IBM Rational® Integrations

Setting up the ClearQuest®-RequisitePro® integration for use with CQTM

Rational software

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This module provides an overview on how to enable CQTM and establish integrations between ClearQuest and Requisite Pro.

Course objectives

- The following topics are covered in this module:
  - ▶ Configuring the ClearQuest (CQ) database (DB) to include CQTM functionality
  - ▶ Applying the ReqPro 1.8 package to the CQTM records
  - ▶ Establishing Back References in CQ for the CQTM records
  - ▶ Upgrading the CQ user DB with the changes
  - ▶ Creating new attributes in ReqPro for record types used for the integration
  - ▶ Establishing CQ/ReqPro integration using the wizard

Setting up the ClearQuest RequisitePro integration for use with CQTM   © 2008 IBM Corporation

This module covers several topics. It explains how to configure the CQ database to include CQTM functionality, and how to upgrade the CQ schema. The module also details applying the ReqPro 1.8 package and establishing Back References in CQ for CQTM created records. Additionally, the module covers upgrading the CQ user database with any changes, creating new attributes in the ReqPro project for record types used for the CQ-ReqPro integration, and establishing the CQ-ReqPro integration using the Integration Wizard.
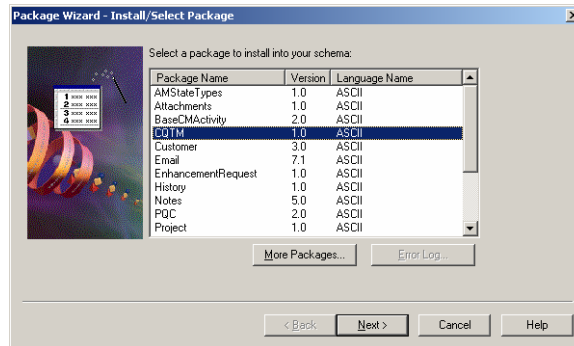
Configuring CQ database for CQTM functionality

- Start the ClearQuest Designer tool.
- Multiple Schema Repositories generate in a list.
- Pick the schema to work with.
- Click **Next**.
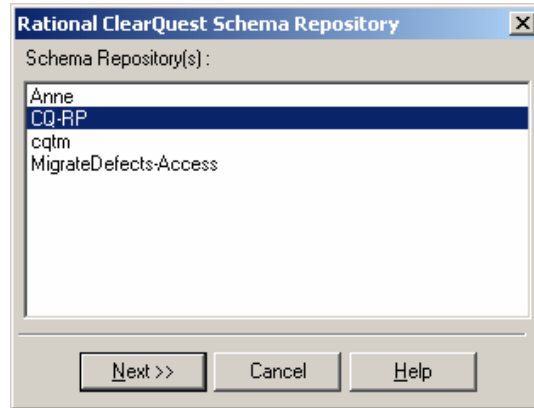
When configuring the CQ database for CQTM functionality, the first step after installing or upgrading ClearQuest to Release 7 is to apply the CQTM package to the schema you plan to use. First, start the ClearQuest Designer tool. If more than one Schema Repository is registered on the computer, a list opens, as shown on this slide. Pick the repository to work with, and click **Next**.

Next, a login screen opens. Enter the administrator username and password, then click **OK**. The open schema – step one of two – opens inside the designer. Click **Cancel** to dismiss the window. Select "Package" then "Package wizard" from the main Designer menu to produce the screen on the slide.
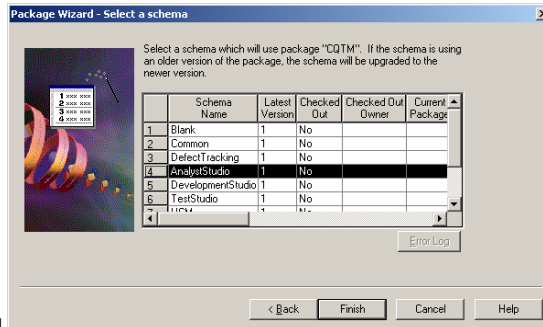
Selecting the CQTM package

