

Rational Integration Tester



SCM Application Guide

Version 8.0.0

Note

Before using this information and the product it supports, read the information in “Notices” on page 33.

This edition applies to version 8.0.0 of Rational Integration Tester and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this Publication

Contents

Intended Audience

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This guide provides information about using the Source Control Management (SCM) application in IBM® Rational® Integration Tester, including how to install additional plugins to enable the synchronisation of Rational Integration Tester projects with various source control management (SCM) systems.

Intended Audience

This document is intended for users who are familiar with Rational Integration Tester and the SCM applications with which they intend to synchronize.

Scope

This document is about Rational Integration Tester and its built-in SCM application – it does not discuss specific SCM applications (for example, CVS, SVN, and so on). If you wish to familiarize yourself with such technologies, please refer to the documentation that is provided by the relevant companies or individuals.

Typographical Conventions

The following typographical conventions are observed throughout this document:

Type	Usage
Constant width	Program output, listings of code examples, file names, commands, options, configuration file parameters, and literal programming elements in running text.
<i>Italic</i>	Document title names in statements that refer you to other documents. Also used to highlight concepts when first introduced.
Bold	Menu items in graphical user interface windows (such as Microsoft Windows-based or UNIX X Window applications) from which you select options or execute macros and functions. Submenus and options of a menu item are indicated with a “greater than” sign, such as Menu > Submenu or Menu > Option .

Contacting IBM Support

To contact IBM Support, see: www.ibm.com/contact/us/en/

Overview

Contents

SCM and Rational Integration Tester

This chapter provides information about using Rational Integration Tester's SCM application to manage projects.

1.1 SCM and Rational Integration Tester

Utilizing source control management (SCM) with Rational Integration Tester is a reliable way to share projects among multiple users without having to manually provide version control and rollback capabilities.

Support for different SCM systems is provided by the installation of Eclipse Team Provider plug-ins. Support for CVS is enabled by default. If you wish to share and synchronize projects by means of another team provider, you will have to install it.

The following chapters provide information about how to access the source control features in Rational Integration Tester. Additionally, an example of how to add the features of another team provider is included.

Getting Started

Contents

Check In a Project

Check Out a Project

Using the SCM Application

This chapter provides information about sharing a Rational Integration Tester project with the SCM application, and describes the basic functionality of the tool.

2.1 Check In a Project

After Rational Integration Tester has been installed, you can immediately start using the source control features of the product.

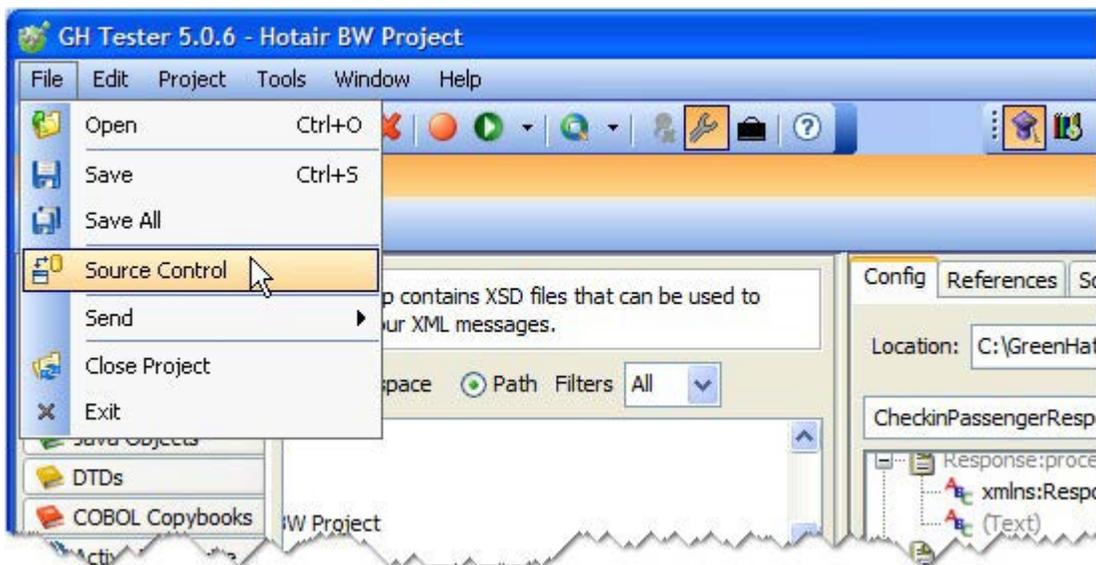
NOTE: You may wish to review the *IBM Rational Integration Tester Getting Started Guide* or the *IBM Rational Integration Tester Reference Guide* (or at least have them available for reference) to learn more about getting started with Rational Integration Tester and projects.

This section provides information about how to share an existing Rational Integration Tester project. For information about how to use the SCM application while working in your project, see [Using the SCM Application](#).

Follow the steps below to share a Rational Integration Tester project using the SCM application.

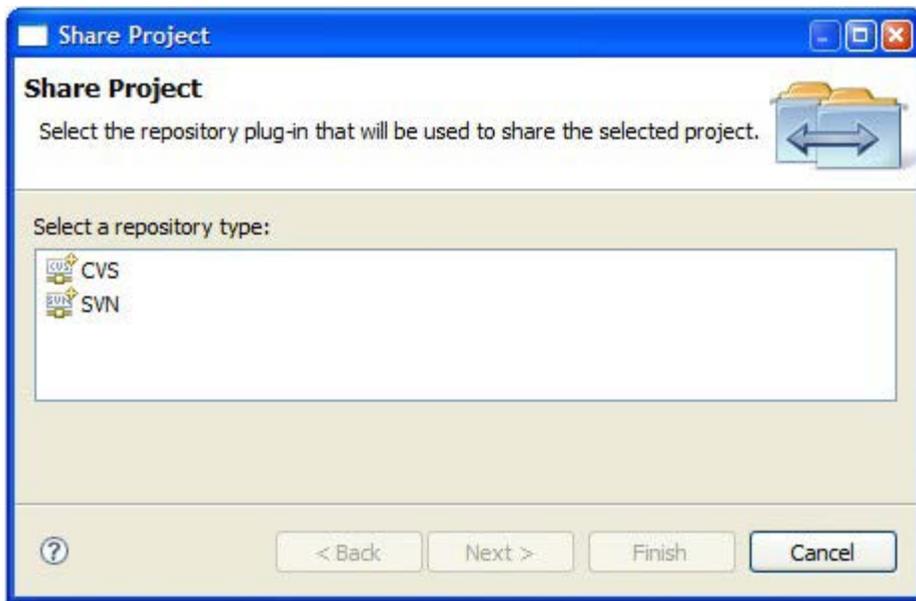
NOTE: The example illustrated in the following steps utilizes an SVN repository, enabled with the Subclipse Team Provider. See [Team Providers](#) for more information about adding different providers.

1. Launch Rational Integration Tester and create a new project or open an existing project.
2. Select **Source Control** from the **File** menu.



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- If no other providers are installed (that is, only CVS), the CVS repository location window is displayed. If additional providers are available, however, you can select one and click **Next**.

NOTE: If the current project has already been shared by means of source control, the project will be displayed in the GH Tester Tools window (see step 12).



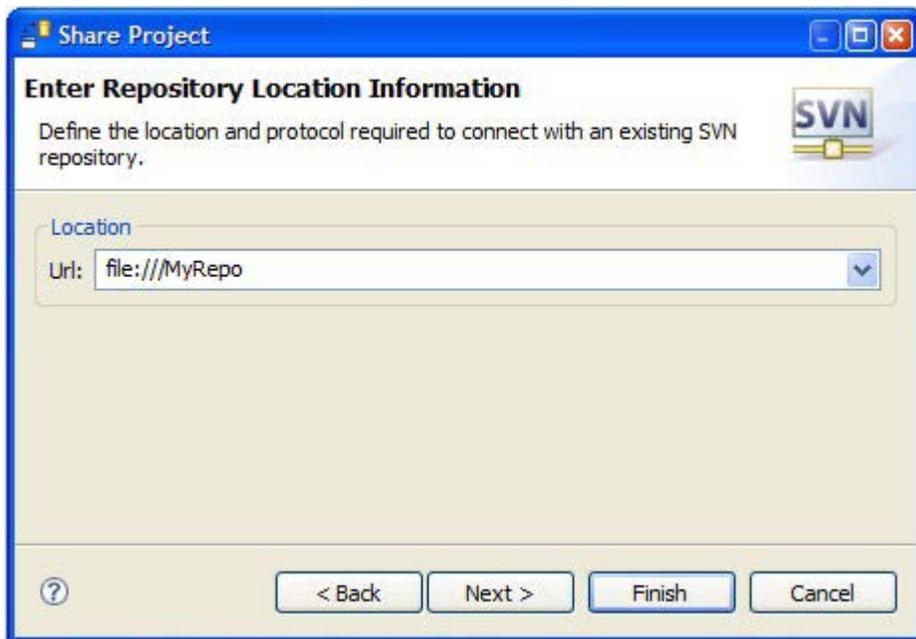
NOTE: If you need to add support for another team provider, click **Cancel** and refer to [Team Providers](#).

