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Putting the Agility into software delivery with IBM Rational Team Concert

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Business needs software delivery that supports agility..

Must Deliver:

- ✓ More solutions
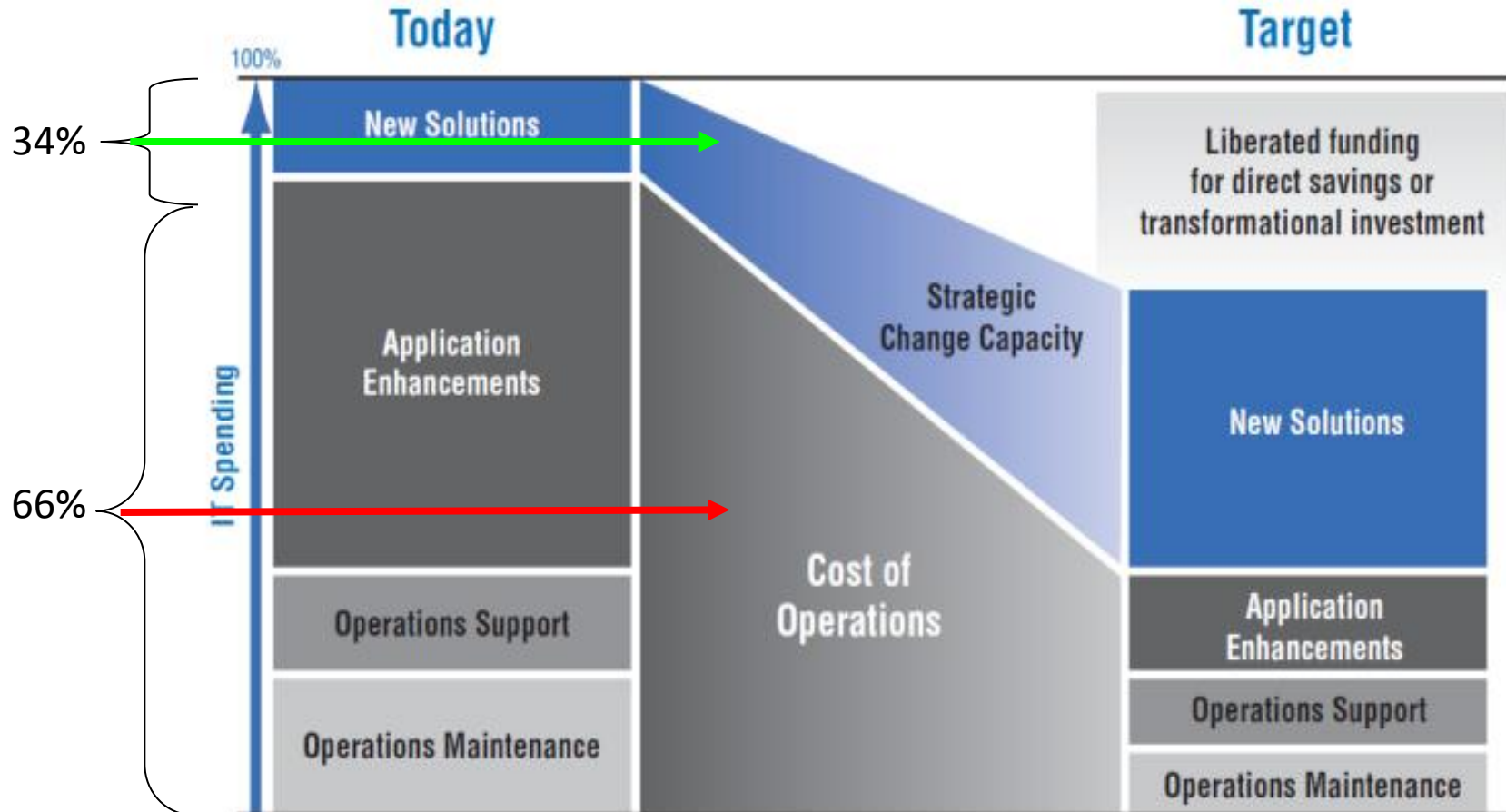- ✓ More flexibility
- ✓ More quality
- ✓ More value

-yet-

- ✓ Less risk
- ✓ Less costs
- ✓ Less or flat resources

Business Needs

Resources

Effective software & systems development promotes a delicate balance of resources, reducing costs while delivering more, higher-quality business solutions.

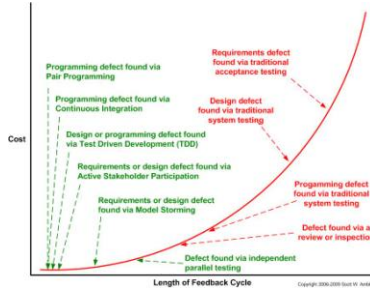# Business and Agility: Balancing Resources to Support Business Innovation

- Forrester estimates that ongoing operations and maintenance consume **66%** of IT budgets
- While new projects and software initiatives represent only **34%**

Lean Software Development Principles

Eliminate Waste

Build Quality In

Defer Commitment

Deliver Fast

Amplify learning

Engage Everyone

Optimize the Whole

Agile values

We value   Individuals Interactions   **over**   Processes and Tools

Working Software — Comprehensive Documentation

Customer Collaboration — Contract Negotiation

Responding to Change — Following a Plan

While there is value in the items on the right, we value the items on the left more.   www.agilemanifesto.org

