviews under a particular project.
Comment content	Find comments that contain the specified text.
Review Permald	Find comments made on the specified review.
After	Find comments made after a particular date.
Before	Find comments made before a particular date.
Comment Author	Find comments made by a particular user.
Search Type	Filter for comments marked as <b>Defects</b> . Check <b>Comments</b> to find comments that are not flagged as Defects.
Review State	Find comments on reviews that are in a particular state. See <i>Review State Filter</i> (above).
Ranking	Find defects have been given a particular ranking (e.g. 'Major', 'Minor').
Ranking	Find defects have been given a particular ranking (e.g. 'Major', 'Minor').

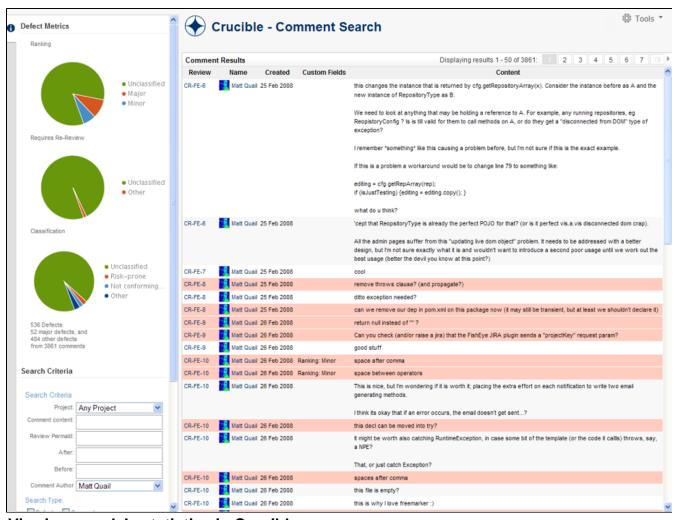
Screenshot: Search Comment Filter Options



**Displaying Defect Metric Charts for Comment Search Results** 

Once you have retrieved results for a review comment search, you can click **Defect Metrics** in the left navigation pane to display defect classification charts.

Screenshot: Comment Search Results



# Viewing people's statistics in Crucible

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:

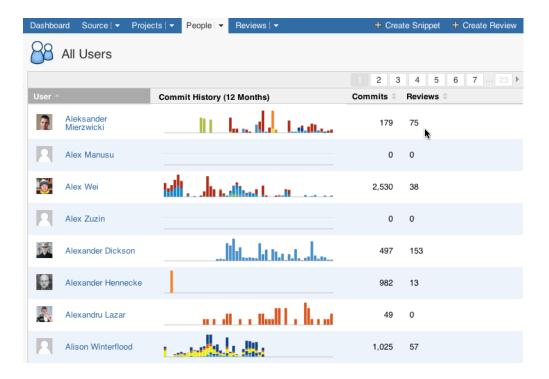
- · Opening the list of People
- Viewing a Person's Activity Screen
- · Viewing charts of a person's activity

### 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 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. You can add your own avatar by uploading an image to an external service such as Gravatar, which Crucible supports. See Changing your User Profile.

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



#### Viewing a Person's Activity Screen

Click on a username to see a listing of activity for them as well as charts showing statistics for their activity.

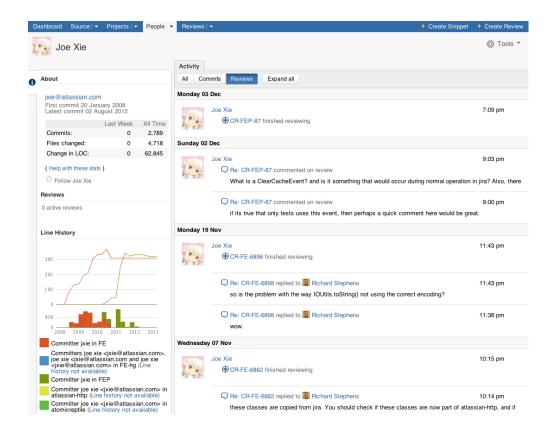
The right hand pane displays a list of all activity for this user. You can:

- 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
- click the star icon to add an item to your favourites.

The left hand pane displays charts around this activity, including:

- number of active reviews
- · charted history of lines of code
- code committing activity
- general statistics.

Screenshot: The People Activity Screen in Crucible



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 of 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

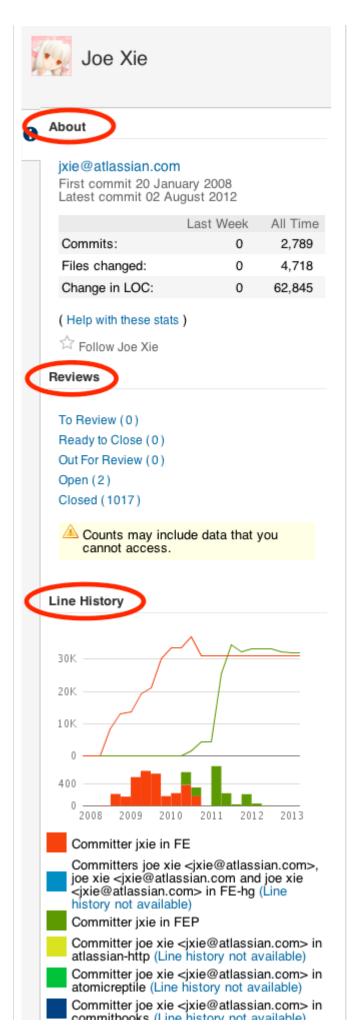
The charts in this section are only available when using FishEye.

Screenshot: People Activity Charts in Crucible

#### About

The username section shows the email address, then the first and latest commit dates for the person in context.

Also displayed are data points for the previous week and all-time. It shows number of commits, number of files changed and number of lines changed.



#### Reviews

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**, **Ready to Close**, **Out For Review**, **Ope n** and **Closed**.

## Line History

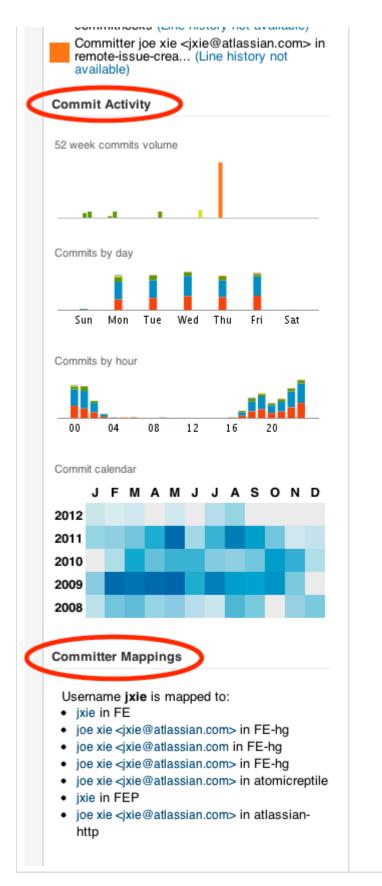
The Line History section shows a graph with the number of lines committed to the repository, charted over time.

#### Commit Activity

The Commit Activity section shows four 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; the last shows a commit calendar.

#### Committer Mappings

The Committer Mappings section displays userna me mappings from various systems if they have several usernames in play.



## **Browsing Projects**

To browse the content in a project, click **Projects** at the top of the page and choose a recent project, or choose **All projects** and click on a project name in the table.

The page for the project has the following sections:

Left navigation panel

Displays an overview of the project's history, statistics and activity.

#### **Activity tab**

Lists recent commit and review activity on separate sub-tabs, and all these together on the All sub-tab.

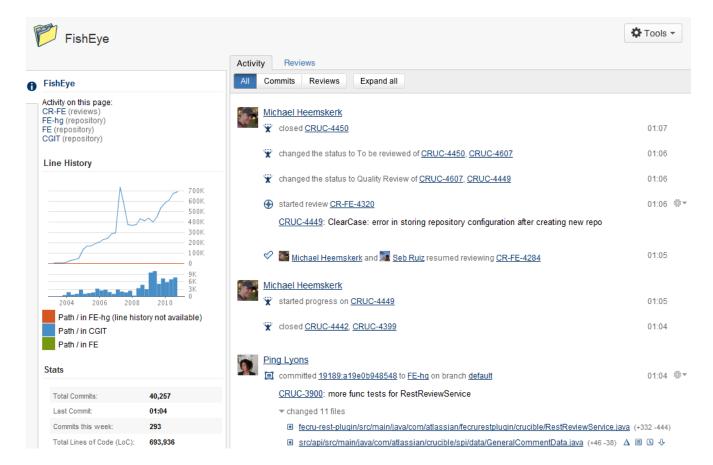
Click **Expand all** to see more detail for every commit or review.

#### Reviews tab

Lists all the reviews for the project.

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

Screenshot: The Crucible Project View



### **Viewing Project Statistics**

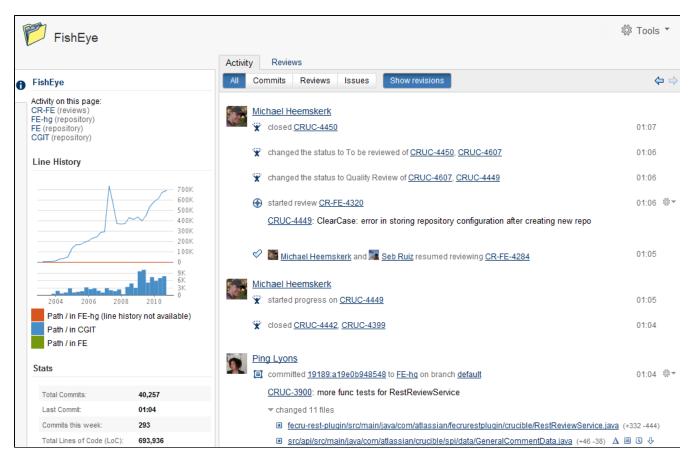
This page explains the layout of the Project Summary page.

## 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



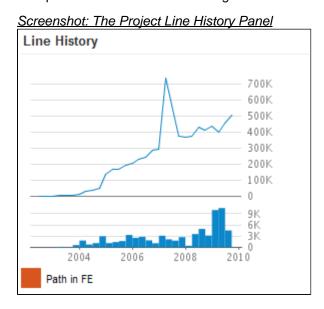
In the right hand pane, you can see an activity stream relating to this project. In the left hand pane, you can see various statistics charts relating to the project in context. These appear in a reduced size until you click them, when they will expand to show more information.

#### **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.



### **Project Stats Panel**

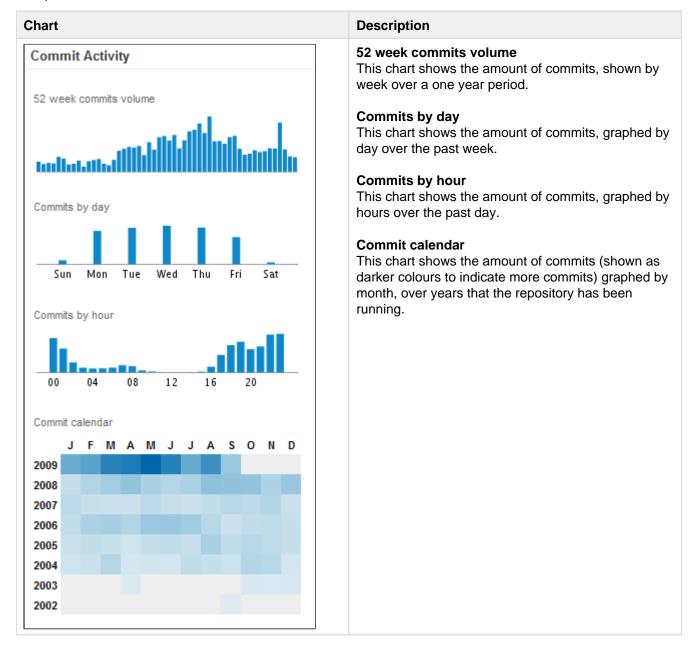
This panel contains a chart showing numerical data for commits, files changed and lines change, graphed over time.

Screenshot: The Project Stats Panel

S	tats		
		Last Week	All Time
	Commits:	137	16,033
	Files changed:	543	69,896
	Lines changed:	33,543	504,583

#### **Project Commit Activity Chart**

This panel contains a number of charts:



## **Changing your User Profile**

See Changing your User Profile in the FishEye documentation.

## **Viewing Your Favourites**

This page contains instructions on how to view, rename and remove your existing favourites in Crucible. You

can select code reviews, changesets, files, people and repositories as favourites in Crucible. This allows you to personalise the information that you see in your activity stream.

See Using favourites for instructions on how to add new favourites.

### On this page:

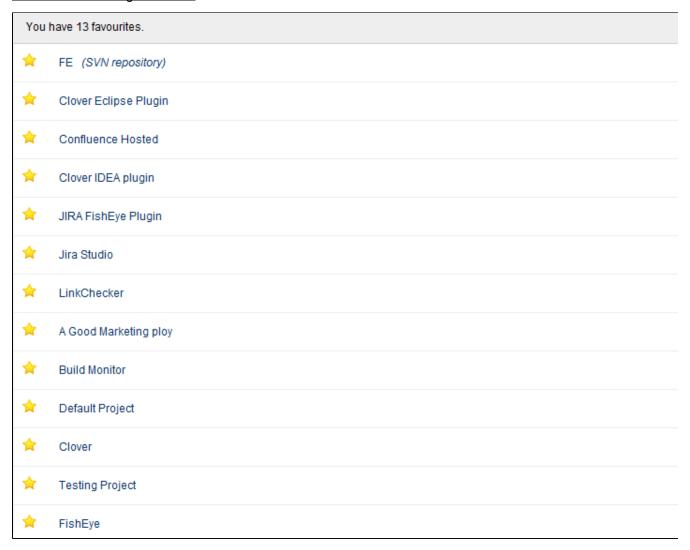
- Viewing your Existing Favourites
- Renaming a Favourite
- Removing a Favourite

Viewing your Existing Favourites

### To view your favourites,

- Click the favourites icon ( ) in the header.
   The code reviews, changesets, files, people and repositories that you have selected will be displayed in a list on the dashboard (see screenshot).
- 2. Click the favourites icon ( ) next to a favourite to show the dialogue for renaming (i.e. changing the 'Label') the favourite or removing the favourite. See Using favourites for more information.
- Tip: You can add favourites wherever you see star icons next to code reviews, changesets, files, people and repositories, not just on this screen.

### Screenshot: Viewing favourites



Renaming a Favourite

To rename a favourite,

- Click the favourites icon ( ) in the header.
   The code reviews, changesets, files, people and repositories that you have selected will be displayed in a list on the dashboard (see screenshot).
- 2. Click the favourites icon ( ) next to a favourite to show the 'Update favourite' dialogue (see screenshot below).
- 3. Enter the new name for the favourite in the 'Name' field and click the 'Save label' button. The favourite will be renamed on the dashboard.

#### Screenshot: The 'Update favourite' dialogue



## Removing a Favourite

### To view your favourites,

- Click the favourites icon ( ) in the header.
   The code reviews, changesets, files, people and repositories that you have selected will be displayed in a list on the dashboard (see screenshot).
- 2. Click the favourites icon (>) next to a favourite to show the 'Update favourite' dialogue (see screenshot below).
- 3. Click the 'Remove' button. The code review, changeset, file, person or repository will be removed as your favourite (the icon will be greyed out) and will not display the next time you view your list of favourites.
- Tip: You can remove favourites wherever you see star icons next to code reviews, changesets, files, people and repositories, not just on this screen, not just on this screen.

### Screenshot: The 'Update favourite' dialogue



**Using favourites** 

This page contains instructions on adding favourites in Crucible. You can select code reviews, changesets, files, people and repositories to be added to your favourites. This allows you to personalise the information that you see in your activity stream. We suggest you select items that you are currently working on as favourites, to create a more relevant personalised view.

See Viewing Your Favourites for instructions on how to view your existing list of favourites and how to rename and remove favourites.

#### On this page:

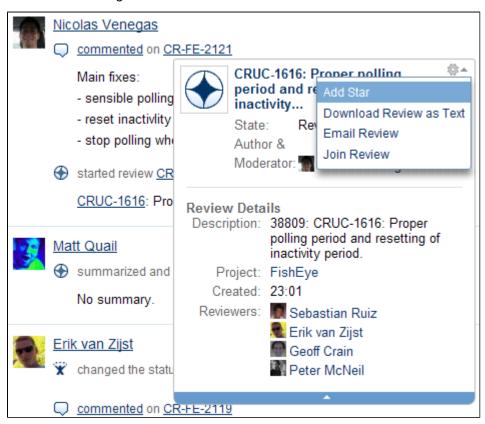
- Adding a review to your favourites
- · Adding a review comment thread to your favourites

- 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

## 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.

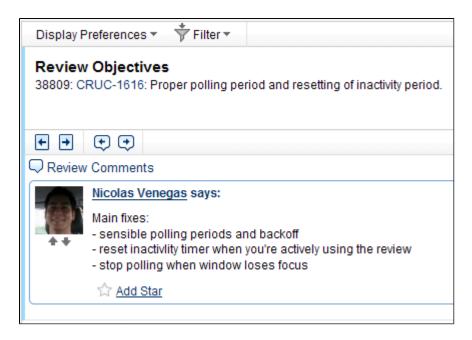
Screenshot: Adding a Review To Your Favourites



### 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.

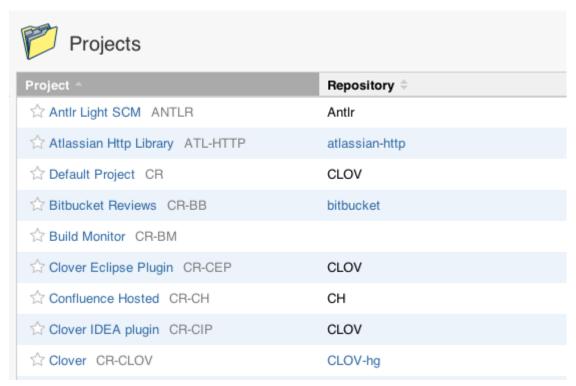
Screenshot: Adding a Review Comment Thread to Your Favourites



#### 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.

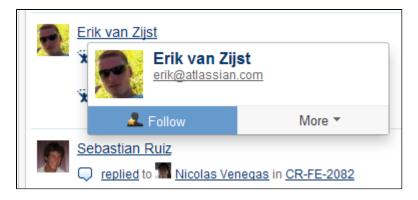
Screenshot: Adding a Project to your Favourites



#### 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



# **Using Keyboard Shortcuts in Crucible**

To see the available shortcuts, navigate to a review in Crucible, then choose **Tools** > **Keyboard Shortcuts**.

### 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

## **Custom navigation**

Key	Function
,	(Comma) Go to the previous element (file, comment, defect or diff hunk depending on your current context)
	(Period) Go to the next element (file, comment, defect or diff hunk depending on your current context)

# Comment navigation

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
I	Go to next thread (skips replies)
h	Go to previous thread (skips replies)
1	Go to next unread comment
[	Go to previous unread comment
r	Reply to a comment
m	Toggle comment read/unread status

# File navigation

Кеу	Function
j	Go to the next element (file, comment, defect or diff hunk depending on your current context)
k	Go to the previous element (file, comment, defect or diff hunk depending on your current context)
shift + k	Go to first file
shift + j	Go to last file
u	Go to next unreviewed file
i	Go to previous unreviewed file
у	Set file reviewed and go to next unreviewed file
shift + y	Toggle file reviewed/unreviewed status
е	Expand current file
С	Collapse current file

shift + e	Expand all files
shift + c	Collapse all files

## The Crucible workflow

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

On this page:

#### Crucible Workflow

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

### Roles

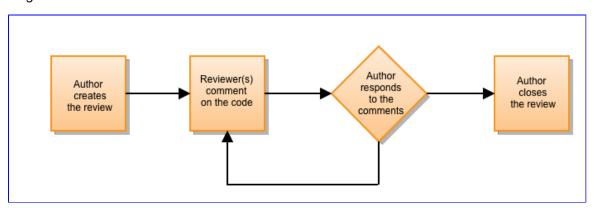
Crucible is a flexible application that caters for a wide range of team sizes and work styles. You will need to know about the basic roles used in Crucible:

- authors: 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. The moderator is disabled for the "agile" permission scheme to simplify workflow.

### **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 an example workflow for a two-person code review in Crucible.

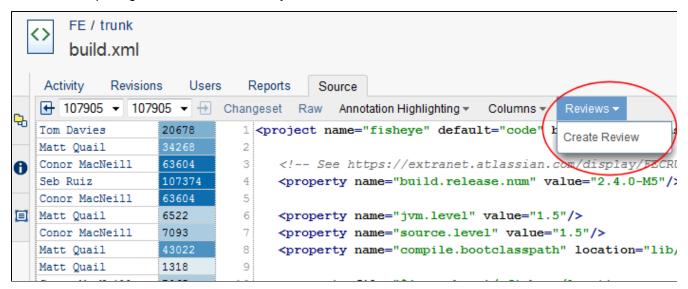
Example workflow: Two participant code review

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

#### 1. The author starts the review

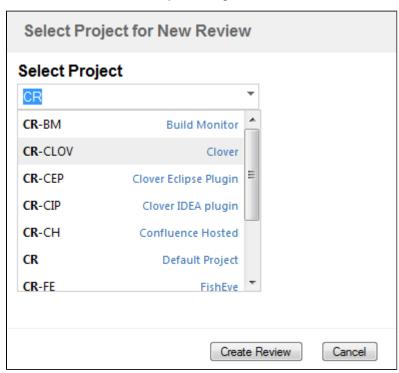
To begin, the code author sets up the review. There are a number of ways to do this, but for this example, the author starts from the FishEye source view of the file he wants to review:

Screenshot: Opening a review from the FishEye Source view



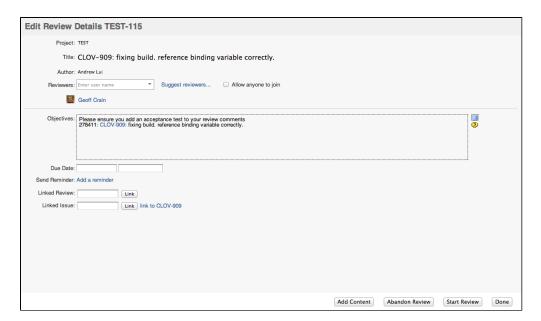
From the FishEye Source view, the author chooses **Reviews** > **Create Review**. If there are multiple projects, the Select Project dialogue opens.

Screenshot: The Select Project dialogue



In the Select Project dialogue, you are prompted to choose a project for this review from the drop-down list. Once the selection is made, the author clicks **Create Review**. The Edit Review Details dialogue opens, where the author can create and issue the review.

Screenshot: Creating a review in the Edit Review Details dialogue

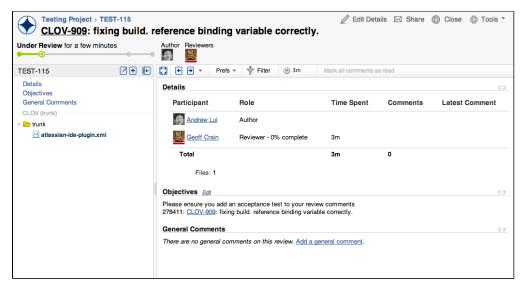


In the Edit Review dialogue, the author enters information needed for the review. This includes entering a title and description for the review, selecting reviewers, a due date and the key for a related JIRA issue (if any). The project and author are pre-selected.

The author can also add more content to the review, if they wish, by clicking **Add Content**. See Adding content to the review.

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

Screenshot: A new Crucible review



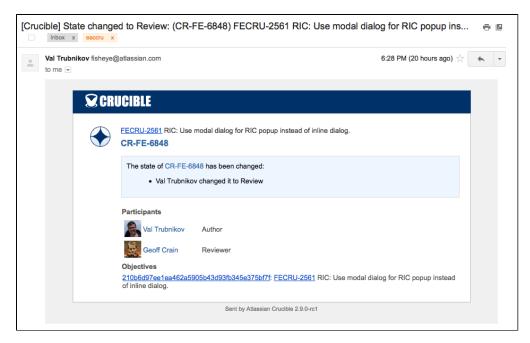
The draft review opens. In the draft stage, the author can check the contents of the review files to ensure they are correct and put in any notes for reviewers as comments. During the draft phase, no notification emails are sent out to reviewers. Once the author is finished with the draft phase, he clicks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

The review will now be started and a notification email will go out to all 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.

## 2. The reviewer comments on the code

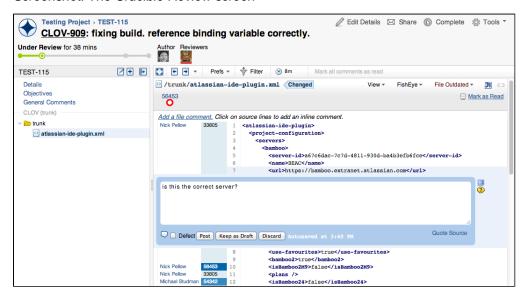
The reviewer will receive an email from Crucible with a link that they can follow to the review.

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



The Review screen displays the source files that are under review. The reviewer clicks file names to see the code to be reviewed. As the reviewer reads the changes, they can add comments:

- Click Add a general comment (under 'General Comments' on the Review screen) to comment on the overall review.
- Click Add a file comment (just above the source code listing) to add a general comment about a source
  code file.
- Click on any line in the source file to enter a comment there (multiple lines can be selected by clicking and dragging).

The reviewer clicks **Post** to add the comment to the review.

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.

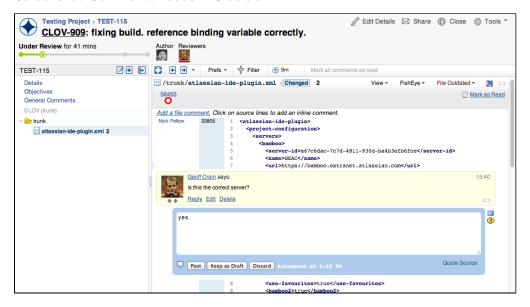
When the reviewer has finished their code review work, they click **Complete**.

(i) 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 can also make contributions, responding to reviewer comments and making corrections.

Screenshot: Comment threads in Crucible



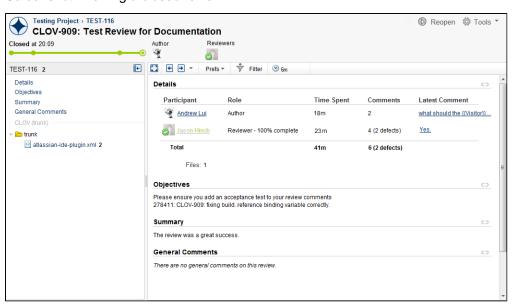
#### 4. The author closes the review

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

The author can then add any final comments, and click **Close** when finished.

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, archiving the completed review as read-only.

Screenshot: Viewing a closed review



If the author ever needs to resume work on the closed review, they can simply click **Reopen** when viewing this screen. This returns the status of the review to "Open", without changing the status of existing reviewers. Click **E dit Details** to add reviewers or to change other details of the review.

### 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

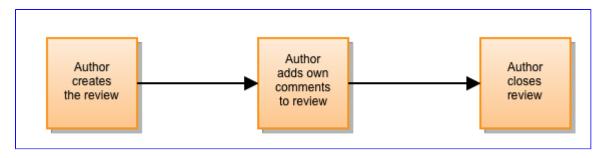
which suits your team.

- 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.

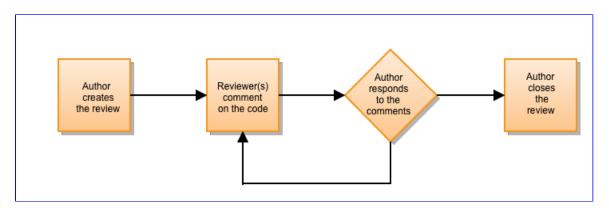
Diagram: Workflow for Lightweight Code Commenting



#### 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



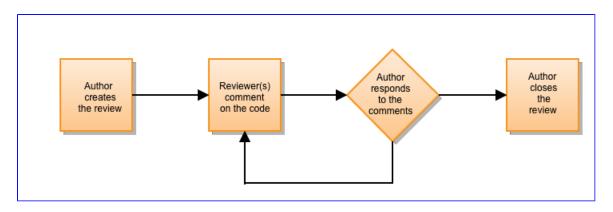
For more information on one-to-one reviews, see The Crucible workflow. The workflow process in Crucible is covered in detail within this document.

### 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.

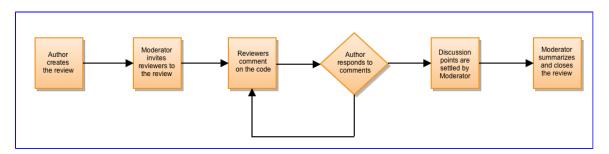
Diagram: Workflow for One-to-Many Reviews



#### Formal Group Reviews (CMM Team)

- 1. Author creates the review.
- 2. Moderator invites reviewers to take part in 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 The Crucible workflow.

### **Roles and Status Classifications**

This page explains the roles and 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 *mod erator* 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. See also au thor, the person whose changes to the code are to be reviewed.

#### 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 to be participants of the review, but are not 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.

# Creating a review

This page provides an overview of how to create a review in Crucible.

More information about the stages in creating a Crucible review can be found on these pages:

- Add content to the review
- · Choose reviewers
- Perform the review
- Summarise and close the review

You can also create Crucible reviews in these other ways:

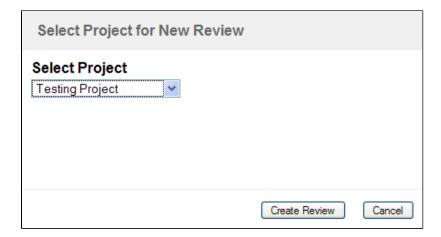
- Creating a review from FishEye
- Creating a review from JIRA
- Creating a review from a URL
- Creating a Snippet Review
- Creating reviews from the command line
- Note that only people with the 'Create' permission can create a review.

### On this page:

- Create a new review
- Add content to the review
- · Edit the review details
- Considerations when creating reviews

#### Create a new review

Within Crucible, create a new review by clicking **Create review** in the header. Select the project for the review (if you have multiple projects), and click **Create Review**.

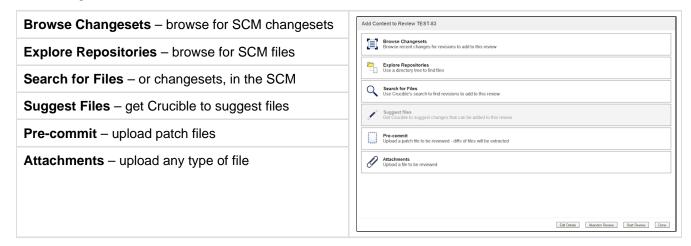


#### Add content to the review

In the 'Add Content to Review' dialog, click one of the options to choose files or changesets for review. Crucible supports post-commit and pre-commit review types – these simply depend on the type of content you add to the review:

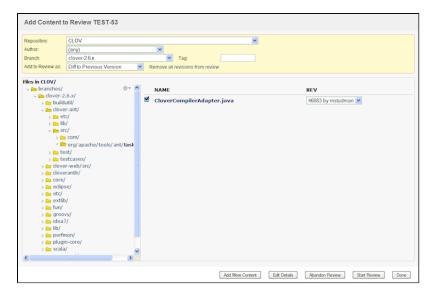
- Post-commit reviews You want code changes that have already been committed to the SCM to be
  reviewed. In Crucible, you can browse and search for files or changesets in the SCM, which you then add
  to the review. Crucible can suggest files that should be considered for review, based on recent activity.
- Pre-commit reviews You want code changes that have not yet been committed to the SCM to be reviewed. You need to create a patch file for the code changes and then, in Crucible, add the patch to the review.

See Adding content to the review for more details.



Note that Crucible supports iterative reviews – for both post-commit and pre-commit reviews you can update the review with new versions of files, and changesets, created after the review was started. Crucible allows the

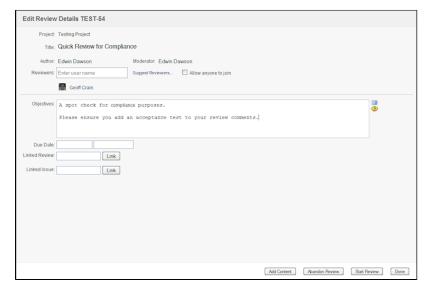
reviewer to see the different versions of updated files, so as to understand the changes that have been made.



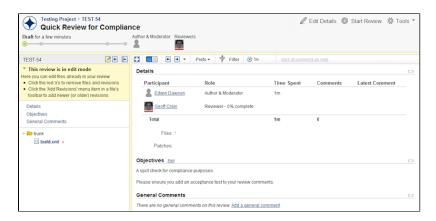
Click **Edit Details** to move to the next stage.

Edit the review details

Here you can choose a title, reviewers, objectives, due date, linked reviews and issues:



Once you're finished, click Done.



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.

When the reviewers have performed their reviews, you can summarise and close the review.

Considerations when creating reviews

Review effectiveness

Based on our own experience of over 13000 reviews, we have found that reviews with fewer files and reviewers are more effective. We have seen effects such as:

- Time spent reviewing each file decreases as the number of files increases.
- Reviewers spend less time reviewing as the number of reviewers increases.
- Reviewers find fewer defects as the number of reviewers increases.

This suggests that reviews should be created with care to get the best value from them:

- Avoid overloading the review. Reviews should be focussed on just a few necessary files.
- Avoid overcrowding the review. Reviewers should be selected with care, and should be guided individually on what to look for.

Crucible performance

The performance of a Crucible instance can be seriously degraded if very large reviews are created.

To prevent a user from accidentally causing this, Crucible has a limit on the review content size when creating reviews. The limit is 800 file revisions.

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 and not is deleted", 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 FishEye

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

#### On this page:

- 1. Open the FishEye Source view
- 2. Create the review
- 3. Choose a project

#### 1. Open the FishEye Source view

To begin, the code author sets up the review. There are other ways to do this, but for this example, the author starts from the FishEye Source view of the file he or she wants to have reviewed.

#### To navigate to the Source view for a file:

- 1. On the **Source** tab, click the name for a repository.
- 2. Click the name of the file to be reviewed.
- 3. Click the **Source** sub-tab.
- 2. Create the review

#### To create the review:

• From the FishEye Source view, choose **Reviews** > **Create Review**.



#### 3. Choose a project

In the Edit Review Details dialog, choose the project for this review, and add reviewers. Now click Start Review.



#### Creating a review from JIRA

This page describes how to create a Crucible review directly from an issue in JIRA, the Atlassian issue-tracking application.

JIRA must be integrated with *both* FishEye and Crucible before you can do this. See Linking Crucible to JIRA for information on how to set this up.

Note that FishEye content appears on the Source tab, and Crucible content on the Reviews tab, in JIRA.

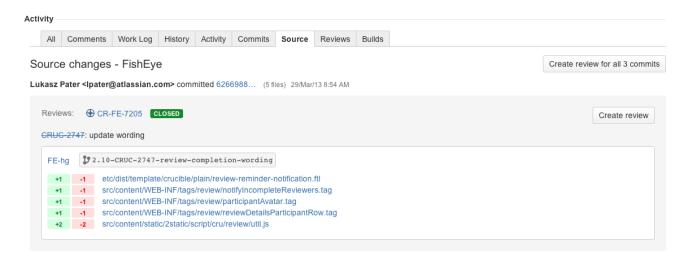
See also Creating JIRA issues from the review.

#### To create a review from within JIRA:

- 1. Go to the issue in JIRA that relates to the work to be reviewed.
- 2. Under 'Activity', click the **Source** tab.
- 3. Either:
  - a. Click **Create review** to create a new review for a particular changeset.
  - b. Click **Create review for all commits** to include all changesets from the JIRA issue in the new review.
- 4. If a similar review already exists, you can add the changesets to that.
- 5. In Crucible, the new review is in edit mode:
  - 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.
- 6. Choose **Tools** > **Start Review**, in Crucible, when you are ready.

The next step is to add reviewers.

Screenshot: Adding a review from within JIRA



### Creating a review from a URL

You can set up a URL that 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 projects 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 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.

To create a snippet review:

- 1. Copy the code to be reviewed from the source to your system clipboard.
- 2. Click Create snippet from the Create review menu in the Crucible toolbar.
- 3. Enter details for the snippet review:
  - Paste the code into the panel, where indicated.
  - Click on Click to add title near the top to enter a title for your review. If you don't specify a title, one will be automatically created for you.
  - Select a project from Project.
  - Select a programming language from Syntax Highlighting.
- 4. Click **Save** to create the snippet review.
- 5. Invite anyone that you want to participate in the snippet review by sending them the link to the review. The link is the review key, just above the review title. Anyone who is allowed to view the snippet is allowed to comment on it, and can close it.
- 6. Click **Reply** on any comments to respond.
- 7. Choose from the **Tools** menu to either close or delete the snippet review. Anyone can re-open, re-review or close snippet reviews, however, only the creator of a snippet review can delete it.

You can see your own snippets, or everyone's snippets, by choosing **Reviews > Review dashboard**. See Sear ching Crucible for information about filtering snippet reviews.

Screenshots: Creating a Snippet Review (click to view larger images)



Step 1 Step 2

#### Creating reviews from the command line

You can use the Review CLI tool to create reviews in Crucible, for patches and commits, directly from your terminal. It takes the uncommitted changes in your workspace and creates a review for them in Crucible. The Review CLI tool may be especially useful if:

- you often create pre-commit reviews
- you want to submit a diff from an external tool for review

You can use the tool on Windows, Linux and Mac OS X, for repositories that are managed in:

- Subversion
- Perforce
- Git
- Mercurial
- CVS

The tool supports Crucible 3.0, and later versions. Python 2.7 must be installed on your local machine (Python 3 is not supported).

You can use the tool to create new reviews, and to update existing reviews with new patches.

#### Known limitations

- The CLI tool does not yet allow you to create a review for an existing commit.
- The CLI tool takes all the files that have been modified, added or removed in the working copy and submits those for review. It doesn't support choosing only files associated with a specific changeset.
- You can only use the CLI tool to create reviews in projects for which you already have review create perm ission.

#### On this page:

- Installing the Review CLI tool
- Python
- Using the Review CLI tool

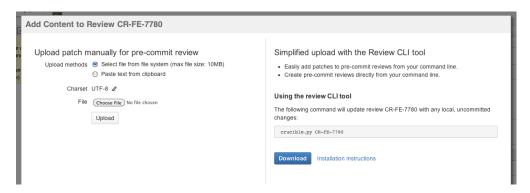
#### Related pages:

- Creating a review
- Adding content to the review

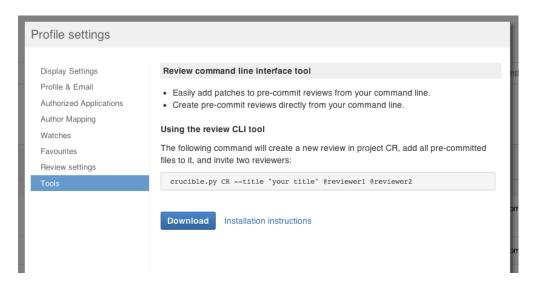
Installing the Review CLI tool

Download the Review CLI tool from either of the following locations in Crucible:

When creating a review, click Pre-commit in the 'Add Content to Review' dialog, then click Download:



• Choose Profile settings from your user menu, and then Tools. Click Download:



The script comes pre-configured for the user for the given SCM server.

Copy the script to a location somewhere in your system path, for greatest ease of use.

**Python** 

Python 2.7 is required.

Linux

Python 2.7 should come with your distribution. If not, or if 2.7 isn't installed, you will need to install the appropriate package. Please refer to your package manager for the appropriate version.

Windows

You can install Python by running the latest Python 2.7 Installer for Windows.

#### MacOS X

Python 2.7 should come with any modern version of MacOS X. You can also download Python 2.7 from http://www.python.org/getit/.

**Using the Review CLI tool** 

To create a review using the Review CLI tool, run the script from a directory under SCM control that has local, uncommitted changes. The changes will be submitted to Crucible for review.

Call the script with the following command:

```
crucible.py <arguments list>
```

The Review CLI syntax is consistent with that for Crucible and FishEye smart commits. Examples of syntax usage are provided in the following table:

Action	Syntax	Result
View usage help	crucible.pyhelp	Displays the help with descriptions of all the valid commandline arguments
Create a pre-commit review interactively	crucible.py	Gets the patch from the current SCM, prompts for the project and review title, and creates a draft review
Create a pre-commit review with a given project and title	crucible.py -m "the review title" CR-FE	Gets the patch from the current SCM, creates a draft review in the CR-FE project with the given title
Create a pre-commit review with moderator and reviewers	crucible.py CR-FE @matt @joemoderator ted	Gets the patch from the current SCM, creates a review in the CR-FE project, adds matt and joe as the reviewers and ted as a moderator, starts the review
Create a pre-commit review anchored to a specific repository	crucible.py -r repol	Creates a pre-commit review interactively, trying to anchor the patch to the given repository
Add a patch to a review	crucible.py CR-FE-1204	Gets the patch from the current SCM and adds it to the review CR-FE-1204
Create a review from diff output	hg diff   crucible.py	Creates a pre-commit review interactively, taking the output of the first command as a patch
Create a review from a diff file	crucible.py -f file.diff	Creates a pre-commit review interactively, taking the output of the patch from the given file

## Adding content to the review

This page explains how to add content, such as files and changesets, to a Crucible review. The procedure depends on whether you are setting up a post-commit or pre-commit review:

- Post-commit reviews You want code changes that have already been committed to the SCM to be reviewed. In Crucible, you can browse and search for files or changesets in the SCM, which you then add to the review. Crucible can suggest files that should be considered for review, based on recent activity.
- Pre-commit reviews You want code changes that have not yet been committed to the SCM to be

reviewed. In Crucible, you need to add patch files to a pre-commit review.

#### Related pages:

- Creating a review
- Iterative reviews
- Choosing reviewers
- Performing the review

Note that Crucible supports 'iterative' reviews – for both post-commit and pre-commit reviews you can update the review with new versions of files, and changesets, created after the review was started.

#### On this page:

- General procedure
- Selecting changesets for review
- Selecting repository files for review
- Searching for files to review
- Adding patch files to a pre-commit review
- Adding attachments to a review
- Choosing the way files are added to the review

#### **General procedure**

#### To add content to a review:

- 1. Log in to FishEye/Crucible and either;
  - Create a new review, as described on Creating a review, or
  - Open an existing review, for which you are the creator or moderator, and click the Add Content ( ) button.
- 2. In the 'Add Content to Review' dialog, click an option for how you wish to add content to the review, and then follow the instructions in the relevant section below:

Post-commit reviews	
Browse Changesets	Allows you to choose changesets from a Source Code Management (SCM) repository. See Selecting changesets for review below.
Explore Repositories	Allows you to browse for files in a SCM repository. This option only appears when FishEye is installed. See Selecting repository files for review below.
Search for Files	Allows you to search a SCM repository for files or changesets. This option only appears when FishEye is installed. See Searching for files to review below.
Pre-commit reviews	
Pre-commit	Allows you to upload patch files to a review. See Adding patch files to a pre-commit review below.
All reviews	
Attachments	Allows you to upload any file to a review, including binary files and files outside of a SCM repository. See Adding attachments to a review below.

3. Click **Done** to save your changes, without starting the review.

#### Selecting changesets for review

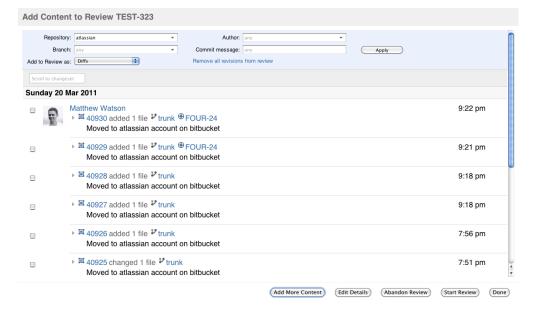
Click Browse Changesets in the 'Add Content to Review' dialog to add SCM changesets to your review.

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 dialog:

Repository	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	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.
Commit message	Filter for specific commit messages.
Add to Review as	Choose the form of the review. See Choosing the way files are added to the review below.
Scroll to changeset	Allows you to jump to a particular change set by entering its title and pressing Enter.

Select the checkbox next to a changeset ID to add the entire changeset. Note that:

- You cannot add individual file revisions to a review, although you can remove them once the changeset is added. Click **Remove all revisions from review** to remove all.
- You cannot add changesets that are entirely synprops changes (i.e. it has no non-metadata changes).
   For details, see How do I force reviews to include SVN property changes?



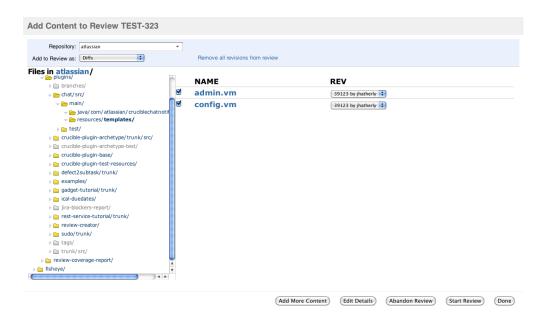
#### Selecting repository files for review

Click **Explore Repositories** on the 'Add Content to Review' dialog to browse the SCM repositories for files to add to your review:

- By default, the folders are sorted by path name but they can also be sorted by last-commit or first-commit.
- To select a particular revision of a file, select Load full history... from the revision number list. This will
  refresh the available options in the list.

#### Note that:

- Empty folders are greyed out.
- The 'Cog' menu has options to Hide empty directories and to Hide deleted files.



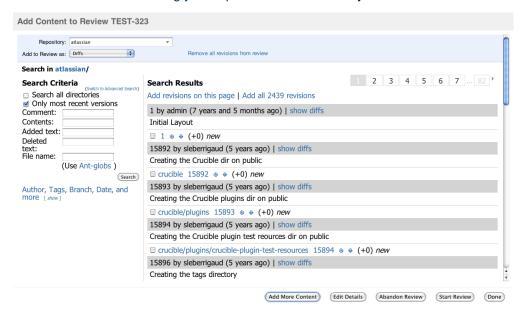
#### Searching for files to review

Click **Search for Files** on the 'Add Content to Review' dialog to search for files to add to your review.

A Search is only available when using FishEye with Crucible.

Adjust the search filters to find the files you need. If the simple filters are not enough, consider using EyeQL queries.

Read more about searching your repositories in the FishEye documentation.



#### Adding patch files to a pre-commit review

Click **Pre-commit** on the 'Add Content to Review' dialog to add previously created patch files to a pre-commit review.

Choose an upload method:

Select file from the file system	<b>Charset</b> – click the edit icon (∠) to choose the character set being used. UTF-8 is the default.	
	<b>Choose File</b> – click to to browse for the file that you want to add to the review.	
Paste text from clipboard	Patch text — paste your copied text in this text area.	

For more information see Creating patch files for pre-commit reviews.

#### Add Content to Review TEST-400

### Upload patch manually for pre-commit review



#### Patch anchoring

A short-coming of patches for code review is the reduced context around code changes because the patch does not include all lines of code from the file. Crucible 'patch anchoring' overcomes this by searching for the relevant file content in the connected repositories, and automatically anchoring the patch to the trunk or the branch with the most recent commit activity. Crucible can then seamlessly display more context, as required.

See Using Crucible patch anchoring for more information.

#### Adding attachments to a review

Click Attachments on the 'Add Content to Review' dialog to add attachments to your review.

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

Charset	Click to choose the character set being used. UTF-8 i s the default.
Choose File	Browse for a file that you want to add to the review.
Upload	Browse for a file that you want to use as the base of a diff with a previously attached file.

To add another iteration of a file, upload a different version of the file with the same filename. It will be added as a new version.



Choosing the way files are added to the review

When adding files to a review, you can set the form of review taking place in the Add to Review as list:

Diffs	This is the default. This allows you to add multiple revisions of a file to one review and compare them in-review, in context with the change history.
Whole Files	Adds the entire file with all content, rather than just a diff with context.
Diffs to Last Branch Point	This adds files with a diff to the revision each file was last branched.
Diffs to Last Reviewed Version	This adds files with a diff to the last reviewed changeset.
Diffs to (a particular revision)	This allows you to specify the file to show the differences between two specific versions of a file.

Click **Done** once you have finished selecting the required files. The files will be added to your review and the review will be displayed.

#### Iterative reviews

Crucible supports iterative (cumulative, or incremental) reviews for both post-commit and pre-commit reviews. This allows you to update the review with new versions of files, and changesets (for post-commit reviews) or patches (for pre-commit reviews) that have been created after the review was started.

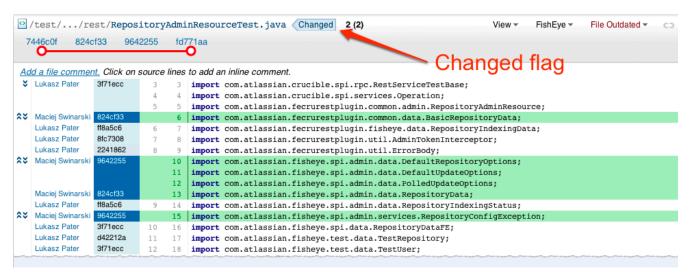
Iterative reviews allow your team to discuss changing code in the context of a single review. This lets the reviewers see all the related changes together, and to more easily keep track of comments and defects.

#### On this page:

- Iterative post-commit reviews
- Iterative pre-commit reviews
  - Initial patch upload
  - Iterative patch uploads
- Viewing diffs

Iterative post-commit reviews

To set up an iterative post-commit review, you create a review, and add content to it, in the usual way. Crucible automatically recognises when files under review have been updated in the repository, and provides the option to add the revision to the review.



See Viewing diffs below for information about the slider and diffs.

Iterative pre-commit reviews

Pre-commit reviews make use of patch files that are uploaded to a review. Crucible allows revisions of patch files to be uploaded to the review, and can display diffs for files in the patches. This allows your team to set up and perform iterative pre-commit reviews.

See Creating patch files for pre-commit reviews.

#### Initial patch upload

When uploading the initial patch for a review, Crucible must be able to anchor the patch to a repository if you subsequently want to upload patch iterations. If Crucible is unable to anchor the patch to a repository, you will only be able to upload the patches as separate files.

You upload the initial patch for a review in the usual way – see Adding content to the review.

#### Iterative patch uploads

When you add a new iteration of the patch to the review, you can choose which previously uploaded patch it is a revision of. The new patch must be anchored to the same repository as an existing patch.

Note that you cannot add unanchored patches, even if they include full-context diffs. You can include an unanchored *file* in the anchored patch, however Crucible is unable to provide full context for that.

### Add Content to Review CR-10

### Upload patch manually for pre-commit review

Upload methods

Select file from file system (max file size: 10MB)

Paste text from clipboard

Charset UTF-8 

File Choose File No file chosen

Upload

### Existing patches in CR-10

CR-10-patch-0.txt (8 minutes ago) - 2 iterations

- CR-10-patch-0.txt: (anchored to svnsample1 : / )

  - trunk/to-be-modified

  - trunk/copied-and-modifie2
  - trunk/added
- CR-10-patch-1.txt: (anchored to svnsample1 : / )

#### Viewing diffs

Crucible allows the reviewer to see the different revisions of a file within the same review. The 'slider' in the file view allows you to interactively select which revisions are compared in the displayed diff, and to see the full source content. Comments are connected to, and displayed with, a specific revision. This allows you to review every change that has occurred on a code file over a given range of commits, and lets you see the evolution of the file through various revisions (all within one Crucible review).

These screenshots show how, for a post-commit review, you can drag the slider 'handles' so as to display just the changes in the last commit:



Drag the 'handles' to the same commit to see the full source of that version of the file.

When viewing patch files in a pre-commit review, the slider displays the diff for the selected iterations, in a similar way to that for post-commit reviews. Each patch iteration is referred to as a 'working copy'.



### Creating patch files for pre-commit reviews

This page describes how to create patch files from your local repository, how to attach them to a Crucible review and how to use Crucible's Patch Anchoring to retrieve more context from the original file.

A patch file is a portion of a source code file that contains the code changes that you have made – it's a diff that shows the differences between your working copy and the base revision.

A pre-commit review in Crucible allows a developer's code changes, in the form of a patch file, to be reviewed before those changes are committed to the SCM. A typical scenario is where the developer does not have write access to the repository. The developer creates the patch file and adds it to a Crucible review. Once reviewed, the patch is either committed to the repository or is sent back to the author.

You can create the patch file from your local repository:

- using tools in your IDE described below
- using repository command-line tools
- using the Crucible Review CLI tool see Creating reviews from the command line



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

As an enhancement, Crucible's patch anchoring adds context:

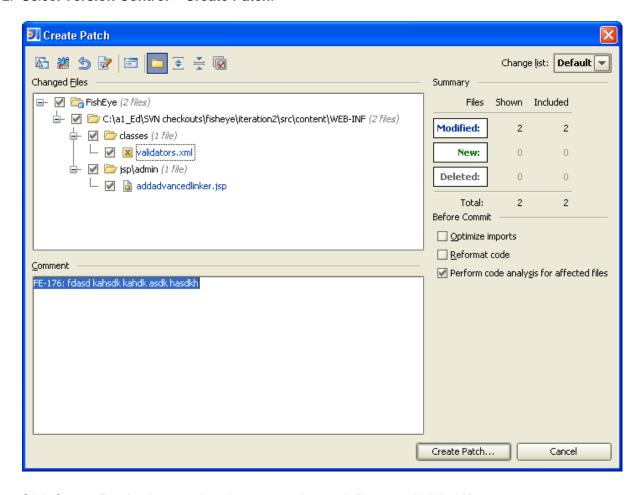
- By default, patch files will only show a few lines of code surrounding each change, rather than the entire file and its changes. This feature overcomes this limitation.
- Note however that anchoring is done as an afterthought, and can be reverted.

On this page:

Creating a patch file from IntelliJ IDEA 7.0

1. Select a parent folder, sub-folder or file that you have altered, in the Project tool window.

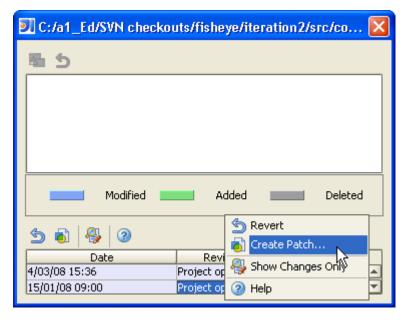
2. Select Version Control > Create Patch:



3. Click  $Create\ Patch$ , choose a location to save the patch file to, and click OK. If you do not have the Create Patch command available in 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**.



