

# Installing Rational ClearQuest

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the e-development company™

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# 1

## Installing ClearQuest

This chapter describes how to install ClearQuest. You, the ClearQuest administrator, set up the databases to use with ClearQuest, install ClearQuest, and provide the required setup information to each client user. You (or your client users) can then install ClearQuest on the client machines.

This chapter covers the following topics:

- “Before you begin” on page 8
- “Understanding the install process” on page 9
- “Setting up Microsoft Access” on page 10
- “Setting up SQL Anywhere” on page 11
- “Setting up Microsoft SQL Server Version 6.5” on page 16
- “Setting up Microsoft SQL Server 7” on page 22
- “Setting up the Oracle Server” on page 26
- “Installing ClearQuest for the administrator” on page 30
- “Installing ClearQuest for end-users” on page 34
- “Setting up configuration management integrations” on page 38
- “Setting up record submission via e-mail” on page 42
- “Installing Crystal Reports” on page 43

## Before you begin

Before you install ClearQuest, read the following:

- *Rational ClearQuest Release Notes* (\\Program Files\Rational\ClearQuest\readme.htm): An HTML file that contains the most current system requirements information (including platform version support).
- *Introducing Rational ClearQuest*: An overview of ClearQuest components and how to use them.
- *Administering Rational ClearQuest*: A guide on how to customize ClearQuest to meet your needs.

**Note:** If you are using Rational ClearQuest/TeamTest Edition, see the Getting Started with Rational ClearQuest TeamTest Guide. This guide is available as a Portable Document Format (PDF) file in the \\ClearQuest\books directory.



## Understanding the install process

You, the ClearQuest administrator, install ClearQuest by performing the following steps:

- 1 Set up your database product. As the ClearQuest administrator, you are responsible for setting up the databases your users will use with ClearQuest. See the appropriate section:
  - “Setting up Microsoft Access” on page 10.
  - “Setting up SQL Anywhere” on page 11.
  - “Setting up Microsoft SQL Server Version 6.5” on page 16.
  - “Setting up Microsoft SQL Server 7” on page 22
  - “Setting up the Oracle Server” on page 26.
- 2 Install ClearQuest on the administrator’s workstation and create the ClearQuest databases. See “Installing ClearQuest for the administrator” on page 30.
- 3 Set up your license server. See “Licensing ClearQuest” on page 89.
- 4 Optionally, customize your installation. See the *Administering Rational ClearQuest* guide for details on customizing ClearQuest.
- 5 Install ClearQuest on the client machines and provide users with the information they need to connect to ClearQuest. See “Installing ClearQuest for end-users” on page 34.
- 6 If you are installing ClearQuest Web, see Chapter 2, “Setting Up ClearQuest Web” on page 45.
- 7 If you are integrating with a configuration management system, such as ClearCase or Visual SourceSafe, set up the integration. See “Setting up configuration management integrations” on page 38.

## Setting up Microsoft Access

If you are using ClearQuest with Microsoft Access,

- 1 Create one shared directory on the machine for the directory that will contain your Microsoft Access databases.
- 2 Make a note of the UNC path of the share directory. The path should be of the form:

```
\\<machine_name>\<share_name>\<database_directory>\
```

For example:

```
\\developmentserver\project34share\clearquestdbs\
```

The first time you run the ClearQuest, you are asked to create a schema repository. You will specify this pathname and provide a filename for the schema repository. ClearQuest then creates and initializes the appropriate Access databases in this directory.

Now that you have set up the Access databases, proceed to “Installing ClearQuest for the administrator” on page 30.

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

## Setting up SQL Anywhere

To create an SQL Anywhere database server, complete the following tasks:

- Install the Sybase SQL Anywhere Server software. (**Note:** SQL Anywhere is available on the ClearQuest CD and can be installed using the Rational Software Setup wizard).
- Choose or create a user account to run the SQL Anywhere database server and set user privileges for that account. See Defining user privileges below.
- Create an SQL Anywhere database server. See “Creating an SQL Anywhere database server” on page 13.

### Defining user privileges

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

- 1 Make sure you have installed the Sybase SQL Anywhere Server software.
  - 2 Do one of the following:
    - If your Windows NT computer is running Windows NT Workstation software, click **Start > Programs > Administrative Tools (Common) > User Manager**.
    - If your Windows NT computer is running Windows NT Server software:
      - Click **Start > Programs > Administrative Tools (Common) > User Manager for Domains**.
      - Click **User > Select Domain** and type the local machine name in the Domain box, and then click **OK**.
- Note:** If the user does not already exist, create the user (**User > New User**).
- 3 Click **Policies > User Rights** to open the User Rights Policy dialog box.
  - 4 Select **Show Advanced User Rights**.

- 5** In the **Right** list box of the User Rights Policy dialog box, select **Access this computer from network**.
- 6** Click **Add**.
- 7** For **List Names From**, select the domain of the account running the SQL Anywhere database server.
- 8** Click **Show Users**.
- 9** In the **Names** list, select the account running the SQL Anywhere database server.
- 10** Click **Add**, and then click **OK**.
- 11** In the **Right** list box of the User Rights Policy dialog box, select **Log on as a service**.
- 12** Repeat Steps 6 through 10.
- 13** In the **Right** list box of the User Rights Policy dialog box, select **Log on locally**.
- 14** Repeat Steps 6 through 10.
- 15** Click **OK**.
- 16** Click **User > Exit**.

## Creating an SQL Anywhere database server

An SQL Anywhere database server is a process that runs on the database server machine. Its function is to coordinate all activity against your SQL Anywhere databases. You create one SQL Anywhere server to provide access to all of your database files.

Follow these steps to use the Rational Administrator to create a new server:

- 1 From the Start menu, click **Sybase SQL Anywhere Database Server > Rational Administrator**.
- 2 Click **File > New SQL Anywhere Database Server**.
- 3 Type a unique alphanumeric string of up to 30 characters that identifies this database server on the network, and then click **Next**.

**Important:** Do not use spaces or special characters in the server name (underscores are acceptable).

- 4 Type the amount of space to use for caching data for the SQL Anywhere database server, and then click **Next**. Allow 2048 KB 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, select only those protocols that are actually used on your network.

- 6 Select the Startup options, as described in the following steps.
  - a Select one of the following Windows NT Service Startup options. These options start the SQL Anywhere database server when you power on your system:
    - Click **Automatic** to automatically start the SQL Anywhere database server when you start your system.
    - Click **Manual** if you do not want the SQL Anywhere database server to automatically start when you start your system. If you select this option you will have to manually start the

database server after each time you reboot the server machine.

- b** Select or clear **Start service immediately**. This option starts the SQL Anywhere database server immediately after you create it. If the box is cleared, you will need to start the server manually after creating it.

**7** In the Account section, do the following.

- a** Click **Other Account** to allow users to access a shared ClearQuest database or shared repository. This option gives users the most flexibility for accessing a database or repository.

**Note:** Do not use **System Account (LocalSystem)** to run the service under a local account. Doing so prevents you from remotely configuring a ClearQuest database using UNC.

- b** Type a domain and user account name for the **Other Account**. This is the account you created and configured under “Defining user privileges” on page 11. The name is case-sensitive.

Enter the user account information as follows:

- If you created a local machine account in Step 2 on page 11, enter the domain and account name as:

`.\userid`

- If you created a domain account, enter the domain and account name as:

`domain\userid`

- c** Type the password for the **Other Account**. The password is case-sensitive.

**8** Click **Next**.

The Rational Administrator displays a summary of your choices.

**9** Click **Finish**.

- 10** After installing the SQL Anywhere software, create one shared directory on the machine for the directory that contains your SQL

Anywhere databases. (To increase performance, keep your databases on the same machine as the database server.)

- 11** Make a note of the UNC path of the share directory. The path should be of the form:

```
\\<machine_name>\<share_name>\<database_directory>
```

**For example:**

```
\\developmentserver\project34share\clearquestdbs
```

Now that you have set up your SQL Anywhere databases, proceed to “Installing ClearQuest for the administrator” on page 30.

## Setting up Microsoft SQL Server Version 6.5

Install SQL Server 6.5 with SQL Server Service Pack 5a, if you have not already installed it.

**Note:** When you install SQL Server, select one of the following sort-order options:

- Dictionary order, case-sensitive
- Dictionary order, case-insensitive

If you change sort orders after installing SQL Server, you must rebuild the SQL databases and reload the data.

### Registering your SQL Server machine for SQL Server 6.5

Start SQL Server Enterprise Manager. If the SQL Server machine is not already registered, register it now.

1 Click Server > Register Server.

2 Type the server name.

**Note:** Make a note of the server name because you will need it during the ClearQuest installation.

3 Click Use Standard Security.

4 For Login ID, type SA, which is the System Administrator.

5 For Password, type your SA password.

6 Click Register.

The server should now appear in the list of servers.

7 Set up the SQL Server databases as described in the next section.



## Setting up SQL Server 6.5 databases

You must set up one empty SQL Server 6.5 database for the ClearQuest schema repository, and one empty SQL Server 6.5 database for each ClearQuest Client user database (such as the optional `SAMPL` database). For each SQL Server 6.5 database, complete the following tasks:

- Create an empty database
- Create login accounts for the database
- Set up a backup procedure for the database

To add more databases to ClearQuest, repeat the preceding tasks for each new database.

**Note:** These instructions assume that you have a simple SQL Server configuration. If you have large databases or many users, consider setting up separate log devices or spreading data across multiple devices. For details, see your SQL Server documentation.

### *Creating empty databases*

Use the SQL Server Enterprise Manager to create an empty SQL Server 6.5 database for the ClearQuest schema repository and for each ClearQuest client user database (such as the `SAMPL` database). For each SQL Server 6.5 database, do the following.

- 1 Create the data device.
  - a Select your SQL Server machine. If your machine does not appear in the list of servers, you need to register it. See “Registering your SQL Server machine for SQL Server 6.5” on page 16.
  - b Click **Manage > Database Devices**.
  - c Click the **New Device** icon.

- d** Type a name for the device, select a location, and type a size.  
For the schema repository, allocate at least 50 MB. The device must be large enough to hold all the schema versions. You can adjust this size later, if necessary.  
For the user database, allocate at least 15 MB for every 1,000 records you expect to generate. The exact amount of space required depends on the complexity of your schema.

- e** Click **Create Now**.  
The new device should now appear in the list of devices.

- f** Close the **Manage Database Devices** window.

## **2** Create the database.

- a** Click **Manage > Databases**.
- b** Click the **New Database** icon.
- c** Type a name for the database.
- d** For **Data Device**, select the device you just created.
- e** Leave **Log Devices** as `none`.
- f** Click **Create Now**.

The new database should now appear in the list of databases.

## **3** Configure the database:

- a** In the **Manage Database** window, double-click the database you just created. The **Edit Database** dialog box appears.
- b** Click the **Options** tab.
- c** Click **Select Into/Bulk Copy** and **Truncate Log on Checkpoint**.
- d** Click **OK**.
- e** Close the **Manage Databases** window.

### ***Creating login accounts for each database***

Use the SQL Server 6.5 Enterprise Manager to create login accounts for ClearQuest. ClearQuest uses these accounts to log into the SQL Server database program on behalf of ClearQuest users. These login accounts are separate from ClearQuest user logins and are hidden after the installation.

**Note:** When you create the ClearQuest schema repository, the ClearQuest Maintenance tool prompts you for the three logins listed below. If you do not want to create three separate login accounts, you can use the DBO login ID for all three. Be aware, though, that the read-only account is public to all users.

Create the following login accounts for each database using SQL Server authentication:

- A database owner (DBO) login account
- A general purpose login account
- For the schema repository only, create a read-only account

**Note:** Because ClearQuest requires a SQL Server login for each database and does not support Windows NT Authentication, you will need to set up SQL Server to operate in Mixed Mode (Windows NT Authentication and SQL Server Authentication). This property can be set via Enterprise Manager, right-click on the server and select Properties menu, Security tab.

Follow these steps to create the login accounts:

- 1 Click **Manage > Logins**.
- 2 Type a unique login name and password.  
**Note:** Remember the names and passwords of each login account; you will need them during the ClearQuest installation.
- 3 In the **Permit** column, click the database for which you are creating the login. A check mark should appear in the **Permit** column.
- 4 If you are creating the database owner login, click the **Alias** column and select **DBO**.

- 5 Click **Add** and confirm the password.
- 6 Repeat steps 2 through 5 for the other accounts.
- 7 Close the **Manage Logins** window.

### ***Setting up database backup procedures***

The backup procedure described here provides a daily backup for the ClearQuest databases by overwriting the backup device each day. It assumes that your site also periodically backs up the backup device to recoverable media.

Use the SQL Server Enterprise Manager to set up backup schedules for the schema repository and for the databases.