- Look for CQTM in the list of available packages.
  - ▶ If CQTM is in the list of available packages, select it.
  - ▶ If CQTM is not present, select "More Packages," find CQTM in the list, and select it.
- Click **Next**.
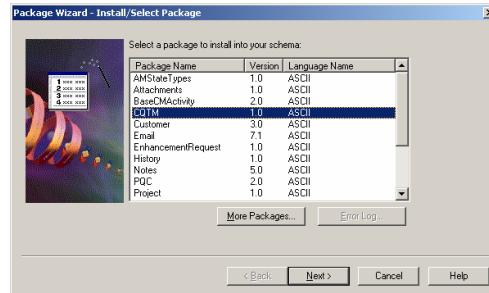
If CQTM is in the list of available packages shown in this slide, select it, then click **Next**. If it is not available, select "More Packages," pick CQTM from the resulting list, and click **OK** from the "Install Packages" window. Afterwards, select it from the "Install/Select Package" window, and click **Next**.
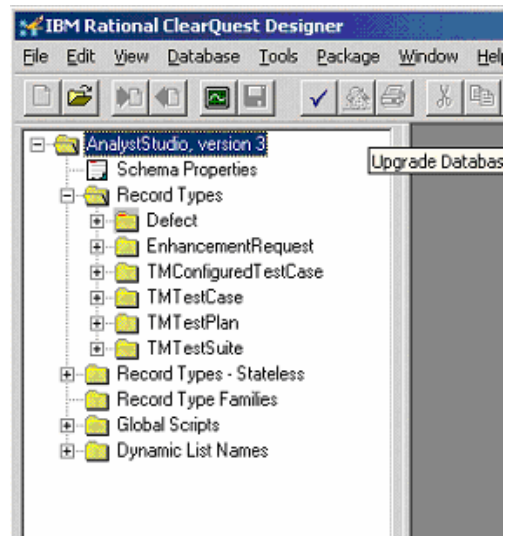
Selecting the CQTM package

- From the "Select a schema" dialog, pick the schema to apply to the CQTM package.

- Click **Finish**.
  - ▸ **Note:** Additional schema modifications might be required.

- If successful, an "enabled schema" message displays

Package Wizard - Select a schema

Select a schema which will use package "CQTM". If the schema is using an older version of the package, the schema will be upgraded to the newer version.

	Schema Name	Latest Version	Checked Out	Checked Out Owner	Current Package
1	Blank	1	No		
2	Common	1	No		
3	DefectTracking	1	No		
4	AnalystStudio	1	No		
5	DevelopmentStudio	1	No		
6	TestStudio	1	No		
	UCM	1	No		

Error Log

< Back   Finish   Cancel   Help

From the "Select a Schema" dialog, pick the schema to apply to the CQTM package, and click **Finish**. This example uses Analyst Studio. Note that if the schema you are upgrading does not have defect and enhancement request records, or is not set up for integrations with Test Manager, additional schema modifications are required. If this process is successful, a message displays stating that the schema has been enabled.

Open the schema and expand the "Record Types" folder. Confirm that there are four record types that all begin with "TM." The schema are TMConfiguredTestCase, TMTestCase, TMTestPlan, and TMTestSuite. If they are present, check in the schema, adding comments if necessary.

Upgrading the schema, if necessary

- Close the schema if it is open in Designer.

- Select Packages→ Upgrade Packages.

- If packages require an upgrade, the "Upgrade Installed Packages" screen opens.