NOTE: Depending on the selected provider, you must configure the connection to an existing repository using the screens provided (they differ for each provider). The remaining steps in this example illustrate how to share the project using the SVN (Subclipse) provider.

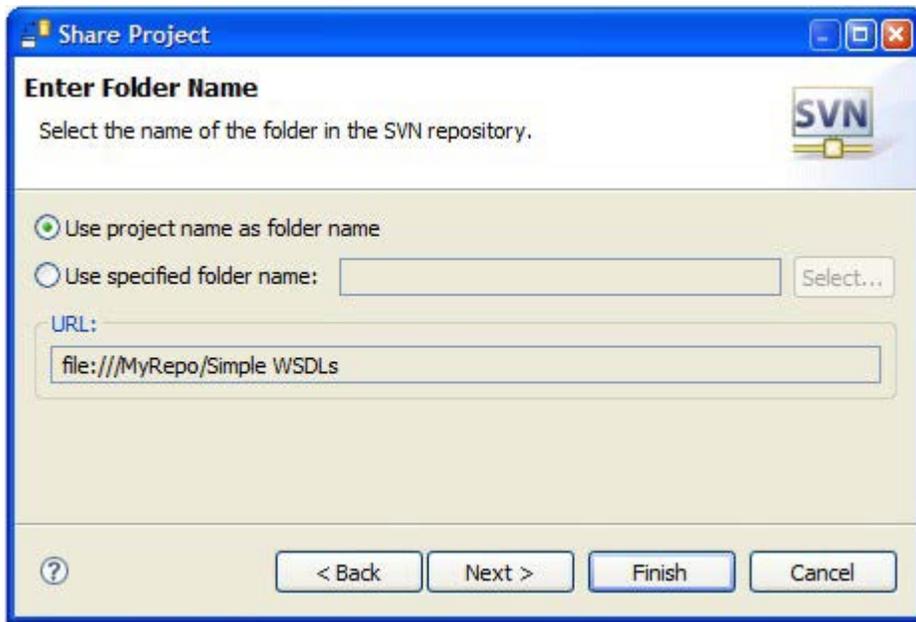
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4. Select whether you want to create a new repository location or use an existing location, then click **Next**. In this example, the new location is selected.



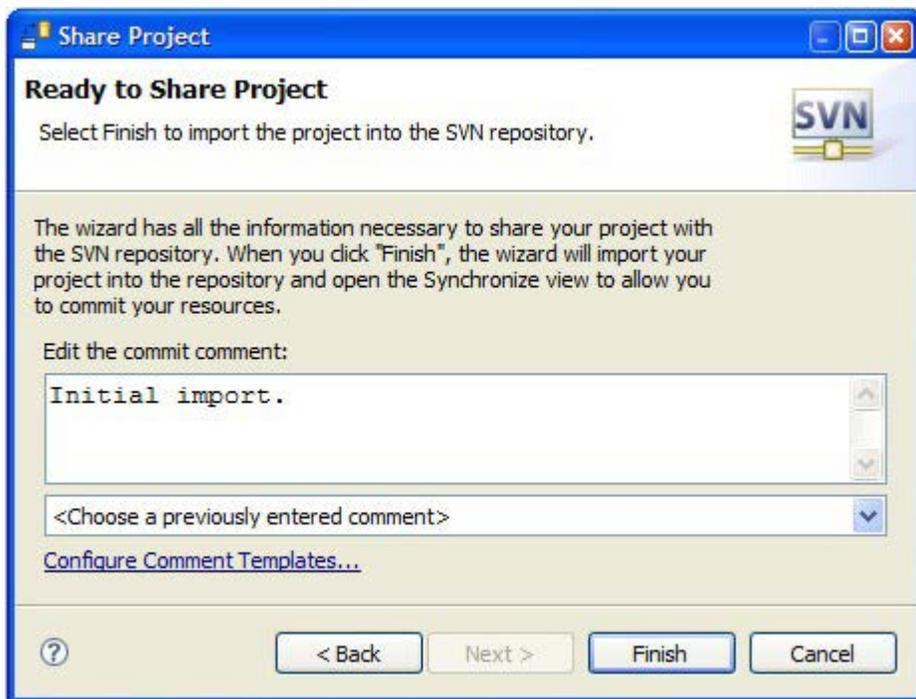
5. Enter the repository URL or select from the list of recently used URLs, then click **Next**.



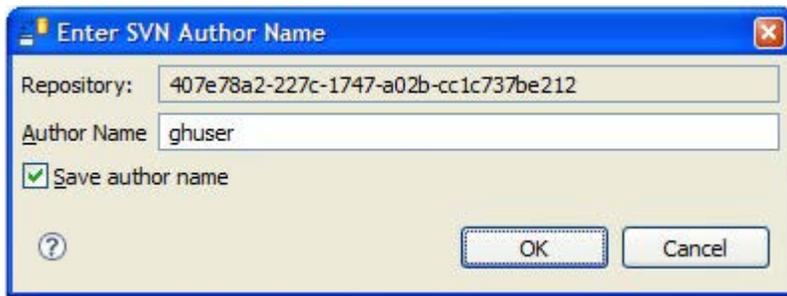
-
6. Select whether you want to use the project name as the folder name in the repository or a new (specified) name, then click **Next**.



7. When the project is ready to share, you can enter any desired comments or select from any previously entered comments, then click **Finish**.

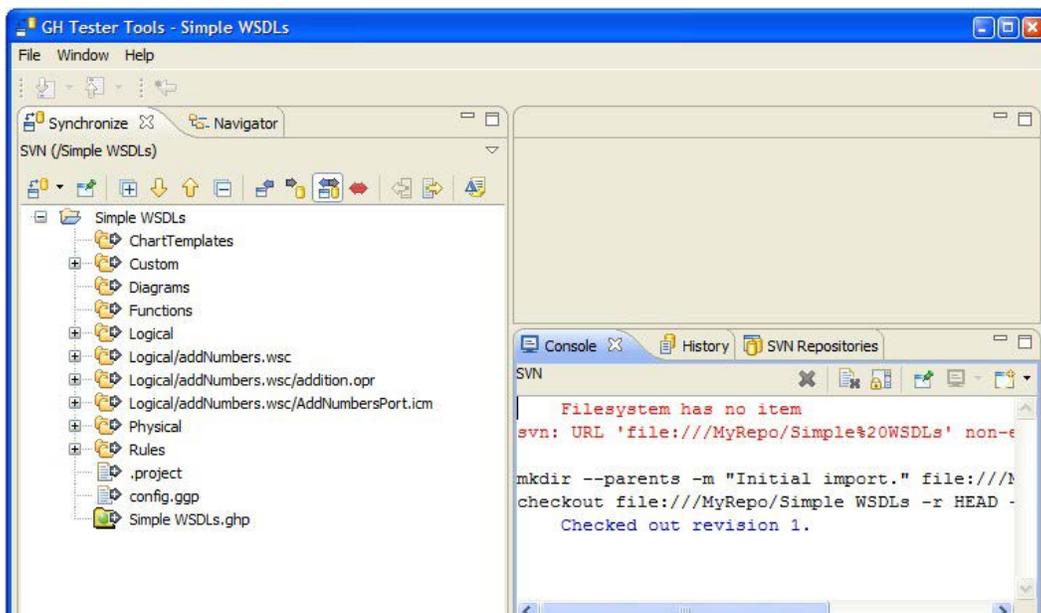


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- If prompted, you can enter an SVN author name for the new project, then click **OK** to proceed.



When finished, the **GH Tester Tools** window is displayed and the shared project is shown under the **Synchronize** tab.

