

Globally Distributed Software Development

Erich Gamma

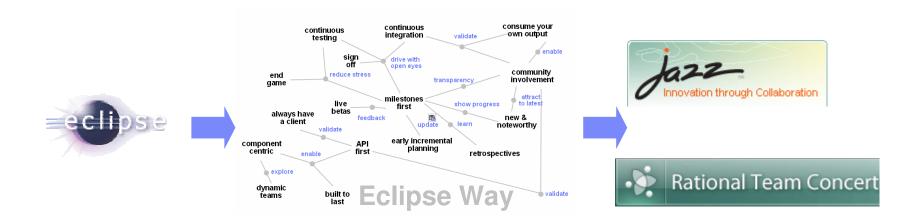
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Our Journey: XDE -> CDE





The Jazz Project

- An effort to create a scalable, extensible team collaboration platform.
- A vision for the future of software delivery supporting a workforce that is organizationally and globally distributed.
- A community at Jazz.net the online venue for open commercial development of Jazz-based products.



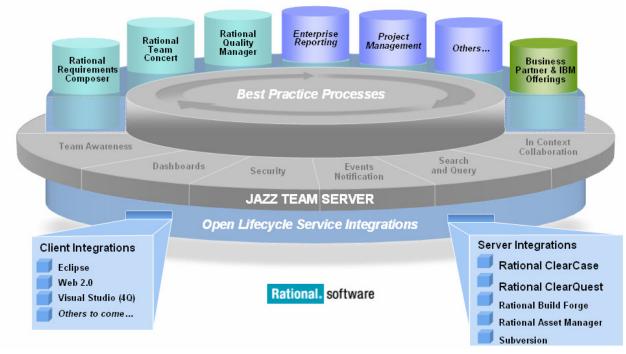






Jazz and Team Concert

Jazz is a technology platform



Rational Team Concert is the first Jazz based product



Team Concert

SCM

- Change sets
- Suspending changes
- Workspaces, Streams
- Components, Baselines
- Snapshots
- ClearCase Connector, SVN Bridge

Work Items

- Defects, Enhancements
- Task tracking
- Approvals
- Iteration planning
- Workflow customization
- ClearQuest Connector

Build

- Continuous integration
- Build engine
- Work Item and Change Set Traceability
- Run Personal Builds
- Integration with Build Forge

Project Health

- Reports
- Dashboards (project, team, personal)

- Project, Teams, Users
- Process enactment, customization, role based Permissions
- In-context Collaboration, Events, Presence

Rational Team Concert

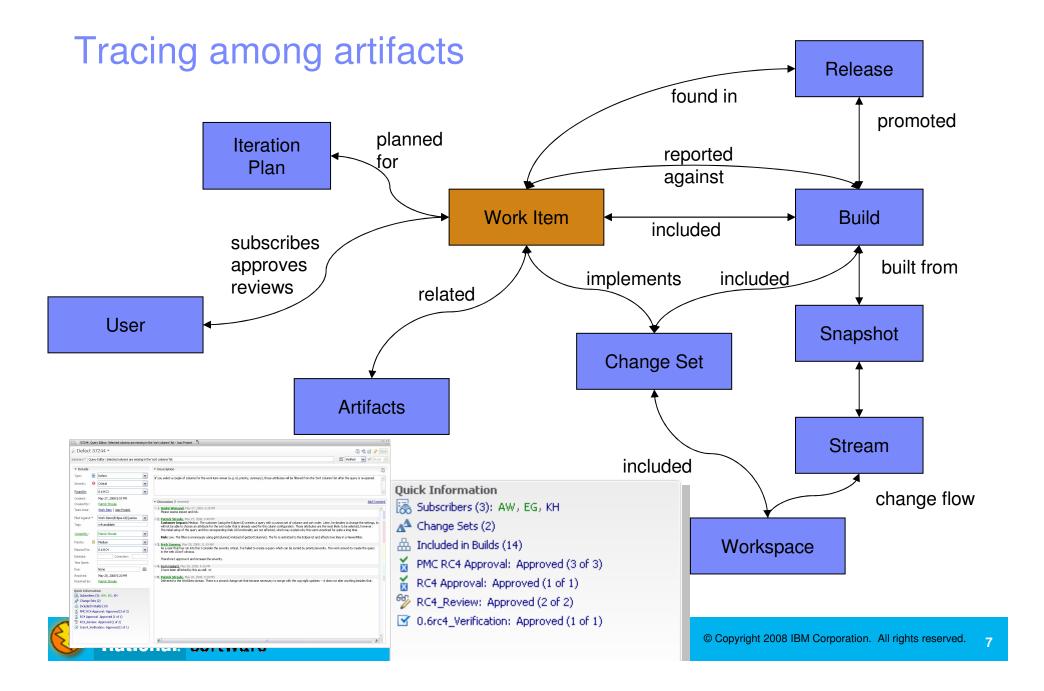




Team Concert Themes

- Themes derived from the CDE properties:
 - Integration
 - ▶ Team First
 - Collaboration
 - Transparency/visibility

