

IBM Rational Team Concert 4.0.3 Feature Overview



Be agile. Be lean. Work Together

IBM Rational Team Concert v4.0.3 Q2 2013

- **Agile your way** – Scrum, waterfall or hybrid; adapt planning to meet your team needs and rhythm.
- **Friction free communication** by smart linking of tasks, code changes, builds and releases as you work
- **Live dashboards** - write code not status reports – live web based dashboards tell everyone the story
- **Empower developers** - Fix goofs, juggles tasks, patch in seconds, easily add or remove features
- **Runs anywhere – open platform** Works with your existing tools and data for incremental adoption



IBM Rational Team Concert v4.0.3 Highlights

- **Simple and fast agile ranking** – Rank plans quickly and easily with drag and drop or explicit ranking
- **New Jenkins plug-in with traceability to RTC SCM and work items** - Adopt RTC into Jenkins teams faster, leverage hundreds of other Jenkins OSS plug-ins, such as Sonar etc..
- **Visual Studio developers see all their work in one place** - See work across projects, customize views
- **Performance improvements** – **Load plans faster in the web UI, Improved CLI performance**
- **Regulatory reporting** – **Report on time spent, approval descriptors and Modified by custom attributes**
- **ClearCase history importer** – **Import multi-branch, multi-baseline version history**
- **Enterprise Build improvements** – **Build subset editor, subset security, static link dependencies**

NEW!

RTC 4.0.3 Release Themes

Developer Productivity – Work Faster

- **Usability** – “Simpler faster ranking, developer “my work” view in VS IDE, Windows Shell Basic Mode
- **Performance** – “Faster planning from the web UI”
- **Enhanced Enterprise Build System z** - “I want to build only part of a much larger application”

Incremental Adoption – Get Started Quicker

Make it easier to adopt RTC into my existing tool chain - Jenkins, ClearCase / Synergy etc.

Extend Enterprise Capability – Do More

- **Reporting** – “Make more data available for my team to report on”
- **Process** – “Improved UI for permissions, new process history, new process guidance in work items”
- **Plan Across Projects** – “Improve managing cross project plans and schedules”

Continuous Delivery - Respond to customers changing needs

Move from one release a year to a quarterly release cadence

Rational Team Concert 4.0.3: Usability



2011

2012

2013

Usability: Simple and fast agile ranking

[Simplify ranking \(218174\)](#)

- Today:
 - We support automated stack based ranking in backlogs, which can sometimes lead to ranking gaps during drag operations.
- Now we allow more explicit control over ranking.
 - **New explicit actions to assign row numbers as rank numbers**
 - **Make the rank number manually editable**
 - **Improve drag and drop behavior**
 - **Make it much faster to rank order a large backlog and maintain consecutive rank when using drag and drop.**



RTC 4.0.3 : Apply Rank Action Examples



2011

2012

2013

“I've got the plan ordered the way I want. One click to apply rank across the plan”



Planned Items Links Snapshots Dashboard Notes

View As: Ranked List Type to Filter

Summary		Priority	Rank
*	Task 1	High	1
*	Task 2	High	2
*	Task 3	Medium	3
*	Task 4	Medium	4
*	Task 5	Low	5
*	Task 6	Low	6

Task 1

Edit Work Item

Promote

Demote

Move Above

Move Below

Move Into

Plan For

Assign To Owner

Remove

Apply New Rank Above

Add Link

Rank

New Rank

New Rank Below

“I've moved a group of lower priority tasks
to the bottom of the backlog, apply an ordered
rank below, from my current selected task”



RTC 4.0.3 : Integer Based Ranking Example

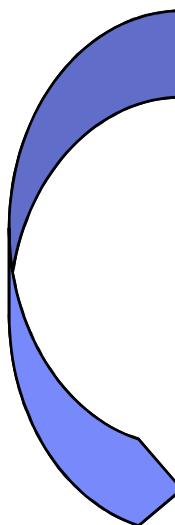


2011

2012

2013

"I change the rank of an individual plan item from rank 4 to rank 2 and the rest of the list is re-ranked sequentially"



