



IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



Introduction to IBM Rational Team Concert

Terry Quatrani
Rational Evangelist

Agenda

- Today's Software Development Landscape
- All that Jazz
- Rational Team Concert
- Demo



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Today's reality: An intense focus on business outcomes



Align *IT* investments with rapidly evolving business priorities



Manage value and mitigate risks by improving project management



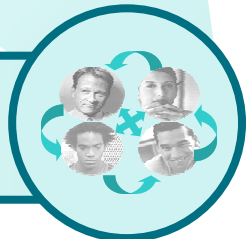
Control costs & improve global operational efficiencies



Ensure security and compliance in a changing global environment



Integrate value in organizationally diverse environments



Creates pressure on software delivery and solution sourcing



"2/3 of our projects span multiple business units and locations"



"People knew it was a train wreck; no one could see what to do"



"The business is always changing what they want and we are the last to know"



"We run on the Web... we run fast so new code makes us really nervous"



"As-is won't do, we need new business models and capture the best talent"

- Increasing reliance on out sourced partnerships & software reuse
- Interest in replicating the proven models of open, community-governed software delivery models
- Popularity of Agile development
- Investments in SOA and Web 2.0 to enable new business models



Impact of growing modularity

- ▶ More granular service functionality used across business applications
- ▶ Larger number of projects and assets including custom, outsourced and packaged



Impact of accelerating change

- ▶ Asset are impacted by frequent updates and changing interdependencies
- ▶ Effective cross-organizational visibility and synchronization becomes an imperative!



The defining challenges in effective software delivery

Only 37% of stakeholders are satisfied with the speed of internal application development¹.

Only 42% are satisfied with the quality¹.

50% of outsourced projects are expected to underperform².

Silos of people, process, and projects

Geographic Barriers

- Poor communication
- Language, culture, time
- Process gaps resulting in rework
- High degree of friction

Organizational Barriers

- Lack of meaningful collaboration
- Weak project governance
- Lack of domain expertise
- Poor LOB oversight
- Security of IP when outsourcing

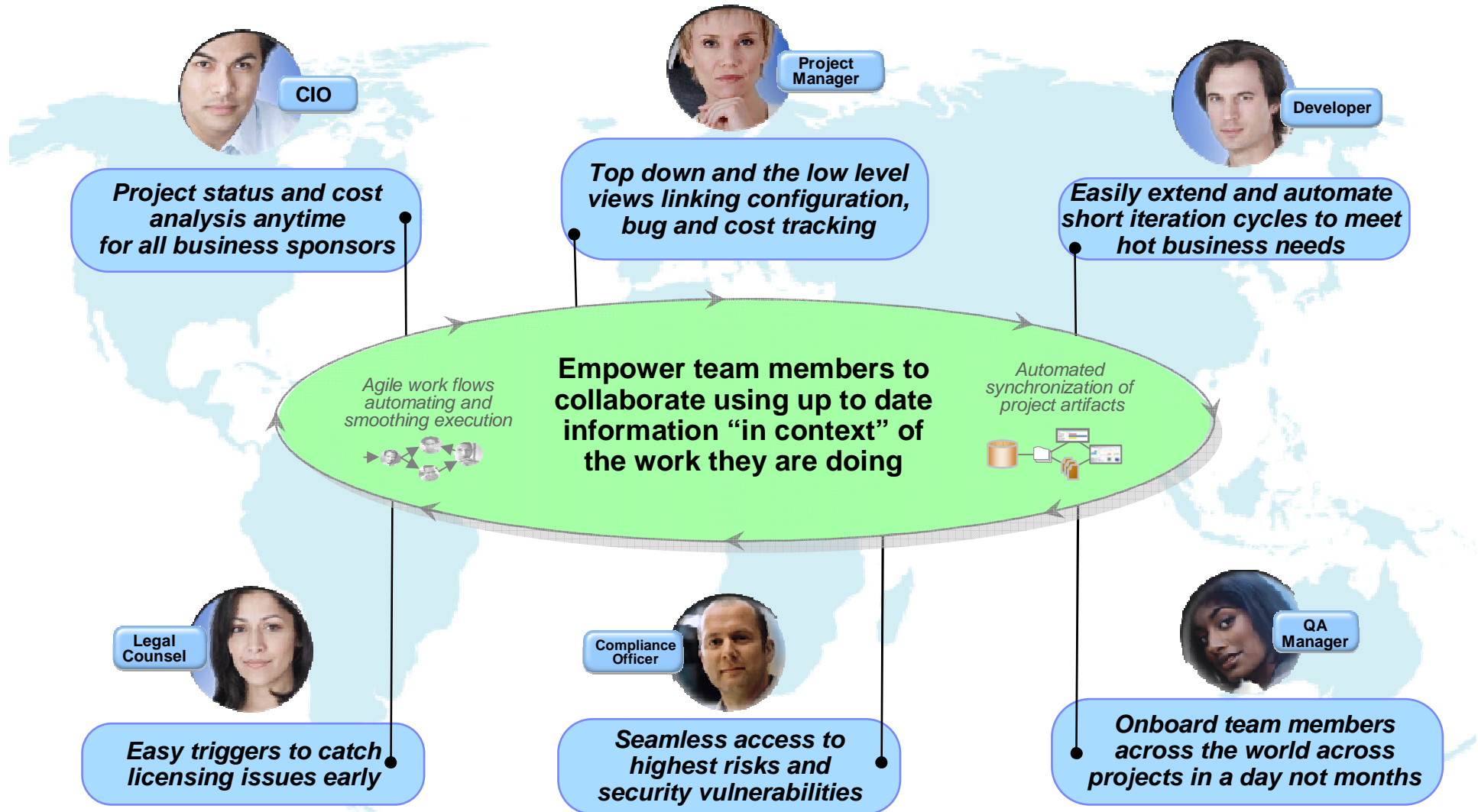
Infrastructure Barriers

- Incompatible tools / repositories
- Unreliable access artifacts
- Lengthy on-boarding
- Inflexible tooling integration

Source: ¹Forrester, ²Gartner



Customer Speak: What they would like to see possible



Collaborative Development Environments

The purpose of a **Collaborative Development Environment** is to create a **frictionless surface** for development **by eliminating of automating many of the daily, non-creative activities** of the **individual and the team** and by providing mechanisms that encourage creative, healthy, and **high-bandwidth modes of communication among a project's stakeholders** – Grady Booch

- Guiding Principles
 - ▶ **Integration** of work flows and artifacts
 - ▶ **Team First** – the tools know about the team
 - ▶ **Collaboration** on artifacts/work products following the rules of the team (Process)
 - ▶ **Transparency/visibility** into what is happening in project for everybody



Envisioning a platform that can transform software delivery

A open technology initiative to *transform how people work together* to deliver greater value and performance from their software investments



- Robust, extensible and scaleable
- Globally distributed, fluid and dynamic
- Community-based and open at Jazz.net

Collaborate in Context

- Enable team transparency of “who, what, when, why”
- Build team cohesion and presence
- Automate hand-offs so nothing falls through the cracks



Right-size Governance

- Automate team workflow improving productivity
- Automate data collection eliminating administrative overhead
- Real time reporting and alerts reduces project risk



Day One Productivity

- Dynamic provisioning of projects and teams
- Real-time iteration planning and workload balancing
- Unify teams with tools choice

Real-time integration of people, process and projects across the lifecycle



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The Jazz project

People working together to deliver great software

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

A major investment by IBM to create a scalable, extensible team collaboration platform.

