

## Square 17.0.0

### Eclipse Plugin Guide

Reference : SUM\_Square\_ECL\_PLG  
Version : 17.0.0  
Date : 18/05/2017

# Eclipse Plugin Guide

Copyright © 2017 Squoring Technologies

## Abstract

This edition of the Eclipse Plugin Guide applies to Squore 17.0.0 and to all subsequent releases and modifications until otherwise indicated in new editions.

## Licence

No part of this publication may be reproduced, transmitted, stored in a retrieval system, nor translated into any human or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of the copyright owner, Squoring Technologies.

Squoring Technologies reserves the right to revise this publication and to make changes from time to time without obligation to notify authorised users of such changes. Consult Squoring Technologies to determine whether any such changes have been made.

The terms and conditions governing the licensing of Squoring Technologies software consist solely of those set forth in the written contracts between Squoring Technologies and its customers.

All third-party products are trademarks or registered trademarks of their respective companies.

## Warranty

Squoring Technologies makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Squoring Technologies shall not be liable for errors contained herein nor for incidental or consequential damages in connection with the furnishing, performance or use of this material.

## Table of Contents

Typographical Conventions .....	iv
Acronyms and Abbreviations .....	v
<b>1. Introduction .....</b>	<b>1</b>
1.1. Foreword .....	1
1.2. About This Document .....	1
1.3. Contacting Squoring Technologies Product Support .....	1
1.4. Responsibilities .....	2
1.5. Getting the Latest Version of this Manual .....	2
<b>2. Introducing the Squore Eclipse Plugin .....</b>	<b>3</b>
2.1. Squore Eclipse Plugin in the Squore ecosystem .....	3
2.2. Who is the Squore Eclipse Plugin destined to? .....	4
<b>3. Installing and setting up the Squore Eclipse Plugin .....</b>	<b>5</b>
3.1. Installation Prerequisites .....	5
3.1.1. Supported Operating Systems .....	5
3.1.2. For All Systems .....	5
3.1.3. Packages for Windows .....	6
3.1.4. Packages for Linux .....	6
3.1.5. Packages for CentOS and Red Hat Enterprise Linux .....	7
3.1.6. Packages for Ubuntu .....	8
3.2. Third-Party Plugins and Applications .....	9
3.3. Squore Eclipse Plugin installation .....	9
3.4. Squore Eclipse Plugin setup .....	10
<b>4. Getting Started With the Squore Eclipse Plugin .....</b>	<b>12</b>
4.1. Launching Your First Analysis .....	12
4.2. Visualising Analysis Results .....	14
<b>Index .....</b>	<b>19</b>

## Typographical Conventions

The following conventions are used in this manual.

Typeface or Symbol	Meaning
<b>Bold</b>	Book titles, important items, or items that can be selected including buttons and menu choices. For example: Click the <b>Next</b> button to continue
<i>Italic</i>	A name of a user defined textual element. For example: <b>Username</b> : <i>admin</i>
Courier New	Files and directories; file extensions, computer output. For example: Edit the <code>config.xml</code> file
<b>Courier Bold</b>	Commands, screen messages requiring user action. For example: <b>Username</b> : <i>admin</i>
>	Menu choices. For example: Select <b>File</b> > <b>Open</b> . This means select the File menu, then select the Open command from it.
<...>	Generic terms. For example: <SQUORE_HOME> refers to the Squore installation directory.

### Notes

*Screenshots displayed in this manual may differ slightly from the ones in the actual product.*

## Acronyms and Abbreviations

The following acronyms and abbreviations are used in this manual.

CI	Continuous Integration
CLI	Command Line Interface
DP	Data Provider, a Squore module capable of handling input from various other systems and import information into Squore
RC	Repository Connector, a Squore module capable of extracting source code from source code management systems.

# 1. Introduction

## 1.1. Foreword

This document was released by Squoring Technologies.

It is part of the user documentation of the Squore software product edited and distributed by Squoring Technologies.

## 1.2. About This Document

This document is the Eclipse Plugin Guide for Squore.

Its objective is to guide you through various aspects of the Squore Eclipse Plugin:

- Chapter 2, *Introducing the Squore Eclipse Plugin* positions the Squore Eclipse Plugin inside the Squore ecosystem, explaining its main features.
- Chapter 3, *Installing and setting up the Squore Eclipse Plugin* describes the steps to follow in order to install the Squore Eclipse Plugin.
- Chapter 4, *Getting Started With the Squore Eclipse Plugin* walks you through the features provided by the Squore Eclipse Plugin.

If you are already familiar with Squore, you can navigate this manual by looking for what has changed since the previous version. New functionality is tagged with **(new in 17.0)** throughout this manual. A summary of the new features described in this manual is available in the entry \* **What's New in Squore 17.0?** of this manual's Index.

For information on how to use and configure Squore, the full suite of manuals includes:

- Squore Installation Checklist
- Squore Installation and Administration Guide
- Squore Getting Started Guide
- Squore Command Line Interface
- Squore Configuration Guide
- Squore Eclipse Plugin Guide
- Squore Reference Manual


## 1.3. Contacting Squoring Technologies Product Support

If the information provided in this manual is erroneous or inaccurate, or if you encounter problems during your installation, contact Squoring Technologies Product Support: <http://support.squoring.com/>

You will need a valid Squore customer account to submit a support request. You can create an account on the support website if you do not have one already.

For any communication:

 [support@squoring.com](mailto:support@squoring.com)

 **Squoring Technologies Product Support**  
76, allées Jean Jaurès / 31000 Toulouse - FRANCE

## 1.4. Responsibilities

Approval of this version of the document and any further updates are the responsibility of Squoring Technologies.

## 1.5. Getting the Latest Version of this Manual

The version of this manual included in your Squore installation may have been updated. If you would like to check for updated user guides, consult the Squoring Technologies documentation site to consult or download the latest Squore manuals at <http://support.squoring.com/documentation/17.0.0>. Manuals are constantly updated and published as soon as they are available.

## 2. Introducing the Squore Eclipse Plugin

### 2.1. Squore Eclipse Plugin in the Squore ecosystem

Squore analyzes projects (in a broad sense) to provide high level indicators and produce personalised dashboards and tailored action lists for each kind of connected user. The whole process can be automated, and integrated in a continuous integration framework.

