



IBM

Work smarter with Global Collaboration & Enterprise Agile

Ericsson Rational User Conference 2009

Stockholm

© 2009 IBM Corporation

A SMARTER PLANET
MEANS A BRIGHTER FUTURE

ERICSSON 





IBM

Improving Enterprise Change Management with C/ALM integrations

Mats Göthe | mats.gothe@se.ibm.com

A SMARTER PLANET
MEANS A BRIGHTER FUTURE

ERICSSON 



Improving Enterprise Change Management with C/ALM integrations

- **Presentation Summary**

This session will present the new C/ALM integrations for Enterprise Change Management between Rational ClearQuest, Rational Team Concert and Rational Quality Manager delivered in 2009.

Scenarios from the CALM@Scale greenthread will be used to exemplify the improvements in cross team collaboration, transparency and openness. The session will also discuss deployments of the ClearQuest Bridge Connector, OSLC server communications, and role-based usage examples of the ClearQuest Dashboard viewlets

- **Presenter**

Mats Göthe | mats.gothe@se.ibm.com



- Solution Architect with a focus on Application Lifecycle Management and Greenthreads
- Author of the C/ALM Redbook
- Currently engaged in shaping the CALM@scale solutions for IT and Systems

Improving Enterprise Change Management with C/ALM integrations

- Major progress in the Collaborative ALM solution has been achieved in 2009; integrations supporting disciplined collaborative workflows, lifecycle asset traceability, and open standards integrations
- Integrations for Enterprise Change Management has been simplified and better aligned with Collaborative ALM
- Integrations between the Enterprise and Team Change Management is key for existing deployments of ClearQuest and ClearCase.
- Driving a scenario-based approach to capability development to achieve commonality across products – rather than product feature uniqueness

Agenda

- Collaborative ALM Integrations
- The Collaborative ALM @scale scenario
- Integration examples of Enterprise Change Management
 - Tool Admin: Configuring the integrations; CQ Bridge, Dashboard and OSLC
 - Product Owner: Prioritizing Requests
 - Dev Lead: Planning an iteration
 - Tester: Submitting a defect
- Summary and Conclusions



What does ALM mean?

- Application Lifecycle Management is a discipline as well as a product category.
- ALM doesn't support specific life-cycle activities; rather, it keeps them in sync.
- ALM doesn't live in practitioner tools; it lives in the integrations between them.
- A collection of development life-cycle tools is not necessarily ALM.

***Application lifecycle management is**
the coordination of development life-cycle activities,
including requirements, modeling, development, build, and testing,
through Process – Traceability - Reporting*

FORRESTER®



Traceability answers the commonly asked questions...

Which **requirements** are addressed in this iteration?

Can we pass an **audit**?

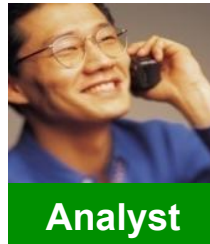
Are all of the **requirements** tested?

Are we **ready**
to **release**?

What **defects** were
resolved in this release?

What's the **quality** of the
high priority **requirements**?

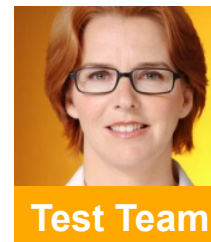
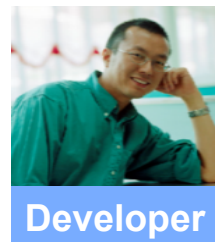
What **defects** are reported
against which **requirements**?



What **tradeoffs** can we make
to **release on time**?

What is the **quality of the build**?

How can I recreate
the **last version**
to do a **patch**?



What has **changed**
that I **need to test**?

What **requirements** am I implementing?

How can I **speed up** my builds?

What **test** uncovered this **defect**,
on which **environment** and what build?

How can I **standardize**
when teams use different tools?

Are **build times** getting longer or shorter?

What **changes** occurred overnight?

Where are the bottlenecks
in our **processes**?

What **defects** have been
addressed since the last build?



Technical Requirements of a Software Delivery Platform

■ Take advantage of the Internet

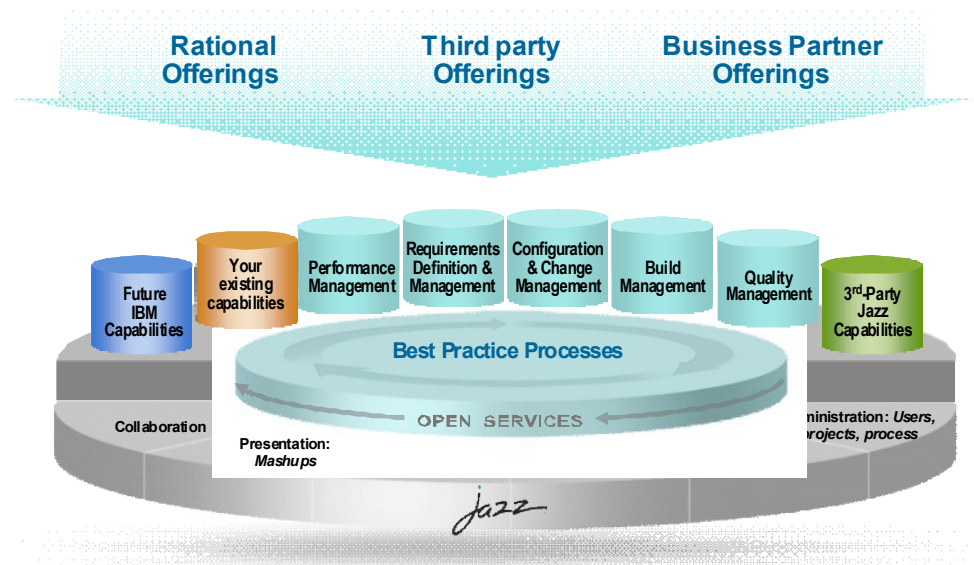
- Amazingly scalable and extensible
- Integrates information on a massive scale
- Collaboration on unprecedented scale