- 1 Click **Tools > Database Backup/Restore**.
- 2 On the **Database Backup/Restore** dialog box, click the **Backup** tab.
- 3 From the **Database Backup** list, select the database you want to back up.
- 4 From the **Backup Devices** list, select **New**.
- 5 Type a name and select a location. We recommend that you put the backup device on a different disk than the database devices, and that this daily backup be backed up to tape by your site's normal backup procedures.
- 6 Select **Disk Backup Device**.
- 7 Select **Create**.
- 8 Click **Schedule**.
- 9 In the **Backup Volume Labels** dialog box, leave **Volume level** blank.
- 10 In the **Schedule Backup** dialog box, select **Recurring**.
- 11 Click **Change**.
- 12 For **Daily Frequency**, select **12 a.m.** or another time of your choice.
- 13 Click **OK** to close the open dialog boxes.

**14** Click **Close** to close the Database Backup/Restore dialog box.

Now that you have set up your SQL Server databases, proceed to “Installing ClearQuest for the administrator” on page 30.

## Setting up Microsoft SQL Server 7

You need to set up one empty SQL Server 7 database for the ClearQuest schema repository, and one empty SQL Server 7 database for each ClearQuest Client user database (such as the optional `SAMPL` database). For each SQL Server 7 database, complete the following tasks.

- (Verify) server registration
- Create an empty database
- Set up a backup procedure for the database
- Create a SQL Server 7 login with the `db_owner` role to use for the ClearQuest database logins (the same login is used by ClearQuest for all connections).

**Note:** Do not use the `SA` (system administrator) login. During an upgrade or move process, ClearQuest requires empty databases. However, if the `SA` login is used, ClearQuest is able to see the System Tables, assumes the database is not empty, and does not allow the upgrade/move process to continue.

If you want to add more user databases to ClearQuest, repeat the preceding tasks for each new database.

### Registering your SQL Server machine for SQL Server 7

- 1 In the SQL Server Enterprise Manager, select your Windows NT server in the SQL Server Group.

If your server is not shown, register it now by going to Step 2. If your server is already registered, go to “Creating a new SQL Server 7 database” on page 23.

- 2 Right-click on the SQL Server Group and select **New SQL Server Registration**. The Register SQL Server Wizard displays.
- 3 Select a server name, and click **Next**.

**Note:** Make a note of the server name because you will need it during the ClearQuest installation.

- 4 For Authentication Mode, select SQL Server, then click Next.
- 5 For Login ID, type SA, and for Password, type your SA password. Then click Next. (The SA user has the privilege to create logins and databases.)
- 6 Add this server to an existing group, or create a new group. Then click Next.
- 7 Click Finish. The server will appear in the list of servers.

### **Creating a new SQL Server 7 database**

- 1 From the Getting Started Taskpad, select Administer SQL Server > Create a database.
- 2 In the wizard, specify a file system location for the database and the log. You can accept the defaults for the growth rate of the database and the log.

If you want to give the databases larger initial values, allocate at least 50 MB for the schema repository and at least 15 MB for every 1,000 records expected for your user databases.
- 3 After you create a database, you are prompted to create a Database Maintenance Plan. The Database Maintenance Plan Wizard allows you to set up a database backup routine. It is strongly recommended that you set up automated nightly backups for all your ClearQuest databases.
- 4 Set database properties for the new database:
  - a Select the new database from the server's databases folder.
  - b Right-click on the database and select Properties.
  - c On the Options tab, select these Settings :
    - Select into / bulk copy
    - Truncate log on checkpoint
  - d Click OK.

## Creating SQL Server logins

Create a `db_owner` login for each ClearQuest database (schema repository and each user database) by selecting the `db_owner` role for each of the logins you create.

**Note:** Do not use the `SA` (system administrator) as the owner login of a ClearQuest database. During an upgrade or move process, ClearQuest requires empty databases. However, if the `SA` login is used, ClearQuest is able to see the System Tables, assumes the database is not empty, and does not allow the upgrade/move process to continue.

- 1 Expand the Security folder, then right-click Logins, and click New Login. The SQL Server Login Properties - New Login dialog box displays.
- 2 On the General tab, select SQL Server authentication mode because ClearQuest does not support Windows authentication.

**Note:** Because ClearQuest requires a SQL Server login for each database and does not support Windows NT Authentication, you will need to set up SQL Server to operate in Mixed Mode (Windows NT Authentication and SQL Server Authentication). This property can be set via Enterprise Manager, right-click on the server and select Properties menu, Security tab.

- 3 Enter a name and password.
- 4 On the Server Roles tab, do not grant *any* server roles.
- 5 Grant `db_owner` privileges to the login in the new database.
  - a On the Database Access tab, select from the Permit list the new database to grant the login permission.
  - b Under Permit in database role, check `db_owner` and `public`. Do not grant this user any other privileges.
- 6 Set up daily backups for the database if you did not do so under Step 2. You can do this by selecting either Administer SQL Server > Backup a database or > Create a maintenance plan.



## Migrating from SQL Server 6.5

Use the ClearQuest Maintenance Tool to migrate your schema repository to a SQL Server 7 database. Then use ClearQuest Designer to move previous SQL Server 6.5 user databases to SQL Server 7. You do this by using the Properties dialog box to change the properties of the user database.

**Warning:** When migrating from SQL Server 6.5 to SQL Server 7, do **not** use the SQL Server 7 Upgrade Wizard to upgrade your schema repository and user databases. You need to use the ClearQuest Maintenance Tool and ClearQuest Designer.

## Ensuring SQL Server 7 Client Connectivity

SQL Server 7 client machines require SQL Server ODBC driver number 3.7x. To update the ODBC driver for a client machine:

- 1 Go to that machine, insert the SQL Server 7 CD-ROM, and run  
`D:\x86\other\mdac_type.exe`  
where *D*: is the letter of your CD-ROM drive.
- 2 Choose the Custom install option when prompted.
- 3 Select ODBC Driver for Microsoft SQL Server (and unselect other options such as Microsoft JetEngine).

Now that you have set up your SQL Server databases, proceed to “Installing ClearQuest for the administrator” on page 30.

## Setting up the Oracle Server

If you are using ClearQuest with Oracle databases, install and create the databases according to Oracle's documentation. Follow these guidelines when you set up your Oracle databases:

- Create a specific Oracle database instance, or identify an existing Oracle instance, to use for ClearQuest data.
- Create two or more separate Oracle database users (each with its login):
  - the ClearQuest schema repository user login
  - one user login for each ClearQuest user database
- Grant each user login the Connect and Resource roles only.

**Note:** If you plan to use the Oracle Context Option, you should also grant the CTXAPP role. See “Enhancing search capabilities” on page 29.

- We recommend that you associate each Oracle database user with a unique default tablespace that is separate from all other users.

**Note:** The Oracle database users can share the **temporary** tablespace(s), but the temporary tablespace(s) for these users must be separate from the Oracle system tablespace.

### Configuring an Oracle 7 client installation for ClearQuest

The ClearQuest administrator and all ClearQuest end-users must install Oracle Client Software on their local machines before they can install and use ClearQuest. Oracle 7 client software contains networking drivers ClearQuest needs to interact with Oracle databases. To install Oracle Client Software, follow the Oracle Networking Products documentation.

Before using ClearQuest, all users must use the **SQL\*Net Easy Configuration** program to configure their computers to access Oracle databases.

**Important:** If your Oracle for Windows menu does not list SQL\*Net Easy Configuration, you do not have the correct network configuration drivers installed. If your menu lists Net8 Easy Configuration, for information on installing the correct drivers, see “Configuring an Oracle 8 client installation for ClearQuest” on page 28. When you have the correct configuration drivers installed, return here and proceed with the following steps.

- 1 From the Start menu, click Oracle for Windows NT > SQL\*Net Easy Configuration and complete these steps:
- 2 Select **View Configuration Information** to see if your Oracle database administrator configured a Database Alias for you. If not, go to the next step.
- 3 Add a new database alias by selecting **Add Database Alias**. Click **OK**.
- 4 Type a SQL\*Net Database Alias (database name your Oracle database administrator set up previously). Make a note of the Database Alias because you will need it during the ClearQuest database setup. Click **OK**.

**Note:** All ClearQuest users must use the same Database Alias.

- 5 Select **TCP/IP** as the network protocol to use to communicate with the database. Click **OK**.
- 6 Type the **Host Name** (the name of database server machine) and the **Database Instance** (the system ID or SID). Get this information from your Oracle database administrator.

**Note:** All ClearQuest users must use the same Database Alias, Database Instance (system ID or SID), TCP/IP protocol, and Host Name (Oracle server machine).

- 7 When you click **OK**, the SQL\*Net Easy Configuration program asks you to confirm your choices. Click **Yes** to confirm the current configuration information.
- 8 After configuring your database, the installer displays the initial opening screen so that you can configure additional aliases. To quit the program, click **Cancel**.

## Configuring an Oracle 8 client installation for ClearQuest

ClearQuest requires the Oracle 7 networking drivers. These drivers are not automatically installed with an Oracle 8 client installation. If you are using an Oracle 8 client installation, you must manually install the correct drivers from your Oracle CD before creating database aliases.

To configure an Oracle network client for ClearQuest, do the following.

- 1 Install the Oracle 8 Client Software by following the Oracle Networking Products documentation.
- 2 Run the Oracle Installer.  
(Start > Programs > Oracle for Windows > Oracle Installer.)
- 3 Select the files to install:
  - a In the Installer window click From.
  - b Browse the Oracle CD and select the following file:  

```
\Win32\Install\nt.prd
```
  - c Expand All Products > Oracle Networking Products > Oracle Protocol Adapters.
  - d Select the following components for installation:
    - Oracle TCP/IP Protocol Adapter 2.3.4.0.0
    - SQL\*Net Client 2.3.4.0.2
    - Oracle 7 Util 7.3.4.0.0
    - Required Support Files 7.3.4.1.1.
- 4 After installing, reboot your system.
- 5 Use the SQL\*Net Easy Configuration program to create database aliases as described in “Configuring an Oracle 7 client installation for ClearQuest” on page 26.

## **Enhancing search capabilities**

With a standard Oracle installation, you cannot perform a string search on multi-line text fields. For example, in ClearQuest you cannot search for text in a multi-line Notes field.

Oracle does provide an option called the ConText Option (Oracle 7) or ConText Cartridge (Oracle 8) that enables string searches in multi-line text fields. When installed, multi-line text fields become available for queries in ClearQuest.

To enable ConText with ClearQuest, do the following.

- 1** Install the ConText Option/Context Cartridge according to the Oracle documentation.
- 2** Start at least two ConText servers. Be sure to use the QDM (Query, DDL, DML) personality options.
- 3** Grant the CTXAPP role to the Oracle user logins you created when you set up the ClearQuest databases.

Now that you have set up your Oracle databases, proceed to “Installing ClearQuest for the administrator” on page 30.

## Installing ClearQuest for the administrator

Before installing ClearQuest on client machines you must install it on the administrator's machine, set up licensing, and set up your schema repository and user databases.

If you are using an Oracle database, install the Oracle client software **before** installing ClearQuest. See "Setting up the Oracle Server" on page 26 for more information.

To install ClearQuest for administrators:

- 1 Load the ClearQuest CD-ROM.
- 2 If the setup program does not run automatically, navigate to the top level directory of the CD-ROM and double-click `setup.exe`.  
The Rational Software Setup wizard prompts you through the ClearQuest installation.
- 3 If you are evaluating ClearQuest, choose the **Evaluator** installation. Otherwise, choose the **Administrator** installation.
- 4 Launch the Licence Administrator to enter your ClearQuest licenses. Follow the instructions on your License Certificate and in the online Help for the License Key Administrator.

## Creating ClearQuest databases

After you install ClearQuest, you must create the ClearQuest databases (schema repository and user databases). Initially you can create a sample user database to use while you familiarize yourself with the product. You can create your production user databases later.

If you chose the Evaluator installation, Microsoft Access databases are created for you automatically. If you chose the Administrator installation, follow these steps to create ClearQuest databases:

- 1 Launch the ClearQuest Maintenance Tool (Start > Programs > Rational ClearQuest > ClearQuest Maintenance Tool).

**Note:** The first time you launch ClearQuest, the Maintenance Tool runs automatically.

- 2 Select Create a new schema repository and click Next.
- 3 Select the vendor database you plan to use, enter the properties appropriate for that vendor, then click Next. Save this information for clients to use when they connect to the databases. The information to enter is as follows:

- MS\_ACCESS
  - Enter a name for the schema repository. Enter the entire path to the file using a UNC style path. For example:

```
\\DevServer\ProjectShare\CQ_DBS\schema_repo.mdb
```

You can browse to the directory where you want to create the database. Be sure to browse using the Network Neighborhood to preserve the UNC style path name.

- **SQL\_ANYWHERE**

- Enter a name for the schema repository. Enter the entire path to the file using a UNC style path. For example:

```
\\DevServer\ProjectShare\CQ_DBS\schema_repo.mdb
```

You can browse to the directory where you want to create the database. Be sure to browse using the Network Neighborhood to preserve the UNC style path name.