Information generated in this fashion can be refreshed with any desired rate, and the results will be available each time the Squore process concludes a new build. However, this scenario is best suited to a daily cycle at most, where all input files are the result of a daily commit, and results are generated along with the nightly build.

The Squore Eclipse Plugin is destined to operate at a faster rate, the objective being to deliver results during the development process, before files are committed and fed to the continuous integration process. Tightening the processing loop has several consequences for the Squore Eclipse Plugin behavior:

- *It doesn't need to be connected to a central Squore server to rate a project, unless for project activation / licence validation purposes.*

By limiting communication with the server to a minimum, we make sure projects can evolve outside the global rating cycle, but still offer the rating service.

Should the server be unreachable, rating service is still available for a whole week, before being deactivated. Once a connection is available again, and the credentials are validated, the rating capabilities are restored.

- *It must be able to process and rate a project locally*

The Squore Eclipse Plugin embeds the Squore rating module, much like Squore CLI.

This allows us to retrieve data from Data Providers, assemble them, and launch the Squore Analysis and Decision Engines.

Since the core module used for these phases are the exact same one used by Squore Server, the results are identical.

- *It must use a configuration (in terms of Analysis Model and Data Providers) synchronised with the one installed on Squore Server*

Since the Squore Eclipse Plugin uses a Squore rating module, it needs a rating environment, which must be synchronised with the server's, to ensure results equivalence.

The Squore Eclipse Plugin will perform such synchronisation during the product activation, which is a feature available in the Squore Eclipse Plugin preferences page.

- *It must be able to manage projects using other languages than Java (e.g. C, C++, C# Ada)*

The Squore Eclipse Plugin benefits from the Squore source code analyzer, which provides support for several languages (see Squore documentation for more details).

Analysis results will be available at folder and file level.

- *It must be integrated into the Eclipse IDE, taking advantage of its extensibility*

The Eclipse plugin development framework offers a number of mechanisms to enhance various parts of the IDE. The added features have been designed to be both unobtrusive and informative.

- *It must enhance a project's available information by displaying ratings, Action Items, Findings and highlights for each compatible object*

The added information is assigned to each artefact, which means at project, file, module, class and function level. Each of these elements will have a rating, as well as a list of Action Items and Findings, depending on the model. A search view offering project artefacts sorted by rating is also available.



→ *It must be able to manage local versions, which are dissociated from the source code control versioning mechanism*

One of the differences between the Squore Eclipse Plugin and Squore is that Squore Server uses a database to store the project builds across multiple versions, whereas the Squore Eclipse Plugin uses a local file storage mechanism, to maintain a local history.

This allows functions such as `DELTA_VALUE` or `PREVIOUS_VALUE` to work as expected, and produce trend analysis indicators.

The data used to produce that trend are these of the current version, and the last rated version.

## 2.2. Who is the Squore Eclipse Plugin destined to?

As hinted by its name, the Squore Eclipse Plugin is a developer tool. Its objective is to provide the user with enough information to help him:

- Process the generated action items list
- Check the evolution of the source code rating as it is being produced
- Find what artefacts are responsible for a poor rating, and understand why
- Anticipate and address problems that will appear in the project's daily Squore server build

As the Squore Eclipse Plugin seamlessly integrates Squore results in the IDE, and uses the same model as the one on Squore Server, developers will gain visibility over the evaluation process, and improve their development practices to match the standard defined by the model.

The integrated rating feedback also gives the developer the opportunity to actively participate to the global effort on quality improvement.

## 3. Installing and setting up the Squore Eclipse Plugin

### 3.1. Installation Prerequisites

#### 3.1.1. Supported Operating Systems

The following is a list of the officially supported and tested operating systems:

- CentOS 6
- CentOS 7
- Fedora 19
- Ubuntu Server 14.04
- Windows 7
- Windows 8
- Windows 10

#### **Note**

Only the 64-bit versions of these OSes are supported.

The following is a list of the operating systems that are not regularly tested but are known to be working:

- RedHat EL 6
- RedHat EL 7
- SuSe Linux 11.1
- Ubuntu Server 10.04
- Ubuntu Server 16.04
- Windows Server 2008 R2
- Windows Server 2012 R2

#### 3.1.2. For All Systems

For a successful installation of Squore, you will need:

- The latest version of the Squore Eclipse Plugin, which can be downloaded from [http://localhost:8180/SQuORE\\_Server/eclipse](http://localhost:8180/SQuORE_Server/eclipse)
- A user account with system administrator privileges
- The Oracle Java Development Kit version 1.8 or higher

#### **Warning**

- It is technically possible to run Squore using a 32-bit JRE, however this will limit the memory available to 1GB of RAM to run the application, which will result in poor performance. If you still want to attempt such an installation, consult the troubleshooting page at [http://openwiki.squoring.com/index.php/Running\\_Squore\\_On\\_A\\_32-bit\\_Java\\_Installation](http://openwiki.squoring.com/index.php/Running_Squore_On_A_32-bit_Java_Installation)
- An operational Eclipse IDE. The versions currently supported are:
  - 3.7 32 bits (Indigo)
  - 3.7 64 bits (Indigo)

- 4.2 32 bits (Juno)
- 4.2 64 bits (Juno)
- 4.3 32 bits (Kepler)
- 4.3 64 bits (Kepler)
- At least 2 GB of space available on the disk for a full installation
- At least 8 GB of RAM on the server machine
- At least 4 GB of RAM on the client machine

### 3.1.3. Packages for Windows

A compatible version of Eclipse must be downloaded from <http://www.eclipse.org/downloads/>.

