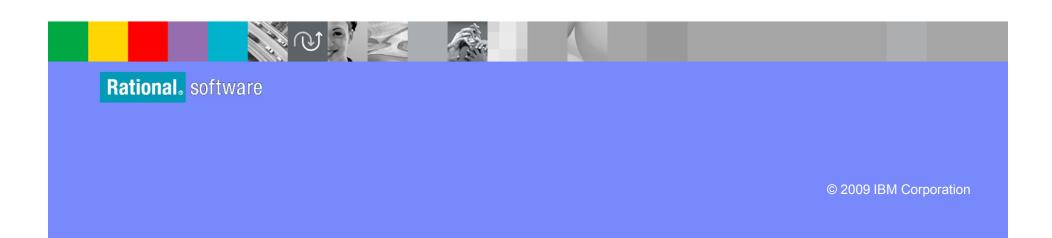


## **IBM Software Group**

# **Rational Team Concert**



# Agenda

- Jazz platform introduction.
- Rational Team Concert introduction.
- Rational Team Concert in-depth.
  - ▶ Jazz Team Server features
  - Change management with work items and planning
  - Version control
  - ▶ Build Management
- Extensions to Rational Team Concert.
  - ▶ RTCp
  - **▶** RTCz
- Live Demo.





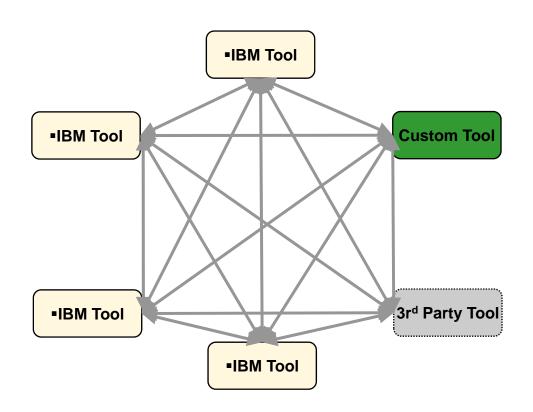
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## Our customers have invested in a diverse set of tools...

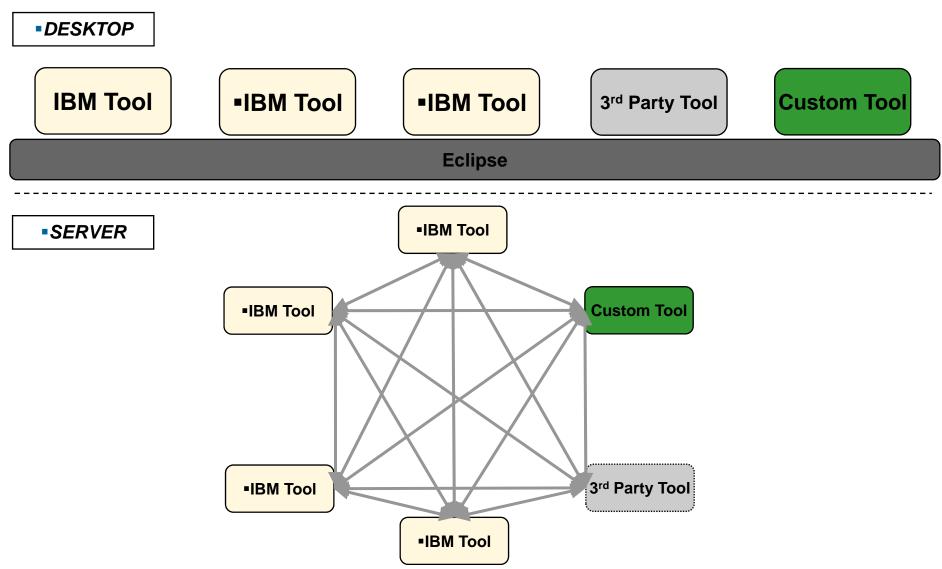
- Traditionally, each tool came with its own
  - UI Web and desktop presentations of views and tasks
  - ▶ Logic Workflow, process, search, query, scale, security and collaboration
  - Storage Availability, traceability
  - ▶ Privacy, backup/archive
- Resulting in...
  - ▶ Brittle integrations
  - Silos everywhere
  - High cost to maintain and administer
  - Proprietary API's



How do you solve this?