- Enter the name of the database server.
  - Enter the protocols used to communicate with the SQL Anywhere server.
  - Enter the database host name. The database host machine must be visible to the client machines via network share and via one or more of the communication protocols. For TCP/IP, this can also be the IP address.
- **SQL\_SERVER**
    - Enter an SQL Server database name for the database that will contain the schema repository.
    - Enter the name of the database server.
    - Enter the database owner (DBO or Administrator) login.
    - Enter the password for the database owner (DBO or Administrator) login.
    - Enter the general purpose or read/write login.
    - Enter the password for the general purpose or read/write user login.
    - Enter the schema repository or read-only user login.
    - Enter the password for the schema repository or read-only login.



- **ORACLE**

- Enter the TNS name (SQL\*Net Alias pointing to the Oracle instance).
- Enter the Oracle login you created for the schema repository.
- Enter the password for the login.

**Note:** All ClearQuest users must use the same SQL\*Net Alias (TNS name), Database Instance (system ID or SID), TCP/IP protocol, and Host Name (Oracle server machine).

- 4 We recommend that you create a sample database using one of the provided schemas. Select a schema, give the sample database a name, then click **Next**.
- 5 If you created a sample database, you must select a vendor and enter the database properties. When you are finished, click **Next**.
- 6 You can save these settings as a default profile, or click **Finish** to complete the setup. The profile records the entries you made and saves them to a file (the default name is `cgprofile.ini`). Clients can connect to the database by using the profile file instead by typing the connection information.

You have completed Step 2 of the steps described in “Understanding the install process” on page 9. Return to that page to determine the next step.

## Installing ClearQuest for end-users

ClearQuest must be installed on each end-user machine. When ClearQuest is installed and connected to the database, users can enter and modify records.

**Note:** It is also possible to allow users to install ClearQuest from a network location, for more information see “Silent Installation of Rational ClearQuest” on page 91.

To install ClearQuest for end-users:

- 1 Load the ClearQuest CD-ROM.
- 2 If the setup program does not run automatically, navigate to the top level directory of the CD-ROM and double-click `setup.exe`.

The Rational Software Setup wizard prompts you through the ClearQuest installation.

- 3 Choose the Client installation.

If you will be doing schema development, select the **Administrator** installation, which includes additional administrative tools.

- 4 Launch the Licence Administrator to enter your ClearQuest licenses.

## Connecting to ClearQuest databases

After installing ClearQuest as a client user, the first time you run ClearQuest, client users need to connect to an existing schema repository. You must provide them database properties information needed.

You can create a database profile for client users to use to connect to the schema repository, see Step 6 of “Connecting to ClearQuest databases” on page 35.

The following instructions apply to client users who need to connect to a schema repository:

- 1 Launch the ClearQuest Maintenance Tool (Start > Programs > Rational ClearQuest > ClearQuest Maintenance Tool).

**Note:** The first time you launch ClearQuest, the Maintenance Tool runs automatically.

- 2 Select Connect to Existing schema repository and click Next.
- 3 Select the vendor database that you plan to use, enter the properties appropriate for that vendor, then click Next.

Enter the information provided by your administrator, or, if your ClearQuest administrator created a user profile file (usually called `cqprofile.ini`) that includes the database information you need, click **Load Profile** to navigate to the profile file.

If you did not create a profile for client users, they must enter the following information:

- **MS\_ACCESS**
  - Enter the entire path to the schema repository using a UNC style path. For example:

```
\\DevServer\ProjectShare\CQ_DBS\schema_repo.mdb
```

You can browse to the directory containing the database. Be sure to browse using the Network Neighborhood to preserve the UNC style path name.

- **SQL\_ANYWHERE**
    - Enter the path to the schema repository using a UNC style path. For example:  
`\\DevServer\ProjectShare\CQ_DBS\schema_repo.mdb`  
You can browse to the directory containing the database by using Network Neighborhood, which preserves the UNC style path name.
    - Enter the name of the database server.
    - Enter the protocols used to communicate with the SQL Anywhere server.
    - Enter the database host name.
  - **SQL\_SERVER**
    - Enter an SQL Server database name for the database containing the schema repository.
    - Enter the name of the database server.
    - Enter the schema repository or read-only user login.
    - Enter the password for the schema repository or read-only login.
  - **ORACLE**
    - Enter the SQL\*Net Alias (alias pointing to the Oracle instance).
    - Enter the Oracle login created for the schema repository.
    - Enter the password for the login.
- 4** Click **Finish** to complete the connection.

## **Enabling e-mail notification**

After installing ClearQuest, users must enable e-mail notification if they want to receive automatic e-mail messages from ClearQuest. To do this:

- 1** Launch ClearQuest (Start > Programs > Rational ClearQuest > Rational ClearQuest).
- 2** Choose View > E-mail Options. This opens the E-mail Setup dialog.
- 3** Select Enable E-mail Notification.
- 4** Select either SMTP or MAPI
- 5** If you entered SMTP:
  - Enter the SMTP host address of your mail server.
  - Enter your e-mail address.
  - Click Finish.
- 6** If you entered MAPI:
  - Choose a MAPI profile from the list.
  - Click Finish.

## Setting up configuration management integrations

You can integrate ClearQuest with software configuration management tools to create a complete change management system. ClearQuest relates change requests directly to changes in your evolving code base, allowing you to answer such questions as:

- Which defects have been fixed in one release but not in another?
- Which defects can be attributed to a specific release?

### Integrating with Rational ClearCase

The integration of ClearQuest and ClearCase allows you to associate change requests with one or more ClearCase elements. To set up the integration:

- 1 Within ClearCase, use the ClearQuest Integration Configuration tool located on the ClearCase Administration menu. The online Help describes how to set up and use the integration.
- 2 Within ClearQuest, apply the ClearCase package to a schema to enable the integration. For more information on installing packages, see the *Administering Rational ClearQuest* guide.

**Note:** If you have a previous installation of ClearQuest that used the ClearCase add-in, select the **Upgrade 1.0** version of the ClearCase package. If this is the first time you are installing the integration, use the 1.0 version of the package.

### *Unified Change Management (UCM)*

To use the ClearQuest/ClearCase UCM integration, consult the following documentation:

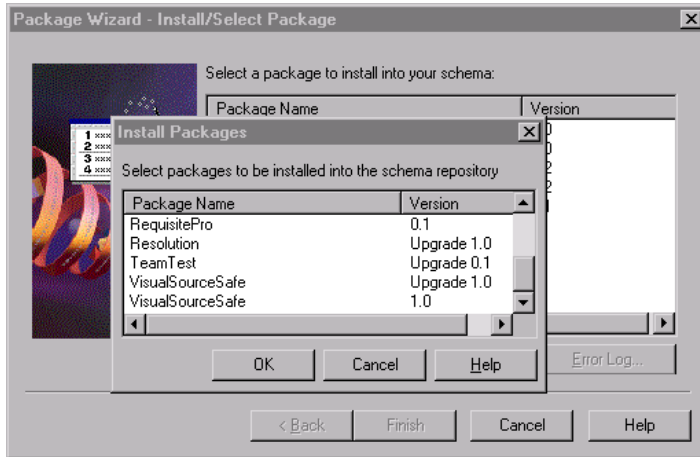
- To set up the ClearCase part of the integration and to learn about the UCM process, see the *Managing Software Projects with ClearCase* guide provided with ClearCase.
- To set up the ClearQuest part of the integration, see Appendix B, “Enabling ClearQuest for Unified Change Management,” in the *Administering Rational ClearQuest* guide.

## Integrating with Microsoft Visual SourceSafe

The ClearQuest/Visual SourceSafe integration adds Visual SourceSafe fields to a record type you choose, and the Visual SourceSafe tab to the record type form.

To enable the integration:

- 1 Install ClearQuest and Visual Studio according to the normal procedure for each product.
- 2 Set up your ClearQuest schema repository and user databases.
- 3 Use the ClearQuest Designer to add the Visual SourceSafe integration package to your schema using the Package Wizard.
  - a Launch the ClearQuest Designer from the Start menu
  - b Check out the schema you want to use with the integration.
  - c Install the Visual SourceSafe package by choosing Package > Package Wizard. Click More Packages to locate the VisualSourceSafe package, then click OK.



d Select the Visual SourceSafe package and click Next.

**Note:** If you have a previous installation of ClearQuest that used the Visual SourceSafe add-in, select the **Upgrade 1.0** version of the package. If this is the first time you are installing the integration, use the 1.0 version.

e Select the record types to be enabled by the package, then click Finish.

For more information on packages, consult the *Administering Rational ClearQuest* guide or the Help for the ClearQuest Designer.

4 Check in the schema.

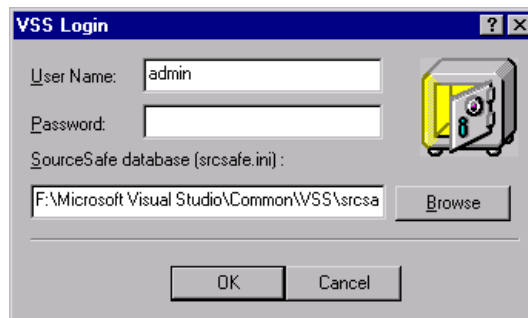
5 Upgrade your user database to the new version of the schema.

**Important:** We recommend that you first upgrade a test database and familiarize yourself with the integration features before upgrading your production database.

6 In ClearQuest, create a query that your end users can use to find the records you want to associate to projects in Visual SourceSafe.

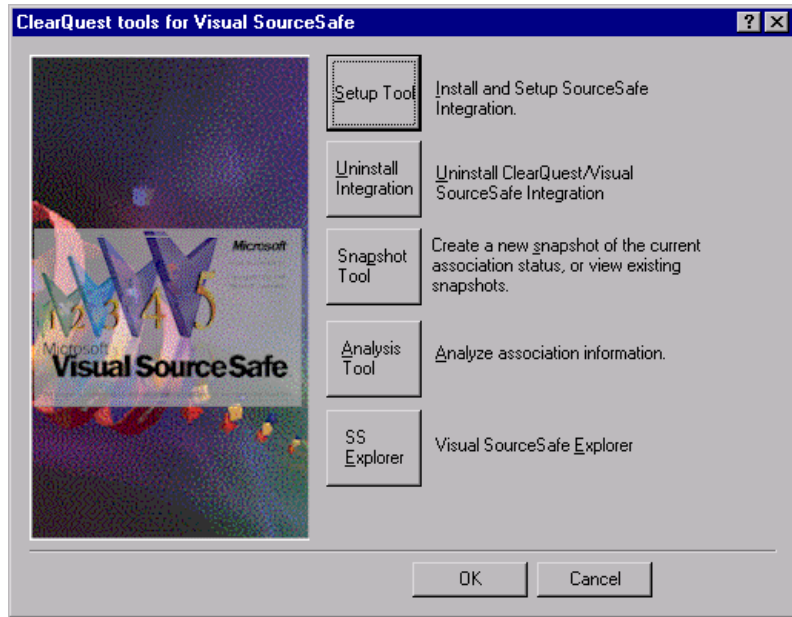
7 On each client that wants to use the integration, launch the ClearQuest Visual Source Safe tool (cqvss.exe) located in the ClearQuest home directory. You can drag a copy of cqvss.exe to the desktop to create a shortcut to it.

8 Log in and select the Visual SourceSafe database you want to use.





- 9 From the ClearQuest tools for Visual SourceSafe screen, select Setup Tool.



- 10 In the Visual SourceSafe Integration dialog, select the ClearQuest query you want to use and click OK.

The installation of the integration is complete. To begin using the integration, see the Help for the ClearQuest Visual SourceSafe tool.

## Setting up record submission via e-mail

To enable your users to submit and modify records via e-mail, you configure the Rational E-mail Reader. The E-mail Reader is an e-mail processing tool that parses submitter's e-mail and commits new records or changes to the database. The E-mail Reader requires a dedicated e-mail account to be assigned for parsing records.

Use the Rational E-mail Reader to designate one machine to be the Rational Mail Server. We recommend that the Rational Mail Server run on the same machine as your ClearQuest database(s) to ensure that the service is always available.

The E-mail Reader (mailreader.exe) is automatically installed in the `\Rational\common` directory. You can drag a copy of the mailreader.exe to the desktop to create a shortcut to it. You can then follow the instructions in the online Help (located in `\Rational\common\mailreader.hlp`) on how to set up the E-mail Reader. For more information on the E-mail Reader see “Administering ClearQuest E-mail” in the *Administering Rational ClearQuest Guide*.

## Installing Crystal Reports

If you want to customize the defect reports that ship with ClearQuest, you must install Crystal Reports Pro 6.0. This software comes on a separate CD in your Rational ClearQuest software kit.

To install Crystal Reports, use the Crystal Reports installation directions that come with the CD.

**Note:** Users who will not be editing existing or creating new report formats, do not need to install Crystal Reports.



# 2

## Setting Up ClearQuest Web

This chapter describes how to set up the ClearQuest Web server for both Microsoft Internet Information Server version 4 (IIS 4) for Windows NT, and Windows 2000 Server, which includes Microsoft Internet Information Server version 5 (IIS 5).