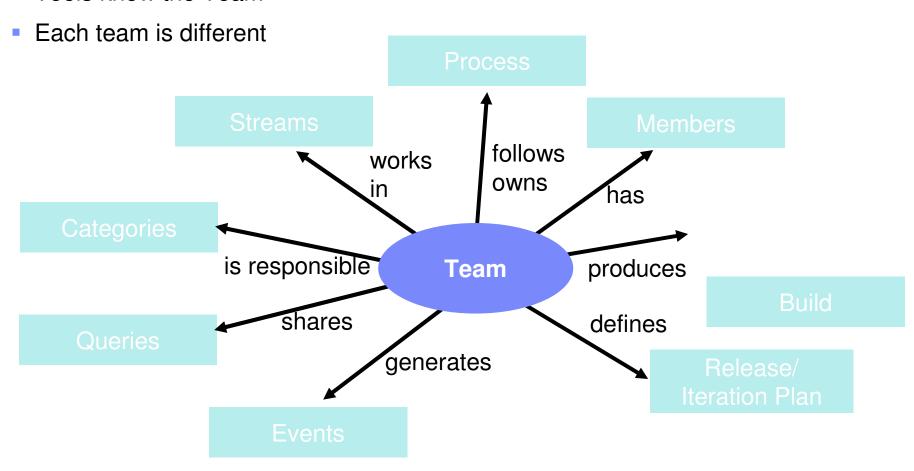






Team First

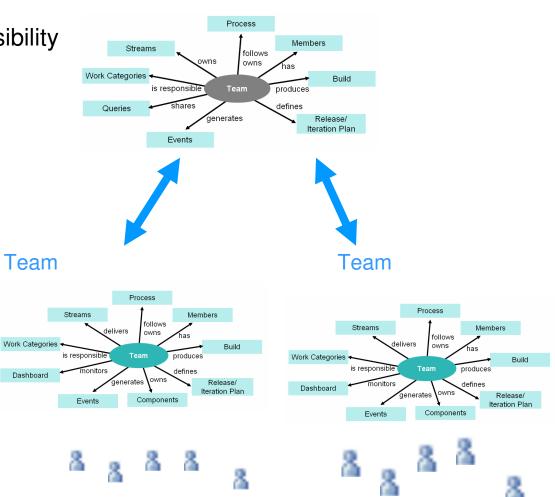
Tools know the Team





Team First: Scoped Collaboration

- Multiple level of information visibility
- Isolation levels:
 - individual user
 - team
 - teams of teams
- Distributed teams



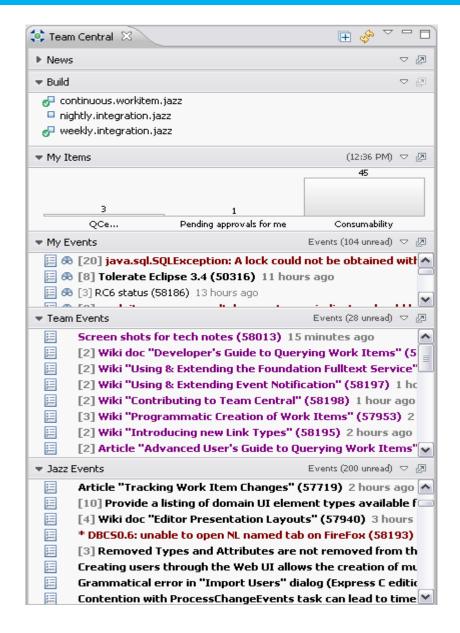
Team of Teams





Notifications

- RSS feeds enable everybody to be informed of changes
- Feeds for the:
 - individual user
 - team
 - team of teams

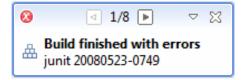




Builds

- Scoped builds
 - Personal builds
 - Continuous team builds
 - Scheduled integration builds
- Collaborate in context on build failures









Rules/Process

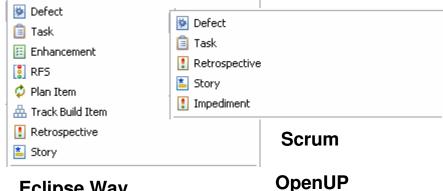
- All collaborations have underlying context specific rules and patterns Each project follows a process
- Each team is unique and thus can work differently ⇒ Team's own their process
- Team members play roles defined by the process





Process

- Process manifested through:
 - artifact types and their states
 - role-specific preconditions and follow-up actions on operations manipulating artifacts
 - artifact change events
 - role-specific and permissions



Eclipse Way



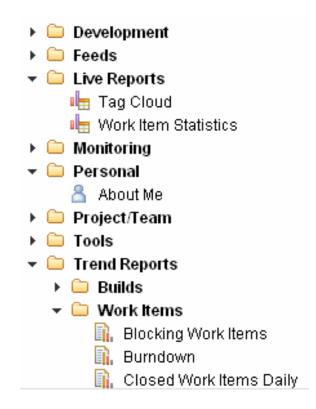




Transparency/Visibility: Dashboards

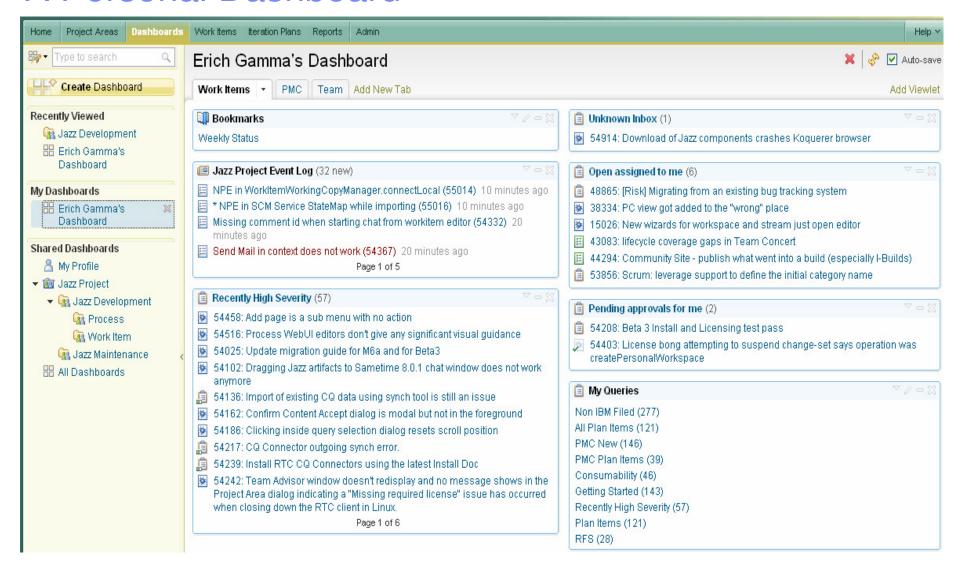
- Knowing what is going on without having to ask
- At a glance view on team artifacts
- Three dashboard types:
 - project
 - team
 - individual user

