

IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



Introduction to IBM Rational Team Concert

Terry Quatrani
Rational Evangelist

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



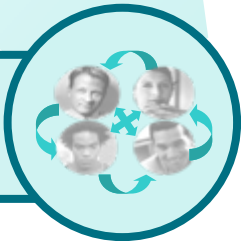
Control costs & improve global operational efficiencies



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

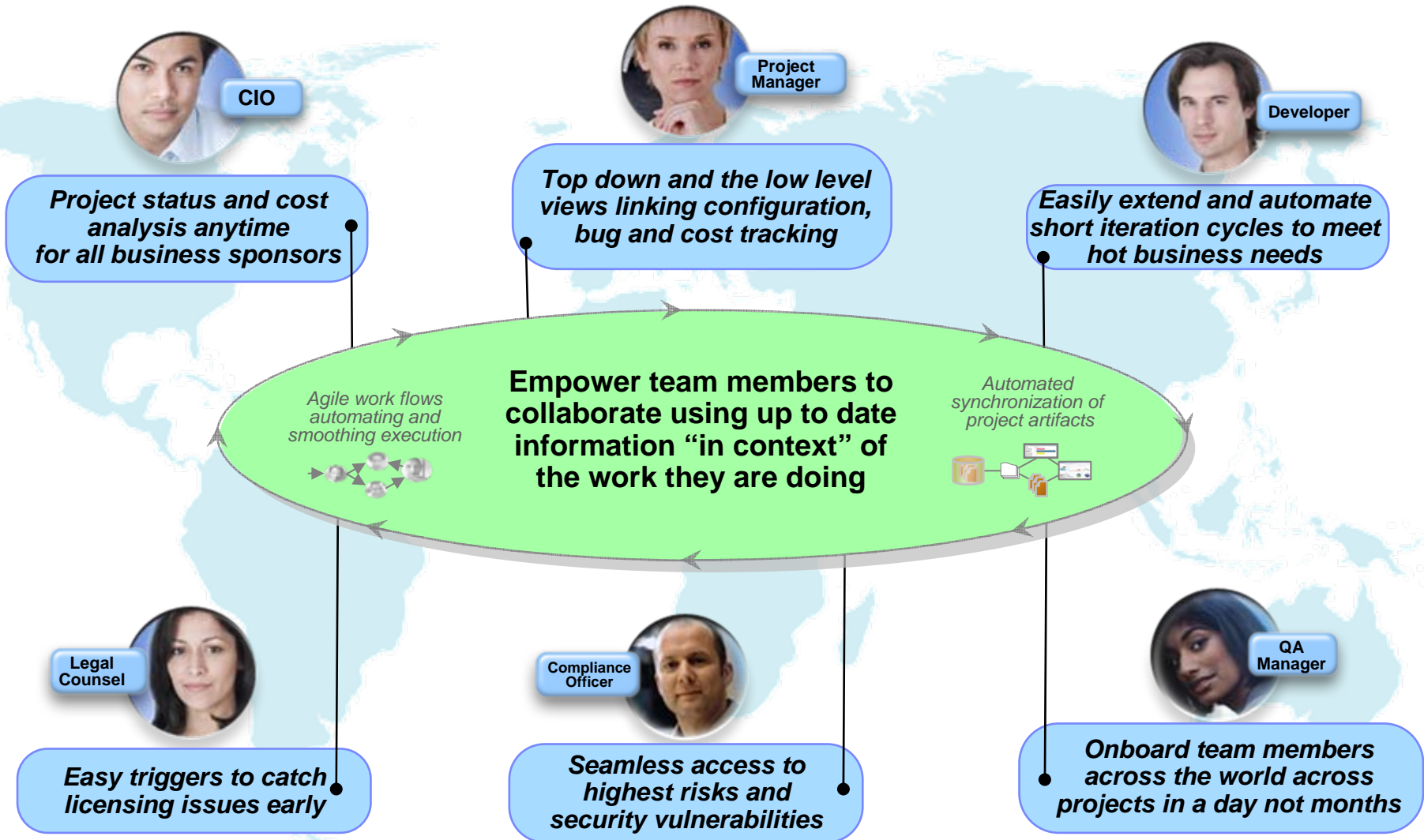
- Lack of meaningful collaboration
- Weak project governance
- Lack of domain expertise
- Poor LOB oversight
- Security of IP when outsourcing

Infrastructure Barriers

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



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 or 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