	Summary	Priority	New Rank
	Task 4	High	1
	Task 1	High	2
	Task 2	Medium	3
	Task 5	Medium	4
	Task 6	Low	5
	Task 3	Low	6

	Summary	Priority	New Rank
	Task 4	High	1
*	Task 5	Medium	2
	Task 1	High	3
	Task 2	Medium	4
	Task 6	Low	5
	Task 3	Low	6

Drag and drop position based ranking
Is still supported and maintains rank order

Rational Team Concert 4.0.3 : Usability



2011

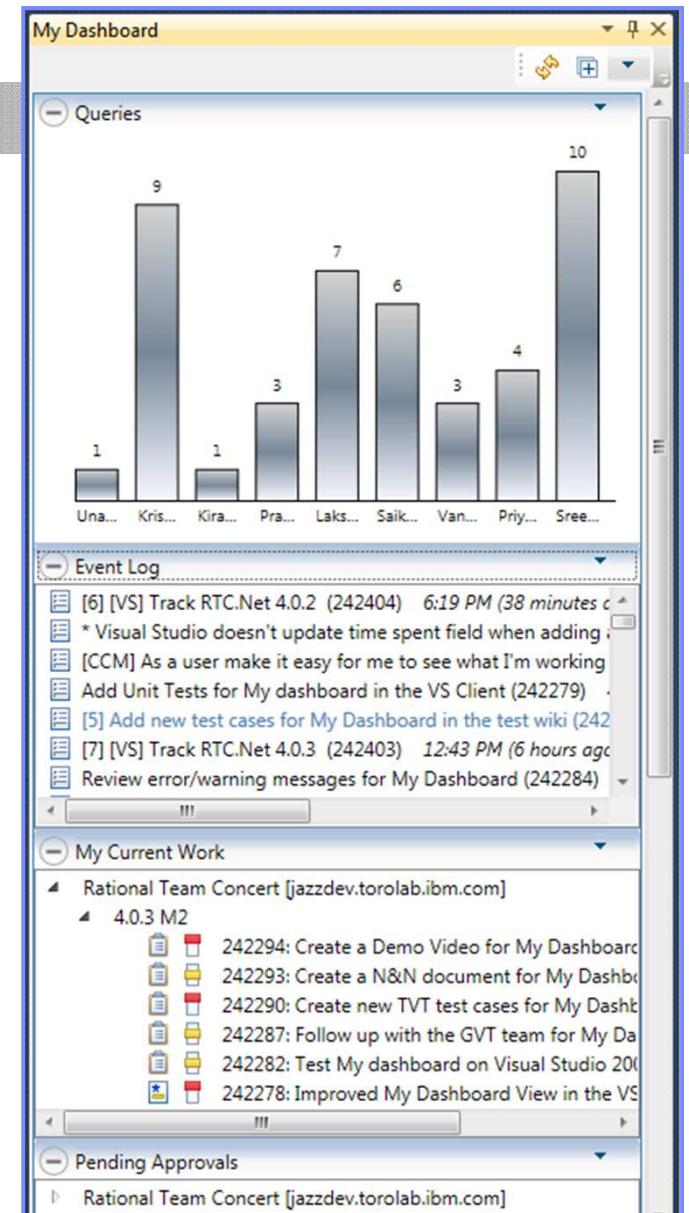
2012

2013

Usability: Visual Studio Developers see all their work organized in one place

[\[CCM\] As a user make it easy for me to see what I'm working on, in the VS Client \(227379\)](#)

- We improved the current “My Dashboard” UI to make it very easy for a developer to see:
 - **Current Work** - my to do list of work items in the current iteration
 - **Future Work** - my to do list of work items grouped by future iterations
 - **Pending Approvals** – my work items owned by me in “pending” approval state
 - **Pending Requests** - All work items that require my approval
- User customization of these views (sort order, bar charts, rich hovers)
- See work **across multiple Visual Studio projects**.