Challenges with becoming more Agile

Enterprise discipline

Project focus ⟷ Enterprise focus

Compliance/regulations

Low risk ⟷ Critical, Audited

Geographical distribution

Co-located ⟷ Global

Entrenched process, people, and policy

Minimal ⟷ Significant

Agile Delivery

Application complexity

Simple, single platform ⟷ Complex, multi-platform

Work groups

In-house ⟷ Third party

Team size

Under 10 developers ⟷ 100's of developers

Governance

Informal ⟷ Formal

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
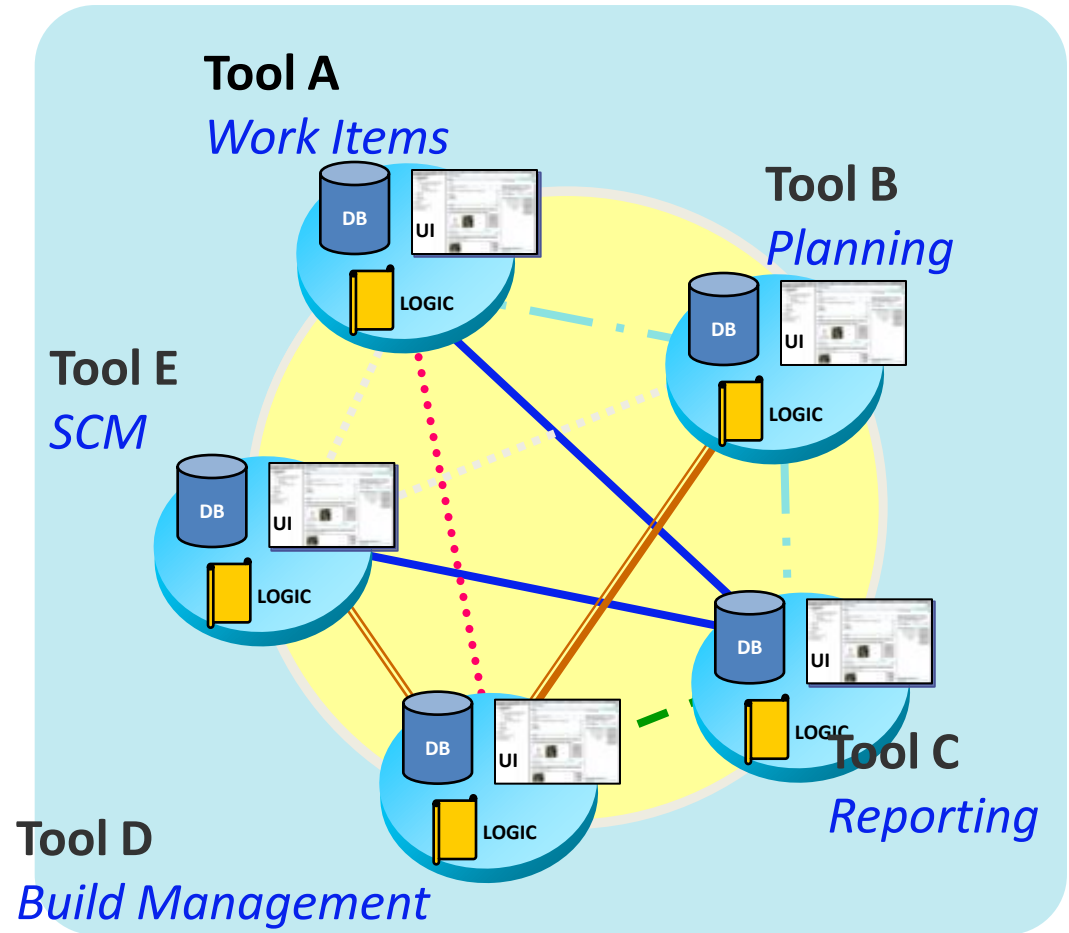
How do you solve this?

Team Concert enables teams to more easily adopt and support agile development with greater team productivity and results

Facilitates the principles of high-performance teams

IBM Rational Team Concert

transparent *integrated presence* wikis OPEN real-time
reporting chat automated hand-offs Web 2.0 *custom*
dashboards automated data gathering *EXTENSIBILITY* *Eclipse*
plug-ins services architecture *FREEDOM TO CREATE*

JAZZ TEAM SERVER

Working Software	**Individuals Interactions**	**Respond to Change**	**Customer Collaborative**
▪ Continuous integration	▪ Starting ad-hoc teams	▪ Process flexibility	▪ Transparency
▪ Manage team assets	▪ Team awareness	▪ Iterative plan-execution	▪ Objective commonality
▪ Change driven	▪ Process awareness	▪ Multiple releases	▪ Project health checks
▪ Integrated / traceable	▪ Ad-hoc sharing	▪ JIT code reviews	▪ Context driven

Team Concert : A Closer Look

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

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

SCM
- Component based SCM enables reuse across projects
- Change set based for easy addition or removal of features
- Server-based sandboxes
- Use RTC SCM or SVN, Git, ClearCase or Synergy

Work Items
- Defects, enhancements and conversations
- View and share query results
- Support for approvals and discussions
- Query editor interface
- Connects to ClearQuest or Change

Build
- Automated Work item and change set traceability
- Build definitions for team and personal builds
- Local or remote build servers
- Multi-level continuous integration
- Can integrate 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

Work items

- A **work item** captures any type of task or activity
  - **Plan items** are work items used for high-level planning.
  - **Execution items** are work items which are planned for a single iteration and assign work.
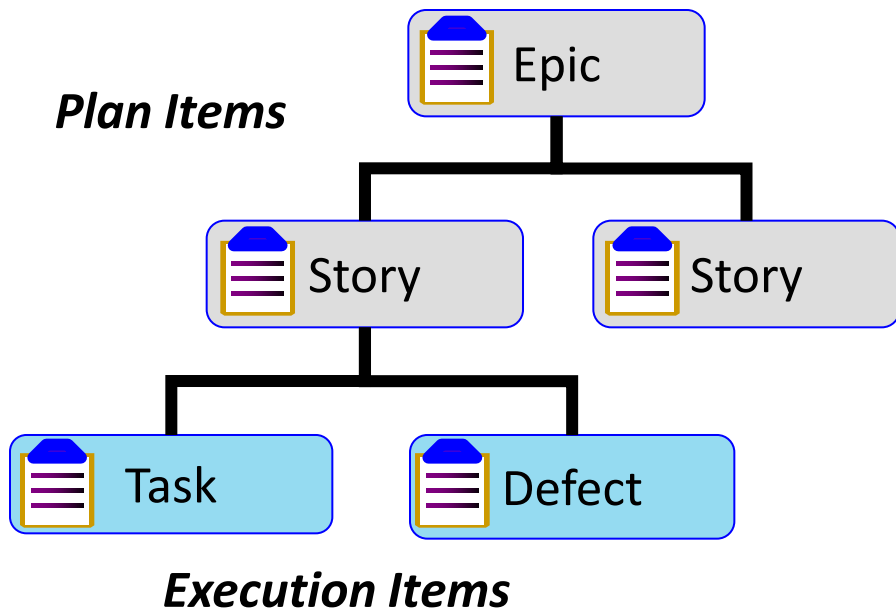
Collaborate in real-time and in context - maximize progress

Avoid Duplication

- Find potential duplicates
- Subscribe team members
- Move / Copy work between projects

Team Awareness

- Shows team members and their online status
- Discussions kept with work for all time

Change Awareness

- Automatically links to changes if mentioned in chat
- Drag and drop any work item or query into chat