### 3.1.4. Packages for Linux

On Linux platforms, the following must be installed before installing Squore:

- **Perl** version 5.10.1 or greater including the following extra-modules:
  - Mandatory packages:
    - **Algorithm::Diff** [module details] [<http://search.cpan.org/~nedkonz/Algorithm-Diff/lib/Algorithm/Diff.pm>]
    - **Archive::Zip** [module details] [<http://search.cpan.org/~phred/Archive-Zip/lib/Archive/Zip.pm>]
    - **Date::Calc** [module details] [<http://search.cpan.org/~stbey/Date-Calc/lib/Date/Calc.pod>]
    - **Digest::SHA** [module details] [<http://search.cpan.org/~mshelor/Digest-SHA/lib/Digest/SHA.pm>]
    - **HTTP::Request** [module details] [<http://search.cpan.org/~gaas/HTTP-Message/lib/HTTP/Request.pm>]
    - **JSON** [module details] [<http://search.cpan.org/~makamaka/JSON/lib/JSON.pm>]
    - **LWP** [module details] [<http://search.cpan.org/~ether/libwww-perl/lib/LWP.pm>]
    - **LWP::UserAgent** [module details] [<http://search.cpan.org/~gaas/libwww-perl/lib/LWP/UserAgent.pm>]
    - **Time::HiRes** [module details] [<http://search.cpan.org/~zefram/Time-HiRes/HiRes.pm>]
    - **XML::Parser** [module details] [<http://search.cpan.org/~toddr/XML-Parser/Parser.pm>]
  - Optional packages for working with Microsoft Excel:
    - **HTML::Entities** [module details] [<http://search.cpan.org/dist/HTML-Parser/lib/HTML/Entities.pm>]
    - **Spreadsheet::BasicRead** [module details] [<http://search.cpan.org/~gng/Spreadsheet-BasicRead/BasicRead.pm>]
  - Optional packages for working with OSLC systems:
    - **Date::Parse** [module details] [<http://search.cpan.org/~gbarr/TimeDate/lib/Date/Parse.pm>]
    - **WWW::Mechanize** [module details] [<http://search.cpan.org/~ether/WWW-Mechanize/lib/WWW/Mechanize.pm>]
    - **XML::LibXML** [module details] [<http://search.cpan.org/~shlomif/XML-LibXML/LibXML.pod>]
  - Optional packages for working with GitHub systems:
    - **Date::Parse** [module details] [<http://search.cpan.org/~gbarr/TimeDate/lib/Date/Parse.pm>]
    - **Mail::Box::Manager** [module details] [<http://search.cpan.org/~markov/Mail-Box/lib/Mail/Box/Manager.pod>]

- **Mail::Message::Body::Lines** [module details] [<http://search.cpan.org/~markov/Mail-Box/lib/Mail/Message/Body/Lines.pod>]
- **Mail::Message::Construct** [module details] [<http://search.cpan.org/~markov/Mail-Box/lib/Mail/Message/Construct.pod>]
- **Mail::Mbox::MessageParser** [module details] [<http://search.cpan.org/~dcoppit/Mail-Mbox-MessageParser/lib/Mail/Mbox/MessageParser.pm>]
- **Net::GitHub** [module details] [<http://search.cpan.org/~fayland/Net-GitHub/lib/Net/GitHub.pm>]
- Optional packages for working with Semios/Prometil systems:
  - **File::Slurp** [module details] [<http://search.cpan.org/~uri/File-Slurp/lib/File/Slurp.pm>]
- Optional packages for Advanced CSV Export Management:
  - **Text::CSV** [module details] [<http://search.cpan.org/~makamaka/Text-CSV-1.33/lib/Text/CSV.pm>]

### Tip

If some of these modules are not available as packages on your operating system, use your perl installation's cpan to install the modules. Using the OS packages is recommended, as it avoids having to reinstall via cpan after upgrading your version of perl.

- **Tcl** version 8.5 or greater,
- An Eclipse installation (Indigo and up)

## 3.1.5. Packages for CentOS and Red Hat Enterprise Linux

On Red Hat Enterprise Linux and CentOS (6.5 and 7.1), the dependencies are satisfied by the following packages:

### Mandatory packages:

- **java-1.8.0-openjdk**
- **perl**
- **perl-Algorithm-Diff**
- **perl-Archive-Zip**
- **perl-Date-Calc**
- **perl-Digest-SHA**
- **perl-JSON**
- **perl-libwww-perl**
- **perl-Time-HiRes**
- **perl-XML-Parser**
- **tcl**
- A compatible installation of Eclipse downloaded from <http://eclipse.org/downloads> .

### Optional packages for working with Microsoft Excel:

- **perl-HTML-Parser**
- **perl-CPAN** (CPAN utility requirement)
- **perl-Spreadsheet-ParseExcel** (available in the EPEL repository)

→ **perl-Spreadsheet-XLSX** (available in the EPEL repository)

### Warning

The module **Spreadsheet::BasicRead** is not available as a package and must therefore be installed using `cpan` (make sure `cpan` is properly configured, by running `cpan` without arguments first):

```
sudo cpan -i Spreadsheet::BasicRead
```

### Optional packages for working with OSLC systems:

- **perl-TimeDate**
- **perl-WWW-Mechanize** (available in the EPEL repository)
- **perl-XML-LibXML**

### Optional packages for working with GitHub systems:

- **perl-TimeDate**
- **perl-Mail-Box** (available in the EPEL repository)
- **perl-Mail-Mbox-MessageParser** (available in the EPEL repository)
- **perl-Net-GitHub** (available in the EPEL repository)

### Optional packages for working with Semios/Prometil systems:

- **perl-File-Slurp**

### Optional packages for Advanced CSV Export Management:

- **perl-Text-CSV** (available in the EPEL repository)

For more information about how to install the Extra Packages for Enterprise Linux (EPEL) repository, consult <https://fedoraproject.org/wiki/EPEL>.

## 3.1.6. Packages for Ubuntu

On Ubuntu 14.04.3 LTS, the dependencies are satisfied by the following packages:

### Mandatory packages:

- **libalgorithm-diff-perl**
- **libarchive-zip-perl**
- **libdate-calc-perl**
- **libhttp-message-perl**
- **libjson-perl**
- **libwww-perl**
- **libxml-parser-perl**
- **openjdk-8-jre**
- **perl**
- **tcl**
- A compatible installation of Eclipse downloaded from <http://eclipse.org/downloads>.

