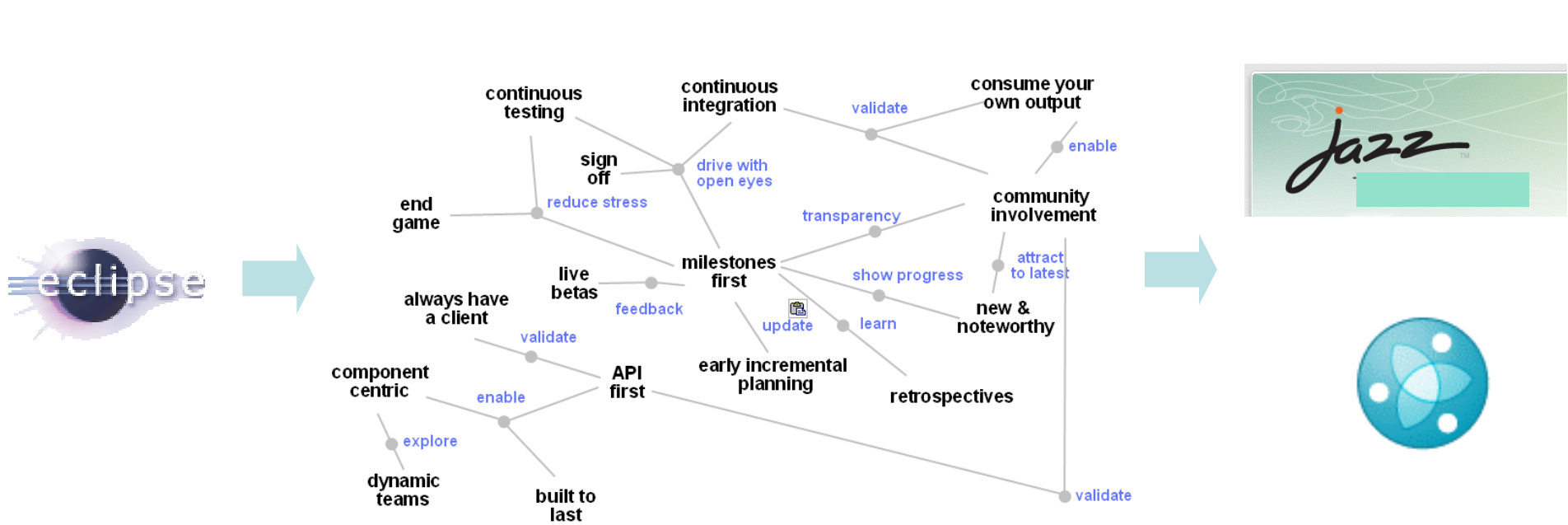




# From **Eclipse** to **Jazz** to **Team Concert** Developing Software like a band plays Jazz

**Erich Gamma**  
*Jazz Technical Lead*  
IBM Distinguished Engineer  
IBM Rational Zurich Research Lab

# Our Journey



## Eclipse Way

## Eclipse and Jazz

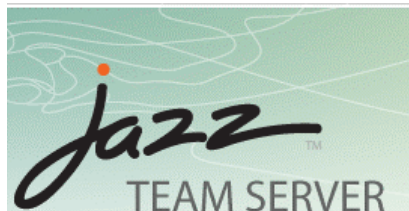
- Eclipse components used by Jazz
  - ▶ OSGi run-time
  - ▶ Eclipse platform
  - ▶ EMF
  - ▶ GEF
  - ▶ Birt
  - ▶ Mylin (incubator)
  - ▶ TPTP ProbeKit (incubator)
- More Open Source Apache
  - ▶ Log4j
  - ▶ Lucene



➤ You can use all your favorite plug-ins CDT, PHP...

## Jazz and Team Concert

- **Jazz** is a **technology platform**



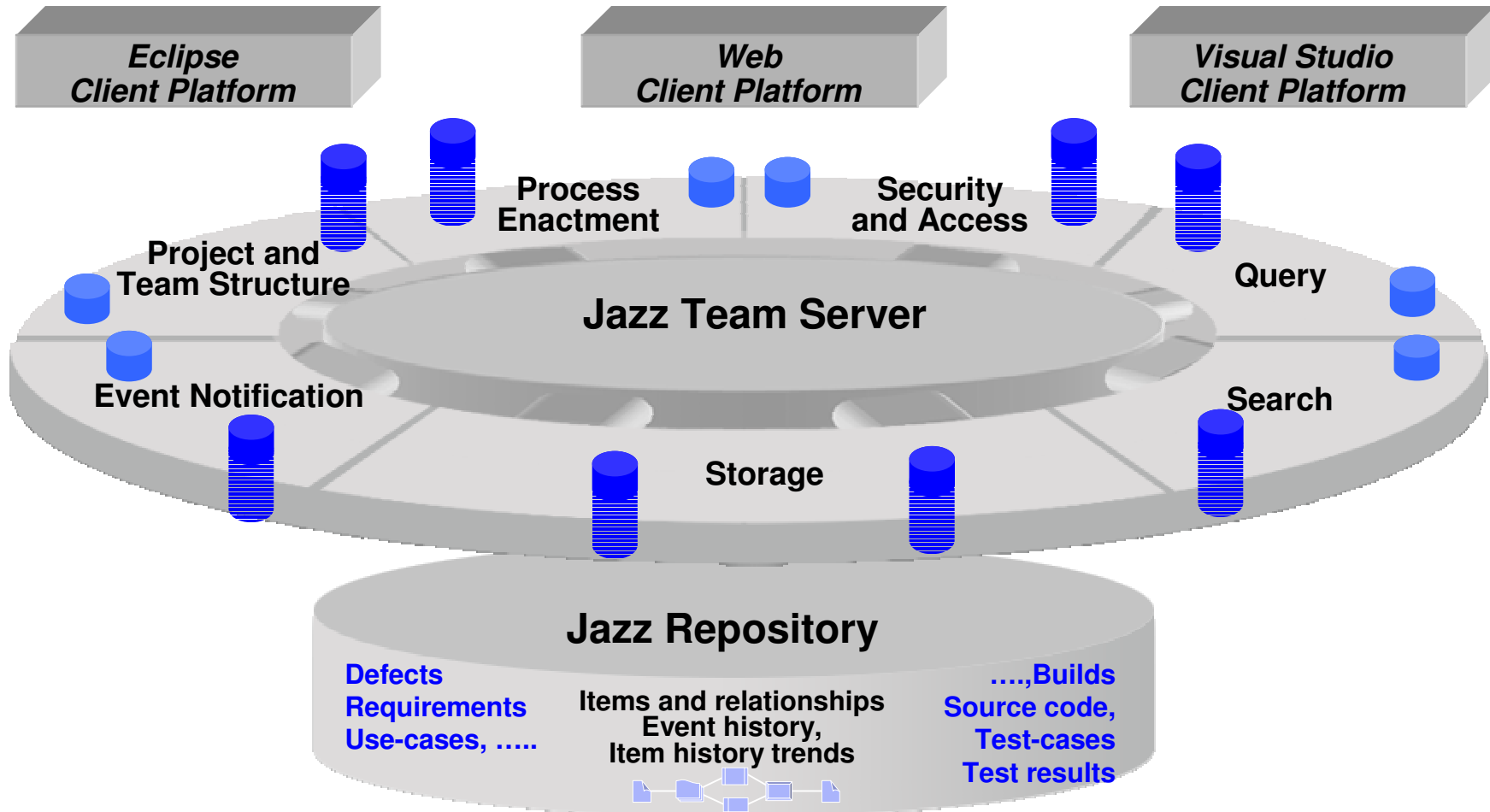
- **Rational Team Concert**

- ▶ Team Concert is the **first Jazz based product**
- ▶ Source control, build system, work items
- ▶ Other products will follow

