

IBM Software Group

Rational 動能開發-新世代爵士協同開發平台 IBM Rational Team Concert





Joseph Chang
Senior I/T Specialist
IBM SWG Rational

Agenda

- Typical Software Development Process
- What the challenge of software development today?
- What is Jazz and Rational Team Concert?
- How Jazz is different?
- Have a Quick Look on Jazz
- Demo & Learn
- Q&A





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A Typical Development Process



Define requirements.
Verify and report back

Project status anytime for all business sponsors

7 **Deliver**Release Engineer, US

Packages releases and milestones.

Baseline artifacts

Shorter iterations demonstrate progress and enable continuous stakeholder feedback

3 Collaborate on a plan Patricia: Project Manager,

Manage approval of new requirements, assign request and work. Monitor project status

Top down and the low level views link configuration, bug and cost tracking

Collaborative Application Lifecycle Management

6 Manage quality Test Lead, India

Assigns system tests. Ensure release quality following the sun

Onboard team members across the world across projects in days, not months

4 Develop solution

Al: Software Architect, US Deidre: Developer, Europe

Develops, integrates and deliv

Doesn't get in the way and doesn't add overhead

5 Build and verify Mark Release Engineer,



Monitors the continuous build and verification. Resolve and report baseline instabilities

Reduce integration errors with continuous build management





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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







The defining challenge in collaborative software delivery

Failure to communicate and collaborate across silos

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

Only 42% are satisfied with the quality.

50% of outsourced projects are expected to underperform.

Silos of people, process, and projects inhibit collaboration

Geographic Barriers

- Poor communication
- Language, culture and time differences
- Lengthy project and team member on-boarding
- High degree of friction across teams

Organizational Barriers

- Lack of meaningful stakeholder input
- Process gaps resulting in errors and rework
- Poor LOB oversight
- Weak project governance

Infrastructure Barriers

- Incompatible tools and repositories
- Unreliable access to common artifacts
- Brittle and inflexible tooling integrations







Customer Speak: What they would like to see possible



Project status and cost analysis anytime for all business sponsors

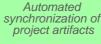


Top down and the low level views linking configuration, bug and cost tracking



Easily extend and automate short iteration cycles to meet hot business needs

Agile work flows automating and smoothing execution Empower team members to collaborate using up to date information "in context" of the work they are doing







Easy triggers to catch licensing issues early



Seamless access to highest risks and security vulnerabilities



Onboard team members across the world across projects in a day not months





Paradigm shift: What would collaborative ALM look like?

- Desktop/database integration → Global integration
- Function first → Team first
- Manual → Process aware and transparent
- Pre-determined tool function → Dynamically extensible
- Proprietary infrastructure → Internet standards
- Lengthy team and project onboarding → Day one productivity
- Rigid process → Creative collaboration
- Project post-mortems → Continuous steering
- Best guesstimates → Real-time insight

"We can't solve problems by using the same kind of thinking we used when we created them."

- Albert Einstein





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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.





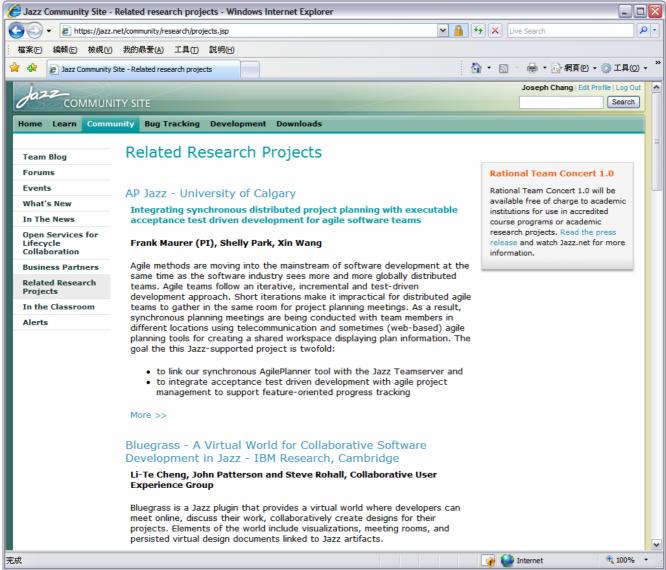
- A major investment by IBM to create a scalable, extensible team collaboration platform.
- IBM's vision of the future of software delivery—globally distributed, fluid and dynamic.
- An evolution of the Rational portfolio, which will evolve to support Jazz technology over time.
- A community at Jazz.net –where you can see Jazz-based products being built.







