Cómo IBM utiliza Jazz para el desarrollo de sus propias soluciones (or: How IBM uses Jazz to develop Jazz)

Scott Rich
IBM Distinguished Engineer
Technical Leader for Rational CLM

Six Years Ago: Our Pain Points…

- ✓ joining a team
- ✓ get my environment configured to be productive
- ✓ what is happening in my team
- ✓ collecting progress status
- ✓ following the team's process
- ✓ ad hoc collaboration/sharing of changes
- ✓ starting an ad hoc team

Team awareness

- ✓ is the fix in the build?
- ✓ run a personal build
- ✓ tracking a broken build
- ✓ why is this change in the build?
- ✓ reconstructing a context for a bug/build failure

Build awareness

- ✓ interrupting development due to a high priority bug fix
- ✓ working on multiple releases concurrently
- ✓ tracking the code review of a fix
- ✓ referencing team artifacts in discussions
- ✓ how healthy is a component?
- ✓ collecting project data/metrics?
- ✓ keeping plans up to date

Project awareness

Boring and painful

IBM

Pain relief: Rational Team Concert

Agile Planning

- Integrated release/iteration planning
- Effort estimation & progress tracking taskboards
- Out of the box agile process templates

Project Transparency

- Customizable web based dashboards
- Real time metrics and reports
- Project milestone tracking and status

SCM

- Integrated stream management
- Component level baselines
- Server-based sandboxes
- Identifies component in streams and available baselines
- SVN, Git, CC bridge, connector

Work Items

- Defects, enhancements and conversations
- View and share query results
- Support for approvals and discussions
- Query editor interface
- ClearQuest bridge, connector

Continuous Integration

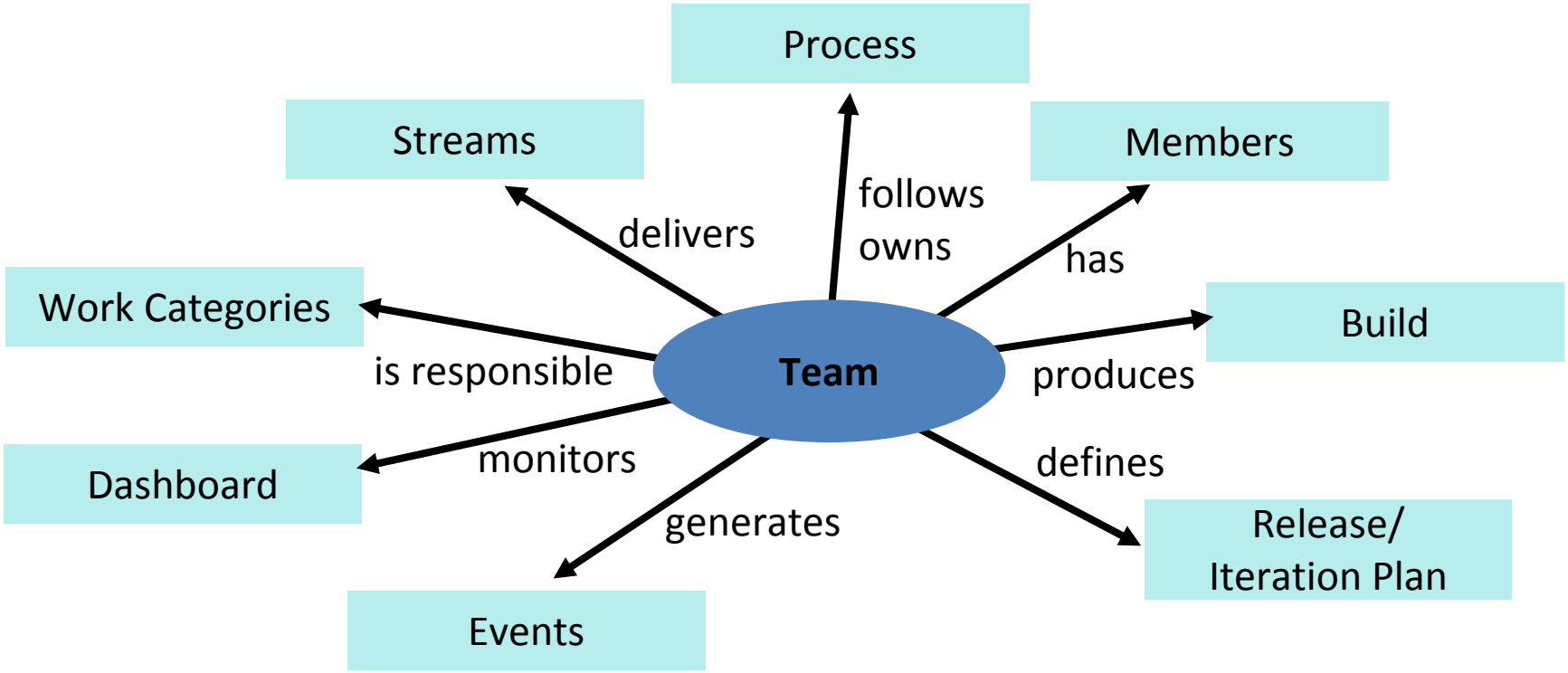
- Work item and change set traceability
- Build definitions for team and private builds
- Local or remote build servers
- Supports Ant and command line tools
- Integration with Build Forge

Jazz Team Server

- Single structure for project related artifacts
- World-class team on-boarding / offboarding including team membership, sub-teams and project inheritance
- Role-based operational control for flexible definition of process and capabilities
- Team advisor for defining / refining "rules" and enabling continuous improvement
- Process enactment and enforcement
- In-context collaboration enables team members to communicate in context of their work

