# Scribble Java Eclipse Guide

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## **Chapter 1. Installation**

#### Download Eclipse

The Scribble Java tools are installed as plugins within the Eclipse Integrated Development Environment (IDE).

Therefore the first step is to download a copy of Eclipse from *http://www.eclipse.org/downloads*. This download page includes various configurations of the IDE customised for specific needs. However if you are simply wanting to experiment with the Scribble tooling then it is best to initially just use the standard version.

• Start Eclipse

Once you have downloaded Eclipse, and unpacked it into an appropriate location, start it up by running the *eclipse* command in the top level folder.

• Install Scribble Java Tooling

Go to the Help  $\rightarrow$  Install New Software... menu item. This will show a dialog window.

Enter the URL *http://download.jboss.org/scribble/tools/latest* into the *Work With* field and press the return key. This will show the available Eclipse features and plugins (from this update site) in the main window. Select the checkbox against the top level *Scribble* node and then press the Next button and following the remaining instructions.

When the plugins have been installed you will need to restart the Eclipse IDE when requested.

## Chapter 2. How To ...

This chapter will describe how the Scribble tooling can be used within the Eclipse IDE.

### 2.1. Create a Scribble Protocol

Before being able to create a protocol, we need to first create an Eclipse project, if one does not already exist. This is achieved by selecting the  $New \rightarrow Project \dots$  menu item from the context menu associated with the *Project Explorer*, which appears on the left hand side of the Eclipse tool.

This will result in a dialog box being displayed showing the different types of project that can be created. If the project is not required for any other purpose, then expand the *General* top level node and choose the *Project* child node. Press the Next button and then enter the project name before pressing the Finish button.

Once a project has been created (or selected if already exists), then we need to create a hierarchy of folders representing the module path within which the protocol will be defined.

A folder is created by selecting  $New \rightarrow Folder$  menu item from the context menu associated with either the project, or a parent folder. This will show a dialog window in which the new folder's name can be specified.

Once the appropriate folder hierarchy has been created, then the next step is to create the protocol file. This can be achieved by selecting the  $New \rightarrow Other \dots$  menu item from the context menu associated with the containing folder. This will present a dialog window with the list of items that can be created. Expand the top level *Scribble* node and select the *Protocol* child node. When the Next button is pressed it will offer the ability to enter the name of the protocol. Finally press the Finish button to create the file.

When the protocol file is created, it will also launch the editor for the file. For further information, on how to edit the protocol, see the next section.

#### 2.2. Edit a Scibble Protocol

To edit a Scribble protocol file (with extension *.scr*) simply locate the file within the *Project Explorer*, by expanding the relevant project and folders, and then double click on the file to launch the Scribble editor.

The editor will appear in the main area. It is essentially a standard text editor, although will provide some guidance (e.g. keyword highlighting).

When a change has been made to the file, an astrisk will appear against the filename to indicate that it is in a *dirty* state. To save the file, use Ctrl-S, Alt-F followed by S, or the disc icon in the top left part of the toolbar.

#### 2.3. Validate a Scribble Protocol

When a protocol is edited, and saved, it will automatically trigger the validation of the protocol.

An issues that are found with the protocol will be displayed in the *Markers* view (window) in the bottom region of the Eclipse window. Double clicking on any of the errors in this area will navigate to the protocol file (and specific text in that file).

### 2.4. Project a Global Protocol

Projecting a Global Protocol will create a set of Local Protocols, one per role within the Global Protocol. To perform this task, select the *Scribble*  $\rightarrow$  *Project* menu item from the context menu associated with the Scribble protocol file in the *Project Explorer*.

This will cause the local protocol files to be created in the same folder as the global protocol. This is because they are associated with the same module. However the filename will be appended with the role, indicating that it is a local protocol associated with that role.