



# Best Practices for Adopting Jazz

## IBM case study - How we self-host with C/ALM

Mats Göthe – IBM Rational  
May, 2010

# Topics

- IBM and Agile
- The Jazz Team
- Self-Hosting our practices



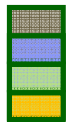


## We Needed to Change

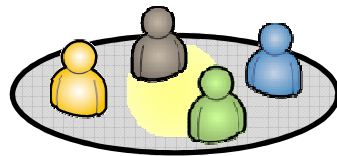
- Organize differently
  - Develop differently
  - Deliver differently
  - Measure differently
- 
- Why did IBM choose Agile?
    - Response to fast changing environment
    - Large overhead of existing process
    - Experience accumulated from experimentations
    - Improving morale
    - Driving innovations
    - Influenced by Open Source community
    - Expansion of globally distributed development



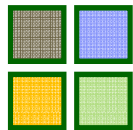
# Three Common Solution Patterns



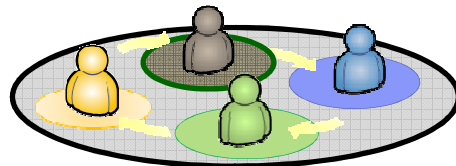
**Vertically aligned**  
 > Centralized ALMaaS



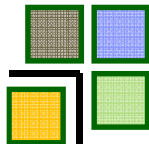
◀ **Integrated team with collaborative, transparent and automated workflows.**



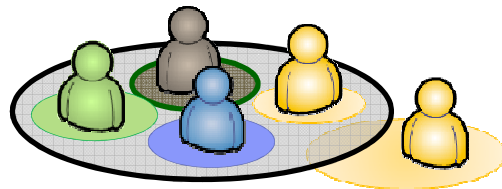
**Divided by Function**  
 > Integrated ALM Cloud



◀ **Functional silos, organized by discipline and line organization, form software delivery chain**



**Outsourced**  
 > Secure and Connected



◀ **Organizations depending on functions and contributors outside corporate boundaries, while preserving IP security**

## A Look at the Global Rational Jazz Team



- >70 developers world-wide
- Distributed leadership, development and testing teams
- 30.000 contributors on Jazz.net

# What is important for us?

We value...

- Adoption of Agility @ Scale practices
- Being proud of our products and enjoy working on them
- Developing openly, ship with high quality, on time
- Scenario driven development

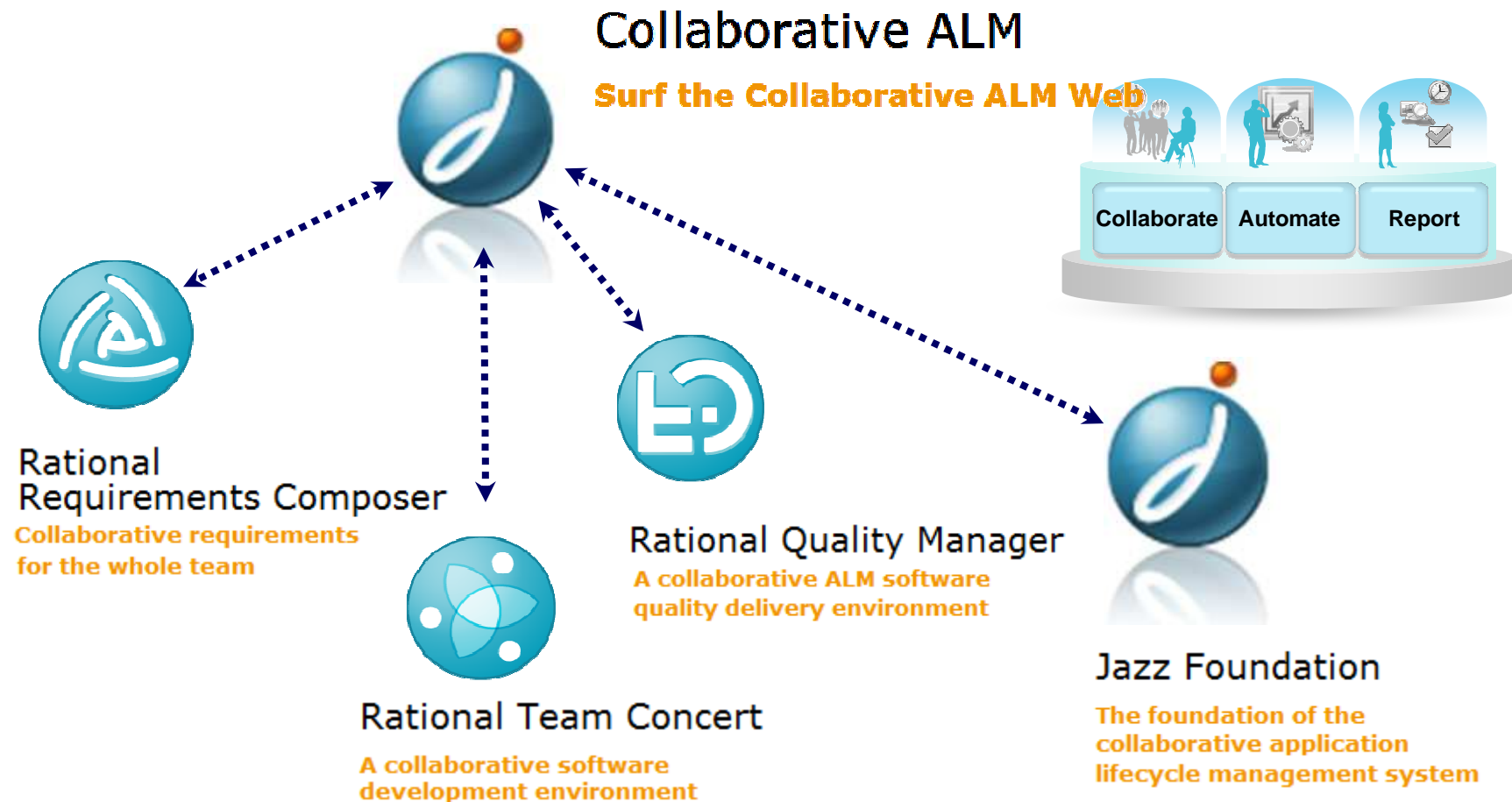
Self-hosting with Jazz enables...