IBM's vision for the future of software delivery -- supporting a workforce that is increasingly organizationally and globally distributed, fluid and dynamic.

An evolution of the Rational portfolio, which will evolve to support the Jazz technology platform over time.

A community at **Jazz.net** – the online venue for open commercial development of select Jazz-based products.




How Jazz is different

Dynamic integration of

People

Desktop/database integration → **Global integration**
Function first → **Team first**
Pre-determined tool function → **Dynamically extensible**

Process

Rigid rules → **Creative collaboration**
Manual tasks → **Process aware and transparent**
Proprietary infrastructure → **Internet standards**

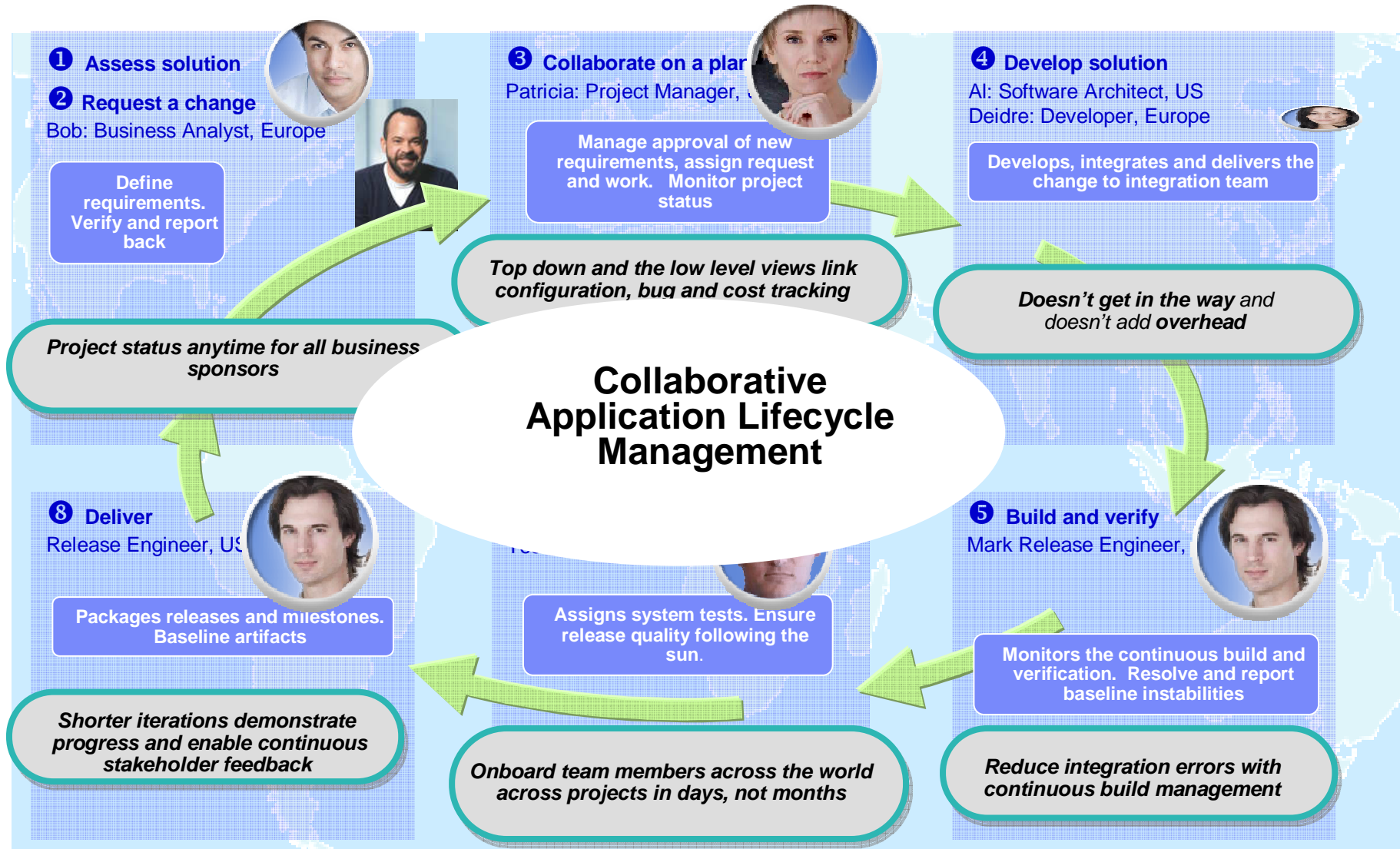
Projects

Lengthy project onboarding → **Day one productivity**
Hindsight analysis → **Continuous steering**
Status guesstimates → **Real-time insight**