■ Make it open and extensible

- Specify data independently of tools
- Standardize data access through HTTP/REST standard protocols

■ Learn from industry mistakes

- Don't assume that customers will only use your products
- Don't assume that all data will be stored in a central repository



Collaborative ALM@Scale Scenario



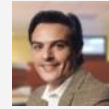
- "I'm Andy the
Tool Admin."

I am responsible for
configuring the
tool platform



- "I'm Bob the
Product Owner."

I am responsible for
producing,
prioritizing and
accepting user
stories



- "I'm Marco the
team **Dev Lead.**"

I'm leading a team who
embrace agile
practices



- "I'm Tanuj, a
Tester in the
team."

We practice concurrent and
independent
testing

Rational Clear Quest

Organize
requests



Rational Project Conductor

Prioritize
backlog



Plan
project

Rational Team Concert

Detail sprint
plans



Develop
Test
Deliver

Triage
defects /
change
requests



Deliver and
review sprint

Rational Quality Manager

Plan
tests

Detail test
plans

Develop
& configure
tests

Test
Submit/
Confirm



1 Adapt

2 Plan

3 Sprint

4 Deliver

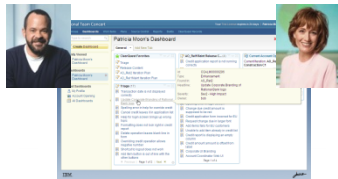


C/ALM@Scale Integrated Solution

- C/ALM relationships improves traceability and transparency to the ALM artifacts
- The C/ALM Dashboards display role based information from the web of ALM artifacts
- OSLC improves openness cross repositories

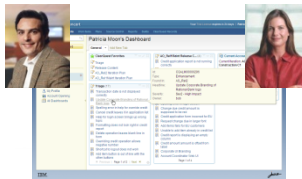
Stakeholders, Product Owner and Product Managers

- Solution requests
- Program and Project plans
- Delivery and Quality measures



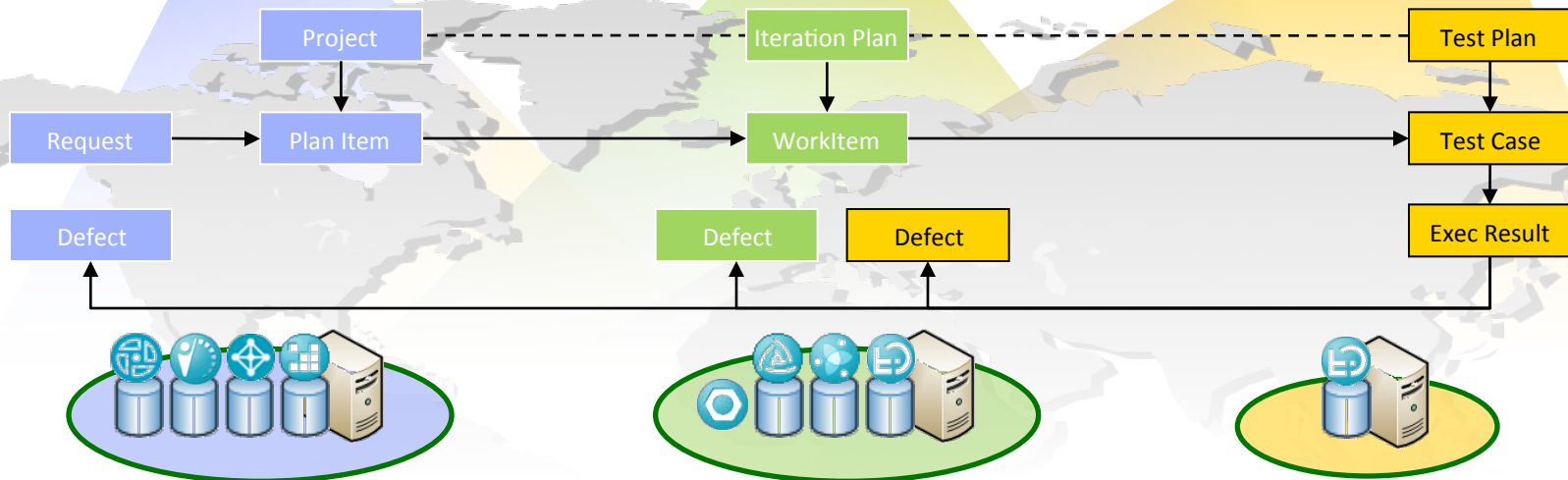
Development Dashboards

- Project transparency, collaboration and health
- Work Items and Iteration plans
- Release quality
- Stakeholder integration



Quality Dashboards

- Application quality
- Test planning and plan health
- Work tracking
- Requirements coverage
- Test lab management



