Collaborative Design Management

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Collaborative Design Management on Jazz

**Software Architect**
**(UML) Modeling and Transformation**
Create/maintain your models and transform these into models/code

**Team Concert**
Collaborative software delivery
Collaborative SCM, work item, build automation & iteration planning

**Design Manager**
Collaborative architecture design and analysis
Collaborate among stakeholders on software architectures, and deployment plans
Gartner Marketscope on Application Lifecycle Management

IBM Rational Positioned as a Clear Leader in this Expanding Segment

"IBM is one of the few vendors with credible offerings in almost all the requirements of ALM"

"IBM Rational is one of the first vendors to tell a story about integrating across the lifecycle"

"Jazz is a solid architectural foundation for further innovation"

We rate IBM as a **Strong Positive** because of its current market strengths and breadth of portfolio"
IBM Rational Team Concert
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
  - Eclipse-, Web-, Visual Studio - Client
  - Support for System z and PowerSystems servers

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IBM Rational Team Concert

- Open and extensible on Jazz
- Collaborate in context
- Right-size governance
- Day one productivity

- **FREEDOM TO CREATE**
  - Eclipse plug-ins

- **EXTENSIBILITY**
  - services architecture

- **OPEN**
  - wikis
  - real-time reporting

- **Web 2.0**
  - chat
  - automated hand-offs

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IBM Software Group | Rational software
Source code management

Integrated stream management solution

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

Development projects contained in those components

Individual user server workspaces

Working with Change Sets
Work items

Predefined, custom and personal queries

Subscribe to work items you're interested in

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**
- **Create local or remote build servers**
- **Supports Ant and command line build tools**
- **Identify work items and change sets that went into the build**
- **Historical view of the build queue with status**
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.

Plan and execute iterations while managing team and individual load.

Drag-and-drop work items to change owners/create child parent relationships.
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
Interactive dashboards provide real-time status, transparency, collaboration, and control via customizable dashboards.

Dashboards clearly understand team goals and risks, issues, and challenges surfaced at both the team and project level.

Real-time status ensures everyone is aligned and working towards common goals.
Dashboards and reporting

Trending by project or by individual team

Team member details

Current milestone status

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
- [1] Deliver new csevicon (52956) 15 minutes ago

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Work Item Builds
- Succeeded: continuous.workitem.jazz C20080424-0748 10 minutes ago
Superior reporting for real time status

**Jazz Project Description**

Process enabled team collaboration platform

The goal of the Jazz project is to build a scalable, extensible team collaboration platform for seamlessly integrating tasks across the software lifecycle. The new technology is called the Jazz Platform. This Jazz project is defining the overall architecture of the Jazz Platform, and building an initial set of Jazz components that plug into the Jazz Platform.

The work in the Jazz project is divided into development work and maintenance work. Development work produces a major release at time of release. Maintenance work produces bug fixes/releases in the releases produced by the development work.

Development so as well as maintenance work is overseen by the PMG. The team members listed in the project area constitute the PMG.

**Jazz Project Members (15)**

- Chen Guo
- Emile Garma
- Javan Michel Lemieux
- John Vail
- Kari Lehto
- Kevin Hallock
- Kevin Haaland
- Mark Carew
- Peter Blank
- Scott Dick

**Open vs Closed Work Items**

- Team Area: Jazz Development/Dashboard
- Category: Dashboards
- Interval: 0.6 RC3

**Open Work Items by Type**

- Team Area: Jazz Development/Dashboard
- Category: Dashboards
- Interval: 0.6 RC3

**Open Work Item**

- Team Area: Jazz Development/Dashboard
- Category: Dashboards
- Interval: 0.6 RC3

**Open Dashboard Items (96) Priority**

- High: 8
- Medium: 20
- Low: 14
- Unassigned: 54
How we use Rational Team Concert

- Two-way Intel® Xeon® server running WebSphere® Application Server and another running IBM DB2®
- Jazz Project – Using bi-weekly iteration builds
  - Jazz and Rational Team Concert self hosting since 4Q06
  - Global team in seven locations in North America, Europe and India
  - ~150 developers, plus jazz.net webclient access
  - Repository >24G, >170K files, >60K work items
- Over 60 Rational development teams using Rational Team Concert
- More than 125 other teams around IBM
Rational Design Manager
Collaborative Design Management Offerings

