



*RRC 3.0: An Evolutionary
Path to Success for Teams
in Requirements Definition
and Management*

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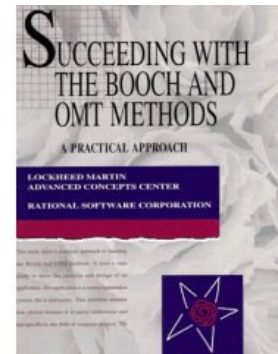
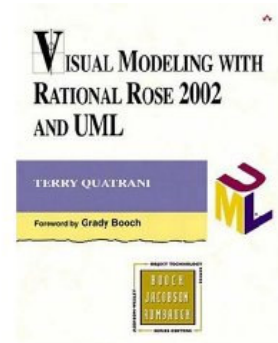
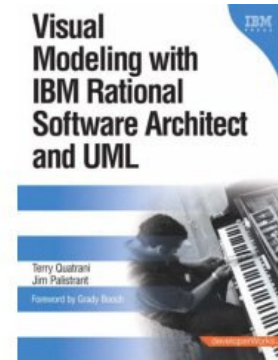
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Who is Terry Quatrani?



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Agenda

- Who We Are
- Understanding Common Pain Points and How to Address Them
- An RM Solution with the ALM Imperatives in Mind
- In Context Collaboration
- Lifecycle Traceability
- Reduce Cost of Ownership
- Usability Considerations
- Possibilities for Teams Using RequisitePro and or RequisitePro with RRC to Optimize their Requirements Process

Understanding Common Pain Points

1

Problem: Our organization has limited time and resources to implement and deploy CLM solutions.

Cause: *Current economic climate requires our organization to be lean both in number of resources and time taken for solutions deployed.*

2

Problem: Our team struggles to understand current status of the project, relationships and pertinent details.

Cause: *Our organization uses separate tools which make it difficult for our teams to understand the status of the project, track communication and make business decisions across the lifecycle.*

3

Problem: It's difficult to understand key CLM trace relationships

Cause: *The use of separate tools makes it difficult to understand and maintain CLM traceability*

Understanding Common Pain Points

4

Problem: Our organization aspires to break down silos but is having difficulty with cross-team communication.

Cause: *The development process does not lend itself to team collaboration due to a lack of solutions aligning process and tooling.*

5

Problem: Our team has struggled deploying new tools in the past and is adverse to new solutions.

Cause: *Previous solutions didn't align process and tooling as effectively, or leverage web 2.0 concepts that make the solution more intuitive to use.*

An RM Solution with ALM Imperatives in Mind

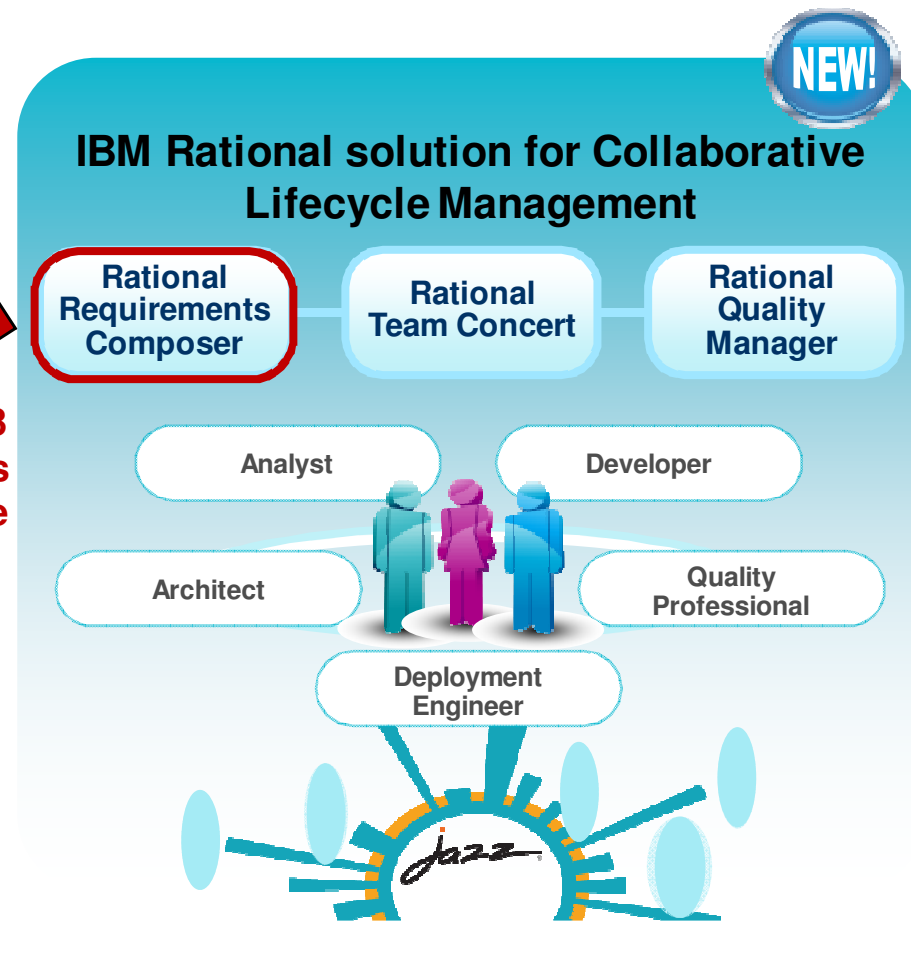
Improve productivity by 4-6% annually with an integrated ALM solution

- **Optimize your team through support of the 5 ALM Imperatives**

- Real-time planning
- Lifecycle traceability
- In-context collaboration
- Development Intelligence
- Continuous Improvement

RRC V3 focuses in these areas

- **Get up and running quickly**
- **Extend as your needs evolve**
- **Support heterogeneous development across multiple platforms and technologies**



In Context Collaboration

- **Goal of in context collaboration:** A main focus in context collaboration is fostering a team based approach and obtain relevant information to the RM process for the team when it's needed.
 - The key element is to leverage the **right information which impacts business decisions** at your finger tips.
 - Business decisions may be a result of **informal conversations** tracked as RRC **comments**
 - More **formalized business decisions** may be a result of a review. (Leverage RRC reviews to track **formal approval** of requirements artifacts.)
 - Discern details to **expand across a release** or **limit to a smaller sub-set** (e.g. functional component) through the use of RRC filters
 - **Utilize key information** (legacy or otherwise) from **external sources**

In Context Collaboration – A Focus on RRC V3

- Where RRC V3 differs from V2.0:
 - We've enhanced functions to **import** and **export** in RRC V3
- New Functionality includes:
 - **Easy import**: Use RRC V3 import capabilities to automatically create requirements.
 - **Multiple sources**: Pull in and utilize external resources from CSV or Word
 - **Easy export**: Export and print requirements to PDF or Word documents from RRC V3

In Context Collaboration CSV/Document Import

Business Problem – Although many teams prefer a **simplistic approach** like Excel or Word to capture requirements, they often find these solutions **fall short** in meeting their **full RM needs** of lifecycle traceability, reporting and capturing other visual elements like (storyboards and diagrams.)