Access to the Collaborative ALM Information Web

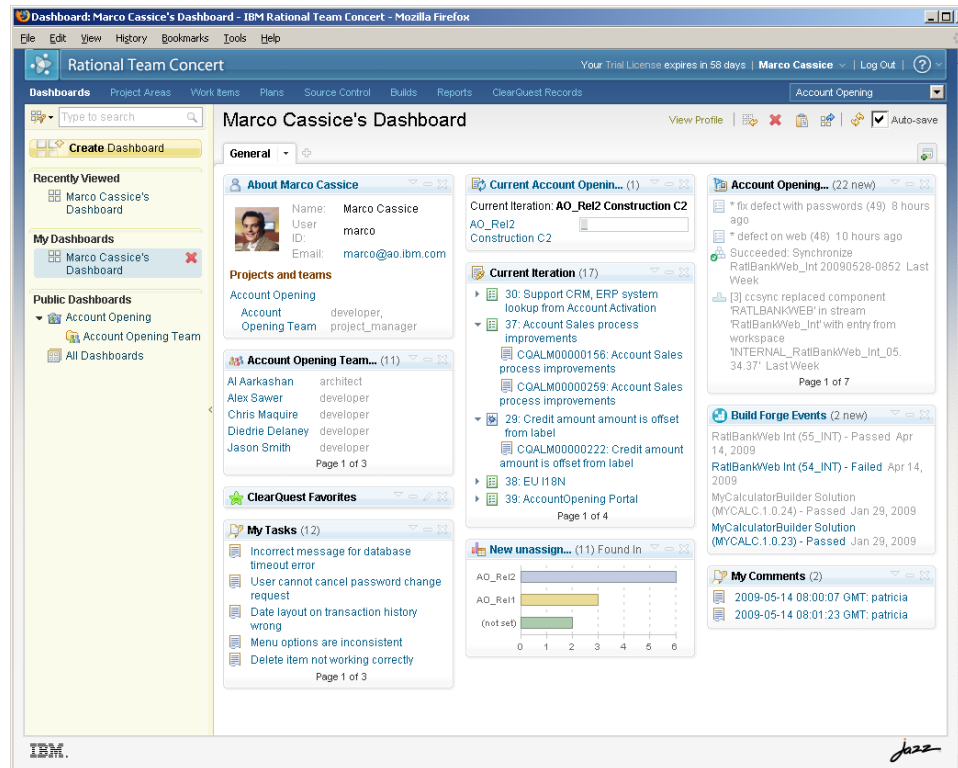
- The C/ALM Dashboards display role based information from the web of ALM artifacts
- Presents overview information and web navigation to asset details
- Provides openness cross disciplines, tools and repositories

**Teams,
Team members,
Projects** ▶

Access to team and project information

My Tasks ▶ Overview of my work

New to triage ▶ Overview stakeholders requests to the project



◀ **Solution Plans and Backlogs**

Requests and stories planned for the project

◀ **Project events**

Events that matter, e.g. Builds

◀ **Discussions and Comments**

Track discussions in context of requests

◀ **Measures**

Queries and charts to overview the health of the project

Configure the CQ Bridge and OSLC Server Connection



- ▶ Andy is the **Tool Admin** responsible for the **application infrastructure** used by the development teams
- ▶ He is **configuring server connections** and **project links**
- ▶ Andy will
 - ▶ Configure the **CQ Bridge** server properties
 - ▶ Configure the **team dashboard**
 - ▶ Configure the server connection for **OSLC**
 - ▶ Configure the **project links** for OSLC

Status Summary - IBM Rational Jazz Team Server - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://rpc:9443/jazz/rpc/admin#action=jazz.viewPage&id=com.ibm.team.repository.server

IBM Rational Project Conductor Status Summary - IBM Rational J...

Rational Jazz Team Server

Your Trial License expires in 51 days | ADMIN | Log Out | ?

Project Management Administration Project Areas Server User Management Project Area Management Process Template Management Project Management Administration Admin

Status Summary

Server Status		Memory Usage	
Database Status	Connected	Maximum Memory Allocation	700 MB
Server Uptime	12 minutes	Current Memory Allocation	304 MB
		Free Memory (of Current)	19 %

Installed Products

IBM Rational Project Conductor	1.0 (I20091103_1356)
Jazz Foundation Server	1.0 (I20090618-1753)
Rational Team Concert	2.0 (I20090618-1753)

License Status

Server License	Rational Jazz Team Server (RPC) - Standard (60 day trial)
License Status	Trial - Expires On 8 Januari 2010 (51 days remaining)
Floating License Server	Not Configured
Floating License Client	Not Configured

Server VM

J2RE - 1.5.0 IBM J9 2.3 Windows Server 2003 x86-32 j9vmwi3223ifx-20090422 (JIT enabled)
J9VM - 20090421_34076_IHdSMr
JIT - 20081112_1511ifx6_r8
GC - 200811_07

