

Title: Using IBM Rational Requirements Composer in the real world

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Requirements Affect the Entire Lifecycle

Products and ALM



IBM Rational Requirements Composer 4.0.4

Requirements Management for the Development Lifecycle

Rational Requirements Composer

Definition

- Rich-text documents
- Diagrams: Process, Use Case
- Storyboards, UI sketching & flow
- Project glossaries
- Templates (formal/agile)

Visibility

- Customizable dashboards
- Project dashboards
- Analysis views
- Collections
- Milestone tracking & status

Collaboration

- Review & Approval
- Discussions
- Email Notification



Supports RequisitePro Data Migration

Management

- Structure, Attributes/Types
- Traceability, Suspect Link
- Filtering, Change History
- Tags, Reuse, Baselines,
- Reporting Metrics & Doc.

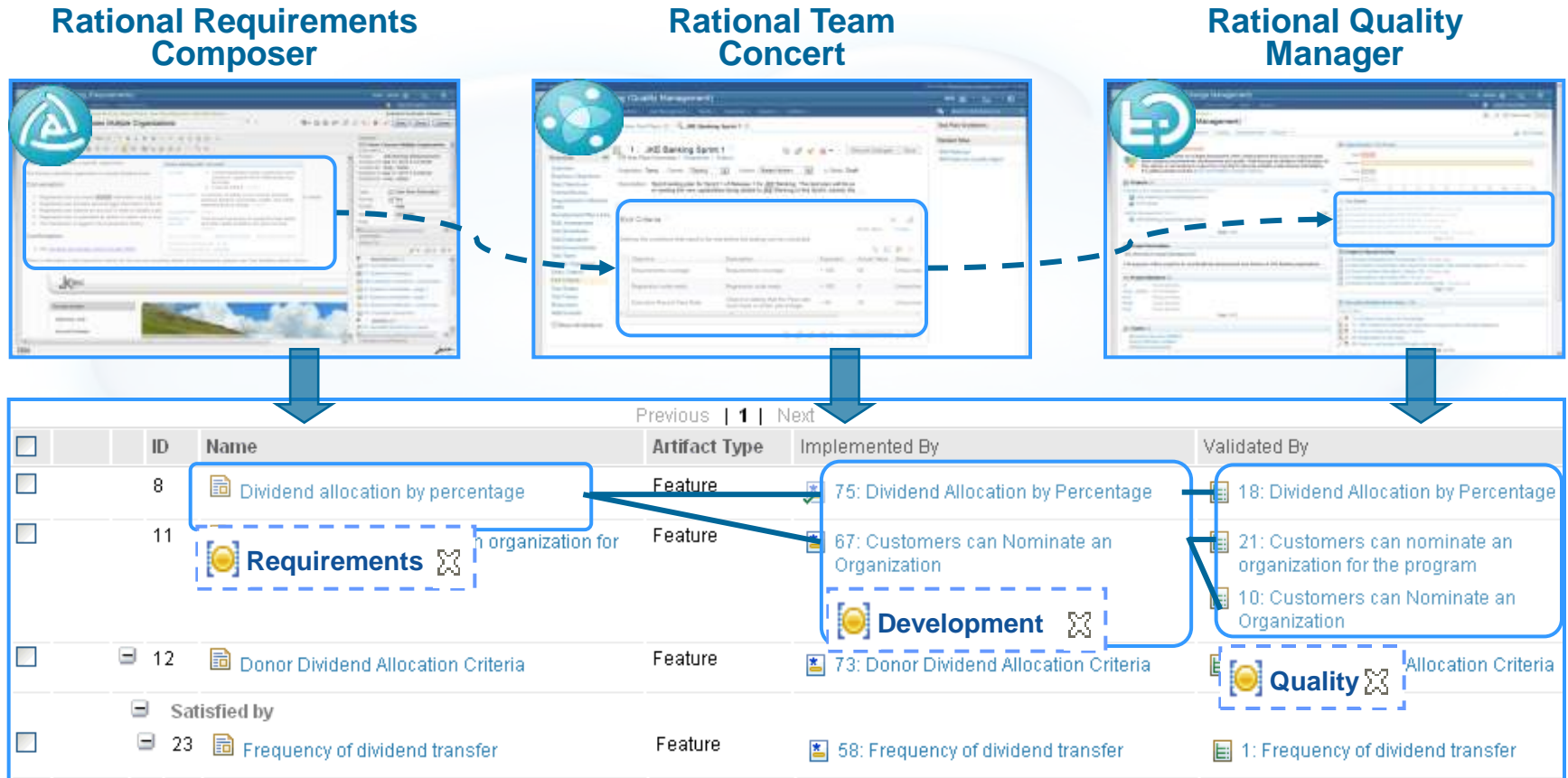
Lifecycle

- Central requirements, test, & development repository
- WAS Clustered Server
- Common admin and role-based user licensing
- Warehouse reporting

Planning

- Integrated planning
- Effort estimation
- Task management

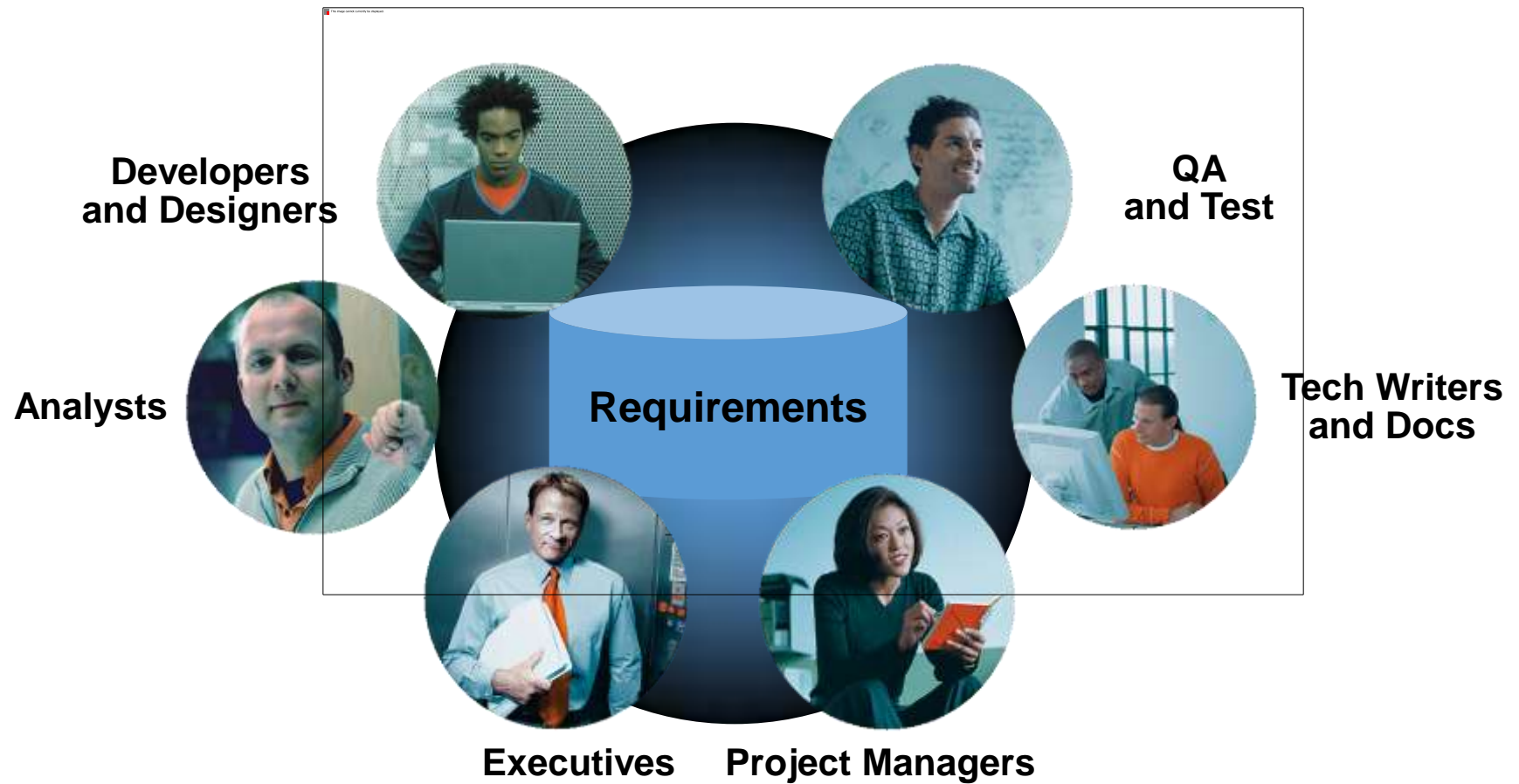
Rational CLM solution for Software/IT using requirements



Real-time Planning, Lifecycle Traceability, Team Collaboration, Development Intelligence, Continuous Improvement

How Would you use RRC for development in the real world?

Who needs requirements?



All project team members need access to requirements

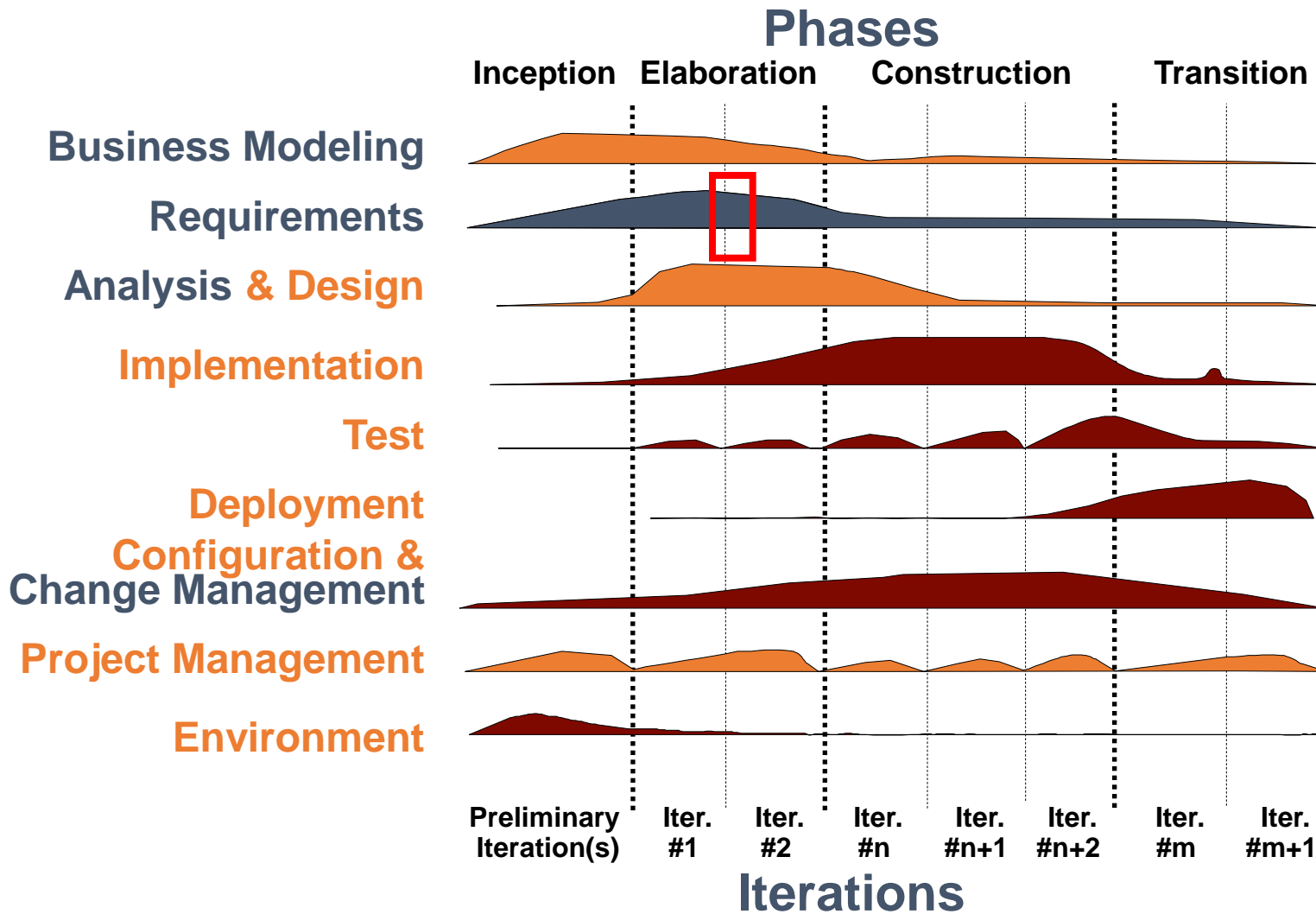
What is your Development Process?