This chapter covers the following topics:

- “Understanding the installation process” on page 46
- “Setting up ClearQuest Web for IIS 4” on page 47
- “Setting Up ClearQuest Web for IIS 5” on page 59
- “Enabling e-mail notification for web clients” on page 75
- “Providing ClearQuest Web information to web clients” on page 76

## Understanding the installation process

The following are special considerations for using ClearQuest Web:

- ClearQuest Web does not support Microsoft Access databases.
- Your browser must have cookies enabled when using ClearQuest Web.
- Make sure your web server is set to display 256 colors. This is necessary for generating charts.

To install and configure ClearQuest Web on your Windows server, you must complete the following tasks:

- 1 If you are using Windows NT, verify that Windows NT 4.0 Option Pack, which includes Microsoft Internet Information Server 4.0 (IIS), is installed on your web server.
- 2 Install ClearQuest on the Web server. See, “Installing ClearQuest for the administrator” on page 30.

**Note:** We recommend, for improved performance, security, and reliability, that the Web server machine and the database server machine be two different machines, each with its software installed onto an NTFS partition.

- 3 Follow the instructions in this chapter to configure Microsoft Internet Information Server to serve the ClearQuest Web pages.
- 4 Configure the web server so that web clients can take advantage of ClearQuest’s e-mail notification feature.
- 5 Provide users with the path to ClearQuest Web.

## Setting up ClearQuest Web for IIS 4

This section is for users using Windows NT (Workstation or Server) with IIS 4. If you are using Windows 2000 Server, which has IIS 5 as an embedded component, see “Setting Up ClearQuest Web for IIS 5” on page 59.

This section contains the following:

- “Setting up an anonymous user account for IIS 4” on page 47
- “Creating a cache directory for IIS 4” on page 50
- “Configuring IIS 4.0 to serve ClearQuest Web pages” on page 51

### Setting up an anonymous user account for IIS 4

Create an anonymous user account for IIS to use when it serves the ClearQuest pages. If you are using an SQL Server database, the anonymous user account should be known in the domain that contains the ClearQuest database, and should have full access to that database.

#### *Create the anonymous user account*

Create the anonymous user account as follows:

- 1 Log on as a Windows NT administrator.
- 2 If the web server belongs to a Windows NT domain, ask your Windows NT system administrator to create a domain user and provide you with the user name and password. (If not, go to Step 4.)
- 3 Run the User Manager (Start > Programs > Administrative Tools > User Manager), select Policies > User Rights, select the Show Advanced Rights checkbox, and give this user the following privileges on the Web server:
  - Access this computer from network
  - Log on locally
  - Log on as a service

Also provide access to any other resources used by your hook scripts such as mail accounts or auxiliary databases. Skip to Step 6.

- 4 If the web server operates in stand-alone mode (does not belong to a Windows NT domain), use the default anonymous account created by the IIS installation (IUSR\_<machine\_name>) for Step 5.
- 5 Run the User Manager (Start > Programs > Administrative Tools > User Manager), select Policies > User Rights, select the Show Advanced Rights checkbox, and give the IUSR\_<machine\_name> account the following privileges:
  - Access this computer from network
  - Log on locally
  - Log on as a service

Also provide access to any other resources used by your hook scripts such as mail accounts or auxiliary databases.

- 6 Verify that the anonymous user account has a specific, known password (you will need it later). Make sure there are no password policies in effect such as "User must change password at next login," because these prevent the anonymous user account from functioning properly.



### ***Set up the registry key access privileges***

Give the anonymous user account full access privileges to the HKEY\_LOCAL\_MACHINE\Software\Rational Software\ClearQuest registry key as follows.

- 1 Select **Run** from the Start menu and type REGEDT32 to run the REGEDT32 program.
- 2 In the HKEY\_LOCAL\_MACHINE MDI window, select **Software\Rational Software\ClearQuest**.
- 3 On the Registry Editor menu bar, select **Security > Permissions**.
- 4 In the Registry Key Permissions dialog box, select the anonymous user. For the type of access, select **Full Control**. Select **Replace Permission on Existing Subkeys** so that the the anonymous user can update the entire registry tree below ClearQuest.
- 5 Close the REGEDT32 program.

### ***Set up read access permission***

Give the anonymous user account read access permission to the directory tree containing the ClearQuest web files (this is the www directory in the ClearQuest installation area).

**Note:** If you installed ClearQuest onto a FAT partition instead of an NTFS partition, you will not see a Security tab and can skip this section.

- 1 Use the Windows Explorer to locate the directory in which you installed ClearQuest. Right-click the www directory and select **Properties** from the shortcut menu.
- 2 On the Properties dialog box, click the **Security** tab. Click **Permissions** and select **Replace Permissions on Subdirectories**.
- 3 On the Directory Permissions dialog box, click **Add**.

- 4 Select the anonymous user account.
  - If you chose the default local anonymous username in Step 2, set **List Names From** to the name of the local machine, click **Show Users** below the **Names** list, then select the **IUSR\_machinename** account from the **Names** list.
  - If you are using a domain account, select that domain in the **List Names From** field, click **Show Users**, and select the domain account from the **Names** list.
- 5 Click **Add**.
- 6 Set **Type of Access** to **Read**.
- 7 Click **OK**.

### **Creating a cache directory for IIS 4**

Create a cache directory in the ClearQuest Web directory hierarchy:

- 1 At the top of the web directory tree, there should be a directory called `cache`. If a `cache` directory does not exist, create one under the ClearQuest WWW directory. For example:  

```
c:\Program Files\Rational\ClearQuest\WWW\cache
```
- 2 Give the anonymous user full access to everything in this directory tree.

## Configuring IIS 4.0 to serve ClearQuest Web pages

This section describes how to configure the IIS 4.0 web server to serve ClearQuest Web pages.

- “Create a virtual directory for IIS 4” on page 51
- “Edit the properties of the virtual directory for IIS 4” on page 54
- “Edit the properties of the cache directory for IIS 4” on page 57
- “Edit the properties of the images directory for IIS 4” on page 58
- “Restart the web server for IIS 4” on page 58

**Note:** If the Internet Service Manager is not available, you must install the Windows NT 4.0 Option Pack. When installing the Option pack, be sure to explicitly select the Internet Service Manager.

### *Create a virtual directory for IIS 4*

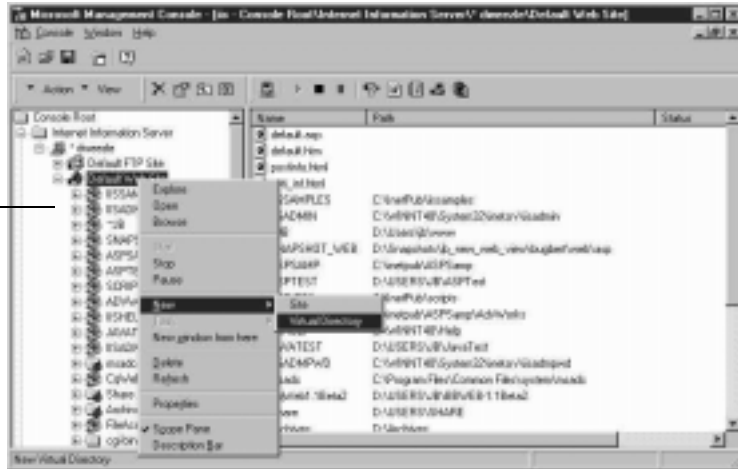
The first step in setting up IIS 4.0 is to create a virtual directory for the web. To create this directory, you use the Internet Service Manager program (Microsoft Management Console) that comes with IIS 4.0.

- 1 Start the Microsoft Management Console program (Internet Service Manager).

Start > Programs > Windows NT 4.0 Option Pack > Microsoft Internet Information Server > Internet Service Manager

- 2 In the Navigator window, right-click **Default Web Site**, then click **New > Virtual Directory** from the shortcut menu.

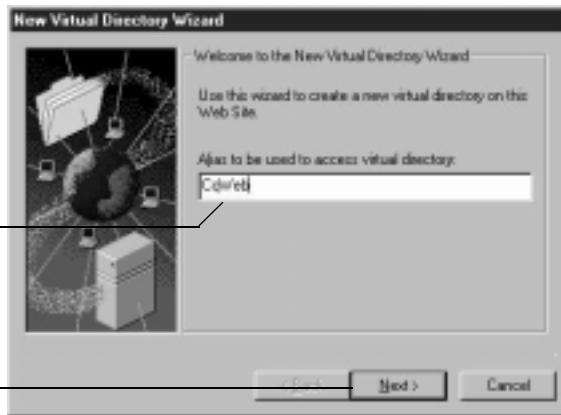
In the Navigator window,  
right-click Default Web Site.



- 3 In the New Virtual Directory Wizard, type an alias name, such as **CqWeb**. Do not use a “/” character in the alias name.

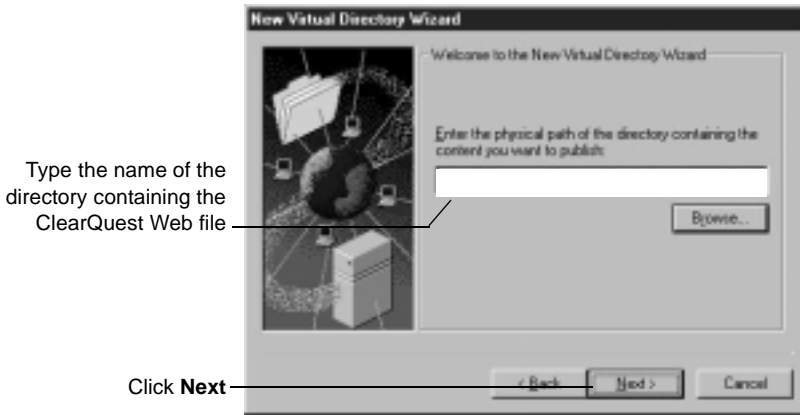
Type an alias name

Click **Next**

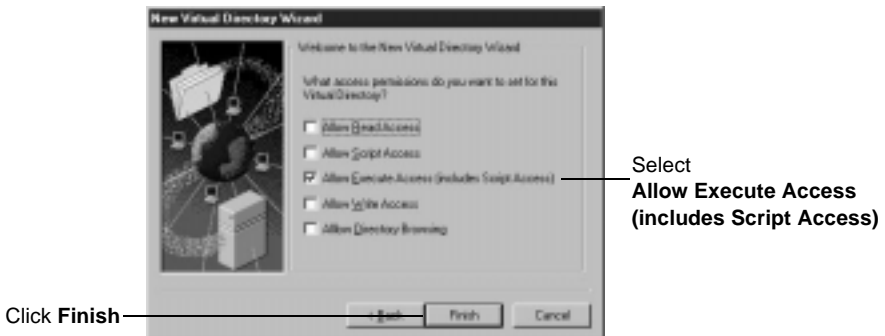


- 4 Type or browse to the name of the directory containing the ClearQuest Web files. These files are located in the WWW subdirectory of the ClearQuest installation directory. For example:

C:\Program Files\Rational\ClearQuest\WWW



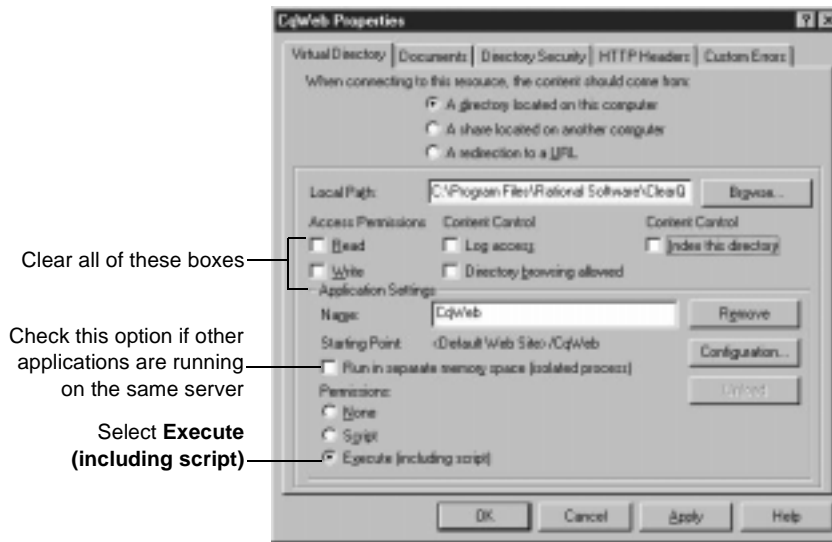
- 5 Select the default permissions for the virtual directory:



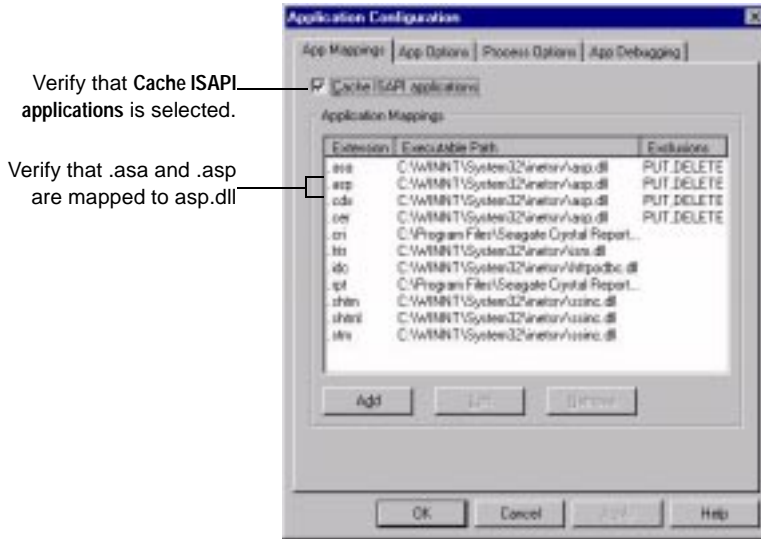
### *Edit the properties of the virtual directory for IIS 4*

Edit the properties of the virtual directory as follows:

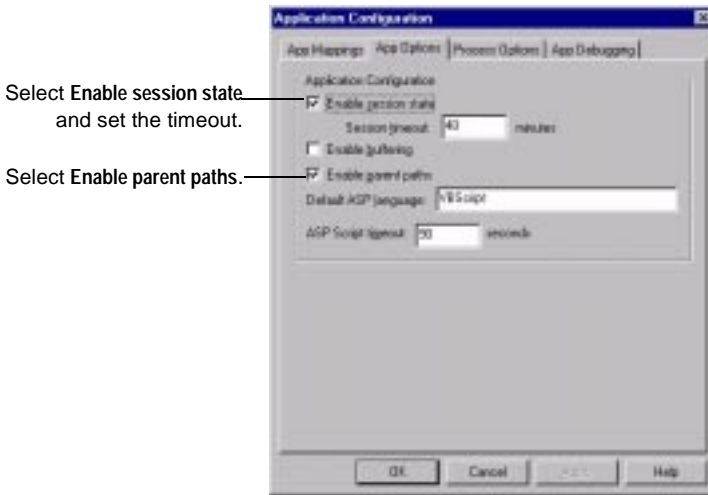
- 1 In the Microsoft Management Console left pane, navigate to the virtual directory you created earlier.
- 2 Right-click on the virtual directory and select Properties from the shortcut menu.
- 3 In the Properties dialog box, click the Virtual Directory tab.



- 4 In the same Properties dialog box, click Configuration. In the Application Configuration dialog, click the App Mappings tab.



- 5 In the same Application Configuration dialog box, click the App Options tab.

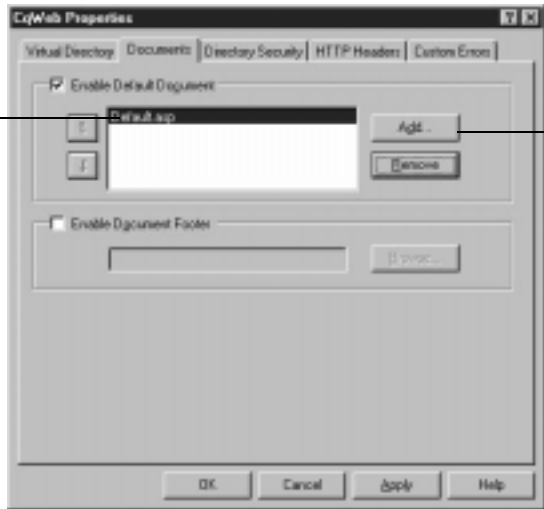


6 Click OK to return to the Properties dialog box.

7 In the Properties dialog box, click the Documents tab.

If necessary, add the Default.asp document to the list of documents...

then remove any other documents and select **Default.asp** as the default

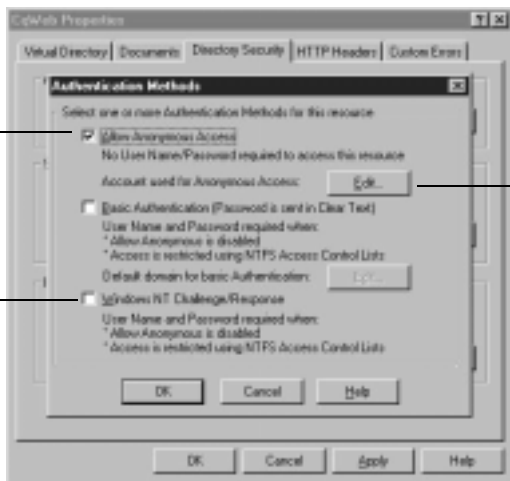


Click to add the Default.asp document to the list

8 In the same Properties dialog box, click the Directory Security tab. In the Anonymous Access and Authentication Control, click Edit to open the Authentication Methods dialog box.

Select **Allow Anonymous Access**

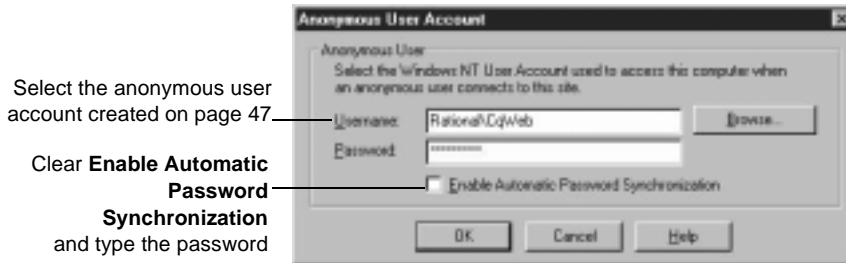
**Important:** Verify that Windows NT Challenge/Response is **NOT** selected. If the box has a check mark, be sure to clear it.



Then click **Edit** to define the anonymous user account



**9 Define the anonymous user account:**



**Note:** ClearQuest Web does *not* work if **Enable Automatic Password Synchronization** is selected.

- 10 Click OK.
- 11 Type the password in the Confirm Password dialog box and click OK.
- 12 Click OK again to close the Properties dialog.

***Edit the properties of the cache directory for IIS 4***

Edit the properties of the cache subdirectory as follows:

- 1 In the Microsoft Management Console left pane, navigate to the cache directory under the virtual directory name.
- 2 Right-click the cache directory.
- 3 Click **Properties** from the shortcut menu.
- 4 In the Properties dialog box, click the **Directory** tab.
- 5 For **Access Permissions**, select only **Read**. Verify that no other options are selected.
- 6 For **Permissions**, select **None**.
- 7 Click **OK**.

### ***Edit the properties of the images directory for IIS 4***

Edit the properties of the images subdirectory as follows:

- 1** In the Navigator window of the Microsoft Management Console, expand the directory tree of the Default Web Site until you locate the images directory under your alias name.
- 2** Right-click the images directory.
- 3** Click Properties from the shortcut menu.
- 4** In the Properties dialog box, click the Directory tab.
- 5** For Access Permissions, select only Read. Verify that no other options are selected.
- 6** For Permissions, select None.
- 7** Click OK.

### ***Restart the web server for IIS 4***

Close the Microsoft Management Console, saving your console settings, then restart the web server.

You have completed installing and configuring the ClearQuest web server for IIS 4.

## Setting Up ClearQuest Web for IIS 5

This section describes how to set up the ClearQuest Web server for Windows 2000 Server, which includes Microsoft Internet Information Server version 5 as an embedded component. If you are using Windows NT, see “Setting up ClearQuest Web for IIS 4” on page 47.

This section contains the following:

- “Setting up an anonymous user account for IIS 5” on page 59
- “Creating a cache directory for IIS 5” on page 63
- “Configuring IIS 5 to serve ClearQuest Web pages” on page 64

### Setting up an anonymous user account for IIS 5

Create an anonymous user account for IIS to use when it serves the ClearQuest pages. If you are using an SQL Server database, the anonymous user account should be known in the domain that contains the ClearQuest database, and should have full access to that database.

#### *Create the anonymous user account*

Create the anonymous user account as follows:

- 1 Log on as a Windows 2000 administrator.
- 2 If the web server belongs to a Windows domain, ask your Windows system administrator to create a domain user and provide you with the user name and password. (If not, go to Step 4.)

**3** For this domain user, click **Start > Programs > Administrative Tools > Local Security Policy**, select **Local Policies > User Rights Assignment**. For each of the following double-click to view the **Local Security Setting** dialog box then use the **Add** button to grant this user the following privileges on the Web server:

- **Access this computer from network**
- **Log on as a service**
- **Log on locally**

Also provide access to any other resources used by your hook scripts, such as mail accounts. (Go to Step 6.)

**4** If the web server operates in stand-alone mode (does not belong to a Windows NT domain), use the default anonymous account created by the IIS installation (**IUSR\_<machine\_name>**). Click **Start > Programs > Administrative Tools > Local Security Policy**, select **Local Policies > User Rights Assignment**, and use the **Add** button to grant this user the following privileges on the Web server:

- **Access this computer from network**
- **Log on as a service**
- **Log on locally**

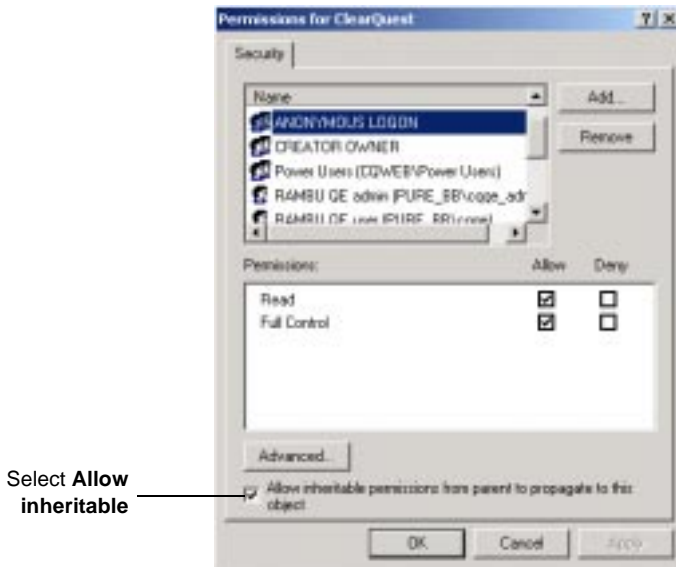
Also provide access to any other resources used by your hook scripts, such as mail accounts.

**5** Verify that the anonymous user account has a specific, known password (you will need it later). Make sure there are no password policies in effect such as “User must change password at next login,” because these prevent the anonymous user account from functioning properly.

### ***Set up registry key access privileges***

Give the anonymous user account full access privileges to the HKEY\_LOCAL\_MACHINE\Software\Rational Software\ClearQuest registry key as follows.

- 1 Select **Run** from the Start menu and type `REGEDT32` to run the `REGEDT32` program.
- 2 In the HKEY\_LOCAL\_MACHINE MDI window, select `Software\Rational Software\ClearQuest`.
- 3 On the Registry Editor menu bar, select **Security > Permissions**.
- 4 In the Registry Key Permissions dialog box, select the anonymous user. For the Permissions, select **Full Control**.
- 5 Select **Allow inheritable permissions**.



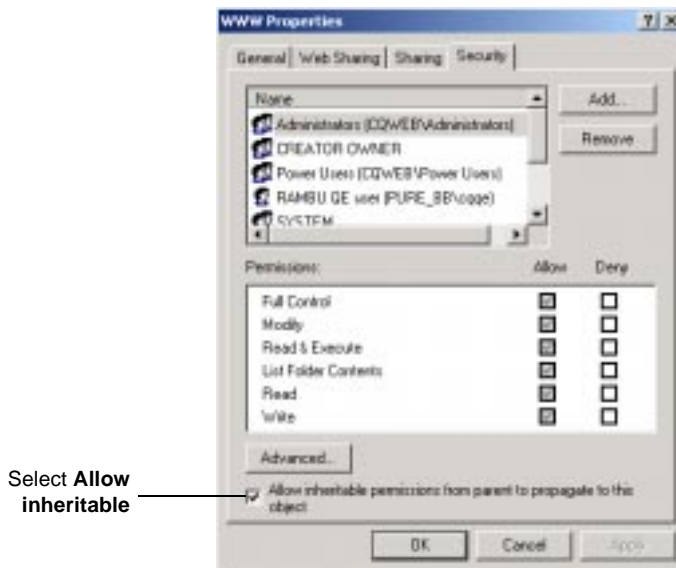
- 6 Close the `REGEDT32` program.

### ***Set up read access permission***

Give the anonymous user account read access permission to the directory tree containing the ClearQuest web files (this is the `WWW` directory in the ClearQuest installation area).

**Note:** If you installed ClearQuest onto a FAT partition instead of an NTFS partition, you will not see a Security tab and can skip this section.

- 1 Use the Windows Explorer to locate the directory in which you installed ClearQuest. Right-click the `www` directory and select Properties from the shortcut menu.
- 2 On the Properties dialog box, click the Security tab and select **Allow inheritable permissions**.



- 3 On the Security tab, click **Add**.

