



Value of the IBM Rational Solution for Collaborative Lifecycle Management (CLM)

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IBM Software

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Agenda

- 
- 1 Application Lifecycle Management (ALM)
 - 2 IBM Rational Collaboration Lifecycle Management
 - 3 Delivering the 5 ALM imperatives
 - 4 Summary

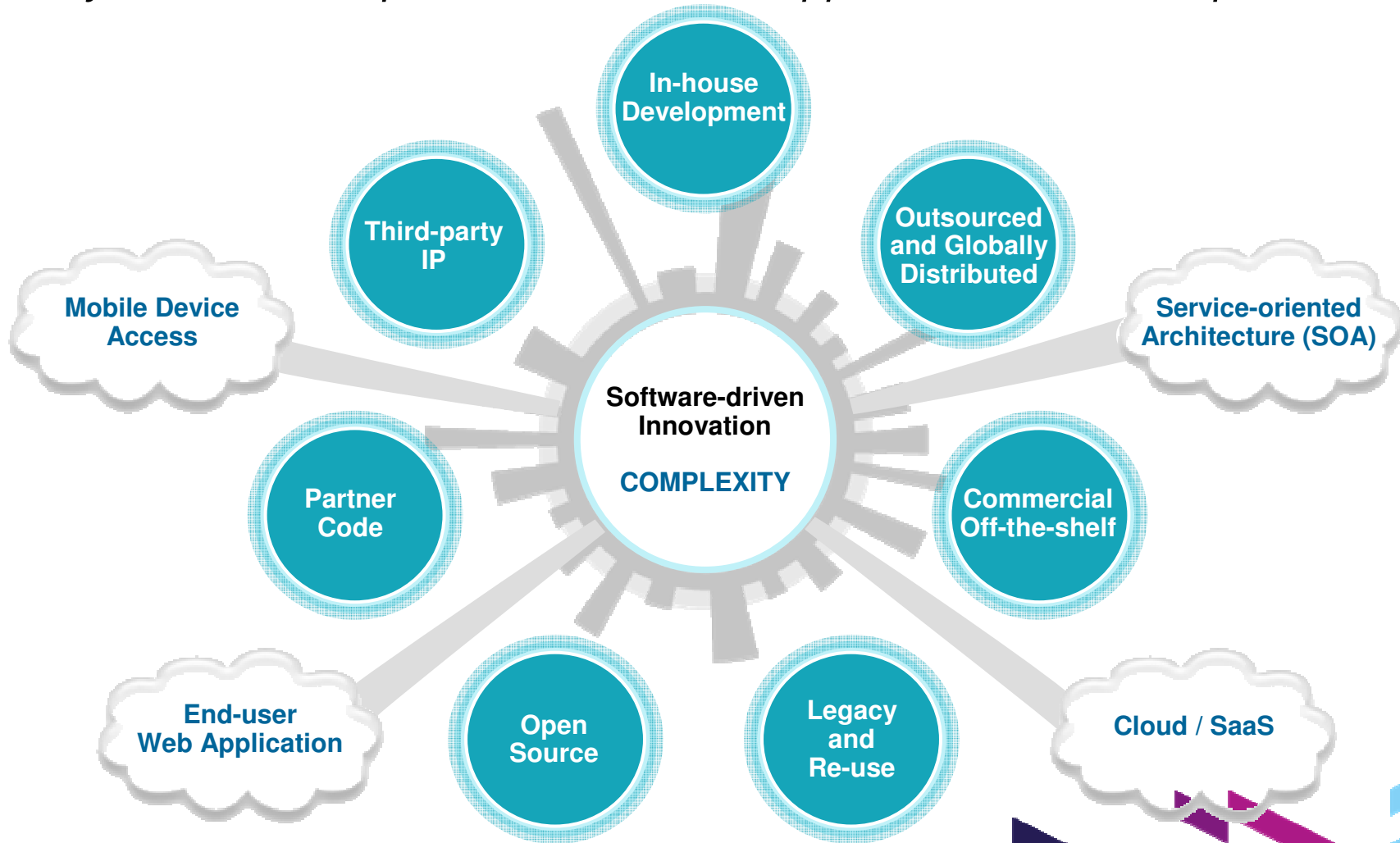
Software drives today's innovation for a smarter planet

Transforming the way we live, work, and play

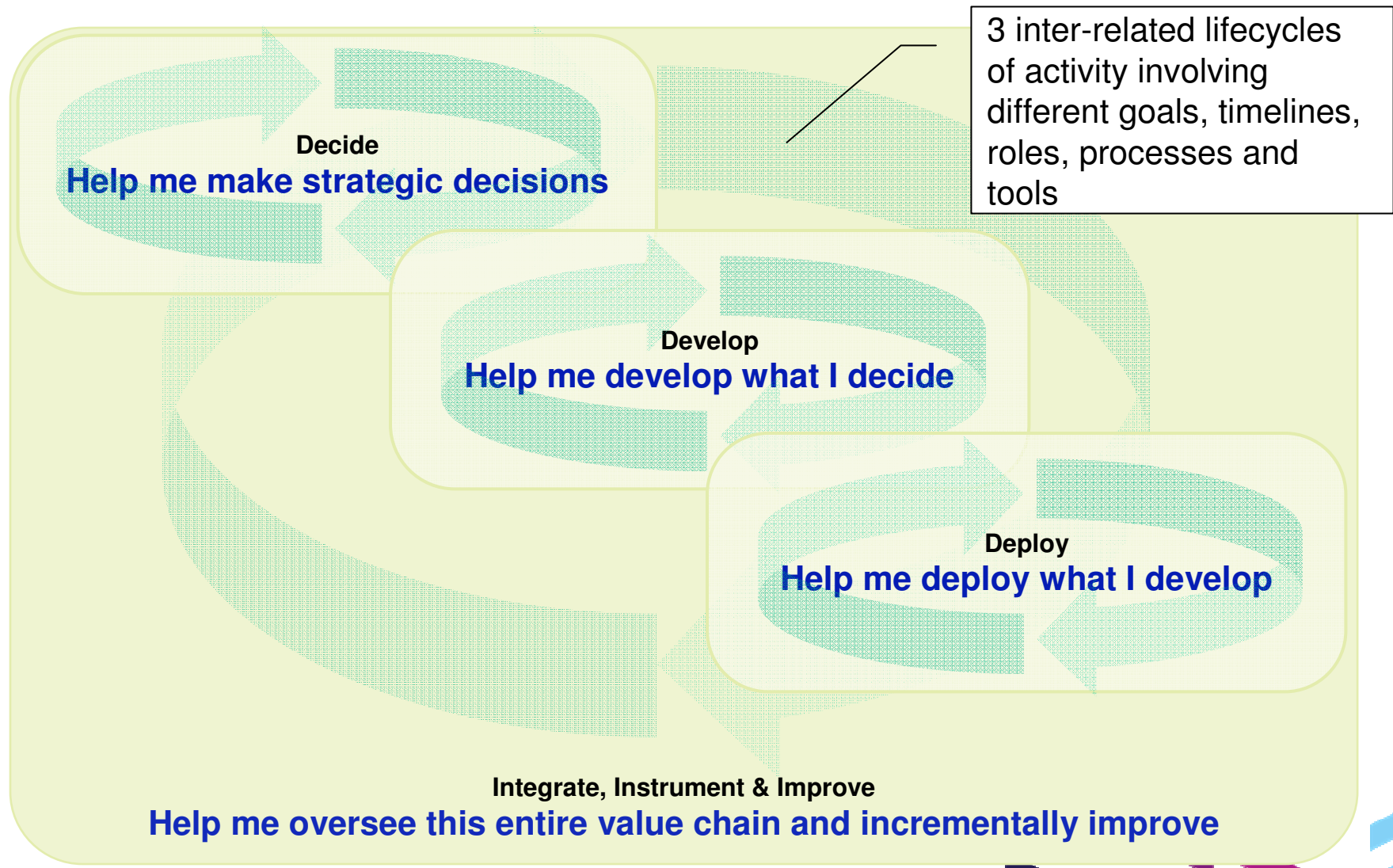


The defining challenge: Managing “systems of systems”

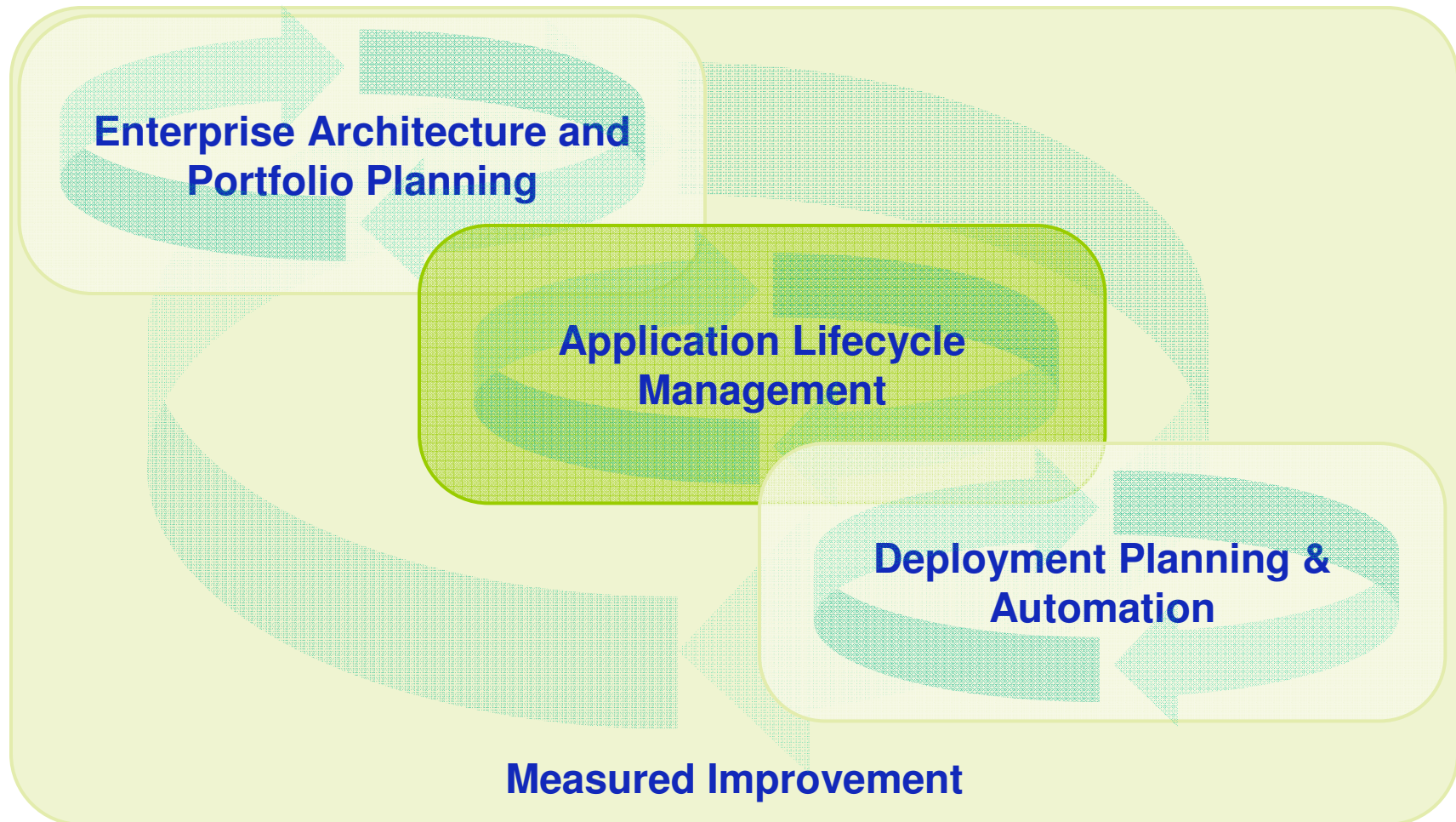
From back-end software to customer facing portals, systems of systems drive your relationships with customers, suppliers and business partners