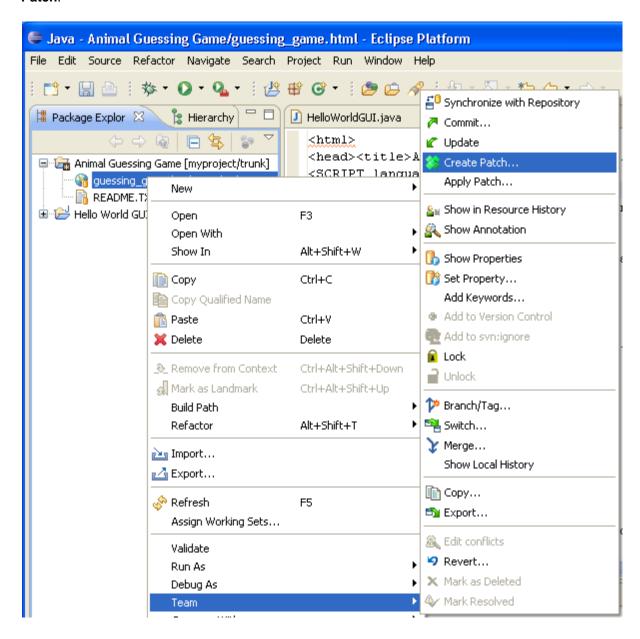
2. In the Local History view, right-click the revision number, and choose Create Patch.



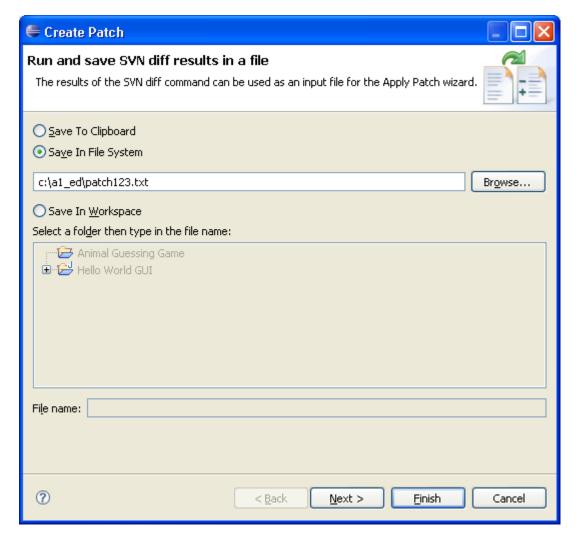
3. In the Create Patch dialog, choose a location for the patch file and a file name, then click **OK**.

Creating a patch file in Eclipse 3.3.1.1

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



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



Creating a patch file from the command line

Use the following commands to create patch files from the respective SCMs. patch.txt represents your name for the new patch file.

SCM	Command	Notes
cvs	cvs diff -Nu > patch.txt	Creates a patch file with around three lines of code, before and after each change.
		Revision information is included by default, so if you have FishEye, you may be able to anchor the patch to get full context.
	cvs diff -N -U 10000 > patch.txt	Creates a patch file that shows all code in the file.  10000 refers to the number of code lines before and after each change that are included in the patch.

SVN	<pre>svn diff &gt; patch.txt</pre>	Creates a patch file with around three lines of code, before and after each change.
		Revision information is included by default, so if you have FishEye, you may be able to anchor the patch to get full context.
		svn diff does not print any information about files copied in the workspace.
	svn diffdiff-cmd diff	Creates a patch file that shows all code in the file.
	-x "-U 10000" > patch.txt	<ul> <li>The built-in diff feature in svn diff does not support specifying lines of context, so you must tell Subversion to use an external diff command.</li> <li>The second diff in the command 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.</li> <li>On the Windows platform, you may need a Unix-like emulator such as Cygwin, and install the optional diff command for that.</li> </ul>
Perforce	p4 diff -dcu > patch.txt	Creates a patch file with around three lines of code, before and after each change.
		Revision information is included by default, so if you have FishEye, you may be able to anchor the patch to get full context.
		The -dcu option provides a combination of "context format" and "unified format". It provides the diff in a standard unified diff format (which we need to parse the diff) as well as revision information (which we need to anchor to FishEye).

	<pre>diff -u /dev/null path_to_added_file &gt;&gt; patch.txt</pre>	Example of using GNU diff to ap pend files individually to the patch in UNIX.
		Since Perforce diffs do not include added and deleted files, you should use p4 opened to find such files.
		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.
	Perforce does not directly suppor lines of code. A workaround is to che of the file, and use GNU Diff to creat That file could then be loaded into a	eck out 'before' and 'after' versions te a patch between the two files.
Mercurial	hg diff > patch.txt	Creates a patch file with around three lines of code, before and after each change.
		Revision information is included by default, so if you have FishEye, you may be able to anchor the patch to get full context.
		If you use Git-style diffs (git), the revision information will not be provided. This means that we cannot anchor the patch to a FishEye repository.
Git	git diff > patch.txt	Creates a patch file with around three lines of code, before and after each change.
		Revision information is included by default, so if you have FishEye, you may be able to anchor the patch to get full context.

Using Crucible patch anchoring to automatically add full context

Crucible's Patch Anchoring feature allows you to add a regular patch (showing only a few lines of context) to a review. 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 files so that you can view all of the lines of code (greatly enhancing the review process).

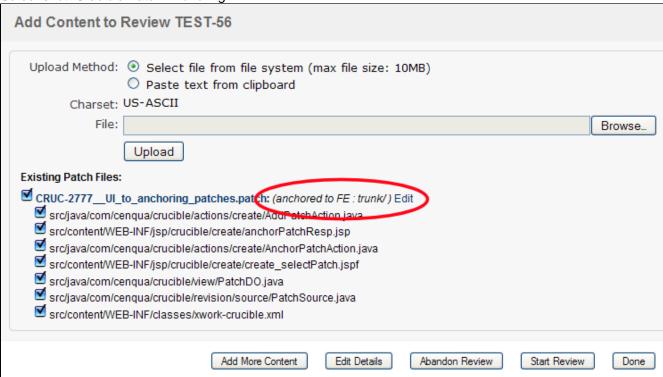
### To use patch anchoring:

- 1. Click **Create review** in the Crucible header.
- 2. Click **Pre-commit**. In the dialog that appears, click **Choose File** to locate your file, then **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.

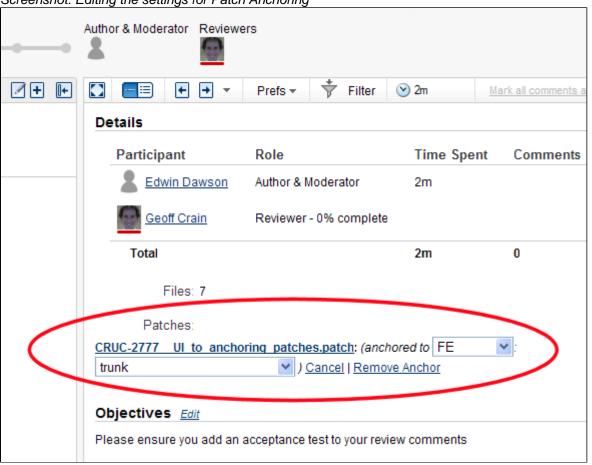
① Crucible makes a 'best guess' in its processing – you should check that it has anchored the patch to the correct location in your repository.

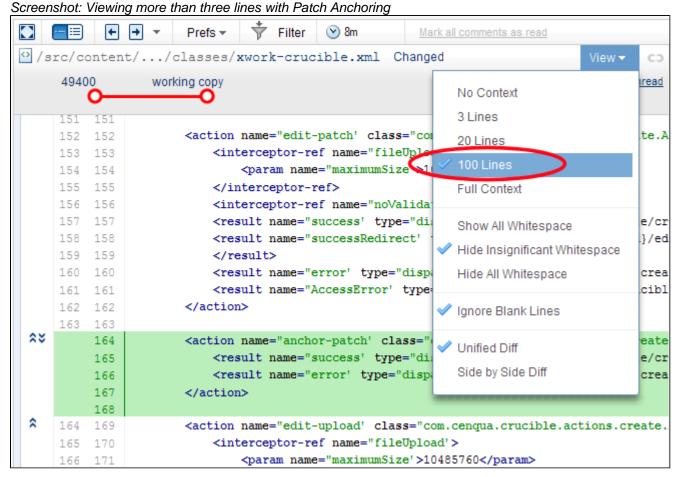
- You can click **Edit** to change the anchoring, by choosing a new match or removing the anchor. You can change the anchoring later, after the review is live.
- Start the review. When viewing the diffs, you will be able to choose more than three lines of context from the View menu.

Screenshot: Crucible Patch Anchoring



Screenshot: Editing the settings for Patch Anchoring





### **Choosing reviewers**

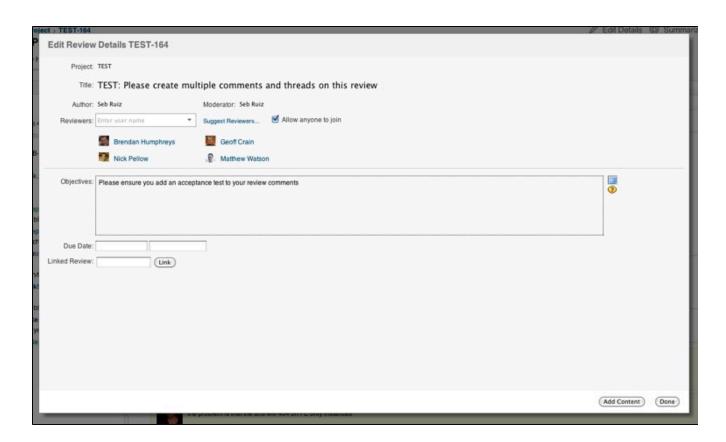
This page explains how to add reviewers to a new review, after it has been created. See Creating a review for information about creating reviews.

#### On this page:

- Entering basic information
- Adding and removing reviewers
  - Adding users to a review
  - Suggested reviewers
  - Inviting unregistered users to the review
  - Removing reviewers
- Checking the draft and starting the review
- Next steps

#### **Entering basic information**

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



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, described next.

#### Adding and removing reviewers

Before a review can be started, you need to choose reviewers. When adding reviewers, you can add Crucible users immediately.

You can also invite external users who do not have an account in Crucible by typing their email address into the Reviewers field.

#### Adding users to a review

Choose reviewers from the available Crucible users by typing names into the **Reviewers** field. The users who are available to be reviewers is determined by the project's settings for **Default Reviewers** – see Creating a project.

Click **Done** to save the review as a draft for later issue.

You can also allow any Crucible user to add themselves as a reviewer by selecting Allow anyone to join.

#### Suggested 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 unregistered users to the review

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



1 There are two prerequisites:

- FishEye's SMTP server must be configured and capable of sending email.
- The Public Signup setting must be set to ON. Go to the Admin area and click on Authentication,

under 'Security Settings', and look in the 'Built-in' section.

#### To invite an external user to a review:

- 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.

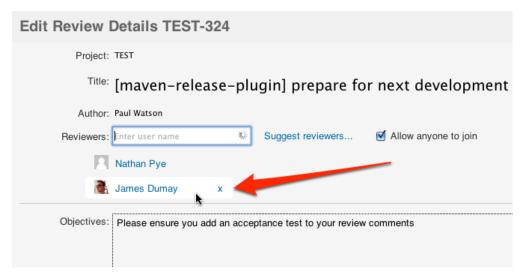
1 You can enter multiple addresses separated by commas, allowing you to paste in a list of email addresses from your favourite email application.

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

#### Removing reviewers

You can remove reviewers who no longer need to contribute to the review.

Click Edit Details to open the 'Edit Review Details' screen, hover over the reviewer's name, and click the cross.

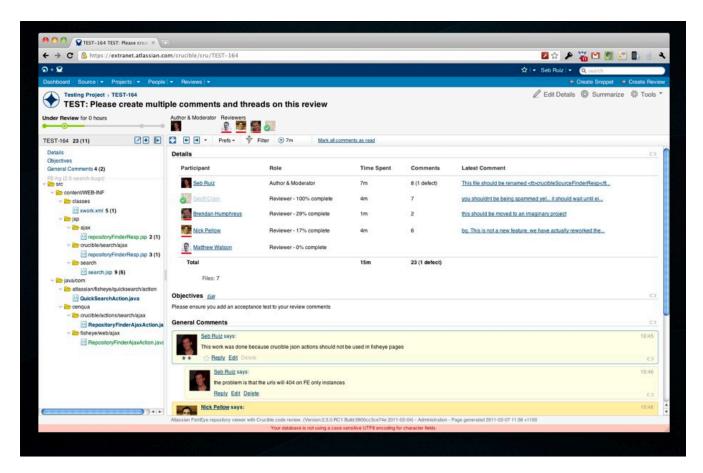


#### Checking the draft and starting the review

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 Starting a review.

### Performing the review

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

#### On this page:

- Browse your reviews on the Dashboard
- Browse all reviews on 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 on the Dashboard

When you first start Crucible, the Dashboard is displayed, which shows your current reviews and other activity related to you.

Use the 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. The reviews then move to the **To** Summarize list.

Read more about using the Dashboard.

#### Browse all reviews on the 'Reviews' tab

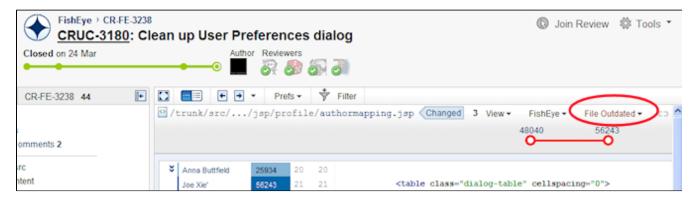
All reviews that involve you in any role are listed when you click Inbox or Outbox under the Reviews menu. For

example, choose Reviews > Inbox to see reviews that don't require further action from you, but are still active.

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.

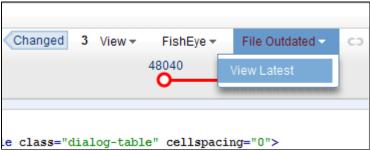
#### When files change during a review

If a file in the repository changes during a review, Crucible will visually alert you by showing the **File Outdated** m enu, when viewing the file:



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

- Starting a review
- Adding comments
- Changeset discussions
- Flagging defects
- Creating JIRA issues from the review
- Viewing reports
- Completing your review
- Using the Review History Dialog
- Using RSS feeds in Crucible
- Using Wiki Markup in Crucible
- Tracking Crucible Review Metrics

### Starting a review

#### On this page:

- Starting a review
- · Editing a review once started

#### Starting a review

Starting 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

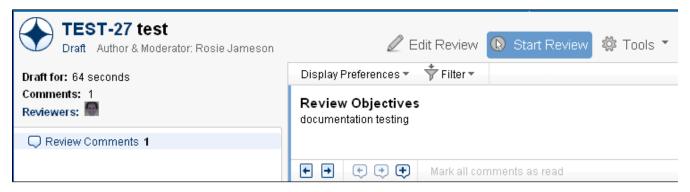
moderator) that they can start reviewing. The review has been in 'Draft' state until this point. Only the moderator has the permission to start a review.

To start the review:

- If you are the moderator of the review, click **Start Review**.
- If you are not the moderator of your review, click Send to Moderator. This changes the state to 'Requires
  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



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

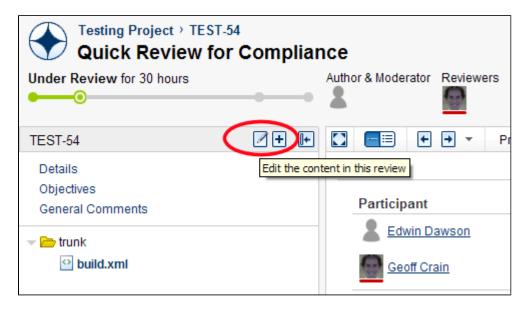
Editing a review once started

You can quickly add files to, or remove files from, the content of a review at any time:

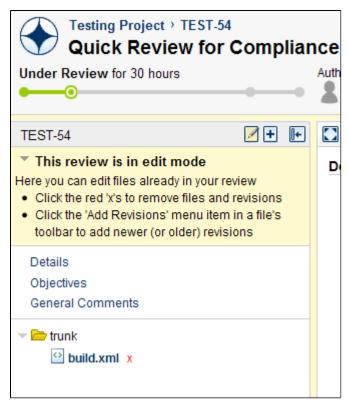
- Add files to a review by clicking the 'Add content' button.
- Remove files by clicking the 'Edit' button in the left navigation panel, then clicking the red cross icons beside files to be removed.

You can edit all the details of a review, including the content, by clicking **Edit Details** near the top right of the review.

Screenshot: Launching Edit Mode



Screenshot: Crucible Edit Mode for Review Content



### **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:

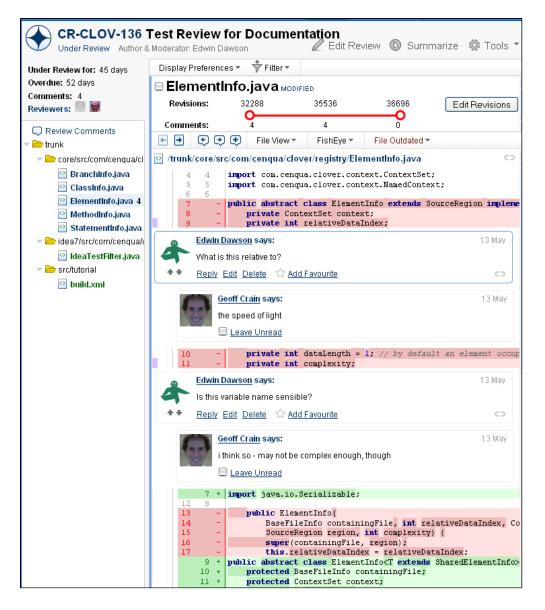
- Locating existing comments
- Adding comments
- Draft comments

Locating existing comments

The number beside a filename, in the left-hand panel of a review, indicates the number of comments on that file.

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

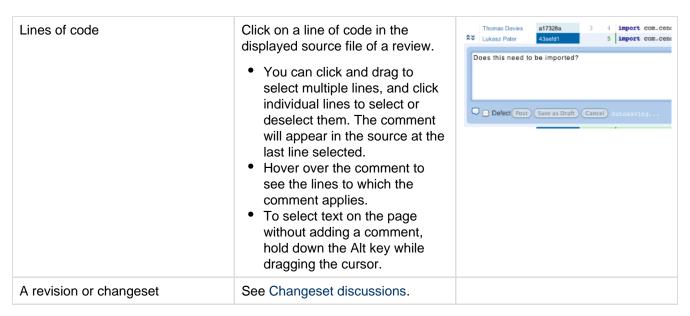
Screenshot: Comments



#### Adding comments

There are various types of comments that you can add in Crucible:

To comment on	Do this	
The whole review	Click <b>General Comments</b> (in the left-hand panel), then <b>Add a general comment</b> (under 'General Comments').	General Comments  Lukasz Pater says: Piggybacking ProjectListResource here, as it's a similar programment.  Piggybacking ProjectListResource here, as it's a similar programment.  Piggybacking ProjectListResource here, as it's a similar programment.  Piggybacking ProjectListResource here, as it's a similar programment it's Reply Leave Unread Create Issue  Add a general comment.
A source file under review	Click on the file in the left-hand panel, then click <b>Add a file comment</b> (just above the source code listing).	Add a file comment. One on source lines to add an inline con  Thomas Davies a17328a 1 1 package com.atlassian.  2 2  Lukasz Pater



To reply to a comment, click **Reply** at the bottom of the comment.

Only people with the 'Comment' permission can add comments. A comment can only be deleted by the author of the comment.

Read about flagging defects too.

#### **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.

### **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.

1 You need to be logged in to create changeset comments.

Adding comments to changesets

#### To add a comment to a changeset:

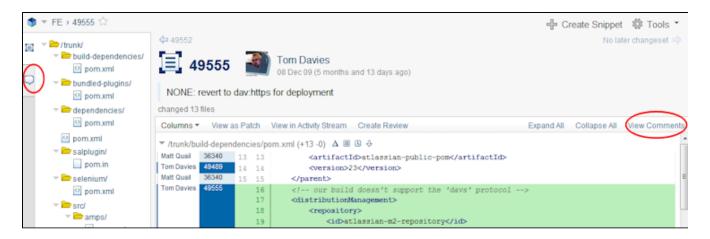
- 1. Click on a changeset on the **Commits** tab for the repository. Display comments by clicking **Discuss** at the upper right corner, or the speech bubble icon in the left margin.
- 2. Click **Add a comment** (under the repository details near the top left).
- 3. Type your comment. If required, you can tag your comment as being a defect note by clicking **Defect**.
- 4. Click Post.

Once submitted, others can respond to your comment by clicking **Reply**. Replies are threaded as separate comment discussions. You can right-click on the permalink icon to copy a link to the comment. The comment author can edit or delete their own comments.

To hide the changeset comments, click the page icon . You can display the comments panel by clicking the speech bubble icon again.

As you compose a comment, it will auto-save periodically.

Screenshot: Opening Changeset Discussions



Turning changeset discussions on and off

You can turn off changeset discussions in the Admin area:

- 1. In the Admin area, click **Repositories** (under 'Repository Settings' on the left).
- 2. Find your repository and choose View from the 'cog' menu in the Actions column.
- Click Other Settings in the left panel.
- 4. Under 'Changeset Discussions' clear the Allow changeset discussions checkbox.

By default, changeset discussions are on.

#### **Notifications**

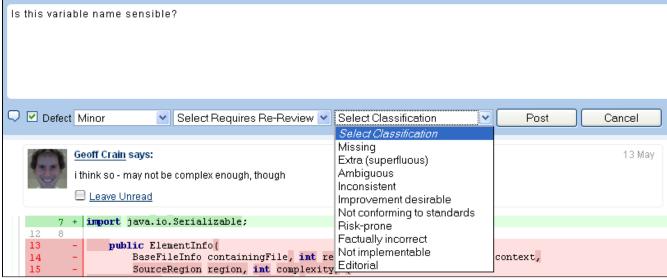
- · Comments show up in the activity stream,
- The author of the changeset will get email notifications when comments are added,
- Comment authors will get email notifications when someone replies to their comments.

### Flagging defects

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

To do this, simply check **Defect** when adding a comment and select a category from the drop-down list.

# Screenshot: Defects



You may want to mark comments as defects in order to associate defect classifications, or simply to highlight to the author or moderator that the issue you raised in your comment requires attention. You can use the **with defects** filter to find files that have been flagged with defects.

① Crucible intentionally does not mandate how defects are to be used. The Crucible administrator can customis e the defect classifications.

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

### Creating JIRA issues from the review

From any review comment (general, file, inline) in Crucible, you can create a JIRA issue directly from the comment. This requires that Crucible is integrated with JIRA, version 5.0 or later, and is disabled if you have an earlier version of JIRA.

Inline issue creation allows:

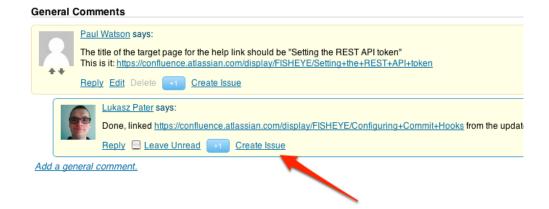
- Tracking of the status of the comment
- A faster way to pull out incidental suggestions raised in reviews as JIRA issues
- A quick link back to the comment from the JIRA issue, using Remote Issue Links.

You might find this useful when:

- 1. Tracking the status of a review:
  - a. The 'Issues Raised from Comments' section in the review shows the open/closed status of related issues.
  - b. Raising related issues enforces dealing with subtasks before the review can be closed.
- Closing off a review:
  - a. You can create JIRA issues, unrelated to the current review, to track matters to be dealt with later.

#### Creating a JIRA issue

To create a JIRA issue from a review, click **Create Issue** in an existing comment. Note that you need the 'Comment' permission in Crucible to see the **Create Issue** link.



Crucible suggests a JIRA instance, project and issue type, but you can choose from the available options. You can choose **Sub-task** from the **JIRA Issue Type** list if a JIRA issue is already linked to the review.

Crucible only displays required fields for the issue type; these can be configured in JIRA by your administrator.



Once the issue is created, the comment displays a link to the issue in JIRA, and in JIRA, the issue displays a link back to the comment in Crucible. The 'Issues raised from comments' section of the review displays links to the JIRA issues.

See Creating a review from JIRA.

### Viewing reports

This page describes 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'.

#### On this page:

- Viewing the Review Blockers report
- Viewing the JIRA Blockers report

#### See also:

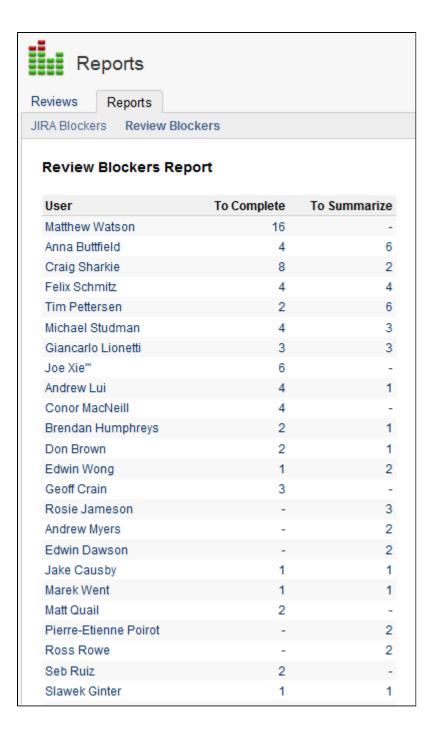
Viewing the Review Coverage report

Viewing the Review Blockers report

To view a list of people who have open reviews assigned to them:

- 1. Click the dropdown arrow next to the **Reviews** tab at the top of the page and select **Reports**.
- 2. Click Review Blockers (under the 'Reports' sub-tab).
  - 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 a list of reviews for that user

Screenshot: 'Review Blockers' Report



Viewing the JIRA Blockers report

The 'JIRA 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.

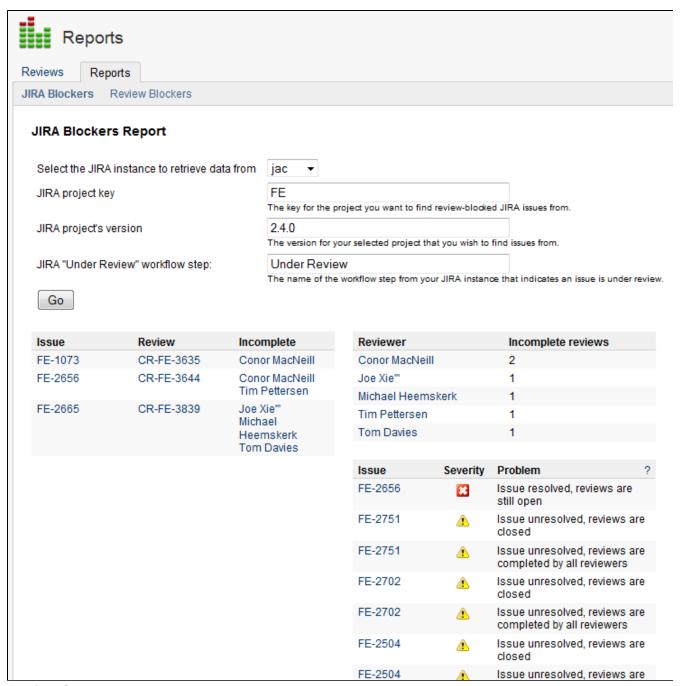
To view the 'JIRA Blockers' report:

- 1. Click the dropdown arrow next to the **Reviews** tab at the top of the page and select **Reports**.
- 2. Click JIRA Blockers (under the 'Reports' sub-tab).
- 3. Enter details for your JIRA server and project, and click Go.

The 'JIRA Blockers' report displays the following information:

- 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.

Screenshot: 'JIRA Blockers' Report



**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, and which files, in your repository have been reviewed, and when. You can also access the reviews.

1 This feature requires FishEye integrated with Crucible.

#### On this page:

- Opening the Review Coverage report
- Using the Summary Panel
- Using the Review Coverage Overview
- Using the Individual Committer Stats panel
- Using the Changesets panel

Screenshot: The Review Coverage report



#### Opening the Review Coverage report

#### To open the Review Coverage report:

- 1. Click **Repositories** and choose a repository. The repository you chose sets the scope for the report.
- 2. If desired, navigate down the tree (in the lefthand panel) and click the desired path you want to view coverage on.
- 3. Click **Reports** in the secondary toolbar.
- 4. Click Review Coverage from the list of reports in the upper panel.

1 You can view coverage of any path by navigating 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 displays the following metrics for your selected repository:

- 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

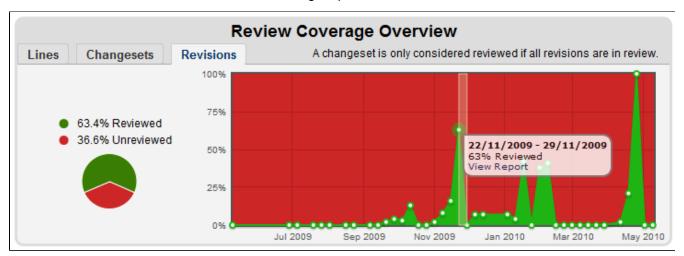


#### Using the Review Coverage Overview

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 Stats panel

The Individual Committer Stats panel 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 A	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

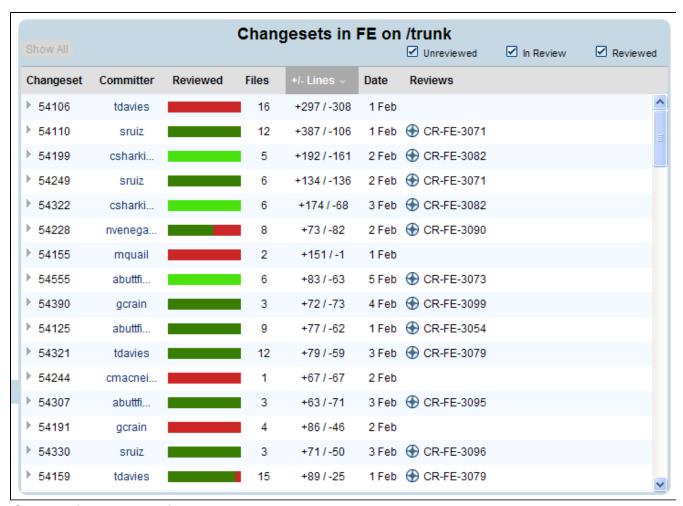
#### Using the Changesets panel

The Changesets 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 panel in the Review Coverage report



# Completing your review

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

To complete your individual review, go to the review and click **Complete** at the top of the screen, next to the **Too Is** menu:



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

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

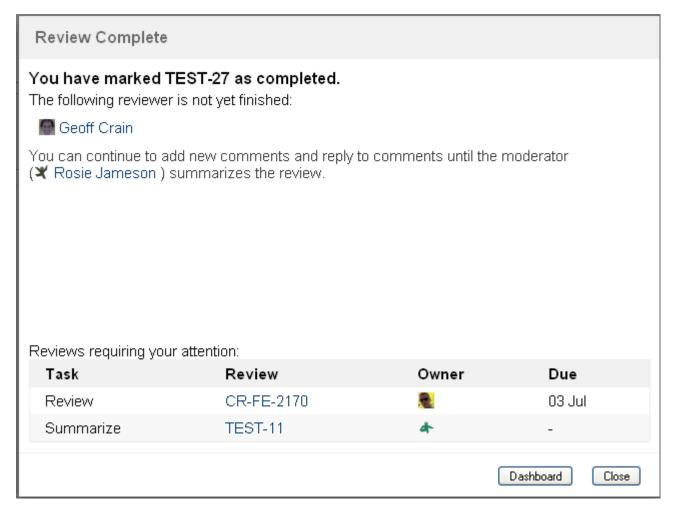
Reviewers can still continue to add comments until the moderator summarises the review. The moderator does **not** have to wait for all reviewers to complete their individual reviews before summarising.

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

Screenshot: Draft comments

Warning
You have draft comments  Draft comments that aren't posted will be deleted.
View drafts Delete drafts Post drafts
Complete Anyway Cancel

Screenshot: Review complete



# **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.

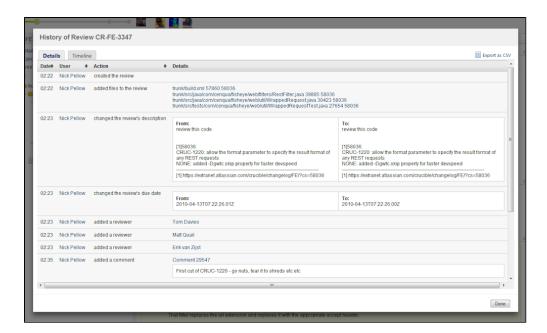
### To open the Review History dialog:

- 1. Open a review in Crucible.
- 2. Choose **Tools** > **View Review History** from the top right of the screen.

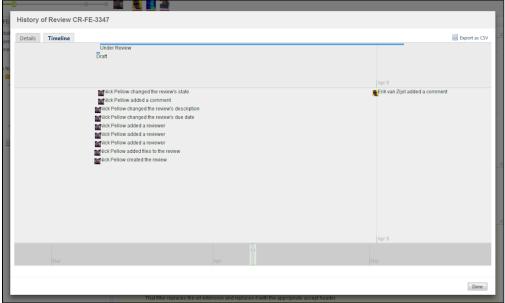
Click the **Timeline** tab at the top of the History dialog to see the review's events in a horizontal calendar. You can drag the calendar and the timeline at the bottom to scroll to other events.

Click **Export as CSV** near the top right to export the entire review history, 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



# Using RSS feeds in Crucible

### Subscribing to an RSS feed

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

Right-click the RSS icon and choose **Copy Link Address** to get the URL that you can paste into your RSS reader of choice.

Click the RSS icon to see a page with the RSS feed displayed.

# **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.

1 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 <b>bold</b> .
_italic_	Makes text appear in italics.
+underline+	Makes text appear <u>underlined</u> .
??citation??	Makes text appear in —citation form.
-strikethrough-	Makes text appear etruck through.
^superscript^	Makes text appear in <sup>superscript</sup> .
~subscript~	Makes text appear in 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	<ul> <li>A bulleted list</li> <li>Second item <ul> <li>indented item 1</li> <li>indented item 2</li> </ul> </li> <li>A numbered list</li> <li>Second item <ul> <li>a. indented item 1</li> <li>b. indented item 2</li> </ul> </li> </ul>

# 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	

```
{code}code goes here{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}.
{code:title=Bar.java|borderStyle=solid}
// Some comments here
                                                      The default language is Java but you can specify
                                                      JavaScript, ActionScript, XML or SQL.
public String getFoo()
{
                                                      Examples:
return foo;
}
{code}
                                                      Java with a title bar:
{code:xml}
<test>
                                                              Bar.java
<another tag="attribute"/>
                                                           // Some comments here
</test>
                                                           public String getFoo()
{code}
                                                                return foo;
                                                      A basic display with XML code:
                                                              <another tag="attribute"/>
                                                            </test>
```

#### Miscellaneous Markup Features

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

Notatio	n					Des	scrip	tion					
\X				Esc	Escape special character X (i.e. {)								
:), :(						Gra	phic	al emo	otico	ns (sn	nileys): 😃	, 😃 .	
Notati on	:)	:(	:P	:D	;)	(y)		(n)		(i)	(/)	(x)	(!)
Image	<u></u>	<u>#</u>	<u>_</u>	<u></u>	<u>e</u>	<u></u>		<del>_</del>		0	•	×	<u> </u>
Notatio n	(+)	(-)	(?)	(on)	(0	off)	(*)		(*r)		(*g)	(*b)	(*y)
Image	•		?	<u></u>		<b></b>	*		*		*	*	*

### **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.

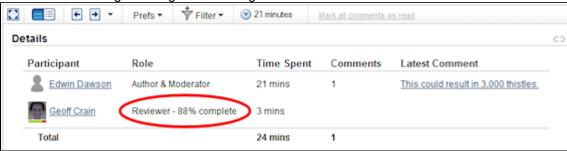
When participating in iterative reviews, progress tracking also takes lines of code and revisions into account.

#### Viewing the progress tracking totals

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

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

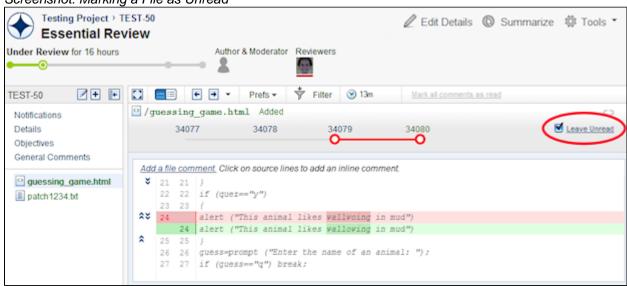
Screenshot: Viewing the Progress Tracking Totals



#### How to adjust progress tracking on a review

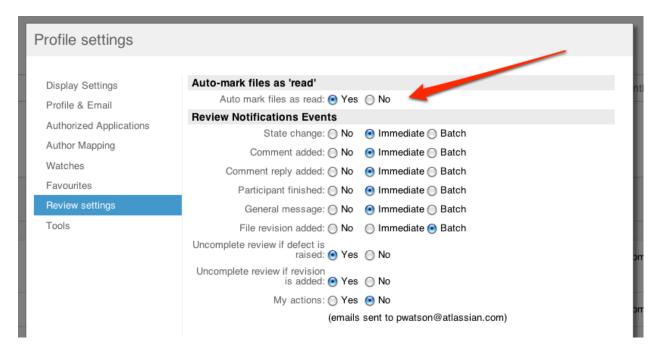
You can mark a file as unread by clicking on its name to view the file's contents, and then clicking **Leave Unread** (at the right of the file's toolbar). This file is now not included in your progress percentage.

Screenshot: Marking a File as Unread



#### Adjusting settings for progress tracking

Progress tracking is a configurable user preference – choose **Profile settings** from your user menu. On the **Rev iew settings** tab. **Auto-mark files as read** is on by default – when set to off, you have to mark files as read or unread yourself.



#### 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



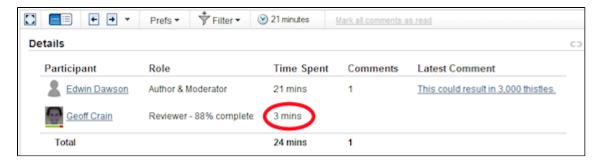
#### How to adjust the time tracked on a review

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' section 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.

# JIRA integration in Crucible

JIRA is Atlassian's issue tracking and project management application.

When Crucible is integrated with JIRA, you and your team get all the benefits described on this page.

In Crucible, you can:

- Link your Crucible review to a JIRA issue
- Create a JIRA issue from a review comment
- Transition JIRA issues from within Crucible
- · See issues from multiple instances of JIRA

# In JIRA, you can:

Create a Crucible review directly from an issue in JIRA

### Related pages:

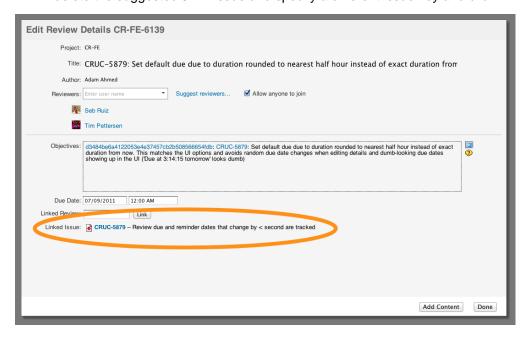
- · Creating a review from JIRA
- Creating JIRA issues from the review
- Transitioning JIRA issues
- Linking Crucible to JIRA

Note that your Crucible and JIRA instances must be configured to make use of these JIRA integration features. The Crucible project requires a linked JIRA project before issues can be linked to reviews. See Linking Crucible to JIRA.

Link your Crucible review to a JIRA issue

When creating, or editing, your review, Crucible will suggest a JIRA issue that can be linked to the review, if a JIRA issue key is found in the review title. You can:

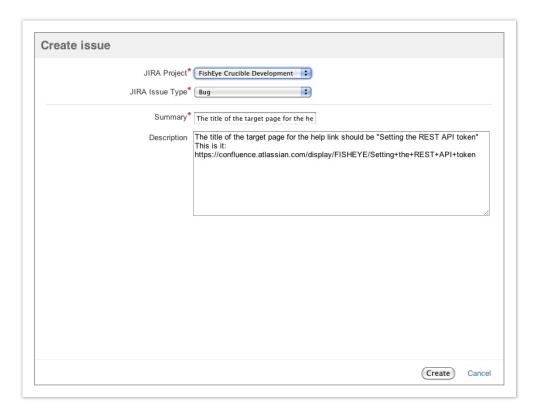
- click the suggested JIRA issue key, to link it to the review
- delete the suggested JIRA issue and specify a different issue key and click Link to save it.



#### Create a JIRA issue from a review comment

When viewing any review comment (genaral, file, inline), you can click **Create Issue** in the comment to create a JIRA issue. Crucible suggests the JIRA instance, project and issue type, but you can modify these. This requires JIRA 5.0, or later, and is disabled if Crucible is integrated with an earlier version of JIRA.

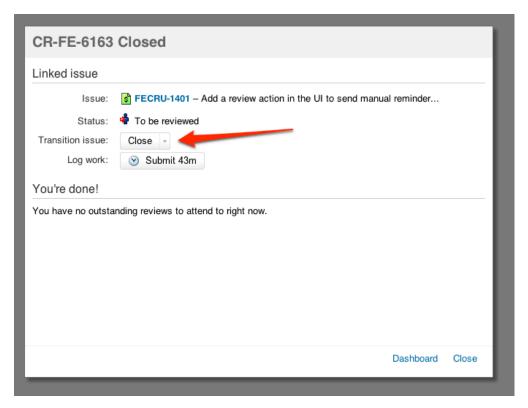
See Creating JIRA issues from the review for more details.



### **Transition JIRA issues from within Crucible**

For Crucible reviews that have linked JIRA issues, you can advance the JIRA workflow for the issue from within

Crucible. You can do this at any time by clicking the linked issue, or when you close the review:



See Transitioning JIRA issues for more details.

See issues from multiple instances of JIRA

Crucible can link to more than one JIRA server at a time, so different teams can work with their own projects in different JIRA instances, or a single team can link to issues across multiple JIRA servers.

# Summarising and closing the review

Summarize is an optional step before closing a review.

To enable or disable the Summarize step, you will have to configure the permission in your Permission Scheme. Crucible ships with two permission schemes:

- · 'Agile' the summarize step is disabled for all users
- 'Default' the summarize step is enabled for the moderator

You can choose to either *summarize a review* or *close a review* at any time, given that your Permission Scheme allows it. You can skip the summarize step by directly clicking **Close**.

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

Normally, we recommend that you wait for all reviewers to complete their reviews, before summarizing or closing the review.

The reviews that the reviewers have completed will be in your Ready to Close menu on the Dashboard.

To summarize a review,

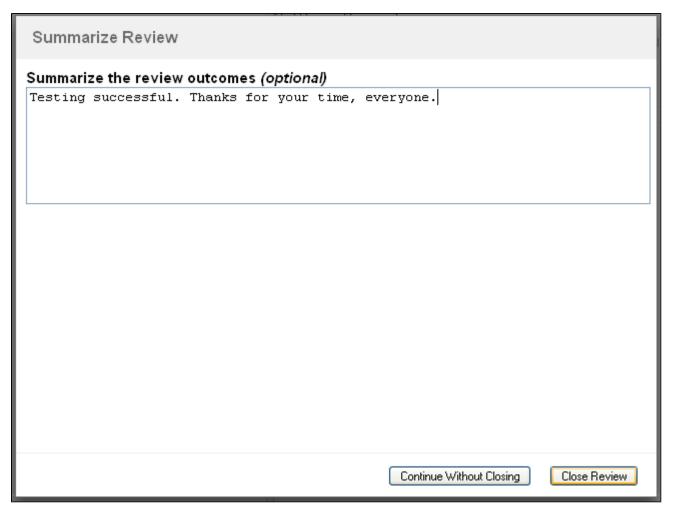
- Click **Summarize** at the right of the screen.
- Optionally enter a summary of the review.
- If you have no further comments to add, click Close Review; otherwise, click Continue Without Closing.
- On clicking Summarize, you may be prompted to confirm the action if there are incomplete reviews or draft comments in the review. These are warnings, however; the review can still be summarized and closed.

Screenshot: 'Summarize' button. We can see that Geoff Crain has still not finished reviewing, because there is

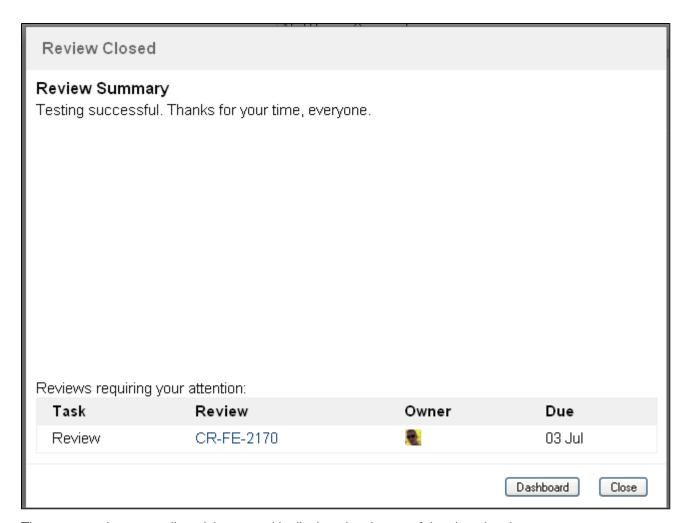
no green tick next to his name.



Once the review is in the 'Summarize' state, the moderator can optionally add a review summary, for example, to describe the outcomes/tasks/etc:



Screenshot: Review Closed



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

- Reviews in the 'Review' or '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.
- See this page for a list of the states that a review can be in.



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).

# Managing your reviews

#### See:

- Using Review Reminders
- Sending a review's comments via email
- Moving a Review to Another Project
- Deleting a review

### **Using Review Reminders**

Crucible will automatically send reviewers a reminder email one working day before the deadline.

Review authors and moderators can also do the following:

- Send manual reminders to reviewers whose work is still pending.
- Configure preset reminders for reviews that have a deadline.

Reminders are only sent if Crucible's SMTP server is configured. Please see Configuring the SMTP server.

#### **Preset Reminders**

When a review has a deadline (due date), you can have Crucible send a preset reminder to all of the pending

reviewers, some number of working days before the deadline.

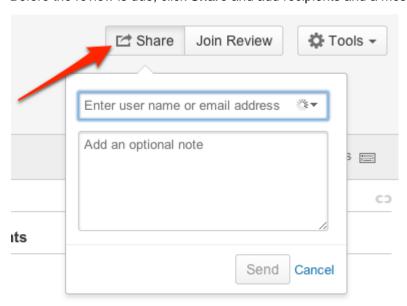
To add a reminder, firstly edit the review, then click **Add a reminder**. You can edit the reminder period.

1 The Send Reminder setting is only available if the review has a due date set.

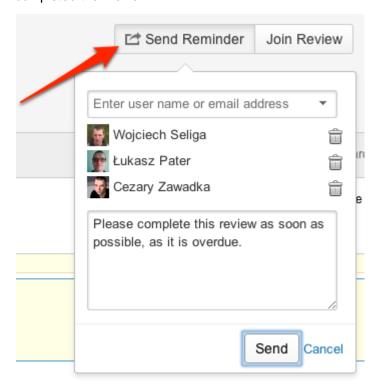
#### Manual Reminders

You can send a reminder to all the reviewers that have not yet completed their review:

Before the review is due, click **Share** and add recipients and a message:



If the review is overdue, click **Send Reminder**. The message is pre-populated with recipients who have not yet completed their review.



### Sending a review's comments via email

You can download all of the comments from a review as plain text, so that you can send that 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.

#### To send all of a review's comments via email:

- 1. In Crucible, navigate to the review in question.
- 2. Choose Tools > Download as Text.
- 3. Copy the on-screen text and paste it into an email.
- 4. Send.

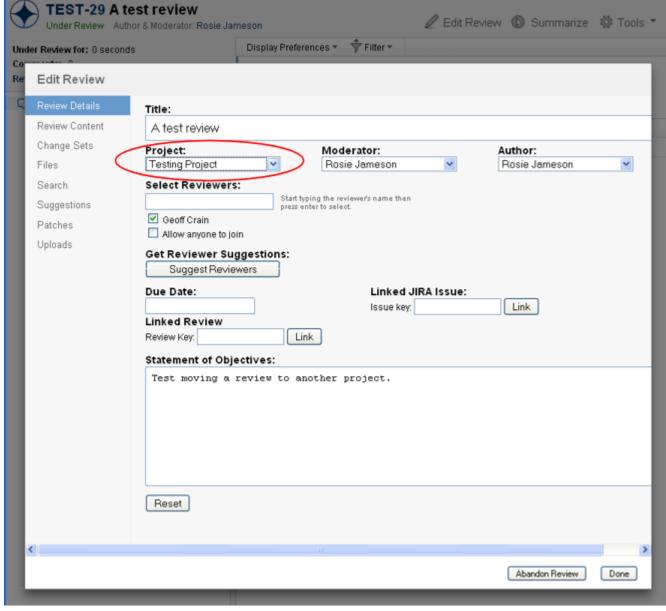
# Moving a Review to Another Project

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.
- 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



Deleting a review

To delete a review you must first abandon the review. To do that, follow the instructions below.

Deleted reviews cannot be retrieved.

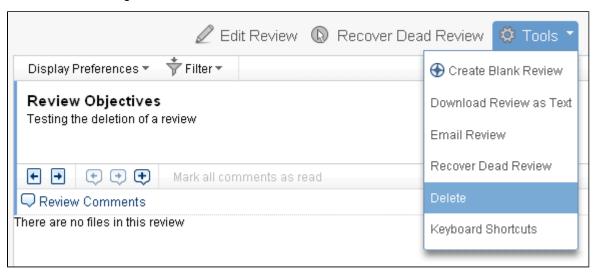
### Related page:

Deleting hung reviews manually

#### To abandon and then delete a review:

- 1. Open the review.
- 2. Choose **Tools** > **Abandon**.
- 3. Now, on the Crucible dashboard, click **My Abandoned Reviews** in the left-hand navigation bar.
- 4. In the list of abandoned reviews, click the name of the review you wish to remove.
- 5. Once the review details are displaying, choose **Tools** > **Delete**. The review will be instantly deleted.

Screenshot: Deleting a review in Crucible



# **Transitioning JIRA issues**

When Crucible is linked to JIRA, you can advance the workflow for a JIRA issue directly from within Crucible.

You can transition a JIRA issue in two ways:

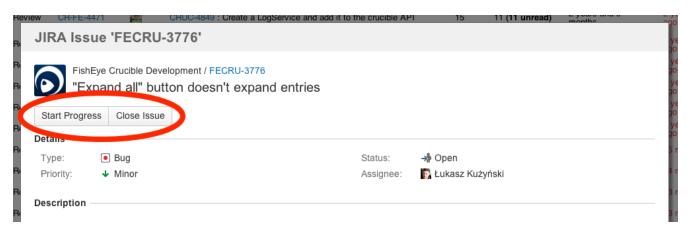
- Transitioning any JIRA issue at any time
- Transitioning a linked JIRA issue when closing the review

#### Related pages:

- JIRA integration in Crucible
- Creating JIRA issues from the review
- Linking Crucible to JIRA

Transitioning any JIRA issue at any time

You can easily transition a JIRA issue at any time from within Crucible. Click on a JIRA issue link anywhere in Crucible to see a dialog with the available workflow steps:

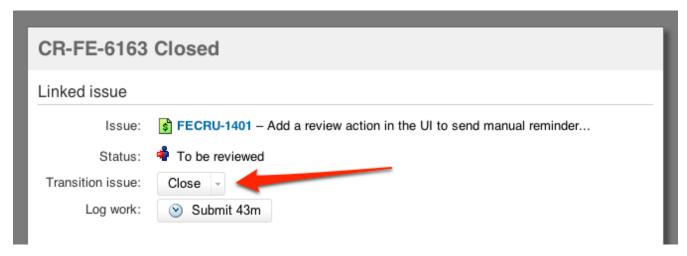


Click on a step in the dialog, and complete any displayed fields as required. If there are custom required fields that are unsupported by Crucible, just click **Edit this field in JIRA** to transition the issue directly in JIRA.

Transitioning a linked JIRA issue when closing the review

When closing a Crucible review you may also want to close a JIRA issue that is linked to that review.

In the Review Summary screen, click **Close** near the top right. In the 'Closed' dialog, the available workflow transitions for the linked JIRA issue appear in the **Transition issue** dropdown:



Choose a step from the dropdown, and click Close.

#### Notes

- JIRA administrators can activate or deactivate JIRA issue transitions (the workflow) from the JIRA administration interface.
- Only the transitions accessible by the user are displayed.
- The list of available transitions only appears if the user has visibility to any available workflow transitions.

This feature does not support editing fields on the issue, only setting the resolution field if required by the transition.

# **Administering Crucible**

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

Once Crucible is installed and running, you can log in to the Admin area by either:

- logging in with an administrator's account.
- clicking Administration at the foot of the page.
- navigating to http://HOSTNAME:8060/admin/, where HOSTNAME is the name of the server on which you installed Crucible.

Once logged in as an administrator you can get to the Admin area by clicking the 'cog' menu in the FishEye/Crucible header, and choosing **Administration**.

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

#### **Topics**

- Best practices for Crucible configuration
- Crucible and FishEye
- · Administering projects
- Configuring repositories
- Setting up users and security
- Permissions
- Migrating to an external database
- Backing up and restoring Crucible data
- Customising Crucible
- Integrating Crucible with other applications
- Managing add-ons

# **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.

4. Do not use the built-in HSQLDB database for production use.

The Crucible built-in database, running HSQLDB is somewhat susceptible to data loss during system crashes. We recommend that you do not use HSQLDB for production systems. External databases are generally more resistant to data loss during a system crash and are more suited for production use.