**Optional packages for working with Microsoft Excel:**

- **make** (CPAN utility requirement)
- **libhtml-parser-perl**
- **libspreadsheet-parseexcel-perl**
- **libspreadsheet-xlsx-perl**

**Warning**

The module **Spreadsheet::BasicRead** is not available as a package and must therefore be installed using **cpan** (make sure **cpan** is properly configured, by running **cpan** without arguments first):

```
sudo cpan -i Spreadsheet::BasicRead
```

**Optional packages for working with OSLC systems:**

- **libtimedate-perl**
- **libwww-mechanize-perl**
- **libxml-libxml-perl**

**Optional packages for working with GitHub systems:**

- **libtimedate-perl**
- **libmail-box-perl**
- **libmail-mbox-messageparser-perl**
- **libnet-github-perl**

**Optional packages for working with Semios/Prometil systems:**

- **libfile-slurp-perl**

**Optional packages for Advanced CSV Export Management:**

- **libtext-csv-perl**

## 3.2. Third-Party Plugins and Applications

If you have deployed some third-party tools on Squore Server, they will automatically be downloaded to your client when you launch the client synchronisation script.

**Tip**

AntiC and Cppcheck on Linux also require special attention: Cppcheck must be installed and available in the path, and antiC must be compiled with the command:

```
# cd <SQUORE_HOME>/addons/Antic_auto/bin/ && gcc antic.c -o antic
```

For more information, refer to the Command Line Interface Manual, which contains the full details about special installation procedures for Data Providers and Repository Connectors.

## 3.3. Squore Eclipse Plugin installation

The Squore Eclipse Plugin complies with the Eclipse requirements, and is an OS-independent package to be deployed in the Eclipse plugins directory. Installation is done through an update site.

**Tip**

In order to launch analyses, the plugin needs to use an installation of perl and tclsh. If you are using a Windows operating system, the easiest way to install both dependencies is to install the Squore CLI package on your machine.

- Create a new update site within Eclipse
  - Select **Help > Install new software;**
  - Click on **Available Software Sites;**
  - Add a new site;
  - Give it a name (for example: "Squore Eclipse Plugin");
  - Set the location to **http://localhost:8180/SQuORE\_Server/eclipse**
- Go back to the **"Install"** window with the **"OK"** buttons;
- Select the newly created update site;
- Proceed with the plugin installation as with any Eclipse plugin.

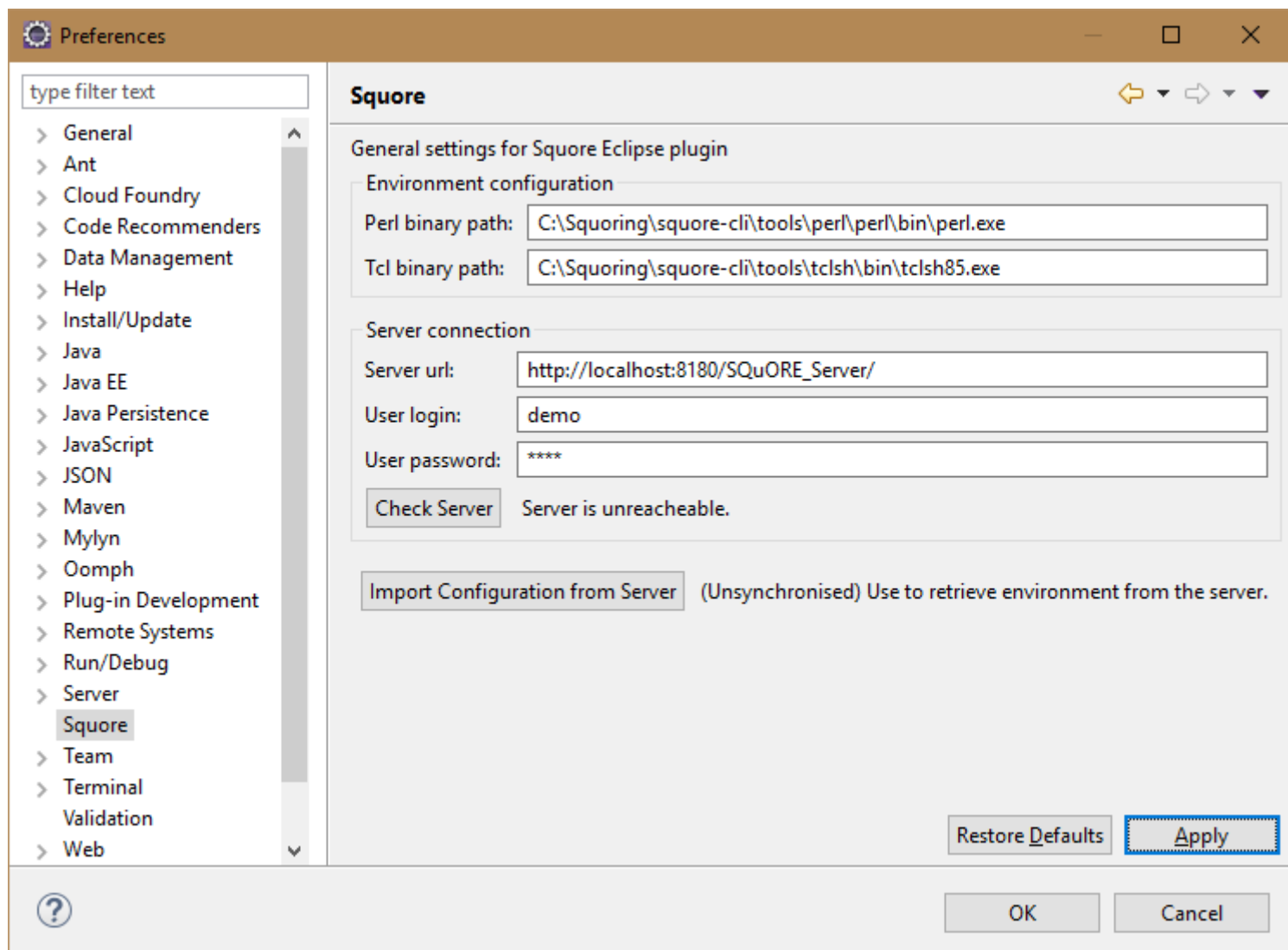
**Note**

- If the Squore Eclipse Plugin does not appear, please uncheck "Group items by category".
- To speed-up installation procedure, it is possible to uncheck "Contact all update sites during install to find required software", as no external software is needed by the Squore Eclipse Plugin.
- Should the plugin fail to deploy, Eclipse will notify the user of the problem cause, and will start its operations as usual. If necessary, copy and send the generated Eclipse log to support@squoring.com.