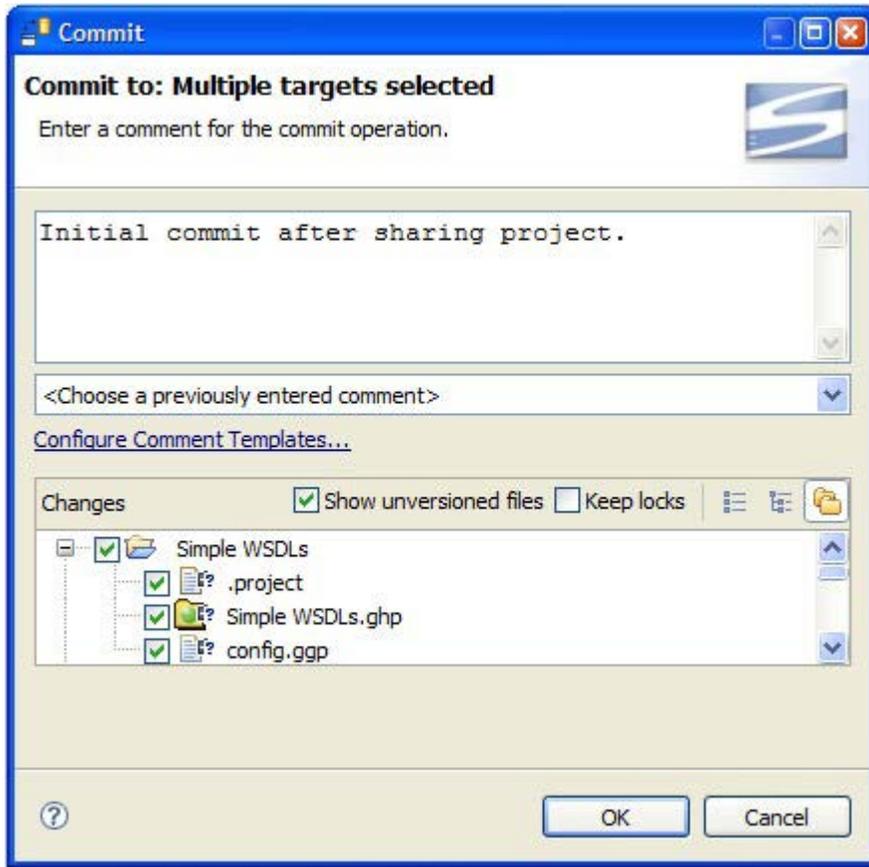
- Expand the project folder to see all of the components that it contains.



The  icon indicates an outgoing change in a component (that is, the updated item has not yet been committed to the repository).

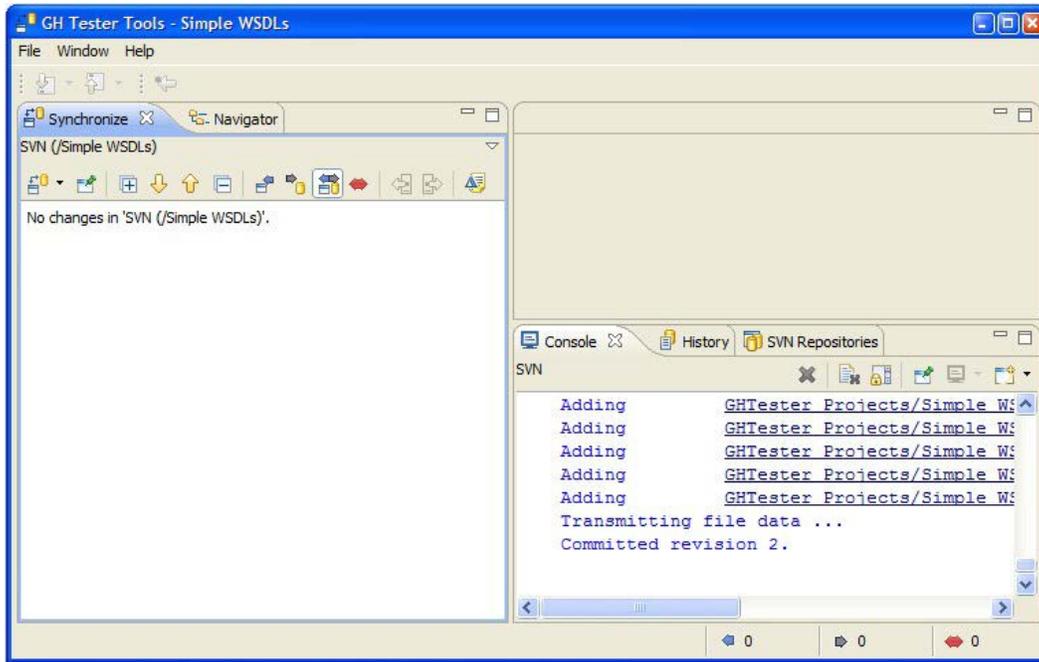
- Click the **Commit All Outgoing Changes** icon  to commit the project to the repository.

11. In the **Commit** dialog, enter any desired comments and click **OK**.



NOTE: The entire project should be committed because selecting individual components could cause problems.

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12. Once the project is committed and checked in, it is displayed in the **GH Tester Tools** window.



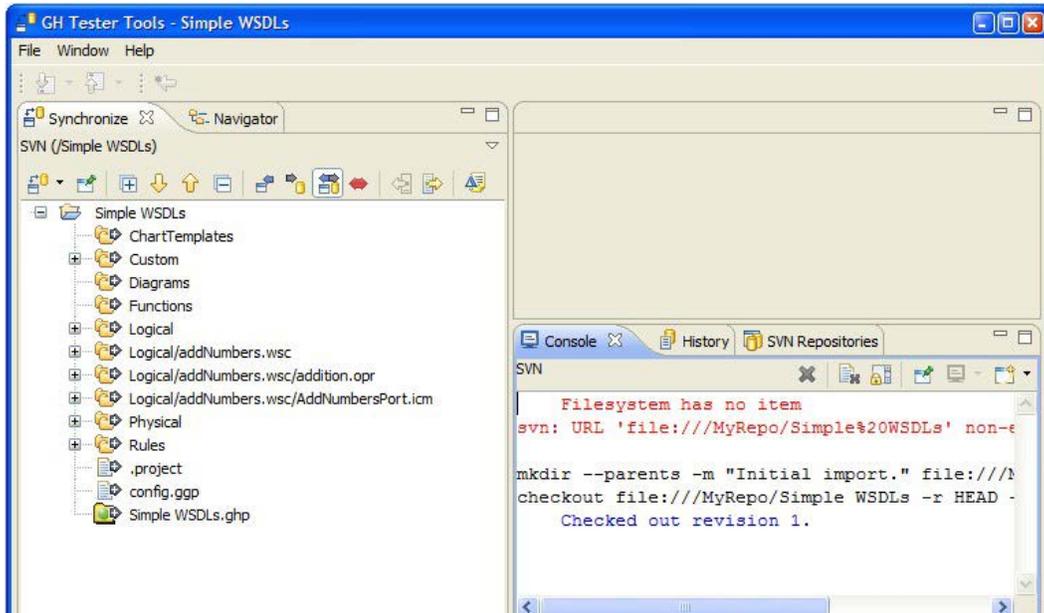
2.2 Check Out a Project

While a project can be checked out from the SCM application, such projects should be opened by using the Fetch Project from Source Control option when starting Rational Integration Tester.

For more information, refer to *IBM Rational Integration Tester Reference Guide*.

2.3 Using the SCM Application

The SCM application is run in the **GH Tester Tools** window, available from the **File > Source Control** menu option.



This section describes the available features in the application, including how to work in projects between Rational Integration Tester and the SCM application.

By default, four views are displayed in the SCM application – [Synchronize](#), [Navigator](#), [Console](#), and [History](#). Other views can be displayed by selecting **Window > Show View > Other...** and selecting the desired view from the dialog that is displayed.

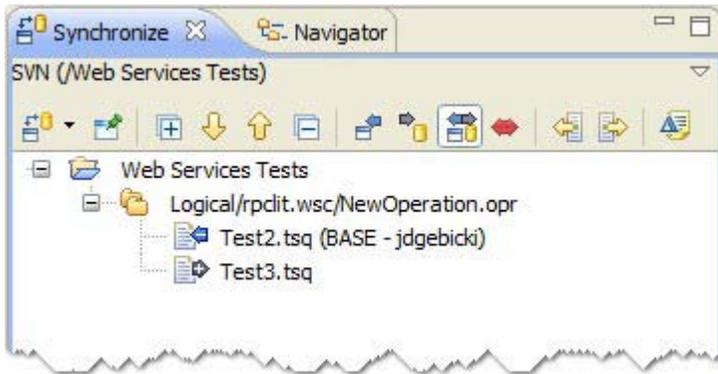
NOTE: The contents of the SCM application are updated by selecting **File > Source Control** in Rational Integration Tester. There is no other way to refresh the view in the SCM application.