It's Free for Academic Users!!



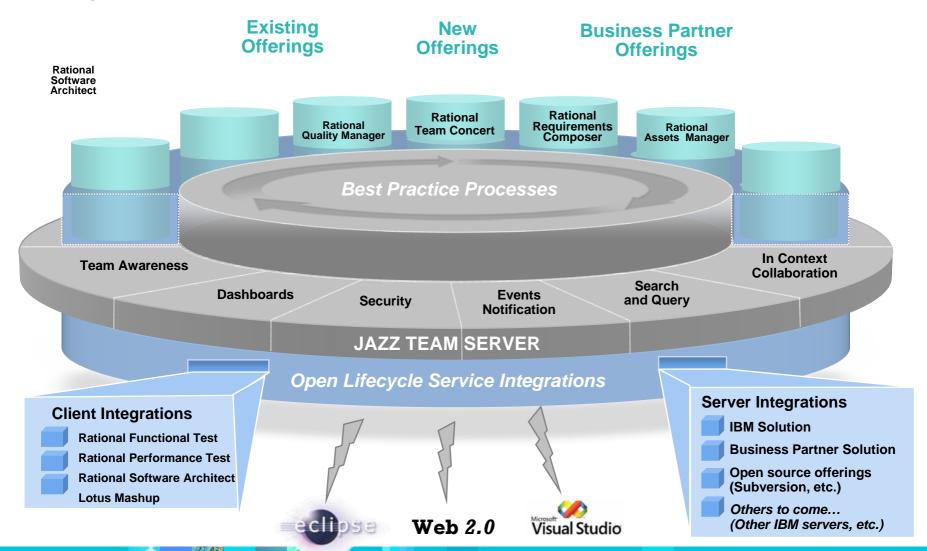








Jazz platform architecture



Introducing IBM Rational Team Concert

Software innovation through collaboration

- Think and work in unison across functional and organizational silos
 - Integrated source control, work item, and build management built on the Jazz team server
- Streamline everyday activities
 - Dynamic processes automate hand-offs
 - Leverage out-of-the-box or custom processes
- Simplify governance
 - Automated data gathering
 - Transparency of teams and processes
 - Real-time project health information
- Unify teams that use a variety of clients
 - Leverage Web, Eclipse or any Eclipse-based product
 - Extend the value of ClearQuest & ClearCase in enterprise deployments









Rational Team Concert: A Deeper Look

SCM

- Flow Browser Shows Developer to Team Flow
- Integrated Stream Management
- 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

- Integrated Iteration Planning and Execution
- Real-time Project Status Window
- 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
- Customizable Project Dashboard
- Real-time Reporting and Queries

