



IBM Rational Software Conference 2009
As Real as It Gets!



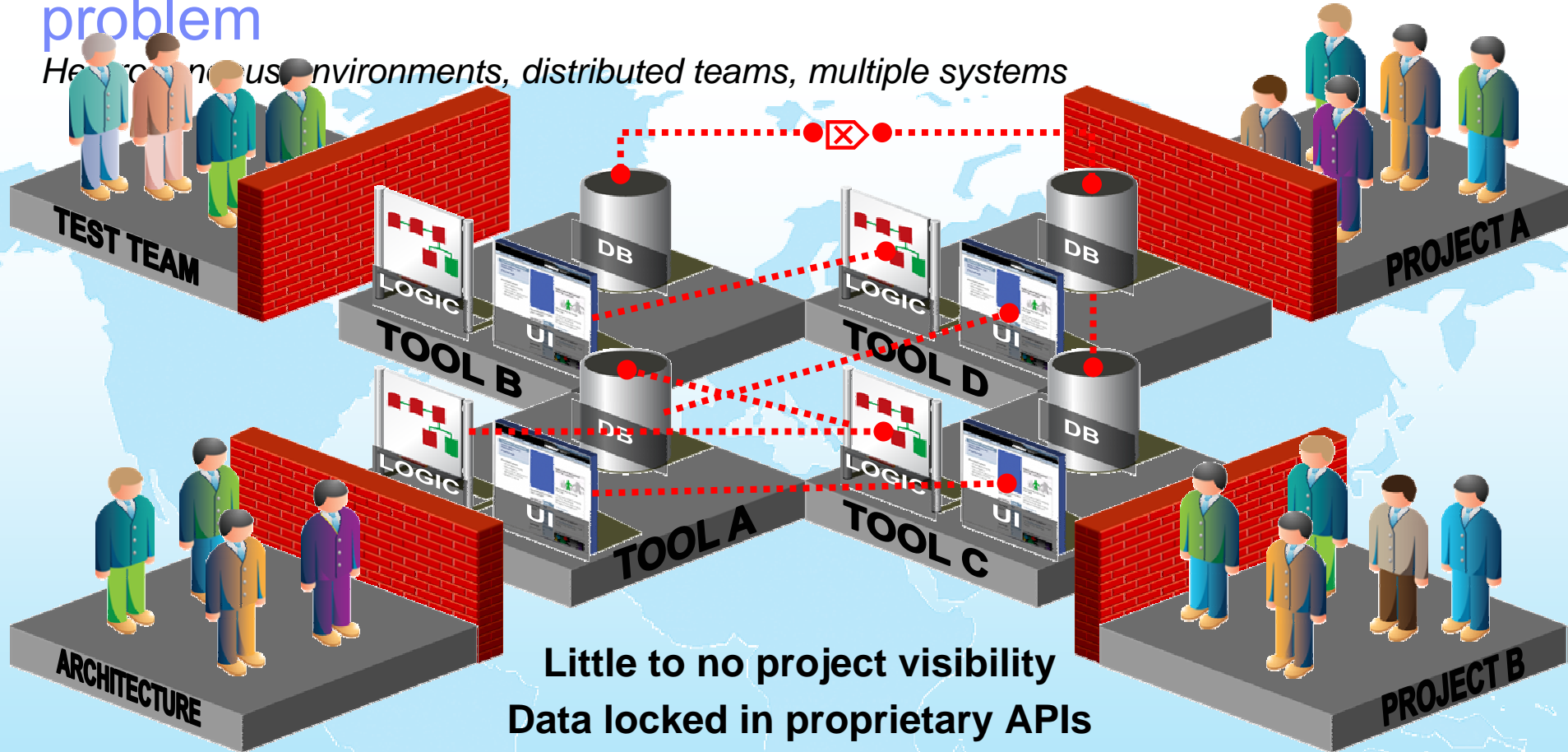
Jazz overview and What's New With Rational Team Concert (TM)

Kartik Kanakasabesan – Manager: World Wide Jazz Jumpstart Manager
Robin Garside – Manager: Jazz Customer Relations and Jazz.net

Rational. software

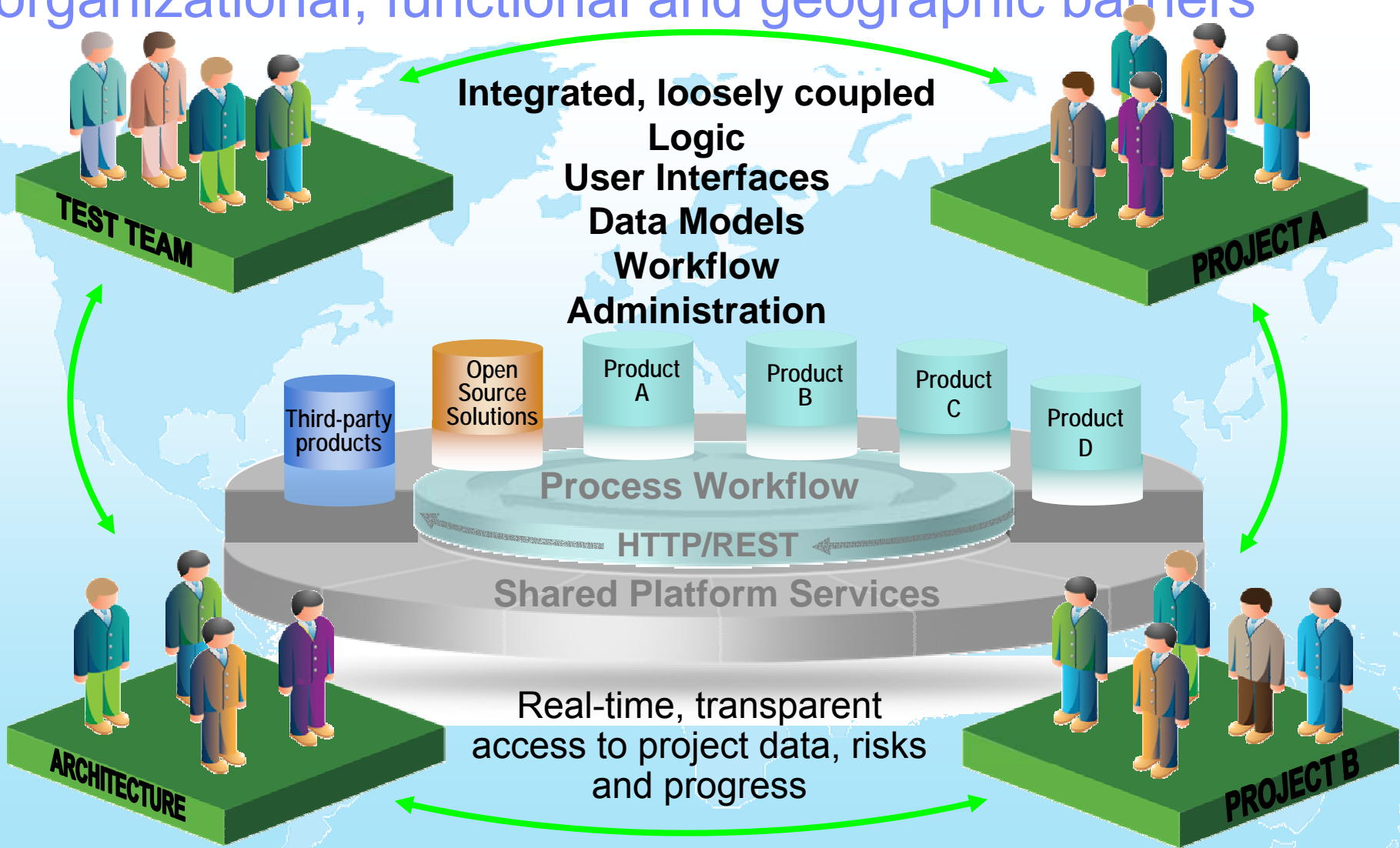
Traditional software delivery environments reinforce the problem

Here are some of the problems, distributed teams, multiple systems



- Little to no project visibility**
- Data locked in proprietary APIs**
- Poor process and workflow integration**
- High maintenance and administration costs**
- Inconsistency among products (UI, logic, storage)**

A software delivery platform can break down organizational, functional and geographic barriers



Enabling transformation to from "command and control" to "sense and respond" approaches



- **Process control** → **"Right size" the process**
 - Lightweight to heavyweight project lifecycle process enforcement
 - Waterfall to agile – Choose what's right for this project



- **Progress management** → **Honest assessment**
 - Real-time view into distributed teams progress
 - Cross-Product velocity and progress projections



- **Quality oversight** → **Incremental demonstrable results**
 - Traceable linkages between development and quality
 - Multi-level dashboards – from multiple data sources



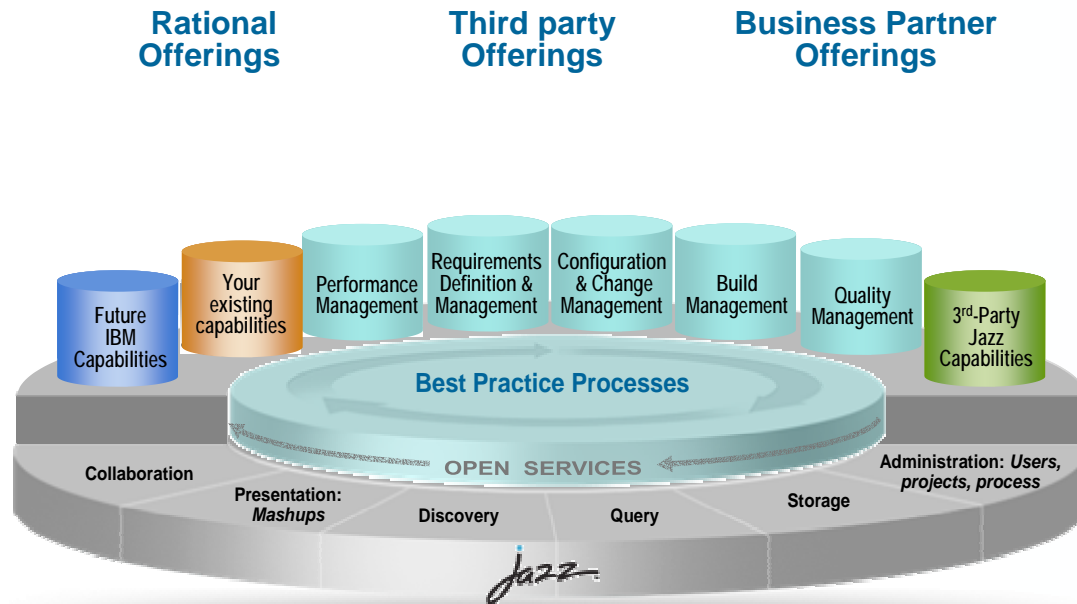
- **Proscribed environment** → **Open and extensible architecture**
 - Navigation across tools and domains using a consistent UI framework
 - Integration of in-house, commercial and packaged tools