Rational Team Concert 4.0.3 : Usability – Simple, Basic Versioning



2011

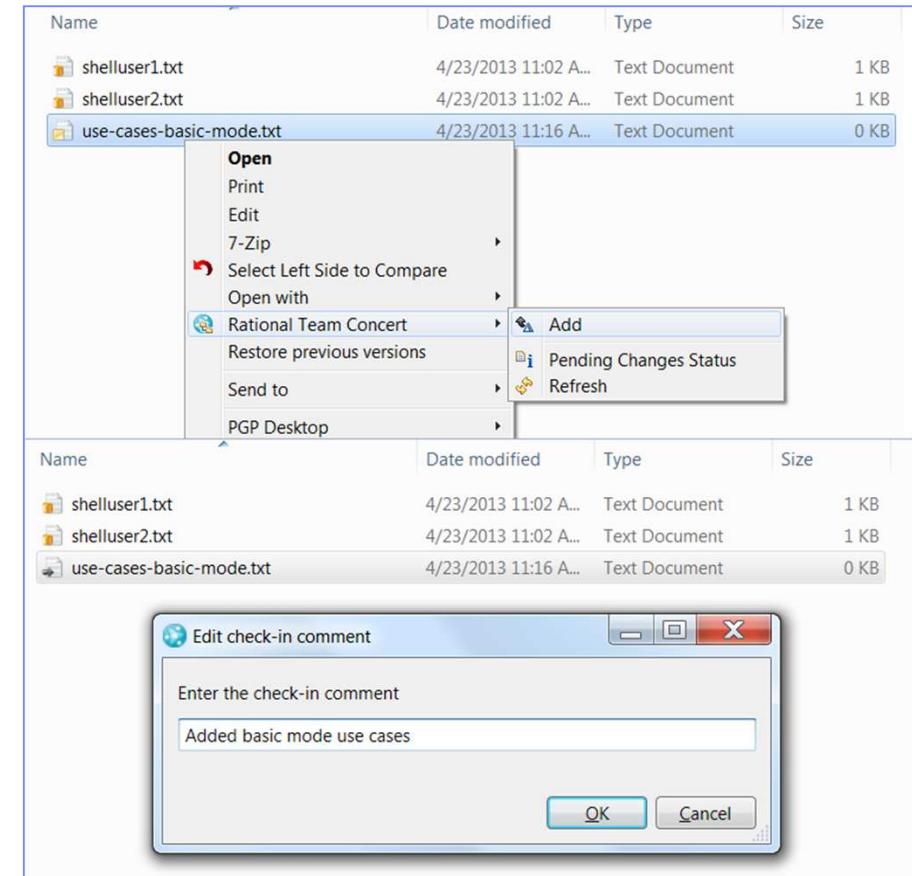
2012

2013

Enhanced Windows Shell Explorer : New Basic Mode – Simple Versioning

[\[CCM\] As an RTC User, I want to have a simpler user experience in the RTC Shell \(252666\)](#)

- Provide a new **Basic Mode** targeted at non-developers who do not need to know SCM concepts to use versioning
- **Integrated on-line help** to guide new users
- **Auto check-in of changed files** once you add them to source control. Eliminates two step “check-in” and then “deliver”.