Jazz Team Server

Rational Team Concert

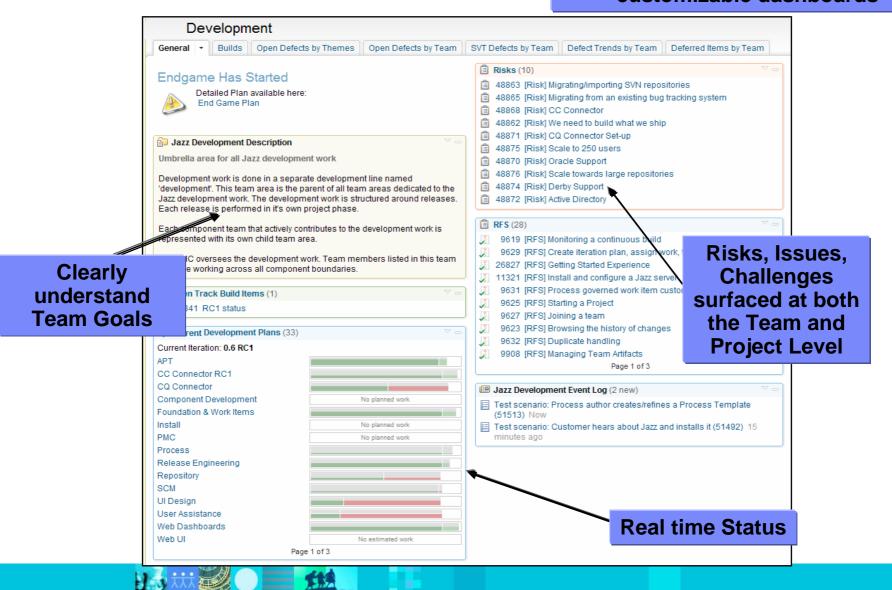






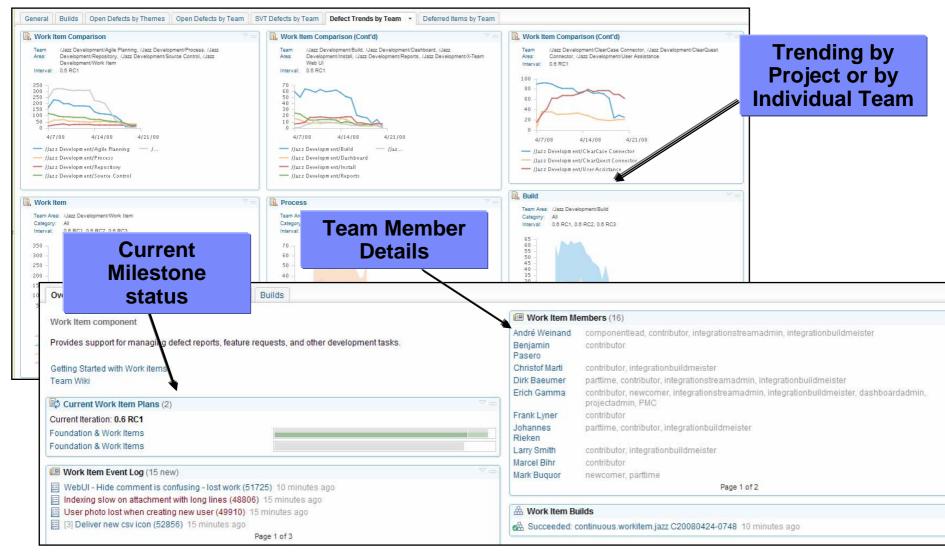
RTC Value to the Business

Transparency and control via customizable dashboards





RTC Value to the Business







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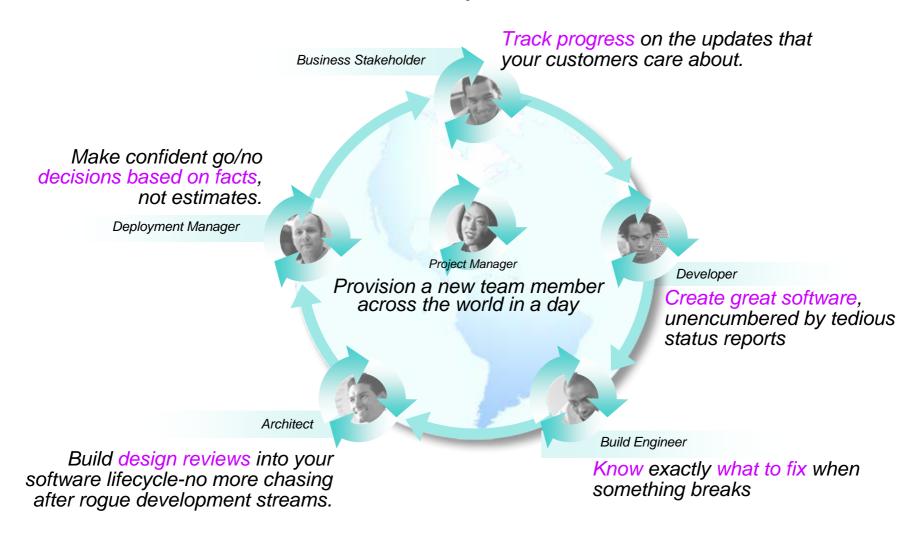
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Delivering global team collaboration and visibility