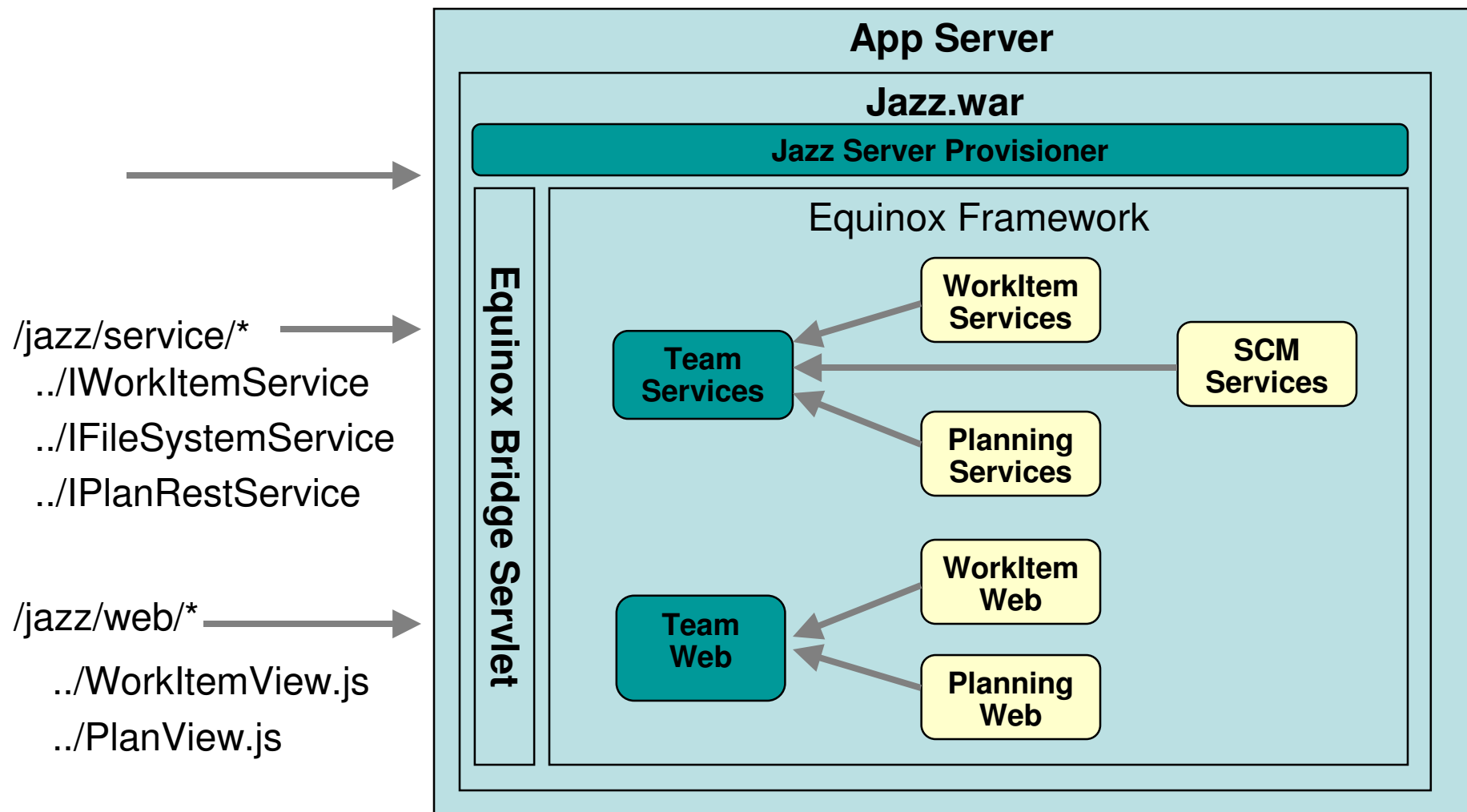


Free for qualified Open Source Projects and academic use

# Jazz Conceptual Architecture

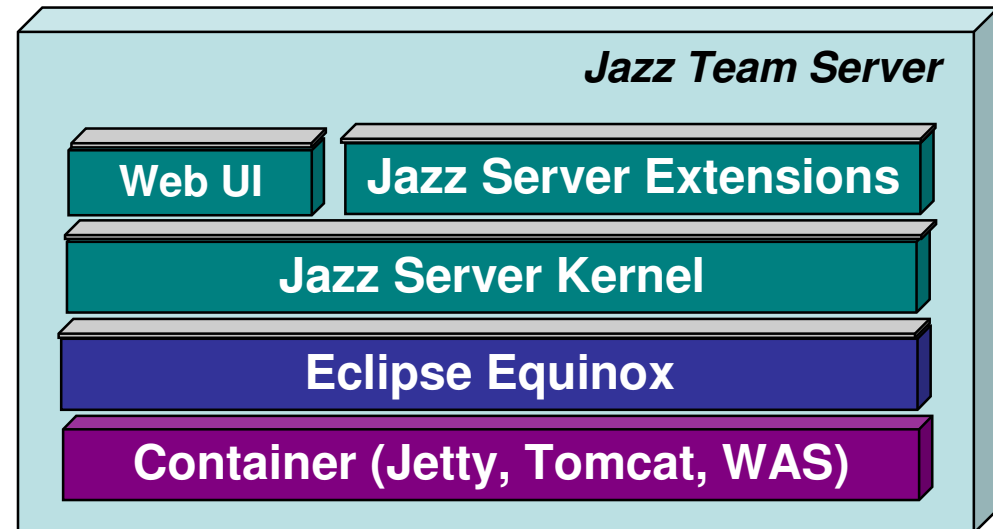


# Extending the Jazz Platform – Understanding jazz.war



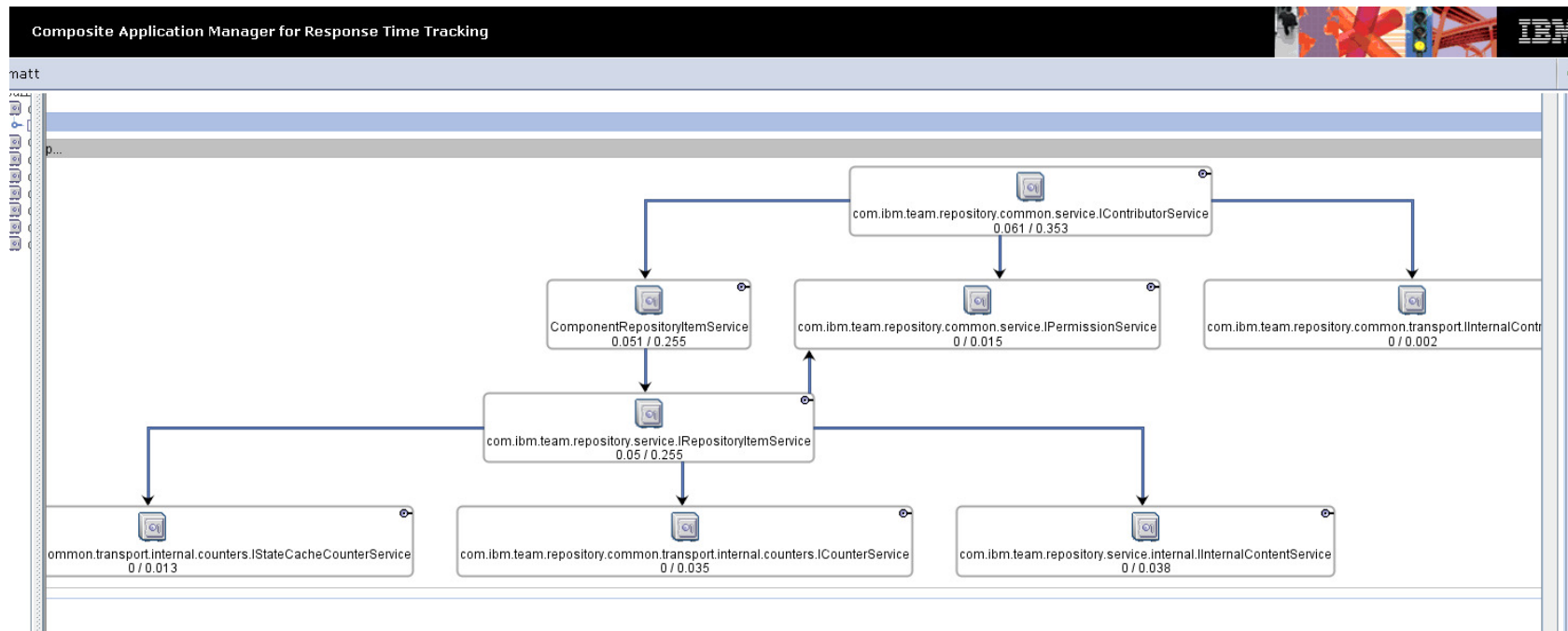
## Jazz Server Kernel

- Team Repository Services
  - ▶ Provides the basics for querying, fetching, and updating repository data
  - ▶ Provides support for change events and feed rendering
  - ▶ Provides the notions of projects, teams, and process
  - ▶ Provides a platform for extensible AJAX Web UIs
  - ▶ Runs in an OSGI environment



# Extending the platform - Service programming model

- It's stateless services all the way down...
- Services are contributed by bundles
- Statelessness is key to scalability
  - ▶ All state is in the DB, all client interactions are atomic
  - ▶ Clusterable and restartable
  - ▶ No session state (clients are stateful)

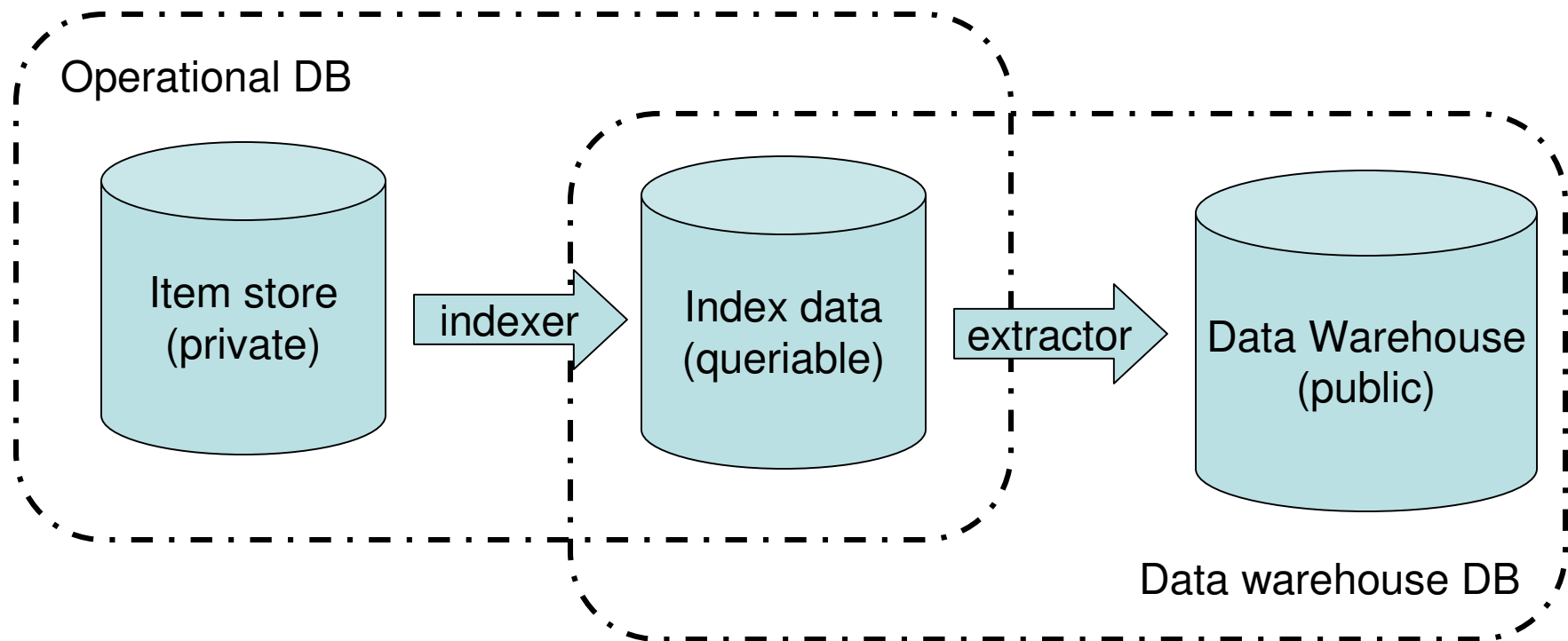




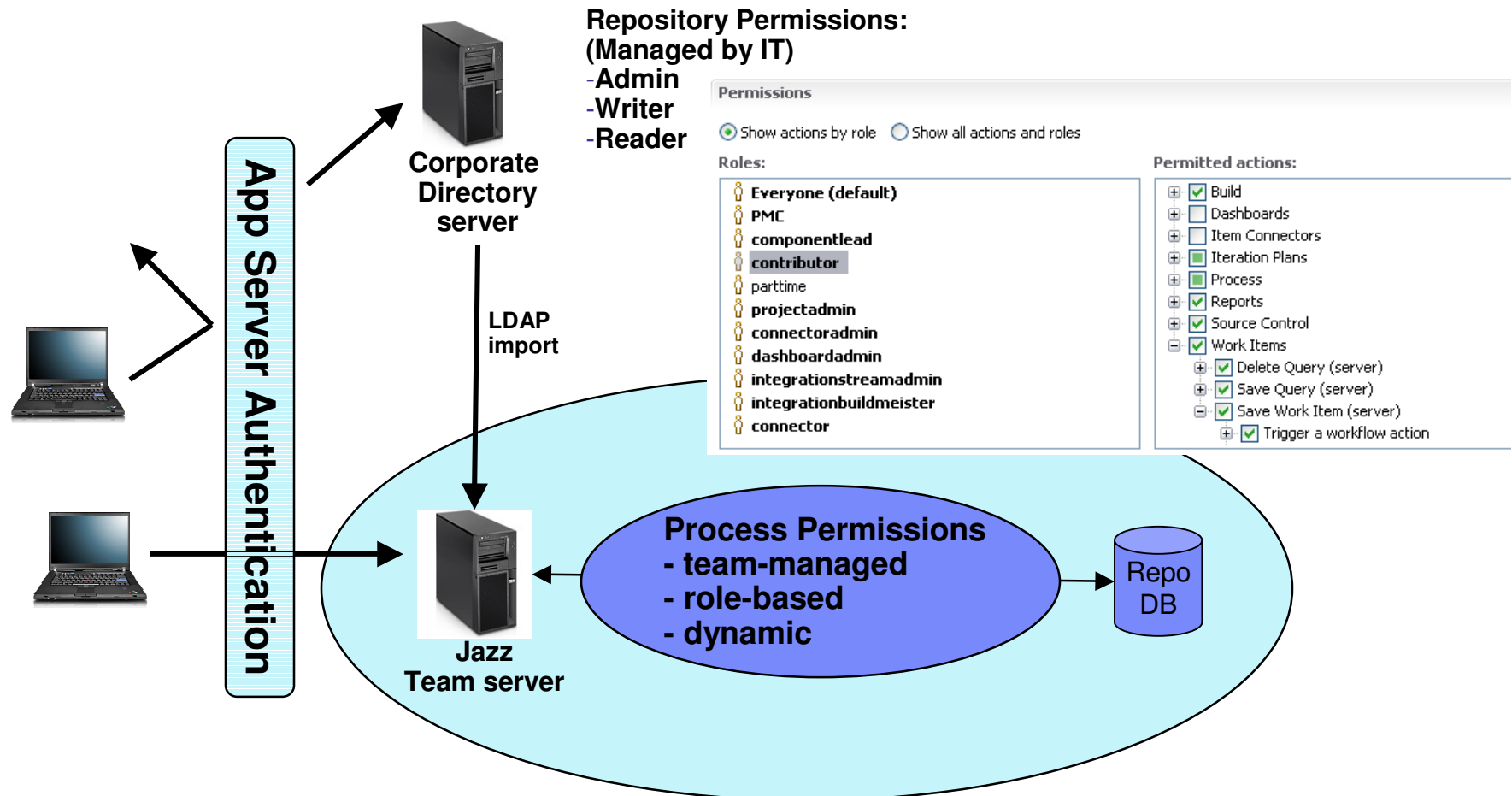
# Extending the Jazz Platform – repository data model

## ...three DBs in one

- An open-ended item store
  - ▶ Stores structured items as XML
  - ▶ Stores arbitrary content as BLOBs
- A declarative indexing story to support query
- Lucene to support full-text search
- A snapshot framework for extracting summary data for reporting