...across the software lifecycle



Dynamic processes streamline team communication and collaboration



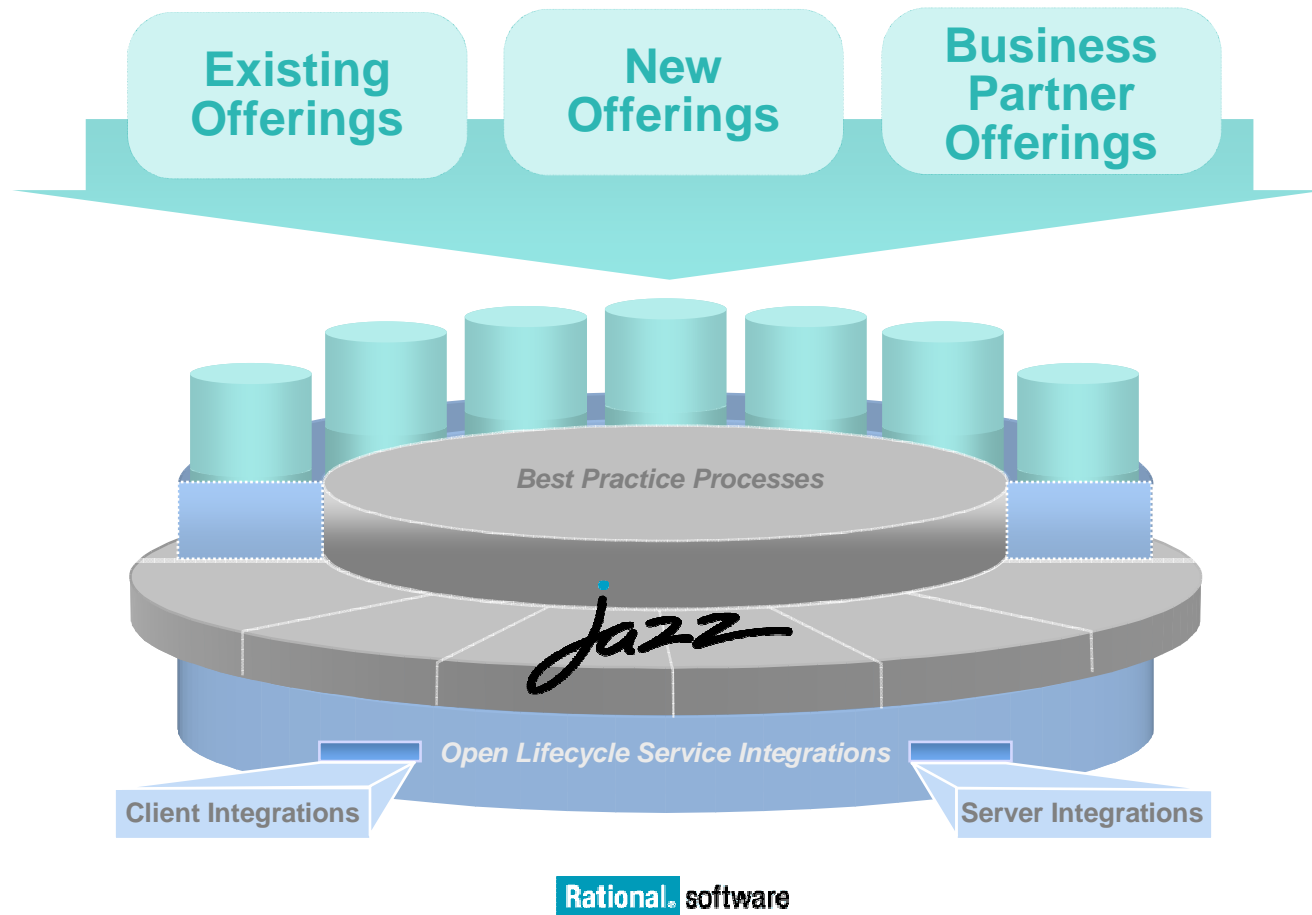
Jazz.net: Delivering greater openness and customer participation in the products they depend on for software delivery

- IBM is opening up the Rational Software Delivery Platform for greater ease of consumption, extensibility and integration to meet the unique usage needs of our customers
- IBM is providing transparent, collaborative customer participation in the development of new Rational technologies through an open commercial community



An evolution of value for new and existing customers

The next generation of the IBM Rational Software Delivery Platform





Create a jazz.net account

Jazz.net registration is now open to everyone! In most cases, we can validate your registration and send you your password right away if you provide us with complete and accurate information.

*Create a jazz.net User ID:

[Check this User ID for availability](#)

Personal Information:

*First name:

*Last name:

*E-mail:

*Re-type E-mail:

*Company or Organization name:

*Select the entry that best describes you:

Mailing Address:

*Address line 1:

Address line 2:

*City:

State/Province (required U.S./Canada):

Zip/Postal Code (required U.S./Canada):

*Country/region:

If you have a [registration code](#), enter it below:

Why register?

Creating a jazz.net account allows you to take part in the Jazz community. You can download product Betas, and other previews of Jazz technology.

You'll be able to interact directly with the Jazz development team and other members of the Jazz community through forums and mailing lists, and help guide the evolution of the Jazz platform.

Still not sure?

Watch the [guided tour](#) of Jazz.net.



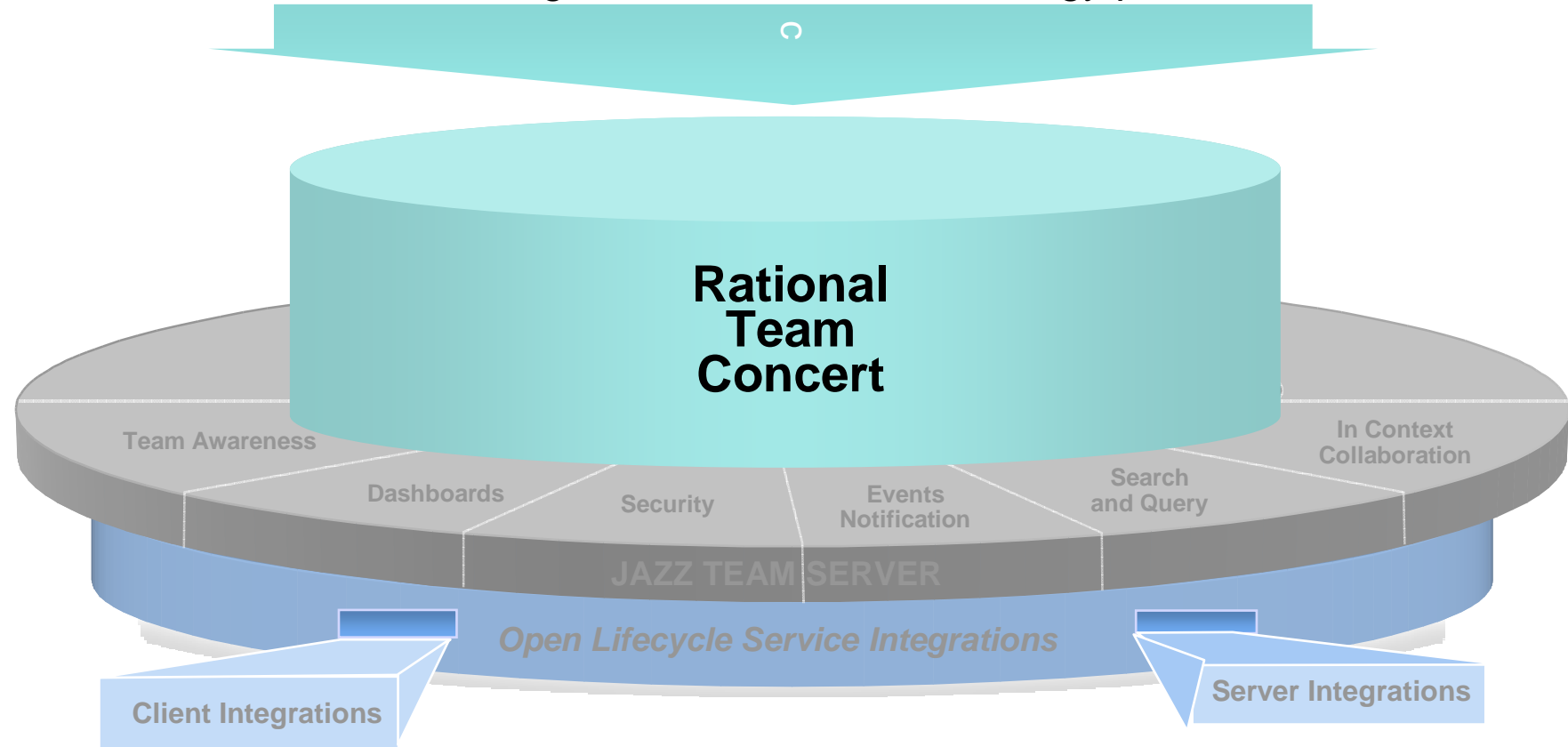
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Rational Team Concert