Solution – RRC V3 provides the ability to **specify details of multiple requirements** in Excel and then **import** them into a fully functional web based RM solution. The newly created requirements will contain the details specified in the CSV file. An analyst may also **refine** the requirements with additional detail such as **RM traceability** to various artifacts like storyboards as well as **ALM traceability** with development and test.

Identify the folder where the requirements will be created

Best Practice Consideration

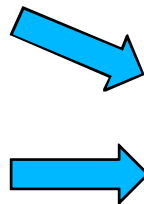
Monolithic large documents may become a thing of the past. A requirement can be captured as a **distinct rich text object** and a report maybe be generated to compile multiple requirements as needed.

In Context Collaboration CSV/Document Import

Business Problem – I need to **work offline** and **elicit some requirements** during an interview with a stakeholder. How can I capture the content and leverage in RRC?

Solution – In addition to leveraging Excel to capture data for import, one may also capture content in **Word**. RRC V3 provides the ability to **import a document** via the **Import Document** feature. A **requirement or requirements** may be created from the contents of the document.

Identify the name of the artifact and the type of artifact to create



Import Document ✕

Import a Microsoft Word, OpenDocument, Open Office, or rich-text document.

▶ Limitations:

File: *

Artifact Name:

Folder:

Artifact Type:

Import Options:

Import for viewing use Import for editing and viewing

Create comments from comments in the imported document

In Context Collaboration CSV/Document Import

Business Problem – I have no easy way to transfer requirements data stored in a custom requirements management solution to RRC V3.

Solution – Data may be converted to an Excel spreadsheet format (CSV) and then easily imported using the RRC V3 CSV import functionality.

Identify the artifact format

Identify the type

Identify the title

Identify other data elements well such as primary text and attributes

	A	B	C
1	Artifact format	Type	Title
2	Text	Business Rule	Account Lockout
3	Text	Business Rule	Charity Coordinator and or designated contact must respond to the Organization request
4	Text	Business Rule	Donation amount cannot exceed 100 percent
5	Text	Business Rule	Donation amount cannot exceed donation limit specified in user profile
6	Text	Business Rule	Donor must be registered user to access account details
7	Text	Business Rule	Falsified information will lead to denied status
8	Text	Business Rule	Organization does not meet charity criteria
9	Text	Business Rule	Organization or customer response required
10	Text	Business Rule	Request will be closed if no response from organization
11	Text	Business Rule	Respond to customer request within forty eight hours
12			

Consideration

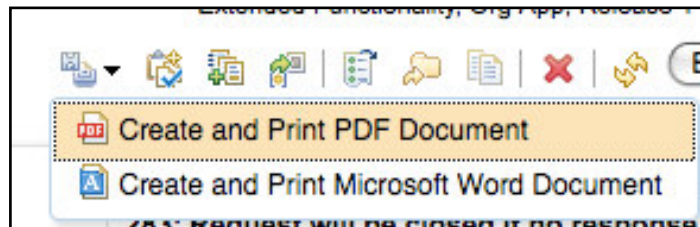
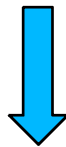
Currently the CSV import only supports creating **new requirements**. Additionally, **trace relationship information cannot be imported**.

In Context Collaboration Export/Print Requirements

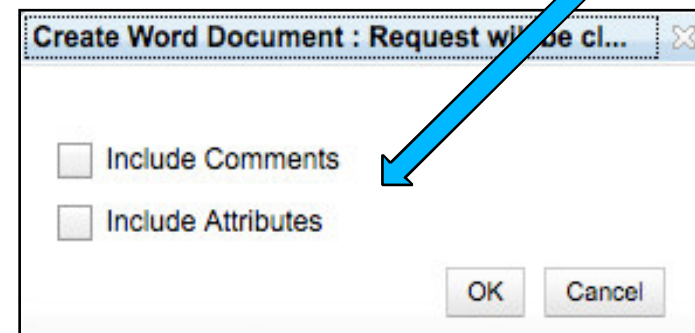
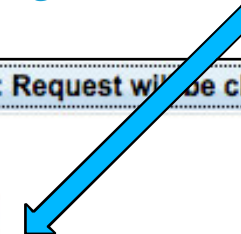
Business Problem – I have been managing my requirements using RRC V3, but I would like to have the **content in a medium** that I can use for an **offline meeting**. Additional examples may entail a **customer** or **contractor without RRC access**.

Solution – RRC V3 provides the ability to **export requirements** to either **PDF** or **Word** format. Any modifications made outside of RRC V3 on a word document can be **imported as a new requirement** and or **document via document import**.

Export options provide a quick mechanism to get data out of RRC



These options provide an analyst the ability to include pertinent collaboration details and attributes without having to execute a report