Viewlets



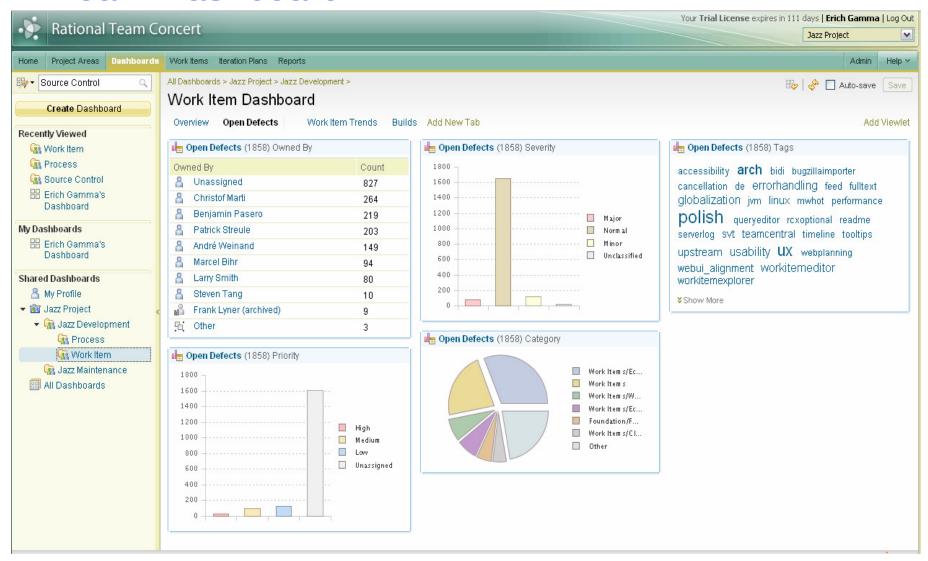


A Personal Dashboard





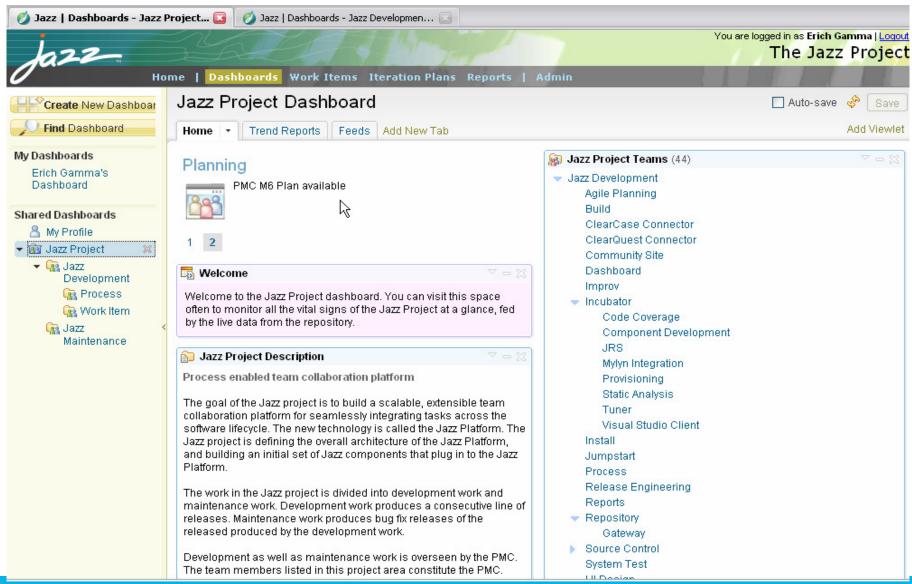
A Team Dashboard





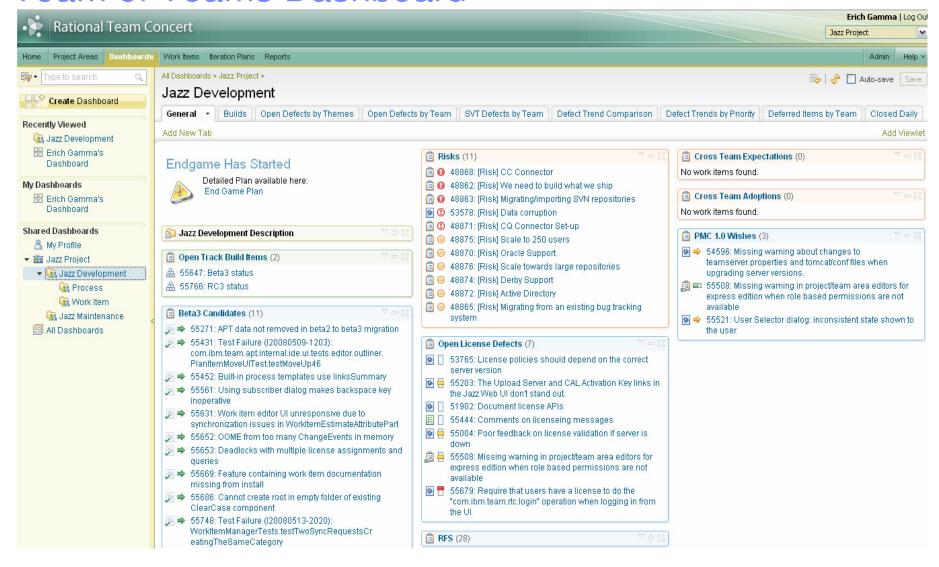


Team Dashboard





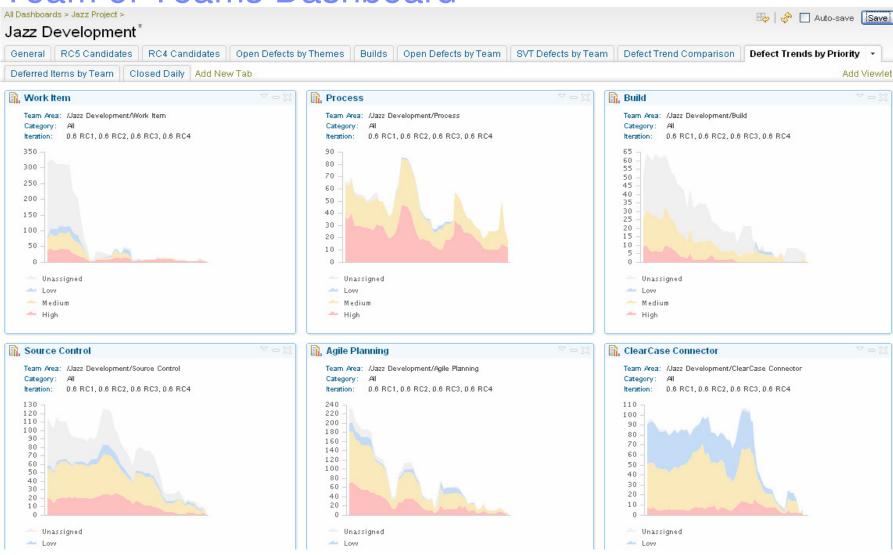
Team of Teams Dashboard







Team of Teams Dashboard







Point of Friction: Getting Started

- Cost of setting-up a new team member
- Demo:
 - new team member joins a team
 - learns about the team
 - fixes and delivers the first bug



Team Invitation

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Erich Gamma/Zurich/IBM@IBMCH

03/11/2008 11:40 AM

Please respond to Erich Gamma/Zurich/IBM@IBMCH

Default custom expiration date of 06/09/2008

10		

bcc

Subject Welcome to the Work Item Team