The first offering built on the Jazz technology platform



Rational. software



Software innovation through collaboration

- **Real time, in-context team collaboration**
 - ▶ Make software development more automated, transparent and predictive
- **"Think and work in unison"**
 - ▶ Integrated source control, work item and build management
- **Assess real-time project health**
 - ▶ Capture data automatically and unobtrusively
- **Automate best practices**
 - ▶ Dynamic processes accelerate team workflow
 - ▶ Out-of-the-box or custom processes
- **Unify software teams**
 - ▶ Integrate a broad array of tools and clients
 - ▶ Extend the value of ClearQuest and ClearCase
 - ▶ Visual Studio Client (4Q08)
 - ▶ Support for System z and System i servers (2H08)

Open and extensible on



- ✓ Collaborate in context
- ✓ Right-size governance
- ✓ Day one productivity



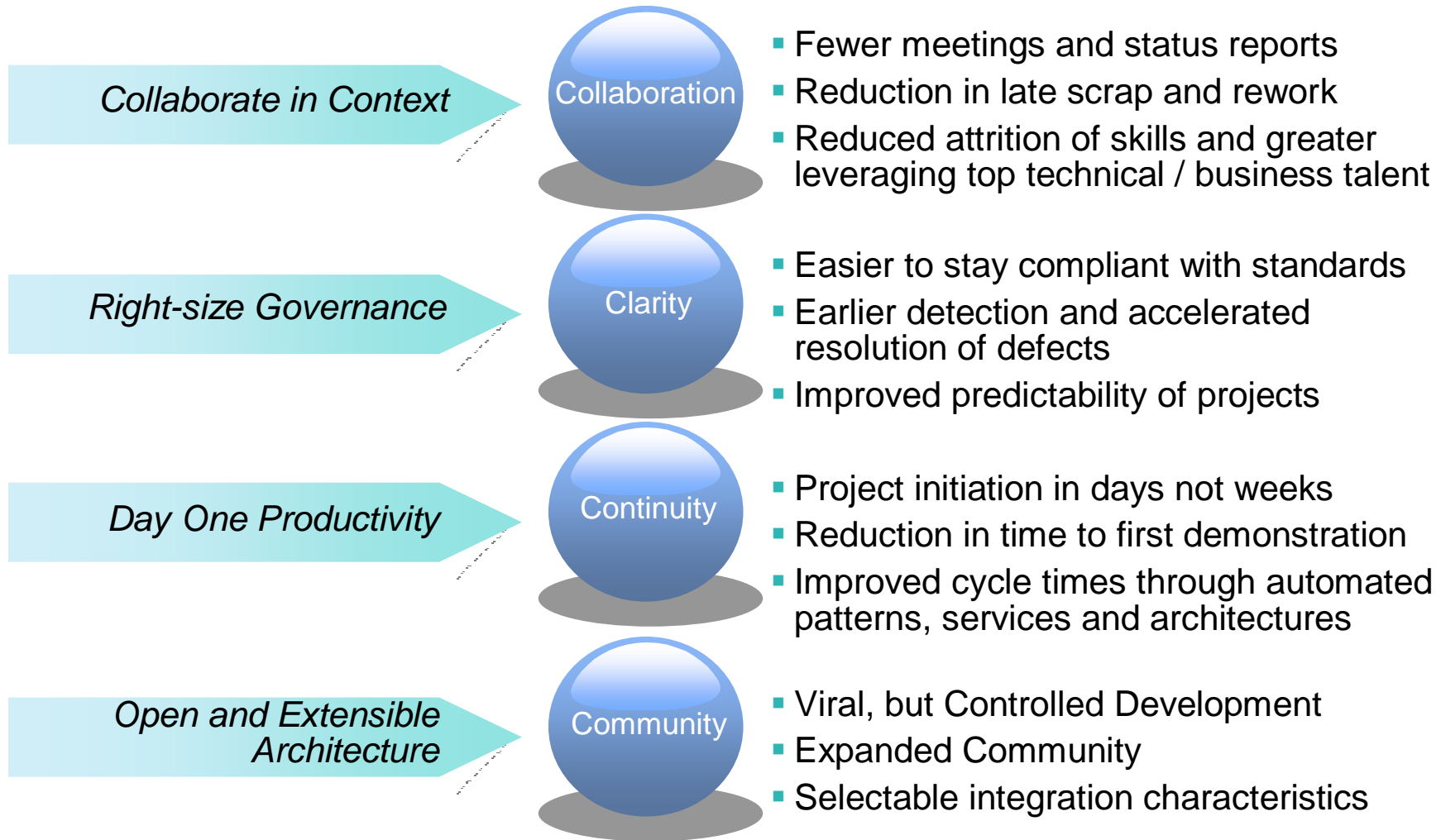
IBM Rational Team Concert

transparent *integrated presence*
 wikis OPEN real-time reporting
 chat automated hand-offs Web 2.0
custom dashboards automated data gathering
EXTENSIBILITY Eclipse plug-ins services
 architecture **FREEDOM TO CREATE**

JAZZ TEAM SERVER



Translating words to actions



The Rational Team Concert family 2008

Statement of
Direction
(2009)

Express-C

Community and Academia

- In-context collaboration
- Open source middleware
- Up to 10 users per server

Express

Mid-sized and Departmental

- Transparent development
- Out-of-the-box processes
- Commercial middleware
- Up to 50 users per server

Standard

Corporate Teams

- Customizable process
- Real-time project health
- LDAP admin
- Enterprise scale and extensibility
- Up to 250 users per server

Enterprise

Enterprise Deployments

- Enterprise optimized extensions
- Integrated ClearCase, ClearQuest Build Forge
- Enterprise scale, security, governance & provisioning

Eclipse™, Linux®, MS Windows®, UNIX® - z/OS® (1H 09) & i5/OS (3Q) w/ native asset & work item mgmnt



Rational Team Concert

Iteration Planning

- Integrated iteration planning and execution
- Task estimation linked to key milestones
- Out of the box agile process templates

Project Transparency

- Customizable web based dashboards
- Real time metrics and reports
- Project milestone tracking and status

SCM

- Integrated stream management with flow relationships
- Component level baselines
- Server-based sandboxes
- Identifies component in streams and available baselines
- ClearCase connector