- Adoption of Agility @ Scale practices through Collaborative ALM
- Useful products with better quality
- Seamless sharing and tracking of information across teams and functions
- Allow the right role-based tool for the job

*Allow to establish integrated cross-functional teams in the light of the realities of day-to-day software developing and shipping*

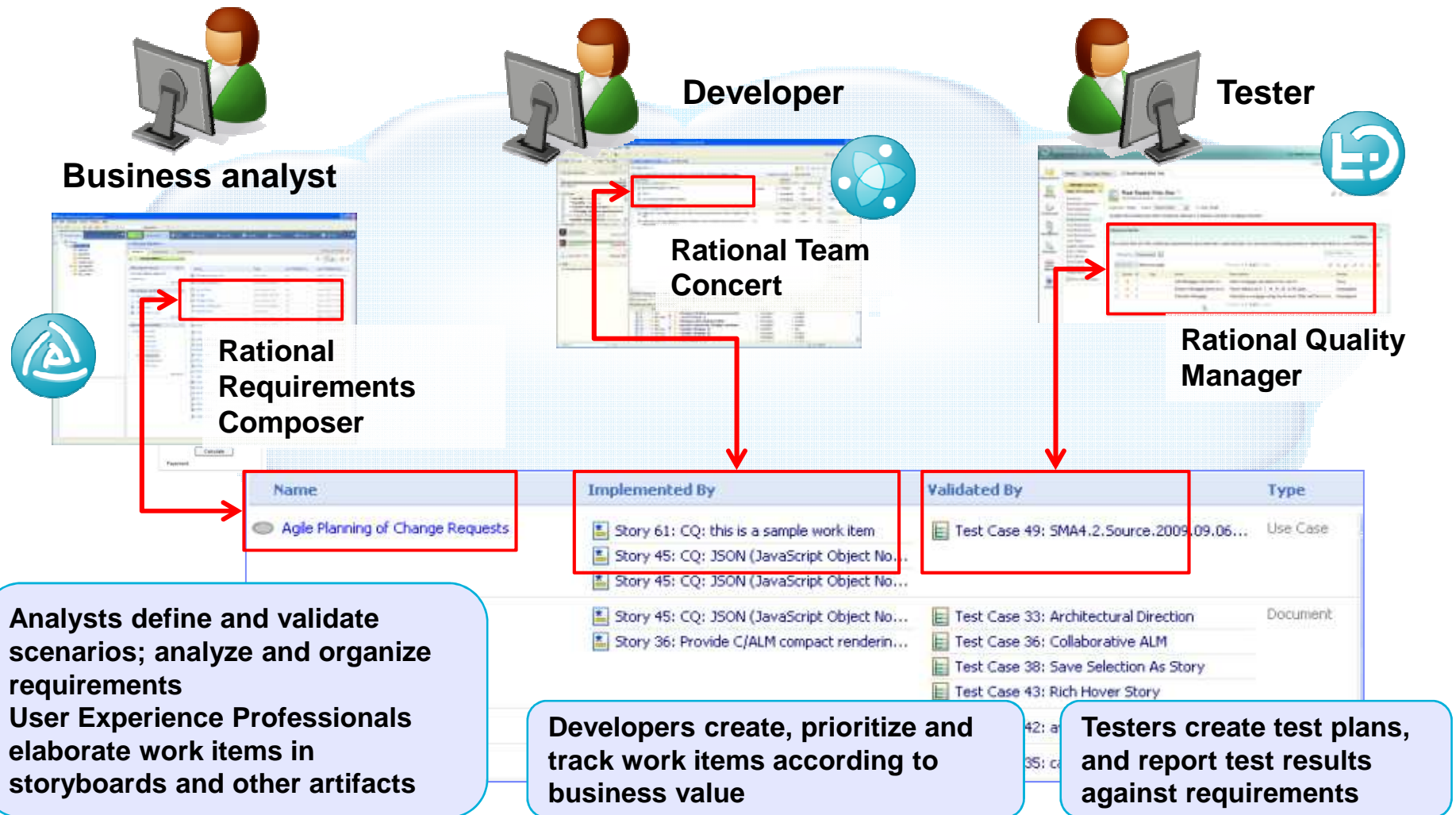
# Collaborative ALM - A Program of Projects on Jazz.net