To see a list of external databases that Crucible supports, see the Supported platforms page. For information on how to set up an external database, see the Crucible Database documentation.

# Crucible and FishEye

This page gives an overview of the joint installation of Crucible and FishEye. Both Crucible and FishEye are Atla ssian 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. If you are using Subversion, Git, Mercurial, CVS or Perforce
  you can significantly enhance your Crucible experience by also using FishEye.
  - See What happens if I decide to stop using FishEye with Crucible? to learn more.



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 area.

 Upgrading an existing FishEye installation to also use Crucible requires a Crucible install. 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.

The <Crucible home directory> and FISHEYE\_INST

Throughout the Crucible documentation, references are made to the <Crucible home directory>, which refers to the location of the Crucible application. Be aware that, when Crucible is run with FishEye, this location is equivalent to the location referred to by <FishEye home directory> in the FishEye documentation.

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.

Installing the Crucible binary files

See the following for Crucible install instructions:

- Installing Crucible on Windows
- Installing Crucible on Linux and Mac

Setting up a repository for use with stand-alone Crucible

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 read Supported platforms, Subversion client setup, and granting permission to FishEye to scan your repository.
- Git, please read Supported platforms and Git Client setup.
- Perforce, please read Supported platforms and Perforce Client setup.
- CVS, please read Supported platforms and CVS Client setup.
- Mercurial, please read Supported platforms and Mercurial Client setup.

**Detailed Documentation** 

You can find more information in:

- Crucible Getting Started
- FishEye Getting started

# Administering projects

A Crucible *project* provides a way to group and manage related reviews – typically reviews that are all involved with the same software project. A Crucible 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'.

When administering your Crucible projects from the projects listing in the admin area, you can:

- Click Add a new project (at the bottom of the list) to create a new project.
- Click Edit (in the 'Crucible Settings' column) for an existing project to edit its settings.
- Click **Delete** for an existing project to delete it. See Deleting a project below.

## Deleting a project

### Before you begin:

- By default, Crucible contains one project; it has the key 'CR' and the name 'Default Project'. This project cannot be deleted.
- Deleted projects cannot be recovered.

#### To delete a Crucible project:

- 1. Go to the admin area and click Projects (under 'Project Settings').
- 2. Click **Delete** (in the 'Crucible Settings' column) for the project you wish to remove.
- 3. If empty, the project instantly disappears.

  If the project contains reviews, you will be prompted to either delete all the reviews in the project, or move them into the default project.

# Creating a project

A Crucible *project* provides a way to group and manage related reviews – typically reviews that are all involved with the same software project. A Crucible 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'.

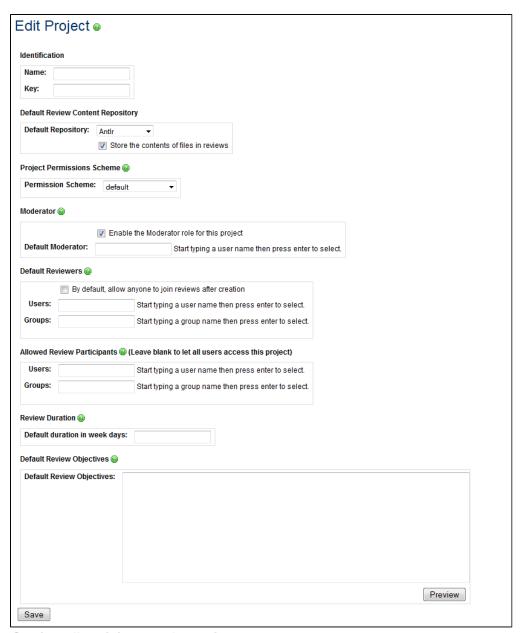
#### To create a new project:

- 1. Click the 'cog' menu in the Crucible header, and choose **Administration**. You need to be logged in as an administrator to see this.
- 2. Click Projects (under 'Project Settings').
- 3. Click Add a new project (at the bottom of the list).
- 4. Complete the fields in the 'Edit Project' page (described below).
- 5. Click **Save** to create your new project.

Identification	<ul> <li>Name – the plain language name as displayed in the Crucible interface.</li> <li>Key – the project key used when giving reviews their unique code names. If you change the key for a project all open, and closed, reviews in the project are updated with the new key.</li> </ul>
Content	<ul> <li>Default Repository – the repository that contains the source code for this project. This is the repository that will be searched by default when you add files to a review.</li> <li>Store the contents of files in reviews – check to have the source files under review stored in the Crucible database, along with the comments and review data. This retains a copy of all the source files under review even if the repository is disconnected from Crucible. See Storing all revisions under review.</li> </ul>

Permission Scheme	Permission Scheme – the permission scheme ap plied to this project. (A permission scheme controls who can perform particular actions, for example, create a review.)
Moderator	<ul> <li>Enable the Moderator role – clear to have reviews run by the author only. See Enabling the moderator role.</li> <li>Default Moderator – the user who will be set as the moderator for all new reviews created in the project. Leave this field blank to force the review's creator to choose a moderator. See Creating a review.</li> </ul>
Default Reviewers	<ul> <li>By default, allow anyone to join reviews after creation – sets the default state of the A llow anyone to join checkbox on the 'Choosi ng reviewers' screen.</li> <li>Users – set the individual users to whom new reviews will be assigned by default.</li> <li>Groups – set the groups to which new reviews will be assigned by default.</li> </ul>
Allowed Review Participants	Use <b>Users</b> and <b>Groups</b> to restrict who can have a role (author/creator/moderator/reviewer) in this project's reviews. These users will be the only ones whose names appear when a review is assig ned. Leave these fields blank to allow all users to have access.
Review Duration	Default duration – 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. Reviews that are overdue will show up in red on the reviewer's dashboards. 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.
Default Review Objectives	<b>Default Objectives</b> – specify some text that will appear by default in the <b>Review Objectives</b> field of each new review. This text can be edited, as with any text in the Review Objectives text box. See Setting default review objectives.

Screenshot: The Edit Project Screen



Storing all revisions under review

When creating a project or editing a project's properties, you can set Crucible to save all files (and revisions of those) 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.

1 Note that the storage of files 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 have files stored unless you look at them again after Revision Storage is enabled.

### Enabling file storage

You can enable file revision storage on the 'Edit Project' page.

For an existing project:

- 1. Go to the admin area and click **Projects** (under 'Project Settings').
- 2. Click Edit (in the 'Crucible Settings' column) for an existing project.
- 3. Check Store the contents of files in reviews (under 'Content').
- 4. Click Save.

### Editing a project

Once a project is created, an administrator can edit the default values for settings such as repository, moderator, allowed reviewers, allowed groups and permissions scheme. These are the settings that are applied to any new

review created for the project.

# To edit project settings:

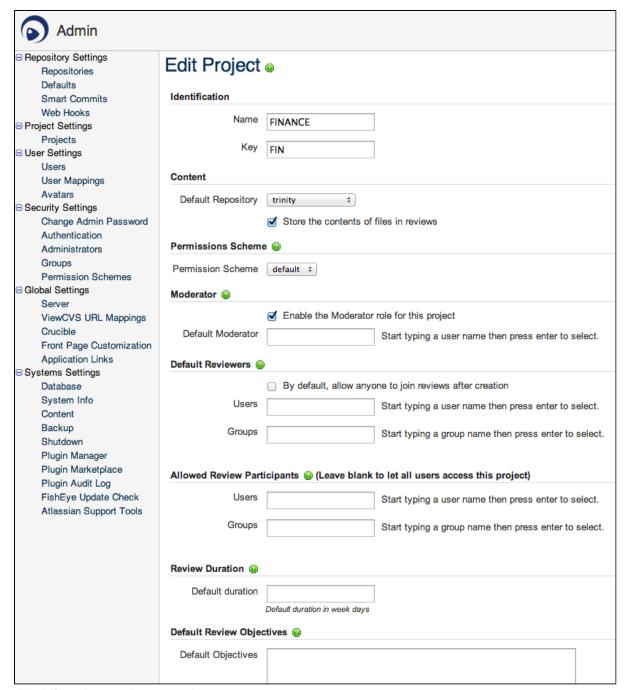
- 1. In the admin area, click **Projects** (under 'Project Settings').
- 2. In the list of projects, click Edit in the ('Crucible' column) for the required project.
- 3. Modify the available settings, as required:

Identification	<ul> <li>Name – the plain language name as displayed in the Crucible interface.</li> <li>Key – the project key used when giving reviews their unique code names. If you change the key for a project all open, and closed, reviews in the project are updated with the new key.</li> </ul>
Content	<ul> <li>Default Repository – the repository that contains the source code for this project. This is the repository that will be searched by default when you add files to a review.</li> <li>Store the contents of files in reviews – check to have the source files under review stored in the Crucible database, along with the comments and review data. This retains a copy of all the source files under review even if the repository is disconnected from Crucible. See Storing all revisions under review.</li> </ul>
Permission Scheme	Permission Scheme – the permission scheme ap plied to this project. (A permission scheme controls who can perform particular actions, for example, create a review.)
Moderator	<ul> <li>Enable the Moderator role – clear to have reviews run by the author only. See Enabling the moderator role.</li> <li>Default Moderator – the user who will be set as the moderator for all new reviews created in the project. Leave this field blank to force the review's creator to choose a moderator. See Creating a review.</li> </ul>
Default Reviewers	<ul> <li>By default, allow anyone to join reviews after creation – sets the default state of the A llow anyone to join checkbox on the 'Choosi ng reviewers' screen.</li> <li>Users – set the individual users to whom new reviews will be assigned by default.</li> <li>Groups – set the groups to which new reviews will be assigned by default.</li> </ul>
Allowed Review Participants	Use <b>Users</b> and <b>Groups</b> to restrict who can have a role (author/creator/moderator/reviewer) in this project's reviews. These users will be the only ones whose names appear when a review is assig ned. Leave these fields blank to allow all users to have access.

Review Duration	Default duration – 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. Reviews that are overdue will show up in red on the reviewer's dashboards. 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.
Default Review Objectives	<b>Default Objectives</b> – specify some text that will appear by default in the <b>Review Objectives</b> field of each new review. This text can be edited, as with any text in the Review Objectives text box. See Setting default review objectives.

4. Add additional FishEye repositories to the project if required – click **Edit** in the 'FishEye content' column. See How to add several repositories to one project in Crucible for further information.

Screenshot: The Edit Project screen in Crucible



**Enabling the moderator role** 

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. However, you can enable the moderator role for Crucible projects, if required.

The moderator role can only be set by a Crucible administrator.

## On this page:

- Enabling the moderator role
- Removing the moderator role from an existing project
- Adding the moderator role to an existing project

### 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. Go to the admin area in Crucibleand click **Projects** (under 'Project Settings').

- 2. Click Edit (in the 'Crucible Settings' column) for the project.
- 3. Check Enable the Moderator role (under 'Moderator').

#### Removing the moderator role from an existing project

When you remove the moderator role from an existing project, note that:

- Existing reviews, created before the change, will still retain the moderator they were assigned.
- Reviews created after the change will not have the moderator role.
- If the removal of the moderator conflicts with other Crucible project settings, a warning will be shown on the Projects page.

1 If in doubt about the impact of removing the moderator role, you can create a new project, and set the moderator status while doing that.

#### Adding the moderator role to an existing project

If you add the moderator role to an existing project, note that:

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

1 If in doubt about the impact of adding the moderator role, you can create a new project, and set the moderator status while doing that.

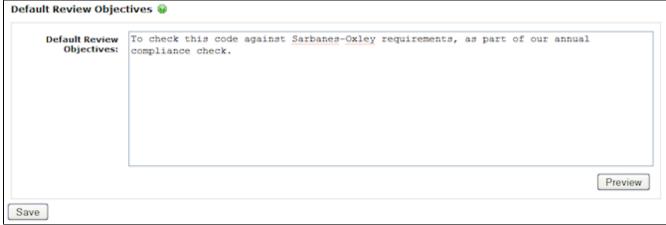
Setting default review objectives

To set default review objectives for all the reviews in a given project:

- 1. Go to the admin area and click Projects (under 'Project Settings').
- 2. Click Edit (in the 'Crucible Settings' column) for the project.
- In the **Default Objectives** text box specify the text that will appear by default in the **Review Objectives** fi
  eld of each new review. This text will be able to be edited, as with any text in the Review Objectives text
  box.
- 4. Click Save.

See Editing a project for more information about project defaults.

Screenshot: Default Review Objectives in Crucible



# Configuring repositories

The instructions for configuring your repositories differ, depending on your Crucible setup:

If you are running Crucible with Atlassian's FishEye, you can manage your repositories using FishEye. See the FishEye documentation for more information.

**If you are running Crucible alone**, you can manage your repositories using native repository access (bundled with Crucible):

- 1. Go to the Crucible admin area.
- 2. Click Repositories (under 'Repository Settings'), and then Native Repository Access (if necessary).

- 3. Click Add Existing...
- 4. Refer to the following pages in the FishEye documentation for details about setting up particular repositories:
- CVS
- Git
- Mercurial
- Perforce
- Subversion

Please also see the What happens if I decide to stop using FishEye with Crucible page for important information about light FishEye.



## Crucible SCM plugins superseded by Native Repository Access

Crucible now ships with native repository access, which allows you to connect to repositories without a working version of FishEye. Crucible SCM plugins will still work, but we recommend that you stop using them in favour of native repository access. See What happens if I decide to stop using FishEye with Crucible for instructions.

# Setting up a Git repository in Crucible

This page describes how to use Crucible's native repository access to connect to an external Git repository. This native access uses a FishEye component (without requiring a FishEye license) which is why the description below refers to FishEye in places. See What happens if I decide to stop using FishEye with Crucible for more information.

Crucible interacts with Git repositories by executing the Git command in a separate process. Hence, the server running Crucible needs to have Git installed. Crucible indexes Git repositories by making a private, bare clone of your repository within Crucible's cache area. It uses this private clone for most Git operations.

See the Supported platforms page for the version of Git that is required by the server running Crucible.

Git repository setup

### To add an external Git repository to FishEye:

- 1. Click the cog' menu in the FishEye header, and choose **Administration**. You will need to be logged in as an administrator to see this link.
- 2. Click Repositories (under 'Repository Settings').
- 3. Click Add Existing...
- 4. Complete the wizard:

#### Step 1

Field	Description
Repository Type	Select Git.
Name	Enter a name for this repository. The name may contain alphanumeric, underscore, '-' or '.' characters. This will be repository name in FishEye.
Description	Enter a short description of this repository.

#### Step 2

Field	Description
-------	-------------

Repository Location	Enter the URL describing the Git repository location. FishEye will clone this repository for indexing purposes. You can use any URL recognised by Git itself. Fisheye recognizes the following URL's: git://server_name[:port]/path_to_repository http://server_name[:port]/path_to_repository https://server_name[:port]/path_to_repository ssh://server_name[:port]/path_to_repository file://[hostname]/path_to_repository  Do not use spaces in your URL.
Path	(optional) Enter the path within the Git repository that you want FishEye to index. This lets you limit FishEye to indexing a subset of the complete Git repository.
Block Size	(optional) Enter how many commits you want FishEye to process in one batch. Larger values require more memory and increase the amount of work FishEye commits to the database in a single operation. The default is 400. The minimum being 1. This field only accepts positive whole numbers. Requires a repository restart.
Command Timeout	(optional) Enter the time that a single Git command is allowed to take to execute. Any command that exceeds this time is terminated and the operation will fail.
Rename Detection	(optional) Select which Git rename detection strategy FishEye will use to detect copy and move operations within the repository. Please refer to the Git documentation for more information.

### Step 3

Field	Description
Store Diff Info	Tick this checkbox, if you want FishEye to cache information about file diffs in its database. This is required for some FishEye features. See Configuring Repository Details for more information on this setting.
Enable Repository After Adding	Tick this checkbox, to enable the repository after adding (i.e. when you click the 'Add' button).

Screenshots: Adding a Git repository



#### Limitations

When FishEye indexes a Git repository, it indexes by the available branches. As it processes the commits on a branch, FishEye will assign the commit to the branch it first sees the commit on. Commits are only indexed once so if a commit belongs to multiple branches, the commit will not be indexed against subsequent branches.

Furthermore, indexing of a Git repository can be slow when new branches are pushed. Performance in such cases can be improved by setting a command line option for FishEye. See this KB page for more information.

## Setting up a Perforce repository in Crucible alone

This page describes how to configure Crucible access to Perforce repositories.



# Crucible SCM plugins superseded by Native Repository Access

Crucible now ships with native repository access, which allows you to connect to repositories without having FishEye integrated with your Crucible instance. Crucible SCM plugins will still work, but we recommend that you stop using them in favour of native repository access. See What happens if I decide to stop using FishEye with Crucible for instructions.

Setting up a Perforce repository using native access

To set up native access to a Perforce repository:

- 1. Go to the Crucible admin area.
- 2. Click Repositories (under 'Repository Settings'), and then Native Repository Access (if necessary).
- 3. Click Add Existing...
- 4. Refer to Perforce in the FishEye documentation for detailed information about completing the wizard.

Setting up the Crucible Perforce SCM plugin

This section describes how to configure the Crucible Perforce SCM plugin to access Perforce repositories.

#### To set up Perforce in Crucible alone:

- 1. Ensure that the Perforce executable file is on the system path, in the Crucible server's Environment Variables
- 2. Start Crucible and go to the admin area.
- 3. Click Manage Add-ons (under 'Systems Settings').
- 4. Find and click on the Crucible Perforce SCM Plugin (click Show System Plugins) and then click Confi aure.
- 5. Click **Add a repository** and complete the form:

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)

#### 6. Click Save.

Your Perforce repository is now set up for Crucible. You will be able to select changesets from it when creating reviews.

#### Notes

- There is no 'initial scanning' required in this process, as Crucible's access to Perforce (when running alone) is strictly on-demand. Data is not indexed, hence there is no scanning.
- Crucible executes the Perforce command-line tool to enable this functionality.

# Setting up a Subversion repository in Crucible alone

This page describes how to configure Crucible access to Subversion repositories.



# 

Crucible now ships with native repository access, which allows you to connect to repositories without a working version of FishEye. Crucible SCM plugins will still work, but we recommend that you stop using them in favour of native repository access.

For more information, see

- Advantages of Native Repository Access over lightSCM plugins
- What happens if I decide to stop using FishEye with Crucible

Setting up a Subversion repository using native access

To set up native access to a Subversion repository:

- 1. Go to the Crucible admin area.
- 2. Click Repositories (under 'Repository Settings'), and then Native Repository Access (if necessary).
- 3. Click Add Existing...
- 4. Refer to Subversion in the FishEye documentation for detailed information about completing the wizard.

Setting up the Crucible Subversion SCM plugin

This section describes how to configure the Crucible Subversion SCM plugin to access Subversion repositories. The plugin is bundled with Crucible.

### To set up Subversion in Crucible alone:

- 1. Start Crucible and go to the admin area.
- 2. Click Manage Add-ons (under 'Systems Settings').
- 3. Find and click on Crucible Subversion SCM Plugin (click Show System Add-ons) and then click Conf igure.
- 4. Click **Add a repository** and complete the form:

Name	Choose a unique name for the repository.
Repository Root	Enter the repository root URL for the repository. See Finding your repository root below for instructions on how to find this.

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.

#### 5. Click Save.

Your Subversion repository is now set up for Crucible. You will be able to select changesets from it when creating reviews.

Note that there is no 'initial scanning' required in this process, as Crucible's access to Subversion (when running alone) 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.

# Enabling reviews from the server file system in Crucible

You can set up the server file system to be a code repository for Crucible. You will be able to browse files and directories on the hard drive and select files from it when creating reviews.

#### To set up the file system as a code repository in stand-alone Crucible:

- 1. Go to the admin area in Crucible.
- 2. Click Manage Add-ons (under 'Systems Settings').
- 3. Find and click on **Crucible FileSystem SCM Plugin** (click **Show System Plugins**, then click **Enable** if that is displayed).

- 4. Click Configure then Add a repository.
- 5. Complete the form:

Name	Choose a unique name for the repository.
Base Path	Choose the lowest level of directory that Crucible will access.

6. Click Save.

# Setting up a repository via FishEye

To use FishEye to access an external source control repository, such as Subversion or Git, for Crucible, see the FishEye documentation for how to add a repository.

- CVS
- Git
- Mercurial
- Perforce
- Subversion



# 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.

1 We recommend you access the repository with a user that has only **read** access to the repository.

# Setting up users and security

User management and security settings are covered in the FishEye documentation. See:

- Managing users and groups in FishEye
- Configuring FishEye Security

#### Other related security resources

- Configuring User Managed Mappings
- Creating a permission scheme
- Creating a user
- How to Report a Security Issue
- Security Advisory Publishing Policy
- Security Patch Policy
- Severity Levels for Security Issues

### Creating a user



Some user management functions are identical in both Crucible and FishEye. 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 local database for FishEye/Crucible.
- · 'External' user accounts these are stored in an external directory (e.g. LDAP), if configured. See Config uring External Authentication Sources.



# Note regarding 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 in FishEye/Crucible will be automatically added the first time they log in to Crucible.

#### To add a new user:

- 1. In the admin area, click Users under 'User Settings'.
- 2. Click Add user at the bottom of the screen.
- 3. Configure the following settings:

Username	Type the user's login name. You can use the following characters:  • letters and numbers • hyphen ('-') • underscore ('_') • 'at' sign ('@')
Display name	The user's display name appears in the user interface.
Email	The email address is where the user will receive n otifications.
Auth Type	Select either <b>built-in</b> or the appropriate external directory where the user identity will be stored.
Password	(For built-in users only) i The user can easily change their own password later.

4. Click Add.

# Add New User @

Information about the new user		
Username		
Display name		
Email		
Auth Type	built-in 💠	
Password		
Confirm Password		
	Add Cancel	

# **Permissions**

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

Permissions in Crucible are managing through the use of permission schemes.

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.

#### **Further reading**

- Creating a permission scheme
- Associating a permission scheme with a project
- Agile permissions schemes in Crucible

## Creating a permission scheme

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

## On this page:

- Creating a permission scheme
- · Editing a permission scheme
- List of Crucible permissions

Creating a permission scheme

#### To create a permission scheme:

- 1. In the admin area, click **Permission Schemes**, under 'Security Settings'.
- 2. Under 'Add a new permission scheme', enter a Name to uniquely identify your new scheme.
- 3. Click **Add**. Your new permission scheme will have the default assignees shown in the permissions table b elow.
- 4. If required, edit this permission scheme, as described below.
- 1 Next step: see Associating a permission scheme with a project.

Screenshot: Adding a Permission Scheme

Add a new permission scheme		
Name		
	Add	

Editing a permission scheme

#### To edit a permission scheme:

- 1. In the admin area, click **Permission Schemes** under 'Security Settings'.
- 2. Click edit for the scheme you wish to change.
- 3. Click **edit** for the permission you wish to modify, and choose the appropriate assignee(s) for this permission:

Allow Anonymous users	Assign this permission to anonymous users
Allow All logged in users	Assign this permission to all logged-in users
Individuals	Enter a username to assign this permission to a particular user.

Groups	Enter a group name to assign this permission to a particular group of users.
Review Participants	Select check boxes to assign this permission to users who belong to any of the Reviewer / Creat or / Author / Moderator participants.

Click **Save** when you are done.

⚠ Note: for ongoing ease of management, it is recommended that you grant permissions to groups of participants rather than to individual users.

## 4. Click Save.

Screenshot: Editing the 'Close' permission

# Edit User Action @

# Close: Ability to close a review once it has been summarized. Allow All logged in users Individuals Start typing a user name then press enter to select.

✓ Seb RuizGroupsStart typing a group name then press enter to select.

Review Participants 🗹 Reviewer 🗹 Creator 🗹 Author 🗹 Moderator

Save Cancel

List of Crucible permissions

The following permissions are available:

Permission	Description	Default Assignees
Abandon	Ability to abandon (i.e. cancel) a review.	Creator Author Moderator
Approve	Ability to approve a review (i.e. issue it to the reviewers).	Creator Author Moderator
Close	Ability to close a review once it has been summarised.	Creator Author Reviewer Moderator
Comment	Ability to add or remove a comment to or from a review.	Creator Author Reviewer Moderator
Complete	Ability of a reviewer to change their individual review status to Complete.	Reviewer
Create	Ability to create a review.	All logged-in users

Delete	Ability to delete a review.	Creator Author Moderator
Edit Review Details	Ability to edit a review's details and change the set of revisions being reviewed.	Creator Author Reviewer Moderator
Re-Open	Ability to re-open a closed or abandoned review.	Creator Author Reviewer Moderator
Recover	Ability to resurrect an abandoned (i.e. cancelled) review.	Creator Author Reviewer Moderator
Reject	Ability to reject a review submitted for approval (i.e. prevent it from being issued to reviewers).	Creator Author Moderator
Submit	Ability to submit a review for approval (i.e. request that the review be issued to the reviewers).	Creator Author Moderator
Summarise	Ability to summarise a review. (Normally this would be done after all reviewers have completed their review.)	
Uncomplete	Ability of a reviewer to change their individual review status from Complete to Uncomplete.	Reviewer
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

## 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. In the admin area, click **Projects** (under 'Project Settings').
- 2. Find the project you wish to associate with your permission scheme, and click **Edit** (in the 'Crucible Settings' column).
- 3. Under 'Permissions Scheme', choose a scheme from the Permission Scheme list.
- 1) You will be shown a list of the schemes that have been created in Crucible. You can create a new permission scheme if necessary.

#### 4. Click Save.

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	No roles. All logged-in users
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 All logged-in users

1.6. 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	No roles. All logged-in users
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	No roles.
Uncomplete	false	false	None	None	Reviewer
View	true	true	None	None	Reviewer, Creator, Author, Moderator Anonymous users
					All logged-in users

Related links

· Creating a permission scheme

## 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 **Permissions Scheme** list on the 'Edit Project' screen.

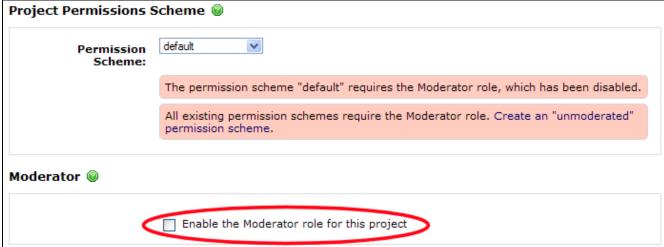
#### Considerations

ightharpoonup 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



# Migrating to an external database

This page contains information about migrating Crucible from its default embedded HSQL database to an external database. Advantages of using a database other than the embedded HSQL database include:

- 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. HSQLDB is not supported in production environments and should only be used for evaluation purposes.
- **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:

- Supported Databases
- Support for Other Databases
- Notes

#### **Supported Databases**

You can use a number of alternatives to the built-in HSQLDB database for storing FishEye and Crucible's relational data. The supported alternative databases are listed on the Supported platforms page. Please note, that only the database versions listed on that page are supported.

The pages linked below outline the steps required to switch to an external database:

- Migrating to MySQL
- Migrating to Oracle
- Migrating to PostgreSQL
- Migrating to SQL Server

#### Support for Other Databases

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.

#### **Notes**

Crucible uses Read Committed transaction isolation. There is no requirement to configure this explicitly when setting up an external database - Crucible will configure the transaction isolation when connecting to the database.

## Migrating to MySQL

This page describes how to use FishEye/Crucible with both MySQL Enterprise Server and MySQL Community Server. Note that when they are used together, FishEye and Crucible share the same external database.

To switch to a MySQL database, install MySQL and then follow the steps below. Please note that during the migration of database servers, the FishEve/Crucible instance will not be available to users or to external API clients.

⚠ Note that for FishEye 2.9+, the JDBC driver for MySQL is not bundled with FishEye/Crucible (due to licensing restrictions).



## MySQL 5.6.x Compatibility

For MySQL 5.6, Fisheye requires 5.6.11 or later.

## **Prerequisites**

#### To start with:

- 1. Install a supported version of MySQL. Check the Supported platforms page for the exact versions that are supported.
- 2. Download and install the JDBC driver, if necessary. Note that for FishEye 2.9+, the JDBC driver for MySQL is not bundled with FishEye/Crucible (due to licensing restrictions).
  - a. Download the MySQL Connector/J JDBC driver from the MySQL download website.
  - b. Expand the downloaded zip/tar.gz file.
  - c. Copy the mysql-connector-java-x.y.zz-bin.jar file to your FISHEYE\_INST/lib director y. If the lib/ directory doesn't already exist, you will need to create it.
  - d. Restart FishEye/Crucible.

## On this page:

- Prerequisites
- Step 1. Create a MySQL database
- Step 2. Configure FishEye/Crucible to use MySQL, and migrate data

## Related pages:

- Migrating to PostgreSQL
- Migrating to Oracle
- Migrating to SQL Server
- Migrating to an external database
- Troubleshooting Databases

## Step 1. Create a MySQL database

Set up a MySQL database as follows:

- Configure the database to use the InnoDB storage engine
- Create a database on MySQL for FishEye/Crucible to use
- Create a FishEye user on the database
- Configure the database to use utf8 character set encoding
- Configure the database to use utf8\_bin collation (to ensure case sensitivity).

Here is an example of how to do that. When FishEye/Crucible and MySQL run on the same machine (accessible through localhost), issue the following commands (replacing fisheyeuser and password with you own values):

```
mysql> SET GLOBAL storage_engine = 'InnoDB';
mysql> CREATE DATABASE fisheye CHARACTER SET utf8 COLLATE utf8_bin;
mysql> GRANT ALL PRIVILEGES ON fisheye.* TO 'fisheyeuser'@'localhost'
IDENTIFIED BY 'password';
mysql> FLUSH PRIVILEGES;
mysql> QUIT
```

Note that for MySQL 5.6 and later, replace the first statement (SET GLOBAL storage\_engine = 'InnoDB') with the following:

```
mysql> SET GLOBAL default_storage_engine = 'InnoDB';
```

This creates an empty MySQL database with the name fisheye, and a user that can log in from the host that FIshEye is running on who has full access to the newly created database. In particular, the user should be allowed to create and drop tables, indexes and other constraints.

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 operating systems (create the file at /etc/my.cnf if it doesn't already exist). It has to be declared in the Server section, which is the section after [mysqld]:

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

You'll need to restart MySQL for that change to take effect. Now use the status command to verify database character encoding information:

```
mysql> use fisheye;
mysql> status;
```

Screenshot: Using the MySQL 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
                        5764
Connection id:
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:
                               st via UNIX socket
                        utf8
Server characterset:
      characterset:
                        utf8
        aracterset:
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> 📗
```

♠ Both the server and database character set must be UTF-8. You may not initially notice a problem because of the characterset overlap but this is indeed a requirement. We've verified that when using a charset such as Swedish 7 bit as the server charset and UTF-8 as the database charset data corruption is easy to reproduce and obvious. This proves that the server character set is as important and that data corruption is possible when there is a charset mismatch. We absolutely cannot suggest a configuration where the server charset and database charset are anything other than UTF-8.

Step 2. Configure FishEye/Crucible to use MySQL, and migrate data

In order to migrate to a different database backend, you must create a backup of sql data, configure the database and finally import the data via a backup restoration process. This can be done from either the FishEye/Crucible administration console, which streamlines the process, or via the command line tool which FishEye/Crucible provides.

## Option 1: Migrate using the UI (FishEye/Crucible Administration)

1. Navigate to the Database page in FishEye/Crucible's Administration console.

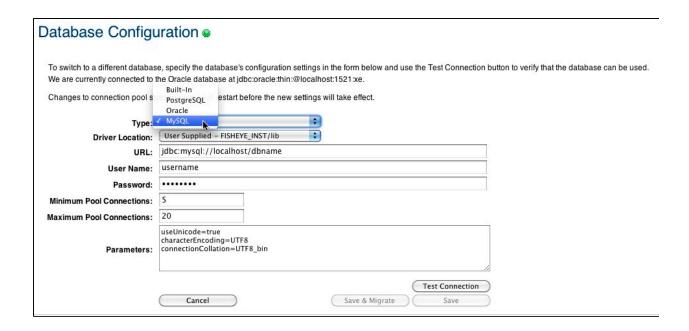
To log in to the Admin area, you can either:

- click Administration at the foot of the page.
- navigate to http://HOSTNAME:8060/admin/, where HOSTNAME is the name of the server on which you installed Fisheye.

Once logged in as an administrator you can also get to the Admin area by clicking the 'cog' menu in the FishEye/Crucible header, and choosing **Administration**.

- Choose Edit > Test Connection to verify that FishEye/Crucible can log in to the database.
- Select MySQL from the database type.
- 4. Fill in the appropriate fields, replacing the host, port, database name, username and password using the same connection details as used when creating the MySQL database in Step 1 above.
- 5. Click **Test Connection** to validate the values.

Screenshot: Testing the connection



If this fails, verify that you have the MySQL JDBC driver . jar file in the classpath (see Prerequisites section above for instructions on how to install the driver). Also, ensure that the database user can log in to the database from the machine that FishEye/Crucible is running on and that all the required privileges are present.

6. Click **Save & Migrate** 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, FishEye/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 Database...

From: jdbc:hsqldb:file:/Users/ervzijst/cenqua/demotion/var/data/crudb/crucible
To: jdbc:mysql://localhost/crucible

Started
Creating table definitions...
1 rows written, 0 tables completed.
9 rows written, 1 tables completed.
2328 rows written, 2 tables completed.
11143 rows written, 3 tables completed.
12140 rows written, 4 tables completed.
12740 rows written, 4 tables completed.
12740 rows written, 4 tables completed.
30492 rows written, 5 tables completed.
30492 rows written, 6 tables completed.
30497 rows written, 5 tables completed.
30497 rows written, 5 tables completed.
30497 rows written, 5 tables completed.
```

#### Option 2: Migrate using the command line

- 1. Create a backup of the sql data from the FishEye/Crucible instance. Read Backing up and restoring FishEye data and Backing up and restoring Crucible data for information on how to create a backup.
- 2. Run the following command from the bin directory in FISHEYE\_INST

3. When the import is complete, FishEye/Crucible can be started and will use MySQL.

## Migrating to Oracle

To switch to an Oracle database, install Oracle and follow the steps below. When they are used together, FishEye and Crucible share the same external database.

Please note that during the migration of database servers, the FishEye/Crucible instance will not be available to users or to external API clients.

Oracle support for FishEye/Crucible and Crucible was introduced in version 2.5.0. In order to migrate to Oracle, your instance must be currently running at least version 2.5. If you are running an older version, then you will be required to first upgrade FishEye/Crucible and then migrate.

## On this page:

- Step 1. Install and Create a Oracle Database
- Step 2. Configure FishEye/Crucible to use Oracle, and Migrate Data

## Related pages:

- Migrating to MySQL
- Migrating to PostgreSQL
- Migrating to SQL Server
- Migrating to an external database
- Troubleshooting Databases

#### Step 1. Install and Create a Oracle Database

- 1. The JDBC drivers for Oracle are bundled with FishEye/Crucible. 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 download the Oracle JDBC driver . jar file from the Oracle website
  - (hhttp://www.oracle.com/technetwork/database/features/jdbc/index-091264.html) and copy the .jar file 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/Crucible to have it pick up the new driver.
- 2. Because creating a database with Oracle is a complex process, we recommend speaking to your resident DBA for creation of a new database for usage with Crucible. We highly recommend installing Oracle with the AL32UTF8 encoding otherwise you may see encoding issues in the product.



## Permissions

Ensure the database user has CREATE SEQUENCES and CREATE TRIGGER permissions in addition to the read/write permisisons to the database.

## Step 2. Configure FishEye/Crucible to use Oracle, and Migrate Data

In order to migrate to a different database backend, you must create a backup of sql data, configure the database and finally import the data via a backup restoration process. This can be done from either the FishEye/Crucible administration console, which streamlines the process, or via the command line tool which FishEye/Crucible provides.

#### Option 1: Migrate using the UI (FishEye/Crucible Administration)

1. Navigate to the Database page in FishEye/Crucible's Administration console.

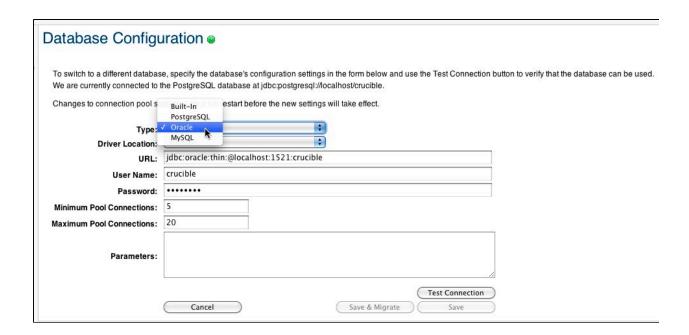
To log in to the Admin area, you can either:

- click Administration at the foot of the page.
- navigate to http://HOSTNAME:8060/admin/, where HOSTNAME is the name of the server on which you installed Fisheye.

Once logged in as an administrator you can also get to the Admin area by clicking the 'cog' menu in the FishEve/Crucible header, and choosing **Administration**.

- 2. Then choose **Edit** > **Test Connection** to verify that FishEye/Crucible can log in to the database.
- 3. Select Oracle from the database type
- 4. Fill in the appropriate fields, replacing the host, port, database name, username and password using the same connection details as used when creating the Oracle database in Step 1 above.
- 5. Click on Test Connection to validate the values

Screenshot: Testing the Connection

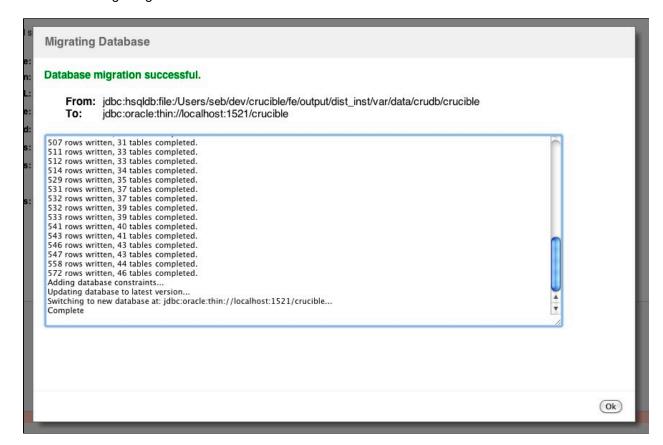


If this fails, verify that you have the Oracle JDBC driver <code>.jar</code> file in the classpath (by placing the <code>.jar</code> file in <code>FISHEYE\_INST/lib</code>). Also, ensure that the database user can log in to the database from the machine that FishEye/Crucible is running on and that all the required privileges are present.

6. 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, FishEye/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



#### Option 2: Migrate using the command line

- 1. Create a backup of the sql data from the FishEye/Crucible instance. Information on how to create a backup can be found at Backing up and restoring FishEye data \ Backing up and restoring Crucible data
- 2. Run the following command from the bin directory in FISHEYE\_INST

3. When the import is complete, FishEye/Crucible can be started and will use Oracle.

## Migrating to PostgreSQL

To switch to a PostgreSQL database, install PostgreSQL and follow the steps below. When they are used together, FishEye and Crucible share the same external database.

Please note that during the migration of database servers, the FishEye/Crucible instance will not be available to users or to external API clients.

## On this page:

- Step 1. Install and Create a PostgreSQL Database
- Step 2. Configure FishEye/Crucible to use PostgreSQL, and Migrate Data

## Related pages:

- Migrating to MySQL
- Migrating to Oracle
- Migrating to SQL Server
- Migrating to an external database
- Troubleshooting Databases

### Step 1. Install and Create a PostgreSQL Database

- 1. The JDBC drivers for PostgreSQL are bundled with FishEye/Crucible. Skip to <a href="Step 2">Step 2</a> if this meets your needs. If you want to install a specific, different version of the bundled JDBC driver, download the download the PostgreSQL JDBC driver . jar file from the PostgreSQL website and copy the . jar file 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/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;

Step 2. Configure FishEye/Crucible to use PostgreSQL, and Migrate Data

In order to migrate to a different database backend, you must create a backup of SQL data, configure the database and finally import the data via a backup restoration process. This can be done from either the FishEye/Crucible administration console, which streamlines the process, or via the command line tool which FishEye/Crucible provides.

## Option 1: Migrate using the UI (FishEye/Crucible Administration)

1. Navigate to the Database page in FishEye/Crucible's Administration console.

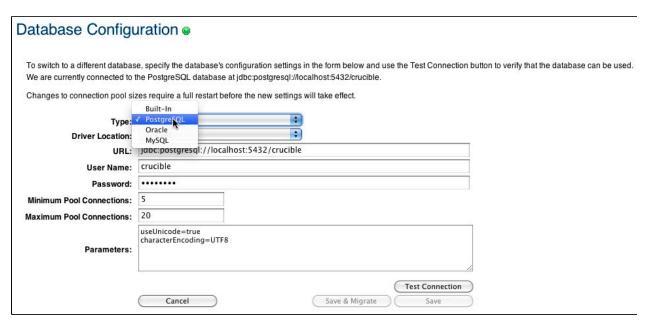
To log in to the Admin area, you can either:

- click Administration at the foot of the page.
- navigate to http://HOSTNAME:8060/admin/, where HOSTNAME is the name of the server on which
  you installed Fisheye.

Once logged in as an administrator you can also get to the Admin area by clicking the 'cog' menu in the FishEye/Crucible header, and choosing **Administration**.

- 2. Choose Edit > Test Connection to verify that FishEye/Crucible can log in to the existing database.
- 3. Select PostgreSQL from the database Type.
- Fill in the appropriate fields, using the same connection details as used when creating the PostgreSQL database in Step 1 above.
  - a. Driver Location: either your own PostgreSQL JDBC or the Bundled one that came with FishEye
  - b. **URL**: create this field by replacing the host, port, and database name with your own (i.e. jdbc:postgresql://localhost:5432/<dbname> e.g. jdbc:postgresql://localhost:5432/crucible)
  - c. Username: your DB username
  - d. Password: your DB password
  - e. **Minimum Pool Connections**: 5 is the default f. **Maximum Pool Connections**: 20 is the default
  - g. Parameters: (one per line)
    - i. useUnicode=true
    - ii. characterEncoding=UTF8
- 5. Click **Test Connection** to validate the values.

Screenshot: Testing the Connection

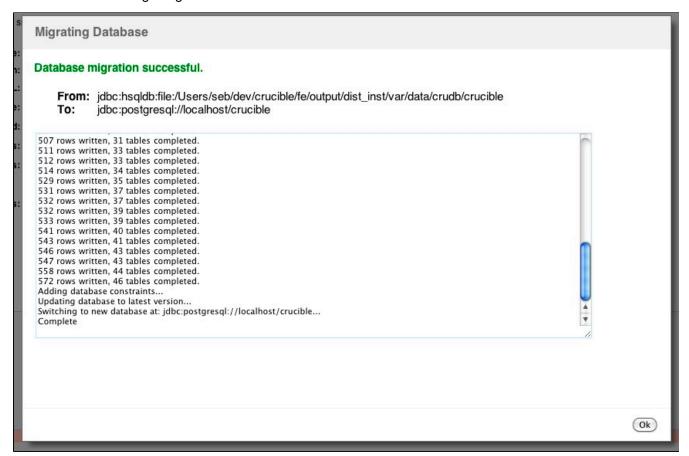


If this fails, verify that you have the PostgreSQL JDBC driver .jar file in the classpath (by placing the .jar file in FISHEYE\_INST/lib). Also, ensure that the database user can log in to the database from the machine that FishEye/Crucible is running on and that all the required privileges are present.

6. Click Save & Migrate 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, FishEye/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. If successful, the following message is displayed:

Screenshot: Migrating the Database



Option 2: Migrate using the command line

- 1. Create a backup of the sql data from the FishEye/Crucible instance. Information on how to create a backup can be found at Backing up and restoring FishEye data / Backing up and restoring Crucible data.
- Run the following command from the bin directory in FISHEYE\_INST:

3. When the import is complete, FishEye/Crucible can be started and will use PostgreSQL.

## Migrating to SQL Server

To migrate FishEye/Crucible to an SQL Server database, install SQL Server and follow the steps below. When they are used together, FishEye and Crucible share the same external database.

Before you begin

Check that you are using version of SQL Server that is supported for use with FishEye. See Supported platforms

An existing Java bug prevents connection with Java 1.6.0\_29 and above (including Java 1.7.0). Read more about the issue and possible workarounds here.

Step 1. Install and create an SQL Server database

See the SQL Server Online resources (MSDN) for instructions on how to install and create an SQL Server database.

Please note the following FishEye/Crucible-specific information when installing and creating an SQL Server database:

- The JDBC jtds drivers for SQLServer are bundled with FishEye/Crucible. We do not support using the Microsoft distributed jdbc driver.
- The FishEye database user must have permission to connect to the database and to create and populate tables.
- The database user should **not** be the database owner, but **should** be in the db\_owner role. (See SQL Server Startup Errors for details.)
- Your database server must be configured to use the Latin1\_General\_CS\_AS collation set.
- Your database server should be configured to use snapshot mode for the transaction isolation level. To enable snapshot mode, run:

```
ALTER DATABASE crucible
SET READ_COMMITTED_SNAPSHOT ON;
```

See this and this Microsoft MSDN articles for more information.

Note that it is preferable to run the above command after stopping FishEye/Crucible (and with no other applications connected to the SQL Server database), especially if you find that the alter statement does not complete quickly.

## On this page:

- Before you begin
- Step 1. Install and create an SQL Server database
- Step 2. Configure FishEye/Crucible to use SQL Server and migrate data

## Related pages:

- Migrating to MySQL
- Migrating to PostgreSQL
- Migrating to SQL Server
- Migrating to an external database
- Troubleshooting Databases

Step 2. Configure FishEye/Crucible to use SQL Server and migrate data

In order to migrate to a different database backend, you must create a backup of your SQL data, configure the database and finally import the data via a backup restoration process. This can be done from either the Crucible administration console, which streamlines the process, or via the command line tool which Crucible provides. These two methods are described below. The following resources may be of interest:

- Backing up and restoring FishEye data
- · Backing up and restoring Crucible data
- SQL Server Online resources (MSDN)

#### Option 1: Migrate using the UI (FishEye/Crucible Administration)

## Before you begin:

- Note, during the migration process (which will take several minutes, depending on the size of your
  database and network throughput), the FishEye/Crucible instance will be inaccessible to users and
  external API clients. Users will see a maintenance screen that informs them of the process.
- If you are attempting a migration after a previous migration has failed, you must drop all tables, indexes
  and constraints before attempting a new migration. This is because the destination database may contain
  data from the previous migration attempt.
- Verify that you have the jtds JDBC driver .jar file in the classpath (by placing the .jar file in FISHEYE\_INST/lib).
- Ensure that the database user can log in to the database from the machine that FishEye/Crucible is running on and that all the required privileges are present.



Please ensure that you use a **SQL Server** user account to log into your database, not a Windows user account.

## To configure FishEye/Crucible to use SQL Server and migrate data using the administration console:

1. Navigate to the **Database** page (under 'System Settings') in FishEye/Crucible's Administration console.

To log in to the Admin area, you can either:

- click Administration at the foot of the page.
- navigate to http://HOSTNAME:8060/admin/, where HOSTNAME is the name of the server on which you installed Fisheye.

Once logged in as an administrator you can also get to the Admin area by clicking the 'cog' menu in the FishEye/Crucible header, and choosing **Administration**.

- 2. Configure FishEye/Crucible to use SQL Server, as follows:
  - Choose Edit > Test Connection to verify that FishEye/Crucible can log in to the database.
  - Select SQLServer from the Type dropdown (choose SQLServer 2008 even if you are using SQL Server 2012).
  - Complete the appropriate fields, replacing the URL (host, port and database name), User Name a
    nd Password as required, using the same connection details as used when creating the SQL
    Server database in Step 1 above.
    - NOTE: The default SQL server instance listens on port 1433. If your instance is not the default, use the port number that is associated with your particular instance.
    - e.g. **URL:**jdbc:jtds:sqlserver://localhost:1433;databaseName=your database name here;
- 3. Click **Test Connection** to verify that FishEye/Crucible can log in to the database (see 'Testing the Connection' screenshot below).
- 4. Click Save & Migrate Data to start the migration process (see 'Migrating the Database' screenshot below). If the migration fails, FishEye/Crucible will not switch to the new database and will report the problems encountered.

Screenshots: Configuring FishEye/Crucible to use SQL Server and migrating data (click to view full-size images)



2. Migrating Data

1. Configuring the Database

Option 2: Migrate using the command line

## To configure FishEye/Crucible to use SQL Server and migrate data using the command line:

- 1. Create a backup of the sql data from the FishEye/Crucible instance. Information on how to create a backup can be found at Backing up and restoring FishEye data \ Backing up and restoring Crucible data
- 2. Run the following command from the bin directory in FISHEYE\_INST:

When using SQL Server 2012, use the same parameters as in the code snippet above, so --dbtype should be set to sqlserver 2008, even if you are using SQL Server 2012.

3. When the import is complete, FishEye/Crucible can be started and will use SQLServer.

# **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.

**Backing up Crucible data** 

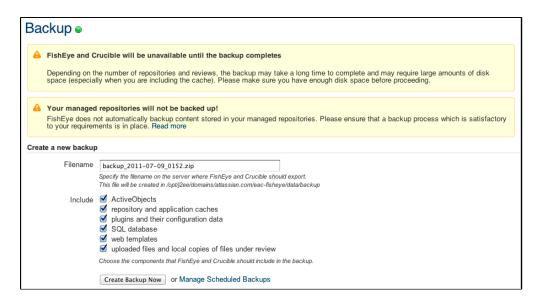
The Crucible admin backup process

- 1. Navigate to the Crucible Admin area (click the Administration link in the footer of any Crucible page).
- 2. Click **Backup** (under 'System' heading in the left navigation bar).
- 3. 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 'Include', a list of check boxes is shown, with the following items:

## On this page:

- Backing up Crucible data
  - The Crucible admin 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
  - Restoring Crucible data from the command line
  - Command line restore options
  - Advanced command line restore settings
- · 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

- 1 Your Crucible instance must be running during the backup.
  - 1. Open a command line interface on the Crucible server computer.
  - 2. Navigate to the <Crucible home directory>/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.

    i 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 dire ctory is already covered by some other backup mechanism.
ActiveObjects	Configuration data stored by plugins	Backed up by default

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 file name fisheyectl.bat and use the correct slashes. Run the command from the <Crucible home directory>/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 <Crucible home directory>/b in/ directory:

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

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

Quiet mode	-q ORquiet	Suppresses output	No
Output filename	-f ORfile	Specify a different path and filename to the FISH EYE_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 ORanonymise	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. Pl ease 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**

i 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 <Crucible home directory>/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.

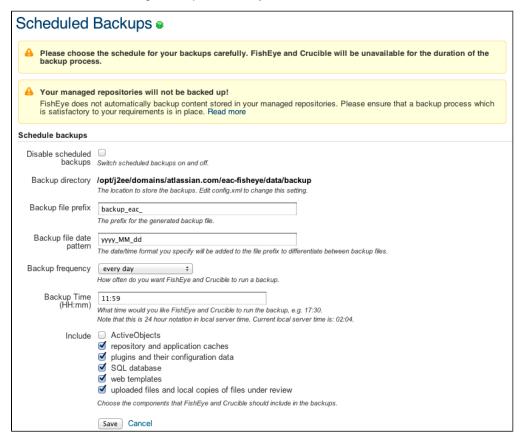
On the 'Scheduled Backups' page, click 'Edit' to adjust the backup schedule. Set the desired options and click 'S ave'.

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 yyyyMM_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**

Restoring Crucible data from the command line

1 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

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.

## **Command line restore options**

1 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 <Crucible home directory>/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 <Crucible home directory>/b in/ 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', 'sqlserver2008' 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 throughdbt ype. (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

i 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 <Crucible home directory>/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
```

## **Customising Crucible**

This section describes the ways in which you can configure Crucible.

- Customising the Welcome Message
- Customising email notifications
- · Customising the defect classifications
- Configuring User Managed Mappings
- Enabling Access Logging 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>
```

## **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 <Crucible home directory>/template/crucible/folder.

There are sets of templates for both HTML and plain-text emails, as listed in the table below. 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.

You can edit templates in any text editor:

- Either: Stop Crucible before editing templates to avoid disrupting notifications that may otherwise be sent.
- Or: Avoid editing a 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.
- After an edit, the change to the email template will take place immediately. No restart is required.

#### 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.

See Freemarker Data Model for Email Templates in the FishEye documentation for details of the data model used by FishEye/Crucible.

#### Crucible email template files

The following template files for Crucible notification are stored in the <Crucible home directory>/template/crucible/folder.

Template filename	Purpose
crucible-notification-subject.ftl	Subject template.
	All of the content must be contained within the first line of the template.
	You can't use markup in this line.
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
review-reminder-notification.ftl	Review Reminder 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

```
public ClassFileInfo getClassFileInPackage(String name) {
         107
         108 +
                         return getClassFile(getPath() + name);
   114
         109
                    public List getClasses() {
Why on Earth are we getting a list of classes here?
                                                                                                          Post
                                                                  Keep as
✓ Defect Major
                             Select Classification
                                                        v
                                                                    Draft
                                                                                   Discard
                              Select Classification
                              Missing
   165
        160
                    protected Extra (superfluous)
   166
        161
                                                           ist();
         162
                        Array Ambiguous
                                                           iFiles.values().iterator(); iterator.hasNext();) {
   168
                         for Inconsistent
                                                           (AbstractFileInfo) iterator.next();
                            Improvement desirable
                                                           tClasses());
                              Not conforming to standards
         163
                                                           les.values().iterator(); iterator.hasNext();) {
                             Risk-prone
         164
                                                           :Info = (BaseSourceFileInfo) iterator.next();
                             Factually incorrect
                                                           Info.getClasses());
         165
   171
                              Not implementable
         166
                         for Editorial
                                                           iFiles.values().iterator(); iterator.hasNext();) {
                             AbstractFileInfo fileInfo = (AbstractFileInfo) iterator.next();
                             tmpClasses.addAll(fileInfo.getClasses());
         167
                             (Iterator iterator = classFiles.values().iterator(); iterator.hasNext();) {
         168
                             ClassFileInfo classFileInfo = (ClassFileInfo) iterator.next();
                             tmpClasses.add(classFileInfo.getDeclaredClass());
```

## Changing classification settings

1 Only Crucible Admin users can edit defect classifications.

## To change the default classifications:

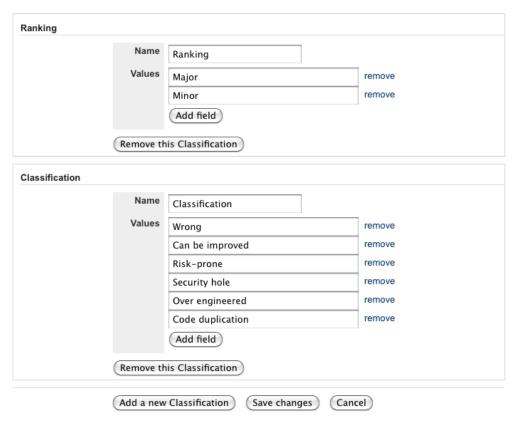
- 1. In the Admin area, click Crucible under 'Global Settings'.
- 2. Click Edit Defect Classifications.
- 3. You can add and remove classifications, and add fields to, or remove fields from, classifications.