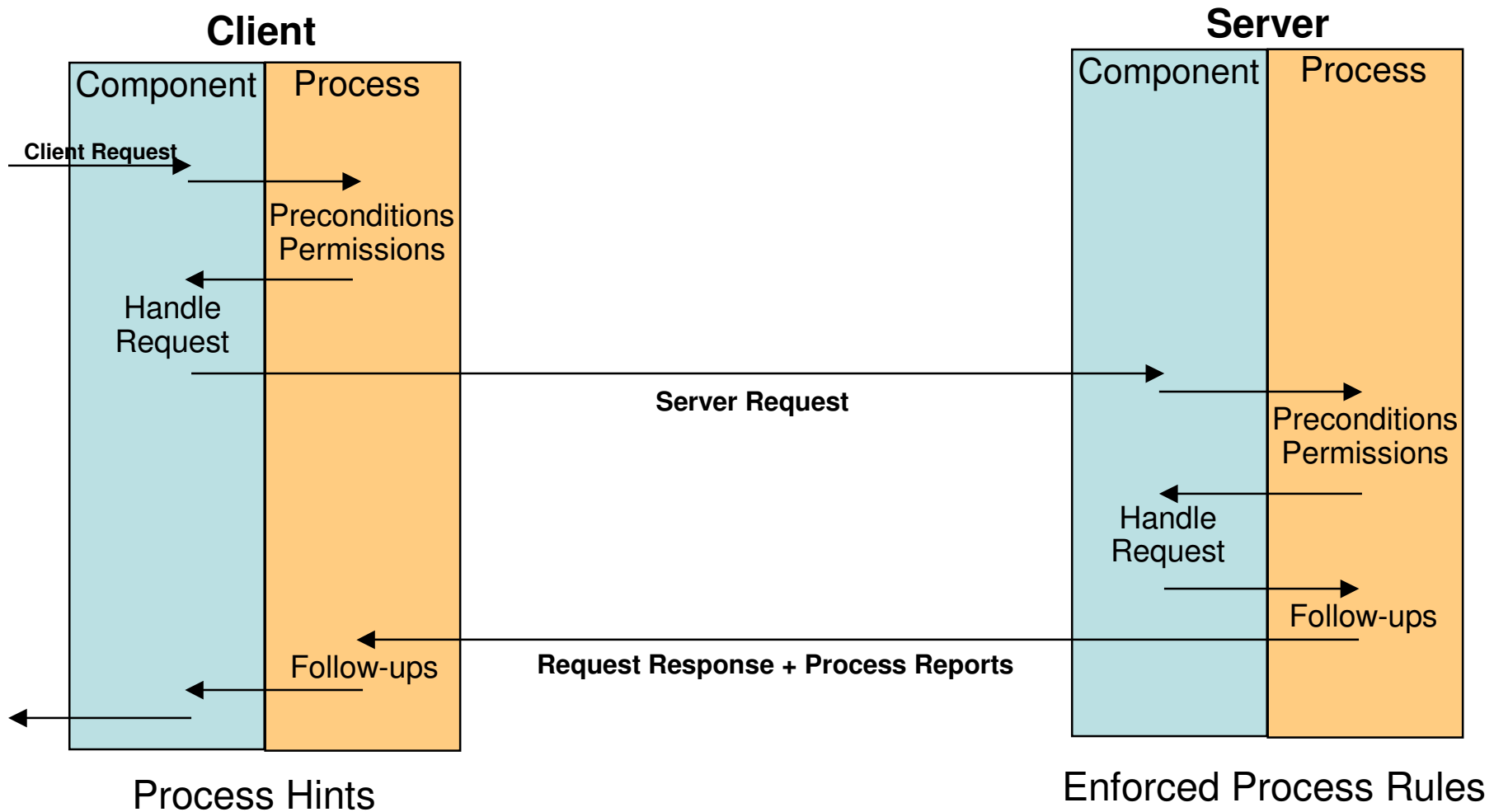
# Authentication and Permissions



## Process basics

- Teams work on projects
- Each project follows a process
- Work inside the scope of a team follows the team's process
- Team members play roles defined by the process
- Process manifests itself through artifacts types, operations manipulating the artifacts, and artifact change events

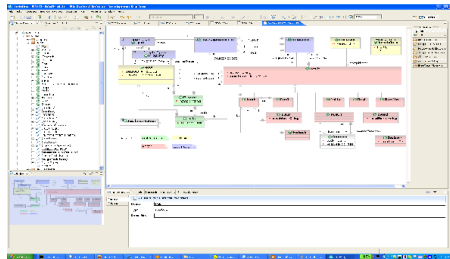
# Process Execution Flow



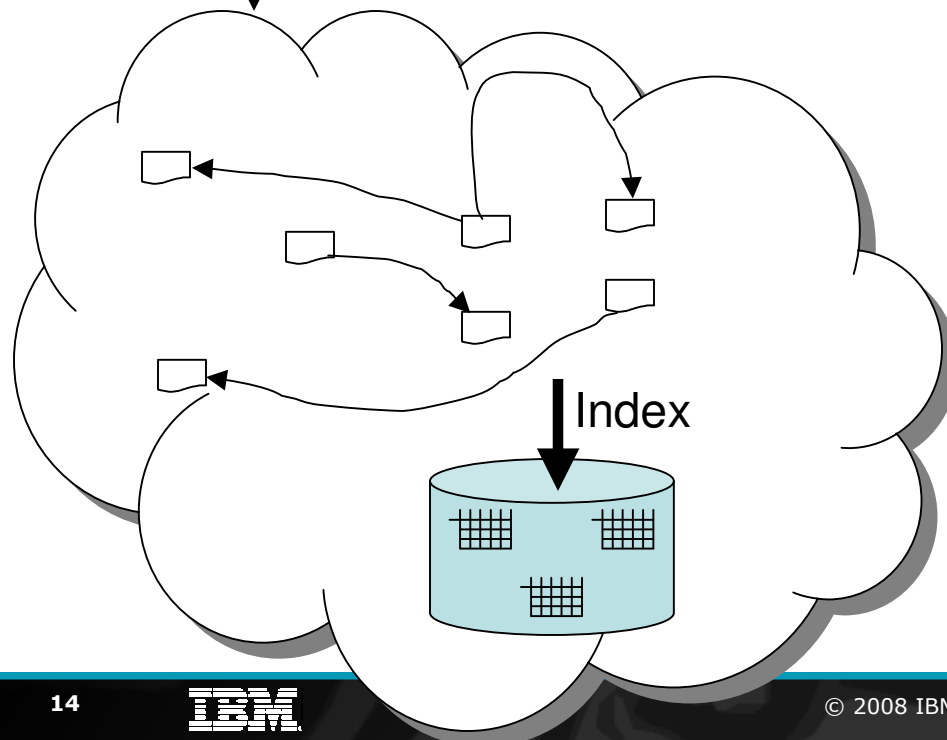
## What we learned

- Jazz Platform 0.6 provides a general server-side programming model
  - ▶ Wire protocol is implementation, clients program to Java client libraries
    - Resources modeled; serialized between client and server
  - ▶ Clients communicate using RPC style interface
  
- Currently exploring providing a simpler programming model
  - ▶ Provide an on-ramp to ease extensibility
  - ▶ Characteristics of experiment
    - Wire protocol is API, accessible to clients of all kinds
      - Resource representations explicitly specified
    - Clients communicate using RESTful interface
    - More declarative building blocks

## Experiment: Implement tools like an internet application



HTTP GET/PUT/POST/DELETE



- Build on Jazz experiences in Web UI
- Data specified independently of tools
- All data are resources with URLs
  - ▶ Ubiquitous access
- Tools access data through HTTP/APP
  - ▶ Multiple tools same data
  - ▶ Data integration without forcing same tool for multiple roles
- References are embedded URLs
  - ▶ Cross technology/location
- Resources have representations
  - ▶ XML encouraged, not required
- Search and query through “structured indexes”, independent
  - ▶ Standard analysis, query, reporting

## Team Concert: Developing software like a band plays “Jazz”?

- Developing software in a team is like playing an instrument in a band. Both require a **balance of team collaboration** and **solo expertise**
- Band members knows what the others are doing/playing
- Live music/live software



## Guiding Principles

Help *people* work *together* to be more *effective*:

- Integration
- Team First
- Collaboration
- Transparency

➤ Collaborate with pleasure



# Integration

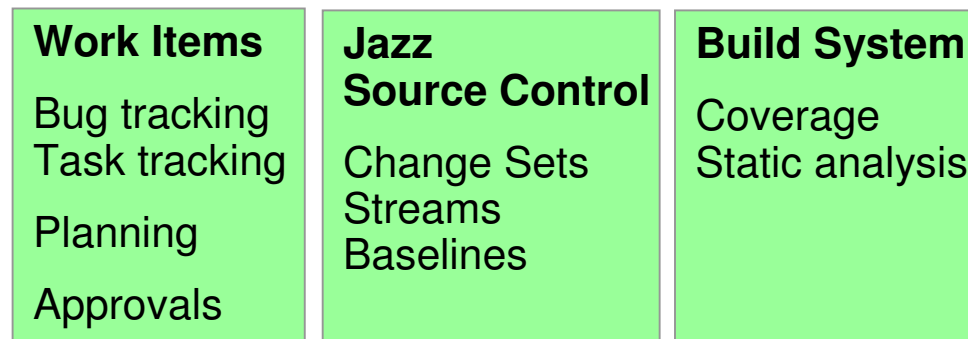
- ▶ Tools should be invisible
- ▶ Users work and collaborate on tasks

## Tasks

	Work Items	SCM	Build	Reports	Project Mgt.
joining a team	X	X	X		
what is happening in the team?	X	X	X	X	X
following the team's process	X	X	X		
starting an ad hoc/dynamic/tiger team	X	X	X		
deliver a change to the team	X	X			
find out if a fix is in the build?	X	X	X		
run a personal build		X	X		
tracking a broken build	X		X		
reconstructing a context for a bug/build failure	X	X	X		
interrupting development due to a high priority bug fix	X	X			
working on multiple releases concurrently		X	X		X
tracking the code review of a fix	X	X			
tracking status			X	X	X

Tools

# Rational Team Concert



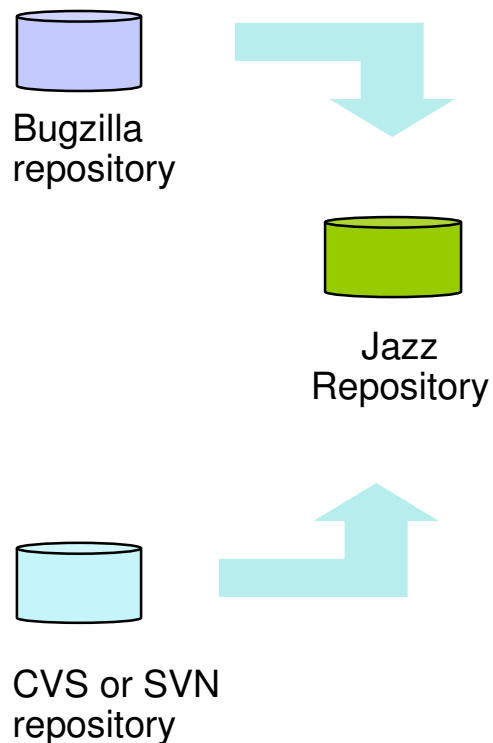
**Foundation:** Project Areas, Teams, Users, Process, Chat, Presence, Events, Alerts, Dashboard, Reports

- Team Concert provides an integrated Collaborative development environment
  - Using a single repository
  - Integrated Version Control, Work Item and a Build System