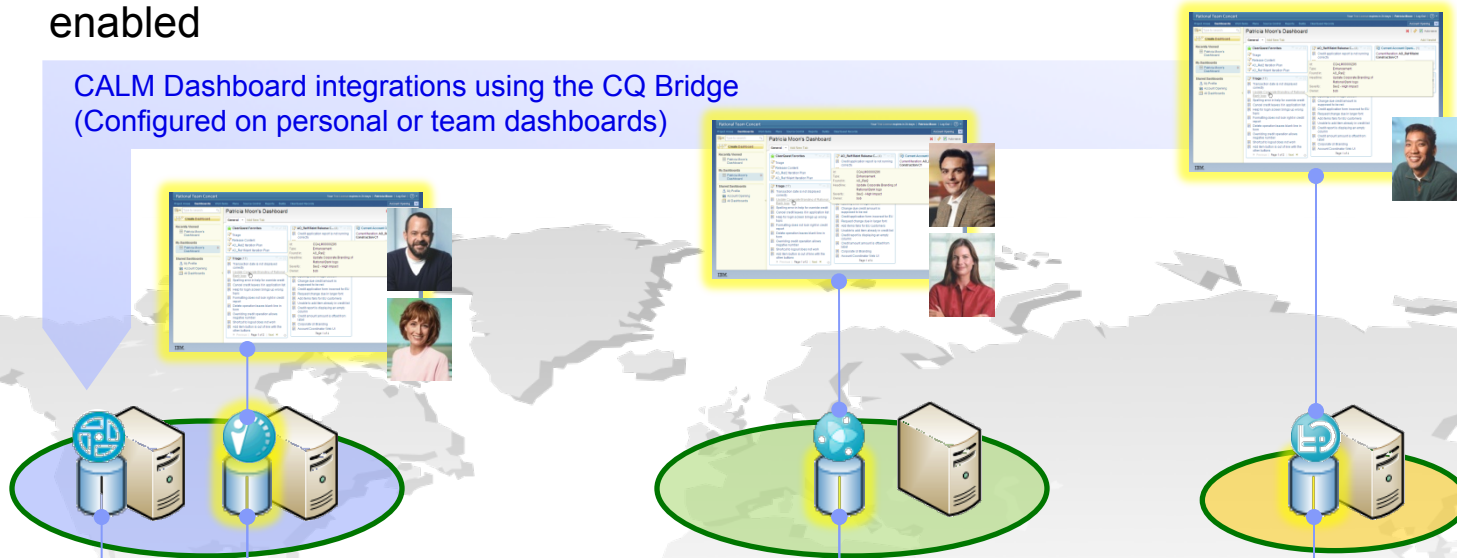
Database Status

The Big Picture: Configuring CALM Integrations

What did we learn ...

- The CQ Bridge viewlets connects the RPC / RTC / RQM dashboards to ClearQuest and the Enterprise Change Management workflows
- Dashboards are configured by the user, or provisioned for a team
- The CM OSLC interfaces connects CQ (CM providers) with RTC / RQM (consumer) and streamline the workflow to e.g. submit change requests / defects
- Both OSLC and CQ Bridge are using internet standards and deployments are WAN enabled

CALM Dashboard integrations using the CQ Bridge
(Configured on personal or team dashboards)



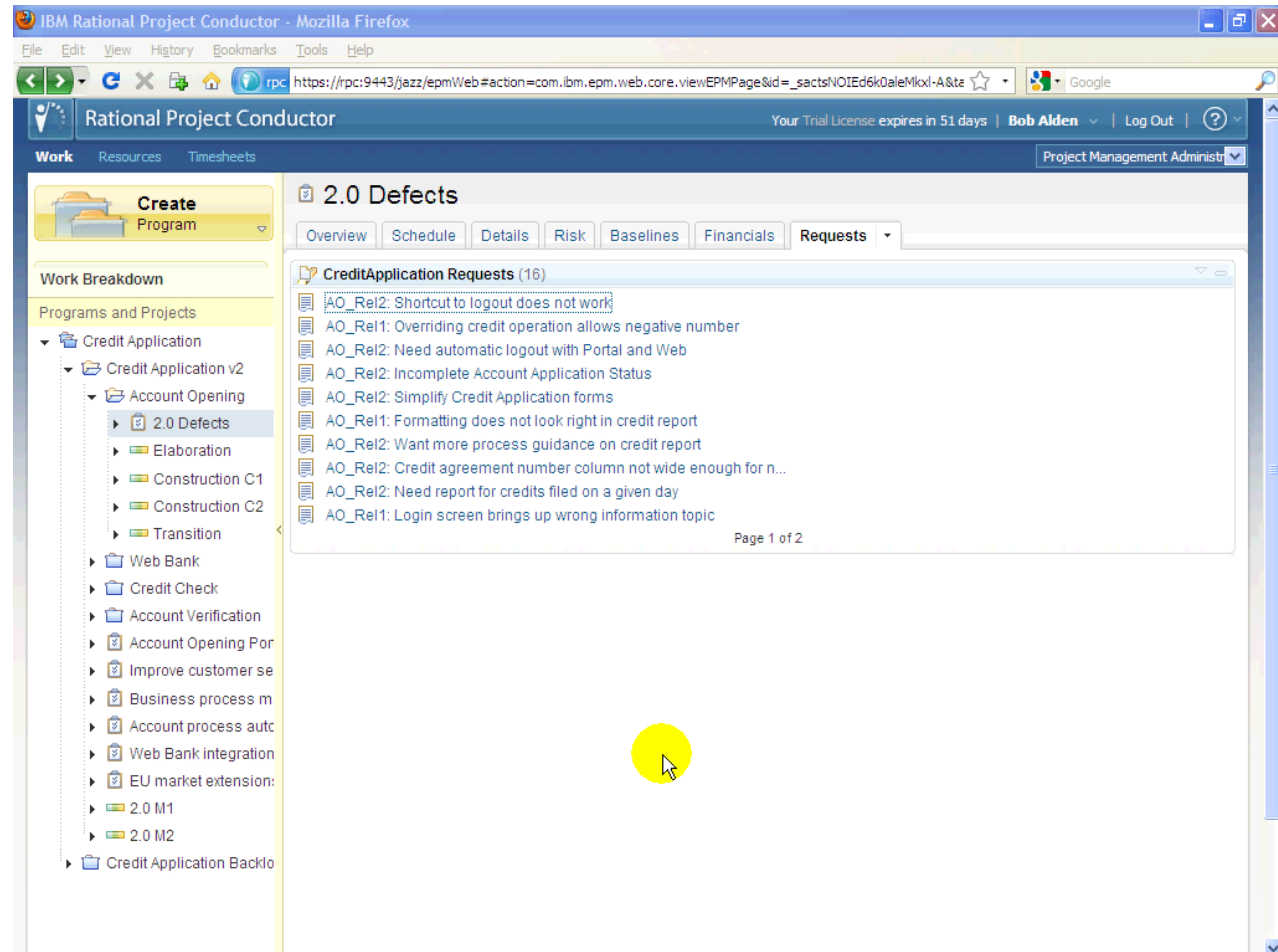
CM / Defect integrations using the OSLC
(Configured in RPC, RRC, RTC and RQM Server and Project settings)