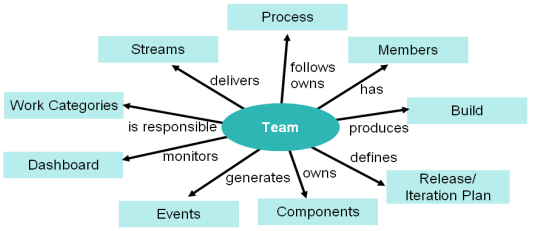
IBM

Ways of Working: Team Centric

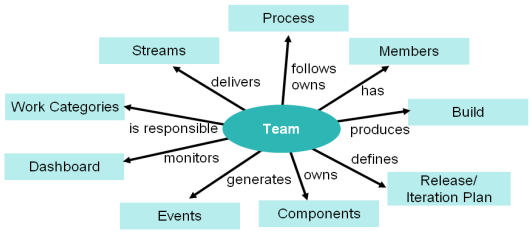


Teams are self-tuned but share a common rhythm

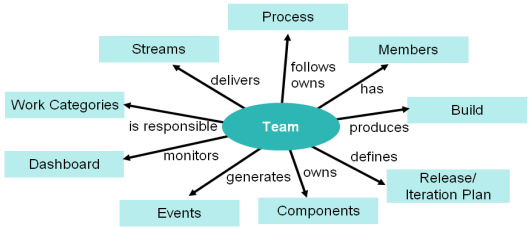
Scaling up: Teams of Teams



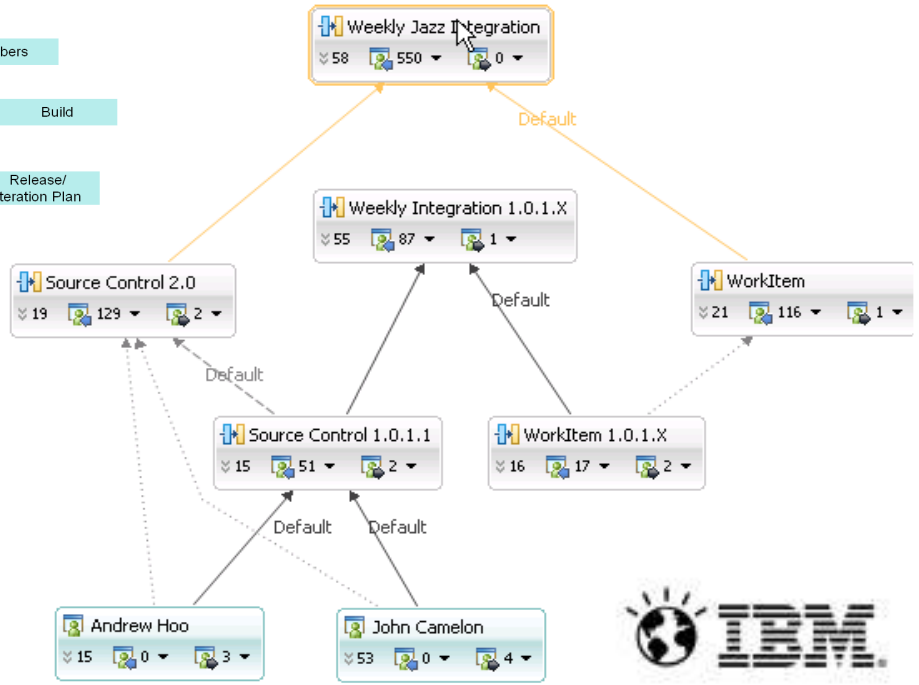
Jazz Development



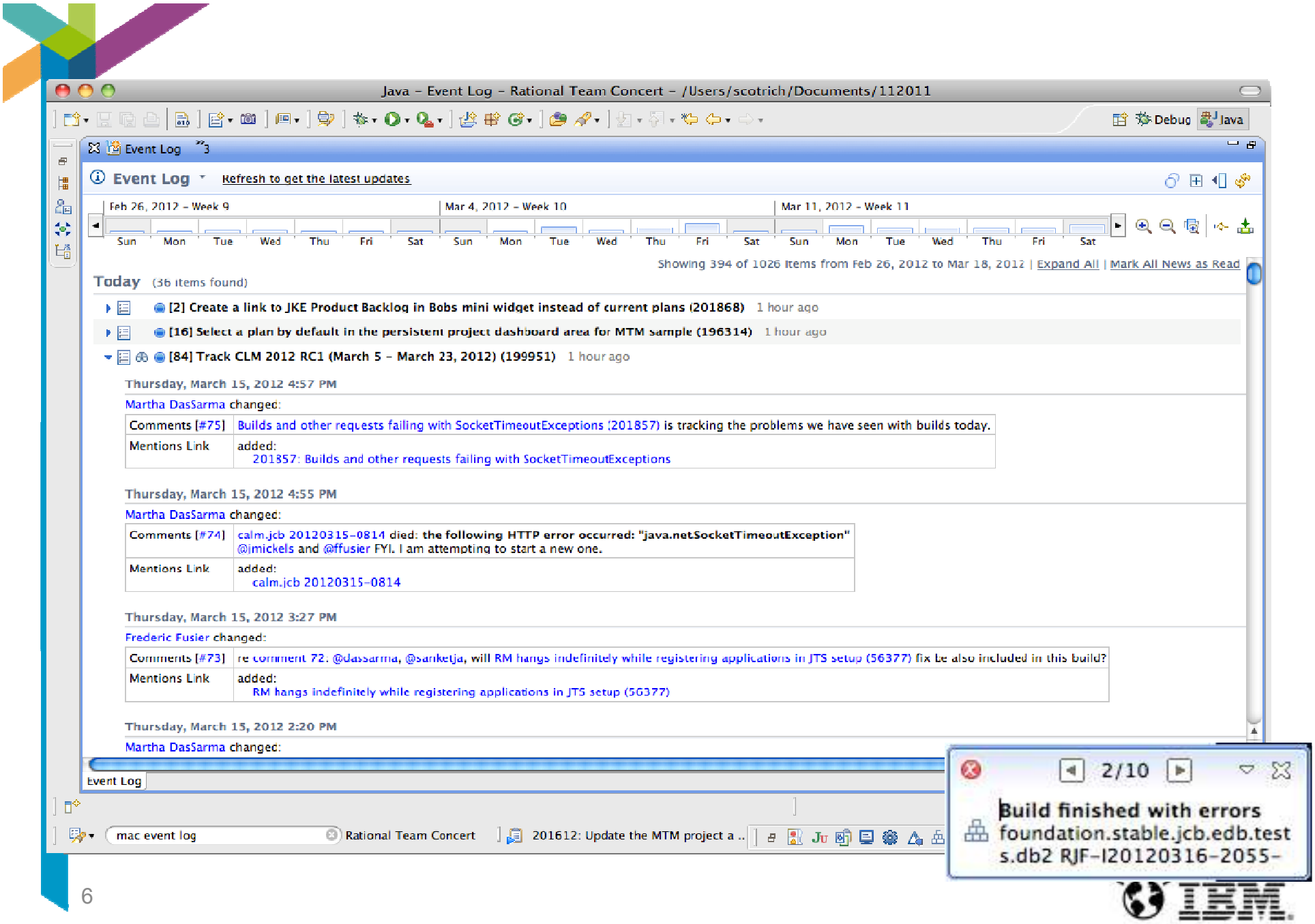
Process



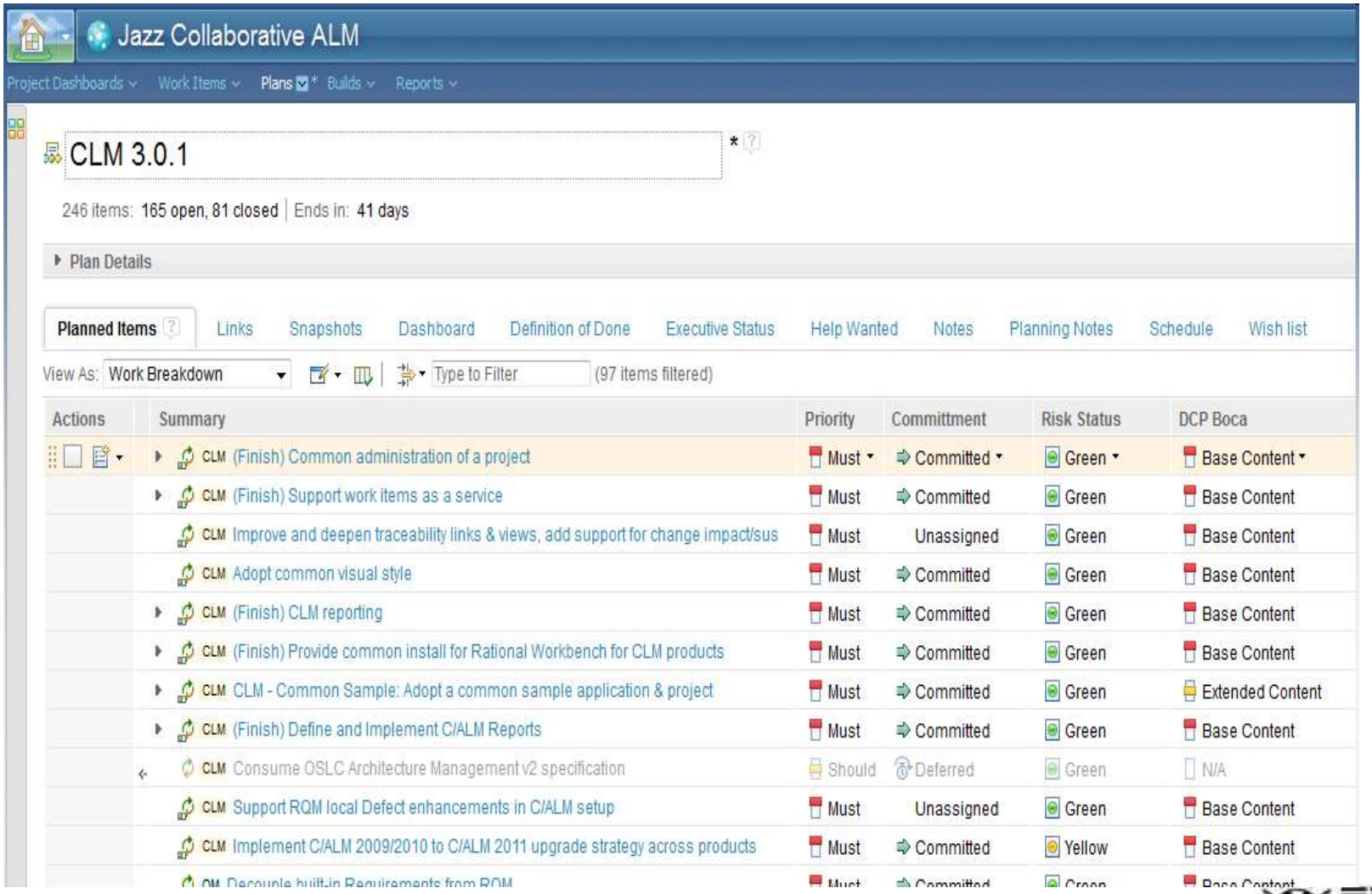
Repository

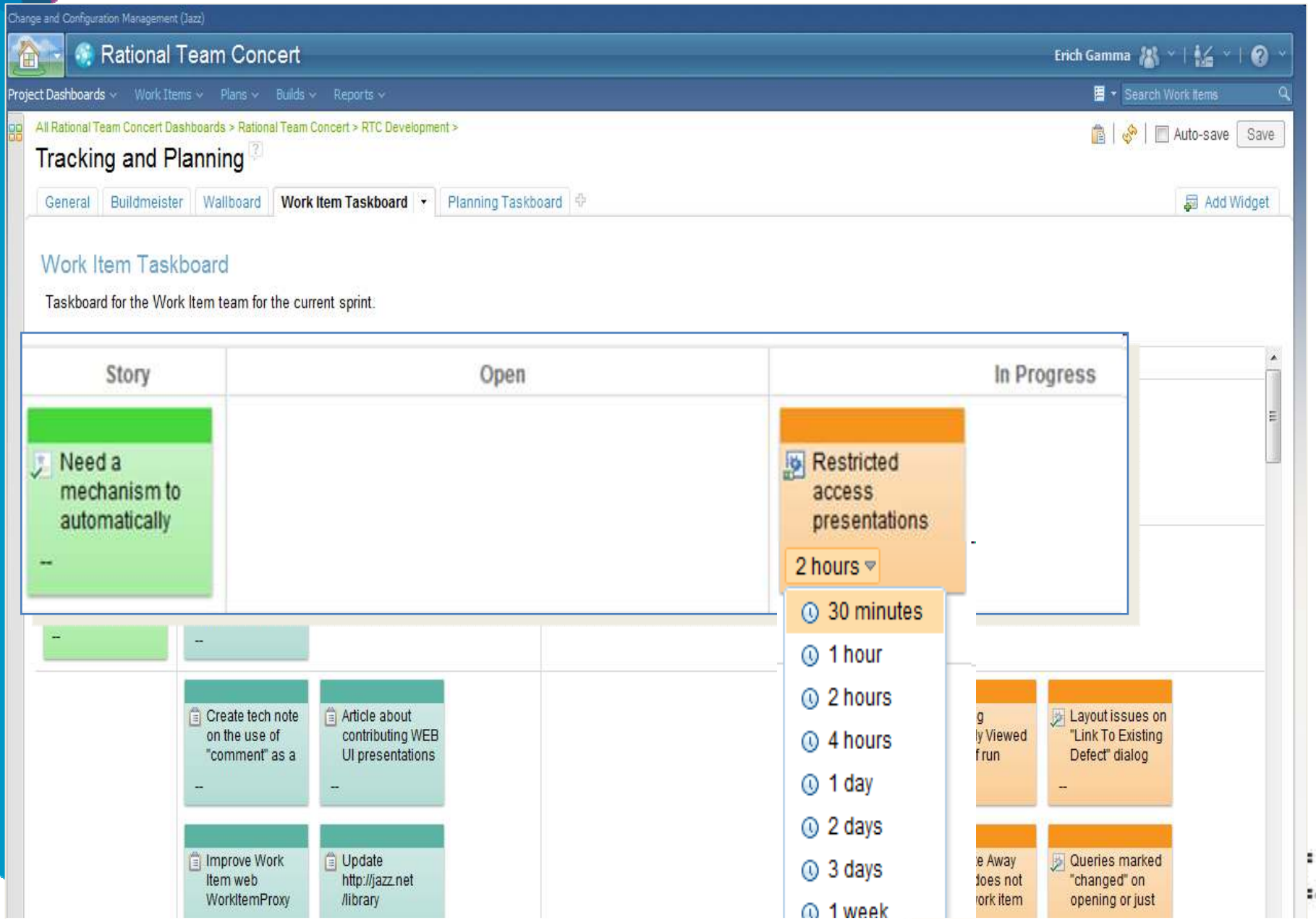


IBM


Java – Event Log – Rational Team Concert – /Users/scotrich/Documents/112011
Debug
Java
Event Log
Event Log
Refresh to get the latest updates
Feb 26, 2012 – Week 9
Mar 4, 2012 – Week 10
Mar 11, 2012 – Week 11
Sun Mon Tue Wed Thu Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun Mon Tue Wed Thu Fri Sat
Showing 394 of 1026 items from Feb 26, 2012 to Mar 18, 2012 | Expand All | Mark All News as Read
Today (36 items found)
[2] Create a link to JKE Product Backlog in Bobs mini widget instead of current plans (201868) 1 hour ago
[16] Select a plan by default in the persistent project dashboard area for MTM sample (196314) 1 hour ago
[84] Track CLM 2012 RC1 (March 5 – March 23, 2012) (199951) 1 hour ago
Thursday, March 15, 2012 4:57 PM
Martha DasSarma changed:
Comments [#75] Builds and other requests failing with SocketTimeoutExceptions (201857) is tracking the problems we have seen with builds today.
Mentions Link added: 201857: Builds and other requests failing with SocketTimeoutExceptions
Thursday, March 15, 2012 4:55 PM
Martha DasSarma changed:
Comments [#74] calm.jcb 20120315-0814 died: the following HTTP error occurred: "java.netSocketTimeoutException" @jmickels and @ffusier FYI. I am attempting to start a new one.
Mentions Link added: calm.jcb 20120315-0814
Thursday, March 15, 2012 3:27 PM
Frederic Fusier changed:
Comments [#73] re comment 72: @dassarma, @sanketja, will RM hangs indefinitely while registering applications in JTS setup (56377) fix be also included in this build?
Mentions Link added: RM hangs indefinitely while registering applications in JTS setup (56377)
Thursday, March 15, 2012 2:20 PM
Martha DasSarma changed:
Event Log
mac event log
Rational Team Concert
201612: Update the MTM project a ..
2/10
Build finished with errors
foundation.stable.jcb.edb.tests.db2 RJF-I20120316-2055-

Team awareness: What's the plan?