You have been invited to join the Jazz team Work Item.

If you have not already done so, please download and install a Jazz client from https://jazz.net/

To learn about the project please visit: https://jazz.net/jazz/web/projects/Jazz%20Project#action=com.ibm.team.dashboard.viewDashboard

Once the Jazz client is installed, use File>Accept Team Invitation. Copy the invitation below and paste into the Accept Invitation text field.

teamRepository=https://jazzdev.torolab.ibm.com:9443/jazz/userId=egamma userName=Erich Gamma projectAreaName=Jazz Project teamAreaPath=/Jazz Development/Work Item





Team Invitation

projectAreaName=Jazz Project

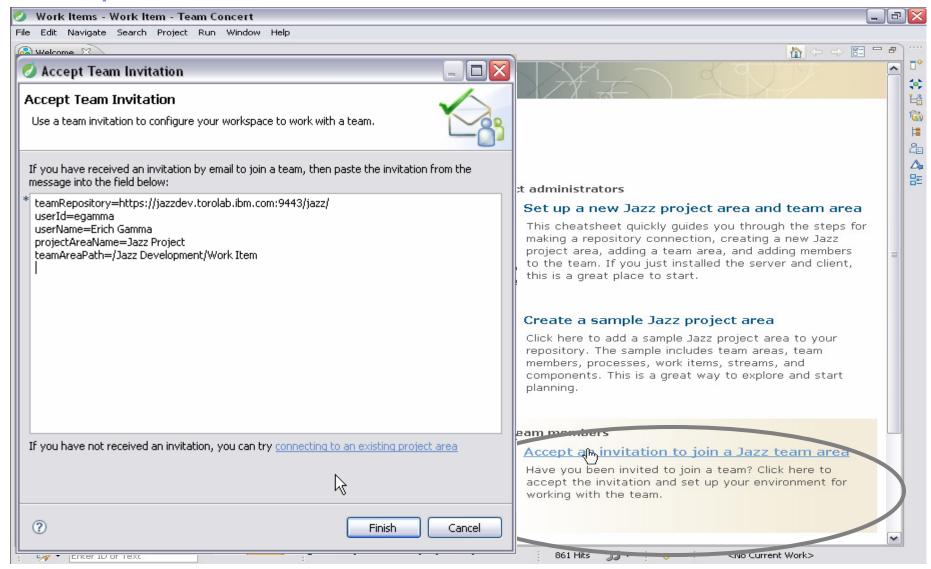
teamAreaPath=/Jazz Development/Work Item