Prioritize Backlog and Review Requests

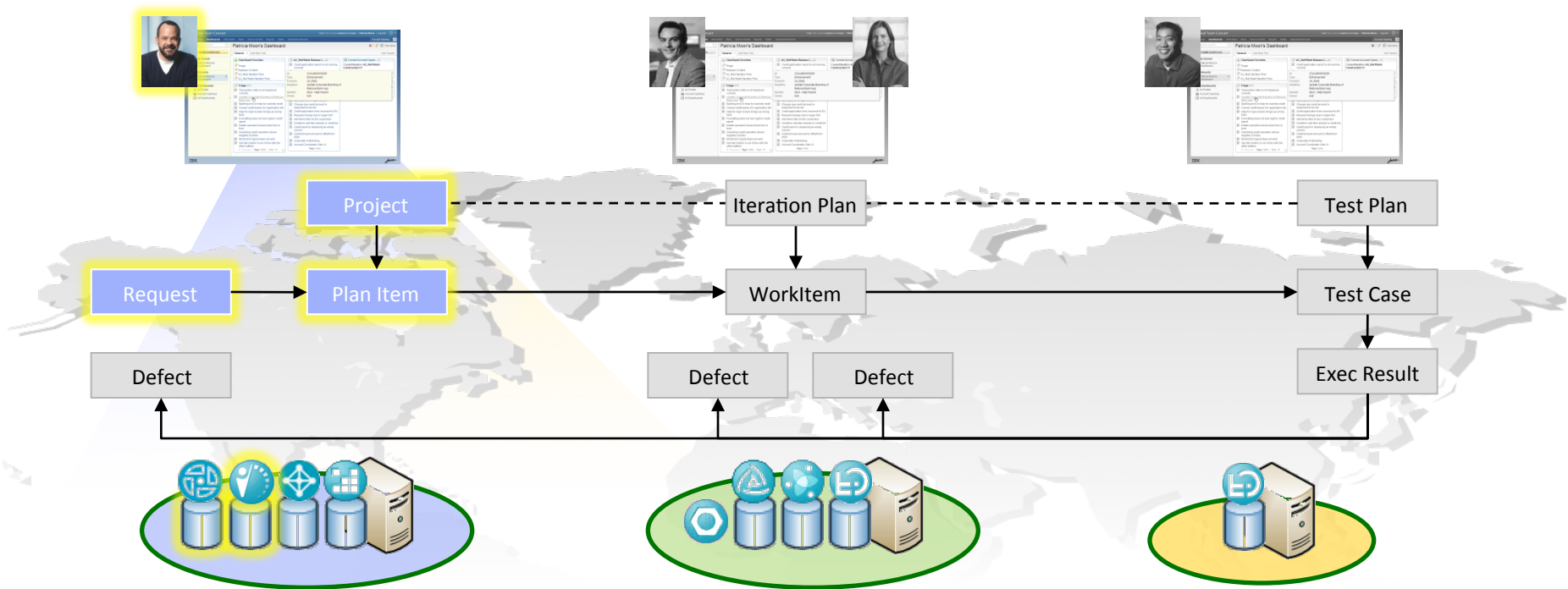


- ▶ Bob is the **Application Owner** working on the priorities for the next release
- ▶ Stakeholder requests are submitted into **ClearQuest**
- ▶ Bob needs to **review** his stakeholder needs, **refactor**, tag and **organize** his requests
- ▶ Bob needs to manage his **product backlog** and establish traceability to the stakeholder requests
- ▶ Bob uses his dashboard to
 - ▶ **Overview** the requests
 - ▶ **Browse details** CQ Web
 - ▶ **Establish links** from CQ to his product backlog



