

**Drinking our Own Champagne**  
The Rational Collaborative Lifecycle Management Solution at Work

IBM Software  
**Innovate2011**  
The Premier Event for Software and Systems Innovation

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**What does Collaborative ALM mean for us?**

- Allow to establish integrated cross-functional teams in the light of the realities of day-to-day software challenges
- Seamless sharing and effective tracking of information across teams, functions, and products
- Allow the right tool for the job and the person

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**Team Topologies**

- Vertically aligned**  
> Centralized ALMaaS  
◀ **Integrated team with collaborative, transparent and automated workflows.**
- Divided by Function**  
> Integrated ALM Cloud  
◀ **Functional separation, organized by discipline and line organization**
- Outsourced**  
> Secure and Connected  
◀ **Organizations depending on functions and contributors outside corporate boundaries**

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**Rational's ALM solution – Our Self Hosting Story**

- Rational's ALM solution (currently) consists of
  - Rational Requirements Composer for the Business (RM)
  - Rational Team Concert for Development (CCM)
  - Rational Quality Manager for Quality Management (QM)
- The products are based on an integration architecture provided by the Jazz Team Server (JTS)
- We self host on all three products

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**Our Organization**

The Rational CLM team

CCM Prod. Team	CCM Dev Team	CCM Quality Team
QM Prod. Team	QM Dev Team	QM Quality Team
RM Prod. Team	RM Dev Team	RM Quality Team
JF Prod. Team	JF Dev Team	JF Quality Team

Product Delivery (Business)      Development      Quality Management

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## History: Our Self Hosting Adoption Path

- **single** RTC project
  - manage development projects: defects, tasks, plans, scm, build
- **multiple** RTC projects in **multiple** repositories
  - linking of artifacts across repository boundaries
  - cross project dashboards across repository boundaries
- **collaborate** with **test** organizations using **multiple** RQM repositories
  - linking RTC and RQM artifacts
- **collaborate** with the **business** using **multiple** RRC repositories
  - linking RTC, RQM, and RRC artifacts

time ↓

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## Inside Development

The Rational CLM team

CCM Prod. Team	CCM Dev Team	CCM Quality Team
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Product Delivery (Business)      Development      Quality Management

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## Development Practices

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## Continuous Adaption

- No tool supports all practices "out-of-the-box"
  - different teams want to adapt the tool to the process that works best for them
    - e.g. "Be as agile as you want"
- Teams continuously customize the tools to adapt to their process by...
  - ... experimenting with "The Rhythm":
    - configuring **Timeline Structures** with different **Process Rules**
  - ... integrating **Testers** and **Product Managers** into teams:
    - defining new **Roles** and role specific behavior
  - ... tracking additional activities like **Retrospectives**, **Build Status**, **Adoptions**:
    - introducing new **Work Item Types** with additional **Attributes** and specific **Workflows**
  - ... making all activities and artifacts transparent:
    - creating specific **Dashboards**, **Reports**, and **Queries**

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## The Rhythm

- We configure our timeline structures as we need it:

- We share timelines across projects

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## Development Project Linking

- We use multiple Rational Team Concert repositories for development
  - Separate repositories for more flexible self hosting, RTC team wants to run on the latest

- C/ALM program coordinates product projects of Rational's C/ALM solution

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## Roles: We Work as an Integrated Team

- Testers and Product Managers are members of the development team
- Tasks for everyone...

**Defined Roles**

- PMC
- Component Lead
- Contributor**
- parttime
- Project Admin
- Connector Admin
- Dashboard Admin
- integrationstreamadmin
- integrationbuildmeister
- connector
- Development Manager
- Product Manager**
- Release Manager**
- Tester**

Defect <04:38:31>

Summary: Exception when deleting open social dashboard

Type: Defect

Severity: Normal

Found In: 3.0 MS

How Found: **Development**

OS: Unknown

Customer Use: Self Host

Client: Development

Team Area: Internal

*Populated based on role*

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## Work Item Types

- Plan items, Stories, Tasks
- Tracking
  - Build status
  - Adoptions
- Defects
- Enhancement
- Retrospectives

- Defect
- Task
- Enhancement
- Plan Item
- Track Build Item
- Retrospective
- Story
- Adoption Item

Support "personal" builds

- Children
- Documentation for the "personal build" pattern
- Personal builds
- Children
- Improve personal build user experience

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## Team Structure

- We work in both **component** and **feature** teams
- Component team
  - Dependencies between adoption tracked using Adoption Items
- Feature teams
  - Execution tracked in the plan items

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## Adoption Work Item Type

- Tracks changes from Jazz Foundation that need adoption
- additional Attributes:
  - Affected teams
  - Impact
- specific Workflow:
  - Proposed
  - Approved
  - Rejected
  - Done

Java - Rational Team Concert - Rational Team Concert

Adoption Item 64477

Summary: Adopt new web UI code

Type: Adoption Item

Created: Nov 17, 2009 2:40 PM

Team Area: Web UI Foundation / IBM.com

Priority: Medium

Planned For: 2.0 MS

Due Date: None

Resolution Date: Dec 18, 2009 1:50 PM

Resolved By: SDC/SB/MS

Quick Information: Subscribers (1): AC, CL, OS, DL, EG, HPO, JH, JC...