Technical requirements of a software delivery platform

- **Learn from industry mistakes**
 - ▶ Don't assume that customers will only use your products
 - ▶ Don't assume that all data will be stored in a central repository
- **Take advantage of the Internet**
 - ▶ Amazingly scalable and extensible
 - ▶ Integrates information on a massive scale
 - ▶ Collaboration on unprecedented scale
- **Make it open and extensible**
 - ▶ Specify data independently of tools
 - ▶ Standardize data access through HTTP/REST standard protocols



Jazz is a platform for transforming software delivery

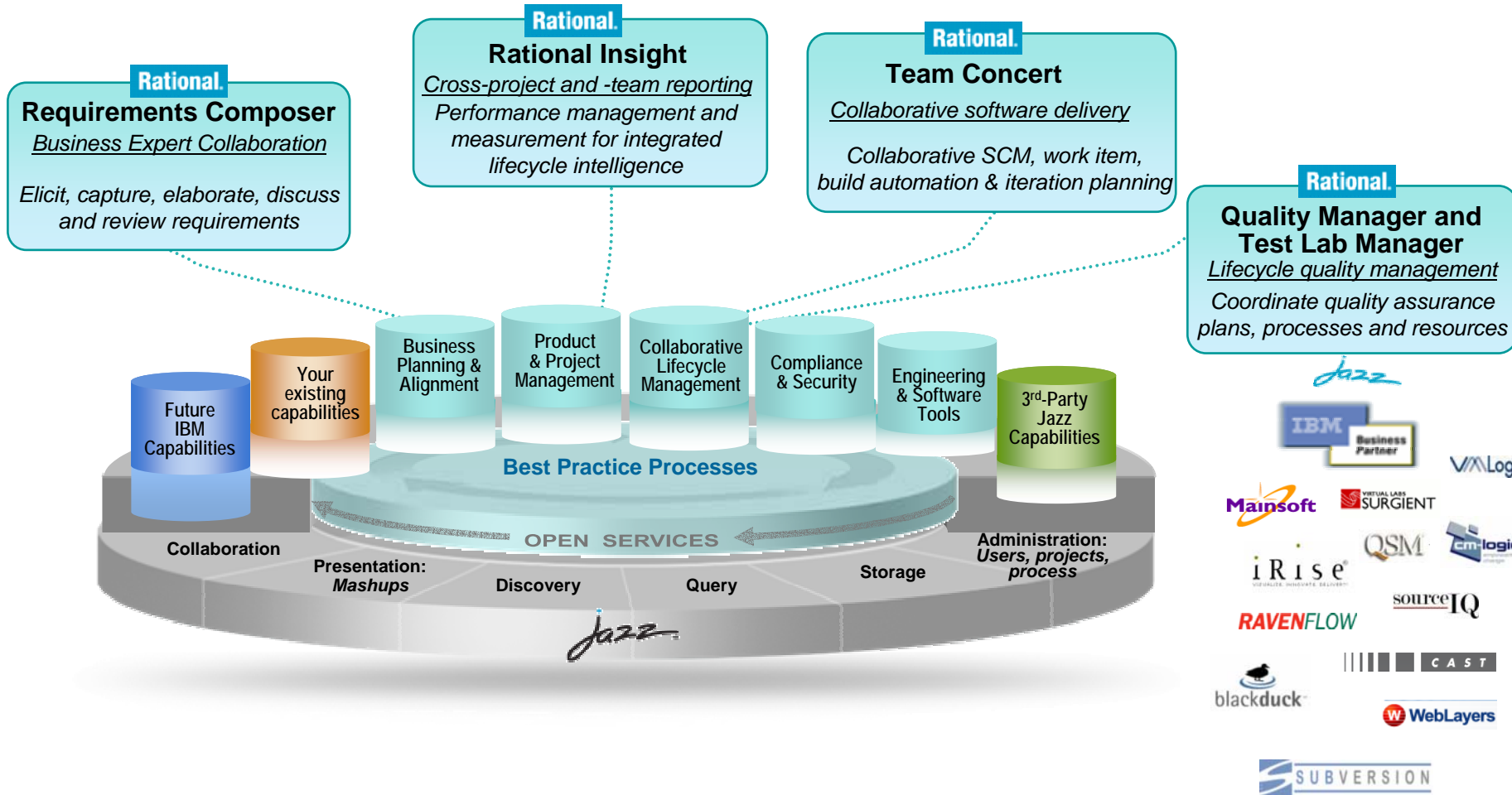


Jazz is a platform for *transforming how people work together* to deliver greater value and performance from their software investments.

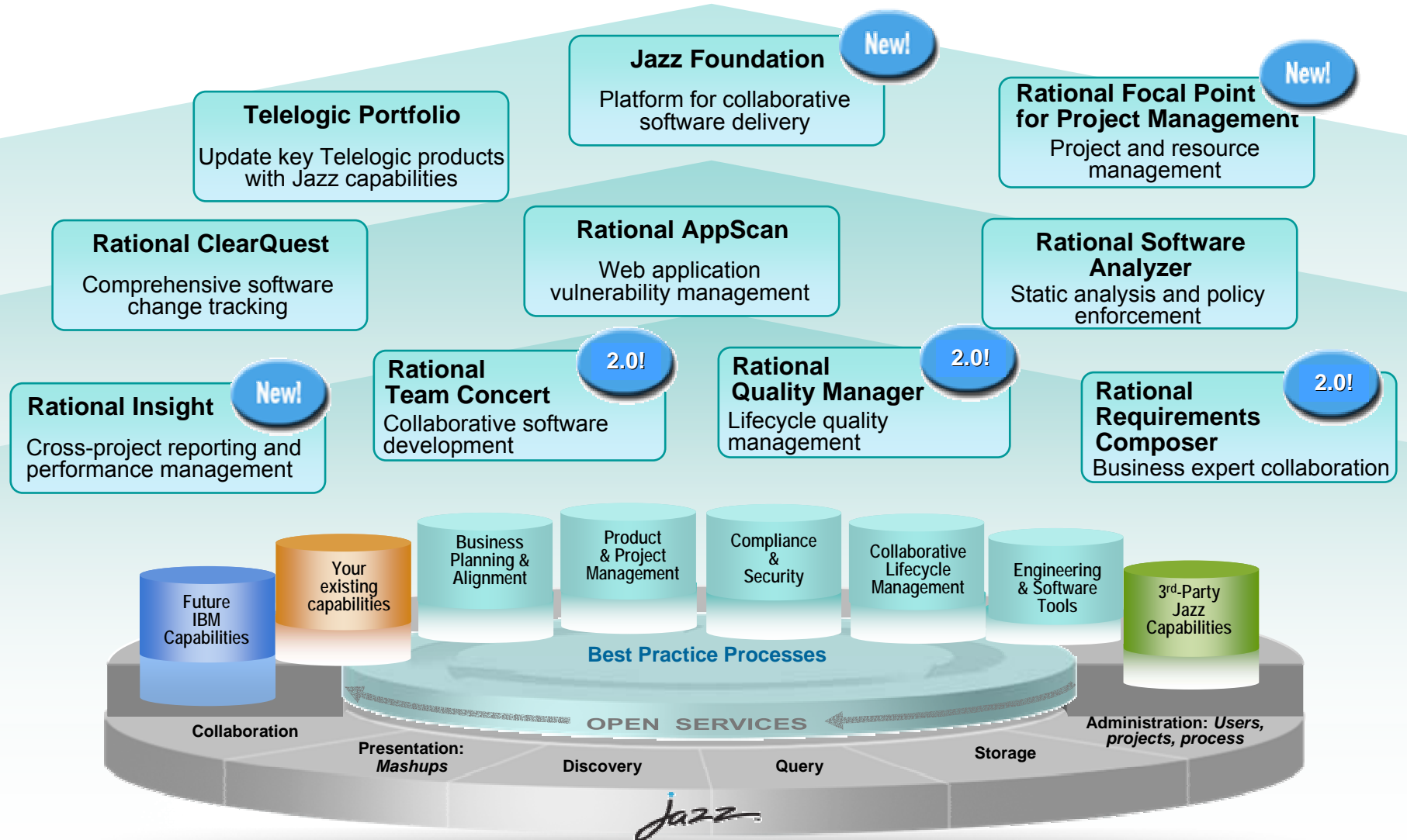
Jazz is...

- Our vision of the future of systems and software delivery
- A scalable, extensible team collaboration platform
- An integration architecture enabling mashups and non-Jazz products to participate
- A community at Jazz.net where Jazz products are built
- An evolution of our portfolio over time

First wave of products built on Jazz technology



Upcoming waves (2009 and beyond)

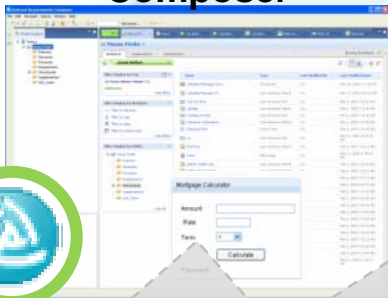


Accelerate the build-test-debug cycle

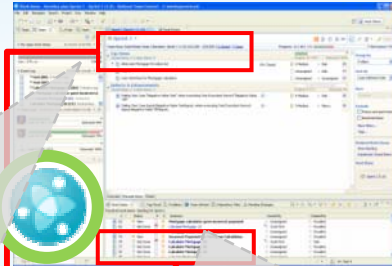
Integrated workflows speed defect time-to-resolution