Any changes made to defect classifications will only apply to reviews created after the change is saved.

Screenshot: Editing defect classifications in Crucible

## Defect Classifications @

Note: Changes will only apply to new reviews Current defect classification version is 9.



## 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

Crucible users can rank a defect as Major or Minor, indicating the importance of the defect.

#### Classification

This setting helps to provide more detail about the defect. This classification can be set to one of the options described in the following table:

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.

## **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 **Authentication** (under 'Security Settings') in the left navigation bar. You can set User Managed Mappings either **On** or **Off**. The setting is applied immediately.

Screenshot: User Managed Mappings



## **Enabling Access Logging in Crucible**

To enable access logging in FishEye 3.0 and later:

- 1. Stop Fisheye/Crucible,
- 2. 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.eclipse.jetty.webapp.WebAppContext">
  <Set name="handler">
    <New
class="com.cenqua.fisheye.web.jetty.FishEyeRequestLogHandler">
      <Set name="requestLog">
        <New id="RequestLogImpl"</pre>
class="org.eclipse.jetty.server.NCSARequestLog">
          <Arg><SystemProperty name="jetty.logs"</pre>
default="./var/log/" />fisheye-access-yyyy_mm_dd.log</Arg>
          <Set name="retainDays">90</Set>
          <Set name="append">true</Set>
          <Set name="extended">false</Set>
          <Set name="LogTimeZone">GMT</Set>
        </New>
      </Set>
    </New>
  </Set>
</Configure>
```

## 3. Restart Fisheye/Crucible.

This will create an access log in FISHEYE\_HOME/var/log/fisheye-access-yyyy\_mm\_dd.log format (e.g. fisheye-access-2010\_03\_17.log). If you want to change the path to your FISHEYE\_INST directory, change the d efault="./var/log/" to the path to the log folder in FISHEYE\_INST.



## The log directory must exist

If the path to the log directory given by the default attribute of the SystemProperty tag (defined in the line 10 in the jetty-web.xml above) does not exist, then FishEye will fail to start and will not log any error message.

The path given in the example below is correct when FISHEYE\_INST and FISHEYE\_HOME are the same directory, otherwise please use the absolute path of your FISHEYE\_INST/var/log directory.

## Log format

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&ou
tputtype=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&out
puttype=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&outp
uttype=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&outputty
pe=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&outpu
ttype=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&out
puttype=image HTTP/1.1" 200 128
```

Please refer to the Jetty documentation for more configuration options.

#### Compatibility

If you are using an earlier version of FishEye than FishEye 2.7.8, replace com.cenqua.fisheye.web.jetty.FishEyeRequestLogHandler by org.mortbay.jetty.handler.RequestLogHandler.

FishEyeRequestLogHandler was added in 2.7.8 to fix an issue where the user credentials would not be added to the NCSA log: FE-3040.

# Integrating Crucible with other applications

- Linking Crucible to JIRA
- Configuring Application Links
- Trusted Applications

## Linking Crucible to JIRA

JIRA is Atlassian's issue tracking and project management application. This page describes how to integrate JIRA with Crucible.

When Crucible was first installed, JIRA integration may have been configured using the setup wizard, which configures the JIRA connection automatically using the most common options. See Configuring JIRA integration in the Setup Wizard.

However, JIRA integration with Crucible can be configured at any time after installation, as described on this page.

Initial configuration in JIRA

Configure the following setting in each instance of JIRA that you wish to link to Crucible:

Allow remote API access

Consider also the following settings, to make full use of the integration between Crucible and JIRA:

- Enable subtasks
- Allow unassigned issues

## On this page:

- Initial configuration in JIRA
- Linking Crucible with JIRA instances
  - 1. Configuring an application link with JIRA
  - 2. Connecting to JIRA for user management
- Inline issue creation

## Related pages:

- JIRA integration in Crucible
- User management limitations and recommendations
- Configuring application links

#### **Linking Crucible with JIRA instances**

You can integrate Crucible with one or more instances of JIRA using the Crucible administration screens. There are two parts to integrating each JIRA instance:

- A peer-to-peer link between JIRA and Crucible for sharing information and facilitating integration features. This link is set up using Application Links.
- A client-server link between Crucible and JIRA for delegating user and group management to your JIRA server.

#### 1. Configuring an application link with JIRA

This section describes how to create a two-way trusted applications link between Crucible and JIRA. We assume that your Crucible and JIRA servers are using the same set of users. If not, please refer to Adding an application link for information about the various options available.

## To add a two-way trusted applications link between Crucible and JIRA:

- 1. Go to your Crucible administration screen and click **Application Links** (under 'Global Settings').
- 2. Now:
  - a. Click 'Add Application Link'. Step 1 of the link wizard will appear.
  - b. Enter the **server URL** of the application that you want to link to (the 'remote application').
  - c. Click the 'Next' button.
  - d. Enter the following information:
    - 'Create a link back to this server' Tick this check box to add a two-way link between the two applications.
    - 'Username' and 'Password' Enter the credentials for a username that has administrator access to the remote application.
      - *Note:* These credentials are only used to authenticate you to the remote application, so that Application Links can make the changes required for the new link. The credentials are not saved.
    - 'Reciprocal Link URL' The URL you give here will override the base URL specified in your remote application's administration console, for the purposes of the application links connection. Application Links will use this URL to access the remote application.
  - e. Click the 'Next' button.
  - f. Enter the information required to configure authentication for your application link:
    - 'The servers have the same set of users' Tick this check box, because the users are the same in both applications.
    - 'These servers fully trust each other' Tick this check box, because you trust the code in both applications and are sure both applications will maintain the security of their private keys.
      - For more information about configuring authentication, see Configuring Authentication for an Application Link.
  - g. Click the 'Create' button to create the application link.

## 2. Connecting to JIRA for user management

This option is available only with JIRA 4.3 and later.

To manage your Crucible users using JIRA, configure a connection in JIRA and then set up the user directory in

Crucible. Both steps are described below.

## 2.1. To configure a new connection for user management in JIRA:

- 1. Log in to JIRA as a user with the 'JIRA System Administrators' global permission.
- 2. Click **Administration** on the JIRA top navigation bar.
  - a. Go to the JIRA administration screen for configuring the applications that have been set up to use JIRA for user management:
    - In JIRA 4.3: Click 'Other Applications' in the 'Users, Groups & Roles' section of the JIRA administration screen.
    - In JIRA 4.4: Select 'Administration' > 'Users' > 'JIRA User Server'.
  - b. **Add** an application.
  - c. Enter the application name and password that your application will use when accessing JIRA.
  - d. Enter the **IP address** or addresses of your application. Valid values are:
    - A full IP address, e.g. 192.168.10.12.
    - A wildcard IP range, using CIDR notation, e.g. 192.168.10.1/16. For more information, see the introduction to CIDR notation on Wikipedia and RFC 4632.
    - Save the new application.

## 2.2. To set up the JIRA user directory in Crucible:

Go to your Crucible administration screen.

- 1. Click Authentication (under 'Security Settings').
- 2. Click **Setup JIRA/Crowd authentication**. Note, if LDAP authentication has already been set up, you will need to remove that before connecting to JIRA for user management.
- 3. Make the following settings:

Authenticate against	Select a JIRA instance	
Application name and password	Enter the values that you defined for your application in the settings on JIRA.	
JIRA URL	The web address of your JIRA server. Examples:	
	http://www.example.com:808 0/jira/ http://jira.example.com	
Auto-add	Select Create a FishEye user on successful login so that your JIRA users will be automatically added as a FishEye user when they first log in.	
Periodically synchronise users with JIRA	Select <b>Yes</b> to ensure that JIRA will synchronize all changes in the user information on a regular basis. Change the value for <b>Synchronise Period</b> if required.	
When Synchronisation Happens	Select an option depending on whether you want to allow changes to user attributes from within FishEye.	
Single Sign On	Select <b>Disabled</b> . SSO is not available when using JIRA for user management and if enabled will make the integration fail.	

- 4. Click **Next** and select at least one user group to be synchronised from JIRA. If necessary, you could create a new group in JIRA, such as 'fisheye-users', and select this group here.
- 5. Click Save.

Inline issue creation

Inline issue creation allows a user to create a JIRA issue from a review comment. The user must have the 'Comment' permission in Crucible to see the **Create Issue** link in the comment. See Creating JIRA issues from the review.

This requires that Crucible is integrated with JIRA 5.0, or later, and is disabled if Crucible is integrated with an earlier version of JIRA.

When creating the issue, the Create Issue dialog only displays required fields for the selected issue type.

- A JIRA administrator can configure other fields to be required (and so displayed) from within JIRA. See S
  pecifying Field Behaviour.
- Not all field types are supported. In particular, unbundled custom field types are not supported. See Supported fields for inline issue creation.
- If any required field for the selected issue type is not supported, Crucible displays an error, with a link to create the issue directly in JIRA. This link will pre-populate the project, issue type, summary and description fields, but will not create a link from the comment to the issue.

In the new issue in JIRA, you see a link back to the comment in Crucible. However:

- Issue links may be disabled in JIRA.
- The JIRA login that Crucible uses needs permission to create links.
- The FishEye plugin (available from the Atlassian Marketplace) must be installed in JIRA for permission checking on the display of issue links in JIRA.

You can disable the Inline Issue Creation plugin in Crucible to restore the earlier behaviour.

User management limitations and recommendations

This page describes the optimal configurations and limitations that apply when you are connecting Crucible to JIRA for user management.

#### On this page:

- Recommendations for connecting to JIRA for user management
  - Single Sign-On Across Multiple Applications is Not Supported
  - Custom Application Connectors are Not Supported
  - Custom Directories are Not Supported
  - Optimal Number of Users and Applications
  - Recommendations
- Related pages

#### Recommendations for connecting to JIRA for user management

Please consider the following limitations and recommendations when connecting to a JIRA server for user management.

## Single Sign-On Across Multiple Applications is Not Supported

When you connect to JIRA for user management, you will not have single sign-on across the applications connected in this way. JIRA, when acting as a directory manager, does not support SSO.

#### **Custom Application Connectors are Not Supported**

JIRA, Confluence, FishEye, Crucible and Bamboo can connect to a JIRA server for user management. Custom application connectors will need to use the new REST API.

#### **Custom Directories are Not Supported**

Earlier versions of JIRA supported OSUser Providers. It was therefore possible write a special provider to obtain user information from any external user directory. This is no longer the case.

#### **Optimal Number of Users and Applications**

Please consider the following limitations when connecting to a JIRA server for user management:

- Maximum 500 users.
- Maximum 5 connected applications.

#### Recommendations

Your environment	Recommendation
<ul> <li>You have fewer than 500 users.</li> <li>You want to share user and group management across just a few applications, such as one JIRA server and one Confluence server, or two JIRA servers.</li> <li>You do not need single sign-on (SSO) between JIRA and Confluence, or between two JIRA servers.</li> <li>You do not have custom application connectors. Or, if you do have them, you are happy to convert them to use the new REST API.</li> <li>You are happy to shut down all your servers when you need to upgrade JIRA.</li> </ul>	Your environment meets the optimal requirements for using JIRA for user management.
<ul> <li>If one or more of the following are true:</li> <li>You have more than 500 users.</li> <li>You want to share user and group management across more than 5 applications.</li> <li>You need single sign-on (SSO) across multiple applications.</li> <li>You have custom applications integrated via the Crowd SOAP API, and you cannot convert them to use the new REST API.</li> <li>You are not happy to shut down all your servers when you need to upgrade JIRA.</li> </ul>	We recommend that you install Atlassian Crowd for user management and SSO.
If you are considering creating a custom directory connector to define your own storage for users and groups	<ul> <li>Please see if one of the following solutions will work for you:</li> <li>If you have written a custom provider to support a specific LDAP schema, please check the supported LDAP schemas to see if you can use one of them instead.</li> <li>If you have written a custom provider to support nested groups, please consider enabling nested groups in the supported directory connectors instead.</li> <li>If you have written a custom provider to connect to your own database, please consider loading the data into the application's database instead.</li> <li>If you need to keep the custom directory connection, please consider whether Atlassian Crowd meets your requirements. See the documentation on Creating a Custom Directory Connector.</li> </ul>

# Related pages

## Linking Crucible to JIRA

Supported fields for inline issue creation

Inline issue creation allows a user to create a JIRA issue from a review comment. See Creating JIRA issues from the review.

This requires JIRA 5.0, or later, and is disabled if Crucible is integrated with an earlier version of JIRA. See Linking Crucible to JIRA.

When creating the issue, the Create Issue dialog only displays required fields for the selected issue type. However, a JIRA administrator can configure other fields to be required (and so displayed) from within

# JIRA. See Specifying Field Behavior.

#### Note that:

- Unbundled custom field types in JIRA are not supported for inline issue creation.
- If *any* required field for the selected issue type is not supported, Crucible displays an error, with a link to create the issue directly in JIRA. This link will pre-populate the project, issue type, summary and description fields, but will not create a link from the comment to the issue.

The tables below list the supported JIRA field types.

#### **Built-in fields**

Field Name	Supported
Affects Version/s	YES
Assignee	N/A
Attachment	N/A
Comments	N/A
Component/s	YES
Description	YES
Due Date	NO
Environment	YES
Fix Version/s	YES
Issue Type	N/A
Labels	YES
Linked Issues	NO
Log Work	NO
Priority	YES
Reporter	N/A
Resolution	N/A
Security Level	YES
Summary	YES
Time Tracking	YES

## **Bundled custom field types**

Field Name	Supported
Bug Import Id	N/A
Date Picker	NO
Free Text Field	YES
Hidden Job Switch	NO

Job Checkbox	NO
Multi Checkboxes	NO
Multi Select	NO
Number Field	YES
Radio Buttons	NO
Select List	NO
Text Field	YES
User Picker	NO
Cascading Select	NO
Date Time	NO
Group Picker	NO
Import Id	N/A
Labels	YES
Multi Group Picker	NO
Multi User Picker	NO
Project Picker	YES
Read-only Text Field	N/A
Single Version Picker	YES
URL Field	YES
Version Picker	YES

## **Using Crucible gadgets**

This page explains how to add a Crucible gadget to a JIRA dashboard. The process is similar for adding a gadget to a Confluence page.

## On this page:

Overview of Crucible gadgets

- 1. Add an application link from FishEye to JIRA
- 2. Add the Crucible gadget to JIRA's Gadget Directory
- 3. Add the Crucible gadget to a JIRA dashboard

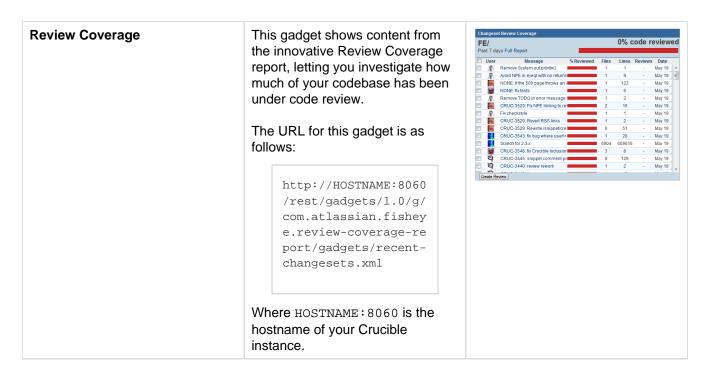
## Overview of Crucible gadgets

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

Crucible bundles the following gadgets by default:

Gadget Name Description and Gadget URL	Screenshot
--	------------

# **Hassle Review Blockers** This gadget shows you who you are still waiting on; in other words, FE-1234: fix Widget sta which reviewers haven't completed FE-1234: fix Widget stamping FE-4567: Disentangle states your reviews. The URL for this gadget is: http://HOSTNAME:8060 /rest/gadgets/1.0/g/ com.atlassian.fecru. fecru-gadgets-plugin :overdueReviews/gadg ets/hassle.xml Where HOSTNAME: 8060 is the hostname of your Crucible instance. **Overdue Reviews** This gadget shows you reviews ID Name CR-3 FE-3456: Make stuff nicer that are yet to be completed in the CR-4 FE-4567: Disentangle state: in 10 hours project, across all authors. This is useful for managers or team leads. The URL for this gadget is: http://HOSTNAME:8060 /rest/gadgets/1.0/g/ com.atlassian.fecru. fecru-gadgets-plugin :overdueReviews/gadg ets/overdueReviews.x m٦ Where HOSTNAME: 8060 is the hostname of your Crucible instance. **Review Inbox** This gadget is a list of Crucible to-do items including reviews to do, comments to read or reviews Respond CR-1 FE-1234: fix Widget stamping in 6 days Review FE-2345: Repair Things to summarise. The URL for this gadget is: http://HOSTNAME:8060 /rest/gadgets/1.0/g/ com.atlassian.fecru. fecru-gadgets-plugin :overdueReviews/gadg ets/todo.xml Where HOSTNAME: 8060 is the hostname of your Crucible instance.



#### 1. Add an application link from FishEye to JIRA

Go to the admin area in FishEye and set up an application link from FishEye to JIRA.

When completing the wizard, leave the **Also create a link** checkbox selected, and choose the **These servers fully trust each other** option.

#### 2. Add the Crucible gadget to JIRA's Gadget Directory

As a JIRA administrator you allow the use of these gadgets by adding them to the Gadget Directory. You'll need the URL listed in the table above for each gadget that you want to add.

See the JIRA documentation for details on this process.

## 3. Add the Crucible gadget to a JIRA dashboard

As a JIRA user, you can add gadgets to a JIRA dashboard that you have created.

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

You can also add Crucible gadgets to the Confluence dashboard. See the General Gadgets Documentation for more information.

## **Configuring Application Links**

An application link is a trust relationship between two applications. Linking two applications allows you to share information and to access one application's functions from within the other.

For example, you may want to set up a trust relationship between Crucible and two JIRA servers.



Screenshot above: Application links to two JIRA servers

Related Topics

- Adding an application link
- Configuring Authentication for an Application Link
- Deleting an Application Link
- Editing an Application Link
- Making an application link the primary link
- Relocating an Application Link
- Upgrading an Application Link
- Configuring Project Links across Applications

#### Adding an application link

This page describes how to add a new application link in Crucible. The process for adding an application link depends on whether or not the application you are linking Crucible to supports Atlassian's Application Links.

If you are linking Crucible to an application that does not have Application Links, you will need to do additional configuration in that application. This is because Application Links in Crucible will not be able to automatically configure authentication in your remote application.

## On this page:

- · Before you begin
- For applications that support Application Links
- For applications that do not support Application Links

#### Before you begin

Check the following settings. This is required for synchronisation to work correctly:

- Make sure that the base URL is set correctly in Crucible. See the FishEye documentation on configuring the web server.
- Make sure that the base URL is set correctly in the application you wish to link to. See the appropriate instructions for JIRA, FishEye, Bamboo and Confluence.

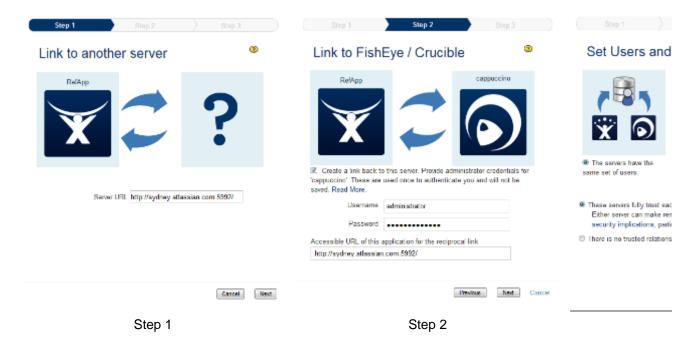
#### For applications that support Application Links

#### To link to an application that supports Application Links:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click 'Add Application Link'. Step 1 of the link wizard will appear.
- 3. Enter the **server URL** of the application that you want to link to (the 'remote application').
- 4. Click the 'Next' button. Step 2 of the link wizard will appear.
- 5. Enter the following information:
  - 'Create a link back to this server' Tick this check box if you want to create a two-way link between the remote application and your application. If you want to do this, you will need to enter the username and password of an administrator for the remote application.
     Note: These credentials are only used to authenticate you to the remote application, so that Application Links can make the changes required for the new link. The credentials are not saved.
  - 'Reciprocal Link URL' The URL you give here will override the base URL specified in your remote application's administration console, for the purposes of the application links connection. Application Links will use this URL to access the remote application.
- 6. Click the 'Next' button. Step 3 of the link wizard will appear.
- 7. Enter the information required to configure authentication for your application link:
  - 'The servers have the same set of users' or 'The servers have different sets of users' Select one of these options depending on how you manage users between the two applications.
  - 'These servers fully trust each other' Tick this check box if you know that the code in both
    applications will behave itself at all times and are sure each application will maintain the security of
    its private key.
    - For more information about configuring authentication, see Configuring Authentication for an Application Link.
- 8. Click the 'Create' button to create the application link.

Screenshots: Adding an application link to an application that supports Application Links (click to view full-sized

#### images)

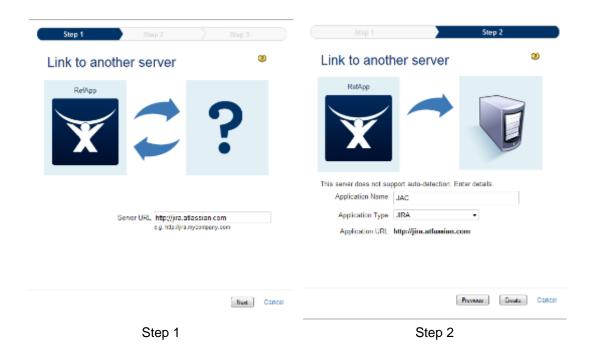


## For applications that do not support Application Links

## To link to an application that does not support Application Links:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click 'Add Application Link'. Step 1 of the 'Link to another server' dialogue will be displayed.
- 3. Enter the server URL of the application that you want to link to, in the 'Server URL' field. Click the 'Next' button. Step 2 of the 'Link to another server' dialogue will be displayed.
- 4. Fill out the fields, as follows:
  - 'Application Name' Enter the name by which this remote application will be referred to, in your application.
  - 'Application Type' Select the type of application that you are linking to: Generic, FishEye/Crucible, Confluence, Stash, Bamboo, JIRA.
  - 'Application URL' This will be set to the server URL you entered in the previous step and will
    not be editable.
- Click the 'Create' button to create the application link. The 'Configure Application Links' page will be displayed, listing all of the application links that have currently been set up for your application including the one you just added.
- 6. Configure the desired authentication type (Trusted Applications, OAuth, basic HTTP, none) for your new application link. See Configuring Authentication for an Application Link.
- 7. In your application that does not support Application Links, configure the same type of authentication that you configured for your application link's *outgoing* authentication (in the previous step). For example, if you configured outgoing Trusted Applications authentication in your Application-Links-enabled application, you also need log into your non-Application-Links application and manually configure Trusted Applications (see the relevant administrator's documentation for the application).

Screenshots: Adding an application link to an application that does not support Application Links (click to view full-sized images)



## **Related Topics**

Making an application link the primary link Configuring authentication for an Application Link Configuring project links across applications

**Configuring Authentication for an Application Link** 

When you configure authentication for an application link, you are defining the level of trust between Crucible and the application that it is linked to.

## On this page:

- Choosing Authentication for an Application Link
- Security Implications for each Authentication Type
- About Primary Authentication Types
- About Impersonating and Non-Impersonating Authentication Types

#### Choosing Authentication for an Application Link

The level of authentication that you should configure for your application link depends on a number of factors.

- Do the two applications trust each other? In other words, are you sure that the code in the application will behave itself at all times and that the application will maintain the security of its private key?
- Do the two applications share the same user base?
- Do you have administrative access to the application you are linking to?

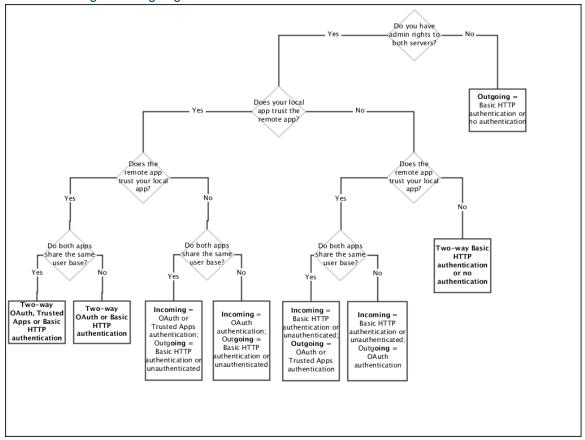
#### Common scenarios include:

- If the two applications you are linking trust each other and share the same user base, configure two-w
  ay authentication using Trusted Applications for both incoming and outgoing authentication. For
  example, you may link your internal Crucible server to an internal JIRA server.
- If the two applications you are linking trust each other but do not share the same user base, configure two-way authentication using OAuth for both incoming and outgoing authentication. For example, you may link your internal Crucible server to an external (customer-facing) JIRA server.
- If you do not have administrative rights to the application that you are linking to (for example, linking to a public Crucible server), configure a one-way outgoing link authenticated using basic HTTP authentication or do not configure any authentication for the link. For example, you may link your external Crucible server to a partner organisation's Crucible server. An unauthenticated link will still allow the local application to render hyperlinks to the remote application or query anonymously-accessible APIs.

The flowchart below provides a guide to what authentication you should configure for your application link.

Read the following topics for information on how to configure authentication for an application link:

- Configuring Basic HTTP Authentication for an Application Link
- Configuring OAuth Authentication for an Application Link
- Configuring Trusted Applications Authentication for an Application Link
- Incoming and Outgoing Authentication



Flowchart above: Determining what authentication to configure for an Application Link

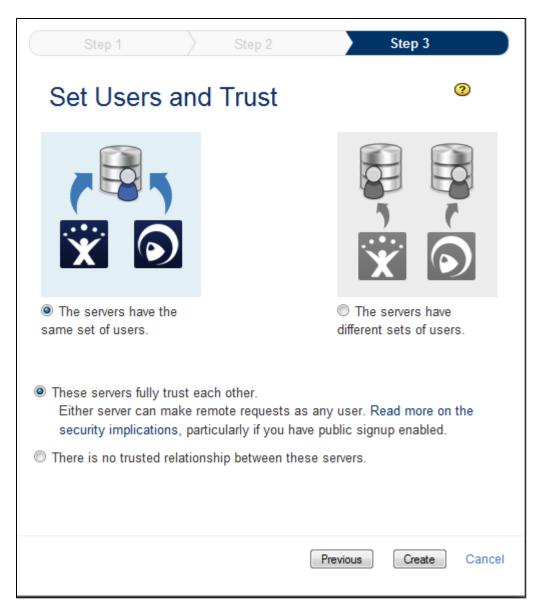
#### Security Implications for each Authentication Type

If you configure **Trusted Applications authentication** for your application (meaning that your servers have the same set of users and they fully trust each other) please be aware of the following security implications:

Trusted applications are a potential security risk. When you configure Trusted Applications
authentication, you are allowing one application to access another as any user. This allows all of the
built-in security measures to be bypassed. Do not configure a trusted application unless you know that all
code in the application you are trusting will behave itself at all times, and you are sure that the application
will maintain the security of its private key.

If you configure **OAuth authentication** for your application (meaning that your servers have different sets of users and they fully trust each other) please be aware of the following security implications:

- Adding an OAuth consumer requires the transmission of sensitive data. To prevent 'man-in-the-middle'
  attacks, it is recommended that you use SSL for your applications while configuring OAuth authentication.
- Do not link to an application using OAuth authentication, unless you trust all code in the application to behave itself at all times. OAuth consumers are a potential security risk to the applications that they are linked to.



Screenshot above: Configuring authentication during application link setup

#### About Primary Authentication Types

You can configure multiple authentication types for each application link. When a feature makes a request using an Application Link, it will use one of the configured authentication types. If more than one authentication type is configured, it will by default use the authentication type that is marked as the primary authentication type. The default authentication type is indicated by the green tick next to the authentication type on the list application link screen.

You **cannot** configure which authentication type is the primary authentication type. The primary authentication type is determined automatically by Application Links and depends on a weight defined by each authentication type method. However, every feature that uses Application Links can also choose to use a specific authentication type and might not use the default primary authentication type.

#### About Impersonating and Non-Impersonating Authentication Types

Applications Links allows you to configure 'impersonating' and 'non-impersonating' authentication types:

- Impersonating authentication types make requests on behalf of the user who is currently logged in. People will see only the information that they have permission to see. This includes OAuth and Trusted Applications authentication.
- **Non-impersonating authentication types** always use a pre-configured user when making a request. Everyone logged into the system will see the same information. This includes basic HTTP authentication.

Configuring Basic HTTP Authentication for an Application Link

Tthis page describes how to configure Basic HTTP authentication for incoming and/or outgoing authentication

for an application link.

Basic HTTP authentication allows Crucible to provide a specific set of user credentials to a remote application and vice versa. Once authenticated, one application can access specified functions on the other application on behalf of that user. For example, if you supply the credentials of a Crucible administrator on your Crucible server to a remote application, the remote application will be able to access all functions on your Crucible server that the Crucible administrator can access.

This method of authentication relies on the connection between Crucible and the remote application being secure. We recommend that you use Trusted Applications authentication or OAuth authentication for your application link instead, if possible.

#### On this page:

- Before You Begin
- Configuring Basic HTTP Authentication for Outgoing Authentication
- Configuring Basic HTTP
   Authentication for Incoming
   Authentication

#### Before You Begin

- The instructions assume that both of the applications that you are linking have the Application Links plugin installed. If the remote application that you are linking to supports Basic HTTP authentication, but does not have the Application Links plugin installed, you will need to configure Basic HTTP authentication from within the remote application. See the relevant administrator's documentation for the application. This is in addition to configuring the outgoing/incoming authentication for the application link described below.
- You must be a Crucible administrator to configure Basic HTTP authentication for an application link.

#### **Configuring Basic HTTP Authentication for Outgoing Authentication**

Configuring **outgoing basic http authentication** will allow Crucible to trust a remote application. This allows the remote application to access specified functions in Crucible.

# To configure basic http authentication for an outgoing application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click the 'Configure' link next to the application link that you want to configure authentication for.
- 3. Click the 'Outgoing Authentication' tab. The outgoing authentication page will be displayed.
- 4. Click the 'Basic Access' tab.
- 5. Click the '**Configure**' button and enter the credentials (username and password) that the remote application will use to log into your application .
- 6. Click the 'Apply' button to save your changes.

## Configuring Basic HTTP Authentication for Incoming Authentication

Configuring **incoming basic http authentication** will allow the remote application that you are linking to, to trust Crucible. Crucible will be able to access specified functions on the remote application.

# To configure basic http authentication for an incoming application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click the 'Configure' link next to the application link that you want to configure authentication for.
- 3. Click the 'Incoming Authentication' tab. The incoming authentication page will be displayed.
- 4. Click the 'Basic Access' tab.
- 5. Click the '**Configure**' button and enter the credentials (username and password) that the your application will use to log in to the remote application.
- 6. Click the 'Apply' button to save your changes.

#### **Related Topics**

Configuring OAuth Authentication for an Application Link Configuring Trusted Applications Authentication for an Application Link

**Configuring OAuth Authentication for an Application Link** 

This page describes how to configure **OAuth** for outgoing authentication and/or incoming authentication for an application link.

OAuth is a protocol that allows a web application to share data/resources with any other OAuth-compliant application. These applications could be another web application (such as a JIRA site or an iGoogle home page), a desktop application or a mobile device application, provided that they are accessible from within your network or available on the Internet.

A typical scenario is to set up an application link between two applications which trust each other, have the Application Links plugin installed, but do not share the same set of users. In this case, you would configure OAuth for both outgoing and incoming authentication.

## **Key OAuth Terminology:**

- Service provider An application that shares ('provides') its resources.
- Consumer An application that accesses ('consumes') a service provider's resources.
- User An individual who has an account with the service provider.

#### On this page:

- Before You Begin
- Configuring OAuth for Outgoing Authentication
- Configuring OAuth for Incoming Authentication

## Related pages:

- Configuring Basic HTTP Authentication for an Application Link
- Configuring Trusted Applications
   Authentication for an Application Link

#### Before You Begin

- Adding an OAuth consumer requires the transmission of sensitive data. To prevent 'man-in-the-middle' attacks, it is recommended that you **use SSL** for your applications while configuring OAuth authentication.
- Do not link to an application using OAuth authentication, unless you **trust all code in the application** to behave itself at all times. OAuth consumers are a potential security risk to the applications that they are linked to.
- The instructions assume that both of the applications that you are linking have the Application Links
  plugin installed. If the remote application supports OAuth but does not have the Application Links plugin
  installed, you will need to configure OAuth from within the remote application (see the administrator's
  documentation for the application) in addition to configuring the outgoing/incoming authentication for the
  application link as described below.
- You must be a Crucible administrator to configure OAuth authentication for an application link.

#### **Configuring OAuth for Outgoing Authentication**

Configuring **outgoing OAuth authentication** will allow Crucible to access data in a remote application on behalf of a user. In other words, Crucible can access specified functions in the remote application.

#### To configure OAuth authentication for an outgoing application link:

1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.

- 2. Click the 'Configure' link next to the application link that you want to configure OAuth for.
- 3. Click the 'Outgoing Authentication' tab. The outgoing authentication page will be displayed.
- 4. Click the 'OAuth' tab.
- 5. If you are not currently logged in to the remote application (or you logged in to the remote application under a variant of the application's hostname, such as the IP address), a login dialogue will display.
  - Enter the 'Username' and 'Password' for the remote server, not your local server, and click the 'Lo gin' button. The remote server needs to learn the identity of your local server for the OAuth protocol to work and your admin credentials are used to store your local server's public key on the remote server. If you are already logged into your remote server, then the appropriate changes can be made without having to log in again.
- 6. Click the 'Enable' button to enable OAuth authentication for the outgoing link. Your application will be automatically set up to be the 'consumer' and the remote application as a 'service provider'.

#### Configuring OAuth for Incoming Authentication

Configuring incoming OAuth authentication will allow the remote application to access data in Crucible.

# To configure OAuth authentication for an incoming application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click the 'Configure' link next to the application link that you want to configure OAuth for.
- 3. Click the 'Incoming Authentication' tab. The incoming authentication page will be displayed.
- 4. Click the 'OAuth' tab.
- 5. Click the 'Enable' button to enable OAuth authentication for the incoming link. The remote application will be automatically set up to be the 'consumer' and your local application as a 'service provider'.

Configuring Trusted Applications Authentication for an Application Link

This page describes how to configure **Trusted Applications** for outgoing and/or incoming authentication for an application link.

Trusted Applications authentication allows one application to gain access to specified functions within another application on behalf of any user, without the user having to log in to the second application.

A typical scenario is to set up an application link between two applications which trust each other, have the same set of users and have the application links plugin installed. In this case, you would configure Trusted Applications for both outgoing and incoming authentication.

# On this page:

- Before You Begin
- Configuring Trusted Applications for Outgoing Authentication
- Configuring Trusted Applications for Incoming Authentication

#### Before You Begin

- Trusted applications are a **potential security risk**. When you configure Trusted Applications authentication, you are allowing one application to access another as any user. This allows all of the built-in security measures to be bypassed. Do not configure a trusted application unless you know that all code in the application you are trusting will behave itself at all times, and you are sure that the application will maintain the security of its private key.
- The instructions below assume that **both of the applications that you are linking have the Application Links plugin installed**. If the remote application supports Trusted Applications but does not have the Application Links plugin installed, you will need to configure Trusted Applications from within the remote application (see the relevant administrator's documentation for the application) in addition to configuring the outgoing/incoming authentication for the application link as described below.
- You must be a Crucible administrator to configure Trusted Applications authentication for an application link.

#### **Configuring Trusted Applications for Outgoing Authentication**

Configuring **outgoing Trusted Applications authentication** will allow the remote application to trust Crucible. In other words, Crucible will be able to access specified functions and data on the remote application.

## To configure Trusted Applications authentication for an outgoing application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click the 'Configure' link next to the application link that you want to configure Trusted Applications authentication for.
- 3. Click the 'Outgoing Authentication' tab. The outgoing authentication page will show, with the 'Trusted Applications' tab displayed.
- 4. If you are not currently logged into the remote application (or you logged into the remote application under a variant of the application's hostname, e.g. the IP address), a login dialogue will display.
  - Enter the 'Username' and 'Password' for the remote server, (not your local server), and click the 'Login' button. You need to enter the credentials for the remote server, as the remote server needs to be instructed to trust your local server for the Trusted Applications protocol to work. If you are already logged into your remote server, then the appropriate changes can be made without having to log in again.
- 5. Configure the settings for the Trusted Applications authentication:
  - 'IP Patterns' Enter the IP addresses (IPv4 only) from which the remote application will accept requests (this effectively is the IP address your local server). You can specify wildcard matches by using an asterisk (\*), e.g. '192.111.\*.\*' (note, you cannot use netmasks to specify network ranges). If you are entering multiple IP addresses, separate them with commas or spaces.

    ⚠ Please note, if you are setting up Trusted Applications between two applications that both have the Application Links plugin installed, you can leave this field blank (or explicitly use \*.\*.\*.\*). However, if your remote application does not have the Application Links plugin installed and you are configuring the IP Patterns in the remote application (not the Application Links plugin), you must not leave this field blank nor use \*.\*.\*.\* Failure to configure IP address restrictions in this scenario is a security vulnerability, allowing an unknown site to log into your site under a user's login ID.

Consider the following scenarios, if you want to limit access by using this field:

- If your local application is using a proxy server, you need to add the proxy server's IP address to this field.
- If your local application is a clustered instance of Confluence, you need to configure the remote server to accept requests from each cluster node. If you do not set up each node appropriately, your Confluence users may not be able to view any information from the remote server. You can set this up by either specifying each individual IP address for each node of the cluster (e.g. 172.16.0.10, 172.16.0.11, 172.16.0.12), or specifying the IP address for the clustered Confluence instance using wildcards (e.g. 172.16.0.\*).
- 'URL Patterns' Enter the URLs in the remote application that your local application will be allowed to access. Each URL corresponds to a particular application function. Enter one URL per line, as follows:
  - If your remote application is JIRA, enter the following URL Patterns: /plugins/servlet/streams, /sr/jira.issueviews:searchrequest, /secure/RunPortlet, /rest, /rpc/soap
  - If your remote application is Confluence, enter the following URL Patterns: /plugins/ser vlet/streams, /plugins/servlet/applinks/whoami
- 'Certificate Timeout (ms)' Enter the certificate timeout. The default is 10 seconds. The
  certificate timeout is used to prevent replay attacks. For example, if a Trusted Applications request
  is intercepted and (maliciously) re-sent, the application will be able to check when the request was
  first sent. If the second request is sent more than 10 seconds (or whatever the certificate timeout is
  set to) after the initial request, it will be rejected. Please note, you should not have to change the
  default value of this field for most application links. Note that the certificate timeout relies on the
  clocks on both servers being synchronised.
- 6. Click the 'Apply' button to save your changes.

**Configuring Trusted Applications for Incoming Authentication** 

Configuring **incoming Trusted Applications authentication** will allow Crucible to trust the remote application. The remote application will be able to access specified functions and data on Crucible.

## To configure Trusted Applications authentication for an incoming application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click the 'Configure' link next to the application link that you want to configure Trusted Applications authentication for.
- 3. Click the 'Incoming Authentication' tab. The incoming authentication page will show, with the 'Trusted Applications' tab displayed.
- 4. The tab will show whether Trusted Applications is currently enabled or not. Use the 'Modify' or 'Configur e' button to configure Trusted Applications. The Trusted Applications configuration settings will be displayed:
  - 'IP Patterns' Enter the IP addresses (IPv4 only) from which our application will accept requests. You can specify wildcard matches by using an asterisk (\*), e.g. '192.111.\*.\*' (note, you cannot use netmasks to specify network ranges). If you are entering multiple IP addresses, separate them with commas or spaces.

Please note, if you are setting up Trusted Applications between two applications that both have the Application Links plugin installed, you can leave this field blank (or explicitly use \* . \* . \* . \*). However, if your remote application does not have the Application Links plugin installed and you are configuring the IP Patterns in the remote application (not the Application Links plugin), you must not leave this field blank nor use \* . \* . \* . \* . Failure to configure IP address restrictions in this scenario is a security vulnerability, allowing an unknown site to log into your site under a user's login ID.

Consider the following scenarios, if you want to limit access by using this field:

- If the remote application is using a proxy server, you need to add the proxy server's IP address to this field.
- If the remote application is a clustered instance of Confluence, you need to accept requests from each cluster node. If you do not specify each node's address, Confluence users may not be able to view any data from your application. You can set this up by either specifying each individual IP address for each node of the cluster (e.g. 172.16.0.10, 172.16.0.11, 172.16.0.12), or specifying the IP address for your clustered Confluence instance using wildcards (e.g. 172.16.0.\*).
- 'URL Patterns' Enter the local URLs that the remote application will be allowed to access. Each URL corresponds to a particular application function. Enter one URL per line, as follows:
  - If your local application is JIRA, enter the following URL Patterns /plugins/servlet/ streams, /sr/jira.issueviews:searchrequest, /secure/RunPortlet, /rest, / rpc/soap
  - If your local application is Confluence, enter the following URL Patterns /plugins/serv let/streams, /plugins/servlet/applinks/whoami
- 'Certificate Timeout (ms)' Enter the certificate timeout. The default is 10 seconds. The
  certificate timeout is used to prevent replay attacks. For example, if a Trusted Applications request
  is intercepted and (maliciously) re-sent, the application will be able to check when the request was
  first sent. If the second request is sent more than 10 seconds (or whatever the certificate timeout is
  set to) after the initial request, it will be rejected. Please note, you should not have to change the
  default value of this field for most application links. Note that the certificate timeout relies on the
  clocks on both servers being synchronised.
- 5. Click the 'Apply' button to save your changes.

**Related Topics** 

Configuring Basic HTTP Authentication for an Application Link Configuring OAuth Authentication for an Application Link

**Incoming and Outgoing Authentication** 

When you configure authentication for an application link, you are defining the level of trust between the two linked servers. When configuring a link from one application to another, you can set up:

- **Incoming authentication** (authentication of requests coming from a linked application into this application).
- Outgoing authentication (authentication of requests sent from this application to a linked application).

See Configuring Authentication for an Application Link.

## **Deleting an Application Link**

Deleting an application link stops the two applications from sharing information. You will no longer be able to make requests from one application to the other. This means that certain integration features may not work.

If you have set up application links to multiple servers of the same application type, for example you have linked Crucible to multiple JIRA servers, deleting the primary link will mean that another of the links will be made the primary link.

Deleting an application link will also delete all project links set up for that application link.

#### To delete an application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click the '**Delete**' link next to the application link that you want to delete. A confirmation screen will be displayed.
- 3. Click the 'Confirm' button to delete the application link.

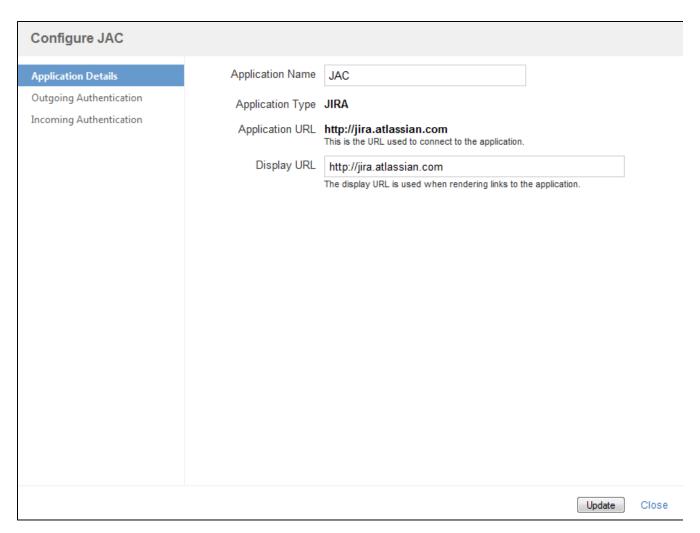
#### **RELATED TOPICS**

Editing an Application Link Relocating an Application Link Editing an Application Link

You can change the details, such as the application name and display URL, for an existing application link.

# To edit an application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- 2. Click the 'Configure' link next to the application link that you want to edit the details for. The application details for the application link will be displayed.
- Update the application details as desired. Please note, you cannot update the Application Type nor the Application URL.
  - 'Application Name' Update this field to change the display name for the application that you are linking to.
  - 'Display URL' This URL is used when displaying links to the application in the browser. When creating the application link, you may have used a URL that is not accessible to other users, such as an internal IP address. If so, you can change the display URL to an address in a domain that is accessible to other users.
- 4. Click the 'Update' button to save your changes.



Screenshot above: Editing an application link Related Topics

Configuring Authentication for an Application Link Making an application link the primary link

Making an application link the primary link

If you have set up application links to more than one of the same application type, for example you have linked Crucible to two JIRA servers, then one of the servers will be marked as the 'primary' link. This means that any outgoing requests will be directed to the primary link's application.

For example, if you have linked a Crucible server to two JIRA servers with two-way authentication for both links, you can nominate an application link to one of the JIRA servers as the primary link. Every time Crucible requests JIRA information, it will request it from the primary link's JIRA server. Both JIRA servers can still make requests of the Crucible server.

Please see Configuring Project Links across Applications for information on how primary project links also influence the information shared between servers.

## To make an application link the primary link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- Click the 'Make Primary' link next to the application link that you want to make the primary link. A 'e' symbol will display in the 'Primary' column next to the application link.
  - 1 The 'Primary' column and 'Make Primary' link will only display if you have set up application links to more than one of the same application type, e.g. you have linked your application to two JIRA servers.

#### Relocating an Application Link

This page describes how to change the location of an application link. You will need to relocate an application

link if the target application has moved to a new address.

#### To relocate an application link:

- 1. Log in as a system administrator and go to the administration page. Click 'Application Links' in the administration menu. The 'Configure Application Links' page will appear, showing the application links that have been set up.
- If the remote application for an application link cannot be reached by your application, the 'List
   Application Links' page will display a warning message (see 'Relocate Link Warning Message'
   screenshot below).
- If your remote application has been moved to a different address (rather than just being offline temporarily), click the 'Relocate' link in the warning message (see 'Relocate Link - Updating URL' screenshot below).
- 4. Enter the new URL for the remote application of your application link and click 'Relocate'.
- 5. You will need to confirm the relocation, if the new URL cannot be contacted. Otherwise, the application link will be updated.



Screenshot above: Relocate link - The warning message



Screenshot above: Relocate link - Updating the URL

Related Topics

Making an application link the primary link

**Upgrading an Application Link** 

This page describes how to upgrade an existing application link. You may want to upgrade an application link in either of the two situations below:

- Your local Crucible application has been upgraded from a version that does not include Application Links to a version that does.
- Your remote application has been upgraded to a version that includes Application Links. For example, you had set up an application link to a JIRA 4.2 site (does not include Application Links) and have since upgraded to JIRA 4.3 (includes Application Links).

## On this page:

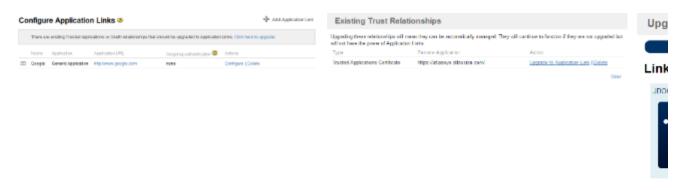
- Upgrading an Application Link (Local App Upgraded to Include Application Links)
- Upgrading an Application Link (Remote App Upgraded to Include Application Links)

#### Upgrading an Application Link (Local App Upgraded to Include Application Links)

When you upgrade from a Crucible version that does not include Application Links to a version that does, you will have the option of converting any Trusted Applications or OAuth links to Application Links. The advantage of converting your links to Application Links is that link configuration will be simplified in future.

## To upgrade an application link when Crucible has been upgraded to include Application Links:

- 1. After your Crucible upgrade, go to the administration console.
- 2. Click 'Application Links'. The 'Configure Application Links' screen will show the following message: "There are existing Trusted Applications or OAuth relationships that should be upgraded to Application Links. Click here to upgrade."
- 3. Click the 'Click here to upgrade' link. The 'Existing Trust Relationships' screen will appear, showing all Trusted Applications and OAuth relationships that can be upgraded to Application Links.
- 4. Click the '**Upgrade to Application Link**' link next to the desired trust relationship. The 'Upgrade to Application Link' wizard will appear.
- 5. Complete the wizard. The process will be similar to adding a new link (described on Adding an application link), except that most fields should be pre-filled.



Step 1 Step 2

Screenshots above: Upgrading an application link for your local application

## Upgrading an Application Link (Remote App Upgraded to Include Application Links)

When an application link is created between a version of Crucible that supports Application Links, and a remote application that does not (either a non-Atlassian product, or an older version of an Atlassian product that did not ship with Application Links), this link is configured to run in 'legacy mode'. While there is no distinguishable difference to a user, connection and configuration without Application Links is a little different. For example:

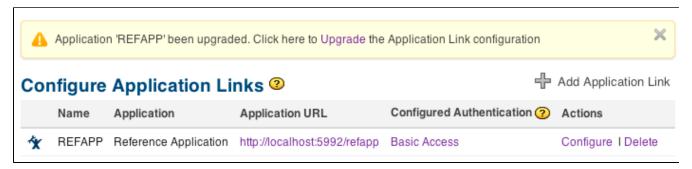
Setting up OAuth requires manual configuration by the administrator. If your applications support
Application Links, exchange of the consumer keys and public keys is done automatically.

• The Trusted Applications protocol (Atlassian-specific) will not be available for authentication.

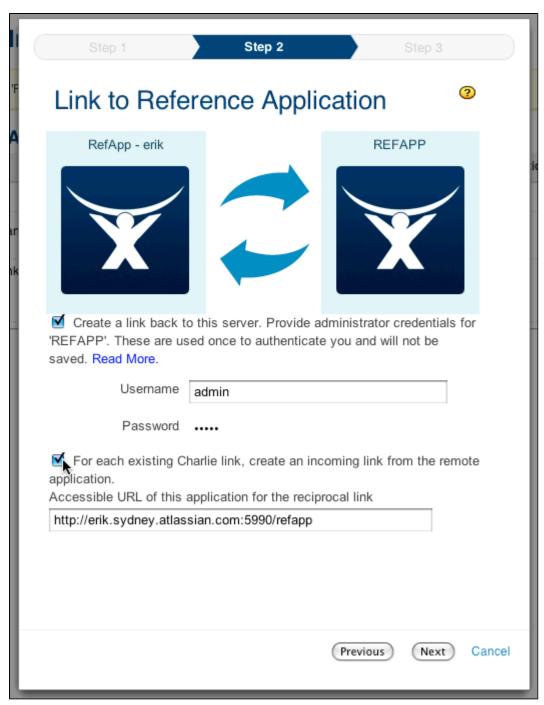
If you upgrade your remote application to a version that does support Application Links, the application link will continue to work. Upgrading your link may simplify link configuration and make additional authentication protocols available (as mentioned above).

# To upgrade an application link when your remote application has been upgraded to include Application Links:

- 1. After you have upgraded your remote application to a version that includes Application Links, go to the administration console of your local application. A warning will be displayed, requesting that you upgrade the link to full Application Links mode.
- 2. Click 'Upgrade' in the warning message to start the upgrade wizard. Note the following:
  - You will be prompted to make your application link a reciprocal link. You will need to provide administrator credentials for your remote application, if you choose to do so.
  - If you make your application link a reciprocal link, you will also be able to make reciprocal links for your project links. For example, you may be able to link your JIRA project to a FishEye repository and also make a link from your FishEye repository back to the JIRA project.



Screenshot above: Upgrading an application link for remote application



Screenshot above: Upgrading an application link wizard Related Topics

Adding an application link

Configuring Authentication for an Application Link

**Configuring Project Links across Applications** 

We no longer recommend the use of project links with Crucible 2.9 and later. This is because application links now provide all of the functionality previously available with project links.

However, project links are retained for the following reasons:

- Setting up project links provides a way to restrict the scope of JIRA searches, which can provide performance benefits.
- Legacy configurations can continue to use project links without any need for changes.
- Third-party plugins may continue to rely on project links for their functionality.

## On this page:

- Adding a Project Link
- Deleting a project link
- Making a project link the primary link

#### Related pages:

Adding an application link

#### Adding a Project Link

#### To link a Crucible project to a project in another application:

- 1. Go to the Crucible administration console and click **Projects**.
- 2. Click Application Links in the 'Operations' column next to the project that you want to link from.
- 3. The instructions for adding a project link will vary depending on whether the target application has the Application Links functionality installed:
  - If the target application has Application Links:
    - a. Click 'Add Link'. A dropdown menu will appear listing the applications you have already linked to.
    - b. In the dropdown menu, click the application that contains the project you want to link to. For example, if you want to link to a specific JIRA project, click the JIRA site that contains that project. If you want to link to a Confluence space, click the Confluence site that contains that space.
    - c. Click one of the options on the 'Authorization required' screen:
      - 'Authorize' Click this option if you want to grant your project authorised access to the target project. The target application will open in a new window, so that you can log in and authorise access.
      - 'Skip your access is anonymous' Click this option if you only want to allow anonymous access to the target project.
    - d. In the 'Name or Key' field, enter the name/key of the project in the remote application that you want to link to. For example, if you want to link to a JIRA project, enter the project key. If you want to link to a Confluence space, enter the space key.
    - e. Click the 'Create' button to create the project link.
  - If the target application does not have Application Links:
    - a. Click 'Add Link'. A dropdown menu will display listing the applications you have already linked to.
    - b. In the dropdown menu, click the application that contains the project you want to link to. For example, if you want to link to a specific JIRA project, click the JIRA site that contains that project. If you want to link to a Confluence space, click the Confluence site that contains that space.
    - c. In the '**Key**' field, enter the name/key of the project in the remote application that you want to link to. For example, if you want to link to a JIRA project, enter the project key. If you want to link to a Confluence space, enter the space key.
    - d. *(optional)* Enter the alias for the project in the 'Alias' field. This is the display name for the project in your administration console.
    - e. Click the 'Create' button to create the project link.