# Playing with Others

## Import

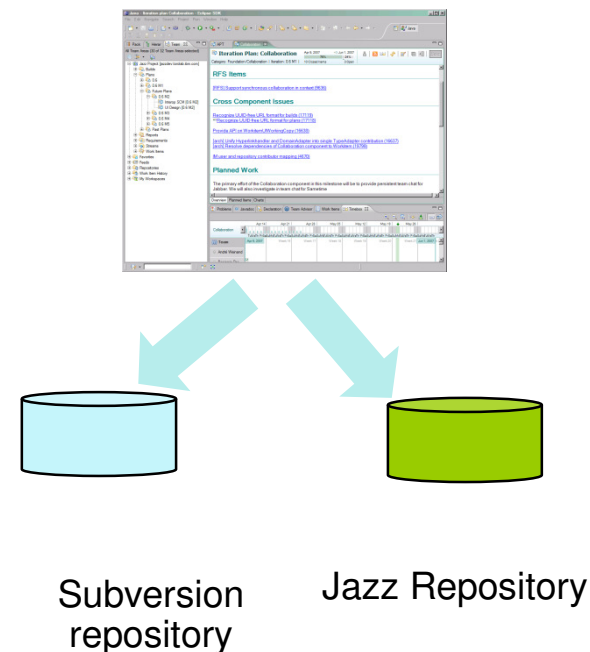
One way data migration



## Bridge

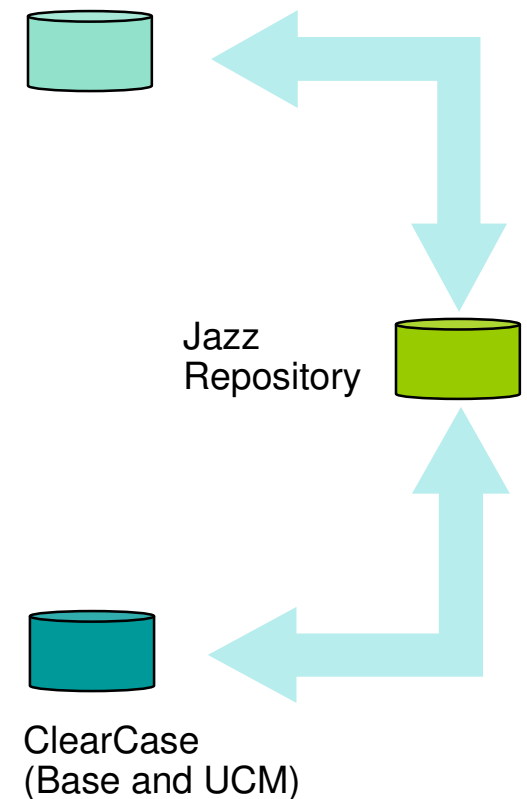
**SVN Bridge** links work items with change sets.

**Mylin repository connector (incubator)**

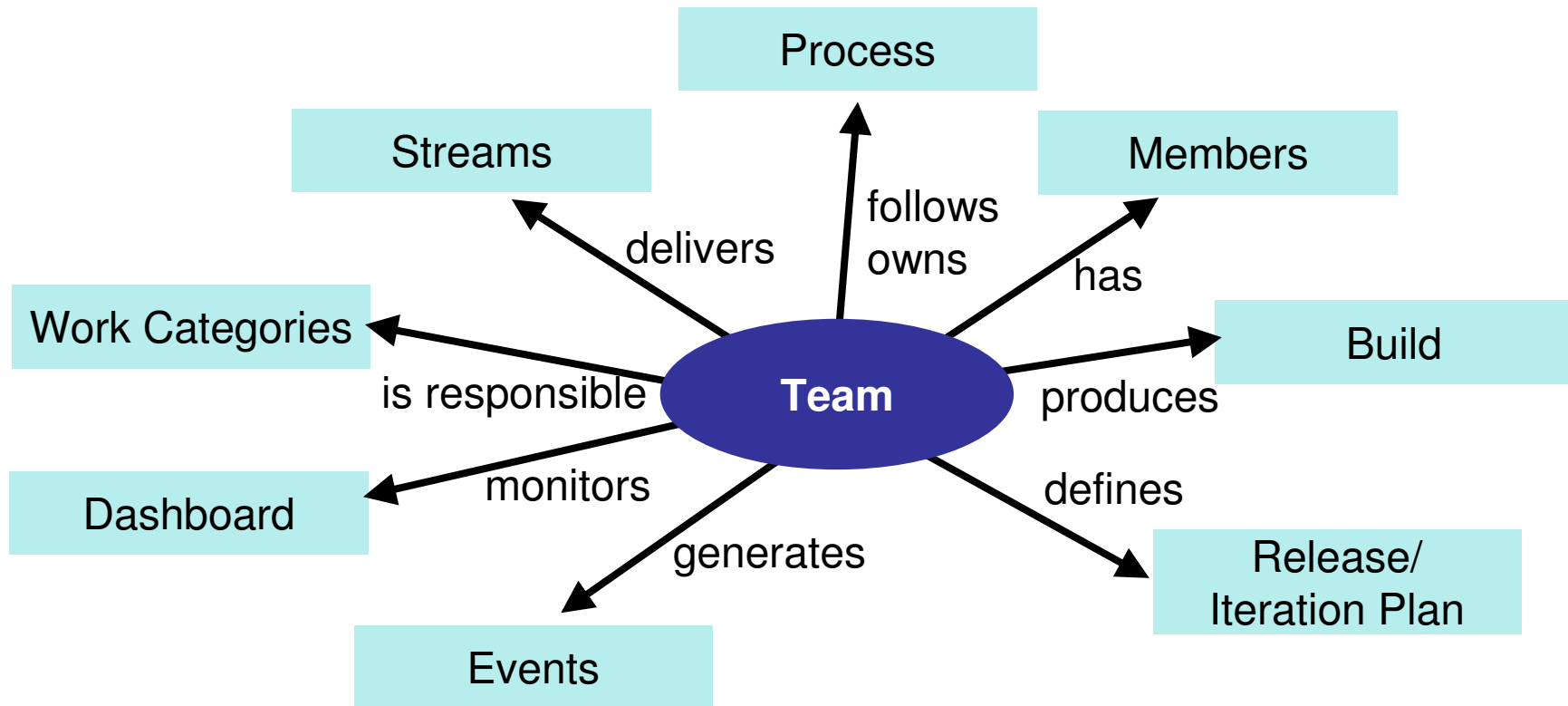


## Connectors

Two way data synchronization

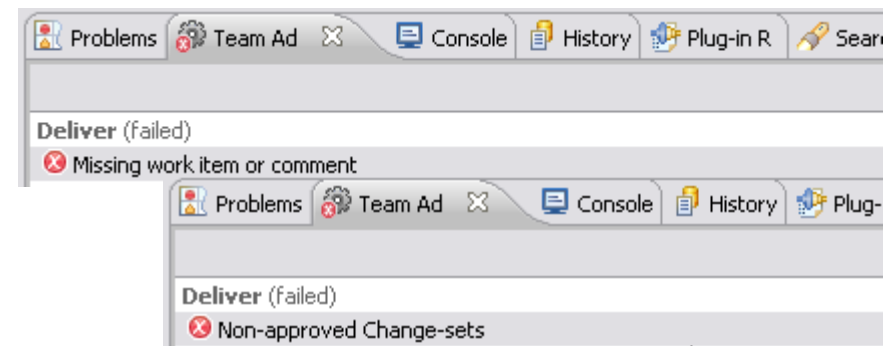
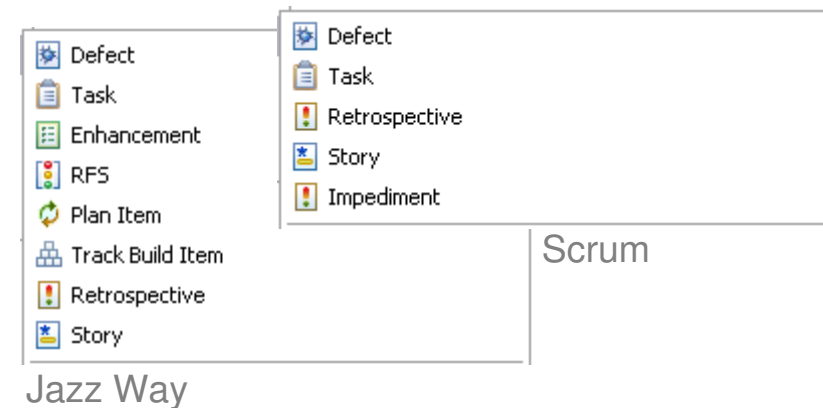


# Team First



## Team First: My Way your Way...

- Jazz allows teams to define **their rules** and the **artifacts** they care about
- **Process templates** define **their way** and rituals
  - ▶ Eclipse Way, Scrum, OpenUp
- Process templates defines
  - ▶ **Artifacts** and their **states**
    - Bugs, Tasks, Stories
  - ▶ **Pre/post conditions** for team operations
    - delivering a change
    - saving a work item
  - ▶ Roles and permissions





## Demo: Developer Role

## Demo: Joining a team (before...)

### If They Come, How Will They Build It?

9 Sep 2007

**To: Mike Cooper**  
**From: Ed Johnson**

Hi Mike,

I started on the AccountView project today. Can you tell me how to get the code and get started developing?

Thanx,

Ed

**To: Ed Johnson**  
**From: Mike Cooper**

Hi Ed,

The code is all in CVS in the module called AccountView. Just check it out and you'll be right to go. As you've probably noticed, we're all using the Eclipse IDE here. That's all you need to get stuck into it.

Mike

**To: Mike Cooper**  
**From: Ed Johnson**

Mike,

Can you tell me the connection details for your CVS server? Will I automatically have access to it, or will I need someone to create an account for me?

Ed.

**To: Mike Cooper**  
**From: Ed Johnson**

Mike,

I finally got CVS access today from Arnold. So I've checked out the AccountView module OK, but it won't compile. The Eclipse project has dependencies on about five other projects. I tried checking those dependent projects out as well, but a few of them won't build at all? How are you managing to develop this thing when the dependent projects don't build?

Ed

**From: Mike Cooper**  
**To: Ed Johnson**

Oh yeah - I forgot to tell you about the dependent projects. I always forget about them. I'm not so surprised some of them don't build for you. I've got versions on my machine that build OK but I haven't checked them in for a while. Gimme about 15 minutes and I'll check them in, then you should be right to go.

M.

**From: Ed Johnson**  
**To: Mike Cooper**

Mike,

I just got your check-ins, but the utils project still doesn't build. Did you forget to check in some logging library?

Ed

# Video Demo: Joining a Team (after...)

The screenshot shows an email invitation from Erich Gamma/Zurich/IBM@IBMCH dated 03/11/2008 11:40 AM. The email body contains the following text:

You have been invited to join the Jazz project. If you have not already done so, please click on the link below to learn more about the project.

To learn about the project please visit <https://jazz.net/jazz/web/projects/Jazz>

Once the Jazz client is installed, you will receive a further invitation. Copy the invitation below and paste it into the Jazz client.

```
teamRepository=https://jazzdev.torol.ibm.com
userId=egamma
userName=Erich Gamma
projectAreaName=Jazz Project
teamAreaPath=/Jazz Development/Work
```

The email is open in a browser window. In the background, the Rational Team Concert web interface is visible, showing a 'First Steps' guide and a 'Work Item' configuration page for 'Team Concert'. The 'Work Item' page includes a 'Members' table and a tree view of artifacts.

Name	Process Roles
André Weinand	componentlead, contributor
Benjamin Pasero	contributor
Christof Marti	contributor
Dirk Baeumer	parttime, contributor
Erich Gamma	newcomer, parttime
Frank Lyner (archived)	contributor

The artifact tree shows a hierarchy including Builds, Feeds, Plans, and Work Items. The 'Plans' section is expanded, showing '0.6 M6 [development]' and 'Foundation & Work Items [0.6 M6]'.





# Project Lead

# Iteration based Planning

- Planning integrated with bug/defect tracking
- Work break down, e.g., (Stories, Tasks)
- Team load
- Progress tracking, burndown

The screenshot shows the 'Foundation & Work Items' interface for iteration plan '0.6 MSD1'. At the top, a burndown chart indicates progress from Dec 3, 2007 to Jan 25, 2008, with 93% completion and 7% remaining. The team area is 'Work Item' and the iteration is '0.6 MSD1'. The interface shows 214 closed items and 15 open items.