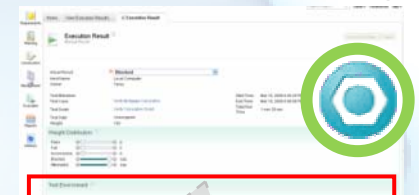
Analyst
Rational Requirements Composer



Developer
Rational Team Concert

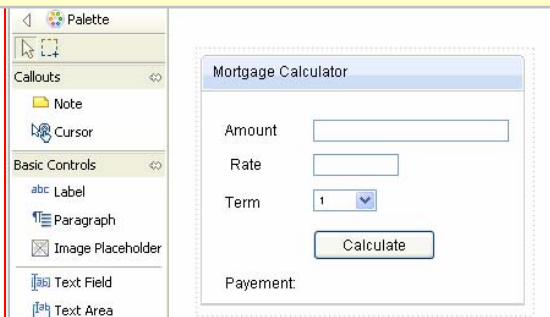


Tester
Rational Quality Manager

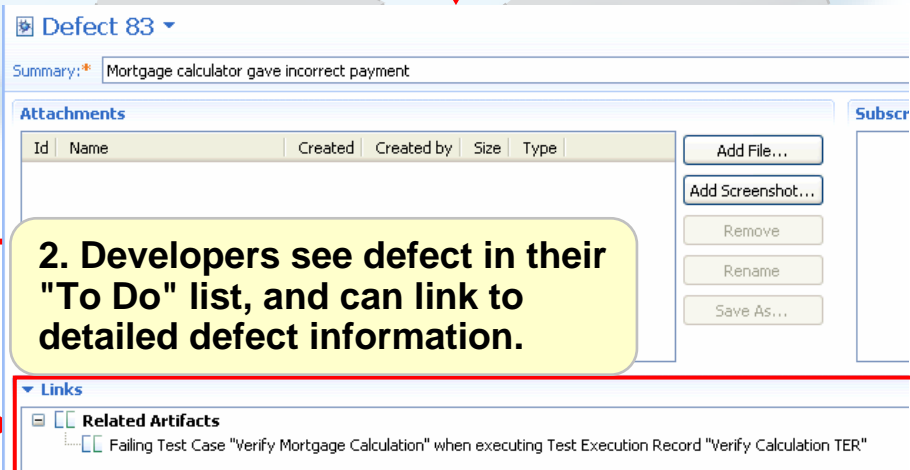


1. Tester captures test execution results and logs defect as a work-item.

3. At any time, developers and testers can link to associated requirements.



2. Developers see defect in their "To Do" list, and can link to detailed defect information.

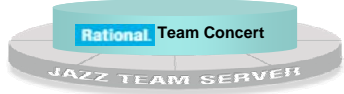


Agenda



- **Deliver Global Enterprise Readiness**
- **Enhanced agile planning via web**
- **Support Collaborative ALM**
- **Support growth of a vibrant Ecosystem**
- **Bridges to your existing environments**
- **Other Enhancements**

Enterprise Scalability for Team Concert



Express-C

Small Teams

- Quick Start
- Collaborative ALM
- Open source servers

Express

Mid Sized Teams

- Project Dashboards
- Collaborative ALM
- Commercial Middleware

Standard

Corporate Teams

- Customizable workflow
- Advanced Reporting
- Departmental Scaling

Enterprise

Enterprise Teams

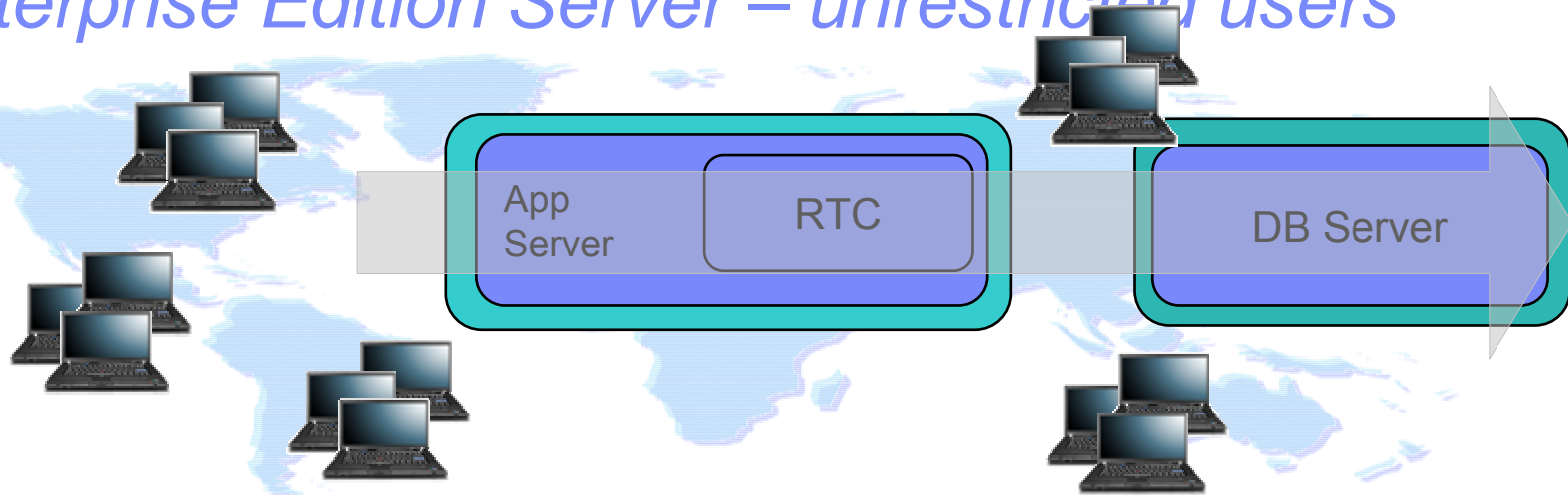
- Customizable Workflow
- Advanced Reporting
- **High Availability**
- **Unrestricted scaling based on hardware**

	Express-C	Express	Standard	Enterprise
Maximum developers/contributors	10 / unrestricted	50 / unrestricted	250 / unrestricted	Unrestricted / unrestricted
Database and Application Server	Derby, Tomcat	DB2, Tomcat (SQLServer, Oracle, WebSphere)	DB2, Tomcat (SQLServer, Oracle, WebSphere)	DB2, Tomcat (SQLServer, Oracle, WebSphere)
<ul style="list-style-type: none"> • Agile planning: at the daily, iteration, and release level • SCM -Stream and component based • Builds – w/ Continuous Integration • Work items w/ custom attributes, discussions and approvals • Customizable Process Templates • Project Milestone Tracking & Status • LDAP authentication • Subversion Integration Bridge • Role-based process permissions • Project level permissions • Cross repository dashboards 	✓	✓	✓	✓
Customizable Dashboard Mashups	1 per project	1 per project	unlimited project, team, and personal dashboards	unlimited project, team, and personal dashboards
Advanced Reports and Customization			✓	✓
Customizable work item workflow			✓	✓
Plan risk assessment			✓	✓
CC/CQ Connectors and Bridges			✓	✓
Floating Licenses Available			✓	✓
LDAP import / synchronize			✓	✓
HTTP proxy support			✓	✓
High Availability				✓*

* Entitles installation of a second copy of the server in an idle standby application server failover configuration. Requires WebSphere Application Server and optional high availability database configuration (DB2, Oracle, SQL Server).



Scale to New Heights with Rational Team Concert *Enterprise Edition Server – unrestricted users*



■ Scales to your server hardware

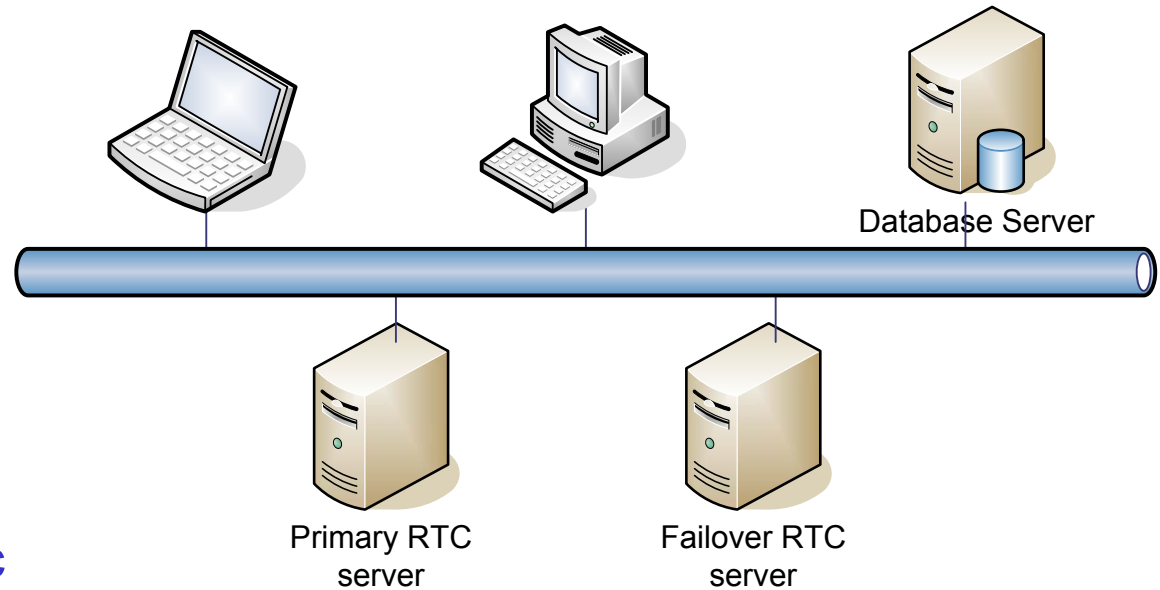
- ▶ Thousands of users
- ▶ Millions of files and work items
- ▶ Unlimited file size
- ▶ Hundreds of builds

- New 64-bit server support
- New hardware platform support
 - ▶ IBM System p

Consolidate & Lower TCO by deploying a centralized, consumable, infrastructure.

[More details here](#)

Basic High Availability *Supported in Enterprise Edition*



Provides critical availability for enterprise customers with automatic failover on hardware failure, software server crash, or other outage

Entitles installation of a second copy of the server in an idle standby application server failover configuration. Requires WebSphere Application Server and optional high availability database configuration (DB2, Oracle, SQL Server).

Fine Grained Access Control for Project Areas

- The project area editor in the web UI now has an access control page
- You can now configure read access control at the project area level
 - ▶ For everyone
 - ▶ For all members of the entire project area hierarchy
 - ▶ For a specific list of user

Active Project Areas >

AProj

Overview Permissions **Access Control**

Access Control

Configure which users have read access to the project area and its artifacts.