## 3.4. Squore Eclipse Plugin setup

To use the Squore Eclipse Plugin, it must be activated, the server must be reachable with proper credentials, and rating preferences must be provided.

All these operations are accessible through the **Window > Preferences > Squore** page. Note that all provided information uses the Eclipse secure storage.



The Squore Eclipse Plugin preferences page

Fill in the paths to the perl and tclsh executables and the server details and click **Check Server** to ensure that your configuration is correct.

If you can successfully connect to the server, click **Import Configuration from Server** to synchronise your environment with the one from Squore Server.

When the synchronisation finishes, click **OK** to close the preferences window.

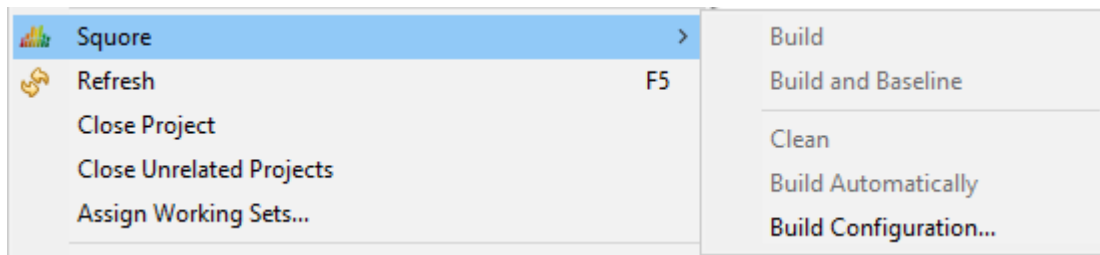


## 4. Getting Started With the Squore Eclipse Plugin

### 4.1. Launching Your First Analysis

Once the Squore Eclipse Plugin is installed in Eclipse, obtaining a rating for your project is rather straightforward.

First locate the Squore contextual menu entry for the project you want to rate.

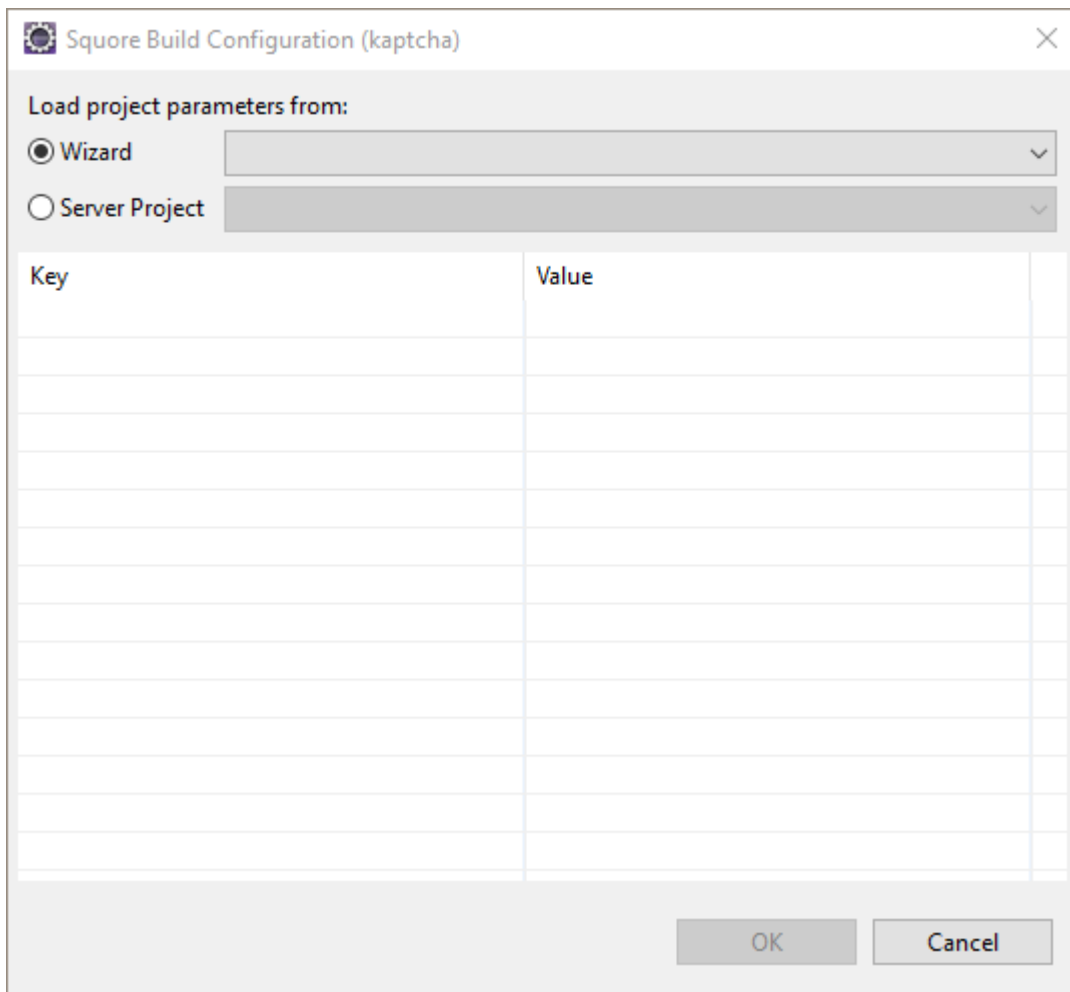


Contextual menu on an Eclipse project

Rating (or "building") a project with Squore Eclipse Plugin can either be performed as a baseline build or a draft build.