- How much Requirements Analysis?
 - Agile purists who argue 'do none or at the most don't do much because the requirements will change'
 - "Rather than coming up with a bunch of features and planning a multi-month release, come up with new ideas continually and try them out individually on users."¹
 - Traditionalists who want to do as much as possible, because we need to know we are doing the right thing before investing
 - "For the second consecutive year, IAG found poor requirements definition and management consume over one-third of IT's application development budget."²
- Context Determines the Approach
 - Both the agile approach and the verifiable approaches to requirements engineering are appropriate in their own context. Projects with a lot of change that need to get out to the market quickly might be best done with high-level, low-ceremony requirements practices.
 - Stable projects with safety-critical implications could best be done with a plan-driven, well-documented specification.

¹ <http://www.informit.com/articles/article.aspx?p=1829417>

² <http://esj.com/articles/2009/09/29/wasted-it-development-spending.aspx>

Waterfall Development Process

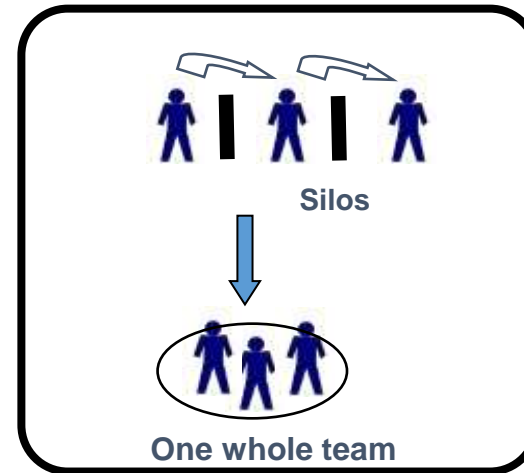
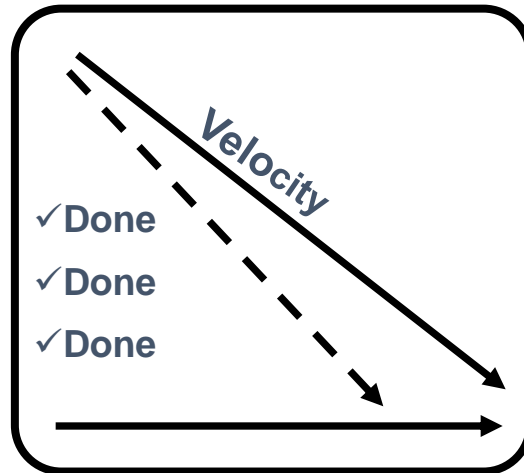
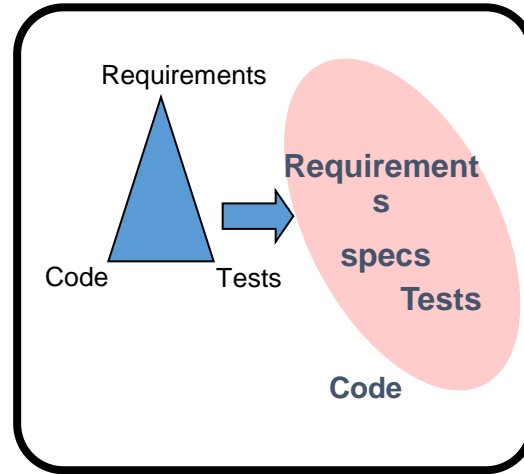
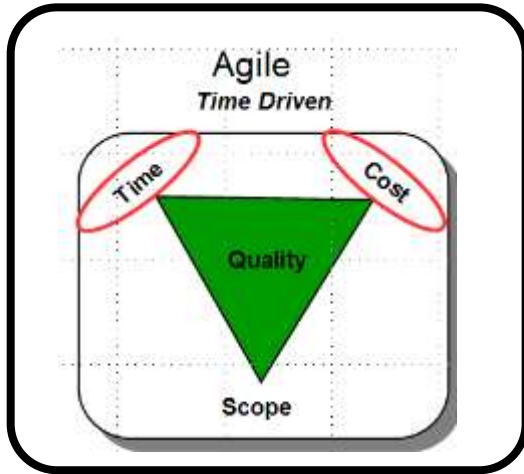


RM key activities for Waterfall

- ✓ Analyze the (Customer) Problem
- ✓ Understand (Document) Stakeholder Needs
 - ✓ Agree requirements up Front
- ✓ Define the System (Requirements)
 - ✓ Trace to Stakeholder Requirements
 - ✓ Agree System Requirements
- ✓ Manage the Scope of the System
 - ✓ Track progress of project requirements
 - ✓ Manage traceability/impact coverage
- ✓ Refine the System Definition
- ✓ Manage Changing Requirements
 - ✓ Change Requests (tracked through RTC)

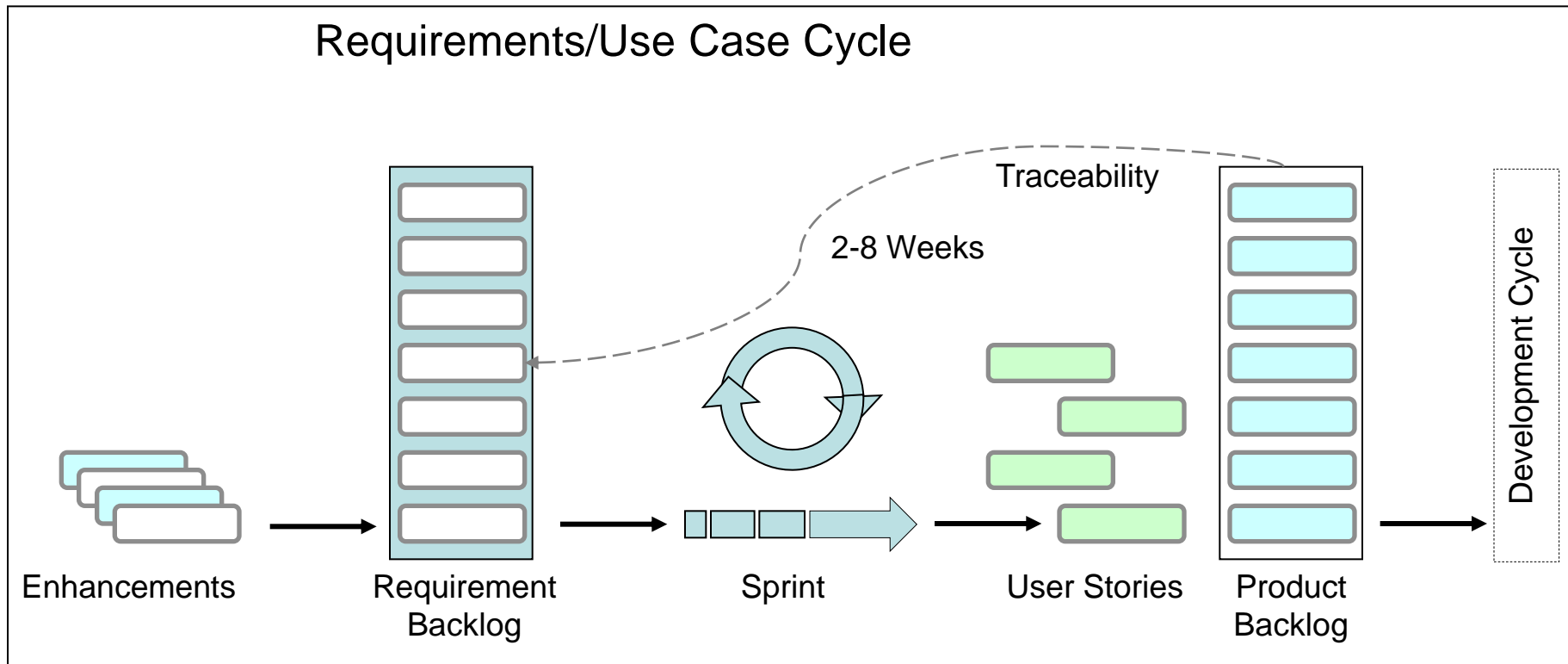


Consider an Agile Approach



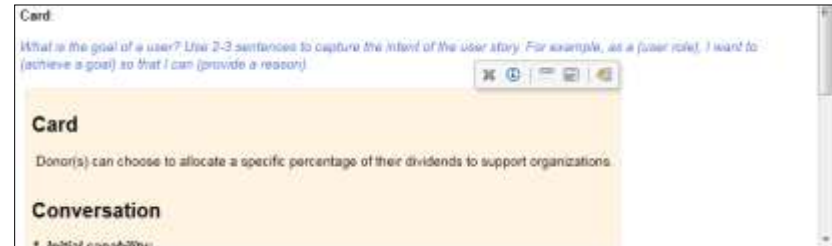
Agile Development Using Requirements

Requirements/Use Case Cycle



Agile requirements techniques

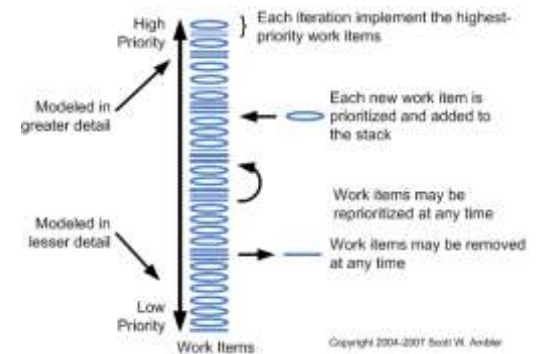
- Story telling
- Story cards
- Story boards and sketches
- User stories and Story Points
- Requirements stacks
- Writing just enough requirements
- Talking rather than writing
- Not designing screens too early



Story cards



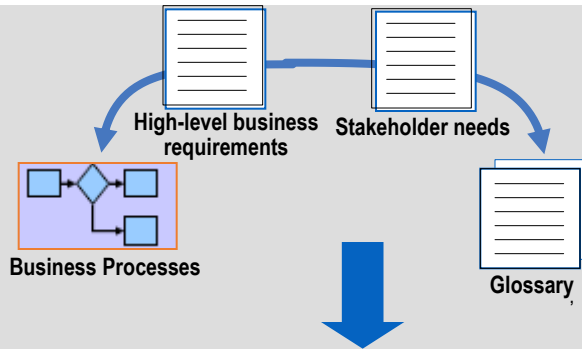
Storyboards



Backlog stack

How will your requirements work together?