- When complete, the schema opens. Check it in.
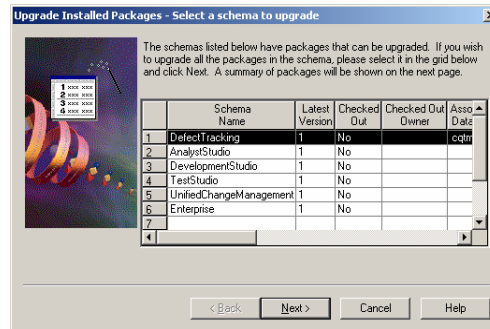
Schema created in previous releases require an upgrade before continuing. To upgrade a schema, start Designer as in earlier steps. Close the schema if it is open in Designer. Select "Packages," then select "Upgrade Installed Packages." The window on this slide opens if updates are needed. If there are no packages requiring updates, a screen stating that fact is shown in place of the one shown on this slide. When updates are complete, the schema opens. Check it in, and add comments if necessary.
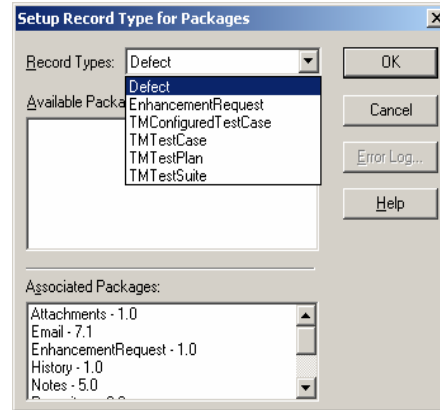
Applying ReqPro 1.8 to CQTM created records

- Add the ReqPro 1.8 package to:
  - ▸ TMConfiguredTestCase
  - ▸ TMTestCase
  - ▸ TMTestPlan
  - ▸ TMTestSuite

After updating the packages, apply the Requisite Pro 1.8 package to the CQTM records TMConfiguredTestCase, TMTestCase, TMTestPlan, and TMTestSuite.

To proceed, first start ClearQuest Designer. Open the schema that contains the CQTM records. Select "Package," then select "Setup Record Types for Packages." A dialogue opens similar to the image on the slide. From the "Record Types" dropdown list, pick one of the "TM" type records.

Applying ReqPro 1.8 to CQTM created records
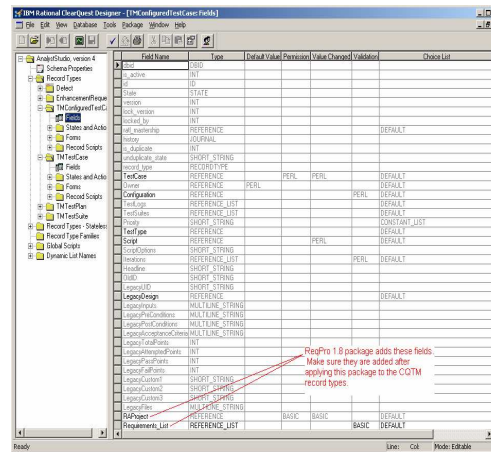
- In the Available Packages list, check off RequisitePro 1.8.

- Click **OK**.

- Check in the schema, adding check in comments, if necessary.

- Repeat for the remaining three TM Record Types
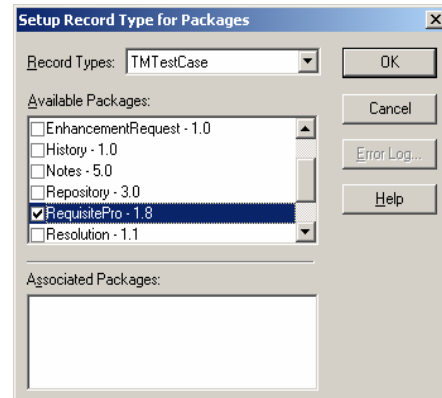
In each of the TM type record windows that appear, an Available Packages list is visible. Check the package marked "Requisite Pro 1.8," and click **OK**. Check in the schema, adding check in comments, if necessary. Repeat these steps for all four TM Record Types.

Establishing Back References

- Open the schema in CQ Designer.

- Expand the Record Types node in the left pane.

- Expand one of the TM record types.

- Open the record type fields by double clicking "Fields," or by right-clicking and selecting "Open."

- Confirm that the RAProject and Requirements_List fields are included.

Next, establish Back References in ClearQuest for the CQTM created records. To proceed, open the schema again in ClearQuest Designer. Expand the "Record Types" node located in the left pane. Expand one of the TM record types. Open the "Record Type" fields by double-clicking "Fields," or right-clicking and selecting "Open." You should now see a view similar to the image on the slide. Confirm that the RAProject and Requirements_List fields are included.