Key Software development lifecycles

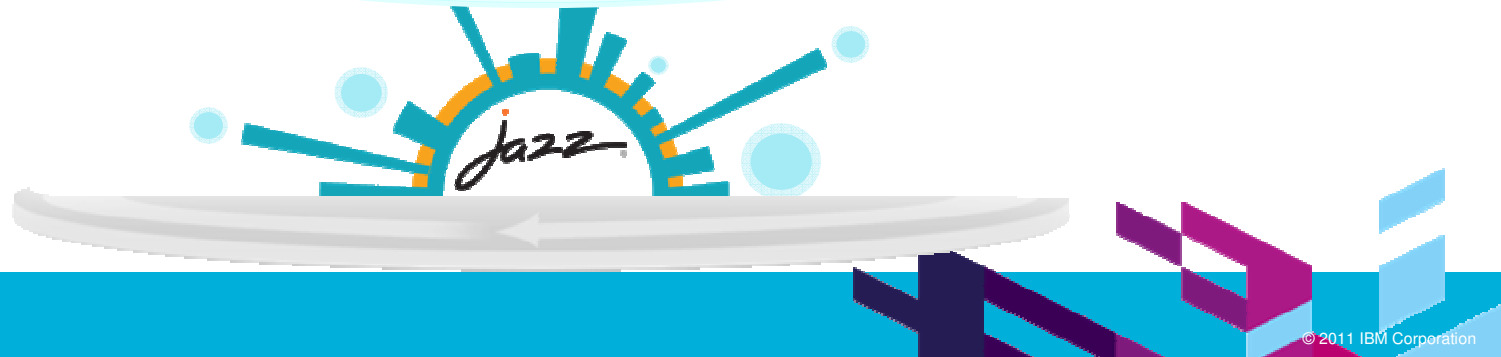
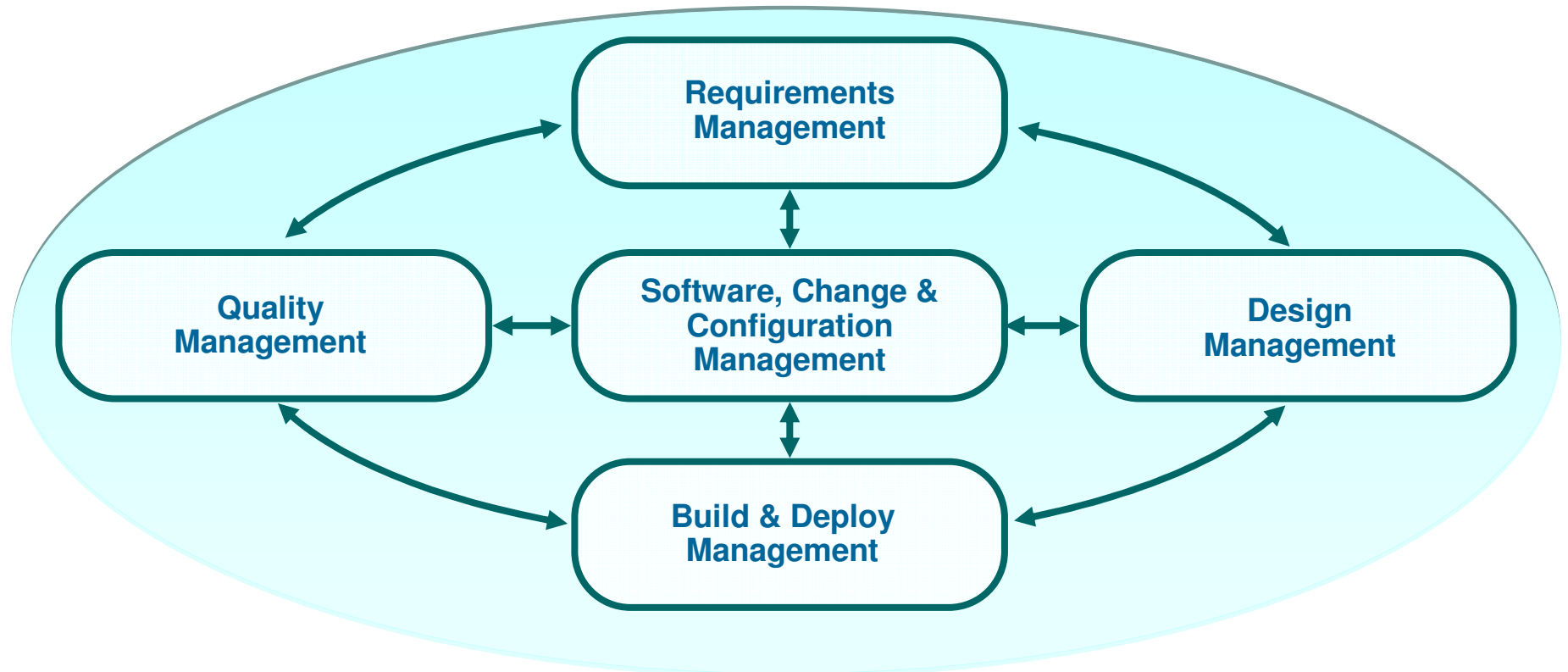


Key Software development lifecycles




Rational Application Lifecycle Management (ALM)

Modular, open and extensible



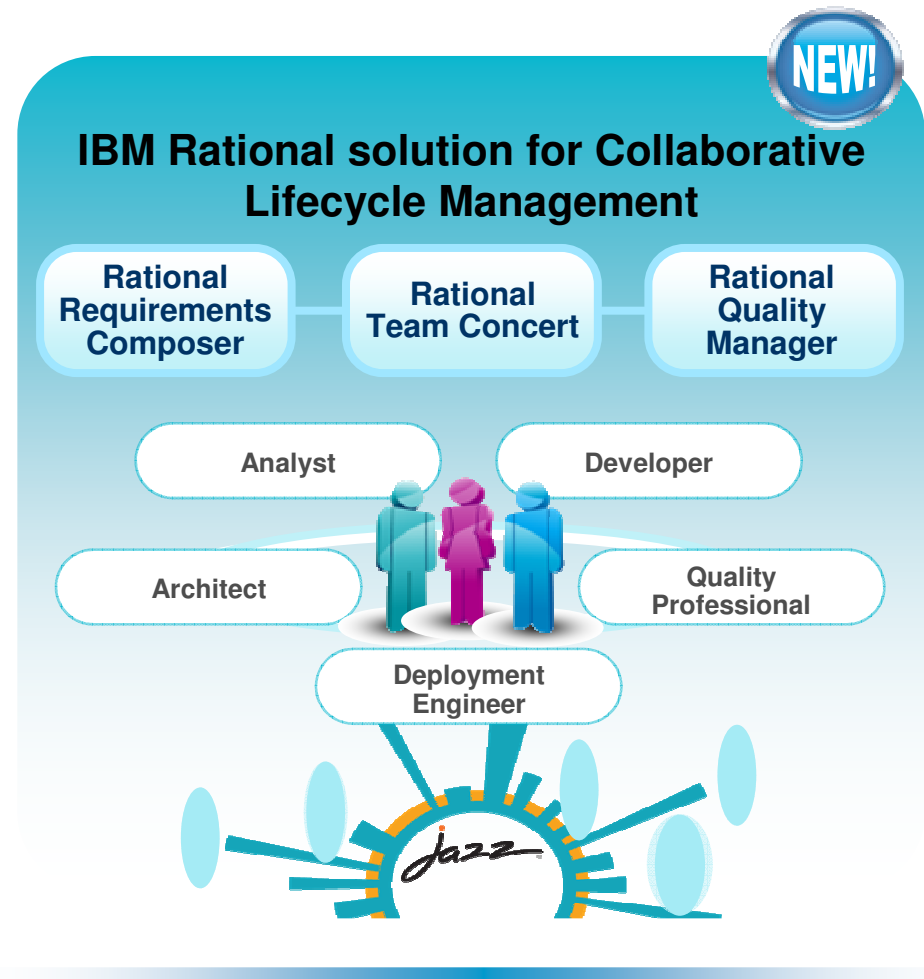
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IBM Rational solution for Collaborative Lifecycle Management

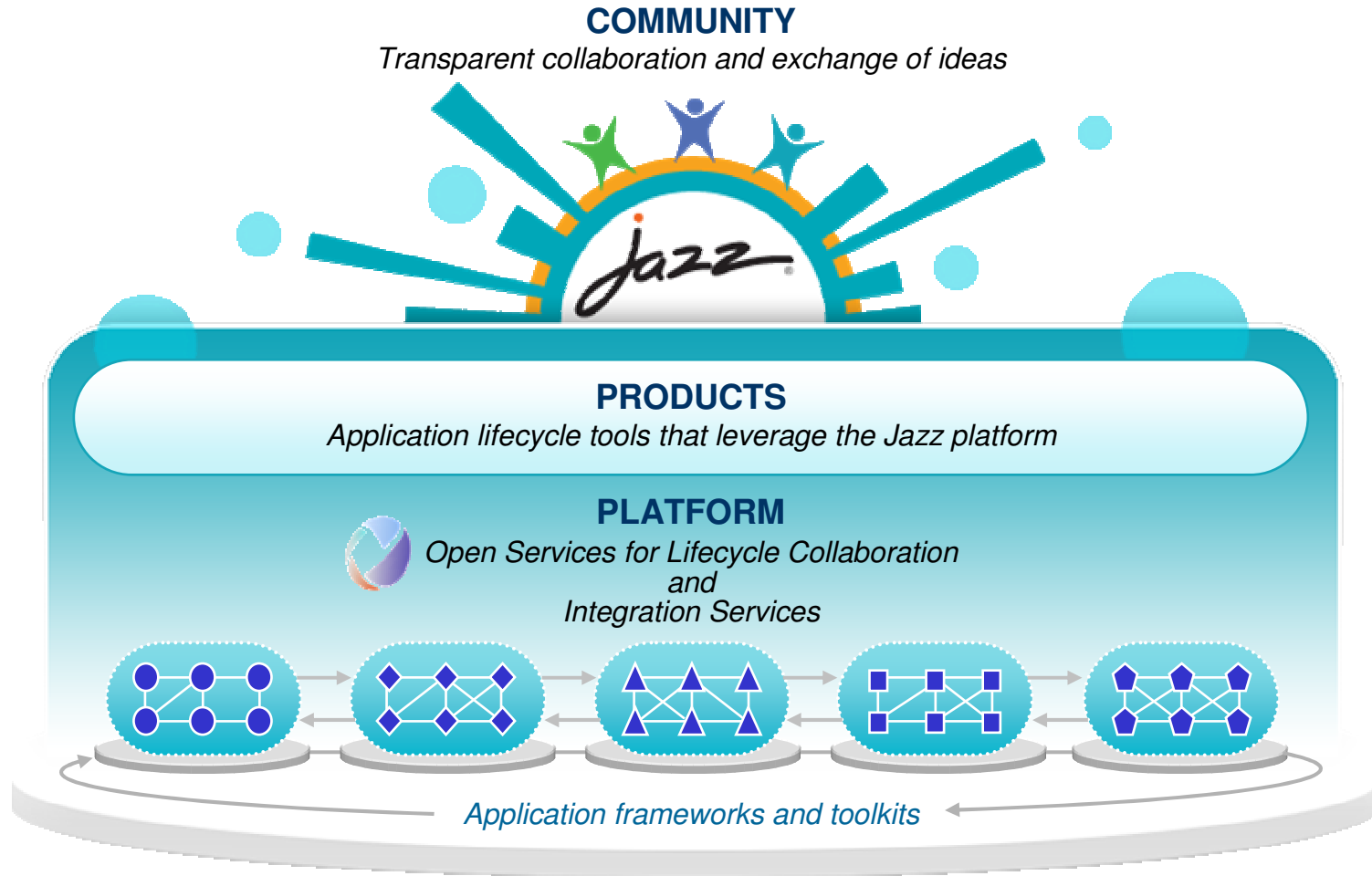
Improve productivity with an integrated ALM solution

- **Optimize your team through support of the 5 ALM Imperatives**
 - Real-time planning
 - Lifecycle traceability
 - In-context collaboration
 - Development Intelligence
 - Continuous Improvement
- **Get up and running quickly**
- **Extend as your needs evolve**
- **Support heterogeneous development across multiple platforms and technologies**



Learn more at: <https://jazz.net/projects/clm/>

Jazz provides open collaboration across the software and systems lifecycle



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

Open Services for Lifecycle Collaboration (OSLC)

An initiative aimed at simplifying data linking and tool integration across the lifecycle



Open Services for Lifecycle Collaboration


Barriers to sharing resources and assets among tools

- ▶ Multiple vendors, open source projects, and in-house tools
- ▶ Private vocabularies, formats and stores
- ▶ Entanglement of tools with their data

- ▶ Community Driven – specified at **open-services.net**
- ▶ Specifications for ALM, PLM and DevOps Interoperability
- ▶ Inspired by Internet architecture
 - Loosely coupled integration with “just enough” standardization
 - Common resource formats and services
- ▶ A different approach to industry-wide proliferation

Learn more at: <http://open-services.net/>

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What is required to deliver end-to-end visibility across teams, tools and projects?