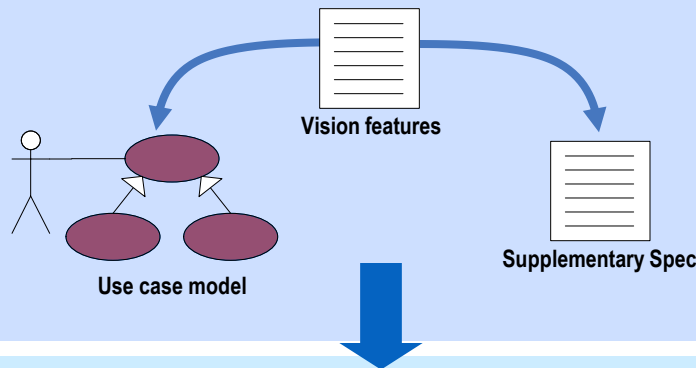
Business perspective



- Business goals and objectives
- Business processes (as-is versus to-be)
- Stakeholder needs
- Glossary
- Business rules

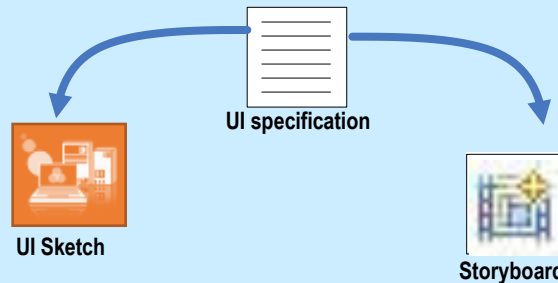
Problem space

User perspective



- Features
- Functional requirements
- Non-functional requirements (including constraints)
- Use cases and user story elaborations

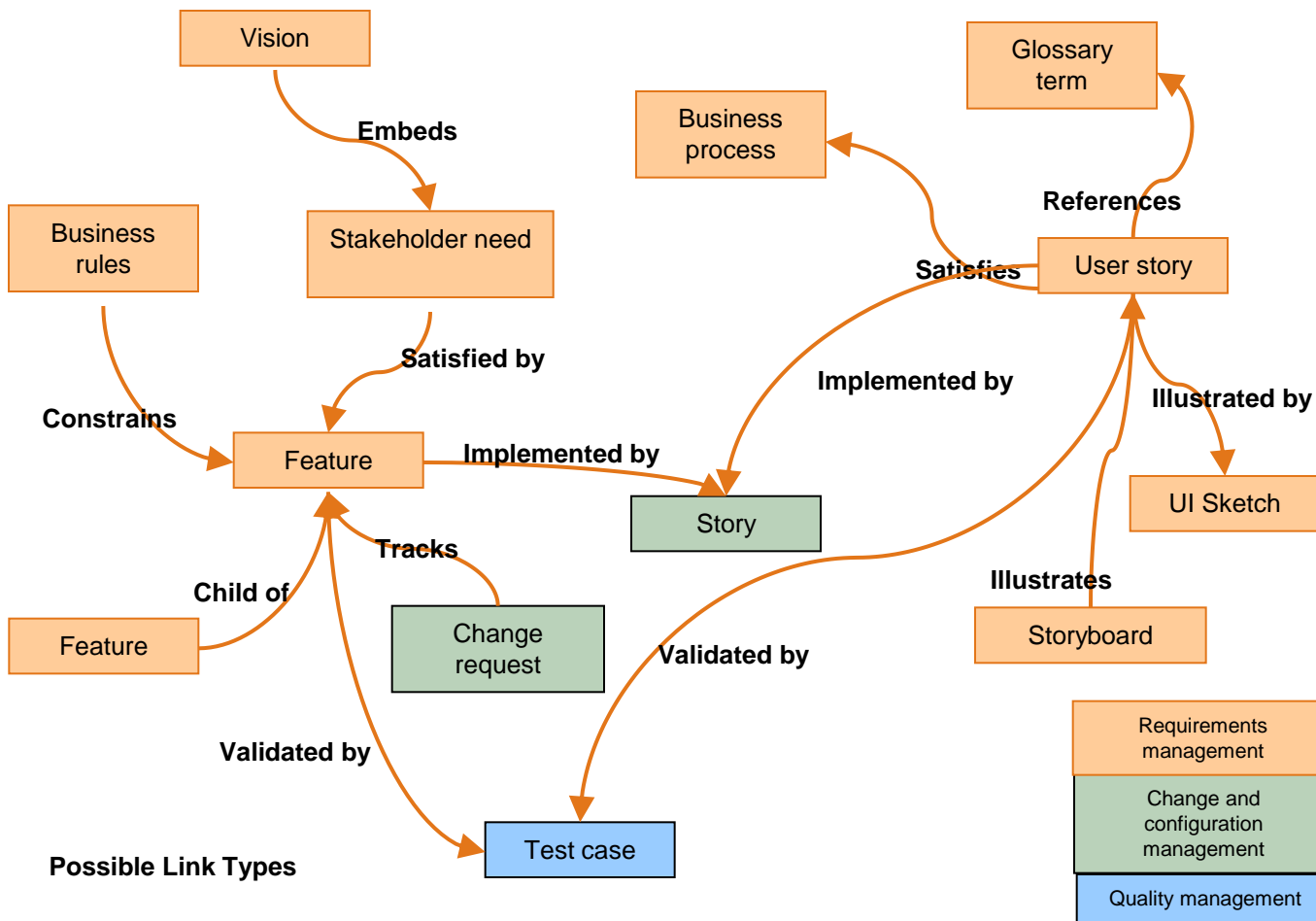
System perspective



- User interface specification
- User interface
- Storyboard

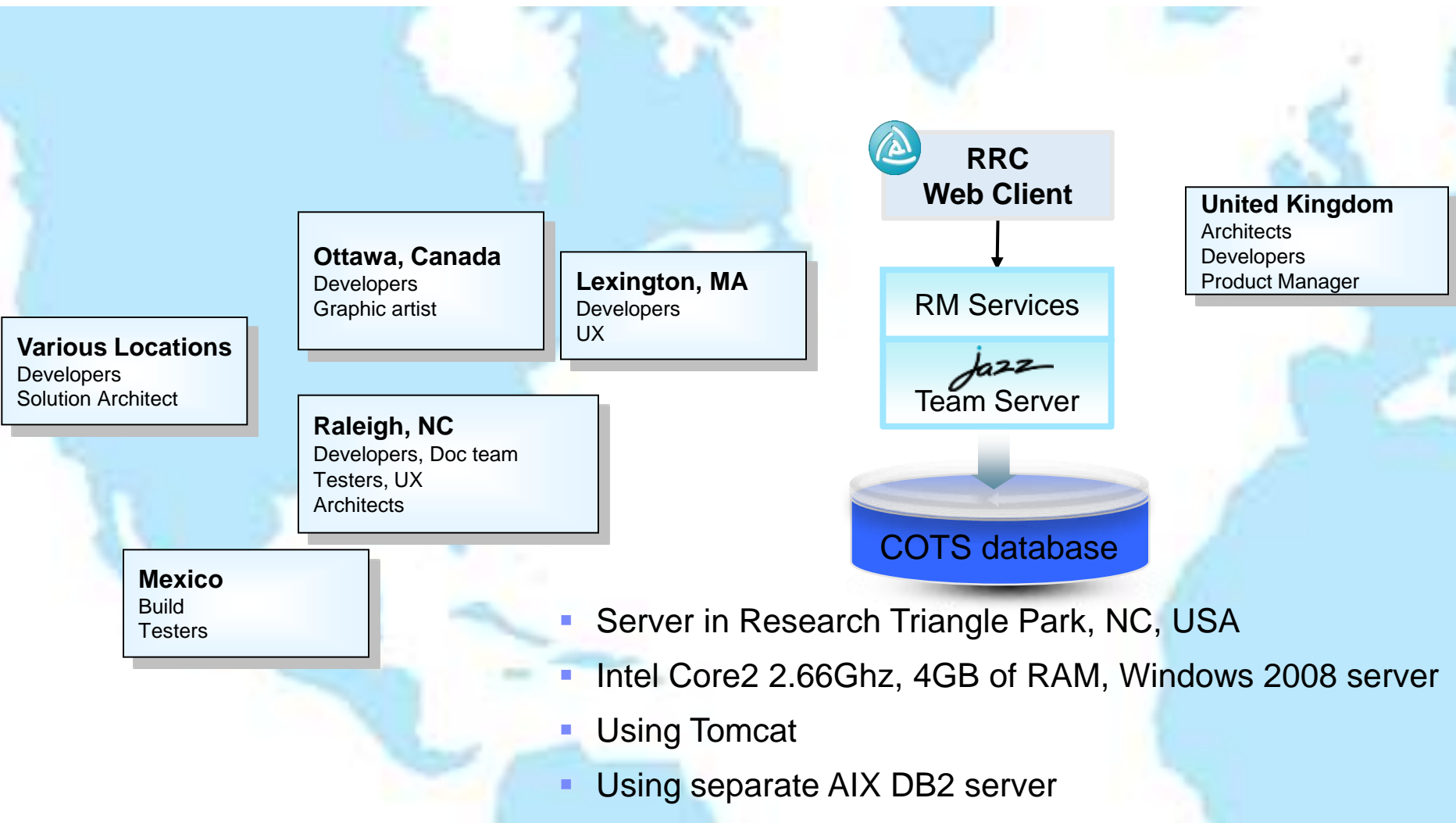
Solution space

How will your requirements Relationships Trace Together?