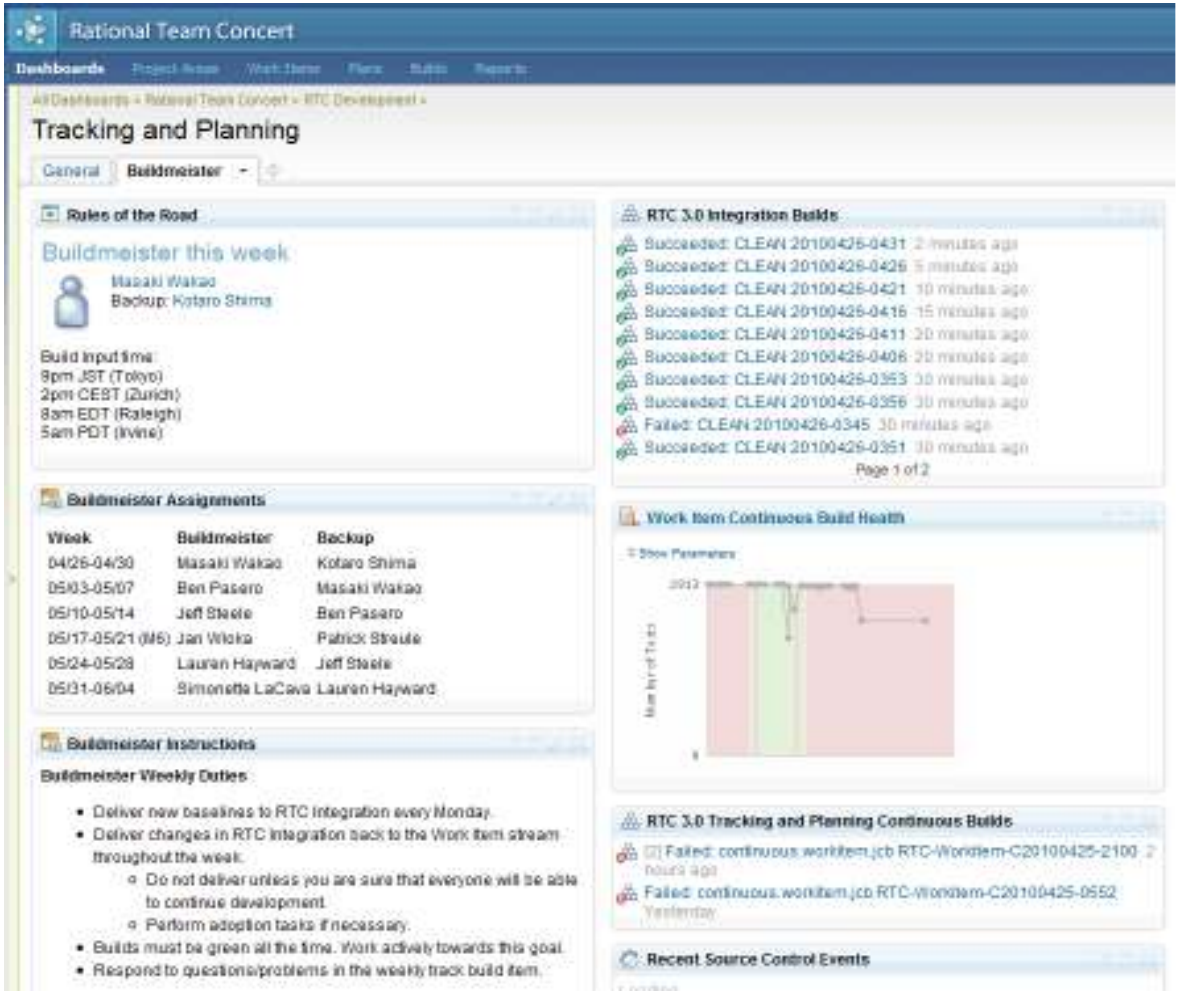



Change and Configuration Management (Jazz)
Rational Team Concert
Erich Gamma
Project Dashboards
Work Items
Plans
Builds
Reports
Search Work Items
All Rational Team Concert Dashboards > Rational Team Concert > RTC Development >
Tracking and Planning
Auto-save
Save
General
Buildmeister
Wallboard
Work Item Taskboard
Planning Taskboard
Add Widget
Work Item Taskboard
Taskboard for the Work Item team for the current sprint.
Story
Open
In Progress
Need a mechanism to automatically
--
Restricted access presentations
2 hours
30 minutes
1 hour
2 hours
4 hours
1 day
2 days
3 days
1 week
Create tech note on the use of "comment" as a
Article about contributing WEB UI presentations
Improve Work Item web WorkItemProxy
Update http://jazz.net /library
Layout issues on "Link To Existing Defect" dialog
Queries marked "changed" on opening or just

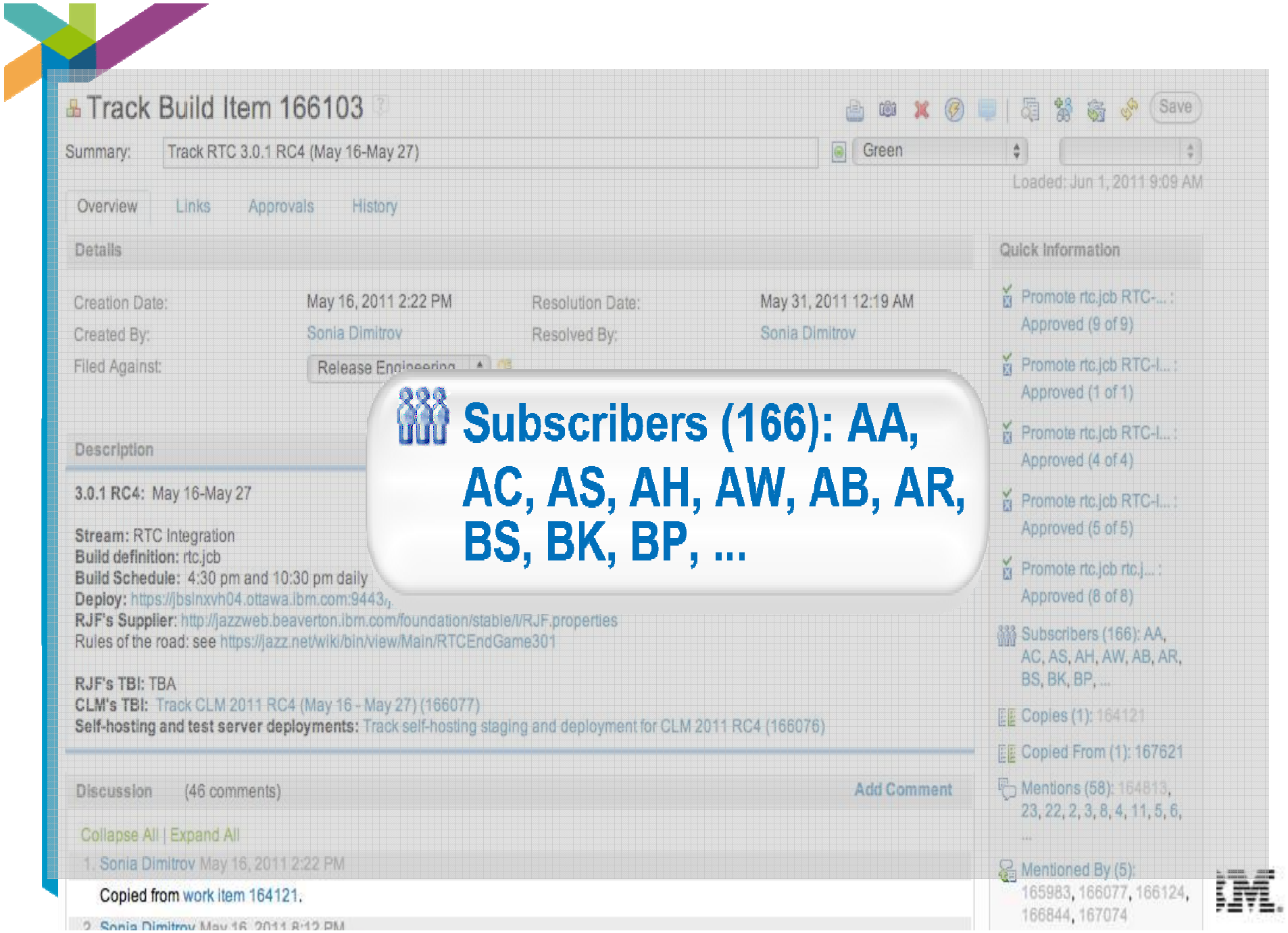
Build Awareness

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

A Team's Build Dashboard



Information Radiators: *Wallboards*


Track Build Item 166103
Save
Summary:
Track RTC 3.0.1 RC4 (May 16-May 27)
Green
Loaded: Jun 1, 2011 9:09 AM
Overview
Links
Approvals
History
Details
Creation Date:
May 16, 2011 2:22 PM
Resolution Date:
May 31, 2011 12:19 AM
Created By:
Sonia Dimitrov
Resolved By:
Sonia Dimitrov
Filed Against:
Release Engineering
Description
3.0.1 RC4: May 16-May 27
Stream: RTC Integration
Build definition: rtc.jcb
Build Schedule: 4:30 pm and 10:30 pm daily
Deploy: https://jbsinxvh04.ottawa.ibm.com:9443/
RJF's Supplier: http://jazzweb.beaverton.ibm.com/foundation/stable/l/RJF.properties
Rules of the road: see https://jazz.net/wiki/bin/view/Main/RTCEndGame301
RJF's TBI: TBA
CLM's TBI: Track CLM 2011 RC4 (May 16 - May 27) (166077)
Self-hosting and test server deployments: Track self-hosting staging and deployment for CLM 2011 RC4 (166076)
Discussion
(46 comments)
Add Comment
Collapse All | Expand All
1. Sonia Dimitrov May 16, 2011 2:22 PM
Copied from work item 164121.
2. Sonia Dimitrov May 16, 2011 8:12 PM
Quick Information
Promote rtc.jcb RTC-... : Approved (9 of 9)
Promote rtc.jcb RTC-I... : Approved (1 of 1)
Promote rtc.jcb RTC-I... : Approved (4 of 4)
Promote rtc.jcb RTC-I... : Approved (5 of 5)
Promote rtc.jcb rtc.j... : Approved (8 of 8)
Subscribers (166): AA, AC, AS, AH, AW, AB, AR, BS, BK, BP, ...
Copies (1): 164121
Copied From (1): 167621
Mentions (58): 164813, 23, 22, 2, 3, 8, 4, 11, 5, 6, ...
Mentioned By (5): 165983, 166077, 166124, 166844, 167074
Subscribers (166): AA, AC, AS, AH, AW, AB, AR, BS, BK, BP, ...

