

IBM Software

Innovate2012

The Premier Event for Software and System Innovation

Next  NOW!



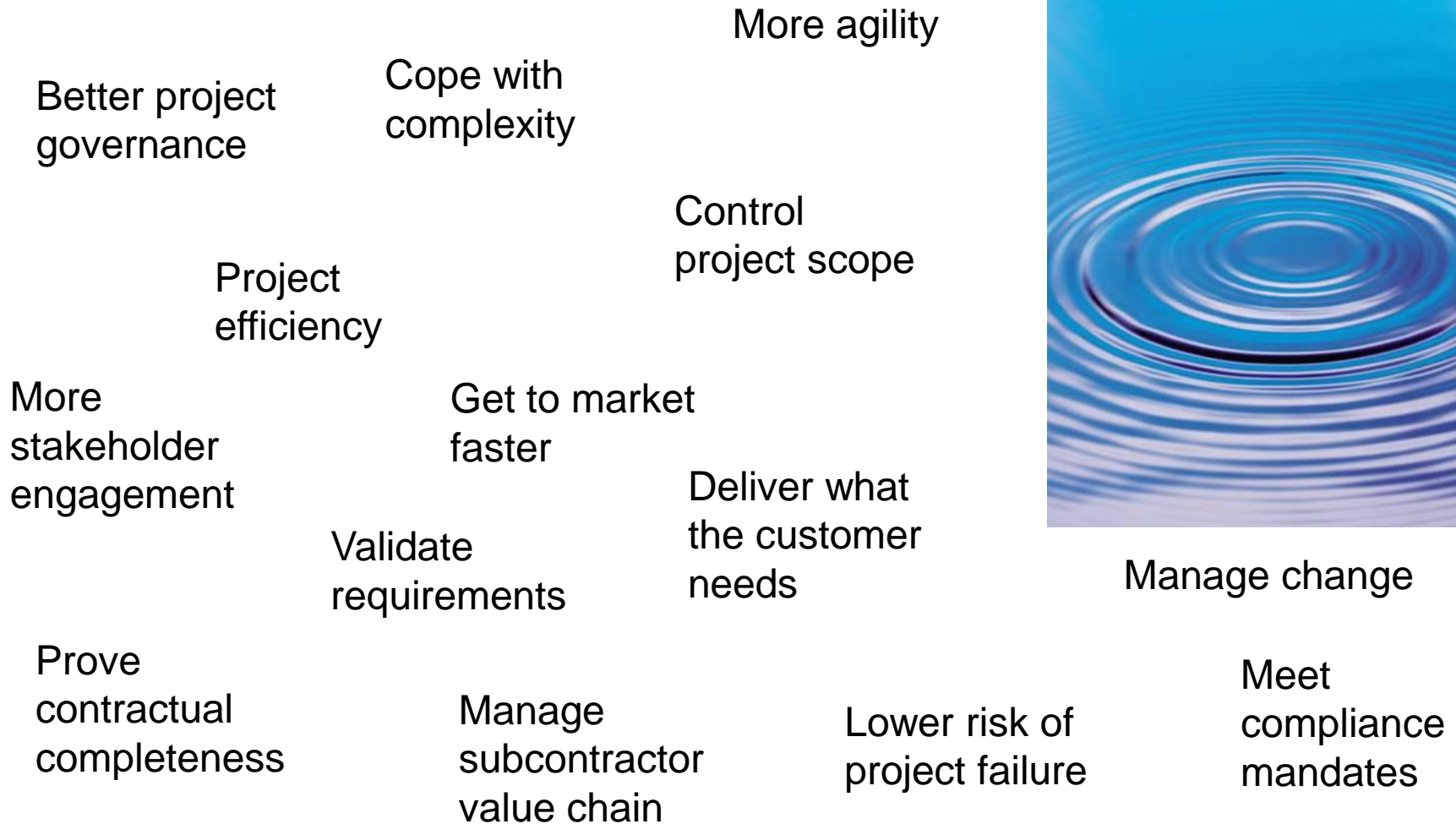
IBM Rational Requirements Composer

Improve project outcomes through better requirements definition and management

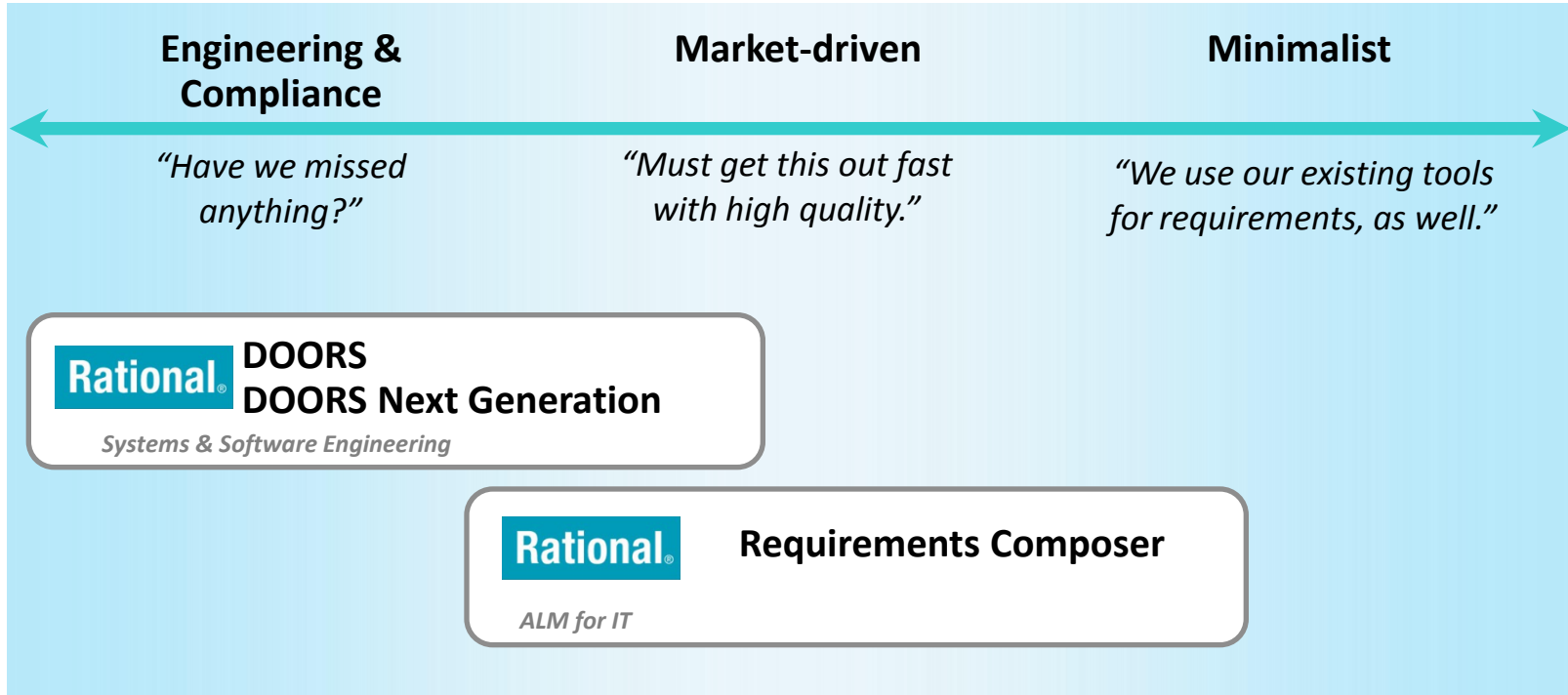
Agenda

- Overview of Requirements Definition & Management Portfolio
- Rational Requirements Composer Overview
- Product Demo

Requirements matter...



Addressing various RM needs



Jazz is IBM's initiative for improving collaboration across the systems and software lifecycle

COMMUNITY

Transparent collaboration and exchange of ideas

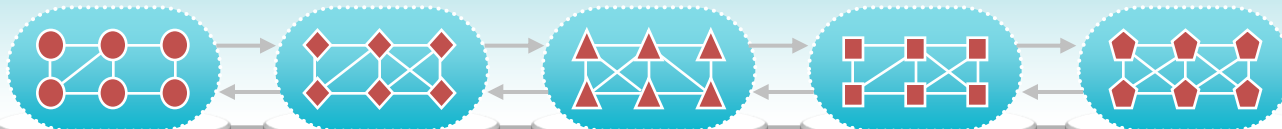


PRODUCTS

Systems and software development lifecycle tools

PLATFORM

Open Services for Lifecycle Collaboration and integration services



Application frameworks and toolkits

Learn more at: <https://jazz.net/about/>

Agenda

- Overview of Requirements Definition & Management Portfolio
- **Rational Requirements Composer Overview**
- **Product Demo**

IBM Rational Requirements Composer

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)**

Improved!

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
- Baselines, Tags, Reuse
- Reporting Metrics & Doc.

NEW!

Improved!