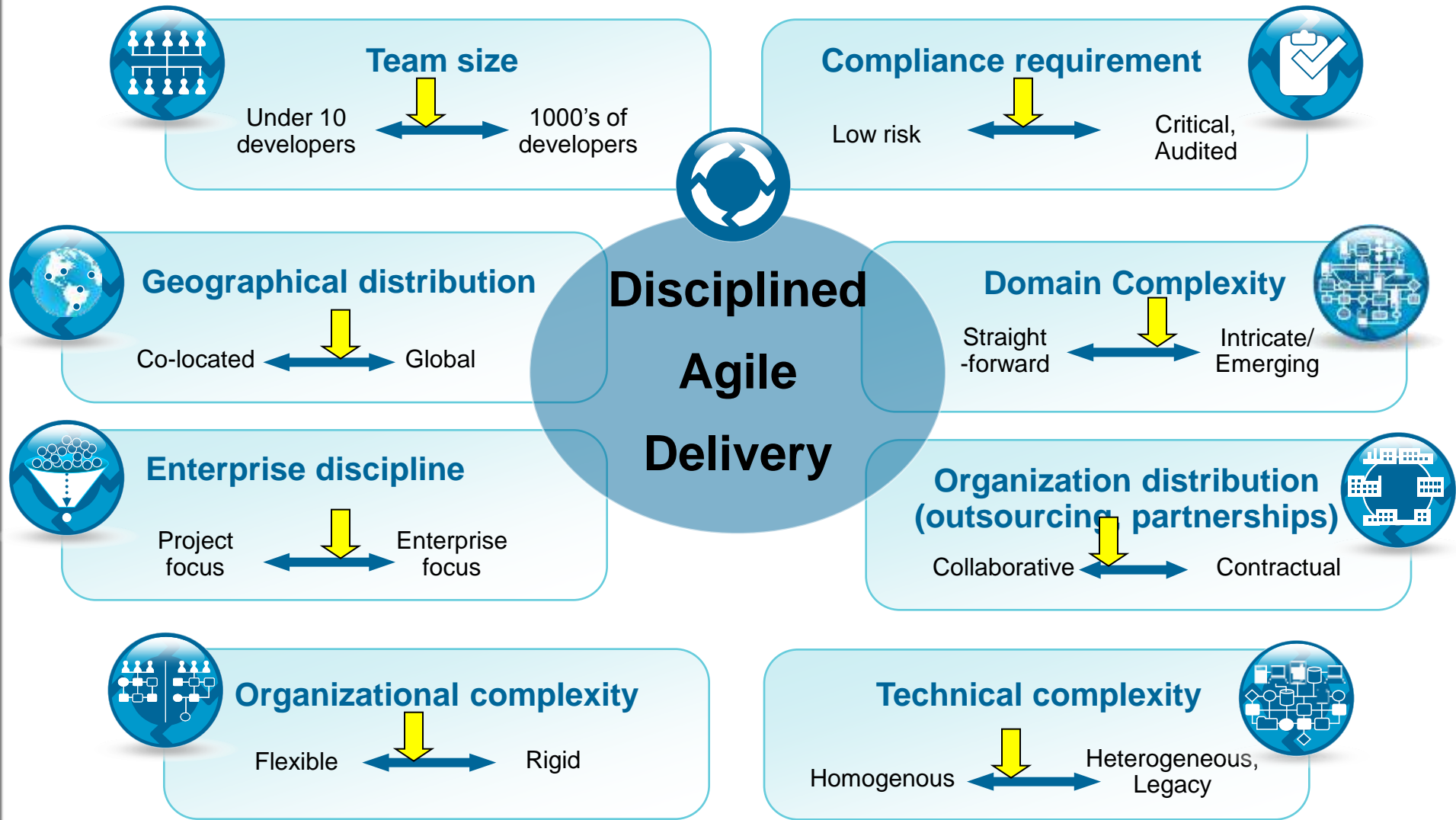
How Rational use Requirements Composer for development in the real world

RRC Product Team



- Server in Research Triangle Park, NC, USA
- Intel Core2 2.66Ghz, 4GB of RAM, Windows 2008 server
- Using Tomcat
- Using separate AIX DB2 server

IBM agility@scale™ – our team self-assessment



We do much of our work on <https://jazz.net/rm/web>

The screenshot displays the Jazz Requirements Management (RM) web application. The browser window shows the URL <https://jazz.net/rm/web>. The page title is "RM Product Definitions (RM) Project Dashboard". The interface includes a navigation menu with "Home", "About Jazz", "Roles", "Projects", and "Downloads". The sidebar on the left shows "All Projects (jazz.net)" and "My Projects" with links to "Collaborative Lifecycle Management - Requirements (RM)", "Rational Quality Manager (RM)", and "RM Product Definitions (RM)". The main content area is divided into several sections:

- Project Members:** Lists three members: Bas Bekker (Email: bekker@mx1.ibm.com), Barry McIntosh (Email: barrymcintosh@uk.ibm.com), and Ayako Nagayama (Email: wb64898@jp.ibm.com).
- Recent Changes in All Projects (5):** Lists recent changes such as "versions, variants, configurations (9750) 45 minutes ago" and "2012-04-17 terminology notes and actions (9751) Last Week".
- Comments in All Projects (0):** States "No comments have been added recently."
- Reviews in RM Product Definitions (RM) (0 of 0):** Shows no reviews.
- User Requirements - 2012.. Implemented By (32):** Lists requirements like "324: Common - Multi-level Traceability View" and "44275: [DOORS Next][RM] DOORS - Multi-level traceability view (single rm repository)".
- Glossary (76):** Lists glossary items like "\$\$ README for this glossary (1858)" and "Artifacts page (1865)".

A secondary window shows a document titled "312: RM self host on Jazz.net. Guide for Visitors". The document includes a "Welcome and Introduction" section and an "An invitation to collaborate" section. The IBM logo is visible in the bottom right corner.

We release milestones <https://jazz.net/downloads/> for feedback

The screenshot shows the Jazz website homepage. The navigation bar includes 'Products', 'Downloads', 'Community', and 'Our Story'. A banner at the top reads 'Get the latest releases and cutting-edge milestones'. Below this, there are four product cards, each with a 'New!' badge and a 'Download 4.0.4 Release September 6, 2013' button. The products are: Rational Team Concert, Rational Quality Manager, Rational Requirements Composer, and Rational DOORS Next Generation. Each card also includes a 'Try 4.0.3 in the Sandbox' button and a 'Learn about the project >' link.

The screenshot shows the Rational Requirements Composer product page. The navigation bar includes 'Products', 'Downloads', 'Community', and 'Our Story'. A search bar is visible in the top right. The page title is 'Rational Requirements Composer' with the subtitle 'Definition · Management · Analysis'. There are three tabs: 'Overview', 'Downloads', and 'What's happening'. The 'Downloads' tab is active. On the right side, there is a 'Download 4.0.4 Release September 6, 2013' button, a 'Try it in the Sandbox' button, and a 'Buy it | Questions?' dropdown menu. Below the tabs, there is a section for 'All Versions' with a table of releases and milestones.

Date	Type	Version
2013/09/06	Release	Rational Requirements Composer 4.0.4
2013/07/29	Milestone	Rational Requirements Composer 4.0.4 RC1
2013/07/11	Milestone	Rational Requirements Composer 4.0.4 M2
2013/06/12	Milestone	Rational Requirements Composer 4.0.4 M1

For the two projects we support

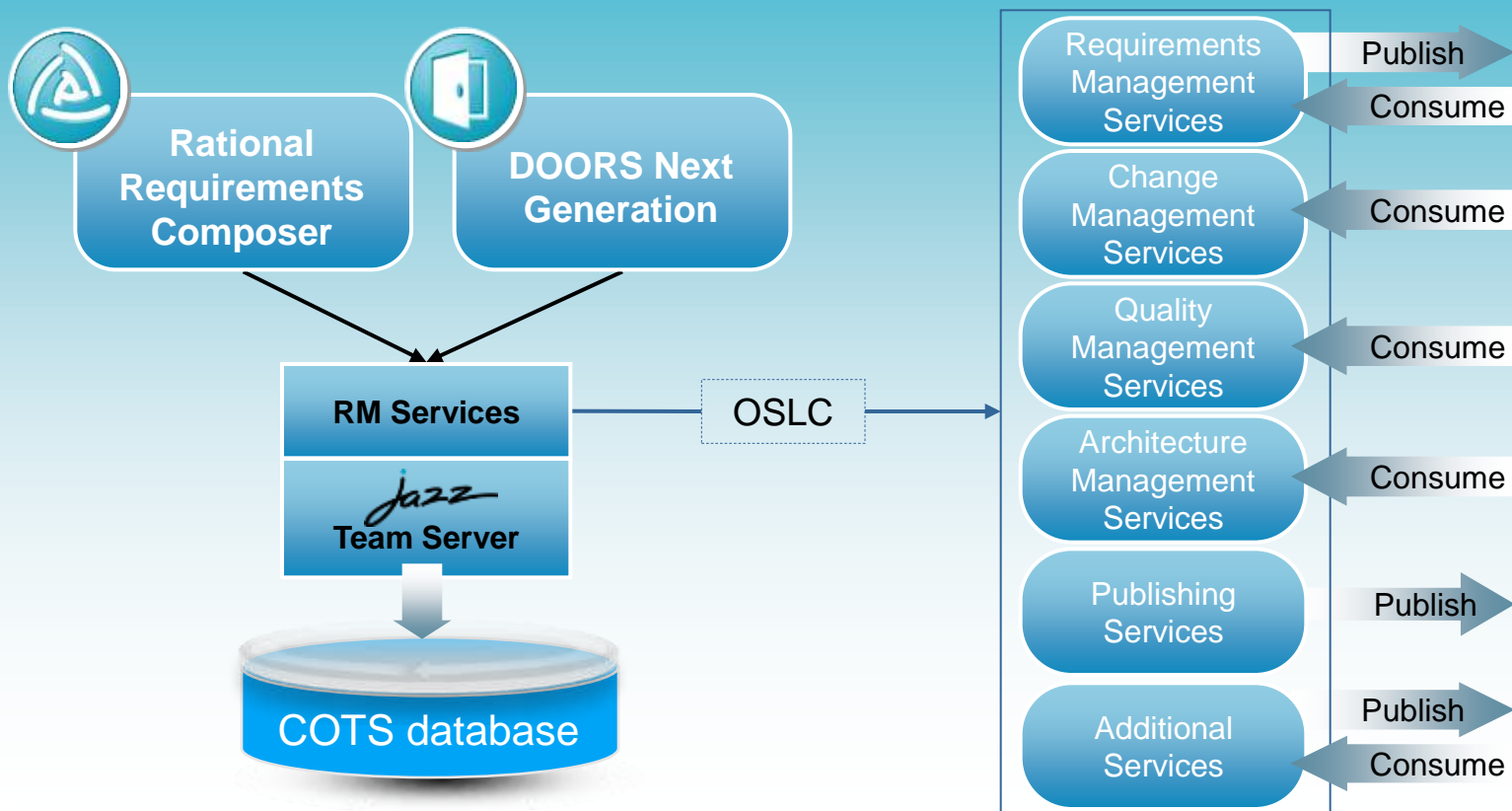
- Rational Requirements Composer
 - <https://jazz.net/projects/rational-requirements-composer/>
- DOORS Next Generation
 - <https://jazz.net/projects/rational-doors/>

The screenshot shows the product page for Rational Requirements Composer. The header includes the Jazz logo and navigation links. The main heading is "Rational Requirements Composer" with subtext "Definition Management Analysis". A video player is embedded on the left, showing a software interface. To the right, a text block reads: "Need more than documents and spreadsheets to drive requirements". Below this, it states: "Development projects typically use up-front requirements to drive a project forward – and eventually documents and spreadsheets just don't cut it. Try IBM Rational Requirements Composer. A requirements management solution for complex software and systems engineering environments, helping engineers to work more effectively across disciplines, time zones, and supply chains." A "Features >" link is at the bottom.