## Deleting a project link

If you have set up multiple project links to the same application, for example you have linked a Crucible project to multiple JIRA projects, deleting the primary link will mean that another of the links will be made the primary link.

#### To delete a project link:

- 1. Go to the Crucible administration console and click **Projects**.
- 2. Click **Application Links** in the 'Operations' column next to the project that you want to link from.
- 3. Click **Delete** next to the link that you want to delete.
- 4. Click Confirm.

#### Making a project link the primary link

If you have set up project links to more than one project in the same application, then one of the project links will be marked as the primary link. All outgoing requests will be directed to the primary link.

For example, if you have a Crucible project that is linked to two JIRA projects, you can nominate the link to one of the JIRA projects as the primary link. Every time Crucible requests JIRA information, it will request it from the

primary link's JIRA project. Both JIRA projects can still request information from the Crucible project.

#### To make a project link the primary link:

- 1. Go to the Crucible administration console and click Projects.
- 2. Click **Application Links** in the 'Operations' column next to the project that you want to link from.
- 3. Click **Make Primary** in the 'Action' column for the project link that you want to make the primary link. A symbol will be displayed in the 'Primary' column next to the link.

  Note: The 'Primary' column and 'Make Primary' link will appear only if you have set up multiple project links to the same application, for example if you have linked a Confluence space to a number of JIRA projects.

# **Trusted Applications**

A 'trusted application' is an application that Crucible will allow to access specific functions in Crucible on behalf of any user, without the user logging in to Crucible. You can configure Trusted Applications authentication between FishEye, Crucible, JIRA (3.12 and later) and Confluence (2.7 and later).

Using the bundled Application Links plugin, you can configure application links with Trusted Applications authentication as well as other types of authentication.

For further instructions, please see Configuring Application Links.

#### Related Topics

Configuring Application Links Linking Crucible to JIRA

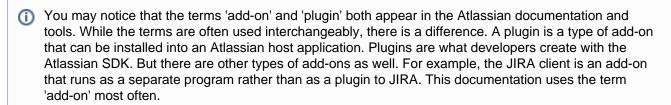
# Managing add-ons

An add-on is an installable component that supplements or enhances the functionality of Crucible in some way. For example, the Automatic Review Creator automatically creates a Crucible review each time a commit is made to a FishEye repository. Other add-ons are available for reviewing changes in Git or Subversion source code repositories, and for using Crucible features directly from the IntelliJ IDEA interface.

Crucible comes with many pre-installed add-ons (called system add-ons). You can install more add-ons, either by acquiring the add-on from the Atlassian Marketplace or by uploading it from your file system. This means that you can install add-ons that you have developed yourself. For information about developing your own add-ons for Crucible, see the Crucible Developer documentation.

#### On this page:

- About the Universal Plugin Manager (UPM)
- Administering Add-ons in Crucible



## About the Universal Plugin Manager (UPM)

You administer add-ons for Crucible using the Universal Plugin Manager (UPM). The UPM is itself an add-on that exposes add-on administration pages in the Crucible Administration Console. UPM works across Atlassian applications, providing a consistent interface for administering add-ons in Crucible, Confluence, Fisheye, JIRA, Stash and Bamboo.

UPM comes pre-installed in recent versions of all Atlassian applications, so you do not normally need to install it yourself. However, like other add-ons, the UPM software is subject to regular software updates. Before administering add-ons in Crucible, therefore, you should verify your version of the UPM and update it if needed.

## **Administering Add-ons in Crucible**

You can update UPM, or any add-on, from the UPM's own add-on administration pages. Additionally, you can perform these tasks from the UPM administration pages:

- Install or remove add-ons
- Configure add-on settings
- Discover and install new add-ons from the Atlassian Marketplace
- Enable or disable add-ons and their component modules

For information on performing these add-on administration tasks, see the Universal Plugin Manager documentation.

# Crucible releases

#### Crucible 3.2

#### **27 November 2013**

- · Quick Search filters
- User data moved to the SQL database
- Improved protection against XSRF
- Internally managed Git repositories no longer supported by FishEye 3.2
- Microsoft SQL Server 2012 is now supported (support for SQL Server 2005 is deprecated).
- Microsoft Internet Explorer 10 is now supported (support for IE 8 is deprecated).
- MySQL 5.0 is deprecated.
- PostgreSQL 8.2 is deprecated.
- FishEye communication with JIRA versions older than 5.0 is no longer supported.
- More in the release notes and changelog

See the Crucible upgrade guide.

## Crucible 3.1

# 27 August 2013

- Dashboard improvements
- QuickNav and QuickSearch improvements
- New JIRA issue dialog
- Transition JIRA issues from within Crucible
- Small improvements: native SVN 1.7, OpenJDK
- More in the release notes and changelog

See the Crucible upgrade guide.

#### Crucible 3.0

## 30 May 2013

- Redesigned user experience
- Review CLI tool
- Iterative pre-commit reviews
- Platform upgrades: Jetty 8, Infinity 3 DB
- Optimised indexing for new SVN repositories
- Small improvements
- More in the release notes and changelog

See the Crucible upgrade guide.

#### Crucible 2.10

## 15 January 2013

Inline issue creation

- Repository management REST API
- · Repository review creation limit
- More in the release notes
- Crucible 2.10 upgrade guide

#### Crucible 2.9

#### 14 November 2012

- Simpler JIRA integration
- Better performance of the Reviews tab in JIRA
- · Faster review creation for large teams
- More in the release notes
- Crucible 2.9 upgrade guide

## Crucible 2.8

#### 15 August 2012

- Mentions
- Shares
- Improved performance for the projects listing
- Support for Subversion 1.7
- End of life announcements
- More in the release notes
- Crucible 2.8 Upgrade Guide

#### Crucible 2.7

## 7 September 2011

- JIRA Transitions in Crucible
- Review Reminders
- Small Improvements
- More in the release notes
- Crucible 2.7 Upgrade Guide

#### Crucible 2.6

#### 6 June 2011

- New Quick Search
- HTML Emails for Reviews
- Dashboard and Navigation Improvements
- SQL Server Support
- Oracle Support
- Review Creation without Metadata Changes
- Improved Patch Anchoring
- More in the release notes
- Crucible 2.6 Upgrade Guide

## Crucible 2.5

# 8 February 2011

- Oracle (Beta)
- Redesigned Activity Stream
- Improved Header
- Comment Notification Batching
- More in the release notes
- Crucible 2.5 Upgrade Guide

#### Crucible older release notes (click to expand)

### Crucible 2.4

#### 20 October 2010

- Easier Application Linking
- Native Repository Access
- Starter Licenses
- Adding Changesets to Reviews Simplified
- User Interface Improvements
- Snippets Tweaks
- More in the release notes
- Crucible 2.4 Upgrade Guide

#### Crucible 2.3

## 26 May 2010

- Snippet Reviews
- Changeset Discussions
- Mercurial SCM Alpha
- Review Coverage report
- Revamped Installation Process
- Gadgets
- More in the release notes
- Crucible 2.3 Upgrade Guide

#### Crucible 2.2

## 18 February 2010

- Smart Pre-Commit (Patch) Support
- 'No Moderator' Reviews
- Wizard-Like Review Creation
- Integrated Timetracking Between Crucible and JIRA
- Edit Mode for Reviews
- More in the release notes
- Crucible 2.2 Upgrade Guide

## Crucible 2.1

## 12 November 2009

- 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 the release notes
- Crucible 2.1 Upgrade Guide

## Crucible 2.0

#### 30 June 2009

- Support for iterative reviews
- New User Interface
- Indicators for read/unread comments
- Enhanced JIRA integration

- More in the release notes
- Crucible 2.0 Upgrade Guide

## Crucible 1.6

#### 23 September 2008

- · 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 the release notes
- Crucible 1.6 Upgrade Guide

#### Crucible 1.5

#### 14 April 2008

- Project Dashboard
- Filtered comments & defects search, with statistical summary
- Customisable email templates
- Improvements to Crucible Plugin API beta
- More in the release notes
- Crucible 1.5 Upgrade Guide

#### Crucible 1.2

#### 5 Dec 2007

- Reviews grouped into projects
- Customisable permission schemes
- Plugin API
- Enhancements to user management
- JIRA integration
- Crucible 1.2 includes FishEye 1.4
- More in the release notes
- Crucible 1.2 Upgrade Guide

## Crucible 1.1

# 18 September 2007

- 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 the release notes
- Crucible 1.1 Upgrade Guide

## Crucible 1.0.x Changelog

Security advisories (click to expand)

#### Security advisories

- FishEye and Crucible Security Advisory 2013-07-16
- FishEye and Crucible Security Advisory 2012-08-21
- FishEye and Crucible Security Advisory 2012-05-17
- FishEye and Crucible Security Advisory 2012-01-31
- FishEye and Crucible Security Advisory 2011-11-22
- FishEye and Crucible Security Advisory 2011-05-16
- FishEye and Crucible Security Advisory 2011-01-12

- Crucible Security Advisory 2010-06-16
- Crucible Security Advisory 2010-05-04

# Crucible upgrade guide

This page describes how to upgrade to a new version of Crucible.

- For the latest Crucible release, see Crucible releases.
- Read about how your Crucible installation works with FishEye.
- For production environments we recommend that you test the Crucible upgrade on a QA server before deploying to production.

#### On this page:

- Upgrade steps
- Upgrading to Crucible 3.2
- Upgrading to Crucible 3.1
- Upgrading to Crucible 3.0
- Checking for known issues and troubleshooting the Crucible upgrade

#### **Upgrade steps**

This section provides general instructions for upgrading Crucible. See also the specific notes on this page for the version of Crucible you are upgrading to. We *strongly recommend* that you upgrade Crucible by following these steps:

- Back up your entire Crucible instance (see Backing up and restoring Crucible data):
  - If you are backing up your Crucible instance via the Admin interface, tick all of the **Include** checkbo xes (e.g. plugins, templates, uploads, SQL database, etc).
  - If you are backing up your Crucible instance using the command-line interface, do not use any exclusion options.
- Read the Release Notes and Changelog and version-specific Upgrade Guides for the version you are upgrading to, as well as for any versions you are skipping.
- Read the Supported platforms page for the full list of supported platforms for Crucible.
- Download the Crucible zip file.
- Once the new vesion of Crucible is installed, remember to update any custom configurations in the new version of Crucible, for example your SQL driver and your wrapper.config file.

Your upgrade procedure depends on whether you are using a FISHEYE\_INST directory (i.e. "FishEye instance" directory).

- The FISHEYE\_INST directory is the FishEye data directory (*not* the installation directory) and has a location defined by the FISHEYE\_INST environment variable. It is used to keep the FishEye data completely separate from the FishEye/Crucible application files. We recommend that you configure FishEye/Crucible to use a FISHEYE\_INST directory for production instances. Read more about FISHEYE \_INST in Installing FishEye on Windows or Installing FishEye on Linux and Mac.
- The <FishEye home directory> is the location of the FishEye/Crucible application files.

NOTE: For all methods below, if you previously ran FishEye as a Windows service and are installing the new version of FishEye in a new location, you need to reinstall FishEye as a Windows service. Make sure to run ...\wrapper\bin\Fisheye-Uninstall-NTService.bat from the old location. Subsequently, prior to starting the new instance of FishEye, follow these instructions to set up Fisheye as a Windows service again. Make sure to copy over the changes from the old ...\wrapper\conf\wrapper.conf file to the new wrapper.conf file.

#### Method 1: Using a FISHEYE\_INST directory

Click here to expand...

If you have FishEye/Crucible configured to use a FISHEYE\_INST directory, then follow the instructions below. This is the recommended scenario for production installations.

- 1. Shut down your existing FishEye/Crucible server, using bin\stop.bat or bin\stop.sh from the < FishEye home directory>.
- 2. Make a backup of your FISHEYE\_INST directory.

- 3. Download FishEye or Crucible.
- 4. Extract the new FishEye/Crucible version to a new directory.
- 5. Leave your FISHEYE\_INST environment variable set to its existing location. Both FishEye and Crucible use this variable.
  - Please be aware that jar files in the FISHEYE\_INST/lib directory may conflict with those
    required for FishEye's normal operation. Jar files in this directory should be limited to those
    which provide functionality not provided by FishEye (e.g. database drivers).
- 6. Start FishEye/Crucible from the new installation directory by running bin/run.sh. (Use run.bat on Windows.)
- 7. Follow any version-specific instructions found in the FishEye upgrade guide or Crucible upgrade guide

#### Method 2: Without a FISHEYE\_INST directory

#### Click here to expand...

If you do not have FishEye/Crucible configured to use a FISHEYE\_INST directory and do not want to set one up, then follow the instructions below. The <FishEye home directory> is the location of the existing FishEye/Crucible installation. Note that this is the typical scenario for evaluation installations, and is not recommended for production installations.

You will need to copy some files from your old FishEye/Crucible installation to your new one.

- 1. Download FishEve or Crucible.
- 2. Extract the new FishEye/Crucible archive into a directory such as <New FishEye home directory>.
- 3. Shut down the old FishEye/Crucible server, using bin\stop.bat or bin\stop.sh from the <FishE ye home directory>.
- 4. Copy <FishEye home directory>/config.xml to <New FishEye home directory>.
- 5. Delete the following directories from the <New FishEye home directory>/var directory:
  - New FishEye home directory>/var/cache
  - <New FishEye home directory>/var/data
  - <New FishEye home directory>/var/log
- 6. Copy (or move) the following directories from <FishEye home directory>/var to <New FishEye home directory>/var:
  - <FishEye home directory>/var/cache
  - <FishEye home directory>/var/data
  - <FishEye home directory>/var/log

## DO NOT include the following directories when you do that:

- <FishEye home directory>/var/osgi-cache
- <FishEye home directory>/var/plugins
- <FishEye home directory>/var/tmp
- 7. Delete the <New FishEye home directory>/cache directory.
- 8. Copy (or move) the <FishEye home directory>/cache directory to <New FishEye home directory>/cache.
- 9. Start FishEye/Crucible from the new installation by running <New FishEye home directory>/bin/run.sh. (Use run.bat on Windows.)
- 10. Follow any version-specific instructions found in the FishEye upgrade guide or Crucible upgrade guide.

#### Method 3: Without a FISHEYE\_INST directory, but would like to set one up

#### Click here to expand...

If you do not have FishEye/Crucible configured to use a FISHEYE\_INST directory but would like to set one up, then follow the instructions below. You may wish to do this when reconfiguring an existing installation for a production environment.

The FISHEYE\_INST directory is the FishEye data directory, which has a location defined by the FISHEYE\_I NST environment variable, and which should be completely separate from the <FishEye home directory>. The <FishEye home directory> is the location of the existing FishEye/Crucible installation.

- 1. Download FishEye or Crucible.
- 2. Shut down the existing FishEye/Crucible server, using  $bin\stop.bat$  or  $bin\stop.sh$  from the <F

- ishEye home directory>.
- 3. Set up the FISHEYE\_INST environment variable, then create the FISHEYE\_INST directory on your file system.
- 4. Copy <FishEye home directory>/config.xml to the FISHEYE\_INST directory.
- 5. Copy the <FishEye home directory>/var directory to the FISHEYE\_INST directory.
- 6. Copy the <FishEye home directory>/cache directory to the FISHEYE\_INST directory.
- 7. If it exists, copy the <FishEye home directory>/data directory to the FISHEYE\_INST directory.
- 8. Extract the new FishEye/Crucible archive into a directory such as <New FishEye home directory>.
- 9. Start FishEye/Crucible from the new installation by running <New FishEye home directory>/bin/run.sh. (Use run.bat on Windows.)
  - 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 the <FishEye home directory> and FISHEYE\_INST. Check that your FISHEYE\_INST is pointing to the right directory.
- 10. Follow any version-specific instructions found in the FishEye upgrade guide or Crucible upgrade guide.

## **Upgrading to Crucible 3.2**

Please also see the Upgrade steps section above, and read the End of Support Announcements for Crucible page.

Please note the following changes in Crucible 3.2:

## REST endpoint change

For Crucible 3.2, the RestReviewService.remindIncompleteReviewers() ('/rest-service/reviews-v1/{reviewId}/remind') end point was changed from accepting 'application/x-www-form-urlencoded' content type with 'message' and 'recipient' params to 'application/json' content type with 'message' and 'recipients' JSON fields. See https://docs.atlassian.com/fisheye-crucible/latest/w adl/crucible.html#d2e1881.

## User data is moved from data0.bin to the SQL database

An upgrade task is run on startup that moves user data to the SQL database. We are doing this to mitigate the risk of data corruption or loss.

## XSRF protection

FishEye/Crucible 3.2.0 includes protection against XSRF attacks.

If you have implemented a LightSCM plugin, and have used the SimpleConfigurationServlet base class provided in the scmutils library, you will need to modify your administration page so that it performs 'delete' operations using an HTTP POST, not a GET.

You can have FishEye convert your anchor tags to form POSTs at runtime by giving them the class "anchor-post". For example, the anchor:

```
<a class="anchor-post" href="#"
data-href="./fsscm?name=TEST&delete=true">Delete</a>
```

will be converted into a form which POSTs to ./fsscm with form parameters name=TEST and delete=true.

## Internally managed Git repositories no longer supported

As previously announced, internally managed Git repositories are no longer supported by FishEye 3.2.

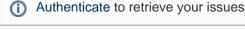
Please read the migration guide for information about options and procedures for migrating your internally managed Git repositories – note that we recommend that you upgrade to FishEye 3.2 before migrating any internally managed repositories.

#### Supported platform upgrades

- Communication with JIRA versions older than 5.0 is no longer supported.
- Microsoft SQL Server 2012 is now supported (support for SQL Server 2005 is deprecated).
- Microsoft Internet Explorer 10 is now supported (support for IE 8 is deprecated).
- MySQL 5.0 is deprecated.
- PostgreSQL 8.2 is deprecated.
- The Atlassian AUI plugin has been upgraded to AUI 5.2.
- jQuery has been upgraded to 1.8.3.
- backbonejs has been upgraded to 1.0.

#### Known issues for Crucible 3.2

Туре	Key	Summary	Status
•	CRUC-6158	Review performance in IE 8&9 is pathetic	→ Open
	CRUC-6485	Indicate that the listing of reviewers is truncated in the Edit Details view	→ Open



2 issues

# Upgrading to Crucible 3.1

Please also see the Upgrade steps section above, and read the End of Support Announcements for Crucible page.

Please note the following changes in Crucible 3.1:

#### Crucible 3.1 Merge some per-repository Lucene indices into a global cross-repository Lucene index

Crucible 3.1 has greatly improved performance and scalability for QuickSearch and QuickNav. To achieve this, the per-repository 'METADATA' Lucene indices will be moved into a single global cross-repository Lucene index. This means Crucible is able to search across more repositories in less time because now only a single search index needs to be queried instead of the previous N. Merging these indices into the single cross-repository index can be refreshed in two ways:

- 1. **Recommended**: As an upgrade task that is run automatically when Crucible 3.1 is run for the first time.
- 2. As an offline process on a separate staging server.

During the automatic upgrade task, Crucible is fully usable and functional, although search results for files, commits and committers may be incomplete.

In our testing we have found that the automatic upgrade task took 4 hours to complete on a Crucible instance with 144 repositories of different kinds, with 58 GB of data in the FISHEYE\_INST folder (excluding logs). We are confident that the automatic upgrade task is suitable for the majority of production Crucible installations. It is worth repeating that the instance was fully functional (reviews, JIRA Integration, Activity Streams, Charts etc) apart from Quick Nav and Quick Search during this time.

Nevertheless, where required, we provide instructions for performing the reindex as an offline process on a separate staging server.

#### Plugin Settings will be moved from the config.xml to the SQL database

As of Crucible 3.1.0, plugin settings which were previously stored in the cproperties> element inside config.xml will be stored in the SQL database. This includes settings for any bundled plugins such as ApplicationLinks, the UniversalPluginManager etc, and any 3rd party plugins.

An upgrade task is run on startup which will first insert all the properties found in config.xml into a new table in the SQL database. Once successful, the properties are removed from config.xml.

As part of this change, the RepositoryOptions.setProperties (Map<String, String>properties)

and RepositoryOptions.getProperties() methods have been removed from our API. If you are using a plugin which uses either of these methods, you will need to update the plugin to a version which uses the Spring component PluginSettingsFactory. Plugins can use this to access the migrated global and per-repository properties that were previously available via the old RepositoryOptions API.

#### **Known issues for Crucible 3.1**

Туре	Key	Summary	Status
•	CRUC-6597	Cyrillic is not working in comments	→ Open
	CRUC-6596	Resolving long content hashes from short content hashes in git patches goes over the whole contentHashDB for each hash in patch	<b>-</b> ∳ Open
	CRUC-6568	Duplicated files on review	→ Open
Authenticate to retrice	eve your issues		

#### 3 issues

## **Upgrading to Crucible 3.0**

Please also see the Upgrade steps section above.

Please note the following changes in Crucible 3.0:

#### Jetty 8

Crucible 3.0 now uses Jetty 8 as its web server and Java servelet container. This change should be completely transparent when you upgrade to Crucible 3.0. However, if you have customised either your <code>jetty-web.xml</code> file, or the <code>maxFormContentSize</code> system property, you will need to update those in the new version. See Enabling Access Logging in FishEye and this FishEye KB page for more information.

## Infinity DB

Crucible 3.0 now uses the InfinityDB 3.0 database internally to provide improved performance for concurrent access to Crucible. This change is transparent to users in all respects.

#### Pipelined indexing

Crucible 3.0 introduces a new indexing approach that splits the repository indexing process into separate tasks that can be performed in a phased and concurrent way. Users will benefit from the way in which Crucible functionality, such as review creation, now becomes available as indexing progresses. This change is transparent to users in all other respects. See Pipelined indexing.

Improved handling of user preferences with session cookies

Upgrading may result in some users losing their preferences.

## SQL Server transaction isolation configuration

We recommend a configuration change for SQL Server to use snapshot mode for the transaction isolation level – see Migrating to SQL Server. This change avoids occasional database deadlocks, and prevents performance warning messages in the logs and admin screens.

## Known issues for Crucible 3.0

Туре	Key	Summary	Status
------	-----	---------	--------

	CRUC-6567	Perforce native SCM management get branches completely wrong	→ Popen
•	CRUC-6521	File creation is not displayed as change	<b>∲</b> Open
	CRUC-6596	Resolving long content hashes from short content hashes in git patches goes over the whole contentHashDB for each hash in patch	→ Popen
•	CRUC-6553	Upgrade to 3.0.x may fail if there are unprocessed cru_feindex_msg rows	→ Open
•	CRUC-6550	Code Review UI real estate misallocation	<b>-∳</b> Open
•	CRUC-6528	User still suggested for review after disabling for him Crucible	→ Open
	CRUC-6520	If the P4DIFF environment variable is set, the crucible.py review tool might not be able to get the patch properly	→ Open
	CRUC-6487	ConstraintViolationExce ption: could not insert: [com.cenqua.crucible.m odel.CommentReadStat us]	→ Popen
	CRUC-6470	Inline issue creation: when not logged in to Crucible the review comment icon is not fetched	→ Open
	CRUC-6447	Providing s FishEye licence does not allow repositories to be started until FishEye itself has been stopped and started	→ Open

## 10 issues

# Checking for known issues and troubleshooting the Crucible upgrade

If something is not working correctly after you have completed the steps above to upgrade your Crucible installation, please check for known Crucible issues and try troubleshooting your upgrade as described below:

- Check for known issues. Sometimes we find out about a problem with the latest version of Crucible
  after we have released the software. In such cases we publish information about the known issues in the
  Crucible Knowledge Base. Please check the Fisheye and Crucible Known Issues in the Crucible
  Knowledge Base and follow the instructions to apply any necessary patches if necessary.
- Did you encounter a problem during the Crucible upgrade? Please refer to the guide to troubleshooti
  ng upgrades in the Crucible Knowledge Base.
- If you encounter a problem during the upgrade and cannot solve it, please create a support ticket and one of our support engineers will help you.

# **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.

FISHEYE\_INST – this is an environment variable that defines the path to the FishEye data directory, which is used for installations where the FishEye instance data is stored in a separate location from the install (home) directory. Both Crucible and FishEye use this environment variable.

Read more about the FISHEYE\_INST environment variable.

## On this page:

- Upgrade procedure
  - Method 1: Without a FISHEYE INST directory (default)
  - Method 2: Using a FISHEYE\_INST directory
  - Method 3: No FISHEYE\_INST directory, but wish to use one
- Initial Crucible configuration

### Upgrade procedure

- We strongly recommend that you make a backup of your data before following one of the methods below. Refer to making a backup.
- 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>). This is the typical scenario for evaluation installations.
- 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>, separately from your FishEye data directory, which has a location defined by FISHEYE\_INST). This is the recommended scenario for production installations.
- Follow **Method 3** if you are not using a FISHEYE\_INST directory but would now like to start using one. You may wish to do this when configuring an existing installation for a production environment.

## Method 1: Without a FISHEYE\_INST directory (default)

- 1. Download Crucible.
- 2. Extract the new Crucible archive into a directory, which we will refer to as <Crucible directory>.
- 3. Shut down your existing FishEye server, if it is running.
- 4. Copy <FishEye home directory>/config.xml to <Crucible directory>.
- 5. Delete the <Crucible directory>/var directory.
- 6. Copy the <FishEye home directory>/var directory to <Crucible directory>/var.
- 7. Follow any version-specific instructions found in the Release Notes.
- 8. Start Crucible from the new installation by running <Crucible directory>/bin/run.sh. (Use run. bat on Windows).
- 9. Follow the initial configuration steps outlined below.

#### Method 2: Using a FISHEYE\_INST directory

- 1. Shut down your existing FishEye server, if it is running.
- 2. Make a backup of your FISHEYE\_INST directory.
- Download Crucible and unzip the archive into a directory, which we will refer to as <Crucible directory>.
- 4. Leave your FISHEYE\_INST environment variable set to its existing location. Crucible will use this variable.
- 5. Start Crucible from the new installation by running <Crucible directory>/bin/run.sh. (Use run. bat on Windows).
- 6. Follow the initial configuration steps outlined below.

#### Method 3: No FISHEYE\_INST directory, but wish to use one

- 1. Shut down your existing FishEye server, if it is running.
- 2. Create a new directory on your filesystem, then set up a FISHEYE\_INST environment variable to point to the new directory.
- 3. Copy the <fishEye home directory>/config.xml to the FISHEYE\_INST directory.
- 4. Copy the <FishEye home directory>/var directory to the FISHEYE\_INST directory.
- Download Crucible.
- 6. Extract the new Crucible archive into a directory such as <Crucible directory>.
- 7. Start Crucible from the new installation by running <Crucible directory>/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 the <Crucible directory> and FISHEYE\_INST. Check that FISHEYE\_INST is pointing to the correct directory it should point to the location to where you copied the existing FishEye files in steps 3 and 4 above.

#### 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 after upgrading, you must enter your Crucible license key. To do this, update your Crucible license by going to the admin area and clicking **System Info** (under 'System Settings'). Click **Edit License** (under 'License') to 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 area.
     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 3.2 release notes

27 November 2013

Today we're excited to release Crucible 3.2, which brings a range of usability and platform improvements.

If you are upgrading from an earlier version of Crucible, please read the Crucible upgrade guide. Please also read the End of Support Announcements for Crucible.

The Crucible 3.2 changelog is at the bottom of this page.



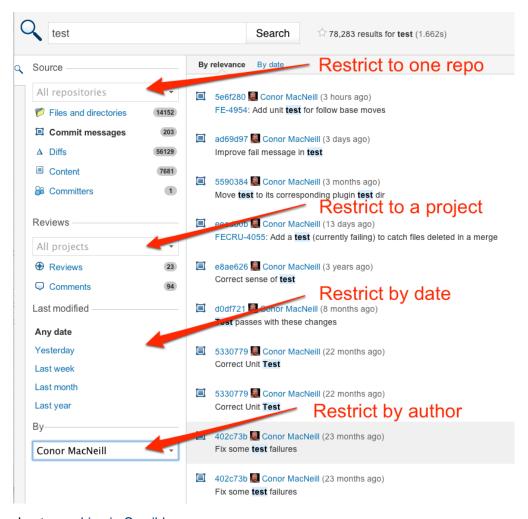
## **Quick Search filters**

We've added filters to QuickSearch, to make finding the content you want even... quicker!

Now, in Crucible 3.2, you can also filter by the last modified date and by author.

Of course, for a while now, you've been able to filter search results by reviews and review comments, and

restrict the search scope for reviews to a particular project. And when used with Atlassian FishEye, you can filter for different source types such as files and directories, commit messages, diffs, file content, and committers.



Read more about searching in Crucible...

# Internally managed Git repositories are no longer supported

As previously announced, internally managed Git repositories are no longer supported by FishEye 3.2.

Please read the migration guide for information about options and procedures for migrating your internally managed Git repositories.

Crucible communication with JIRA versions older than 5.0 is no longer supported

As previously announced, communication with JIRA versions older than 5.0 is no longer supported by Crucible 3.2. Please note that communication from JIRA to Crucible will continue to work as it currently does.

# **Small improvements**

#### Platform upgrades

- Microsoft SQL Server 2012 is now supported (support for SQL Server 2005 is deprecated).
- Microsoft Internet Explorer 10 is now supported (support for IE 8 is deprecated).
- MySQL 5.0 is deprecated.
- PostgreSQL 8.2 is deprecated.
- The Atlassian AUI plugin has been upgraded to AUI 5.2.
- jQuery has been upgraded to 1.8.3.
- backbonejs has been upgraded to 1.0.

### See Supported platforms.

Improved protection against XSRF attacks

We've added a security token to protect Crucible from XSRF attacks and to allow plugin developers to add protection to their plugins. See the Crucible upgrade guide for details of changes required by LightSCM plugins.

User data moved to the SQL database

To prevent any chance of loss, the user data store has relocated. See the Crucible Upgrade guide for details.

# **Change log**

This section will contain information about the Crucible 3.2 minor releases as they become available. These releases will be free to all customers with active Crucible software maintenance.

If you are upgrading from an earlier version of Crucible, please read the Crucible upgrade guide.

The issues listed below are just the highlights of all those that have been resolved for the Crucible 3.2.x releases.

#### 27 November 2013 - Crucible 3.2.0

Туре	Key	Summary
<b>&gt;</b>	CRUC-6609	JIRA issue transition after closing review looks bad
	CRUC-6624	Document changes to the sharing features of Crucible
	CRUC-6620	Broken tooltip in quicknav for reviews
	CRUC-6608	Review indexing interrupted by killing application does not continue after restart
	CRUC-6595	Some Ajax calls never return, eventually timeout with a 502 proxy error
	CRUC-6588	Make it possible to query only selected users via REST
	CRUC-6587	REST /users-v1/username should return a limited data set for other users
	CRUC-6586	Should return avatar from external server if configured
	CRUC-4697	Empty strings accepted in proxy-host / proxy-scheme
	CRUC-3008	REST should return a 401 when using invalid basic http credentials instead of falling back to anonymous
Authenticate to retrieve your	issues	

10 issues

# Crucible 3.1 release notes

### 27 August 2013

Today we're excited to release Crucible 3.1, which brings you a cleaner and faster interface. We've also added some further JIRA integration points.

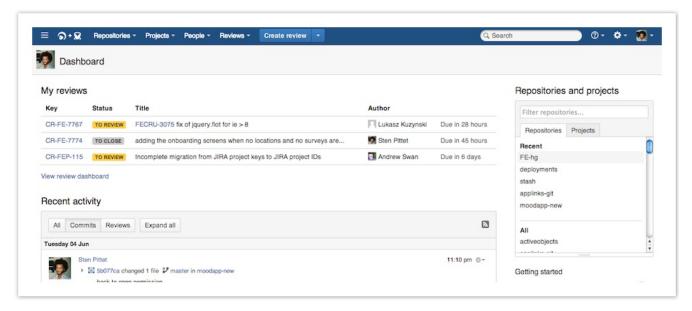
If you are upgrading from an earlier version of Crucible, please read the Crucible upgrade guide. Please also read the End of Support Announcements for Crucible.

The Crucible 3.1 changelog is at the bottom of this page.



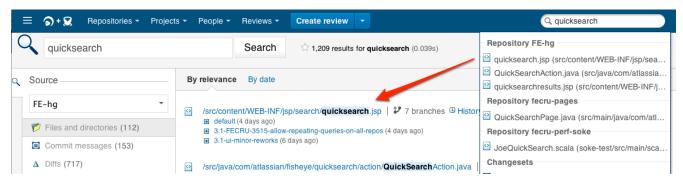
#### The new Dashboard

Crucible's new dashboard makes your pending reviews the highest priority, putting them right at the top and clearly indicating their urgency. The repository and project navigator lets you jump to your recent content (try pressing Enter as soon as you launch the dashboard), and includes filters and keyboard shortcuts that facilitate navigation, especially when your organisation has hundreds of repositories.



## QuickNav and QuickSearch improvements

Previously in Crucible, QuickSearch was limited to searching 100 repositories concurrently. Now, in Crucible 3.1, you can search across files and directories, commit messages, and committers, for every one of your repositories. And it's 40% faster. And you can order search results by date. Furthermore, QuickNav now uses the same indexes as QuickSearch, so it's faster too, and it produces the same results as QuickSearch:



Note that upgrading to Crucible 3.1 requires an upgrade to the cross-repository index. See the Crucible upgrade guide for details.

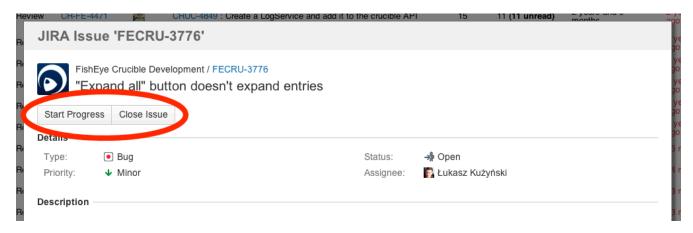
New JIRA issue dialog

Now, when you click on any linked JIRA issue key in Crucible, you'll see a dialog that displays a summary of the issue details. From that dialog, you can transition the workflow for the issue, and easily click through to edit the issue in JIRA:



#### **Transition JIRA issues from within Crucible**

Previously in Crucible, you could transition a JIRA issue linked to a review at the time that you closed the review. Now you can advance the workflow for any JIRA issue mentioned in Crucible at any time, right from within Crucible – just click the issue link to see the transitions available to you:

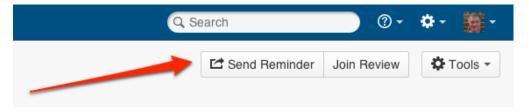


Read more about JIRA issue transitions in Crucible ...

### **Small improvements**

Simplified reminder for overdue reviewers

Alerting reviewers about an overdue review is now a simple 1-click action:



Improved browsing performance

The display of the file source page is now 60% faster in Crucible 3.1.

Native SVN 1.7 support

Crucible 3.1 now supports the native JavaHL 1.7 SVN client. It does not support the native JavaHL 1.6 SVN client. See Native support for SVN 1.7 for more details.

**OpenJDK** support

Crucible 3.1 now supports OpenJDK 1.7. See Supported platforms for details.

### Change log

This section will contain information about the Crucible 3.1 minor releases as they become available. These releases will be free to all customers with active Crucible software maintenance.

If you are upgrading from an earlier version of Crucible, please read the Crucible upgrade guide.

The issues listed below are just the highlights of all those that have been resolved for the Crucible 3.1.x releases.

#### 30 October 2013 - Crucible 3.1.5

There are no Crucible-specific fixes in this release. See the FishEye 3.1 release notes for some general issues that have been fixed.

CRUC-6644

Error removing files from pre-commit patch

Authenticate to retrieve your issues

#### 1 issue

#### 8 October 2013 - Crucible 3.1.4

This release also includes some minor security fixes.

CRUC-6620 Broken tooltip in quicknav for reviews

Authenticate to retrieve your issues

#### 1 issue

## 17 September 2013 - Crucible 3.1.3

Fixes a bug which can cause review indexing to fail when upgrading from versions prior to 3.0.

Туре	Key	Summary
	CRUC-6595	Some Ajax calls never return, eventually timeout with a 502 proxy error

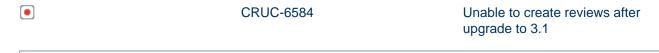
(i) Authenticate to retrieve your issues

#### 1 issue

- 11 September 2013 Crucible 3.1.2
  - · a few XSS security issues addressed

### 29 August 2013 - Crucible 3.1.1

Type Key Summary



Authenticate to retrieve your issues

1 issue

### 27 August 2013 - Crucible 3.1.0

Туре	Key	Summary
+	CRUC-6384	Allow issue transitions for issues raised in Inline Issue Creation
	CRUC-6530	Remove Crucible Transition error as a warning
	CRUC-6534	Type when starting FishEye/Crucible
	CRUC-6525	upgrade to 3.x release occasionally fails when deduplicating paths in db
	CRUC-6417	Better handling of Authentication Errors when manually linking a Review to a JIRA Issue
	CRUC-6416	Optimize number of database queries for Crucible instances with Many Projects and Permission Schemes
	CRUC-6339	Send notifications for replies to comments even if the user is not in the review

7 issues

# Crucible 3.0 release notes

Authenticate to retrieve your issues

30 May 2013

Today we're excited to release Crucible 3.0, which introduces huge indexing performance gains – especially for Subversion repositories – and significant upgrades to how you perform pre-commit reviews. We think development teams will be able to work faster, every day.

If you are upgrading from an earlier version of Crucible, please read the Crucible upgrade guide.

The Crucible 3.0 changelog is at the bottom of this page.



Redesigned user experience

We've made a few key design changes to help you work faster with your reviews:

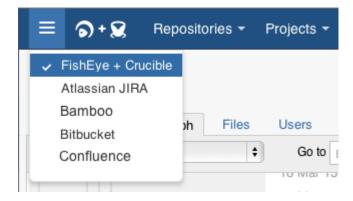
### New global header

The new header across the top of the page makes it quicker to access recent repositories, projects, people and reviews, and has the large **Create review** button at top center, right where you can find it.



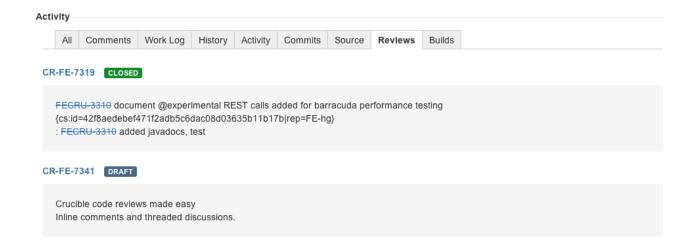
#### Application navigator

The new application navigator, at the left of the header, connects you directly to your other applications, such as JIRA and Bamboo. Now you can switch between Crucible and JIRA – or any other Atlassian application – all from the Crucible header. No more bookmarks in your browser; we do the job for you. Admins can easily configure which apps appear in the navigator – just click **Application navigator** in the admin area.



#### JIRA Reviews tab redesign

We wanted to simplify the experience but still give you the important information you need to make decisions around your issues. We think you'll like it:



#### **Review CLI tool**

Crucible now ships with a command line tool that allows you to quickly create reviews in Crucible directly from your terminal. The tool takes the uncommitted changes in your workspace and creates a review for them in Crucible. You can use the tool to create new reviews, and to update existing pre-commit reviews with new patches. *Read more..* 

#### Iterative pre-commit reviews

Crucible now supports iterative reviews for both post-commit and pre-commit reviews. This allows you to update the review with new versions of files, and changesets (for post-commit reviews) or patches (for pre-commit reviews) that have been created after the review was started.

Iterative reviews allow your team to discuss changing code in the context of a single review. This lets the

reviewers see all the related changes together, and to more easily keep track of comments and defects. *Read more...* 

Create reviews sooner for new SVN repositories

We've introduced a new approach that splits the indexing process into separate tasks that can be performed in a phased and concurrent way. This allows you to start using core functionality in Crucible, such as creating reviews, up to 15X sooner than in Crucible 2.10. You can get on with your work, while Crucible quietly completes the fine details of indexing in the background. *Read more...* 

### **Small improvements**

Faster browsing for large teams

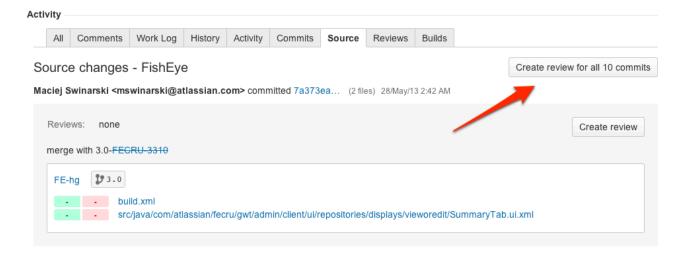
Crucible now uses the InfinityDB 3.0 internal database to provide faster concurrent access. Your team gets a better browsing experience!

Quicker review creation

We've optimised some SQL statements in Crucible. You spend less time creating, or modifying, reviews.

Better review creation from JIRA when Stash is integrated

We've improved the integration between JIRA and Crucible. Now you can create a review for all the commits related to a JIRA issue, even when Atlassian Stash is integrated with JIRA.



#### Diff hunk shortcuts

We've changed the 'j' and 'k' keyboard shortcuts to now work with diff hunks when looking at a review, so as to be consistent with their new behaviour in FishEye.

Improved handling of user preferences with session cookies

We've made session cookies more robust, but this may result in your existing preferences being lost at upgrade time.

#### **REST API change**

The 'groups-v1' REST endpoint now requires the user to be an administrator – it will fail authentication and return a 403 otherwise. *Read more...* 

## Change log

This section will contain information about the Crucible 3.0 minor releases as they become available. These releases will be free to all customers with active Crucible software maintenance.

If you are upgrading from an earlier version of Crucible, please read the Crucible upgrade guide.

The issues listed below are just the highlights of all those that have been resolved for the Crucible 3.0.x releases.

### 23 July 2013 - Crucible 3.0.3

Туре	Key	Summary
	CRUC-6556	Error editing permission scheme action containing deleted user
	CRUC-6552	Searching over REST for a JIRA Project key doesnt look at Review Linked Issues
	CRUC-6537	Deleting and recreating projects with keys which differ only in case can cause NonUniqueResultException on Viewing Review

Authenticate to retrieve your issues

### 3 issues

# 2 July 2013 - Crucible 3.0.2

Туре	Key	Summary
+	CRUC-6503	Crucible upgrade may fail in the middle if DB socket timeout too short
	CRUC-6555	Can't use distinct in queries on tables with CLOB types in Oracle
	CRUC-6504	Review pre-commit tool can fail to include all the lines for an added file with Perforce
	CRUC-6416	Optimize number of database queries for Crucible instances with Many Projects and Permission Schemes

### 4 issues

# 6 June 2013 - Crucible 3.0.1

Туре	Key	Summary
	CRUC-6491	duplicated null cru_stored_path rows leads to 3.0 upgrade problems

(i) Authenticate to retrieve your issues

Authenticate to retrieve your issues

## 1 issue

# 28 May 2013 - Crucible 3.0.0

Туре	Key	Summary
	CRUC-6434	Add disclaimer that "Create crucible review" is only available with FishEye integration
<b>©</b>	CRUC-6414	Update on 'Editing a Project' documentation
<b>⊘</b>	CRUC-6271	Update on Using Gadgets in Crucible documentation
\$	CRUC-6410	Allow /filter/details to include a date range filter
\$	CRUC-6361	Change semantics of j/k shortcuts in Crucible, be consistent with the new diff navigation in Fisheye
<b>&gt;</b>	CRUC-6394	Crucible Project Repository Link is Broken if Leading Slash Is Omitted
<b>&gt;</b>	CRUC-6391	Documentation Update for JIRA Integration
<b>&gt;</b>	CRUC-6349	Crucible and FishEye Page Contains Outdated Information
<b>&gt;</b>	CRUC-4719	Improve Project Creation/Editing with large user base
<b>&gt;</b>	CRUC-4518	Crucible regularly hangs and is very slow
<b>&gt;</b>	CRUC-2998	Iterative pre-commit reviews
<b>&gt;</b>	CRUC-1452	REST API should notify client if session token is invalid
	CRUC-6466	Dismiss barracuda's feature discovery message when it is closed.
	CRUC-6463	Multiple open transactions in idle instance
	CRUC-6454	Scheduled user synchronization doesn't close DB sessions
	CRUC-6412	Stream has already been closed on getting Notifications
	CRUC-6408	URLs in comments with # followed by ! and other characters are not correctly generated.
	CRUC-6398	Unable to link to JIRA issues containg a project key longer than 10 characters, containing underscores _



Showing 20 out of 30 issues

# Crucible 2.10 release notes

# 15 January 2013

With great pleasure, Atlassian presents **Crucible 2.10**, which introduces the best JIRA integration we have ever built.

- See the change log for Crucible 2.10.x minor releases.
- <u>Visit our issue tracker</u> to see the full list of improvements and bug fixes in Crucible and FishEye for this release.
- Upgrading from a previous version of Crucible. Upgrading Crucible should be fairly straight forward.
   We strongly recommend that you back up Crucible before upgrading. Please refer to the Crucible 2.10
   Upgrade Guide for further essential information about your upgrade.
- Known Issues. Please check the important technical advisories on the front page of the Knowledge Base for information about any known issues for this release.
- JIRA 5.0 integration. The features described below are supported by JIRA 5.0, or later, with the latest version of the <u>JIRA FishEve plugin</u>.

# Highlights of this release:

- Inline Issue Creation
- Repository Management REST API
- · Repository review creation limit
- Other announcements



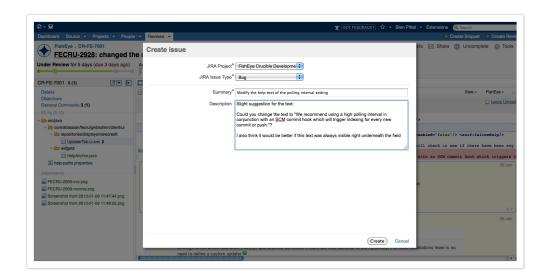
### Providing feedback:

Please log your votes and issues. They help us decide what needs doing, and are much appreciated!



### **Inline Issue Creation**

With Crucible 2.10 you can now create any type of issue from your reviews. You only need to link your Crucible and JIRA instances to get it working. Once this is done you can create issues in any JIRA project you have access to.





### **Repository Management REST API**

Crucible 2.10 lets you optimize your instance by using the REST API to trigger indexing when it's necessary. Instead of configuring Crucible to poll each repository every minute, you can add a post-commit or post-receive hook to your repositories which will ping Crucible when new commits need to be indexed.

If your repositories are hosted on Bitbucket or Github you will find corresponding Service Hooks in the settings of your repositories which will do the job for you.





# Repository review creation limit

Crucible 2.10 now has a limit to prevent oversized reviews from being created during wrong manipulations. We have set the limit fairly high at 800 file revisions, a number way above the recommended number of files per review. The limit will help to prevent your instance from having performance issues.



#### Other announcements

- Improved performance of the repositories listing in the administration interface.
- Snippets share the same permission as reviews.

• You can now easily step through the diffs in reviews via shortcuts.

### The Crucible 2.10 team

### Development

#### Core team

Brendan Humphreys Conor MacNeill Geoff Crain Lukasz Pater Maciej Swinarski Piotr wity wicicki Richard Stephens Tom Davies Valery Trubnikov

#### Team lead

Nick Pellow

### **Product management**

Sten Pittet

## Project manager

Anton Mazkovoi

Support

Ajay Sridhar
Daniel Rohan
Douglas Fabretti
Felipe Kraemer
Gurleen Anand
Kah Loun Foong
Leonardo Macedo
Malik Mangier
Patrick Hill
Renan Battaglin
Rene Verschoor

**Others** 

### **Product marketing**

Ricardo Martins

Giancarlo Lionetti

**Quality assurance** 

George Filippoff Mark Hrynczak

**Technical writing** 

Paul Watson

Operations

James Fleming

# Crucible 2.10 changelog

This page contains information about the Crucible 2.10 minor releases. FishEye license holders should also check the FishEye 2.10 Changelog.

See the Crucible 2.10 release notes for details of what's new in 2.10.



Please read the Crucible 2.10 Upgrade Guide before upgrading to any of the minor releases below.

# 17 July 2013 - Crucible 2.10.7

Туре	Key	Summary	Status
•	CRUC-6555	Can't use distinct in queries on tables with CLOB types in Oracle	A Closed



1 issue

### 05 July 2013 - Crucible 2.10.6

Туре	Key	Summary	Status
	CRUC-6416	Optimize number of database queries for Crucible instances with Many Projects and Permission Schemes	♣ Closed



1 issue

### 06 Jun 2013 - Crucible 2.10.5

Туре	Key	Summary	Status
	CRUC-6463	Multiple open transactions in idle instance	🎝 Closed

(i) Authenticate to retrieve your issues

1 issue

# 02 Apr 2013 - Crucible 2.10.4

Туре	Key	Summary	Status
	CRUC-6394	Crucible Project Repository Link is Broken if Leading Slash Is Omitted	🎝 Closed
	CRUC-6412	Stream has already been closed on getting Notifications	🎝 Closed
	CRUC-6408	URLs in comments with # followed by ! and other characters are not correctly generated.	🎝 Closed
•	CRUC-6395	Inconsistent Repository Links on Project Page	🎝 Closed
•	CRUC-5238	URLs with # in comments do not render properly	🎝 Closed
	CRUC-2747	Review details says "Reviewer is 100% complete" when she hasn't completed the review	🎝 Closed
Authenticate to retrie	eve your issues		

# 19 Mar 2013 - Crucible 2.10.3

Туре	Key	Summary	Status
	CRUC-6398	Unable to link to JIRA issues containg a project key longer than 10 characters, containing underscores	<i>♣</i> Closed
Authenticate to retri	eve your issues		

# 1 issue

# 25 Feb 2013 - Crucible 2.10.2

Туре	Key	Summary	Status
	CRUC-6385	An SQLException can corrupt a connection in the connection pool and cause Crucible to became unstable	🍌 Closed
•	CRUC-6383	Inline Issue Creation	🎝 Closed

		doesn't remember the last issue type selected	
•	CRUC-6380	Reinstate the Star/Favourite link for comments	
•	CRUC-6350	JIRA errors being displayed inline on review comments	🎝 Closed
•	CRUC-6345	Can not remove reviewers in IE	🏂 Closed
•	CRUC-6268	When creating issue from comment summary put by the user gets lost on JIRA/project change	🎝 Closed
•	CRUC-6246	User hovers are broken in IE9 (and probably 8 and 10 as well)	🎝 Closed
(i) Authenticate	e to retrieve your issues		

### 29 Jan 2013 - Crucible 2.10.1

Туре	Key	Summary	Status
0	CRUC-6274	Update Add Comments related Crucible document	🎝 Closed
	CRUC-6344	Change Inline Issue Creation upgrade task warning	🎝 Closed
	CRUC-6342	LazyInitializationExcepti on during indexing of repositories containing Changeset Comments	🎝 Closed
	CRUC-6333	IIC Plugin makes unneeded AJAX requests on pages other than the review page	🎝 Closed
Authenticate to retrie	eve your issues		

# 4 issues

# 15 Jan 2013 - Crucible 2.10.0

Туре	Key	Summary	Status
\$	CRUC-6282	If an Entity Link is present between a JIRA Project and a Crucible	🎝 Closed

		Project, then a review created from the JIRA Source Tab should default to the entity linked Crucible Project.	
<b>&gt;</b>	CRUC-6351	Managing Add-Ons Page Refers to Add-On That Is Not Compatible With Latest Versions	丸 Closed
<b>&gt;</b>	CRUC-6143	When Creating Jira Issues From a Code Review Provide Capability to Handle REQUIRED Fields	🎝 Closed
<b>&gt;</b>	CRUC-6031	Need keyboard shortcuts for moving to previous, current, and next diff.	🎝 Closed
<b>&gt;</b>	CRUC-5847	The Graph should display % and also value.	🎝 Closed
<b>&gt;</b>	CRUC-5628	Add Ability to Limit Number and/or Size of Crucible Reviews	🎝 Closed
	CRUC-6267	No success/error notification when creating JIRA issue directly from comment	🎝 Closed
	CRUC-6266	Smart commit plugin does not handle multi-line commit messages	🎝 Closed
•	CRUC-6259	Share review user suggestion contain deleted user	A Closed
•	CRUC-6249	There is no pre-load handling for next diff?	婧 Closed
•	CRUC-6248	Double infinite spinner, what does it mean?	🎝 Closed
•	CRUC-6210	Deleted users are appearing in reviewer, moderator dropdown	🎝 Closed
	CRUC-6142	"Edit Review Details" end sometimes in "The server is not responding" but the server is ok	🎝 Closed
	CRUC-6072	FeCru REST API docs don't provide description of the XML tags.	🎝 Closed

	CRUC-6038	Error creating subtask in JIRA: com.atlassian.jira.rpc.ex ception.RemotePermissi onException: This issue does not exist or you don't have permission to view it.	
	CRUC-5716	GWT error when navigating away from loading page	
	CRUC-5666	Snippet review link is displayed even if user doesn't have permission to create a review in any project	
	CRUC-2667	Not able to create the subtask in JIRA if some of the fields are required in the subtask creation screen	🏂 Closed
	CRUC-2202	NPE thrown when trying to change project key	🎝 Closed
Authenticate to	retrieve your issues		

# Crucible 2.10 upgrade guide

Please refer to the FishEye 2.10 upgrade guide for important notes on upgrading to Crucible 2.10.

For details of the new features and improvements in this release, please read the Crucible 2.10 Release Notes.

# **Upgrading to Crucible 2.10**

### Crucible Subtask Creation has been deprecated

If you are currently using issue subtask creation please read the following section.

Click here to expand...