Erich Gamma/Zurich/IBM@IBMCH	<u>To</u>	Erich Gamma/Zurich/IBM@IBMCH
03/11/2008 11:40 AM	cc	
Please respond to	bcc	
Erich Gamma/Zurich/IBM@IBMCH		Welcome to the Work Item Team
	Cabject	welcome to the work term ream
Default custom expiration date of 06/09/2008	THE ME	
You have been invited to join the Jazz team		
If you have not already done so, please down	ıload and i	install a Jazz client from https://jazz.net/
To learn about the project please visit:		
https://jazz.net/jazz/web/projects/Jazz%20Pr	oject#acti	ion=com.ibm.team.dashboard.viewDashboard
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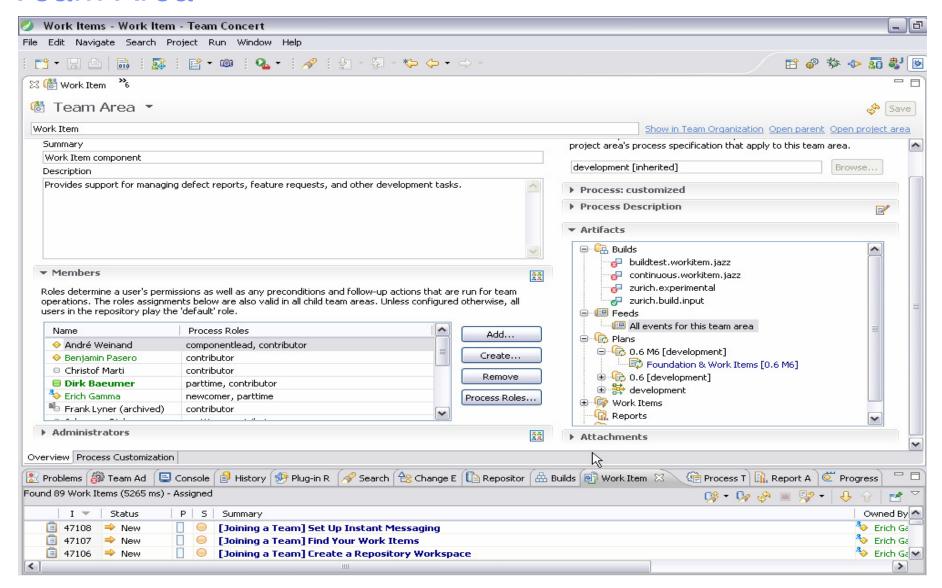
Accept Team Invitation