Lifecycle Traceability

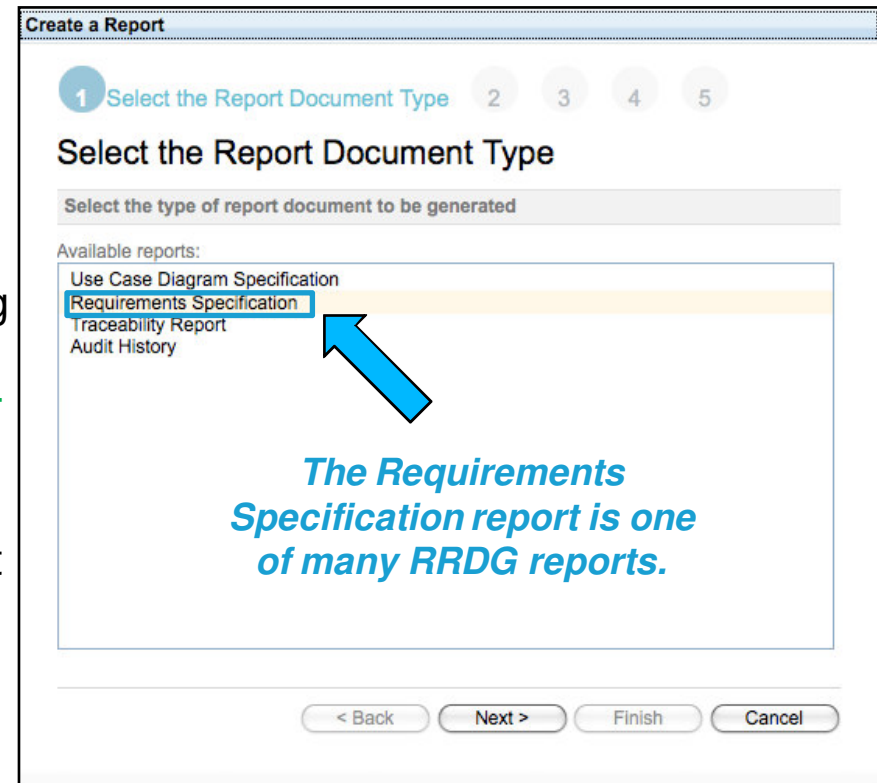
- **Easier to create documents:** Quickly create Rational Reporting for Document Generation (RRDG) reports based on the current view
 - RRDG provides the ability to **create a requirements specification containing one or more artifacts**
 - **Custom RPE** reports may also be executed within RRC via **RRDG** without an additional license
- **Powerful RRC V3 filters:** Use RRC V3 filters to show and trace relationships in RRC, or across all CLM tools
 - Saved filters may be quickly created **from the current selection**. (These filters may be shared with a team or private.)
- **Reusable filtering:** Filter re-use and sharing is enabled through “Saved Filters” capability.
- **Unified dashboard:** Get an at-a-glance understanding of current project status and lifecycle traceability
- **Unified intelligence:** Rational Reporting for Developer Intelligence (RRDI) enables management-level reporting abilities across CLM

Lifecycle Traceability

Rational Reporting for Document Generation

Business Problem - Even with a purposeful RM solution, there are instances where teams need to create a **summary of requirements in a report**. (e.g. Need a listing of requirements implemented in a release for audit concerns)

Solution - RRC V3 with the Rational Reporting for Document Generation (RRDG) wizard, an analyst may **generate a report containing one or more requirement artifacts**. (e.g. I can create a **Requirements Specification report** containing all requirements in a folder, or all requirements that meet a specific filter criteria.) The “Requirements Specification” provides a **detailed summary** of all selected requirements.

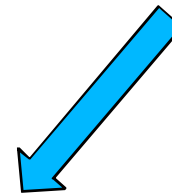


Lifecycle Traceability RRC Filters

Business Problem - I need to understand which requirements have dependencies.

Solution - This problem may be solved by leveraging hierarchical link types. Next, filters may be applied to quickly visualize and understand dependencies between requirements.

Use the Configure Tree option to identify the filter criteria for the traceability. This example displays hierarchical relationships by filtering upon "Parent of"



Source artifact type(s)	Link types to show	Link targets to show
Any	Parent Of	Any

ID	Name	Type	Date
305	Donor Dividend Allocation Criteria	Feature	May 25
Parent Of			
354	Donation by Amount	Feature	May 25
330	Dividend allocation by percentage	Feature	May 25
281	Frequency of dividend transfer	Feature	May 25
Parent Of			
304	Dividend processing payment is a one time transaction.	Feature	May 25

Lifecycle Traceability RRC Filters

Business Problem – It’s difficult to understand **where traceability is missing**. I need to understand where traceability is expected but is missing across the RM lifecycle (i.e. **find gaps in lifecycle traceability**). I also need the ability to **track coverage** (aka **completeness**).

Solution – To **find these gaps**, a **filter** can be configured to **display** specific types of artifacts **which do NOT** have the expected **lifecycle traceability links**.

This filter is a saved filter displaying high priority Features with gaps

The screenshot shows a 'Saved Filters' panel on the left and a table of artifacts on the right. The filter 'High Priority Features (Gap analysis)' is highlighted with a blue box. The 'Filter by Attribute' section is also highlighted with a blue box and contains the following settings:

- Artifact type: is Feature
- Business Priority: is Must, Should
- Link type: does not exist Satisfied by

The table of artifacts is as follows:

ID	Name	Artifact Type	Status
359	Organizations can apply	Feature	Approved
361	Organizations may apply with an initial request	Feature	Approved
364	JKE Charity Coordinator will respond to request in the website triggering..	Feature	Approved
279	Organization must identify how much money is desired	Feature	Approved
304	Dividend processing payment is a one	Feature	Approved

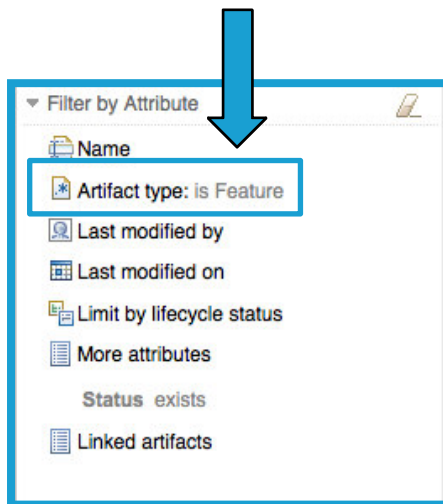
The Attribute filter helps define the kind of artifact, pertinent attributes and link types. Refine the filter to include gaps where the Link type “does not satisfy” or verify coverage by selecting a specific link type (e.g. Implemented By for development details.)

Lifecycle Traceability RRC Filters

Business Problem - I need a way to quickly evaluate the status of a specific requirement type.

Solution – You can create a saved filter for the specific requirement type then group the results based on status.