The Big Picture: Prioritize Backlog and Review Requests

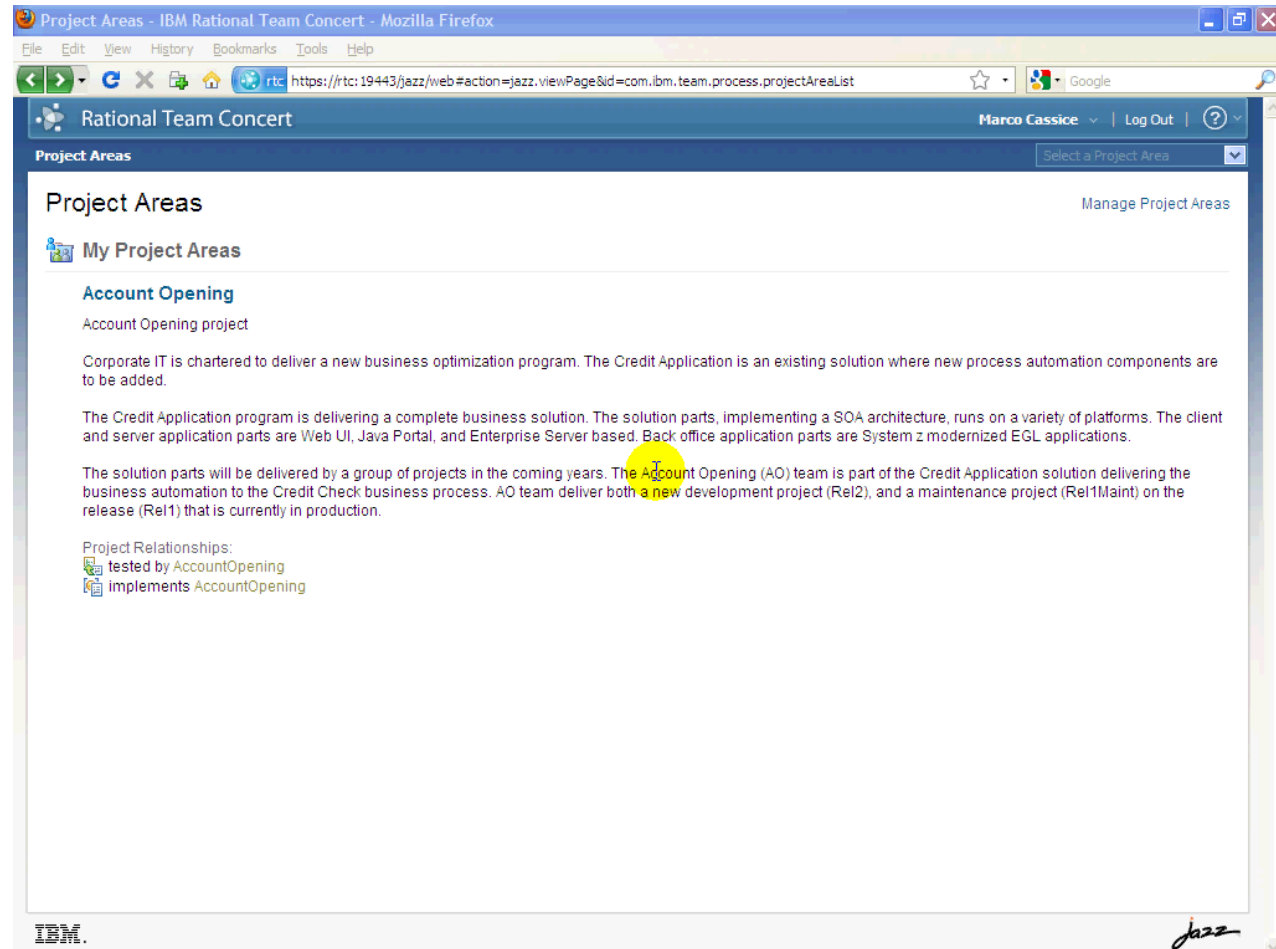
- Integrating ClearQuest into the CALM Dashboard enables openness to Enterprise Change Management assets and workflows to projects
- Establish traceability cross product plan items and stakeholder requests



