

Using the Rational Administrator

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Preface

This manual describes how to use the Rational Administrator to configure Rational projects. A Rational project stores software testing and development information for your Rational test datastores, RequisitePro projects, and ClearQuest databases.

Audience

This manual is intended for Rational system administrators, application developers, quality assurance managers, and quality assurance engineers.

Other Resources

- This product contains complete online Help. From the main toolbar, choose an option from the Help menu.
- All manuals for this product are available online in PDF format. These manuals are on the *Rational Solutions for Windows* Online Documentation CD.
- For information about training opportunities, see the Rational University Web site: <http://www.rational.com/university>.

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To send feedback about documentation for Rational products, please send e-mail to our technical publications department at techpubs@rational.com.

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If you have questions about installing, using, or maintaining this product, contact Rational Technical Support as follows:

Your Location	Telephone	Facsimile	E-mail
North America	(800) 433-5444 (toll free) (408) 863-4000 Cupertino, CA	(781) 676-2460 Lexington, MA	support@rational.com
Europe, Middle East, Africa	+31 (0) 20-4546-200 Netherlands	+31 (0) 20-4545-201 Netherlands	support@europe.rational.com
Asia Pacific	+61-2-9419-0111 Australia	+61-2-9419-0123 Australia	support@apac.rational.com

Note: When you contact Rational Technical Support, please be prepared to supply the following information:

- Your name, telephone number, and company name
- Your computer's make and model
- Your operating system and version number
- Product release number and serial number
- Your case ID number (if you are following up on a previously-reported problem)

About the Rational Administrator

1

This chapter introduces the Rational Administrator, the Rational project, and the UCM project, as well as the different types of datastores. This chapter includes the following topics:

- *About the Rational Administrator* on page 3
- *What is a Rational Project?* on page 1
- *What is UCM?* on page 3
- *Parts of a Rational Project* on page 5
- *About the Rational Test Datastore* on page 6
- *About the Rational ClearQuest Database* on page 7
- *About the Rational RequisitePro Project* on page 10
- *About the Rose Model* on page 10
- *About Rational Synchronizer Rules* on page 10

What is a Rational Project?

A *Rational project* stores software testing and development information for the following products: Rational RequisitePro, Rational ClearQuest, Rational Rose, and Rational testing products (Rational Robot, Rational TeamTest, and Rational QualityArchitect). Most of the Rational software on your computer updates and retrieves data from the same Rational project.

A Rational project consists of the following items:

- Rational Test datastore – Stores application testing information such as test assets, logs, reports, and builds. For more information, see *About the Rational Test Datastore* on page 6.
- Rational RequisitePro project – Stores requirements documents and a dynamically-linked database. For more information, see *About the Rational RequisitePro Project* on page 10.

- Rational ClearQuest database – Stores change-request information for software development, including enhancement requests, defect reports, and documentation modifications. Each ClearQuest database consists of one schema and one user database. In ClearQuest, the term schema refers to all attributes associated with a database. This includes field definitions, field behaviors, the state transition table, actions, and forms. For more information, see *About the Rational ClearQuest Database* on page 7.
- Rational Rose models – Stores visual models for business processes, software components, classes and objects, and distribution and deployment processes. For more information, see *About the Rose Model* on page 10.

Benefits of the Rational Project

When you create a Rational project, you can associate various Rational product datastores, databases, and projects that are used for storing critical software development and testing information.

Once you associate these items with a Rational project, you can link specific data from one item to another by using individual product features or by using the Rational Synchronizer. For more information about the Rational Synchronizer, see *About the Rational Synchronizer* on page 39.

The following table provides specific examples of how you can benefit from associating various items with one another in a Rational project as you design, develop, and test software applications.

When you associate	Then you can
A RequisitePro project with a Rose model	Use the Integrated Use Case Management feature to manage use cases between Rose and RequisitePro.
A RequisitePro project with a Rational Test datastore	Create a product or software requirement using RequisitePro and associate that requirement with a test case in Rational TestManager. Associate a test case in TestManager with a requirement in RequisitePro.
A ClearQuest database with a Rational Test datastore	Generate a defect using Rational TestManager, and automatically store the defect in the correct Rational project in a ClearQuest database.

About the Rational Administrator

The Rational Administrator centralizes the management of a Rational project. It manages the association of Rational product information and the users and groups for Rational Test.

With the Rational Administrator, you can:

- Create a Rational project under configuration management.
- Create a Rational project outside of configuration management.
- Connect to a Rational project.
- Work with Rational projects on the network and not on your machine (register a project).
- Delete a Rational project.
- Configure a SQL Anywhere database server.
- Create and manage users and groups for a Rational Test datastore.
- Create and manage Rational projects containing RequisitePro projects and Rose models.
- Manage security privileges for a Rational Test datastore.
- Synchronize data among Rational Test datastores, Rational RequisitePro projects, and Rational Rose using the Rational Synchronizer.

What is UCM?

Unified Change Management (UCM) is Rational Software's approach to managing change in software system development from requirements to release. UCM spans the development lifecycle, defining how to manage change to requirements, design models, documentation, components, test cases, and source code.

UCM is unique because it links the activities used to plan and track Rational project progress to the artifacts undergoing change.

The Building Blocks

UCM focuses on these two concepts:

- An *activity* is a piece of work you want to accomplish. An activity might arise from an issue raised in a meeting, a defect entered into a defect database, or a request for enhancement sent in by a customer. In fact, your development process defines what an activity is.
- An *artifact* is an item, usually a file, that you want to place under version control. At a more conceptual level, artifacts can be requirements, tests, visual models, code, project plans, and so on.

Configuration Management (CM) in UCM is activity-based and allows you to baseline your test assets.

A *baseline* is a logical grouping of project files at a specific point in time. Baselines allow teams to capture the progress of software artifacts at key project milestones, such as releases or development iterations, in relation to each other.

Component Management in UCM is a means of creating and manipulating a consistent change as a single named entity rather than a set of file versions.

One of UCM's key strengths is that it links the activities used to plan and track project progress with the artifacts that are undergoing change. UCM is supported by both process and tools:

- The Change Management workflow in Rational Unified Process describes the process of using UCM.
- Rational ClearQuest manages a project's activities – the tasks, defects, and requests for enhancement – and provides charting and reporting tools that can help you track project progress.
- Rational ClearCase manages all the artifacts produced by a software project.

See the *Using Unified Change Management with Rational Suite* manual for more information about UCM and how it is implemented and used with a Rational Suite.

Why Use UCM?

Rational customers and Rational employees have successfully used ClearCase and ClearQuest for years. During that time, common patterns have emerged regarding how users set up and use the tools. Based on our experience and observations, we've created UCM, a process that helps you get started with ClearCase and ClearQuest quickly and easily.

UCM raises the level of abstraction of working with software configuration management and change management tools. For example, in a typical software configuration environment, you need to track the individual files you change. With UCM, you work on activities, letting the tools keep track of the details for you (for example, which files changed).

UCM is supported by Rational tools. ClearCase and ClearQuest have built-in support for it, so that you can start using UCM as soon as you install the tools and set up your environment. In addition, the Rational Unified Process describes UCM in the Configuration and Change Management workflow.

What UCM Is in Relation to the Rational Administrator

Use the Rational Administrator to make a Rational project UCM-enabled if it is not yet under configuration management. The high-level steps are:

- 1 Use the Rational Administrator to configure the UCM policies for the Rational project. This includes the setup steps you perform in ClearCase. See *Creating and Configuring a Rational Project* on page 28 for information relating to this step.
- 2 Use the Rational Administrator to check in all elements under Configuration Management. See *Configuring a Rational Project* on page 32.
- 3 Launch the ClearCase Project Explorer from the Rational Administrator.
- 4 Create a baseline from the ClearCase Project Explorer. See *Setting Up ClearCase for UCM-Enabled Projects* on page 29.

UCM component baselines can include requirements, test information, source code, and models.

UCM support comes with every Rational Suite; ClearCase LT is one of the team-unifying tools.

UCM has been extended to manage change to requirements and test artifacts and to support UNIX. Also, UCM ClearQuest features are available to Rose developers.

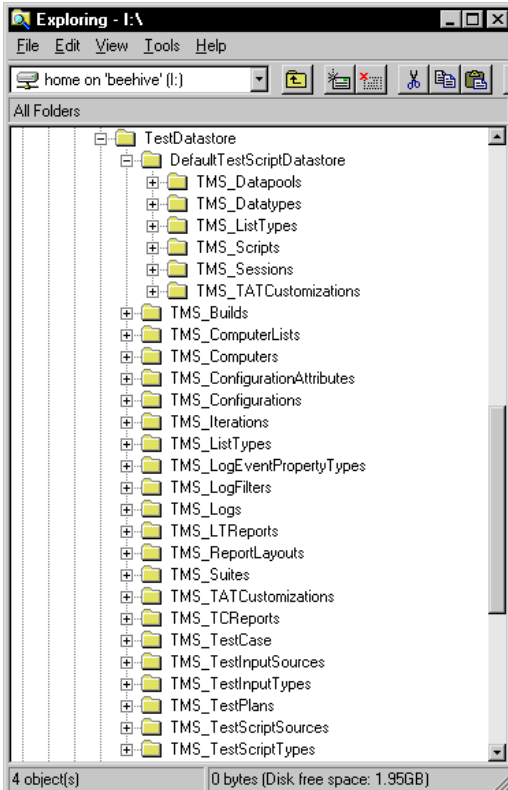
Parts of a Rational Project

A Rational project can consist of the following parts:

- No more than one Rational Test datastore
- No more than one RequisitePro project
- No more than one ClearQuest database
- Any number of Rose models
- Rational Synchronizer rules

About the Rational Test Datastore

A Rational Test datastore is a large collection of test assets, many of which are represented via XML files. The XML files are grouped logically into a hierarchy of folders and contain test asset properties and information about the relationships between test assets. A TestDatastore includes assets such as test scripts, suites, datapools, logs, reports, test plans, build information, and more.



Rational Test users and groups are maintained in a separate datastore named TestUsersAndGroups.

About Users

Test users are typically the QA managers, developers, and test engineers who use Rational Test components to create, edit, run, monitor, analyze, and manage scripts that run across a network.

For each test user, you can specify a user ID, password, first name, last name, company, title, department, phone number, and e-mail address.

You can assign privileges to a test user by adding a user to a test group. When you add a test user to a test group, the test user takes all privileges of that test group. A test user can be a member of one or more test groups. The only privilege needed to modify or add test users of test groups is the Rational project password.

For more information about users, see *Managing Test Users* on page 44.

About Groups

Each Rational Test datastore that you create comes with a default test user, *Admin*. The Admin test user is not a member of any specific test group and takes on all available privileges.

You can make any test group a default group. When you add a test user to a Rational Test datastore, and this option is set, every test user that you create takes on the privileges of the default test groups.

For more information about groups, see *Managing Test Groups* on page 42.

About the Rational ClearQuest Database

A Rational ClearQuest database consists of a schema and a user database. A ClearQuest schema stores all schemas and all data associated with existing schemas. The schema does not store any user data. A ClearQuest user database contains all user data and a copy of the schema associated with the database. User data in a ClearQuest database includes change-request records such as defects, as well as reports, records or tables, and all data entered by users.

A ClearQuest schema defines the following information for each change-request record:

- Forms used to submit and modify a record
- Field types, legal values, and so on
- States a record can be in (optional)
- Actions used to modify or change the state of a record
- Hooks written in Visual Basic Script that further customize legal field values, dependent fields, and actions (optional)

A full version of Rational ClearQuest comes with Rational Suite TestStudio. If you have purchased Rational TeamTest, you will need to upgrade to the full version of ClearQuest if you want to add fields to a schema or connect to a database to which fields have been added.

Types of Rational ClearQuest Databases

When you create a ClearQuest user database, it can be either a Microsoft Access, Sybase SQL Anywhere Database Server, Microsoft SQL Server, or Oracle database. For a summary of which type of database software to install, see *Determining a Database Type* on page 9.

Rational ClearQuest Web lets you remotely enter change-request records using a Web-based interface.

Note: Rational ClearQuest Web does not support Microsoft Access databases.

Microsoft Access – Microsoft Access is the default database type and installs automatically when you install your Rational software. We recommend using Microsoft Access for a database with seven or fewer concurrent users. However, with more than seven users, data access is slower than for a comparably sized Sybase SQL Anywhere Database Server database. This type of database is virtually maintenance-free. For example, you can back up the database simply by backing up the Rational project directory.