Identify the Artifact type;
here it is “Feature”



Order the Status to group
the status attributes
together. Here, all draft's
are grouped together

Page size: 20

Group by Status

ID	Name	Artifact Type	Constrains	Status
Draft (3)				
329	Customers can nominate an organization for the program	Feature		Draft
341	Organization must provide justification for why funds are needed	Feature		Draft
284	Support dividend processing via mobile devices	Feature		Draft
Approved (13)				
Under Review (1)				
317	Requests sent in form of hard copy mail	Feature		Under Review

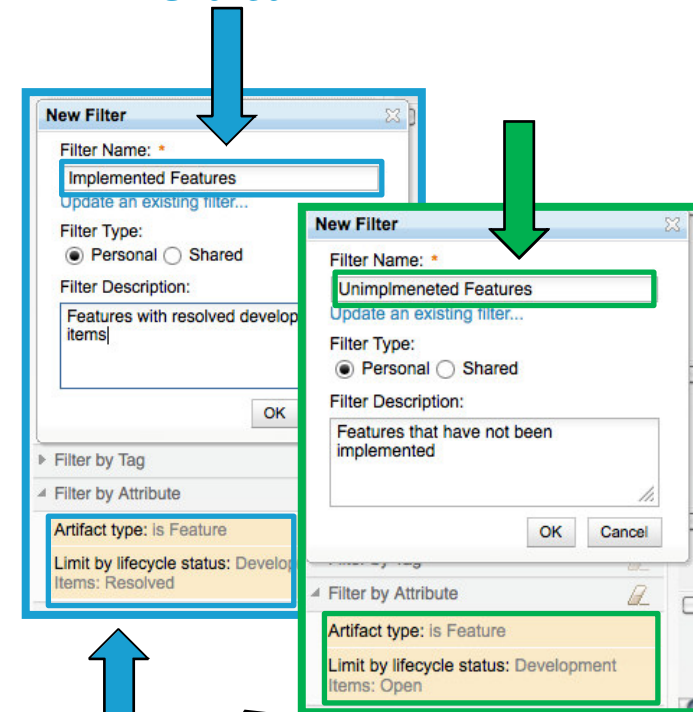
Lifecycle Traceability RRC Filters

Business Problem - I need to understand what has been implemented and what has not.

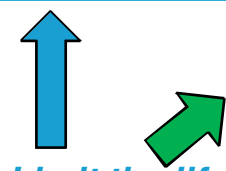
Solution – An analyst may create and execute saved filters to display requirements that have been Implemented vs. Unimplemented (e.g. features.)

ID	Name	Artifact Type	Business Priority	Status	Tracked By	Implemented By
330	Dividend allocation by percentage	Feature	Must	Approved		146: Dividend Allocation by Percentage
362	Donors will receive confirmation and receipt	Feature	Must	Approved		142: Donors will receive confirmation and receipt
314	Donors can choose to support an organization	Feature	Should	Approved		137: Donors Can Choose to Support an Organization

Name the filter and identify if Personal or Shared



Limit the lifecycle status (e.g. Resolved or Open)



Lifecycle Traceability

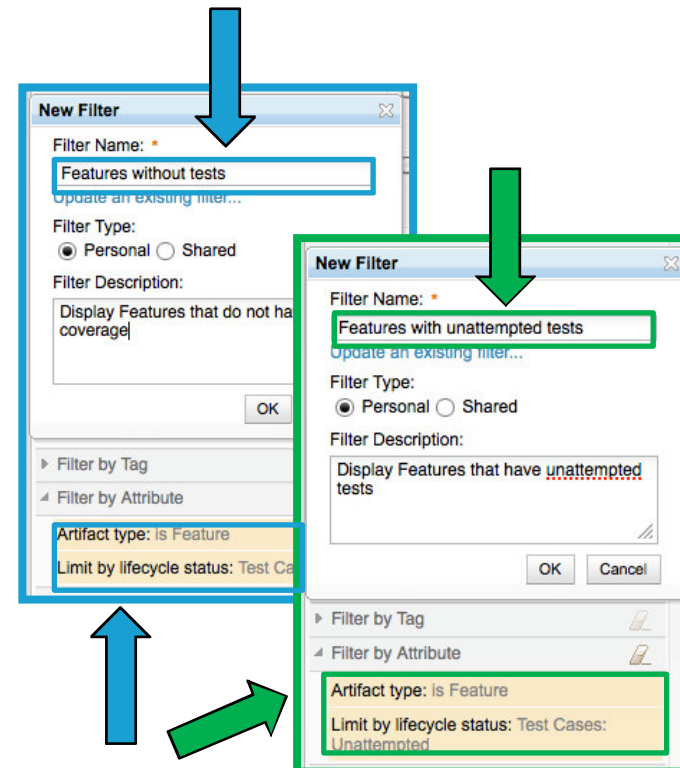
RRC Filters

Business Problem – It is critical to understand if there is test coverage for requirements.

Solution – An analyst may create and execute saved filters representing requirements with test case or without test case coverage and if test cases have execution results.

Page size: 20	ID	Name	Artifact Type	Last Modified Date	Validated By
<input type="checkbox"/>	329	Customers can nominate an organization for the program	Feature	May 25, 2011 4:43:36 PM	10: Customers can Nominate an Organization
<input type="checkbox"/>	354	Donation by Amount	Feature	May 25, 2011 4:43:41 PM	13: Donation amount limits
<input type="checkbox"/>	305	Donor Dividend Allocation Criteria	Feature	May 25, 2011 4:43:32 PM	16: Donor dividend allocation conforms to stated criteria
<input type="checkbox"/>	308	Donors Deposit Money in a Pooled Assistance Fund	Feature	May 25, 2011 4:43:32 PM	2: Donors Deposit Money into a Pooled Assistance Fund

Name the filter and identify if Personal or Shared



Limit the lifecycle status (e.g. Unattempted vs. Attempted)

Lifecycle Traceability Dashboards

Business Problem - As an manager it's important for me to quickly ascertain an overview of CLM coverage.

Solution - In the Requirements Dashboard, one may quickly determine which requirements have been implemented by development and which have been tested by test teams.

The screenshot shows a dashboard titled "Erik's Requirements Dashboard" with several widgets:

- Requirements Tracing Validated By (1)**: A widget with a green border containing two items: "330: Dividend allocation by percentage" and "18: Dividend Allocation by Percentage". A green arrow points to this widget from the text "Requirements that have been validated".
- Requirements Tracing Implemented By (5)**: A widget with a blue border containing five items: "314: Donors can choose to support an organization", "137: Donors Can Choose to Support an Organization", "287: Allocate dividends by Percentage", "131: Allocate Dividends by Percentage", and "330: Dividend allocation by percentage". A blue arrow points to this widget from the text "Requirements that have been implemented".
- Recent Changes in All Projects (100)**: A list of changes including "JKE Enterprise Diagram (369) Yesterday", "Allocating Dividends to a Cause (368) Yesterday", "Organization or customer response required (367) Yesterday", "Internallization (118n) (366) Yesterday", "Promote JKE Corporate Image (365) Yesterday", "JKE Charity Coordinator will respond to request in the website triggering.. (364) Yesterday", "Business Goals (363) Yesterday", "Donors will receive confirmation and receipt (362) Yesterday", "Organizations may apply with an initial request (361) Yesterday", and "Donor must be registered user to access account details (360) Yesterday".
- My Requirements Projects (1)**: A widget containing "JKE Banking (Requirements)" and "Page 1 of 1".