The screenshot shows the product page for Rational DOORS Next Generation (Beta). The header includes the Jazz logo and navigation links. The main heading is "Rational DOORS Next Generation (Beta)" with subtext "Requirements engineering for complex systems". A green button indicates "Download 4.1 Beta 2 April 5, 2012". Below the heading, a table of contents is visible for a document titled "587: AMR System Requirements Specification". The table lists sections: "2 General Description", "2.1 Functions and Purpose", and "2.1.1 The AMR system is used to determine water service connections to residential, commercial and industrial buildings". A text block to the right reads: "Bridge the gaps between customers, requirements, and deliverables. IBM Rational DOORS Next Generation. The next generation requirements management solution for complex software and systems engineering environments, helping engineers to work more effectively across disciplines, time zones, and supply chains." A "Features >" link is at the bottom.

Architectural End Goal for Rational RDM Tools

- Requirements visibility and traceability across the lifecycle
- Open integration architecture built on the Jazz Team Server
- Integrations using Open Services for Lifecycle Collaboration (OSLC)



Drinking Our Own Champagne

Summary	id
CheckData: PMC_Res: US [RM] Core Module support	44243
CLM: PMC_Res: US [RM] Suspect links: 160220154407	44275
CLM: PMC_Res: US [RM] Finer grained WRITE access control	44238
CLM: US [RM] Improve upgrade experience 169175	44234
CheckData: PMC_Res: US [RM] Ret/F part 1 - Round trip without process contr	44286
CheckData: PMC_Res: US [RM] Requirements Parsing (rich-test/convertable do	44251
[RM] Server acceptance test (owned by server and client team)	44262

330: Common - Suspect Link

Brief Description

Note: This type of feature is often called "Suspect Link".

Users need link relationships between project information content for different requirements, or in other words (data) change status to the artifacts on both ends of the links. If the information content of one of the artifacts "changes".

Links are accepted or not suspect depending on the user's perspective and which direction the link is being in terms of links in requirements owned by them and they make requirement changes in the context of the link.

However from the perspective of the opposing requirement (on the opposite side of the link) the modification is suspect. The user, on the other end of the link, needs an automated way of diagnosing this change and prior link to validate the link relationship.

Business Justification

User: Suspicion in a requirements management tool is not to deny businesses and submit to these who they identified as a significant market gap if not provided as a feature or property requirement. There could be an it is a feature that was originally developed in a requirements management objective for both the Requester user's visibility, but been added.

2957: UI Design for Suspect Profile

List of profiles is listed on the left. Click New Profile to create a new profile.

Suspect Artifact Profiles

All Project Areas

Manage Profiles for RM Project 1

Suspect Artifact Profiles + New Profile

Click to create new profile

Declarations

1. All link types (available from the project) are searched for the profile list are listed. All are unsearched by default.

Link types to follow

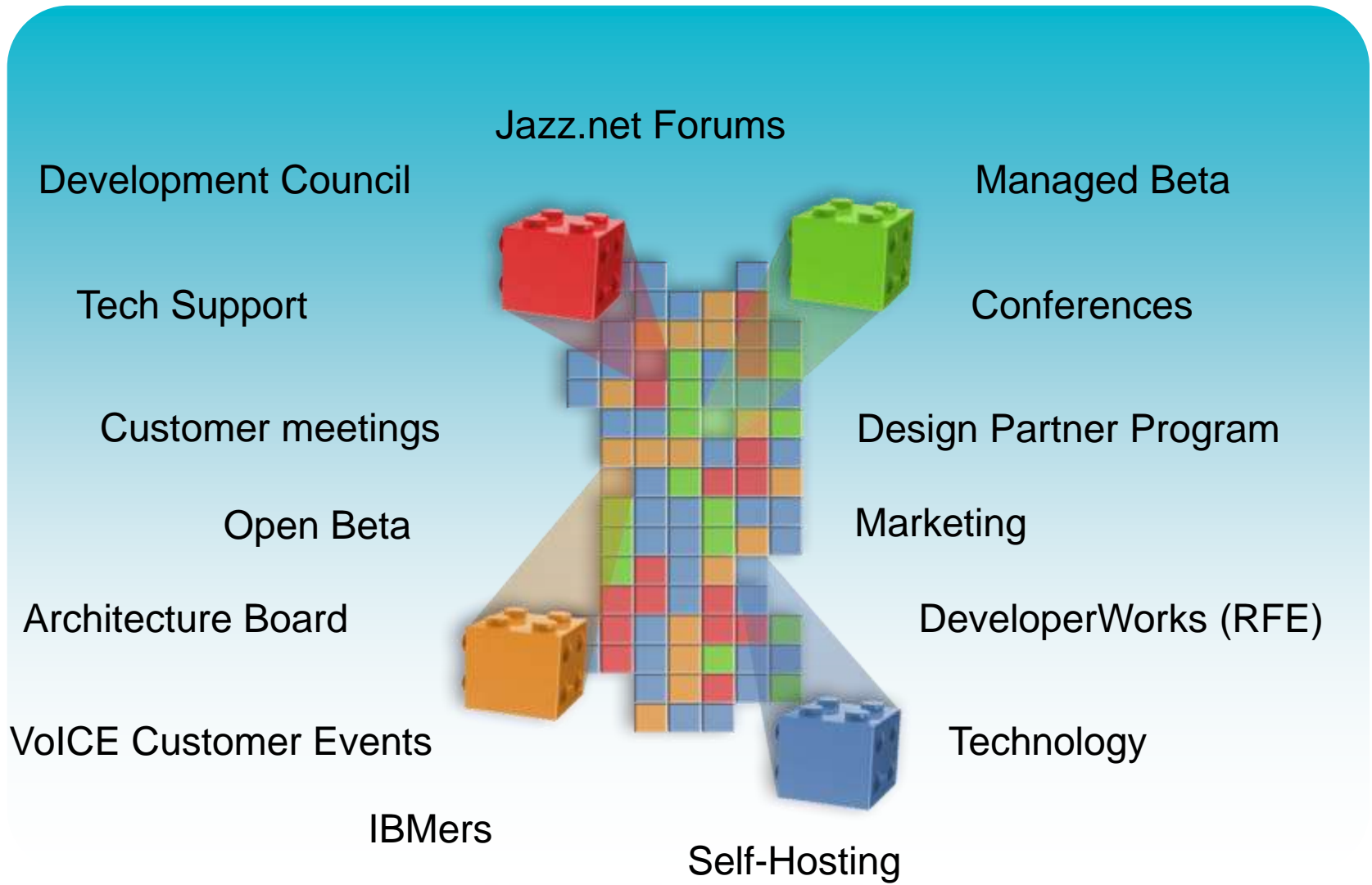
Imported from by

Transparency

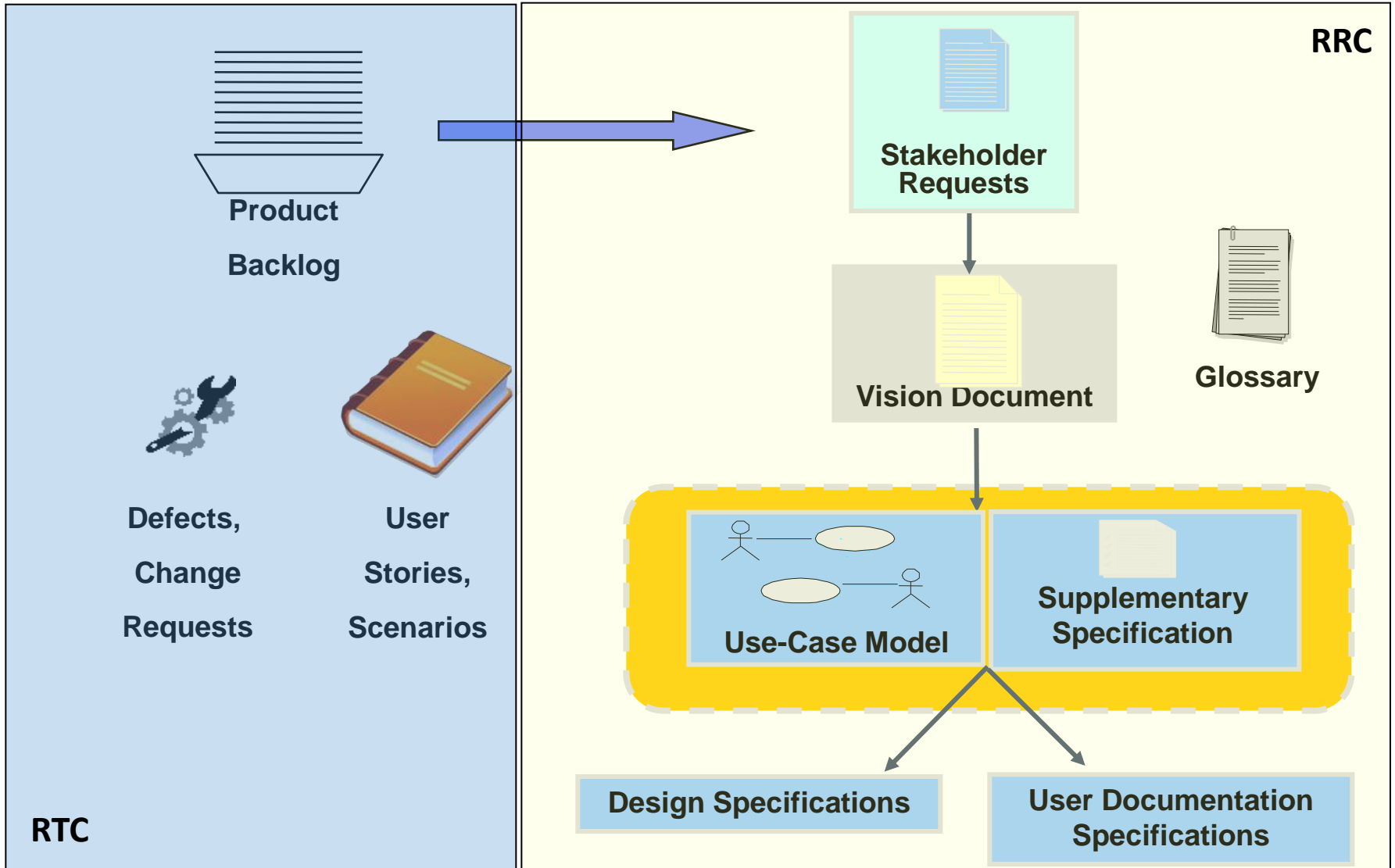
Typical feature evolution

1. Stakeholder describes the feature
2. Product Manager then creates Plan Items
3. Product Manager then Ranks the Plan Items
4. Product Manager describes the business scenario and related requirements
5. Architect defines the workflow and oversees design
6. User Interface designers then developed mockups
7. Development team developed incremental solutions, creating "Stories" based on Plan Items
8. Test team creates test cases based on Stories and UI design documents, tests drivers, opens defects.
9. We use milestone drivers to obtain feedback from the stakeholders

Sources for our Requirements – Everywhere!