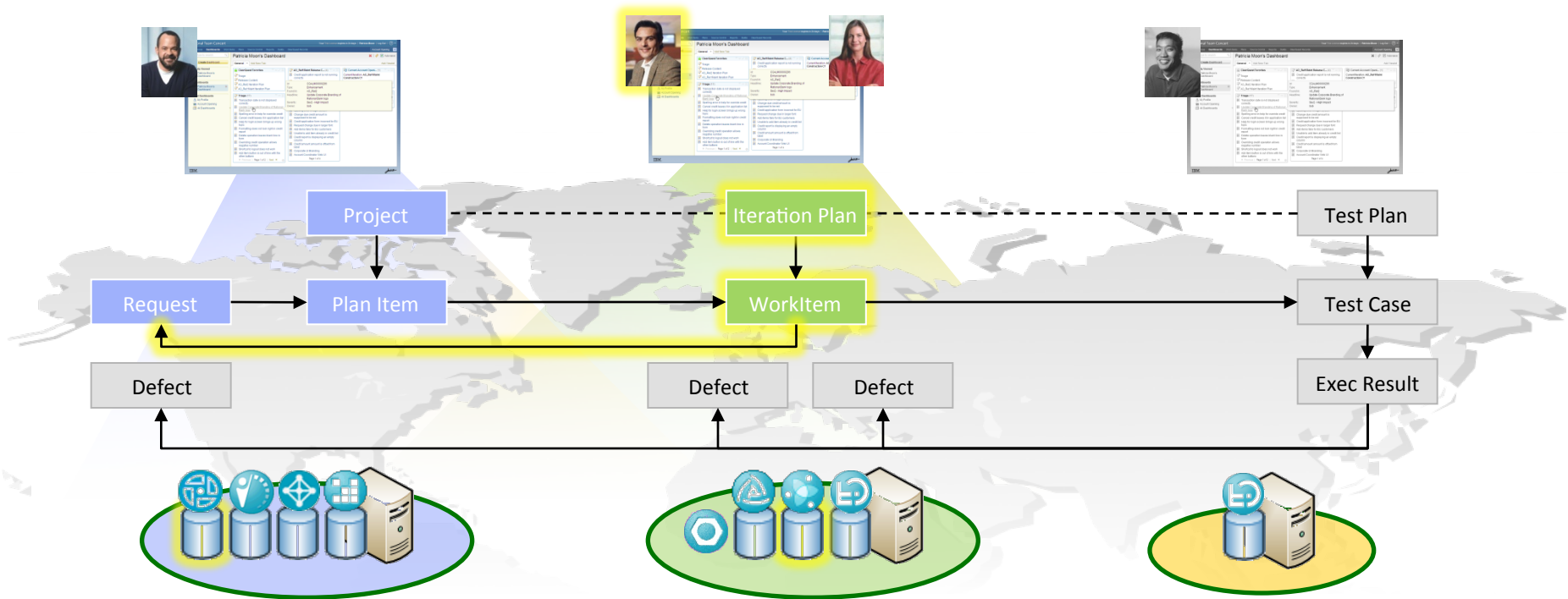
Detail Sprint Plans



- ▶ Marco is the **Development Team Lead** working on the iteration plan for the next sprint
- ▶ He is managing his **sprint plan** in RTC and **linking** plan and execution items to supporting requests in **ClearQuest**
- ▶ Marco uses his dashboard to
 - ▶ Make sure his plan **covers the prioritized requests**
 - ▶ Browse supporting request **information in CQ**
 - ▶ **Collaborate** with his stakeholders for additional information



- Integrating ClearQuest with RTC Work Items and Iteration Plans enables openness to Enterprise Change Management assets and workflows to projects
- Establish traceability cross development iteration plans and stakeholder requests





Submit Defect

- ▶ Tanuj is one of the **Testers** in the development team practicing **concurrent and independent testing**
- ▶ He is designing his **test cases** from sprint plan items in RTC and the requests in CQ
- ▶ Tanuj will **validate** the delivery of new features. He will also **confirm fixes** to submitted defects
- ▶ Tanuj **submit defects** in RTC to his team, or optionally in CQ to other teams on related components
- ▶ Tanuj will
 - ▶ Manage **tasks**
 - ▶ Overview builds, delivered work items, **test results**, and **defects** in the dashboard
 - ▶ **Submit defects** into RTC and CQ

Dashboard: Tanuj Padur's Dashboard > Scorecard - Rational Quality Manager - Rational Quality Manager - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://rqm:29443/jazz/web/console/AccountOpening#action=com.ibm.rqm.planning.home.actionDispatcher&...

Rational Quality Manager Your Server Trial License expires in 50 days | Tanuj Padur | Log Out | Type to Search

Preferences AccountOpening

Dashboards

Tanuj Padur's Dashboard

General | Scorecard | Test Execution Results

Welcome

About Tanuj Padur

Name: Tanuj Padur
User ID: tanuj
Email: unknown

Projects and teams

AccountOpening tester
WebBank
Quality Manager tester

AccountOpening Members (7)

Bob Alden
Diedrie Delaney tester
Marco Cassice testlead
Patricia Moon testmanager
Tammy Archin testlead, labmanager, testmanager
Tanuj Padur tester
Terry Impleman

My Tasks

Type Filter Text

Previous | 1 - 4 of 4 | Next

ID	Summary	Artifact	State
8	Complete the Te...	Account Activatio...	New
7	Complete the Su...	Account Opening	New
6	Complete the Te...	AccountOpening...	New
5	Complete the Te...	Account Coordin...	New

Previous | 1 - 4 of 4 | Next

My Work Item Changes (32 new)

[7] Account Sales process improvements (37) Last Week
[23] Add Registration to Login (44) Last Week
[5] Account numbers not ordered in web ui (27) Last Week
[4] AccountOpening Portal (39) Last Week

Page 1 of 5

Blocking Defects (1)