- 4 Select the anonymous user account.
  - If you chose the default local anonymous username in Step 2, set **Look in** to the name of the local machine, then select the **IUSR\_machinename** account from the **Name** list.
  - If you are using a domain account, select that domain in the **Look in** field, and select the domain account from the **Name** list.
- 5 Click **Add**, then click **OK**.
- 6 On the **Security** tab, in the **Permissions** section, select the checkbox to allow **Read**, then click **OK**.

### **Creating a cache directory for IIS 5**

Create a cache directory in the ClearQuest Web directory hierarchy.

**Note:** If you installed ClearQuest onto a FAT partition instead of an NTFS partition, you will not see a **Security** tab and can skip this section.

- 1 At the top of the web directory tree, there should be a directory called `cache`. If a `cache` directory does not exist, create one your ClearQuest WWW directory. For example:

```
c:\Program Files\Rational\ClearQuest\WWW\cache
```

- 2 Right-click the cache directory to see its properties.
- 3 On the **Properties** dialog box, click the **Security** tab.
- 4 In the **Permissions** section, select the checkbox to allow **Full Control**.

## Configuring IIS 5 to serve ClearQuest Web pages

This section describes how to configure the IIS 5 web server to serve ClearQuest Web pages.

- “Create a virtual directory for IIS 5” on page 64
- “Edit the properties of the virtual directory for IIS 5” on page 68
- “Editing the properties of the cache directory for IIS 5” on page 73
- “Edit the properties of the images directory for IIS 5” on page 73
- “Restart the web server for IIS 5” on page 74

### *Create a virtual directory for IIS 5*

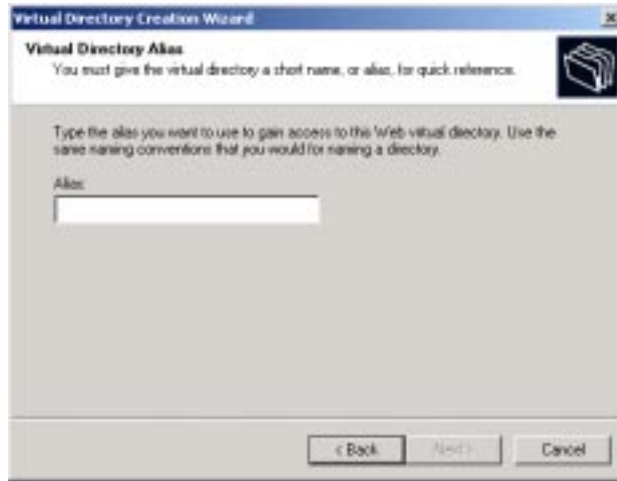
Create a virtual directory for the web as follows.

- 1 Start the Internet Services Manager.  
Start > Programs > Administrative Tools > Internet Services Manager
- 2 In the Navigator window, right-click **Default Web Site**.





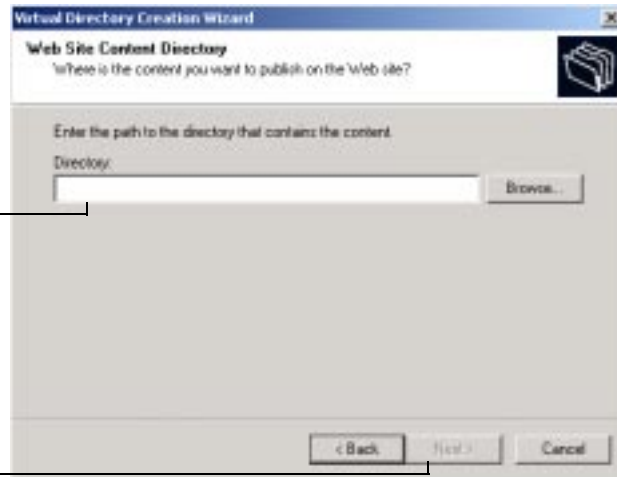
- 5 Type an alias name, such as CqWeb. Do not use a “/” character in the alias name. Then click Next.



- 6 Type or browse to the name of the directory containing the ClearQuest Web files. These files are located in the WWW subdirectory of the ClearQuest installation directory. For example:

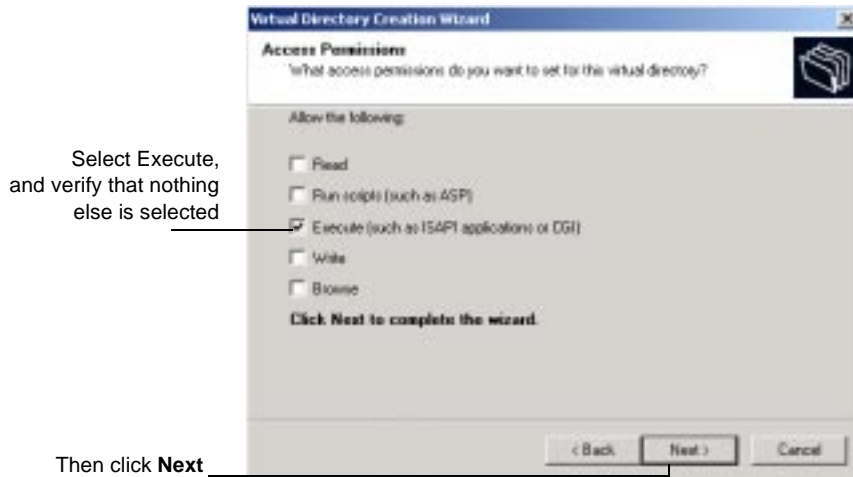
C:\Program Files\Rational\ClearQuest\WWW

Type (or browse to) the directory containing the ClearQuest Web file



Then click **Next**

**7** Clear Read, clear Run scripts, and select Execute. Then click Next.



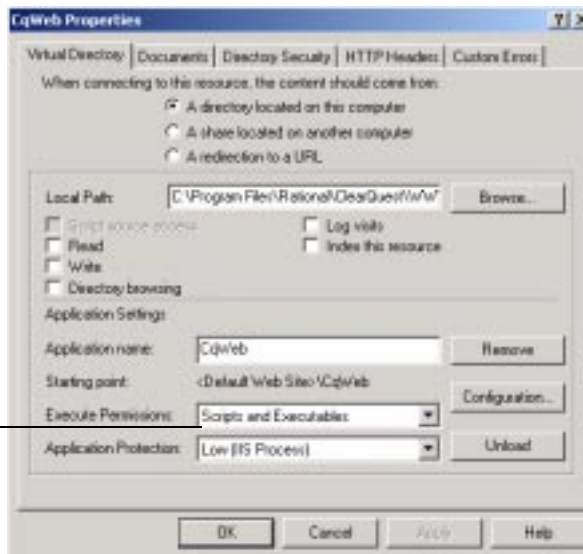
**8** Click Finish to complete the Wizard.

### *Edit the properties of the virtual directory for IIS 5*

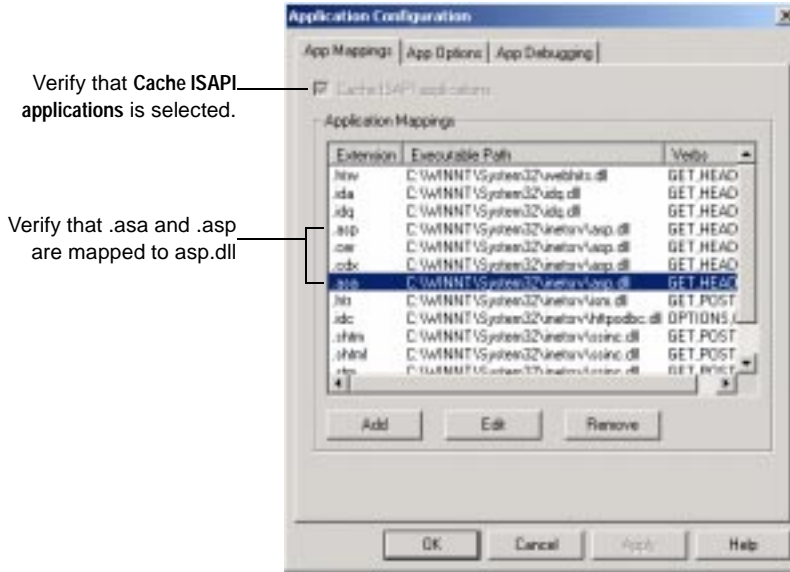
Edit the properties of the virtual directory as follows:

- 1 In the Internet Information Services left pane, navigate to the virtual directory you created earlier.
- 2 Right-click on the virtual directory and select Properties from the shortcut menu.
- 3 In the Properties dialog box, click the Virtual Directory tab.

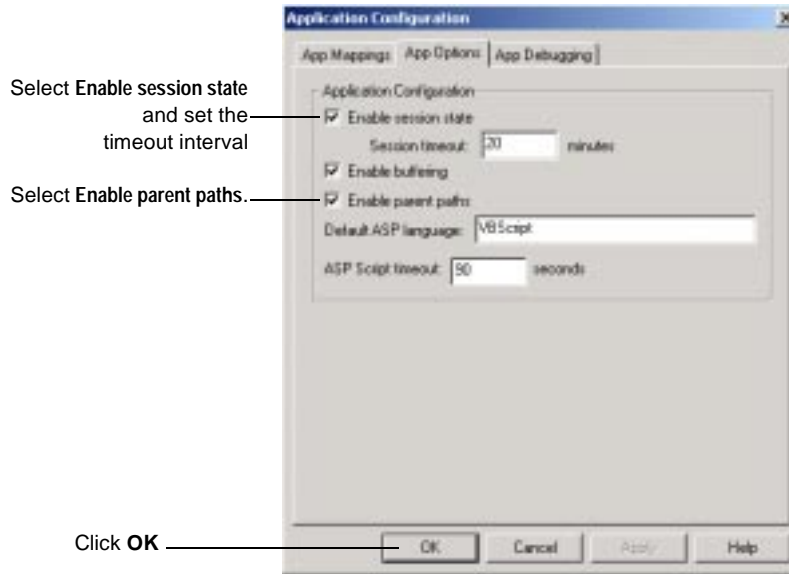
Verify that **Scripts and Executables** is selected



- 4 In the same Virtual Directory tab, click Configuration. In the Application Configuration dialog, click the App Mappings tab.



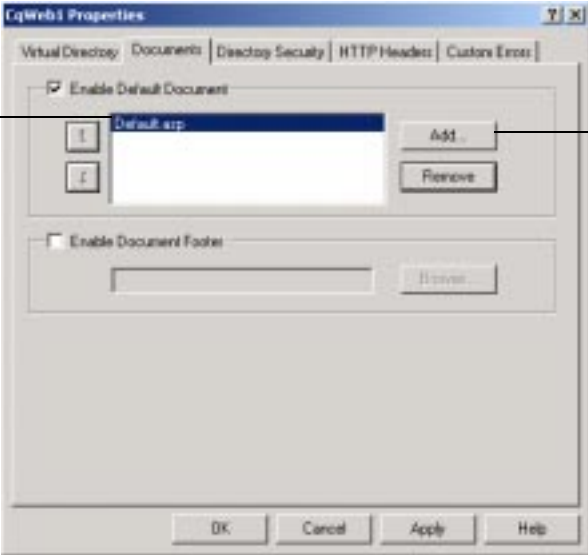
- 5 In the same Application Configuration dialog box, click the App Options tab.



**6** In the Properties dialog box, click the Documents tab.

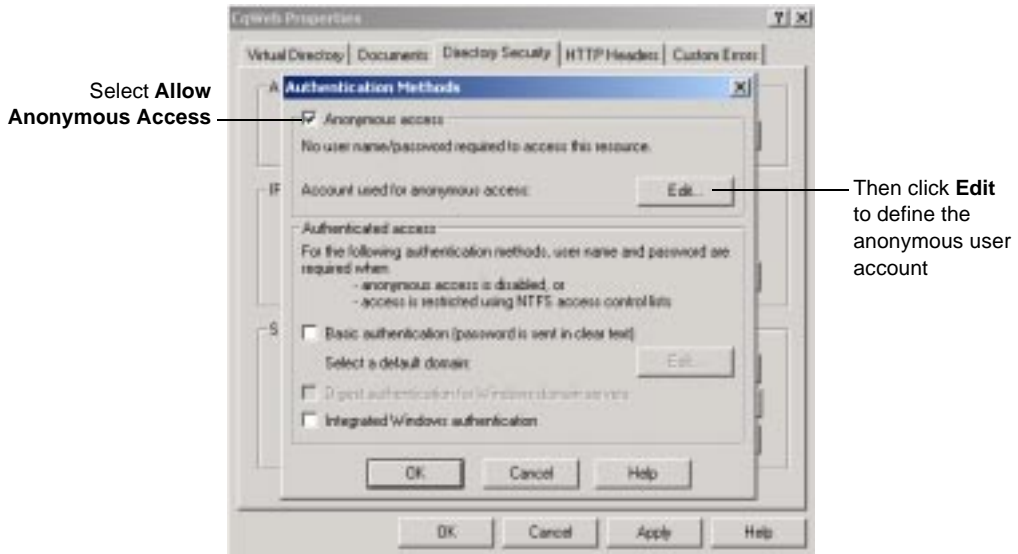
If necessary, add the Default.asp document to the list of documents...

then remove any other documents and select **Default.asp** as the default

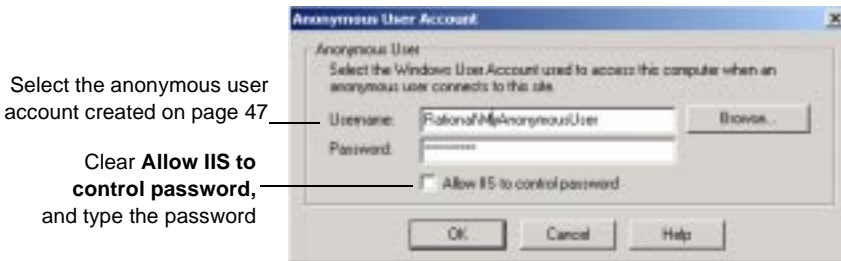


Click to add the Default.asp document to the list

- 7 In the same Properties dialog box, click the Directory Security tab. In the Anonymous Access and Authentication Control, click Edit to open the Authentication Methods dialog box.