The Five Imperatives of Application Lifecycle Management

Improve organizational productivity

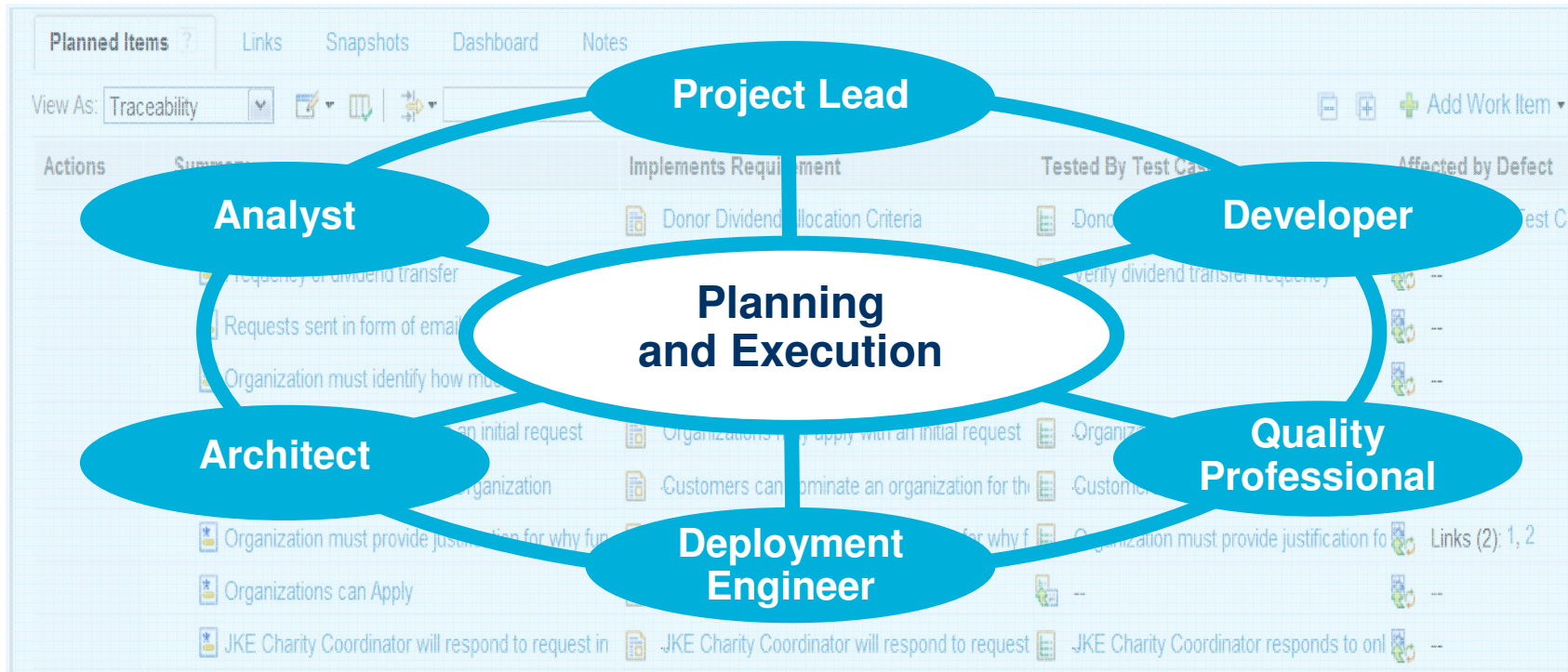
1. Real-time planning
2. Lifecycle traceability
3. In-Context collaboration
4. Development intelligence
5. Continuous improvement



What is Real-time Planning?

Real-time Planning accelerates time to delivery by:

- ▶ Providing a **single plan** that spans requirements, development, and test, ensuring a team understanding of the overall scope of a project
- ▶ **Integrating planning with execution** ensuring the entire team understands the true project status
- ▶ Allowing **everyone to participate** in keeping the plan current and accurate
- ▶ Helping teams **respond to the unexpected** in a timely manner ensuring the team stays on schedule



One plan - Multiple views facilitate detailed analysis

1 BRM Sprint 2 (1.0) Plan

26 items: 23 open, 3 closed | Ends in: 3 days

Plan Details

Planned Items Links Snapshots Dashboard Notes

View As: Roadmap (3 items filtered)

Actions	Summary	Effective Estimate	Owned By
▶	Frequency of dividend transfer	--	Unassig
▶	Requests sent in form of email	--	Unassig
▼	Organization must identify how much money is desired	--	Marco
▶	Implement - Organization must identify how much money	1.5 days	Marco
▼	Organizations may apply with an initial request	--	Marco
▶	Implement - Organizations may apply with an initial requ	4 hours	Marco
▼	Customers can Nominate an Organization	--	Deb
▶	Implement - Customers can Nominate an Organization	1 day	Deb
▶	Organization must provide justification for why funds are	--	Masse

2 BRM Sprint 2 (1.0) Plan

30 items: 25 open, 5 closed | Ends in: 6 days

Plan Details

Planned Items Links Snapshots Dashboard Notes

View As: Taskboard

Story	Open	In Pro
Donor Dividend Allocation Criteria	Implement - Donor Dividend Allocation Criteria	
Frequency of dividend transfer		Implement - Frequency of dividend transfer

3 BRM Sprint 2 (1.0) Plan

30 items: 25 open, 5 closed | Ends in: 6 days

Plan Details

Planned Items Links Snapshots Dashboard Notes

View As: Planned Time

▶	Bob	Closed Items: 0 Open Items: 1	Load: 0/8 +8 h
▶	CP	Closed Items: 0 Open Items: 1	Load: 0/8 +8 h
▶	Deb	Closed Items: 3 Open Items: 5	Load: 168/8 -160 h
▶	Marco	Closed Items: 2 Open Items: 14	Load: 92/8 -84 h
▶	Tanuj	Closed Items: 0 Open Items: 0	Load: 0/8 +8 h

Align Plans to improve your time to delivery

- ✓ No wasted effort – development is qualitative and aligned to the agreed upon requirements at the right time
- ✓ Quality Assured – test teams know exactly what requirements and functionality have and haven't been tested
- ✓ Whole team buy-in improves team trust, efficiency and focus

Developers understand the business needs and test effort

The screenshot shows a software development tool interface for 'JKE Banking'. It features a 'Release 1.0 Backlog' section with a 'Plan Details' view. A pop-up window titled '1: JKE Banking Release 1' provides details for a specific release plan, including its name, state (Approved), description, and originator (tammy).



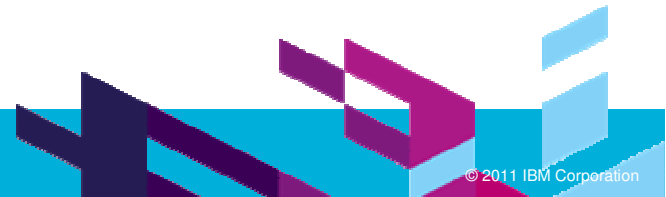
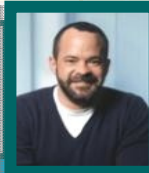
This screenshot displays the 'Test Plan Overview' for 'JKE Banking Release 1'. It shows the test plan's description, originator (Tammy), owner (Tammy), and state (Approved). A 'Development Plan Link' section is visible, showing a link to the 'Release 1.0 Backlog [Release 1.0]' with a progress bar indicating 100% completion.



Testers understand Sprint Plans and business expectations

The screenshot shows a 'Release 1 Planning' view with a list of artifacts. The list includes items like 'Allocate dividends by amount and frequency' and 'Dividend allocation by percentage'. A 'Release 1.0 Backlog [Release 1.0]' is highlighted, showing its progress bar at 100%.

Requirements owners clarify the business needs in a collection



Rankings improve clarity

Team clearly understand the goals

BRM Sprint 2 (1.0) Plan

28 items: 25 open, 3 closed | Ends in: 3 days

Plan Details

Planned Items ? Links Snapshots Dashboard Notes

View As: Ranked List

Actions	Summary	Story Points	Effective Estimate	Priority	Rank
	Search is not finding this term	--	1 hour	High	1
	Improve link colors	--	1 hour	High	2
	Login not working anymore	--	5 hours	High	3
	Donor Dividend Allocation Criteria	5 pts	--	High	4
	Implement - Donor Dividend Allocation Criteria	--	2.5 days	High	5
	Logout is not working anymore	--	3 hours	Medium	6
	Performance on first startup is bad	--	2 hours	Medium	7
	Some links are not working	--	5 hours	Medium	8
	Implement - Frequency of dividend transfer	--	1 week	Medium	9
	SWT Exception	--	1.5 days	Medium	10
	Implement - Requests sent in form of email	--	4 days	Medium	11
	Implement - Organization must identify how much money is desired	--	1.5 days	Medium	12
	Implement - Organization must provide justification for why funds are nee...	--	4 hours	Medium	13
	Implement - Organizations can Apply	--	1 day	Medium	14

Annotations:

- ✓ Rankings are better!
- ✓ Priorities are good.

Plan at the right level of detail

- Everyone participates in planning

✓ Stories decomposed into the right set of tasks

✓ Plans include all work!
 ✓ All team members,
 ✓ All types of work

The screenshot shows a JIRA sprint plan for 'BRM Sprint 2 (1.0) Plan'. The view is set to 'Work Breakdown' and shows 5 filtered items. The plan is organized by team members: Bob, Deb, Marco, Tanuj, and Unassigned. Each team member has a progress bar and estimated completion percentage. The main table lists tasks with their effective estimates, progress, status, and work item types. A green box highlights the 'Work Item Type' column, which includes Defect, Story, and Task. Another green box highlights a sub-task under 'Donor Dividend Allocation Criteria'.

Actions	Summary	Effective Estimate	Progress	Status	Work Item Type	Change Sets	Attachments
	Improve link colors	1 hour	0/1 h	New	Defect	--	--
	Donor Dividend Allocation Criteria	--	0/5 pts 0/20 h	In Progress	Story	--	Links (2...)
	Implement - Donor Dividend A...	2.5 days	0/20 h	New	Task	--	--
	Update router module with ne...	--	0/0 h	In Progress	Task	△ Changes in P...	--
	create new service for validati...	--	0/0 h	In Progress	Task	△ Changes in W...	--
	Performance on first startup is bad	2 hours	0/2 h	New	Defect	--	--
	Some links are not working	5 hours	0/5 h	New	Defect	--	--
	Frequency of dividend transfer	--	0/13 pts 0/40 h	New	Story	--	--
	Requests sent in form of email	--	0/8 pts 0/32 h	New	Story	--	--

Plans tied to execution

- Deliverables and Work Products show results

BRM Sprint 2 (1.0) Plan

28 items: 25 open, 3 closed | Ends in: 3 days

Plan Details

Planned Items ? Links

View As: Work Breakdown

Bob
Closed Items: 1 | Open Items: 3

Deb
Closed Items: 0 | Open Items: 9

Marco
Closed Items: 2 | Open Items: 11

Tanuj
Closed Items: 0 | Open Items: 0

Unassigned
Closed Items: 0 | Open Items: 2

✓ Change Sets & Attachments are better !

✓ Progress & Status are good indicators of execution.

Actions	Summary	Effective Estimate	Progress	Status	Work Item Type	Change Sets	Attachments
	Improve link colors	1 hour	0/1 h	New	Defect	--	--
	Donor Dividend Allocation Criteria	--	0/5 pts 0/20 h	In Progress	Story	--	Links (2-...
	Implement - Donor Dividend A...	2.5 days	0/20 h	New	Task	--	--
	Update router module with ne...	--	0/0 h	In Progress	Task	△ Changes in P...	--
	create new service for validati...	--	0/0 h	In Progress	Task	△ Changes in W...	--
	Performance on first startup is bad	2 hours	0/2 h	New	Defect	--	--
	Some links are not working	5 hours	0/5 h	New	Defect	--	--
	Frequency of dividend transfer	--	0/13 pts 0/40 h	New	Story	--	--
	Requests sent in form of email	--	0/8 pts 0/32 h	New	Story	--	--

Test your real-time planning capabilities

Can your team...

- Plan across the entire team?
- Plan for waterfall, iterative and agile environments?
- Integrate planning with execution?
- Instantly see the impact of a change in project scope or resources?