Performance Disclaimer

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

Rational Team Concert 4.0.3 Performance



2011

2012

2013

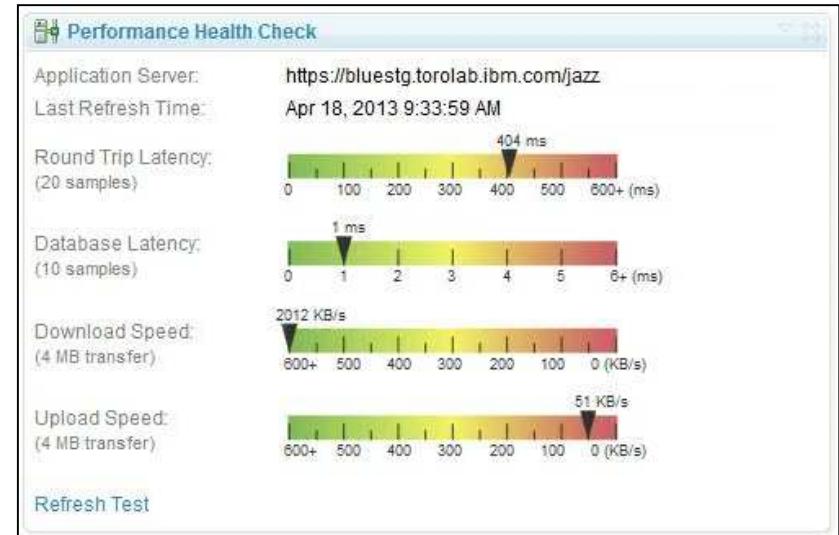
Performance: User Productivity

SCM command line:

- 10% boost in CLI execution

Plan loading performance: Phase II

- In RTC 4.0.1 we improved performance by 25%
- In RTC 4.0.3 plan loading uses a new “pay as you go” model and other optimizations that improve performance by up to 40 to 50 percent. For example, the Rational Team Concert product backlog now loads in 10 seconds, compared to 20 seconds in 4.0.3 M3, over a network latency shown in the image above using browser Mozilla Firefox 17.0.5.
- Pay as you go: When we load a plan, not all plan view data is loaded until you ask for it.
- Parallelize requests: Parallel requests when loading data rather than sequential requests



RTC 4.0.3 Performance – Plan loading Web UI – Details



2011

2012

2013

Plan loading performance: (Tests are FireFox from Switzerland client to Canadian server)

- **Improved plan loading 36-60% for sample plans, with 130 - 5000 work items**
 - RTC Product Backlog plan - **10 seconds vs. 20 seconds (50%)**
 - Plan Size: 238 work items
 - Plan View: Ranked list
 - RTC Foundation & WorkItems Backlog plan - **26 sec. vs. 66 sec. (60%)**
 - Plan Size: ~5,000 work items
 - Plan View: Ranked List
 - Foundation Process 4.0.3 plan - **14.5 sec. vs. 26.5 sec. (45%)**
 - Plan Size: 1,200 work items
 - Plan View: Ranked List
 - RTC TAP 4.0.2 M2 plan - **16 sec. vs. 25 sec. (36%)**
 - Plan Size: 130 items
 - Plan View: Work Breakdown

Note: Your results may vary based on your network latency, plan view mode & browser. Numbers taken on live staging server, not a fully controlled environment.

Rational Team Concert 3.x and 4.x – New Jenkins OSS plug-in. Available from the Jenkins plug-in site.



2011

2012

2013

Incremental Adoption: New Jenkins plug-in

- Installs into Jenkins as a Jenkins plug-in, not shipped with the RTC product
- Runs SCM phase of a Jenkins build when you're using RTC SCM
- Supports integration at both SCM level and Build level with traceability from RTC build result.
- Works with multiple versions of RTC (RTC 3.0.1.5 and 4.x and later)

Benefits:

- Simpler to set up – provides incremental adoption of RTC
 - Automatically creates an RTC build result for you
 - Provides traceability to build workspace, snapshot, SCM changes link and “included in build” work item links
 - Leverage other Jenkins plug-ins / ecosystem
-
- More details about obtaining the plug-in see our wiki page:
<https://wiki.jenkins-ci.org/display/JENKINS/Team+Concert+Plugin>



Jenkins

New Jenkins plug-in for Rational Team Concert



2011

2012

2013

Jenkins RTC Plugin Selfhost Build... + Jenkins Jenkins RTC Plugin Selfhost Build #72 search ENABLE AUTO REFRESH