Lifecycle

- Central requirements, test, & development repository
- Common administration and role-based user licensing
- Access permissions**
- Warehouse reporting

NEW!

Planning

- Integrated planning
- Effort estimation
- Task management

Working in a Development Lifecycle (ALM)

Business-driven development across the lifecycle

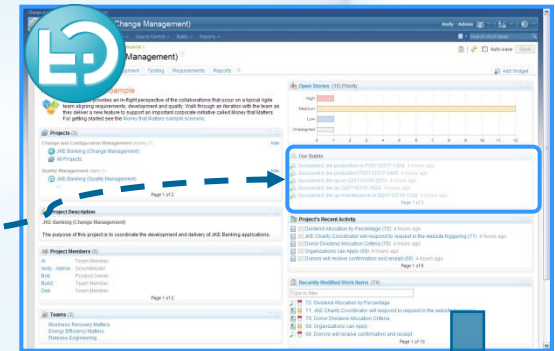
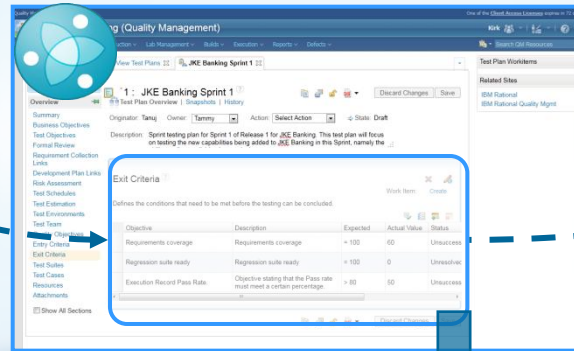
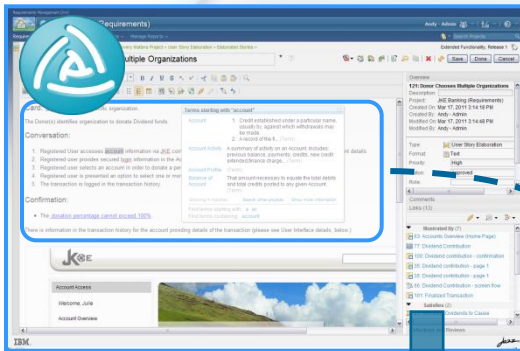


**Analysts,
Testers,
Developers**

**Rational Requirements
Composer**

**Rational Team
Concert**

**Rational Quality
Manager**




Previous | 1 | Next

	Artifact Type	Implemented By	Validated By
<input type="checkbox"/> 8	Feature	75: Dividend Allocation by Percentage	18: Dividend Allocation by Percentage
<input type="checkbox"/> 11	Feature	67: Customers can Nominate an Organization	21: Customers can nominate an organization for the program 10: Customers c: Organization
<input type="checkbox"/> 12	Feature	73: Donor Dividend Allocation Criteria	16: Donor Dividend Allocation Criteria
<input type="checkbox"/> Satisfied by			
<input type="checkbox"/> 23			: Frequency of dividend transfer

Single View for End to End Development

Rich Requirement Editor (Documents)



Used by All Project Team Members

RRC Rich Requirement Editor

Capability

- Collaborative Rich Document Editor Environment (Text/Tables/Graphics)
- Specific Attributes and Links
- Glossary Terms

Benefits

- Rich document controls and table support for requirements capture, sharing, and management
- Unify teams around a common Vocabulary

Card: [Donor](#) identifies a specific organization.

The Donor(s) identifies organization to donate Dividend funds.

Conversation:

- Registered User accesses **account** information via JKE.com
- Registered user provides secured **login** information in the Account
- Registered user selects an account in order to donate a percentage
- Registered user is presented an option to select one or more
- The transaction is logged in the transaction history.

Confirmation:

- The [donation percentage cannot exceed 100%](#).

Terms starting with "account"

Account	1. Credit established under a particular name, usually by, against which withdrawals may be made. 2. A record of the fi... (Term)
Account Activity	A summary of activity on an Account. Includes: previous balance, payments, credits, new credit extended, finance charge... (Term)
Account Profile	(Term)
Balance of Account	That amount necessary to equate the total debits and total credits posted to any given Account. (Term)

Showing 4 matches. [Search other projects](#) [Show more information](#)

Find terms starting with:

Find terms containing:

Overview

121: Donor Chooses Multiple Organizations

Description:

Project: JKE Banking (Requirements)

Created On: Mar 17, 2011 3:14:18 PM

Created By: Andy - Admin

Modified On: Mar 17, 2011 3:14:48 PM

Modified By: Andy - Admin

Type:

Format:

Priority:

Status:

Role:

Comments

Links (13)

Illustrated By (7)

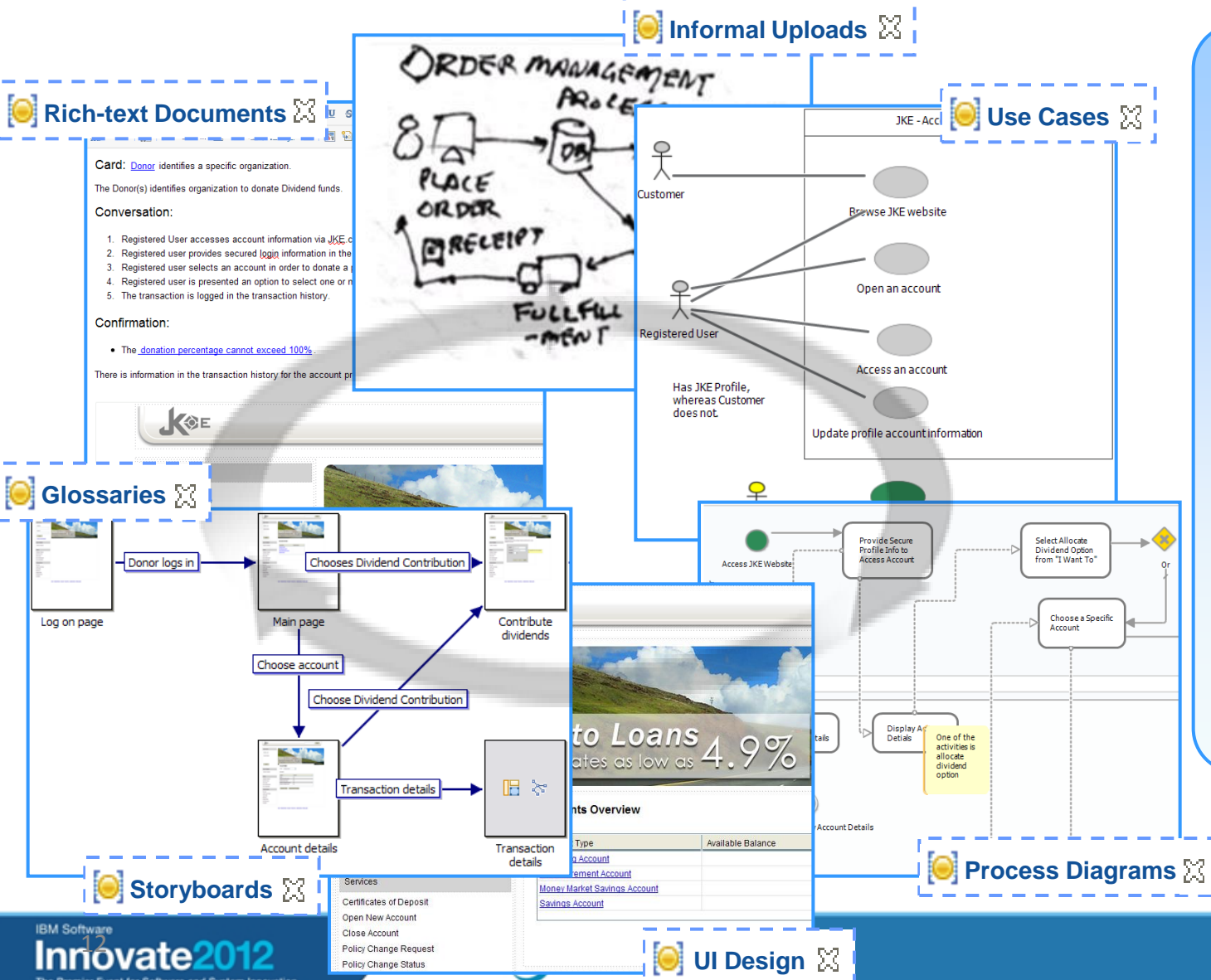
- 63: Accounts Overview (Home Page)
- 77: Dividend Contribution
- 100: Dividend contribution - confirmation
- 35: Dividend contribution - page 1
- 35: Dividend contribution - page 1
- 35: Dividend contribution - page 1
- 35: Dividend contribution - page 1
- 66: Dividend Contribution - screen flow
- 101: Finalized Transaction

Satisfies (2)

- 23: Allocating Dividends to Cause

Use Visual Scenarios to Uncover Customer Needs

Using Rational Requirements Composer



- Defining requirement flows using scenarios to uncover missing critical details
- Text requirements link to diagrams to complete the development picture
- Visualise your development results through a variety of requirements forms
- Traceable elements helps ensure complete coverage thinking

Use Case Diagrams

The screenshot displays the IBM Rational software interface for creating and managing Use Case Diagrams. The main workspace shows a diagram with actors 'Customer' and 'Registered User' connected to use cases: 'Browse JKE website', 'Open an account', 'Access an account', and 'Update profile account information'. A note specifies 'Has JKE Profile, whereas Customer does not'. A secondary diagram shows a 'Donor' actor connected to a 'Dividend Processing for a Cause' use case.