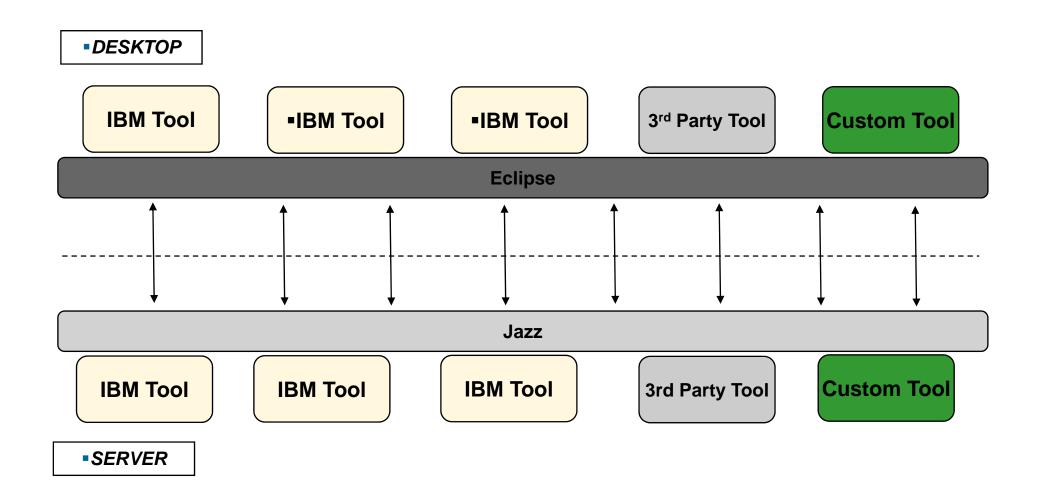


# First step with Eclipse some years ago...





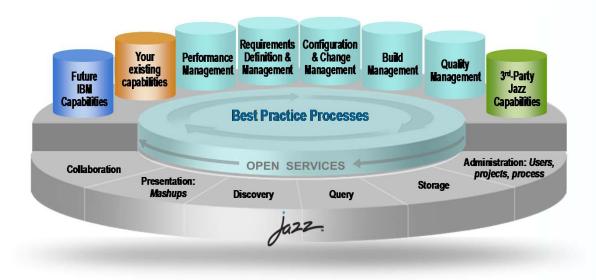
# Next step with Jazz today...





# The Jazz technology

# Collaborative hub for Systems and Software delivery solutions



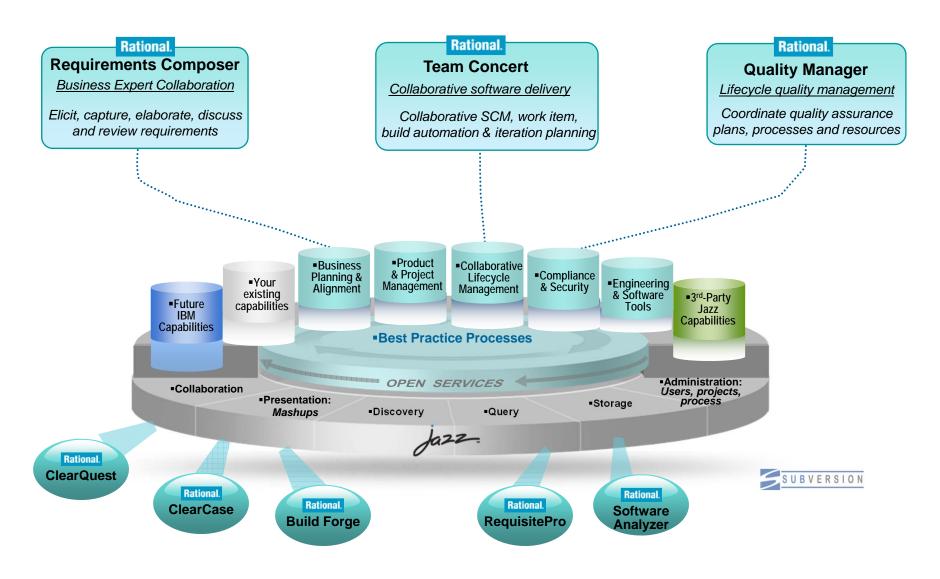
\*Jazz is a project and platform for *transforming* how people work together to deliver greater value and performance from their software investments.

## Jazz is...

- A scalable, extensible team collaboration platform
- A community at Jazz.net where you can see Jazz-based products being built
- Our vision of the future of systems and software delivery, supporting globally distributed teams
- An integration architecture enabling mashups and non-Jazz based products to participate
- An evolution of our portfolio which will evolve to leverage Jazz technology over time



# First wave of products built on Jazz technology





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## **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

Parallel development

ClearCase bridge and connector

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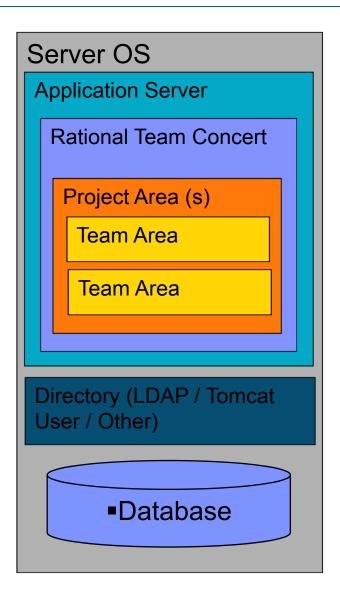
Process enactment and enforcement

In-context collaboration enables team members to communicate in context of their work