Work Items

- Defects, enhancements and conversations
- Query results view and share queries with team or member
- Support for approvals and discussions
- ClearQuest connector
- Query editor interface

Build

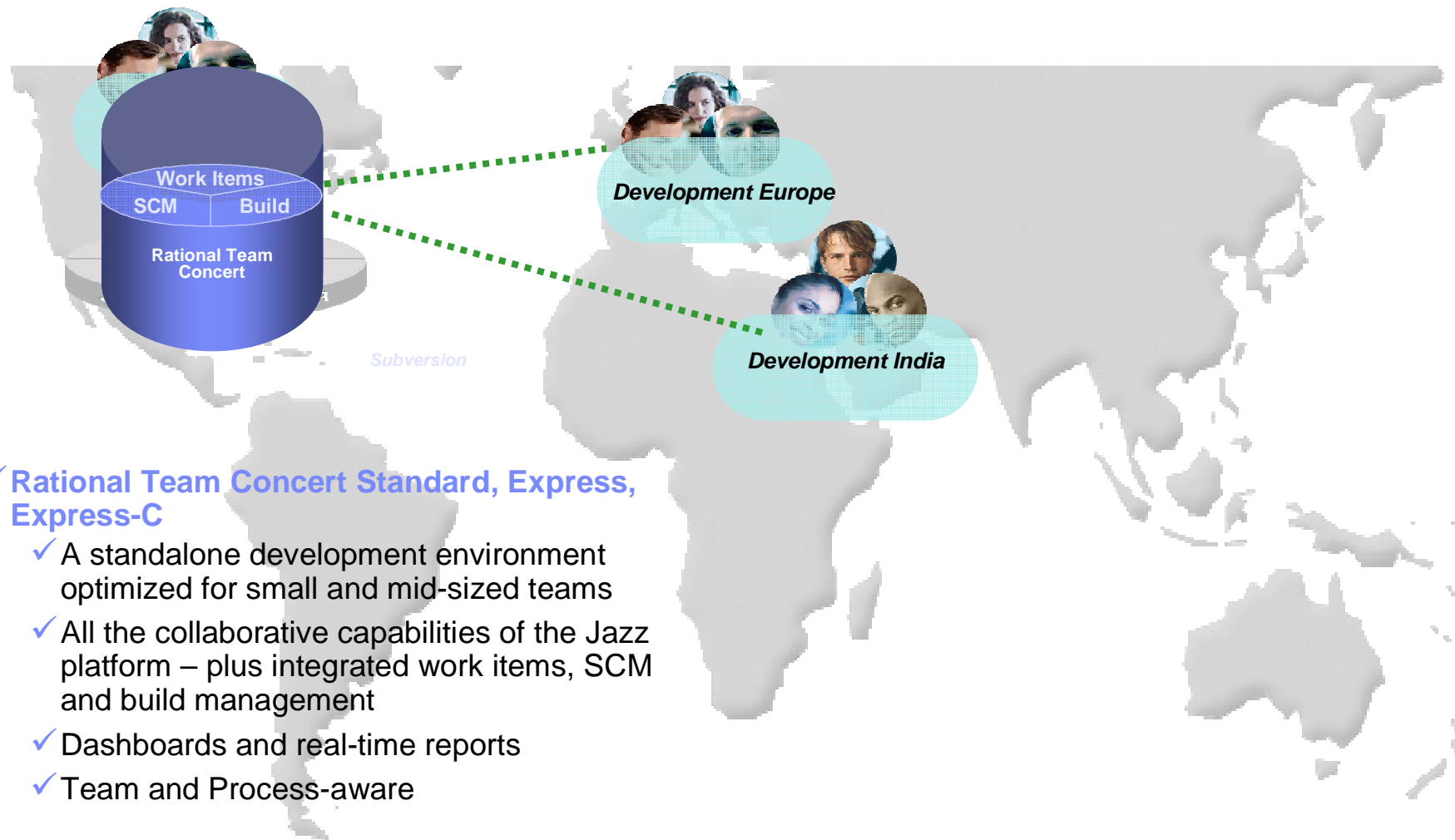
- Work item and change set traceability
- Local or remote build servers
- Supports ant and command line tools
- Integration with build forge
- Build definitions for team and private builds

Jazz Team Server

- Single structure for project related artifacts
- World-class team on-boarding / offboarding including team membership, sub-teams and project inheritance
- Role-based operational control for flexible definition of process and capabilities
- Team advisor for defining / refining “rules” and enabling continuous improvement
- Process enactment and enforcement
- In-context collaboration shows team members and status of their work



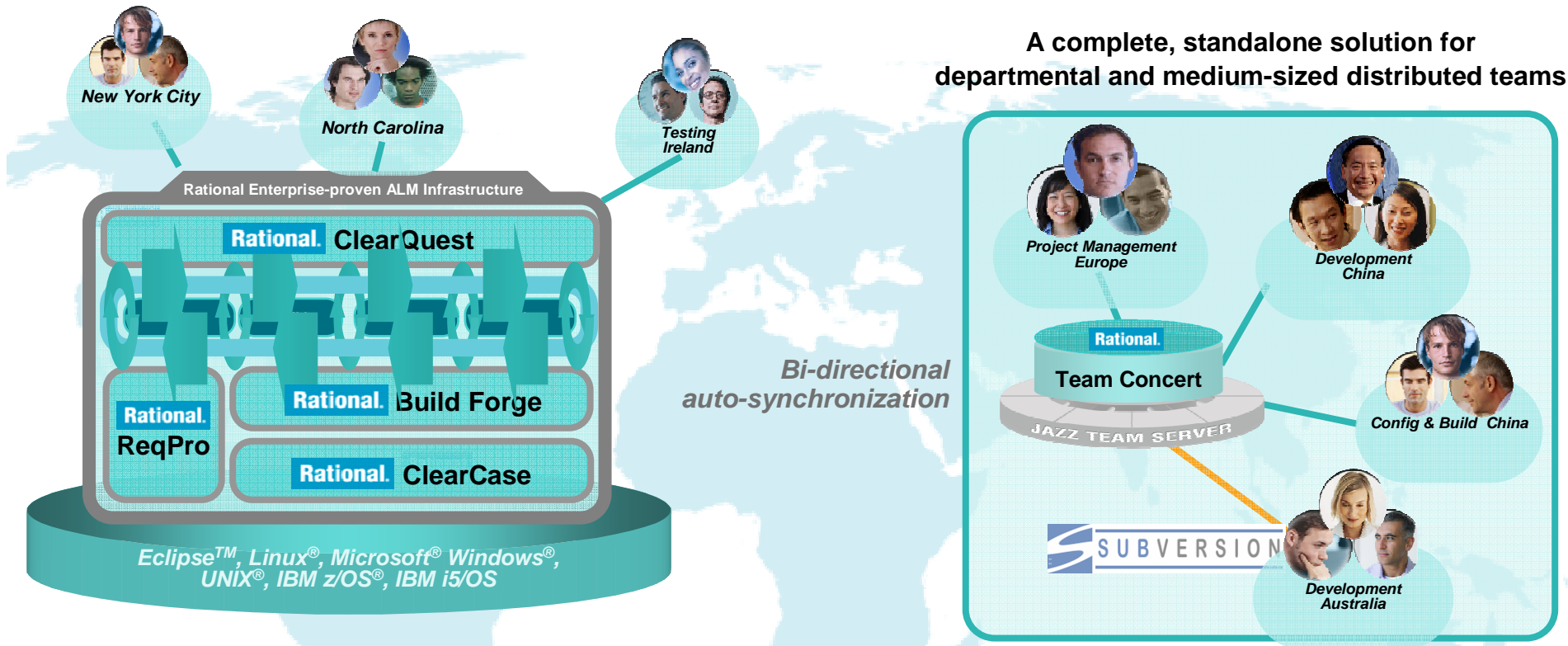
Leveraging Rational Team Concert independently