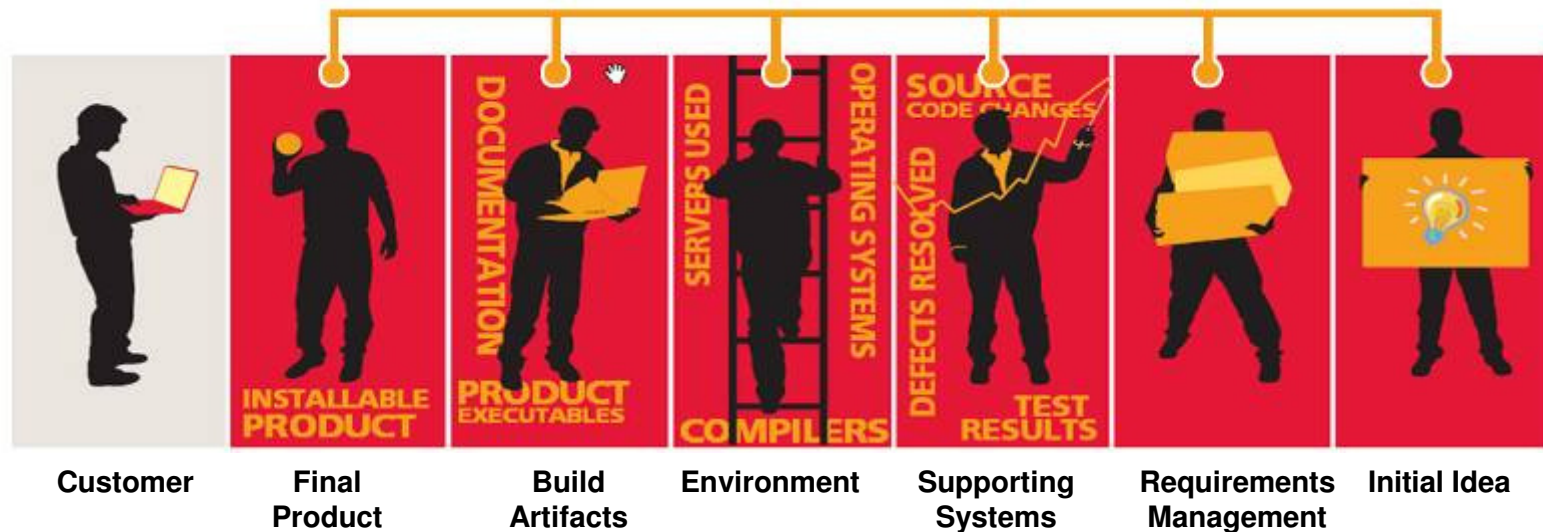


What is Lifecycle Traceability?

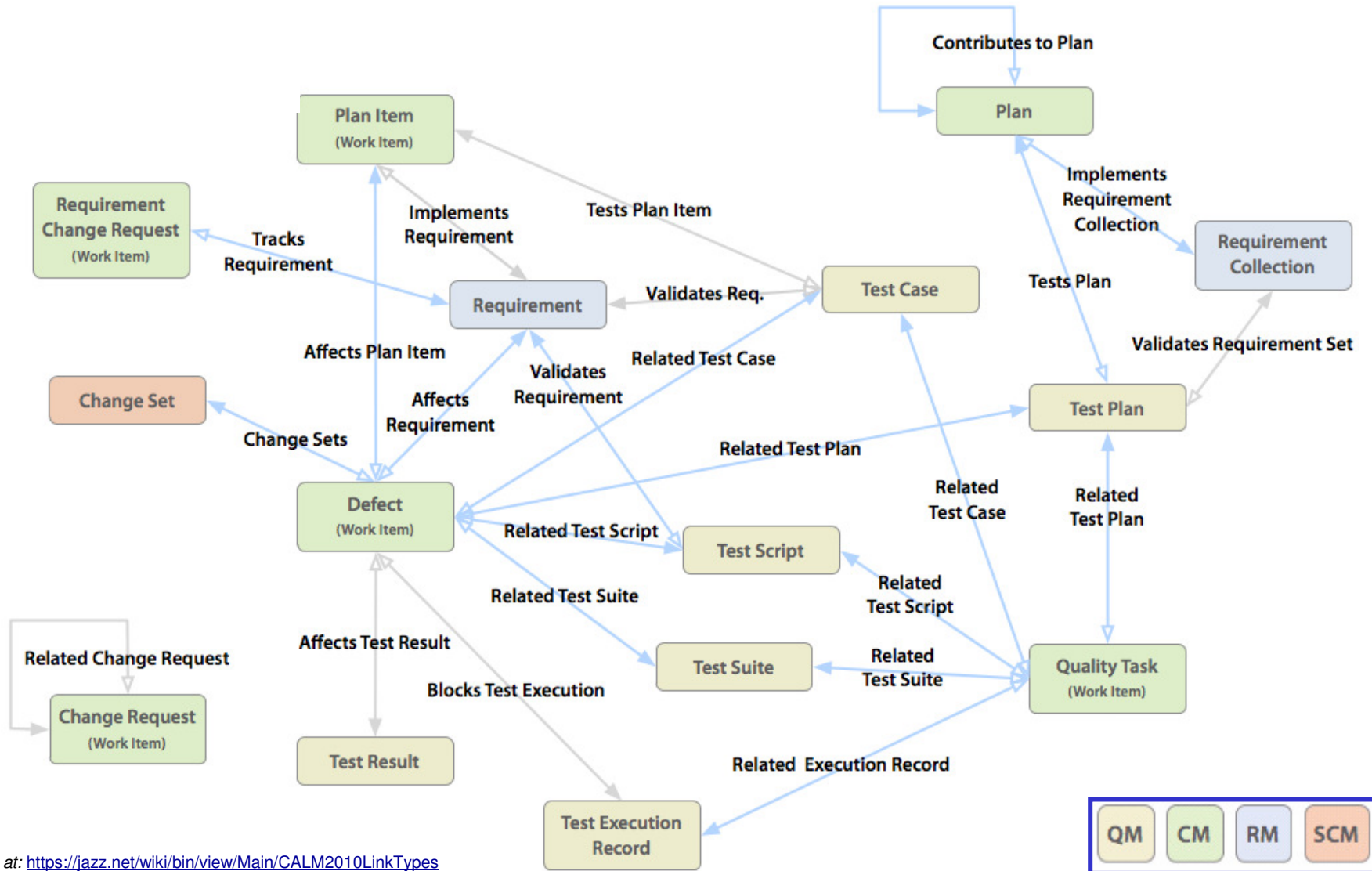
Lifecycle Traceability improves quality by:

- ▶ Establishing **relationships between software artifacts**
- ▶ Helping you **identify and close artifact gaps**, ensuring **coverage** across disciplines
- ▶ Provides visibility into the **completeness** of planned items by inspecting all related artifacts
- ▶ Provides easy **access to related artifacts** ensuring everyone shares the same view
- ▶ Delivers transparency which enables everyone to make **fully informed decisions** based business priorities

Instant access to details from any point in the development process



CLM Link Types



Learn more at: <https://jazz.net/wiki/bin/view/Main/CALM2010LinkTypes>

Team Leads have visibility into coverage & completeness

- Proactively respond to gaps as they surface through out the project
- Issues quickly highlighted and resolved

BRM Sprint 2 (1.0) Plan * ?

26 items: 23 open, 3 closed | Ends in: 3 days

Plan Details [Edit](#)

Planned Items ? [Links](#) [Snapshots](#) [Dashboard](#) [Notes](#)

View As: Traceability [Type to Filter](#) (17 items filtered) [Add Work Item](#)

Actions	Summary	Owned By	Implements Requirement	Tested By Test Case	Affected by I
	Requests sent in form of email	Unassigned	Requests sent in form of email	--	--
	Frequency of dividend transfer	Unassigned	--	Verify dividend transfer frequency	--
	Organization must provide justification for why funds are nee	Marco	Organization must provide justification for why funds are ne	Organization must provide justificatio	--
	Organizations can Apply	Marco	Organizations can apply	Organizations can Apply	--
	Organization must identify how much money is desired	Marco	Organization must identify how much money is desired	Organization must identify how much	Links (2)
	Donor Dividend Allocation Criteria	Deb	Donor Dividend Allocation Criteria	Donor dividend allocation conforms t	--
	Organizations may apply with an initial request	Bob	Organizations may apply with an initial request	Organizations may apply with an initi	--
	JKE Charity Coordinator will respond to request in the websit	Marco	JKE Charity Coordinator will respond to request in the web	JKE Charity Coordinator responds to	425: Rur
	Customers can Nominate an Organization	Marco	Customers can nominate an organization for the program	Customers can Nominate an Organi	--

Team Leads have visibility into coverage & completeness

Tailor traceability View to highlight planning Gaps

BRM Sprint 2 (1.0) Plan Auto-Save Save

26 items: 23 open, 3 closed | Ends in: 3 days

Plan Details

Planned Items

View As: Traceability

Traceability

Options

Sorting

Filter

Colors

Colors

Colors

Colors

Colors

Link Type : value

gap | implementsRequirement:unset

gap | testedByTestCase:unset

Defect | affectedByDefect:set

Actions	Summary	Owned By	Implements Requirement	Tested By Test Case	Affected by Defect
gap	Requests sent in form of email	Unassigned	Requests sent in form of email	--	--
gap	Frequency of dividend transfer	Unassigned	--	Verify dividend transfer frequency	--
	Organization must provide justification for why funds are nee	Marco	Organization must provide justification for why fund	Organization must provide justification fc	--
	Organizations can Apply	Marco	Organizations can apply	Organizations can Apply	--
Defect	Organization must identify how much money is desired	Marco	Organization must identify how much money is des	Organization must identify how much mc	Links (2): 1, 2
	Donor Dividend Allocation Criteria	Deb	Donor Dividend Allocation Criteria	Donor dividend allocation conforms to sl	--
	Organizations may apply with an initial request	Bob	Organizations may apply with an initial request	Organizations may apply with an initial re	--
Defect	JKE Charity Coordinator will respond to request in the we	Marco	JKE Charity Coordinator will respond to request in	JKE Charity Coordinator responds to onl	425: Running out of SW
	Customers can Nominate an Organization	Marco	Customers can nominate an organization for the pi	Customers can Nominate an Organizati	--

Automated defect traceability reduces costs and improves quality



Testers execute tests and submit defects

- ✓ 4-clicks to submit a defect automatically linked to impacted artifacts
- ✓ Test results are recorded and linked to test cases, and associated requirements
- ✓ Test results can be linked to software builds
- ✓ Everyone has visibility into the defects, their impact, and the action taken to resolve them

Execution Result
Result Overview | History

Action: Select Action | State: Draft

Actual Result: Failed
Host Name: Local Computer
Owner: [User]

Test Part: JKE Banking Sprint 2
Test Case: Frequency of dividend transfer
Test Script: Multiple Dividends to a Single Cause
Test Data: Unassigned
Built: Unassigned

Defects

Summary: Defect 76: Failing Test Case "Frequency of dividend transfer"

Status: New
Resolution: Failing Test Case "Frequency of dividend transfer"

Details:
Type: Defect
Filed Against: JKEBRM
Severity: Normal
Found In: Unassigned
Team Area: Business Res+Matters JKE Banking
Creation Date: September 29, 2010 10:22 AM
Created By: cp

Quick Information:
Affects Test Execution (1): 1
Affects Plan Item (1): 1
Affects Requirement (1): 1
Affects Test Case (1): 1
Affects Test Plan (1): 1

Description:
Test Part: JKE Banking Sprint 2



Developers can see the exact test failure without having to ask and remediate it

Defect 76

Summary: * Failing Test Case "Frequency of dividend transfer"

Overview | Links | Approvals | History

Attachments

Add File: [Input Field] [Browse...]

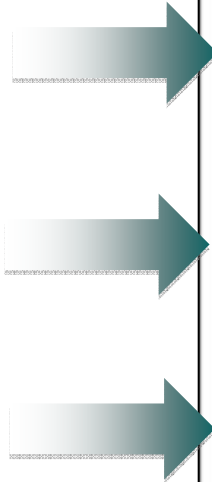
No Attachments.

Links

Actions	Summary	Owned By	Implements Requirement	Tested By Test Case	Affected by Defect
	Requests sent in form of email	Unassigned	Requests sent in form of email	--	--
	Frequency of dividend transfer	Unassigned	--	Verify dividend transfer frequency	--
	Organization must provide justification for why funds are nee	Marco	Organization must provide justification for why fund	Organization must provide justification fo	--
	Organizations can Apply	Marco	Organizations can apply	Organizations can Apply	--
Defect	Organization must identify how much money is desired	Marco	Organization must identify how much money is des	Organization must identify how much mo	Links (2): 1, 2
	Donor Dividend Allocation Criteria	Deb	Donor Dividend Allocation Criteria	Donor dividend allocation conforms to st	--
	Organizations may apply with an initial request	Bob	Organizations may apply with an initial request	Organizations may apply with an initial re	--
Defect	JKE Charity Coordinator will respond to request in the we	Marco	JKE Charity Coordinator will respond to request in	JKE Charity Coordinator responds to onl	425: Running out of SW
	Customers can Nominate an Organization	Marco	Customers can nominate an organization for the pi	Customers can Nominate an Organizati	--

Linked data is visible on all artifacts

- All roles can view the links on their artifacts.
- Each user has their own perspective and user interface for viewing links.
- Create, delete, navigate links on artifacts
- Example: Developer sees the relationships on a defect
- Traceability links on defects are automatically created



Defect 300 📄 🗨

Summary: * ➔ New

Overview **Links** Approvals History

Attachments

Add File:

No Attachments.