- **RSA Design Manager** provides Collaborative Design Management for the Rational Software Architect family

- Extends RSA’s existing design authoring capabilities with enhanced team collaboration

- Connects RSA into the Jazz platform, so teams can collaborate in the context of designs

- Team capability offered through Design Manager and Design Reviewer user roles

- Users access through either Web client or desktop client with Design Management client installed

“We are excited about the capabilities in Collaborative Design Management .... We see it playing a significant role in our development process because it allows us to transition away from our home grown solutions in that area to standardized Rational products.”

Hans-Peter Berger, Department Head, Application Development Infrastructure, GAD
Design Server
Maximize productivity and lower costs

- Increase team knowledge through an enterprise and system-wide repository with Web-based access
- Leverage Jazz to quickly search across designs for review, analysis and potential reuse
- Analyze the impact of design changes

- Teams need to quickly find existing designs to review, analyze, and identify reuse, but…
  - Information may be stored in multiple designs or models
  - Desktop client installation is required to view the design information
  - Access to SCM system also may be required to access the information

  - With RSA Design Manager…
    - All designs for an organization or system can be stored and accessed from a central location
    - All known designs can be searched, viewed, analyzed on the server from RSA or Web client
    - The new *Relationship diagram* supports impact analysis and discovery of related design elements and resources
Stakeholder Collaboration
Easily share software architectures, deployment plans and system designs

- **Improve quality by enabling the extended team to easily access and review designs and trace analysis**
- **Keep stakeholders informed on how their work relates to designs**

- Teams need to collaborate on designs and incorporate design into the workflow, but...
  - Stakeholders cannot easily access the latest design information
  - It’s not clear to stakeholders which designs are related to their work
  - Design dependencies are mismanaged, resulting in data duplication and inefficient workflows

  **With RSA Design Manager…**
  - Stakeholders have self-serve access to design milestones, improving collaboration and quality of designs
  - Stakeholders can determine how their task relates to designs with traceable links to work items, requirements and test cases
Faster Design Reviews
Shorten time-to-market and improve quality

✓ Speed up decision-making by keeping people informed as decisions are made
✓ Improve quality by ensuring that the extended team has direct input into updates and corrections
✓ Automate the design review process

- Teams need to collaborate with stakeholders on software architectures, deployment plans, and system designs, but..
  - Design reviews are painful, tedious, and time consuming
  - Stakeholders do not have direct access to designs so reviews need to be handled outside of the design tools; feedback is difficult to communicate and confirm

  With RSA Design Manager…
  - Designers automate reviews, specifying which designs and stakeholders participate
  - Stakeholders can view the design and attach comments and mark-up via the Web or rich client
    - Design reviews can be linked to RTC work items for planning and tracking
Multi-discipline Document Generation and Reporting
Satisfy regulatory and customer demands

✓ Easily create comprehensive documentation for specifications, communication, compliance and auditing
✓ Help prove compliance by including OSLC link information and design review information

- Teams must document for specifications, communication, regulatory compliance, and auditing, but…
  - Documents need to contain information from different domains (requirements, design, change management); individual products have separate reporting solutions
  - Existing solutions are difficult to use for designs and limited in the types of information they can access

- With RSA Design Manager and Rational Publishing Engine…
  - Users create templates and generate documents and reports pulling data from all relevant sources using open interfaces
  - Documents can show the impact of design changes on other lifecycle resources leveraging the OSLC linking data
  - Reports can include comments and details from design reviews
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**Best Practice Processes**

**Future IBM Offerings**
Manage Evolving Requirements
Manage Architecture
Ensure Security & Compliance
Accelerate Change & Delivery
Deliver Enduring Quality
Improve Project Success
3rd Party Jazz Offerings

**Jazz Platform**
Jazz Integration Architecture
Additional resources

- Find out more about Rational Team Concert
  http://ibm.com/rational/rtc
- Download the trial and participate in the open commercial development project
  http://jazz.net
- Find out more about Rational Design Manager
  https://jazz.net/projects/design-management/