- ✓ **Rational Team Concert Standard, Express, Express-C**
 - ✓ A standalone development environment optimized for small and mid-sized teams
 - ✓ All the collaborative capabilities of the Jazz platform – plus integrated work items, SCM and build management
 - ✓ Dashboards and real-time reports
 - ✓ Team and Process-aware



Unify distributed teams in mid-sized or enterprise settings



A complete, standalone solution for departmental and medium-sized distributed teams

- Supports departmental “satellite” or “agile” projects optionally integrated with existing enterprise-proven Rational ALM infrastructure offerings
- Enhances existing ALM offerings with new collaborative & process capabilities



Source code management

The screenshot displays the IBM Rational Team Concert interface. On the left, a tree view shows 'All Team Areas' with sub-areas like 'Streams', 'Builds', and 'Work Items'. The 'Core Library (Core Library)' is selected. The main pane shows the 'Stream' details for 'Core Library', including repository information and a list of components. The 'Components' section lists 'Core (8: v20080201-publish)' and 'Core Tests (7: v20080201-publish)'. The 'Projects in Component' section shows 'net.jazz.uws.squawk' and 'net.jazz.uws.squawkers'. The bottom pane shows a 'Pending Changes' view for the 'Core Library Workspace with Jerry', listing outgoing changes for 'Core', 'Core Tests', and 'User Interface Workspace'. A 'Squawker.java' file is visible in the file explorer.

Integrated stream management solution

Identifies components in those streams and the baselines available for the team

Individual user server workspaces

Working with Change Sets

Development projects contained in those components



Work items

Subscribe to work items you're interested in

Predefined, custom and personal queries

The screenshot displays the IBM Rational Work Items application. The main window shows a 'Defect 12' with the following details:

- Summary: UWS Add JavaDoc to CLI code
- Type: Defect
- Severity: Normal
- Found In: Unassigned
- Created: Jun 6, 2007 5:11 PM
- Created By: Jerry Jazz
- Team Area: UWS Temperature Conversion Team /
- Filed Against: Core/Command Line
- Owned By: April Blues
- Priority: Unassigned
- Planned For: -> 1.0 M1
- Estimate: 1 h
- Time Spent:
- Due: None
- Resolved: Jan 24, 2008 4:30 PM
- Resolved By: April Blues

The 'Description' field contains the text: "We need to add JavaDoc to our code. Note that I have sized this at one day and targeted it for M1. This means do it now while Zach gets the build going but only spend at most this much time on it, maybe less. We just need to get a start on it now."

The 'Discussion' section shows a comment: "We have decided to make the change|".

At the bottom, a table shows query results for 'Closed created by me':

I	Status	P	S	Summary	Owned By	Created By
12	Resolved			UWS Add JavaDoc to CLI code	April Blues	Jerry Jazz
10	Resolved			Expose functionality via public get method to core temperature ...	Unassigned	Jerry Jazz

Integrated discussion threads

Query results

Understands and persists work item's relationship to SCM and build artifacts



Builds

Create build definitions for team and private builds

Supports Ant and command line build tools

Create local or remote build servers

Identify work items and change sets that went into the build

Historical view of the build queue with status

The screenshot displays the IBM Rational Build Workbench interface. The top-left pane shows a tree view of Team Areas, including Repository Connections, Builds, Build Engines, Plans, Reports, Streams, Work Items, Favorites, Feeds, My Repository Workspaces, My Team Areas, and Work Item History. The main pane shows details for a completed build: 'Build workshop.squawk.core.continuous.build B20080303-1042-workshop.squawk.core.continuous.build'. It indicates the build is 'Completed' with a duration of 27 seconds, starting at 1:41:40 PM and ending at 1:42:07 PM on March 3, 2008. A status trend bar shows a sequence of green and red bars. Below this, a 'Contribution Summary' section lists links for changes, logs, repository workspace, snapshot, and work items. To the right, a 'General Information' section shows the requested by (Zach Builder), build definition, engine, history, and tags. At the bottom, a 'Builds' tab is active, showing a table of historical build activities.

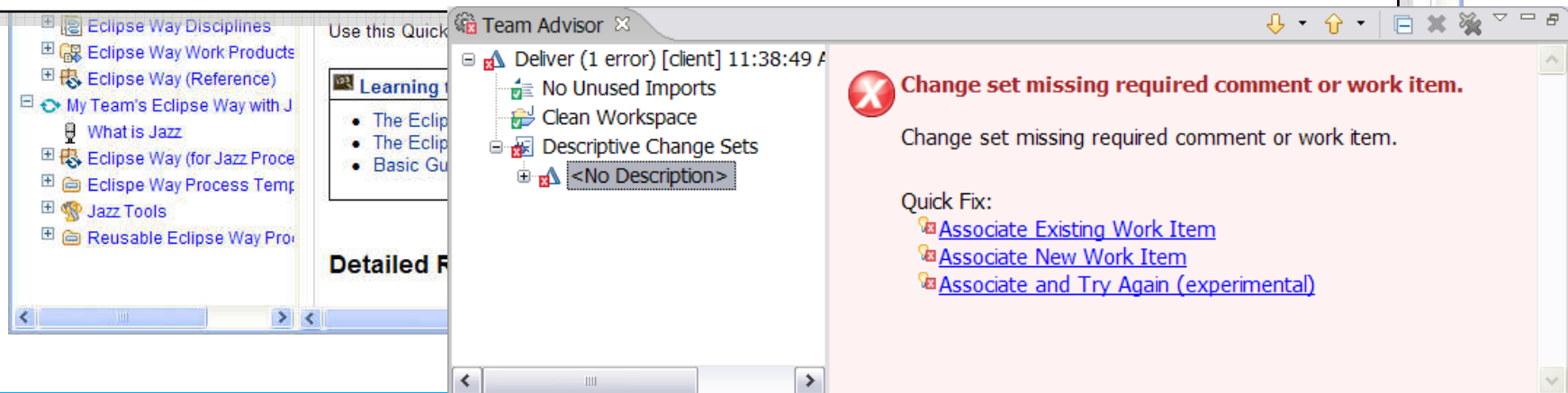
	Build	Label	Progress	Estimated Completion	Start Time	Duration	Tags
✓	workshop.squawk.core.c...	B20080310-2231...	Completed		March 10, 2008 10:30...	34 seconds	
✓	workshop.squawk.core.c...	B20080305-2325...	Completed		March 5, 2008 11:25:...	19 seconds	
✓	workshop.squawk.core.c...	B20080305-2324...	Completed		March 5, 2008 11:24:...	33 seconds	
✓	workshop.squawk.core.c...	B20080303-1057...	Completed		March 3, 2008 1:57:0...	24 seconds	
✓	workshop.squawk.core.c...	B20080303-1048...	Completed		March 3, 2008 1:48:1...	28 seconds	
✗	workshop.squawk.core.c...	B20080303-1042...	Completed		March 3, 2008 1:41:4...	27 seconds	
✗	workshop.squawk.core.c...	20080303-1017...	Completed		March 3, 2008 1:17:5...	26 seconds	
✓	workshop.squawk.core.c...	B20080201-1707...	Completed		February 1, 2008 8:06...	30 seconds	v20...
✓	workshop.squawk.core.c...	B20080128-1359...	Completed		January 28, 2008 4:59...	39 seconds	wor...
✓	workshop.squawk.core.c...	B20080123-1623...	Completed		January 23, 2008 7:23...	10 seconds	
✗	workshop.squawk.core.c...	B20080123-1621...	Completed		January 23, 2008 7:21...	18 seconds	