Allows individuals to focus on what they do best



Delivering customer value with Rational Team Concert



The evolution of software delivery

Collaborate in context

- Fewer meetings and status reports
- Reduction in late scrap and rework
- Reduced attrition of skills and greater flexibility to leverage top technical and business talent

Right-size governance

- Less overhead to stay compliant with standards
- Earlier detection and accelerated resolution of defects
- Improved predictability of project outcomes

Day one productivity

- Project initiation in days rather than weeks
- Reduction in time to first demonstrable release
- Improved cycle times through automated and reusable patterns, services and architectures

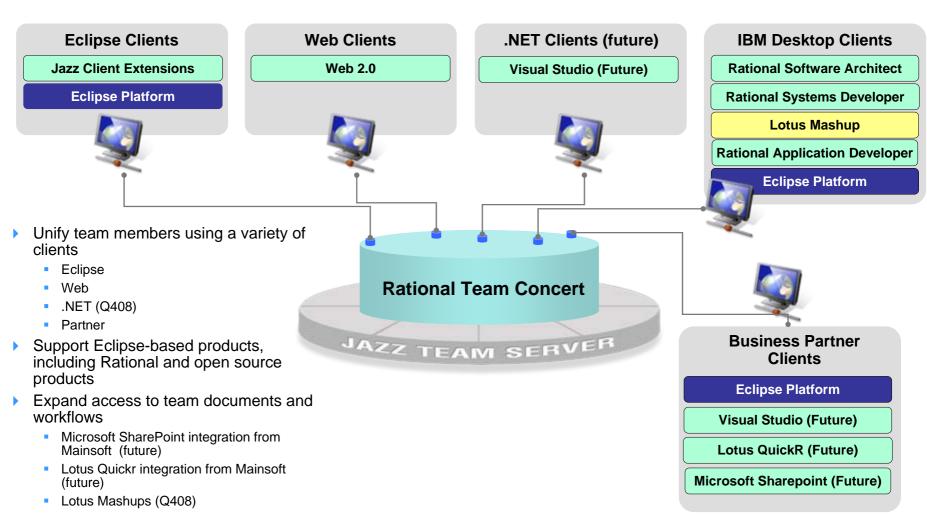


Supporting the software economics of an increasingly global, dynamic and web-based technology environment

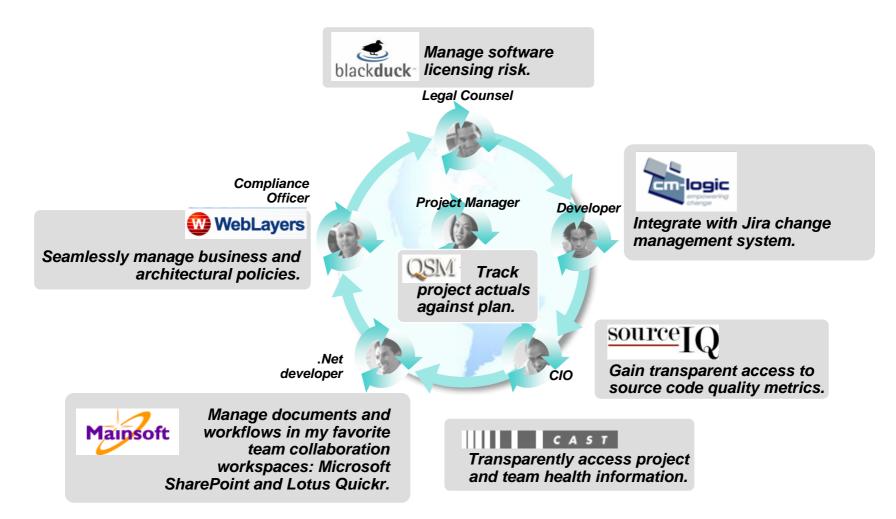




Extend team collaboration to a broader range of users, from business to software professional