- C/ALM program coordinates product projects of Rational's C/ALM solution
- Self-hosting in the open on Jazz.net



# C/ALM Integrate Development and Test Practices

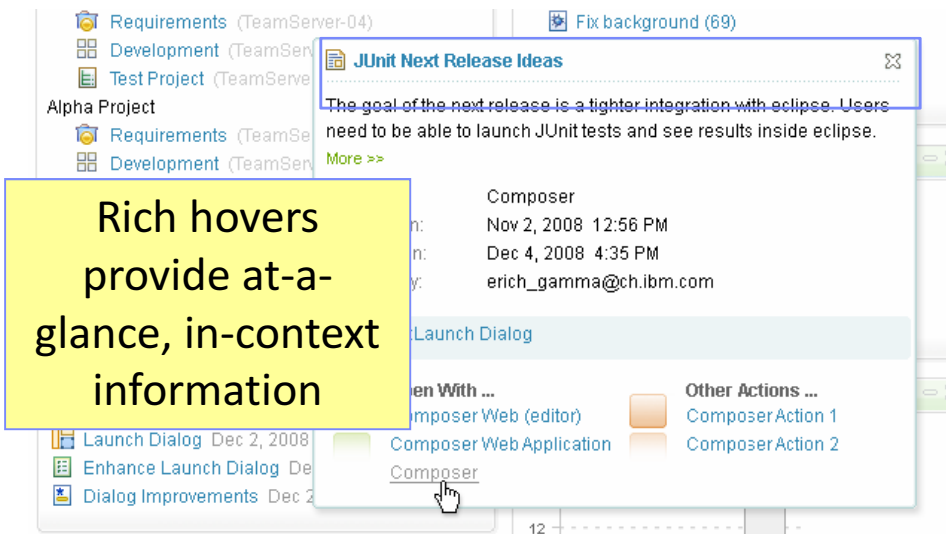
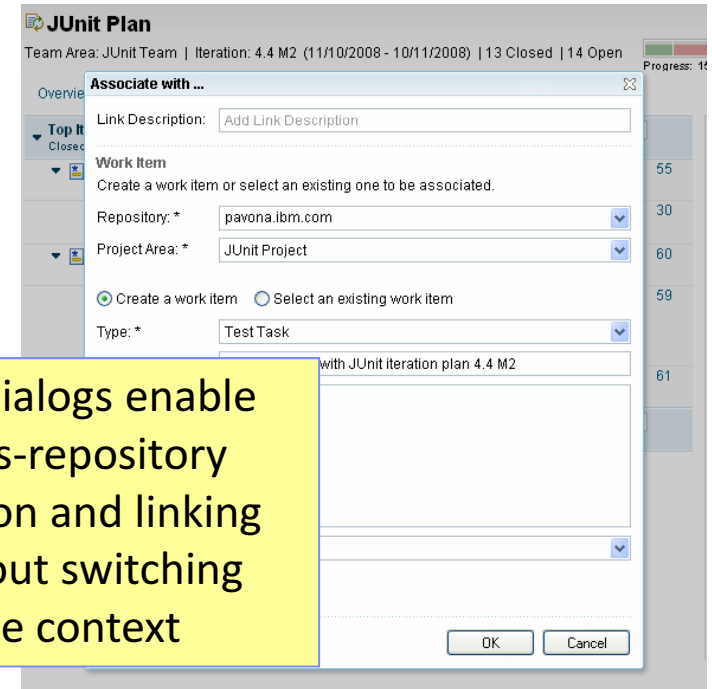
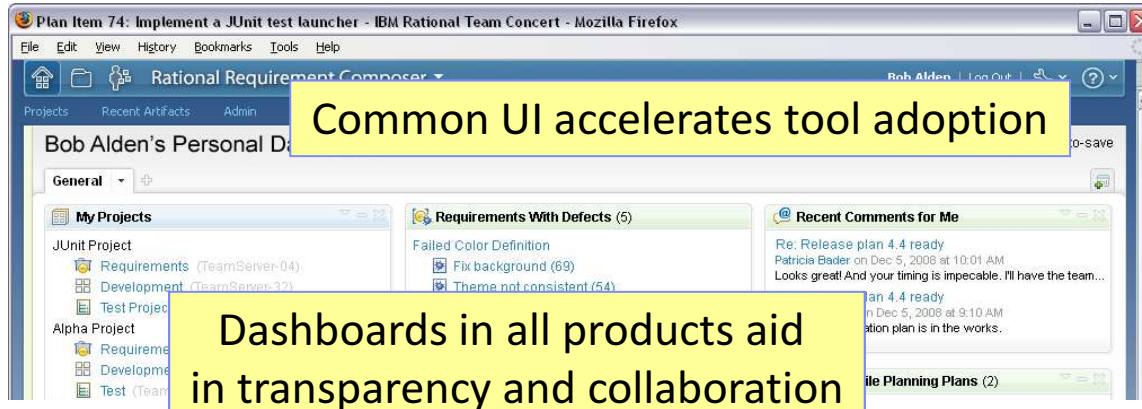
*Break down and integrate role-based practice silos for better project execution*





# C/ALM Integrate Development and Test Practices

*Break down and integrate role-based practice silos for better practice adoption*



# Adopting Release Planning: C/ALM Project Area

- We work as a team of teams
- The goal is to track the progress with minimal overhead but transparently for everyone
  - ▶ We adopt two-level release planning to define themes and features
  - ▶ We track the progress at the feature team level
  - ▶ The progress is tracked in the C/ALM Plan Items
  - ▶ We establish dependencies to product development and test teams

Item	Status	Priority	Assigned To	ID
Define C/ALM Install	Implementing	Must	Adrian Cho	99282
Define the composite product development teams build and test	Implementing	Must	Jean-Michel Lemieux	110344
Define C/ALM 2010 topologies and enable transition of C/ALM products to those topologies	Exploring	Must	Kai-Uwe Maetzel	105103
Define and realize C/ALM 2009 to C/ALM 2010 migration strategy across products	Exploring	Must	Kai-Uwe Maetzel	107921
Implement simpler uniform licensing model	Implementing	Must	Kai-Uwe Maetzel	108082
Common administration of a project	Implementing	Must	Kai-Uwe Maetzel	99039
Support common reporting	Implementing	Must	Erich Gamma	99050
Define C/ALM Reports	Defined	Must	Erich Gamma	104377
Support task tracking as a service	Defined	Must	Erich Gamma	99043
Support RQM local Defect enhancements in C/ALM setup	Defined	Must	John Whitfield	105892
Decouple built-in Requirements from RQM	Defined	Must	John Whitfield	107963
Self-host using C/ALM	Implementing	Must	Adrian Cho	99035
Unleash other products with C/ALM guidelines	Adopting	Must	Erich Gamma	99036
Open C/ALM dashboards to support other widget technologies	Implementing	Must	Kai-Uwe Maetzel	99052