All Project Team Members

Create Link

Linking from artifact: 47: JKE Enterprise Diagram
 Link type: Parent Of

What to link to: Link to an artifact Link to web
 Select project area: JKE Banking (Requirements)

Search for artifacts by id or for words contained in the name:
 Search...

Select artifact: Displaying 1-5 of 5 matches

- 121: Donor Chooses Multiple Organizations
- 22: Allocate dividends by amount and frequency
- 27: User Story Elaboration Template
- 54: Donor Chooses an Organization
- 99: Allocate dividends by Percentage

RRC Use Cases

Capability

- Use Case Diagrams
- Element Traceability to Use Case Description

Benefits

- Visually Represent How Your Product is Used
- Consistent Visual Notation Across Requirements for Consistent Team Understanding

Links (1-15 of 26)

Previous | 1 2 | Next

Illustrates (4)

- 22: Allocate dividends by amount and frequency
- 21: Apply for Organizational Funding (Apply)
- 54: Donor Chooses an Organization (Divid
- 29: Organization must identify how much n

Constrained by (3)

- 38: Charity Coordinator and or designated
- 55: Charity Coordinator and or designated
- 51: Donation amount cannot exceed 100 p

User Interface Sketching

Development and UI Designers

RRC UI Sketching

Capability

- Design User Interfaces
- GUI Controls
- Rapid Changes Via Reusable Parts
- Interface Traceability

Benefits

- Visually Represent Software and Gain Conceptual Understanding/Agreement From Non-technical Stakeholders
- Collaborate Across Projects on Interface Proposals

Accounts Overview

Account Type	Available Balance
Checking Account	
IRA Retirement Account	
Money Market Savings Account	
Savings Account	

Links (1-15 of 16)

- Illustrates (2)
 - 54: Donor Choose
 - 121: Donor Choose
- Embeds (10)
 - 68: Account access
 - 71: Account Details
 - 56: Accounts Overview
 - 56: Accounts Overview
 - 58: Financial Services
 - 36: Footer
 - 107: Home page frame

User Interface Storyboard

Development and UI Designers

RRC Interface Storyboard

Capability

- Storyboard Layout
- Frame List
- GUI Controls
- Sketch Reuse
- Interface Traceability

Benefits

- Layout Timeline for Flow Understanding and Collaboration
- Gain conceptual understanding and agreement from non-technical stakeholders

Links (14)

- Illustrates (4)
 - 99: Allocate dividends by Percentage
 - 23: Allocating Dividends to Cause
 - 54: Donor Chooses an Organization
 - 121: Donor Chooses Multiple Organization
- Embeds (10)
 - 114: Account Details
 - 63: Accounts Overview (Home Page)
 - 63: Accounts Overview (Home Page)
 - 100: Dividend contribution - confirmation
 - 100: Dividend contribution - confirmation

Frame List Create your storyboard frame list. Press 'Enter' to create a new frame. Use Ctrl+Click on a frame to edit it.

1. Log on to JKE
2. Accounts overview

Timeline frames: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

User Interface Screen Flow

For Development
and Architects

RRC Interface Screen Flow

Capability

- Interface Screen Flow
- UI Process
- GUI Controls
- Interface Traceability

Benefits

- Interface Screen Flow Understanding and Collaboration
- Team Conceptual Understanding for UI Flow


```

graph TD
    A[Log on page] -- Donor logs in --> B[Main page]
    B -- Chooses Dividend Contrib --> C[Choose account]
    C -- Choose Dividend Contribution --> D[Account details]
    D -- Transaction details --> E[Transaction details]
    
```

Illustrates (3)

- 99: Allocate dividends by Percentage
- 54: Donor Chooses an Organization
- 121: Donor Chooses Multiple Organization

Embeds (5)

- 114: Account Details
- 63: Accounts Overview (Home Page)
- 100: Dividend contribution - confirmation
- 35: Dividend contribution - page 1
- 83: Log In Page