Agenda

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



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**

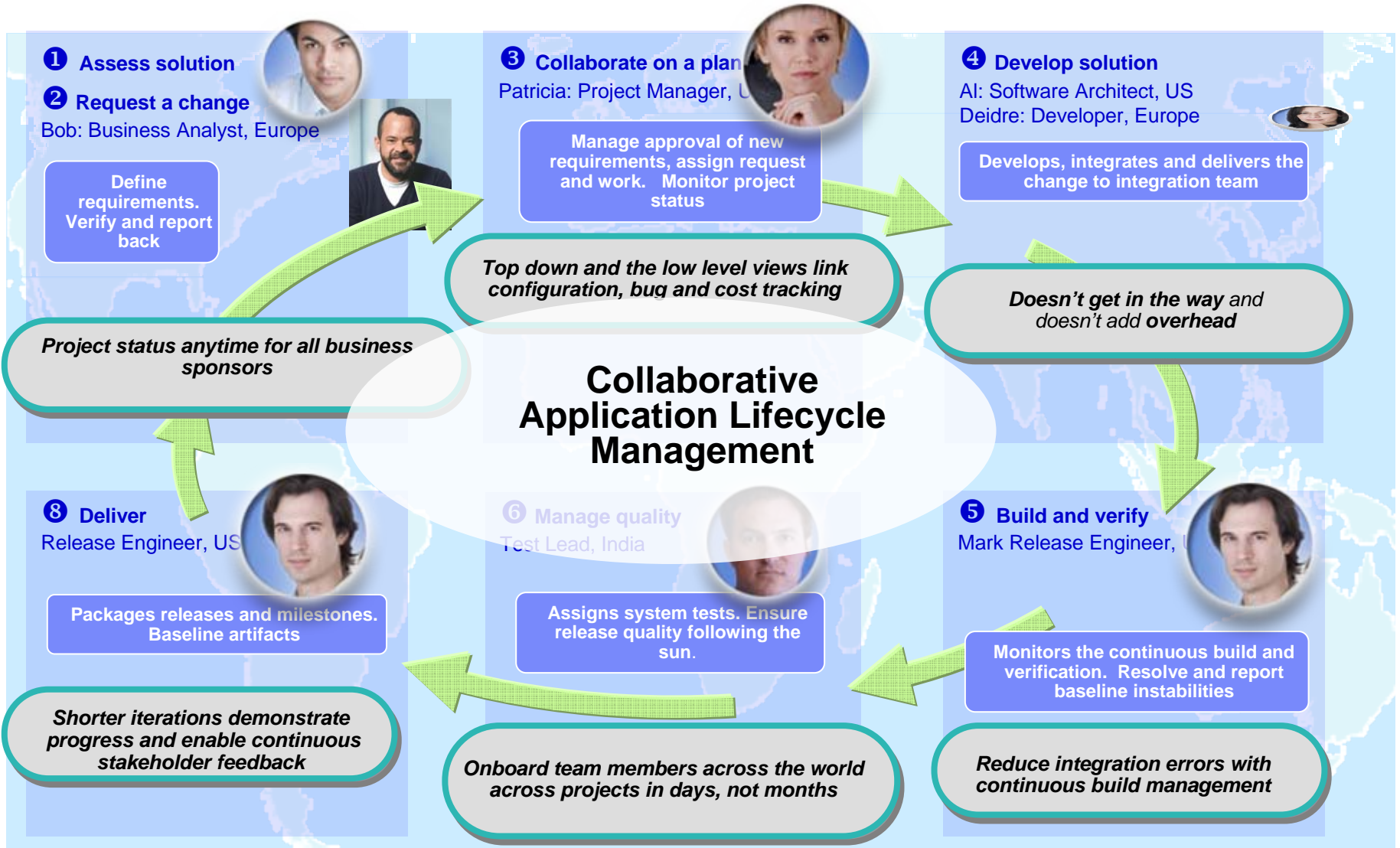
Projects

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

...across the software lifecycle

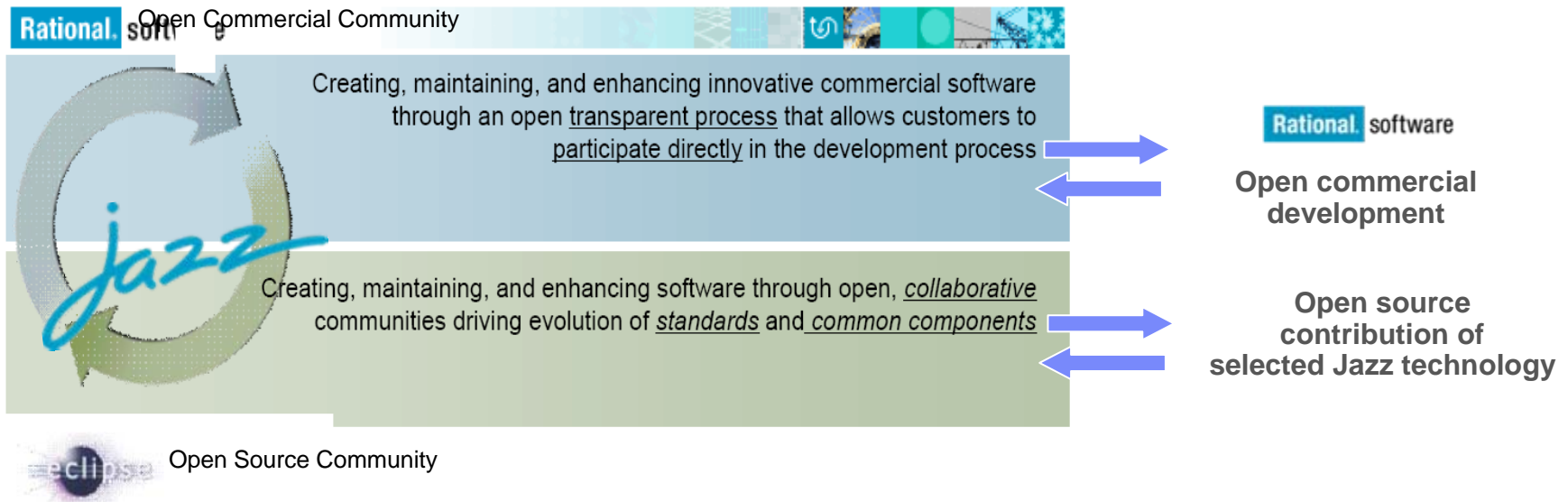


Dynamic processes streamline team communication and collaboration