Provide transparency and focus to what matters to you

- Create feeds for
  - work items, queries
  - builds, build definitions
  - team events
- A consolidated view of events in your team area/project area
- You can customize feeds by filtering
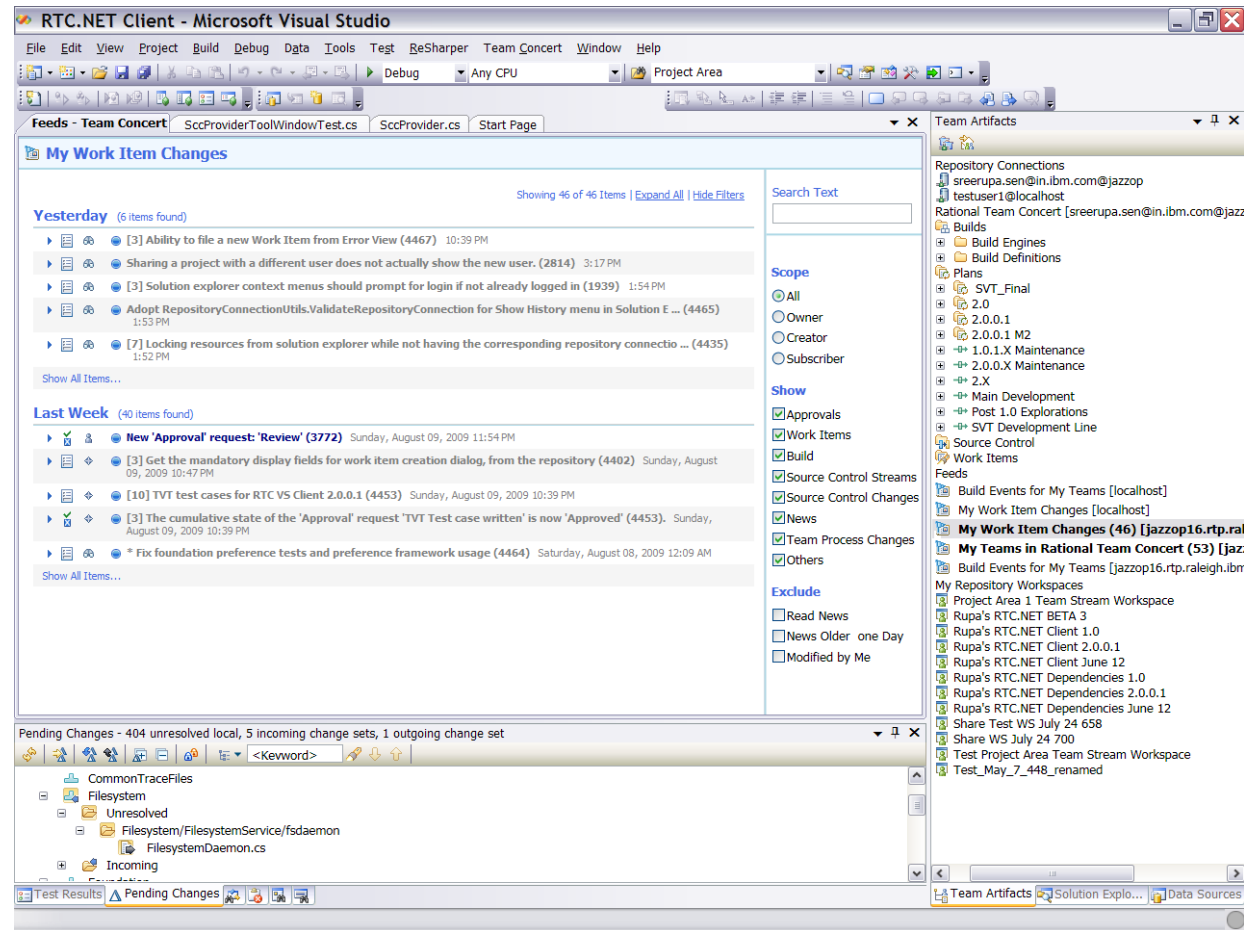
Change management available everywhere – IDE or Web

Predefined, custom and personal queries; Share queries with individuals, teams and projects Favorite Queries, Work Items

Subscribe to work items you're interested in Copy / move work items between projects Find potential duplicates
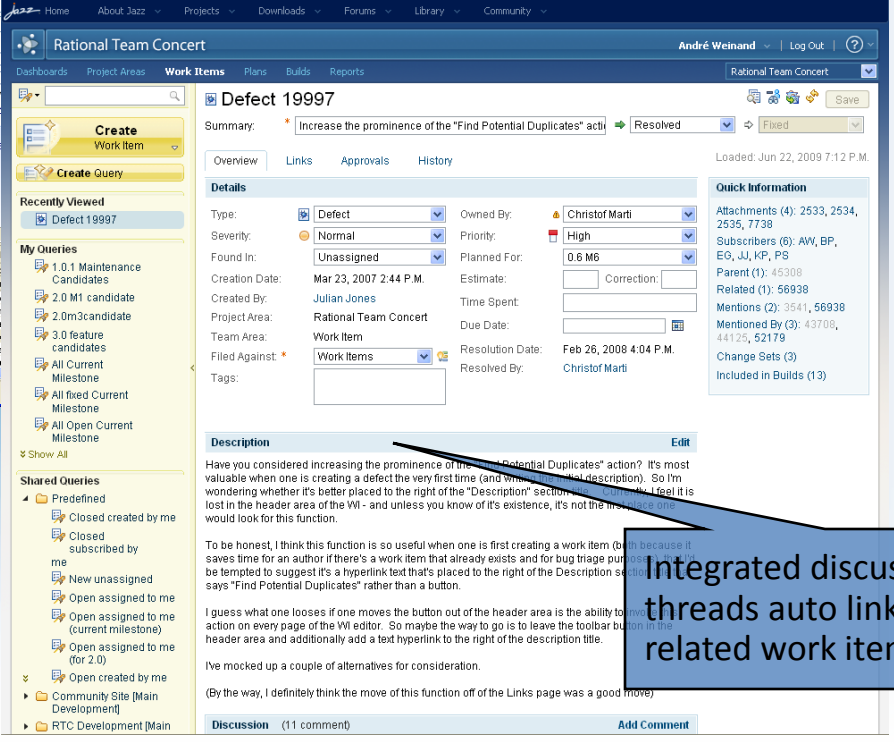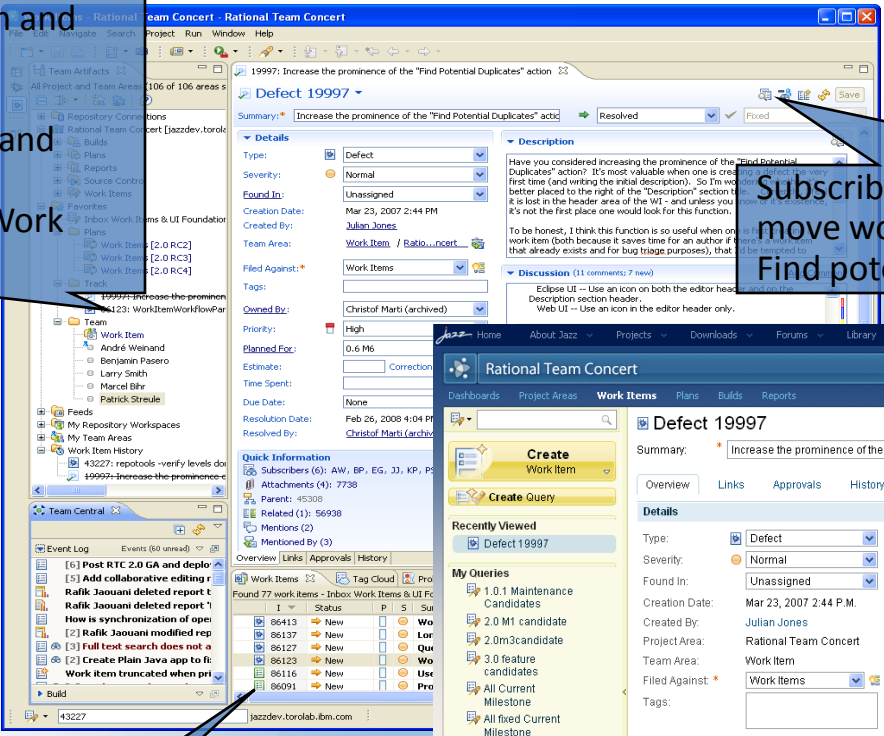
Interactive query results Bulk Edit Mode