Build #72 (Apr 5, 2013 10:52:19 AM)

Build Artifacts [teamconcert.hpi](#) 346.13 KB

Snapshot : [Jenkins RTC Plugin Selfhost Build #72](#)
2 change sets accepted

Build

- 257803: HPI: Support specification of Build definition - use item query for engine ([detail](#)) / ([change set](#))
- 257803: HPI: Support specification of Build definition - Add build definition validation ([detail](#)) / ([change set](#))

Started by an SCM change

Test Result (no failures)

[Help us localize this page](#) Page generated: Apr 8, 2013 3:02:54 PM REST API Jenkins ver. 1.480.3

After the SCM phase has run, the build change log captures:

SCM change sets and snapshot, with links to associated work items

RTC 4.0.3 Plans : Enhanced ClearCase Importer



2011

2012

2013

ClearCase Multi-branch Importer Improvements

- Import baselines for multiple related releases or branches
 - Must import streams in dependency order
- Baselines are created in RTC automatically
 - Now the version trees of imported files are comparable across ClearCase and RTC

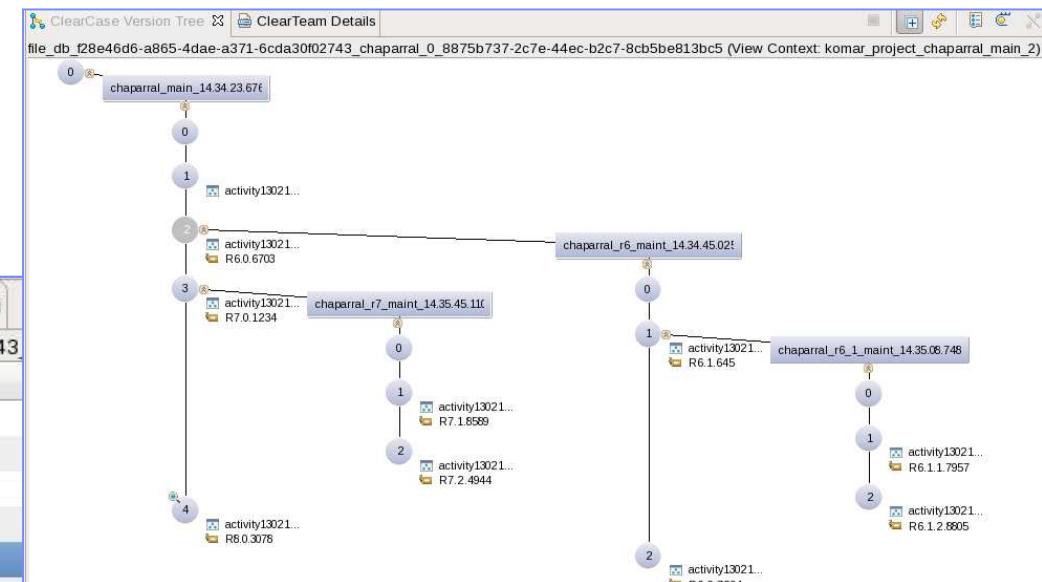
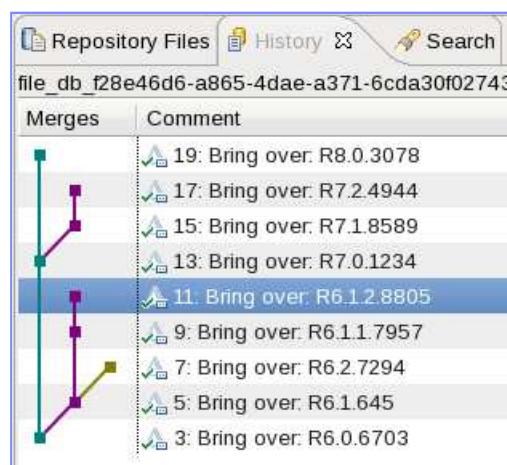
Main line R8.0