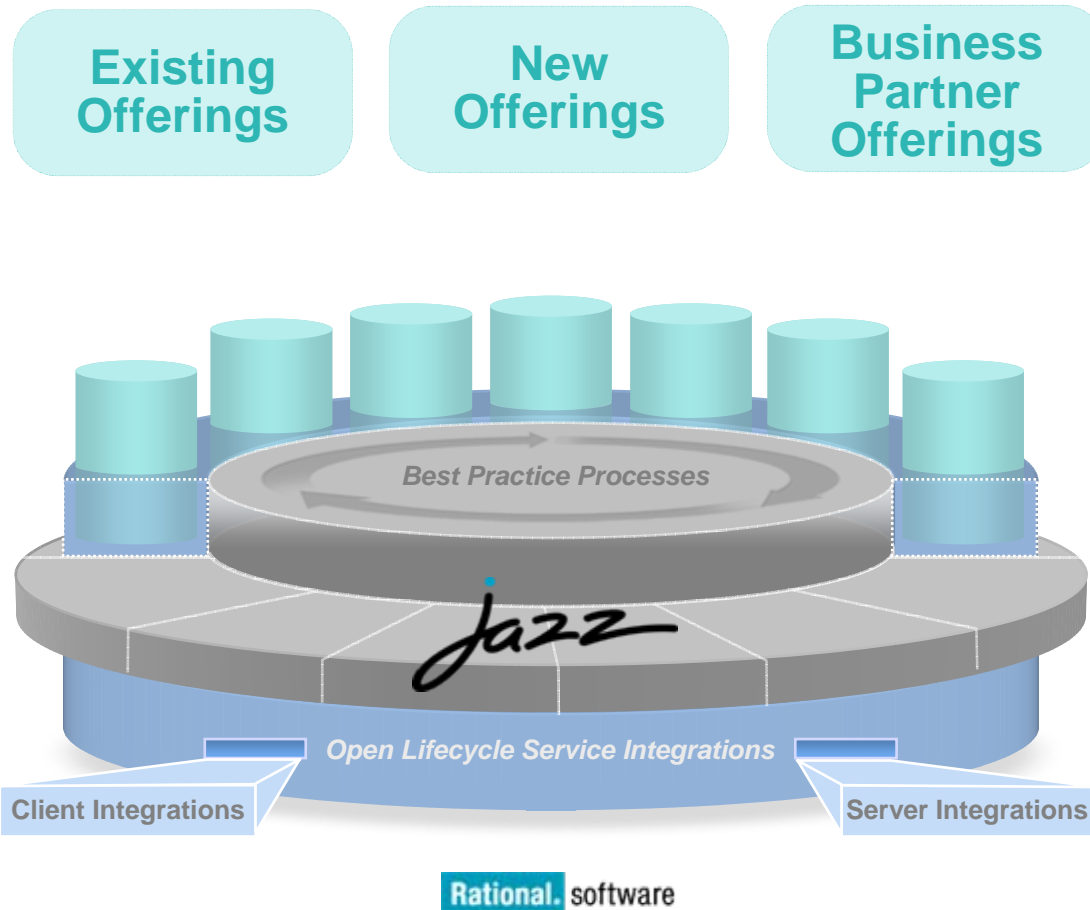
Jazz.net: Delivering greater openness and customer participation in the products they depend on for software delivery

- 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.



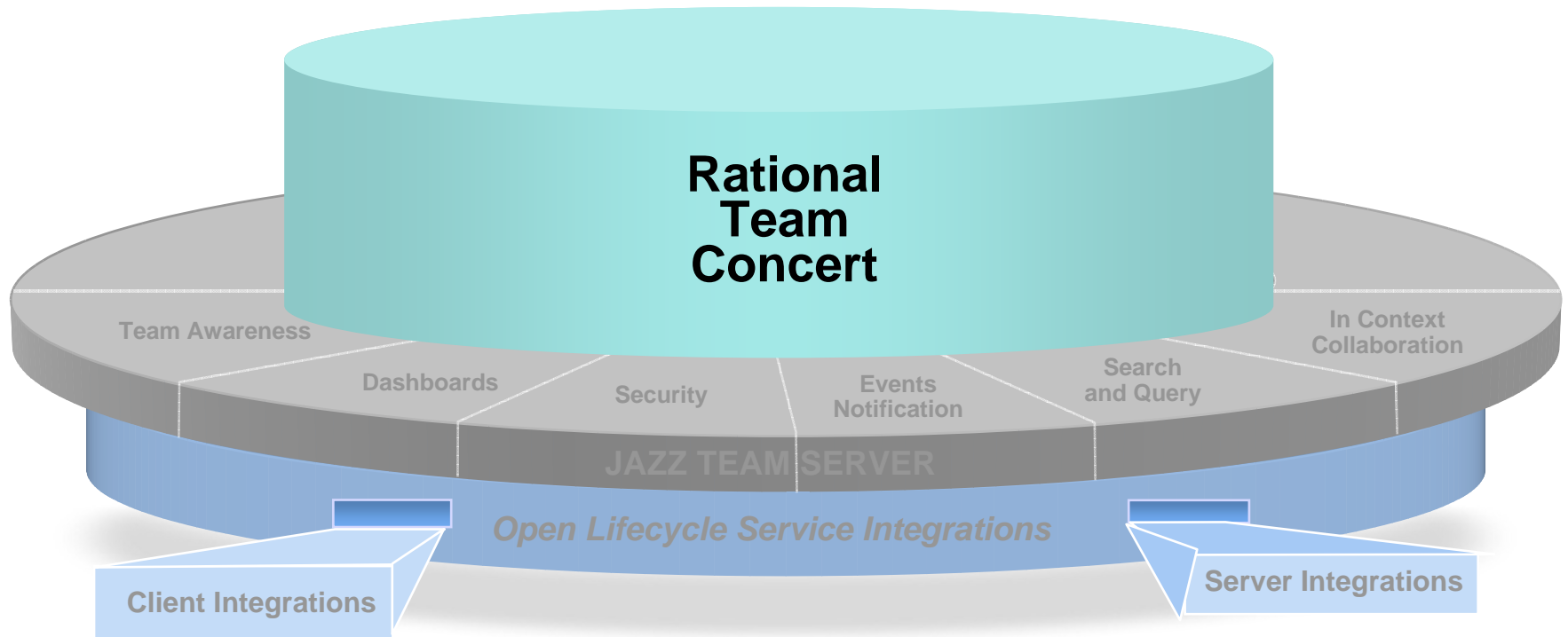
Agenda

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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