Enables process awareness and guidance

■ Team Advisor

- Rules can be run when delivering changes to enforce team or organizational standards
- Helps ensure higher quality results through enforcement of agreed-upon standards
- Rules are configurable
- “Quick Fixes” can be specified to simplify corrective action
- Process rules can be defined, refined “on the fly”, enabling continual improvements
- Out of the box processes include OpenUP, Scrum, The Eclipse Way, etc



Iteration Planning

Understand how well you are progressing against your targets in real-time

UWS Temperature Conversion M1 Plan [1.0 M1] x

UWS Temperature Conversion M1 Plan

Team Area: UWS Temperature Conversion Team | Iteration: 1.0 M1 (12/1/07 - 6/20/08) | 5 Closed | 9 Open

Team Member	Closed items	Open items	Progress	Estimated
April Blues	1	1	1 / 17 -15 h	100%
UWS Create the temperature conversion CLI package (2 days, Unassigned, 9)				
Derek Holt	0	2	0 / 8 -7 h	100%
UWS Define permissions (4 hours, Unassigned, 5)				
Jerry Jazz	1	1	0 / 4 -3 h	100%
UWS Define team members (4 hours, Unassigned, 6)				
Zach Builder	2	2	25 / 37 -10 h	100%
UWS Create the core temperature conversion package (1 day, Unassigned, 7)				
UWS Define iterations/milestones (4 hours, Unassigned, 3)				
Zara Intern	0	2	0 / 17 -16 h	100%
UWS Add JavaDoc to core temperature conversion JUnit tests (1 hour, Unassigned)				
UWS Create the core temperature conversion package JUnit tests (2 days, Unassigned, 8)				
Unassigned	1	1	8 / 9 h	100%
Expose functionality via public get method to core temperature conversion code (1 hour, High)				

Group by: Owner
Sort By: Priority
Bars: Progress
Exclude: Future and past items, Resolved items
More Filters...
Tags...
Related Work Items: Show Backlog

Drag-and-drop work items to change owners/create child parent relationships

Plan and execute iterations while managing team and individual load



In-context collaboration

Team Awareness

Shows team members and their online status
Shows what they are working on

Team Central

- News & events
- Build status
- What's being worked on
- Changes

Configurable (RSS feeds)
Personalizable

The screenshot displays the IBM Rational software development environment. On the left, a sidebar shows 'Team Awareness' with team members and their status. The main area shows 'Team Central' with news, build status, and work items. A 'Collaborate in Context' callout points to a chat window where team members are discussing a story.

Collaborate in Context

Dashboards

Transparency, collaboration and control via customizable dashboards

The screenshot shows a 'Development' dashboard with several sections:

- General** (dropdown menu)
- Builds** (button)
- Open Defects by Themes** (button)
- Open Defects by Team** (button)
- SVT Defects by Team** (button)
- Defect Trends by Team** (button)
- Deferred Items by Team** (button)
- Endgame Has Started**: A warning icon and text: 'Detailed Plan available here: End Game Plan'.
- Jazz Development Description**: A text box explaining the development process and team structure.
- Open Track Build Items (1)**: A list showing '1841_RC1 status'.
- Current Development Plans (33)**: A list of tasks with progress bars, including 'CQ Connector', 'Component Development', 'Foundation & Work Items', 'Install', 'PMC', 'Process', 'Release Engineering', 'Repository', 'SCM', 'UI Design', 'User Assistance', 'Web Dashboards', and 'Web UI'.
- Risks (10)**: A list of risk items with IDs and descriptions, such as '48863 [Risk] Migrating/importing SVN repositories'.
- RFS (28)**: A list of Risk-Free Set items with IDs and descriptions, such as '9619 [RFS] Monitoring a continuous build'.
- Jazz Development Event Log (2 new)**: A list of recent events, including test scenarios.

Clearly understand team goals

Risks, issues, challenges surfaced at both the team and project level

Real-time status



Dashboards and reporting

The dashboard displays various metrics and reports:

- Work Item Comparison (Cont'd):** Three line charts showing trends for different teams/areas over time (4/7/08 to 4/21/08).
 - Chart 1: Team: /Jazz Development/Agile Planning, Area: Development/Repository, Interval: 0.6 RC1.
 - Chart 2: Team: /Jazz Development/Build, Area: Development/Install, Interval: 0.6 RC1.
 - Chart 3: Team: /Jazz Development/ClearCase Connector, Area: Connector, Interval: 0.6 RC1.
- Work Item:** Overview chart for Team Area: /Jazz Development/Work Item, Category: All, Interval: 0.6 RC1, 0.6 RC2, 0.6 RC3.
- Process:** Overview chart for Team Area: /Jazz Development/Process, Category: All.
- Build:** Overview chart for Team Area: /Jazz Development/Build, Category: All, Interval: 0.6 RC1, 0.6 RC2, 0.6 RC3.
- Work Item Members (16):** List of team members and their roles.