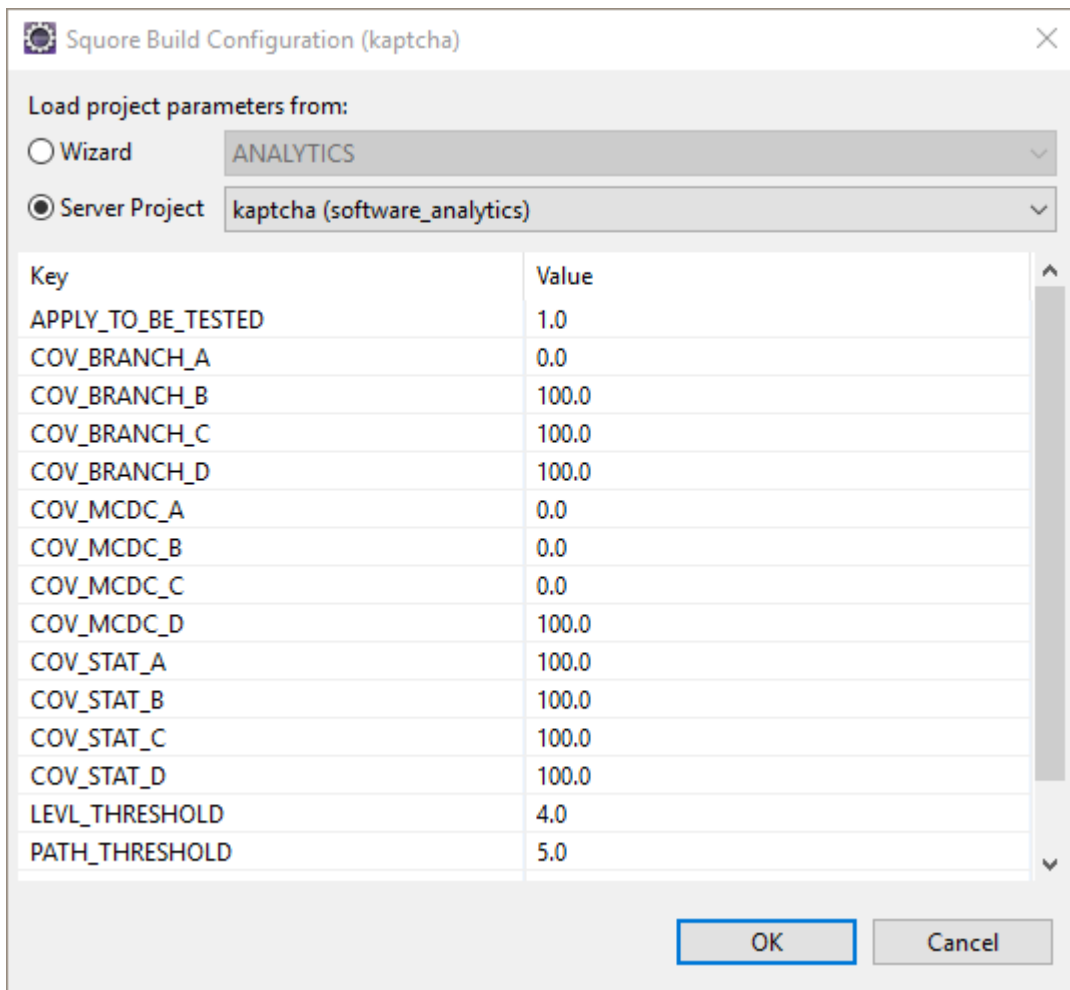
- When choosing baseline build, the project rating will produce a new reference version, with which all subsequent ratings will be compared to. This will affect rating computations based on metrics previous values, as well as all trends displayed in the Squore Eclipse Plugin views.  
The baseline mode is useful when a stable state of the project has been reached, and a development phase is about to begin.
- When choosing draft build, the project is rated as usual, but the reference version is not modified. Multiple draft builds will always compare to the last defined baseline.  
The draft mode is useful during a development phase, when the project can undergo several back and forth changes, and the user wants to keep comparing the current version to the last stable one.

Before you can build a project, you first need to define its build configuration:



The Build Configuration screen

On the Build configuration screen, you can choose an analysis model for your project, or you can select the project on the server that corresponds to the code you are working on locally. By selecting an existing project, you can retrieve the project attributes from the server, and therefore run your local analysis in the same conditions as it is run on the server.



Project options for the kaptcha project on the server

Click **OK** to close the configuration dialogue. You are now ready to start building your project using the draft or baseline submenu in the Squore Eclipse Plugin context menu.

## 4.2. Visualising Analysis Results

After your analysis completes, switch to the Squore perspective to view the results.

### Tip

Click **Window > Perspective > Open Perspective > Other** and search for **Squore** in the list of available perspectives if you are using it for the first time.

The Squore perspective displays various views with information relative to the file or folder you click in the Project Explorer.

neon - Squore - kaptcha/src/java/com/google/code/kaptcha/core/FishEyeGimpy.java - Eclipse

Source Refactor Navigate Search Project Run Window Help

Quick Access

DefaultNoise.java FishEyeGimpy.java

```

1 package com.google.code.kaptcha.core;
2
3 import java.awt.Color;
4
5
6
7
8
9 /**
10  * {@link FishEyeGimpy} adds fish eye effect with vertical and horizontal
11  */
12 public class FishEyeGimpy implements GimpyEngine
13 {
14     /**
15      * Applies distortion by adding fish eye effect and horizontal vertical
16      * lines.
17      *
18      * @param baseImage the base image
19      * @return the distorted image
20      */
21     public BufferedImage getDistortedImage(BufferedImage baseImage)
22     {
23
24         Graphics2D graph = (Graphics2D) baseImage.getGraphics();
25         int imageHeight = baseImage.getHeight();
    
```

System Library [JavaSE-1.8]

com
 

- google
  - code
    - kaptcha
      - core
        - DefaultBackground
        - DefaultKaptcha.java
        - DefaultNoise.java
        - FishEyeGimpy.java
        - NoNoise.java
        - ShadowGimpy.java
        - WaterRipple.java
      - impl
      - Servlet
      - text
      - util