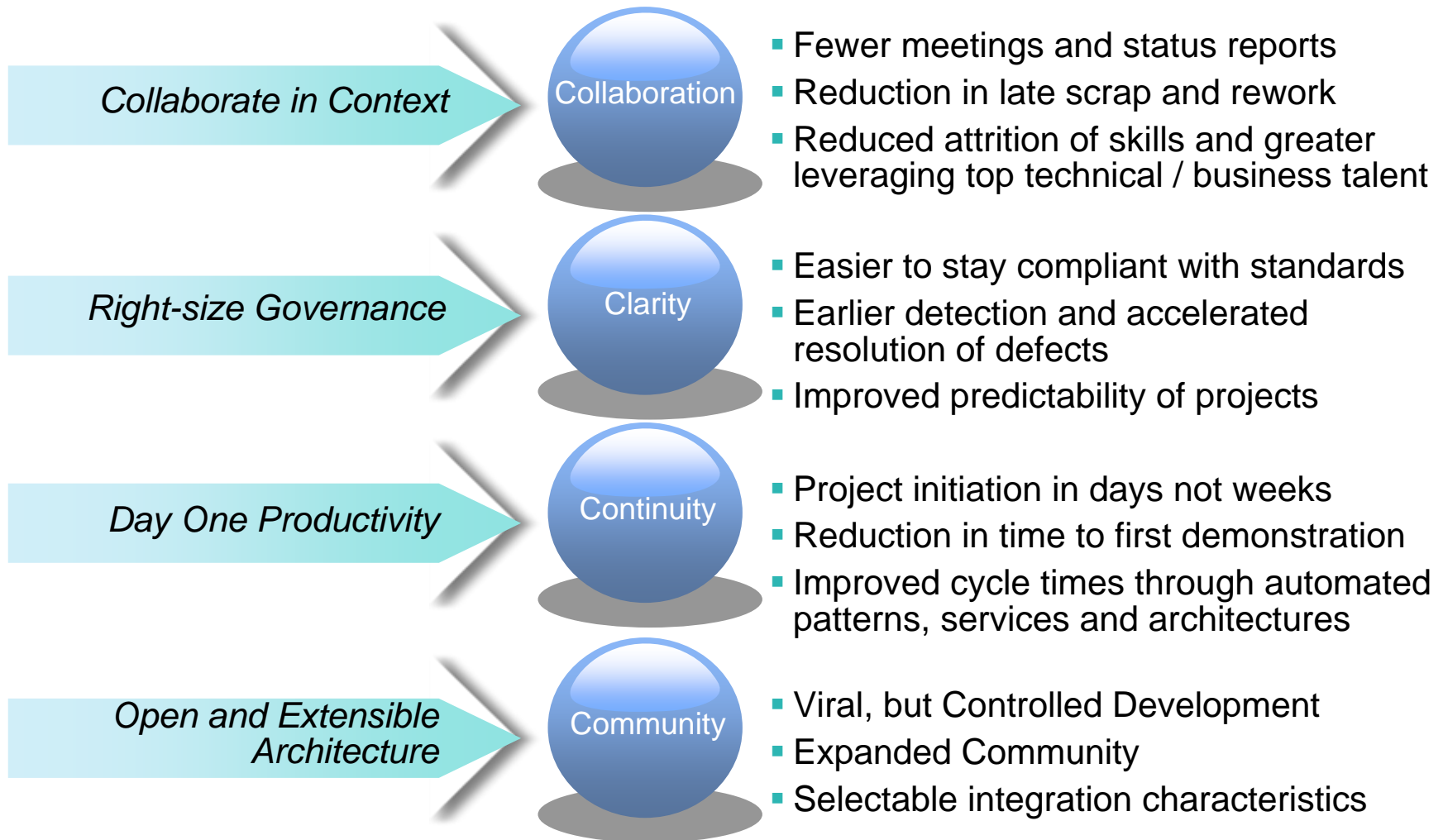





transparent *integrated presence*
 wikis **OPEN** real-time reporting
 chat automated hand-offs **Web 2.0**
custom dashboards automated data gathering
EXTENSIBILITY *Eclipse plug-ins* services
 architecture **FREEDOM TO CREATE**



Translating words to actions



The Rational Team Concert family 2008

Statement of Direction (2009)

Enterprise

Enterprise Deployments

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

Standard

Corporate Teams

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

Express

Mid-sized and Departmental

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

Express-C

Community and Academia

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

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

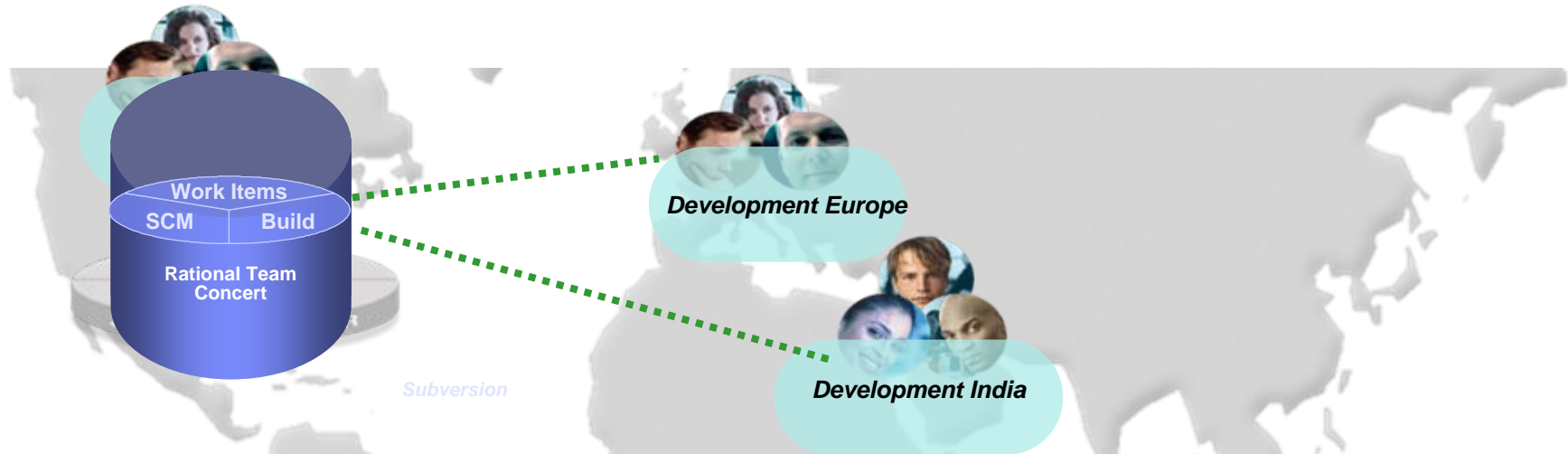
- Work item and change set traceability
- Local or remote build servers
- Supports ant and command line tools
- Integration with build forge
- Build definitions for team and private builds