Our Artifacts in RRC and RTC



Plan Items - Ranked

Plan Items

Ranking

Summary	Id	Architect	Feature Team Lead	Priority	Rank	Status	DCP Boca	Commitmer	Filed Against
DNextBeta1 PMC_Req UX [RM] Core Module support	44243	ian green	Chris McGraw	High	1	Implementing	Base Cont	Commit	Server
CLM PMC_Req UX [RM] Suspect links 169220/164497	44275	George DeCandio	Marc Baumbach	High	5	Ready to Test	Base Cont	Commit	Collabor
CLM PMC_Req UX [RM] Finer grained WRITE access control	44238	Dominic Tulley	Mark Goossen	High	7	Implementing	Base Cont	Commit	Server
CLM UX [RM] Improve upgrade experience 169175	44234	Devang Parikh	Alastair Stuart	High	8	Exploring	Base Cont	Commit	Server
DNextBeta1 PMC_Req UX [RM] ReqIF part 1 - Round trip without process contr	44286	Dominic Tulley	Tom Mutdosch	High	9	Implementing	Base Cont	Commit	Server
DNextBeta1 PMC_Req UX [RM] Requirements Parsing (rich-text/convertable do	44251	Vishy Ramaswamy	Min Idzelis	High	10	Ready to Test	Base Cont	Commit	Server
[RM] Server acceptance test (owned by server and client team)	44262	ian green	Charles Wells	High	11	Implementing	Base Cont	Commit	Server
CLM UX [RM] Support Data reorganization (server move) (CLM 166347)	44255	Devang Parikh	Devang Parikh	High	12	Implementing	Pressures	Commit	Server
CLM [RM] Adopt clustering for HA and/or horizontal scaling (CLM 103973)	44233	Devang Parikh	Knut Radloff	High	13	Implementing	Base Cont	Commit	Server
PMC_Req UX [RM] Baselineing modules for auditability	44289	ian green	Tim Neilson	High	14	Implementing	Unassigne	Propose	Server
UX [RM] Group access rights	44285	Dominic Tulley	Mark Goossen	High	16	Implementing	Extended C	Commit	Server
PMC_Req UX [RM] Module wide find and replace	44301	Ed Gentry	Lynne Kues	High	17	Ready to Implr	Unassigne	Commit	RRC We
UX [RM] HP-QC Integration	44237	George DeCandio	Todd Merriweather	High	21	New	Base Cont	Commit	Server
UX [RM] Design Manager (DM) (RSA/Rhapsody) integration	44244	Vishy Ramaswamy	Terry Caudill	High	22	Implementing	Pressures	Commit	Server

Plan Items – Release Plan (RM) Dashboard

Change and Configuration Management (acc2)

Requirements Management

Jared Pulliam

Project Dashboards | Work Items | Plans | Builds | Reports

All Requirements Management Dashboards > Requirements Management > RM > Development

RM Web Client Team Dashboard

General | Run Team (Current Sprint Scrum) | 4.0.5 Sprint 1 Results | Defect Overview / 4.0.5 Activity | 4.0.4 Defect Activity | 4.0.3 Defect Activity

Auto-save Save

Add Widget

Prioritized Defect Backlog

The following are queries for defects in different priority-buckets, sorted in priority order. Note that the priority of these queries may change with time.

- All queries here show defects that are NOT being worked on and are therefore waiting for an owner. NOT being worked on means:
 - Status is not "In Progress"
 - Planned For is "Unassigned" or "Product Backlog"
- If there is a default owner and the Status is "Triaged", this indicates that the owner plans to fix this at some point, so contact the owner if you want to take a Triaged defect. Otherwise, the defect is available for the taking. When you take ownership of a defect:

4.0.5 Sprint 2

Starts 09/09/2013 - Ends 10/04/2013
RM Dev Calendar
78510: 4.0.5 L3 Support Tracking

Current Run Team:

- Lynne Kues (scrum lead)
- Jeff Hardy
- Kinny Kun
- Kristine Sanchez
- Lorelei Ngooi
- Paul Boney

Prioritized work items to work on next (Not in progress)

- RT Web: Bkkg Not In Progress 01: cin_blockers (0)
- RT Web: Bkkg Not In Progress 02: Sev 1/2 Found by SVT (0)
- RT Web: Bkkg Not In Progress 03: Any Sev 1/2 (0)
- RT Web: Bkkg Not In Progress 04: svt_blockers (0)
- RT Web: Bkkg Not In Progress 05: Regressions (0)
- RT Web: Bkkg Not In Progress 06: APARs - Hotfix Requested (0)
- RT Web: Bkkg Not In Progress 07: APARs (2)
- RT Web: Bkkg Not In Progress 08: E10 & FF24 defects (1)
- RT Web: Bkkg Not In Progress 08: New Customer Use defects (3)
- RT Web: Bkkg Not In Progress 09: Focus enhancements (0)
- RT Web: Bkkg Not In Progress 10: Focus defects (32)
- RT Web: Bkkg Not In Progress 11: Found in 405 Non-Regressions (16)

Prioritized work items - All Unresolved

- RT Web: Active 01: cin_blockers (0)
- RT Web: Active 02: Sev 1/2 Found by SVT (0)
- RT Web: Active 03: Any Sev 1/2 (2)
- RT Web: Active 04: svt_blockers (0)
- RT Web: Active 05: Regressions (1)
- RT Web: Active 06: APARs - Hotfix Requested (0)
- RT Web: Active 07: APARs (5)
- RT Web: Active 08: E10 & FF24 defects (1)
- RT Web: Active 08: New Customer Use defects (4)
- RT Web: Active 09: Focus enhancements (2)
- RT Web: Active 10: Focus defects (48)
- RT Web: Active 11: Found in 405 Non-Regressions (17)

RT Web Awaiting Information (7) Owned By

Owned By	Count
Lynne Kues	3
Kinny Kun	1
Maria Velasco	1
paul boney	1

RT Web Defects in Progress (7) Owned By

Owned By	Count
Lynne Kues	3
Kinny Kun	1
Lorelei Ngooi	1
paul boney	1
Steven Chung	1

RT Web Enhancements in Progress (2) Owned By

Owned By	Count
Jeff Hardy	1
Kinny Kun	1

RT Web APARs in Progress (2) Owned By

Owned By	Count
Lynne Kues	1
paul boney	1

RT Web Defects Planned (14) Planned For

Sprint	Count
RM 4.0.5 Sprint 2	14
RM 4.0.5 Sprint 1	2

RT Web Defects Planned (14) Owned By

Owned By	Count
Jeff Hardy	3

RT Unresolved High Priority Defects - Sev 1/Sev 2/APAR/Regression/... (8) Status

Status	Count
Awaiting Information	3
Triaged	2
In Progress	1
New	2

Top 2 Features – User Requirements (RRC)

Summary	Id
DNextBeta1 PMC_Req UX [RM] Core Module support	44243
CLM PMC_Req UX [RM] Suspect links 169220/164497	44275

9929: Common - Module

Brief Description
Module is where people author structure, reuse, link requirements, and...

Business Justification
Module is a key feature that brings together different RM capabilities to...

Scope

Note:
This document defines some User Requirements that may be broken...

Definitions
In this document we have borrowed definitions from 929: Common - S...

- **Originating requirement / artifact** - a requirement / artifact that
- **Requirement instance / artifact** - a new instance of an original

Key Functions

- **Modules as Artifacts**
 - A Module shall behave like any existing RRC Artifact. By this we mean that the set of base behaviors we see in today's RRC Artifacts (Text Artifacts etc) are also present in Module Artifacts. For example, from the mile high perspective of the RRC Project Dashboard, Module Artifacts would be virtually indistinguishable from Text Artifacts.
 - The Module as an Artifact is a completely separate concern from the Module's role as a container of Artifacts. This is how Collection behaves today.
 - So with respect to Modules as Artifacts in their own right, the following operations can be applied:
 - Tagging
 - Commenting
 - Reviews

330: Common - Link Suspicion

Brief Description
Note: This type of feature is often called "Suspect Link".

Users need link relationships between project information content for different requirements on to other development life-cycle artifacts. After a relationship link is created between two requirements (or two ALM elements) users need an automated method to identify the (data) change status to the artifacts on both ends of the links. If the information content of one of the artifacts changes, the link (relationship) may no longer be appropriate or valid. In this case, we would say that the link has become "Suspect" or there is "Change Suspicion".

Links are suspect or not suspect depending on the user's perspective and which direction the link is being examined. For example suppose that the requirement for a particular link was modified since the link was created. The person making a modification typically is aware of links in requirements owned by them and they make requirement changes in the context of the link presence. From the perspective of this requirement, the change modification and the link would not be suspect.

However from the perspective of the opposing requirement (on the opposite side of the link) the modification may be significant and that change was made without their knowledge. So therefore from the perspective of the opposing requirement (or link) the change is suspect. The user on the other end of the link needs an automated way of recognizing this change and provided with the features to examine the change and remove the suspicion or resolve the suspicion by changing the value of the requirement on the other end of the link to validate the link relationship.

Business Justification
Link Suspicion in a requirements management tool is vital to many businesses and critical to those who rely on traceability consistency in their development process. Link Suspicion is now a well understood capability (not market differentiating) and would be quickly identified as a significant market gap if not provided as a feature or properly implemented. There could be ideas or methods to extend the basic concept of link suspicion to create something market differentiating.

It is a feature that was originally developed in a requirements management discipline for tools like RequisitePro and DOORS. It is a capability that is mandatory to many organization's processes and extends beyond requirements to any tool in the development lifecycle where traceability has been applied.

Scope

Key Functions

Comments

3 Kirk Gröjahn to Daniel Mout, Jared Putham Aug 16, 2011 (1 reply)
We don't really have "owners"
I don't believe "Owner" is a system attribute, so I'm not sure we can base things on artifact, document or collection owners.

5 Jared Putham to Daniel Mout, Kirk Gröjahn Aug 17, 2011
RE: We don't really have "owners" [RE: #3]
The term owner was really just referencing the user of the collection, document, etc. I've changed the word, as these are user level requirements. Thanks for the feedback.

1 George DeCandia to Jared Putham, Ima Zhou Jul 20, 2011 (1 reply)
What about some attributes not triggering suspicion?
Some customers have asked to allow some attributes changes on requirements not to trigger suspect state. Examples include development sprints, dev priority, etc...

4 Jared Putham to George DeCandia, Ima Zhou Aug 17, 2011
RE: What about some attributes not triggering suspicion? [RE: #1]
Yes, thankful I was overreact that I missed.