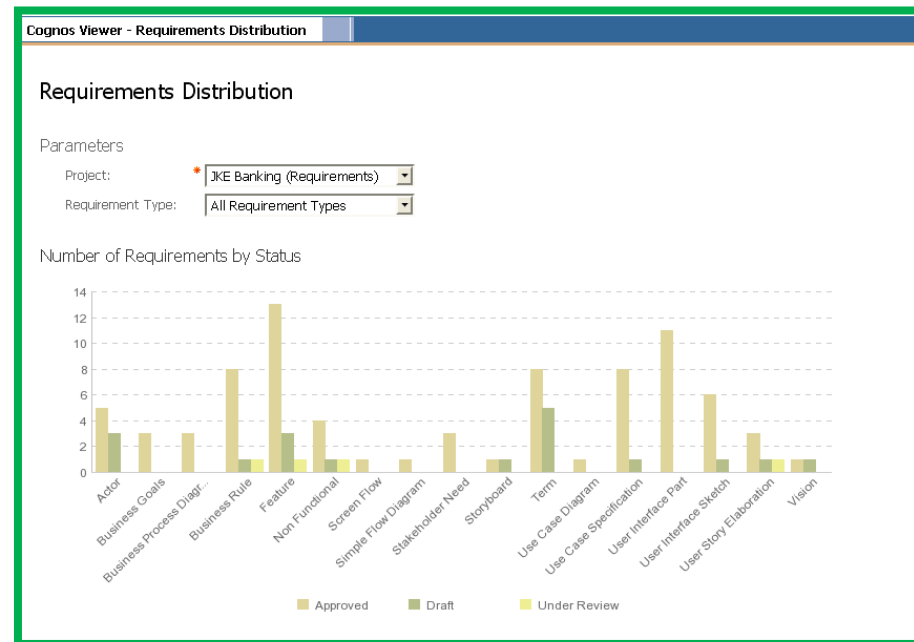
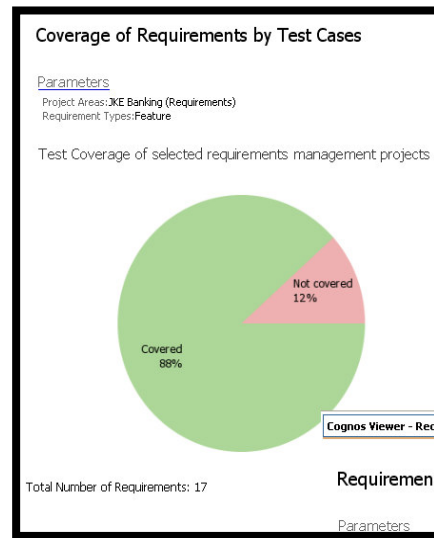
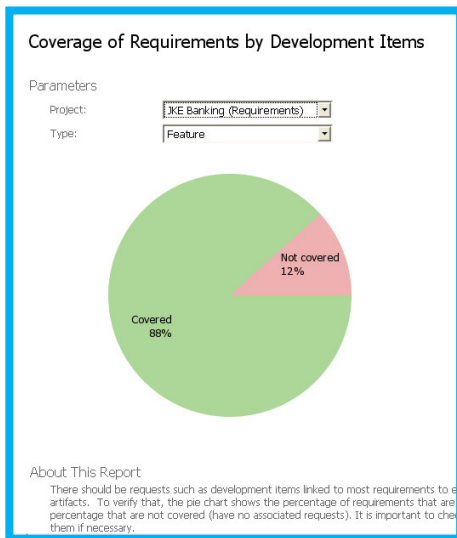
Requirements that have been validated

Requirements that have been implemented

Lifecycle Traceability RRDI Reports

Business Problem - I need formalized reports that help convey project status.

Solution - Rational Reporting Development Intelligence (RRDI), provides visibility across the CLM lifecycle. It provides in-depth metric reports and charts which reflect the status of a project.



Reduce the Cost of Ownership

- **Easier to Install:** Simplify installation of multiple products
- **Easier to Deploy:** Provide flexible deployment options; Harmonize platform and language support
- **Easier to Administer:** Provide unified administration across the products
- **Easier to Learn:** A sample application demonstrating CLM

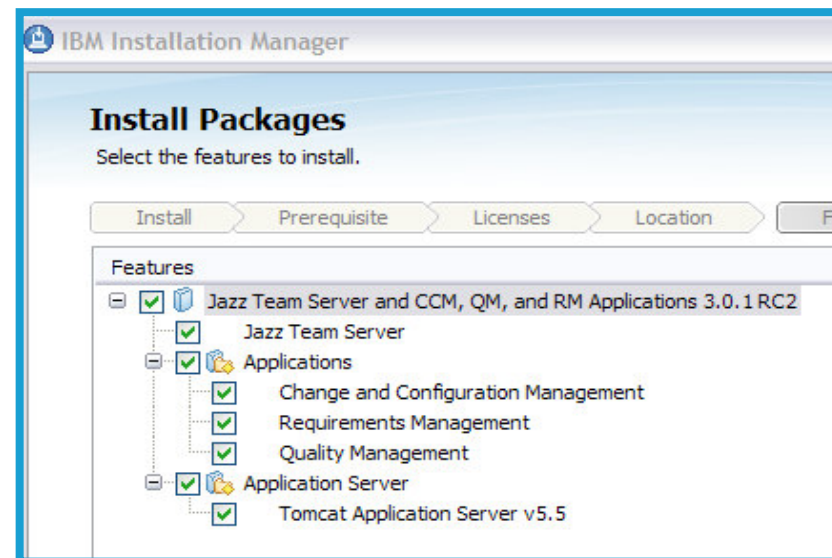
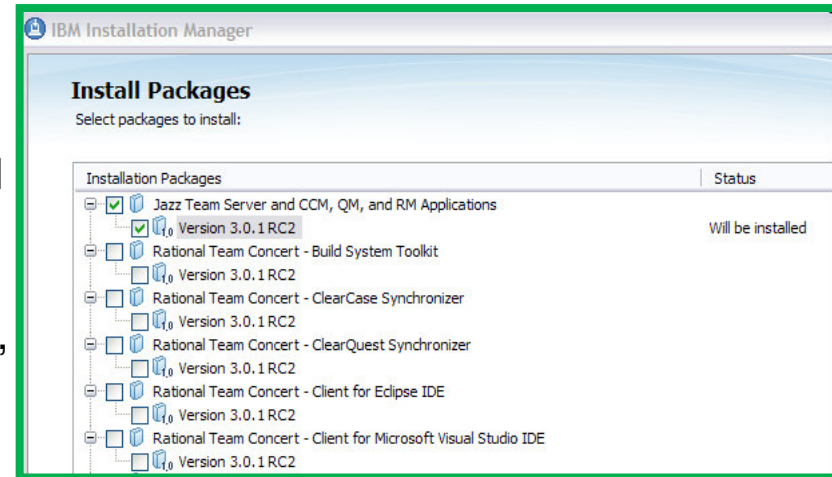
Reduce the Cost of Ownership Easier to Install