Item	Due Date	Priority	Count
Better align Web UI and Eclipse UI	1 day	High	35966
Enable using Jazz for Open Source projects	0 hours	Medium	35794

Team members and their work item counts:

- Marcel Bihr: Open items: 0 | Closed items: 24
- Martin Aeschlimann: Open items: 0 | Closed items: 0
- Michael Schneider: Open items: 0 | Closed items: 1
- Patrick Streule: Open items: 13 | Closed items: 40

Additional work items for Patrick Streule:

Missing distinct in TC query count statements?	-	High	40086
Better align Web UI and Eclipse UI	1 day	High	35966
Edit unsaved queries once they are run	-	High	25047
Set 'Cache-Control: public' header for IImageContentService HTTP responses	-	Medium	38418
Web UI Query Editor: Gray out and disable unavailable attributes	-	Medium	37593

The interface includes a 'Show' sidebar with options for Parent Summary, Description, Status, and Exclude options like Empty groups, Estimated items, and Resolved items. It also features 'Group By' (Owner) and 'Semi-sorted (sort)' (Priority) options.

# Tracking/Transparency

Rational Team Concert Erich Gamma | Log Out

Jazz Project

---

Home Project Areas **Dashboards** Work Items Iteration Plans Reports Admin Help

Type to search Auto-save Save

All Dashboards > Jazz Project >

## Jazz Development

General Builds Open Defects by Themes Open Defects by Team SVT Defects by Team Defect Trend Comparison Defect Trends by Priority Deferred Items by Team Closed Daily

Add New Tab Add Viewlet

**Create Dashboard**

**Recently Viewed**

- Jazz Development
- Erich Gamma's Dashboard

**My Dashboards**

- Erich Gamma's Dashboard

**Shared Dashboards**

- My Profile
- Jazz Project
  - Jazz Development**
  - Process
  - Work Item
  - Jazz Maintenance
  - All Dashboards

### Endgame Has Started

Detailed Plan available here:  
End Game Plan

**Jazz Development Description**

**Open Track Build Items (2)**

- 55647: Beta3 status
- 55766: RC3 status

**Beta3 Candidates (11)**

- 55271: APT data not removed in beta2 to beta3 migration
- 55431: Test Failure (I20080509-1203): com.ibm.team.appt.internal.ide.ui.tests.editor.outliner.PlanItemMoveUITest.testMoveUp46
- 55452: Built-in process templates use linksSummary
- 55581: Using subscriber dialog makes backspace key inoperative
- 55631: Work item editor UI unresponsive due to synchronization issues in WorkItemEstimateAttributePart
- 55652: OOME from too many ChangeEvents in memory
- 55653: Deadlocks with multiple license assignments and queries
- 55669: Feature containing work item documentation missing from install
- 55686: Cannot create root in empty folder of existing ClearCase component
- 55748: Test Failure (I20080513-2020): WorkItemManagerTests.testTwoSyncRequestsCreatingTheSameCategory

**Risks (11)**

- 48868: [Risk] CC Connector
- 48862: [Risk] We need to build what we ship
- 48863: [Risk] Migrating/importing SVN repositories
- 53578: [Risk] Data corruption
- 48871: [Risk] CQ Connector Set-up
- 48875: [Risk] Scale to 250 users
- 48870: [Risk] Oracle Support
- 48876: [Risk] Scale towards large repositories
- 48874: [Risk] Derby Support
- 48872: [Risk] Active Directory
- 48865: [Risk] Migrating from an existing bug tracking system

**Open License Defects (7)**

- 53765: License policies should depend on the correct server version
- 55203: The Upload Server and CAL Activation Key links in the Jazz Web UI don't stand out.
- 51902: Document license APIs
- 55444: Comments on licensing messages
- 55004: Poor feedback on license validation if server is down
- 55508: Missing warning in project/team area editors for express edition when role based permissions are not available
- 55679: Require that users have a license to do the "com.ibm.team.rtc.login" operation when logging in from the UI

**RFS (28)**

**Cross Team Expectations (0)**

No work items found.

**Cross Team Adoptions (0)**

No work items found.

**PMC 1.0 Wishes (3)**

- 54596: Missing warning about tomcat changes to teamserver.properties and tomcat/conf files when upgrading server versions.
- 55508: Missing warning in project/team area editors for express edition when role based permissions are not available
- 55521: User Selector dialog: inconsistent state shown to the user

# Tracking Stabilization

Rational Team Concert

Home Project Areas **Dashboards** Work Items Iteration Plans Reports

All Dashboards > Jazz Project >

## Jazz Development

General Builds Open Defects by Themes Open Defects by Team SVT Defects by Team Defect Trend Comparison Defect Trends by Priority Deferred Items

Add New Tab

**Work Item**

Team Area: /Jazz Development/Work Item  
Category: All  
Interval: {Current Iteration}  
Severity: All

Date	Normal	Major	Critical
5/12/08	3	3	1
5/19/08	18	1	1

**Source Control**

Team Area: /Jazz Development/Source Control  
Category: All  
Interval: {Current Iteration}  
Severity: All

Date	Minor	Normal	Major	Critical
5/12/08	1	13	1	0
5/19/08	1	15	1	0

**Process**

Team Area: /Jazz Development/Process  
Category: All  
Interval: {Current Iteration}  
Severity: All

Date	Normal	Major	Critical
5/12/08	7	2	1
5/19/08	13	7	0

**Repository**

Team Area: /Jazz Development/Repository  
Category: All  
Interval: {Current Iteration}  
Severity: All

Date	Normal
5/19/08	11

**Agile Planing**

Team Area: /Jazz Development/Agile Planning  
Category: All  
Interval: {Current Iteration}  
Severity: All

Date	Normal	Major
5/19/08	12	1

**Web UI**

Team Area: /Jazz Development/Web UI  
Category: All  
Interval: {Current Iteration}  
Severity: All

Date	Normal
5/19/08	5

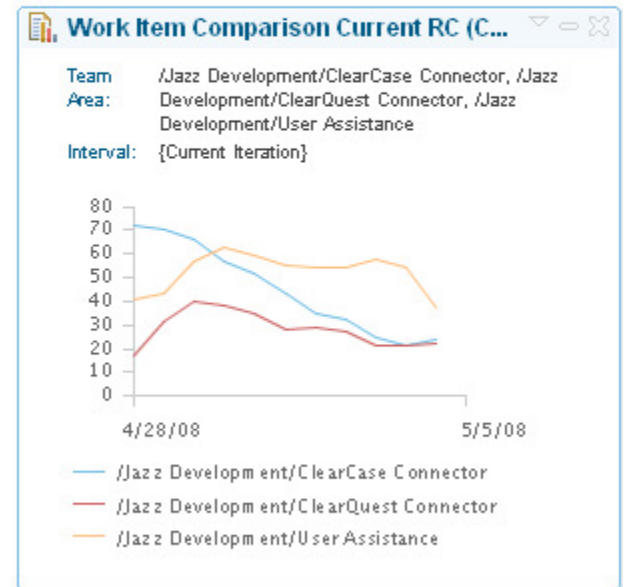
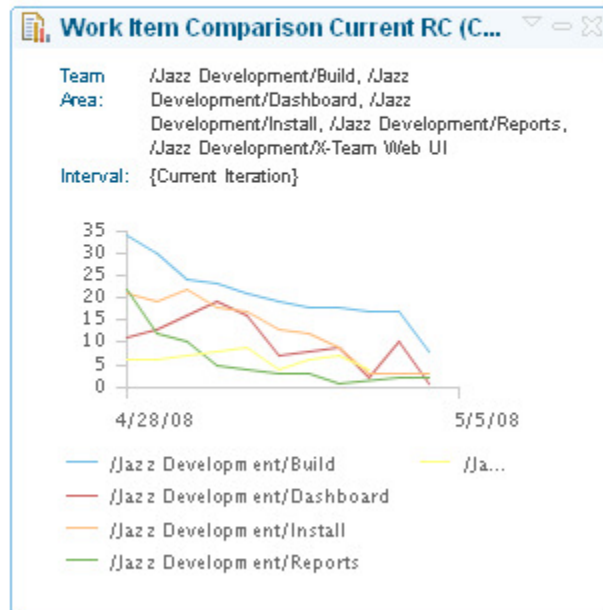
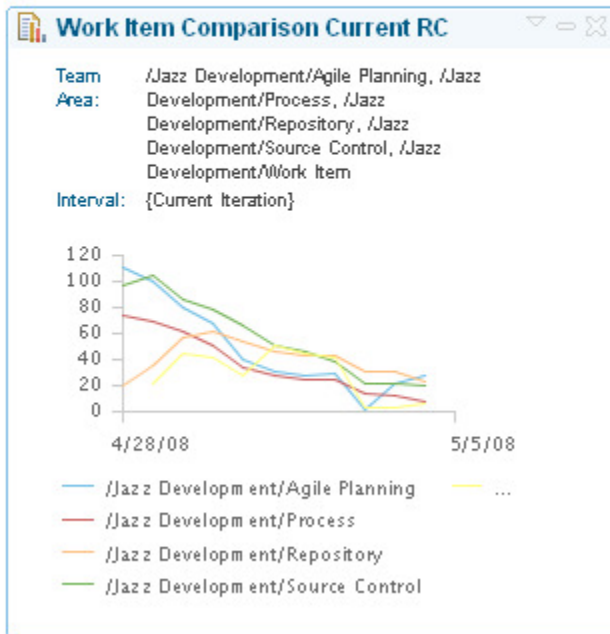
# Trends across Teams

## Jazz Development

General Builds Open Defects by Themes Open Defects by Team SVT Defects by Team **Defect Trend Comparison** Defect Trends by Team