Grant read access to everyone
 Grant limited read access

- Grant read access to members of the project area hierarchy
- Grant read access to a specific list of users

 Grant access to repository administrators only

Members Pending To Add

Name	User ID
TestJazzAdmin1	TestJazzAdmin1

Members Pending To Remove

Name	User ID
TestJazzAdmin2	TestJazzAdmin2

Members with Read Access

Previous | 1 - 6 of 6 | Next

Name	User ID
TestJazzAdmin2	TestJazzAdmin2
TestJazzGuest1	TestJazzGuest1
TestJazzGuest2	TestJazzGuest2
TestJazzNoGroups	TestJazzNoGroups

Coverage of all agile levels of the “Planning Onion”

- The Planning Onion (*Mike Cohn Agile Estimating and Planning*)
 - ▶ Daily (my work view)
 - ▶ Iteration
 - ▶ Release (new in 2.0)
- Release 2.0 adds release planning and now covers all level of the Onion
 - ▶ View by iteration to see roadmap of the planned work
 - ▶ Web UI enables product owner to work on backlog without an eclipse install

JUnit Product Backlog
Team Area: JUnit Team | Iteration: 4.4 | 0 Closed | 4 Open

Overview | Planned Items | Charts | Retrospective

View As: Iterations

Progress: 0/8 Story Points Estimated: 100%

Item	Points	Progress	Priority	Estimate
As a user I want to re-run only failed tests	8 pts	0/0	High	62
Provide improved Assertion syntax	0 pts	0/0	High	60
4.4 s1 Closed Items: 0 Open Items: 0				
4.4 s2 Closed Items: 0 Open Items: 1				
Improve documentation for 4.4	0 pts	0/0	High	55
4.4 s3 Closed Items: 0 Open Items: 0				
Provide improved Assertion syntax			No Work	
4.4 s4 Closed Items: 0 Open Items: 0				
			No Work	

JUnit Product Backlog
Team Area: JUnit Team | Iteration: 4.4 | 0 Closed | 4 Open

Overview | Planned Items | Charts | Retrospective

View As: Backlog

Progress: 0/8 Story Points Estimated: 100%

Item	Points	Progress	Priority	Estimate
As a user I want to re-run only failed tests	8 pts	0/0	High	
Provide improved Assertion syntax	0 pts	0/0	High	
A new Story	0 pts	0/0	Medium	

63

Summary: * A new Story

State: New

Filed Against: * JUnit

Story Points: 0 pts

Quick Information: Subscribers (1): BC

Taskboards track Work in Progress

Accelerate stand-up meetings, increased transparency

See the work currently in progress

Markus Kent Closed Items: 4 Open Items: 7		Progress: 0.25 h		Estimated: 71%	
To Do		In Progress		Done	
<ul style="list-style-type: none"> Improve documentation for 4.4 (55) Provide improved Assertion syntax (60) 	<ul style="list-style-type: none"> javadoc updates for @Ignore in 4.3 (30) Based on the assertThat syntax we should provide assumptions and theories support (59) 	<ul style="list-style-type: none"> assertArrayEquals misses differences (7) testCount hard-coded to 1 for childless Description (27) Tests on protected methods fail (14) assertThat fails with Class tests (documentation problem) (10) 	<ul style="list-style-type: none"> [Docs] Cookbook TestRunner section incorrect (23) 	<ul style="list-style-type: none"> shows green bar while assert false (44) Should not call derived's afters if super's before failed (47) @After method not called after my test timeout in 4.3.1 (48) 	

assertArrayEquals misses differences

Drag and drop work items to change their state.

Backlog Plan Mode

Easily rank work items to define priority

- Ideal for managing SCRUM backlog
- Support coarse & fine grained prioritization
- Ranking is reflected in all planning views, e.g. iteration plans and release plans

JUnit Product Backlog

Team Area: JUnit Team | Iteration: 4.4 | 0 Closed | 4 Open

Overview | **Planned Items** | Charts | Retrospective

Progress: 0/8 Story Points Estimated: 100%

View As: Backlog

Drag and drop work items to rank them relative to others.

As a user I want to re-run only failed tests	8 pts	0/0	High	62
Provide improved Assertion syntax	0 pts	0/0	High	60
Improve documentation for 4.4	Improve documentation for 4.4	0 pts	Medium	55
No download link to latest version			Medium	12

Plan Risk Assessment

Helps teams identify tasks with high risk items early

Task Description	Priority	Duration	Probability	Other Metrics
...Link for enhanced hover in Work Item view	High	2 hours	1.0	71777
... functionality on the service layer	High	3 days	1.0	77066
... namespaces, ra prefixes and media	High	2 hours	1.0	77921
... (1-2548):	High	2 days	1.0	76899
... tests URServiceTest.testCommentJ	High	2 hours	1.0	54771
... for five custom attributes at the same time	High	2 hours	1.0	76854
... of each attribute in the ResultRowDTO	High	2 hours	1.0	77291
... workflowInfo on Resource is not updated on project area	Medium	2 hours	1.0	69970
... Align ROA collection with OSLC's Atom-based RDF Bags	High	4 hours	1.0	70731
... Consider to surface links as attributes in the Resource	High	1 day	0.995	73229
... workItem REST API shall also expose the Included in bulk	High	2 hours	0.994	69977
... Preserve Mentioned By links when their target is protected	High	1 hour	0.749	77322
... OSLC REST cleanup	Medium	4 hours	0.629	77096
... Check enforcement of permissions for Web UI bulk operation	Medium	1 hour	0.605	68972
... Consider to use OpenID for migration problem	Medium	4 hours	0.490	61246
... PUT/POST	Medium	2 days	0.169	61247
... Unassigned	Unassigned	4 hours	0.109	76150
... Unassigned	Unassigned	2 hours	0.003	71800
... Unassigned	Unassigned	4 hours	0.057	71767

More detailed developer estimation.. low, nominal, high

Automatically calculates probability of task fitting into the schedule

Color codes high risk tasks for quick identification and action

Web based Build Management

- From Team Concert Web UI:
 - ▶ Request new build
 - ▶ Request rebuild of existing build
- Exposes build facilities to wider community
- Provides access to build function from any desktop

Build Definitions > com.example.integration >

Submit

Request Build

Build: com.example.integration

Build Options

Personal Build

Repository Workspace:*

Browse

Build Properties

Name: Value:

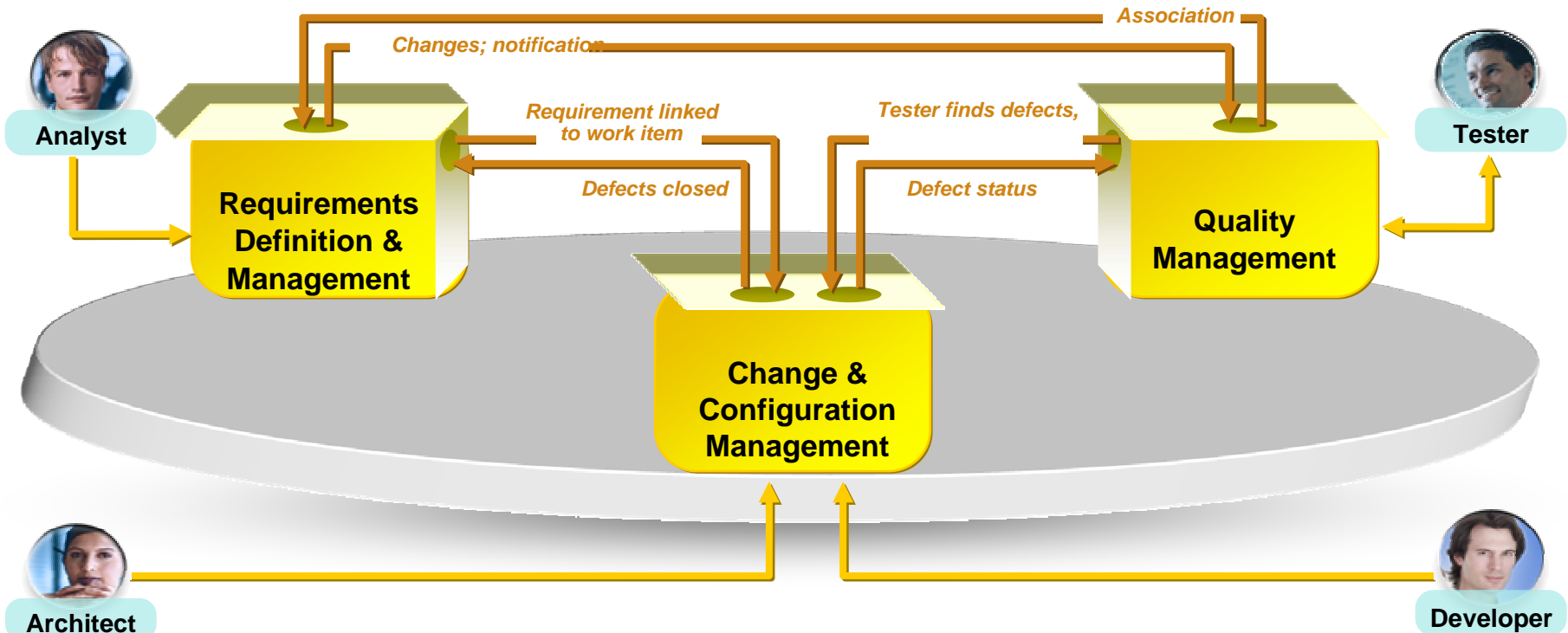
Remove

Description:

Add

Submit

Collaborative ALM connects Analysts, Developers and Testers



- **Coordinate analysts, developers and testers**

- Collaborate in context and track status

- **Align teams on project plans**

- Which requirements are in the development plan?

- **Track builds and the impact of defects**

- What build is ready for test?
- What defects are blocking test from proceeding?