- 8 Define the anonymous user account:



- 9 Click OK.
- 10 Type the password in the Confirm Password dialog box, then click OK.
- 11 Click OK, then click OK again to close the Properties dialog.



### ***Editing the properties of the cache directory for IIS 5***

Edit the properties of the cache subdirectory as follows:

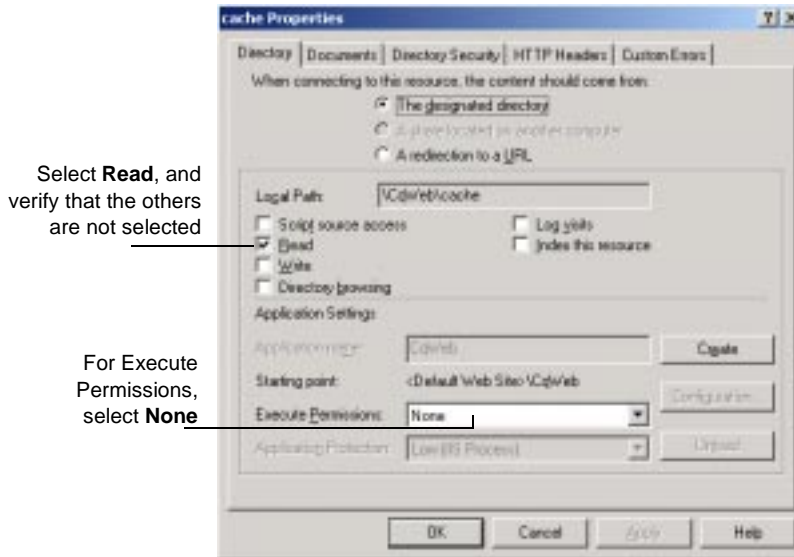
- 1** In the Internet Information Services left pane, navigate to the cache directory under the virtual directory name.
- 2** Right-click the cache directory.
- 3** Click **Properties** from the shortcut menu.
- 4** In the Properties dialog box, click the **Directory** tab.
- 5** Select the **Read** check box. Verify that no other options are selected.
- 6** For **Execute Permissions**, select **None**.
- 7** Click **OK**.

### ***Edit the properties of the images directory for IIS 5***

Edit the properties of the images subdirectory as follows:

- 1** In the Navigator window of Internet Information Services, expand the directory tree of the Default Web Site until you locate the images directory under your alias name.
- 2** Right-click the images directory.
- 3** Click **Properties** from the shortcut menu.

- 4 In the Properties dialog box, click the Directory tab.
- 5 Select the Read check box. Verify that no other options are selected.
- 6 For Execute Permissions, select None.



- 7 Click OK.

### ***Restart the web server for IIS 5***

Close Internet Information Services, saving your console settings, then restart the web server.

You have completed installing and configuring the ClearQuest web server for IIS 5.

## Enabling e-mail notification for web clients

ClearQuest clients use e-mail notification according to the business rules of your schema. To extend e-mail notification support to users of the web client, perform the following steps.

- 1 Copy the code below into a text editor.

```
REGEDIT4
```

```
[HKEY_USERS\.DEFAULT\Software\Rational Software\ClearQuest\  
st\  
<version_no>\SendMail]  
"MailTransport"="Protocol"  
"MAPIProfile"="MyMAPIProfile"  
"SendActive"=dword:00000001  
"SMTPHost"="MyMailHost"  
"RealName"="Web Server On \\\MyWebServerMachine"  
"ReplyTo"="MyGenericReturnAddress@MyDomainName"
```

The <version\_no> number is the current ClearQuest release number. If you have a service pack release (for example 1.1 Service Pack 1), enter the release number portion only (in this example, just 1.1).

- 2 Edit the pertinent entries (MailTransport, MAPIProfile, SMTPHost, RealName, and ReplyTo) of the text in step 1 so that
  - Protocol is either SMTP or MAPI
  - MyMAPIProfile is the name of your MAPI profile (this value is ignored if MailTransport is set to anything other than MAPI)
  - MyMailHost is the name of your mail host computer if you are using SMTP
  - MyWebServerMachine is the name of your web server
  - MyGenericReturnAddress@MyDomainName is the email address for receiving e-mail notification
- 3 Save the file.
- 4 Import the text file into the Registry Editor (select Registry > Import Registry File).

## Providing ClearQuest Web information to web clients

To enable your users to access ClearQuest over the web, tell them to enter the URL:

```
http://<host>/<alias>
```

where `<host>` is the host name of the ClearQuest Web server machine, and `<alias>` is the directory containing the ClearQuest Web files.

# 3

## Upgrading ClearQuest

This chapter describes how to upgrade your existing ClearQuest installation. Before you begin the upgrade, read the release notes (`\\ClearQuest\readme.html`) to become familiar with what has changed in this release.

Topics covered in this chapter include:

- “Understanding the upgrade process” on page 78
- “Preparing to upgrade” on page 79
- “Performing a test upgrade” on page 80
- “Performing the production upgrade” on page 85
- “Upgrading clients” on page 86
- “Upgrading ClearQuest Web” on page 87

**Note:** If you are using Rational ClearQuest/TeamTest Edition, see the Getting Started with Rational ClearQuest TeamTest Guide. This guide is available as a Portable Document Format (PDF) file in the `\\ClearQuest\books` directory.

## Understanding the upgrade process

The following steps summarize the upgrade procedure. The sections of this chapter describe the steps in detail.

- 1 Read the ClearQuest release notes (`\\Program Files\Rational\ClearQuest\readme.htm`) to learn what has changed in this release.
- 2 Read this chapter and be sure you understand the upgrade procedure before you begin.
- 3 **Warning:** Back up your current schema repository and user databases.
- 4 Perform a test upgrade.
  - Create new, empty vendor databases for your schema repository and user databases.
  - Install the new version of ClearQuest.
  - Use the ClearQuest Maintenance Tool to upgrade your schema repository and user databases.
  - Unlock your old databases so users can continue to work with those databases during the testing period.
- 5 Perform the upgrade on your production databases.
- 6 Notify your users of the new database connection information.

**Important:** If you are using multiple products from the Rational Suite, all products must be from the same Suite version (installed from the same CD-ROM). If you want to upgrade a product from the Suite, uninstall all Rational Suite products and install the desired products from the newer Suite CD-ROM.

## Preparing to upgrade

The ClearQuest upgrade process upgrades the application and your databases. Because upgrading changes the underlying structure of your data and can change your schemas, we highly recommend the following:

- Do complete backups of your databases.

Having a backup is the only way to be assured that you can recover your schemas and user data if something goes wrong during the upgrade process.

- Do a test upgrade.

By testing the upgrade, you can be sure that your data upgrades successfully and your customizations work with the new release. Testing also gives you the chance to try new functionality in the form of Packages (for more information on packages, see the release notes).

You should only upgrade your user databases when you completely understand the upgrade process and are sure the upgrade works with your customizations.

**Note:** Upgrading might fail if you have custom database tables that were not created by ClearQuest. For information about upgrading if you have custom database tables, read the release notes (`\\Program Files\Rational\ClearQuest\readme.htm`).

## Performing a test upgrade

We strongly recommend the following steps for performing a test upgrade. You should be sure the process works before upgrading your production databases.

### Database locking

To upgrade, install the latest version of ClearQuest, then use the ClearQuest Maintenance Tool to upgrade your databases. After ClearQuest upgrades your data, it locks your original databases. When your original databases are locked, you have two options for how to proceed with the upgrade:

- You can complete the entire upgrading testing with the original databases locked.

This means that your users will not be able to use ClearQuest until the upgrade testing is completed. How long that takes depends on the size and complexity of your database and the amount of testing you do. If the upgrade is successful, upgrade your client installations, and notify users about how to connect to the upgraded databases.

- You can unlock your original databases while you test the upgrade.

This means that your users can continue to use your current version of ClearQuest and continue to enter records while the upgrade testing is performed. The only down time for your users occurs while the actual database upgrade and unlock procedures are being performed. If the upgrade test is successful, you must discard the test databases and perform the process again to upgrade the most current data.

To unlock your original schema repository and user databases, see “Unlocking your original databases” on page 83.



## Upgrade steps

The upgrade steps are the same whether you are performing a test upgrade or the final production upgrade. We highly recommend performing a test run. The following steps assume you are doing a test upgrade first.

To perform an upgrade:

- 1 Install the latest version of ClearQuest on your test machine using the Administrator installation.

Follow the installation steps in “Installing ClearQuest for the administrator” on page 30 to install the new version of ClearQuest.

- 2 Create new, empty vendor databases for your schema repository and user databases. You should create the new databases in a new test directory or on a test server. For information on creating vendor databases see:
  - “Setting up Microsoft Access” on page 10
  - “Setting up SQL Anywhere” on page 11
  - “Setting up Microsoft SQL Server Version 6.5” on page 16
  - “Setting up Microsoft SQL Server 7” on page 22
  - “Setting up the Oracle Server” on page 26

**Warning:** Create empty databases only. Do not use your vendor database tools to move or copy the data. ClearQuest updates the data structure and moves it into the new databases as part of the upgrade process.

- 3 Notify users to log off from ClearQuest, and shut down your web server.

Users should not access ClearQuest during the upgrade process.

**Note:** Some high-end databases give the administrator a tool for logging users off from the database. Check your vendor database to see if it has such a tool.

#### 4 Back up your data.

Use your vendor tools to back up your schema repository and user databases. Upgrading changes the underlying structure of your data and can change your schemas. We strongly recommend you have a backup to revert to it if necessary.

#### 5 Upgrade your schema repository and user databases.

- a Run the ClearQuest Maintenance Tool from the Start menu.
- b Select the **Upgrade schema repository and/or user database(s)** and click Next.
- c Specify the schema repository to upgrade from (your existing production schema repository). Click Next.
- d To upgrade databases associated to this schema repository, select the **Upgrade user databases** option (recommended).
- e Enter the ClearQuest login name and password for a ClearQuest user account with Superuser privileges, then click Next.
- f Select the user databases to upgrade, then click Next.
- g Enter the schema repository to upgrade to (the new, empty database you created), then click Next.
- h For each of your user databases, enter the user database to upgrade to (the new, empty databases you created), then click Finish.

ClearQuest upgrades your schema repository and user databases and notifies you when the process is complete.

#### 6 Determine whether you want to unlock your original databases and allow users to continue working with ClearQuest during upgrade testing. If you choose to unlock the database, see “Unlocking your original databases” on page 83.

#### 7 Apply packages.

If you are upgrading from release 1.1 and had applied e-mail rule or integration add-ins, you must apply certain upgrade Packages

to your schemas. For details, see the release notes and the online Help for the Package Wizard in the ClearQuest Designer. After the packages are applied, you must upgrade the user databases associated with that schema.

**8 Test the application.**

Enter a few test records and move them through your entire state model to be sure the upgrade is working correctly.

### **Unlocking your original databases**

If you choose to allow users to continue using your original databases while you test the upgrade, you must unlock the database.

**Note:** After you perform the final upgrade, do not unlock your original databases. Keeping the original databases locked prevents your users from accessing the wrong databases.

**1 Start a command window ("DOS prompt"), and change to the new ClearQuest home directory.**

**2 To unlock the schema repository, type the command for your vendor database:**

```
> installutil unlockschemarepo dbvendor server db  
dbologin dbopassword ""
```

where:

- `dbvendor` (vendor database) is either:
    - `SQL_SERVER` for SQL Server databases
    - `MS_ACCESS` for Microsoft Access
    - `SQL_ANYWHERE` for Sybase SQL Anywhere
    - `ORACLE` for Oracle
  - `server` is either:
    - the hostname of the SQL Server database server
    - the SQL Anywhere database server name
    - the Oracle SQL\*Net alias
    - an empty string (“”) for Microsoft Access
  - `db` is the database name containing your original schema repository for Oracle and SQL Server, or the full path to the database for Microsoft Access and SQL Anywhere
  - `dbologin` is the userid that owns the database (use `admin` for Microsoft Access or SQL Anywhere)
  - `dbopassword` is the password to that userid (use `admin` for Microsoft Access or SQL Anywhere)
- 3 To unlock user databases, repeat the above steps with the following exceptions:**
- the *installutil* subcommand to use is *unlockuserdb* instead of *unlockschemarepo*
  - point to the server database containing the original user database, not the schema repository

## Performing the production upgrade

After you have performed a test upgrade and are comfortable with the process, you are ready to upgrade your production schema repository and user databases.