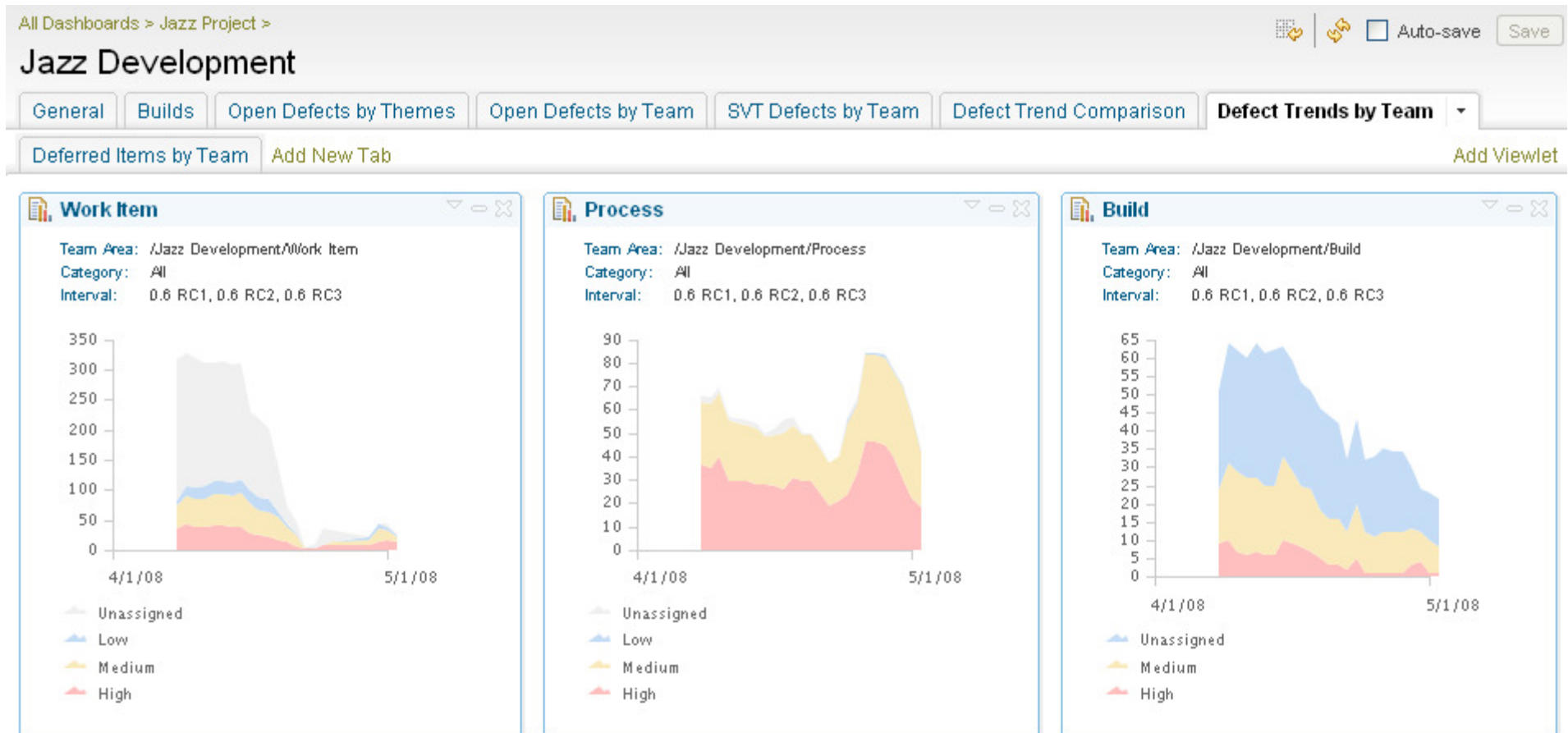
Deferred Items by Team Add New Tab

Add Viewlet

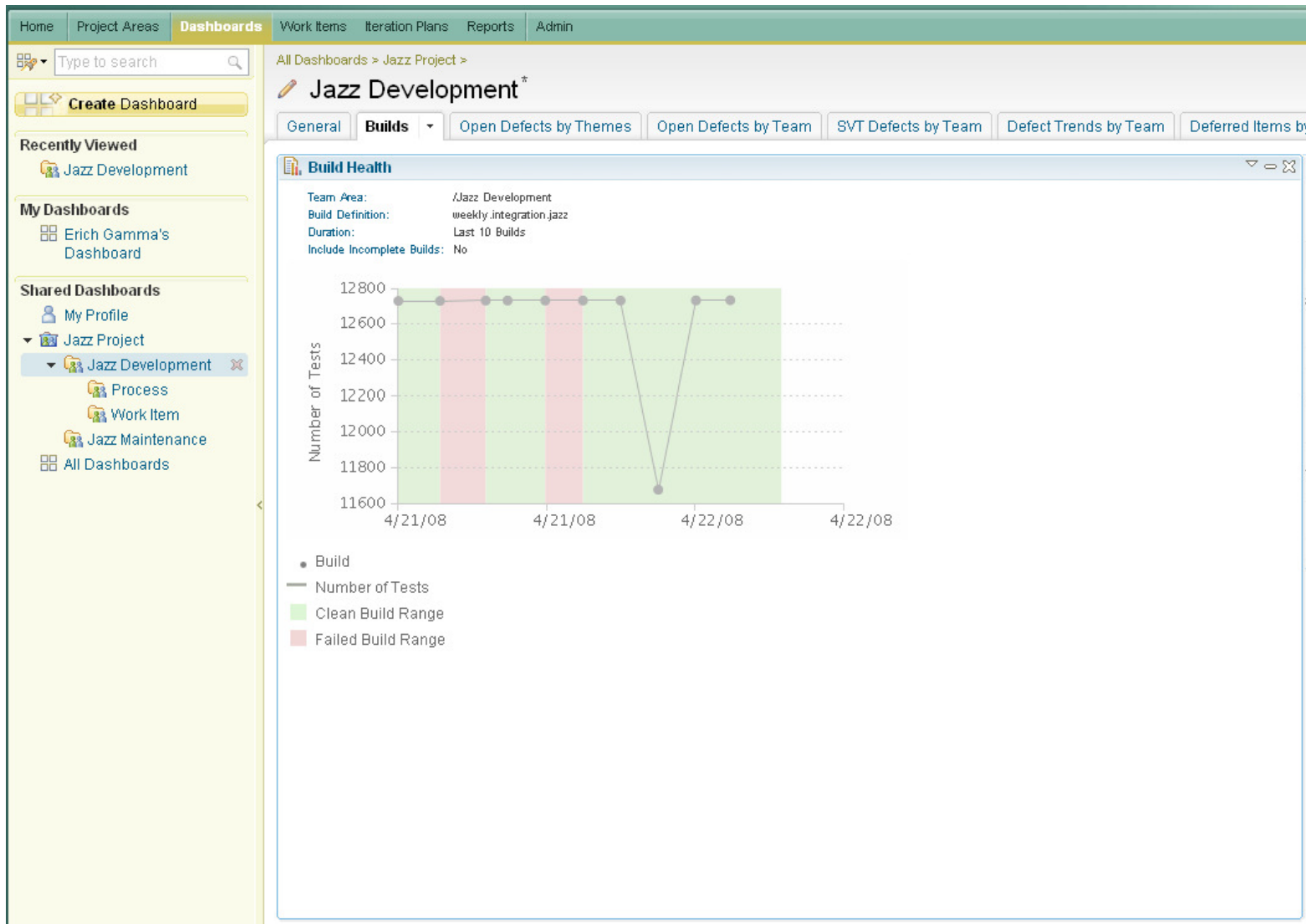




# Trends across Teams (Cont'd)



# Build Health



# Build Health

Home | Project Areas | **Dashboards** | Work Items | Iteration Plans | Reports | Admin

All Dashboards > Jazz Project >

## Jazz Development

General | **Builds** | Open Defects by Themes | Open Defects by Team | SVT Defects by Team | Defect Trend Comparison | Defect Trends by Team

Deferred Items by Team | Add New Tab

**Recently Viewed**

- Jazz Development
- Erich Gamma's Dashboard

**My Dashboards**

- Erich Gamma's Dashboard

**Shared Dashboards**

- My Profile
- Jazz Project
  - Jazz Development
    - Process
    - Work Item
    - Jazz Maintenance
  - All Dashboards

**Jazz Development Builds**

Succeeded: continuous.workitem.jazz C

**Build Health**

Team Area: /Jazz Development  
 Build Definition: weekly.integration.jazz  
 Duration: Last 10 Builds  
 Include Incomplete Builds: No

**Frequent Test Failures**

Team Area: /Jazz Development  
 Build Definition: weekly.integration.jazz  
 Component: All

Test	Failures	Last
JzUnitTests.testBuildClientForCcSync com.ibm.team.connector.scm.cc.client.tests	15	May 2, 2008
WorkItemPublisherTests.testPublishWithChangeSets com.ibm.team.build.internal.publishing.tests	14	May 4, 2008
MyWorkWorkflowTest.testReopenWorkItem com.ibm.team.apt.internal.ide.ui.tests.personal	12	May 2, 2008
WorkItemPublisherTests.testPublishWithChangeSetsLinkTypeNotRegistered com.ibm.team.build.internal.publishing.tests	12	May 4, 2008
JzUnitTests.testUnitTest_RoundTripNewItem com.ibm.team.connector.scm.cc.client.tests	10	May 5, 2008
JzUnitTests.testUnitTest_TasksAndActivities com.ibm.team.connector.scm.cc.client.tests	10	May 5, 2008
TeamLoadInformationTest.testChangeOwnerDuration com.ibm.team.apt.internal.ide.ui.tests.teamload	9	May 2, 2008
WorkItemHelperTests.testCreateAndLinkWorkItemSavedException com.ibm.team.build.internal.ui.workitems.tests	9	Mar 25, 2008
JzUnitTests.testUnitTest_ChangeOtherSyncWs com.ibm.team.connector.scm.cc.client.tests	9	May 5, 2008
WorkItemHelperTests.testCreateAndLinkWorkItemNotSaved com.ibm.team.build.internal.ui.workitems.tests	8	Mar 25, 2008





**Create**  
Work Item

**Create** Query

### Recently Viewed

Track Build Item 55766

### My Queries

- All Open 1.0
- All Plan Items
- beta2candidate
- Beta3 Candidates
- Consumability
- Cross Team RFS
- Fixed SVT Defects

Show All

### Shared Queries

- Predefined
  - Closed created by me
  - Closed subscribed by me
  - New unassigned
  - Open assigned to me
  - Open assigned to me (current milestone)
  - Open created by me
  - Open subscribed by me
- Jazz Development
- Process
- Work Item
- Individually Shared

## Track Build Item 55766

Summary: RC3 status

- Overview Links Approvals History

### Details

Creation Date: 14 May 2008 16:03:01  
 Created By: [Sonia Dimitrov](#)  
 Filed Against:

### Description

Build tracking item for 1.0 RC3.

Current build: [weekly.integration.jazz I20080514-0250](#)

JUnit failure in CQ Connector: [defect 55748](#)

### Discussion (4 comments)

Collapse All | Expand All

- [Sonia Dimitrov](#) 15 May 2008 23:31:58  
Heads up that I will be requesting a test deploy of the most recent green [weekly.integration.jazz](#) build as of 9 am tomorrow (Friday).
- [Ritchie Schacher](#) 16 May 2008 03:44:21  
We also need to request a background migration, rc1->rc2, against the unused db on bluesdev1, to regression test the fix for [bug 55567](#).
- [Richard Backhouse](#) 16 May 2008 13:44:27  
I suspect my changes for workitem [55705](#) have broken alot of junit tests in the Integrations builds. One of the changes I made was to a build pro "com.ibm.team.server.embedded.webapp.webui" plugin to include its plugin.xml among other things.  
  
I'm guessing that the local tests are all sharing the same target platform and now the "com.ibm.team.server.embedded.webapp.webui" is confli "com.ibm.team.server.embedded.webapp.bridge" plugin because the assembly of the com.ibm.team.server.feature.sdk feature is happening in
- [Sonia Dimitrov](#) 16 May 2008 16:07:57  
I have delivered a change to exclude the server SDK from being installed in the test target. I have started [weekly.integration.jazz I20080516-1001](#) Given the number of changes since the last green build ([weekly.integration.jazz I20080515-1452](#)), I will request a test deploy on a build from tod

# A Dashboard of a Project Lead

Home Project Areas **Dashboards** Work Items Iteration Plans Reports Admin

Erich Gamma's Dashboard

Work Items PMC Team Add New Tab

Type to search

**Create Dashboard**

**Recently Viewed**

- Jazz Development
- Erich Gamma's Dashboard

**My Dashboards**

- Erich Gamma's Dashboard

**Shared Dashboards**

- My Profile
- Jazz Project
  - Jazz Development
    - Process
    - Work Item
  - Jazz Maintenance
- All Dashboards

**Bookmarks**

- Weekly Status

**Jazz Project Event Log (32 new)**

- NPE in WorkItemWorkingCopyManager.connectLocal (55014) 10 minutes ago
- \* NPE in SCM Service StateMap while importing (55016) 10 minutes ago
- Missing comment id when starting chat from workitem editor (54332) 20 minutes ago
- Send Mail in context does not work (54367) 20 minutes ago

Page 1 of 5

**Recently High Severity (57)**

- 54458: Add page is a sub menu with no action
- 54516: Process WebUI editors don't give any significant visual guidance
- 54025: Update migration guide for M6a and for Beta3
- 54102: Dragging Jazz artifacts to Sametime 8.0.1 chat window does not work anymore
- 54136: Import of existing CQ data using synch tool is still an issue
- 54162: Confirm Content Accept dialog is modal but not in the foreground
- 54186: Clicking inside query selection dialog resets scroll position
- 54217: CQ Connector outgoing synch error.
- 54239: Install RTC CQ Connectors using the latest Install Doc
- 54242: Team Advisor window doesn't redisplay and no message shows in the Project Area dialog indicating a "Missing required license" issue has occurred when closing down the RTC client in Linux.