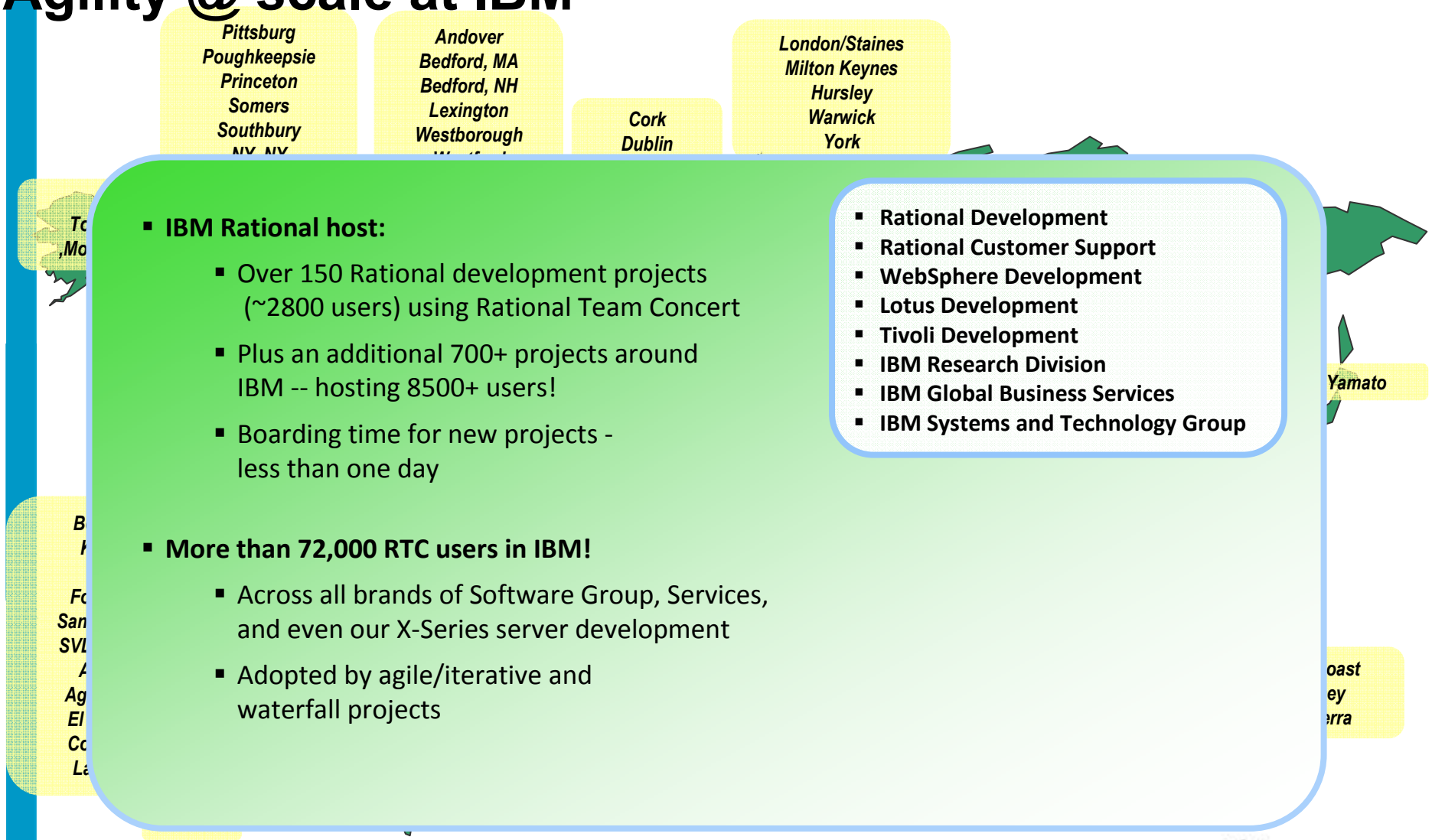
27. Bankat Jain May 26, 2011 3:57 PM
Build and Deploy Status -
- The latest build rtc.jcb RTC-I20110525-2359 is RED due to WorkItem JUnit Test failure - Defect 162255
- Manually promoted rtc.jcb RTC-I20110525-2359 build
- rtc.jcb RTC-I20110525-2359 build is based on foundation stable jcb RJF-I20110525-2115
28. Johannes Rieken May 26, 2011 6:02 PM
Rejected because we had two deliveries today
29. Sonia Dimitrov May 26, 2011 6:09 PM
Given the jazzdev outage scheduled for 8 pm ET this evening, I would like to move the 4:30 pm build up to 2 pm with the aim to get a CLM build based on this to allow testers in India to test a fix for defect 167061.
@martina - can you get the fix for defect 167061 delivered before 2 pm ET?
@deesarma - is it possible to get a CLM build based on a rtc.jcb build that will complete around 8 pm?
30. John Cameron May 26, 2011 7:55 PM
Rejected as we will be wanting to include work item 167295.
31. Tim Mok May 26, 2011 7:43 PM
Delivered change for work item 167295 to RTC Integration.
32. Martha DeeSarma May 26, 2011 8:14 PM
@admins re comment 29. The rtc.jcb build is taking around 8 hours and 30 minutes. Not sure if one will get done before the outage at 8PM and I don't see one running yet. I will keep an eye.
33. Sonia Dimitrov May 26, 2011 9:21 PM
Given the outage, the next complete rtc.jcb build should complete sometime around 6 am ET tomorrow (Fri). The 10:30 pm build has been pushed to 11:15 pm.
34. Jared Burns May 26, 2011 11:18 PM
Rejecting due to required CAL changes being tracked in Update CLM CALs due to change of process authoring operation IDs (167302)
35. Bankat Jain May 27, 2011 10:22 AM
Build and Deploy Status -
- The latest build rtc.jcb RTC-I20110526-2015 is green and is based on foundation stable jcb RJF-I20110526-1745
- rtc.jcb RTC-I20110526-2015 has been deployed to jbelnxvm04.
36. Sonia Dimitrov May 27, 2011 1:44 PM
I have created a new approval item and moved some folks over based on new contributions between rtc.jcb RTC-I20110526-2015 and rtc.jcb RTC-I20110525-2359.
37. Guy Slade May 27, 2011 3:48 PM
SVT_RCI_W2: Binary rebuild does not rebuild COBOL file if trust output is true (165938) has just been reopened on us. Investigating now to see what the deal is and whether we can fix it today

About those pain points…

- Good progress on awareness and collaboration
  - Build awareness is very good, even if it's not always Green
  - Collaboration across sites is good, enabling worldwide feature teams
  - Fewer, more productive planning calls, less time reporting status
- Our new pain points have to do with the rest of the product lifecycle
  - Getting to a plan
    - Agreeing on and communicating the details of a complex feature
  - Getting to done
    - Getting from a final Milestone to shipped software
  - They involve a lot of interaction with non-Eclipse project members…