- Project Relationships**
- related to Jazz Foundation
  - related to JazzCS
  - related to Rational Build Forge
  - related to Rational Quality Manager
  - related to Rational Requirements Composer
  - related to Rational Requirements Composer Private
  - related to Rational Team Concert
  - related to Rational Team Concert for System z
  - tested by SVT\_CALM

# Adopting Whole Team: C/ALM Project Area Relationships

- We use multiple Rational Team Concert repositories for *development*
- We also use multiple Rational Quality Manager repositories for *functional and system verification testing*
- Program and Product relationships are managed explicitly within the tooling

## Jazz Collaborative ALM

Jazz Collaborative ALM Project

The purpose of this project is to provide integrations between Rational Team Concert, Rational Quality Manager, Rational Requirements Composer and ClearQuest (using the ClearQuest bridge). These integrations empower teams with in-context collaboration on software artifacts, web-like artifact navigation, and status tracking across team and project repositories.

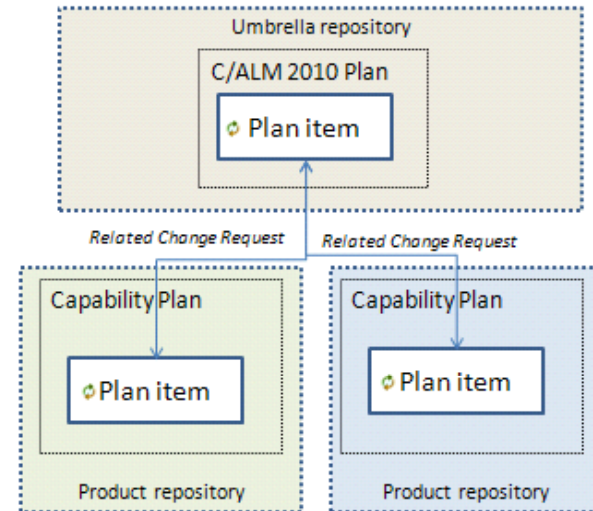
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Link Type	Service Provider
Related To	Rational Team Concert
Related To	Rational Quality Manager
Related To	Rational Requirements Composer
Related To	Rational Team Concert for System z
Related To	Jazz Collaborative ALM
Related To	JazzCS
Tested By	SVT_RRC
Tested By	SVT_RTC

# Adopting Iterative Development: Plan and Work Item Relationships

- We are using work item links to manage plan dependencies
- CALM features are tracked and linked to product capability plan items
- In this example > Link 'Support for OSLC QM' to the remote RTC repository and RQM plan
- We are continuously improving the capabilities to manage plan and work dependencies



105260	New	Consume OSLC Architecture Management v1 specification
105258	New	Consume OSLC Change Management v2 specification
105257	New	Support the latest OSLC Quality Management specification
105256	New	Consume OSLC Requirements Management v2 specification
105103	Committed	Define C/ALM