Integrated discussion threads auto linking to related work items

Real-time dynamic planning

- Plans live outside of ALM environment

- Manual, error-prone updates

- Separate from team activities and assignments

- Plans fully integrated with execution

- Continuous planning

- Instantly see the impact of changes to delivery dates

What is the impact of business trade-offs on our current delivery dates?

Create, manage, and prioritize your backlog(s)

Manage the big picture for releases, roll up progress and work load

Team and project work breakdown - easily rebalance and self organize

Agile planning dashboard

# Save time by using work item templates

- Work item templates allow you to create a set of work items in an automated fashion and populate them with preset attributes and links

- For example: Work items that reflect repeating tasks in different iterations can be created simply by instantiating a template for each iteration.

- A work item template wizard makes it easy to capture and create new templates.
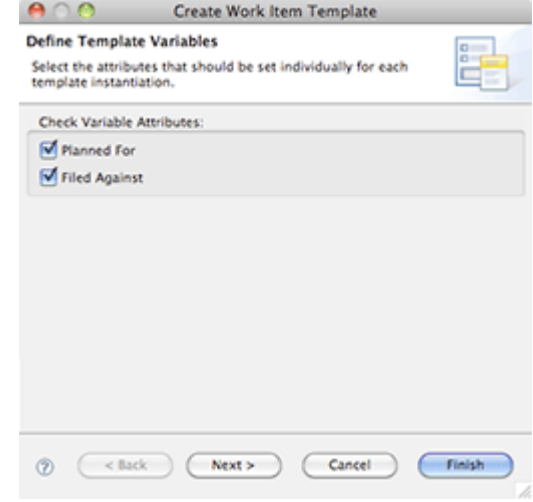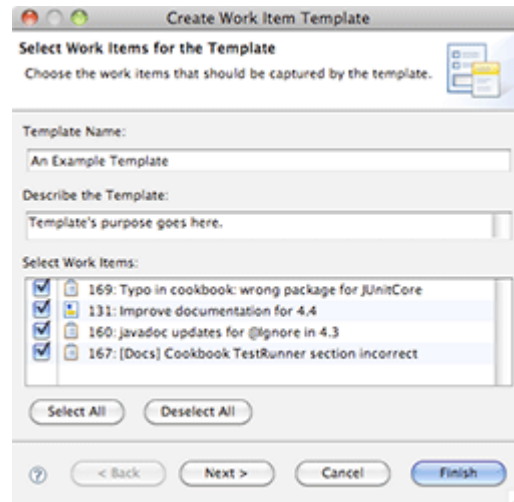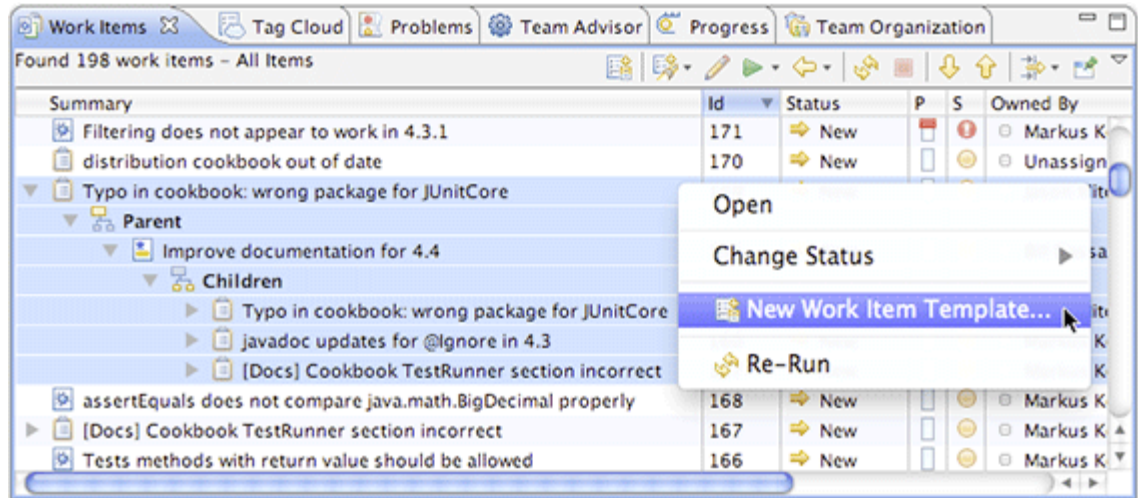
Govern change