Business Problem - It's difficult to install all of the CLM tools

Solution – Installation is now a shared wizard, with a single download containing all of the components for CLM

May choose Jazz Team server with all applications

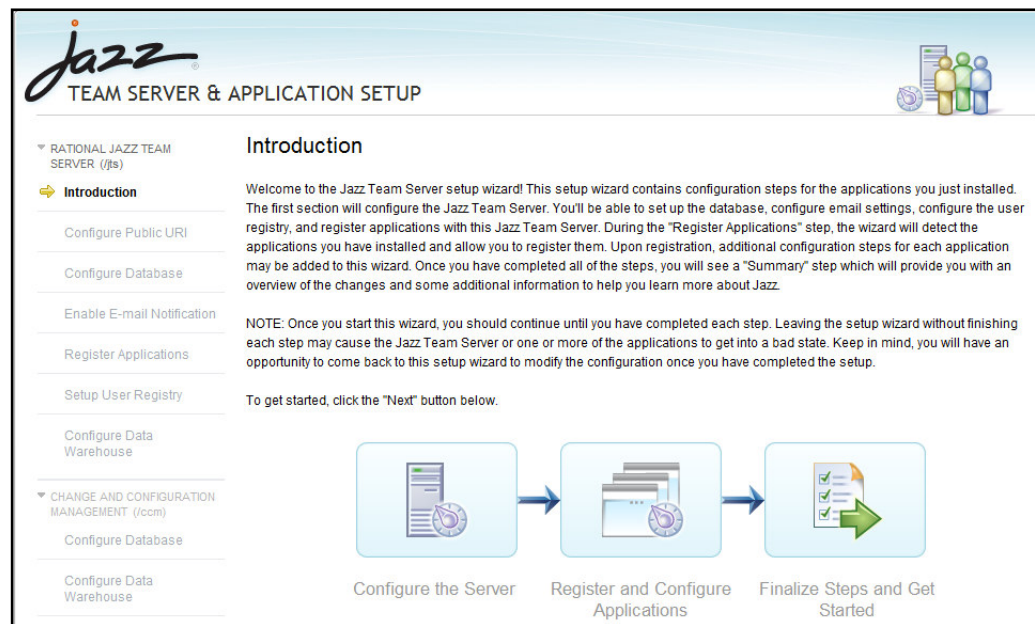
May select and or deselect applicable components in the install



Reduce the Cost of Ownership Easier to Deploy

Business Problem – **Configuring** the installed **server(s)** is a **time** consuming process.

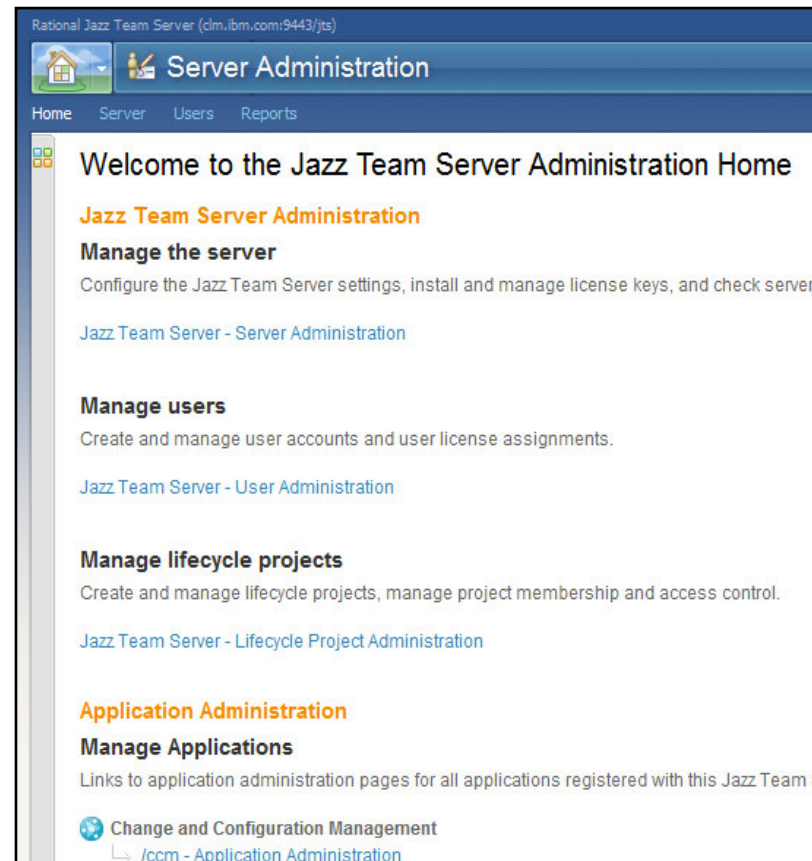
Solution – **Setup** and **configuration** of entire CLM solution in a single wizard shortening deployment activities.



Reduce the Cost of Ownership Easier to Administer

Business Problem – Managing my CLM projects involves **navigating to multiple URLs**, performing the **same task repetitively**.