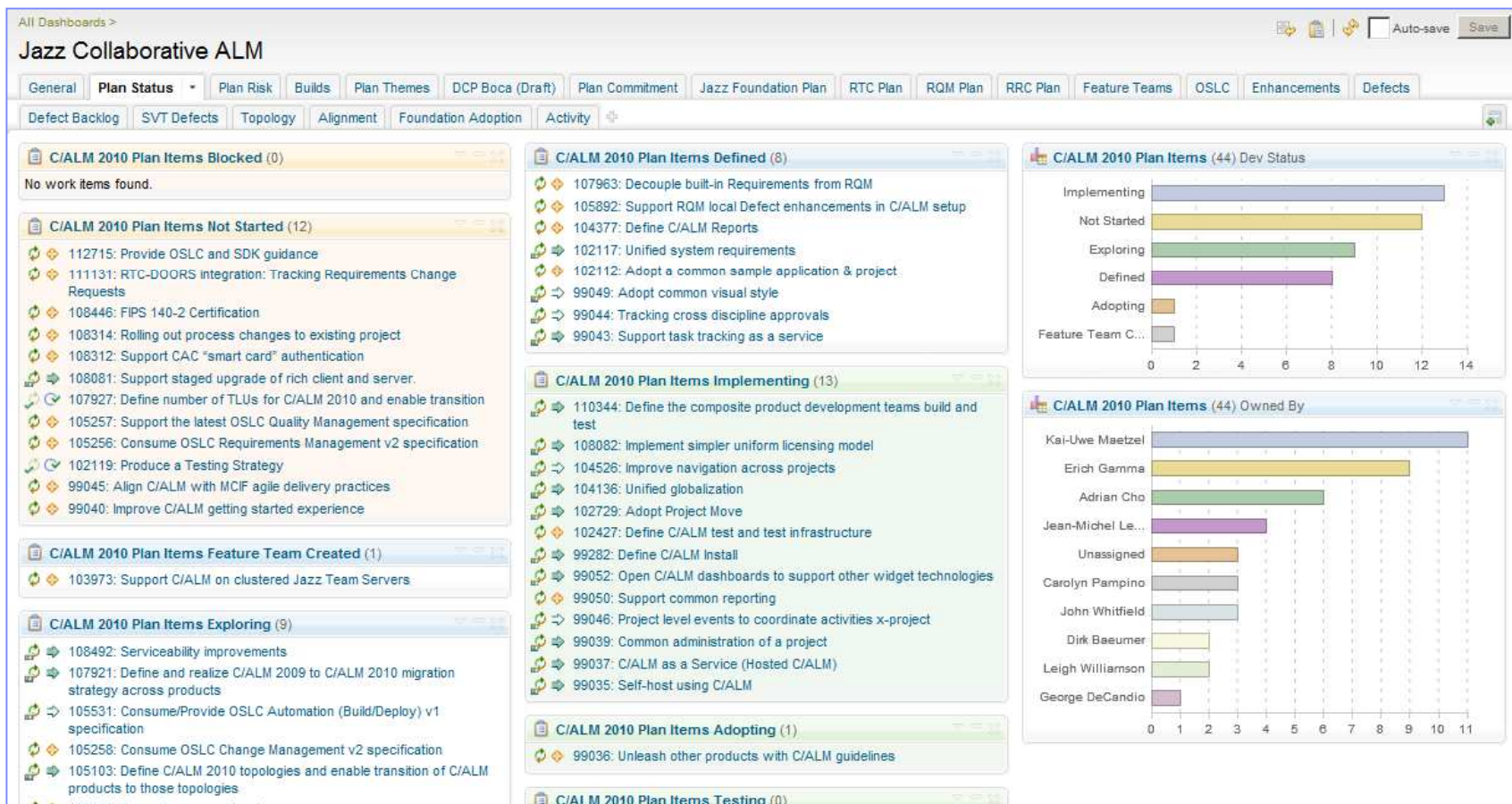
**Links**

- Mentions
  - <http://open-services.net/bin/view/Main/QmHome&nbsp>
  - Related Change Request**
    - 29227: Provide OSLC QM v2 spec implementation