André Weinand	componentlead, contributor, integrationstreamadmin, integrationbuildmeister
Benjamin Pasero	contributor
Christof Marti	contributor, integrationbuildmeister
Dirk Baeumer	parttime, contributor, integrationstreamadmin, integrationbuildmeister
Erich Gamma	contributor, newcomer, integrationstreamadmin, integrationbuildmeister, dashboardadmin, projectadmin, PMC
Frank Lyner	contributor
Johannes Rieken	parttime, contributor, integrationbuildmeister
Larry Smith	contributor, integrationbuildmeister
Marcel Bihr	contributor
Mark Buquor	newcomer, parttime
- Current Work Item Plans (2):** Shows current iteration 0.6 RC1 and progress bars for 'Foundation & Work Items'.
- Work Item Event Log (15 new):** Log of recent events such as 'WebUI - Hide comment is confusing - lost work (51725) 10 minutes ago'.
- Work Item Builds:** Shows build status, e.g., 'Succeeded: continuous.workitem.jazz C20080424-0748 10 minutes ago'.



Customer feedback

*"By helping us to make project deliveries more repeatable and predictable, we anticipate that Rational Team Concert will **reduce project overrun costs by 20%.**"*

--Matt Pomroy - Business Unit Executive, Software Engineering, Ascendant Technology

*"Its automated project management dashboards are transparent to everyone – not just managers. This immediate and **automated feedback helps keeps teams on track and motivated** to achieve project goals."*

--Han Jie - Senior Consultant, Siemens

*" Where we previously used separate systems, with Rational Team Concert we now have well integrated functionality. **Our developers are more efficient because they are better able to focus on important issues.** Our project managers greatly value the ability to customize these dashboards and **instantly provide status** on their milestones!"*

--Mika Koivuluoma - Production Manager, TietoEnator

*"Having a **unified and extensible environment is very compelling for us.** Rational Team Concert provides **the team transparency and visibility needed to keep work progressing** so everyone knows what's going on without finger-pointing."*

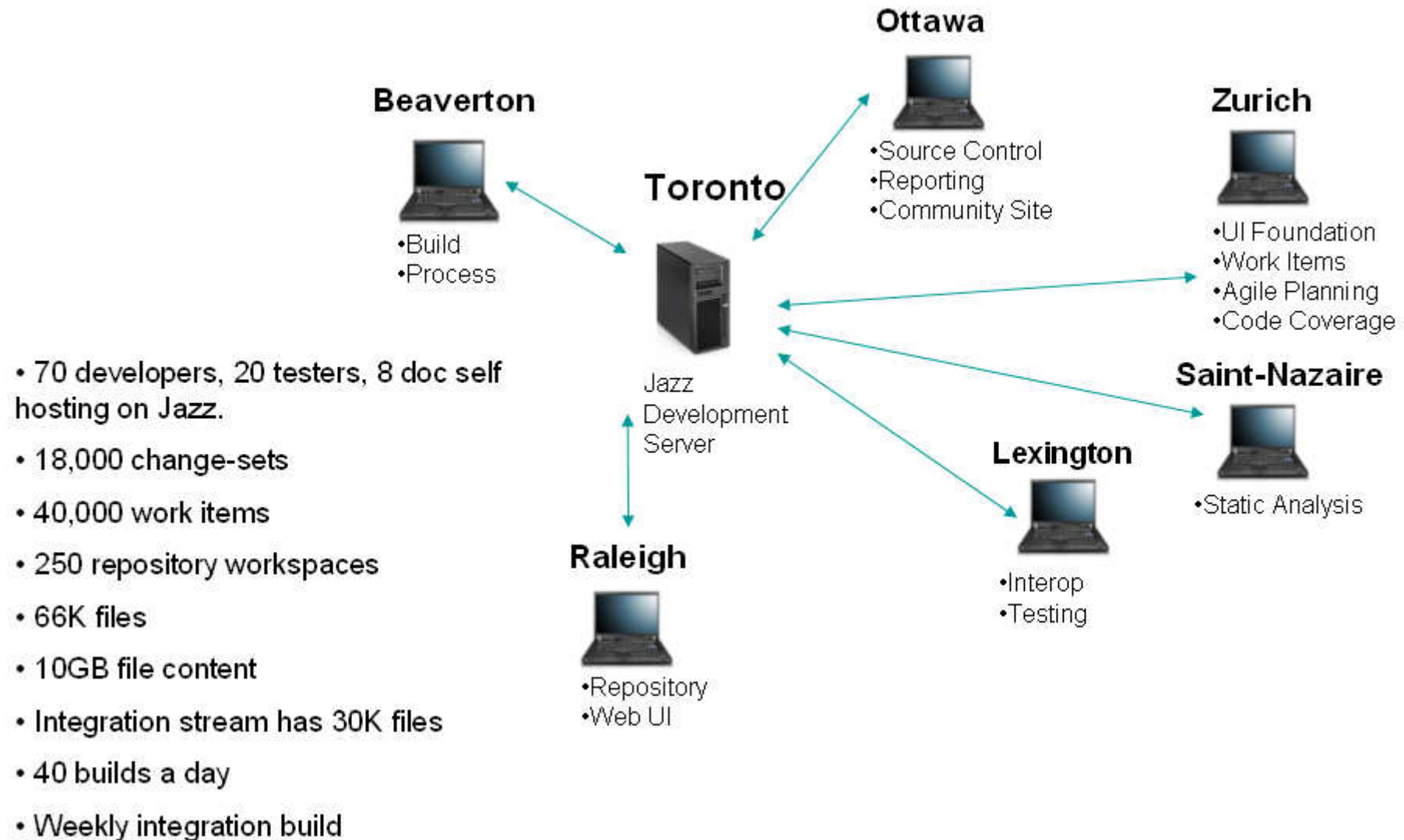
--Carson Holmes - Unified ALM Services Manager, Noblestar



DEMO



Developing Jazz/Team Concert with Team Concert



Getting Started

- Go to Jazz.net
 - ▶ Browse the forums
 - ▶ Read the Blogs
- Explore the JUnit Sample Project
 - ▶ Read the sample guide

The screenshot displays the IBM Rational Team Concert web interface. The top section, titled "First Steps", contains several tutorial links: "Learn about Rational Team Concert", "What you need to know to get started", "What is Jazz?", and "Overview of the Jazz Platform architecture". Below this, the "Samples" section is visible, with a red circle highlighting the link for "Rational Team Concert JUnit example project".

The bottom section of the screenshot shows the "JUnit Project" details page. It includes a "Details" section with a "Summary" and "Description" field, and a "Members" section listing "Bill Cassavelli". On the right side, there is a "Process Iterations" tree view showing a hierarchy of development iterations (4.4, 4.4 m1, 4.4 m2, 4.4 rc0, 4.4 rc1) with associated "Development" and "End Game" actions. A "JUnit Sample Repository Process" description is also visible.





QUESTIONS





THANK YOU

- **Learn more at:**
- [IBM Rational software](#)
- [IBM Rational Software Delivery Platform](#)
- [Process and portfolio management](#)
- [Change and release management](#)
- [Quality management](#)
- [Architecture management](#)
- [Rational trial downloads](#)
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