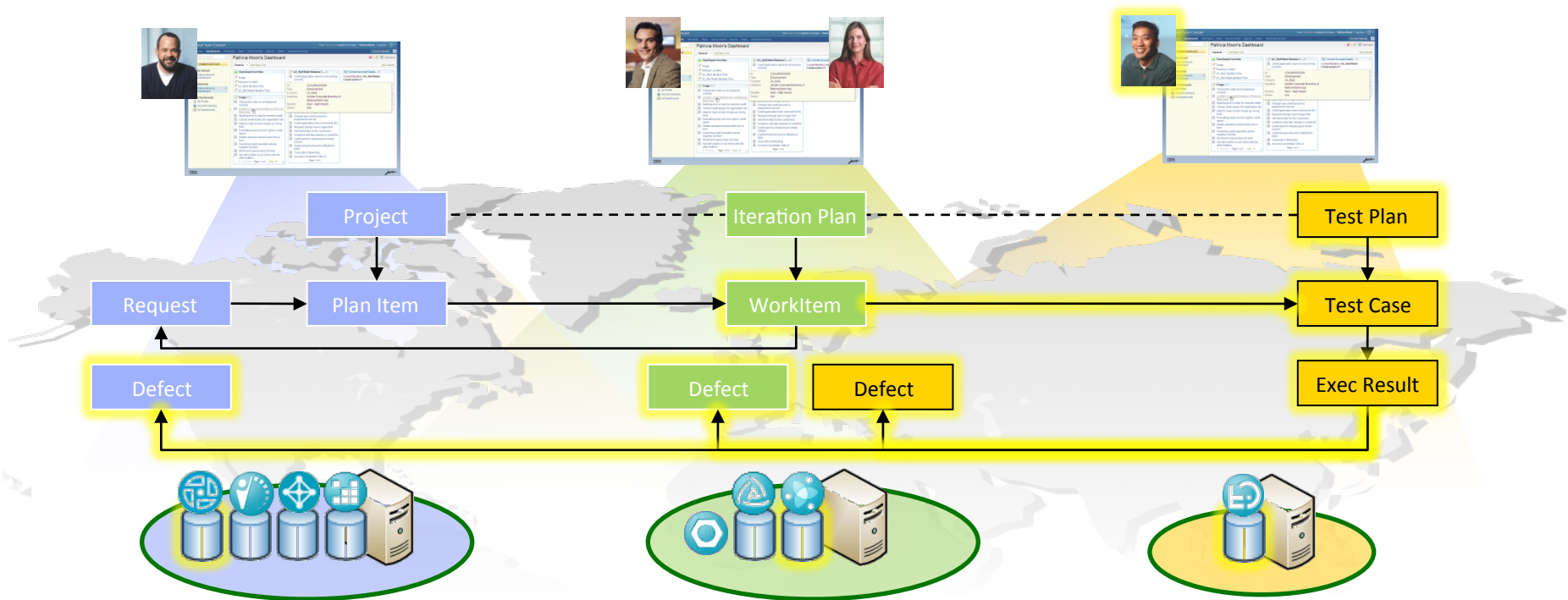
27: Account numbers not ordered in web ui

Related Sites

IBM Rational
IBM Rational Quality Mgmt

The Big Picture: Submit Defect

- Integrating Quality Manager with Enterprise Change Management and Team Change Management enables efficient continuous and independent testing practices.
- Establish traceability cross tests, requirements and implementation plans
- Enables collaboration cross functionally separated teams

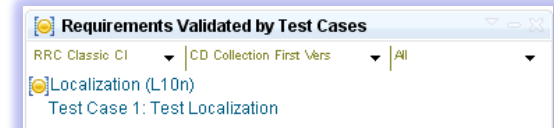
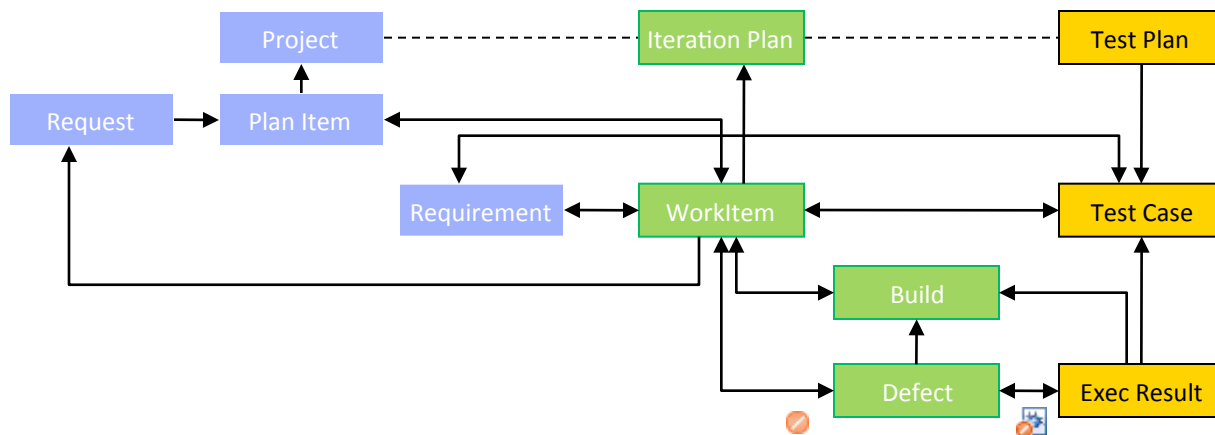


CALM Queries

- CALM Queries drive **process – collaboration - automation**

- Domain view examples

- Requirements** Requirements with traceability links ►►
 - Development**
 - Defects blocking test
 - Plan items with failing test execution
 - Plan items with no test executions ►
 - Plan items tested successfully
 - Defects affecting tests
 - Plan items with no test case
 - Plan items ready for testing
 - Defects ready for testing
 - Plan items implementing requirements ►
 - Test**
 - Plan Requirements Coverage by test Case
 - Plan Requirements Defect Impact
 - Plan Test Cases Not Covering Requirements



Conclusion / Summary

A view of integrating Enterprise Change Management and CALM has been presented

Other integrations also contribute to CALM@scale

- Requirements definition and Model management
- Configuration management and Build automation
- Asset management and deployment automation

The Read Ahead - 2010

- **Better** – Deepen integrations. Process, Traceability, and Reporting
- **Faster** – Simplify deployments, administration and getting started
- **Stronger** – Cont to unify and open the solution
- **Unleashed** – Bring more into CALM with guidelines and more OSLC standards
- **Self-hosting** C/ALM on jazz.net - Linked Requirements, Development and Testing

Stay updated on <https://jazz.net/wiki/bin/view/Main/CALMHome>