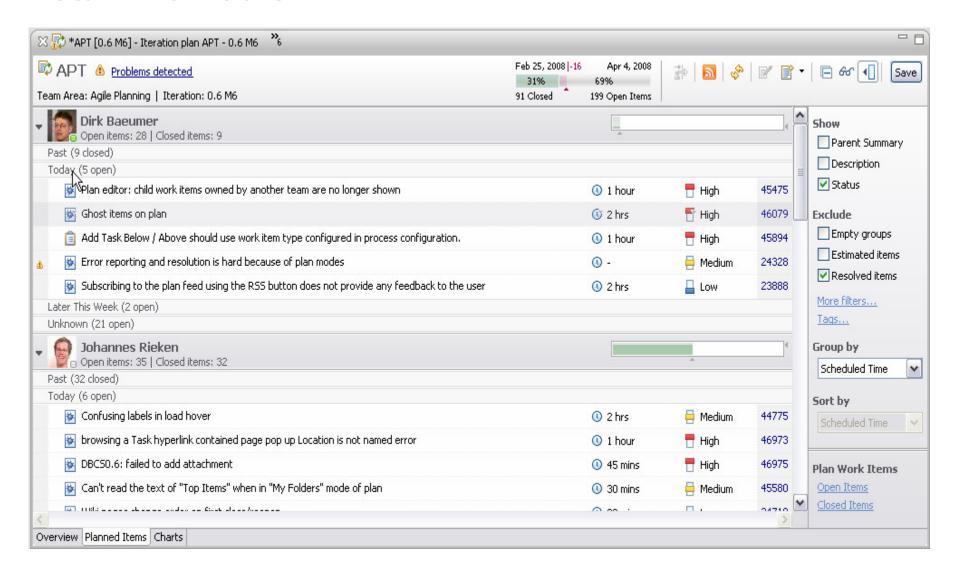


Team Area



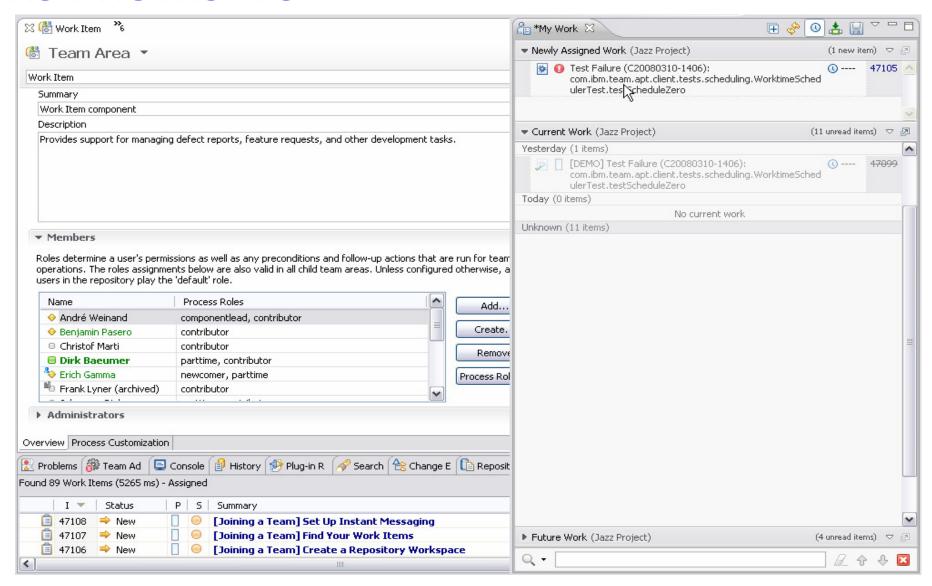


Team Members



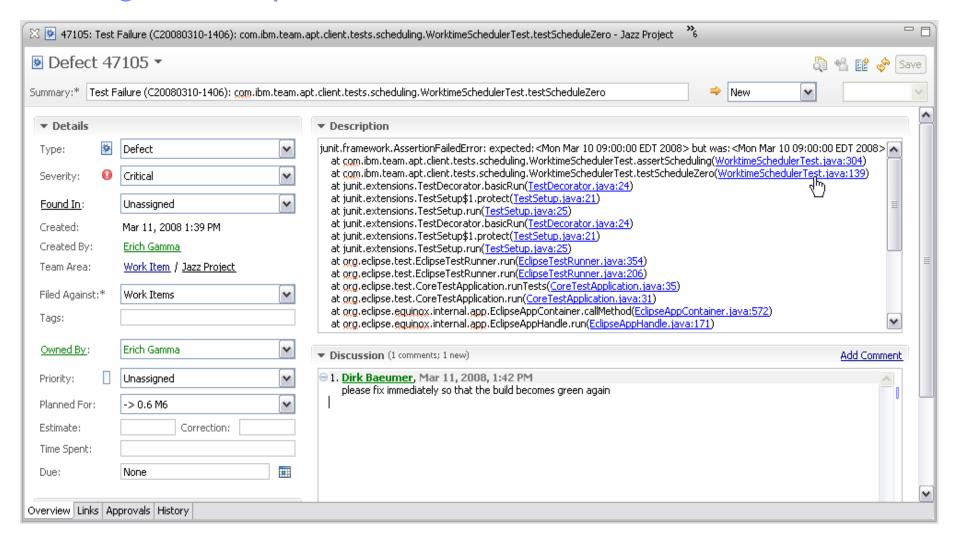


New Work for Me





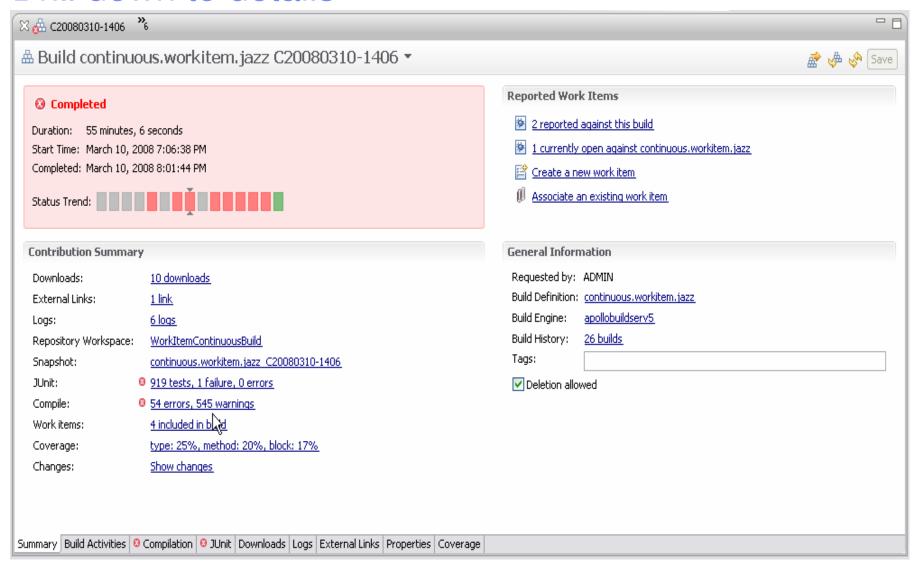
Linkage to the problem







Drill down to details



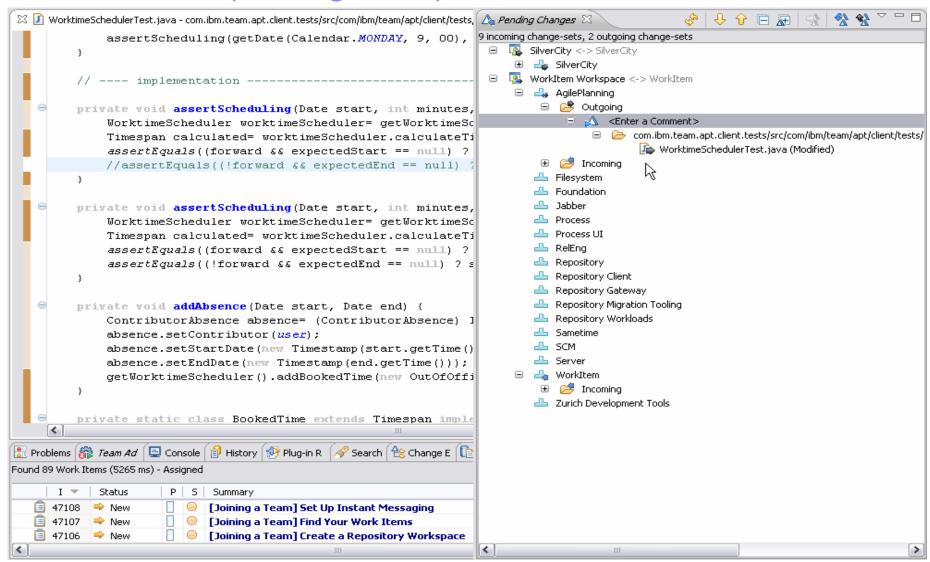


Fix the Problem

```
WorktimeSchedulerTest.java - com.ibm.team.apt.client.tests/src/com/ibm/team/apt/client/tests/scheduling **6
             assertScheduling(getDate(Calendar.MONDAY, 9, 00), 4 * 60, true, null, getDate(Calendar.MONDAY, 15, 15)); /
        private void assertScheduling(Date start, int minutes, boolean forward, Date expectedStart, Date expectedEnd) {
             WorktimeScheduler worktimeScheduler= getWorktimeScheduler();
            Timespan calculated= worktimeScheduler.calculateTimeSpan(start, getDuration(minutes), forward);
                                                                    art : expectedStart , calculated.getStart());
      Author: Michael Schneider
                                                                     t : expectedEnd, calculated.getEnd());
      Date: Mar 5, 2008 10:13 PM
      Comment: No Comment