Squore Card Action Items Findings Highlights Console

FishEyeGimpy.java

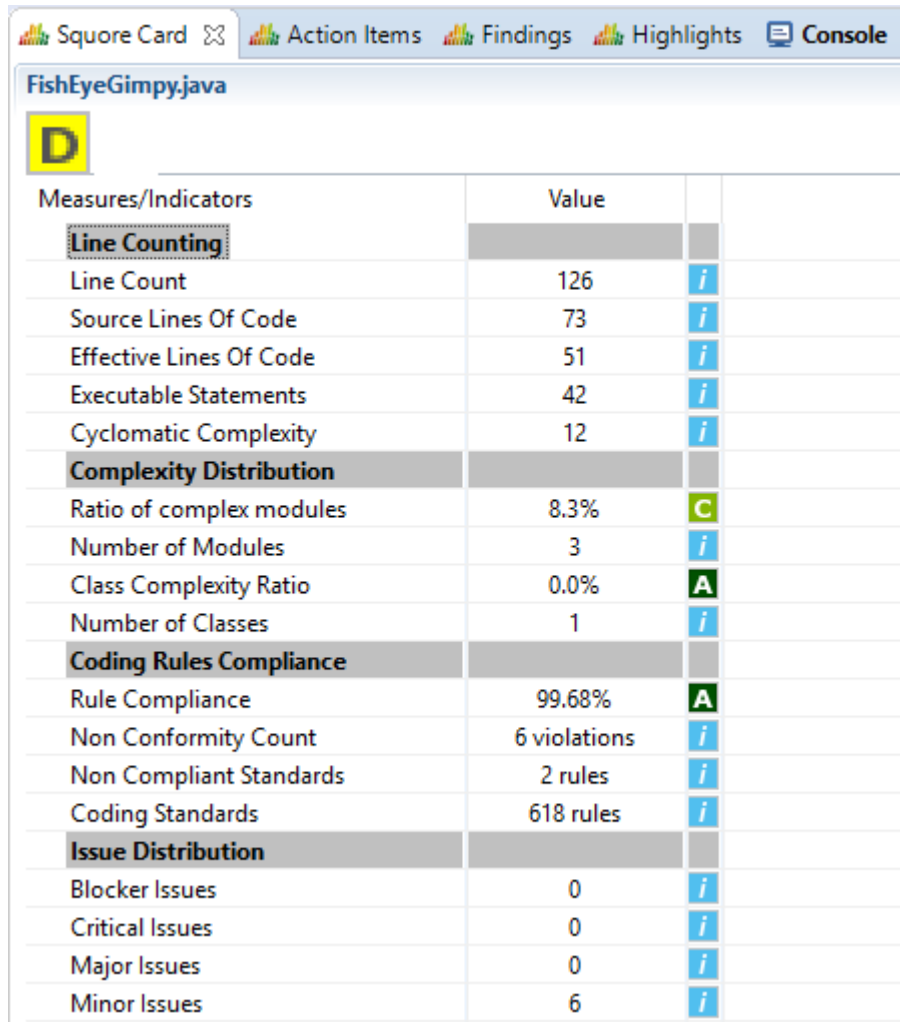
Measures/Indicators	Value	
<b>Line Counting</b>		
Line Count	126	<i>i</i>
Source Lines Of Code	73	<i>i</i>
Effective Lines Of Code	51	<i>i</i>
Executable Statements	42	<i>i</i>
Cyclomatic Complexity	12	<i>i</i>
<b>Complexity Distribution</b>		
Ratio of complex modules	8.3%	C
Number of Modules	3	<i>i</i>
Class Complexity Ratio	0.0%	A
Number of Classes	1	<i>i</i>
<b>Coding Rules Compliance</b>		
Rule Compliance	99.68%	A

The Squore Perspective with the Squore Card, Action items, Findings and Highlights views in the bottom panel

Click a file or folder in the Project Explorer and use one of the following views in the bottom panel to understand your rating:

→ The Squire Card view

displays the overall rating for the current artefact, and its trend. It also lists the tables of interests for this artefact, as defined in the Analysis Model used to rate the project.

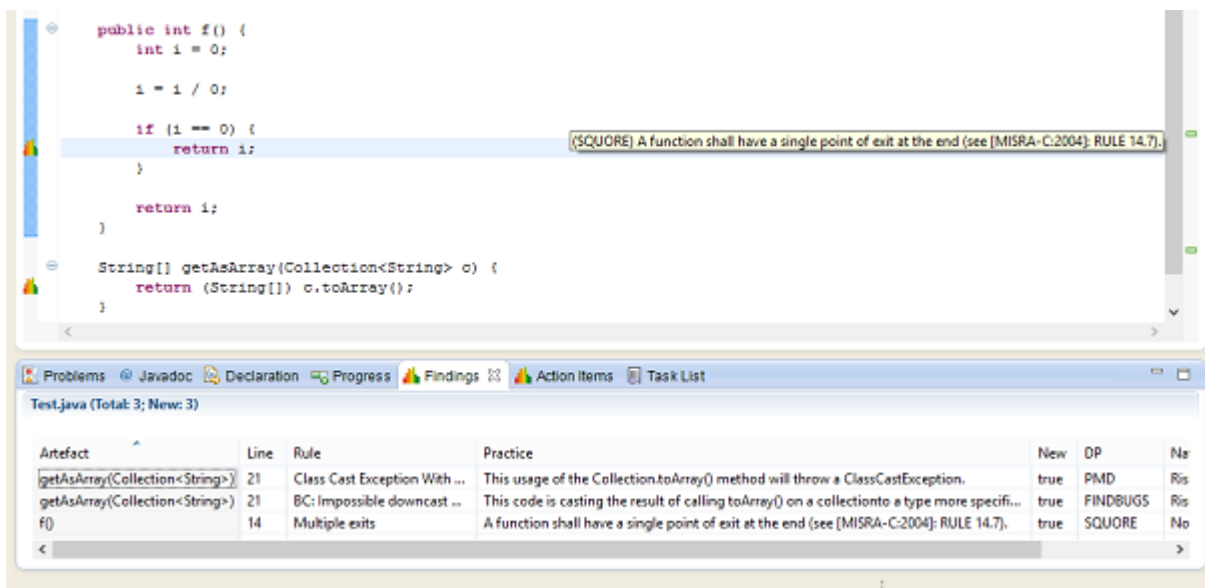


Measures/Indicators	Value	
<b>Line Counting</b>		
Line Count	126	<i>i</i>
Source Lines Of Code	73	<i>i</i>
Effective Lines Of Code	51	<i>i</i>
Executable Statements	42	<i>i</i>
Cyclomatic Complexity	12	<i>i</i>
<b>Complexity Distribution</b>		
Ratio of complex modules	8.3%	<b>C</b>
Number of Modules	3	<i>i</i>
Class Complexity Ratio	0.0%	<b>A</b>
Number of Classes	1	<i>i</i>
<b>Coding Rules Compliance</b>		
Rule Compliance	99.68%	<b>A</b>
Non Conformity Count	6 violations	<i>i</i>
Non Compliant Standards	2 rules	<i>i</i>
Coding Standards	618 rules	<i>i</i>
<b>Issue Distribution</b>		
Blocker Issues	0	<i>i</i>
Critical Issues	0	<i>i</i>
Major Issues	0	<i>i</i>
Minor Issues	6	<i>i</i>