IBM

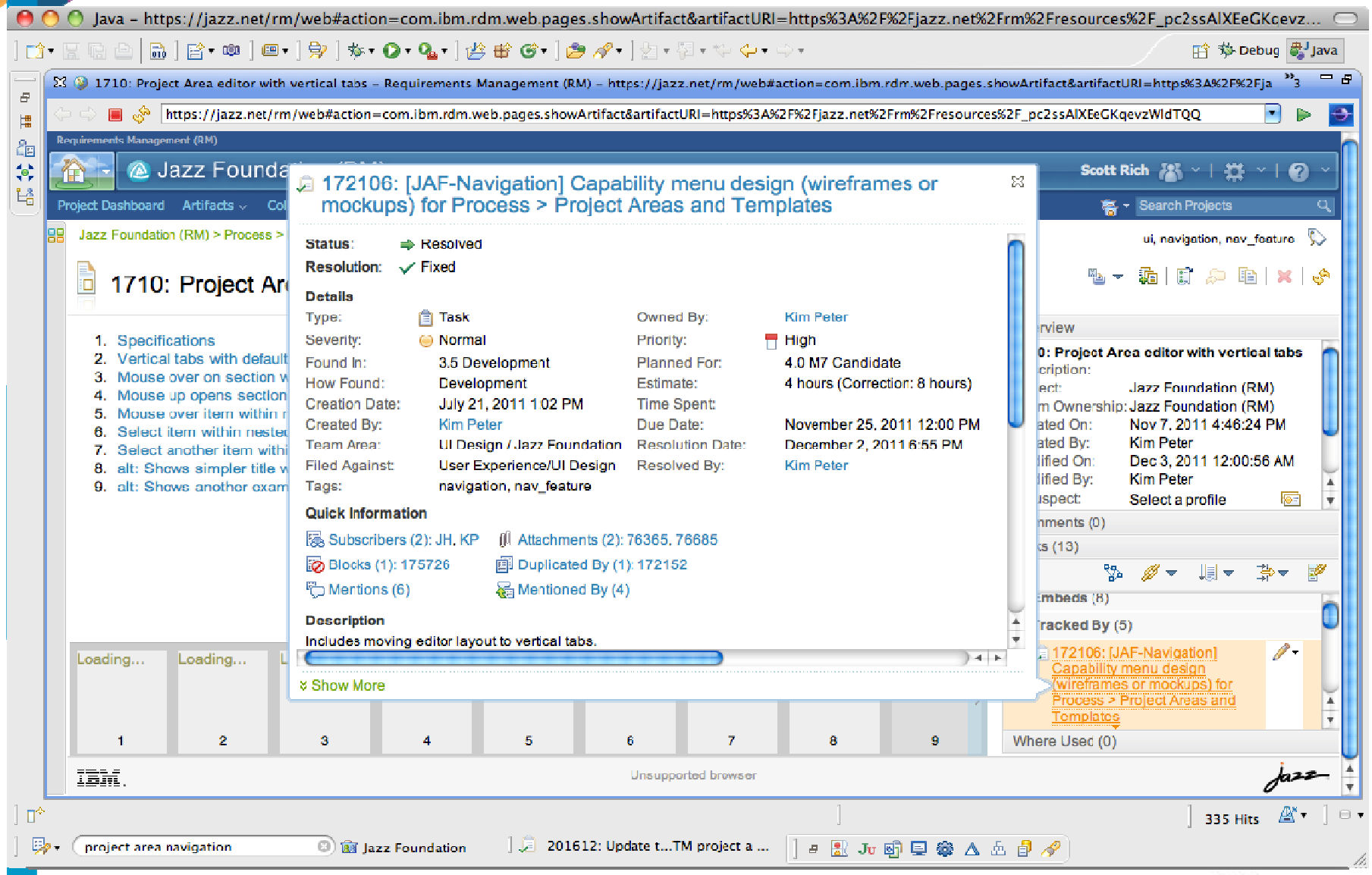
Agility @ scale at IBM



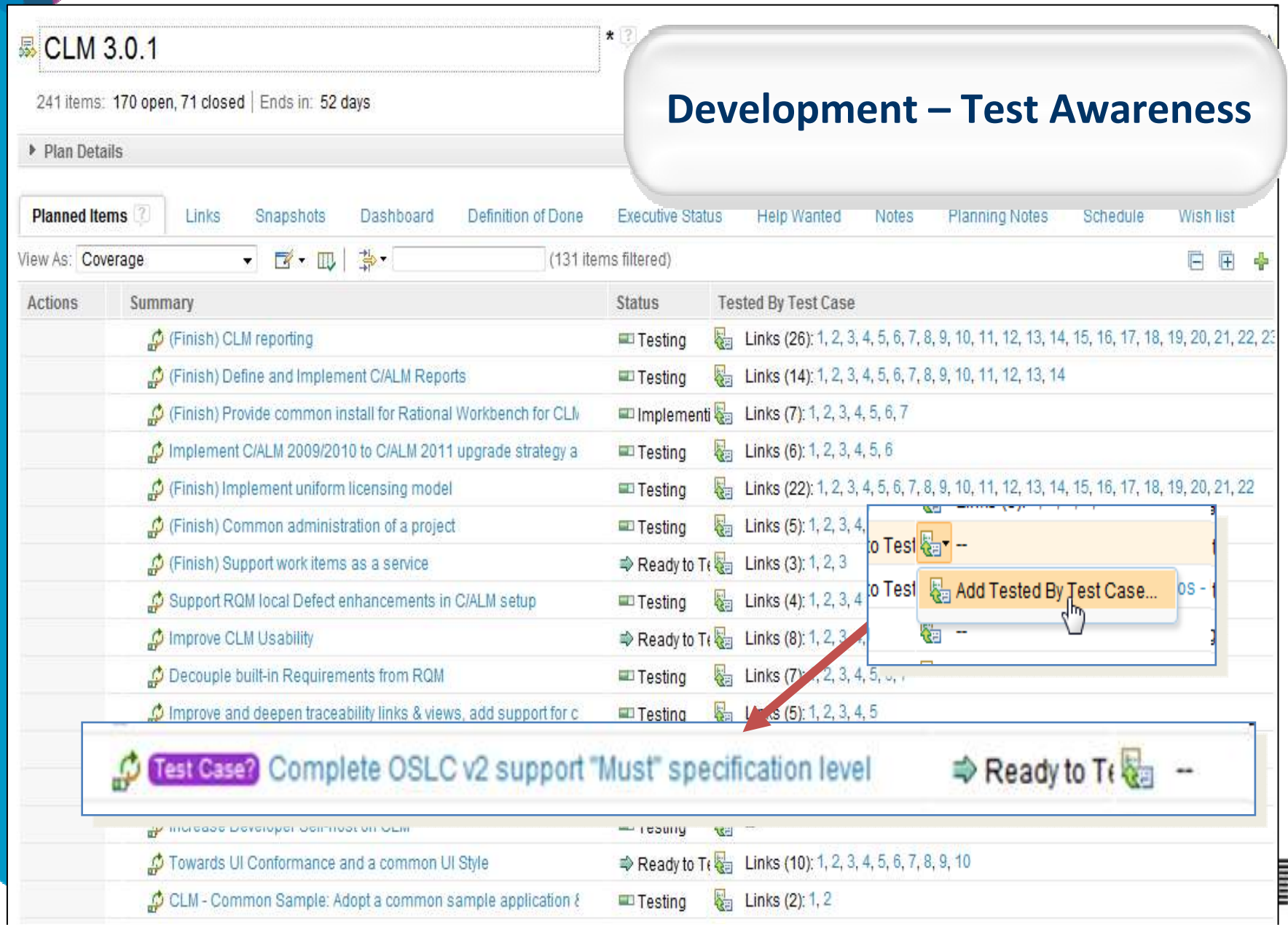
- **IBM Rational host:**
  - Over 150 Rational development projects (~2800 users) using Rational Team Concert
  - Plus an additional 700+ projects around IBM -- hosting 8500+ users!
  - Boarding time for new projects - less than one day
- **More than 72,000 RTC users in IBM!**
  - Across all brands of Software Group, Services, and even our X-Series server development
  - Adopted by agile/iterative and waterfall projects