Links
Where Used

User Requirements Satisfied by Software Requirements (in RRC)






























Artifacts

Page size: 20 ▾

Software requirements that satisfy User requirements

No grouping ▾



<input type="checkbox"/>	ID	Name	Artifact Type	Satisfied By
<input type="checkbox"/>	317	 Common - Type and Attribute Management System	User Requirement	 386:Type System  387:Type system useability
<input type="checkbox"/>	318	 Common - Audit History	User Requirement	 390:Audit History
<input type="checkbox"/>	323	 Common - Relationships for Traceability Structure	User Requirement	 392:Traceability
<input type="checkbox"/>	324	 Common - Multi-level Traceability View	User Requirement	 392:Traceability
<input type="checkbox"/>	325	 Common - Database Wide Query	User Requirement	 384:Sample queries and views  383:Saved query  393:Search
<input type="checkbox"/>	333	 Glossary Tagging Capability	User Requirement	 391:Glossary and Terms
<input type="checkbox"/>	334	 Sketching/GUI Wireframe, Storyboards Facility	User Requirement	 457:Enable installation and upgrade of artifact plugins and extensions
<input type="checkbox"/>	335	 Use Cases and Process Diagram Infrastructure	User Requirement	 457:Enable installation and upgrade of artifact plugins and extensions
<input type="checkbox"/>	336	 Common - User Collaboration	User Requirement	 458:CLM UI compliance
<input type="checkbox"/>	338	 Common - CSV Data Import (Attribute Import)	User Requirement	 388:CSV import and export
<input type="checkbox"/>	339	 Common - CSV Export: View Based	User Requirement	 388:CSV import and export
<input type="checkbox"/>	340	 Common - Requirements Document Import (Data Parsing)	User Requirement	 389:Import a Word document and convert it to a rich-text artifact
<input type="checkbox"/>	341	 Common - Word Export	User Requirement	 382:Printing requirements artifacts and collections

User Requirements Implemented By Plan Items

Artifacts ?

Page size: 20 ▾

▾ No grouping ▾

Previous | 1 2 3 | Next

<input type="checkbox"/>	ID	Name	Artifact Type	Artifact Owner	Business Priority	Status	Implemented By
<input type="checkbox"/>	296	Common - Linking	User Requirement	tina zhuo	Must	Under Review	99047: Improve and deepen traceability links & views, add support for change impact/suspect links 44254: [RM] Graphical traceability view 44256: [RM] Backlinking - Query service consumption for OSLC linking (DM)
<input type="checkbox"/>	315	Common - User Dashboards	User Requirement	Jared Pulham	Must		151399: RM - User Dashboard Layout Controls
<input type="checkbox"/>	316	Common - Requirements Document Database (Library) Structure	User Requirement	Jared Pulham	Must		151400: RM - Requirements Document Database (Project) Structure
<input type="checkbox"/>	317	Common - Type and Attribute Management System	User Requirement	tina zhuo	Must	Approved	148453: RM - Attribute Type Management System
<input checked="" type="checkbox"/>	318	Common - Audit History	User Requirement	Jared Pulham	Must		148456: RM - Audit Trail Change History and Audit Trail Change comparison

Stories (in RTC) that implement User requirements

Top 2 Features - Plan Items (RTC)

Summary

DNextBeta1 **PMC_Req** **UX** **[RM] Core Module support**

CLM **PMC_Req** **UX** **[RM] Suspect links 169220/164497**

44275: [RM] Web Client Suspect links 169220/164497

Status: **Testing**
Resolution: Unresolved
Details
Type: **Plan Item** **Planned For:** RRC 4.0 (CLM 2012)
Filed Against: Collaborative ALM **Estimate:**
Theme: Consumability **Time Spent:**
Progress: **Due Date:** Unassigned
Tags: mba, clm_required, elaborated, rrc.toprank, cust_412+, pmc_requested, doorsnext, ux_assigned, avp@stg, avp, bancodbrasil, bb, voicenov2011 **Creation Date:** June 28, 2011 2:05 PM
Owned By: Marc Baumbach **Created By:** Muhtar Akbulut
Team Area: Collaborative ALM / Requirements Management **Severity:** **Critical**
Priority: **High** **Found In:** Unassigned

Quick Information

Children (18): 45327, 52076, 52078, 52079, 52209, ...
Subscribers (9): AC, DBL, EMdS, MA, px, TM, TM, VA, ...
Depends On (1): 45324
Implements Requirement (1)
Tested By (7)
Related (5): 46079, 46301, 48223, 51545, 52999
Mentions (2)
Mentioned By (4)
Related Change Management (1)

Description

Lifecycle traceability is a key aspect of the CLM solution. After a traceability link is created between two requirements (or two CLM elements) users need an automated way to identify the (data) change status of requirements on both ends of the links.

This plan item is to implement a detailed user requirement. For requirement details, please follow the link in the Links tab.

44243: [RM] Core Module support

Status: **Implementing**
Resolution: Unresolved
Details
Type: **Plan Item** **Planned For:** Future Release
Filed Against: Server **Estimate:**
Theme: Unassigned **Time Spent:**
Progress: **Due Date:** February 24, 2012 12:00 PM
Tags: mba, elaborated, doorsnextbeta1, rrc.toprank, cust_412+, pmc_requested, ux_assigned, avp@stg, rrc.35.qcert **Creation Date:** June 28, 2011 2:05 PM
Owned By: Chris McGraw **Created By:** Muhtar Akbulut
Team Area: Server / Requirements Management **Severity:** **Major**
Priority: **High** **Found In:** Unassigned

Quick Information

Children (201): 44434, 44766, 45016, 45205, 45238, ... **Attachments (1):** 16878
Subscribers (16): AC, BS, CH, DM, DC, GD, HH, ig, ... **Duplicated By (1):** 37797
Implements Requirement (2) **Tested By (5)**
Related (5): 45448, 45449, 45937, 46300, 48220 **Mentions (15)**
Mentioned By (12) **Related Artifacts (3)**

Description

Provide support for Modules in both rich and web clients:

Modules appear in folders as artifacts (they have a type and attributes)
 Add, remove, move modules in folders

View of module contents - scalable grid representation reflecting tree structure
 Structured tree of artifacts (textual, wrapped and RRCx)
 Visibility of links in the module view
 Reviewing a module (commenting, book like reading experience - smooth, continuous)

Show Less

Suspect Links - Plan Items Decomposed to Child Stories

Plan Item 44275 ?
Summary: [RM] Web Client Suspect links 169220/164497

Overview Commitment Execution Done Criteria Test Links

Attachments

Add File: Browse...

Links

Add: related ▾

Children

- 45327: Requirement and Architecture Review: Suspect Link
- 52209: Implement suspect profile crud service
- 52210: Implement suspect entry crud service
- 52211: Implement suspect query service
- 52212: Implement TRS client for calculating suspect entries
- 52213: Implement link triple store for holding CLM links
- 52214: Implement suspect profile management web UI
- 52215: Implement suspect query in traceability views
- 52217: As a user, I will be able to clear suspect links from artifact editors
- 52078: As a user, I will be able to identify suspect links in the artifact editors**
- 52079: As a user, I will be able to run reports on suspect links
- 52076: As a user, I will be able to define suspect profiles from the web
- 53043: Provide discovery service for the suspect profiles admin UI
- 54096: As a user, permissions should work around suspect links
- 54742: As a user, I will be able to identify suspect links from the grid
- 54741: As a user, I will be able to clear suspect links from the grid
- 55258: As a user, I will be able to export the suspicion column to CSV
- 57600: Allow RM to support TRS

52078: As a user, I will be able to identify suspect links in the artifact editors

Status: Testing
Resolution: Unresolved

Details

Type: Story
Story Points: Small (3)
Filed: RRC Web Client
Estimate:
Time Spent:
Due Date: March 2, 2012 12:00 PM

Against:
Progress: 3/65hrs | 65/65hrs --
Resolution Date: February 16, 2012 11:34 PM
Tags: pu
Resolved By: Patrick Danford
Owned By: Christian Funkhouser
Tested By: December 14, 2011 5:27 PM
Team Area: Web Client / Requirements Management
Severity: Normal

Priority: Signed
Planned For:

Quick Information

- Parent: 44275
- Subscribers (3): CF, MB, PD
- Duplicated By (1): 52215
- Related (1): 53725
- FVT test cases approval: Approved (1 of 1)

Description

As a user, I will be able to identify suspect links in the artifact editors

- Artifact overview section
- Artifact links sidebar

Discussion

- Patrick Danford, Feb 15, 2012, 11:50 AM

Show More

Test Case 4101 - Suspicion in rich text editor - Links section, Test Case 4103 - Suspicion in module editor - Overview section, Test Case 4099 - Suspicion in rich text editor - overview section, Test Case 4100 - Suspicion in rich text editor - Links section, Test Case 4104 - Suspicion in module editor - Links section, Test Case 4102 - Suspicion in graphical editor - links section

Plan Item Stories

Example Story

Links to Test Cases

Plan Items - Release Plan in RTC (Lifecycle View)

Plan Items

Links to Requirements

Links to Test Cases

Summary	Rank	Business Value	Implements Requirement	Tested By Test Case	Feature Tez	Architect
< ▶ [DOORS Next] Core Module support	1	10 - Show Stopp	--	--	Unassig	ian green
< ▶ [RM] Core Module support	2	7 - Priority	Links (2): 1, 2	Links (5): 1, 2, 3, 4, 5	Chris Mc	ian green
< ▶ [RM] Artifact sharing, potentially controlled r...	5	7 - Priority	636: Common - Support for requirements reuse	--	Chris Mc	ian green
▶ [RM] Web Client Suspect links 169220/164...	6	2 - Nice to Have	330: Common - Link Suspicion	Links (7): 1, 2, 3, 4, 5, 6, 7	Marc Ba	George De
▶ [RM] Backlinking - Query service consumpti...	7	7 - Priority	296: Common - Linking	Test Case 56706 - RRM_Req2De	Marc Ba	Vishy Ram:
▶ [RM] Finer grained WRITE access control	8	7 - Priority	495: Manage Security on Data	Links (2): 1, 2	Mark Go	Dominic Tu
▶ [RM] Improve upgrade experience 169175	9	7 - Priority	342: Data migration from RRC 2.0.x	Test Case 51839 - RRM_RRC_Ac	Alastair	Devang Pa
▶ [RM] Requirements Parsing (rich-text/conve...	10	7 - Priority	340: Common - MS Word Document Import (Data	Links (3): 1, 2, 3	Min Idze	Vishy Ram:
▶ [RM] Support Data reorganization (server m...	11	7 - Priority	--	Test Case 55020 - RRM_RRC_Se	Devang	Devang Pa
▶ [RM] Adopt clustering for HA and/or horizont...	12	7 - Priority	Links (3): 1, 2, 3	Links (2): 1, 2	Knut Ra	Devang Pa
< ▶ [RM] Web Client Baselineing modules for au...	13	2 - Nice to Have	Links (2): 1, 2	Test Case 52582 - RRM_AlignIT_f	Tim Neil	ian green
< ▶ [DOORS Next] Type Based Link Preferences	14	7 - Priority	739: Link Schema Control User Stories	--	Lynne K	Ed Gentry
▶ [RM] Group access rights	15	2 - Nice to Have	495: Manage Security on Data	Test Case 52458 - RRM_AlignIT_!	Mark Go	Dominic Tu
< ▶ [RM] Module wide find and replace	16	2 - Nice to Have	1442: Module Wide Find and Replace	Test Case 52582 - RRM_AlignIT_f	Lynne K	Ed Gentry

Other Requirement Elaboration Artifacts in RRC

- End user scenarios
- Feature team supporting documents
- UI design documents
- Terminology
- Meeting minutes
- Customer feedback (e.g., beta program, DPP, etc.)
- Process documents



www.ibm.com/software/rational

End User Scenarios

Project Dashboard Artifacts Collections Reports

Create Scenario

Views
Filter by Tag
Filter by Attribute
Filter by Folder

- RM Product Definitions_Private (F)
 - 1. README FIRST
 - 2. Scenarios**
 - DOORS Next Generation
 - RELM
 - RRC v3.0.1
 - Collaboration
 - Beta program
 - CLM 2012 Retrospective N

Artifacts

Page size: 20

ID	Name	Artifact Type	Last Modified By
289	Author, Structure and Reuse Requirement Artifacts	Scenario	Richard Watson
434	Baseline	Scenario	Richard Watson
424	Collaborate on requirements through review and comment	Scenario	tina zhuo
408	Create and Manage a DOORS Next project	Scenario	Richard Watson
554	DOORS Next Beta 1 Scenario	Scenario	George DeCandio
1570	DOORS Next Beta 2 Scenario (Replaced by Artifact 2114)	Scenario	tina zhuo
9759	DOORS and DOORS NG Interop Scenario for 2012	Scenario	tina zhuo
426	Data Import, Export and Printing	Scenario	tina zhuo

Beta Scenario



554: DOORS Next Beta 1 Scenario [?]