We have improved JIRA issue creation from Crucible with a feature called Inline Issue Creation. It uses JIRA APIs introduced in JIRA 5.0, so it is not compatible with earlier versions. It also has some changed behaviour from the old "Crucible Subtask Creation".

# If you are using JIRA 4.4 or earlier

The new feature will not be compatible with your JIRA version. You can revert back to the old behaviour if you want to continue being able to create Crucible subtasks from review comments.

Disabling of the plugin should be automatic on upgrade. Crucible will poll your linked JIRA servers to check their version. If a version earlier than JIRA 5.0 is detected, the 'Inline Issue Creation' plugin will be disabled.

If the plugin is not disabled you can revert to the old behaviour by clicking **Manage Add-ons**, under 'System Settings' in the Admin area. Click **Show system plugins**, find the 'Inline Issue Creation' plugin, and disable it. When you upgrade your JIRA server, you can come back here to re-enable the plugin.

If you are using JIRA 5.0 or later

#### Removed functionality:

- The ability to "Resolve" after the issue has been created has been removed. Users will now have to transition issues via the JIRA interface.
- Existing subtasks that have been created will still be visible, however you will not be able to resolve them.

## New functionality:

- We now support various required fields, both built-in and custom field types.
- There is no longer any configuration required, except for the Application Link to JIRA.
- We now support 'normal' (non-subtask) issue creation, users can choose what Project and Issue Type to create in, and we support various required fields.
- There is now a report at the top of the review for all issues created.
- There is now a Remote Issue Link from the JIRA issue back to the comment.
  - Note that Issue Linking can be disabled in JIRA.
  - The user creating the issue must have the permission to create Remote Issue Links.
  - The latest version of the JIRA FishEye Plugin will hide these links from users without the View Source permission.

# Crucible 2.9 release notes

#### 14 November 2012

With great pleasure, Atlassian presents **Crucible 2.9**, which introduces the best JIRA integration we have ever built.

- See the change log for Crucible 2.9.x minor releases.
- Visit our issue tracker to see the full list of improvements and bug fixes in Crucible and FishEye for this
  release.
- **Upgrading from a previous version of Crucible.** Upgrading Crucible should be fairly straight forward. We strongly recommend that you back up Crucible before upgrading. Please refer to the Crucible 2.9 Upgrade Guide for further essential information about your upgrade.
- **Known Issues.** Please check the important technical advisories on the front page of the Knowledge Base for information about any known issues for this release.
- **JIRA 5.0** integration. The features described below are supported by **JIRA 5.0**, or later, with the latest version of the **JIRA FishEye plugin** .

#### Highlights of this release:

- Simpler JIRA integration
- Better performance of the Reviews tab in JIRA
- Faster review creation for large teams
- Other announcements



### Providing feedback:

Please log your votes and issues. They help us decide what needs doing, and are much appreciated!



Simpler JIRA integration

With Crucible 2.9, linking your instance to JIRA is as simple as Plug & Play. As soon as you create an Application Link between your JIRA server and your Crucible instance, you get all the power of the JIRA / Crucible integration:

- See in JIRA the list of reviews corresponding to a specific issue
- Navigate to the related review from your issue page
- Get the JIRA data corresponding to issues mentioned in your review comments, titles and objectives

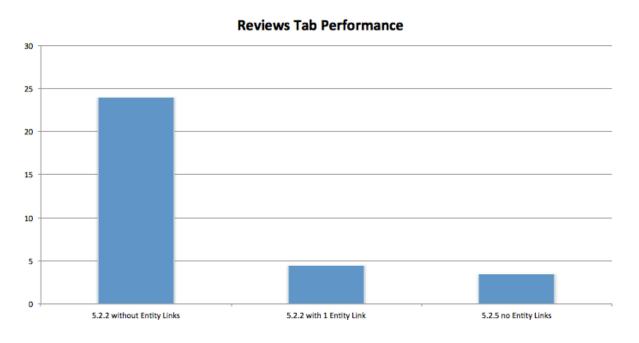
You no longer need to create and maintain multiple links between projects in JIRA and projects in Crucible. Maintaining your JIRA / Crucible integration has never been simpler! *More...* 





Better performance of the Reviews tab in JIRA

When we changed the implementation of the Crucible / JIRA integration we also improved the performance of the Reviews Tab display in JIRA. You will see your reviews in JIRA faster, even without having to create any links between your JIRA project and your Crucible repositories. In other words, with Crucible 2.9 you spend less time administering your instance, while your users get all the relevant content in JIRA in a better way than before.

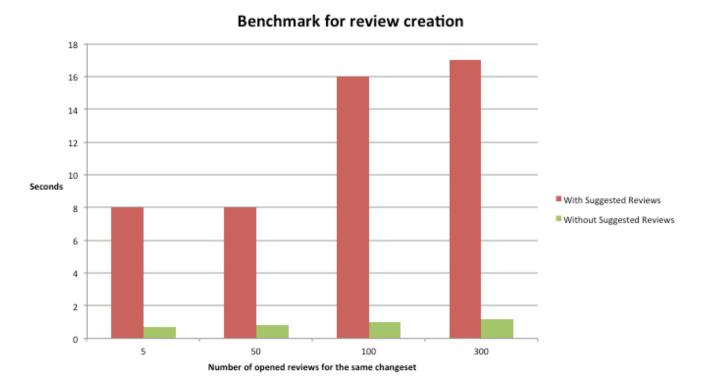




#### Faster review creation for large teams

Crucible is a tool that is built to help organizations and distributed teams perform code reviews. When you have large teams you can find that you always have a large number of reviews waiting to be closed. Prior to Crucible 2.9, this could slow down the review creation process because Crucible looked for other reviews where changesets might have been included.

With Crucible 2.9 we have removed the Suggested Reviews step during review creation. Not only does this accelerate the process, but it also ensures that performance of the whole Crucible instance is not impacted by a single process. The chart below shows the performance improvement we have seen from this modification.





#### Other announcements

## Suggested reviews removed

As described above, we have removed the suggested reviews step during review creation, to improve Crucible performance and to ensure that review creation never interferes with the responsiveness of your Crucible instance.

#### Remote API setting always on

We have removed the Remote API setting from the Server Settings page. From this release onwards, Remote APIs are always accessible, which helps to make the JIRA integration straightforward.

### Changes to the JIRA settings dialog

- Allow Time Tracking Submission is no longer a configurable option. Users are always able to submit time for their reviews when the JIRA integration is set up.
- We have simplified permissions by removing the Disable for Unmapped Projects setting. All

- permissions to view the reviews tab are now controlled by the Project permission settings in JIRA.
- Force Project Mappings has been removed as part of simplifying the JIRA FishEye Plugin behavior. Project links are respected, and act as restrictions on the integration.
- Max review age is now only applied to versions of Crucible prior to 2.9.0.

# • Changes to the diff view in reviews

In order to facilitate the review process and give a clearer interface to see all the modifications and comments on a particular file we are now showing one file at a time in the reviews. You can use the file tree or the keyboard shortcuts to navigate between files.

## The Crucible 2.9 team

Development

#### Core team

Brendan Humphreys Conor MacNeill Geoff Crain Lukasz Pater Maciej Swinarski Piotr wity wicicki Richard Stephens Tom Davies Valery Trubnikov

Team lead

Nick Pellow

Product management

Sten Pittet

Project manager

Anton Mazkovoi Support

Ajay Sridhar
Daniel Rohan
Douglas Fabretti
Felipe Kraemer
Gurleen Anand
Kah Loun Foong
Leonardo Macedo
Malik Mangier
Patrick Hill
Renan Battaglin

Rene Verschoor Ricardo Martins

**Others** 

**Product marketing** 

Giancarlo Lionetti

**Quality assurance** 

George Filippoff

**Technical writing** 

Paul Watson

Operations

James Fleming

# Crucible 2.9 changelog

This page contains information about the Crucible 2.9 minor releases. FishEye license holders should also check the FishEye 2.9 Changelog.

See the Crucible 2.9 release notes for details of what's new in 2.9.0.



Please read the Crucible 2.9 Upgrade Guide before upgrading to any of the minor releases below.

### From 2.9.1 to 2.9.2

### **11 December 2012**

This is a bug fix release. The complete list of issues is below.

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
•	FE-439 2	Svnkit fine logging causes very large debug logs	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Dec 04, 2012	Dec 11, 2012
•	FE-439 1	Validati on of start-re v in admin is incorre ct	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	•	A Clos ed	Fixed	Dec 04, 2012	Dec 11, 2012
	FE-436 8	Chang eset Comm ent re-inde xing incorre ctly uses a	Brenda n Humph reys [Atlassi an]	Brenda n Humph reys [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Nov 20, 2012	Dec 11, 2012

	threadl ocal session							
FE-435 7	Improve the way permis sions are handle d, as a lot of time is spent in user/re po permis sion checks, which should be cached	Brenda n Humph reys [Atlassi an]	Geoff Crain [Atlassi an]	•	clos ed	Fixed	Nov 07, 2012	Jun 14, 2013

# From 2.9.0 to 2.9.1

### **19 November 2012**

This is a bug fix release. The complete list of issues is below.

Authenticate to retrieve your issues

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
•	CRUC- 6279	Next review comme nt button does not work	Unassi gned	Kah Loun Foong [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Nov 21, 2012	Nov 26, 2012
	CRUC- 6272	Crucibl e calls out to JIRA once per Comm ent	Geoff Crain [Atlassi an]	Geoff Crain [Atlassi an]	<b>†</b>	♣ Clos ed	Fixed	Nov 13, 2012	Nov 19, 2012

(i) Authenticate to retrieve your issues

2 issues

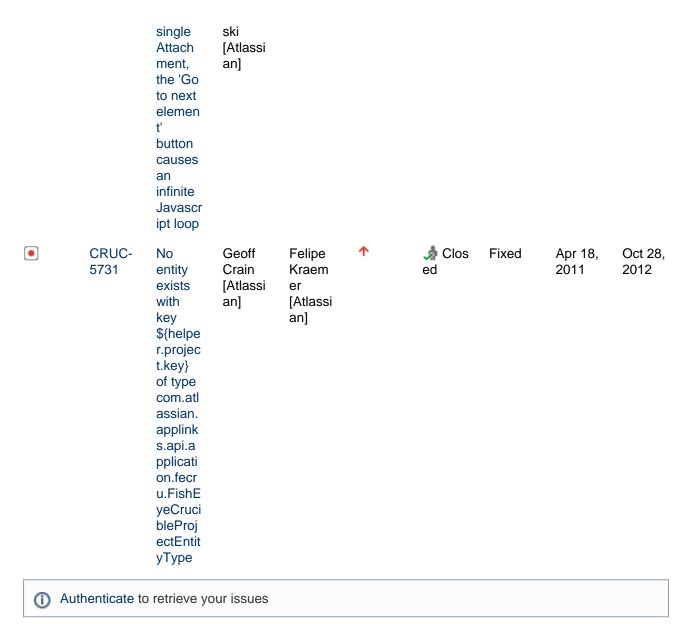
Crucible 2.9

# **14 November 2012**

The complete list of issues is below.

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
<b>&gt;</b>	CRUC- 6372	Update doco for "Openi ng the List of People"	Paul Watson [Atlassi an]	Malik Mangie r [Atlassi an]	•		Fixed	Feb 12, 2013	Mar 22, 2013
	CRUC- 6351	Managi ng Add-On s Page Refers to Add-On That Is Not Compa tible With Latest Version s	Unassi gned	Ricardo Martins [Atlassi an]	•	clos ed	Fixed	Jan 30, 2013	Mar 06, 2013
<b>&gt;</b>	CRUC- 6163	Display month in a literal format for the due date	Val Trubnik ov [Atlassi an]	Sten Pittet [Atlassi an]	•		Fixed	Jul 02, 2012	Sep 13, 2012
	CRUC- 6129	Odd and Even rows in all tables should have differen t shadin g betwee n rows.	Jeroen De Raedt [Atlassi an]	Robert Massai oli [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	May 08, 2012	Oct 26, 2012
<b>&gt;</b>	CRUC- 2752	if backup cant stop one	Conor MacNei II [Atlassi an]	Geoff Crain [Atlassi an]	•	A Clos ed	Fixed	Nov 20, 2009	Oct 31, 2012

		reposit ory, no caches are include d							
•	CRUC- 6238	Perforc e patche s cannot be anchor ed	Richard Stephe ns [Atlassi an]	Richard Stephe ns [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Oct 11, 2012	Nov 01, 2012
	CRUC- 6231	Gravat ar-s avatars dont show	Brenda n Humph reys [Atlassi an]	Malik Mangie r [Atlassi an]	<b>+</b>	♣ Clos ed	Fixed	Oct 05, 2012	Nov 01, 2012
	CRUC- 6204	Dead link on READ ME.htm I file	Nick Pellow [Atlassi an]	Katie Grigora tou [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Aug 31, 2012	Oct 24, 2012
	CRUC- 6138	Deadlo cks occur in c3p0 GooGo Statem entCac he when using MS SQL Server	Val Trubnik ov [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jun 01, 2012	Nov 05, 2012
	CRUC- 6105	Chrom e crashe s if during a code review the user navigat e using the shortcu ts	Maciej Swinar ski [Atlassi an]	Renan Battagli n [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Apr 05, 2012	Oct 17, 2012
	CRUC- 5781	In a Review containi ng a	Maciej Swinar	Tom Davies [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jun 01, 2011	Oct 23, 2012



# Crucible 2.9 upgrade guide

Please refer to the FishEye 2.9 upgrade guide for important notes on upgrading to Crucible 2.9.

For details of the new features and improvements in this release, please read the Crucible 2.9 Release Notes.

# **Crucible 2.8 Release Notes**

#### 15 August 2012

With great pleasure, Atlassian presents **Crucible 2.8**, introducing social features and performance improvements.

See the change log for Crucible 2.8.x minor releases.

Visit our issue tracker to see the full list of improvements and bug fixes in Crucible and FishEye for this release.

- Upgrading from a previous version of Crucible. Upgrading Crucible should be fairly straight forward.
   We strongly recommend that you back up Crucible before upgrading. Please refer to the Crucible 2.8
   Upgrade Guide for further essential information about your upgrade.
- **Known Issues.** Please check the important technical advisories on the front page of the Knowledge Base for information about any known issues for this release.

#### Highlights of this release:

- Mentions
- Shares
- Improved performance for the projects listing
- Support for Subversion 1.7
- End of life announcements

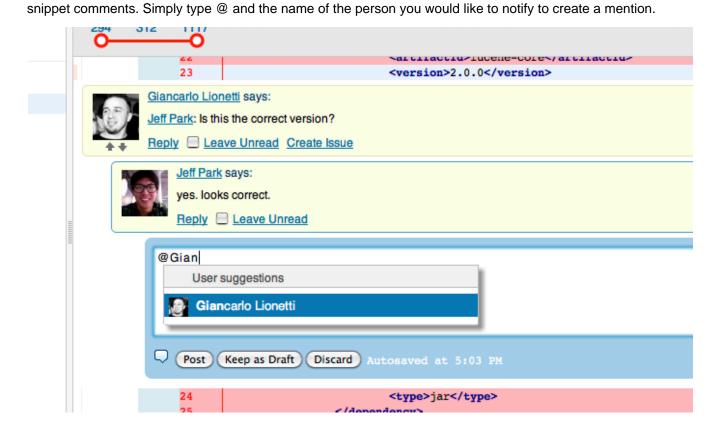


#### Providing feedback:

Please log your votes and issues. They help us decide what needs doing, and are much appreciated!

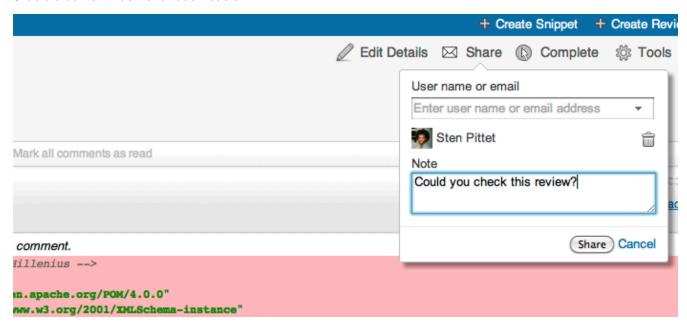


In Crucible 2.8 you can use mentions to notify other users in the changeset discussions, review comments and





You can now share reviews with other users of Crucible as well as external people via their email. Sharing Crucible content has never been easier.





Improved performance for the projects listing

We improved the rendering performance of the projects listing in Crucible.



**Support for Subversion 1.7** 

Crucible now supports Subversion 1.7.





**End of life announcements** 

As announced earlier, support for IBM ClearCase repositories has been removed in Crucible 2.8.

# The Crucible 2.8 team

## Development

#### Core team

Geoff Crain Tom Davies Brendan Humphreys Conor MacNeill Richard Stephens

Team lead

Nick Pellow

### **Product management**

Sten Pittet

### Project manager

Anton Mazkovoi Support

Ajay Sridhar Armen Khachatryan Daniel Rohan Douglas Fabretti

Felipe Kraemer

Gurleen Anand

Renan Battaglin

Rene Verschoor

Malik Mangier

Others

# Product marketing

Giancarlo Lionetti Jeff Park

**Quality assurance** 

George Filippoff

**Technical writing** 

Paul Watson

Operations

James Fleming

# **Crucible 2.8 Changelog**

This page contains information about the Crucible 2.8 minor releases. FishEye license holders should also check the FishEye 2.8 Changelog.

See the Crucible 2.8 Release Notes for details of what's new in 2.8.0.



⚠ Please read the Crucible 2.8 Upgrade Guide before upgrading to any of the minor releases below.

# On this page:

- From 2.8.1 to 2.8.2
- From 2.8.0 to 2.8.1
- Crucible 2.8

### From 2.8.1 to 2.8.2

#### **5 October 2012**

This is a FishEye bug fix release.

### From 2.8.0 to 2.8.1

### 29 August 2012

This is a bug fix release. The complete list of issues is below.

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 6203	Notifica tions/S hares don't work if Oracle is being used.	Geoff Crain [Atlassi an]	Renan Battagli n [Atlassi an]	0	♣ Clos ed	Fixed	Aug 28, 2012	Mar 12, 2013
	CRUC-6200	Missing Attach ment Upload Item's cause NullPoi nterExc eption when viewing a Review which has inline comme nts on the missing attach ment	Geoff Crain [Atlassi an]	Nick Pellow [Atlassi an]	<b>†</b>	♣ Clos ed	Fixed	Aug 27, 2012	Aug 29, 2012

Authenticate to retrieve your issues

# Crucible 2.8

# 15 August 2012

The complete list of issues is below.

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 6156	Test upgrad e from 2.7 to 2.8 on all Suppor ted DBs	Unassi gned	Nick Pellow [Atlassi an]	0	♣ Clos ed	Fixed	Jun 21, 2012	Jul 02, 2012
<b>&gt;</b>	CRUC- 6104	Allow sharing reviews using emails or accoun t	Unassi gned	Felipe Kraem er [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Apr 04, 2012	Aug 13, 2012
<b>A</b>	CRUC- 5146	show last indexe d time of a reposit ory	Geoff Crain [Atlassi an]	Geoff Crain [Atlassi an]	<b>V</b>	Å Clos ed	Fixed	Dec 12, 2010	May 09, 2012
•	CRUC- 6188	Crucibl e privileg e escalati on vulnera bility	Vitaly Osipov [Atlassi an]	Paul Watson [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Aug 10, 2012	Aug 16, 2013
	CRUC- 6168	A null review particip ant causes review indexin g to fail partwa y through the set of reviews	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Jul 10, 2012	Sep 27, 2012

	CRUC- 6166	Setup Func Tests are failing under JDK 1.7	Geoff Crain [Atlassi an]	Nick Pellow [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jul 06, 2012	Jul 09, 2012
	CRUC- 6162	Investig ate why Crucibl e seems to auto-sa ve always exactly when you go to post a comme nt.	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jul 02, 2012	May 02, 2013
	CRUC- 6157	Re-ind exing crucible can cause a NullPoi nterExc eption if LogIte m table contain s referen ces to non-exi stant users	Richard Stephe ns [Atlassi an]	Richard Stephe ns [Atlassi an]	<b>↓</b>	Å Clos ed	Fixed	Jun 22, 2012	Jul 09, 2012
	CRUC- 6151	Fix perform ance issues caused by Lower and Upper DB functions	Geoff Crain [Atlassi an]	Renan Battagli n [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Jun 18, 2012	Jul 03, 2012
•	CRUC- 6149	Update support ed	Paul Watson [Atlassi	Melani e Wright	<b>4</b>		Fixed	Jun 14, 2012	Aug 14, 2012

		platfor ms now that Clearca se is no longer support ed	an]	[Atlassi an]					
	CRUC- 6132	NPE on manual remind er email if due date is null	Roman Tekhov [Atlassi an]	Geoff Crain [Atlassi an]	<b>V</b>	A Clos ed	Fixed	May 23, 2012	Jul 17, 2012
•	CRUC- 6131	Invalid email notificat ion and inconsi stent langua ge	Geoff Crain [Atlassi an]	Sean Curtis [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	May 17, 2012	Jul 30, 2012
	CRUC- 6130	Missing parent on one side of a merge fails indexin g proces s	Brenda n Humph reys [Atlassi an]	Renan Battagli n [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	May 09, 2012	Jul 05, 2012
	CRUC- 5987	LDAP/ Crowd Users auto-sy nced and added as crucible users, exceedi ng licence limit	Geoff Crain [Atlassi an]	Matthe w Watson [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Nov 29, 2011	Jun 18, 2012
•	CRUC- 5845	Whites pace at the end of a pasted patch	Tom Davies [Atlassi an]	Rene Versch oor [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jul 26, 2011	Sep 17, 2013



Authenticate to retrieve your issues

16 issues

# Crucible 2.8 Upgrade Guide

Below are some important notes on upgrading to Crucible 2.8. For details of the new features and improvements in this release, please read the Crucible 2.8 Release Notes.

# On this page:

- Upgrade Notes
- Upgrade Procedure
- Checking for Known Issues and Troubleshooting the Crucible Upgrade

### Related pages:

Crucible 2.8 Release Notes

**Upgrade Notes** 

### Crucible 2.8

# Crucible 2.8

A minor schema change has been made to the Crucible SQL Schema in 2.8. If you need to rollback to an earlier version, you will need to restore from a backup to do so. Be sure to take a backup before you upgrade.

Please also be sure to read the End of Life Announcements for FishEye/Crucible 2.8.

**Upgrade Procedure** 



# Before you begin

- Test your upgrades in your test environment before rolling into production.
- Back up your entire Crucible instance (see Backing up and restoring Crucible data), i.e.
  - If you are backing up your Crucible instance via the Admin interface, tick all of the 'Include' checkboxes (e.g. plugins, templates, uploads, SQL database, etc).
  - If you are backing up your Crucible instance using the command-line interface, do not use any exclusion options.

If you are already running a version of Crucible, please refer to the Crucible upgrade guide.

Checking for Known Issues and Troubleshooting the Crucible Upgrade

If something is not working correctly after you have completed the steps above to upgrade your Crucible installation, please check for known Crucible issues and try troubleshooting your upgrade as described below:

- Check for known issues. Sometimes Atlassian finds out about a problem with the latest version of
  Crucible after the software is released. In such cases we publish information about the known issues in
  the Crucible Knowledge Base. Please check there for known issues, and follow the instructions to apply
  any necessary patches if necessary.
- Did you encounter a problem during the Crucible upgrade? Please refer to the guide to troubleshooti
  ng upgrades in the Crucible Knowledge Base.
- If you encounter a problem during the upgrade and cannot solve it, please create a support ticket and one
  of our support engineers will help you.

# Crucible 2.7 Release Notes

### 7 September 2011

With great pleasure, Atlassian presents Crucible 2.7 featuring new JIRA Transitions and Review Reminders.

# **Highlights of this Release:**

- JIRA Transitions in Crucible
- Review Reminders
- Small Improvements



- Thank you for all your issues and votes. Keep logging issues to help us keep improving!
- Read the release notices for important information about this release.

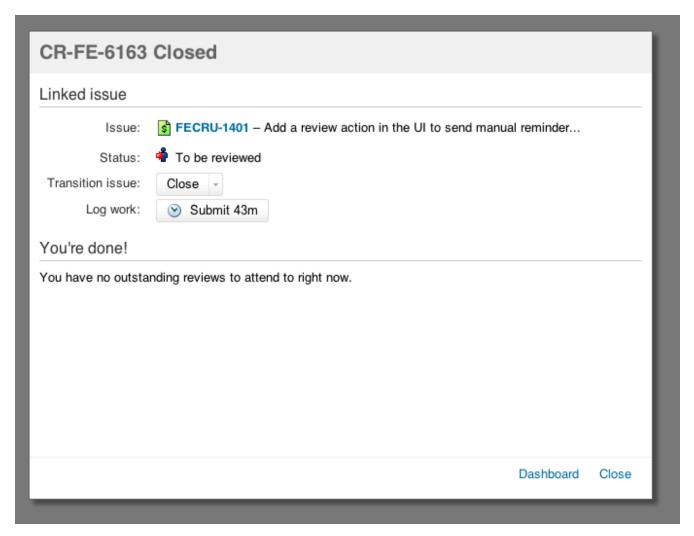
# **Highlights of Crucible 2.7**



#### **JIRA Transitions in Crucible**

For Crucible reviews that are linked to JIRA issues, you can now transition these JIRA issues through workflow from within Crucible.

After **closing a review**, Crucible will now display any available transitions for the linked JIRA issue.



More...

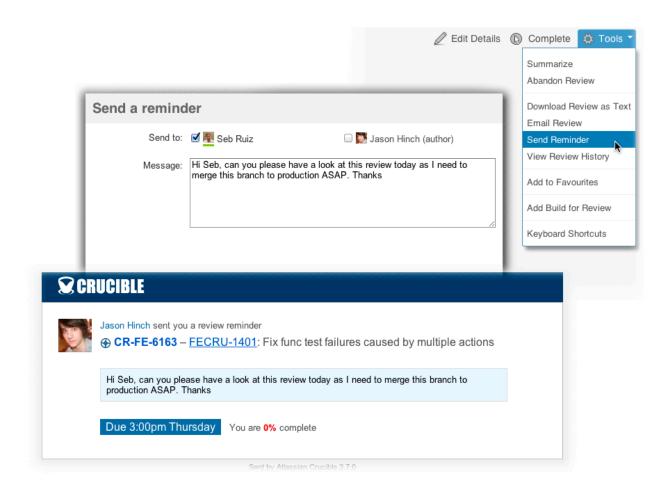


#### **Review Reminders**

Crucible will now automatically send reviewers a reminder email one working day before the deadline.

Review authors and moderators can also do the following:

- Send manual reminders to reviewers whose work is still pending.
- Configure preset reminders for reviews that have a deadline.



More...



#### **Small Improvements**

Crucible 2.7 also comes bundled with numerous other bug fixes and improvements, including:

- Syntax highlighting for Java 7, Groovy, Velocity and Scala
- Crucible can now run on Java 7
- · Improved user interface for the administration screens
- Improved plugin points for developers

Visit our issue tracker to see the full list of improvements and bug fixes in Crucible and FishEye for this release.

### **Release Notices**

- Upgrading from a previous version of Crucible. Upgrading Crucible should be fairly straight forward.
   We strongly recommend that you back up Crucible before upgrading. Please refer to the Crucible 2.7
   Upgrade Guide for further essential information about your upgrade.
- Known Issues. Please check the important technical advisories on the front page of the Knowledge Base for information about any known issues for this release.

#### Crucible 2.7 Changelog

This page contains information about the Crucible 2.7 minor releases. FishEye license holders should also check the FishEye 2.7 Changelog.

See the Crucible 2.7 Release Notes for details of what's new in 2.7.0.



Please read the Crucible 2.7 Upgrade Guide before upgrading to any of the minor releases below.

## On this page:

- From 2.7.14 to 2.7.15
- From 2.7.13 to 2.7.14
- From 2.7.12 to 2.7.13
- From 2.7.11 to 2.7.12
- From 2.7.10 to 2.7.11
- From 2.7.9 to 2.7.10
- From 2.7.8 to 2.7.9
- From 2.7.7 to 2.7.8
- From 2.7.6 to 2.7.7
- From 2.7.5 to 2.7.6
- From 2.7.4 to 2.7.5
- From 2.7.3 to 2.7.4
- From 2.7.2 to 2.7.3
- From 2.7.1 to 2.7.2
- From 2.7.0 to 2.7.1

#### From 2.7.14 to 2.7.15

### 10 July 2012

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
+	FE-408 7	IllegalA rgumen tExcept ion: No local entity with key 'REPO NAME' and type 'class com.atl assian. applink s.applic ation.fe cru.Fis hEyeR eposito ryEntity TypeIm pl' exists	Geoff Crain [Atlassi an]	Nick Pellow [Atlassi an]	•	clos ed	Fixed	May 07, 2012	Jul 09, 2012
•	FE-422 2	FishEy e privileg e escalati on	Vitaly Osipov [Atlassi an]	Paul Watson [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Aug 09, 2012	Aug 16, 2013

		vulnera bility							
	FE-417 8	Getting "No entity exists with key <repo name=""> of type com.atl assian. applink s.api.a pplicati on.fecr u.FishE yeRepo sitoryE ntityTy pe" editing clicking applink s for a reposit ory</repo>	Unassi gned	David Corley	<b>↑</b>	♣ Clos ed	Fixed	Jul 05, 2012	Jul 09, 2012
•	FE-415 6	Watch Emails throwin g excepti on in certain circums tances	Unassi gned	Nick Pellow [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jun 25, 2012	Feb 18, 2013
•	CRUC- 6188	Crucibl e privileg e escalati on vulnera bility	Vitaly Osipov [Atlassi an]	Paul Watson [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Aug 10, 2012	Aug 16, 2013
	CRUC- 6157	Re-ind exing crucible can cause a NullPoi nterExc eption if LogIte m table contain	Richard Stephe ns [Atlassi an]	Richard Stephe ns [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Jun 22, 2012	Jul 09, 2012

	s referen ces to non-exi stant users							
CRUC-6136	java.lan g.Illegal Argum entExc eption: No local entity with key 'PROJ ECTNA ME' and type 'class com.atl assian. applink s.applic ation.fe cru.Fis hEyeCr ucibleP rojectE ntityTy pelmpl' exists	Unassi gned	Rene Versch oor [Atlassi an]	•	♣ Clos ed	Fixed	May 30, 2012	Jul 05, 2012

(i) Authenticate to retrieve your issues

## 7 issues

# From 2.7.13 to 2.7.14

## 12 June 2012

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	FE-411 9	Missing change sets cause Hg indexin g to fail	Unassi gned	Tom Davies [Atlassi an]	<b>V</b>	A Clos ed	Fixed	May 30, 2012	May 31, 2012
•	FE-411 1	If Anon Access is OFF, smart	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]	•	A Clos ed	Fixed	May 25, 2012	Aug 01, 2012

		commit s that interact with JIRA will not work							
	FE-410 6	Fishey e 2.7.13 startup error when FISHE YE_IN ST have spaces	Nick Pellow [Atlassi an]	Leo Leung	<b>↑</b>	♣ Clos ed	Fixed	May 24, 2012	Jun 08, 2012
	FE-410 5	100+ request s of type "update JiraTim eAjax!d efault" timing out when modifyi ng Time Spent	Geoff Crain [Atlassi an]	Daniel Rohan [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	May 24, 2012	Jun 08, 2012
	FE-410 3	NPE when indexin g git repo with missing ancest or	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	•	A Clos ed	Fixed	May 22, 2012	Jun 08, 2012
•	CRUC- 6107	Error synchr onizing users: null	Tom Davies [Atlassi an]	Sheppe Pharis	0	♣ Clos ed	Fixed	Apr 05, 2012	Jun 13, 2012
(i) A	uthenticate to	o retrieve yo	our issues						

### From 2.7.12 to 2.7.13

# 21 May 2012

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	FE-396 1	Emulat e pre-2.7 behavi our: when an user is created by the user synchr onisatio n, restore any deleted user with the same userna me	Brenda n Humph reys [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>?</b>	♣ Clos ed	Fixed	Feb 16, 2012	Aug 20, 2012
•	CRUC- 6092	Email generat ed via "Tools -> Email Review " has incorre ct comme nt URLs	Brenda n Humph reys [Atlassi an]	Sylvia Yee	<b>↓</b>	Res olved	Fixed	Mar 16, 2012	May 18, 2012
<b>\$</b>	FE-401 9	web-se rver/ma x-threa ds increas es from 20 to 150	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Mar 14, 2012	Nov 18, 2012
\$	FE-401 8	EyeQL Search Results not displayi ng author fields	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Mar 27, 2012	Apr 10, 2012
+	FE-401 7	Add authent icated user in	Brenda n Humph reys	Issa	<b>↑</b>	♣ Clos ed	Fixed	Mar 26, 2012	Apr 05, 2012

		http respon se header s for logging ability in reverse proxy	[Atlassi an]						
<b>&gt;</b>	FE-398 9	Allow disablin g of precise content Hash to csid mappin g	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Mar 09, 2012	May 01, 2012
<b>&gt;</b>	FE-392 2	Add custom syntax highligh ting for shell scripts	Brenda n Humph reys [Atlassi an]	Eddie Webb	<b>¥</b>	♣ Clos ed	Fixed	Jan 27, 2012	Nov 07, 2012
	FE-349 5	com.atl assian. crowd. excepti on.Ope rationF ailedEx ception if SSO is enable d with JIRA user manag ement	Brenda n Humph reys [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jun 14, 2011	Jul 31, 2012
<b>&gt;</b>	CRUC- 6075	Link to comme nts from dashbo ard	Richard Stephe ns [Atlassi an]	Frederi k Dinkela ker	<b>\</b>	A Clos ed	Fixed	Feb 26, 2012	Apr 09, 2012
<b>&gt;</b>	CRUC- 6017	Allow plugins to detect when a draft comme	Richard Stephe ns [Atlassi an]	Olli Nevalai nen [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 05, 2012	Apr 17, 2012

		nt is publish ed							
*	CRUC- 6009	Allow plugins to detect change s to reviewe rs or modera tor	Brenda n Humph reys [Atlassi an]	Olli Nevalai nen [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 22, 2011	Apr 03, 2012
•	FE-408 4	hidden text behind the left navigati on panel when using Firefox 12	Unassi gned	Leonar do De Maced o [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	May 01, 2012	Jun 27, 2012
	FE-407 0	Fishey e does not allow userna me returne d by AuthTo ken to be differen t from userna me entered by user	Richard Stephe ns [Atlassi an]	Richard Stephe ns [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Apr 19, 2012	Apr 30, 2012
	FE-406 0	CC Indexin g can fetch version 0 and index it even if before the start date.	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	•	Å Clos ed	Fixed	Apr 17, 2012	Apr 18, 2012
•	FE-404 4	Lack of userna mes elemen	Conor MacNei	Conor MacNei	<b>↑</b>		Fixed	Apr 11, 2012	Apr 16, 2012

		t in security config can stop AJPAut h working	II [Atlassi an]	II [Atlassi an]					
	FE-404 3	Handle NPE caused by change set without a position value in Commit Graph	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	•	♣ Clos ed	Fixed	Apr 11, 2012	Apr 16, 2012
	FE-403 6	P4 GetLat estRevi sion will fail for paths with no revision s - leads to excessi ve logging .	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Apr 05, 2012	Apr 11, 2012
	FE-403 4	Copy from a file which existed before the start-re vision is ignored	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Apr 04, 2012	Apr 11, 2012
•	FE-402 9	Store Perforc e Branch Details	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Apr 03, 2012	Apr 26, 2012
•	FE-402 5	Modifie d port not reflecte	Brenda n Humph reys	Rene Versch	•	A Clos ed	Fixed	Mar 31, 2012	Apr 04, 2012

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### From 2.7.11 to 2.7.12

## 16 April 2012

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
•	FE-401 6	FishEy e XML Vulnera bility	Vitaly Osipov [Atlassi an]	Paul Watson [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Mar 26, 2012	Aug 16, 2013
	FE-400 1	Perforc e branch es are unnece ssarily, repeate dly, scanne d	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Mar 15, 2012	Apr 03, 2012
	FE-400 0	Corrupt ion of CrossR eposito ry Index Propert ies	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>†</b>		Fixed	Mar 14, 2012	Mar 22, 2012
	FE-399 6	Clearto ol since date format need to be English	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	•	♣ Clos ed	Fixed	Mar 12, 2012	Mar 22, 2012
•	FE-397 6	ClassC astExc eption on startup	Richard Stephe ns [Atlassi an]	Wanne s Geysen	<b>V</b>		Fixed	Feb 27, 2012	Apr 11, 2012

		on window s							
	FE-397 0	Commit Calend ar incorre ct for project s includin g several paths in the same reposit ory	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 23, 2012	Feb 29, 2012
	FE-396 9	The 'Param eters' on the 'Databa se Configu ration' page are ignored	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Feb 22, 2012	Oct 03, 2012
① Au	thenticate to	o retrieve yo	our issues						

## From 2.7.10 to 2.7.11

## **27 February 2012**

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
<b>S</b>	FE-394 1	Add a limit for the number of paths to index to a change set	Matthe w Watson [Atlassi an]	Matthe w Watson [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Feb 09, 2012	Feb 27, 2012
\$	FE-393 7	Add properti es to stop	Matthe w	Matthe w	0	♣ Clos ed	Fixed	Feb 08, 2012	Feb 27, 2012

		branch and tag point ancestr y detecti on for SVN	Watson [Atlassi an]	Watson [Atlassi an]					
<b>(\$)</b>	FE-393 1	Null Pointer Excepti on com.ce nqua.fi sheye.r ep.impl .Comm onFileR evision. setAuth or(Com monFil eRevisi on.java :149)	Brenda n Humph reys [Atlassi an]	Cardin al Arman d du Piessis de Richeli eu First Ministe r of Louis XIII	<b>\</b>	♣ Clos ed	Fixed	Feb 03, 2012	Jan 17, 2013
	FE-395 8	Conten t Indexin g: Filter the paths to index before proces sing the list twice.	Matthe w Watson [Atlassi an]	Matthe w Watson [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 16, 2012	Feb 22, 2012
	FE-395 7	Lucene re-inde x is only triggere d for cross-r epo until after first commit	Matthe w Watson [Atlassi an]	Matthe w Watson [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 16, 2012	Feb 16, 2012
<b>&gt;</b>	FE-395 6	Conten t Indexin g: Add an option to only index	Matthe w Watson [Atlassi an]	Matthe w Watson [Atlassi an]	<b>V</b>	A Clos ed	Fixed	Feb 16, 2012	Feb 27, 2012

		trunk, not root and trunk							
<b>A</b>	FE-395 5	ReInde x: Only delete all the content docs if there are >0 docs in the index	Matthe w Watson [Atlassi an]	Matthe w Watson [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 16, 2012	Feb 20, 2012
<b>&gt;</b>	CRUC- 6051	Improv e perform ance of the Review Blocker s Report plugin	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 13, 2012	Feb 23, 2012
	FE-395 3	Per user LoC figures are meanin gless when the 'All' button is selecte d	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 15, 2012	Feb 16, 2012
	FE-395 2	Breadc rumb links on the Users tab are incorre ct when a branch is selecte d	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 15, 2012	Feb 15, 2012
•	FE-393 9	PHP syntax highligh ting incorre ctly	Brenda n Humph reys [Atlassi an]	Chris Butler	<b>V</b>	A Clos ed	Fixed	Feb 08, 2012	Feb 08, 2012

		matche s keywor ds at the end of functio n names							
•	FE-393 4	Chang esets with large number of revision s can exhaus t heap	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	•	♣ Clos ed	Fixed	Feb 07, 2012	Feb 27, 2012
•	FE-393 2	FishEy e appear s hung on upgrad e, till upgrad e finishes	Conor MacNei II [Atlassi an]	Matthe w Watson [Atlassi an]	•	♣ Clos ed	Fixed	Feb 06, 2012	Mar 28, 2013
	FE-392 1	Fishey e treats files as binary if they used to have a svn:mi me-typ e propert y, even after the propert y has been remove d	Michael Heems kerk [Atlassi an]	Michael Heems kerk [Atlassi an]	<b>↓</b>	♣ Clos ed	Fixed	Jan 27, 2012	Feb 23, 2012
	FE-390 8	Investig ate lib dir containi ng random JS files and director	Unassi gned	Nick Pellow [Atlassi an]	<b>V</b>	A Clos ed	Fixed	Jan 22, 2012	Feb 08, 2012

		ies. and scmutil s.jar is missing							
	FE-390 5	Upgrad e from 2.5->2. 7 fires events for all commit s and replays all smart commit s	Matthe w Watson [Atlassi an]	Matthe w Watson [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 20, 2012	Jan 24, 2012
	FE-388 5	Smart Commit s: Using the #time comma nd with a comple x time format (i.e. 2d 4h) only saves the 2d part	Nick Pellow [Atlassi an]	Felipe Cuozzo [Atlassi an]	•	Å Clos ed	Fixed	Jan 13, 2012	Jul 23, 2013
	FE-385 9	Unable to add users when using IE8	Seb Ruiz [Atlassi an]	Felipe Kraem er [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 12, 2011	Nov 08, 2012
•	FE-385 1	Old broken Suppor t Zip link still present	Brenda n Humph reys [Atlassi an]	Rene Versch oor [Atlassi an]	<b>†</b>		Fixed	Dec 02, 2011	Feb 15, 2012
	FE-360 8	Issue keys, wrappe d in square bracket s [JRA-9]	Brenda n Humph reys [Atlassi an]	Nick Pellow [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jul 27, 2011	Feb 23, 2012

are not linked correctl y in quick search results

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### From 2.7.9 to 2.7.10

## 20 January 2012

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	FE-390 3	Unable to see FishEy e activity stream in JIRA Activity Stream gadget on dashbo ard when have Reposit ory with no description	Unassi gned	Matthe w Watson [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Jan 19, 2012	Jan 19, 2012
	FE-390 2	Issue Transiti on control s don't appear when closing a review	Unassi gned	None	<b>⊗</b>	♣ Clos ed	Fixed	Jan 19, 2012	Jan 19, 2012
•	FE-390 0	fecru-re view-is sue-tra nsition- plugin fails under fisheye	Unassi gned	Nick Pellow [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Jan 19, 2012	Jan 19, 2012

2.7.9 due to incomp atible class change error

(i) Authenticate to retrieve your issues

#### 3 issues

### From 2.7.8 to 2.7.9

## 19 January 2012

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC-6027	New parame ter to GET /rest-se rvice/pr ojects-v 1 to optiona lly load all user data. If false, Project Data.g etAllow edRevi ewers will return an empty list	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]		♣ Clos ed	Fixed	Jan 15, 2012	Jan 18, 2012
	CRUC- 5999	Add REST end point for getting the list of groups	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Dec 07, 2011	Dec 12, 2011
•	FE-389 6	FishEy e wrongly remove s admin	Nick Pellow [Atlassi an]	Alex Wei [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 05, 2012	Jan 18, 2012

		privileg es for a Crowd group when Crowd is not up when FishEy e is starting up							
•	FE-389 1	Webwo rk 2 vulnera bility	Vitaly Osipov [Atlassi an]	Paul Watson [Atlassi an]	<b>↑</b>		Fixed	Jan 17, 2012	Jan 31, 2012
	FE-388 8	FishEy e does not correctl y handle moved tags	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 16, 2012	Jan 18, 2012
	FE-388 4	Default UserM anager. getUse rsInGro up incorre ctly acquire s a write lock instead of a read lock	Brenda n Humph reys [Atlassi an]	Brenda n Humph reys [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jan 13, 2012	Jan 13, 2012
	FE-388 0	P4 client doesn't handle job names with a leading	Brenda n Humph reys [Atlassi an]	Brenda n Humph reys [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jan 09, 2012	Jan 10, 2012
•	FE-387 8	When proces sing perforc e file revision s, only	Anna Buttfiel d [Atlassi an]	Anna Buttfiel d [Atlassi an]	<b>*</b>	♣ Clos ed	Fixed	Jan 08, 2012	Jan 09, 2012

		branch specs that have been added or modifie d since the last restart are conside red							
	FE-387 5	SVN propert y change s with content lines containing certain strings break diff parsing	Anna Buttfiel d [Atlassi an]	Anna Buttfiel d [Atlassi an]	<b>\</b>	Clos ed	Fixed	Jan 04, 2012	Jan 18, 2012
•	FE-386 2	JS errors in ie8	Anna Buttfiel d [Atlassi an]	Anna Buttfiel d [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 14, 2011	Jan 18, 2012
	FE-386 1	lock misma nagem ent in Lucene Connec tion	Brenda n Humph reys [Atlassi an]	Brenda n Humph reys [Atlassi an]	<b>†</b>	A Clos ed	Fixed	Dec 13, 2011	Dec 13, 2011
	FE-381 7	Clickin g on reposit ory in Fishey e Admini stration generat es error dialog in IE8	Anna Buttfiel d [Atlassi an]	Felipe Kraem er [Atlassi an]	<b>*</b>	A Clos ed	Fixed	Nov 04, 2011	Jan 17, 2012
•	FE-379 0	Trying to look at the source of an	Brenda n Humph	Rene Versch oor [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Oct 20, 2011	Dec 23, 2011

		empty file results in java.lan g.Array IndexO utOfBo undsEx ception 1	reys [Atlassi an]						
	CRUC- 6028	Internal avatar on change set comme nt is broken	Anna Buttfiel d [Atlassi an]	Brian McKen na [Atlassi an]	<b>V</b>	A Clos ed	Fixed	Jan 05, 2012	Jan 18, 2012
•	CRUC- 6022	getRevi ewsByI ds perform s N queries	Brenda n Humph reys [Atlassi an]	Brenda n Humph reys [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 10, 2012	Jan 12, 2012
	CRUC- 6013	If during review creatio n the content of a file revision can't be upload ed (via FishEy e), that file is regarde d as having no content	Geoff Crain [Atlassi an]	Anna Buttfiel d [Atlassi an]	<b>↓</b>	♣ Clos ed	Fixed	Dec 28, 2011	Aug 28, 2012
	CRUC- 6010	Crucibl e search doesn't deal properl y with author user names containi ng punctu ation	Anna Buttfiel d [Atlassi an]	Anna Buttfiel d [Atlassi an]	<b>\</b>	& Clos ed	Fixed	Dec 22, 2011	Jan 09, 2012

		d reposit ories cause NPEs in crucible reviews	gned	Buttfiel d [Atlassi an]		ed		2011	2012
•	CRUC- 6003	Timelin es only work with a small set of timezo nes	Anna Buttfiel d [Atlassi an]	Eric Dalglie sh [Atlassi an] Recove ring Bugma ster	<b>↑</b>	Clos ed	Fixed	Dec 15, 2011	Jan 09, 2012
•	CRUC- 5996	Review creator is unavail able from within Review Create dEvent handler	Nick Pellow [Atlassi an]	Adrian Hempel [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 06, 2011	Dec 14, 2011

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## From 2.7.7 to 2.7.8

## **30 November 2011**

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 5984	UI improv ements to the Edit classifi cation admin screen	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Nov 25, 2011	Nov 29, 2011
	CRUC- 5968	Allow files with no extensi on to be	Pierre- Etienne Poirot [Atlassi an]	Melani e Wright [Atlassi an]	<b>¥</b>	A Clos ed	Fixed	Nov 09, 2011	Nov 29, 2011

		treated as text rather than binary							
J.	CRUC- 5925	In Git, our separat ion of files by branch can be confusi ng	Pierre- Etienne Poirot [Atlassi an]	Wesley Walser [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 28, 2011	Nov 24, 2011
•	FE-384 6	crowd admin groups get remove d on startup	Geoff Crain [Atlassi an]	Geoff Crain [Atlassi an]	<b>+</b>		Fixed	Nov 28, 2011	Nov 29, 2011
•	FE-384 2	"Interna I Server Error" on jira issue hover	Geoff Crain [Atlassi an]	Geoff Crain [Atlassi an]	<b>+</b>		Fixed	Nov 24, 2011	Nov 24, 2011
•	FE-383 9	autoco mplete dropdo	Geoff Crain [Atlassi	Geoff Crain [Atlassi	•	丸 Clos ed	Fixed	Nov 21, 2011	Nov 22, 2011
		wns give inconsi stent and someti mes wrong results (results missing )	an]	an]					
	FE-377 5	give inconsi stent and someti mes wrong results (results missing	Pierre- Etienne Poirot [Atlassi an]	Adam Ahmed [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Oct 11, 2011	Nov 29, 2011

	5	ng Block Size triggers a reindex + restart, while only a restart is needed	Etienne Poirot [Atlassi an]	Versch oor [Atlassi an]		ed		2011	2011
	FE-304 0	FishEy e Access Loggin g is not writing the userna me	Pierre- Etienne Poirot [Atlassi an]	Felipe Kraem er [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Apr 27, 2011	Nov 29, 2011
	FE-247 3	Cannot find link for downlo ading latest and greates t RAW revision of a file	Pierre- Etienne Poirot [Atlassi an]	David Hergert [Person al]	<b>\</b>	♣ Clos ed	Fixed	Feb 19, 2010	Nov 30, 2011
•	CRUC- 5951	admin.j s fails in IE8	Pierre- Etienne Poirot [Atlassi an]	Renan Battagli n [Atlassi an]	<b>↑</b>	♪ Clos ed	Fixed	Oct 26, 2011	Nov 08, 2012
	CRUC- 5927	Improv e behavi our when licence limits are exceed ed	Pierre- Etienne Poirot [Atlassi an]	Tom Davies [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Sep 29, 2011	Nov 30, 2011
①	Authenticate to	o retrieve yo	our issues						

#### From 2.7.6 to 2.7.7

## **21 November 2011**

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
<b>-</b>	CRUC- 5962	Internal avatars URL are always generat ed with HTTP urls, even over SSL	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	•	♣ Clos ed	Fixed	Nov 07, 2011	Nov 10, 2011
	CRUC- 1853	Display prefere nces menu doesn't disapp ear when filter menu clicked or menu item is selecte d	Jonath an Poh [Atlassi an]	Seb Ruiz [Atlassi an]	•	Å Clos	Fixed	Jul 23, 2009	Nov 17, 2011
	FE-383 6	In SVN, if a tag is created and the identifie d parent change set id is not indexe d by FishEy e the tag won't show up in the branch es and tags dropdo wn or on the commit graph	Anna Buttfiel d [Atlassi an]	Anna Buttfiel d [Atlassi an]	•	Clos ed	Fixed	Nov 17, 2011	Nov 18, 2011

•	FE-383 3	Perforc e jobids are not indexe d	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Nov 15, 2011	Nov 17, 2011
•	FE-383 2	Links in RSS feed do not use absolut e URLs	Seb Ruiz [Atlassi an]	Oleg Semyo nov	<b>V</b>	♣ Clos ed	Fixed	Nov 15, 2011	Nov 17, 2011
	FE-382 6	Jetty log messa ges are not reporte d anywhe re	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Nov 11, 2011	Nov 17, 2011
	FE-382 2	mime type mappin g for file names rather than suffixes remove s first charact er of candid ate file name before matchi ng with key filenam e	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>↓</b>	♣ Clos ed	Fixed	Nov 09, 2011	Nov 17, 2011
	FE-317 4	When navigating forward in time in activity stream, items are shown earliest to latest	Michael Studma n [Atlassi an]	None	<b>↑</b>	å Clos ed	Fixed	Sep 22, 2010	Feb 01, 2012

		down the page							
•	FE-315 5	Browse /diff menu inactive s look active and vice-ve rsa	Jonath an Poh [Atlassi an]	None	<b>\</b>	♣ Clos ed	Fixed	Dec 13, 2010	Nov 17, 2011
	CRUC- 5977	Crucibl e 'active users' list loaded unnece ssarily, making review creatio n and editing slow	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Nov 15, 2011	Nov 17, 2011
	CRUC- 5972	Side-by -Side Diffs in Crucibl e are misalig ned. Line number column s are very long	Adam Ahmed [Atlassi an]	Adam Ahmed [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Nov 10, 2011	Nov 16, 2011
	CRUC- 5957	Code review reply comme nts saved as draft, are deleted when any reviewe r comple tes review	Michael Studma n [Atlassi an]	Maggie Reside	<b>↑</b>	A Clos ed	Fixed	Nov 03, 2011	Nov 11, 2011
	CRUC-	The	Adam	Zed	<b>↑</b>	🎝 Clos	Fixed	Oct 06,	Nov 17,

	5932	side by side diffs displayi ng display 3 colums instead of 2	Ahmed [Atlassi an]	Yap [Atlassi an]		ed		2011	2011
	CRUC- 5828	Crucibl e links to review comme nts cut off for mail notificat ions in Micros oft Outlook	Jonath an Poh [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jul 15, 2011	Nov 17, 2011
	CRUC- 5784	Selecti ng a folder in File browse r in FE on IE8 causes content -view tabs to disapp ear	Jonath an Poh [Atlassi an]	Jaie Wilson [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jun 01, 2011	Nov 14, 2011
	CRUC- 5751	Double spinner s in Branch selecto r	Jonath an Poh [Atlassi an]	Tim Petters en [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	May 02, 2011	Nov 15, 2011
•	CRUC- 5326	Add revision popup in review vanishe s when not hovere d over	Jonath an Poh [Atlassi an]	Chris Lam [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Jan 06, 2011	Nov 17, 2011
(i) Au	uthenticate to	o retrieve yo	our issues						

### From 2.7.5 to 2.7.6

### 8 November 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	FE-381 6	Shutdo wn the thread pool once the backgr ound upgrad e tasks have been comple ted	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	*	Å Clos	Fixed	Nov 04, 2011	Nov 04, 2011
	FE-379 1	Chang e authent ication provide rs to return Comm unicatio nExcep tion when appropr iate	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>↑</b>	clos ed	Fixed	Oct 21, 2011	Nov 02, 2011
7	FE-377 2	Add option to enable client authent ication SSL	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Oct 09, 2011	Oct 18, 2012
<b>A</b>	FE-361 1	Improv e the way avatars are loaded to avoid unnece ssary calls	Anna Buttfiel d [Atlassi an]	Renan Battagli n [Atlassi an]	<b>\</b>	Å Clos	Fixed	Jul 29, 2011	Jan 23, 2013
<b>&gt;</b>	CRUC- 5952	Syntax highligh ting for	Seb Ruiz [Atlassi	Leif Wickla nd	•		Fixed	Oct 26, 2011	Oct 31, 2011

