

IBM Software Group | Rational software

**IBM® Rational® ClearCase® and  
ClearQuest® Evaluation Guide**

**Module 4: Project Integrator role**

@business on demand.

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The slide features a blue background with a circular pattern of dots. The IBM logo is in the top right corner. The title is centered in a white box. A horizontal bar with various icons (a person, a globe, a network, a refresh icon, a person, a globe, a network, a refresh icon) is located below the title. The IBM logo and the text '@business on demand.' are in the bottom right corner. The copyright notice '© 2006 IBM Corporation' is in the bottom right corner.

In this module, you will see how Rational ClearCase and Rational ClearQuest work together to keep the team focused and informed and to keep project progress moving efficiently through the eyes of the Project Integrator.

## Role: Project Integrator

- Moving from the Developer environment, you will change hats and login to Rational ClearQuest as the project *integrator*.
- For this demonstration, the project integrator has the combined roles of Quality Engineer and Release or Integration Engineer.
- In this section you will learn how to:
  - Create a baseline from the latest delivered activities
  - Review, test and validate the latest changes to the activity
  - Create and promote a new baseline based on your results

You may be familiar with a software development organization where there is one well-identified product with multiple releases already supported, and new releases every six months. Now, imagine yourself in an Information Technology environment. Managing technology is a moving target. You and your team may produce many mission-critical custom products, often with no more than one release at a time. In either scenario, project management and managing software assets are critical to any project's success.

Moving from the Developer environment, you will change hats and login to Rational ClearQuest as the project *integrator*. For this demonstration, the project integrator has the combined roles of Quality Engineer and Release or Integration Engineer.

After the development work is completed, the change request proceeds to Quality Engineering to verify the change implemented and to begin testing. You, the Quality Engineer, will look up the appropriate tasks from the ClearQuest native client.

In this section you will learn how to:

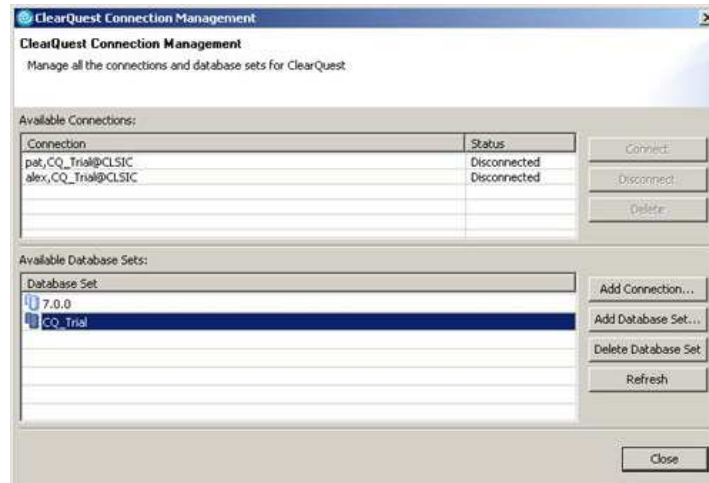
Create a baseline from the latest delivered activities;

Review, test and validate the latest changes to the activity;

Create and promote a new baseline based on your results

## ClearQuest Connection Management

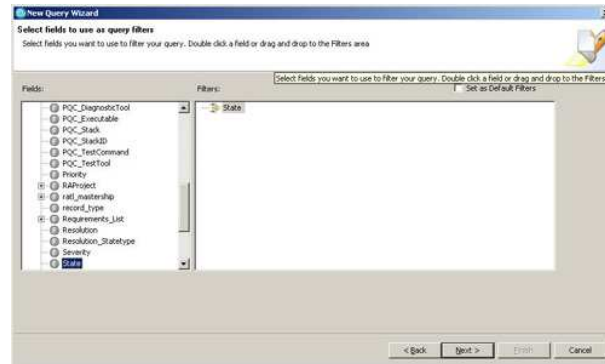
- Use the ClearQuest Connection Manager to manage all the connections and database sets for ClearQuest.



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## Filtering by state

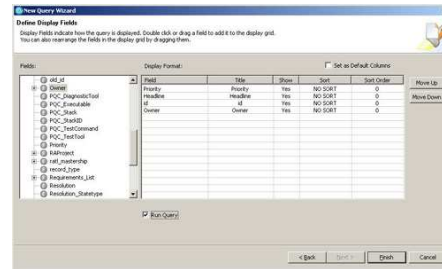
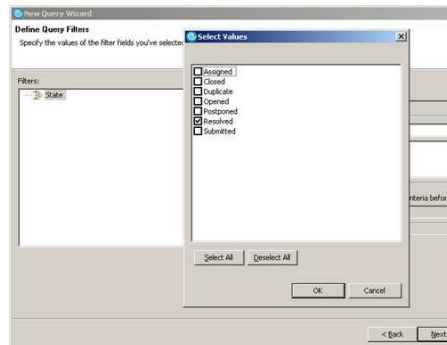
- Use the New Query Wizard to build a query that searches on **Defects** in the **Resolved** state.