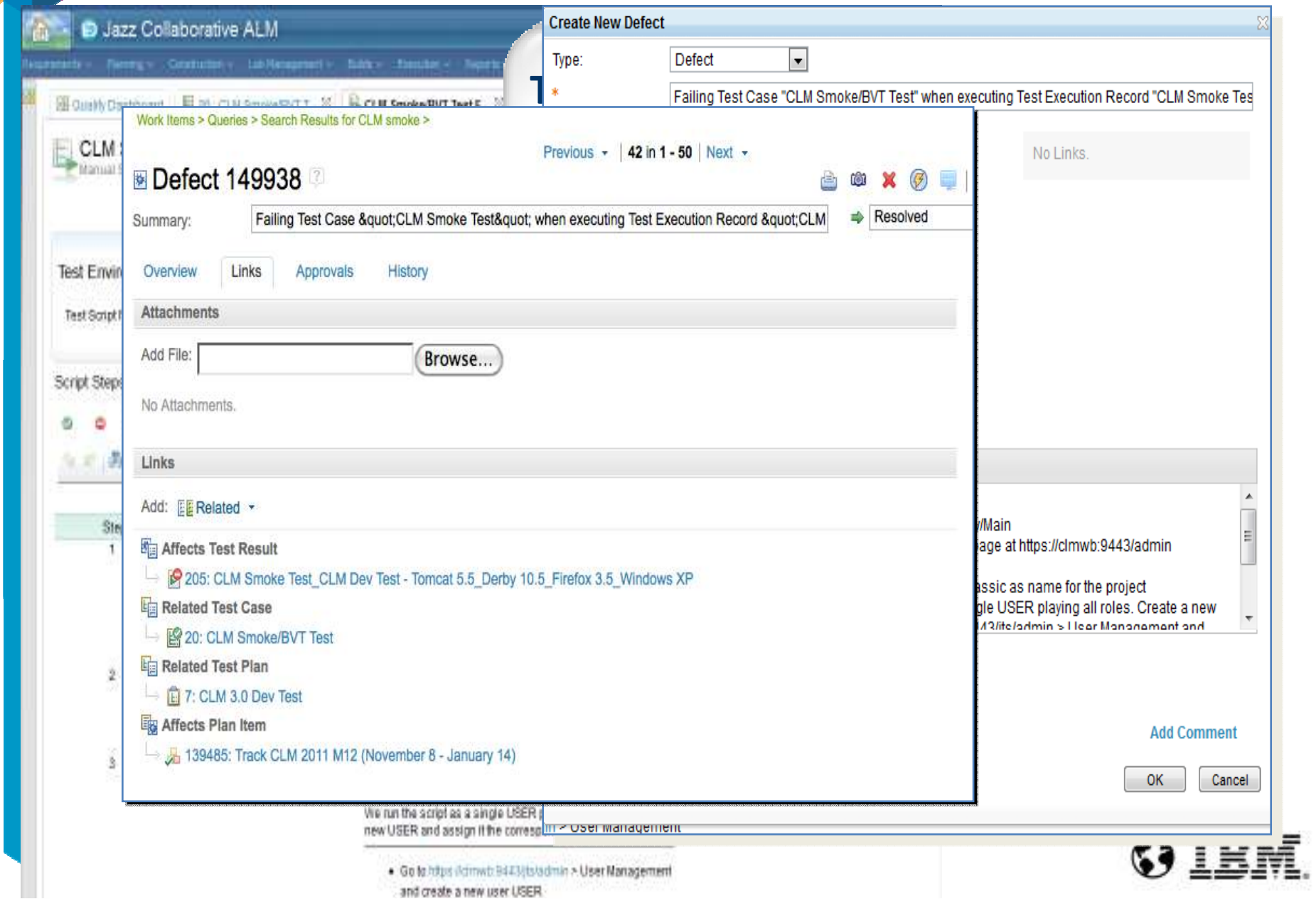
- **Rational Development**
- **Rational Customer Support**
- **WebSphere Development**
- **Lotus Development**
- **Tivoli Development**
- **IBM Research Division**
- **IBM Global Business Services**
- **IBM Systems and Technology Group**