- **Track status with C/ALM dashboard mashups**

- Transparency across teams and artifacts

Establish Traceability Links

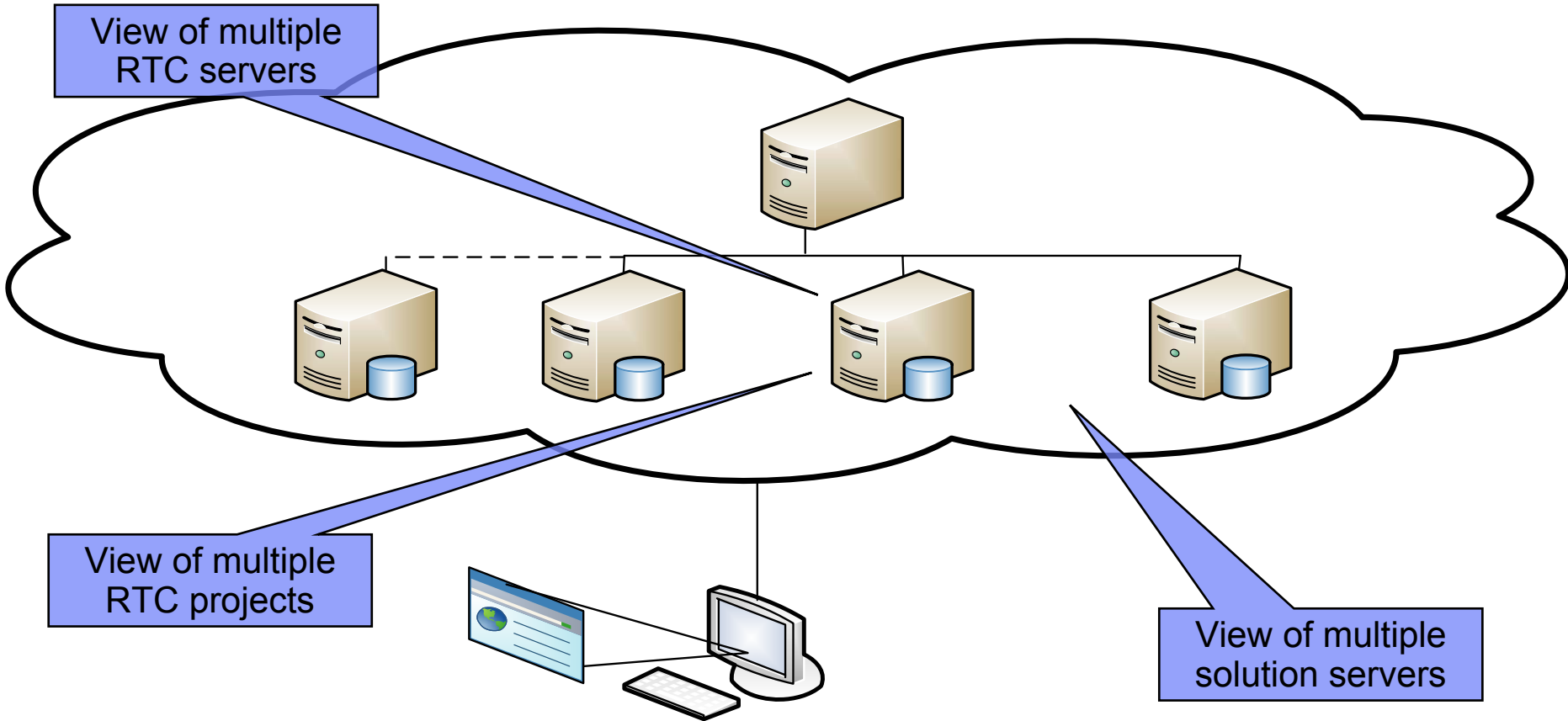
The image shows two screenshots of IBM Rational software. The top screenshot is from Rational Quality Manager (RQM), displaying a test case titled 'Improvement for CQ Integration'. A callout box points to a table of plan items, stating 'Rich hovers show the state of the linked items'. Another callout points to a specific plan item, stating 'Link to RTC Work item'. The bottom screenshot is from Rational Team Concert (RTC), showing a 'Defect 57' with a summary 'Typo in the cookbook - section 1.1'. A callout points to the 'Related Artifacts' section, stating 'Link from work item to test execution result'. A third callout on the left side of the RQM screenshot states 'Associate work item with test case'.



Surfing the ALM Web

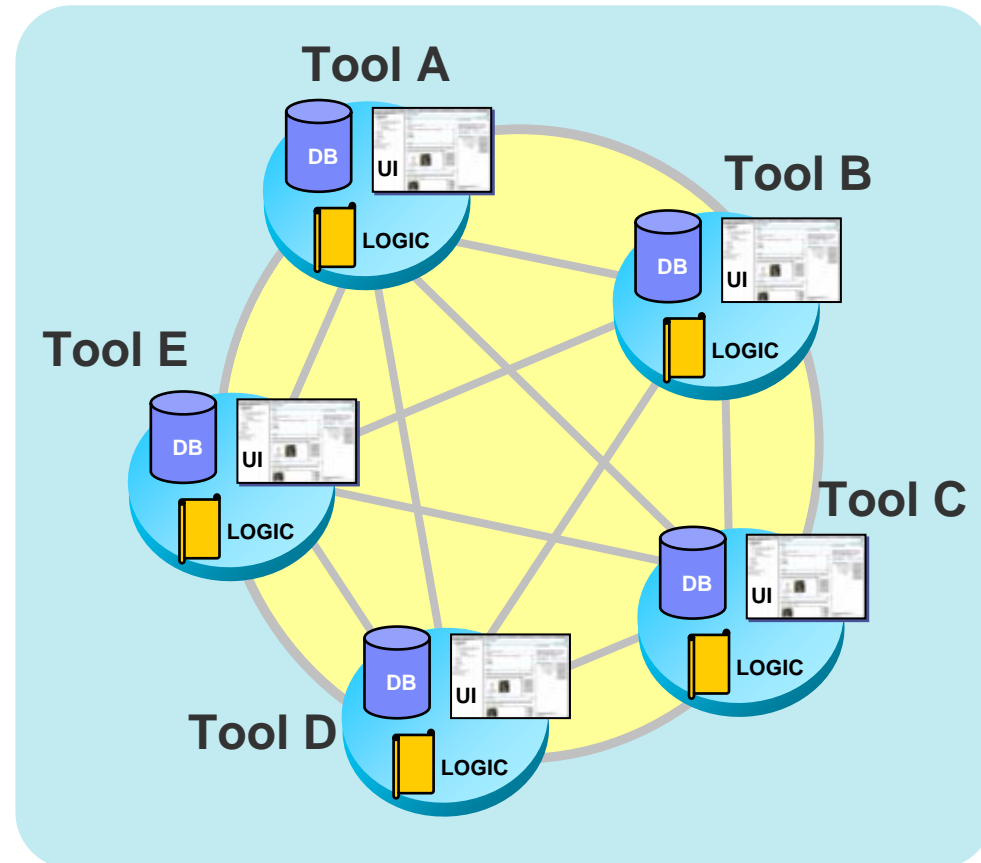
Dashboards across servers & projects

ALM "Cloud"

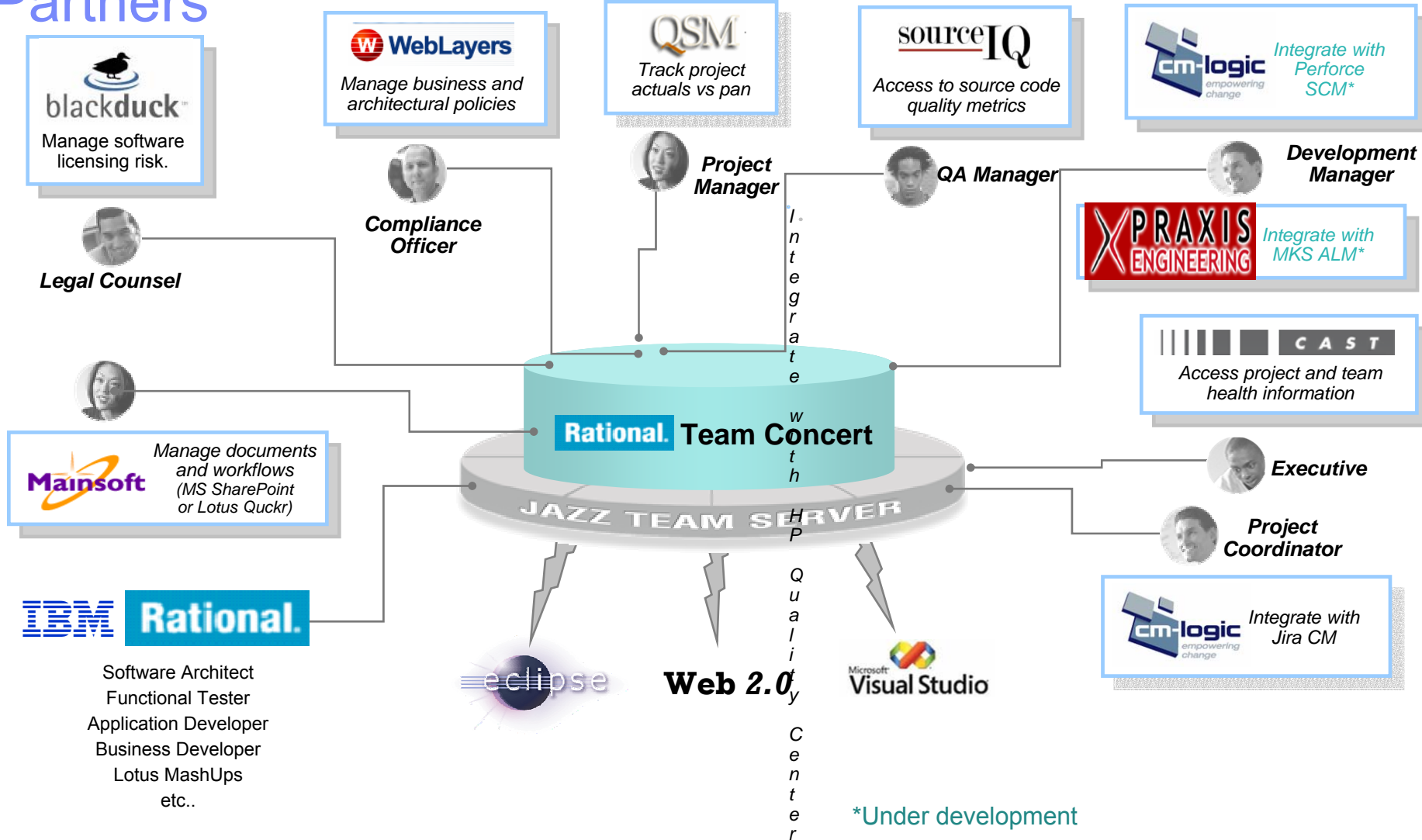


Release 2.0 API's available for extensibility

- Release 2.0 SDK supports
 - ▶ Creating and managing work items
 - ▶ Creating and managing source control artifacts
 - ▶ Creating importers from other source control systems
 - ▶ Integrations with other Jazz Foundation solutions
 - ▶ And more...
- More details to follow with on-line wiki's, documentation etc...