Embedded Artifacts (Requirements Reuse)

The screenshot displays the IBM Requirements Management (RM) interface. On the left, the 'Insert Artifact' dialog is open, showing a search for artifacts. A mouse cursor points to the artifact '77: Give Back'. In the center, a blue rounded rectangle contains an illustration of two analysts at computer monitors with the text 'Analysts, Development' below it. On the right, the 'Artefact Embed (Reuse)' panel is visible, listing capabilities and benefits. At the bottom, a 'Card' artifact is shown with the text: 'Donor(s) can choose to allocate a specific percentage of their dividends to support organizations.' The IBM logo is in the bottom left, and the 'jazz' logo is in the bottom right.

Insert Artifact

Select an artifact to insert

Select project area: JKE Banking (Requirements)

Select Link Type: No Traceability Link

Search for artifacts by id or for words contained in the name:

Search...

Select artifact from the following recently visited artifacts: Displaying 1-3 of 3 matches

- 104: Promote JKE Corporate Image
- 73: Healthy Customer Ecosystem
- 77: Give Back

**Analysts,
Development**

Artefact Embed (Reuse)

Capability

- Artefact Embed
- Embedded Artefact Views

Benefits

- Change Common Requirements in Single Location
- Parallel Development
- Reuse Requirements from Other Products that Apply to New Project

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).

Card

Donor(s) can choose to allocate a specific percentage of their dividends to support organizations.

Conversation

1. Initial capability:

Review (Collaboration)

Requirements Management (/rm)

JKE Banking (Requirements)

Requirements Dashboard Artifacts Collections Manage

JKE Banking (Requirements) >

Review project terms

Overall Review: Draft → In progress 42% completed Pause Review

Due: Mar 24, 2011

Instructions to reviewers:
Please review the additional glossary terms that we are using in this project.

Participant	Review Status
AI	Not started
Bob	In progress
Curtis	Not started
Tanuj	Not started
Ursula	Approved

Artifact	Review Status
1. Organization	Not started
2. Donor	In progress
3. Dividends for a Cause	Not started
4. Business Recovery Matters	Approved

ID	Artifact	Review Status
75	Orga	Not started
113	Dono	Approved
17	Divid	Abstained
64	Busi	Approved

Created from: Project
Artifact versions are



Artifact Comments (11)

Tanuj Now
Reviewed in 'Review project terms'
Donor

Marco 1 minute ago
Reviewed in 'Review project terms'
Business Recovery Matters

Ursula 5 minutes ago
Approved in 'Review project terms'
Agree with the definition. Just w... there a third investment option?
Business Recovery Matters

Curtis 5 minutes ago
Abstained in 'Review project terms'
Out of office on vacation
Business Recovery Matters

Curtis 5 minutes ago
Abstained in 'Review project terms'
Out of office on vacation
Dividends for a Cause

Curtis 5 minutes ago

RRC Review (Collaboration)

Capability

- Discussion Collaboration Support
- Review/Approval Workflow
- Email Notification

Benefits

- Improve Requirement Quality Through Team Discussion
- Controlled Formal Review Provides Signoff Process
- Email Broadcast Discussion Statements To One Or Many Team Members

Curtis 5 minutes ago
Abstained in 'Review project terms'
Out of office on vacation
Business Recovery Matters

Curtis 5 minutes ago
Abstained in 'Review project terms'
Out of office on vacation
Dividends for a Cause

Curtis 5 minutes ago

Collections

Requirements Management (/rm)

JKE Banking (Requirements) Andy - Admin

Requirements Dashboard Artifacts Collections Manage Reports Search Projects

Create Collection

Saved Filters

- Business Rules
- Elaborated User Stories (Lifecycle Cov
- Enterprise Terms
- Features with Unattempted Test Cases
- High Priority Features (Gap analysis)
- Release 1 Features (Lifecycle Coverage)
- Satisfying Stakeholder Needs (Traceab

View All Collections ?

