

QM3 Migrating from IBM Rational TestManager to IBM Rational ClearQuest Based Test Management

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▶ What keeps me **Rational**?



Our Agenda for Today

- A demo of CQTM migration
- A bit of due diligence on CQTM
- What do I need to get up and running with CQTM?
- What's different from TM to CQTM?
- Some pitfalls to avoid
- A migration process overview
- Questions (and perhaps answers)





Demo



What is CQTM

- ClearQuest Test Management
 - ▶ A feature of ClearQuest
- Used for test planning, execution and status reporting
- Integrates with ReqPro, RMT, RFT, RPT, Robot, and ClearCase

What is RMT?

- Rational Manual Tester
- Stand alone product
- Used for creating manual test scripts
 - ▶ Ordering test steps and verification points
 - ▶ Can execute scripts from RMT, too
- RMT scripts are implementations of CQTM Test Cases and Configured Test Cases



Differences

- Queries – Main tool to find test assets in CQTM
- .Net Framework needed to import TM manual test scripts to RMT
- CQTM Legacy Data tab, the home of:
 - ▶ Test Inputs (other than ReqPro – Requirements tab)
 - ▶ Pre- and Post-Conditions
 - ▶ Acceptance Criteria
 - ▶ Custom 1,2, and 3
 - ▶ TM External Documents – Test Case Files in CQTM
- Reports
 - ▶ More flexible due to CQ query capabilities
 - ▶ Need Crystal Reports to generate



Migration Pitfalls

- Migration success is directly proportional to datastore health
- CQ – ReqPro integration needs to be set up to keep test asset to requirement relation intact
- Manual test scripts are NOT migrated
 - ▶ Need to import into RMT first
- TC Design is not the same as a manual test script
- Watch case in user names between TM and CQ
 - ▶ ABcd in TM may be the same as abcd in CQ
 - ▶ May cause failures in CQ
- Use an Explorer window to copy UNC paths, browse is klunky.



Manual Test Comparison

Untitled					
	Type	Note	Description	Expected Result	Expected Result File
1			This is a step with a note in legacy ManualTest	This is an expected result for the step written in legacy ManualTest	
2			This is a VP with a note in legacy ManualTest	This is an expected result for the VP written in legacy ManualTest	

Legacy Manual Test Script (From TM)

Same data, imported into RMT

The screenshot shows the IBM Rational Manual Tester interface. On the left is an 'Outline' pane showing a tree structure of test items. On the right is the main editor area displaying the test script content. Red arrows point from labels to specific parts of the script:

- Imported step** points to the first step description: "This is a step with a note in legacy ManualTest".
- Imported expected result** points to the first expected result: "This is an expected result for the step written in legacy ManualTest".
- Imported note** points to the note for the first step: "This is the note for the step.".

The second step and its associated expected result and note are also visible in the script view.

What do I Need to get Up and Running With CQTM?

- CQ 7.0 (7.0.0.1 for Robot integrations) or later. Current version is 7.0.1
- RMT (if you plan to migrate manual test scripts). Current Version is 7.0.0.2
- Robot 7.0 (if you plan to migrate Robot implementations). Current Version is 7.0.0
- Packages
 - ▶ CQTM (2.0 or later for Robot integrations)
 - ▶ ReqPro 1.8 (if migrating requirements)
- Time and Patience
 - ▶ The process is well laid out, but you need to pay attention