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

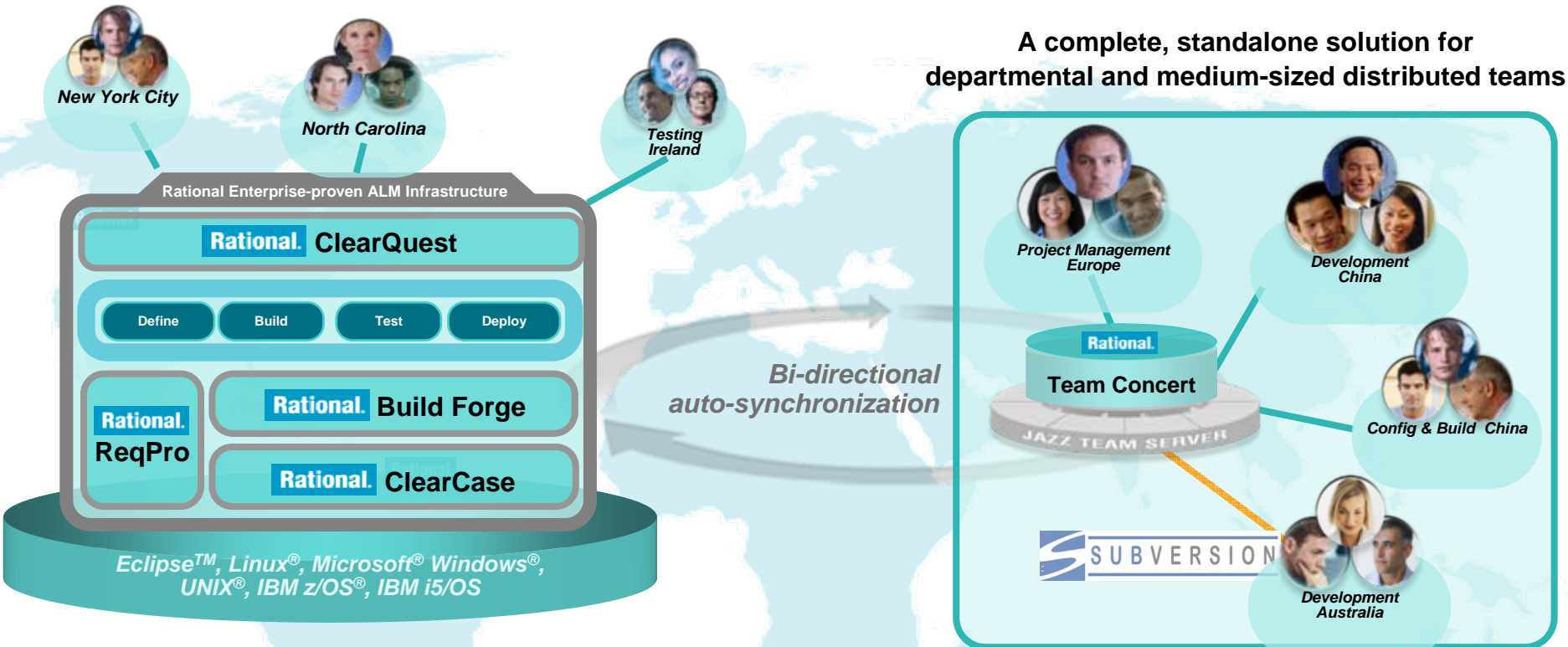


✓ Rational Team Concert Standard, Express, Express-C

- ✓ 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

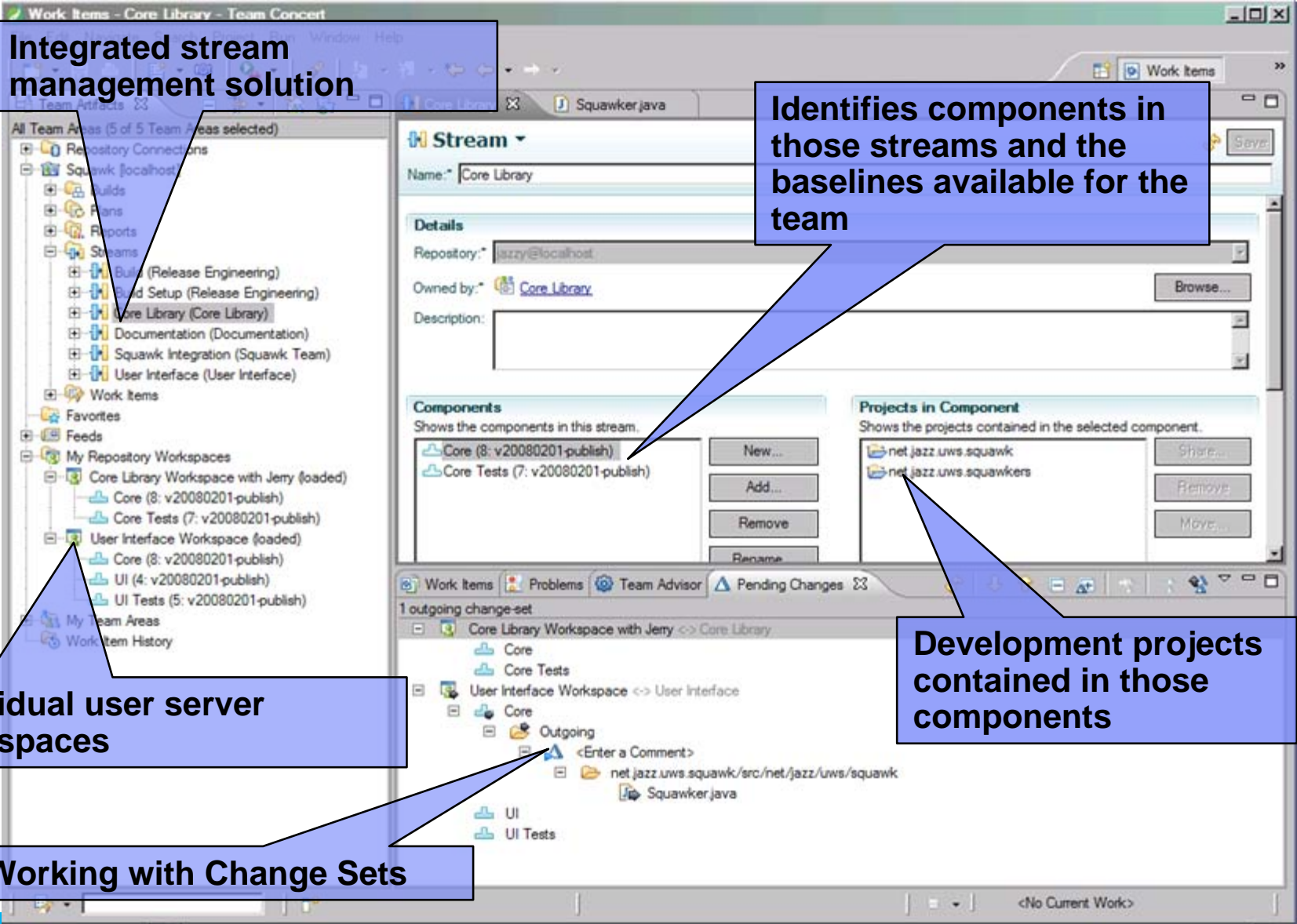
Integrated stream management solution

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

Integrated discussion threads

Query results

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

The screenshot displays the IBM Rational Work Items application interface. The main window shows a detailed view of a defect titled "Defect 12" with the summary "UWS Add JavaDoc to CLI code". The interface includes a left-hand navigation pane with a tree view of queries, a central details panel with various fields (Type, Severity, Found In, etc.), a description field, a discussion thread, and a quick information section. At the bottom, a table displays 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



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 Workshop interface. On the left, a tree view shows 'Team Artifacts' with 'Builds' expanded to show various build engines and queues. The main window shows a 'Completed' build summary for 'workshop.squawk.core.continuous.build'. Below this, a 'Contribution Summary' lists changes, logs, repository workspace, snapshot, and work items. On the right, 'General Information' includes requested by, build definition, engine, history, and tags. At the bottom, a 'Summary' tab shows a table of build history.