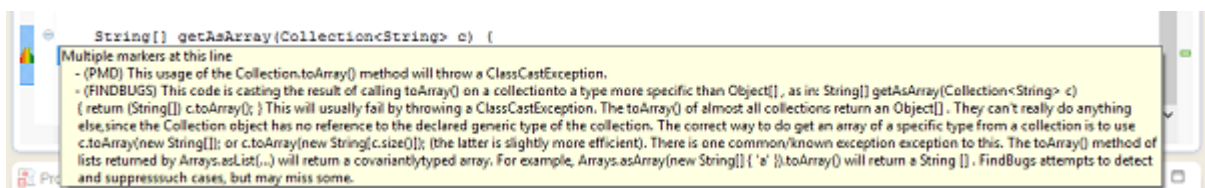
The Squire card

→ The Findings view

lists the Findings for the current artefact as well as underlying artefacts, with their location and definition details. This list can be sorted, and allows navigation to artefacts associated to each finding by double-clicking on their name.

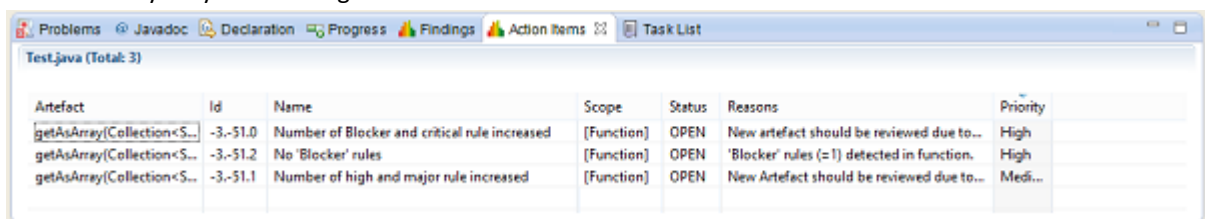


A finding and its location in the source code



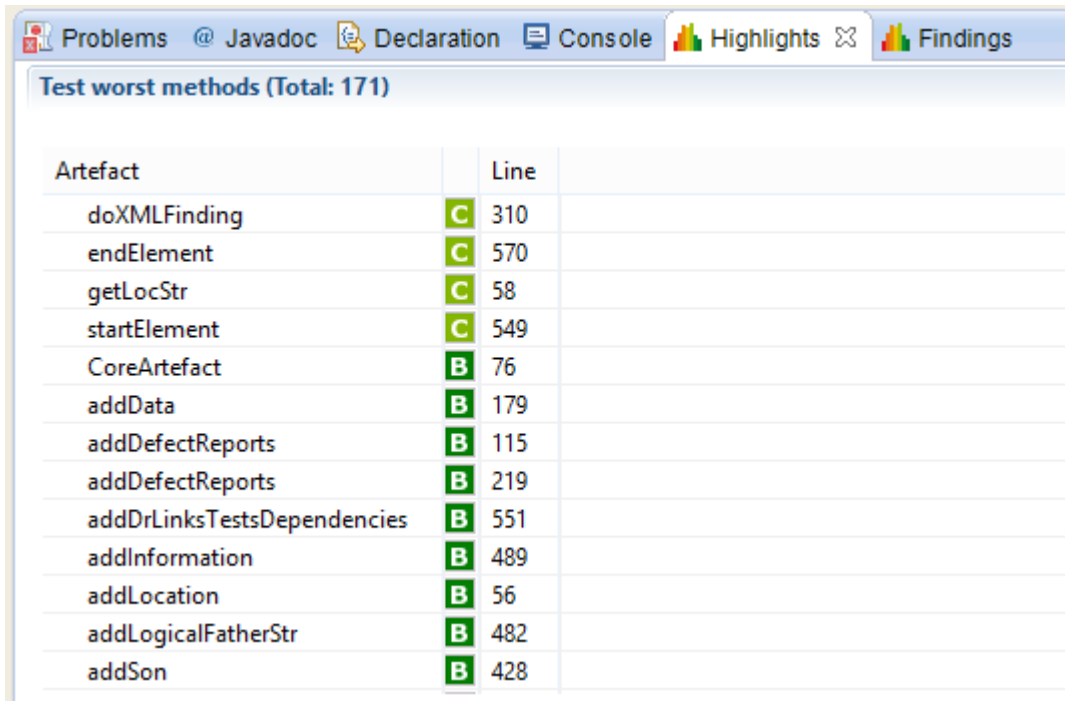
A finding full description

- The Action Items view works much like the Findings one, except it lists the Action Items computed by the Decision Model, and the reason why they have been generated.



Action Items

- The Highlights view works much like the Findings one, except it provides a list of the current project's Files, Classes or Functions, sorted by decreasing rating. Selecting the type of object to sort (File, Class or Function) is performed through the top-left menu icons.



The screenshot shows the Eclipse IDE interface with the 'Highlights' view active. The view title is 'Test worst methods (Total: 171)'. Below the title is a table listing various artefacts and their corresponding quality grades and line numbers.

Artefact	Grade	Line
doXMLFinding	C	310
endElement	C	570
getLocStr	C	58
startElement	C	549
CoreArtefact	B	76
addData	B	179
addDefectReports	B	115
addDefectReports	B	219
addDrLinksTestsDependencies	B	551
addInformation	B	489
addLocation	B	56
addLogicalFatherStr	B	482
addSon	B	428

Highlights

### Tip

Only the highlights created for the role **PLUGIN** are displayed in Eclipse. For more information about configuring highlights in your model, refer to the Configuration Guide.

## Index

### A

Action Items view, 17

### B

Baseline build, 12

### D

Disk Space, 6

Draft build, 12

### F

Findings view, 16

### H

Highlights view, 17

### J

Java, 5

### M

Memory, 6, 6

### P

Prerequisites, 5

### S

Square Card view, 16