Part 1. Product installation and figuration

Role: Product administrator

1. Installs and configures DOORS Next server, DOORS Next Rich client and Web client.
2. Optionally install and configure CCM from the CLM offerings

Part 2. User and project administration

Role: Project Administrator

DOORS Next Web Client

1. Project administrator manages users.
2. Project administrator creates a project using an out-of-box project template, and customize the type system. (Need a requirements engineering template for managing system requirements)
3. Project administrator assigns users to the project.

Part 3. Task management

Role: Project Manager & Requirements Engineer

DOORS Next Web Client & CCM Work Item & Planning

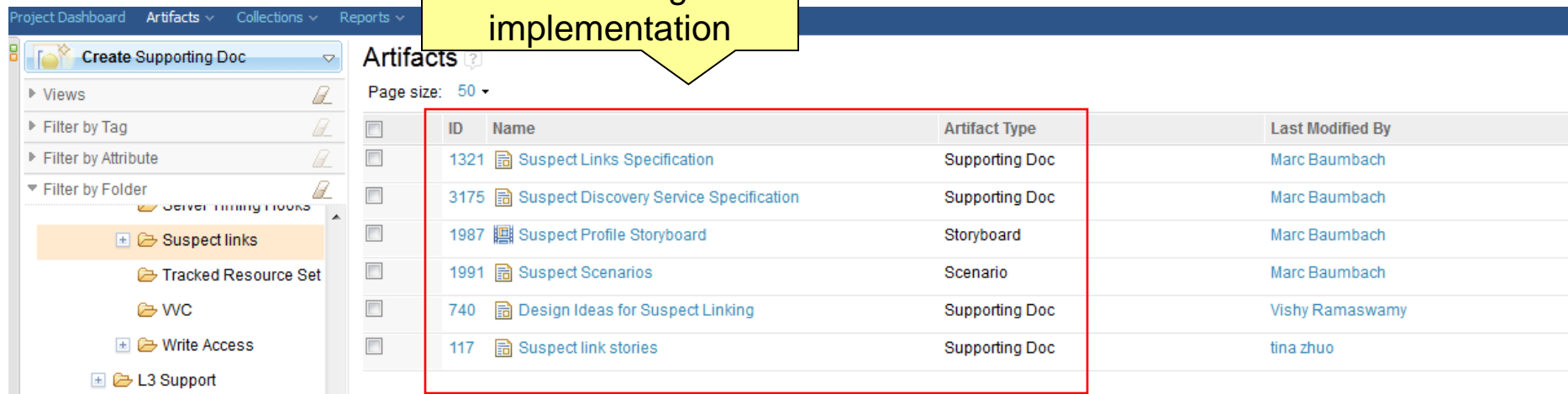
Note: To complete this part of the scenario, CCM application from CLM needs to be installed and configured.

1. Project Manager does RM planning using work items, and creates the following RM tasks and assign them to Requirements Engineers,
 - Define a folder hierarchy to organize requirements
 - Create different requirements specifications (using modules) to capture stakeholder requirements, system requirements and subsystem requirements.
 - Use rich text artifacts
 - Import a Word
 - Import CSV
 - Import a ReqIF package from DOORS9 into a module.
2. Requirements Engineers view assigned tasks on the personal dashboard
3. Requirements Engineers start working on RM tasks

Part 4. Importing, authoring, and linking requirements

Suspect Artifacts – Feature Team Supporting Artifacts

Supporting artifacts
related to design and
implementation








The screenshot shows the 'Artifacts' page in a web application. The left sidebar contains navigation options like 'Views', 'Filter by Tag', 'Filter by Attribute', and 'Filter by Folder'. The main area displays a table of artifacts. A yellow callout box points to the table, and a red box highlights the table's content.

ID	Name	Artifact Type	Last Modified By
1321	Suspect Links Specification	Supporting Doc	Marc Baumbach
3175	Suspect Discovery Service Specification	Supporting Doc	Marc Baumbach
1987	Suspect Profile Storyboard	Storyboard	Marc Baumbach
1991	Suspect Scenarios	Scenario	Marc Baumbach
740	Design Ideas for Suspect Linking	Supporting Doc	Vishy Ramaswamy
117	Suspect link stories	Supporting Doc	tina zhuo

Suspect Artifacts – UX Design

Artifacts

Page size: 20

 No grouping    

ID	Name	Tracked By	Link To
1217	UX Plan for Modules	<ul style="list-style-type: none"> 46445: UX: Design for Navigating to a Module 46448: UI Design for Representing, Managing and Customizing "Views" 46451: UI Design for the basic display of (module) content in a grid in document mode 46452: UI Design for manipulating artifacts in a module – adding artifacts, creating artifacts, removing artifacts and reordering artifacts 46454: UI Design for Virtually Scrolled Grids (Grids 	<ul style="list-style-type: none"> 3267: UI Designs for module audit history 1831: UX Review of Editing Modules 1312: UI Design: Manipulating artifacts in modules 1963: UI designs for commenting in modules 1486: UI explorations for commenting on modules 1365: Module look and specialized columns 1366: Virtual Scrolling in Modules and GRIDS 1368: FishEye-Animation.gif
956	UX Plan for Artifact Suspicion (web client)	<ul style="list-style-type: none"> 52552: UI Design: suspect links - profiles 52554: UI design: suspect links - showing and acting on suspect links in RM 	<ul style="list-style-type: none"> 2861: UI Design for showing suspect artifacts 2957: UI Design for Suspect Profile
941	UX Plans for Baselineing Modules (web client)	<ul style="list-style-type: none"> 46261: UX: Design for module baselines 	<ul style="list-style-type: none"> 940: UI Designs for baselineing modules
1038	UX Plan for finer-grained write access	<ul style="list-style-type: none"> 46838: UX: Design for finer-grained write access 	<ul style="list-style-type: none"> 1510: UI Designs for permission presentation 1367: UI Design for write access control (setting permissions) 607: Write Access Stories
1197	UX Plan for ReqIF (web client)	<ul style="list-style-type: none"> 46419: UX design needed for basic ReqIF import 	<ul style="list-style-type: none"> 1386: UI design for Importing ReqIF (web

UX Plan (in RRC) for each main feature

Tasks in RTC track the UI work

Links to UI design artifacts (storyboards in RRC)

UI Design Storyboard (Suspect Artifacts)



2957: UI Design for Suspect Profile [?]

1. Suspect Artifacts Profiles link
2. Select project
3. Profile editor
4. Create new profile
5. Select link types
6. Select projects
7. Projects updated
8. Select artifact types
9. Select attributes
10. Table updated
11. Save profile
12. Back to project area list

List of profiles is listed on the left. Click New Profile to create a new profile.

Regional Java Team Server (ralind@pwrch.ibm.com/9442/hs)

Suspect Artifact Profiles Kirk

All Project Areas >

Manage Profiles for RM Project 1 Save

Suspect Artifact Profiles + New Profile

Profile Details

2 Click to create new profile

Description:

1 All link types (available from the project we are defining the profile for) are listed. All are unchecked by default.

Link types to follow	watch	Attributes to watch
<input type="checkbox"/> Implemented by		
<input type="checkbox"/> Tracked by		
<input type="checkbox"/> Satisfies by		
<input type="checkbox"/> Satisfies		
<input type="checkbox"/> Illustrated by		
<input type="checkbox"/> Illustrates		

1 2 3

1 2 3 4 5 6 7 8 9 10 11 12

Glossary and Terminology Discussions

Views Page size: 20

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ID	Name	Primary Text	Alternative Spellings	Status	Tags	Satisfies
1858	\$\$ README for this glossary	This glossary is for a number of audiences: The RM product team, to aid us in communicating clearly, consistently, and as simply as possible Other Jazz product teams who need to understand the RM application and related concepts Customers who want to learn more about Rational		Approved		
1865	Artifacts page	The page in the RM application that shows a row and column list of artifacts, their attributes, and their relationships, including hierarchy when the list is expressed in links. This view is customizable. Artifacts can be created and edited in this view. Informally and internally, the list of		Approved		1542:Project page vs View All Artifacts page vs artifact list - term discussion
520	CLM product	A product that can be used as part of the Rational solution for Collaborative Lifecycle Management .		Approved		
368	Collaborative Lifecycle Management	The integration of products on Jazz technology to connect the work of analysts	CLM	Approved		

Filter by Tag

Term (points to the Name column)

Definition (points to the Primary Text column)

Link to term discussion (points to the Satisfies column)

Read more at jazz.net (<https://jazz.net/library/article/812>)

Key benefits experienced by the team

Increased the range and depth of stakeholder participation

Elicited more and better feedback before code was written

- In requirements
- In feature design

Less churn / rework

Converged faster on the “right” requirements

Identified gaps and clarified misunderstandings more quickly

Better productivity through lower cost, higher value communication

Developers and testers communicated better among themselves, especially across component teams.

Many WW Organisations Use RRC for Development

Some real world examples from this year's North America Innovate:

- RM-1403 Thinking Outside the Box with RRC - A Case Study from **Accenture** (Innovate 2012 Tue, Jun 4, 2013)
- RM-1893 How to Deploy Rational Requirements Composer in an IT Organization with 3000+ Developers - Case Study at **Banco do Brasil** (Innovate 2012 Wed, Jun 5, 2013)
- RM-1553 Rational Requirements Composer for Enterprise-Wide Deployment: The Good, the Bad, and the Ugly (**Fidelity**) (Innovate 2012 Wed, Jun 5, 2013)
- RM-1690 Requirements Management: An Enterprise Journey to the Promised Land (**Nationwide**) (Innovate 2012 Thu, Jun 6, 2013)
- RM-1294 Best Practices at Requisite Pro to RRC migration: A case study at **SERPRO** a Brazilian Federal Government software development company (Innovate 2012 Thu, Jun 6, 2013)



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