Sybase SQL Anywhere Database Server – Sybase SQL Anywhere Database Server software comes with your Rational software, but does not install automatically. We recommend using this type of database for a database with eight or more concurrent users. Data access for a SQL Anywhere Database Server database is faster than for a comparably sized Microsoft Access database. For information about installing this software, see your Rational installation manual.

Microsoft SQL Server – Microsoft SQL Server does not come with your Rational software. You can use this software for ClearQuest databases; however, you must purchase the software and install it separately.

Oracle – Oracle does not come with your Rational software. You can use this software for ClearQuest databases; however, you must purchase the software and install it separately.

Determining a Database Type

The following table summarizes which type of database software to use for a ClearQuest database.

If your Rational ClearQuest database	Then
Has seven or fewer concurrent users, is not accessed over a wide-area network, and you are not using Rational ClearQuest Web	Use a Microsoft Access database. This is the default database and installs automatically when you install your Rational software. Rational ClearQuest Web does not support Microsoft Access databases.
Has eight or more concurrent users or is accessed over a wide-area network	Install the Sybase SQL Anywhere Database Server software that comes with your Rational software. We recommend using a Window NT Server for your database server because a Windows NT Workstation allows only ten network connections. For more information about installing Sybase SQL Anywhere Database Server software, see your Rational installation manual.
Has eight or more concurrent users and you want to use Microsoft SQL Server for your database	Purchase Microsoft SQL Server software. Install Microsoft SQL Server to use with ClearQuest. For information about installing Microsoft SQL Server for ClearQuest, see the <i>Installing Rational ClearQuest</i> manual. Configure Microsoft SQL Server to use with ClearQuest. For information about configuring Microsoft SQL Server for ClearQuest, see the <i>Administering Rational ClearQuest</i> manual. Both of these manuals are on the Rational Solutions for Windows Online Documentation CD.
Has eight or more concurrent users and you want to use Oracle for your database	Purchase Oracle software. Install Oracle to use with ClearQuest. For information about installing Oracle for ClearQuest, see the <i>Installing Rational ClearQuest</i> manual. Configure Oracle to use with ClearQuest. For information about configuring Oracle for ClearQuest, see the <i>Administering Rational ClearQuest</i> manual. Both of these manuals are on the Rational Solutions for Windows Online Documentation CD.

About the Rational RequisitePro Project

All requirements for a Rational project are stored in a RequisitePro project. Each RequisitePro project consists of requirements documents and a dynamically-linked RequisitePro database. A RequisitePro project document can store text, graphics, or other objects (such as OLE objects) that identify project needs and are meaningful to users. To open a requirements datastore, start RequisitePro and refer to the RequisitePro Help.

With RequisitePro, you can customize the requirements database and use other advanced requirements management features such as traceability and requirements-attribute management. You can also manage all of your Rational project's requirements — for example, user requirements, software specifications, and use cases.

About the Rose Model

A Rose model is a graphical representation of a software system. A model can represent business processes, software components, classes and objects, and distribution and deployment processes.

About Rational Synchronizer Rules

You can share or link data between applications that store data in Rational Test, Rational RequisitePro, or Rational Rose. However, when you update data in one of these products, you often want to update this data in other products. The Rational Synchronizer is a software tool that lets you:

- Ensure consistency of data across several products — a single change in one type of data can be updated in other types of data simultaneously.
- Jump-start work in one product with the data from another product.
- Conduct impact analysis — you can synchronize data in several different products to gain a deeper understanding of how changes in requirements or design changes impact your overall software development process.

You can start the Synchronizer from the Administrator. For more information, see *Starting the Synchronizer* on page 40.

This chapter explains how to use the Rational Administrator software to perform administrative tasks on a Rational project. It includes the following topics:

- *Starting and Exiting the Rational Administrator* on page 11
- *The Rational Administrator Main Window* on page 12
- *Rational Project Privileges* on page 12
- *Upgrading from Rational Test 7.x to 2001* on page 12
- *The following table lists the new test asset types:* on page 22
- *Rational Project Tasks* on page 23
- *Before Creating a Rational Project* on page 26
- *Creating and Configuring a Rational Project* on page 28
- *Managing a Rational Project* on page 34
- *Starting Rational Products* on page 37

Starting and Exiting the Rational Administrator

To start the Rational Administrator:

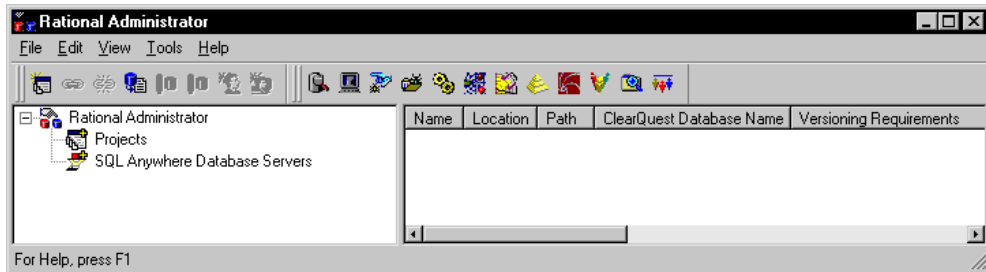
- Click **Start > Programs > Rational product name > Rational Administrator**.

To exit the Administrator:

- Click **File > Exit**.

The Rational Administrator Main Window

After you start the Rational Administrator, the main window appears. It is composed of two parts: the Project pane and the Details pane.



- **The Project Pane** - The left pane of the main window, the Project pane, displays a list of Rational projects and SQL Anywhere database servers. When you connect to a Rational project, you can add or delete projects. You can also add or delete users and groups from a Rational Test datastore.
- **The Details Pane** - When you select an item in the left pane of the main window, information about the selected item appears in the right pane, the Details pane.

Rational Project Privileges

When you connect to a Rational project, you may be asked to enter a password if one has been assigned to the project on the Project Properties dialog box. You can assign a password to an existing project if you wish. See *Displaying and Modifying the Properties of a Rational Project* on page 36.

You can also regulate access to the Rational Test datastore by using users and groups. For more information about privileges, see *Rational Test Datastore Privileges* on page 41.

Upgrading from Rational Test 7.x to 2001

If you are upgrading from Rational Test 7.x, you must do the following tasks in order:

- 1 Install Rational Test 2001.
- 2 Upgrade your TeamTest/TestStudio-based schema from the version available in ClearQuest 7.x.

If you are upgrading from SQA Suite 6.x, you must first convert to a Rational 7.x repository. See the *Installing Rational Testing Products* manual for directions.

- 3 Convert your Rational 7.x repository to a project.

Before starting these procedures:

- Back up your current repository. You will not be able to use it as a repository after you convert it to a project.
- Be aware that you must have administrator permission to convert the repository.

Upgrading the TeamTest/TestStudio Schema (from 7.x to 2001)

These procedures describe how to upgrade a TeamTest/TestStudio-based schema to version 2001. Because the procedures use a sample Rational schema, the packages and record types shown may differ somewhat from what you have at your site. For additional information, see the *Administering Rational ClearQuest* manual, which is available online on the Rational documentation CD.

To upgrade the TeamTest/TestStudio schema:

Connect to Your Existing ClearQuest Master Database

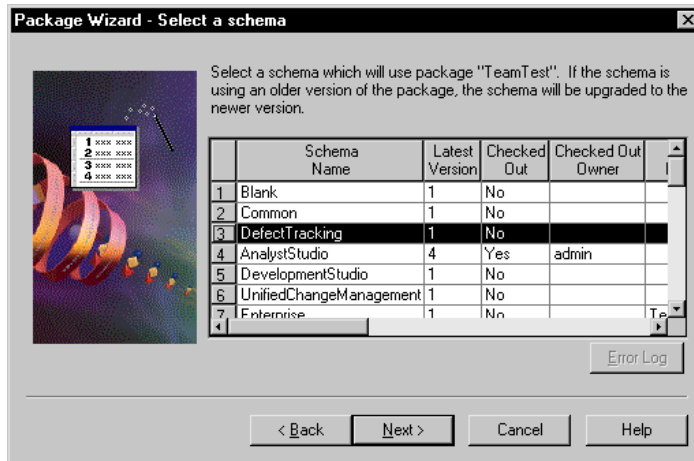
To connect to your ClearQuest master database:

- 1 Click **Start > Programs > *Rational product name* > Rational ClearQuest > Rational ClearQuest Maintenance Tool**.
- 2 Click **Browse** and navigate to your Rational ClearQuest master database or load a profile that points to your master database.

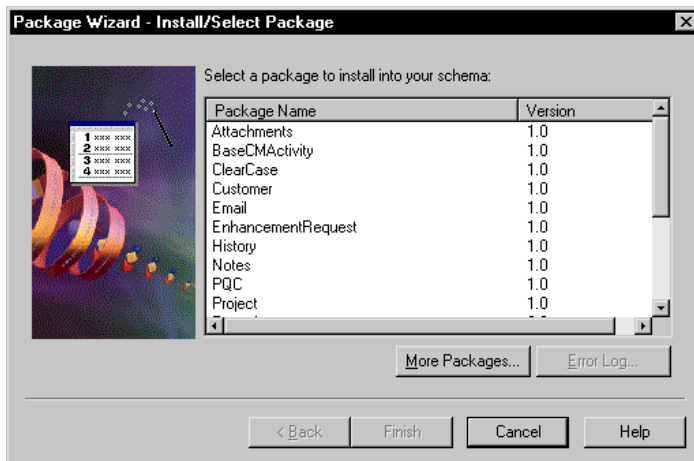
Upgrade the ClearQuest Schema and Database

- 1 Click **Start > Programs > *Rational product name* > Rational ClearQuest > Rational ClearQuest Designer**.
- 2 If prompted, log in to ClearQuest Designer.

- If the Open Schema wizard appears, make sure that the schema you want to upgrade is not checked out, and then click **Cancel**. If the schema is checked out, check it in or undo the check out.



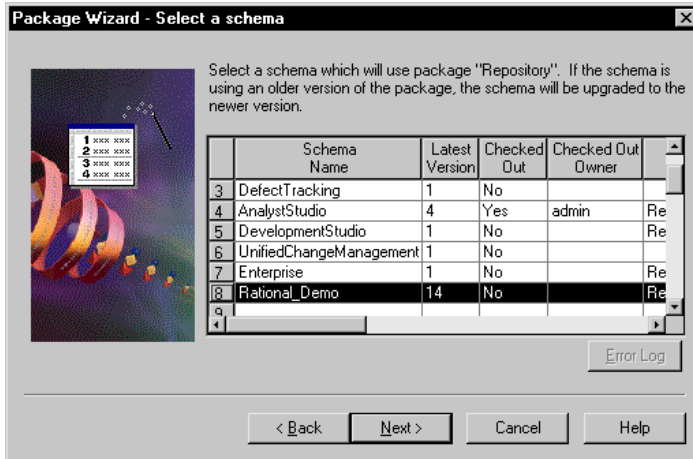
- Click **Package > Package Wizard**.



You must complete Step 5 through Step 10 for each of the following packages:

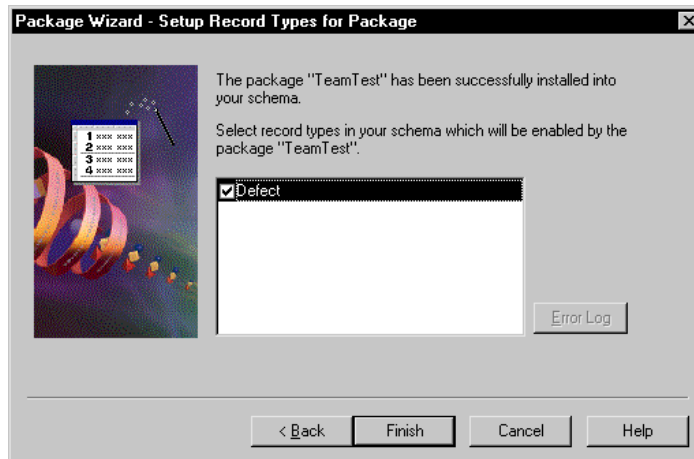
- Repository 1.0
- TeamTest 2.0
- RequisitePro 1.4
- RequisitePro Supplement 1.1
- Email 4.0
- PQC 1.0

- 5 Compare the packages that you have with those that appear when you click **More Packages**. If any of the packages listed above do not appear in the list, click **More Packages** to add the missing packages to the list, and then click **OK**.
- 6 Select the package, and then click **Next**.
- 7 Select a TeamTest/TestStudio-based schema to which you want to apply the package, and then click **Next**.