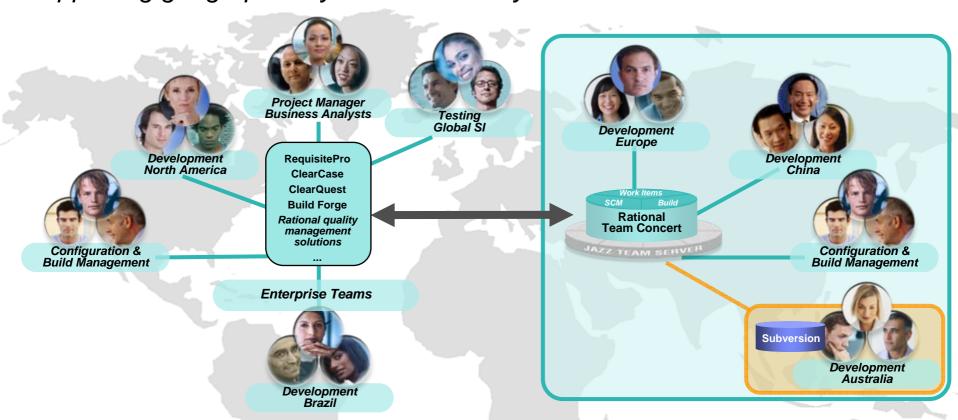
Expand your solution with Ready for IBM Rational partners





Extend the value of existing Rational investments

Supporting geographically and functionally distributed "teams of teams"



Collaborative application lifecycle management today

- Seamless interoperation with Rational requirements, quality and change management products
- Support small agile teams within larger enterprise environments
- Interoperate with Subversion assets





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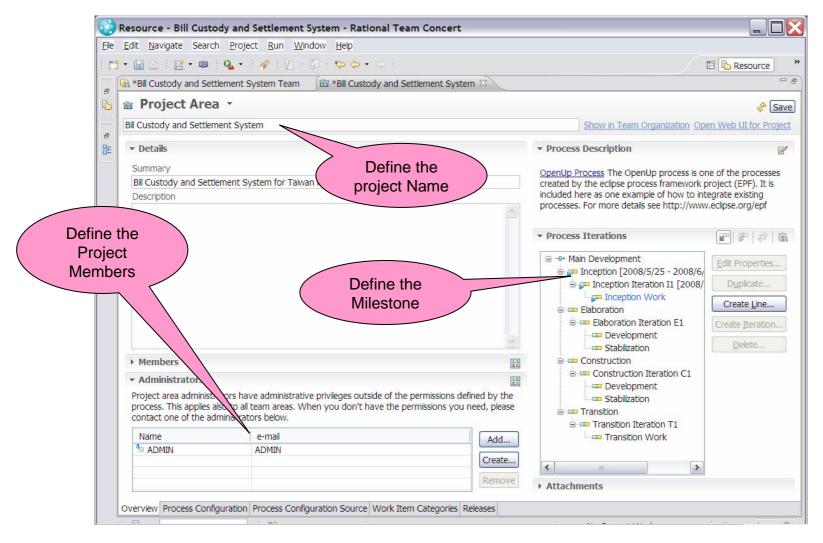
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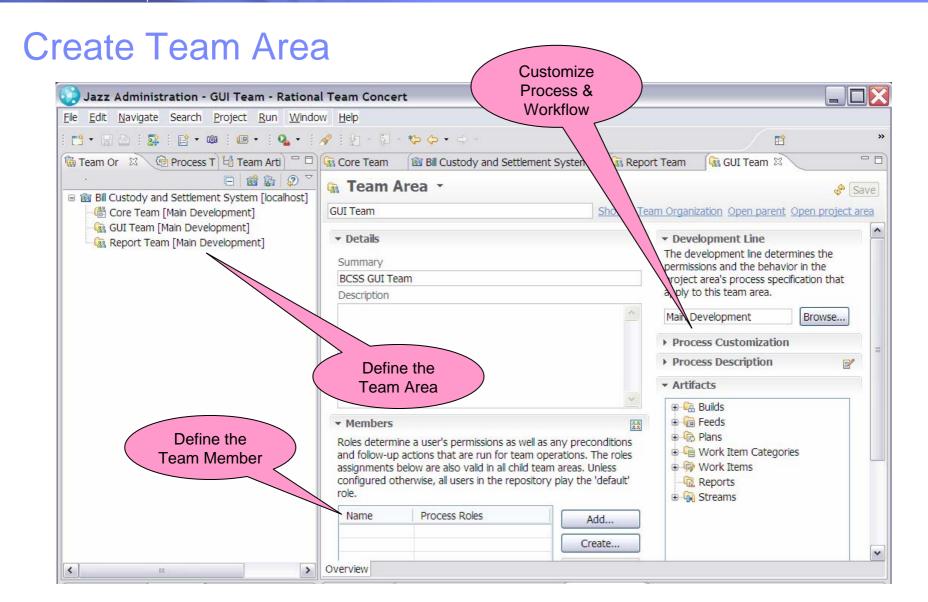
First Step - Create Your Project Area