      Reasons: 42811: Defining pestart date for work items
                                                                     olean forward, Date expectedStart, Date expectedEnd, B
                                                                     Muler();
                                                                     pan(start, getDuration(minutes), forward, Arrays.asLis
                                                                     art : expectedStart , calculated.getStart());
                                                                     t : expectedEnd, calculated.getEnd());
        private void addAbsence(Date start, Date end) {
            ContributorAbsence absence= (ContributorAbsence) IContributorAbsence.ITEM TYPE.createItem();
            absence.setContributor(user);
             absence.setStartDate(new Timestamp(start.getTime()));
             absence.setEndDate(new Timestamp(end.getTime()));
            getWorktimeScheduler().addBookedTime(new OutOfOfficeItem(getPlan(), absence, getPlan().getItemSequenceManag
        private static class BookedTime extends Timespan implements IBookedTime {
    <
```

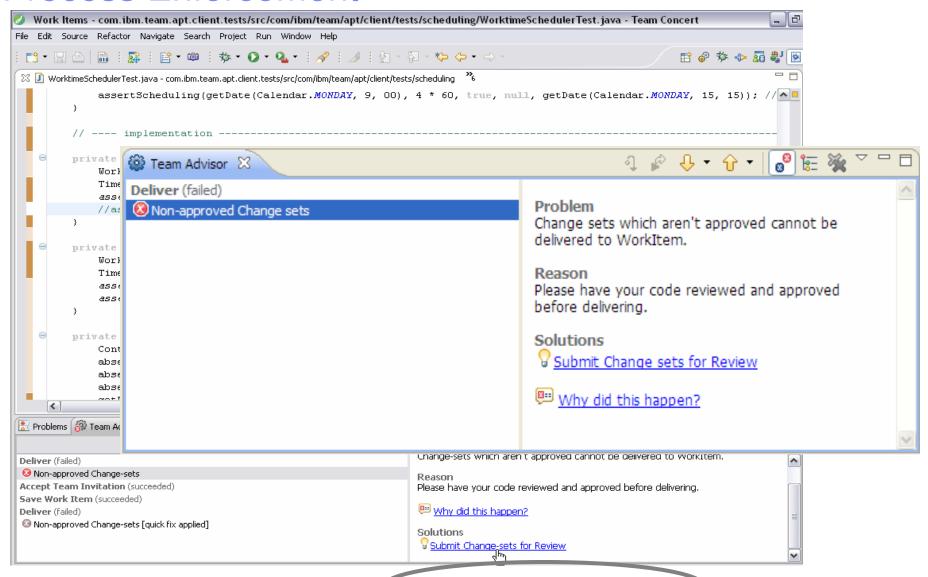


Deliver a Fix (Change Set)