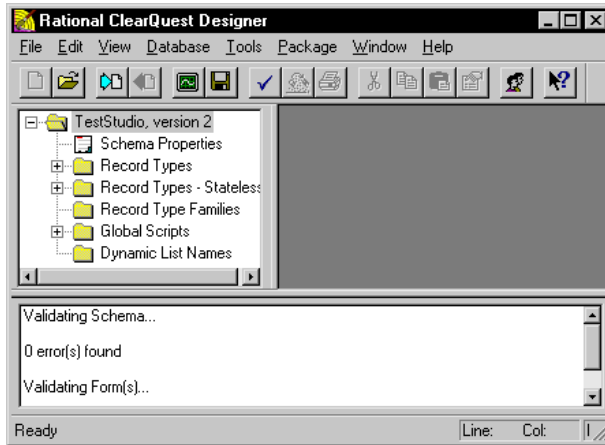


- 8 Select the record types, for example **Defect** and **Enhancement Request**, that will be enabled by the schema and then click **Finish**.

If you have renamed these record types, select the renamed record types instead. If you do not see any record types listed, simply click **Finish** to proceed.



This opens a new revision of the schema with the package that you applied.



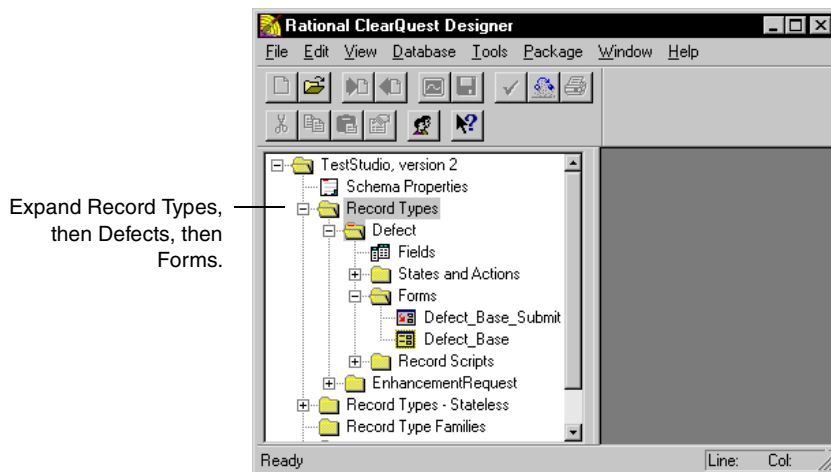
9 Click **File > Check In**.

Add your comments, and then click **OK**.

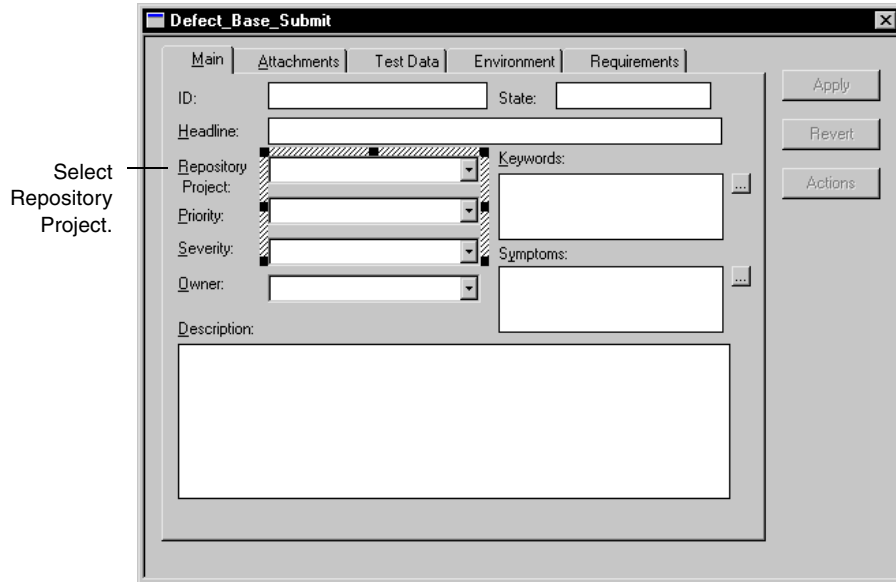
10 Click **OK**.

11 After you finish applying the last package, do the following:

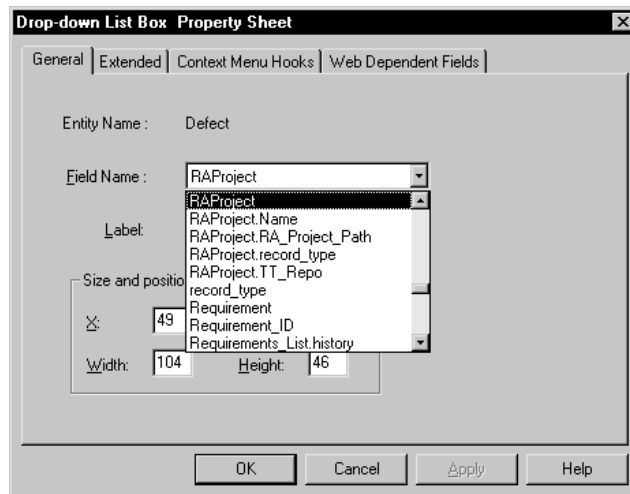
- a Click **File > Open Schema** and open the schema that you just upgraded using the Open Schema wizard.
- b Enter a comment (optional).
- c In the ClearQuest window, expand the **Record Types** folder, then the **Defects** folder, and finally the **Forms** folder.



- d For each of the two forms—**Defect-Base** and **Defect-Base Submit**—complete Step i through Step iii.
 - i Double-click the form.
 - ii Select the drop-down list next to the **Repository Project** box, and then right-click **Properties**.



- iii Select RA Project from the **Field Name** list, and then click **OK**.



- e Change the label from **Repository Project** to RA Project and click **OK**.

The screenshot shows a dialog box titled "Drop-down List Box Property Sheet". It has four tabs: "General", "Extended", "Context Menu Hooks", and "Web Dependent Fields". The "General" tab is selected. The "Entity Name" is "Defect". The "Field Name" is "RAProject". The "Label" is "RA Project". The "Size and position" section shows X: 49, Y: 36, Width: 104, and Height: 46. The dialog has "OK", "Cancel", "Apply", and "Help" buttons.

Change the label from **Repository Project** to **RA Project**.

12 Click **Package > Package Wizard**.

You must complete Step a through Step g for the Resolution Upgrade package.

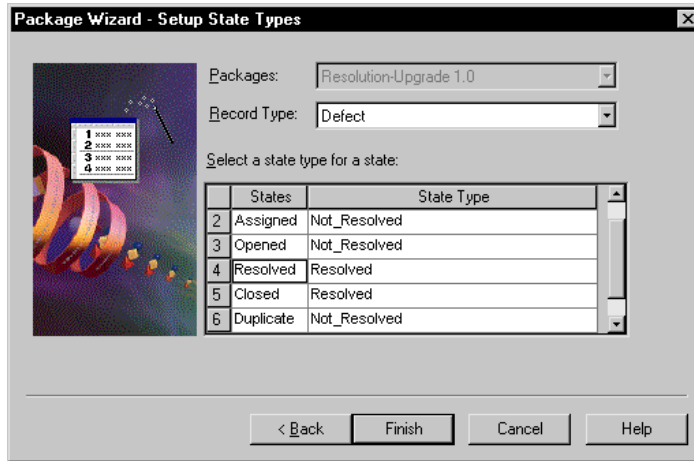
- a Select the Resolution Upgrade 1.0 package, and then click **Next**.

If this package does not appear in the list, click **More Packages** to add the missing package to the list, and then click **OK**.

- b Select a TeamTest/TestStudio-based schema to which you want to apply the package, and then click **Next**.

- c Click **Defect** (or if you renamed the record type, click that record type), and then click **Next**. The Setup State Types page of the Package Wizard appears.

- d Under the **State Type** column, choose **Resolved** in the row of the state that you want to set to resolved.



- e Click **Finish**.
- f Click **File > Check In**.
Add your comments, and then click **OK**.
- g Click **OK**.
- 13 After checking in the last schema revision, back up your databases.
- 14 Do the following to upgrade your database:
- a Click **Database > Upgrade Database**.
 - b Click **Yes**.
 - c Select the database to upgrade, and then click **Next**.
 - d Select the latest version, and click **Finish**.
- 15 Click **File > Check In**.
Add your comments, and then click **OK**.
- 16 Click **OK**.
- 17 Click **File > Exit** to close the ClearQuest Designer.

Upgrading a Rational 7.x Repository to a Project

After you have upgraded your ClearQuest schema and database, you need to convert your repositories to Rational projects. Rational Administrator provides a wizard that creates one new Rational project in the directory you specify for each 7.x project in the source repository.

All repository global assets, such as users, groups, and computers, get copied into each new Rational project. In addition, the repository conversion process upgrades your RequisitePro projects to Rational Test version 2001.

Use the following procedure to upgrade test repositories from Rational Suite 1.0, 1.5, or 2000, or from any test products marked as 7.x, such as Rational Robot 7.x.

- 1 In the Administrator, select **File > Convert Rational Repository into Rational Projects**.
- 2 In the Repository Conversion - Login screen, enter the path of the repository you want to convert, as well as the user ID and the password. Click **Next**.
- 3 In the Destination screen, enter the path where the new Rational project will reside. Click **Next**.

This directory becomes the root for all new projects. One new Rational project is created under this directory for each 7.x project in the source repository. All repository global assets, such as users, groups, and computers, get copied into each new Rational project.

- 4 In the Options screen, select one of the following options and click **Next**:
 - Create a test case for each RequisitePro requirement that defines test criteria and is associated with a test script.
 - Create a test case for each test script associated with a test requirement that describes a feature of the application-under-test. This option is recommended if multiple test scripts are associated with the same requirement.

For more information about test cases, see the *Using Rational TestManager* manual or the Rational TestManager Help.

- 5 In the Summary screen, review your settings and click **Finish**.
- 6 Optionally, review the RepositoryConvert.txt log file that is written to your temp directory.

Rational Test Asset Conversion Information

All test assets that were stored in a 7.x repository project are now stored in a Test Datastore. Each Test Datastore is associated with a Rational project. Any 7.x test assets that were global to the repository are copied into each Test Datastore created for a 7.x repository project. Thus, test assets within a Test Datastore are not shared with any other Test Datastore.

Within a Test Datastore, the test assets are persisted as a collection of files. The properties and relationships of each test asset are stored within an XML file. These files are organized via the Test Datastore directory structure. Each Test Datastore also uses an MS Access database for caching some of the information in the XML files for use by reports and queries.

Note: Users and Groups are stored in a separate datastore called a UserGroupTestDatastore. This datastore is created in a sub-directory of the Rational Administrator project.

Test cases are a new asset type. Test cases define the individual tests that are executed in order to validate test inputs such as RequisitePro requirements. In a 7.x repository project, scripts served this purpose as well as being the actual implementation of the test. In the new Rational Test, scripts are only used as implementations and do not play any role in test coverage. In order to facilitate this new model, the conversion program creates test cases based on the script/requirement relationships that exist in the 7.x repository project.

The following table lists the data that is converted from a v. 7.x repository to a v. 2001 project:

Types of 7.x Rational Test Assets	Converted?
Scripts	Yes (including VPs and Low-Level Scripts)
Schedules	Yes (now called Suites)
Sessions	Yes
Users	Yes
Groups	Yes
Computers	Yes
Datapools	Yes
Data Types	Yes
Performance Reports	Yes

Listing Reports	No
Logs	No
Builds	Yes
Test Documents	No
Coverage Reports	No
Queries	No
Log Filters	No

The following table lists the new test asset types:

New Test Asset Types	Description
Computer List	A collection of Computer assets that can be referenced as the execution target for Suites, Test Cases and Scripts.
Test Plan	A collection of Test Cases which define “what” needs to be tested for a particular feature or set of features.
Test Case	A specific “test” that needs to be planned, designed, and executed in order to validate some aspect of the System Under Test (SUT).
Configured Test Case	A specific “test” that needs to be run under a specific configuration (i.e. Operating System, etc.).
Listing Report (based on Crystal Reports)	A type of report that displays information about the test assets that are stored in the Test Datastore.
Test Case Analysis Report	A type of report that displays information about Test Cases and Test Case Results store in the Test Datastore.
Iteration	A specific period of time during a project, which is typically associated with some exit criteria and milestones.
Test Input	Identifies some aspect of the SUT that needs to be verified by a Test Case. Types of Test Inputs include Requisite Pro requirements and Rose Model elements as well as others that are configured as part of the TestManager extensible Test Input mechanism.
Test Input Type	Types of test inputs, such as RequisitePro requirements and Rose elements.