- 1 Determine if you need to perform the upgrade on your production database.
  - a If you chose to leave your production database locked during testing and the test upgrade was successful, you can put your upgraded databases into production.
  - b If you choose to allow users to continue working with your production database during test, you need to repeat the upgrade process (see “Upgrade steps” on page 81), but this time you will not unlock your original databases.

**Note:** You will need to create new target databases before repeating the upgrade steps for production databases.

- 2 Inform users of the new connection information to use when upgrading their client installations of ClearQuest.

## Upgrading clients

Each client installation should be upgraded by uninstalling the current ClearQuest installation, installing the latest version of ClearQuest (see “Installing ClearQuest for end-users” on page 34), and connecting to the newly upgraded databases.

**Note:** Uninstalling the current version does not delete your databases or license information.

After upgrading, users who had enabled e-mail notification must reenable it. To do this:

- 1 Choose **View > E-mail Options**. This opens the E-mail Setup dialog.
- 2 Select **Enable E-mail Notification**.
- 3 Select either **SMTP** or **MAPI**
- 4 If you entered **SMTP**:
  - Enter the SMTP host address of your mail server.
  - Enter your e-mail address.
  - Click **Finish**.
- 5 If you entered **MAPI**:
  - Choose a MAPI profile from the list.
  - Click **Finish**.

## Upgrading ClearQuest Web

To upgrade ClearQuest Web:

- 1 If you have not done so already, shut down your web server.
- 2 Uninstall the current version and install the new version of ClearQuest on your Web server. See “Installing ClearQuest for the administrator” on page 30.
- 3 Repeat all the steps in Chapter 2, “Setting Up ClearQuest Web” on page 45.
- 4 Restart your web server.





# 4

## Licensing ClearQuest

This chapter gives an overview on how ClearQuest licenses work. The ClearQuest administrator sets up and maintains licenses using the Rational License Administrator.

For more information about licenisng Rational Software products, see the book, *“Administering Licenses for Rational Software”*.

## Working with Rational Software licensing

Rational Software product licensing provides two types of licenses:

- **Node-locked license:** enables a single user to install and use a Rational Software product on a specific system.
- **Floating license:** enables a specified number of users to install and use a Rational Software product on their systems. Floating licenses are shared among all users of the licensed software.

**Note:** If you purchase ClearQuest with a node-locked license, your ClearQuest Web functionality is limited to the ability to submit defects and to run one query (predefined by your ClearQuest administrator). To get full ClearQuest Web functionality, you need to purchase a floating license.

The license key certificate included with your purchase of ClearQuest indicates the type of licenses you are working with and the license keys you need to install.

Rational Software makes it easy to install and maintain licenses by providing the Rational License Administrator. Rational Software also provides GLOBEtrotter Inc.'s FLEXIm License Manager for administering floating licenses.

The Rational License Administrator is automatically installed when you install ClearQuest. To use the Rational License Administrator, select **Rational ClearQuest > License Administrator** from the Start menu. For information about installing your product licenses so you can get started using ClearQuest, see the Rational License Administrator online Help.

To install the FLEXIm License Manager, select **GLOBEtrotter FLEXIm License Server** from the list of products displayed in the Rational Software Setup program. For additional information about FLEXIm licensing, see the Rational License Administrator online Help.

# 5

## Silent Installation of Rational ClearQuest

### Silent Installation of Rational ClearQuest

You can configure Rational Software Setup to perform silent installations of Rational software. Silent installations allow you to perform an installation of a Rational Software product, using the same parameters, repeatedly on a number of systems.

The following sections provide a brief summary of the silent installation features.

**Note:** We recommend you read Rational's *Silent Installation White Paper* before you attempt a silent installation. The white paper is available from the Rational Web site at <http://www.rational.com/>. Select the following links in order: Technical Support, Whitepapers, and Rational Suite.

### Overview of Silent Installations of Rational ClearQuest

This section describes how to perform a silent install. The basic steps, explained below, are:

- 1 Record an installation session.
- 2 Optionally, add a post-installation command to the recorded installation.
- 3 Execute the installation procedure.

## Recording a Software Installation of Rational ClearQuest

You can record a software installation session and then use the responses that you provide to replay the installation. At the end of the recorded installation procedure, you will be given the option to exit without installing the product.

- 1 Insert the Rational ClearQuest software CD in a CD drive.
- 2 Open a command window on your system and run `RSSetup` with the `-autocapture` switch. For example:

```
<Install Location>\setup\rssetup -autocapture
```

Where `<Install Location>` is the location of the Rational ClearQuest software CD.

- 3 When the Rational Software Setup program starts, proceed with the installation procedure on “Installing ClearQuest” on page 7. Your responses will be recorded in the responses file which is named as follows:

```
<Install Path>\RSSetup\response.ini
```

**Note:** The option to use a temporary license is not supported when using the `-autocapture` switch. The silent installation procedure will not support the capture of license certificate information into the `response.ini` file.

- 4 After you have answered all of the questions related to the installation, you will be prompted to continue with the installation of the product or to exit from the setup program. Click **OK** to proceed with the installation or **Cancel** to exit. Even if you cancel at this point, your answers are still saved.

### Example

The following example shows how to record an installation of Rational ClearQuest.

```
<Install Location>\setup\rssetup -autocapture /product  
ClearQuest-1.1
```

## Specifying a Post-Installation Command

You can specify a command that will be performed after the silent installation has completed.

After you have completed preparation for a silent installation, perform the following steps:

- 1 Edit the response file. Append a line similar to the following to the end of the file. The label `[PostInstallCmd]` is required.

```
[PostInstallCmd]
Command=post-installation-commands.bat
```

where, the `post-installation-commands.bat` is a batch file that contains the commands you want to execute. Such a file might contain the following commands:

```
licadmin -fserver.txt
net send administrator "Installation Complete"
```

In this example, the License Key Administrator, `licadmin`, starts and uses the information in `server.txt` to specify the name of the license server that the current system will use. The batch file then sends a message to the administrator, indicating that the installation procedure is complete.

- 2 Save the response file to a unique name (to ensure that is it not overwritten by subsequent autocaptures). For example, save the response file with a name such as `c:\responses\ent-w-post.ini`

## Performing a Silent Software Installation

After you have recorded your responses, use the response file to replay the installation. For example:

```
<Install Location>\setup\rssetup -silent  
-response:response-path
```

Where `response-path` is the path of the response file. The default path is as follows:

```
"c:\Program Files\Rational\RSSetup\response.ini"
```

**Note:** If a response file is in the default location, that response file will be used each time you run the installation procedure. Specifying a response file, using the `-response:response-path` parameter, will override the default response file.

If you specify `-autocapture` on the `RSSetup` command line, your installation will initially select the product name identified in the previous `response.ini` file, but will allow you to select a new product for installation. A new `response.ini` file will be saved at the end of the installation procedure.

## Preparing Multiple Response Files

You can save multiple response files to support attended installation of different products.

- 1 Identify a directory where you will store your response files. The following examples use a directory named as follows:

```
C:\responses
```

- 2 Record the response file for each product you want to install.
- 3 Rename the response file with a unique file name. For example, save the ClearQuest 2.0 response file as

```
C:\responses\ClearQuest2_0responses.ini.
```

- 4 Perform the installation and specify the path to the response file as a parameter to the `-response` switch. For example:

```
<Install Location>\setup\rssetup -silent  
-response:c:\response\ClearQuest2_0response.ini
```

## Examples

See “Silent Installation of Rational ClearQuest” on page 91.

**To record an installation of Rational ClearQuest version 2.0:**

```
<Install Location>\setup\rssetup -autocapture /product ClearQuest-2.0
```

**To remove Rational ClearQuest version 2.0:**

```
<Install Location>\setup\rssetup /uninstall /product ClearQuest-2.0
```

## RSSetup Command Syntax

This section provides the syntax for RSSetup, and well as a table of RSSetup command parameters.

### Syntax

```
RSSetup [-silent [-response:response-path]] |  
        [-verbose [-response:response-path]] |  
        [-autocapture]  
        [/product <product>] [/install /uninstall /update]
```

RSSetup Command Parameter	Description
-silent	Performs a silent (unattended) installation.
-verbose	Replays a previously recorded installation, allowing you to override the recorded responses. <b>Note:</b> if you override the responses, those changes are not written to the response file.
-response:response-path	Specifies the path to the response file. <b>response-path</b> is the path for the response file. You must specify the <b>response-path</b> . The default path is <Install Location>\Setup\ RSSetup\response.ini, where <Install Location> is the location of the installation files.
-autocapture	Records your responses to a software installation, storing the responses in a file for later replay.
/product product-identifier	Specifies the product you are installing. This parameter does not apply for silent installations. For a silent installation, you specify the product name in the response file. See page 97 for the list of identifier you can use with this switch.



<b>RSSetup Command Parameter</b>	<b>Description</b>
/install	Installs the product you specified with the /product switch. This switch cannot be combined with /uninstall or /update. This parameter does not apply for silent installations. For a silent installation, you specify the product name in the response file.
/uninstall	Removes the product you specified with the /product switch. This switch cannot be combined with /install or /update.
/update	Updates the product you specified with the /product switch. This switch cannot be combined with /install or /uninstall. This parameter does not apply for silent installations.

The table below lists the product identifiers you must use with the /product switch.

<b>Product Name</b>	<b>Product Identifiers</b>
Rational LoadTest	atbuLoadTest
Rational Suite Performance Studio Agent	atbuPSAgent
Rational Suite Performance Studio	atbuRSuitePerformanceStudio
Rational Test Enablers	atbuSetupEnablers
Rational TeamTest	atbuTeamTest
Rational TestAccelerator	atbuTestAccelerator
Rational Robot	atbuTSRobot
Rational ClearQuest	ClearQuest-1.1
Rational ClearQuest TeamTest Edition	ClearQuestTeamTestEdition-1.1
Rational PureCoverage	coverageNT

<b>Product Name</b>	<b>Product Identifiers</b>
Rational Suite DevelopmentStudio for UNIX	dsbuRSDSU
Rational Developer Kit	dsbuDeveloperKit
Rational Purify	purifyNT
Rational Quantify	quantifyNT
Rational RequisitePro	rmbuRequisitePro
Rational RequisiteWeb	rmbuRequisiteWeb
Rational Rose Inline EJB Addin	Inline
Rational Rose Enterprise Edition	Rose98i
Rational Rose Professional C++ Edition	Rose98iC++Professional
Rational Rose Professional J Edition	Rose98iJavaProfessional
Rational Rose Modeler Edition	Rose98iModeler
Rational Rose Professional Visual Basic Edition	Rose98iVBProfessional
Rational Rose Professional Data Modeler Edition	RoseDataModelerProfessional
Rational Unified Process	ruObjectory51
Rational SoDA for Word	SoDA
Rational Suite AnalystStudio	wsbuAnalystEdition
Rational Suite DevelopmentStudio	wsbuDevelopmentStudio
Rational Suite Development Studio - RealTime Edition	wsbuDevelopmentStudioRT
Rational Suite Enterprise	wsbuEnterprise
Globetrotter FLEXIm License Server	wsbuFLEXImServer
Sybase SQL Anywhere Database Server	wsbuSQLAnywhereServer
Rational Suite TestStudio	wsbuTestStudio
Rational Suite Web Server Components	wsbuWebComponents

## License Key Administrator Command Line

You can run the Rational License Key Administrator from a command line or batch file to automate your license key installations and configuration.

Additional detailed information about the License Key Administrator command line options and usage is available on the Rational Suite web site:

<http://www.rational.com/products/rs/prodinfo/index.jtmpl>.

## License Key Administrator Syntax

```
licadmin -ffilename.ext
```

**Table 1: Licadmin Command Parameters**

Parameter	Description
-ffilename.ext	Specifies the path to the license parameter file. The license parameter file specifies the name of the license key server that you will use. For example: Server:group-license-server The keyword Server is case-sensitive.

The status of the execution of this command is written to a file named `filename.ext_STATUS`, where `filename.ext` is the name of the license parameter file you used. The status file is created in the directory where you executed the `licadmin` command.

### *Example*

- 1 Create a file that contains the following line:  
Server:group-license-server  
where `group-license-server` is the name of your FLEXlm License Server system.
- 2 Save the file as `server-info.txt`.

**3** In a command window, run the following command:

```
licadmin -fserver-info.txt
```

Your system will be configured to use floating license keys from group-license-server.

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