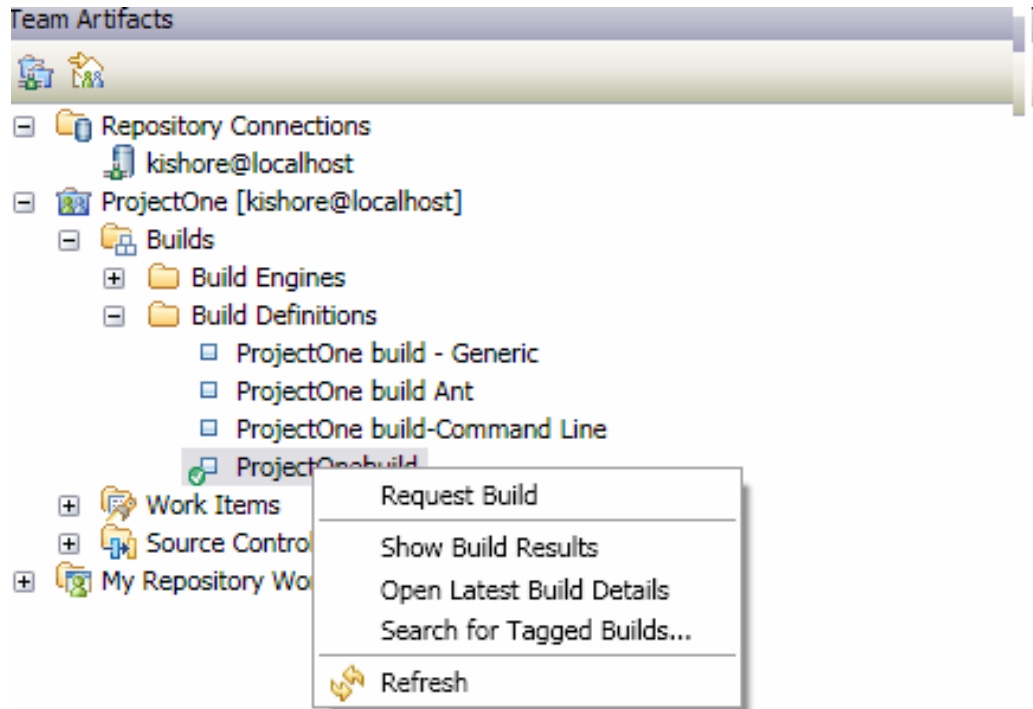


A Growing Ecosystem of Rational Team Concert Partners



Enhanced Visual Studio IDE : Jazz Build Support

- Expose Jazz build to Visual Studio developers
 - ▶ MS-Build support
 - ▶ Build Request
 - ▶ Build History view
 - ▶ Build queue view
 - ▶ Build activity view



Access to developer focused SCM, work item and build

Inside Visual Studio .NET Shell



Developer

Join Development

Connect to repository

Or

Accept invite to join project

Develop in Visual Studio

Select Stream

Run Queries

View Pending Changes

Create Workspaces

Associate Work items

Change Delivery Flow

Load/Unload workspace

Create Work items

Merge Changes

Deliver changes

Change Status of Work Items

View History

Track MS-Build Progress/Result

Web UI for project leads and developer access



Project Lead or Developer

Web UI

Create Project Area*

Customize Process*

Author and edit iteration and release plans

Create Team Area*

Customize Work items*

View Dashboards

* Permission provided



ClearCase Bridge

- Now you can link work items with ClearCase UCM change sets
- If you use the ClearCase Remote Client and UCM you can associate a UCM change set with a Team Concert work item.
- Then you can use agile planning, taskboards and dashboards to show project status of work done in ClearCase!

The screenshot displays the 'Links' tab in the ClearCase Bridge interface. A tree view under 'ClearCase Activities' shows a link to 'activity:Carol_s_activity@/projects'. Below the tree, the 'Properties' view is active, showing details for the activity:

Headline:	Carol's activity
Id:	Carol_s_activity
Kind:	UCM activity
Integration state:	Not integrated with ClearQuest record
Project:	7.1_PROJECT
Stream:	ludin_7.1_mh_ccrc_noserv00
Created on:	Thursday, February 5, 2009 4:18:30 PM ET
Created by:	caroly.user(Carol D. Yutkowitz)
Owner:	RATIONALSWG\caroly

A 'Show Change Set' button is visible at the bottom of the properties view.

References to ClearCase Activities will also show up on the Links tab of their associated work items

Opening a ClearCase Activity link from a work item editor will show the activity properties in the Properties view, just as if the properties were requested from CCRC directly.

ClearCase Importer Wizard

- Imports from ClearCase base or UCM with history
- Choose all baselines or particular baselines or labels
- ClearCase 7.0, 7.0.1 and 7.1.x supported

Import from an existing Base ClearCase branch

ClearCase Branch Type Selector:

Format: <branch-type-name>@<VOB-selector>

Locked ClearCase Label Type Selector:

Format: <label-type-name>@<VOB-selector>

Import with history from ClearCase

Choose Baselines to Import

Import all baselines

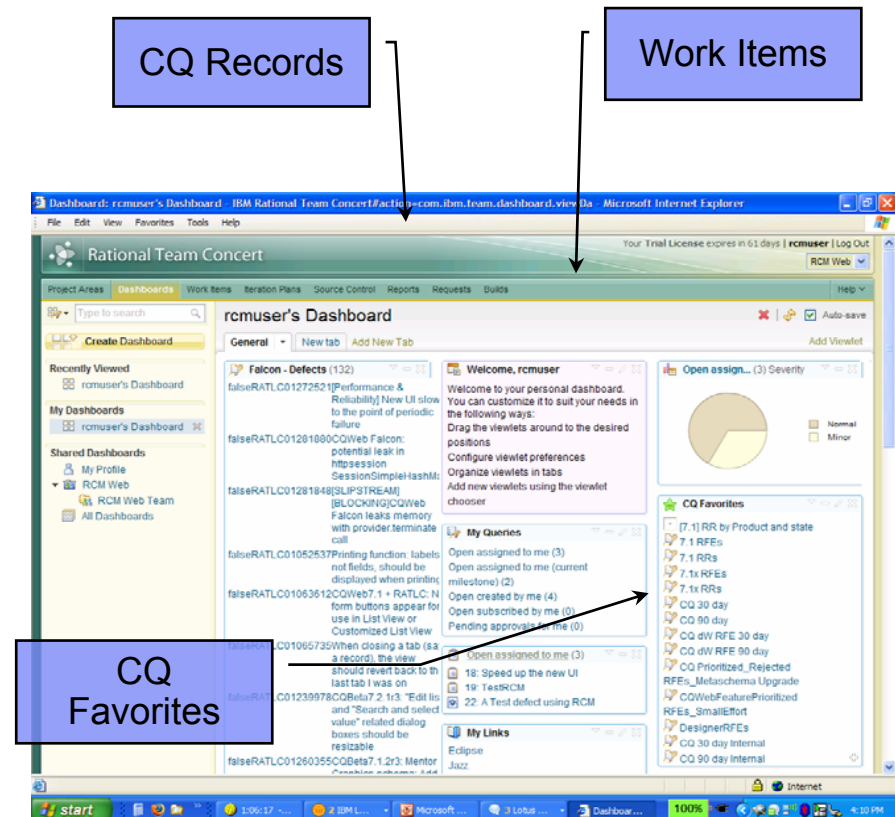
Import all baselines which have the following attribute type:

Format: <attribute-type-name>@<VOB-selector>

ClearQuest Bridge

Lower Total Cost of Ownership

- Reduces Time/Network Traffic
 - ▶ No Waiting for Data Synchronization so Key Use Cases Will Be Faster
 - ▶ Quicker Access to Record Information
- Lower Administration
 - ▶ alternate mechanism for linking CQ with Team Concert
 - ▶ No Data Replication - Helps Minimize Database Growth
- Integrated User Experience Reduces Training Costs
 - ▶ CQ Bridge UI Provides Integration between the RTC and CQ
 - ▶ Appears As If You Are Working In a Jazz-based Environment



ClearQuest Bridge

Integrated User Experience

- Leverage RTC UI Capabilities
 - ▶ Dashboard Capabilities
 - Startup Query
 - ClearQuest Query
 - ClearQuest Favorites list
- New – Link CQ Records and WIs
 - ▶ Work Items
 - Create New & Link with ClearQuest
 - Link with existing work item
 - Annotation of links

ClearQuest
Records

Rational Team Concert

Your Trial License expires in 23 days | rcuser | Log Out | ?

Project Areas | Dashboards | Work Items | Plans | Source Control | Reports | Builds | **ClearQuest Records** | RCM Web

Search

Create Defect

ClearQuest Favorites

My Hot List

Recently Viewed

All Defects

ClearQuest Navigator

- Personal Queries
- Public Queries
- Aging Charts
- Customers
- Distribution Charts
- Email Rules
- Filter Queries
- PrintReportFormats
- ReportFormats
- Reports
- Trend Charts
- All Defects**
- All Defects 1
- All Users
- Keyword Search
- My Hot List
- My To Do List

All Defects

20 Items Per Page

Previous | 1 - 20 | of 72 | Next

	id	Headline	Owner
1	SAMPL00000008	Batch Update Demo 2 alt-C does not invoke cancel	engineer
2	SAMPL00000009	Demo 2 inventory re-order not done on large sale 1	user
3	SAMPL00000010	Demo 2 logout button should be disabled during sale	engineer
4	SAMPL00000012	would like logout button to be larger - Demo 123	engineer
5	SAMPL00000013	logout in middle of sale aborts sale	engineer
6	SAMPL00000014	clerk allowed to charge too much on credit card	engineer
7	SAMPL00000015	end-of-shift report fails if after midnight	admin
8	SAMPL00000016	too many spaces in "change due" field	
9	SAMPL00000017	delete operation leaves blank line in form	engineer
10	SAMPL00000018	add item button not active after adding 3 other items	lead
11	SAMPL00000019	sales tax incorrect for NH	
12	SAMPL00000020	credit card refused message is unclear	lead
13	SAMPL00000021	inventory report is not running correctly	
14	SAMPL00000022	delete item button deletes two items	engineer
15	SAMPL00000023	request change due in larger font	lead
16	SAMPL00000024	overriding price operation allows negative number	
17	SAMPL00000025	heading of application looks too crowded	lead
18	SAMPL00000026	part number column not wide enough	engineer
19	SAMPL00000027	add item button is out of line with the other buttons	
20	SAMPL00000028	context sensitive help fails from reorder window	