Test Script Type	Types of scripts, such as GUI, VU, Java, and VB.
Configuration Attribute	A specific aspect of a configuration such as OS, OS Version, memory, etc.
Configuration	A collection of Configuration Attributes which together describe some environment under which some set of Test Cases need to execute and pass.

Upgrading a RequisitePro Project

You may need to upgrade a RequisitePro project standalone. See *Upgrading a RequisitePro Project* on page 52 for information.

Rational Project Tasks

The following table provides an overview of the typical tasks that you perform to manage a Rational project.

Task	Description	See
Start the Administrator.		<i>Starting and Exiting the Rational Administrator</i> on page 11
Upgrading a Rational 7.x Test Repository	If you already have Rational Test 7.x repositories you would like to use with the current version of Rational Administrator, you need to convert the repositories to projects.	<i>Upgrading from Rational Test 7.x to 2001</i> on page 12
Upgrading a RequisitePro project	You can upgrade a RequisitePro project by itself if for some reason it didn't convert when you converted the repositories to projects.	<i>Upgrading a RequisitePro Project</i> on page 52
Creating a RequisitePro project	You can create a RequisitePro project which you can associate with a Rational project.	<i>Creating a RequisitePro Project</i> on page 53

Task	Description	See
Baselining RequisitePro projects with UCM	Rational RequisitePro project administrators can create baselines of RequisitePro projects by performing tasks in Rational Administrator and Rational ClearCase, implementing the Unified Change Management model.	<i>Baselining RequisitePro Projects with UCM on page 54</i>
Creating a RequisitePro project from a baseline	You can create a RequisitePro project based on the established baseline of an existing project and include the data from that baseline. If you have a Rational RequisitePro project that is baselined, you can use that baseline to create a new project in RequisitePro.	<i>Creating a RequisitePro Project from a Baseline on page 55</i>
Creating a Test datastore	You can create a test datastore in the Rational Administrator.	<i>Creating a Test Datastore on page 47</i>
Baselining Test datastores with UCM	Rational Test datastore administrators can create baselines of RequisitePro projects by performing tasks in Rational Administrator and Rational ClearCase, implementing the Unified Change Management model.	<i>Baselining Test Datastores with UCM on page 47</i>
Creating a Test datastore from a baseline	You can create a test datastore based on the established baseline of an existing test datastore and include the data from that baseline. If you have a Rational Test datastore that is baselined, you can use that baseline to create a new Test datastore.	<i>Creating a Test Datastore from a Baseline on page 48</i>
Configure ClearQuest or attach an already existing ClearQuest database to a Rational project.	To use ClearQuest to store defects, you must configure ClearQuest before you create a ClearQuest database or attach an already existing ClearQuest database to a Rational project.	<i>Configuring ClearQuest on page 27 and Configuring a Rational Project on page 32</i>
Register an existing Rational project.	If you have an existing Rational project, you can add it to the list of projects that appear in the main window of the Administrator.	<i>Registering a Rational Project on page 35</i>

Task	Description	See
Create and configure a Rational project.	You can create and configure a Rational project and associate a Rational Test datastore, a RequisitePro project, and a ClearQuest database with the Rational project, as well as existing Rose models.	<i>Creating and Configuring a Rational Project</i> on page 28
Connect to a Rational project.	You must connect to a Rational project before you can add a user or group or to view properties of datastores and databases associated with the project.	<i>Connecting to a Rational Project</i> on page 34
Add one or more test groups to a Rational Test datastore and assign privileges to a group.	Create a test group or groups with privileges for a Rational test datastore. When you add a user to a group, the user takes on the privileges of that group.	<i>Rational Test Datastore Privileges</i> on page 41
Add one or more test users to a Rational Test database.	You must add a test user to a Rational project before a user can use other Rational software. You must also make a user a member of a group to grant user privileges.	<i>Managing Test Users</i> on page 44 and <i>Rational Test Datastore Privileges</i> on page 41

The tasks in the following table are optional.

Task	Description	See
Attach an existing ClearQuest database.	You can attach an existing ClearQuest database to a Rational project.	<i>Adding a ClearQuest Database to a Rational Project</i> on page 60
Start the Synchronizer.	You can ensure consistency of data across Rational Test, Rational RequisitePro, and Rational Rose products by using Synchronizer rules.	<i>Starting the Synchronizer</i> on page 40 <i>Note:</i> The Rational Synchronizer is available only in Rational Suite products.

Before Creating a Rational Project

Before working with a Rational application for the first time, you must create and connect to a Rational project.

When you work with Rational projects, you can:

- Create a Rational project that is under configuration management, taking advantage of ClearCase's Unified Change Management (UCM) feature, an out-of-the-box process that supports best practices for change management as described in the Rational Unified Process.
- Configure a Rational project that associates a Test datastore, a RequisitePro project, and a ClearQuest database.
- Baseline Test datastores and RequisitePro projects with UCM.
- Create Test datastores and RequisitePro projects from an existing baseline.
- Create Test datastores and RequisitePro projects with no baseline and not under configuration management.
- Delete a Rational project. To delete a project, you must have privileges. For more information, see *Rational Test Datastore Privileges* on page 41.
- Connect or disconnect from a Rational project.
- Register an existing Rational project so it appears in the current list of projects in the left pane of the main window.
- Attach a ClearQuest database to a Rational project.

Before you create a Rational project, you must perform the following steps:

- 1 Decide whether to create the Rational project under configuration management. For information on the steps you need to take before creating a UCM-enabled project, see *Setting Up ClearCase for UCM-Enabled Projects* on page 29.
- 2 Decide what type of database to use. For information about database types, see *Types of Rational ClearQuest Databases* on page 8. For a summary of database types, see *Determining a Database Type* on page 9.
- 3 We recommend that you create a shared directory for each shared database or project. For more information, see *Creating a Shared Directory* on page 28.
- 4 Decide whether to bring a RequisitePro project and Test datastore under configuration management, and whether you want to use an existing baseline.

- 5 If you use SQL Anywhere for a ClearQuest database, you must do the following before you create a Rational project:

- a Install the Sybase SQL Anywhere software.

For information about installing Sybase SQL Anywhere software, see the installation guide for your Rational product.

- b Create a SQL Anywhere database server.

For information about creating a SQL Anywhere database server, see *Creating a SQL Anywhere Database Server* on page 65.

- 6 If your Rational software comes with ClearQuest, you must create a ClearQuest database to store defects for your testing efforts. If you use Oracle or Microsoft SQL Server for a ClearQuest database, do the following:

- a Purchase, install, and configure Oracle or Microsoft SQL Server database software.

Note: If you use either a Microsoft SQL Server database or an Oracle database with ClearQuest, you must install and configure the database specifically for ClearQuest or you will not be able to create a Rational project. For information about installing Oracle or Microsoft SQL Server for ClearQuest, see the *Installing Rational ClearQuest* manual. For information about configuring Oracle or Microsoft SQL Server for ClearQuest, see the *Administering Rational ClearQuest* manual. Both of these manuals are on the Rational documentation CD.

- b Configure ClearQuest by creating a new schema project or by connecting to an existing schema project. For information, see the next section, *Configuring ClearQuest*.

Configuring ClearQuest

Before you create a Rational project with a ClearQuest database, or attach an existing ClearQuest database to a Rational project, you must configure ClearQuest by creating a new schema project or by connecting to an existing schema project. You only need to do this once for all projects. If you attach an existing ClearQuest database to a Rational project that has an existing schema project, you do not have to create a new schema project. For more information about ClearQuest schemas, see *About the Rational ClearQuest Database* on page 7 and the ClearQuest Help.

For information about attaching an existing ClearQuest database when you create a Rational project, see *Configuring a Rational Project* on page 32. For information about attaching an existing ClearQuest database to an existing Rational project, see *Adding a ClearQuest Database to a Rational Project* on page 60.

To configure ClearQuest:

- 1 Click **Tools > Rational ClearQuest Maintenance Tool**.
- 2 Follow the directions in the ClearQuest Setup Wizard to create a new schema project or to connect to an existing schema project.
- 3 Optionally, create a sample database. ClearQuest provides a sample database containing sample records that you can use to familiarize yourself with ClearQuest.

For more information about the ClearQuest Setup Wizard, click **Help** on the wizard. The wizard creates two default ClearQuest accounts. You need the user ID and password to log into ClearQuest. The user IDs and passwords are as follows:

- *Default administrator account* – The user ID is `admin`, with no password.
- *Default user account* – The user ID is `user`, and the password is `password`.

Creating a Shared Directory

To create a shared directory for a database or project:

- 1 Create a directory in the Windows Explorer.
- 2 Right-click the directory, and then click **Sharing**.
- 3 Click **Shared As**.
- 4 Type the name of the shared directory in the **Share Name** box.
- 5 Click **OK**.

Creating and Configuring a Rational Project

This section includes the following topics:

- Setting up ClearCase for UCM-enabled projects
- Creating a Rational project
- Configuring a Rational project

Setting Up ClearCase for UCM-Enabled Projects

Before you can create a Rational project that is associated with a UCM project (that is, UCM-enable the Rational project), use the following steps to perform the necessary setup in ClearCase.

Note: Refer to the ClearCase Help for any specific ClearCase questions you may have. These instructions highlight only what you need to do as it relates to creating a UCM-enabled project in the Rational Administrator.

- 1 Create a project VOB, if necessary. You can skip this step if a project VOB has already been created.
 - a Click **Start > Programs > ClearCase > ClearCase Home Base**.
 - b In the VOBs tab, select **Create VOB**. The VOB Creation Wizard starts and opens the VOB Creation Wizard - Name and Major Parameters screen.
 - i To create a project VOB, select **UCM project data**.
 - ii To store regular files as well, select **Create VOB as a UCM component**.

Note: You may want separate VOBs for teams, products, and so on.
 - iii Click **Next** to proceed.
 - c In the Storage screen, enter the VOB storage location and click **Next**.
 - d In the Options screen, specify the options desired and click **Finish**.
- 2 Create a UCM component(s) in which to store requirements and test assets, if the necessary component(s) do not already exist. A *UCM component* is a ClearCase object that you use to group a set of related directory and file elements within a UCM project. A project must contain at least one component, and can contain multiple components.
 - If you selected the **Create VOB as a UCM component** check box on the VOB Creation Wizard - Name and Major Parameters screen, you have already created a UCM component.
 - If you did not select the **Create VOB as a UCM component** check box on the VOB Creation Wizard - Name and Major Parameters screen, you need to migrate an existing ClearCase configuration to a UCM project. See *Convert a VOB into a Component* in the ClearCase Help for instructions on how to do this.

You use ClearCase Project Explorer to create a UCM component.

- To access ClearCase Project Explorer, either select **Project Explorer** on the Projects tab of ClearCase Home Base, or select **Tools > Rational ClearCase Project Explorer** in the Rational Administrator.

3 Create a UCM project with a reference to a UCM component at a specific baseline. This step creates the integration stream for the UCM project.

- a Access ClearCase Project Explorer, either by selecting **Project Explorer** on the Projects tab of ClearCase Home Base, or **Tools > Rational ClearCase Project Explorer** in the Rational Administrator.
- b Select **File > New > Project**. The New Project Wizard opens.
- c Enter the name of the project and a description on the first wizard screen. Click **Next**.
- d In the second New Project Wizard screen, you can create a project from scratch or create a project based on an existing project's baselines.
 - To create an original project, click **No**.
 - To create a new version of an existing project, click **Yes**, and then navigate to the existing project in the folder tree.

Click **Next** to proceed.

- e On the third New Project Wizard screen, you specify which baselines to include in the project.
 - If you clicked **Yes** on the previous New Project Wizard screen, the latest baselines of the existing project's components appear. To use these baselines in the new project, click **Next**.
 - If you clicked **No** on the previous New Project Wizard screen, no baselines appear. Typically, you will want to add baselines in this step.

To add a baseline, click **Add**. The Add Baseline dialog box opens. Select a component in the **Component** list to see its baselines in the **Baselines** list. Select the baseline that you want to add and click **OK**.

- f On the fourth New Project Wizard screen, you indicate which project policies to enforce. You may want to accept the defaults. If not, see the ClearCase Help for further instructions.

Click **Next** to proceed.

- g On the fifth New Project Wizard screen, you indicate whether to configure the project to work with the ClearQuest integration. Enabling ClearQuest in a project ties in defect reporting and associates processes with activities. This means that, when a tester enters a defect, the configuration management system ships the defect back to the developer associated with the activity in question.

- To enable the project to work with ClearQuest, click **Yes**, and select a user database from the list.
- To set ClearQuest development policies, select the policy's check box. For details on setting up and using the UCM-ClearQuest integration, see the *Managing Software Projects with ClearCase* manual.