# RTC Server Logical Architecture

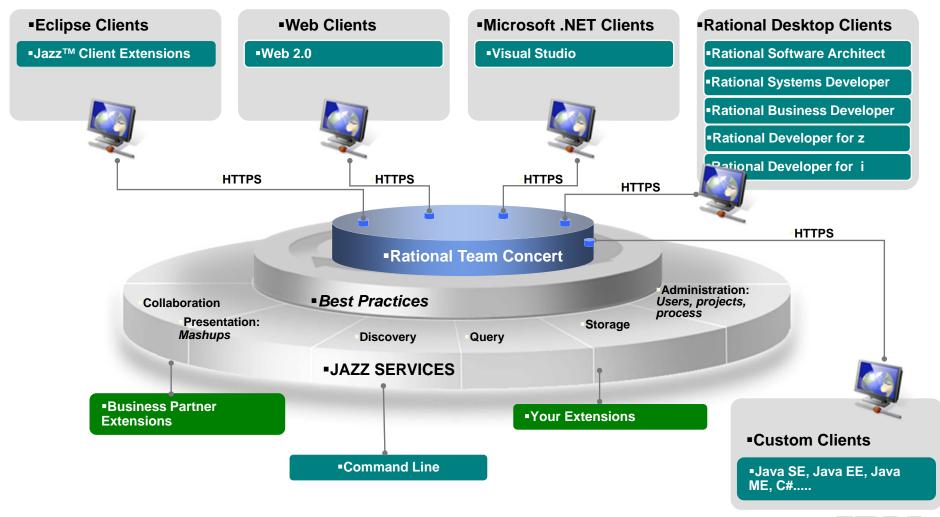
- Server Operating System
  - Windows
  - **▶** Linux
  - ▶ AIX
  - ▶ Solaris
  - ▶ OS/400
  - > z/OS
- Application Server
  - ▶ WebSphere Application Server (WAS)
  - ▶ Apache Tomcat Application Server
- Database
  - Derby
  - ▶ DB2
  - ▶ Microsoft SQL
  - ▶ Oracle
- Directory Services
- Rational Team Concert Server





# Rational Team Concert clients

Supporting a broad range of desktop clients, IDE's and languages





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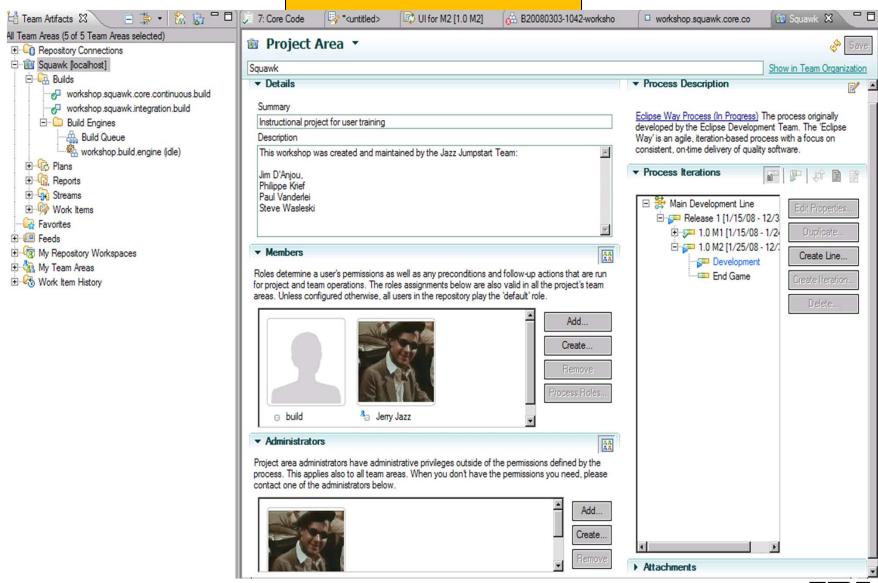
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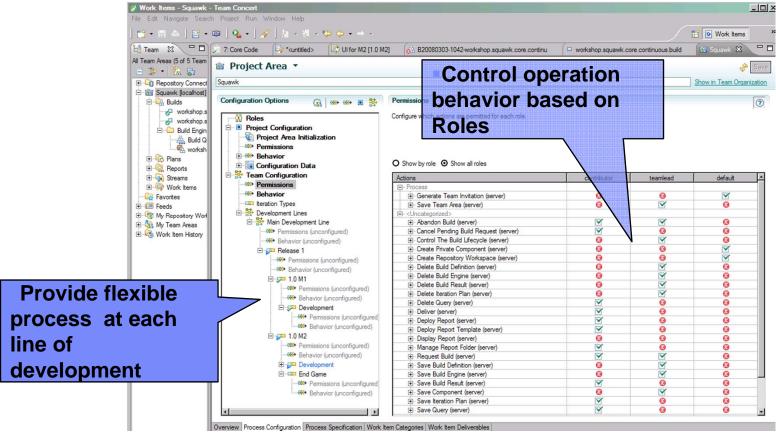


# Organization levels in Jazz



## Access control

- Two levels of access control :
  - ▶ Access control controlled by application server (LDAP)
  - ▶ Access control in Jazz platform (roles with specific permissions for SCM related funcitons)
- All jazz products share the same access control menus (each tool adds its own permissions)

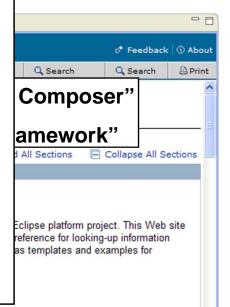


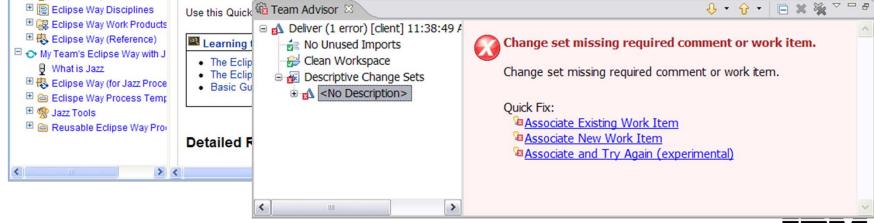


## **Enables Process Automation and Guidance**

#### Team Advisor

- Rules can be run when delivering changes to enforce team or organizational standards
- Helps ensure higher quality results through enforcement of agreed-upon standards
- Rules are configurable
- "Quick Fixes" can be specified to simplify corrective action
- Process rules can be defined, refined "on the fly", enabling continual improvements