When working in a project under SCM, it is useful to return to the SCM application from time to time to review any changes or conflicts that might exist (for example, if another user has opened the same project). To keep your current Rational Integration Tester project up to date, select **File > Source Control** and review any potential changes in the [Synchronize](#) view of the SCM application. If any resources in your Rational Integration Tester project are unsaved, click the **Save All** button  to save them.

Incoming and outgoing changes can be updated/committed using the toolbar in the [Synchronize](#) view. Committed changes will be reflected in the repository, and incoming updates will be reflected in your open Rational Integration Tester project.

2.3.1 Synchronize

The **Synchronize** view displays the current project, highlighting any changes or conflicts that exist between the Rational Integration Tester project and the current version in the repository.

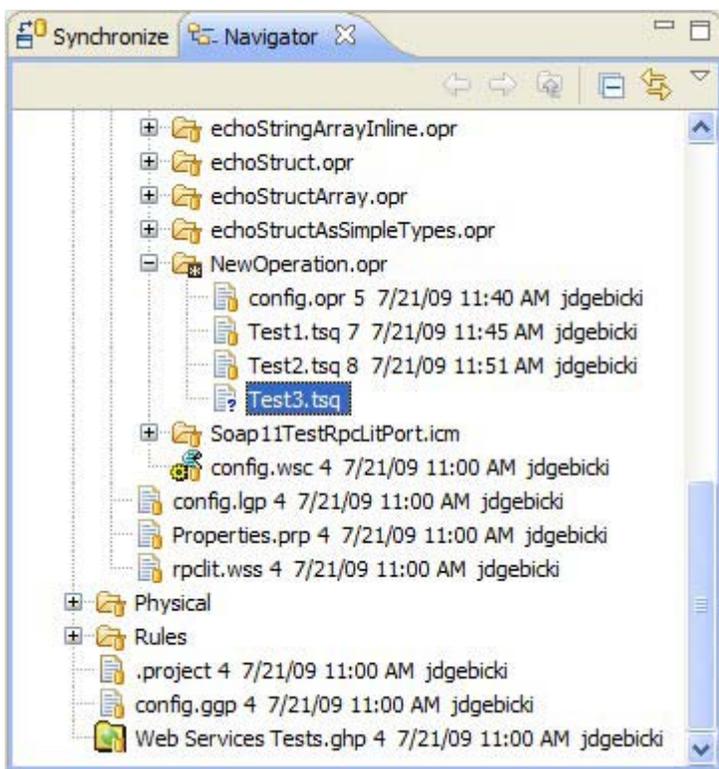


The toolbar in the **Synchronize** view provides features that help you navigate the project tree and resolve differences in the project. The individual toolbar icons are described below:

Icon	Description
	Switch between opened projects or open/synchronize with another project.
	Pins the current synchronization.
	Expands the entire project tree.
	Moves to the next difference in the project.
	Moves to the previous difference in the project.
	Collapses the entire project tree.
	Incoming mode shows changes made outside of the Rational Integration Tester project (for example, by other users).
	Outgoing mode shows uncommitted changes made in your Rational Integration Tester project.
	Incoming/Outgoing mode shows incoming and outgoing changes.
	Conflicts mode shows conflicts between the project and the repository.
	Updates all incoming changes to the Rational Integration Tester project.
	Commits all outgoing changes to the repository.
	Toggles the display of change sets in the synchronization tree.

2.3.2 Navigator

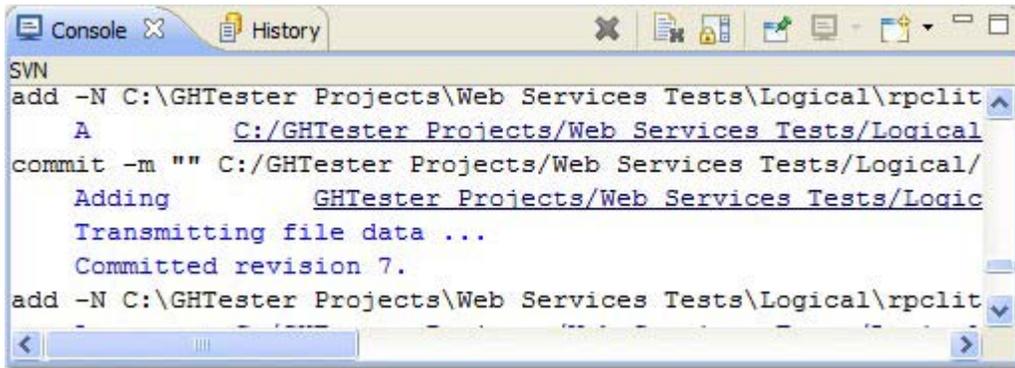
The **Navigator** lets you browse the contents of all projects in the selected repository, showing the status of the items that each one contains.



More information about the status icons in the **Navigator** can be found in the online help (select **Help > Help Contents**, then select the book for the Team Provider currently in use).

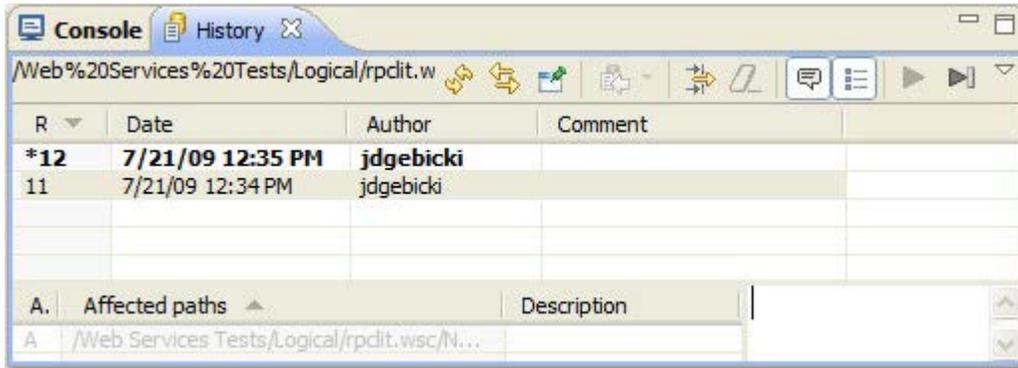
2.3.3 Console

The **Console** displays status and error messages as they pertain to basic operations in the SCM application (for example, sharing a project, updating changes, committing changes, and so on).



2.3.4 History

The **History** shows the revision history of a selected item in the **Synchronize** tree or **Navigator** (by right-clicking the item and selecting **Show History** from the context menu).



Team Providers

Contents

Detailed Example

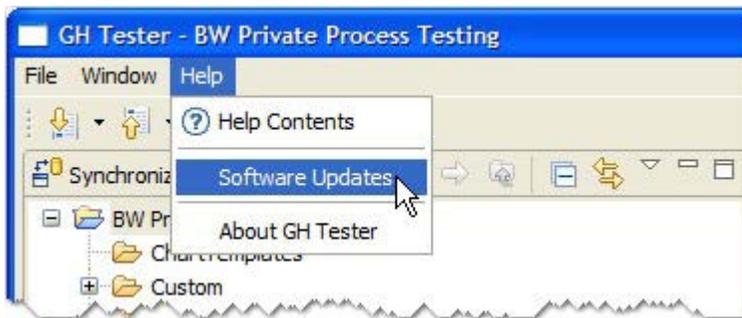
Adding the ClearCase Provider

This chapter provides information about installing additional team provider plugins that support different SCM systems.