Click **Finish**. Review the properties of the project on the New Project Confirmation screen.

- 4 Create the shared integration view that will be used to access the requirements and test assets.

Note: The instructions that follow are suggestions. Be sure to consult your ClearCase Administrator for the options you should select when you create a shared integration view. You can also find information in *Administering ClearCase*, which can be found on the Rational Solutions for Windows Online Documentation CD.

- a Select the integration for a project in the left pane of the Exploring ClearCase Projects window.
- b Select **File > New > View**. The View Creation Wizard opens.
- c On the View Creation Wizard - Choose a Project screen, select **Yes** and select a project.
- d In the Create a Development Stream screen, click **Next**.
- e In the Review Types of Views screen, choose either **Dynamic** or **Snapshot**, then click **Next**.
- f On the next wizard screen:
 - If you selected a dynamic view, name the integration view and select a drive.
 - If you selected a snapshot view, enter the root directory for the view.

Click **Finish**, then confirm that you want ClearCase to create an integration view for you.

Creating a Rational Project

- 1 Select **File > New Project**.
- 2 Enter the project name, the project location (or browse to it), and, optionally, select **UCM enabled** to place a project under configuration management in the New Project – General wizard screen.

Note: When you UCM-enable a project, you gain the ability to baseline test assets and requirements through the Rational Administrator. For further information about baselining, see *Baselining Test Datastores with UCM* on page 47.

If UCM is not enabled, skip to step 4.

- 3 If UCM is enabled, select the UCM policies that apply to the project on the Project UCM Policies wizard screen.
 - i Select **Version Control Requirements Assets** to bring the RequisitePro requirements assets under configuration management.
 - ii Select **Version Control Test Assets** to bring the Test datastore under configuration management.
 - iii Select the UCM project you want to associate with the Rational project.
- 4 Optionally, enter a password and confirm it on the Security wizard screen to associate a password with the project. If you do not want to associate a password with the project, click **Next**.
- 5 Read the summary of the project settings provided. If you want to configure the project now, select the option on the Summary wizard screen.
- 6 Click **Finish**. Rational Administrator validates the project information and creates the project with an extension of .rsp. If you enabled the UCM option, the Administrator establishes an association between the Rational project and the UCM project.

If you selected the **Configure Project Now** option, the Configure Project dialog box opens.

Configuring a Rational Project

If a ClearQuest database has already been associated with the UCM project, you will not be able to select or create another ClearQuest database to associate with the Rational project. To create or change a ClearQuest database, you must create a new Rational project. The ClearQuest database is predetermined by any existing relationship with a UCM project.

Any UCM project that is associated with the Rational project will be enabled for change request management if you select a ClearQuest database on the Configure Project dialog box.

1 Select File > Configure.

- If you selected the **Configure Project Now** option when creating the project, the Configure Project dialog box opens without your having to select **File > Configure**.
- If more than one Rational project is registered, choose the project you want to configure from the selection dialog box.

2 In the Configure Project dialog box, do the following according to your situation:

- If you do not have an existing RequisitePro project, Test datastore or ClearQuest database, use the **Create** buttons to create them and associate them with the Rational project. The **Create** buttons are visible only when a specific product datastore has not been associated with the Rational project. See *Creating a Test Datastore* on page 47 and *Creating a RequisitePro Project* on page 53.

Note: To create a RequisitePro project and a test datastore from an existing baseline, see *Creating a RequisitePro Project from a Baseline* on page 55 and *Creating a Test Datastore from a Baseline* on page 48.

- If you do have an existing RequisitePro project, Test datastore, or ClearQuest database that you want to associate with the Rational project, use the **Select** button. The **Select** buttons are visible only when a specific product datastore, project, or database has not been associated with the Rational project.
- Use the **Add** button to associate existing Rose model files with the Rational project. You cannot create Rose model files from the Configure Project dialog box.
- If you have already associated a RequisitePro project or Test datastore with a Rational project that is UCM-enabled, but have not brought the project or datastore under configuration management, use the **Add to CM** button to add it to configuration management. The **Add to CM** buttons for RequisitePro projects and Test datastores are enabled only if the Rational project is UCM-enabled, and if the project or datastore is not currently under configuration management.

- If the RequisitePro project or Test datastore is using configuration management, you will see the **Check In All...** button. Use the **Check In All...** button to add and check-in all assets, enabling the creation of a baseline in ClearCase. See *Baselining Test Datastores with UCM* on page 47 and *Creating a RequisitePro Project from a Baseline* on page 55.
- If you want to disassociate RequisitePro projects or Test datastores that are under configuration management, use the **Remove from CM** button. The **Remove from CM** buttons for RequisitePro projects and Test datastores are enabled only if the Rational project is UCM-enabled, and the project or datastore is currently under configuration management.

Note: Removing a RequisitePro project or Test datastore from configuration management does the following:

- Copies all of the files in the project or datastore to a non-version-controlled area
- Associates the Rational project with the non-version-controlled area

- 3 When you are finished, click **Close**.

Managing a Rational Project

Managing a Rational project covers certain tasks you can do with an existing project, such as connecting, disconnecting, registering, unregistering, and deleting. You can also display and modify the project's properties.

Connecting to a Rational Project

You must connect to a Rational project before you can configure or delete it. Also, once you have connected to a Rational project you can view the properties of the product datastores, projects, and databases.

- 1 Select **File > Connect**.
- 2 If there is more than one disconnected Rational project, select the project you want to connect to and click **OK**.

Only those registered Rational projects that are not already connected are in the list of projects.

- 3 Optionally, enter the Rational project's password and click **OK**.

Disconnecting from a Rational Project

- 1 Select **File > Disconnect**.
- 2 Select the Rational project you want to disconnect from and click **OK**.

Note: If only one project is connected, Rational Administrator will disconnect you from the project without a selection dialog box appearing.

Only those registered projects that are not already connected are in the list of projects.

Registering a Rational Project

Registering a Rational project makes it appear in the project hierarchy shown in the left pane. You register a project when a user on one computer wants to administer a Rational project that was created on a different computer.

- 1 Select **File > Register Project**.
- 2 Enter the path of the Rational project or browse to it and click **Open**.

If the project is already registered, it will not be registered again when you click **Open**.

Unregistering a Rational Project

Unregistering a Rational project makes it disappear from the project hierarchy shown in the left pane.

- 1 Select **File > Unregister Project**.
- 2 Select the project you want to unregister and click **OK**.

The Administrator removes the project from the project hierarchy.

If you select a project that is currently open, the Administrator closes the project before removing it from the project hierarchy.

You can also select Unregister from the Project context menu to unregister a Rational project.

Displaying and Modifying the Properties of a Rational Project

You must connect to a Rational project before you can display its properties.

1 Select **Edit > Properties**.

The General tab displays the Rational project name, location, and UCM enabled status.

- **UCM enabled** can be turned on only if ClearCase 4.1 or greater is installed.
- **UCM enabled** cannot be turned off unless both the Test datastore and Requirements project are non-UCM enabled.
- The project location cannot be modified.

The Project UCM Policies tab allows you to specify the configuration management attributes.

- You cannot clear the check boxes if the Rational project was under configuration management before opening the Project Properties dialog box.
- The check boxes are enabled only if:
 - The project was non-UCM enabled before opening the Project Properties dialog box, and
 - The **UCM enabled** check box was selected after the Project Properties dialog box was displayed.

The Security tab allows you to modify the Rational project's password.

2 View or modify the properties as desired.

Deleting a Rational Project

Deleting a Rational project does the following:

- Unregisters the project
- Removes the associations among the various projects, datastores, and databases
- Permanently deletes the project

However, none of the associated product projects, datastores, and databases will be deleted when you delete the project.

To delete a Rational project:

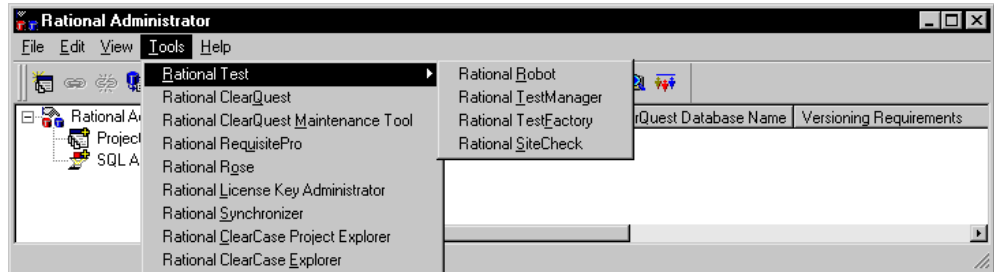
- 1 Select the project you want to delete in the project (left) pane.
- 2 Select **File > Delete Project**.
- 3 To delete the project, click **OK**.

The Administrator permanently deletes the project.

If you select a Rational project that is currently open, the Administrator closes the project before deleting it.

Starting Rational Products

You can access several Rational products from the Rational Administrator, as shown in the following figure:



This chapter explains how to use the Rational Synchronizer in the Rational Administrator. It includes the following topics:

- *About the Rational Synchronizer* on page 39
- *Starting the Synchronizer* on page 40
- *Viewing and Editing Synchronizer Rules* on page 40

About the Rational Synchronizer

The Rational Synchronizer helps maintain Rational project consistency, resulting in improved team communication. The Synchronizer works by creating and updating a Rational project's related items based on the existence of other items in your project.

The Synchronizer works with the requirements (Rational RequisitePro), modeling (Rational Rose), and test domains.

Overview of Using the Synchronizer

The Synchronizer works by using rules to determine which changes are needed. Rational provides some sample rules to get you started. Your administrator or project leader analyzes your development environment to decide which rules to use, and whether to write new rules or to edit existing ones.

For example, every Rose actor has a corresponding Actor requirement in RequisitePro. The Synchronizer can enforce this constraint with a rule. When you run the Synchronizer it finds each requirement for which there is no actor. When you instruct the Synchronizer to proceed, it creates an actor for each requirement. As a result, new developments in the requirements domain are communicated accurately and promptly to the appropriate team.

Tasks Related to Using the Synchronizer

You need to do certain tasks in the Synchronizer. See the Rational Synchronizer chapter in *Configuring Rational Suite* for more information on the following tasks.

- Administration for the Synchronizer
- Importing Rules
- Writing Synchronizer Rules

For More Information

See *Configuring Rational Suite* for information on how to administer the Synchronizer, including how to write and import rules. See the Synchronizer Help for instructions on how to use the Synchronizer, including what to do first in the Synchronizer.

Starting the Synchronizer

To start the Rational Synchronizer from the Rational Administrator, select **Tools > Rational Synchronizer**.

Viewing and Editing Synchronizer Rules

To view and edit Synchronizer rules in a project, you must first connect to the project using **File > Connect**. If needed, select the project to which you want to connect.

Once you connect to the project, to view and edit Synchronizer rules, right-click the Synchronizer Rules item in the left (project) pane and select **Edit Rules**.

This chapter explains how to manage a Rational Test datastore. It includes the following topics:

- *Rational Test Datastore Privileges* on page 41
- *Managing Test Groups* on page 42
- *Managing Test Users* on page 44
- *Displaying the Properties of a Test Datastore* on page 49
- *Adding a Test Datastore to a Project* on page 50
- *Removing a Test Datastore from UCM* on page 50

Rational Test Datastore Privileges

When you connect to a Rational project, you may be asked to enter a password if one has been assigned to the project on the Project Properties dialog box. You can assign a password to an existing project if you wish. See *Displaying and Modifying the Properties of a Rational Project* on page 36.

When you create a project, you can use the Administrator to create a Rational Test datastore. Doing so also creates a Test Users and Groups folder. The Users folder contains an **admin** test user. These default objects appear in the left pane of the main window.

You determine the security of a Rational Test datastore by assigning privileges to test users and test groups. Test groups allow you to set privileges for each test user. When you add a test user to a test group, the test user takes on the privileges of that test group.

You can set the Rational Test datastore privileges for a test user to:

- Create, modify, and delete test planning assets.
- Create, modify, and delete test implementation assets.
- Create, modify, and delete test execution assets.
- Create, modify, and delete test results analysis assets.

Managing Test Groups

Each project that you create comes with a default test user, *admin*. The admin test user is not a member of any specific test group and takes on all available privileges.

For example, as administrator of a test database, you can create a test group with privileges that allow the test group to create and modify test assets, builds, logs, and reports.

You can also make any group a default group and have multiple default groups. When you add a test user to a Rational Test datastore, and this option is set, the user automatically becomes a member of the default groups.