Page size: 20 No grouping

<input type="checkbox"/>	ID	Name	Artifact Type	Last Modified By	Last Modified Date
<input type="checkbox"/>	19	Core Functionality	Iteration Collection	Andy - Admin	Mar 17, 2011 3:14:25 PM
<input checked="" type="checkbox"/>	53	Release 1 Planning	Release Collection	Andy - Admin	Mar 17, 2011 3:14:34 PM
<input type="checkbox"/>	70	Project Glossary	Glossary Collection	Andy - Admin	Mar 17, 2011 3:14:37 PM
<input type="checkbox"/>	81	Release 1 Capabilities	Release Collection	Andy - Admin	Mar 17, 2011 3:14:39 PM
<input type="checkbox"/>	84	Extended Functionality	Iteration Collection	Andy - Admin	Mar 17, 2011 3:14:40 PM
<input type="checkbox"/>	105	Enterprise Glossary	Glossary Collection	Andy - Admin	Mar 17, 2011 3:14:44 PM

Filter by Tag Filter by Attribute

Showing 6 Artifacts

Product & Project Managers

RRC Collections

Capability

- Group Requirement Artefacts Together as Collections

Benefits

- Organise Release Requirements
- Seed Development And Test Plans; Automatically Create Project Trace Links
- Use In Dev And Test Plans



Rational Requirements Composer v4.0

Suspect Links

The screenshot displays the IBM Requirements Manager interface with several key components highlighted:

- Suspicion Notification:** A message states "1 linked artifact has changed significantly:" and lists "Product Manager (1)" and "Developer (1)", both linked to the artifact "5: Test Increasing Agility". Action buttons include "Clear all", "Clear for profile", and "Clear".
- Overview Panel:** Shows details for requirement "349: Increase agility to produce applications and services", including project name "JKE Banking", creation/modification dates, and creator/modifier "p".
- Links Panel:** Shows a list of links, with "Validated By (1)" listing "5: Test Increasing Agility".
- Artifacts Table:** A table listing artifacts with columns for ID, Name, and Artifact Type.

ID	Name	Artifact Type
349	Increase agility to produce applications and services	Business Goals
356	Accelerate economic recovery	Business Goals
- Suspect Links Summary:** A dashed box highlights the "Suspect Links" section, which includes:
 - Capability:**
 - Use suspect profiles to track changes to linked requirements
 - Use suspect notifications in many different areas
 - Clear suspicion for individual/all
 - Benefits:**
 - discover changes across trace links among requirements and other lifecycle elements
 - Easily recognise impact to your requirements

Advantages over RequisitePro

- More flexibility in creating, analyzing and manipulating requirements
- New and improved reporting, planning, and task management
- Visual notations for expressing requirements information
- Richer textual requirements, including rich text, tables and embedded images
- Custom link types for expressing multiple kinds of relationships
- More ways of grouping requirements: tags, folders, artifact types & collections
- More seamless information flow among requirements, development, change management and quality management
- Completely web-based product and sharing a server and user domain with Rational Team Concert software and Rational Quality Manager
- Wider server and client platform support



Publish/Reporting

RRC Document Publish

Capability

- PDF or Microsoft Word Output
- Use OOTB Templates
- Take Data Offline

Benefits

- Useful for meetings and external stakeholders
- Partner/Collaborator Document Delivery



RRC Reporting (data warehouse)

Capability

- Data warehouse and web-based reports
- Rational Insight
- Use OOTB Reports (Coverage, Open Defect, Distribution, Execution Results, Traceability, Test Coverage/Trends)

Benefits

- Reporting for Development Intelligence
- Discover Requirements Impact and Change



Project Snapshot



Requirements Management (/rm)

JKE Banking (Requirements)

Project Snapshot: 03/19/2011 1:14:44 PM
Baseline snapshot

Today (1) Yesterday (0) Past Week (0) Earlier (0)

Create Actor View All Artifacts ?

Page size: 20

ID	Name	Artifact Type
14	Dividend processing payment is a one time transaction.	Feature
25	Dividend allocation by percentage	Feature
29	Organization must identify how much money is desired	Feature

RRC Project Snapshot

Capability

- Snapshot for Project Requirements (Read-Only)

Benefits

- Capture Project/Artifact State At Important Points in Time (Baselines)
- Analyze and Discover Changes to Your Artifacts

71: JKE Charity Coordinator will respond to request in the website triggering

17: JKE Charity Coordinator responds to online request

70: Donor Dividend

16: Donor dividend

Requirements Parsing (from Word Documents)

Requirements Parsing

- Capability**
 - Automatically identify imported requirements using keywords and document hierarchy
- Benefits**
 - Quickly identify requirement with syntax standards using structure and key words

Import

Select what to import

- Import requirements from within a text document**
Identifies and extracts requirements within the document (Word, OpenDocument, ODF document).
- Import requirements from a CSV file**
Extracts requirements from a CSV file.
- Import requirements from a ReqIF file**
Import requirements defined in a Requirements Interchange Format file.
- Import requirements from a ReqIF file in this project**
Choose this option if you previously uploaded a ReqIF file and want to continue importing.
- Import a text document and convert to a rich text artifact**

Specify how to identify requirements

Specify how to identify requirements

There are several criterion you can use to identify requirements within the document. For each criterion you want to use, specify the artifact type to create.