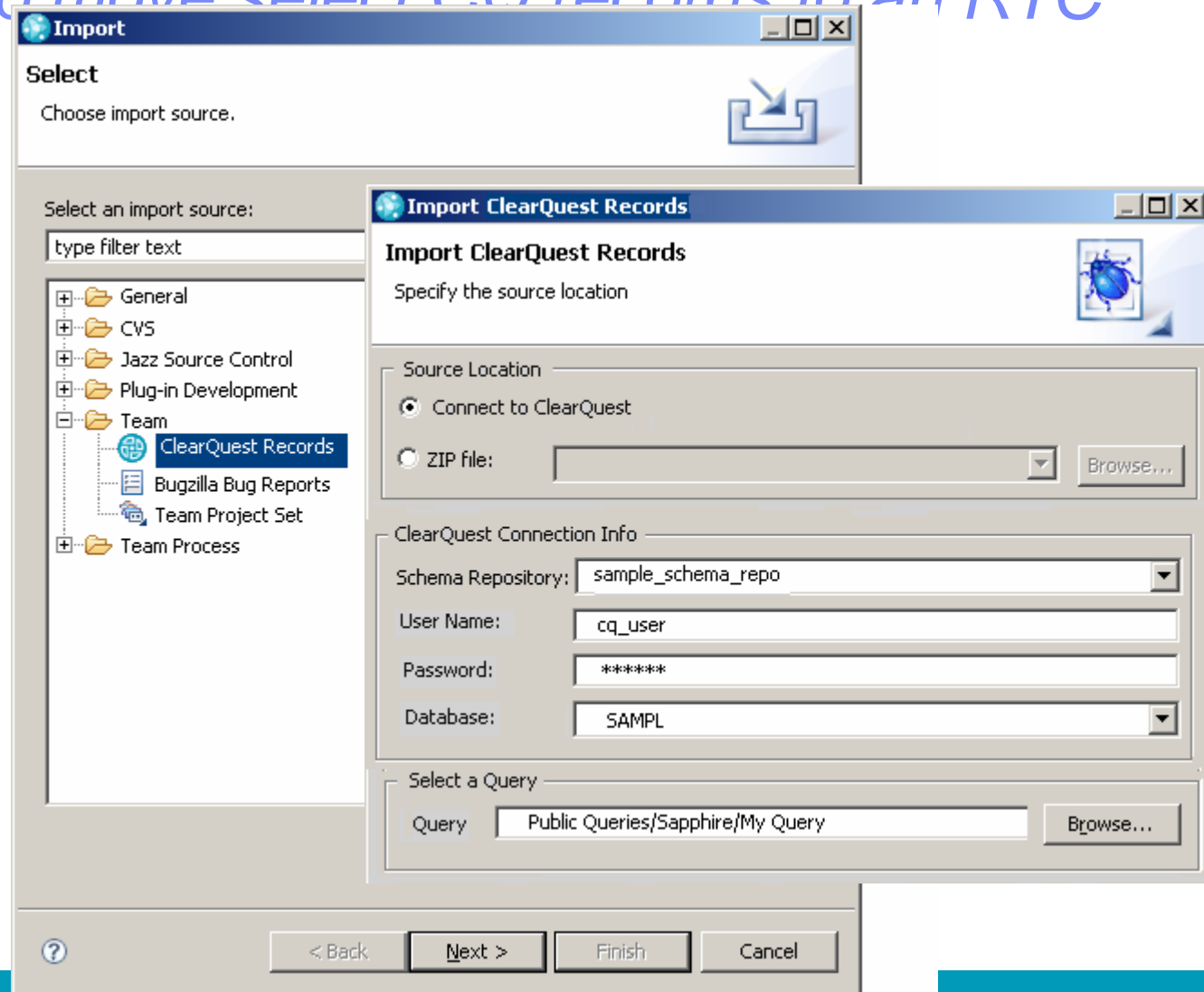
IBM

John

ClearQuest Importer Wizard

Provide ability to move select CQ records to an RTC project

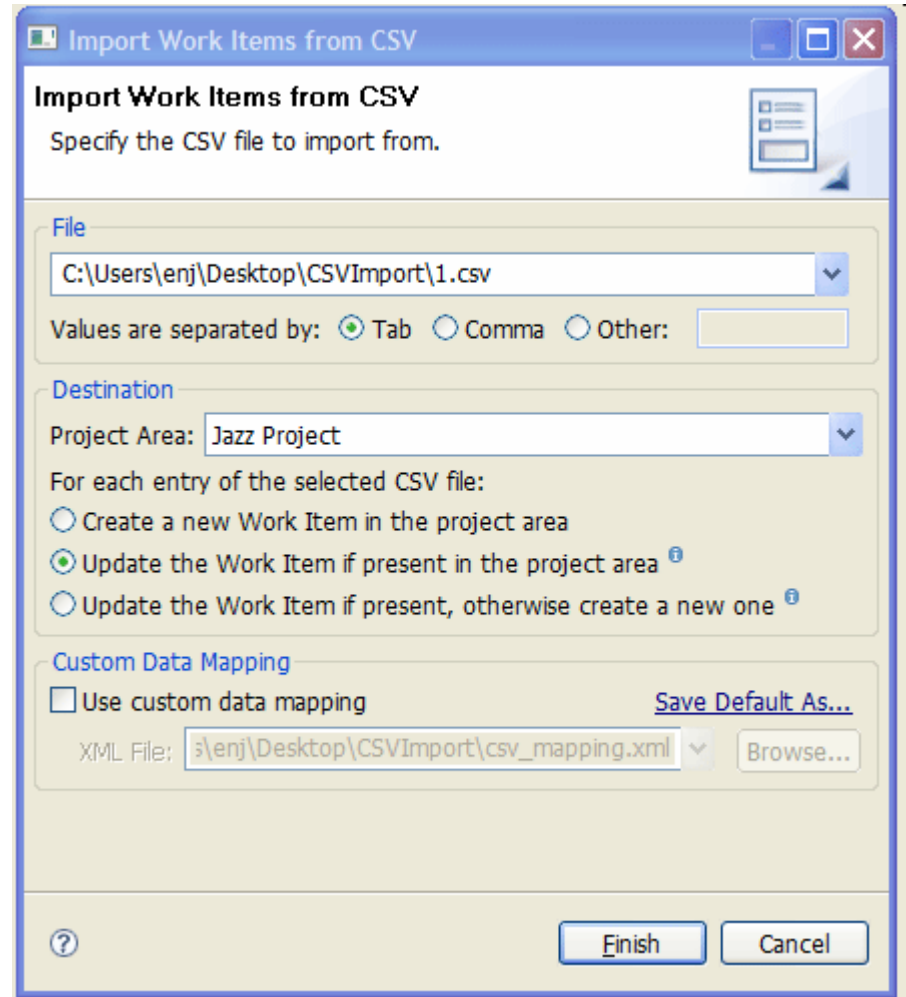
- Import CQ records to an intermediate XML format
- Select scope of import using CQ query
- Create a mapping file to map CQ Record types to work item attributes
- Import into an RTC project once mapping has been validated.



CSV Importer

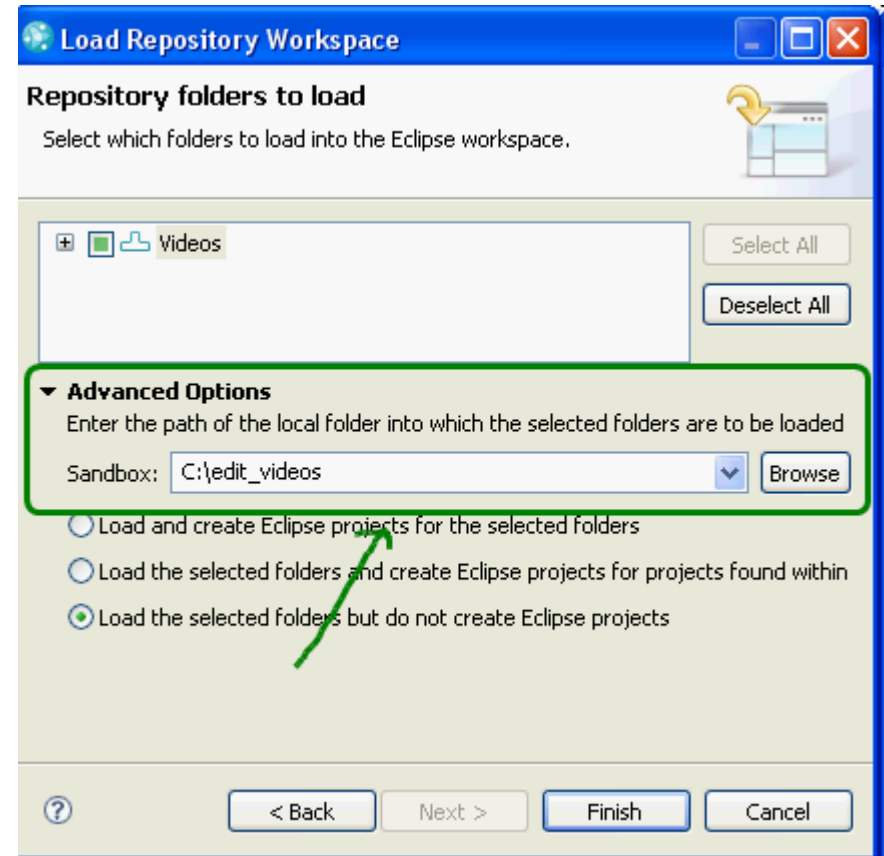
Streamlines migrations

- Create new work items or update existing work items
- First row or custom XML mappings
- Allows for work items to be imported from other systems



