The Rational 2.0 Roadmap – Powered by Jazz

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Today’s Discussion

- Realities of Software Delivery
  - Business and Organizational Trends
  - Impact for Software and Systems

- Rational’s Brand Strategy
  - By Discipline and Across the Software Development Life Cycle
  - Jazz and Collaborative Application Lifecycle Management
The defining challenge in collaborative software delivery

*Failure to communicate and collaborate across silos*

- **Geographic Barriers**
  - Poor communication
  - Language, cultural 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

2/3 of stakeholders are dissatisfied with the speed or quality of corporate software development

50% of outsourced projects are expected to underperform

Silos of people, process, and projects inhibit collaboration.
Selecting the Right Approach

- **Waterfall development**
  When *stability* is the primary driver
  - Example: Rational ClearCase kernel

- **Iterative development**
  When *stability and change* are equal players
  - Example: Rational Software Architect, Rational Business Developer

- **Agile development**
  When *change* is the primary driver
  - Example: Rational Team Concert, Rational Quality Manager, Rational Requirements Composer
2008 and Beyond

Latest shifts in software delivery

- Increasingly diverse, cross organizational global project teams
- Popularity of agile development and social networking models
- Interest in replicating the proven models of community-governed software delivery models
- Adoption of automation to enable rapid tuning of business models
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What if Your Tools Knew and Supported…

**Your Development Policies…**
- Mandatory Peer reviews completed? Unit tests run? Code quality rules checked?

**Who is on Your Team…**
- How to assist new team members in getting started

**When an error occurs …**
- Reliable history of who did what and why. Assistance to unwind or correct.

**Accurate, real-time status of progress and quality**
- Linkage of progress to plan, completion and quality trends

**All the collaborative approaches we typically leverage outside of our tools**
- Integrate Instant Messaging, Wikis, RSS Feeds, etc into your software factory
IBM Rational Software Delivery Platform

**Solutions** to help customers achieve greater value and performance from their investments in software.

- Enterprise Modernization and Transformation
- Organizational Governance

In-house software
Outsource vendors
Packaged applications
Systems & products

Manage Evolving Requirements
Accelerate Change and Delivery
Deliver Enduring Quality
Drive Robust Architecture
Improve Project Success

Deploy Processes, Implementation Services, & Governance Best Practices

Collaborative Application Lifecycle Management Platform
Requirements of a Collaborative ALM Solution

**Improve Team collaboration**
- Presence, chat, document sharing, blogs, discussion groups and bulletin boards
- Access through browser, Eclipse, MSVS.NET
- Custom dashboards and reporting, configurable RSS feeds, notifications
- Integration with Lotus Quickr, Microsoft Sharepoint

**Encourage Process Excellence**
- Build process awareness into individual and team activities and workflows (process enactment)
- Support a broad portfolio of best practices, including out-of-the-box processes—or create your own
- Enable flexible rules enforcement at key checkpoints
- Anticipate common errors and automate correction
- Provide built-in support for best practices, e.g. continuous build, just-in-time code reviews, traceability, integrated change management

**Balance Governance & Autonomy**
- Collect project data automatically and unobtrusively
- Deliver fact-based metrics, not estimates
- Provide real-time view of individual, project and team status and trending
- Support pre-defined, custom, and personal queries, dashboards and reports
- Provide metric-based tracking for CMMI, MCIF or any capability improvement program

**Reduce Total Cost of Ownership**
- Enable efficient on-boarding of projects and teams
- Streamline LDAP user access and administration
- Leverage existing investments in servers, storage, messaging and service management
- Enable interoperability with home-grown, third party and open source tools
- Leverage a rich partner ecosystem with hundreds of sales and support partners, worldwide
Envisioning a platform that can transform software delivery

- An open technology initiative to transform how people work together to deliver greater value and performance from their software investments
  - Enable team transparency of “who, what, when, why”
  - Build team cohesion and presence
  - Automate hand-offs – so nothing falls through the cracks

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

Collaborate in Context
- Collaborate
  - In Context

Right-size Governance
- 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
- Day One
  - Productivity
- Dynamic provisioning of projects and teams
- Real-time iteration planning and workload balancing
- Unify teams with tools choice

Collaborate, Automate, Report

Keynote

Created with Lotus
Rational’s Vision
Open, Web-centric, Services-based

- Existing Offerings
- New Offerings
- Business Partner Offerings

Best Practice Processes

In-Context Collaboration

Client Integrations
- Eclipse
- Web 2.0
- Visual Studio (4Q beta)

Jazz Team Server

Open Lifecycle Services

Server Integrations
- Existing Rational/Telelogic offerings
- Business partner offerings
- Open source offerings (Subversion, etc.)
Here in 2008

Phase 1 – Expanding Collaborative ALM

Rational Team Concert

Innovation Through Collaboration
Unify by “thinking and working” in unison with real-time project health

Rational Requirements Composer

Business Expert Collaboration
Elicit, capture, elaborate, discuss and review requirements

Rational Quality Manager

Collaborative Business-driven Quality
Coordinate quality assurance plans, processes and resources

Best Practice Processes

JAZZ TEAM SERVER

Open Lifecycle Service Integrations

Rational ClearQuest
Rational ClearCase
Rational Build Forge
Rational Requisite Pro
Rational Asset Manager

Business Partner Jazz Offerings
Rational Team Concert

Collaborative, agile development through integrated source control, work item, reporting and build capabilities.