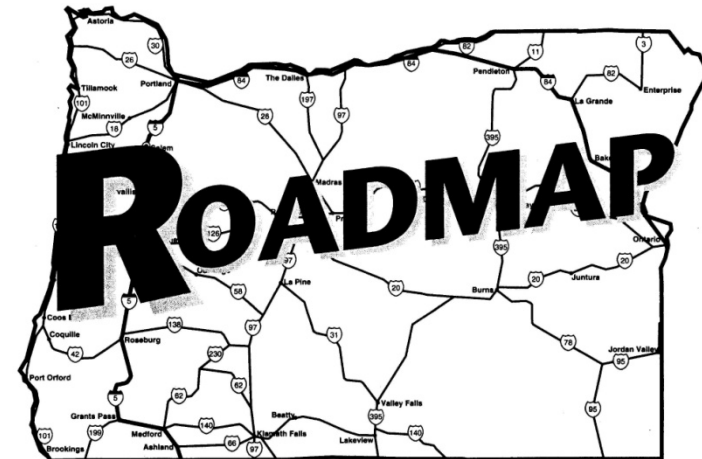
A Migration Roadmap

- Clean up your TM datastore
 - ▶ Run rtdatstoredr.exe
 - ▶ Correct any and all reported errors
- Upgrade your CQ schema and user DB to have the correct Packages installed
- Set up CQ-ReqPro integration for test related assets
- Figure out where you want this data to live:
 - ▶ RMT scripts (formerly Manual Test scripts in TM.)
 - ▶ Robot scripts (if you intend to maintain integration)
 - ▶ External Documents
 - Test Case Designs
 - External documents associated in TM



More Roadmap

- Recommend putting all the above in one UNC shared directory
- Open explorer window to that share to copy paths (only a suggestion)
- Import Manual test scripts to RMT (they will be associated to the migrated test cases in CQTM.)
- Determine how to map TM users and groups
 - ▶ May want to delete old users from TM
 - ▶ May want to deactivate TM users in CQ
- Run the migration
- Perform spot check of migrated data



Migration Tool

- The following will be migrated
 - ▶ Group
 - ▶ User
 - ▶ Iteration,
 - ▶ Configuration
 - ▶ Build
 - ▶ Test Plan
 - ▶ Test Case Folder
 - ▶ Test Case, Configured Test Case
 - ▶ Test Result



Migration Tool

- The following will NOT be migrated
 - ▶ Test Logs
 - ▶ Test Suites
 - ▶ Computers and Computer Groups
 - ▶ Configuration Attributes
 - ▶ Only Configuration Attributes and Attribute data that are used by configurations are migrated. They are migrated as part of Configuration migration
 - ▶ All reporting assets



Script Migration Information

- This refers to pointers from Configured Test Cases to associated scripts
 - ▶ Test Manager Manual test must be migrated to RMT prior to migrating to CQTM.
 - ▶ The following script types will be migrated
 - Rational Functional Tester
 - Rational Manual Tester
 - Rational Robot
 - ▶ What will not be migrated
 - 3rd party scripts
 - Command line
 - VB
 - (Classic) ManualTest

Migration also involves a paradigm shift

- More than using TM one day and CQTM the next
 - ▶ Have to look at more than features and assets
 - ▶ New Terminology
 - ▶ New Usage Scenario



Test Manager to CQ Migration

- What is Migrated
 - ▶ The following Test Manager assets will be migrated to the corresponding Rational ClearQuest Test Manager record type

Rational Test Manager record type	Rational ClearQuest Test Manager record type
Group	Group
User	User
Test Plan	Test Plan
Test Case Folder	Test Plan (Child)
Test Case	Test Case
Configured Test Case	Configured Test Case
Test Results	Test Log
Iteration	Iteration
Configuration	Configuration
Build	Build



Test Manager to CQ Migration

- What about SQLAnywhere?
 - ▶ If the datastore associated with the selected Rational Administrator project uses a SQLAnywhere database, you are prompted to start a datastore conversion from SQLAnywhere to Microsoft Access. After migration finishes, the datastore is restored to a SQLAnywhere database.

- Can I continue to work in TestManager Datastore after Migration?
 - ▶ The Migration tool is not a synchronization tool. If you use the Migration tool to migrate data successfully and then continue to work using both a Test Manager datastore and the migrated ClearQuest Test Manager database, using the Migration tool to re-migrate will not synchronize the data.