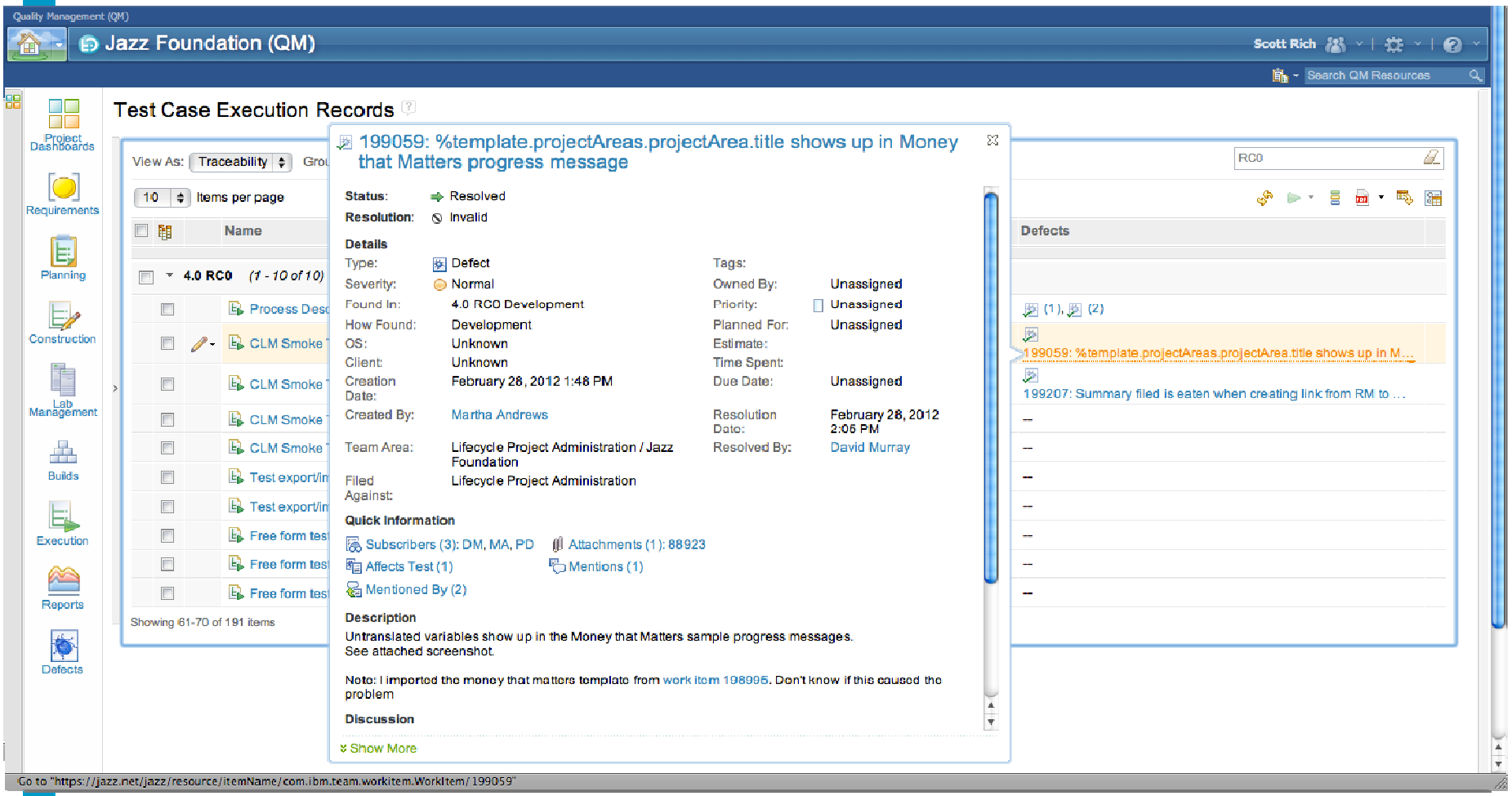
IBM


Java - https://jazz.net/rm/web#action=com.ibm.rdm.web.pages.showArtifact&artifactURI=https%3A%2F%2Fjazz.net%2Frm%2Fresources%2F_pc2ssAlXEeGKcevz...
Debug
Java
1710: Project Area editor with vertical tabs - Requirements Management (RM) - https://jazz.net/rm/web#action=com.ibm.rdm.web.pages.showArtifact&artifactURI=https%3A%2F%2Fja
https://jazz.net/rm/web#action=com.ibm.rdm.web.pages.showArtifact&artifactURI=https%3A%2F%2Fjazz.net%2Frm%2Fresources%2F_pc2ssAlXEeGKqevzWldTQQ
Requirements Management (RM)
Jazz Founda
Scott Rich
Project Dashboard
Artifacts
Search Projects
Jazz Foundation (RM) > Process >
1710: Project Ar
1. Specifications
2. Vertical tabs with default
3. Mouse over on section w
4. Mouse up opens section
5. Mouse over item within
6. Select item within neste
7. Select another item withi
8. alt: Shows simpler title w
9. alt: Shows another exam
172106: [JAF-Navigation] Capability menu design (wireframes or mockups) for Process > Project Areas and Templates
Status: Resolved
Resolution: Fixed
Details
Type: Task
Severity: Normal
Found In: 3.5 Development
How Found: Development
Creation Date: July 21, 2011 1:02 PM
Created By: Kim Peter
Team Area: UI Design / Jazz Foundation
Filed Against: User Experience/UI Design
Tags: navigation, nav_feature
Owned By: Kim Peter
Priority: High
Planned For: 4.0 M7 Candidate
Estimate: 4 hours (Correction: 8 hours)
Time Spent:
Due Date: November 25, 2011 12:00 PM
Resolution Date: December 2, 2011 6:55 PM
Resolved By: Kim Peter
Quick Information
Subscribers (2): JH, KP
Blocks (1): 175726
Mentions (6)
Attachments (2): 76365, 76685
Duplicated By (1): 172152
Mentioned By (4)
Description
Includes moving editor layout to vertical tabs.
Show More
ui, navigation, nav_feature
0: Project Area editor with vertical tabs
Jazz Foundation (RM)
Jazz Foundation (RM)
Nov 7, 2011 4:46:24 PM
Kim Peter
Dec 3, 2011 12:00:56 AM
Kim Peter
Select a profile
Tracked By (5)
172106: [JAF-Navigation] Capability menu design (wireframes or mockups) for Process > Project Areas and Templates
Where Used (0)
Loading...
Loading...
Unsupported browser
335 Hits
project area navigation
Jazz Foundation
201612: Update t...TM project a ...

Development – Test Awareness



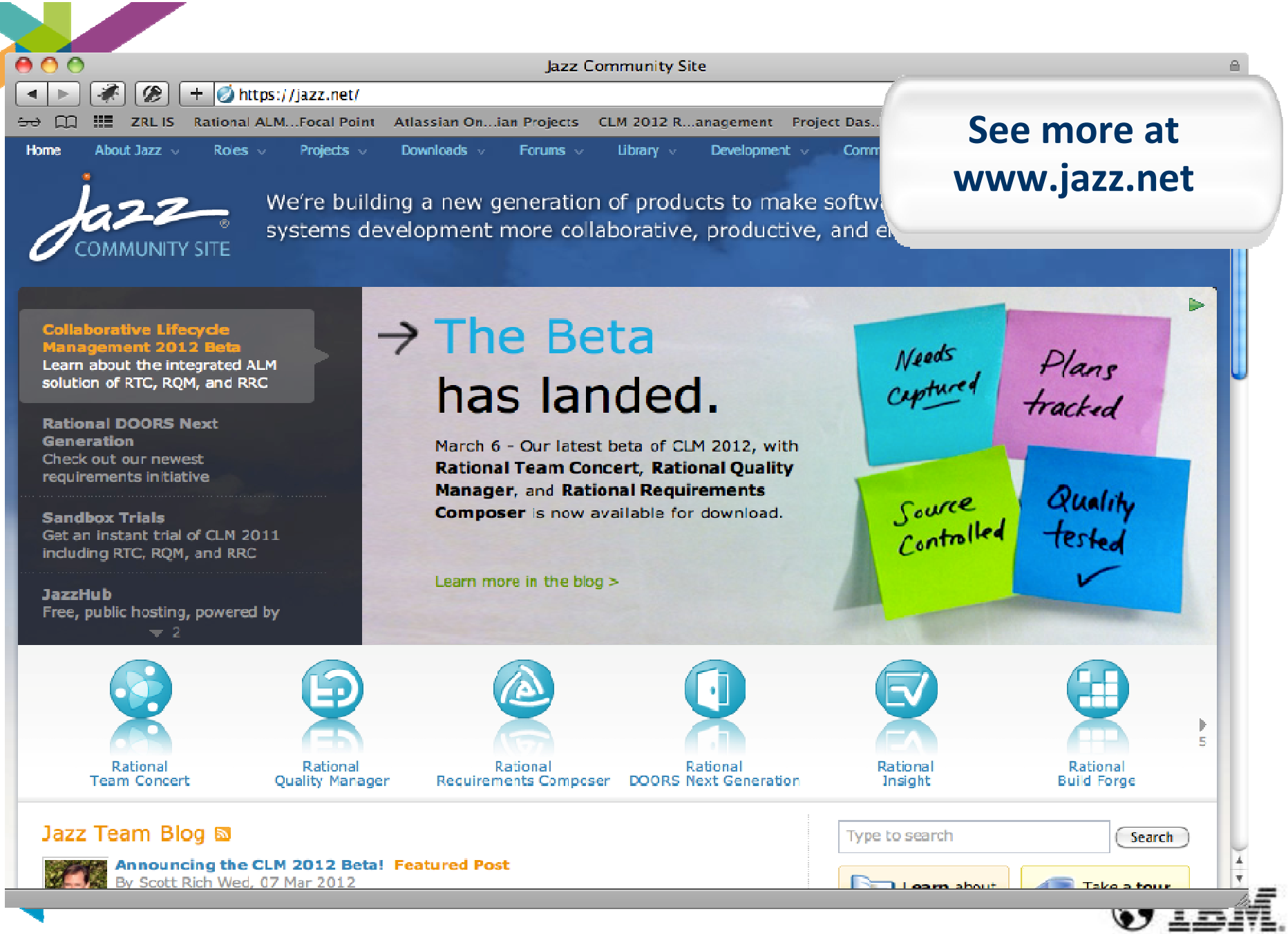

Jazz Collaborative ALM
Create New Defect
Type:
Defect
Failing Test Case "CLM Smoke/BVT Test" when executing Test Execution Record "CLM Smoke Tes
Work Items > Queries > Search Results for CLM smoke >
Previous
42 in 1 - 50
Next
Defect 149938
Summary:
Failing Test Case "CLM Smoke Test" when executing Test Execution Record "CLM
Resolved
Overview
Links
Approvals
History
Attachments
Add File:
Browse...
No Attachments.
Links
Add:
Related
Affects Test Result
205: CLM Smoke Test_CLM Dev Test - Tomcat 5.5_Derby 10.5_Firefox 3.5_Windows XP
Related Test Case
20: CLM Smoke/BVT Test
Related Test Plan
7: CLM 3.0 Dev Test
Affects Plan Item
139485: Track CLM 2011 M12 (November 8 - January 14)
No Links.
Add Comment
OK
Cancel
IBM


Quality Management (QM)
Jazz Foundation (QM)
Scott Rich
Search QM Resources
Project Dashboards
Requirements
Planning
Construction
Lab Management
Builds
Execution
Reports
Defects
Test Case Execution Records
View As: Traceability
10 Items per page
Name
4.0 RC0 (1 - 10 of 10)
Showing 61-70 of 191 items
199059: %template.projectAreas.projectArea.title shows up in Money that Matters progress message
Status: Resolved
Resolution: Invalid
Details
Type: Defect
Severity: Normal
Found In: 4.0 RC0 Development
How Found: Development
OS: Unknown
Client: Unknown
Creation Date: February 28, 2012 1:48 PM
Created By: Martha Andrews
Team Area: Lifecycle Project Administration / Jazz Foundation
Filed Against: Lifecycle Project Administration
Tags:
Owned By: Unassigned
Priority: Unassigned
Planned For: Unassigned
Estimate:
Time Spent:
Due Date: Unassigned
Resolution Date: February 28, 2012 2:05 PM
Resolved By: David Murray
Quick Information
Subscribers (3): DM, MA, PD
Attachments (1): 88923
Affects Test (1)
Mentions (1)
Mentioned By (2)
Description
Untranslated variables show up in the Money that Matters sample progress messages.
See attached screenshot.
Note: I imported the money that matters template from work item 198995. Don't know if this caused the problem
Discussion
Show More
RC0
Defects
199059: %template.projectAreas.projectArea.title shows up in M...
199207: Summary filed is eaten when creating link from RM to ...
Go to "https://jazz.net/jazz/resource/itemName/com.ibm.team.workitem.WorkItem/199059"

Is it really champagne yet?

- It's a lot better than the environment we had six years ago. Noone would go back to that tool chain and way of working.
- For development tasks, we're pretty happy.
- We're seeing teams adopt new capabilities on their own, so the requirements elaboration and test management capabilities are reaching the point of developer demand.
  - OSLC-style integrations work well for us, giving peripheral awareness…
- In summary, we've made a lot of progress, but we're not done yet.

IBM



See more at www.jazz.net

www.ibm.com/software/rational

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