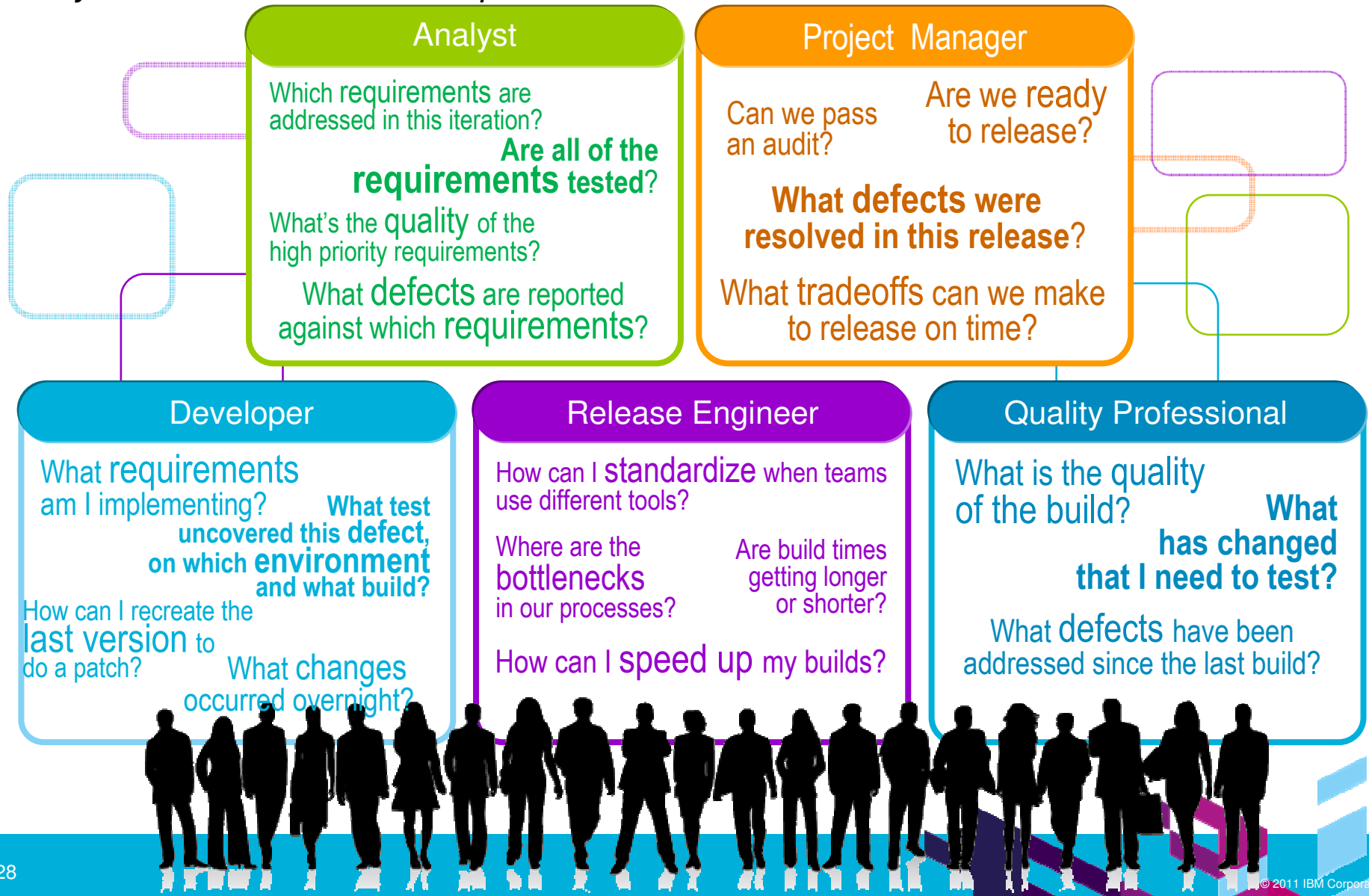
Links

Add: ▾

- Affects Test Result
 - 14: Allocate Dividends to Multiple Causes
- Affects Requirement
 - 444: Donor Chooses Multiple Organizations
- Related Test Plan
 - 12: JKE Banking Sprint 2
- Blocks Test Execution
 - 13: Allocate Dividends to Multiple Causes
- Related Test Case
 - 97: Allocate Dividends to Multiple Causes
- Affects Plan Item
 - 284: Donors Can Choose to Support Multiple Organizations

Test your lifecycle traceability capabilities

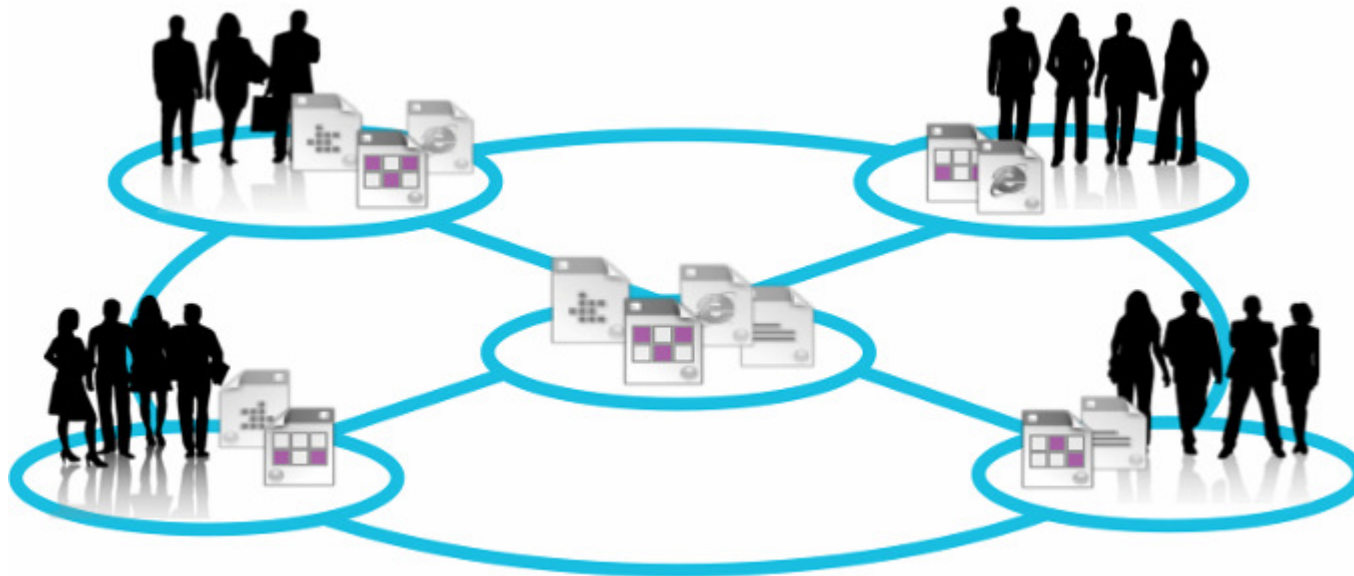
Can your team answer these questions...



What is In-Context Collaboration?

In-Context Collaboration improves product value by:

- ▶ Making **information immediately accessible** to all team members in the context of their work
- ▶ Empowering teams to collaborate on and review software development artifacts so they can **incorporate feedback early and often**
- ▶ Providing **single source of truth** hosted in a shared repository so that team members can collaborate effectively around the globe



Rich hovers automate information access without having to click

The screenshot shows a web application interface for 'Quality Management (/qm)' with a sub-header 'JKE Banking (Quality Management)'. A navigation bar includes 'Requirements', 'Planning', 'Construction', 'Lab Management', 'Builds', 'Execution', and 'Reports'. A 'Mini Dashboard' is visible on the left with a 'My Tasks' section. A rich hover menu is displayed over a task titled '14: Release 1 Planning'. The hover menu contains the following information:

- 14: Release 1 Planning**
- 58: Dividend processing payment is a one time transaction.
- 78: Requests sent in form of email
- 80: Donors will receive confirmation and receipt
- 69: Dividend allocation by percentage
- 79: Organizations may apply with an initial request
- ... 13 More
- Location**
 - JKE Banking (Requirements)
 - Collections
 - Release 1
- Attributes**
 - Type: Release Collection
 - Format: Collection
 - Description:
 - Status: Approved
- Links**
 - Validated By (1): ...
 - Implemented By (1): ...

✓ Rich hovers provide quick access to information to determine if additional details are required!

In-context Collaboration always shows the latest

Comments (4)

- Bob to Deb, Marco 5 minutes ago (2 replies)

Percentage format - numer of decimal places
How many decimal places should we support for percent...
Example: none - 16%, 1 decimal place 16.5%
- Marco to Bob, Deb 5 minutes ago

RE: Percentage format - numer of decimal places #1]
I checked the DB table. We did not take into account decimals for this percentage. If we are going to support decimals I need to know ASAP.
- Deb to Bob, Marco Now

RE: Percentage format - numer of decimal places #2]
Bob, is no decimal support acceptable to the business?
- Tanuj to Bob 1 minute ago

What is the minimum percentage?

Threaded discussions on requirements

View All Artifacts

Page size: 20

ID	Name	Artifact Type	Last Modified By	Last Modified Date
44	Accounts Overview	Part	JTSAdmin	Mar 26, 2011 5:43:06 PM
50	Transaction History	Part	JTSAdmin	Mar 26, 2011 5:43:10 PM
53	Accounts Overview (Home Page)	Sketch	JTSAdmin	Mar 26, 2011 5:43:11 PM
55	Dividend Contribution - screen flow	Screen Flow	JTSAdmin	Mar 26, 2011 5:43:11 PM
60	Account Details	Part	JTSAdmin	Mar 26, 2011 5:43:13 PM
67	Dividend Contribution	Storyboard	JTSAdmin	Mar 26, 2011 5:43:15 PM
75	Donor must be registered user to access account details	Business Rule	JTSAdmin	Mar 26, 2011 5:43:19 PM
79	Donors will receive confirmation and receipt	Feature	JTSAdmin	Mar 26, 2011 5:43:21 PM
89	Dividend contribution - confirmation	Sketch	JTSAdmin	Mar 26, 2011 5:43:23 PM

Recent Threaded discussions highlighted on requirements

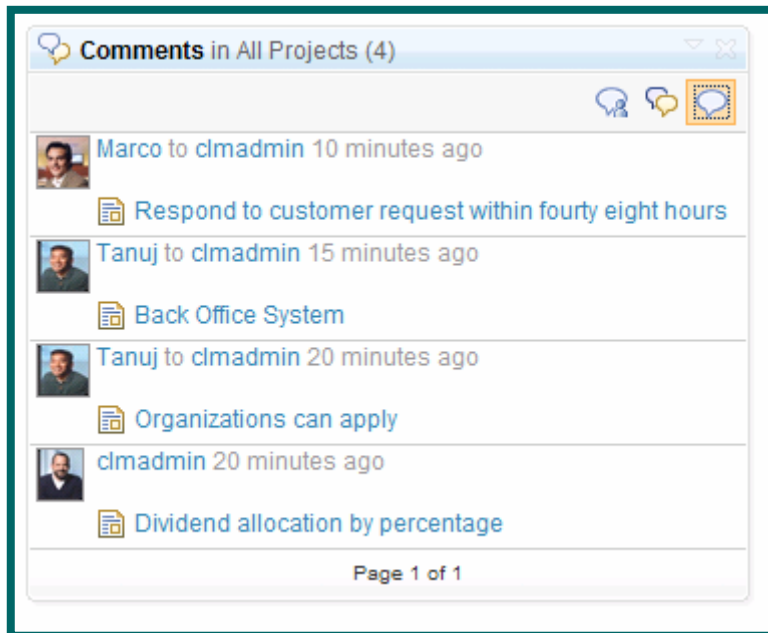
Work Items

Found 9 work items - Stories (current sprint)

Id	Status	P	Story Points	Summary	Owned By
55	New		13 pts	Frequency of dividend transfer	Deb
59	Implemented		8 pts	Requests sent in form of email	Marco
60	New		3 pts	Organization must identify how much money is desired	Marco
62	New		1 pt	Organizations may apply with an initial request	Marco
64	In Progress		2 pts	Customers can Nominate an Organization	Deb
66	New		1 pt	Organization must provide justification for why funds are needed	Marco
69	New		2 pts	Organizations can Apply	Marco
70	In Progress		5 pts	Donor Dividend Allocation Criteria	Deb
71	New		1 pt	JKE Charity Coordinator will respond to request in the website trigger...	Marco

Unread work Items bolded for developers

Viewlets focus the team on recent comments and changes



Requirements comment updates

Feeds focused on Requirement comments focus stakeholders on changes and strip out the noise of attributes changes etc..

Any changes to a Requirement

Feeds on all changes give project leads visibility into all requirements changes so that know exactly what is changing by whom and can access immediately assess the impact for the team.



Glossaries provide a common vocabulary for teams

ID	Name	Artifact Type
17	Enterprise Glossary	Glossary Collection
18	Bank Regulation	Term
22	Account Activity	Term

JKE Banking (Requirements) > ... > Features >

79: Donors will receive confirmation and receipt ?