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## Tracking Adoptions with Dashboards

Rational Team Concert

Jazz Collaborative ALM

General | Plan Status | Build | Plan Themes | DCP (Beta Draft) | Plan Commitment | Jazz Foundation Plan | RTC Plan | RQM Plan | RRC Plan | Feature Teams | OBLC | Enhancements

Tooltips | Alignment | Foundation Adoption | Activity

Headlines

Foundation Adoption

Proposed Foundation 3.0 Adoptions (4)

Approved Foundation 3.0 Adoptions (2)

Incomplete Foundation 3.0 Adoptions (0) Planned For

Rejected Foundation 3.0 Adoptions (1)

Completed Foundation 3.0 Adoptions (2)

113027: Adopt product CAL, less to reflect new licensing strategy

113017: Contributors are no longer automatically added as a dependent

110000: DCP templates related config properties have changed

109793: Adopt DCP 1.4.3

109529: Review references to com.ibm.team.repository.links.config.config

109271: Support search providers in Dashboards

109205: Jazz Foundation Application SDK API changes

109027: Complete errors in processes with the latest

108755: Moving Server Query Service interfaces out of common

108563: Bulk operation service URL, changed to server URL, link in disco

108204: Content based PATHEFS, etc. storage should have 412 instead of

107847: Server Query Service Module Adoption Item

106522: New extension point for determining version of configuration data

106520: Adopter: Specify item id default for all new entry elements

106528: Contact and Owner information on split in Information Abstracts

106188: HSQL in JAZZ\_IMPORTER using unmerged\_APT\_IMPORTER

104481: Adopt E3 3.5.2

104420: Adopt workspaceURL() method for creating Web UI links

107245: JFS application offers developer adoptions for MS

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## Planning/Execution: Feature Teams

A feature team is a cross functional team owning a plan item

99043 - Support task tracking in a service - Jazz Collaborative ALM

Summary: Support task tracking in a service.

Dev Status: Defined

Risk Status: Yellow

Weekly Status: 2/22/2010 - Planned application. Details can be found in [Story 99043](#). End of MM we will have a list of tasks to be addressed in MM. Designated defect creation in RTC has been complete

2/27/2010 - Feature status

2/27/2010 - Added more details to [enhancement 99043](#)

Roadmap

2009 MM - 2009 MM (description)

2010 MM - 2010 MM (description)

Feature home page

Feature Team:

- André Wierand
- Aggelos De Vries
- Craig Lawrence
- Erick Gamma
- Jennifer Hayes
- John Whitfield
- Larry Smith
- Patrick Struelens
- Pratik Shah

Feature team

4/9/2010 - RTC 3.0 MS engine

4/10/2010 - implementation done can be explored in standalone Module Test web app. Waiting for RQM to consume it

4/9/2010 - RTC 3.0 MS engine

4/10/2010 - RTC 3.0 MS engine

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## Planning across Products and Repositories

Umbrella repository  
C/ALM 2010 Plan  
Plan Item

Related Change Request  
Capability Plan  
Plan Item

Product repository  
Product repository

Link to an OSLC Change Request, in this concrete example a work item in a remote RTC repository

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## The CLM Plan

CLM 3.0.1  
270 Items: 175 open, 95 closed, 0 in 101 days

Summary: 270 Items, 175 open, 95 closed, 0 in 101 days

Plan Items: 270 Items, 175 open, 95 closed, 0 in 101 days

Summary: 270 Items, 175 open, 95 closed, 0 in 101 days

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## Progress Tracking

Story Status Current Iteration  
Burn Down Current Iteration  
Stories Open/Closed/In Progress

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## Continuous Integration

### A Team's Build Dashboard

- Multi-staged continuous integration
  - Developer (continuous)
  - Team (continuous)
  - Product (weekly)
  - Composite product (weekly)

Build Dashboard: Tracking and Planning, Build Status, Assignments, Weekly Build Dates

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## Composite Build

Composite Build Dashboard: Build Status, Assignments, Weekly Build Dates

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## Inside Testing

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Product Delivery (Business)    Development    Quality Management

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## Testing Practices

- Test management
- Exploratory testing
- Concurrent testing
- Application vulnerability testing
- Independent testing
- Acceptance testing

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## Testing Practices

- Agile Testing Quadrant \*

Teams:  
Development  
System Test  
Functional Test

\* Lisa Orsini, Janet Gregory, "Agile Testing: A Practical Guide for Testers and Agile Teams"