Establishing Back References

- Right-click Requirements_List in the right grid-based frame. The dialog shown to the right opens.

    ▸ The Back Reference field is typically blank.

- Enter a Back Reference for each of the TM record types.
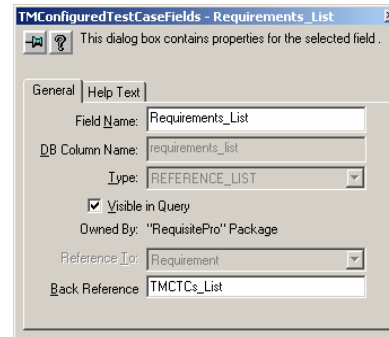
Right-click Requirements_List in the right frame to show the dialogue in the image on this slide. The Back Reference field is typically blank. Enter one of the Back References for each of the TM record types, referring to the table on the next slide.

Back references

Record Type:	Back Reference:
TMConfiguredTestCase	TMCTCs_List
TMTestCase	TMTestCases_List
TMTestPlan	TMTestPlans_List
TMTestSuite	TMTestSuites_List

- Users can change Back References for all records as one schema change.

- Check in schema, adding check in comments, if necessary

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This slide depicts the Back References needed for each record type listed. You can change Back References for all records as one schema change, then check in the schema.

Upgrading the CQ user database with changes

- If not already running, start the ClearQuest Designer

- Select the schema from the list containing the database to be upgraded

- Select Database->Upgrade Database…

- The ClearQuest Designer dialog opens. Click **Yes**

ClearQuest Designer

⚠ This action can not be reversed. Be sure you have backed-up the schema repository and the user database. Continue?

Yes   No

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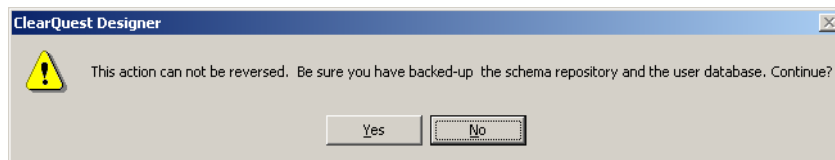
After making the required changes to the schema, apply these changes to the user database that you intend to use with CQTM. Start CQ Designer, if not already running. Select the schema from the list that contains the database to be upgraded. Select "Database," then select "Upgrade Database." The ClearQuest Designer dialogue opens. Click **Yes**.

Confirmation of data

- Select the database to be upgraded

- Confirm the accuracy of the data

- If correct, click **Next**.

Upgrade Database - Step 1 of 2

The following list shows the available databases and their associated information. Click on a row to select the database that you want to update.

	Database	Schema Name	Schema Version	
1	CQ-RP	AnalystStudio	1	C:\CQ-RP integrati
2				
3				
4				
5				

< Back   Next >   Cancel   Help
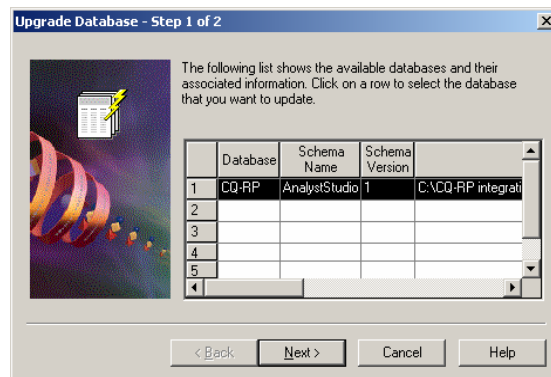
A list of databases belonging to the selected schema displays. Select the database to be upgraded. Confirm that the database and the schema names, current schema version, and database location are all correct. If so, click **Next**.

Confirmation of data

- Select the schema version to apply to the selected database from the list.

- Once the upgrade is complete, a success message displays

Upgrade Database - Step 2 of 2

Choose the new schema version number for the database. This list shows only the schema versions later than the one used by the selected database. This list does not show the most recent schema version if it is currently checked out.