An admin test user can:

- Create, modify, and delete test assets.
- Create, modify and delete reports, builds, and logs.
- Customize test assets and builds.

There is no default password for the admin test user. You can log in as an admin test user, and you do not need a password. This lets you log into any Rational Test component after you first install the software.

Setting Up Security for the Admin Test User

When you connect to a project for the first time, you should define a password for the Admin test user to prevent unauthorized access. The Admin test user always has full test user access privileges and cannot be deleted from a project. For more information about modifying a password, see *Changing a Password* on page 46.

Adding a Test Group

Test groups allow you to set privileges for each test user.

Note: You must connect to a project before you can add a test user or test group to a Rational Test datastore. For more information, see *Connecting to a Rational Project* on page 34.

To add a test group to a Rational Test datastore:

- 1 Click **Insert > Test Group**.
- 2 If you are connected to more than one project, a dialog box opens with a list of all connected project. Select the project to add a test group to, and click **OK**.

The Insert Group dialog box opens.

- 3 Type an alphanumeric string of up to 40 characters for the name of the test group.
- 4 Type a description of the test group.
- 5 Optionally, click **Set as default group** to set a test group as a default group for all test users added.
- 6 Optionally, click **Select All** to select all test group privileges. Alternatively, add and remove privileges from a group by selecting or clearing the appropriate check boxes. Click **Clear All** to clear all selected privileges.
 - **Write Privileges** – Select the appropriate check boxes to give privileges to a group to create, modify, or delete test planning assets, test implementation assets, test execution assets, and test results analysis assets.
 - **Administration Privileges** – Select the appropriate check boxes to give privileges to a test group to customize test assets. Test assets include scripts and suites.
- 7 Click **OK**.

Modifying a Test Group

You must have privileges to modify a test group. For more information about privileges, see *Rational Test Datastore Privileges* on page 41.

To modify existing test group information:

- 1 Connect to the project that you want to modify. For more information about connecting to a project, see *Connecting to a Rational Project* on page 34.
- 2 If Groups is not visible in the left pane of the main window, double-click Rational Test Datastore.
- 3 If the test group that you want to modify is not visible, double-click Groups to display all groups.
- 4 Select the test group to modify.
- 5 Click **Edit > Properties**.
- 6 Change the test group information.
- 7 Click **OK** to apply your changes.

Deleting a Test Group

When you delete a test group, you delete the group privileges for any test users in the deleted group. You do not delete any test users who are members of the deleted group.

You must have privileges to delete a test group from a Rational Test datastore. For more information about privileges, see *Rational Test Datastore Privileges* on page 41.

To delete a test group from a Rational Test datastore:

- 1 Connect to the project that you want to modify. For more information about connecting to a project, see *Connecting to a Rational Project* on page 34.
- 2 If Groups is not visible in the left pane of the main window, double-click Rational Test Datastore.
- 3 If the test group that you want to delete is not visible, double-click Groups to display all groups.
- 4 Select the test group to delete, and then click **Edit > Delete**.
The Administrator prompts you to confirm the deletion.
- 5 Click **Yes**.

RequisitePro and ClearQuest Security

To set security privileges for a RequisitePro project or ClearQuest database, see the RequisitePro or ClearQuest Help.

Managing Test Users

Test users are typically the QA managers, developers, and test engineers who use Rational Test components to create, edit, run, monitor, analyze, and manage scripts.

For each test user, you can specify a user ID, password, first name, last name, company, title, department, phone number, and e-mail address.

You can assign privileges to a test user by adding a user to a test group. When you add a test user to a test group, the test user takes all privileges of that test group. A test user can be a member of one or more test groups. The only privilege needed to modify or add test users of test groups is the Rational project password.

Adding a Test User

Note: You must connect to a project before you can add a test user or test group to a Rational Test datastore. For more information, see *Connecting to a Rational Project* on page 34.

To add a test user to a Rational Test datastore:

- 1 Click **Insert > Test User**.
- 2 If you are connected to more than one project, a dialog box opens with a list of all connected projects. Select the project to add a test user to, and click **OK**.
- 3 Type information about a test user in the General tab of the dialog box.
- 4 Click the Groups tab to add or remove a test user from a test group.
- 5 In the **Not A Member Of** list, select one or more test groups to make the test user a member, and click > or >>.
- 6 Click **OK**.

For more information about test groups, see *Rational Test Datastore Privileges* on page 41.

Modifying a Test User

You must have privileges to modify a test user in a Rational Test datastore. For more information about privileges, see *Rational Test Datastore Privileges* on page 41.

To modify existing test user information:

- 1 Connect to the project that you want to modify. For more information about connecting to a project, see *Connecting to a Rational Project* on page 34.
- 2 If Users is not visible in the left pane of the main window, double-click **Rational Test Datastore**.
- 3 If the test user that you want to modify is not visible, double-click **Users** to display all test users.
- 4 Select the test user to modify.
- 5 Click **Edit > Properties**.
- 6 Click the General tab and change the general information.
- 7 Click the Groups tab and change the test groups information.
- 8 Click **OK** to apply your changes.

Deleting a Test User

You must have privileges to modify a test user in a Rational Test datastore. For more information about privileges, see *Rational Test Datastore Privileges* on page 41.

To delete a test user from a Rational Test datastore:

- 1 Connect to the project that you want to modify. For more information about connecting to a project, see *Connecting to a Rational Project* on page 34.
- 2 If **Users** is not visible in the left pane of the main window, double-click **Rational Test Datastore**.
- 3 If the test user that you want to delete is not visible, double-click **Users** to display all test users.
- 4 Select the test user to delete.
Note: You cannot delete the admin user.
- 5 Click **Edit > Delete**.
The Administrator prompts you to confirm the deletion.
- 6 Click **Yes**.

Changing a Password

To change a password:

- 1 Double-click **Rational Test Datastore** in the left pane of the main window.
- 2 Double-click **Users** to display all test users.
- 3 Select the user name of the password that you want to change.
- 4 Click **Edit > Properties**, or right-click and then click **Properties**.
- 5 Click the **General** tab of the dialog box.
- 6 Select the original password (xxxxx) in the **Password** box, and then type a new password over it.
Type an alphanumeric string of up to 20 characters for the password. Passwords are case-sensitive. A test user with a defined password must type that password and user ID to log into the Rational software.
- 7 Click **OK**.

Creating a Test Datastore

You can create a test datastore in the Rational Administrator by selecting the **Create** button in the Configure Project dialog box.

- 1 Open the Create Test Datastore dialog box by clicking the **Create** button to the right of the **Test Assets** field in the Configure Project dialog box.
- 2 Enter or browse to the path for the new test datastore.
- 3 Optionally, choose the initialization options you want:
 - To initialize the test assets from an existing test datastore, select **Initialize Assets from the following Test Datastore**. Enter or browse to the path of the existing test datastore.
 - To initialize the test users and groups in the new test datastore from an existing Rational project, select **Initialize Test Users and Groups from the Rational Project**. Enter or browse to the path of the existing Rational project.
- 4 Click **OK** to finish creating the test datastore.

Baselining Test Datastores with UCM

Rational test datastore administrators can create baselines of test datastores by performing tasks in Rational Administrator and Rational ClearCase, implementing the Unified Change Management model.

Note: In order to baseline a test datastore, the test datastore must be associated with a UCM-enabled Rational project in Rational Administrator.

To baseline the test datastore:

- 1 Open the Rational Administrator.
- 2 Right-click on the Rational project and select **Configure**.
- 3 In the Configure Project dialog box, to the right of the **Associated Test Datastore** field, click the **Check In All** button.
- 4 Confirm your selection in the messages that follow, and enter an activity to describe the baseline in the Check in All dialog box.
- 5 After the Check In All operation is completed, click **Close** to exit the Configure Project dialog box.
- 6 Select **Tools > Rational ClearCase Project Explorer**.

The ClearCase Explorer appears.

- 7 Right-click on the test assets integration stream and select **Make Baseline** from the shortcut menu.
- 8 Enter a baseline title, select the baseline type, select a view context, and click **OK**.

Creating a Test Datastore from a Baseline

You may want to create a test datastore based on the established baseline of an existing test datastore and include the data from that baseline. If you have a Rational test datastore that is baselined, you can use that baseline to create a new test datastore. The following tasks are performed by test datastore administrators in Rational Administrator and Rational ClearCase, implementing the Unified Change Management model.

Note: Test datastore administrators can also create baselines of test datastores if the test datastore is associated with a UCM-enabled Rational project in Rational Administrator. See *Baselining projects with UCM* for more information.

Creating a test datastore from a baseline requires the following tasks:

- Create a UCM project
- Create a Rational project

Create a UCM Project

See *Setting Up ClearCase for UCM-Enabled Projects* on page 29 and the Rational ClearCase Help for more information.

- 1 Create a UCM project.
- 2 Add a UCM component to the project that already contains a test datastore at a recommended baseline.
- 3 Set the recommended baseline for the new UCM project (by default the baseline specified in step 2 will be selected).
- 4 Create an integration view for the new UCM project.

Create a Rational Project

See *Creating and Configuring a Rational Project* on page 28 for more information.

- 1 From Rational Administrator, click **File > New Project**. The New Project wizard opens.
- 2 Enter requested information in the wizard, select **UCM enabled**, and select **Version Control Test Assets**.

When you complete the wizard, the Configure Project dialog box opens.

- 3 Click the **Select** button to choose Test Assets.
- 4 Browse to the UCM view and select the test datastore path for the baselined test datastore.
- 5 Optionally, to initialize the test users and groups in the new test datastore from an existing Rational project, select **Initialize Test Users and Groups from the Rational Project**. Enter or browse to the path of the existing Rational project.
- 6 Click **OK** in the Configure Project dialog box.

The new test datastore contains the data and structure from the selected baselined datastore.

Note: The new test datastore has the same name as the baselined test datastore.

Displaying the Properties of a Test Datastore

To see the properties of the test datastore in a project, you must first connect to the project using **File > Connect**. If needed, select the project to which you want to connect. You cannot change any of the properties.

To display the properties of the Test datastore:

- 1 Select the Test datastore in the left (project) pane.
- 2 Select **Edit > Properties**.
- 3 Select **Close** to close the dialog box.

Adding a Test Datastore to a Project

- 1 Select **File > Configure**.

If more than one project is registered, choose the project you want to configure from the selection dialog box.

- 2 Use the Configure Project dialog box to associate the Test datastore with the Rational project.
 - Use the **Create** button to create a Test datastore and associate it with the Rational project. The **Create** button is visible only when a Test datastore has not been associated with the Rational project.
 - Use the **Select** button to select an existing Test datastore and associate it with the Rational project. The **Select** button is visible only when a Test datastore has not been associated with the Rational project.
 - Use the **Add to CM** button to add the Test datastore to configuration management. The **Add to CM** button is enabled only if the Rational project is UCM-enabled, and if the datastore is not currently under configuration management.
- 3 When you are finished, click **Close**.

Removing a Test Datastore from UCM

- 1 Select **File > Configure**.

If more than one project is registered, choose the project you want to configure from the selection dialog box.

- 2 Use the Configure Project dialog box to remove the Test datastore from configuration management.

Use the **Remove from CM** button to remove a Test datastore from configuration management. The **Remove from CM** button is enabled only if the Rational project is UCM-enabled, and the datastore is currently under configuration management.
- 3 When you are finished, click **Close**.

Managing a RequisitePro Project

5

This chapter explains how to manage a RequisitePro project in the Rational Administrator. It includes the following topics:

- *About RequisitePro* on page 51
- *Upgrading a RequisitePro Project* on page 52
- *Creating a RequisitePro Project* on page 53
- *Baselining RequisitePro Projects with UCM* on page 54
- *Creating a RequisitePro Project from a Baseline* on page 55
- *Displaying the Properties of a RequisitePro Project* on page 56
- *Adding a RequisitePro Project to a Rational Project* on page 56
- *Removing a RequisitePro Project from UCM* on page 57

About RequisitePro

Requirements management is the process of identifying, organizing, and documenting the changing requirements of a project. A requirement is one criterion for your project's success. Your project's requirements answer questions such as "What do customers want?" and "What new features must we absolutely ship in the next version?" Most project teams work with requirements. On smaller, less formal projects, requirements might be kept in text files or e-mail messages. Other projects may use more formal ways of recording and maintaining requirements.

RequisitePro is unique because it integrates a familiar environment, Microsoft Word, and a database to provide a powerful, yet easy-to-use framework for managing your requirements. You itemize requirements within requirements documents, and then manage them using an integrated database. Your teams can collaborate, communicate, and provide updates on the same project.