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## Project Links for Testing

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## Test Management

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## Test Coverage: Linking plan items and test cases

- The concrete plan item type depends on the process template

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## Traceability Links – Work Item Level

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### Adding Requirements

Linked Requirements    Linked Development    Linked Test

**Rational Quality Manager**

- Project Relationships
- related to Jazz Collaborative ALM
- related to Jazz Foundation
- implements RQM 3.0
- related to Rational Requirements Composer
- related to Rational Team Concert
- tested by SVT\_CC\_CD
- tested by SVT\_RQM
- tested by SVT\_RTC

### Elaborating Requirements

**Design Requirements**

- Save Searches
- Save and share search results in the Search View
- Design searches must be defined in either Design or Demand
- Provide searches that are available to the user who creates them
- Provide searches that are available to all users in the project or sub-project
- Design searches may be hierarchical to all users in a project

**Design Concerns**

- Must be associated to the requirements to which they are linked to the user
- Each concern must be able to be linked to the user, with the user's response of the user's response to the concern
- Each concern must be able to be linked to the user, with the user's response of the user's response to the concern

### Traceability Links – Plan Level

Release 1.0 Backlog

29 items: 21 open, 8 closed | Ends in: 25 days

Plan Details

Planned Items    Links    Snapshots    Dashboard    Notes

Product Backlog Product Backlog

00 pts

Item	Priority	Status	Assignee
37	High	Implemented	1 plan item
36	High	Implemented	1 plan item
35	High	Implemented	1 plan item
15	High	Implemented	1 plan item
40	High	Implemented	1 plan item
14	High	Implemented	none
54	High	Implemented	1 plan item
60	High	Implemented	1 plan item
29	High	Implemented	1 plan item
16	High	Implemented	1 plan item

### Collaborating on the Release Plan

99043: Support task tracking as a service - Jazz Collaborative ALM

Plan Item 99043

Summary: Support task tracking as a service

**Business Commitment**

DCP Base: Base Content

Business Value: 10 - Show Stopper

**Planning Comments**

2/23/2010 Question: does RRC consume Task as a service. Foundation needs to provide a new project task type.

2/28/2010 GFD: I am changing this to not committed for RRC. Given our current plan it is not clear that we can contain this. Pratik will continue to participate in this feature team to define what this could mean for RRC.

3/8/2010-CP: Jared believes this is now in plan. I changed it. @secanlio @prakash please confirm / change.

**M3 Planning**

RTC items can be found as children of the corresponding RTC Story 99074: Make more Work Item functionality available through REST/OSLC based APIs

10 - Show Stopper

10 - Show Stopper

7 - Priority

4 - Tactical Need

2 - Nice to have

0 - Not required

### View Plan by Business Value

Use newly introduced attributes immediately in plans:

CALM 2010

Owner: Jazz Collaborative ALM (Beneath Collaborative ALM 2010 (11/20/09 - 9/30/10)) [3 Closed] [111 Open]

Item	Priority	Status	Assignee
Define CALM install	10 - Show Stopper	Must	Implementing
Define the composite product development teams build and test	10 - Show Stopper	Must	Implementing
Define CALM 2010 topologies and enable transition of CALM products to those topologies	10 - Show Stopper	Must	Exploring
Define and realize CALM 2010 to CALM 2009 migration strategy across products	10 - Priority	Must	Bad
Implement simpler uniform licensing model	10 - Show Stopper	Must	Implementing
Common administration of a project	10 - Show Stopper	Must	Implementing
Support common reporting	10 - Show Stopper	Must	Implementing
Define CALM Reports	10 - Show Stopper	Must	Defined
Support task tracking as a service	10 - Show Stopper	Must	Defined
Support RQM fiscal defect enhancements in CALM step	10 - Priority	Must	Green
Decouple built-in Requirements from RQM	10 - Priority	Must	Defined
Self-Host using CALM	10 - Priority	Must	Implementing
Unleash other products with CALM guidelines	10 - Priority	Must	Defined
Open CALM dashboards to support other widget technologies	10 - Priority	Must	Implementing
Improve and design traceability links & views, add support for dynamic instant traceability links	10 - Show Stopper	Proposed Base Content	Must

### Risk Tracking

99043: Support task tracking as a service - Jazz Collaborative ALM

Plan Item 99043

Summary: Support task tracking as a service

Status: Yellow

Risk Description: J/22/2010: Adjust to yellow, Elin.Jean.9902 has become yellow

**Risk Status**

Yellow

**Risk Description**

J/22/2010: Adjust to yellow, Elin.Jean.9902 has become yellow

**Business Value**

10 - Show Stopper

**Risk**

Work Breakdown

Assigned Items

Empty Groups

Estimated Items

Function Items

Items from Sub-Items

Planned Items

Resolved Items

Risk is tracked in the Plan Item's Execution tab

Updated at the end of the iteration