Page 1 of 6

**Unknown Inbox (1)**

- 54914: Download of Jazz components crashes Koquerer browser

**Open assigned to me (6)**

- 48865: [Risk] Migrating from an existing bug tracking system
- 38334: PC view got added to the "wrong" place
- 15026: New wizards for workspace and stream just open editor
- 43083: lifecycle coverage gaps in Team Concert
- 44294: Community Site - publish what went into a build (especially
- 53856: Scrum: leverage support to define the initial category name

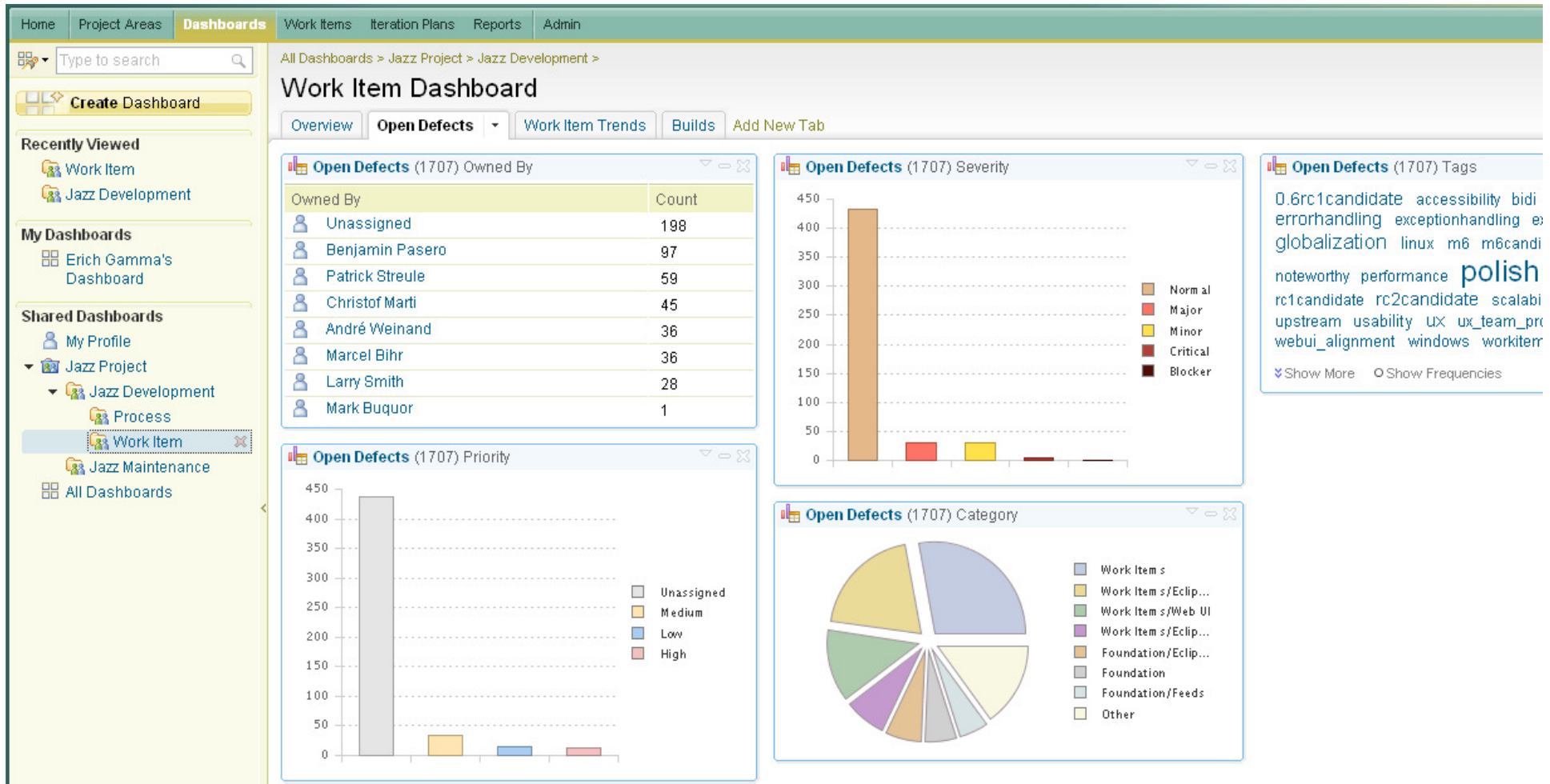
**Pending approvals for me (2)**

- 54208: Beta 3 Install and Licensing test pass
- 54403: License bong attempting to suspend change-set says ope createPersonalWorkspace

**My Queries**

- Non IBM Filed (277)
- All Plan Items (121)
- PMC New (146)
- PMC Plan Items (39)
- Consumability (46)
- Getting Started (143)
- Recently High Severity (57)
- Plan Items (121)
- RFS (28)

# A Dashboard of a Component Lead



## Some Highlights

### Work Items

Bug tracking  
Task tracking  
Planning  
Approvals

### Jazz Source Control

Change Sets  
Streams  
Baselines

### Build System

Coverage  
Static analysis

**Foundation:** Project Areas, Teams, Users, Process,  
Chat, Presence, Events, Alerts, Dashboard, Reports



# Foundation: Feeds, Presence

- Scoped events
  - ▶ My events
  - ▶ Team events
- Team central
  - ▶ Team awareness
- Dashboard
  - ▶ Event viewlets
- User presence

*My Way your way:*  
Subscribe to event feeds of interest

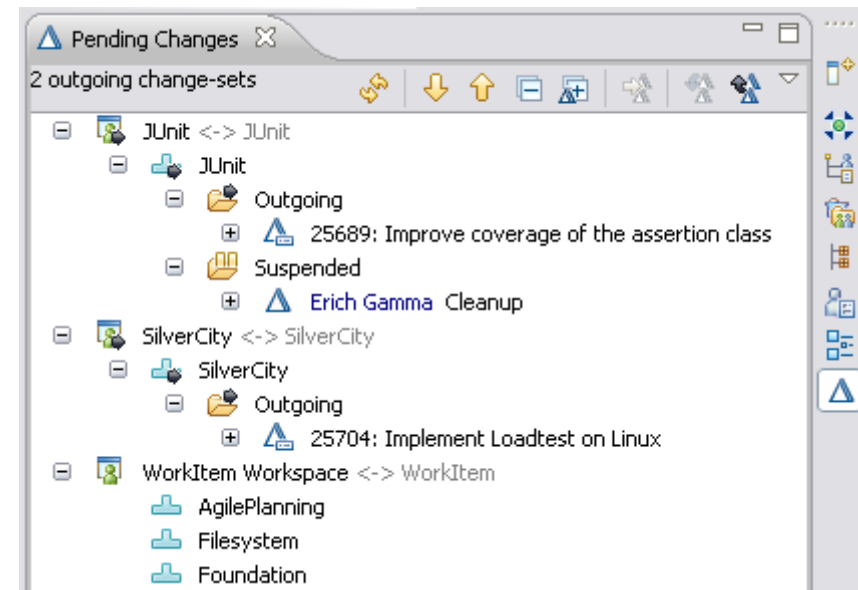
The screenshot displays the Team Central user interface. At the top right, there's a 'Team Central' window with tabs for 'News' (45 unread) and 'Build' (5 failing). The 'Build' tab lists several integration jobs like 'beta2.integration.jazz' and 'buildtest.workitem.jazz'. Below this is an 'Event Log' window showing a list of events, including 'weekly.integration.jazz status - week of March 17, 2008' and 'Improve Team Artifact Navigator initial links (38489)'. A central window shows a detailed event for 'Sametime integration: following a link silently fails when Jazz is not connected to ST (40880)', including a table of status changes:

Status	New → Resolved
Resolution	Unresolved → Fixed
Resolved By	Unassigned → Tobias Widmer

At the bottom, a 'Timeline: Event Log' window shows a calendar view for 'Mar 04 - Week 10' with a list of events for 'Today' (20 items found), such as 'Index out of bounds for project activity for source co' and 'Do not use dialog-specific shell icons' (15883). A pop-up window titled 'Jazz Project Event Log (17, 17 new)' is also visible, listing items like 'checkin needs to track individual upload fail continue onwards (47761) 2 minutes ago'.

# Change Sets, Streams, Components

- ▶ Component based development:
  - Components
  - Base lines
  - Snapshots
- ▶ Multi-streaming is cheap (branching),
  - flexible flowing of change sets
- ▶ Server side workspaces
  - Enables ad hoc sharing of changes, change set sharing
- ▶ Change-set cherry picking
- ▶ Suspending changes
- ▶ Private versions
- ▶ Refactoring tracking ⇒ enables aggressive/agile refactoring



*My Way your way:*

- Customizable flows
- Stream levels
- Delivery rules

# Work Items Planning tracking

- ▶ Tight eclipse integration
- ▶ Iteration planning
  - From unstructured to structured
  - Work item decomposition
- ▶ Personal planning
  - My work

## My Way your way:

- Work item types
- Workflows
- Approvals
- Save preconditions

**Task 21395**  
Summary: \* Remove deprecated Query API  
Status: Resolved, Fixed

**Details**  
 Type: Task  
 Severity: Normal  
 Version: Unassigned  
 Created: 16 avr. 2007 15:23  
 Created By: Ritchie Schacher  
 Team Area: Repository / Jazz Project  
 Category: Repository/Persistence  
 Tags: query0  
 Owned By: Ritchie Schacher  
 Priority: High  
 Target: 0.6 M1  
 Estimate:  
 Due: 17 avr. 2007

**Description**  
 This is an umbrella to capture all places where components must opt in to the new query.  
 Components should do the following:  
 1) Markup queryable properties, and opt-in fully, using the annotation dbMapQueryableProperties only on their model. Regen code.  
 2) Search for all references to IQueryService0#executeItemQuery and IQueryService0#executeDataQuery. Replace these references with new AST query based service methods.

**Discussion** (4 comments: 4 new)  
 1. James Moody, 16 avr. 2007, 16:29  
 2. Ritchie Schacher, 16 avr. 2007, 17:00  
 3. James Moody, 16 avr. 2007, 18:08  
 4. James Moody  
 James\_Moody@ca.ibm.com  
 Teams: Jazz, Reports, Reports

**Links Summary**  
 Children (7): 19001, 21402, 21403, 21404, ...  
 Subscribers (9): André Weinand, Bill Higgins, ...  
 Included in builds (7)  
 Change Sets (8)  
 Related (1): 18787

**Iteration Plan: Foundation & Work Items [0.6 MSD1]**  
 Dec 3, 2007 -8 | Jan 25, 2008  
 93% 7%  
 Team Area: Work Item | Iteration: 0.6 MSD1  
 214 Closed Items 15 Open

Open items: 0 | Closed items: 32  
 Better align Web UI and Eclipse UI 1 day  
 Enable using Jazz for Open Source projects 0 hours

Marcel Bihl  
 Open items: 0 | Closed items: 24

Martin Aeschlimann  
 Open items: 0 | Closed items: 0

Michael Schneider  
 Open items: 0 | Closed items: 1

Patrick Streule  
 Open items: 13 | Closed items: 40

Missing distinct in TC query count statements? -  
 Better align Web UI and Eclipse UI 1 day  
 Edit unsaved queries once they are run -  
 Set 'Cache-Control: public' header for IImageContentService HTTP responses -  
 Web UI Query Editor: Gray out and disable unavailable attributes -

Overview | Planned Items | Charts | Test Plan

# Builds

- ▶ Build awareness for developers
- ▶ Build results integrated into eclipse
- ▶ Linkage between
  - Work item fixed in build
  - Build corresponding to a
  - Build and release
  - change-sets in build
- ▶ Private system builds
- ▶ Build comparison
- ▶ Build promotion, tagging

*My Way your way:*

- Build definitions
- Build result contributions

**Work Items - C20080121-1004 - Team Concert**

Build continuous.workitem.jazz C20080121-1004

**Completed**

Duration: 1 hour, 26 minutes, 51 seconds  
 Start Time: Mon, 21 Jan 2008 15:54:33  
 Completed: Mon, 21 Jan 2008 17:21:25

Status Trend: [Progress bar]

**Contribution Summary**

Downloads: [9 downloads](#)  
 External Links: [1 link](#)  
 Logs: [7 logs](#)  
 Repository Workspace: [WorkItemContinuousBuild](#)  
 Compile: [0 errors, 530 warnings](#)  
 Snapshot: [continuous.workitem.jazz\\_C20080121-0954](#)  
 JUnit: [932 tests, 0 failures, 1 error](#)  
 Work items: [3 included in build](#)  
 Coverage: [type: 28%, method: 23%, block: 19%, line: 19%](#)  
 Changes: [Show changes](#)

**Reported Work Items**

- [2 reported against this build](#)
- [2 currently open against continuous.workitem.jazz](#)
- [Create a new work item](#)
- [Associate an existing work item](#)