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

Team Advisor

Deliver (1 error) [client] 11:38:49 A

- No Unused Imports
- Clean Workspace
- Descriptive Change Sets
 - **<No Description>**

Change set missing required comment or work item.

Change set missing required comment or work item.

Quick Fix:

- [Associate Existing Work Item](#)
- [Associate New Work Item](#)
- [Associate and Try Again \(experimental\)](#)



Iteration Planning

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

UWS Temperature Conversion M1 Plan [1.0 M1]

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	Task	Progress	Estimated	Time	Status	Count
April Blues	UWS Create the temperature conversion CLI package	1 / 17 -15 h	100%	2 days	Unassigned	9
	UWS Define permissions	0 / 8 -7 h	100%	4 hours	Unassigned	5
Jerry Jazz	UWS Define team members	0 / 4 -3 h	100%	4 hours	Unassigned	6
	UWS Define iterations/milestones	25 / 37 -10 h	100%	1 day	Unassigned	7
Zach Builder	UWS Create the core temperature conversion package	0 / 17 -16 h	100%	4 hours	Unassigned	3
	UWS Add JavaDoc to core temperature conversion JUnit tests	0 / 17 -16 h	100%	1 hour	Unassigned	11
Zara Intern	UWS Create the core temperature conversion package JUnit tests	0 / 17 -16 h	100%	2 days	Unassigned	8
	Expose functionality via public get method to core temperature conversion code	8 / 9 h	100%	1 hour	High	23
Unassigned						

Group by: Owner
Sort By: Priority
Bars: Progress
Exclude: Future and past items, Resolved items
Related Work Items: Show Backlog, Unplanned Closed Items, Next Plans