- **Establish and enforce approval and review checkpoints in your change workflow**
- **Require approvals and reviews before a workflow state change**
  - Example: Rejecting a submitted workitem, moving a defect from submitted to planned, moving an enhancement from resolved to implemented
- **Establish multiple approvals and reviews integrating comments and discussion**
- **Require an electronic signature when changing the state**
  - Example: As part of an approval, when moving an enhancement or defect from submitted to rejected or accepted.
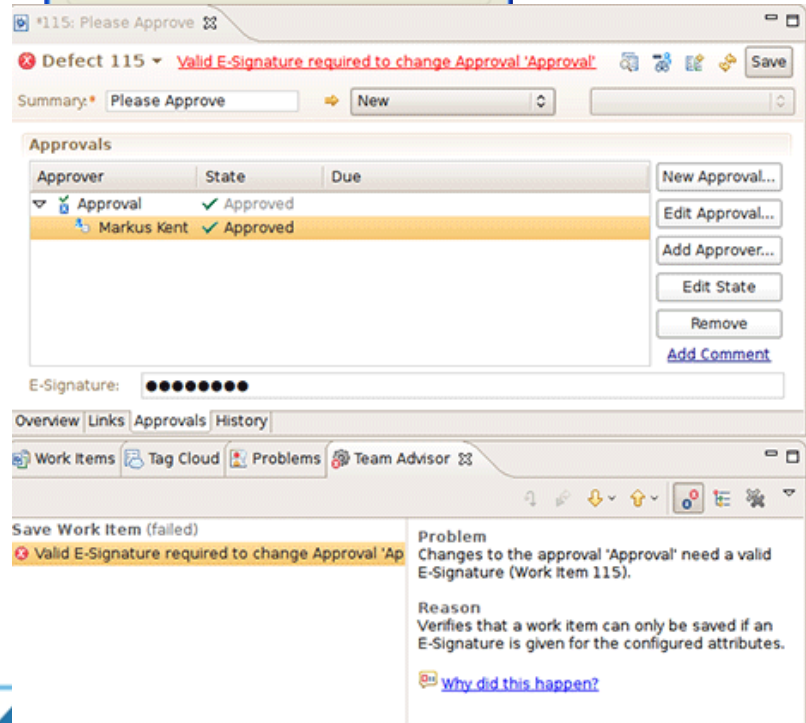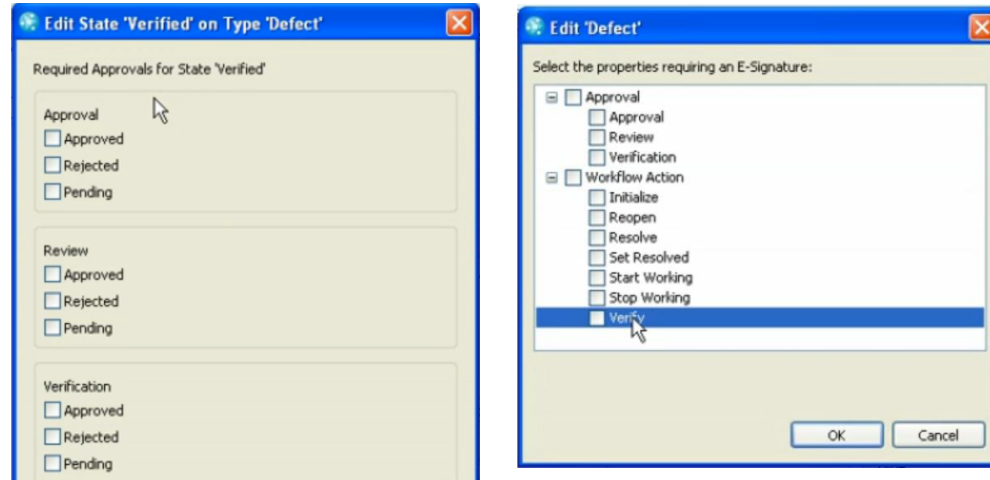
# Multiple development teams can isolate work from one another

Example Use case:

- Each supplier has a team area
- Each member of that team area can see work items in their team area but not in the others.

- Company ABC can read all work items in all team areas under their Project Area

Company ABC's Project Area

**Supplier X – Team Area**

Supplier Y – Team Area
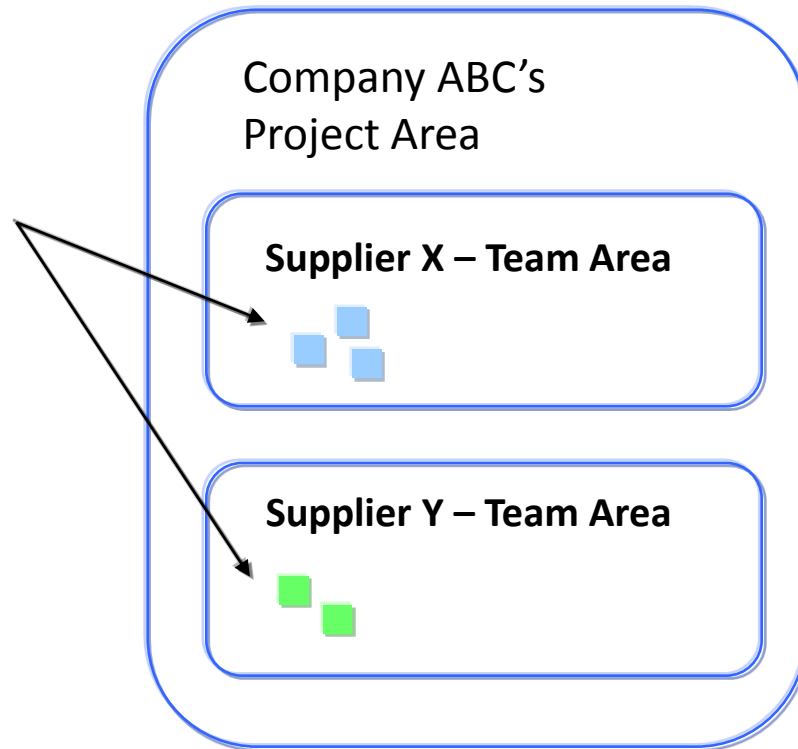
Advanced source code management

- Efficiency
  - Change-set based SCM, rather than file-based, raises the abstraction level, simplifies the flow of changes, removes unnecessary branching and facilitates parallel development
  - Private workspaces allow indivduals to experiment and backup their work without interfering with the rest of the team
  - Ability to suspend and resume work, work on a new task and then resume the saved task, supports interruptions to work seamlessly

- Security
  - Distributed source control works on selected streams and components on a "need to know" basis, rather than copying the entire repository

- Governance
  - Tightly integrated traceability across plans, work items, source control and builds supports the imperatives of effective application lifecycle management