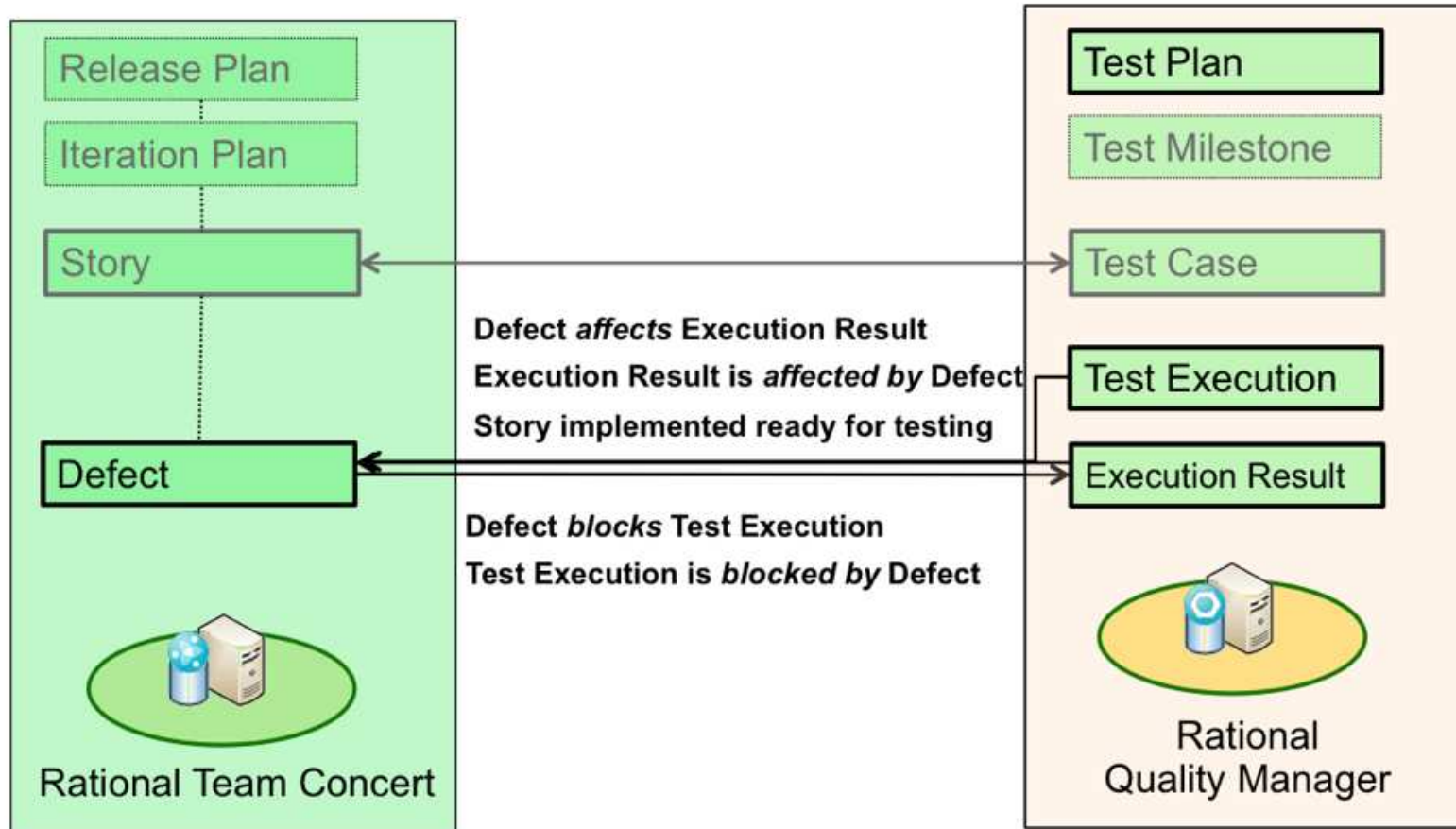


# Adopting Shared Vision: Dashboard example of the C/ALM program

- Cross project, cross-repository queries shown in viewlets
- Provides live insight into program plans, team execution, activities and plan lifecycle