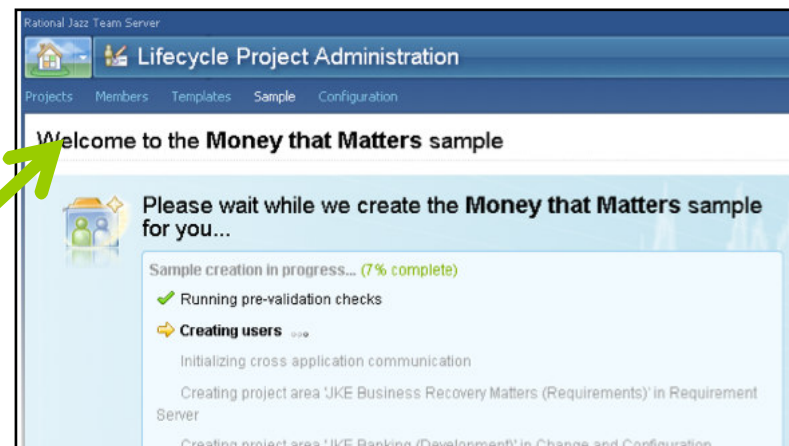
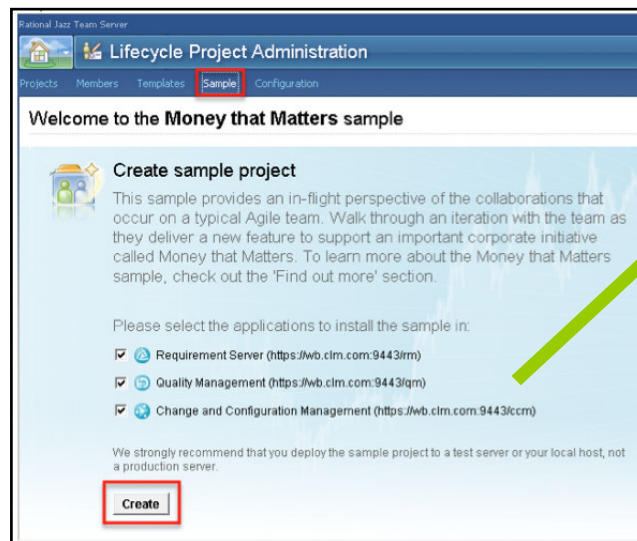
Solution – Administration can now be done in a **centralized Lifecycle Projects Administration (LPA) page**, allowing **user and project management**. Additionally via LPA process templates help teams with **process enactment**.



Reduce the Cost of Ownership Easier to Learn

Business Problem – There is a difficult and expensive ramp-up time to learning new tools.

Solution – RRC and the other CLM tools include a sample project named Money that Matters which provides an example of how to leverage RRC and requirement artifacts as important inputs to the entire CLM lifecycle.



Usability Considerations

- **Fast bulk operations:** Streamline performing actions with many requirements
- **Quick access to information:** Simply hover over an artifact to quickly understand all relevant information across RRC and the entire lifecycle
- **Easier to organize:** Simplified collection usage for easier componentization of artifacts
- **Easier to approve:** Create formal reviews for critical requirements

Usability Considerations

Multi-select and quick create

Business Problem – It's very time consuming to make changes to many requirements or to create artifacts similar to existing ones.

Solution – RRC V3 provides the ability to complete **bulk-edits** to artifacts, as well as a nearly instant **“One-click Create”**.

The screenshot shows a table with columns: ID, Name, Artifact Type, Priority, Status, and Tracked By. The table contains several rows of artifacts, with the first row highlighted. A blue checkmark is visible in the first column of the first row. An 'Edit Attributes' dialog box is open over the table, showing a list of attributes with checkboxes and values. The 'Product Owner' attribute is checked and has the value 'Bob'.

ID	Name	Artifact Type	Priority	Status	Tracked By
296	User Story Elaboration Template				
312	Allocate dividends by amount and frequency				
287	Allocate dividends by Percentage				
291	Donor Chooses Multiple Organizations				
43	Donor Chooses an Organization				

Attribute Name	Value
<input type="checkbox"/> Priority	Different Values
<input type="checkbox"/> Status	Different Values
<input type="checkbox"/> Role	
<input type="checkbox"/> Origin	Different Values
<input checked="" type="checkbox"/> Product Owner	Bob

The screenshot shows a 'Create User Story Elaboration' dialog box with a list of artifact types: Actor, Business Goals, Business Process Diagram, Business Rule, Feature, Meeting, Non Functional, Screen Flow, Simple Flow Diagram, and More... The 'Use One-click Create' option is checked and highlighted with a green box. The 'Upload Artifact' option is also visible.

Select the artifacts to update by providing a checkmark

Choose to edit attributes and select the attributes to edit

Activate One-click Create to create a new artifact by clicking the Create option

Usability Considerations

Rich Hovers

Business Problem – I need to **an efficient mechanism** to provide **pertinent details regarding artifacts** versus **clicking over and over again to obtain details**. I want state information regarding artifacts in my project at my fingertips.

Solution – **RRC** and other CLM solutions provide **quick hover access** which provides all relevant attribute, location, and link information.

The screenshot shows a list of requirements on the left. Requirement 312, 'Allocate dividends by amount and frequency', is highlighted. A blue arrow points to it with the text 'Hover over a requirement to see more details.' A larger blue arrow points from the right towards the hover dialog box. The hover dialog for requirement 312 contains the following information:

- Card :** What is the goal of a user? Use 2-3 sentences to capture the intent of the user story. For example, as a (user role), I want to (achieve a goal) so that I can (provide a reason).
- Conversation:** ...
- Location**
 - JKE Banking (Requirements) Elaborated Stories
 - Extended Functionality, Release 1
- Attributes**

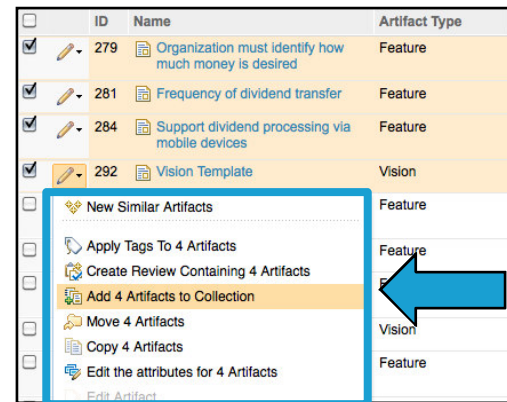
Type:	User Story Elaboration	Format:	Text
Description:		Origin:	Customer
Priority:	Medium	Product Owner:	Bob
Status:	Under Review		
- Links**
 - Illustrates (1): 369
 - Validated By (1): ...
 - Implemented By (1): ...