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

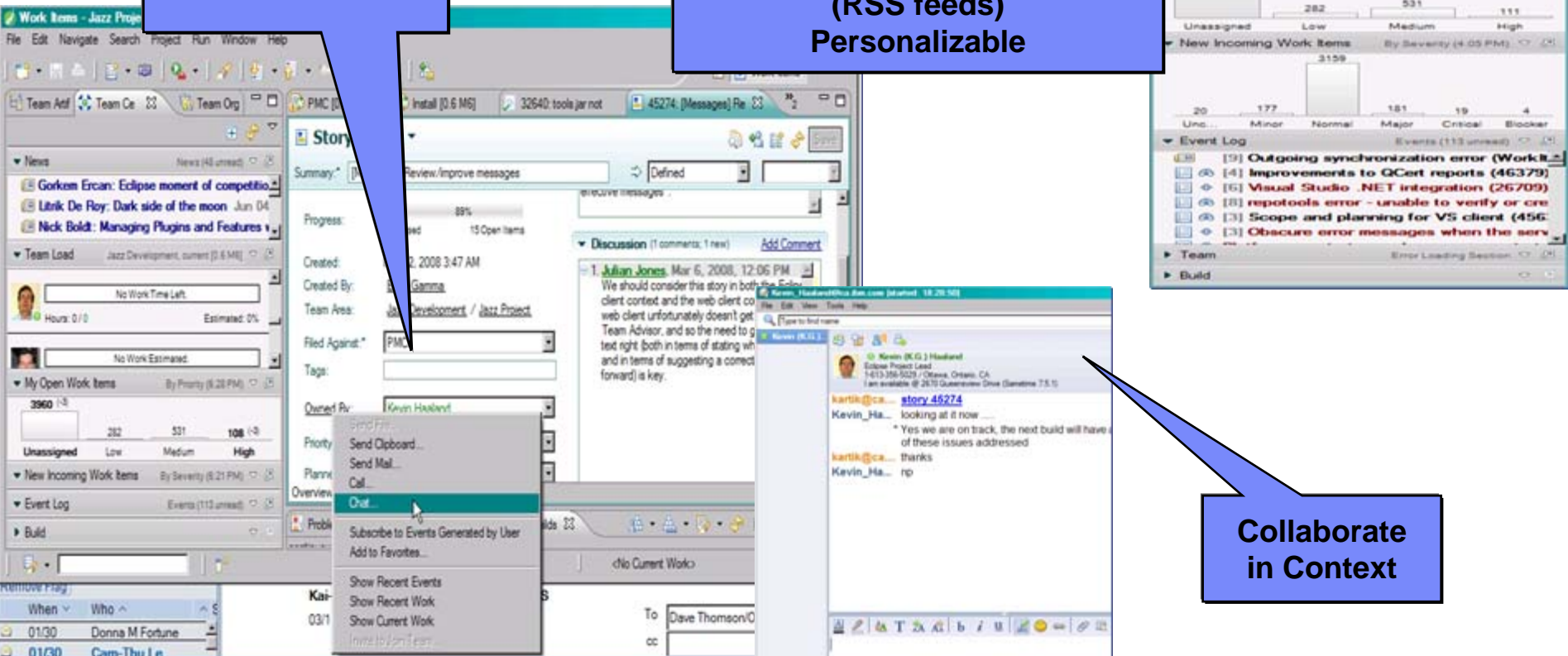
Team Central

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

Configurable (RSS feeds)

Personalizable

Collaborate in Context



Dashboards

Transparency, collaboration and control via customizable dashboards

The dashboard is titled 'Development' and features several tabs: General, Builds, Open Defects by Themes, Open Defects by Team, SVT Defects by Team, Defect Trends by Team, and Deferred Items by Team. The main content area includes:

- Endgame Has Started:** A warning icon and text stating 'Detailed Plan available here: End Game Plan'.
- Jazz Development Description:** A text box explaining the development process, including the role of the PMC and team areas.
- Open Track Build Items (1):** A list showing '1841 RC1 status'.
- Current Development Plans (33):** A Gantt chart showing work items across various categories like CQ Connector, Component Development, Foundation & Work Items, Install, PMC, Process, Release Engineering, Repository, SCM, UI Design, User Assistance, Web Dashboards, and Web UI. Some items show 'No planned work' or 'No estimated work'.
- Risks (10):** A list of risk items such as '48863 [Risk] Migrating/importing SVN repositories'.
- RFS (28):** A list of Risk-Free Setpoint (RFS) items such as '9619 [RFS] Monitoring a continuous build'.
- Jazz Development Event Log (2 new):** A log of recent events, including test scenarios.

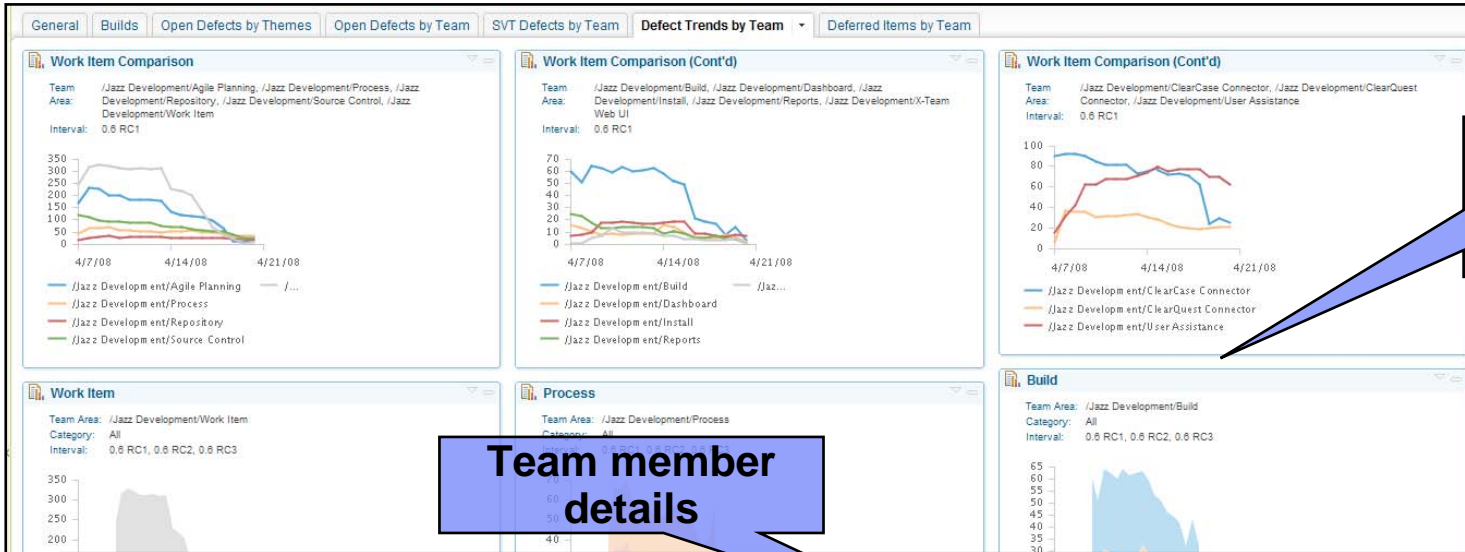
Clearly understand team goals

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

Real-time status



Dashboards and reporting



Trending by project or by individual team

Team member details

Current milestone status

Overview | Open Defects | Work Item Trends | Builds

Provides support for managing defect reports, feature requests, and other development tasks.