Versions:
2
3
4
5
6
7

< Back | Finish | Cancel | Help

ClearQuest Designer

(i) Database has been upgraded successfully.

OK

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Select the schema version to apply to the selected database from the list. It should be the latest version of the schema. Once this upgrade is complete, a "success" dialogue displays. Your CQ schema is now ready for CQTM and ReqPro-ClearQuest Integration.

Creating new attributes in ReqPro

- Start RequisitePro.

- Open the project to be used for ReqPro-CQ integration.

- Open the Project Properties dialog by selecting File-> Project Administration-> Project Properties.

- Select the "Attributes" tab

Project Properties

General | Revision | Requirement Types
Documents | Document Types | Attributes

Requirement Type: FEAT: Product Feature

FEAT: Product Feature
SUPP: Supplementary Requirement
TERM: Glossary Term
UC: Use Case

Requirement Attribute
Labels for Attribut

Type
Priority
Status
Difficulty
Stability
Origin

Add... | Edit... | Delete | Move Up | Move Down

OK | Cancel | Help
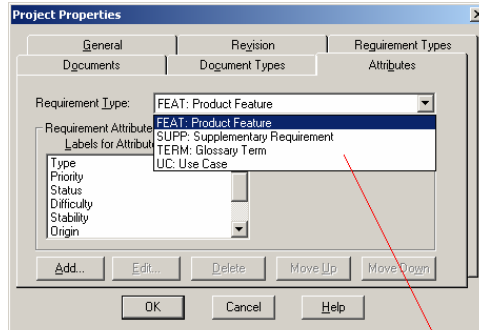
Select requirement type. Example uses UC: Use Case Type.

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In Requisite Pro, attributes must be created for each requirement type used for ReqPro-CQ integration. For this example, set up the attributes for the Use Case requirement type. Repeat the steps for each requirement type used in the ReqPro-CQ integration.

Start ReqPro, and open the project used for the ReqPro-CQ integration. Open the Projects Properties dialogue by selecting "File," "Project Administration," then "Project Properties." Select the "Attributes" tab.
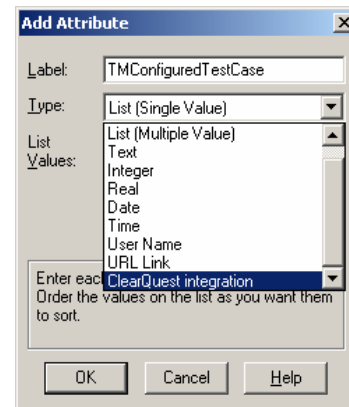
Select the requirement type used for the ReqPro-CQ integration. Click **Add** to add an attribute. Create the first attribute type by entering TMConfiguredTestCase in the label field of the Add Attribute dialogue.

Creating new attributes in ReqPro

- From the "Type" dropdown, select ClearQuest integration.
  - ▶ Leave the other fields blank.
- Repeat the process for the other required attributes:
  - ▶ TMTestCase
  - ▶ TMTestPlan
  - ▶ TMTestSuite
  - ▶ CQ Requirement

Project Properties

| General | Revision | Requirement Types |
| Documents | Document Types | Attributes |

Requirement Type: ASP: ASP

Requirement Attributes
Labels for Attributes:

EnhancementRequest
TMTestCase
TMConfiguredTestCase
TMTestPlan
TMTestSuite
CQ Requirment

Type: ClearQuest

Default Value:

Add... | Edit... | Delete | Move Up | Move Down

OK | Cancel | Help

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From the "Type" dropdown list, select ClearQuest integration. Leave the other fields blank. Go back and repeat these steps for the other three required attributes. When complete, the list should look similar to the image on this slide.

Establishing the CQ-ReqPro integration

- Start Rational Administrator.

- Create a new RA project, or connect to an existing project.