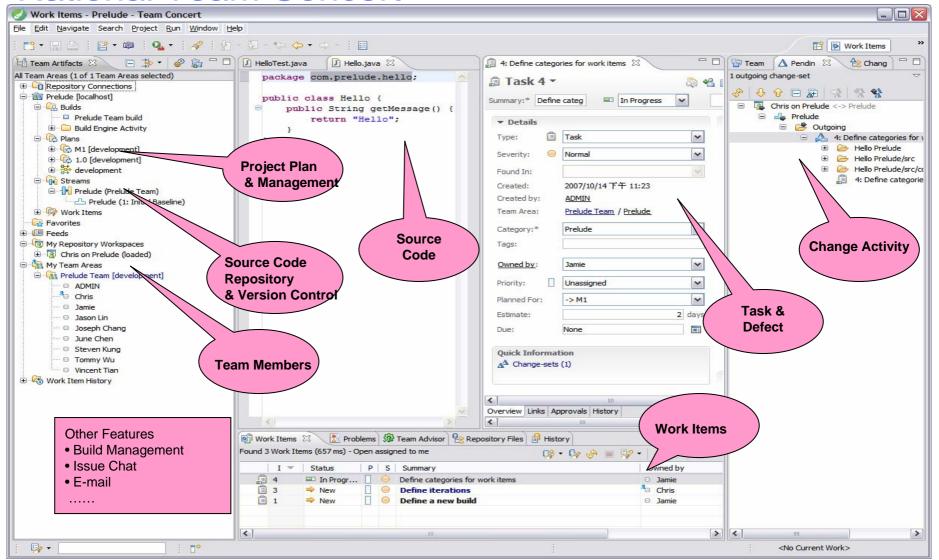






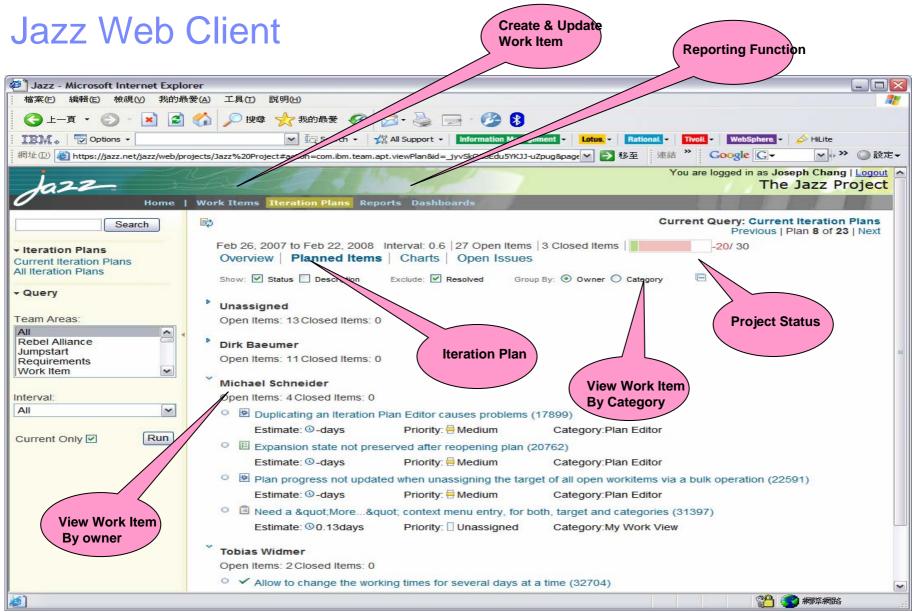


Rational Team Concert





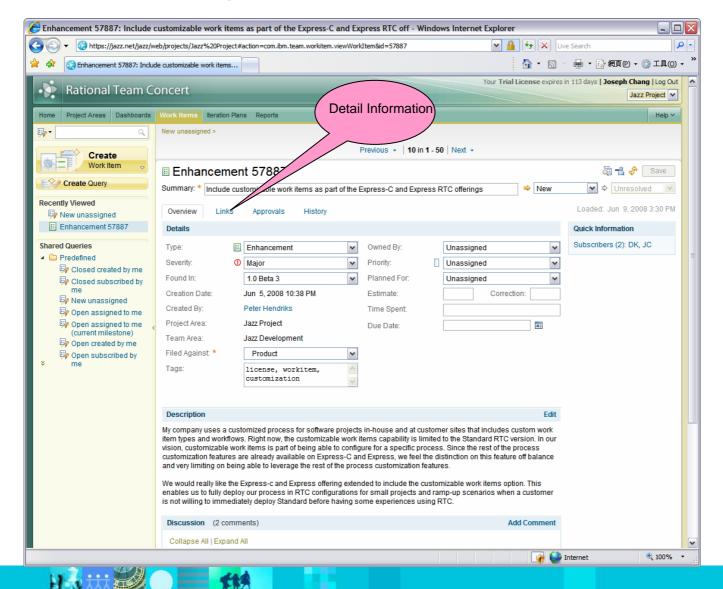








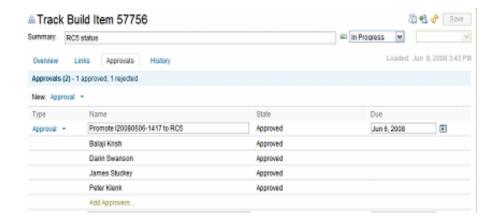
Enhancement Request, Defect, Task

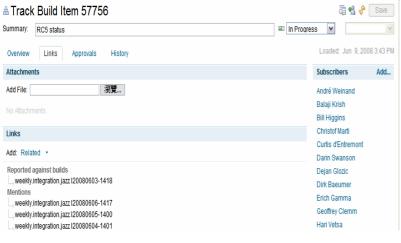


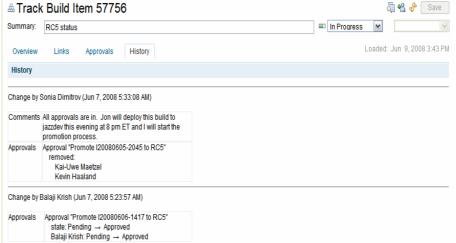


Detail Information

- Links
- Approvals
- History















Jazz Capability: Team Awareness

- Shows team members and their online status
- Shows what the team is working on







Jazz Capability: Team Build

- A Build is a first-class object
 - Associated build results, tests
 - Full navigability to all artifacts contributing to a build, directly or indirectly
- Build engine is "pluggable"
 - CruiseControl
 - BuildForge