# Process templates

- Process templates provide a starting point and a guide for a project area process configuration and iteration structure
- A process template defines the:
  - ▶ Iteration structure
  - ▶ Roles
  - Permissions
  - Work item types
  - Queries
- You apply a process template when you create a project area

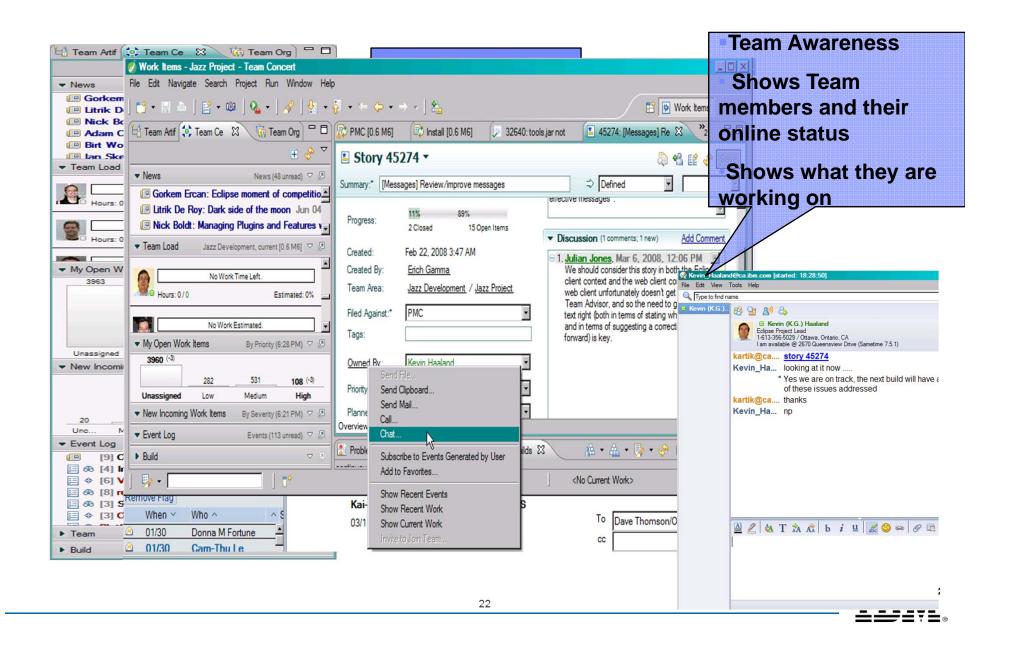


# Predefined process templates

- Rational Team Concert provides the following predefined process templates:
  - Cloudburst Supports the Cloudburst reference project available with the Jazz technology platform
  - OpenUp Preserves the essential characteristics of the Rational Unified Process
  - ► Simple team
    Enables teams to get started quickly
  - Supports the agile approach to managing projects
  - ► Formal Project Management Supports traditional projects



# In Context Collaboration



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# **Project Plans**

- A plan revolves around the following elements
  - ▶ Teams
  - ▶ Time
  - ▶ Work
- Planning levels
  - ▶ Release
  - ▶ Iteration/Sprint
  - ▶ Your day-to-day work

== 1.0 M3 3 Aug 2009 - 31 Dec 2009

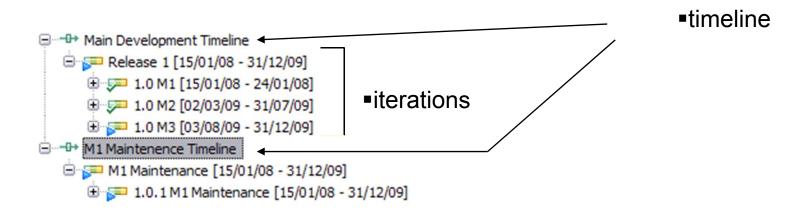






## Time

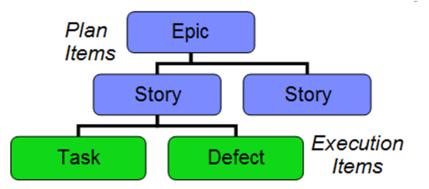
- A project has one or more schedules or timelines.
- Each timeline is broken down into a series of iterations
- Each iteration can be broken into smaller iterations as required
- A milestone marks the end of an iteration
- At the end of any iteration, you may produce a release