# Adopting Concurrent Testing: Relationship Between Development and Test Artifacts



# Adopting Concurrent Testing: Relationship Between Development and Test Artifacts

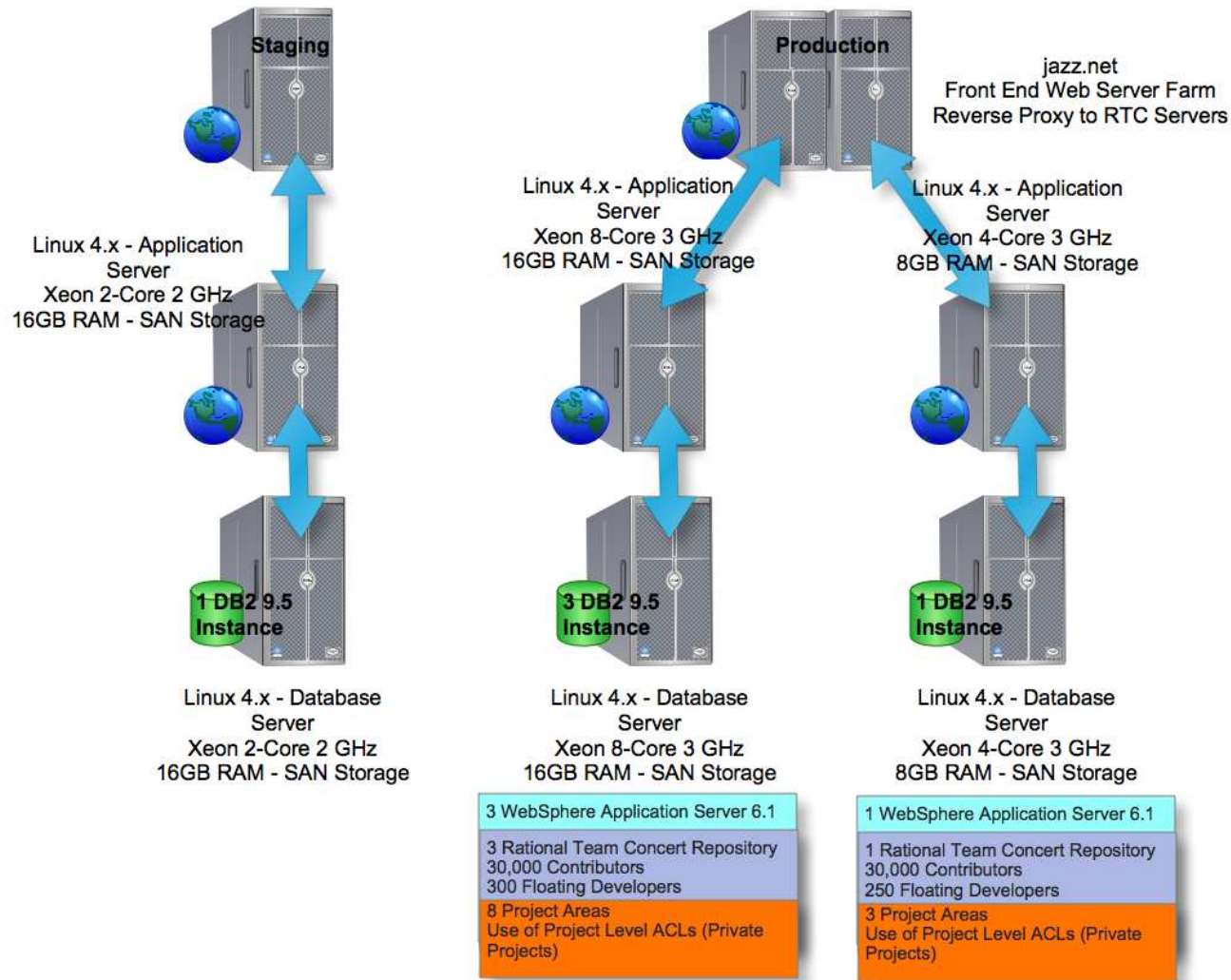
- We use RQM and RTC to establish the rich semantic C/ALM links between development and test artifacts
- We track product quality and trends using C/ALM queries and the dashboard

The screenshot displays the Rational Quality Manager (RQM) interface. The main window shows a defect record for 'Defect 108597' with a summary: 'server exception error attempting to modify v3.0 RTC Plan when project is implemented'. The defect has several attachments, including 'jazz.log', 'server1\_exception.log', and 'server1\_bd20bd2\_10.03.10\_15.08.26.0454957766456884615265.txt'. A 'Links' section shows that the defect affects test execution, blocks test execution, and mentions Mark Gravina and Martin Aeschlimann.

On the right side, a 'Shared Queries' panel is visible, listing various C/ALM Traceability Queries. A red box highlights the following queries:

- Defects blocking tests
- Plan items with failing tests
- Plan items with no test executions
- Plan items tested successfully (current iteration)
- Defects affecting tests
- Plan items with no test case (current iteration)
- Plan items ready for testing
- Defects ready for testing
- Open defects related to open change requests

# Jazz.net Self Hosting – Toronto, ON





## Elements of Enterprise Readiness

- Project Partitioning / Process Configurations
- Remote Teams
- Collaboration
- Process Support
- Server Configuration and Sizing Considerations
- Networking
- Authentication vs. Authorization
- Virtualization
- High Availability – Idle Standby-server
- Disaster Recovery & Continuity Planning

**Join the community at [Jazz.net](http://Jazz.net) and leverage Articles and Newsgroups**

## Summary and Conclusions

- We continuously improve our practice adoptions by self-hosting on the Jazz tools using Collaborative Application Lifecycle Management
- We configure the tools for seamless sharing and effective tracking of information across teams, functions, and products
- We develop openly and welcome your collaboration
  
- Join us at [Jazz.net](http://Jazz.net)

# Questions



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-  ALM-2204 - Hey, You, Get Onto my Cloud!
-  ALM-2263 - Drinking our Own Champagne, C/ALM-ly!
-  ALM-2264- How to Do It Big: Enterprise Deployment of Collaborative ALM
-  ALM-1861 - The Jazz Foundation: The Cornerstone of Collaborative ALM
-  ALM-2265 - Join the C/ALM Chorus: How You Can Develop Collaborative ALM Integrations
-  ALM-2269 - What's New in IBM Rational Team Concert Agile Planning
-  SDP-2286- Developing a Jazz Application
-  SDP-2287- The Hitchhiker's Guide to Jazz.net - The Largest Jazz Deployment in the World





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