Rational Team Concert
Software Configuration Management
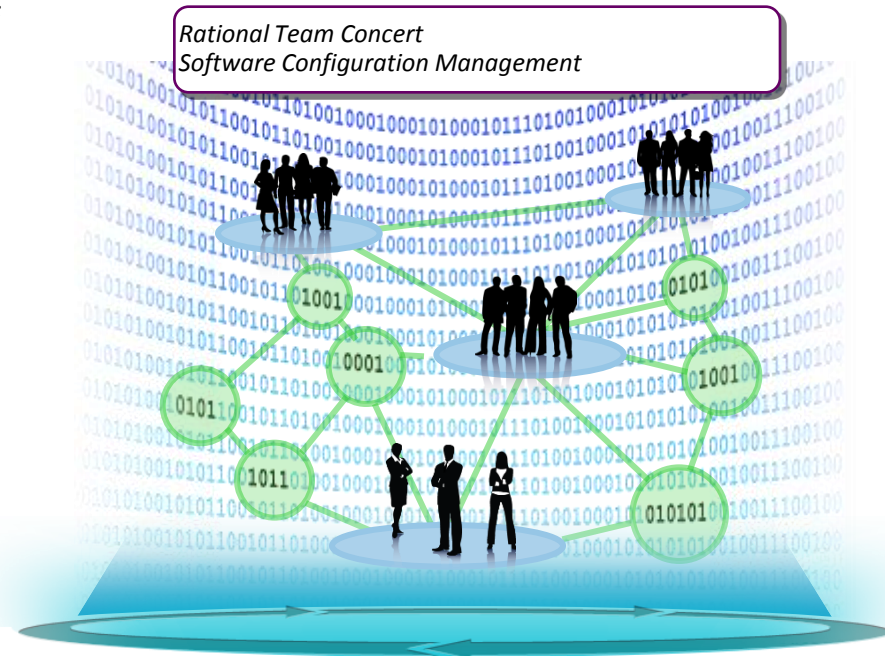
Advanced source code management
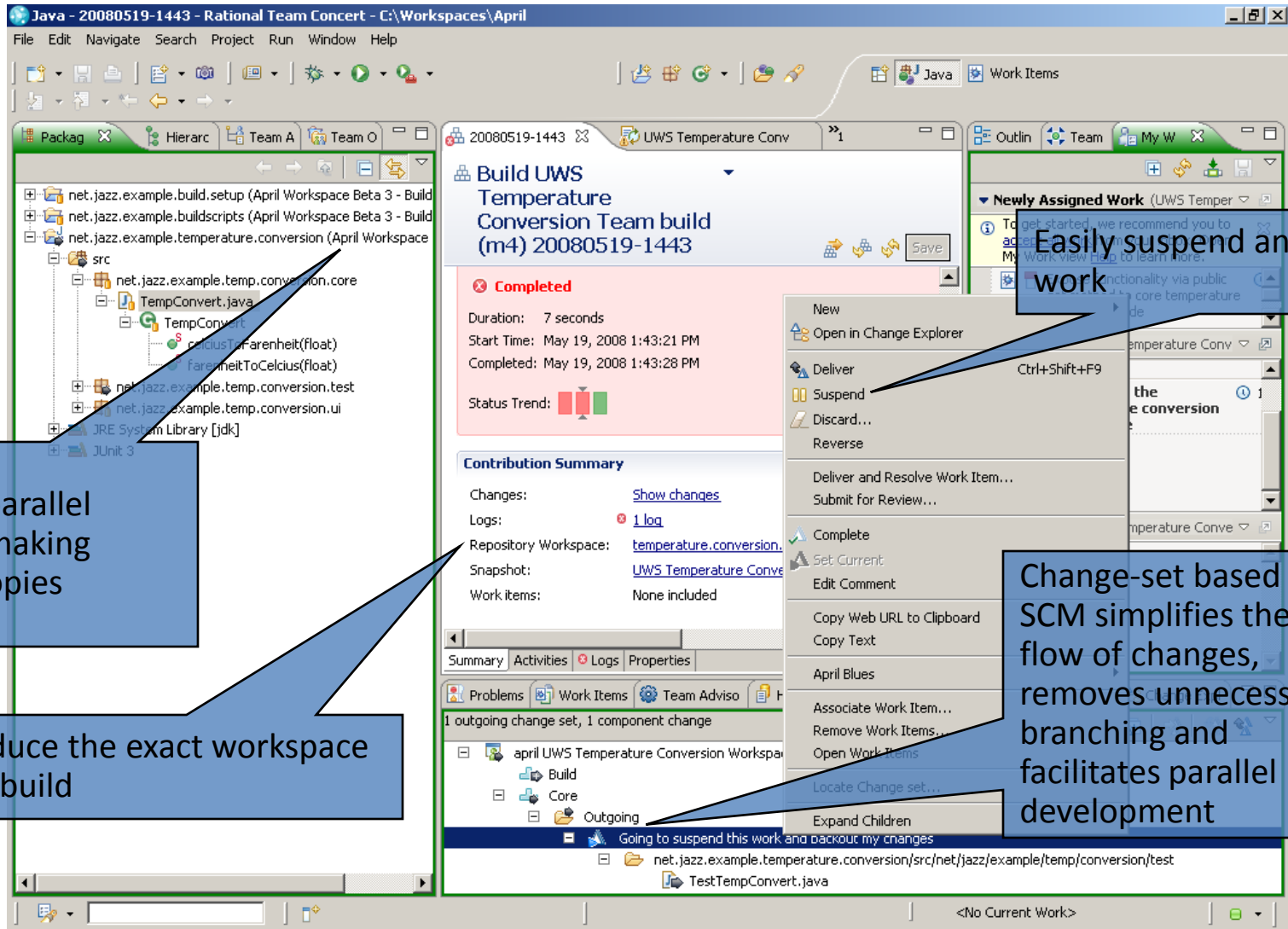

**Work in parallel without making branch copies**

Reproduce the exact workspace of any build

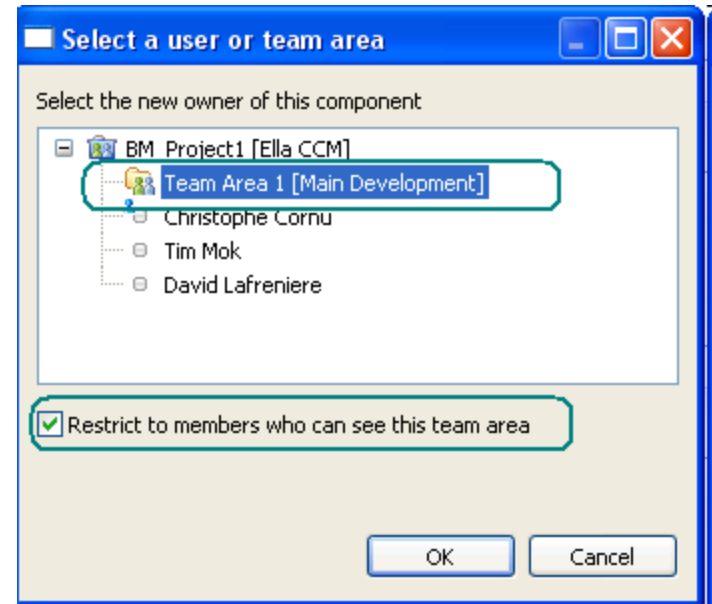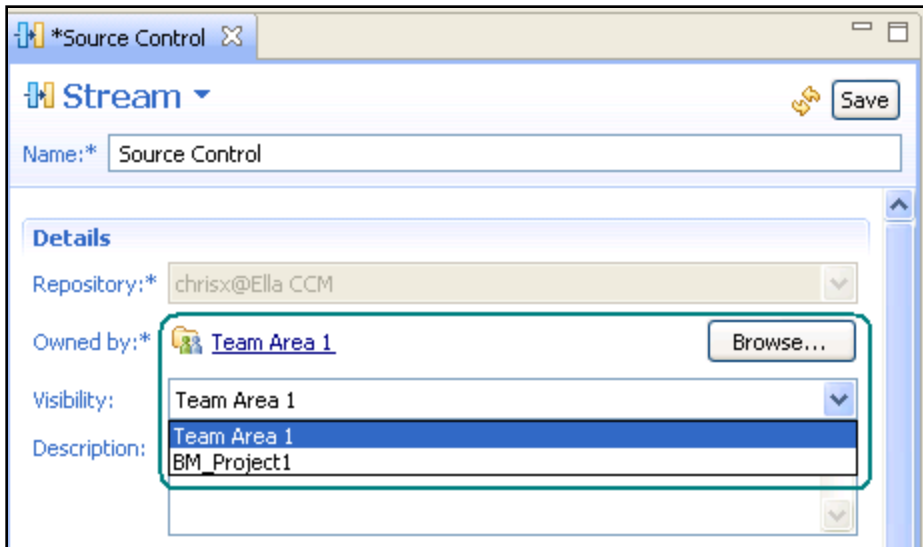**Easily suspend and resume work**