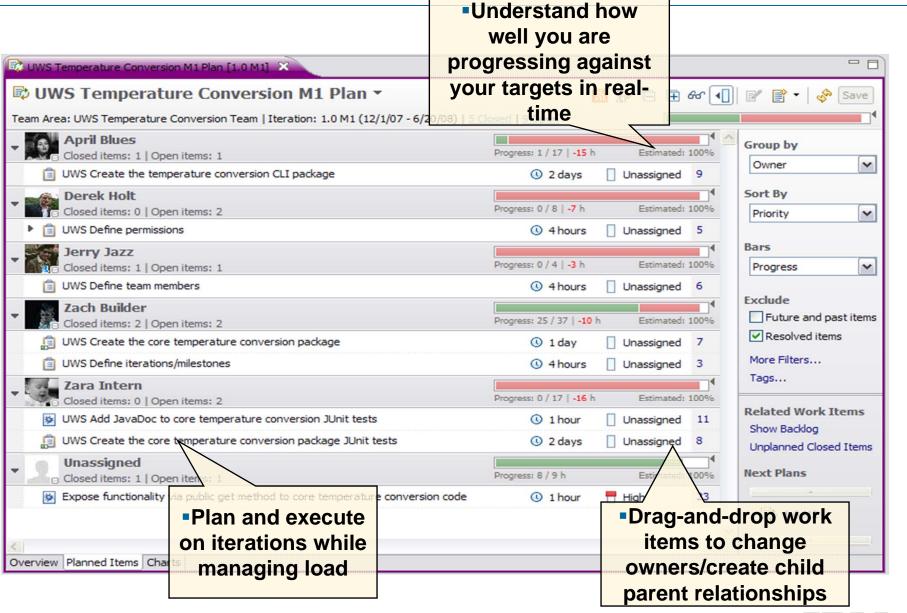
## Work

- All work in your project is tracked as one or more Work Items
- Different kinds of work items are available including
  - ▶ Plan work item types, for example:
    - Plan Item
    - Epic
    - Story
  - ▶ Execution work item types, for example:
    - Task
    - Defect
  - ▶ Plan work item types are used to capture high-level plan elements
  - ▶ Execution work item types are used to capture the lower-level details and the work should be completed in a single iteration
- Each kind of work item has its own lifecycle and data



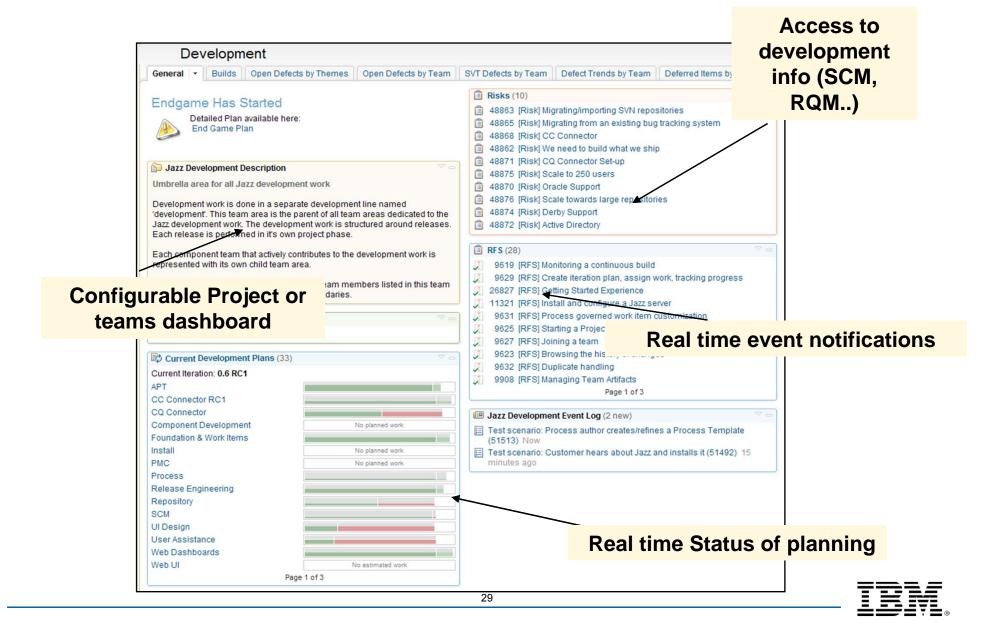


# Work planned is captured as work items





## Customizable web dashboard



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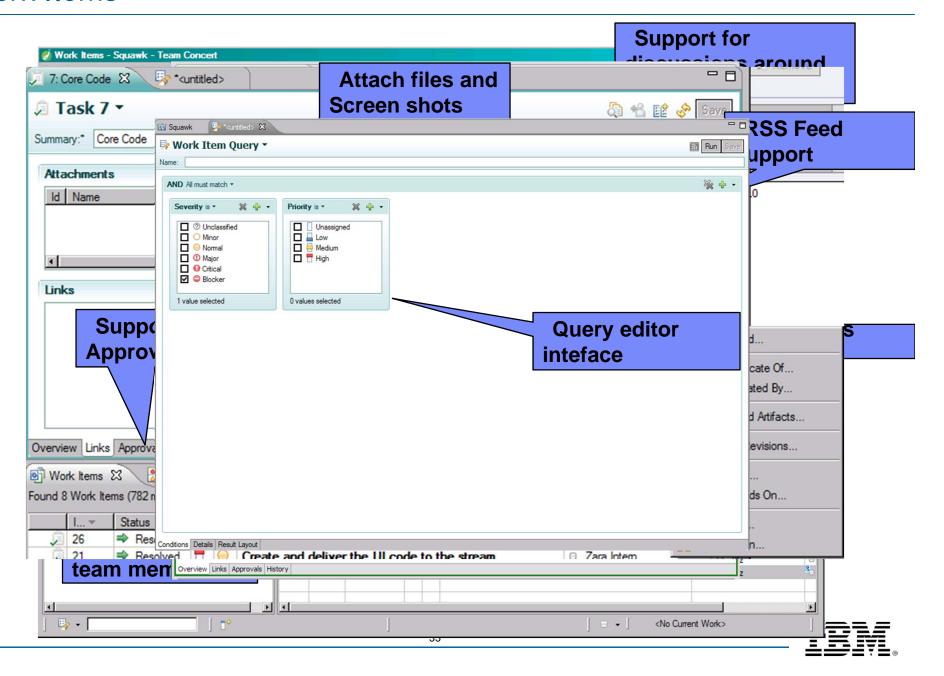