Headings

For each heading, create artifact type:

Term (Glossary Terms)

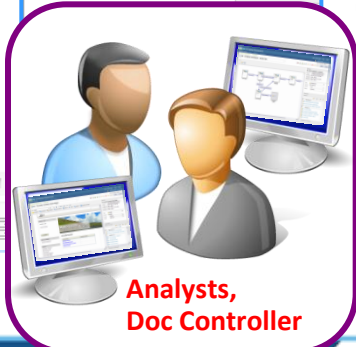
All other text

For all other text (not matching criterion above), create artifact type:

Vision (Vision document)

Click next to begin importing the requirements.

< Back Next > Finish Cancel



Write Access Support Permissions



Application Administration - Requirements Management

Users Project Areas Templates Reports

This project area is part of a Lifecycle Project: Money that Matters Savings

Active Project Areas >

JKE Banking (Requirements Management)

Overview
Timelines
Roles
Permissions ?
Iteration Types
Access Control
Process Description

Permissions

Configuration

- Project Configuration
- Team Configuration**
- Iteration Types
- Timelines

Filter by Folder

- My Project
 - Test
 - Images**

- New Folder
- Create...
- Upload...
- Assign Team Ownership...
- Delete
- Move
- Rename

Roles:

- Everyone (default)
- Administrator
- Author**
- Commenter
- Project Baseline Administrator

Permitted Actions:

- Dashboards
- Process
- Process Authoring
- Reports
- Requirements Management Resources
 - Assign Team Ownership
 - Save Artifact**
 - Create an artifact
 - Delete an artifact
 - Modify an artifact

Write Access Support

Capability

- Set Write access permissions on a project role for the members of a project/team area

Benefits

- Control editing and modification to your project requirements, scenarios, and use cases

Requirements Interchange Format (ReqIF)



ReqIF Manager
 Create and manage ReqIF definitions, which are used to create and export ReqIF files.
 No ReqIF definitions defined yet. Click on the "New Definition..." link below to create one.

ReqIF Definitions + New Definition...

Name	
Mobile Banking	

Name: * Mobile Banking
 Description: Project Milestone for transfer

ReqIF Export

95%

Show Report Download Close

Include Folders

Artifacts + Add Artifact X Remove Artifact

ReqIF

Capability

- Export requirements from project using XML standard format ReqIF
- Take project data to new database

Benefits

- Establish new projects based on existing requirements
- Easily collaborate with partners and collaborator using export formats

Specify Import Options

Select Import Option

Specify the folder location to place newly created artifacts without a defined folder hierarchy.

Selected Folder TestFolder

Place newly created artifacts with no module hierarchy in a user defined module.

Selected Module Test Module

Next Steps

Where to go now...

The following links will lead you to your next step...

...look for more product information and tool demonstrations

- Requirements Composer on jazz.net

- <https://jazz.net/projects/rational-requirements-composer/>

- Requirements Composer Forum

- <https://jazz.net/forums/viewforum.php?f=8>

- Rational Requirements Composer Download

- <https://jazz.net/downloads/rational-requirements-composer/>



IBM Rational provides an integrated software platform dedicated to helping companies develop and deliver smarter products

Summary

How RRC helps you improve your requirements process?

- Authoring: Many ways to author the requirements
- Analyze/Manage Change: Empowering an Analyst to use project links to increase release quality.
- Process Control: Take control of your requirements information during your process and maintain configuration over team environments
- Data Sharing: Remove communication barriers from project experts working with documents or working in separate





www.ibm.com/software/rational

© Copyright IBM Corporation 2012. All rights reserved. The information contained in these materials is provided for informational purposes only, and is provided AS IS without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, these materials. Nothing contained in these materials is intended to, nor shall have the effect of, creating any warranties or representations from IBM or its suppliers or licensors, or altering the terms and conditions of the applicable license agreement governing the use of IBM software. References in these materials to IBM products, programs, or services do not imply that they will be available in all countries in which IBM operates. Product release dates and/or capabilities referenced in these materials may change at any time at IBM's sole discretion based on market opportunities or other factors, and are not intended to be a commitment to future product or feature availability in any way. IBM, the IBM logo, Rational, the Rational logo, Telelogic, the Telelogic logo, and other IBM products and services are trademarks of the International Business Machines Corporation, in the United States, other countries or both. Other company, product, or service names may be trademarks or service marks of others.