Use the New Query Wizard to build a query that searches on **Defects** in the **Resolved** state. Be sure to select **Run Query** when finished.

## Defining the values

- Defining the values for the filter
- Defining display fields



Use the ClearQuest Connection Manager to define both values for the filter and values for the display fields.



## Reviewing and validating the changes

The screenshot shows two windows from the Rational ClearQuest application. The top window is titled 'Comparing C:\wks\developer\dev\_view\CLSICS\_comp1\...\main\alex\_clsics\_CD\1\M' and displays a file comparison interface with a toolbar containing various navigation buttons. The bottom window is titled 'ClearQuest Record Details (data\_CQ\_Trial@CLSIC)' and shows an 'Audit Trail' tab with a 'Record History' section. The history contains two entries, each with fields for Time, Schema Rev, User Name, User Login, User Groups, Action, State, and Fields. The first entry shows a transition from 'Open' to 'Closed' state, and the second entry shows a transition from 'Assigned' to 'Open' state.

- Review the changes
- Validate the changes

Once you have **compared the previous version with the latest one**, you can review the changes using the Next Difference button (arrow) on the toolbar until you have viewed all of the changes to the file.

Once that is complete, you can view the **Audit Trail** tab for defects to review what has happened to this defect thus far and to validate the changes.

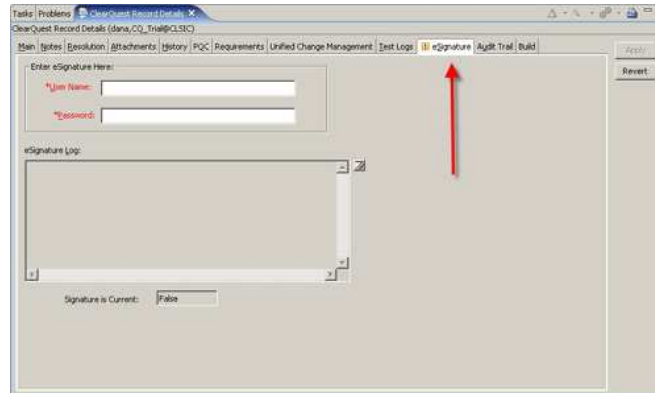
If this were an actual release cycle, you would run through in-depth testing and manage that process. Rational ClearQuest software manages the full range of testing activities from test planning, to test execution, to the capture and analysis of test results. Test plans can be defined. Test cases can be created and associated with specific test plans.

In this case, you will do a simple desk check for validation of the defect. To do this, you will review the code changes implemented to fix this defect. It is very easy to review the changes directly from the change set information that has been collected with the defect report. By right-clicking on any of the files in the change set, you can run many common operations, like looking at the history of the file or comparing the changed version with a predecessor. In this case, you choose to compare the new version of the source file with the version that existed before you started the change. You see that the proper change has been made.

Having confirmed that the proper fix has been completed, you need to change the defect report to indicate that the fix has been validated. To do this, you run the Validate action against that defect report. Once the action has been completed, the defect report is transitioned to the Closed state, and the defect is now considered fixed.

## The eSignature tab

- The Validate action requires that you sign the record before proceeding. Under the **eSignature** tab, a user must enter their username and password to complete the process.



The defect is now closed. You have now completed the lifecycle for a change request through various roles, from assigning by the project lead, through opening and resolving by the developer, and validating by the tester.



## A new baseline

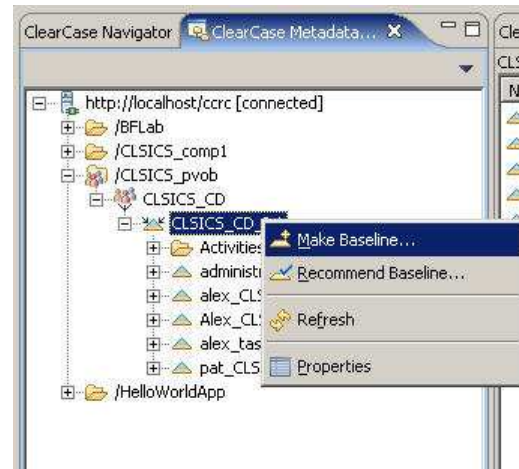
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- Incorporate the latest delivered changes into a new baseline
- Test the new change and create a new baseline that includes any newly delivered activities
  - Create a full or incremental baseline

At this point, you are now ready to incorporate the latest delivered changes into a new baseline. You have the option to create either an incremental or full baseline. The incremental baseline is more efficient because it tags only the objects that have changed since the last full baseline. You also have the option of accepting a default name or specifying a name for the baseline.