When you manage requirements, you can understand how changed requirements affect your project. You can effectively communicate requirements to all team members and to stake holders. Effective requirements management helps your organization ensure that its products meet their stated goals.

See *About the Rational RequisitePro Project* on page 10 for a high-level overview of RequisitePro. See your RequisitePro documentation for information on how to set up the RequisitePro project.

Upgrading a RequisitePro Project

Normally, when you upgrade a Rational 7.x repository to a project, your RequisitePro project is upgraded automatically. (For details, see *Upgrading from Rational Test 7.x to 2001* on page 12).

If for any reason your RequisitePro project does not get converted, you can upgrade it using the following procedure. Before you start, you must first connect to the Rational project associated with the RequisitePro project that needs to be upgraded.

Note: At any time while using the wizard, click **Help** to see the RequisitePro Help.

- 1 If you are not already connected to the Rational project associated with the RequisitePro project that needs to be upgraded, do so by selecting **File > Connect**, then selecting the Rational project you want from the selection dialog box.
- 2 Select **File > Upgrade RequisitePro Project**.
- 3 Select the RequisitePro project you want to upgrade and click **OK**. The RequisitePro Project Upgrade Wizard opens.
- 4 In the Introduction screen, click **Next** to proceed after you have backed up your database.
- 5 In the Select Project screen, enter or browse to the RequisitePro project you want to upgrade and click **Next**.
- 6 In the Project Administrator Identification screen, if your RequisitePro project has security enabled, enter your Rational RequisitePro **User ID** and **Password** and click **Next**.
- 7 In the DBA Identification screen, if there are multiple projects in an enterprise database, enter the **User ID** and **Password** used to create the enterprise database and click **Next**.

- 8 In the Affected Projects screen, the **Affected Projects** list contains the project names and descriptions of all RequisitePro projects in the database affected by the upgrade. Be sure you really want to convert all the projects listed before you click **Next** to continue.
- 9 In the Confirm screen, click **Finish** to begin the upgrade process.
- 10 In the Upgrading screen, click **Exit** to close the wizard when the database upgrade finishes.

Creating a RequisitePro Project

You can create a project in Rational RequisitePro by selecting the **Create** button in the Configure Project dialog box.

RequisitePro projects are created from templates. By clicking on the **Create** button, the document and requirement types, attributes, and security information of the selected project are copied to the new project. If want to copy all the data from another project, in addition to copying the structure, see *Creating a RequisitePro Project from a Baseline* on page 55.

- 1 Open the Create RequisitePro Project dialog box by clicking the **Create** button to the right of the **Requirement Assets** field in the Configure Project dialog box.
- 2 Select one of the following Project Templates:
 - Select the **Blank** template, and individually set all the parameters for the project.
 - Select **Make New Template** to create a template from an existing project, using the New Template Wizard.
 - Select one of the default templates provided with RequisitePro.
- 3 Click the **Create** button once you select a template.

Note: A description of each template appears in the text box at the bottom of the dialog box. Click the **Details/No Details** button to toggle the display of the template description box.
- 4 Enter information about the new project in the dialog boxes that follow. Click **Help** to refer to the RequisitePro Help for assistance in creating the new RequisitePro project.

Baselining RequisitePro Projects with UCM

Rational RequisitePro project administrators can create baselines of RequisitePro projects by performing tasks in Rational Administrator and Rational ClearCase, implementing the Unified Change Management model.

For archiving projects that do not use the UCM model, refer to Archiving Projects with ClearCase in the RequisitePro Help.

Note: When creating a project from a baseline, the newly created project does not maintain the cross-project traceability links from the original baselined project.

In order to baseline a RequisitePro project, you must have the following:

- The RequisitePro project must be associated with a UCM-enabled Rational project in Rational Administrator.
- The RequisitePro project must be closed, and all users must have exited the program.

To baseline the RequisitePro project:

- 1 Open the Rational Administrator.
- 2 Right-click on the Rational project and select **Configure**.
- 3 In the Configure Project dialog box, to the right of the **Associated RequisitePro Project** field, click the **Check In All** button.
- 4 Confirm your selection at the messages that follow, and enter an activity to describe the baseline in the Check in All dialog box.
- 5 After the Check In All operation is completed, click **Close** to exit the Configure Project dialog box.
- 6 Select **Tools > Rational ClearCase Project Explorer**.
The ClearCase Explorer appears.
- 7 Right-click on the RequisitePro Requirements Assets integration stream and select **Make Baseline** from the shortcut menu.
- 8 Enter a baseline title, select **Full** for the baseline type, select a view context, and click **OK**.

Creating a RequisitePro Project from a Baseline

You may want to create a project based on the established baseline of an existing project and include the data from that baseline. If you have a Rational RequisitePro project that is baselined, you can use that baseline to create a new project in RequisitePro. The following tasks are performed by RequisitePro project administrators in Rational Administrator and Rational ClearCase, implementing the Unified Change Management model.

Note: RequisitePro project administrators can also create baselines of RequisitePro projects if the RequisitePro project is associated with a UCM-enabled Rational project in Rational Administrator. See *Baselining projects with UCM* for more information.

Creating a project from a baseline requires the following tasks:

- Creating a UCM project
- Creating a Rational project

Creating a UCM Project

See *Setting Up ClearCase for UCM-Enabled Projects* on page 29 and the Rational ClearCase Help for more information.

- 1 Create a UCM project.
- 2 Add a UCM component to the project that already contains a versioned RequisitePro project at a recommended baseline.
- 3 Set the recommended baseline for the new UCM project (by default the baseline specified in step 2 will be selected).
- 4 Create an integration view for the new UCM project.

Creating a Rational Project

See *Creating and Configuring a Rational Project* on page 28 for more information.

- 1 From Rational Administrator, click **File > New Project**. The New Project wizard opens.
- 2 Enter requested information in the wizard, select **UCM enabled**, and select **Version Control Requirement Assets**.

When you complete the wizard, the Configure Project dialog box opens.

- 3 Click the **Select** button to choose Requirement Assets.

- 4 Browse to the UCM view and select the .rqs file for the baselined RequisitePro project.
- 5 Click **OK** in the Configure Project dialog box.

The new RequisitePro project contains the data and structure from the selected baselined project.

Note: The new project has the same name as the baselined project. You can remove the old baselined project from the RequisitePro list of projects in the Open Project and Documents dialog box.

Displaying the Properties of a RequisitePro Project

To see the properties of the RequisitePro project, you must first connect to the Rational project using **File > Connect**. If needed, select the project to which you want to connect.

To display the properties of the RequisitePro project:

- 1 Select the RequisitePro project in the left (project) pane.
- 2 Select **Edit > Properties**.
- 3 Select the **Properties** button to the right of the **Database** text box to see the database properties.

Adding a RequisitePro Project to a Rational Project

- 1 Select **File > Configure Project**.

If more than one project is registered, choose the project you want to configure from the selection dialog box.

- 2 Use the Configure Project dialog box to associate the RequisitePro project with the Rational project.
 - Use the **Create** button to create a RequisitePro project and associate it with the Rational project. The **Create** button is visible only when a RequisitePro project has not been associated with the Rational project.
 - Use the **Select** button to select an existing RequisitePro project and associate it with the Rational project. The **Select** button is visible only when a RequisitePro project has not been associated with the Rational project.

- Use the **Add to CM** button to add the RequisitePro project to configuration management. The **Add to CM** button is enabled only if the Rational project is UCM-enabled, and if the project is not currently under configuration management.
- 3 When you are finished, click **Close**.

Removing a RequisitePro Project from UCM

- 1 Select **File > Configure**.

If more than one project is registered, choose the project you want to configure from the selection dialog box.

- 2 Use the Configure Project dialog box to remove the RequisitePro project from configuration management.

Use the **Remove from CM** button to remove a RequisitePro project from configuration management. The **Remove from CM** button is enabled only if the Rational project is UCM-enabled, and the RequisitePro project is currently under configuration management.

- 3 When you are finished, click **Close**.

This chapter explains how to manage a ClearQuest database in the Rational Administrator. It includes the following topics:

- *About ClearQuest* on page 59
- *Displaying the Properties of a ClearQuest Database* on page 59
- *Adding a ClearQuest Database to a Rational Project* on page 60
- *Removing a ClearQuest Database from a Rational Project* on page 60

About ClearQuest

ClearQuest is a change request management tool that helps you track and manage all the change activities (such as defects and enhancement requests) associated with a Rational project. ClearQuest stores its information in a database, and comes with a ready-to-use database schema (the fields in the database). ClearQuest is easy to change; an administrator can customize and define queries, fields, activities, and states specific to your development process.

See *About the Rational ClearQuest Database* on page 7 for a high-level overview of ClearQuest. See your ClearQuest documentation for information on how to set up the ClearQuest database.

Displaying the Properties of a ClearQuest Database

To see the properties of the ClearQuest database in a Rational project, you must first connect to the project using **File > Connect**. If needed, select the Rational project to which you want to connect.

To display the properties of the ClearQuest database:

- 1 Select the ClearQuest Database in the left (project) pane.
- 2 Select **Edit > Properties**.

Adding a ClearQuest Database to a Rational Project

Any UCM project that is associated with the Rational project will be enabled for change request management if you select a ClearQuest database on the Configure Project dialog box.

1 Select **File > Configure**.

If more than one Rational project is registered, choose the project you want to configure from the selection dialog box.

2 Use the Configure Project dialog box to associate the ClearQuest database with the Rational project.

- Use the **Create** button to create a ClearQuest database and associate it with the Rational project. The **Create** button is visible only when a ClearQuest database has not been associated with the Rational project.
- Use the **Select** button to select an existing ClearQuest database and associate it with the Rational project. The **Select** button is visible only when a ClearQuest database has not been associated with the Rational project.

3 When you are finished, click **Close**.

Note: If a ClearQuest database has already been associated with the Rational project, you will not be able to select or create another ClearQuest database to associate with the project. To create or change a ClearQuest database, you must create a new Rational project. The ClearQuest database is predetermined by any existing relationship with a UCM project.

Removing a ClearQuest Database from a Rational Project

If a ClearQuest database has already been associated with the Rational project, you will not be able to remove it. To create a Rational project without a ClearQuest database, you must create a new project.

This chapter explains how to manage a Rose model file in the Rational Administrator. It includes the following topics:

- *About Rational Rose* on page 61
- *Adding a Rational Rose Model to a Rational Project* on page 61
- *Removing a Rational Rose Model from a Rational Project* on page 62

About Rational Rose

Rational Rose is a visual modeling tool for developers. Visual modeling helps you manage software complexity. At its simplest, visual modeling means creating a graphical blueprint of your system's architecture. From this visual representation of your architecture, you can quickly detect problems such as inconsistencies and lack of modularity.

Adding a Rational Rose Model to a Rational Project

- 1 Select **File > Configure**.

If more than one Rational project is registered, choose the project you want to configure from the selection dialog box.

- 2 Use the Configure Project dialog box to associate the Rose model with the Rational project.

Use the **Add** button to associate a Rose model with the Rational project.

- 3 When you are finished, click **Close**.

Removing a Rational Rose Model from a Rational Project

- 1 Select **File > Configure**.

If more than one Rational project is registered, choose the project you want to configure from the selection dialog box.

- 2 Use the Configure Project dialog box to associate the Rose model file with the Rational project.

Use the **Remove** button to disassociate a Rose model file from the Rational project.

- 3 When you are finished, click **Close**.

Managing a SQL Anywhere Database Server

8

This chapter explains how to configure and manage a SQL Anywhere database server. It includes the following topics:

- *Network Server Requirements* on page 64
- *Server Terminology* on page 64
- *Creating a SQL Anywhere Database Server* on page 65
- *Changing a SQL Anywhere Database Server Configuration* on page 70
- *Starting a SQL Anywhere Database Server* on page 71
- *Stopping a SQL Anywhere Database Server* on page 72
- *Deleting a SQL Anywhere Database Server* on page 73
- *Using the Sybase Central Database Management Tool* on page 73
- *Using the Sybase ISQL Utility* on page 73
- *Using the SQL Anywhere Service Manager* on page 73

Network Server Requirements

If you use Sybase SQL Anywhere software for your database, make sure that your network server meets the following minimum hardware and software requirements:

Name of Requirement	Minimum
Operating System	Windows NT 4.0 Server or Workstation 4.0
Processor	Pentium
Memory	64 MB
Disk space	100 MB
Network protocol	TCP/IP
Microsoft service pack	5

Note: Novell NetWare is no longer supported for network servers.