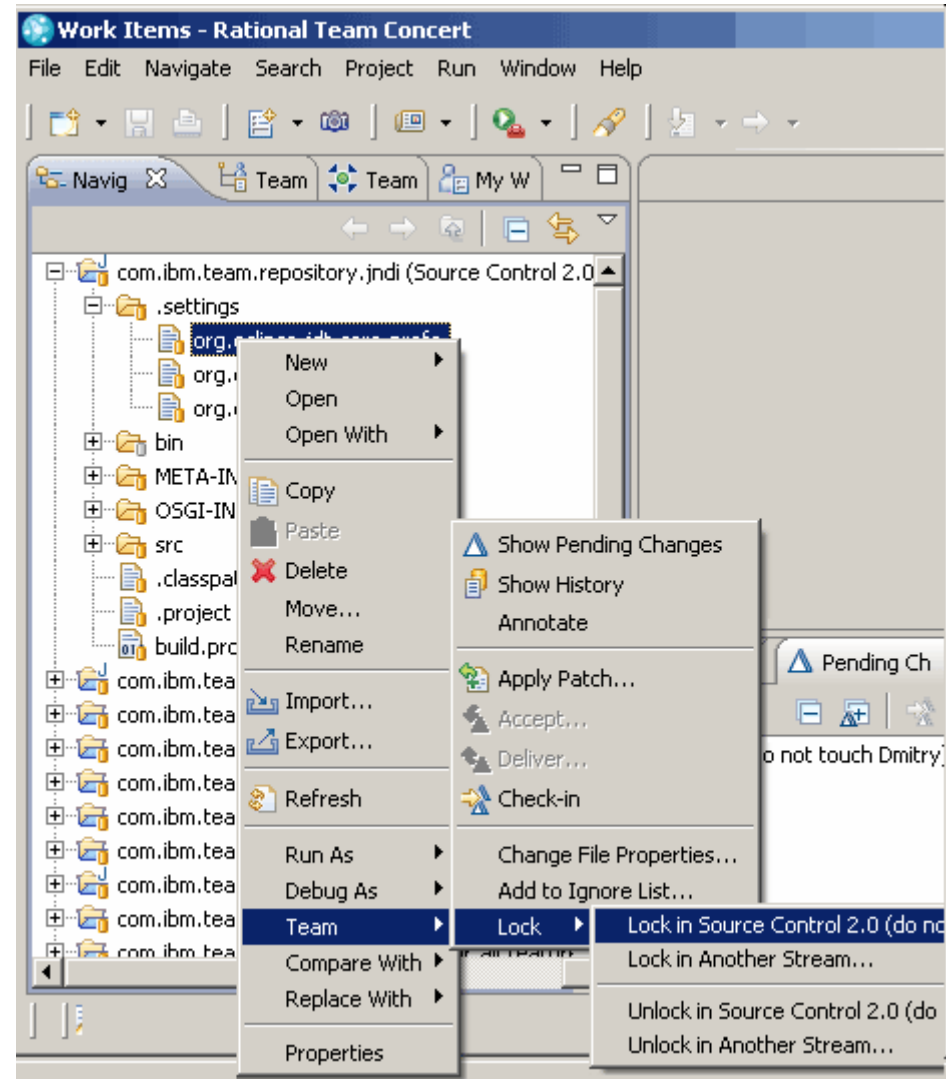
Flexible SCM workspace loading

- You can load to any location on disk and have your projects imported into your Eclipse session.
- You can keep your non-Eclipse directory structure that worked with external tools as is.



SCM file locking to avoid parallel file changes or merging

- You can now lock a file in a particular stream.
 - ▶ Useful for non-mergable contents
 - Images, presentations



Enhanced Work Item Customization

User, Category, and Iteration custom attributes types, along with the ability to define custom attributes of the following types:

- Work Item and Work Item lists
- Project Area and Project Area lists
- Team Area and Team Area lists
- Tags
- User lists

Miscellaneous

Single Work Item: 90: Defin...new build

Single Team: JUnit Team

Single Project: JUnit Project

Single Process Area: JUnit Team

Miscellaneous

Multi Process:

JUnit Project [localhost]

JUnit Team [development]

Multi Project:

Jazz Project [localhost]

JUnit Project [localhost]

Multi Work Item:

90: Define a new build

94: Define team members

Multi Contributor:

Bill Cassavelli

Markus Kent

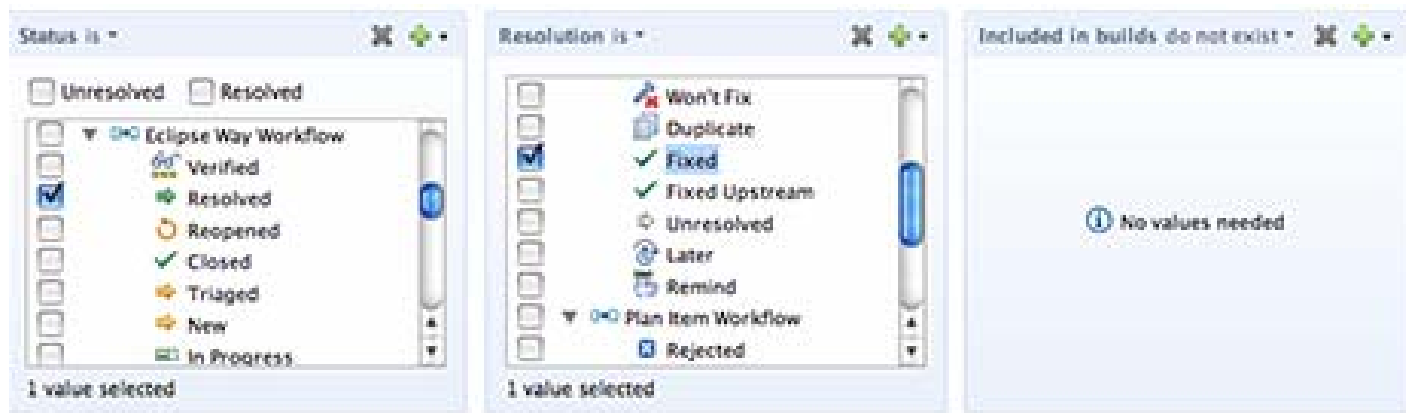
Internal Tags:

Mutli Team:

Jazz Project Team [Main Development]

JUnit Team [development]

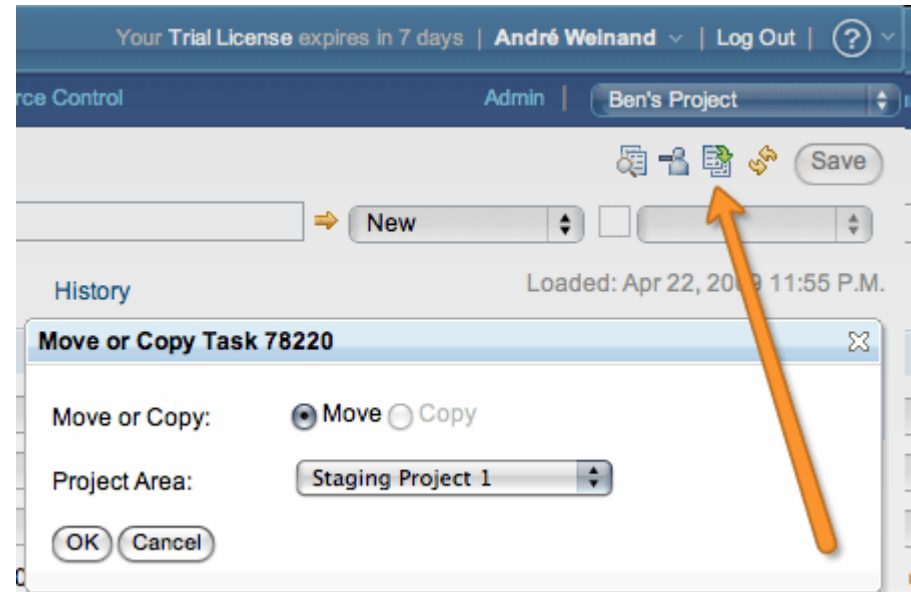
New Query Functionality



- New flexibility in constructing queries:
 - ▶ 'Not Exists' operator for link attributes
 - ▶ Link attributes can be combined
 - ▶ ANDing of multiple custom attributes
 - ▶ Query of multi-valued attributed
- Examples of new queries
 - ▶ Stories without children
 - ▶ Fixed defects not in build
 - ▶ Adoption items affecting team

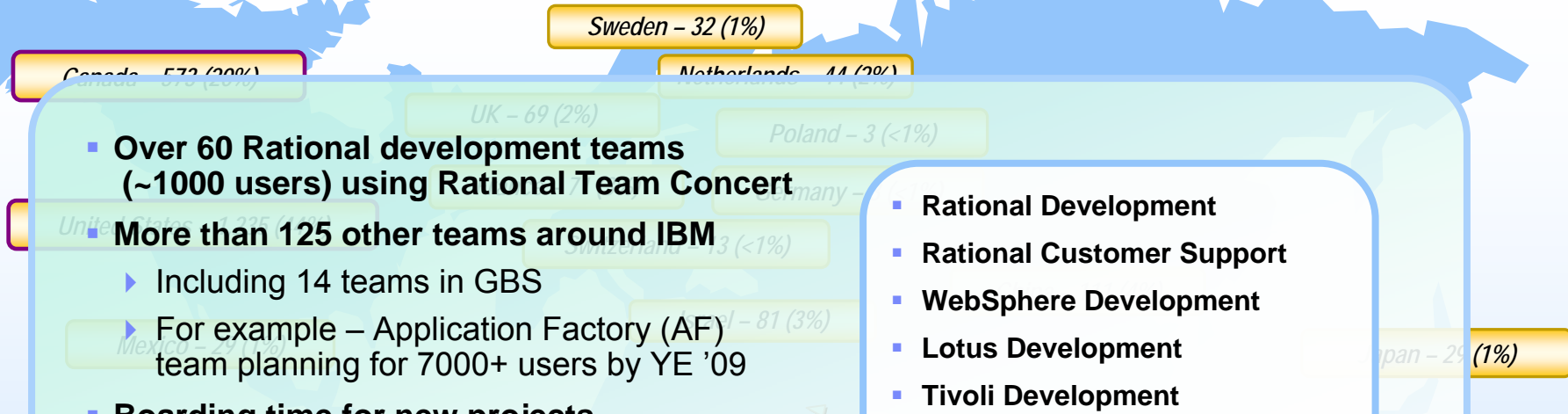
Move/Copy work items

- Easily move or copy work items between project areas
- Encourages collaboration across projects



Agility @ scale with Rational Team Concert

2,836 total resources worldwide



“We've really enjoyed the way Jazz deals with collaboration, keeping track of tasks and linking changes to actual tasks. This is light-years ahead of what we had before with CVS.”

“Less emails. Less lost info. Most accurate vision of features and tasks. Very light weight for everyone. Supports sprints / iterations very nicely.”

- IBM internal feedback

Jazz.net community site: Open commercial development

Suppose we did our development out on the Internet?

The screenshot shows the Jazz.net community site interface. At the top, there's a navigation bar with 'Home', 'Community', and 'Log In'. The main content area features several articles and sections:

- People not organizations build great software.** A section titled 'What is Jazz?' discussing team development and collaboration.
- Rational Team Concert Client for Microsoft Visual Studio IDE beta is now available!** A news item dated 'Fri, 14 Nov 2008' about the beta release of the Rational Team Concert client for Visual Studio.
- Mainsoft Document Collaboration for Rational Jazz: Microsoft SharePoint Edition Beta is now available!** A news item dated 'Wed, 19 Nov 2008' about the beta release of Mainsoft's document collaboration solution.
- In The News (recent)** A section listing recent news items, including 'Agile for a new age' and 'IBM Testing' HP's Market Position In Software Quality Management'.
- Team Blog (recent)** A section for team blogs, currently showing an 'Error loading RSS' message.

- An open, commercial development laboratory where you can...
 - Communicate with the development team
 - Track the progress of builds and milestones
 - Get the latest product trials and betas
 - Join developers and product managers in discussion groups
 - Submit defect and enhancement requests

For the most up to date information ...

- Rational Team Concert 2.0 on jazz.net



Driving Business Differentiation

Questions

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