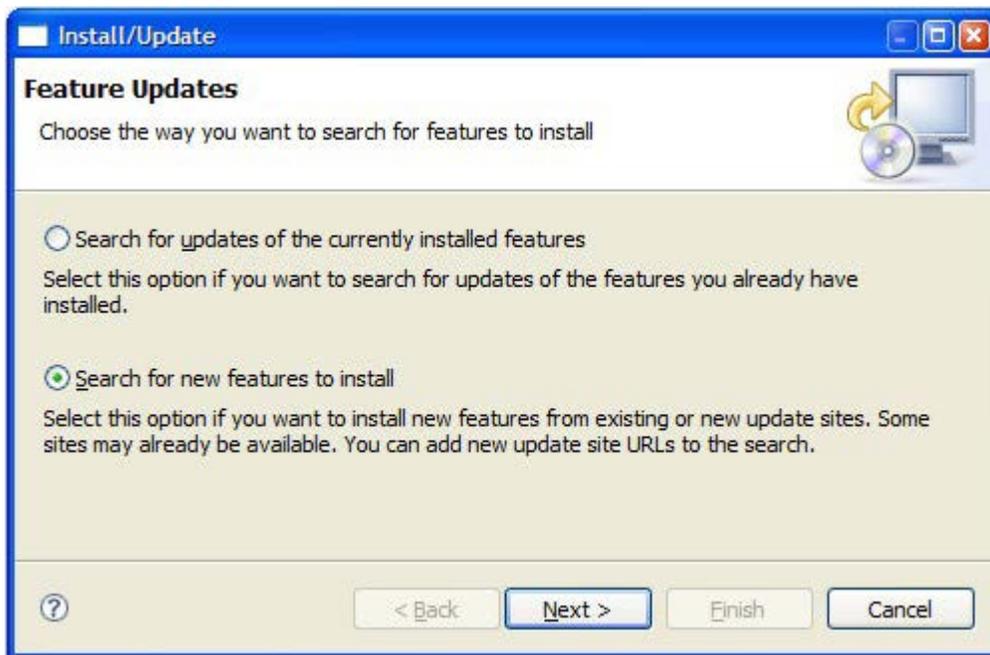
3.1 Detailed Example

The following example illustrates how to install a team provider in full detail. The Subclipse provider is installed in this example.

1. Launch the Rational Integration Tester repository browser as described in [Check In a Project](#).
2. Select **Help > Software Updates**.

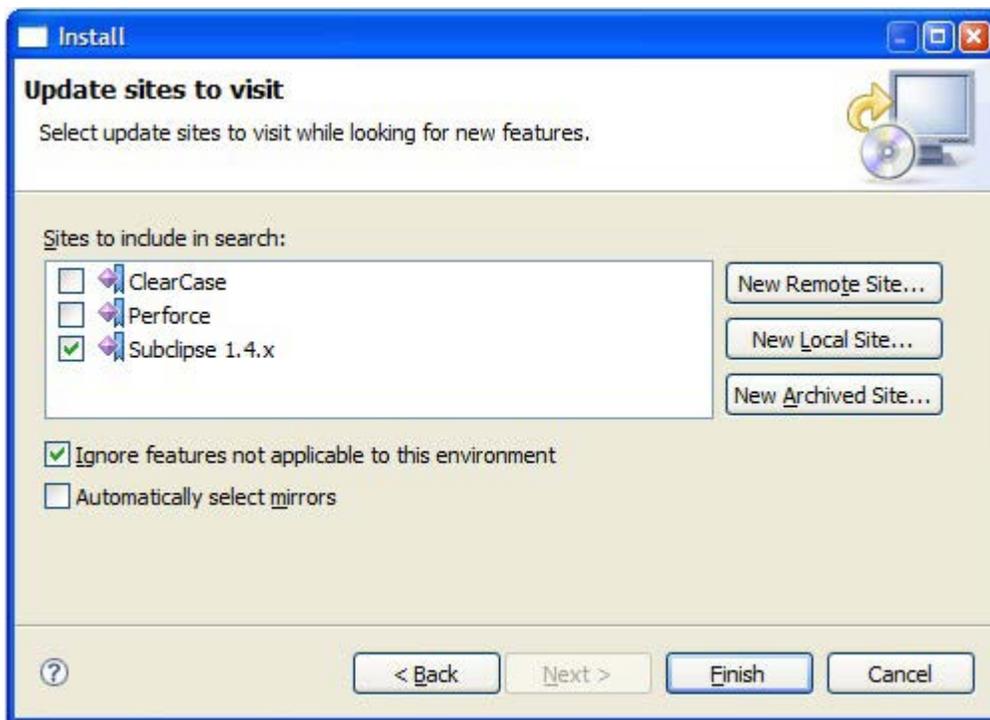


3. In the **Feature Updates** window, select the second option (Search for new features to install) and click **Next**.

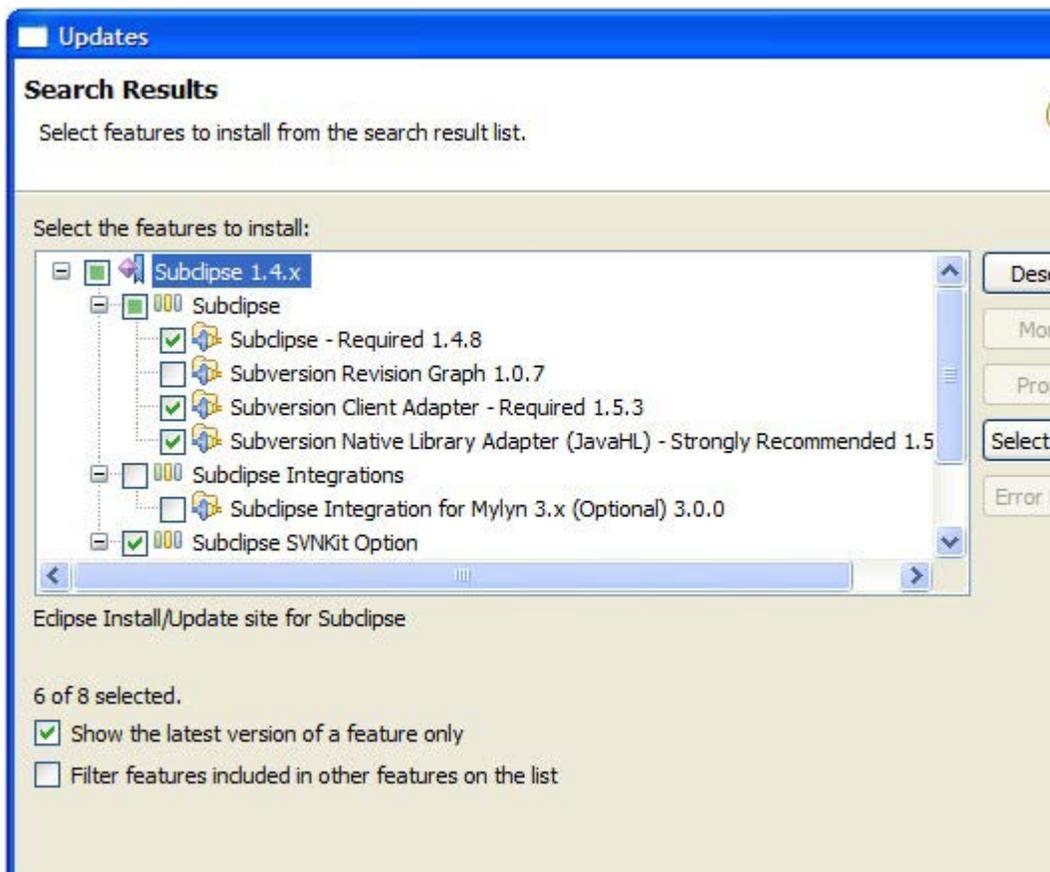


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4. Select the team provider sites from which you want to search for new features and click **Next**.

You can add your own site by clicking **New Remote Site**, and you can add a local site by clicking **New Local Site** (that is, a local or internal network directory) if you are behind a firewall or otherwise are unable to access the remote sites. Select **New Archived Site** if you have a JAR or .zip file that contains the required updates.