In-Context Collaboration
- Team transparency of “who, what, when, why”
- Automated, predictive hand-offs and process
- Fewer meetings and status reports
- Documented conversations

Agility
- Working Software
  - Change Driven Devpmnt
- Individuals & Interactions
  - Team Awareness
- Respond to Change
  - Process Flexibility
- Customer Collaboration

Real-time Information
- JIT Reporting and alerts.
- Dynamic provisioning of projects and teams
- Real-time iteration planning and workload balancing
- Automated data collection
Rational Team Concert Capabilities

### Source code management
- New source code management code base
- Technology will also appear in future ClearCase and Synergy releases
- ClearQuest connector

### Change Management
- New change management code base (defects, tasks)
- Technology will also appear in future ClearQuest and Change releases
- ClearQuest connector

### Build
- New build management code base
- Technology will also appear in future BuildForge releases
- BuildForge integration

### Planning
- Iteration planning and execution integrated with change management
- Technology will also appear in future project management tool

### Reporting
- Customizable project dashboard
- Real-time reporting and queries

### Team Server
- Data Warehousing
- Administration (users, projects, process)
- Query
- Collaboration
- Additional Services
- Storage
Rational Quality Manager

Collaborative, automated solutions for quality-driven software delivery

**Lifecycle Collaboration**
- End-to-end process
  - Customized roles
  - Process guidance
- 360° view of team interactions
  - View shared assets
  - Common progress view

**Test Automation**
- Dynamic, living test plan evolves with the project
- Optimize test coverage for given resource constraints
- Manage and execute virtual and physical test lab assets
- Open, extensible platform

**Quality Governance**
- Real-time access to metrics
- Prioritize assignments to complete vital issues first
- Asset versioning and traceability throughout
- Metrics collection and trending on asset reuse
Quality in Action: Rational Quality Manager

Quality management for the enterprise or the enterprising

- Requirements
- Rational Quality Manager
  - Quality Dashboard
  - Test Management
    - Create Plan
    - Build Tests
    - Manage Test Lab
    - Execute Tests
    - Report Results
- Defects (Work Items)

Functional Tester 8.0
Performance Tester 8.0
SOA Tester 8.0
Robot
AppScan Enterprise
Rational Requirements Composer

Elicit, capture, review and discuss requirements using your best techniques

Rich Composition
- Business processes supported by linked tasks to UI sketches and use cases
- UI sketches and storyboards
- Use cases
- Process sketches

Business Expert Collaboration
- Rich text capture that allows users to embed diagrams and sketches
- Comment threads for conversational context
- Enterprise glossaries
  - Industry-specific

Lifecycle View
- Web review and approvals
- Reuse requirements to increase quality
- Search and query
- Hosted reviews
- Wiki-style interface
  - Categorize / Tag
Requirements Composer View

Rich Authoring Environment
- Process Sketching
- Use Cases
- Glossaries
- UI Sketching and Storyboarding

Rich Text Requirements
- Wiki-style interface
- Categorize / Tag
- Comment
- Review / Approve

Web Review and Approval
- Share work instantly
- Users / teams / authorizations
- Linking between all artifacts
- Versioning

Collaboration Server
- Integrate requirements across the application lifecycle

RequisitePro
The Road Ahead

Phase 2 – Jazz offerings beyond 2008

- **Rational Enterprise Reporting**
  - Gain insight based on real-time and historical trend information

- **Rational Project Management**
  - Manage global projects and resources

- **Rational Method Composer**
  - Dynamic process, enactment and management

- **Rational ClearQuest, Build Forge & RequisitePro**
  - Native Jazz Implementations

- **Rational ClearCase**
  - Native for UCM users

More dynamic integration leveraging Jazz ‘Open Services for Lifecycle Collaboration” services

Powered by Best Practice Processes:
- Rational Project Management
- Rational Method Composer
- Rational ClearQuest, Build Forge & RequisitePro
- Rational Team Concert
- Rational Quality Manager
- Rational Requirements Composer
- Rational Enterprise Reporting
- Rational Project Management
- Rational Method Composer
- Rational ClearQuest
- Rational Build Forge

Rational AppScan & Tester portfolio
- Rational enterprise modernization including system z and i support
- Rational Software Analyzer

Open Lifecycle Service Integrations:
- Subversion
- Rational ClearCase
- Rational RequisitePro
- Rational Enterprise Reporting
- Rational Project Management
- Rational Method Composer
- Rational ClearQuest
- Rational Build Forge

IBM Business Partner
Collaborate with us

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- Lab Advocacy Program
- Board of Advisors
- Voice of the Customer Events
- Rational Software Development Conference
- jazz.net
- developerWorks
- Beta Programs
- RFE Community
- Rational User Groups
- Customer Acceleration Program

Learn more at www.ibm.com/software/rational/collaborate
QUESTIONS?