		Scala doesn't recogni ze symbol literals.	an]						
	FE-382 3	If the total length of the branch names selecte d for the commit graph is too long, the spinner never disapp ears	Unassi gned	Tom Davies [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Nov 09, 2011	Nov 10, 2011
	FE-381 2	When synchr onizing users with LDAP, do not deactiv ate users if the error is a commu nication proble m	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Nov 02, 2011	Nov 02, 2011
	FE-380 9	Upgrad e of instanc es using Oracle fail when upgrad e_75.s ql is run	Anna Buttfiel d [Atlassi an]	Renan Battagli n [Atlassi an]	<b>↑</b>	Å Clos ed	Fixed	Oct 31, 2011	Nov 02, 2011
•	FE-379 4	Sourcin g a Tag from a Tag Can	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Oct 24, 2011	Nov 03, 2011

		cause FishEy e not to display tag content s							
	FE-378 7	When synchr onizing users with Crowd, do not deactiv ate users if the error is a commu nication proble m	Pierre- Etienne Poirot [Atlassi an]	Adam Ahmed [Atlassi an]	<b>?</b>	clos ed	Fixed	Oct 20, 2011	Aug 20, 2012
•	FE-378 4	Modifie d tags fail in the branch selecto r	Adam Ahmed [Atlassi an]	Adam Ahmed [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Oct 19, 2011	Nov 03, 2011
	FE-378 3	Activity Stream UI someti mes slow in git - it makes calls to git remote show.	Adam Ahmed [Atlassi an]	Adam Ahmed [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Oct 17, 2011	Nov 04, 2011
	FE-376 7	WARN messa ges 'Reposi tory index does not match the reposit ory configu ration' incorre	Conor MacNei II [Atlassi an]	Michael Heems kerk [Atlassi an]	•	♣ Clos ed	Fixed	Oct 06, 2011	Nov 02, 2011

	ctly logged after upgradi ng to 2.7							
FE-364 5	Old non-htt p/s Simple Linker configu ration passes upgrad e but results in error when trying to open repo	Pierre- Etienne Poirot [Atlassi an]	Rene Versch oor [Atlassi an]	<b>?</b>	♣ Clos ed	Fixed	Aug 15, 2011	Nov 04, 2011
FE-362 0	Display name not being picked up correctl y in some cases with JIRA user manag ement	Pierre- Etienne Poirot [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Aug 04, 2011	Jan 17, 2012
CRUC- 5953	Scala syntax highligh ter highligh ts substri ngs of identifie rs as keywor ds	Seb Ruiz [Atlassi an]	Leif Wickla nd	<b>\</b>	♣ Clos ed	Fixed	Nov 01, 2011	Nov 02, 2011
CRUC- 5947	Some browse rs drop params to server and Migrati on to	Seb Ruiz [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Oct 20, 2011	Oct 26, 2011

		Postgre s fails							
	CRUC- 5923	Unable to add files to review using "Explor e Reposit ories" option	Geoff Crain [Atlassi an]	Piotr Stefan Stefani ak [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Sep 26, 2011	Feb 02, 2012
	CRUC- 4888	quotati on marks being double escape d in latest comme nt text	Pierre- Etienne Poirot [Atlassi an]	Tim Petters en [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Nov 11, 2010	Nov 09, 2011
<b>①</b>	Authenticate to	retrieve yo	our issues						

## From 2.7.4 to 2.7.5

### 21 October 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
<b>\\$</b>	FE-379 9	p4 support : Cleanu p and Merge the p4 ancestr y suppre ssion flag to 2.6/7/d efault	Conor MacNei II [Atlassi an]	Matthe w Watson [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Sep 27, 2011	Jan 23, 2013
	FE-376 8	FishEy e logs lots of Applica tionPer mission Excepti on when	Michael Heems kerk [Atlassi an]	Michael Heems kerk [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Oct 06, 2011	Oct 12, 2011

		synchr onising Crowd users that have no permis sion on FishEy e / Crucibl e							
	FE-378 8	Git does not report an error when creatin g a manag ed reposit ory over an existing one	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>↓</b>	A Clos ed	Fixed	Oct 19, 2011	Oct 20, 2011
	FE-377 7	Fix docum entatio n of the manag ed reposit ories' REST API	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Oct 12, 2011	Oct 12, 2011
•	FE-377 4	Search results page fails to render for EyeQL queries > 4000 charact ers on Oracle.	Michael Heems kerk [Atlassi an]	Michael Heems kerk [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Oct 11, 2011	Oct 12, 2011
	FE-375 5	SVN: Paths under tag director ies are display	Michael Heems kerk [Atlassi an]	Michael Heems kerk [Atlassi an]	<b>*</b>	♣ Clos ed	Fixed	Sep 30, 2011	Oct 12, 2011

		ed as deleted / empty director ies (greyed out)							
	FE-375 2	Reposit ory path, include s, exclude s and hidden director ies should be copied to newly created forks	Tom Davies [Atlassi an]	Tim Petters en [Atlassi an]	<b>?</b>	Å Clos ed	Fixed	Sep 29, 2011	Oct 05, 2011
•	FE-375 1	'Store diffs' setting is not respect ed for initial imports of SVN reposit ories	Michael Heems kerk [Atlassi an]	Michael Heems kerk [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Sep 29, 2011	Oct 09, 2011
•	FE-373 7	Cannot customi ze front page with global anony mous access turned off	Tom Davies [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Sep 22, 2011	Oct 07, 2011
	FE-372 7	Review covera ge report screen messe d up when using Firefox 6.0.2 and	Michael Studma n [Atlassi an]	Camila Ayres [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 16, 2011	Oct 26, 2011

		Chrom e 12.0.7							
•	FE-372 1	Error when changi ng content of a review	Tom Davies [Atlassi an]	Federic o Silva Armas [Atlassi an]	<b>↑</b>		Fixed	Sep 15, 2011	Jan 23, 2013
	FE-369 8	Web Hooks payloa d receive d with "applic ation/x ml" as the content type	Anna Buttfiel d [Atlassi an]	Sten Pittet [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Sep 07, 2011	Oct 24, 2011
	FE-369 2	When pushin g to a Git manag ed repo while another client is cloning, the client which is cloned freezes	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 06, 2011	Oct 09, 2011
•	FE-367 8	Provide a more friendly messa ge to the users	Anna Buttfiel d [Atlassi an]	Zed Yap [Atlassi an]	<b>\</b>		Fixed	Sep 05, 2011	Oct 13, 2011
•	FE-262 5	code metrics error for branch es director ies	Pierre- Etienne Poirot [Atlassi an]	Tracey Lum [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Jun 03, 2010	Oct 11, 2011
•	CRUC- 5914	'Allow anon users'	Tom Davies [Atlassi	Michael Studma n	•		Fixed	Sep 22, 2011	Oct 12, 2011

		permis sion is broken for all but 'view review' and should be remove d.	an]	[Atlassi an]					
•	CRUC- 5913	Comm ent permis sions don't work for 'all logged in users'	Tom Davies [Atlassi an]	Michael Studma n [Atlassi an]	0	♣ Clos ed	Fixed	Sep 22, 2011	Oct 07, 2011
•	CRUC- 5606	Very large text files produc e OOME when diffing	Anna Buttfiel d [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Feb 08, 2011	May 25, 2012
•	CRUC- 4435	Same file shows up twice in a review	Michael Heems kerk [Atlassi an]	Andrew Myers [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Oct 01, 2010	Oct 11, 2011

## From 2.7.3 to 2.7.4

# 28 September 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	FE-374 8	NullPoi nterExc eption while loading user prefere	Michael Heems kerk [Atlassi an]	Michael Heems kerk [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 27, 2011	Sep 28, 2011

		nces from databa se, causing login failures							
	FE-374 7	If you edit and then save a manag ed reposit ory in Internet Explore r, the text "fork of null" will appear and the forks view will no longer be available.	Tim Petters en [Atlassi an]	Tim Petters en [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 27, 2011	Sep 27, 2011
	FE-374 2	After a user has been deleted and then added again, subseq uent deletio ns fail	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Sep 26, 2011	Sep 27, 2011
•	FE-374 1	Manual Auth Re-Syn c button doesn't do anythin g	Tom Davies [Atlassi an]	Phil Davies	<b>\</b>	♣ Clos ed	Fixed	Sep 23, 2011	Sep 27, 2011
•	FE-373 8	Log files not include d in	Matthe w	Matthe w	<b>↑</b>	♣ Clos ed  ■ Clos  A Clos  A Clos  A Clos  A Clos  A Clos  B Clo	Fixed	Sep 23, 2011	Jan 17, 2012

		support zip	Watson [Atlassi an]	Watson [Atlassi an]					
•	FE-373 5	Commit events fired on Git repos when branch es are added/r emove d	Seb Ruiz [Atlassi an]	Matt Ryall [Atlassi an]	<b>?</b>	♣ Clos ed	Fixed	Sep 22, 2011	Sep 28, 2011
•	FE-373 4	Error upon exceedi ng license limit with Crowd user manag ement	Tom Davies [Atlassi an]	Gurlee n Anand [Atlassi an]	•	♣ Clos ed	Fixed	Sep 22, 2011	Sep 27, 2011
•	FE-371 6	Hg authent ication fails with special charact er in passwo rd	Michael Studma n [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 14, 2011	Jan 17, 2012
•	FE-316 8	Restrict ing Fishey e content in Project s Has No Effect	Michael Studma n [Atlassi an]	None	•	Å Clos ed	Fixed	Dec 06, 2010	Feb 01, 2013
	CRUC- 5920	Constr aintViol ationEx ception : Duplica te entry 'xyz' for key 'cru_us er_nam e' after	Michael Heems kerk [Atlassi an]	Michael Heems kerk [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 26, 2011	Sep 28, 2011

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		upgradi ng to 2.7							
	CRUC- 5900	Showin g only time for each change set (not from today) on Add Conten t to Review screen does not make sense	Seb Ruiz [Atlassi an]	Wojcie ch Seliga	•	clos ed	Fixed	Sep 11, 2011	Oct 05, 2011
	CRUC- 5891	the crucible change set activity was never update d to the new layout, which means some css is broken	Geoff Crain [Atlassi an]	Geoff Crain [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Sep 06, 2011	Sep 21, 2011
•	CRUC- 5866	Unable to link issue due to no OAuth prompt	Michael Studma n [Atlassi an]	Conor MacNei II [Atlassi an]	<b>↑</b>		Fixed	Aug 16, 2011	Sep 22, 2011
(i) A	uthenticate to	o retrieve yo	our issues						

# 13 issues

## From 2.7.2 to 2.7.3

# 20 September 2011

Type	Key	Summ ary	•	•		Status	4.0		
•	FE-371 7	•	Pierre- Etienne	Pierre- Etienne	<b>↑</b>	🎝 Clos	Fixed	Sep 15, 2011	Sep 19, 2011

		git-http- backen d from 1min to 1hour	Poirot [Atlassi an]	Poirot [Atlassi an]		ed			
•	FE-363 5	Backup fails if write.lo ck file still exists in lucene	Michael Studma n [Atlassi an]	Renan Battagli n [Atlassi an]	<b>†</b>	♣ Clos ed	Fixed	Aug 09, 2011	Jan 17, 2012
(i) A	Authenticate to	o retrieve yo	our issues						

## From 2.7.1 to 2.7.2

# 19 September 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	FE-361 6	Chang e com.ce nqua.fi sheye.l ogging. DailyR ollingFil eAppen der to keep the extensi on .log	Conor MacNei II [Atlassi an]	Felipe Cuozzo [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Aug 02, 2011	Jan 17, 2012
<b>&gt;</b>	CRUC- 5896	JIRA title is often too long and wraps	Seb Ruiz [Atlassi an]	Seb Ruiz [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Sep 08, 2011	Sep 14, 2011
	FE-371 8	Eclipse Git integrat ion (egit) fails to clone from manag	Unassi gned	Tim Petters en [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Sep 15, 2011	Sep 19, 2011

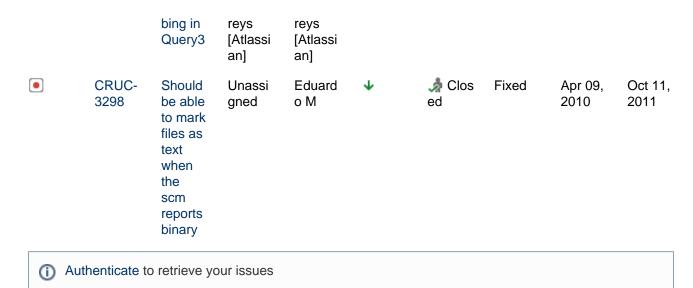
		ed Git reposit ory							
•	FE-371 1	Some Directo ry links in Quick Search have double encode d URLs	Jason Hinch [Atlassi an]	Jason Hinch [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Sep 12, 2011	Jan 17, 2012
	FE-369 6	Web Hooks should be deleted when deletin g a reposit ory	Tom Davies [Atlassi an]	Seb Ruiz [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 07, 2011	Sep 14, 2011
	FE-369 3	Paginat ion number s at bottom of Reposit ories screen overlap with system info footer	Jonath an Poh [Atlassi an]	Rene Versch oor [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Sep 06, 2011	Sep 15, 2011
	FE-364 7	Google collections and Guava both bundle d, packag e exporte d without version	Conor MacNei II [Atlassi an]	Richard Wallac e [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Aug 15, 2011	Sep 14, 2011
•	CRUC- 5902	change set discuss ion autosa ve fails	Tom Davies [Atlassi an]	Joe Xie [atlassi an]	<b>4</b>	♣ Clos ed	Fixed	Sep 13, 2011	Sep 14, 2011

		with error dialog when no comme nt is entered							
•	CRUC- 5888	Closing the Send Remind er dialog via Esc doesn't reset it.	Adam Ahmed [Atlassi an]	Adam Ahmed [Atlassi an]	<b>*</b>	♣ Clos ed	Fixed	Sep 06, 2011	Sep 13, 2011
	CRUC- 5886	If the current user is a review' s author, then switche s to a reviewe r, they show up in the manual Send Remind er dialog.	Adam Ahmed [Atlassi an]	Adam Ahmed [Atlassi an]	•	♣ Clos ed	Fixed	Sep 06, 2011	Sep 13, 2011
•	CRUC- 5885	Review remind er notes do not render new lines in email	Michael Studma n [Atlassi an]	Seb Ruiz [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Sep 06, 2011	Sep 13, 2011
	CRUC- 3298	Should be able to mark files as text when the scm reports binary	Unassi gned	Eduard o M	<b>+</b>	A Clos ed	Fixed	Apr 09, 2010	Oct 11, 2011

## From 2.7.0 to 2.7.1

# 9 September 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	FE-370 1	Commit HookM oduleD escript or#ena ble can fail if Active Objects Configu ration for Commit Hooks Plugin is not availabl e yet	Jason Hinch [Atlassi an]	Jason Hinch [Atlassi an]	•	clos ed	Fixed	Sep 08, 2011	Sep 12, 2011
	FE-370 0	Can't reset user passwo rd	Pierre- Etienne Poirot [Atlassi an]	Conor MacNei II [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Sep 07, 2011	Sep 09, 2011
•	FE-369 5	Deletin g a web hook dialog has a broken layout	Jason Hinch [Atlassi an]	Seb Ruiz [Atlassi an]	*	♣ Clos ed	Fixed	Sep 07, 2011	Sep 09, 2011
	FE-369 4	Testing a Web Hook doesn't send mock change set displayl d	Seb Ruiz [Atlassi an]	Seb Ruiz [Atlassi an]	*	♣ Clos ed	Fixed	Sep 07, 2011	Sep 07, 2011
	FE-301 8	Unnece ssary implicit antglob	Brenda n Humph	Brenda n Humph	<b>+</b>	A Clos ed	Fixed	Apr 11, 2011	Oct 05, 2012



## Crucible 2.7 Upgrade Guide

Below are some important notes on upgrading to Crucible 2.7. For details of the new features and improvements in this release, please read the Crucible 2.7 Release Notes.

### On this page:

- Upgrade Notes
  - Crucible 2.7
- Upgrade Procedure
- Checking for Known Issues and Troubleshooting the Crucible Upgrade

**Upgrade Notes** 

#### Crucible 2.7

Crucible Confluence LightSCM Plugin has Been Removed from Crucible

Previously, Crucible shipped with a plugin to enable reviews against content in Confluence. Since Confluence 4's new editor will no longer support wiki markup, this plugin has been deprecated. The Crucible plugin source as well as the source for the Confluence SCM plugin will remain open-source and are available via the Plugin Exchange at the following locations:

**Crucible Plugin** Confluence Crucible Plugin

### Crucible 2.7 adds ActiveObjects support

ActiveObjects allows plugins to store configuration data in the database. Please note, any already scheduled backups will not have plugin data included during backups. Please modify your scheduled backup configuration appropriately to include ActiveObjects backups.

Confluence has a number of free and commercially available review and workflow plugins. We recommend taking take a look at these, to implement a smooth review process for Confluence pages.

**Upgrade Procedure** 



# A Before you begin

- Test your upgrades in your test environment before rolling into production.
- Back up your entire Crucible instance (see Backing up and restoring Crucible data), i.e.
  - If you are backing up your Crucible instance via the Admin interface, tick all of the 'Include' checkboxes (e.g. plugins, templates, uploads, SQL database, etc).
  - If you are backing up your Crucible instance using the command-line interface, do not use any exclusion options.

If you are already running a version of Crucible, please refer to the Crucible upgrade guide.

Checking for Known Issues and Troubleshooting the Crucible Upgrade

If something is not working correctly after you have completed the steps above to upgrade your Crucible installation, please check for known Crucible issues and try troubleshooting your upgrade as described below:

- Check for known issues. Sometimes Atlassian finds out about a problem with the latest version of
  Crucible after the software is released. In such cases we publish information about the known issues in
  the Crucible Knowledge Base. Please check the Crucible 2.7 Known Issues in the Crucible Knowledge
  Base and follow the instructions to apply any necessary patches if necessary.
- Did you encounter a problem during the Crucible upgrade? Please refer to the guide to troubleshooti
  ng upgrades in the Crucible Knowledge Base.
- If you encounter a problem during the upgrade and cannot solve it, please create a support ticket and one
  of our support engineers will help you.

#### RELATED TOPICS

Crucible 2.7 Release Notes

## **Crucible 2.6 Release Notes**

#### 6 June 2011

With great pleasure, Atlassian presents **Crucible 2.6** with SQL Server support, improved Quick Search, much better handling of reviews for Subversion merge commits and HTML emails.

### Highlights of this Release:

- New Quick Search
- HTML Emails for Reviews
- Dashboard and Navigation Improvements
- SQL Server Support
- Oracle Support
- Review Creation without Metadata Changes
- Improved Patch Anchoring
- And Even More Improvements

## Responding to your Feedback:

★ Over 269 votes satisfied



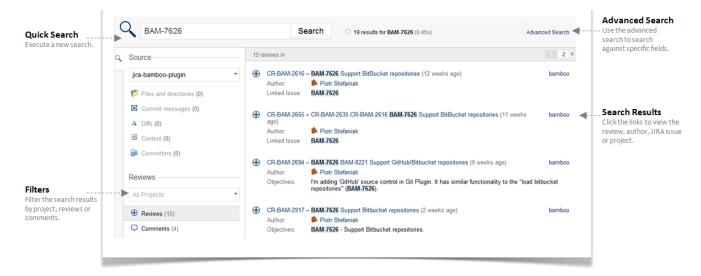
- Thank you for all your issues and votes. Keep logging issues to help us keep improving!
- Read the release notices for important information about this release.

## **Highlights of Crucible 2.6**



#### **New Quick Search**

You'll be able to find information faster using Crucible's new Quick Search. The Quick Search helps you to find the exact information that you need with a click of a button. The search results are also easy to work with – the user interface has a clean look and feel and features wiki rendering for reviews, popup summaries for JIRA issues in commit messages and more.

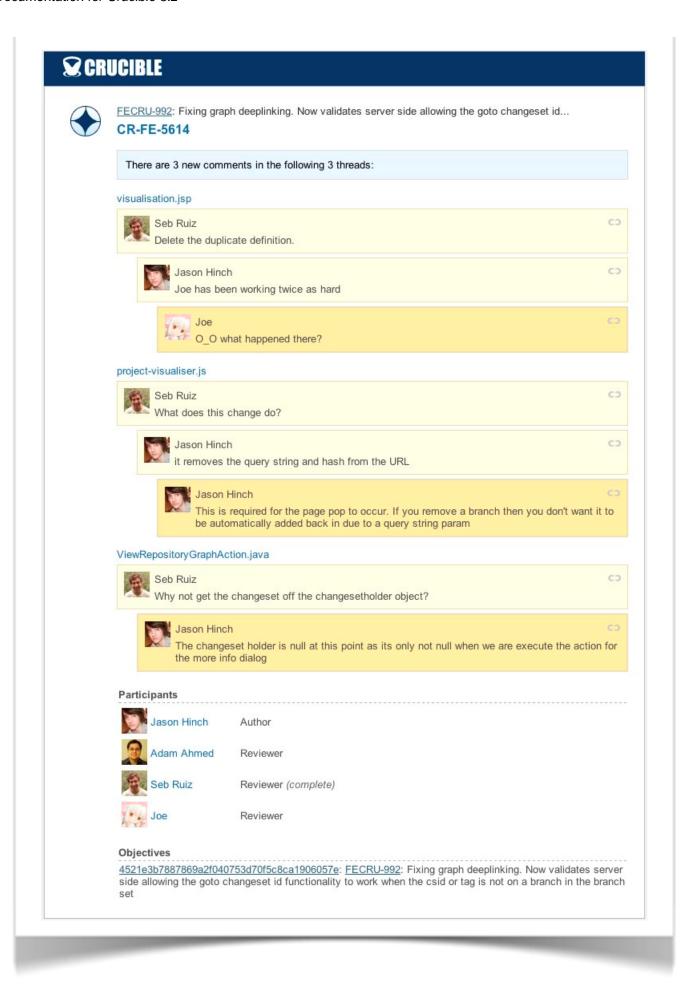


More...



#### **HTML Emails for Reviews**

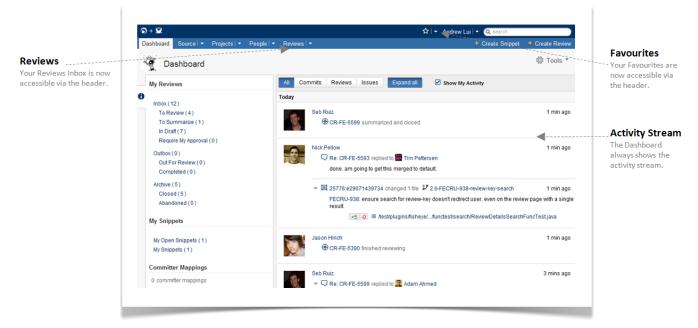
A 20% time project has resulted in email notifications getting a dramatic facelift. Gone are the dreary plain text emails, replaced by much better-looking HTML emails. You'll see the new emails in action for review notifications.





### **Dashboard and Navigation Improvements**

The Dashboard and Header have been tweaked to simplify the user interface in this release. You won't have to click different tabs to find the activity stream, as it will always be displayed. We've moved the other functions to the header to remove the clutter and provide you with a more streamlined view.



#### More...



## **SQL Server Support**

We are happy to announce that Crucible 2.6 now supports Microsoft SQL Server 2005 and 2008.

### More...



### **Oracle Support**

We previously announced beta support for the Oracle DBMS in Crucible 2.5. We are happy to announce that this is no longer in beta, and that the Oracle DBMS is officially supported for Crucible 2.6.

#### More...



### **Review Creation without Metadata Changes**

Creating a review from a Subversion commit will now exclude metadata-only changes to files. You won't get pesky svn mergeinfo properties cluttering your review screens anymore! We've also prevented changesets

that are entirely synprops changes (i.e. don't have any non-metadata changes) from being added to reviews.

More...



### Improved Patch Anchoring

We've revamped patch anchoring in this release. All the work has been done under the covers, to improve how a patch anchors to a repository. You should just notice that anchoring patches works better, when creating a review. And if something does go wrong, we've built in better error handling so that you'll know what went wrong.

More...



### And Even More Improvements

Visit our issue tracker to see the full list of improvements and bug fixes in FishEye and Crucible for this release.

### **Release Notices**

- Upgrading from a previous version of Crucible. Upgrading Crucible should be fairly straightforward. W
   e strongly recommend that you back up Crucible before upgrading. Please refer to the Crucible 2.6
   Upgrade Guide for further essential information about your upgrade.
- Known Issues. Please check the important technical advisories on the front page of the Knowledge Base for information about any known issues for this release.

### Crucible 2.6 Changelog

This page contains information about the Crucible 2.6 minor releases. FishEye license holders should also check the FishEye 2.6 Changelog.

See the Crucible 2.6 Release Notes for details of what's new in 2.6.0.



Please read the Crucible 2.6 Upgrade Guide before upgrading to any of the minor releases below.

## On this page:

- From 2.6.6 to 2.6.7
- From 2.6.5 to 2.6.6
- From 2.6.4 to 2.6.5
- From 2.6.3 to 2.6.4
- From 2.6.2 to 2.6.3
- From 2.6.1 to 2.6.2
- From 2.6.0 to 2.6.1

#### From 2.6.6 to 2.6.7

## 31 January 2012

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
•	FE-389 1	Webwo rk 2 vulnera	Vitaly Osipov [Atlassi	Paul Watson [Atlassi	<b>↑</b>	♣ Clos ed  ■ Clos  A Clos  A Clos  A Clos  A Clos  A Clos  B Clos  A Clos  B Clo	Fixed	Jan 17, 2012	Jan 31, 2012

bility an] an]

(i) Authenticate to retrieve your issues

## 1 issue

## From 2.6.5 to 2.6.6

## 2 September 2011

Type	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 5875	Review permid matchi ng pattern s are too greedy and cause number format excepti ons	Jason Hinch [Atlassi an]	Jason Hinch [Atlassi an]	•	clos ed	Fixed	Aug 26, 2011	Sep 02, 2011
	CRUC- 5871	Cannot view an added file with multiple revision s in side by side diff mode	Jason Hinch [Atlassi an]	Jason Hinch [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Aug 23, 2011	Aug 29, 2011
	CRUC- 5853	Crucibl e ToDo gadget links don't work due to extra slashes in the url	Joe Xie [atlassi an]	Jay Barra	<b>↑</b>	♣ Clos ed	Fixed	Aug 01, 2011	Sep 08, 2011
•	CRUC- 5124	Extra space in review page	Joe Xie [atlassi an]	Felipe Kraem er [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 06, 2010	Sep 02, 2011
① Au	thenticate to	o retrieve yo	our issues						

### From 2.6.4 to 2.6.5

## 24 August 2011

This is a FishEye bug fix release. For details, see the FishEye 2.6 Changelog.

Type	Key	Summ	Assign	Report	Priorit	Status	Resolu	Create	Update
		ary	ee	er	У		tion	d	d

### No issues found

## From 2.6.3 to 2.6.4

## 22 August 2011

This is a FishEye bug fix release. For details, see the FishEye 2.6 Changelog.

Type	Key	Summ	Assign	Report	Priorit	Status	Resolu	Create	Update
		ary	ee	er	У		tion	d	d

## No issues found

## From 2.6.2 to 2.6.3

## 9 August 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
+	CRUC- 4683	Create a plugin point for externa I activity item provide rs	John Kodum al [Atlassi an]	John Kodum al [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Oct 26, 2010	Aug 09, 2011
	CRUC- 5862	Patch Anchori ng: UI Improv ements for uploadi ng patche s	Unassi gned	Matthe w Watson [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jul 22, 2011	Aug 15, 2011
	CRUC- 5842	GZIP Attach ments get GZIPP ED when	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]	<b>V</b>	A Clos ed	Fixed	Jul 22, 2011	Oct 25, 2011

		downlo aded from Crucibl e							
	CRUC- 5832	Crucibl e Source names are not being trimme d, and review creatio n fails.	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]	<b>↓</b>	A Clos ed	Fixed	Jul 19, 2011	Jul 21, 2011
•	CRUC- 5829	uploadi ng a patch can take a very long time	Matthe w Watson [Atlassi an]	Geoff Crain [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jul 15, 2011	Aug 15, 2011

## From 2.6.1 to 2.6.2

# 20 July 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 5830	Admin allows the creatio n of permis sion schem es with blank names	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	*	A Clos ed	Fixed	Jul 18, 2011	Jul 20, 2011
	CRUC- 5827	minute page load time for pre-co mmit diffs of large (1000L OC) files	Geoff Crain [Atlassi an]	Nick Pellow [Atlassi an]	<b>†</b>	A Clos ed	Fixed	Jul 13, 2011	Jul 18, 2011

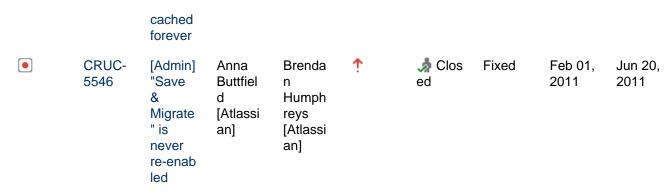
CRUC- 5821	Review InfoDa o.doInc rement al() is inefficie nt and causes Repo Review Indexin g to hang.	Unassi gned	Trevor Samar oo	<b>†</b>	A Clos ed	Fixed	Jul 07, 2011	Jul 20, 2011

## From 2.6.0 to 2.6.1

## 22 June 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 5809	Review s with anchor ed patche s cause NPE when anchor ed reposit ory isn't availabl e.	Adam Ahmed [Atlassi an]	Adam Ahmed [Atlassi an]	<b>\</b>	Å Clos	Fixed	Jun 18, 2011	Jun 21, 2011
•	CRUC- 5783	Applink s to non-JI RA servers confus e the Crucibl e link review to issue proces s	Anna Buttfiel d [Atlassi an]	Conor MacNei II [Atlassi an]	•	clos ed	Fixed	Jun 01, 2011	Jun 24, 2011
•	CRUC- 5782	Excepti on while looking up JIRA issue	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jun 02, 2011	Aug 29, 2011

		ends request in error							
	CRUC- 5780	NPE when trying to link review to JIRA issue causes failure of review creatio n	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	•	♣ Clos ed	Fixed	Jun 01, 2011	Jun 09, 2011
	CRUC- 5778	Moving a review betwee n project s fails when the default modera tor of the destina tion project is the same as the current modera tor	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	•	♣ Clos ed	Fixed	May 27, 2011	Jun 20, 2011
	CRUC- 5777	Recording which reviews contain which revision s stops a reposit ory scannin g	Geoff Crain [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	May 27, 2011	Jun 15, 2011
•	CRUC- 5773	List of JIRA Project s in linked server is	Tom Davies [Atlassi an]	Tim Petters en	<b>V</b>	♣ Clos ed	Fixed	May 25, 2011	Jun 15, 2011



## Crucible 2.6 Upgrade Guide

Below are some important notes on upgrading to **Crucible 2.6**. For details of the new features and improvements in this release, please read the Crucible 2.6 Release Notes.

### On this page:

- Upgrade Notes
  - Crucible 2.6
- Upgrade Procedure
- Checking for Known Issues and Troubleshooting the Crucible Upgrade

### **Upgrade Notes**

#### Crucible 2.6

- Internet Explorer 7 and Java Platform 5 (JDK/JRE 1.5) no longer supported As per the End of Support Announcements for Crucible (published previously), we are no longer supporting Internet Explorer 7 and Java Platform 5 (JDK/JRE 1.5) in this release. See Supported platforms page for the full list of supported platforms for Crucible.
- Disabling review creation without metadata Crucible 2.6 introduces review creation without
  metadata. This functionality is enabled by default. If you want to disable this functionality, you can do
  so by starting up Crucible with the following system property:

-Dcrucible.detect.metadata.revision.changes=false
For further details, read this FAQ: How do I force reviews to include SVN property changes?

**Upgrade Procedure** 



## Before you begin

- Test your upgrades in your test environment before rolling into production.
- Back up your entire Crucible instance (see Backing up and restoring Crucible data), i.e.
  - If you are backing up your Crucible instance via the Admin interface, tick all of the 'Include' checkboxes (e.g. plugins, templates, uploads, SQL database, etc).
  - If you are backing up your Crucible instance using the command-line interface, do not use any exclusion options.

If you are already running a version of Crucible, please refer to the Crucible upgrade guide.

Checking for Known Issues and Troubleshooting the Crucible Upgrade

If something is not working correctly after you have completed the steps above to upgrade your Crucible installation, please check for known Crucible issues and try troubleshooting your upgrade as described below:

Check for known issues. Sometimes we find out about a problem with the latest version of Crucible
after we have released the software. In such cases we publish information about the known issues in the
Crucible Knowledge Base. Please check the Crucible 2.6 Known Issues in the Crucible Knowledge Base
and follow the instructions to apply any necessary patches if necessary.

- **Did you encounter a problem during the Crucible upgrade?** Please refer to the guide to troubleshooting upgrades in the Crucible Knowledge Base.
- If you encounter a problem during the upgrade and cannot solve it, please create a support ticket and one of our support engineers will help you.

#### **RELATED TOPICS**

Crucible 2.6 Release Notes

### **Crucible 2.5 Release Notes**

### 8 February 2011

With great pleasure, Atlassian presents **Crucible 2.5**, now with support for Oracle and redesigned Activity Stream.

### Highlights of this Release:

- Oracle Support (beta)
- Redesigned Activity Stream
- Improved Header
- Comment Notification Batching
- And Even More Improvements

### Responding to your Feedback:

TOVER 150 votes satisfied



- Thank you for all your issues and votes. Keep logging issues to help us keep improving!
- Read the release notices for important information about this release.

## **Highlights of Crucible 2.5**



### **Oracle Support (beta)**

We have been working very hard on adding support for the Oracle DBMS for Crucible 2.5 as this has been a very popular feature request with more that 115 votes.

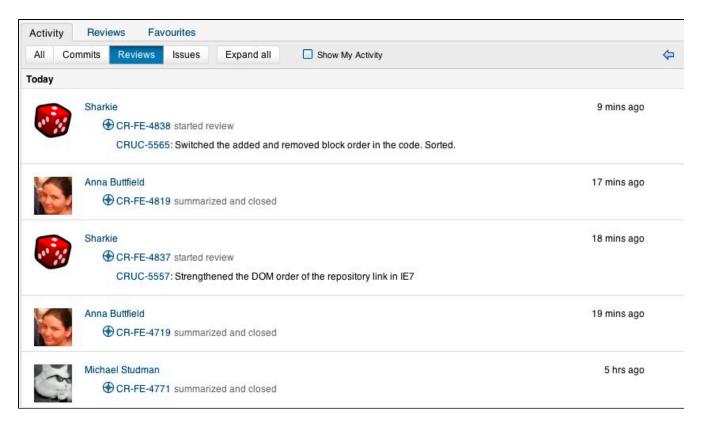
We have been using Crucible with Oracle over the past month ourselves, so we believe we are almost there. We would love for you to give Crucible a try on Oracle DBMS and let us know if you run into any problems by creating an issue.



## **Redesigned Activity Stream**

We have spent a considerable amount of time improving the FishEye activity stream:

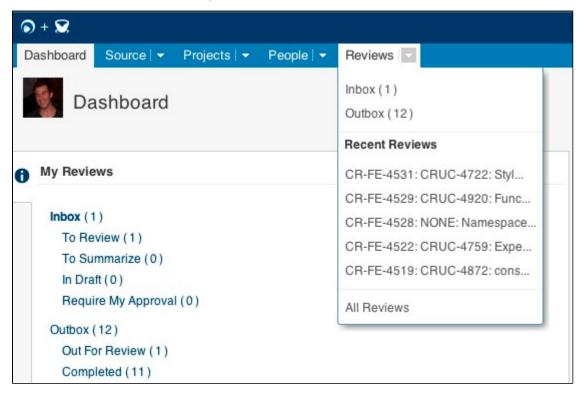
- · Cleaner visual design
- Larger avatars
- Improved scanability
- De-cluttering of UI elements, showing actions on hover
- Space-saving condensed mode so you can see more changesets on the same page





### **Improved Header**

Crucible 2.5 tracks locations that you have recently visited, and provides quick and easy access to navigate to these resources. The five most recently viewed projects, reviews, users and repositories (if FishEye is installed) are available from the header drop down links as shown:





### **Comment Notification Batching**

Email notifications from Crucible can be frequent, particularly on reviews with many participants and lots of comments. We won't say spam, but it can certainly feel "chatty!" Crucible 2.5 remedies this problem with improved batching of emails. All comments are grouped together and sent in a user-specified interval. They're easier to read and will keep your inbox happy. It works for draft comments and edited comments, too, so fixing a typo will no longer send out multiple notifications!

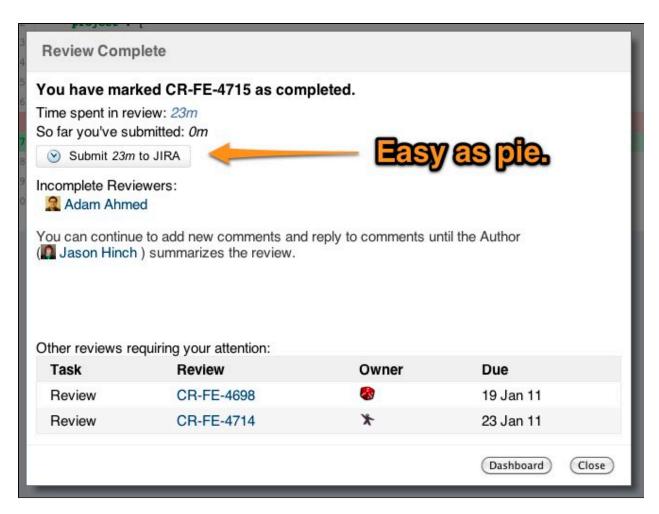
## Example:

```
There are 2 new comments in the following thread:
 AuthenticationStyle.java -
http://localhost:6060/crucible/cru/CR-FE-4223/#c36358
 Geoff Crain on 02 Feb 2011, 12:01
    Is this really how this is supposed to work? You should fix this.
        New
*******
   Seb Ruiz on 02 Feb 2011, 13:31
      Geoff is right. But youll have to fix it on a separate branch.
*****************
***********
      ***** New
******************
      Joe Xie on 02 Feb 2011, 13:32
         Fixed.. change is here:
http://localhost:6060/crucible/changelog/FE?cs=e962e59bccda
 *******************
```

### **And Even More Improvements**

- The Universal Plugin Manager
- Improved submit time dialog to JIRA:

Documentation for Crucible 3.2 312



Visit our issue tracker to see the full list of improvements and bug fixes in FishEye and Crucible for this release.

### **Release Notices**

## Crucible 2.5 Changelog

This page contains information about the Crucible 2.5 minor releases. FishEye license holders should also check the FishEye 2.5 Changelog.



Please read the Crucible 2.5 Upgrade Guide before upgrading to any of the minor releases below.

#### On this page:

- From 2.5.6 to 2.5.7
- From 2.5.5 to 2.5.6
- From 2.5.4 to 2.5.5
- From 2.5.3 to 2.5.4
- From 2.5.2 to 2.5.3
- From 2.5.1 to 2.5.2
- From 2.5.0 to 2.5.1

## From 2.5.6 to 2.5.7

### 22 June 2011

Туре	Key	Summ ary	•	Report er		Status	_	Create d	
•	CRUC- 5811	Permis sion		Andrew Lui	0	♣ Clos ed  A clos  A clo	Fixed		Dec 01, 2011

		checkin g bug in Crucibl e Review Tooltip s	[Atlassi an]	[Atlassi an Techni cal Writer]					
•	CRUC- 5782	Excepti on while looking up JIRA issue ends request in error	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>^</b>	♣ Clos ed	Fixed	Jun 02, 2011	Aug 29, 2011
	CRUC- 5780	NPE when trying to link review to JIRA issue causes failure of review creatio n	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	clos ed	Fixed	Jun 01, 2011	Jun 09, 2011
	CRUC- 5778	Moving a review betwee n project s fails when the default modera tor of the destina tion project is the same as the current modera tor	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	Clos ed	Fixed	May 27, 2011	Jun 20, 2011
•	CRUC- 5773	List of JIRA Project s in linked	Tom Davies [Atlassi an]	Tim Petters en	<b>V</b>		Fixed	May 25, 2011	Jun 15, 2011

	server is cached forever						
CRUC- 5707	review covera ge report gadget is broken	Geoff Crain [Atlassi an]	Geoff Crain [Atlassi an]	<b>↑</b>	Fixed	Apr 01, 2011	Jun 01, 2011

## From 2.5.5 to 2.5.6

# 24 May 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 5540	Fix patch anchoring when the patch generated by IDE Connectors is pasted into the Crucible e UI	Geoff Crain [Atlassi an]	Anton Mazkov oi [Atlassi an]	•	♣ Clos ed	Fixed	Jan 31, 2011	May 18, 2011
•	CRUC- 5769	NullPoi nterExc eption when anchori ng a patch	Conor MacNei II [Atlassi an]	Conor MacNei II [Atlassi an]	<b>V</b>	A Clos ed	Fixed	May 19, 2011	May 19, 2011
	CRUC- 5767	crucible patch anchori ng doesnt support hg patche s generat ed from intellij	Geoff Crain [Atlassi an]	Geoff Crain [Atlassi an]	<b>\</b>	A Clos ed	Fixed	May 17, 2011	May 18, 2011
3 issues									

## From 2.5.4 to 2.5.5

# 11 May 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 5742	Pre-co mmit patche s diff is mixing files togethe r	Geoff Crain [Atlassi an]	Felipe Kraem er [Atlassi an]	•	♣ Clos ed	Fixed	May 02, 2011	May 09, 2011
	CRUC- 5727	Pressin g 'N' or 'P' to travers e comme nts from general comme nts page causes js error	Adam Ahmed [Atlassi an]	Adam Ahmed [Atlassi an]	<b>↓</b>	A Clos ed	Fixed	Apr 15, 2011	Apr 19, 2011
	CRUC- 5722	NullPoi nterExc eption when sorting revision s we a mix of null and not null branch es	Jason Hinch [Atlassi an]	Jason Hinch [Atlassi an]	•	A Clos ed	Fixed	Apr 14, 2011	Jul 15, 2011
•	CRUC- 5356	atl.gen eral decorat or is not applied in Crucibl e	Tim Petters en [Atlassi an]	Mario Mueller	<b>\</b>	♣ Clos ed	Fixed	Jan 11, 2011	Jul 19, 2011
•	CRUC- 4143	View Drafts not viewing drafts	Adam Ahmed [Atlassi an]	Don Willis [Atlassi an]	<b>V</b>	A Clos ed	Fixed	Aug 31, 2010	Apr 12, 2011
	CRUC-	Reposit	Geoff	Ming			Fixed	Jul 15,	May

•	3766	ory path with space breaks the patch review	Crain [Atlassi an]	Giet Chong [Atlassi an]	<b>↑</b>	♣ Clos ed		2010	30, 2011
	CRUC- 3702	pre-co mmit patche s reviews don't work	Geoff Crain [Atlassi an]	Justus Pendlet on [Atlassi an]	<b>↑</b>	A Clos ed	Fixed	Jun 29, 2010	May 30, 2011

## From 2.5.3 to 2.5.4

# 11 April 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
	CRUC- 5715	After migrati ng to a differen t databa se, session factorie s injected into spring beans still point to the old databa se.	Unassi gned	Tom Davies [Atlassi an]	<b>↑</b>	clos ed	Fixed	Apr 06, 2011	Apr 07, 2011
•	CRUC- 5710	Web Resour ces are loaded twice on pages rendere d with some decorat ors	Jason Hinch [Atlassi an]	Jason Hinch [Atlassi an]	•	♣ Clos ed	Fixed	Apr 05, 2011	Apr 07, 2011
	CRUC- 5673	Time field	Adam Ahmed	Felipe Kraem	<b>4</b>	♣ Clos ed	Fixed	Mar 11, 2011	Apr 01, 2011

	display ed incorre ctly when editing review	[Atlassi an]	er [Atlassi an]					
CRUC- 5657	Add comme nt using Chrom e ends up with no review content	Adam Ahmed [Atlassi an]	Brad Baker [Atlassi an]	<b>†</b>	A Clos ed	Fixed	Mar 08, 2011	Apr 18, 2011
CRUC- 5644	RSS Feed option under Tools menu is not displayi ng correctl y on IE7	Craig Sharkie [Atlassi an]	Felipe Kraem er [Atlassi an]	<b>\</b>	A Clos ed	Fixed	Feb 24, 2011	Apr 08, 2011
CRUC- 5585	Date format error in edit crucible review dialog	Adam Ahmed [Atlassi an]	Jake Causby [Atlassi an]	<b>V</b>	A Clos ed	Fixed	Feb 03, 2011	Apr 11, 2011
CRUC- 5427	reloadi ng content in reviews doesnt work. at all.	Adam Ahmed [Atlassi an]	Geoff Crain [Atlassi an]	<b>†</b>	A Clos ed	Fixed	Jan 18, 2011	Apr 01, 2011

## From 2.5.2 to 2.5.3

## 28 March 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
•	CRUC- 5685	No Tools Menu on	Conor MacNei	Eric Scheie	0	♣ Clos ed  ■ Clos  A Clos  A Clos  A Clos  A Clos  A Clos  B Clo	Fixed	Mar 17, 2011	Mar 28, 2011

		Snippet Review screen	ll [Atlassi an]						
•	CRUC- 5670	"Add invitee" button does not work	Seb Ruiz [Atlassi an]	Seb Ruiz [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Mar 11, 2011	Mar 13, 2011
•	CRUC- 5669	LocMet ricsSer vice.get LocCou nt() returns incorre ct results	Joe Xie [atlassi an]	Joe Xie [atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Mar 10, 2011	Mar 28, 2011
	CRUC- 5662	Branch Order in branch selecto r drop down should be sorted better	Seb Ruiz [Atlassi an]	Brydie McCoy [Atlassi an]	•	♣ Clos ed	Fixed	Mar 08, 2011	Mar 21, 2011
	CRUC- 5661	Searchi ng with branch selecto r doesn't show all results	Seb Ruiz [Atlassi an]	Brydie McCoy [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Mar 08, 2011	Mar 21, 2011
	CRUC- 5436	UI Errors: Proble ms calling functio n 'cru:get StyleCl ass' and similar	Conor MacNei II [Atlassi an]	Seb Ruiz [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 19, 2011	Jun 06, 2011
•	CRUC- 5117	Image files (jpg) not comple tely	Adam Ahmed [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 03, 2010	Apr 04, 2011

visible in source tab

## 7 issues

## From 2.5.1 to 2.5.2

## 8 March 2011

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
0	CRUC- 5648	Bundle a Lucene optimiz er as an offline comma nd	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Mar 01, 2011	Jul 18, 2011
<b>A</b>	CRUC- 5138	Add an offline comma nd to optimiz e the indexes	Pierre- Etienne Poirot [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Dec 09, 2010	Sep 15, 2011
<b>F</b>	CRUC- 4818	Need to prevent UAL (and depend ent) plugins from being disable d.	Tom Davies [Atlassi an]	Tim Petters en [Atlassi an]	•	Å Clos	Fixed	Nov 05, 2010	Feb 14, 2011
•	CRUC- 5735	XSS vulnera bility in Crucibl e Author Mappin g	Vitaly Osipov [Atlassi an]	Andrew Lui [Atlassi an Techni cal Writer]	0	♣ Clos ed	Fixed	Apr 21, 2011	May 31, 2011
•	CRUC- 5734	XSS vulnera bility in Crucibl e's Snippet s	Vitaly Osipov [Atlassi an]	Andrew Lui [Atlassi an Techni cal Writer]	0	♣ Clos ed	Fixed	Apr 21, 2011	May 31, 2011

CRUC- 5652	After 2.5 upgrad e indexin g stops with error "Chang eset comme nt messa ges may not be null or empty"	Michael Studma n [Atlassi an]	Gurlee n Anand [Atlassi an]	<b>•</b>	Å Clos	Fixed	Feb 16, 2011	Mar 07, 2011
CRUC- 5645	Files that are added/ moved should take up the whole width of the pane, even if side by side view is selecte d	Geoff Crain [Atlassi an]	Joe Xie [atlassi an]	•	clos ed	Fixed	Feb 25, 2011	Mar 02, 2011
CRUC- 5643	No vertical scroll bar visible when adding change set to Crucibl e review under IE 7.0	Craig Sharkie [Atlassi an]	Felipe Kraem er [Atlassi an]	•	Å Clos	Fixed	Feb 24, 2011	Mar 04, 2011
CRUC- 5641	NullPoi nterExc eption in REST search reviews for terms (becau	Anna Buttfiel d [Atlassi an]	Pierre- Etienne Poirot [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Feb 22, 2011	Mar 07, 2011

		se of an invalid HQL query)							
	CRUC- 5636	JavaSc ript syntax highligh ter does not highligh t undefin ed and delete keywor ds	Seb Ruiz [Atlassi an]	Seb Ruiz [Atlassi an]	<b>↓</b>	♣ Clos ed	Fixed	Feb 21, 2011	Feb 22, 2011
•	CRUC- 5635	Defect classifi cation screen s show id instead of label	Seb Ruiz [Atlassi an]	Seb Ruiz [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 21, 2011	Feb 22, 2011
	CRUC- 5626	Git patch parsing throws a NPE	Anna Buttfiel d [Atlassi an]	Anna Buttfiel d [Atlassi an]	<b>+</b>	♣ Clos ed	Fixed	Feb 16, 2011	Mar 09, 2011
	CRUC- 5622	Getting the list of project s via the api (either rest-ser vice/pr ojects-v 1 or project Service .getAllP rojects) fails with a LazyInit ializatio nExcep tion	Anna Buttfiel d [Atlassi an]	Anna Buttfiel d [Atlassi an]	•	A Clos ed	Fixed	Feb 15, 2011	Apr 07, 2011
•	CRUC- 5616	Empty respon ses from p4	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Feb 11, 2011	Apr 08, 2011

		comma nds cause NullPoi nterExc eption							
	CRUC- 5615	java.lan g.NoCl assDef Found Error: org/tigri s/subve rsion/ja vahl/SV NClient thrown on startup	Tom Davies [Atlassi an]	Tom Davies [Atlassi an]	<b>?</b>	clos ed	Fixed	Feb 10, 2011	Jul 11, 2011
	CRUC- 5539	Proble m with handlin g files with spaces	lan Grunert [Atlassi an]	Anton Mazkov oi [Atlassi an]	<b>↑</b>		Fixed	Jan 31, 2011	Mar 06, 2011
	CRUC- 5429	Error generat ing FishEy e backup on Windo ws	Adam Ahmed [Atlassi an]	Felipe Kraem er [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Jan 19, 2011	Apr 06, 2011
	CRUC- 4984	"that is unrevie wed" filter is broken	Adam Ahmed [Atlassi an]	Agnes Ro [Atlassi an]	<b>↑</b>		Fixed	Nov 18, 2010	Feb 16, 2011
	CRUC- 4787	Patch reviews from mercuri al diffs don't anchor to their reposit ory	Geoff Crain [Atlassi an]	Nicolas Venega s	<b>\</b>	♣ Clos ed	Fixed	Nov 03, 2010	Nov 15, 2011
•	CRUC- 3885	No full context when anchori ng	Geoff Crain [Atlassi an]	Andrew Myers [Atlassi an]	<b>4</b>	A Clos ed	Fixed	Aug 06, 2010	Mar 02, 2011

patche s from CVS

Showing 20 out of 21 issues

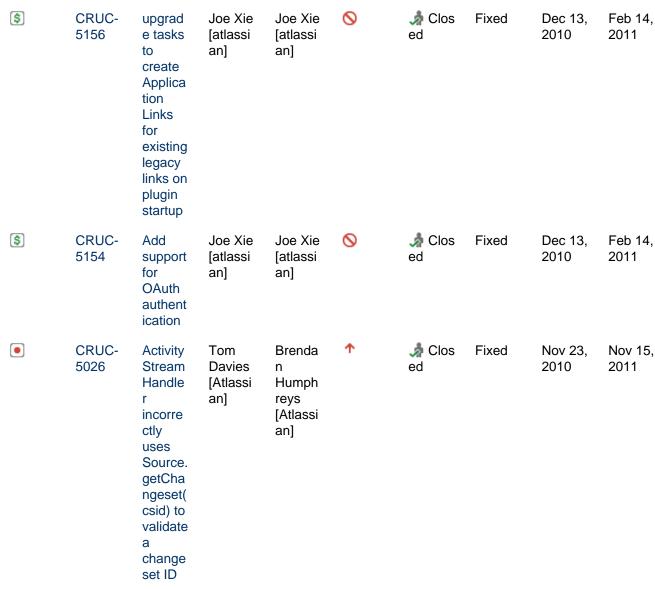
## From 2.5.0 to 2.5.1

## **10 February 2011**

Туре	Key	Summ ary	Assign ee	Report er	Priorit y	Status	Resolu tion	Create d	Update d
<b>A</b>	CRUC- 5612	Make Oracle multidb tests support testing of upgrad es	Michael Studma n [Atlassi an]	Michael Studma n [Atlassi an]	<b>V</b>	♣ Clos ed	Fixed	Feb 09, 2011	Feb 16, 2011
•	CRUC- 5609	Review rss feed provide s no way to navigat e to review in thunder bird	Seb Ruiz [Atlassi an]	Brydie McCoy [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Feb 09, 2011	Feb 09, 2011
•	CRUC- 5608	Cannot Edit Per-Re positor y Authent ication Setting s	Jason Hinch [Atlassi an]	Dylan Hansen [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 08, 2011	Jun 23, 2011
	CRUC- 5599	Upgrad e scripts do not always create the same schem a as scripts to create	Michael Studma n [Atlassi an]	Michael Studma n [Atlassi an]	•	A Clos ed	Fixed	Feb 07, 2011	Feb 16, 2011

	a new databa se							
CRUC- 5597	The "Tabs" on the statistic s panel of the "Project View" do not work in JIRA 4.2.3 and JIRA 4.3	Joe Xie [atlassi an]	Brende n Bain [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 06, 2011	Feb 14, 2011
CRUC- 5594	Adding an AppLin k to a "standa lone Crucibl e" creates a FishEy e configuration that is unusab le.	Luis Mirand a [Atlassi an]	Brende n Bain [Atlassi an]	<b>?</b>	clos ed	Fixed	Feb 04, 2011	Feb 14, 2011
CRUC- 5581	UAL webite m link for fisheye configu ration links to a page that shows all possibl e options , even if those options are global and will not apply to the	Luis Mirand a [Atlassi an]	Joe Xie [atlassi an]	•	clos ed	Fixed	Feb 03, 2011	Feb 14, 2011

		instanc e being edited							
<b>©</b>	CRUC- 5574	Update "refresh cache" links to synch form App Links as well.	Joe Xie [atlassi an]	Mark Lassau [Atlassi an]	<b>\</b>	♣ Clos ed	Fixed	Feb 03, 2011	Feb 15, 2011
	CRUC- 5526	FishEy eInstan ce gets re-creat ed on JIRA restart	Joe Xie [atlassi an]	Luis Mirand a [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 31, 2011	Feb 14, 2011
<b>©</b> 0	CRUC- 5475	Create func tests for all search result pages	Nick Pellow [Atlassi an]	Nick Pellow [Atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Jan 21, 2011	Feb 20, 2011
®o	CRUC- 5426	Add a link in admin UI to UAL admin screen	Joe Xie [atlassi an]	Luis Mirand a [Atlassi an]	<b>4</b>	♣ Clos ed	Fixed	Jan 18, 2011	Feb 15, 2011
₽ <sub>0</sub>	CRUC- 5400	On Plugin startup, synchr onise App Links	Joe Xie [atlassi an]	Mark Lassau [Atlassi an]	<b>4</b>	♣ Clos ed	Fixed	Jan 18, 2011	Feb 14, 2011
\$	CRUC- 5188	Update admin UI	Mark Lassau [Atlassi an]	Joe Xie [atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 14, 2010	Feb 14, 2011
<u>-</u>	CRUC- 5183	Extend oauth service s to REST resourc es (such as gadget s)	Joe Xie [atlassi an]	Joe Xie [atlassi an]	<b>↑</b>	♣ Clos ed	Fixed	Dec 14, 2010	Feb 14, 2011



### 17 issues

## **Crucible 2.5 Upgrade Guide**

Below are some important notes on upgrading to **Crucible 2.5**. For details of the new features and improvements in this release, please read the Crucible 2.5 Release Notes.