## Work items

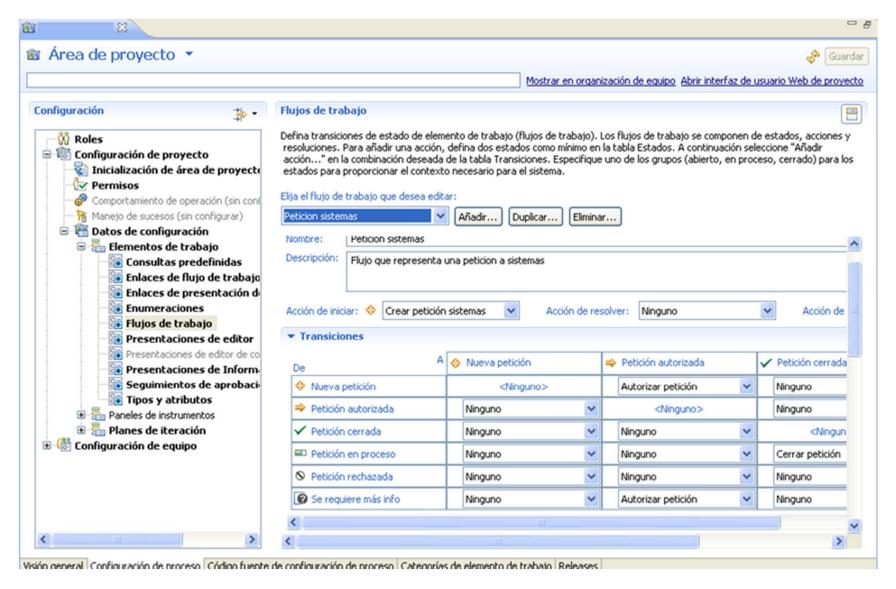
- Work planned for a project is captured in work items
- There are different types of work items
  - Defect—identifies a bug
  - ▶ Enhancement—describes a requested new feature
  - ▶ Task—describes a specific piece of work
  - ▶ Plan Item—provides a high-level description of work targeted for a specific iteration
  - Story—describes part of a use case
- Typical work item attributes
  - Workflows and Status
  - Properties and Values
  - Approvals
  - Attachments



# Work Items

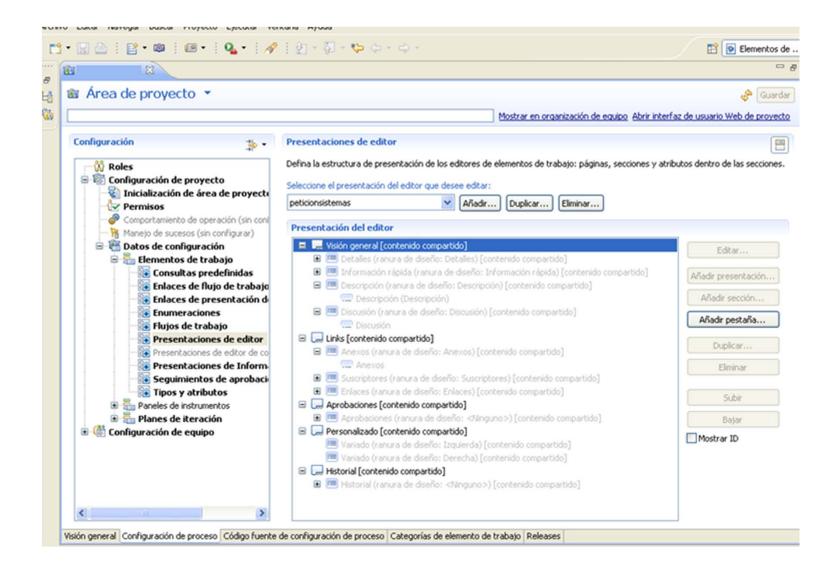


# Visual configurator for states, actions and fields





# Visual configurator to select the format of displayed info





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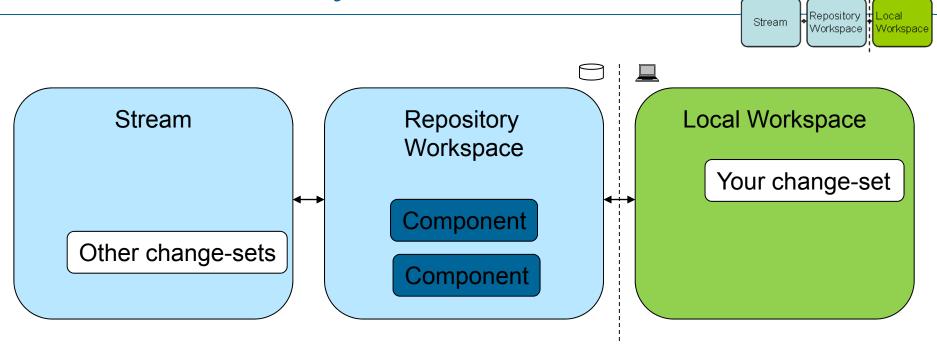
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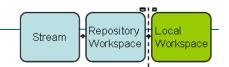
# Basic Jazz SCM Anatomy