Change-set based SCM simplifies the flow of changes, removes unnecessary branching and facilitates parallel development

Distributed source control

- Share, compare, manage the flow of changes between developers, teams, and projects across different repositories
- Provides organizations with flexibility while governing source control across distributed locations
- Improves collaboration with other lines of business, and outside suppliers, who need to share component code changes across repositories
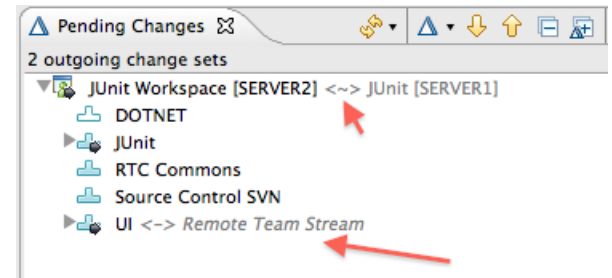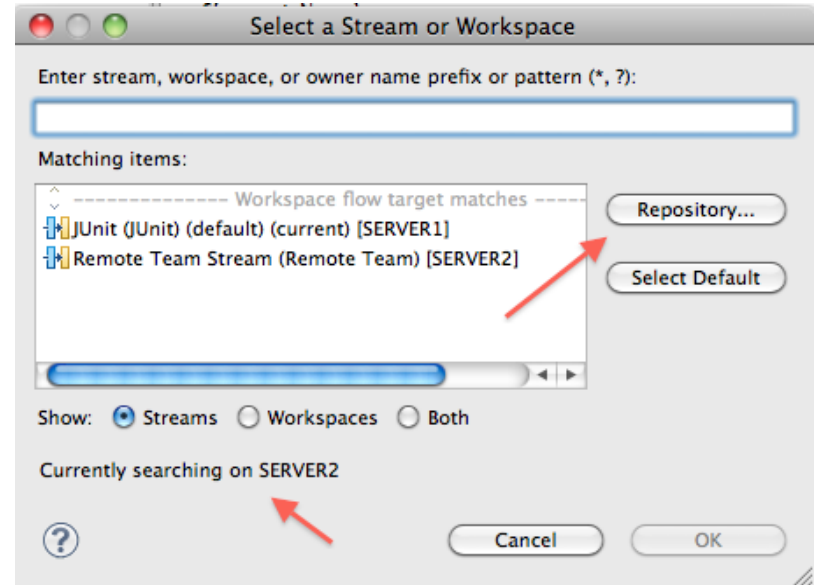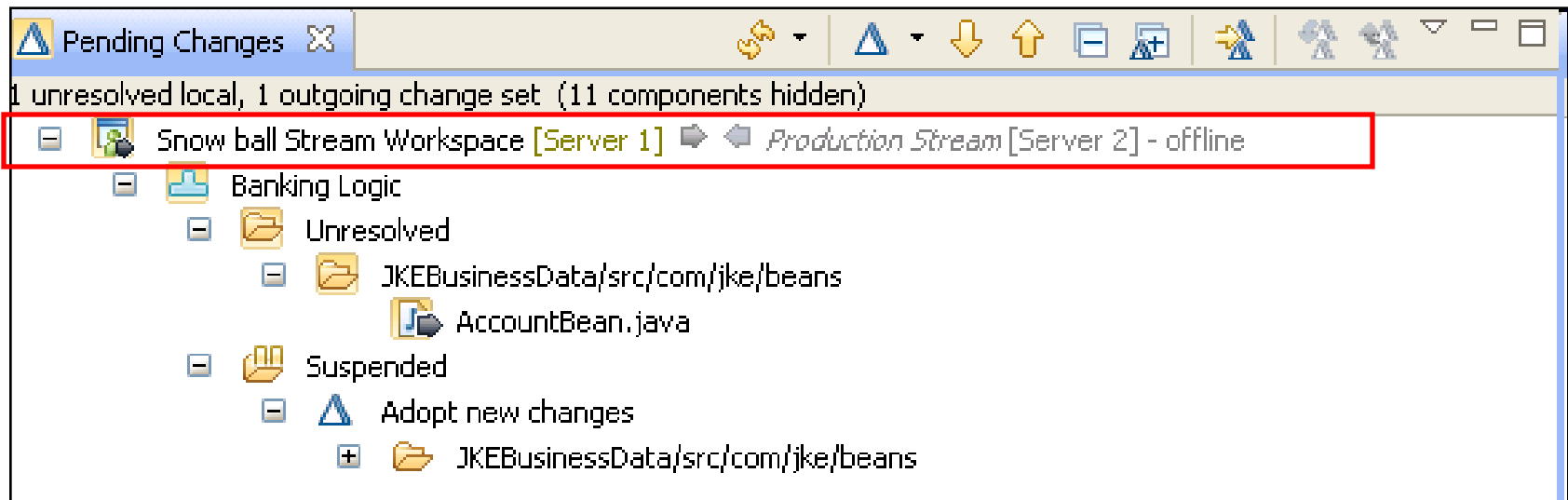
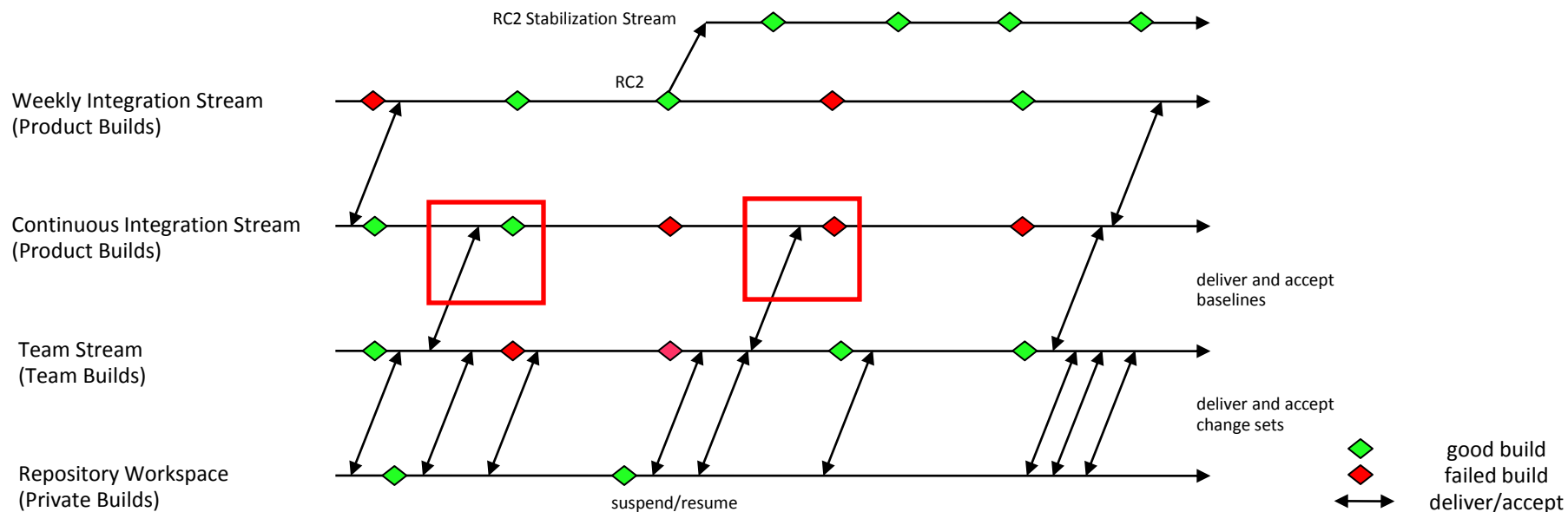# Restrict team area visibility of Components,Streams,Folders, Files