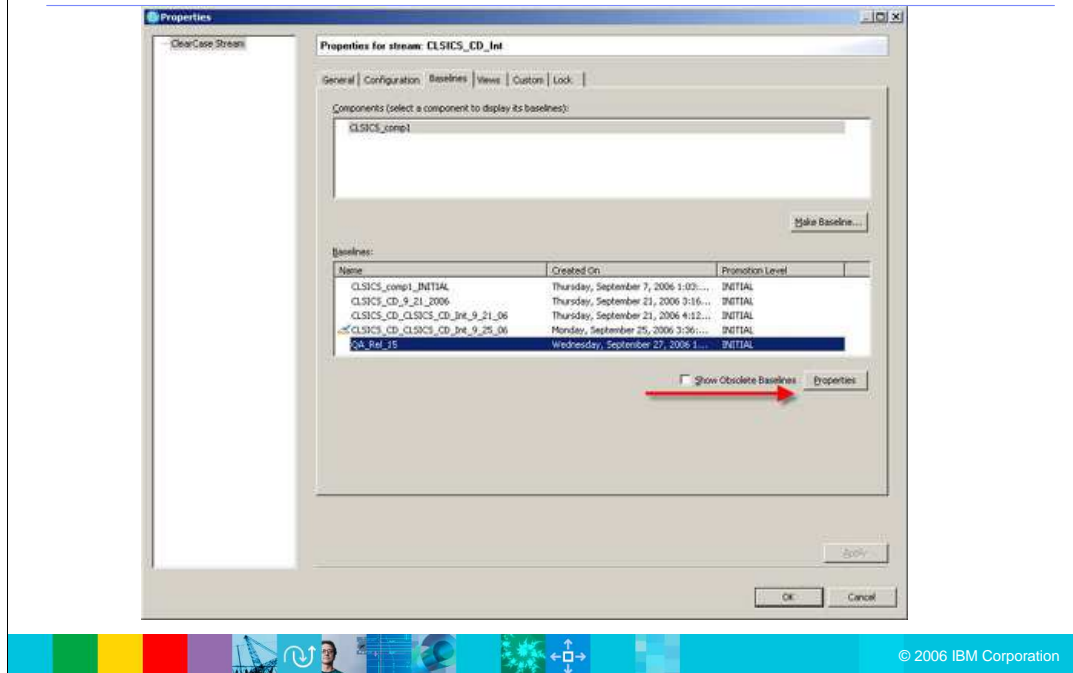
## Baselines

- UCM baselines are meant to represent stable configurations in your software projects.
- Identify or label this release to ensure that you can reproduce this checkpoint at any time
- Other product development activities can then start with this new baseline



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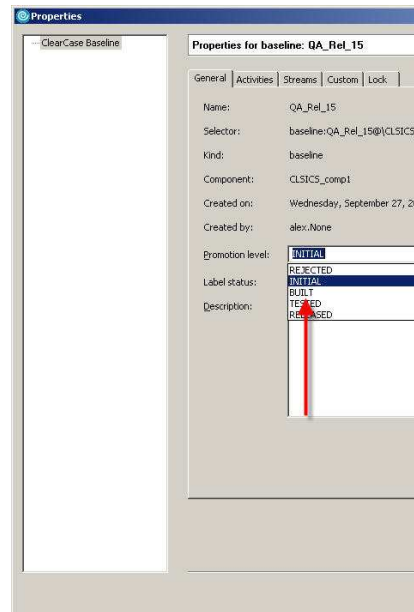
## Properties of a stream



Once the new baseline has been created, you can look at the properties for this baseline. One of the properties tracked for each baseline is the *Promotion Level*. The Promotion Level gives you a way to track the current state or quality level of that baseline's version of your application.

## Promoting the baseline

- On the **General** tab in the *baseline properties* window, you can set the promotion level under the Promotion Level option.



On the **General** tab in the *baseline properties* window, you can set the promotion level under the Promotion Level option. Close the stream properties window when you are finished.

## Summary for Project Integrator role

- In summary, the Project Integrator can:
  - Create a baseline from the latest delivered activities
  - Review, test and validate the latest changes to the activity
  - Create and promote a new baseline based on the results



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Review, test and validate the latest changes to the activity;

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