Key Scenarios

1. **Donor** will receive confirmation notice that donation has been processed.
2. Once the confirmation is received, the **Back Office System** will initiate an email to the donor based on the primary contact information in the donor's profile.
3. If the profile indicates no email address available and or the given email address is not valid, then a hard copy of the donation will be sent to the donor's mailing address specified in the donor's profile.
4. The **Donor** will receive an email - mail notice affirming the donation % ar
 1. If in email, the donor will be provided an option to print the confirm for tax purposes.
5. The printed confirmation notice must be in a format that is acceptable by state, and province agencies and will be mail in their **Bank Statement**

Related Features

is issued at regular intervals, showing all transactions recorded for the period in question,

24: Bank Statement ✕

A periodic record of a customer's Account that is issued at regular intervals, showing all transactions recorded for the period in question,

[Show More](#)

Comments on requirements details are in-context

79: Donors will receive confirmation and receipt

Key Scenarios

1. Donor will receive confirmation notice that donation has been processed.
2. Once the confirmation is received, the Back Office System will initiate an email to the donor based on the primary contact information in the donor's profile.
3. If the profile indicates no email address available and or the given email address is not valid, then a hard copy of the donation will be sent to the donor's mailing address specified in the donor's profile.
4. The Donor will receive an email - mail notice affirming the donation % and amount.
 1. If in email, the donor will be provided an option to print the confirmation notice for tax purposes.
5. The printed confirmation notice must be in a format that is acceptable by country, state, and province agencies and will be mailed in their Bank Statement

Related Features

Overview
Comments (2)

1. Marco to Bob 1 minute ago (1 reply)
 Statements must be mailed?
 We need to understand if this applies to customers that have opted for electronic statements. Does paper still need to be mailed?
2. Bob to Marco 2 minutes ago
 RE: Statements must be mailed? [RE: #1]
 No requirement to mail if customer selected electronic statments.

A click on the comment highlights the text under discussion.

Formal Reviews drive agreement and prevent re-work

✓ Reviews & approvals insures artifacts are reviewed and/or approved by key team members and captures compliance requirements.

Requirements →

JKE Banking (Requirements) > Approval

Participant's Review: In progress 0% completed | Your role: Approver

Overall Review: Draft → In progress 85% completed | Pause Review

Due: Apr 18, 2011

Instructions to reviewers:
List of requirements for our second sprint. All comments have been resolved. Please review and approve requirements as written.

Participant	Type of Participant	Review results
<input type="checkbox"/> Bob	Approver	Done - 5 Approved
<input type="checkbox"/> Deb	Approver	Done - 5 Approved
<input type="checkbox"/> Marco	Approver	60% - 2 Approved, 1 Disapproved
<input type="checkbox"/> Tanuj	Approver	

Test Artifacts ↓

Work Items ↘

18 : Dividend Allocation by Percentage

Test Case Overview | Snapshots | History

Originator: Tanuj | Owner: Tanuj | State: Under Review

Description: select a list of potential donations and enter percentages for each

Formal Review

List the people who will be reviewers and approvers of this content and define your roles.

View: All

Show All items per page | Previous | 1 - 4 of 4 | Next

Review Type	Name	Status	Comments
<input type="checkbox"/> Approver	Bob	Pending	
<input type="checkbox"/> Reviewer	Sally	Pending	

Task 41

Summary: * Implement - Frequency of dividend transfer

Overview | Links | Approvals | History

Approvals (1) - 1 pending

New: Approval

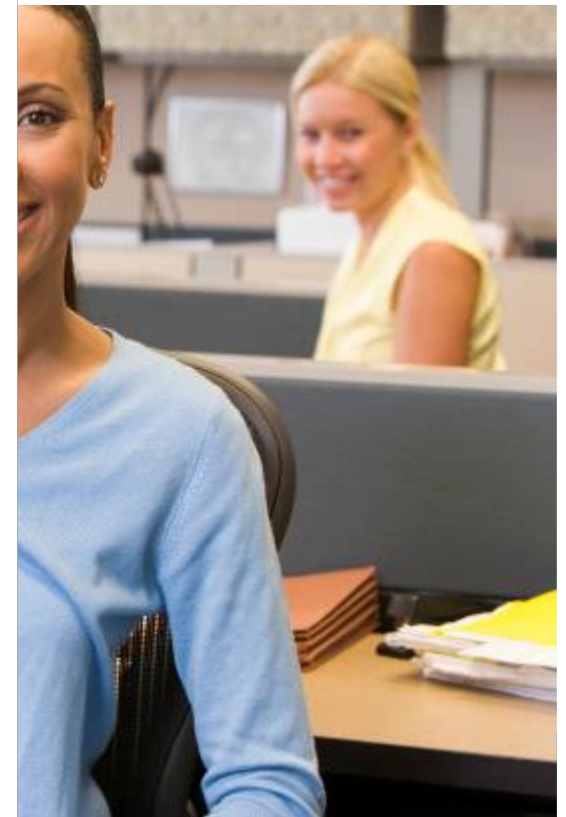
Type	Name	State	Due
Review	Check of algorithm to prevent transfer on weekend	Pending	Apr 18, 2011
	AI	Pending	
	Curtis	Pending	
	Tanuj	Approved	

Add Approvers...

Test your In-Context Collaboration capabilities

Can your team...

- Easily access the “single source of the truth” through linked artifacts?
- Quickly grasp the “who, what, when and why” of team activities?
- Bring new team members up-to-speed quickly?
- Overcome the barriers of multiple time zones when working with outsourced and distributed team members?

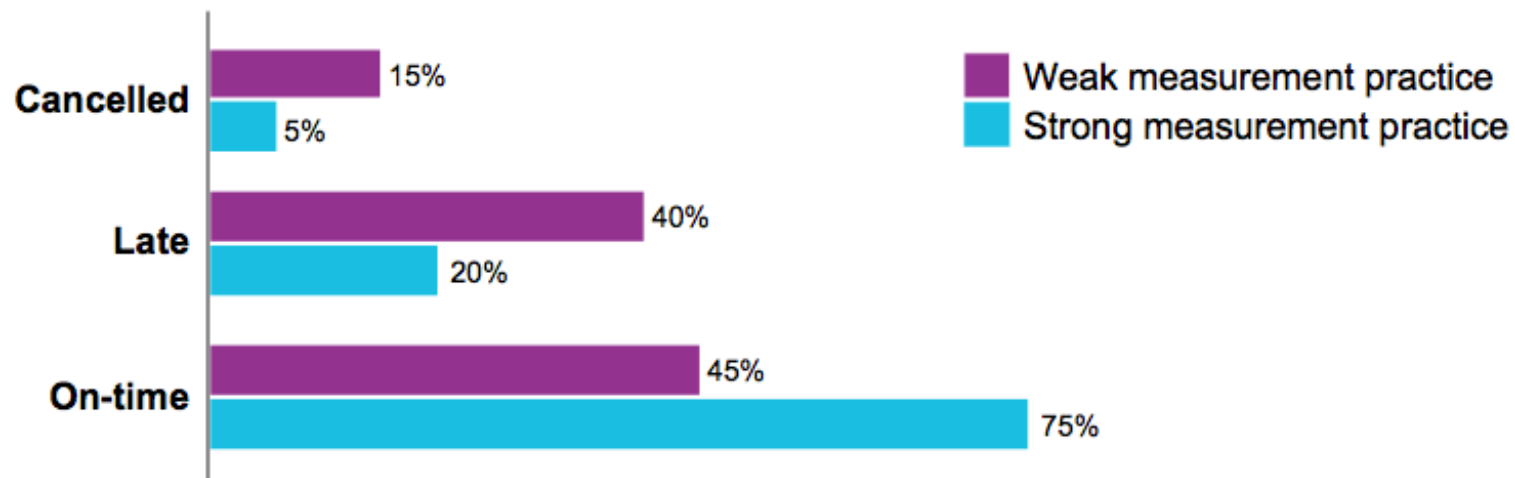


What is Development Intelligence?

Development Intelligence improves predictability by:

- ▶ Applying **Business Intelligence techniques** to software and systems development
- ▶ Enabling **fact-based decision making** (to communicate status, monitor progress, diagnose problems, identify corrective actions)
- ▶ **Steering projects and programs** to deliver on-time

Measurement Practices Impact Project Success



Source: Capers Jones, Measurement, Metrics and Industry Leadership, 2009 and [Software Engineering Best Practices](#), McGraw Hill, 2010.

From In Process (Team) To Executive Value

Appropriate Metrics for Each Management level

Dimensions	Team (In Process)	Middle Management (Development Mgmt.)	Development Executive (VP Development)
Time-to-Value (Schedule)	User Story Points / Use Case Points		
	Iteration Burndown, Blocking Work Item		
		Release Burndown	
Product Value	Iteration Velocity		
	Stakeholder Feedback, # of Enhancement Request, Age of Enhancement Request		
		Tested and Delivered Requirements, Business Value Velocity, Customer Satisfaction	
Product Cost	Effort (Man-hours)		
		Cost / Unit of work	
			Development / Maintenance Costs
Product Quality	Technical Debt (Defect trend, defect density)		
	Test Status, Test Coverage of Requirement, Test Execution Status		
		Quality at Ship	
Predictability	User Story Points / Use Case Points		
		Planned/Actual Cost and Velocity	
		Trend Variance. Likelihood of on-time delivery	

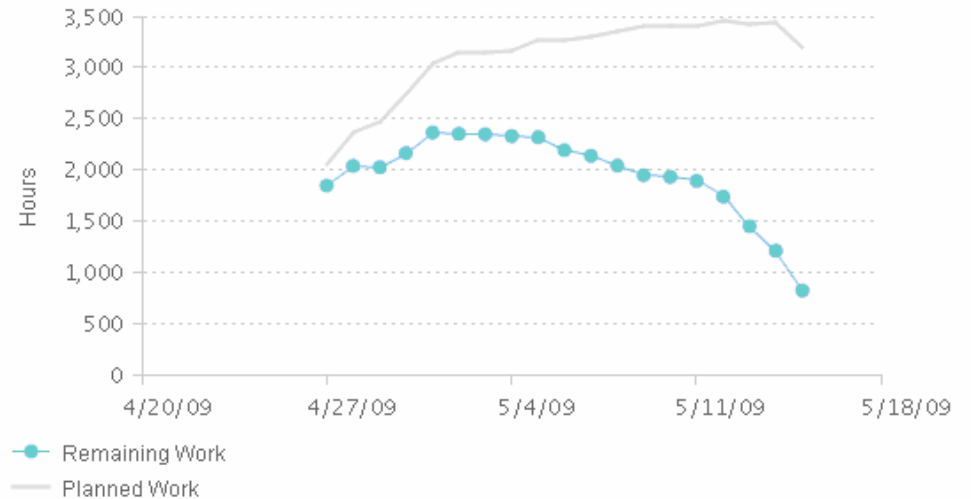
Note: **Bold** indicates that there is Out-Of-The-Box report supported by Rational tools

Measuring Time-to-Value (Schedule)

Iteration Burndown

Showing how much work is left to do in an iteration. It enables the team to adjust scope or resources to finish the iteration successfully.

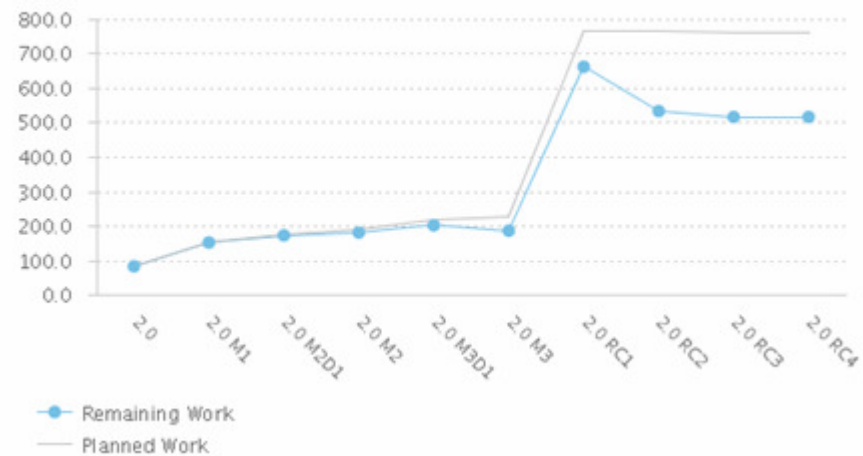
Burndown



Release Burndown

Shows the estimated functionality remaining to complete the current release.