Getting Started with Work items
Team Wiki

Current Work Item Plans (2)
Current Iteration: 0.6 RC1
Foundation & Work Items
Foundation & Work Items

Work Item Event Log (15 new)

- WebUI - Hide comment is confusing - lost work (51725) 10 minutes ago
- Indexing slow on attachment with long lines (48806) 15 minutes ago
- User photo lost when creating new user (49910) 15 minutes ago
- [3] Deliver new csv icon (52856) 15 minutes ago

Page 1 of 3

Work Item Members (16)

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 Bihl	contributor
Mark Buquor	newcomer, parttime

Page 1 of 2

Work Item Builds

- 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."*

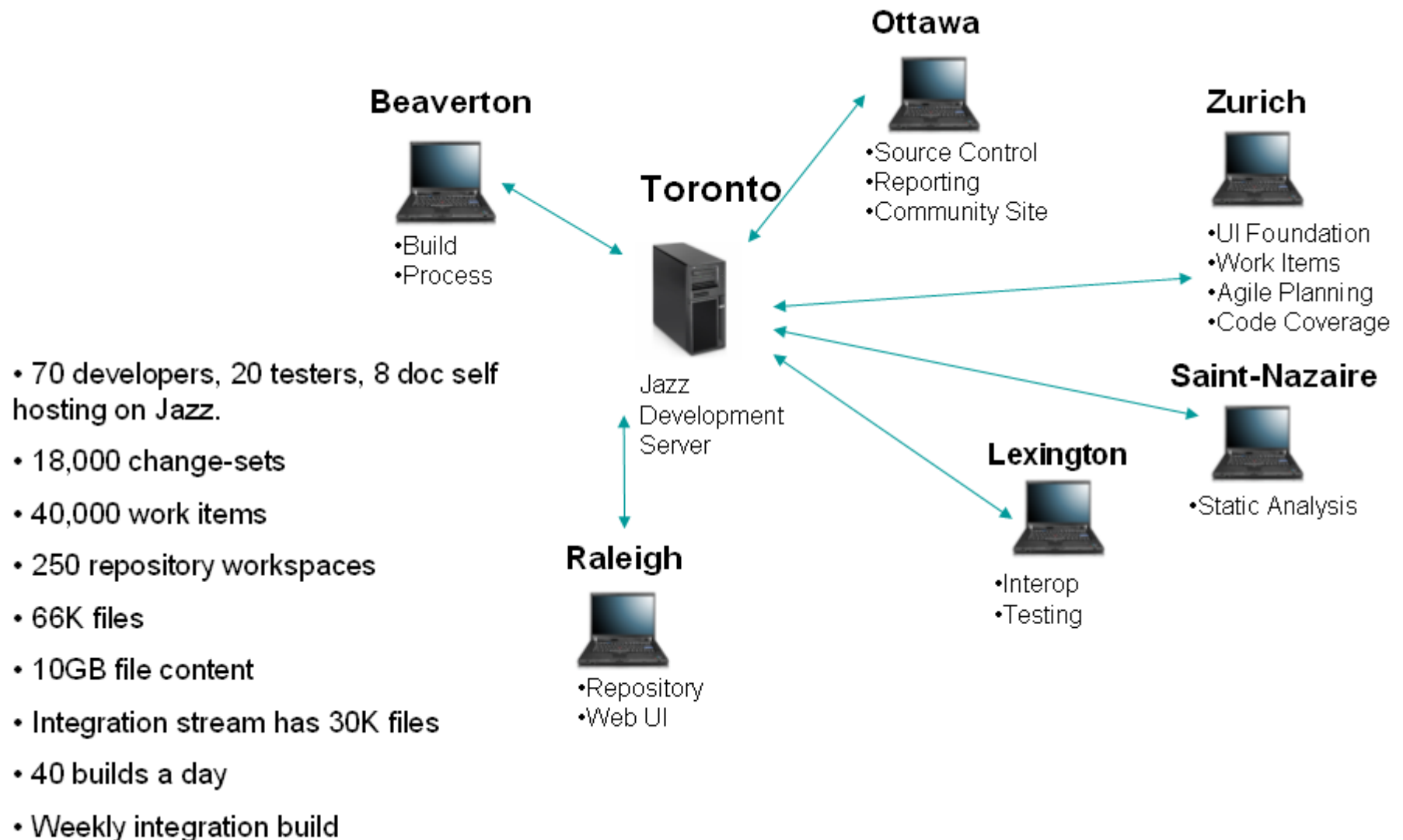
--Carson Holmes - Unified ALM Services Manager, Noblestar



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 main content area is titled "First Steps" and contains several links for getting started, including "What you need to know to get started", "What is Jazz?", and "Overview of the Jazz Platform architecture". To the right, a "Tutorials" sidebar lists "Get started with Rational Team Concert" and "Explore the Rational Team Concert JUnit example project". Below the tutorials, a "Samples" section is visible, with the link "Rational Team Concert JUnit example project" circled in red. The bottom of the screenshot shows a detailed view of the "JUnit Project" configuration, including a "Details" section with a description, a "Members" section with a user profile for Bill Cassavelli, and a "Process Iterations" section showing a tree view of development and end game stages.



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](#)
- [Leading Innovation Web site](#)
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