The hover dialog will display tags, attributes and pertinent link details

Usability Considerations Collections

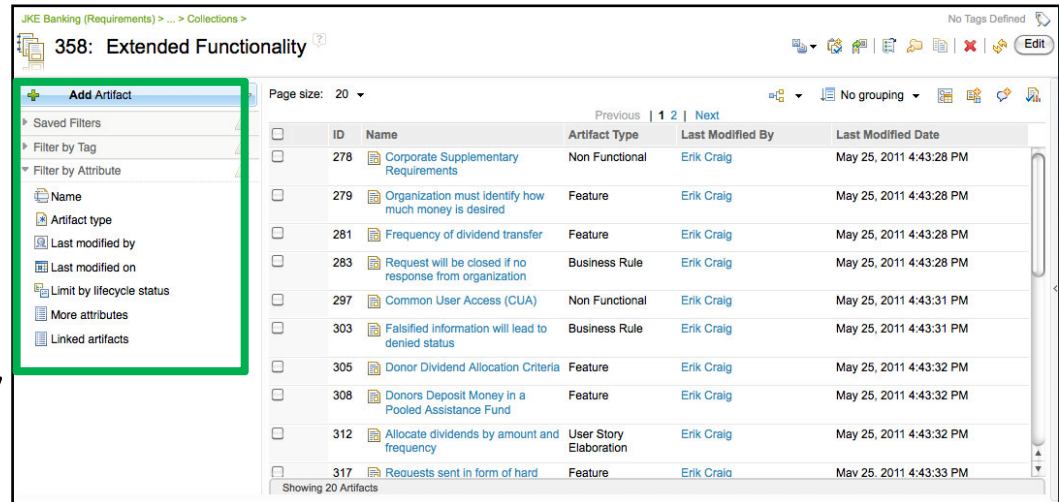
Business Problem – It is very difficult to group artifacts to a relevant function without significant manual steps. (Some solutions require folder structure, otherwise significant reports to compile data.)

Solution – All artifacts relevant to the particular function can be added to one or more Collections. Artifacts in a collection can be independently grouped, sorted, and viewed regardless of folder location. Collections also maintain change information for historical viewing.



One way to add requirements to a collection is to multi-select multiple requirements and choose to add to collection

Add additional artifacts to an existing collection with the Add Artifact option

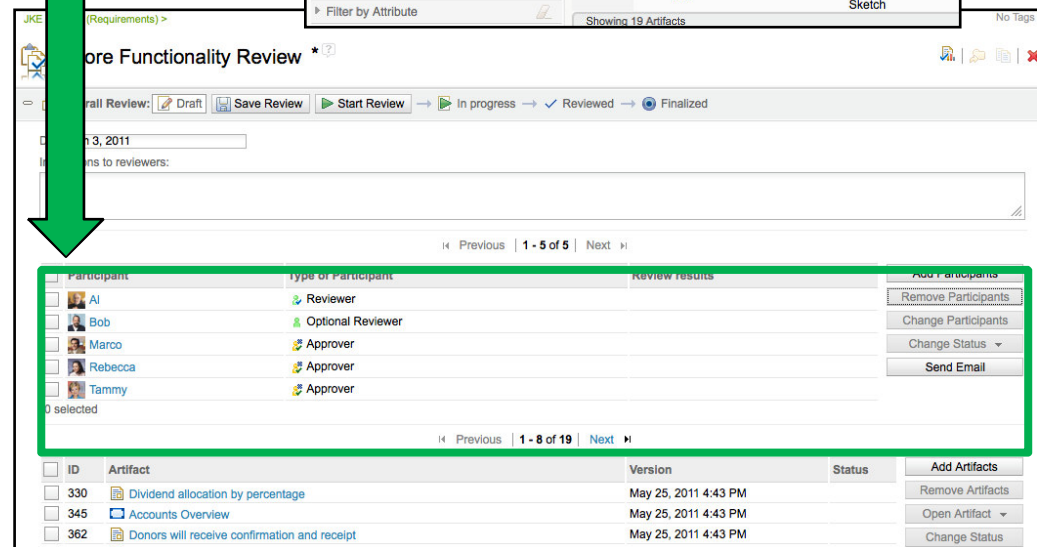
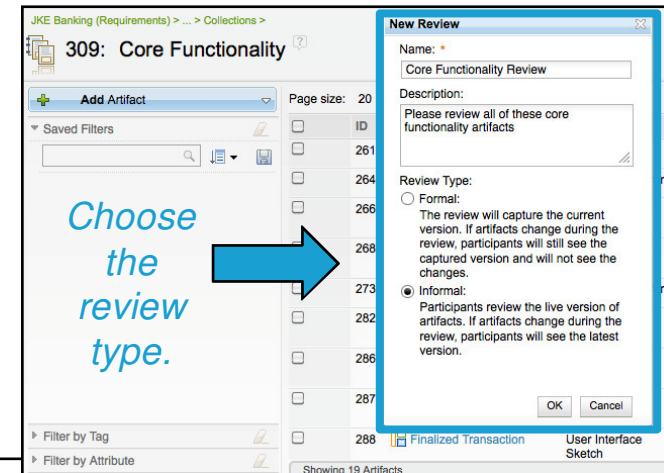


Usability Considerations Reviews

Business Problem – It’s a painful process to gather all requirements, diagrams, or other artifacts and have the proper stakeholders approve them for implementation.

Solution – Relevant artifacts may be added to a collection and a review may be created from the collection. Involve key roles as either an Approver, Reviewer, or Optional Reviewer and the results of the review are tracked identifying which artifacts have been approved and or rejected. These concepts are important for validation and concurrence before implementing requirements.

Choose the reviewers and their roles



Summary

1

Problem: I am an existing RequisitePro customer and have no way to conduct both definition and management in one solution effectively.

Solution: *RRC V3 provides a solution with both **definition** and **management** in a single solution.*

2

Problem: My team would like to have the ability to capture more details about our requirement trace relationships.

Solution: *RRC V3 provides the ability to **capture trace links** to more formally describe traceability*

3

Problem: I have no means to track our reviews

Solution: *RRC V3 provides **review functionality** to track validation and approvals as well as improve cross team involvement.*

Summary

4

Problem: I am struggling with cost of ownership to integrate legacy Rational tools for ALM.

Solution: *RRC V3 as part of CLM 3.0 provides **lower cost of ownership** for both **install, configuration and CLM integrations**.*

5

Problem: I would like assistance with process enactment

Solution: *RRC V3 as part of CLM 3.0 provides process enactment through the use of the **Lifecycle Project Administration (LPA)** tool.*

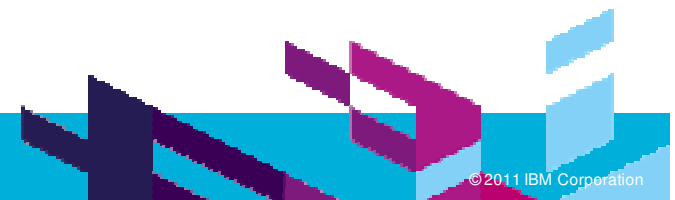
6

Problem: Our organization would like a more simplified approach in a single tool for definition and management and have integrations with CLM. We are users of RRC 2.0 – RequisitePro and RTC.

Solution: *RRC V3 supports both definition and management as well as CLM integrations.*

QUESTIONS

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