- Ensure that the project has a ReqPro project and a CQ database associated to it.
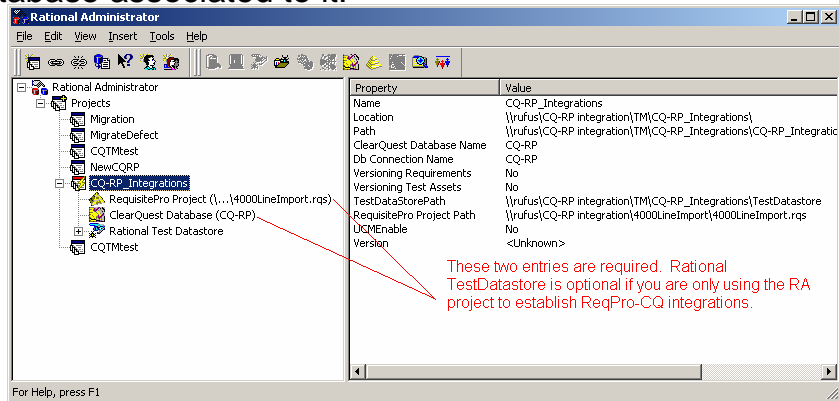
You are now finished making the required modifications in RequisitePro and ClearQuest. The final step is to set up the integration between the two products. This is done from Rational Administrator, using the RequisitePro-ClearQuest Integration Wizard.

Before establishing the integrations, you need to have a project created in Rational Administrator that references the CQ database and the ReqPro project to establish the integration for. Start Rational Administrator and create a new RA project or connect to an existing project. Ensure that the project has a ReqPro projec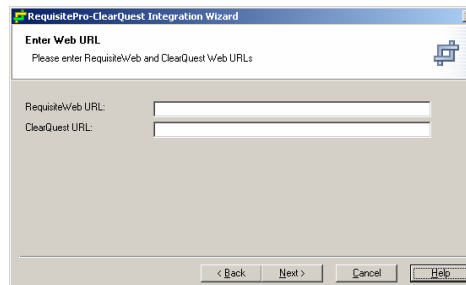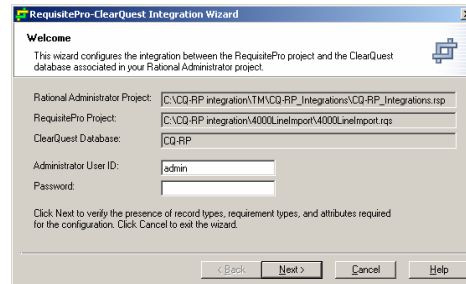t and a CQ database associated to it. The view in the image on the slide can be achieved by right-clicking the project, selecting "Connect," entering any required login credentials, then clicking the plus sign next to the project name to expand it.

Establishing the CQ-ReqPro integration

- Right-click the project, and select RequisitePro-ClearQuest Integration.

- The Wizard begins. An RA project, ReqPro project, CQ database information, and a login for the CQ database opens.

- Enter credentials for the CQ administrator.

- Click **Next**.

- If you use Web clients for your ReqPro project or CQ database, enter the appropriate URLs

RequisitePro-ClearQuest Integration Wizard

Welcome

This wizard configures the integration between the RequisitePro project and the ClearQuest database associated in your Rational Administrator project.

Rational Administrator Project: C:\CQ-RP integration\TM\CQ-RP_Integrations\CQ-RP_Integrations.rsp
RequisitePro Project: C:\CQ-RP integration\4000LineImport\4000LineImport.rqs
ClearQuest Database: CQ-RP

Administrator User ID: admin
Password:

Click Next to verify the presence of record types, requirement types, and attributes required for the configuration. Click Cancel to exit the wizard.

< Back   Next >   Cancel   Help

RequisitePro-ClearQuest Integration Wizard

Enter Web URL

Please enter RequisiteWeb and ClearQuest Web URLs

RequisiteWeb URL:
ClearQuest URL:

< Back   Next >   Cancel   Help

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Right-click the project and select RequisitePro-ClearQuest Integration. The Wizard starts, and the RA project, ReqPro project and CQ database information displays, along with a login for the CQ database. Enter credentials for the CQ administrator, and click **Next**. If you use Web clients for your ReqPro project or CQ database, enter the appropriate URLs.

Establishing the CQ-ReqPro integration

- Press **Next**.