## On this page:

- Upgrade Notes
- Upgrade Procedure
- Checking for Known Issues and Troubleshooting the Crucible Upgrade

## **Upgrade Notes**

- Crucible 2.5:
  - 1 This is only relevant when Crucible is run in conjunction with FishEye.
    This release will trigger an automatic upgrade of the metadata index the first time Crucible is started. Crucible is still usable while this task runs in the background, however the FishEye search functionality will not contain all results. A warning will appear in the UI until the upgrade has complete. Please also see How do I Avoid Long Reindex Times When I Upgrade?

### **Upgrade Procedure**



### Before you begin

- Test your upgrades in your test environment before rolling into production.
- Back up your entire Crucible instance (see Backing up and restoring Crucible data), i.e.
  - If you are backing up your Crucible instance via the Admin interface, tick all of the 'Include' checkboxes (e.g. plugins, templates, uploads, SQL database, etc).
  - If you are backing up your Crucible instance using the command-line interface, do not use any exclusion options.

If you are already running a version of Crucible, please refer to the Crucible upgrade guide.

Checking for Known Issues and Troubleshooting the Crucible Upgrade

If something is not working correctly after you have completed the steps above to upgrade your Crucible installation, please check for known Crucible issues and try troubleshooting your upgrade as described below:

- Check for known issues. Sometimes we find out about a problem with the latest version of Crucible after we have released the software. In such cases we publish information about the known issues in the Crucible Knowledge Base. Please check the Crucible 2.5 Known Issues in the Crucible Knowledge Base and follow the instructions to apply any necessary patches if necessary.
- **Did you encounter a problem during the Crucible upgrade?** Please refer to the guide to troubleshooting upgrades in the Crucible Knowledge Base.
- If you encounter a problem during the upgrade and cannot solve it, please create a support ticket and one
  of our support engineers will help you.

#### RELATED TOPICS

Crucible 2.5 Release Notes

## Security advisories

Finding and reporting a security vulnerability

Atlassian's approach to releasing patches is detailed in How to Report a Security Issue.

Publication of Bamboo security advisories

Atlassian's approach to publishing security advisories is detailed in Security Advisory Publishing Policy.

Severity levels

Atlassian's scale for measuring security issues is detailed in Severity Levels for Security Issues.

Our patch policy

Atlassian's approach to releasing patches is detailed in our Security Patch Policy.

Security advisories

- FishEye and Crucible Security Advisory 2013-07-16
- FishEye and Crucible Security Advisory 2012-08-21
- FishEye and Crucible Security Advisory 2012-05-17
- FishEye and Crucible Security Advisory 2012-01-31
- FishEye and Crucible Security Advisory 2011-11-22
- FishEye and Crucible Security Advisory 2011-05-16
- FishEye and Crucible Security Advisory 2011-01-12
- Crucible Security Advisory 2010-06-16
- Crucible Security Advisory 2010-05-04

## FishEye and Crucible Security Advisory 2013-07-16

This advisory discloses security vulnerabilities that we have found in FishEye/Crucible and fixed in a recent version of FishEye/Crucible.

Customers who have downloaded and installed FishEye/Crucible should upgrade their existing

FishEye/Crucible installations to fix this vulnerability.

• Atlassian OnDemand customers are not affected by any of the issues described in this advisory.

Atlassian is committed to improving product security.

The vulnerability listed in this advisory is a **vulnerability in a third-party framework - Struts 2 / WebWork 2** th at is used by FishEye/Crucible. The vulnerability has been independently discovered by Atlassian and reported to the Struts maintainers.

More details about the underlying Struts vulnerability CVE-2013-2251 are available at the CVE database and in the Struts advisory.

If you have questions or concerns regarding this advisory, please raise a support request at http://support.atlassi an.com/.

**OGNL** injection in WebWork 2

#### Severity

Atlassian rates the severity level of this vulnerability as **critical**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, moderate or low.

This is an independent assessment and you should evaluate its applicability to your own IT environment.

#### Description

We have fixed a vulnerability in WebWork 2, which is a part of the Struts web framework. In specific circumstances, attackers can use this vulnerability to execute Java code of their choice on systems that use these frameworks. In the case of FishEye/Crucible, the attacker needs to be able to access the FishEye/Crucible web interface. A valid user account is not required to exploit this vulnerability.

Customers should be advised that this affects all versions of FishEye/Crucible, except
FishEye/Crucible OnDemand, FishEye/Crucible 2.10.6 and FishEye/Crucible 3.0.2 or later. The issue can be tracked here:

FE-4729 - Webwork 2 code injection vulnerability ( Closed)

### Risk Mitigation

If you are unable to upgrade or patch your FishEye or Crucible server: as a **temporary workaround**, you can do the following:

• Block access to all URLs on a Web Application Firewall or a reverse proxy that contain any of the following strings: "redirect:", "action:" or "redirect-action:" strings. A partial example for an ng inx server is below. Note that the example only covers the "redirect:" prefix and does not account for any URL encoding that may be present.

```
location ~* ^/<path to your FishEye>/ {
   if ($args ~* "redirect:") {
      return 403;
   }
   proxy_pass http://$host.internal$request_uri;
}
```

or

Block access to your FishEye or Crucible server from untrusted networks, such as the Internet.

### Fix

This vulnerability can be fixed by upgrading FishEye/Crucible. There are no patches available for this vulnerability — for any questions, please raise a support request at http://support.atlassian.com/.

The Security Patch Policy describes when and how we release security patches and security upgrades for our products.

#### Upgrading FishEye/Crucible

The fix versions for this vulnerability are described in the 'Description' section above.

We recommend that you upgrade to the latest version of FishEye/Crucible, if possible. For a full description of the latest version of FishEye/Crucible, see the release notes: FishEye releases / Crucible release notes. You can download the latest version of FishEye/Crucible from the download centre: FishEye only / FishEye and Crucible. Additionally, if you have large repositories you may want to take a look at the our guide to Avoiding Long Reindex Times When Upgrading.

## FishEye and Crucible Security Advisory 2012-08-21

This advisory discloses security vulnerabilities that we have found in FishEye and/or Crucible and fixed in a recent version of FishEye and/or Crucible.

- Customers who have downloaded and installed FishEye and/or Crucible should upgrade their existing FishEye and/or Crucible installations to fix this vulnerability.
- Atlassian OnDemand and JIRA Studio customers are not affected by any of the issues described in this advisory.

Atlassian is committed to improving product security. The vulnerability listed in this advisory has been discovered by Atlassian, unless noted otherwise. The reporter may also have requested that we do not credit them.

If you have questions or concerns regarding this advisory, please raise a support request at http://support.atlassi an.com/.

## In this advisory:

Elevation of privileges vulnerability

Elevation of privileges vulnerability

#### Severity

Atlassian rates the severity level of this vulnerability as **Medium**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, moderate or low.

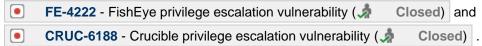
This is an independent assessment and you should evaluate its applicability to your own IT environment.

## Description

We have identified and fixed a vulnerability in FishEye and Crucible that results from behaviour of certain third-party frameworks used in FishEye and Crucible. This vulnerability allows any attacker to:

- Set the FishEye and Crucible instance to allow anonymous access
- Set the FishEye and Crucible instance to allow anonymous signup

All versions of FishEye and Crucible up to and including 2.7.14 are affected by this vulnerability. The vulnerability is fixed in FishEye and/or Crucible 2.8.0 and later. This issue can be tracked at



The table below describes the FishEye and/or Crucible versions and the specific functionality affected by the vulnerabilities.

FishEye and/or Affected versions Crucible Vulnerability	Fixed Version	Issue Tracking
---	---------------	----------------

Elevation of privileges	2.5.x or earlier 2.6.x 2.7.x	2.5.9 2.6.9 2.7.15, 2.8.0	● FE-4222 - FishEy e privilege escalation vulnerability (♪ Clo sed)
			<ul> <li>■ CRUC-6188 - Cr</li> <li>ucible privilege</li> <li>escalation vulnerability</li> <li>(</li></ul>

**Note:** The email we sent out wrongly states that fixed versions are 2.5.8 and 2.6.7. FishEye and Crucible development team apologise for the mistake.

### Risk Mitigation

If you cannot upgrade immediately, you can disable all access from the public Internet to your FishEye and/or Crucible instance to prevent external attacks.

#### Fix

## **Upgrade**

The vulnerabilities and fix versions are described in the 'Vulnerability' section above.

We recommend that you upgrade to the latest version of FishEye and/or Crucible, if possible. For a full description of the latest version of FishEye and Crucible, see the FishEye release notes and Crucible release notes. You can download the latest version of FishEye and Crucible from the FishEye download centre and Crucible download centre.

There are no patches available.

## FishEye and Crucible Security Advisory 2012-05-17

This advisory discloses a **critical** security vulnerability that exists in all versions of FishEye and Crucible up to and including 2.7.11.

- Customers who have downloaded and installed FishEye or Crucible should upgrade their existing Fi shEye and Crucible installations to fix this vulnerability.
- Enterprise Hosted customers need to request an upgrade by raising a support request at http://support. atlassian.com in the "Enterprise Hosting Support" project.
- JIRA Studio and Atlassian OnDemand customers are not affected by any of the issues described in this advisory.

Atlassian is committed to improving product security. The vulnerability listed in this advisory has been discovered by Atlassian, unless noted otherwise. The reporter may also have requested that we do not credit them.

If you have questions or concerns regarding this advisory, please raise a support request at http://support.atlassi an.com/.

### In this advisory:

- Critical XML Parsing Vulnerability
  - Severity
  - Description
  - Risk Mitigation
  - Fix

**Critical XML Parsing Vulnerability** 

#### Severity

Atlassian rates the severity level of this vulnerability as **critical**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, medium or low.

This is an independent assessment and you should evaluate its applicability to your own IT environment.

#### Description

We have identified and fixed a vulnerability in FishEye and Crucible that results from the way third-party XML parsers are used in FishEye and Crucible.

This vulnerability allows an attacker to:

- execute denial of service attacks against the FishEye and Crucible server, and
- read all local files readable to the system user under which FishEye and Crucible runs.

An attacker does not need to have an account with the affected FishEye or Crucible server to exploit this vulnerability.

All versions of FishEye and Crucible **up to and including 2.7.11** are affected by this vulnerability. This issue can be tracked here: FE-4016 - FishEye XML Vulnerability ( Closed)

## Risk Mitigation

We recommend that you upgrade your FishEye and Crucible installation to fix this vulnerability.

Alternatively, if you are not in a position to upgrade immediately, you should do **all** of the following until you can upgrade. Please note, these measures will only limit the impact of the vulnerability, they will not mitigate it completely.

- Disable access to the Remote, SOAP and XML-RPC APIs, if these remote APIs are not required. Note that remote API access is disabled by default. See enabling plugins for instructions.
- Disable public access (such as anonymous access and public signup ) to your FishEye or Crucible instance until you have applied the necessary upgrade.
- Ensure that your FishEye/Crucible system user is restricted as described in best practices for configuring FishEye security.

## Fix

## **Upgrade**

Upgrade to FishEye and Crucible 2.7.12 or later which fixes this vulnerability. For a full description of these releases, see the FishEye and Crucible release notes. The following releases have also been made available to fix these issues in older FishEye and Crucible versions. You can download these versions from the FishEye and Crucible download centres.

- FishEye and Crucible 2.6.8 for FishEye and Crucible 2.6
- FishEye and Crucible 2.5.8 for FishEye and Crucible 2.5

#### **Patches**

There are no patches available for this vulnerability.

## FishEye and Crucible Security Advisory 2012-01-31

This advisory discloses a **CRITICAL** security vulnerability that we have found in versions of FishEye and Crucible from 2.0 up to and including 2.7.8. You need to upgrade your existing FishEye and Crucible installations to fix these vulnerabilities. Enterprise Hosted customers should request an upgrade by raising a support request at http://support.atlassian.com in the "Enterprise Hosting Support" project. Neither FishEye nor Crucible in Studio and Atlassian OnDemand are vulnerable to any of the issues described in this advisory.

Atlassian is committed to improving product security. The vulnerabilities listed in this advisory have been discovered by Atlassian, unless noted otherwise. The reporter may also have requested that we do not credit them.

If you have questions or concerns regarding this advisory, please raise a support request at http://support.atlassi an.com/.

## In this advisory:

- · Code Injection Vulnerability
  - Severity

- Description
- Vulnerability
- Risk Mitigation
- Fix

**Code Injection Vulnerability** 

### Severity

Atlassian rates the severity level of this vulnerability as **CRITICAL**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, medium or low.

### Description

We have identified and fixed a code injection vulnerability in FishEye and Crucible caused by an underlying vulnerability in the **third-party** Webwork 2 framework. This vulnerability allows an attacker to run arbitrary Java code on a FishEye/Crucible server with user privileges of the FishEye/Crucible process. This vulnerability is a variant of a recently disclosed Struts2 vulnerability. The vulnerability exists in FishEye and Crucible pages accessible only by users with administrative privileges. It can be exploited with use of social engineering, e.g. by having the administrator click on a specially crafted link.

The maintainer of the original library can be contacted at http://struts.apache.org/

### Vulnerability

The table below describes the FishEye and Crucible versions and the specific functionality affected by the command injection vulnerability.

FishEye and Crucible Component	Affected FishEye and Crucible Versions	Fixed Version	Issue Tracking
WebWork 2	2.0 - 2.7.8	2.6.7	FE-3891
		2.7.9	

## Risk Mitigation

We recommend that you upgrade your FishEye and Crucible installations to fix this vulnerability.

Alternatively, if you are not in a position to upgrade immediately and you judge it necessary, you can restrict access to your instance of FishEye/Crucible by using a firewall.

## Fix

FishEye and Crucible 2.6.7, 2.7.9 and later versions fix this issue. View the issue linked above for information on fix versions. For a full description of the latest version of FishEye and Crucible, see the FishEye and Crucible release notes. You can download the latest versions from the FishEye and Crucible download centres. There are no patches available for these issues.

## FishEye and Crucible Security Advisory 2011-11-22

This advisory discloses a number of security vulnerabilities that we have found and fixed in versions of FishEye/Crucible earlier than 2.5.7. You need to upgrade your existing FishEye and Crucible installations to fix these vulnerabilities. Enterprise Hosted customers should request an upgrade by raising a support request at htt p://support.atlassian.com in the "Enterprise Hosting Support" project. Neither JIRA Studio nor Atlassian OnDemand are vulnerable to any of the issues described in this advisory.

Atlassian is committed to improving product security. The vulnerabilities listed in this advisory have been discovered by Atlassian, unless noted otherwise. The reporter may also have requested that we do not credit them.

If you have questions or concerns regarding this advisory, please raise a support request at http://support.atlassi an.com/.

### In this advisory:

XSS Vulnerabilities

- Severity
- Risk Assessment
- Vulnerabilities
- Risk Mitigation
- Fix
- Permission Verification Vulnerabilities
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix

#### **XSS Vulnerabilities**

### Severity

Atlassian rates the severity level of these vulnerabilities as **high**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, medium or low. These vulnerabilities are **not** critical.

### Risk Assessment

We have identified and fixed a number of stored cross-site scripting (XSS) vulnerabilities which affect FishEye/Crucible instances, including publicly available instances (that is, internet-facing servers). XSS vulnerabilities allow an attacker to embed their own JavaScript into a FishEye/Crucible page. You can read more about XSS attacks on Wikipedia, at The Web Application Security Consortium and other places on the web.

#### **Vulnerabilities**

The table below describes the FishEye/Crucible versions and the specific functionality affected by the XSS vulnerabilities.

FishEye/Crucible Feature	Affected FishEye/Crucible Versions	Fixed Version	Issue Tracking
FishEye user profile - display name	2.5.4 and earlier	2.5.5	FE-3797
FishEye user profile - snippets in a user's comment	2.5.4 and earlier	2.5.5	FE-3798

## Risk Mitigation

We recommend that you upgrade your FishEye/Crucible installation to fix these vulnerabilities.

Alternatively, if you are not in a position to upgrade immediately and you judge it necessary, you can disable public signup to your instance as a temporary mitigation until you have applied the upgrade. For tighter access control, you can restrict access to trusted groups.

#### Fix

FishEye and Crucible 2.5.5 and later versions fix two these issues. View the issues linked above for information on fix versions. You can download the latest versions of FishEye and Crucible from the download centres (FishEye download centre, Crucible download centre).

There are no patches available to fix these vulnerabilities. You must upgrade your FishEye/Crucible installation.

**Permission Verification Vulnerabilities** 

### Severity

Atlassian rates the severity level of these vulnerabilities as **medium**, according to the scale published in Severity

Levels for Security Issues. The scale allows us to rank the severity as critical, high, medium or low. These vulnerabilities are **not** critical.

#### Risk Assessment

We have identified and fixed two permission verification bugs which affect FishEye/Crucible instances, including publicly available instances (that is, internet-facing servers). These vulnerabilities allow users to view metadata for changesets and reviews, from repositories/projects that they do not have access to, via tooltips.

#### Vulnerability

The table below describes the FishEye/Crucible versions and the specific functionality affected by the vulnerabilities.

FishEye/Crucible Feature	Affected FishEye/Crucible Versions	Fixed Version	Issue Tracking
FishEye changeset tooltips	FishEye 2.4.6 to 2.5.6	FishEye 2.5.7	FE-3811
Crucible review tooltips	Crucible 2.4.6 to 2.5.6	Crucible 2.5.7	CRUC-5811

### Risk Mitigation

We recommend that you upgrade your FishEye/Crucible installation to fix these vulnerabilities.

Alternatively, if you are not in a position to upgrade immediately and you judge it necessary, you can disable anonymous access to your instance. Logged-in users will still be able to view metadata that they do not have permission to view, but anonymous users will be prevented from accessing this information.

#### Fix

FishEye and Crucible 2.5.7 and later versions fix these two issues. View the issues linked above for information on earlier fix versions for each issue. For a full description of this release, see the FishEye 2.5 changelog and Crucible 2.5 Changelog. You can download the latest version of FishEye and Crucible from the download centres (FishEye download centre, Crucible download centre).

There are no patches available to fix these vulnerabilities. You must upgrade your FishEye/Crucible installation.

## FishEye and Crucible Security Advisory 2011-05-16

This advisory announces a number of security vulnerabilities that we have found and fixed in recent versions of FishEye/Crucible. You need to upgrade your existing FishEye/Crucible installations to fix these vulnerabilities. Enterprise Hosted customers should request an upgrade by filing a ticket at http://support.atlassian.com. JIRA Studio is not vulnerable to any of the issues described in this advisory.

Atlassian is committed to improving product security. The vulnerabilities listed in this advisory have been discovered by Atlassian, unless noted otherwise. The reporter may also have requested that we do not credit them.

If you have questions or concerns regarding this advisory, please raise a support request at http://support.atlassi an.com/.

#### In this advisory:

- XSS Vulnerabilities
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix

XSS Vulnerabilities

#### Severity

Atlassian rates the severity level of these vulnerabilities as high, according to the scale published in Severity

Levels for Security Issues. The scale allows us to rank the severity as critical, high, moderate or low.

#### Risk Assessment

We have identified and fixed a number of cross-site scripting (XSS) vulnerabilities which may affect FishEye/Crucible instances, including publicly available instances (that is, internet-facing servers). XSS vulnerabilities potentially allow an attacker to embed their own JavaScript into a FishEye/Crucible page. You can read more about XSS attacks at cgisecurity.com, The Web Application Security Consortium and other places on the web.

### Vulnerability

The table below describes the FishEye/Crucible versions and the specific functionality affected by the XSS vulnerabilities.

FishEye/Crucible Feature	Affected FishEye/Crucible Versions	Issue Tracking
Crucible snippets	Crucible 2.4.5 to 2.5.0	CRUC-5734
Crucible author mapping	Crucible 2.4.5 to 2.5.0	CRUC-5735
Crucible changeset comments in search results	Crucible 2.3.0 to 2.5.0	CRUC-5736
Crucible comments search	Crucible 2.2.6 to 2.5.0	CRUC-5737
FishEye/Crucible dashboard - review activity	FishEye/Crucible 2.2.8 to 2.5.2	FE-3031
FishEye/Crucible reviews list	FishEye/Crucible 2.2.8 to 2.5.2	FE-3032

## Risk Mitigation

We recommend that you upgrade your FishEye/Crucible installation to fix these vulnerabilities.

Alternatively, if you are not in a position to upgrade immediately and you judge it necessary, you can disable public signup to your instance until you have applied the upgrade. For even tighter control, you could restrict access to trusted groups.

## Fix

FishEye/Crucible 2.5.4 fixes all of these issues. View the issues linked above for information on earlier fix versions for each issue. For a full description of this release, see the FishEye 2.5 changelog and Crucible 2.5 Changelog. You can download the latest version of FishEye/Crucible from the download centre (FishEye download centre, Crucible download centre).

There are no patches available to fix these vulnerabilities. You must upgrade your FishEye/Crucible installation.

Our thanks to **Marian Ventuneac** of http://www.ventuneac.net, who reported FE-3031 and FE-3032. We fully support the reporting of vulnerabilities and we appreciate it when people work with us to identify and solve the problem.

## FishEye and Crucible Security Advisory 2011-01-12

This advisory announces a number of security vulnerabilities that we have found and fixed in recent versions of FishEye/Crucible. You need to upgrade your existing FishEye/Crucible installations to fix these vulnerabilities. Enterprise Hosted customers should request an upgrade by filing a ticket at http://support.atlassian.com. JIRA Studio is not vulnerable to any of the issues described in this advisory.

Atlassian is committed to improving product security. The vulnerabilities listed in this advisory have been discovered by Atlassian, unless noted otherwise. The reporter may also have requested that we do not credit them

If you have questions or concerns regarding this advisory, please raise a support request at http://support.atlassi an.com/.

## In this advisory:

- XSS Vulnerabilities
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix
- Administration password logged in debug log
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix
- Review comment search returns comments that a user has no permission to view
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix
- · Anonymous global access exposes entire user list
  - Severity
  - Risk Assessment
  - Vulnerability
  - Risk Mitigation
  - Fix

#### **XSS Vulnerabilities**

#### Severity

Atlassian rates the severity level of these vulnerabilities as **high**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, moderate or low.

#### Risk Assessment

We have identified and fixed a number of cross-site scripting (XSS) vulnerabilities which may affect FishEye/Crucible instances, including publicly available instances (that is, internet-facing servers). XSS vulnerabilities potentially allow an attacker to embed their own JavaScript into a FishEye/Crucible page. You can read more about XSS attacks at cgisecurity.com, The Web Application Security Consortium and other places on the web.

## Vulnerability

The table below describes the FishEye/Crucible versions and the specific functionality affected by the XSS vulnerabilities.

FishEye/Crucible Feature	Affected FishEye/Crucible Versions	Issue Tracking
Crucible review – linked JIRA issue	Crucible 2.0.1 – 2.3.7	CRUC-5307
Crucible email reviews	Crucible 2.2.0 – 2.4.0	CRUC-5308
Crucible review reload	Crucible 2.2.0 – 2.4.2	CRUC-5309
Crucible edit review details screen	Crucible 2.2.0 – 2.3.7	CRUC-5345
FishEye repository configuration	FishEye 2.4.0	CRUC-5310
FishEye charts	FishEye 2.2.0 - 2.4.0	CRUC-5311
FishEye/Crucible code macro	FishEye/Crucible 2.2.0 – 2.4.0	CRUC-5312

FishEye/Crucible changeset page heading	FishEye/Crucible 2.3.2 – 2.4.0	CRUC-5313
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#### Risk Mitigation

We recommend that you upgrade your FishEye/Crucible installation to fix these vulnerabilities.

Alternatively, if you are not in a position to upgrade immediately and you judge it necessary, you can disable public signup to your instance until you have applied the upgrade. For even tighter control, you could restrict access to trusted groups.

#### Fix

FishEye/Crucible 2.4.4 fixes all of these issues. View the issues linked above for information on earlier fix versions for each issue. For a full description of this release, see the FishEye 2.4 changelog and Crucible 2.4 Changelog. You can download the latest version of FishEye/Crucible from the download centre (FishEye download centre, Crucible download centre).

There are no patches available to fix these vulnerabilities. You must upgrade your FishEye/Crucible installation.

Administration password logged in debug log

### Severity

Atlassian rates the severity level of these vulnerabilities as **high**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, moderate or low.

#### Risk Assessment

We have identified and fixed a vulnerability in the FishEye/Crucible logging which may affect FishEye/Crucible instances, including publicly available instances (that is, internet-facing servers). This vulnerability allows administrator passwords to be logged in clear text when debug logging is enabled.

### Vulnerability

This vulnerability affects FishEye and Crucible 2.2.0 to 2.4.0.

## Risk Mitigation

We recommend that you upgrade your FishEye/Crucible installation to fix these vulnerabilities.

Alternatively, if you are not in a position to upgrade immediately and you judge it necessary, you can disable access logging. See Enabling Access Logging in FishEye and Enabling Access Logging in Crucible. You can also apply file restrictions to your log files. Note, this issue only occurs when DEBUG logging is turned on (off by default) when an administrator logs in.

## Fix

FishEye/Crucible 2.4.2 and later fix this issue. For a full description of this release, see the FishEye 2.4 changelog and Crucible 2.4 Changelog. You can download the latest version of FishEye/Crucible from the download centre (FishEye download centre, Crucible download centre).

There are no patches available to fix this vulnerability. You must upgrade your FishEye/Crucible installation.

Review comment search returns comments that a user has no permission to view

## Severity

Atlassian rates the severity level of these vulnerabilities as **medium**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, moderate or low.

## Risk Assessment

We have identified and fixed a vulnerability in the Crucible review comment search which may affect Crucible instances, including publicly available instances (that is, internet-facing servers). This vulnerability allows review comments to be displayed for projects that are not publicly viewable.

## Vulnerability

Documentation for Crucible 3.2

This vulnerability affects Crucible 2.2.0 to 2.4.3.

#### Risk Mitigation

We recommend that you upgrade your FishEye/Crucible installation to fix these vulnerabilities.

#### Fix

FishEye/Crucible 2.2.5, 2.3.8 and 2.4.4 fix this issue. For a full description of this release, see the FishEye 2.4 changelog and Crucible 2.4 Changelog. You can download these versions of FishEye/Crucible via the download centre (FishEye download centre, Crucible download centre).

There are no patches available to fix this vulnerability. You must upgrade your FishEye/Crucible installation.

Anonymous global access exposes entire user list

#### Severity

Atlassian rates the severity level of these vulnerabilities as **medium**, according to the scale published in Severity Levels for Security Issues. The scale allows us to rank the severity as critical, high, moderate or low.

#### Risk Assessment

We have identified and fixed a vulnerability in the FishEye/Crucible anonymous global access which may affect FishEye/Crucible instances, including publicly available instances (that is, internet-facing servers). This vulnerability exposes the user list (usernames and emails) of a FishEye/Crucible instance for access when anonymous global access is enabled.

### Vulnerability

This vulnerability affects FishEye and Crucible 2.2.0 to 2.4.3.

## Risk Mitigation

We recommend that you upgrade your FishEye/Crucible installation to fix these vulnerabilities.

Alternatively, if you are not in a position to upgrade immediately and you judge it necessary, you can disable global anonymous access. See Configuring Anonymous Access.

## Fix

FishEye/Crucible 2.2.6, 2.3.8 and 2.4.4 fix this issue. For a full description of this release, see the FishEye 2.4 changelog and Crucible 2.4 Changelog. You can download these versions of FishEye/Crucible via the download centre (FishEye download centre, Crucible download centre).

There are no patches available to fix this vulnerability. You must upgrade your FishEye/Crucible installation.

## **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-pat ch1.zip	2.3.2	16th June, 2010	6fe98db821a6d26f26907 688af2ccd84

### Patch for FishEye / Crucible 2.2.3

File	FishEye / Crucible Version	Release Date	MD5 Checksum
fisheye-crucible-2.2.3-pat ch1.zip	2.2.3	16th June, 2010	6fe98db821a6d26f26907 688af2ccd84

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 Security Advisory 2010-05-04

①

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 CAPT CHA 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-pat ch1.zip	2.1.4	4th May, 2010	6062fa2e1ad937295273 57fb97b0d2ea

## Patch for FishEye / Crucible 2.0.6

File	FishEye / Crucible Version	Release Date	MD5 Checksum
fisheye-crucible-2.0.6-pat ch1.zip	2.0.6	4th May, 2010	6aae75e2a5308121887b f9532473cf75

### 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	210ef3358aff83861733f8 f22d331d7e

### 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	48e8e8ada0ddb3fc8671 459051df1120

1 To acquire all of the fixes on this page, upgrade to FishEye 2.2.3, which you can download from the download centre.

## Crucible FAQ

#### **Crucible FAQ**

Answers to frequently asked questions about configuring and using Crucible.

- Crucible Resources
- General FAQs
  - Can I deploy Crucible or FishEye as a WAR?
  - Does Crucible support SSL (HTTPS)?
  - How do I force reviews to include SVN property changes?
  - 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?
  - Advantages of Native Repository Access over lightSCM plugins
  - Updating your Crucible license
- 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
- Troubleshooting
  - · Crucible freezes unexpectedly
  - JIRA Integration Issues
  - Problems with very long comments and MySQL migration
- Contributing to the Crucible Documentation
  - Crucible Documentation in Other Languages

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.

## Crucible Resources

## Resources for Evaluators

- Free Trial
- Feature Tour

### Resources for Administrators

- Crucible Knowledge Base
- Crucible FAQ
- 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
- Add-ons for Crucible

### Support

- Atlassian Support
- Support Policies

#### **Forums**

- Crucible Forum
- Crucible Developers Forum

### Mailing Lists

 Visit http://my.atlassian.com to sign up for mailing lists relating to Atlassian products, such as technical alerts, product announcements and developer updates.

#### Feature Requests

• Issue Tracker and Feature Requests for Crucible

### General FAQs

### **Crucible General FAQs**

- Can I deploy Crucible or FishEye as a WAR? Unfortunately FishEye and Crucible cannot be deployed as a WAR.
- Does Crucible support SSL (HTTPS)?
- How do I force reviews to include SVN property changes?
- How to Automate Daily Crucible Backups Configuring Crucible backups is easy.

## 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.

## Does Crucible support SSL (HTTPS)?

Crucible does not have any built-in support for running over SSL via the HTTPS protocol. However, it is possible to setup a proxy web server to forward requests to Crucible. Please see the page on Integrating with Other Web Servers.

## How do I force reviews to include SVN property changes?

Subversion (SVN) allows users to store arbitrary name/value pairs associated with files and directories, called SVN properties. These properties can be used by users for storing metadata and are also used by Subversion (e.g. for storing where code is branched from)

These name/value pairs can only be changed as part of a changeset / commit in Subversion. As such, you will have changesets with purely changes to SVN properties, or changesets with a mix of textual changes and changes to SVN properties. Crucible 2.6 introduced review creation without metadata to prevent SVN properties from being included in reviews.

This functionality is enabled by default, and affects the following functionality:

- Creating a review The "Create Review" link is disabled in the activity stream, dashboard and changeset page for any changeset where all the file revisions only differ by SVN properties.
- Adding content to a review SVN property-only changesets cannot be added to the review from the 'Add Content' dialog. Changesets with a mix of SVN property changes and textual changes can be added to the review, however only the file revisions with textual changes are added. File revisions with both textual changes and SVN property changes are always added.

  (Note, explicitly adding a particular file revision to a review is still permitted, regardless of whether it is a

(Note, explicitly adding a particular file revision to a review is still permitted, regardless of whether it is a textual change or metadata-only change.)

The prime motivation behind the metadata checking is to prevent the creation of reviews with a large number of files which have no effective content changes. Sometimes this sort of problem is seen when there is some wholesale SVN property change - e.g. setting the line endings on all files (svn:eol-style). In that respect, this is a performance setting as it avoids the creation of large reviews. The properties themselves are still stored and managed in FishEye. There is no major performance impact on including properties in reviews.

Disabling this functionality can be done by starting up Crucible with the following system property: -Dcrucible.detect.metadata.revision.changes=false

## **How to Automate Daily Crucible Backups**

Configuring Crucible backups is easy. To set daily Crucible backups, open the administration page, click the 'Ba ckup' 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 Crucible can be run as an
  application alone, without FishEye. However, if you decide to stop using FishEye with Crucible, you will
  lose certain functionality and will need to make configuration changes.
- 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.
- Advantages of Native Repository Access over lightSCM plugins
- Updating your Crucible license

## What happens if I decide to stop using FishEye with Crucible

Crucible can be run as an application alone, without FishEye. However, if you decide to stop using FishEye with Crucible, you will lose certain functionality and will need to make configuration changes.

### On this page:

- How do I run Crucible without FishEye?
- How is Crucible without FishEye different from using Crucible with FishEye?
  - Conducting Reviews
  - Viewing Repositories/Files
  - Charts
- Can I still use lightSCM plugins with Crucible?

How do I run Crucible without FishEye?

### • Have a valid Crucible license but not a FishEye license

To run Crucible without FishEye you need to have a **valid Crucible license but not a FishEye license** or if you want to disable FishEye enter <code>Disabled</code> in the license field. Crucible standalone will actually use a "light" mode of FishEye that comes pre-bundled and does not need to be installed separately. For more information on Crucible with light FishEye, see How is Crucible without FishEye different from using Crucible with FishEye? below.

## No need to reconnect your repositories

Any repositories that you have currently defined in FishEye will not be visible in Crucible after removing FishEye (no more Source tab). The repositories however, will continue to update as usual without any intervention. You can add additional repositories as described in the FishEye documentation. Note, all repositories supported in FishEye are supported in light FishEye.

1 Legacy "lightSCM" plugins, like the Crucible Subversion SCM plugin, will still work. However, the functionality will be limited compared to using Crucible with light FishEye. See the Can I still use lightSCM plugins with Crucible? section below for more information.

You need to reindex your repositories after removing a FishEye license

When you remove a FishEye license, and operate with only a Crucible license, you need to reindex those repositories that were originally indexed under a FishEye license. You do not need to remove those repositories, you just need to run a re-index to create an index which is compatible with your new license setup.

How is Crucible without FishEye different from using Crucible with FishEye?

The following changes in functionality will occur if you use Crucible without FishEye (i.e. use Crucible with "light" FishEye).

## **Conducting Reviews**

 When using Iterative reviews in Crucible, you will not be prompted when a new version of a file is available.

### Viewing Repositories/Files

- Files and changesets displayed in activity streams (e.g. the dashboard activity stream) will not render as links to the relevant files/changesets.
- You will not be able to see your content roots and repositories associated with projects.
- You will no longer be able to see repository lists and browse repositories using the 'Source' tab.

#### Charts

You will not be able to view charts or code metrics.

Can I still use lightSCM plugins with Crucible?

Legacy "lightSCM" plugins, like the Crucible Subversion SCM plugin, will still work with Crucible. However, we recommend that you use the "light" FishEye implementation that is bundled with Crucible, as it supersedes the lightSCM plugins.

For more information, please read this FAQ: Advantages of Native Repository Access over lightSCM plugins.

## 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.

We recommend that you run Crucible together with FishEye. If you choose to run Crucible alone without FishEye, you will have access to your repositories via the "light" FishEye implementation bundled with Crucible. However, a number of FishEye's advanced features will not be available to you, including pre-caching repository content (for improved performance), the ability to search and browse through repositories and FishEye's activity graphs.

For more information, please read the following FAQ: What happens if I decide to stop using FishEye with Crucible

## Advantages of Native Repository Access over lightSCM plugins

Prior to Crucible 2.4, running Crucible without FishEye required the use of "lightSCM" plugins (like the Crucible Subversion SCM plugin). From version 2.4, Crucible provides native repository access which supersedes Crucible's bundled lightSCM plugins. Third-party lightSCM plugins are unaffected and will continue to work with Crucible. The bundled plugins will still be available, so your existing configurations will also continue to work unchanged.

If you are currently using any of the bundled lightSCM plugins, we recommend that you migrate to using native repository access for the following reasons:

• Atlassian's lightSCM plugins (not lightSCM itself) are being deprecated, i.e. we will not update any of the bundled lightSCM plugins after the 2.4 release.

- It is easier for us to support and maintain a single implementation of our SCM interfaces, rather than support the standard FishEye access and the lightSCM implementations.
- Native repository access provides full support for SCMs for which there are no current lightSCM plugin implementations, including CVS and Mercurial.
- Native repository access provides additional functionality that is not available in the lightSCM plugins including:
  - Viewable commits in the activity streams (e.g. the dashboard activity stream).
  - Repositories administration via the administration console.
  - Easier review creation due to the ability to search and browse the repository using the full power of FishEye. For example, browsing for a file to add to a new review (see Adding content to the review ).
- Improved performance of native repository access over the lightSCM plugins. The lightSCM plugins
  retrieve data on demand from the underlying repository, rather than using caches and indexes like
  FishEye and native repository access. Hence, Crucible with native repository access, whilst requiring an
  initial indexing phase, will be faster than Crucible with lightSCM plugins during day-to-day operations.
- Native repository access allows for migration to a full FishEye license in future, if desired. Your
  repositories can simply be re-indexed for full FishEye functionality and existing reviews will then be
  available on the full repository.

## To change over from lightSCM plugins to native repository access:

- 1. Disable your lightSCM plugins via the Crucible Administration Console ('Plugins' link under the 'Systems Settings' section in the left menu).
  - ① Do not disable the SCM plugins for connecting to a Confluence instance or a file system. Native repository access does not include functionality to connect these (nor does FishEye alone), hence you will still need to use plugins.
- 2. Add native repositories for any repositories that are currently connected via lightSCM plugins. See the Fis hEye documentation.
- 3. If you are using Subversion or Perforce, we recommend that you set a "start" revision for the changeover, unless you need to review old code. This will eliminate the need for native repository support to index old repository activity, getting you up and running quickly.

## **Updating your Crucible license**

When you upgrade or renew your Crucible license, you will receive a new license key – you'll need to update your Crucible server with the new license.

Note that you can access your current license, or obtain a new license, by going to my.atlassian.com.

## Related pages:

- Crucible and FishEye
- What happens if I decide to stop using FishEye with Crucible

## To update your Crucible license key:

- 1. Log in to Crucible Admin area.
- 2. Click System Info (under 'System Settings').
- 3. Click **Edit License** and paste your new license key into the appropriate text box.
- 4. Paste your new license into this box. Obtain a new license by clicking my.atlassian.com in the 'Information' section.
- 5. Click **Update**.

## Support

Information	
	New licenses can be acquired from my.atlassian.com.  Your Server ID is BMRI-3AS3-HMMD-PGXX
	Your Server ID IS BMRI-3AS3-HMMD-PGXX
Licenses	
FishEye License	Evaluation
Crucible License	AAAA9g0ODAoPeNptkE9rwzAMxe/+FladPWa7hzXgQ5eELRAnpcmgh15Uo62G1A3+E9Zvv3Yt dBs9C IT03k8PPfS7RJvDRAWnfJ7NeMZnNO96Kp64JAUG4+0Y7cGp3CdjtwNuMIpOMCQ4T0nu8acpl Kl6e xjnTAhirurH2hp0AfvjiA3\siOnAGy6/R+uMvqPgDbdJ+i779eA/og 2KctP4TnA0X2CIOEIIFdzOAiXbCy5kO/YS+KtSLXIVMLjrJ3rQu2PJ1vSZd2ahTsVqKZzGXklzz n +R1Vdzb3I+6TN7sIOD/v3wDPH51STAtAhRYkbBDq2j1NpXxLp5ws8aClhAgBwIVAJceVTPzGBf4w g5FWvNY7c5adD+EX02co

## **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 su pport.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 and Atlassian OnDemand.

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 Atlassian Support Offerings for more support-related information.

## How to Report a Security Issue

Finding and Reporting a Security Issue

If you find a security issue in the product, open an issue on https://jira.atlassian.com in the relevant project.

- Set the security level of the bug to 'Reporters and Developers'.
- Set the priority of the bug to 'Blocker'.
- Provide as much information on reproducing the bug as possible.

All communication about the security issue should be performed through JIRA, so that Atlassian can keep track of the issue and get a patch out as soon as possible.

If you cannot find the right project to file your issue in, email the details to security@atlassian.com.

When reporting a security vulnerability, please keep in mind the following:

We need a technical description that allows us to assess exploitability and impact of the issue.

- Provide steps to reproduce the issue, including any URLs or code involved.
- If you are reporting a cross-site scripting (XSS), your exploit should at least pop up an alert in the browser. It is much better if the XSS exploit shows user's authentication cookie.
- For a cross-site request forgery (CSRF), use a proper CSRF case when a third party causes the logged in victim to perform an action.
- For a SQL injection, we want to see the exploit extracting database data, not just producing an error message.
- HTTP request / response captures or simply packet captures are also very useful to us.

Please refrain from sending us links to non-Atlassian web sites, or reports in PDF / DOC / EXE files. Image files are ok. Make sure the bug is exploitable by someone other than the user himself (e.g. "self-XSS").

Without this information it is not possible to assess your report and it is unlikely to be addressed.

We are not looking for the reports listing generic "best practice" issues such as:

- Specific cookies being not marked as Secure or HTTPOnly
- Presence or absence of HTTP headers (X-Frame-Options, HSTS, CSP, nosniff and so on)
- Clickjacking
- Mixed HTTP and HTTPS content
- Auto-complete enabled or disabled
- SSL-related issues

#### Further reading

See Atlassian Support Offerings for more support-related information.

## **New Features Policy**

### Summary

- We encourage and display customer comments and votes openly in our issue tracking system, http://jira.a tlassian.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:

- Customer contact: We get the chance to meet customers and hear their successes and challenges at Atlassian Summit, Atlassian Unite, developer conferences, and road shows.
- **Customer interviews**: All product managers at Atlassian do customer interviews. Our interviews are not simply to capture a list of features, but to understand our customers' goals and plans.
- **Community forums**: There are large volumes of posts on answers, of votes and comments on jira.atlassi an.com, and of conversations on community forums like groups on LinkedIn.
- Customer Support: Our support team provides clear insights into the issues that are challenging for customers, and which are generating the most calls to support
- Atlassian Experts: Our Experts provide insights into real-world customer deployments, especially for customers at scale.
- Evaluator Feedback: When someone new tries our products, we want to know what they liked and disliked and often reach out to them for more detail.
- In product feedback: The JIRA Issue Collectors that we embed our products for evaluators and our Early Access Program give us a constant pulse on how users are experiencing our product.
- Usage data: Are customers using the features we have developed?
- Product strategy: 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 system, http://jira.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 Atlassian Answers.

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 Atlassian Support Offerings 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 and the last maintenance release of the last major version 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).
   AND
- A patch is technically feasible (i.e., it doesn't require a major architectural change)
   OR
- The issue is a security issue, and falls under our Security Patch 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 Atlassian Support Offerings for more support-related information.

## Security Advisory Publishing Policy

**Publication of Security Advisories** 

When a critical severity security vulnerability in an Atlassian product is discovered and resolved, Atlassian will inform customers through the following mechanisms:

- We will post a security advisory in the latest documentation of the affected product at the same time as releasing a fix for the vulnerability.
- We will send a copy of all posted security advisories to the 'Technical Alerts' mailing list for the product concerned.
  - *Note:* To manage your email subscriptions and ensure you are on this list, please go to my.atlassian.com and click 'Communications Centre' near the top right of the page.
- If the person who reported the vulnerability wants to publish an advisory through some other agency, such as CERT, we will assist in the production of that advisory and link to it from our own.

If you want to track non-critical severity security vulnerabilities, you need to monitor the issue trackers for the relevant products on http://jira.atlassian.com. For example, https://jira.atlassian.com/browse/JRA for JIRA and ht tps://jira.atlassian.com/browse/CONF for Confluence. Security issues in trackers will be marked with a "security" label. All security issues will be listed in the release notes of the release where they have been fixed, similar to other bugs.

One of the ways to monitor updates to security issues is subscribing to the results of a sample search via email or RSS.

#### Further reading

See Atlassian Support Offerings for more support-related information.

## **Security Patch Policy**

**Product Security Patch Policy** 

Atlassian makes it a priority to ensure that customers' systems cannot be compromised by exploiting vulnerabilities in Atlassian products.

#### Scope

This page describes when and how we release security patches and security upgrades for our products. It does not describe the whole of disclosure process that we follow. This policy excludes OnDemand and Bitbucket, since these services are always patched by Atlassian without additional notifications.

#### Critical vulnerabilities

When a **Critical** security vulnerability is discovered by Atlassian or reported by a third party, Atlassian will do all of the following:

- Issue a new, fixed release for the current version of the affected product as soon as possible, usually in a few days.
- Issue a binary patch for the current release.
- Issue a binary patch for the latest maintenance release of the previous version of the product.
- Patches for older versions or releases normally will not be issued.

Patches will be attached to the relevant JIRA issue. You can use these patches as a "stop-gap" measure until you upgrade your installation in order to fully fix the vulnerability.

### Non-critical vulnerabilities

When a security issue of a **High, Medium or Low** severity is discovered, Atlassian will do all of the following:

- Include the fix into the next scheduled release, both for the current and previous maintenance versions.
- Where practical, provide new versions of plugins or other components of the product that can be upgraded independently.

You should upgrade your installation in order to fix the vulnerability.

### Other information

Severity level of vulnerabilities is calculated based on Severity Levels for Security Issues.

Visit our general Atlassian Patch Policy as well.

#### Examples

**Example 1:** A critical severity vulnerability is found in a (hypothetical current release) JIRA 5.3.2. The last bugfix release in 5.2.x branch was 5.2.3. In this case, a patch will be created for 5.3.2 and 5.2.3. In addition, new bugfix releases, 5.3.3 and 5.2.4, which are free from this vulnerability, will be created in a few days.

**Example 2:** A high or medium severity vulnerability is found in the same release as in the previous example. The fix will be included into the currently scheduled releases 5.3.3 and 5.2.4. Release schedule will not be brought forward and no patches will be issued. If the vulnerability is in a plugin module, then a plugin upgrade package may still be supplied.

## Further reading

See Atlassian Support Offerings for more support-related information.

## Severity Levels for Security Issues

**Severity Levels** 

Atlassian security advisories include a severity level. This severity level is based on our self-calculated CVSS score for each specific vulnerability. CVSS is an industry standard vulnerability metric. You can learn more about CVSS at FIRST.org web site.

CVSS scores are mapped into the following severity ratings:

- Critical
- High
- Medium
- Low

An approximate mapping guideline is as follows:

CVSS score range	Severity in advisory
0 – 2.9	Low
3 – 5.9	Medium
6.0 – 7.9	High
8.0 – 10.0	Critical

Below is a summary of the factors which illustrate types of vulnerabilities usually resulting in a specific severity level. Please keep in mind that this rating does not take into account details of your installation.

#### Severity Level: Critical

Vulnerabilities that score in the critical range usually have most of the following characteristics:

- 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.

For critical vulnerabilities, is advised that you patch or upgrade as soon as possible, unless you have other mitigating measures in place. For example, if your installation is not accessible from the Internet, this may be a mitigating factor.

#### Severity Level: High

Vulnerabilities that score in the high range usually have some of the following characteristics:

- The vulnerability is difficult to exploit.
- Exploitation does not result in elevated privileges.
- Exploitation does not result in a significant data loss.

#### Severity Level: Medium

Vulnerabilities that score in the medium range usually have some of the following characteristics:

- Denial of service vulnerabilities that are difficult to set up.
- 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

Vulnerabilities in the low range typically have very little impact on an organisation's business. Exploitation of such vulnerabilities usually requires local or physical system access.

#### Further reading

See Atlassian Support Offerings for more support-related information.

## **Troubleshooting**

### **Crucible Troubleshooting**

- Crucible freezes unexpectedly
- JIRA Integration Issues
- Problems with very long comments and MySQL migration Affects Version

#### 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
com.mysql.jdbc.ServerPreparedStatement.executeBatch(ServerPreparedStatem
ent.java:647)
 at
com.mchange.v2.c3p0.impl.NewProxyPreparedStatement.executeBatch(NewProxy
PreparedStatement.java:1723)
org.hibernate.jdbc.BatchingBatcher.doExecuteBatch(BatchingBatcher.java:4
8)
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
```

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.

## **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
- Contributing Documentation in Other Languages
- Updating the Documentation Itself
  - Getting Permission to Update the Documentation
  - 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....

## **Contributing Documentation in Other Languages**

Have you written a guide to Crucible in a language other than English, or translated one of our guides? Let us know, and we will link to your guide 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** 

Please submit the Atlassian Contributor License Agreement.

**Our Style Guide** 

Please read our short guidelines for authors.

**How we Manage Community Updates** 

Here is a quick guide to how we manage community contributions to our documentation and the copyright that applies to the documentation:

- Monitoring by technical writers. The Atlassian technical writers monitor the updates to the documentation spaces, using RSS feeds and watching the spaces. If someone makes an update that needs some attention from us, we will make the necessary changes.
- Wiki permissions. We use wiki permissions to determine who can edit the documentation spaces. We
  ask people to sign the Atlassian Contributor License Agreement (ACLA) and submit it to us. That allows
  us to verify that the applicant is a real person. Then we give them permission to update the
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  to our documentation knows that their contribution falls under the same copyright.

## RELATED TOPICS

Author Guidelines Atlassian Contributor License Agreement

## **Crucible Documentation in Other Languages**

Below are some links to Crucible documentation written in other languages. In some cases, the documentation may be a translation of the English documentation. In other cases, the documentation is an alternative guide written from scratch in another language. This page presents an opportunity for customers and community authors to share documentation that they have written in other languages.



## Please be aware that these are external guides.

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. The information in the linked guides has not been tested or reviewed by Atlassian.

## On this page:

No guides yet

None

No guides yet

We do not yet have any guides to link here. Be the first to suggest one!

Adding Your Own Guide to this Page

Have you written a guide for Crucible in another language? Add a comment to this page, linking to your guide. We will include it if the content fits the requirements of this page.

Giving Feedback about One of the Guides

If you have feedback on one of the guides listed above, please give the feedback to the author of the linked guide.

If you want to let us know how useful (or otherwise) one of these guides is, please add a comment to this page.

**Other Sources of Information** 

Crucible documentation Atlassian website Atlassian blog Crucible plugins

# 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

authors in Crucible

code review

comment

creator

defect

moderator

participant

permission scheme

permissions in Crucible

projects in Crucible

review duration

reviewer

role

state

statement of objective

users in Crucible

## approve

Issuing a review to the reviewers is known as approving the review.

## authors in Crucible

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 Getting Started.

### 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. See also author, the person whose changes to the code are to be reviewed.

## participant

Crucible uses the terms creator, author, moderator, and reviewer to describe the roles of review participants.

## 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.

## permissions in Crucible

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
Abandon	Ability to abandon (i.e. cancel) a review.	Creator Author Moderator
Approve	Ability to approve a review (i.e. issue it to the reviewers).	Creator Author Moderator
Close	Ability to close a review once it has been summarised.	Creator Author Reviewer Moderator
Comment	Ability to add or remove a comment to or from a review.	Creator Author Reviewer Moderator
Complete	Ability of a reviewer to change their individual review status to Complete.	Reviewer
Create	Ability to create a review.	All logged-in users
Delete	Ability to delete a review.	Creator Author Moderator
Edit Review Details	Ability to edit a review's details and change the set of revisions being reviewed.	Creator Author Reviewer Moderator
Re-Open	Ability to re-open a closed or abandoned review.	Creator Author Reviewer Moderator
Recover	Ability to resurrect an abandoned (i.e. cancelled) review.	Creator Author Reviewer Moderator
Reject	Ability to reject a review submitted for approval (i.e. prevent it from being issued to reviewers).	Creator Author Moderator
Submit	Ability to submit a review for approval (i.e. request that the review be issued to the reviewers).	Creator Author Moderator

Summarise	Ability to summarise a review. (Normally this would be done after all reviewers have completed their review.)	
Uncomplete	Ability of a reviewer to change their individual review status from Complete to Uncomplete.	Reviewer
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

## projects in Crucible

A Crucible *project* provides a way to group and manage related reviews – typically reviews that are all involved with the same software project. A Crucible 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 Editing 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 to be participants of the review, but are not 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.

1 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.
Needs Fixing	This means that the review state is not understood by Crucible, and indicates a programming or data issue. The review moderator can move the review into a known state if this happens.

# statement of objective

A statement of objective is an optional text description of the review and any specific areas the reviewers should focus on.