Server Terminology

The following table lists some terms that apply to a SQL Anywhere database server:

Term	Definition
server	The computer with Sybase SQL Anywhere Server software installed on it
service	Starts the SQL Anywhere database server
SQL Anywhere database server	A service that manages database requests for one or more repositories

Creating a SQL Anywhere Database Server

To create a SQL Anywhere database server, perform the following tasks:

- 1** Install the Sybase SQL Anywhere Server software before you create a SQL Anywhere database server.

For information about installing the SQL Anywhere Server software, see the installation guide for your product.

- 2** Choose a user account to run the SQL Anywhere database server and set privileges for that account.

For information about setting privileges, see the next section, *Setting Privileges*.

- 3** Create a SQL Anywhere database server.

For information about creating a SQL Anywhere database server, see *How to Create a SQL Anywhere Database Server* on page 68.

Setting Privileges

To set privileges for a user account running a SQL Anywhere database server:

1 Do one of the following:

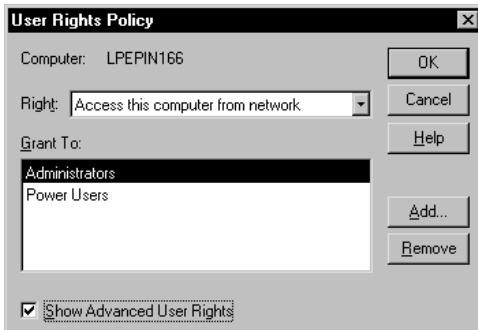
If a computer is running	Then
Windows 2000 Server	<ul style="list-style-type: none">a Click Start > Programs > Administrative Tools > Local Security Policy.b Click Local Policies, and then double-click User Rights Assignment.
Windows 2000 Professional	<ul style="list-style-type: none">a Click Start > Settings > Control Panel.b Click Administrative Tools.c Click Local Security Policy.
NT Server	<ul style="list-style-type: none">a Click Start > Programs > Administrative Tools (Common) > User Manager for Domains.b Click User > Select Domain and type the local machine in the Domain box, and then click OK.c Click Policies > User Rights.d Click Show Advanced User Rights.
NT Workstation	<ul style="list-style-type: none">a Click Start > Programs > Administrative Tools (Common) > User Manager.b Click Policies > User Rights.c Click Show Advanced User Rights.

2 Do one of the following:

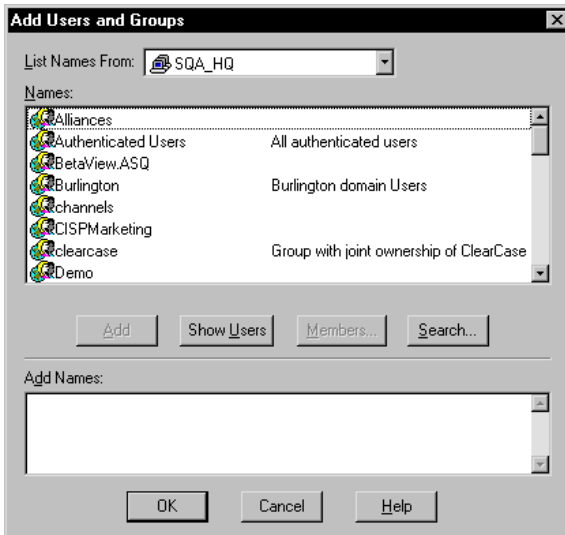
If a computer is running	Then
Windows 2000	<ul style="list-style-type: none">a Click Start > Settings > Control Panel.b Click Administrative Tools.c Click Local Security Policy.

If a computer is running	Then
Windows NT	<ul style="list-style-type: none"> <li data-bbox="691 213 1276 274">a Click Access this computer from network in the Right list and complete steps 3–8. <li data-bbox="691 300 1276 361">b Click Log on as a service in the Right list and complete steps 3–8. <li data-bbox="691 387 1276 447">c Click Log on locally in the Right list and complete steps 3–8.

3 Click Add.



4 Click the domain of the account running the SQL Anywhere database server from the List Names From list.



5 Click Show Users.

- 6 Click the account running the SQL Anywhere database server from the **Names** list.
- 7 Click **Add**, and then click **OK**.
- 8 Go back to steps 2b and 2c to set all privileges.
- 9 Click **OK**.
- 10 Click **User > Exit**.

How to Create a SQL Anywhere Database Server

To create a SQL Anywhere database server:

- 1 Click **Start > Programs > Rational product name > Rational Administrator**.
- 2 Click **File > New SQL Anywhere Database Server**.
- 3 Type an alphanumeric string of up to 30 characters that uniquely identifies this database server on the network, and then click **Next**.
- 4 Type the amount of space for caching data for the SQL Anywhere database server, and then click **Next**. We recommend 2048K for each Rational repository on the server.
- 5 Select one or more protocols to communicate with the SQL Anywhere database server, and then click **Next**.

Note: To reduce connection time, check only those protocols that are actually used on your network.

- 6 Choose the Startup options, as described in the following step:



- a Click one of the following buttons to set the NT Service Startup options. These options start the SQL Anywhere database server when you turn on your system.
 - Click **Automatic** to start the NT Service that starts the SQL Anywhere database server when you start your system.
 - Click **Manual** to not start the NT Service that starts the SQL Anywhere database server when you start your system.
 - b Select or clear the **Start service immediately** check box. This option starts the SQL Anywhere database server immediately after you create it. If the box is cleared, you must start the server manually.
- 7 Among the Account options, click one of the following buttons:
- Click **System Account (LocalSystem)** to run the service under a local account.

Note: If you choose **System Account (LocalSystem)**, you will not be able to remotely configure a ClearQuest database using UNC.
 - Click **Other Account** to allow users access to a shared ClearQuest database or shared repository. We recommend that you choose this option because it allows users the most flexibility for accessing a database or repository.
 - i Type a domain and user account name in the **Other Account** box.

The user account name is case-sensitive. This user account must have the appropriate privileges to access a shared database or repository. For information about setting privileges, see *Setting Privileges* on page 66.
 - ii Enter and re-enter the password for the account.

The password is case-sensitive.
- 8 Among the Account options, click **Display database monitor** to display the SQL Anywhere database monitor when the SQL Anywhere database server starts.

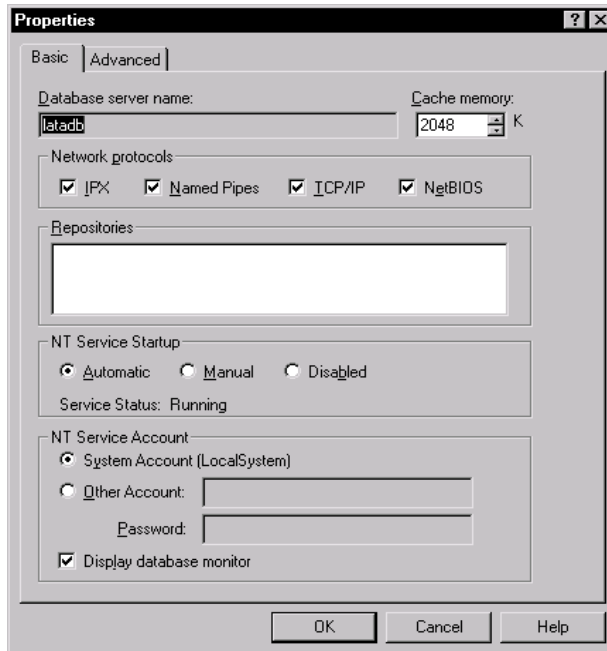
Note: This option is not available when you click **Other Account**.
- 9 Click **Next**.

A summary appears that confirms your choices.
- 10 Click **Finish**.

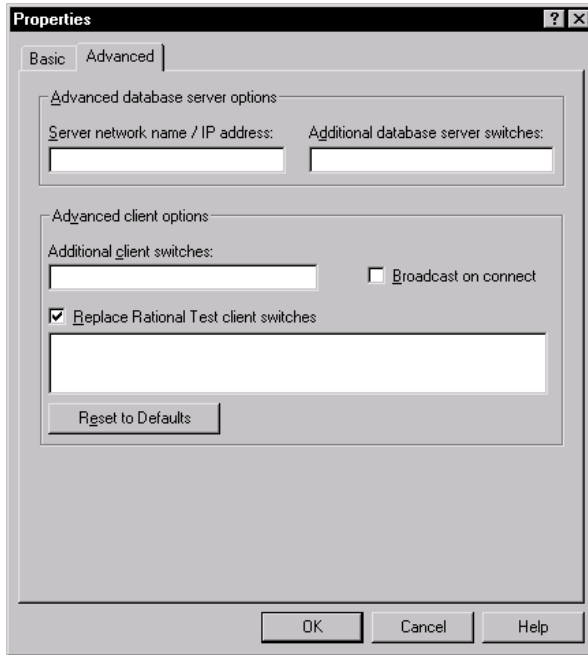
Changing a SQL Anywhere Database Server Configuration

To change the configuration of a SQL Anywhere database server:

- 1 Click **Start > Programs > Rational product name > Rational Administrator**.
- 2 In the left pane, right-click a server under SQL Anywhere Database Servers, and then select **Edit > Properties**.
- 3 Optionally, click the Basic tab and change any of the options.



- 4 Optionally, click the Advanced tab and change any of the advanced settings.



Note: The advanced settings are intended for use by, or in close cooperation with, Rational Technical Support. In most cases, these settings do not need modification.

- 5 Click **OK**.

Starting a SQL Anywhere Database Server

The Rational Administrator generates a startup command that can help you start a SQL Anywhere database server. The Administrator lets you manually start a SQL Anywhere database server on a Windows NT workstation or a Windows NT server.

To start a SQL Anywhere database server:

- 1 Click **File > Start SQL Anywhere Database Server**.

If you created more than one database server, a dialog box appears with a list of all database servers.

- 2 Select the SQL Anywhere database server that you want to start, and then click **OK**.

SQL Anywhere Server Startup Switches

The basic startup command syntax is:

```
DBSRV50 -n ServerName -c CacheMemory -x Protocols  
drive:\database\DB\RAS.DB -n Databasename
```

For example:

```
DBSRV50 c:\SQLDIR\DB\RAS.DB -n Proj1DB
```

or for a shared directory:

```
DBSRV50 \\KRANTI\SQLDIR\DB\RAS.DB -n Proj1DB
```

The default SQL Anywhere startup switches are:

Table 1 SQL Anywhere Server Startup Switches

SQL Anywhere Startup Switches	Description
DBSRV50	The SQL Anywhere server executable.
-n <i>ServerName</i>	The SQL Anywhere server name.
-c <i>CacheMemory</i>	The amount of cache memory. (We recommend using the default cache memory which is set to 2048K for each repository.)
-x <i>Protocols</i>	A comma-separated list of protocols.
<i>drive:\Database</i> or <i>\\machinename\shared\</i>	The drive and location of the repository directory. We recommend that you use the Universal Naming Convention (UNC) here. (The \DB\RAS.DB path is required.)

For complete descriptions of all SQL Anywhere switches and components, see the SQL Anywhere Help.

Stopping a SQL Anywhere Database Server

To stop a SQL Anywhere database server:

- 1 Click **File > Stop SQL Anywhere Database Server**.

If you have more than one database server running, a dialog box appears with a list of the running database servers.

- 2 Select the SQL Anywhere database server that you want to stop, and then click **OK**.

Deleting a SQL Anywhere Database Server

You must have privileges to delete a SQL Anywhere database server. For more information about privileges, see *Rational Test Datastore Privileges* on page 41.

To delete a SQL Anywhere database server:

- 1 Select the server to delete from the list of SQL Anywhere Database Servers in the left pane of the main window.

- 2 Click **Edit > Delete**.

The Administrator prompts you to confirm the deletion.

- 3 Click **Yes** to delete the server.

Using the Sybase Central Database Management Tool

You can start the Sybase Central database management tool from the Administrator. This tool exposes SQL Anywhere database server settings, properties, and utilities in a graphical user interface. For more information about using the Sybase Central database management tool, see the SQL Anywhere Help.

To start the Sybase Central database management tool from the Administrator:



- Click **Tools > Sybase Central**.

Using the Sybase ISQL Utility

The Sybase ISQL provides you with an interactive environment for database browsing and for sending SQL statements to a particular SQL Anywhere database server. For more information, see the SQL Anywhere Help.

To start the Sybase ISQL utility from the Rational Administrator:



- Click **Tools > ISQL**.

Using the SQL Anywhere Service Manager

The SQL Anywhere Service Manager lets you start, stop, or pause a SQL Anywhere Server service. You can also edit the configuration parameters of each service. For more information, see the SQL Anywhere Help.

To start the SQL Anywhere Service Manager from the Rational Administrator:

- Click **Tools > SQL Anywhere Service Manager**.

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