Continue working if your target stream is offline

- If you lose connection to your target, you can still keep working in your repository workspace - check in, create change sets and baselines, associate work items, suspend and resume are unaffected.
- When the connection returns, you'll be ready to accept and deliver again!

Multi-level continuous integration
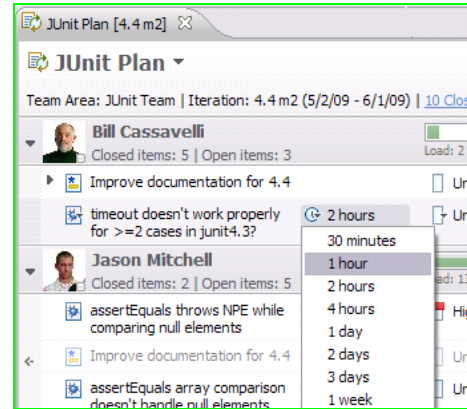
Build auditing

Rational Team Concert – A single tool, many capabilities
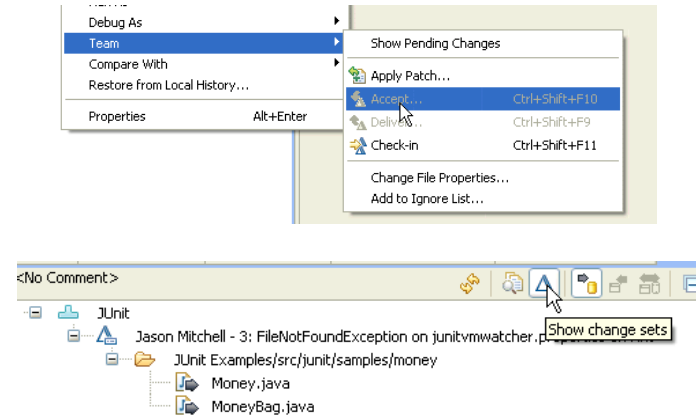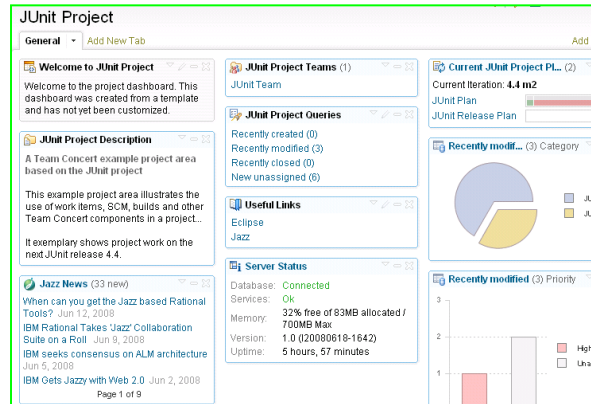
Work Items
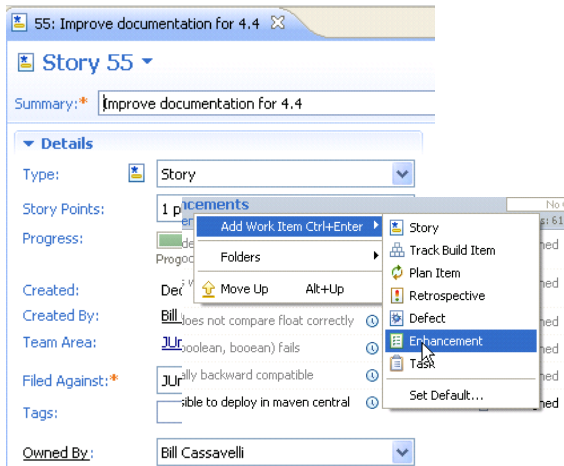
Planning
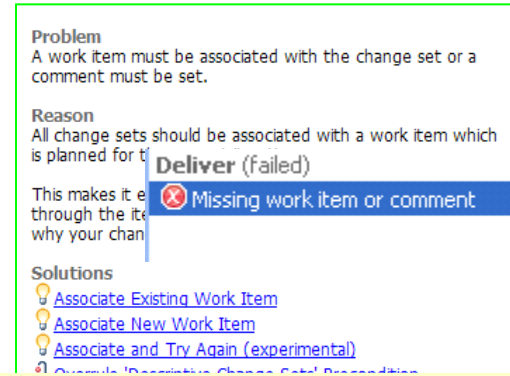
Source Control

Builds – Continuous Integration

Dashboards & Reporting

Method Enforcement and Automation

- **Quality of releases improves 12%***
- **Project governance improvements of 12%**

- **Team productivity increases of up to 50%**
- **Team collaboration performance up 25%***

For more information

- Find out more about Rational Team Concert

  - http://ibm.com/rational/rtc

- Explore Rational Team Concert tutorials, demos, downloads and other developer learning resources

  - https://jazz.net/projects/rational-team-concert/

- Check for the latest RTC integrations

  - http://jazz.net/projects/rational-team-concert/integrations/

- Try the RTC ROI Calculator

  - http://www.ibm.com/rational/rtc/roi

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