Release burndown

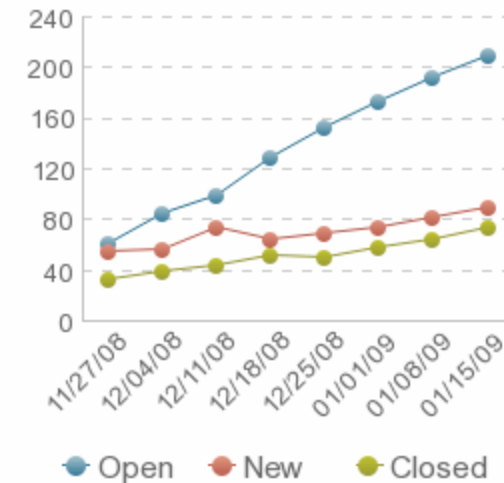


Measuring Product Quality

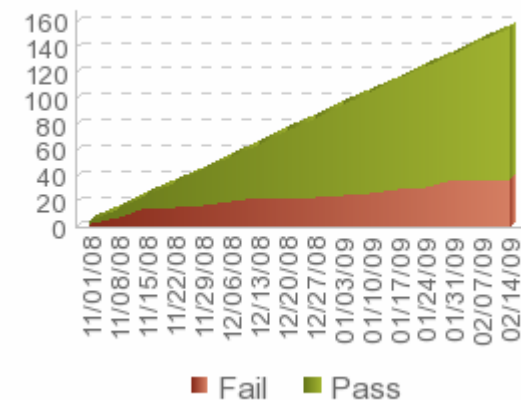
Defect Trends

Shows defect arrival and closure rates, determines the remaining defect backlog, projects the future defect arrival/close rate up to and post-ship

Number of Defects



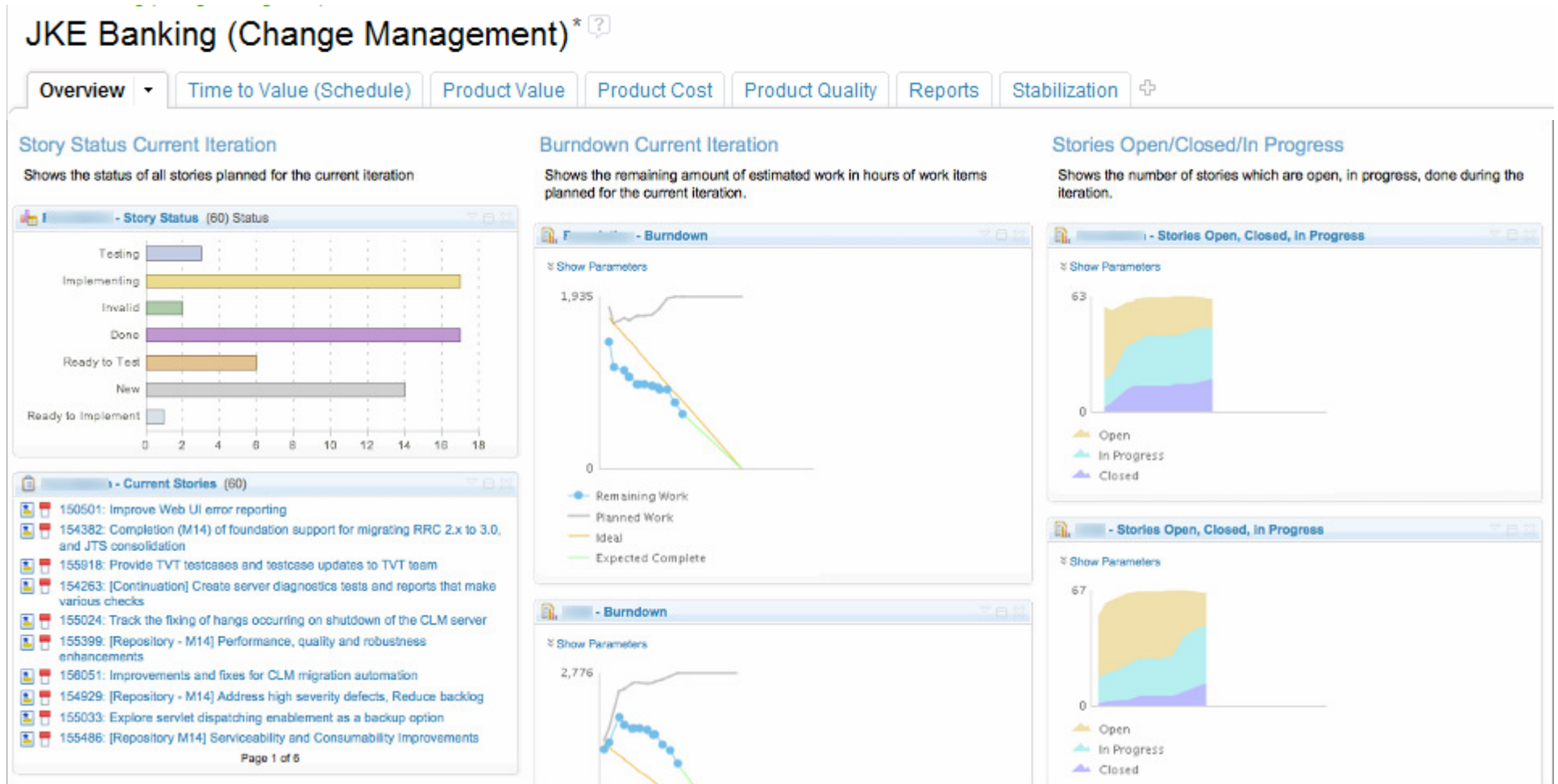
Number of Executed Tests



Test Execution Status

Monitors test completion and success

Use dashboards to provide that 1 view of project health



Test your development intelligence

Can your team...

- **Time-to-Value**

- ▶ Produce the right capabilities according to the committed schedule?

- **Product Value**

- ▶ Deliver a valuable product?

- **Product Cost**

- ▶ Measure what we spending to deliver the system?

- **Product Quality**

- ▶ Build a high quality system?

- **Predictability**

- ▶ Manage the risk and uncertainty?



What is Continuous Improvement?

Continuous Improvement reduces cost by:

- ▶ Improving software delivery through the ongoing **adoption of best practices and automation** to reduce manual, non-creative and error prone tasks
- ▶ Promoting **incremental improvement of a project** when needed
- ▶ Enabling breakthrough improvement by **capturing best practices and reusing** across teams
- ▶ Allowing **everyone to participate** with easy to adopt best practices at your fingertips.



“Successful analytics requires taking it beyond software and reporting, and into the realm of management practices and operations improvement.”

Information Management Online, February 23, 2011

Adopt - Process Sharing

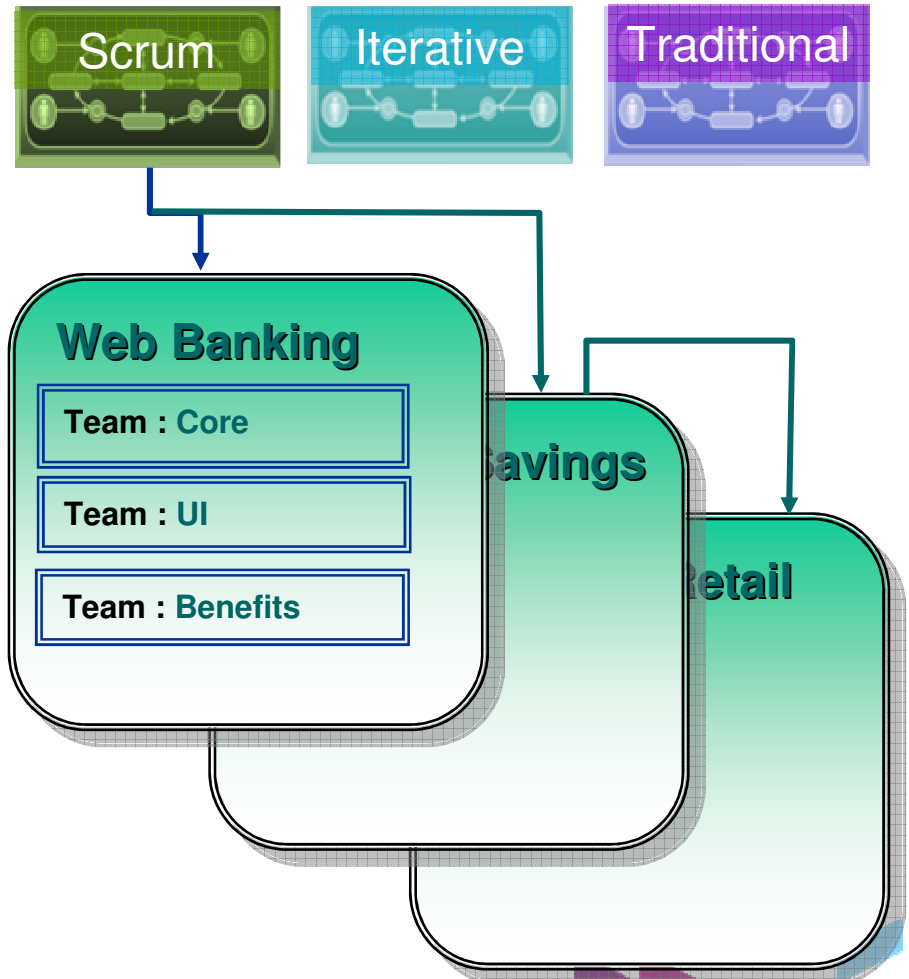
Leverage the Best practices from Rational and other teams

Process Templates on Server: JKE.tools.com:9443/JTS

- 1 **Import/export Templates**
Provides the ability to leverage best practices from Rational and other teams

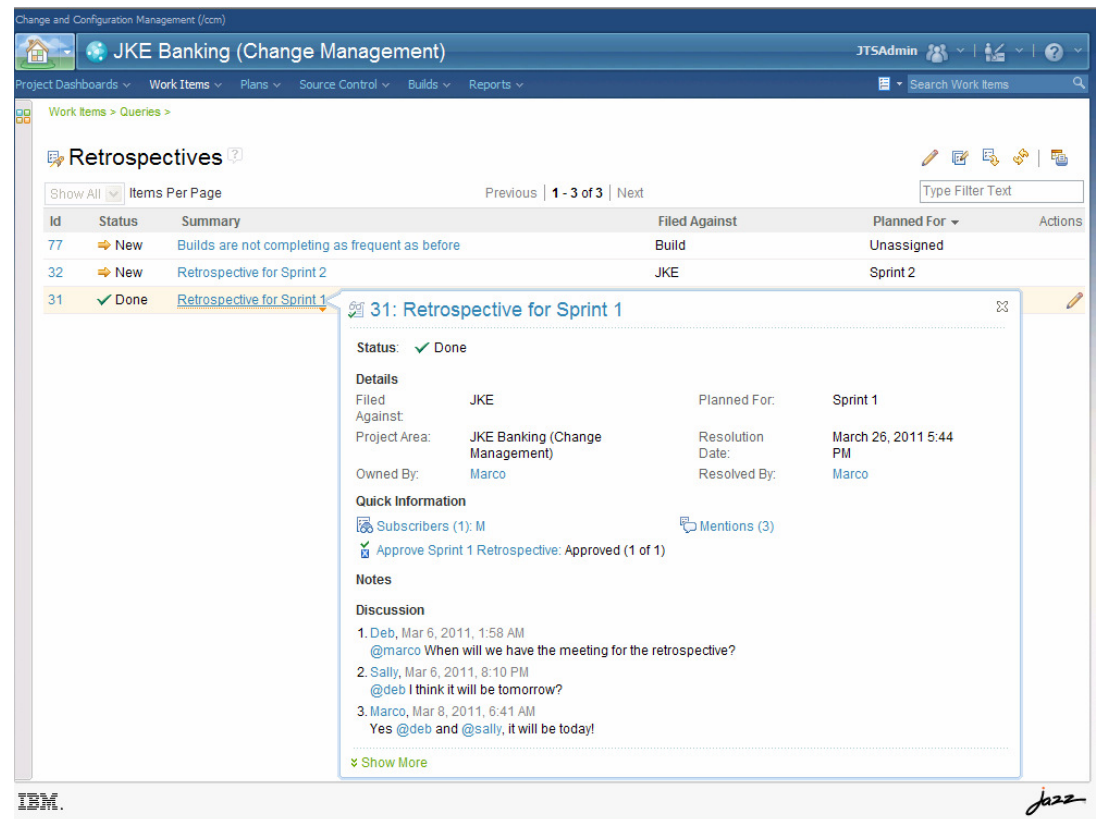
- 2 **Servers support multiple templates**
Allowing administrators to support different processes. Teams improve their process independently.

- 3 **Process updates can be shared**
Allows teams to control when they want to accept improvements.



Team Retrospectives help identify areas of improvement

- Tracking Retrospectives help team members to collaborate on improvements
 - ▶ Ranking of process improvements help to focus on where the team feels the biggest pain.
 - ▶ Metrics where available help support process improvements and show results.



Implement : Require Unit test before deliver

Operation Behavior

Select a cell in the table below to configure the preconditions and follow-up actions for the corresponding operation and role.