- Determine if the ReqPro project includes EnhancementRequest and Defect fields.
  - ▶ If so, set up sample integrations.
  - ▶ If not, the sample option is unavailable.

- Select "Custom" from the options.

- Click **Next**

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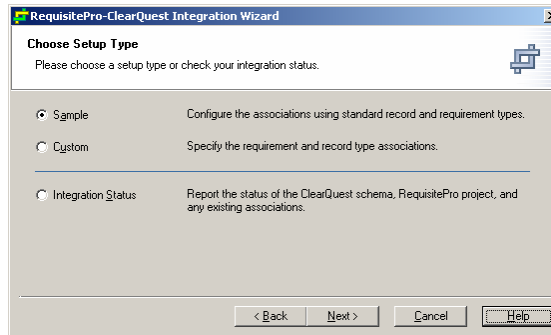
Click **Next**. If your ReqPro project includes EnhancementRequest and Defect fields, you can set up a sample integration. If your project does not include any of those fields, the sample option is unavailable. You can set the Integration Status option to determine if your ReqPro project and CQ database are ready for integration. Select "Custom" from the options screen, and click **Next**.

Establishing the CQ-ReqPro integration

Action	Req Type	Attribute and Record Type	Back Reference	Action
Add	Select From List	TMTestCase	TMTestCases_ List	Modify
Add	Select From List	TMConfigured - TestCase	TMCTCs_List	Modify
Add	Select From List	TMTestPlan	TMTestPlans_L ist	Modify
Add	Select From List	TMTestSuite	TMTestSuites_ List	Modify

For each requirement type in RequisitePro that you intend to set up integrations for with ClearQuest, you need to enter the information shown here into the Configure Associations screen of the Wizard.
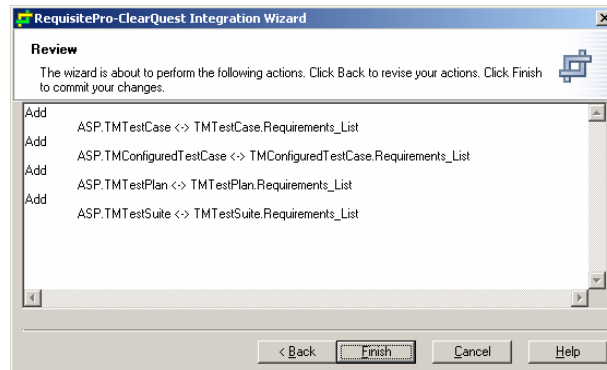
Establishing the CQ-ReqPro integration

- After entering the information, click **Next**.
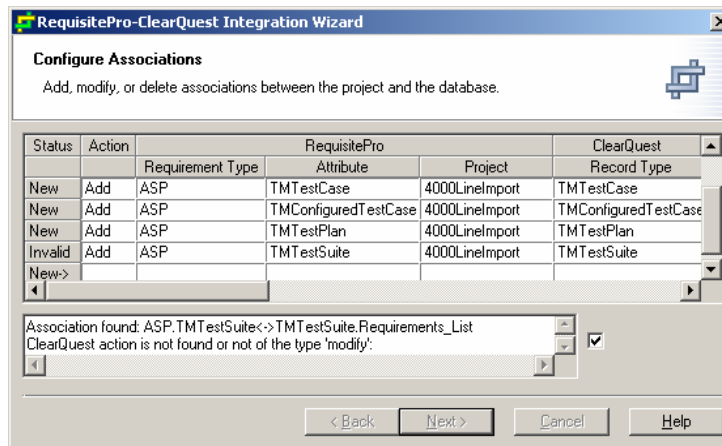
Once all of the information is entered into the tool, click **Next**.

Completing the integration

- A summary of the Integration displays.
- Click **Finish** to set up the integrations.

A summary of the Integration to be established displays. Click **Finish** to complete the integration.

Module summary

- This module covered:
  - ClearQuest Configuration
  - ReqPro configuration
  - Final Steps to achieve Integration

Contributors: Mike Leone

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This module covered how to configure both ClearQuest and Requisite Pro to allow Integration between the two products for use with CQTM.

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