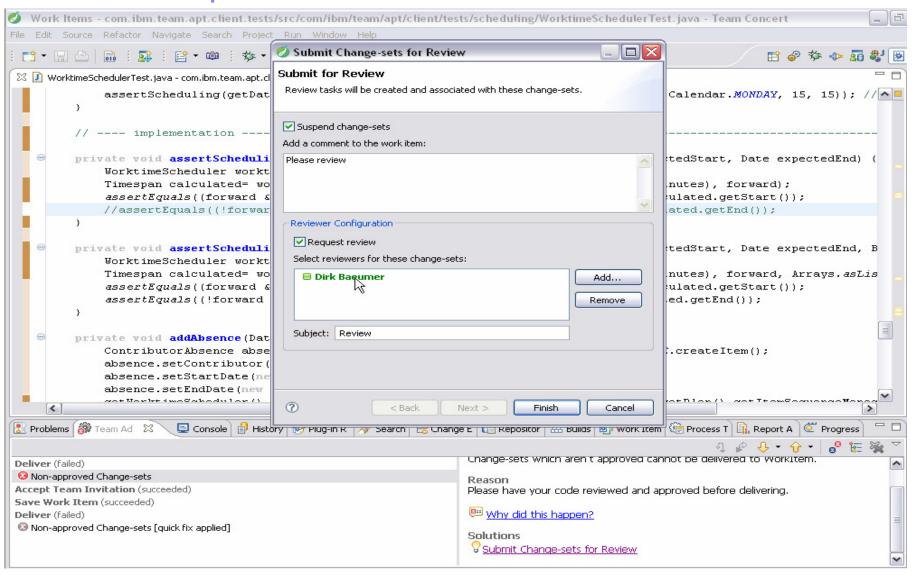


Process Enforcement



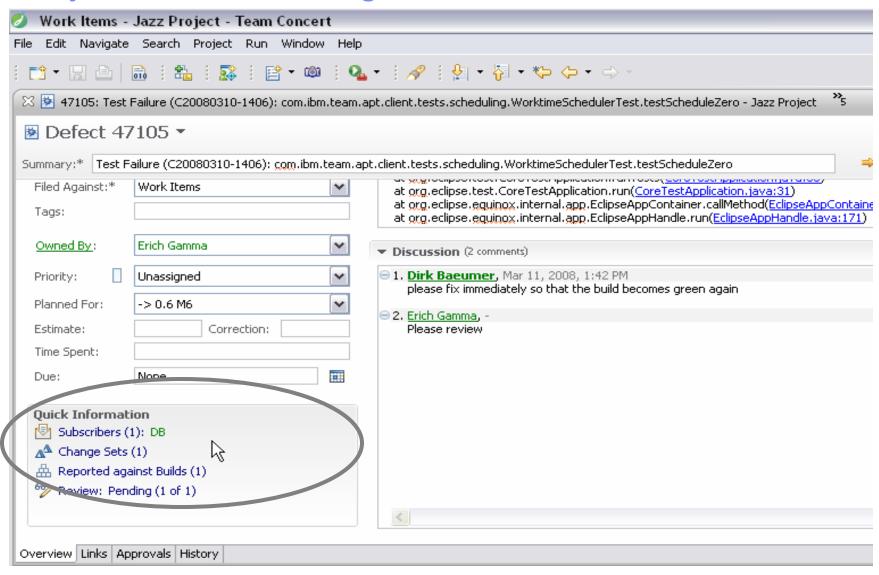


Process Requires Code Review





Easy Access to Change Set to Review







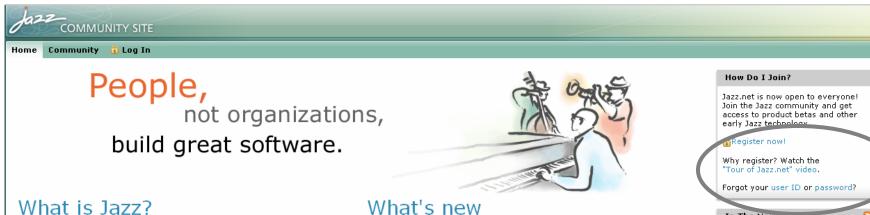
Conclusions

- Jazz and Team Concert is developed and used by a globally distributed team
- Experiences
 - we have become more continuous
 - things important to us we make explicit
 - increased awareness
 - improved practices

Effortless access to assets, notifications, reporting, and tracking for everybody



www.jazz.net



Developing software in a team is much like playing an instrument in a band. Both require a balance of collaboration and virtuosity. Jazz defines a vision for the way products can integrate to support this kind of collaborative work, and a technology platform to deliver on this vision.

Jazz is an IBM Rational project to build a scalable, extensible team collaboration platform for integrating work across the phases of the development lifecycle. We believe Jazz will help teams build software more effectively while making the software development activity more productive and enjoyable.

More about the Rational Jazz Project >>

Open Services for Lifecycle Collaboration

The Open Services for Lifecycle Collaboration initiative is aimed at simplifying collaboration across the software delivery lifecycle. Its goal is to enable teams to use disparate tools and share lifecycle resources in delivering software, whether the tools are from IBM, other vendors, open source projects, or in-house development, and to do so in a way that is open and non-proprietary and that will encourage all industry members to participate.

Rational Team Concert RC4 is now available!

Rational Team Concert is a collaborative software development environment that integrates Source Control, Work Item, and Build Management with Agile Planning and Customizable Process and Workflow, Register now to access the community site and download RC4.

In The News (recent)

When can you get the Jazz based Rational Tools Mike MacDonagh's Blog-

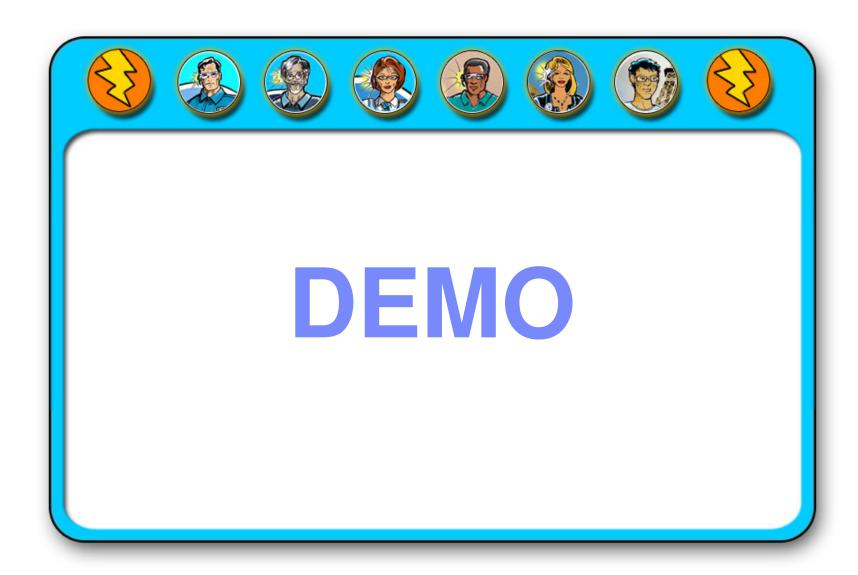
Thursday, 12 June 2008 IBM Rational Takes 'Jazz' Collaboration Suite on a Roll Integration Developer News Monday, 9 June 2008

IBM seeks consensus on ALM InfoWorld Thursday, 5 June 2008

IBM Gets Jazzy with Web 2.0 eWeek Monday, 2 June 2008

More >>



























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