Preconditions are checked before running an operation; follow-up actions are executed after. An operation's preconditions and follow-up actions can be configured differently for each role. Note that operation configurations completely replace each other; they are not additive. The process runtime will choose the most appropriate operation configuration for the logged-in user and will use only the preconditions and follow-up actions defined in that configuration.

Operations	Everyone (d...	Team Member	Team Lead
Reports			
Deploy Report (server)			
Deploy Report Template (server)			
Display Report (server)			
Manage Report Folder (server)			
Source Control			
Deliver (client)			
Deliver (server)			
Save Change Set Links and Comments (server)			
Work Items			
Save Work Item (server)			

The deliver operation is performed when changes or baselines are delivered from a workspace to a stream.

Preconditions and follow-up actions are configured for this operation

Final (ignore customization of this operation in child team areas)

Preconditions (7 available):

Add... (highlighted)

Name: <Select a precondition or Follow-up action>

Description:

Follow-up actions (0 available):

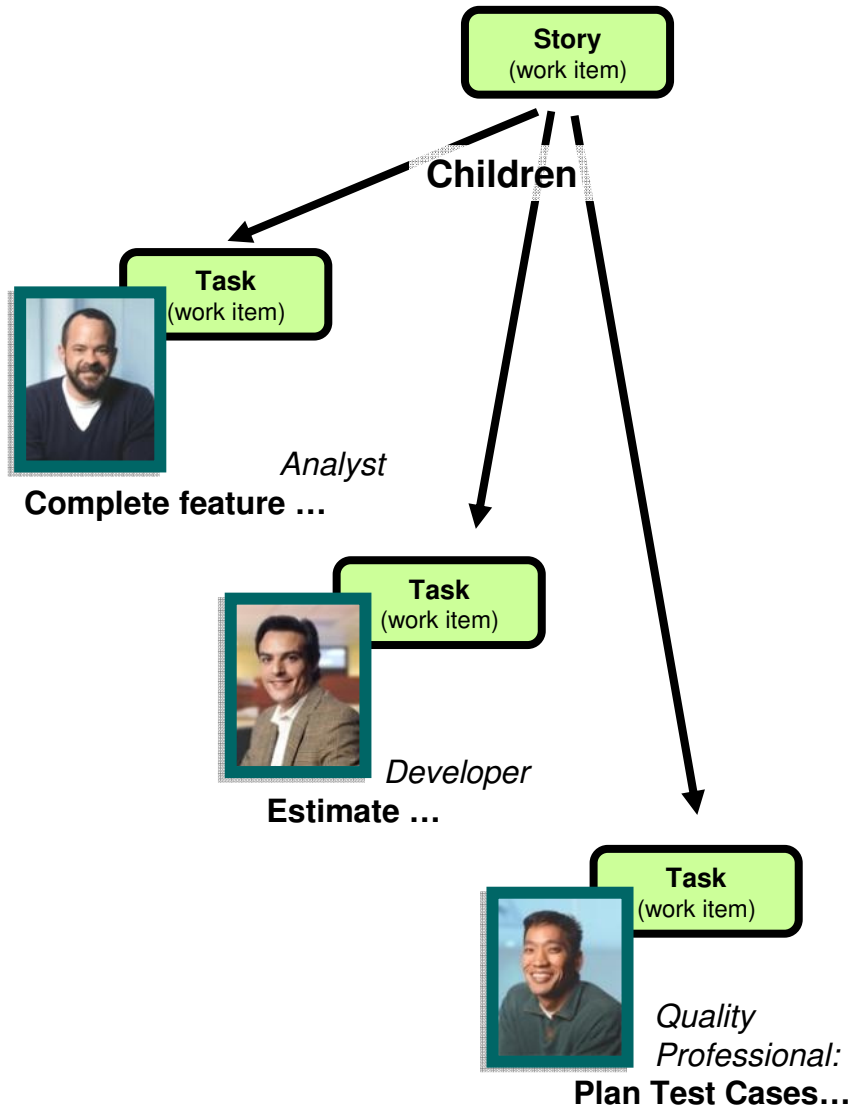
Add Preconditions dialog box:

Select the preconditions to add:

- Prohibit Non-Externalized Java Strings
- Prohibit Unused Java Imports
- Prohibit Workspace Errors
- Require Content
- Require JUnit Test Run** (highlighted)
- Require Work Item Approval
- Require Work items and Comments

OK Cancel

Problem: Story completed without all work completed



Implement: Require detailed tasks completed before completing parent

Operation Behavior

Select a cell in the table below to configure the preconditions and follow-up actions for the corresponding operation and role.

Preconditions are checked before running an operation; follow-up actions are executed after. An operation's preconditions and follow-up actions can be configured differently for each role. Note that operation configurations completely replace each other; they are not additive. The process runtime will use the most appropriate operation configuration for the logged-in user and will use only the preconditions and follow-up actions defined in that configuration.

Operations	Everyone (def...	Team Member	Team Lead
Reports			
Deploy Report (server)			
Deploy Report Template (server)			
Display Report (server)			
Manage Report Folder (server)			
Source Control			
Deliver (client)			
Deliver (server)			
Save Change Set Links and Comments (server)			
Work Items			
Save Work Item (server)			

The Save Work Item operation is executed whenever a work item is saved in the repository.

Preconditions and follow-up actions are configured for this operation
 Final (ignore customization of this operation in child team areas)

Preconditions (8 available):

Add... Required Properties
 Remove
 Up
 Down

Follow-up actions (0 available):

Add...
 Remove
 Up
 Down

Name: Required Properties
Description: Work items must be Filed Against a specific category and a Summary team can quickly evaluate who is responsible for the issue.

Category or Type	Attributes
com.ibm.team.workitem.workItemType	Filed Against,
workitem.workItemType.deliverable	Filed Against,

Add Preconditions

Select the preconditions to add:

- All Children Resolved
- E-Signature
- Implied Properties
- Permissions Advisor
- Prevent Editing
- Required Approvals
- Required Estimates Precondition
- Required Properties

OK Cancel

Plan tasks are not being completed before Story completed

Previous | 14 in 1 - 15 | Next

Story 464 * ?

Child work item '470' is unresolved. Can't resolve work item '464' because its child work item '470' is unresolved.

Summary: * Allocate Dividends To Multiple Causes

Save

Loaded: Jun 2, 2011 12:27 PM

Overview Acceptance **Links** Approvals History

Attachments

Add File: Browse...

No Attachments.

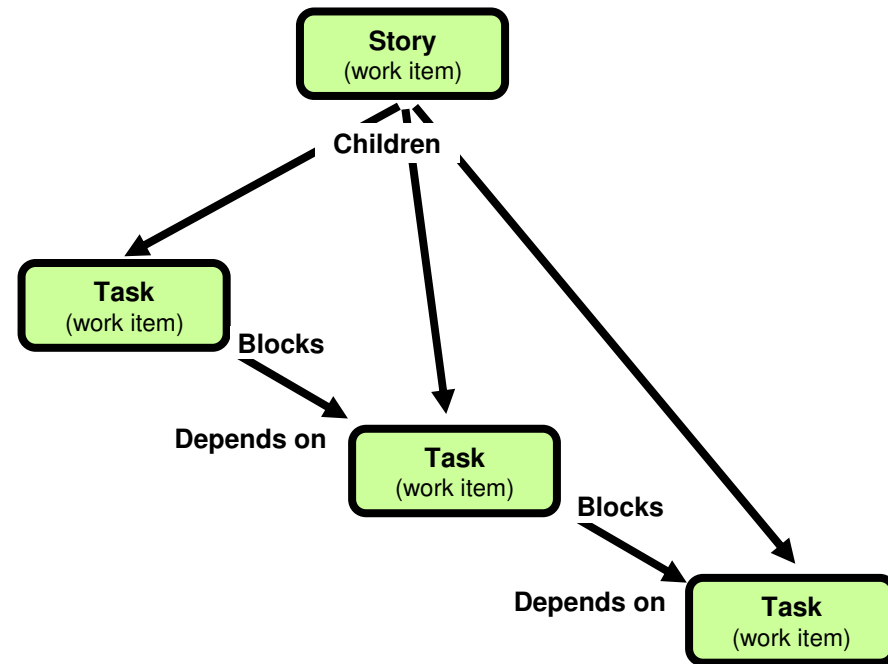
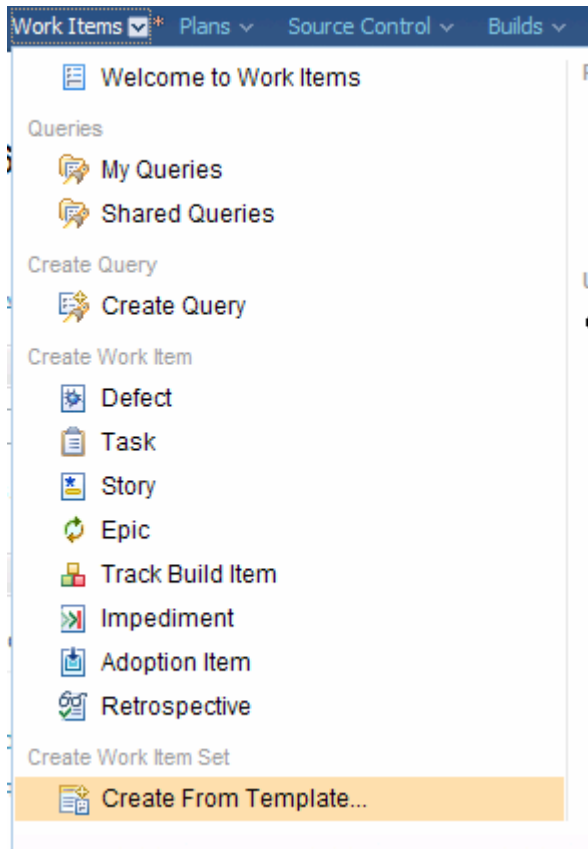
Subscribers Add... Curtis

Links

Add: Children

- Children
 - 468: complete feature description
 - 469: estimate the story
 - 470: plan test cases
 - 471: update calculations module with dividends formula

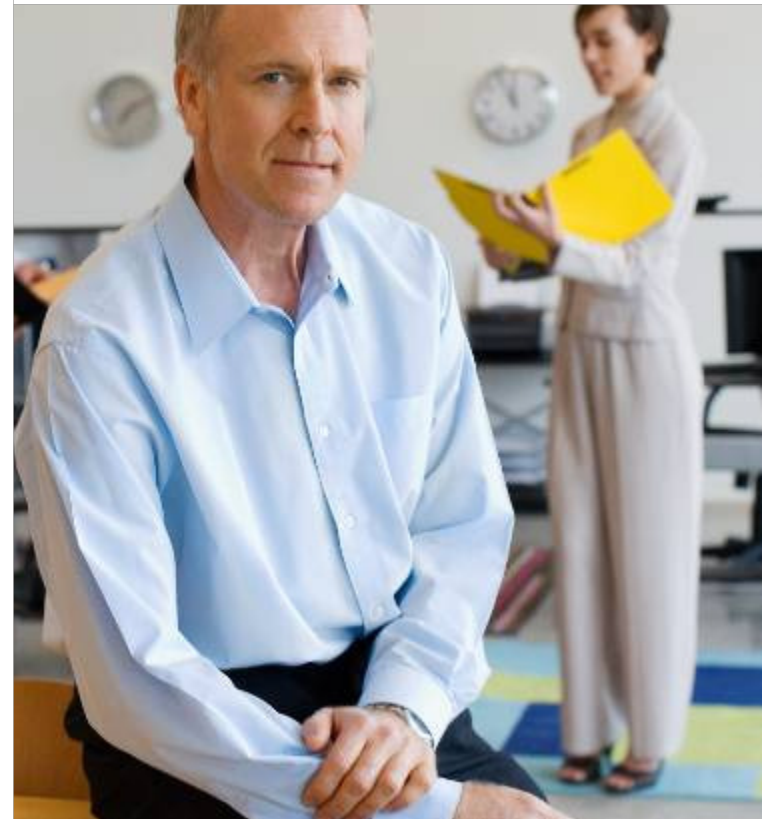
Implement: Work Item Template for a set of repetitive tasks



Test your Continuous Improvement capabilities

Can your team...

- Leverage out-of-the-box process templates for traditional and agile workflows?
- Change process “on the fly” as part of a continuous feedback loop?
- Allow team leads to determine how strict or lax the “rules of the road” should be?
- Modify process enforcement over the life of a project, to encourage early-stage experimentation and end-game stability?



The Five Imperatives of Application Lifecycle Management

Improve organizational productivity

1. Accelerate **time to delivery** with **Real-time Planning**
2. Improve **quality** with **Lifecycle Traceability**
3. Maximize **product value** with **In-Context Collaboration**
4. Refine **predictability** with **Development Intelligence**
5. Reduce **costs** with **Continuous Improvement**



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