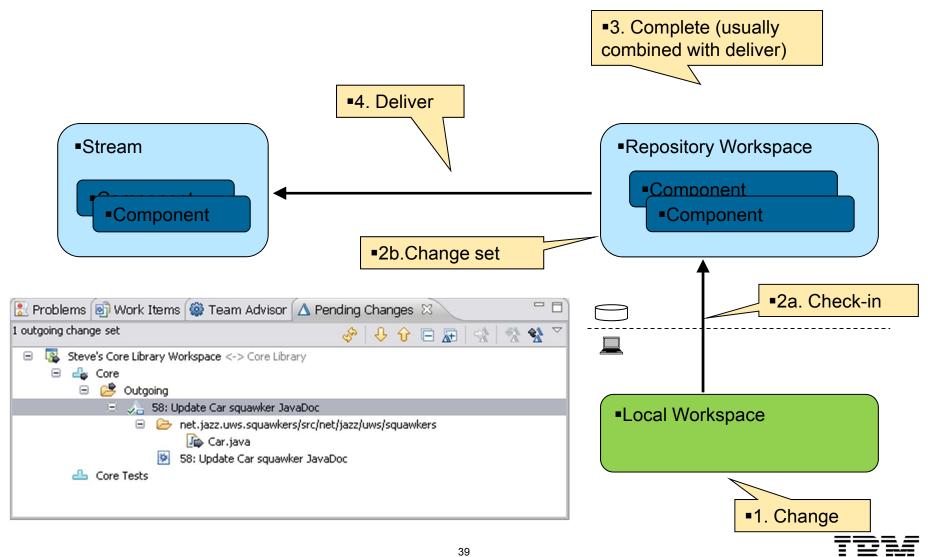


- Streams are for sharing with the team
- Repository workspaces are your personal space in the server
- The local workspace is a folder on your local files system where you develop and test
- Change-sets flow back and forth



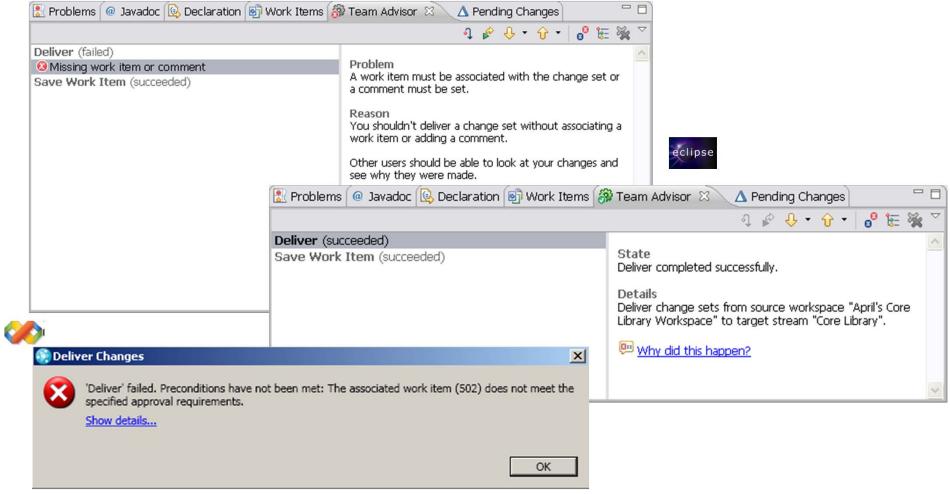
# Typical Journey For A Change set





# Change-set Delivery is Process Enabled

 The deliver operation is process-enabled, allowing the team's process to check and enforce delivery rules automatically

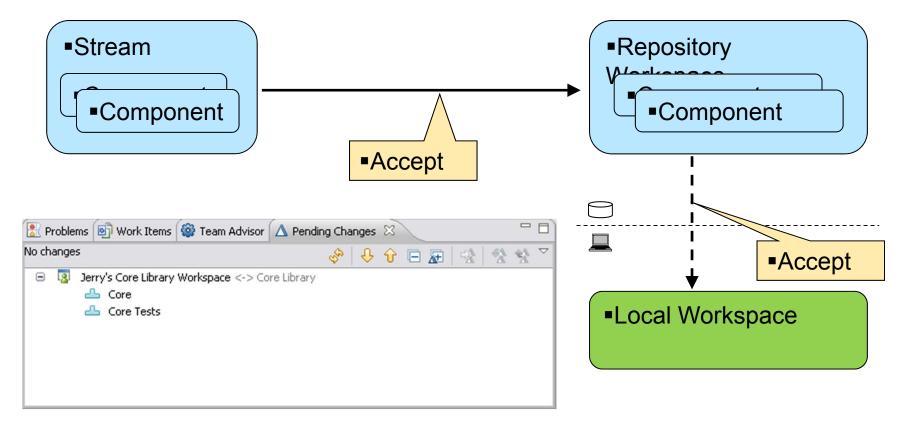




# Getting Teammates' Delivered Work



- An incoming change-set is
  - In the change history of the stream, but
  - Not in the change history of your repository workspace
- Accept adds the change-set to your repository workspace's change history