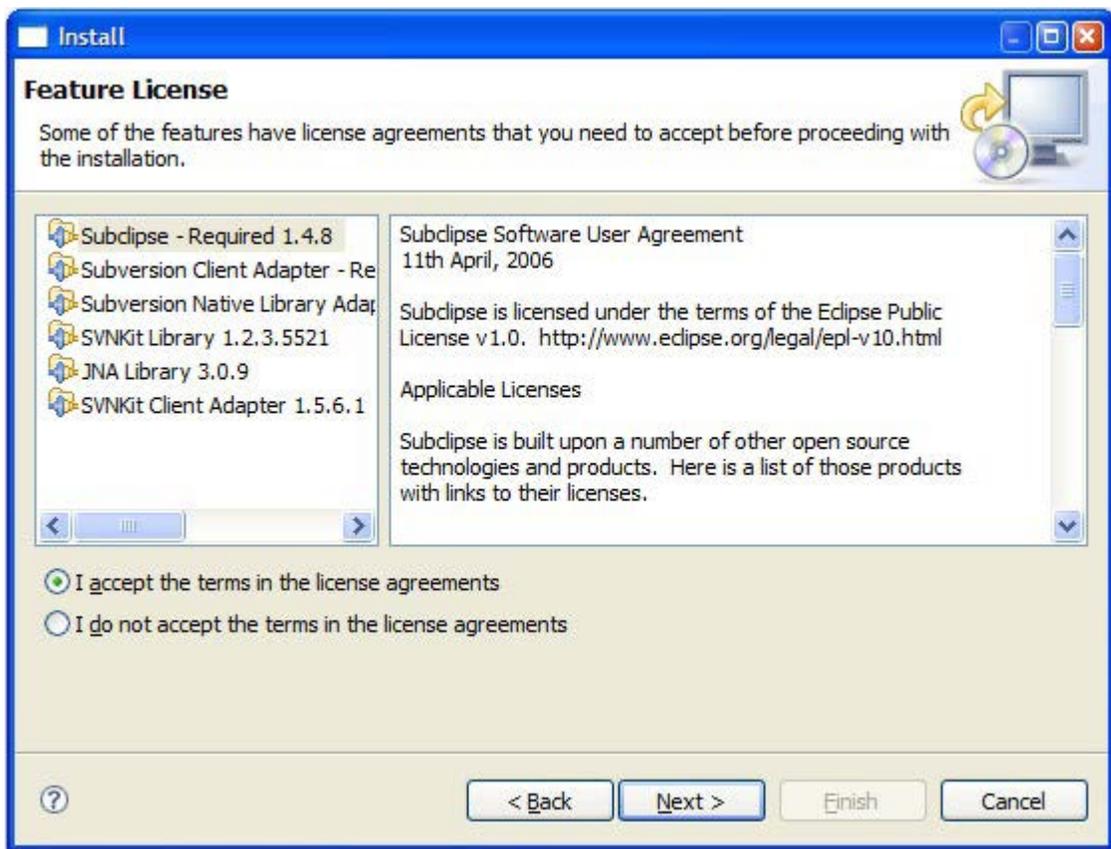


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5. When the feature search is finished (based on the selected sites), select the features that you want to install from the list of those available, then click **Next**.



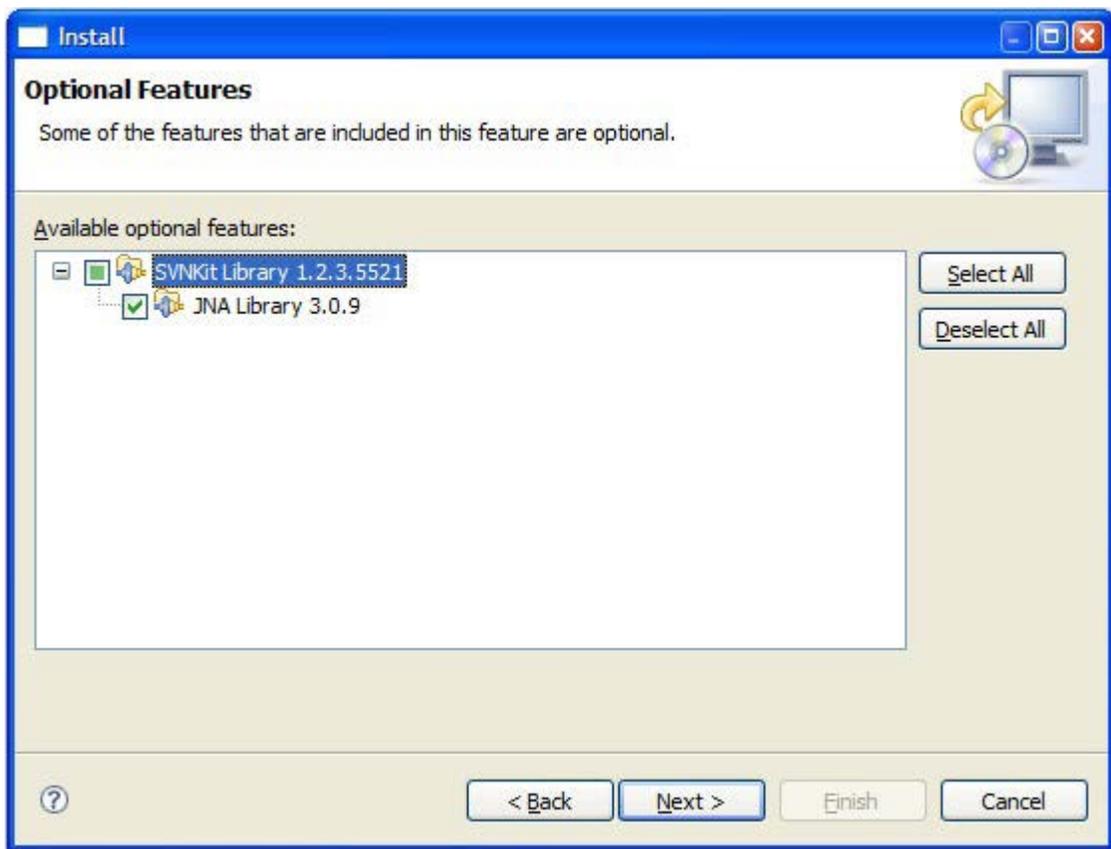
NOTE: For SVN support using the Subclipse provider, the options illustrated above, including the entire **Subclipse SVNKit Option**, should be selected. The SVN kit allows Subclipse to communicate independently with an SVN repository (that is, there is no need for the user to have the SVN Client installed).

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6. Review the license agreements for all of the selected features. If you agree with the terms of the licenses, select the **I accept ...** option and click **Next**.



NOTE: Note, if you do not accept the terms of all displayed license agreements, you will not be able to continue.

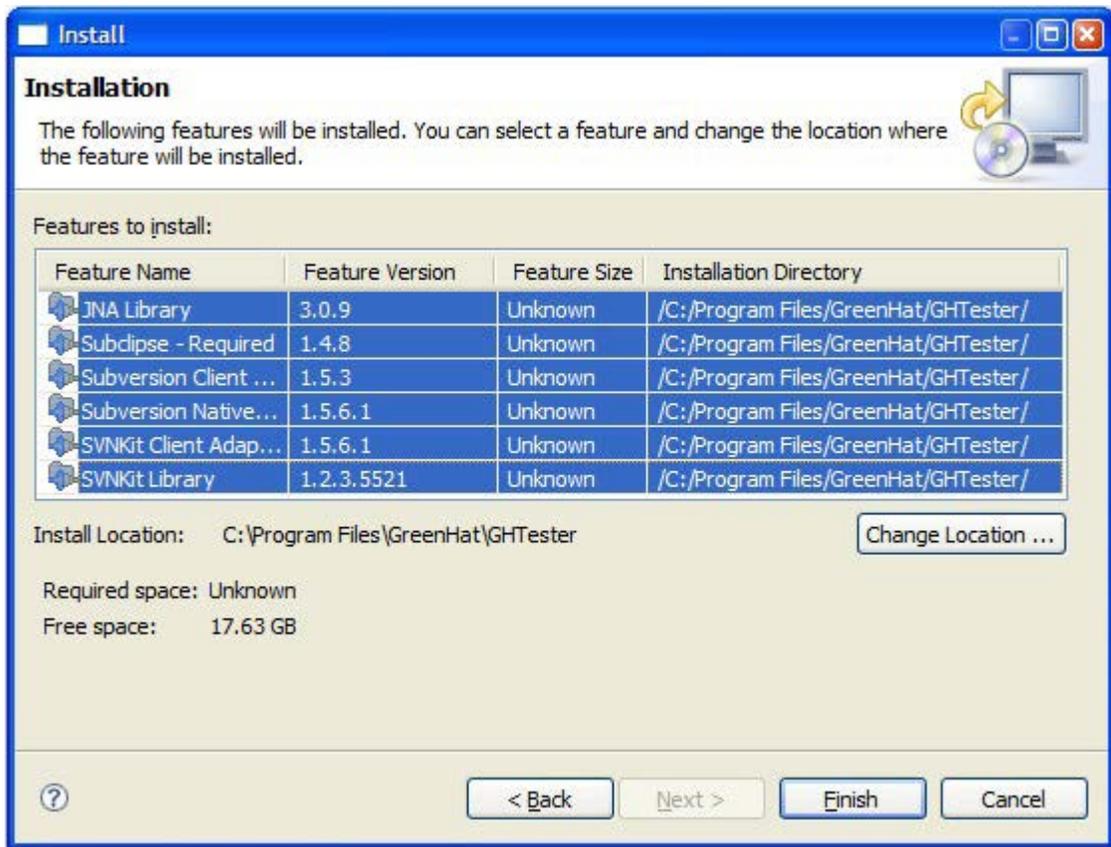
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7. If any optional features are available for your selected team provider, enable the ones that you want to install and click Next.