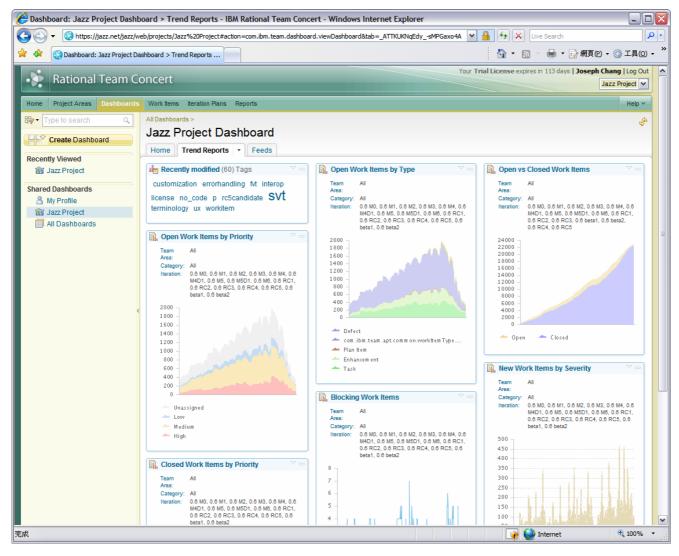








Project Status











Standard

The Rational Team Concert family 2008

			Standard
		Express	≻Corporate teams
	Express-C	≻Small businesses	Customizable process
	➤ Consultants and students In-context collaboration Rapid deployment Open source middleware	 Transparent development Out-of-the-box processes and process enactment Commercial middleware 	 Real-time project health Lower cost of LDAP administration Enterprise scalability and extensibility
Maximum users per server	10	50	250
Middleware	Tomcat, Derby	DB2 Express, DB2, Oracle, Tomcat or WAS	DB2 Express, DB2, Oracle, Tomcat or WAS
Authentication	✓	✓	✓
Server-level user permissions	✓	✓	✓
Off-the-shelf process	✓	✓	✓
Subversion Integration	✓	✓	✓
Process customization			✓
User Import and Synchronization			✓
Proxy Support – when available			✓
Customizable Work Items			✓
Role-based Process Permissions			✓
Customizable Reporting and Alerts			✓
User Customizable Dashboards			✓
ClearCase, ClearQuest Integration			✓





Customer Feedback

- "Rational Team Concert not only brings the communications channel inside the development platform, but it integrates everything. The integration with the complete workflow for the life cycle ... is a big improvement."
 - -- Major health care insurance provider
- "Features provided by Rational Team Concert are equal or more sophisticated than current used tool development environment at RB (JIRA, CVS and Release Engine)."
 - -- Global supplier of industrial, consumer and building technology
- "I found that it was straightforward to install, which made a nice change. Starting up the server and getting the clients talking to it was simple as well."
 - -- Leading UK financial services organization



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Demo & Learn

- Jazz.net
- Demo JUnit Example





Additional resources



- Participate in the open beta of Rational Team Concert http://jazz.net
- Explore Rational Team Concert tutorials, demos and other developer learning resources
 - http://ibm.com/developerworks/spaces/jazz
- Participate in the open commercial development of Jazz by joining the community http://jazz.net
- Learn more about the Jazz technology and the future IBM Rational product roadmap http://ibm.com/rational/jazz/roadmap









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Glossary

- Collaborative application lifecycle management (CALM): A new paradigm for transforming the software lifecycle so that it is more collaborative transparent and productive. CALM is based on the principals of global integration, dynamic extensibility, continuous steering and real-time insight.
- Jazz: Jazz is a project and platform for transforming how people work together to deliver greater value and performance from their software investments.
- Jazz Team Server: A common set of shared services available to all Jazz-based products.
- Jazz.net: The online laboratory where select Jazz-based products are being created by Rational engineers with open community participation.
- Eclipse: An open source community whose projects are focused on building extensible frameworks, tools and runtimes for building, deploying and managing software across the lifecycle. An enthusiastic supporter of the Eclipse project, IBM Rational leverages several Eclipse technologies in the Jazz project.
- Rational Team Concert: IBM Rational's first offering based on the Jazz platform, enabling real-time collaboration that makes software teams more collaborative, transparent and productive. Rational Team Concert provides work item, SCM and build management in addition to all the capabilities of the Jazz platform.
- Rational Software Delivery Platform: The superset of Rational, IBM and certified partner products providing a comprehensive set of capabilities for software and systems delivery.