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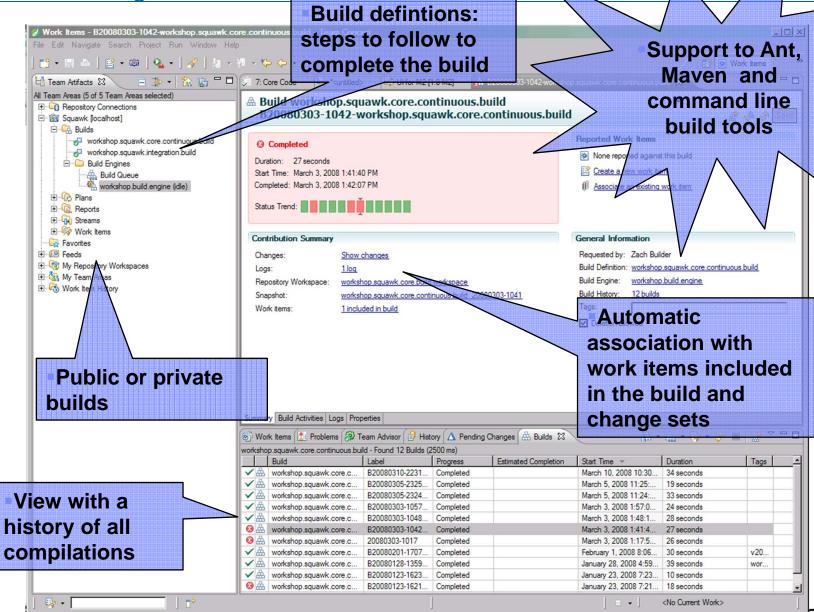
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**Build Management** 



# Jazz database build objects

### Build definition

- Defines build script and other properties that specify how the build is invoked
- Defines a build schedule for automated builds
- Specifies which workspace to build from

# Build engine

Represents a process on a build machine that polls the repository for build requests

# Build request

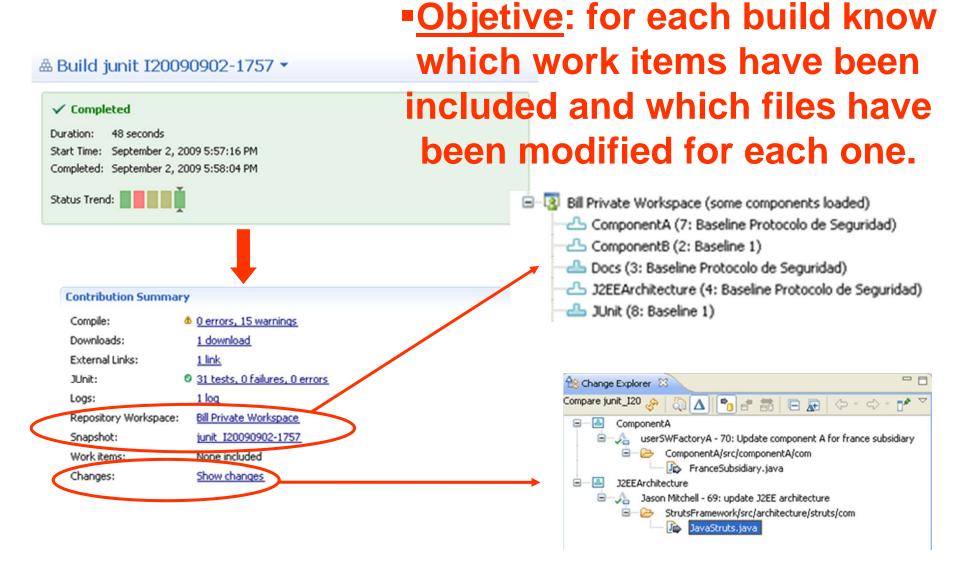
Represents a request to run a build (as specified by the selected build definition) on the next available build engine

### Build result

Contains the output from a build, such as execution summaries, logs, and properties



# History and traceability build-work items-file changes





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# Rational Team Concert for System p

#### Rational Team Concert For Power Systems Software

#### **Rational Team Concert**

#### **The Jazz Platform:**

#### An Open, Services Oriented Architecture that

- Enables teams to collaborate in real time in the context of their work with integrated software delivery lifecycle tools
- Provides visibility into accurate current project health information drawn directly from actual work across the team
- Automates traceability and auditability by managing artifacts and their interrelationships across the lifecycle
- Enables custom process enactment via process automation & definable checkpoints
- Provides an extensible technology platform for building products & adapters

# A New Family of Products based on Jazz Technology

- Consolidates the team's assets and activities on a Team Server
- Optimized for Agile development teams
- In-place collaboration between team members
- Support and enforcement for development processes
- Transparency of status and trends through automated data-gathering and reporting
- Low administrative footprint
- ClearCase & ClearQuest Connectors

#### New Family of Products based on Jazz Technology for IBM i

- Jazz Team Server which runs natively on the IBM i OS and using DB2 for i
- Integration with RDP to enable team collaboration support
- Capabilities for native IBM i application developers writing in RPG, COBOL, CL, DDS, etc.
- -Build system toolkit which runs natively on IBM i (Run IBM i commands and call native programs)
- Support for IBM i file systems: Libraries and IFS



# Rational Team Concert for System z

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# Foundation for a New Family of Products based on Rational Team Concert for System z

- Provides a Team Server that is hosted natively on z/OS or zLinux; primarily supporting multi platform Java and C++ development
- SCM and Build support for COBOL, PL/I, HLASM.



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