- What about TestManager Manual test Scripts?
 - ▶ As noted earlier – TestManager Manual test scripts should be migrated to Rational Manual tester prior to migrating the TestManager assets to CQTM.
 - ▶ Once Migrated – Script associations will remain in tact



Test Manager to CQ Migration

- What happens with Requirements Associations?
 - ▶ If the Rational RequisitePro project and Rational ClearQuest database are configured for the v. 7.0 integration, the associations between Test Manager test cases and RequisitePro requirements are preserved in the migration. This integration requires:
 - Rational RequisitePro version 7.0 client for Windows
 - Rational RequisitePro 1.8 integration package applied to the Rational ClearQuest database
 - Association of the Rational RequisitePro project and Rational ClearQuest database in a Rational Administrator project
 - A custom integration configured for a test plan, test case, or configured test case record using the integration wizard in Rational Administrator

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Getting Started

- **Establish a computer to use as the migration machine.**
 - ▶ Installation of latest versions of Software
 - ▶ Connectivity to the Rational TestManager project datastore including script sources
 - ▶ Connectivity to the ClearQuest schema and user database

- **Update TestManager Datastore to DB2 or Access**
 - ▶ Must upgrade Datastore from SQLAnywhere to DB2 or Access to move to V7



For Existing CQ Users

- **Upgrade CQ to latest version**
- **Upgrade the ClearQuest schema**
 - ▶ apply ClearQuest test management-related packages to existing schemas
 - Utilizing CQ Designer
 - ▶ Apply latest ReqPro package to the ClearQuest Schema(s)
- **Establish required backward references in the schema**
 - ▶ Utilizing CQ Designer
- **Upgrade the user database to the latest schema revision.**
 - ▶ Utilizing CQ Designer
- **Run the ClearQuest-RequisitePro Integration wizard**
 - ▶ For each RequisitePro requirement type in that you will use for ClearQuest integrations, create the test-related attributes
 - ▶ Ran from Rational Administrator



For New CQ Users

- **Install CQ v7.0.1**
- **Set up CQ Project/Datastore/Database**
 - ▶ Create a Schema database based off the CQ Enterprise Schema
 - Use Clear Quest Maintenance Tool
 - ▶ Create a new User Database
 - From CQ Maintenance Tool or CQ Designer



ReqPro Integration

- **Run the ClearQuest-RequisitePro Integration wizard**

- ▶ For each RequisitePro requirement type in that you will use for ClearQuest integrations, create the test-related attributes
- ▶ Integration Wizard Ran from Rational Administrator

Manual test scripts

- **No embedded manual testing in CQTM**
- **Manual Test scripts from Classic TM must be migrated to RMT first.**
- **From RMT -- Import the existing Rational TestManager scripts**
 - ▶ Import them to a network location and make note of the UNC path to that location.
 - ▶ UNC Path will be used during CQTM migration
 - ▶ Migrated test cases into CQTM created with links to the imported Rational Manual Tester scripts.



External Documentation

- **Establish a network location where you can store external documents.**
 - ▶ One use for this area is to create text versions of test case designs from Rational TestManager. Links to these documents will be created in the test cases and CTCs during the migration process.

Users and Groups

- **Determine how you want to control Rational TestManager users and groups in ClearQuest test management.**
 - ▶ By default, any Rational TestManager user or group not in the target ClearQuest database will be created during migration.
 - ▶ This may be a good opportunity to deactivate users who no longer need access to the test data.
 - ▶ User-group relationships within Rational TestManager are maintained in the migrated data in ClearQuest.



Now we are ready

- **Run the migration tool**, pointing to those network locations that you diligently wrote down.
- **Review the ClearQuest users and groups created by the migration process.**
 - ▶ You will probably need to adjust the privileges for some or all of them.
 - ▶ May want to delete some users (clean-up)
- **Retire your Rational TestManager datastore,**
 - ▶ Remember – it is not a synchronization tool



Some Light Reading

- Upgrade from IBM Rational TestManager to IBM Rational ClearQuest test management Part 1: The basics
 - ▶ http://ltsbwass001.sby.ibm.com/cms/developerworks/rational/library/06/1212_tst_mgr-cq-part1/
- Upgrade from Rational TestManager to ClearQuest test management: Part 2: Getting there
 - ▶ http://ltsbwass001.sby.ibm.com/cms/developerworks/rational/library/06/1212_tst_mgr-cq-part2/
- CQ Installation and Upgrade Guide (Publications No. GI11-6375-00)
 - ▶ Chapter 17: Migrating to Rational ClearQuest Test Manager
- Yet to be published (slated for developerworks)
 - ▶ How to set up CQ-ReqPro integration for use with CQTM





Questions





Thank You

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