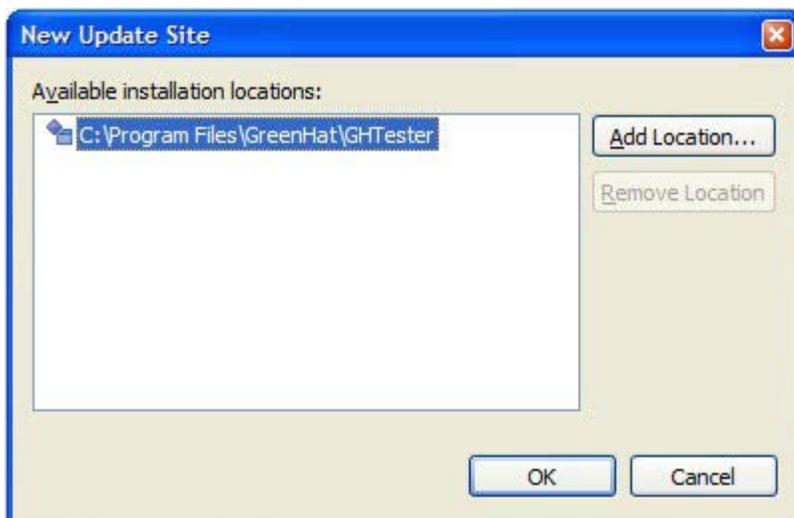
8. Review the installation summary to ensure the desired features will be installed into the expected location.

NOTE: The remaining steps are optional but they will enable users to avoid having to reinstall providers following an update to Rational Integration Tester.

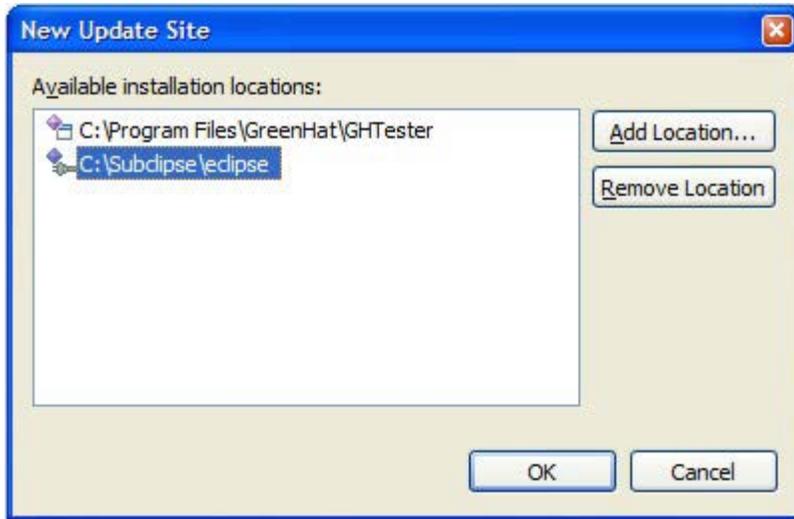
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9. Select all of the features that will be installed (select the first then select the last while holding the **Shift** key) and click **Change Location**.



10. In the **New Update Site** window, click **Add Location**.



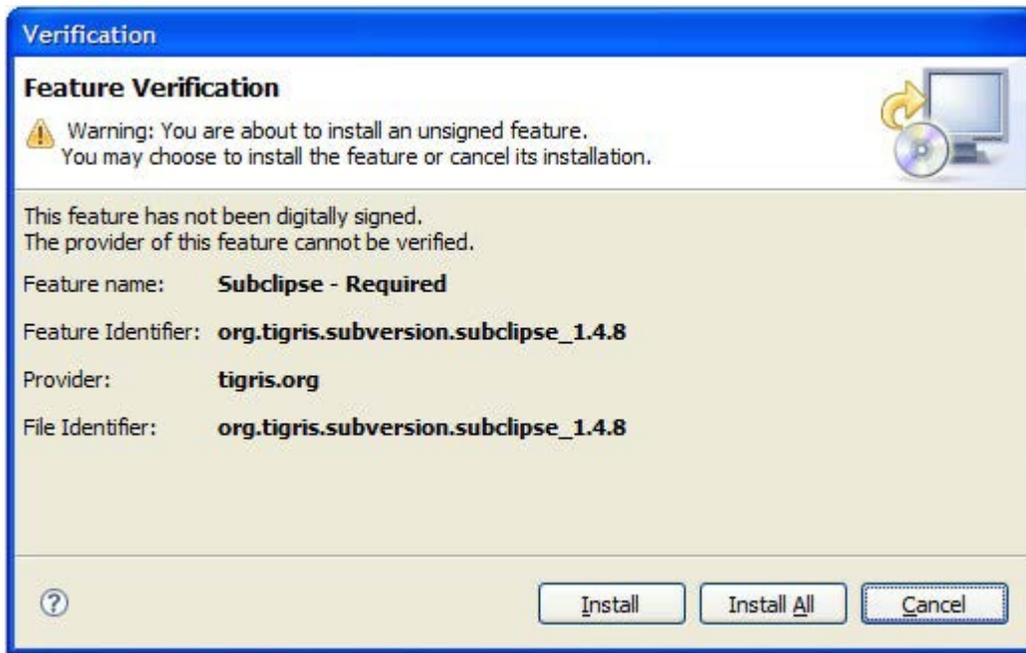
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11. Use the **Browse** dialog to locate an existing folder or to create a new folder into which the team provider features can be installed. In our example, we have created a directory named “Subclipse” on the root of the C:\ drive.



12. Click **OK** to return to the installation summary, then click **Finish** to install the selected features.

NOTE: If you receive any warnings about unverified or unsigned features, you will have to permit their installation to continue. Otherwise you must cancel the installation and you will be unable to use the new team provider.

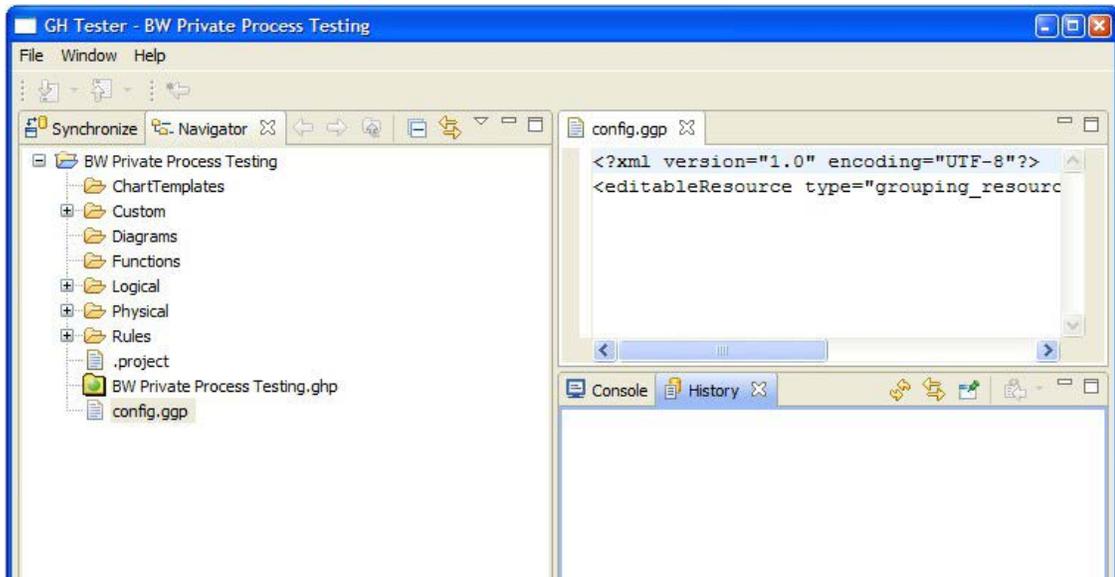
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13. Click **Install** for each feature (or **Install All** to avoid any further prompts) to continue.



14. Once the features are installed, you will be prompted to restart SCM in Rational Integration Tester – select **Yes** to restart the SCM component but not Rational Integration Tester.



