

IBM Rational ClearQuest Administration

Course Summary

Description

Rational ClearQuest is the IBM Rational Suite tool for automating change request management (CRM) processes. It allows for the logging, tracking, assignment and disposition of change requests (CR) among multiple users and groups of users. ClearQuest is not an out of the box CRM solution but has a number of standard schemas provided that allows it to be deployed quickly in most standard CRM situations. Bug and defect tracking (for the purposes of this outline) are considered to be special cases of CRM.

This course is intended for those students who will have to customize ClearQuest and/or administer it in their work environment. The focus of the course is on planning and implementing a CRM process, customizing ClearQuest to automate that process and its associated operations, and administering the resulting ClearQuest implementation.

Objectives

At the end of this course, students will be able to:

- Understand and be able to describe the main concepts of CRM and CRM processes and how those concepts map to the main features of ClearQuest.
- Develop a migration and implementation plan for automating a CRM using ClearQuest.
- Understand the structure of ClearQuest schema and packages.
- Customize ClearQuest schema/processes with ClearQuest Designer.
- Customize ClearQuest functionality with hooks and scripts.
- Customize the forms and reports.
- Develop automation processes using ClearQuest API functions.
- Use ClearQuest from the command line.
- Administer ClearQuest user and group accounts.
- Understand the functionality of ClearQuest Web and ClearQuest e-mail subsystems.
- Administer a ClearQuest system including installation, upgrade, import, export, and integration.
- Troubleshoot common ClearQuest problems.

Topics

- Introduction to CRM
- Introduction to ClearQuest
- Planning the Automation
- ClearQuest Designer
- Customization of the CR Life Cycle
- Customization of Fields and Forms
- Customization using Hooks and Scripts
- The ClearQuest API
- Troubleshooting

Audience

This course is specifically intended for ClearQuest administrators or schema designers.

Prerequisites

Students should have taken the Introduction to Rational ClearQuest course or have equivalent knowledge – there is no review of the ClearQuest user interface in this course. Prior knowledge of CRM concepts and experience with scripting languages are an asset but not required.

Duration

Two days

Due to the nature of this material, this document refers to numerous hardware and software products by their trade names. References to other companies and their products are for informational purposes only, and all trademarks are the properties of their respective companies. It is not the intent of ProTech Professional Technical Services, Inc. to use any of these names generically

IBM Rational ClearQuest Administration

Course Outline

I. Introduction to CRM

- A. Defining change request management (CRM) and its importance
- B. Basic CRM terminology and concepts
- C. Typical CRM processes and CR life cycles (states)
- D. Typical work flow in a CRM – following a change request through its life cycle
- E. How CRM fits in with requirements and development processes
- F. CRM and product application life cycles
- G. When CRM fails us – standard pitfalls to supporting CRM

II. Introduction to ClearQuest

- A. ClearQuest architecture and design principles
- B. Administrative roles and function in ClearQuest
- C. ClearQuest administrative tools
- D. ClearQuest four areas of customization
- E. ClearQuest connections and database

III. Planning the Automation

- A. Modeling the CRM process to be automated
- B. Identifying and defining the artifacts, states and events.
- C. Defining the corresponding ClearQuest items
- D. Developing the migration plan
- E. Developing the roll-out plan

IV. ClearQuest Designer

- A. ClearQuest schema structure and format
- B. Schema repository and user databases
- C. The ClearQuest predefined schema
- D. ClearQuest packages
- E. Using the ClearQuest Designer's main functions
- F. Typical customization steps
- G. Checking out a schema version
- H. Making modifications to a schema
- I. Testing modified functionality in the test database
- J. Adding a schema version to the schema repository
- K. Upgrading the user database
- L. Relationship between schema and packages

V. Customization of the CR Life Cycle

- A. Adding new states
- B. Working with the state transition matrix
- C. Available action types and modifying action properties
- D. States, state types, and packages
- E. Customizing state types

VI. Customization of Fields and Forms

- A. Adding a new field
- B. Customizing field behavior
- C. Customizing forms
- D. Record linking and record types
- E. Developing standardized queries and reports
- F. Multi-record type queries

VII. Customization using Hooks and Scripts

- A. Understanding ClearQuest hooks and how they are used
- B. Field hook descriptions and hook code.
- C. Script editors for the hook code development
- D. Working with action hooks and field hooks
- E. Execution order for action and field hooks
- F. Record scripts
- G. Global scripts
- H. Debugging tools
- I. Working at the command line

VIII. The ClearQuest API

- A. ClearQuest API and API functions
- B. Session and Entity objects
- C. Commonly used ClearQuest API methods
- D. Sequence to use ClearQuest API functions
- E. EventType constants
- F. Key objects to access the schema repository
- G. API methods for the AdminSession

IX. Troubleshooting

- A. Common customization pitfalls
- B. ClearQuest best practices
- C. Developing a retirement plan for the ClearQuest data
- D. Integration with other Rational tools.