**General Information**

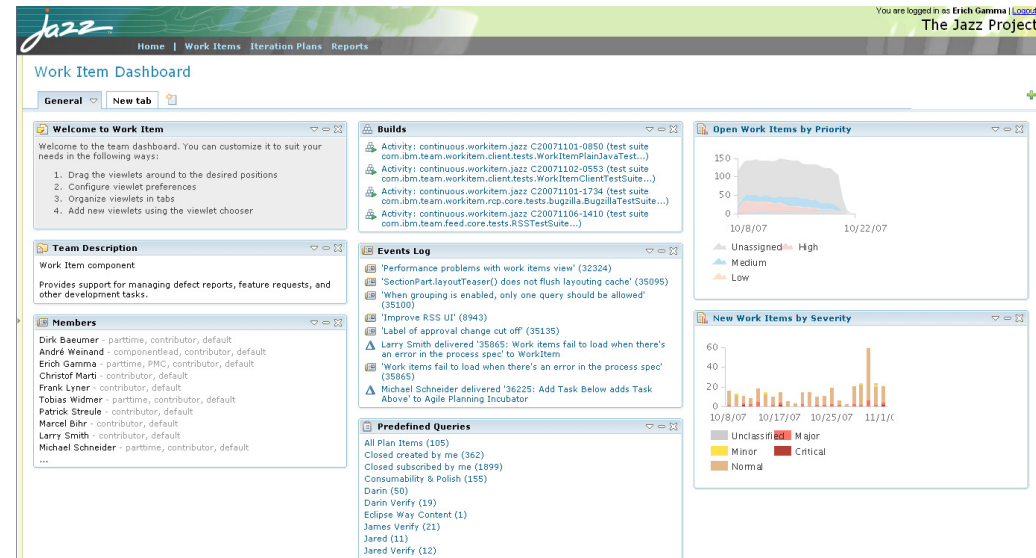
Requested by: ADMIN  
 Build Definition: [continuous.workitem.jazz](#)  
 Build Engine: [apollobuildserv6](#)  
 Build History: [26 builds](#)  
 Tags:   
 Deletion allowed

Build	Label	Progress	Estimated Completion	Start Time	Requestor	Dur
continuous.workitem.jazz	C20080122-0400	Abandoned		Tue, 22 Jan 2008 09:49:19	ADMIN	5 hor
continuous.workitem.jazz	C20080122-0318	Abandoned		Tue, 22 Jan 2008 09:18:40	Marcel Bihl	54 se
continuous.workitem.jazz	C20080122-0307	Abandoned		Tue, 22 Jan 2008 09:17:59	Marcel Bihl	1 mir
continuous.workitem.jazz	C20080122-0246	Completed		Tue, 22 Jan 2008 08:35:29	Christof Marti	1 hor
continuous.workitem.jazz	C20080121-1156	Completed		Mon, 21 Jan 2008 17:51:13	Christof Marti	1 hor
continuous.workitem.jazz	C20080121-1004	Completed		Mon, 21 Jan 2008 15:54:33	ADMIN	1 hor
continuous.workitem.jazz	C20080121-0852	Completed		Mon, 21 Jan 2008 14:54:19	ADMIN	1 hor
continuous.workitem.jazz	C20080121-0543	Abandoned		Mon, 21 Jan 2008 11:54:04	ADMIN	1 mir
continuous.workitem.jazz	C20080120-1426	Abandoned		Sun, 20 Jan 2008 20:26:59	ADMIN	19 h



# Dashboards/Reports

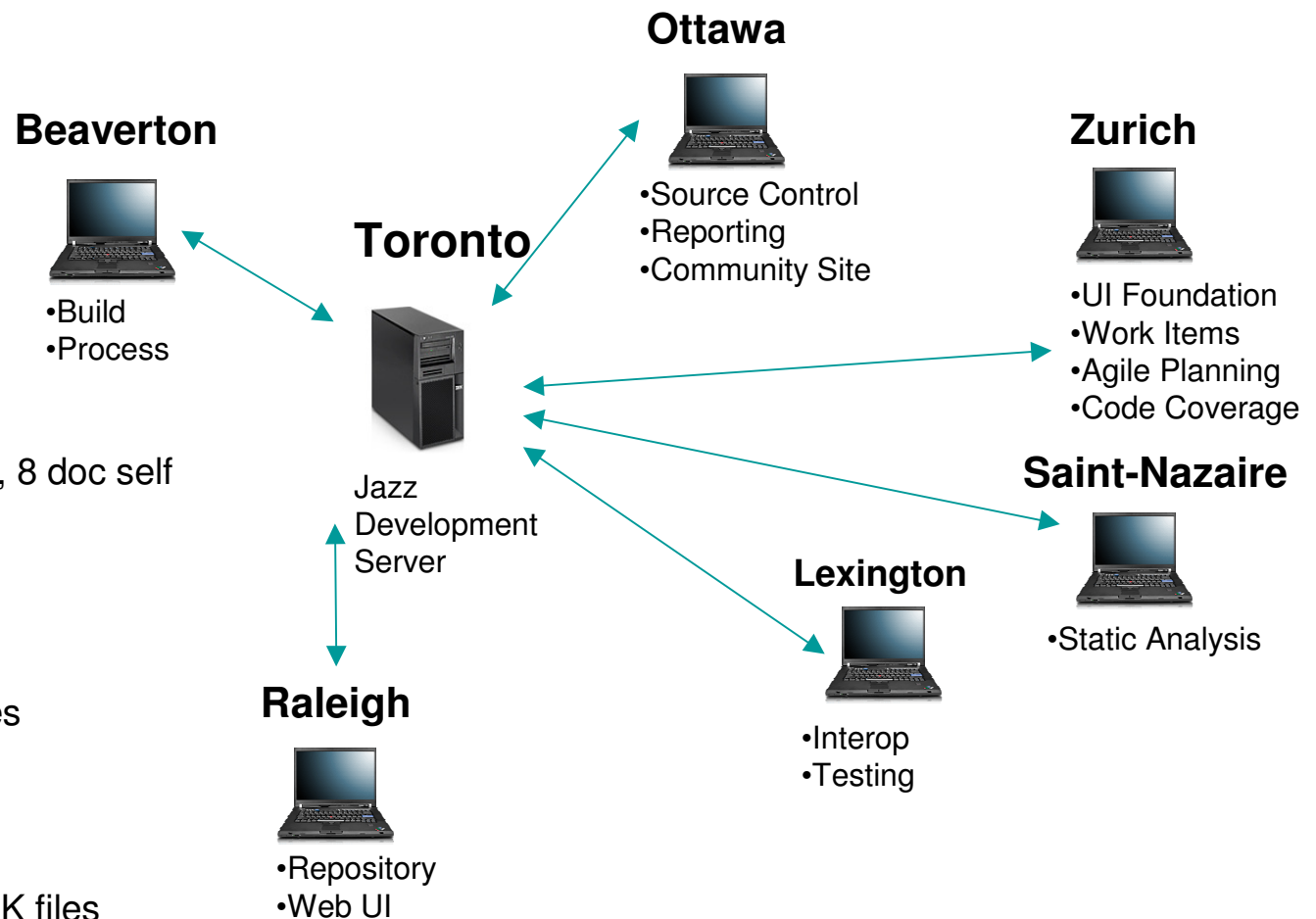
- Scoped by
  - ▶ Project
  - ▶ Team
  - ▶ user
- Viewlet collection
  - ▶ Events, feeds
  - ▶ Queries, bookmarks
  - ▶ Reports with drill down
  - ▶ Planning



*My Way your way:*

- Create dashboards
- Add and customize viewlets

# How we Develop Team Concert/Jazz: Setup



- 70 developers, 20 testers, 8 doc self hosting on Jazz.
- 18,000 change-sets
- 40,000 work items
- 250 repository workspaces
- 66K files
- 10GB file content
- Integration stream has 30K files
- 40 builds a day
- Weekly integration build

## Experiences

- We have become **more continuous**
  - ▶ If it is hard, do it more often, how can you help If it is **simple** to do ⇒ do it more **frequently** ⇒ do it **continuously**
    - Initiate a build, private builds, exchange a change set
    - Coverage, static analysis ⇒ you do not want to run this on the desktop
- Things important to us we make **explicit**
  - ▶ custom work item types, retrospectives, stories, adoptions, track build items...
- Increased **awareness** – staying on top of things
  - ▶ Linking, build awareness, team awareness, dashboards
- Improved **practices**
  - ▶ Retrospectives ⇒ leverage project health data
  - ▶ Testing ⇒ coverage

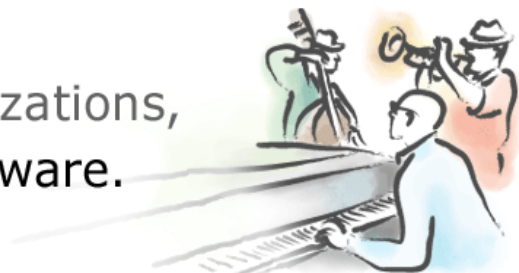
## New & Noteworthy in Beta 3



- SCM
  - ▶ Subversion bridge
  - ▶ Version graph
  - ▶ Command line
- Web UI
  - ▶ Dashboard
- Process
  - ▶ Process editors
  - ▶ Scrum, Agile process templates
- Work items
  - ▶ Approvals
  - ▶ New query editor, link queries
  - ▶ Mylin Incubator
- Jazz Team Server
  - ▶ LDAP
  - ▶ Permissions
  - ▶ Oracle support
- Planning
  - ▶ Team load, My work view
- Build
  - ▶ Personal builds
  - ▶ “Found in” links

Everybody can try it out now

People,  
not organizations,  
build great software.



**How do I Join?**

Access to jazz.net is now open to Rational customers and business partners, and select others by invitation. [Learn more.](#)

[Register now!](#)

Forgot your [username](#) or [password](#)?  
Not a Rational customer or partner?  
Email [info@jazz.net](mailto:info@jazz.net) for more information!

**What is Jazz?**

Simplicity through consistency. Collaboration in context. Agility through transparency... Jazz is about helping people work together to build software more effectively, while making the software development experience more fun!

Jazz is a joint project between [IBM Rational](#) and [IBM Research](#) to build a scalable, extensible team collaboration platform for seamlessly integrating tasks across the software lifecycle.

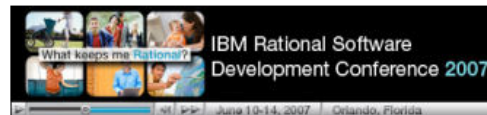
**Learn more...**

You can learn more about Jazz by watching the [demo videos](#) of our events.

[More >>](#)

**Rational Software Development Conference 2007**

Check out our [coverage](#) from the Rational Software Development Conference.



**In The News (top 4)**

- IBM's Jazz: possibly dancing to an open source tune? - ars technica Sat, 25 Aug 2007
- IBM May Open Source Jazz Collaboration Software - PC World Fri, 24 Aug 2007
- Podcast: Interview with Erich Gamma - IBM DeveloperWorks Mon, 25 Jun 2007
- IBM Touts Jazzy New Development Strategy - ChannelWeb Mon, 18 Jun 2007

[More >>](#)

**Upcoming Events (top 3)**

- CASCON 2007, October 22 - 25, Toronto, Canada Wed, 29 Aug 2007
- OOPSLA 2007, October 21 - 25, Montreal, Canada Wed, 29 Aug 2007

[More >>](#)

# Getting Started

- Go to Jazz.net
  - ▶ Forums
  - ▶ Developer Wiki
  - ▶ Blogs
  - ▶ Install
- Jazz workshop
- Install
  - ▶ Try the JUnit Sample Project

**First Steps**

**Learn about Rational Team Concert**

- What you need to know to get started**  
Read this one page "Jazz Platform quick reference" to learn the basic terminology and concepts before you get started.
- What is Jazz?**  
Jazz is a scalable, extensible, team collaboration platform for seamlessly integrating tasks across the software lifecycle.
- Overview of the Jazz Platform architecture**  
Learn about the architecture of the Jazz Platform: the repository, server, and components.

**Project administrators**

- Set up a new Jazz project area and team area**  
This cheatsheet quickly guides you through the steps for making a repository connection, creating a new Jazz project area, adding a team area, and adding members to the team. If you just installed the server and client, this is a great place to start.
- Create a sample Jazz project area**  
Click here to add a sample Jazz project area to your repository. The sample includes team areas, team members, processes, work items, streams and components. This is a great way to explore and start planning.

**JUnit Sample Repository Process:** This sample process contains exemplary process definitions used in the JUnit sample repository.

**Process Iterations**

- development
  - 4.4 [2/14/08 - unknown]
    - 4.4 m1 [1/15/08 - 2/14/08]
      - 4.4 m2 [2/14/08 - 3/15/08]
        - Development
        - End Game
      - 4.4 rc0 [3/15/08 - unknown]
        - Development
        - End Game
      - 4.4 rc1
        - Development
        - End Game