-
15. Once the SCM component is restarted, the **Share Project** dialog is displayed. If you want to share a project using one of the installed providers, select it and click **Next**. Otherwise, click **Cancel** to open the repository browser and get started.
 16. If you are sharing a project, follow the steps provided (which will be the same as those required in the native SCM system) to set up a connection to an existing repository.
- When finished, the Synchronisation view is displayed.



NOTE: The use of the repository browser is described in [Using the SCM Application](#).

For the Subclipse provider, you should set the SVN interface to SVNKit.

-
17. Select **Window > Preferences**, then select the **SVN** entry under the **Team** group. Under **SVN interface**, select the SVNKit option as the client.

Once the installation of a new provider is complete, you can create a link to the provider in your Rational Integration Tester folder. This can help you quickly restore the provider if you remove and update Rational Integration Tester.

18. Create a directory named “links” in your Rational Integration Tester installation directory (for example, C:\Program Files\IBM\RationalIntegrationTester).
19. Create a text file in the new directory, the contents of which is the path to the provider directory (refer to step 11). In our example, the file contents would be `path=c:/Subclipse`.
20. Save and close the file, then rename it `<provider>.link` (for example, `subclipse.link`). The file can have any name, as long as the extension is `.link`.
21. Make a backup copy of the directory, then copy it into any new/updated Rational Integration Tester installation to restore the SCM links.

NOTE: You can include multiple link files in the “links” folder to point to more than one tool.

3.2 Adding the ClearCase Provider

This section provides information about installing the IBM Rational® ClearCase® Remote Client and the Graphical Editing Framework (if required).

The Rational Integration Tester SCM application is built on the Eclipse Europa (3.3) release, and some team providers may be incompatible with this version. For more information about system requirements for the ClearCase Remote Client, see the following URL:

<http://www-01.ibm.com/support/docview.wss?rs=984&uid=swg21224586>

3.2.1 Installing the ClearCase Provider

Follow the steps below to install the ClearCase team provider.

1. Launch the SCM application by selecting **Source Control** from Rational Integration Tester's **File** menu, and close any dialogs that prompt you for repository details.
2. In the SCM application, select **Help > Software Updates**.
3. In the **Feature Updates** dialog, select the **Search for new features to install** option and click **Next**.
4. On the **Update sites to visit** page, click **New Remote Site**.
5. In the **New Update Site** dialog, specify a name for the site in the **Name** field and specify the URL to the update (in the form **http://<computer-name>/ccrc/update** where *<computer-name>* is the name of the computer that has ClearCase and the CM Server for Rational ClearCase Remote Client installed on it.

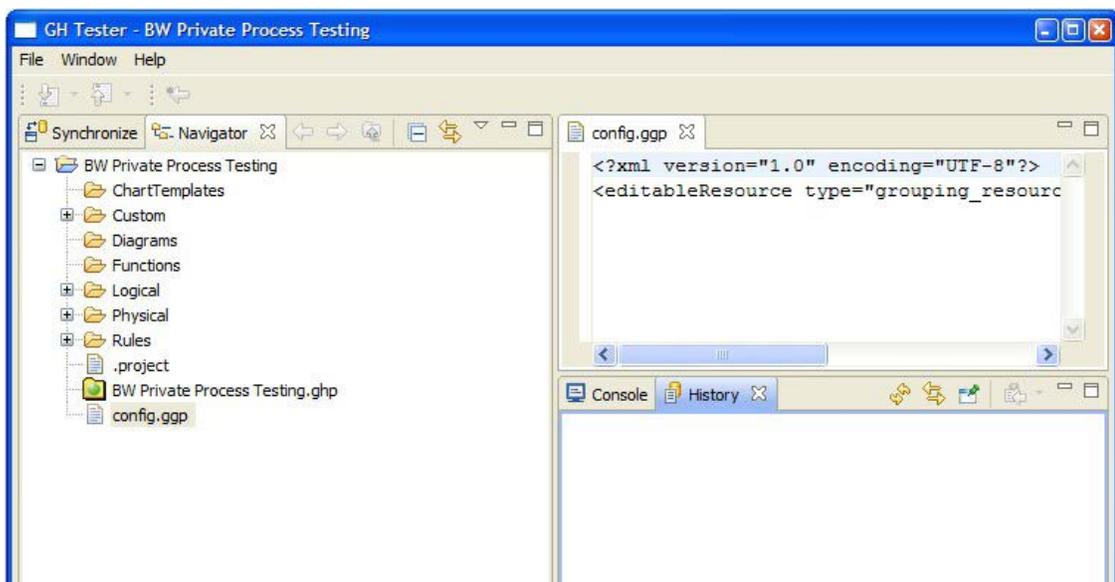
NOTE: Rational ClearCase may be installed on this computer or on a remote computer.

6. Click **OK**, check the box next to the new remote site, then click **Finish**.
7. When the feature search is finished (based on the selected sites), expand the tree under the new update site name and select **Rational ClearCase Remote Client**, then click **Next**.

NOTE: If you see an error about Rational ClearCase Remote Client for Eclipse requiring the "org.eclipse.draw2d" plug-in, follow the instructions in [Installing the Graphical Editing Framework \(GEF\)](#) to install the GEF Runtime plug-in.

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8. On the **Feature License** page, read the license agreement carefully. If you accept the terms, select **I accept the terms in the license agreements...** and then click **Next**. If you do not accept the terms, select **Cancel** to end the installation.
 9. On the **Installation** page, verify that the **Install Location** is where you want to install Rational ClearCase Remote Client for Eclipse. Click **Change Location...** to specify a new install location.
 10. Click **Finish**. You may be presented with a dialog box prompting you to verify that you trust the signer of the jar files in which the client is packaged. After this step, the Eclipse update manager installs Rational ClearCase Remote Client for Eclipse into the selected Eclipse installation directory and then prompts you to restart Eclipse.
 11. Restart Eclipse.
 12. Once the SCM component is restarted, the **Share Project** dialog is displayed. If you want to share a project using one of the installed providers, select it and click **Next**. Otherwise, click **Cancel** to open the repository browser and get started.
 13. If you are sharing a project, follow the steps provided (which will be the same as those required in the native SCM system) to set up a connection to an existing repository.

When finished, the Synchronisation view is displayed.



NOTE: The use of the synchronisation view is beyond the scope of this document since you should already be familiar with its use.

3.2.2 Installing the Graphical Editing Framework (GEF)

The ClearCase team provider requires the Graphical Editing Framework before installing the Rational ClearCase Remote Client for Eclipse. The version of GEF required may not be known until you are installing ClearCase, and that depends on the version of the ClearCase server to which you will be connecting.

1. If required, and once the GEF version is known, download the correct version from <http://www.eclipse.org/gef/downloads>.
2. Download the GEF “runtime” package to a temporary location on the machine where Rational Integration Tester is installed.
3. Extract the GEF .zip archive in the folder where the package was downloaded.
4. Locate the “features” and “plugins” directories in the directory where the GEF archive was extracted.
5. Copy the contents of each directory into the equivalent directories (that is, “features” and “plugins”) within your Rational Integration Tester installation.

NOTE: The directories in the archive may contain both JAR files and directories.

6. Restart Rational Integration Tester and attempt to install the ClearCase provider as described in [Installing the ClearCase Provider](#).

Glossary

The following table below lists some of the key terms used in this document, and provides a description of each.

Term	Description
Field	A bit of data constituent to a message. Most fields are scalar and therefore unitary, equivalent to data attributes. Vector fields are an aggregation of fields both scalar and vector, and are usually referred to as Messages. See also Message.
Message	A unit of information made up of a header consisting of meta-information and a body consisting of the message data.
Host	The computer on which a software process runs.
Publisher-Subscriber	A messaging paradigm whereby a messaging network consists of Publishers and Subscribers.
Transport	Informally, the messaging software in use. For instance, TIBCO Rendezvous, TIBCO ActiveEnterprise, IBM WebSphere® MQ (JMS).
Publishing	Making a message (data) available on a message channel.
Subscribing	Receiving a stream of messages (data) on a given message channel.
Subject	A user-meaningful name for identifying messages on TIBCO transports. For example, the subject EQ.IBM might identify all pricing data about IBM stocks, while EQ.IBM.N might identify price data from the New York Stock Exchange only. See also: JMS queue, JMS topic.
Server	A host computer on a network shared by more than one user.
Subject	A user-meaningful name for identifying data objects. For example, the subject EQ.IBM might identify all pricing data about IBM stocks, while EQ.IBM.N might identify price data from the New York Stock Exchange only.

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