R7 branch

R7.x

R6 branch

R6.x



RTC 4.0.3 Plans - Reporting



2011

2012

2013

Regulatory Reporting: Report on Time Spent, approval descriptors and Modified By custom attributes

[\[CCM\] Improve ability to report on time spent / lean metrics \(213855\)](#)

[\[CCM\] Make complex custom work item attributes, approval descriptors and Modified By data reportable and available in the data warehouse \(242806\)](#)

- Data collected in time sheets (via time tracking) can be reported on using RPE
 - Time sheet data has a REST interface (4.0.1) for RPE
 - Time sheet data is available for live reporting using BIRT reports
- New out of the box timesheet reports

Tabular Output:

Username\Timecode	Coding	Documentation	Review	Testing	Total
Parik	2	3	4	6	15
Qi	3	2	2	2	9
Kai	3	5	2	1	11
Total	8	10	8	9	35

With hyperlink to a drill-in report specific to the person

Project	WI ID	Effort
Project1	Task2	2
	Defect1	1
	Task3	3
Project2	Defect2	2
	Task 4	1
Total		9

Break down by Task

Project	Timecode	Effort
Project1	Coding	3
	Documentation	2
	Review	1
Project2	Review	1
	Testing	2
Total		9

Break down by Timecode

Details: New Approvals and Attribute Data Available for Reporting

- **ETL for "modified by" data**
- RICALM.REQUEST_HISTORY (Field: MODIFIER_ID)
- **ETL for approvals and approval descriptors**
- RICALM.REQUEST_APPROVAL_STATE
- RICALM.REQUEST_APPROVAL_TYPE
- RICALM.REQUEST_APPROVAL
- RICALM.REQUEST_APPROVAL_DESCRIPTOR
- **ETL for complex custom attributes**
- The complex custom attributes data is now loaded into the data warehouse. The data includes complex custom attributes of these types: Category, Contributor, Deliverable, Item, Iteration, Process Area, Project Area, Team Area, Timeline, Work Item, and SCM Component.
- RICALM.REQUEST_COMPONENT_EXT
- RICALM.REQUEST_CATEGORY_EXT
- RICALM.REQUEST_RESOURCE_EXT
- RICALM.REQUEST_RELEASE_EXT
- RICALM.REQUEST_ITERATION_EXT
- RICALM.REQUEST_PROJECT_EXT
- RICALM.REQUEST_TEAM_EXT

Improved Process Permissions Configuration – Web UI



2011

2012

2013

- The contents of the **Permissions** tab were replaced with a new Permissions editor. Features include merging of project and team permissions, inheritance of permissions from the parent when customizing, filtering by operation name, and visibility of roles and time periods configured

Active Project Areas > JKE Banking (Change Management) > **Release Engineering** *

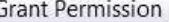
  

Overview **Permissions**  **Save**

Show by Role Show by Operation

Select a role:     

Everyone (default)  **Product Owner**    

Operation	Permission	Actions
Build		
<input checked="" type="checkbox"/> Abandon Build		
<input checked="" type="checkbox"/> Cancel Pending Build Request		
<input checked="" type="checkbox"/> Control The Build Lifecycle		
<input checked="" type="checkbox"/> Delete Build Definition		
<input checked="" type="checkbox"/> Delete Build Engine		
<input checked="" type="checkbox"/> Delete Build Result		 
Delete Build Result		
<input checked="" type="checkbox"/> Delete Personal Build Result		 
<input checked="" type="checkbox"/> Request Build		
<input checked="" type="checkbox"/> Save Build Definition		

Process Area History



2011

2012

2013

- History tab in the web UI, shows the history for project and team areas: who made each change, when it was made, and what was changed.
- UI details what's currently included (membership, roles, iterations, process xml)

History

Previous | **May 21, 2013 to May 21, 2013** | Next

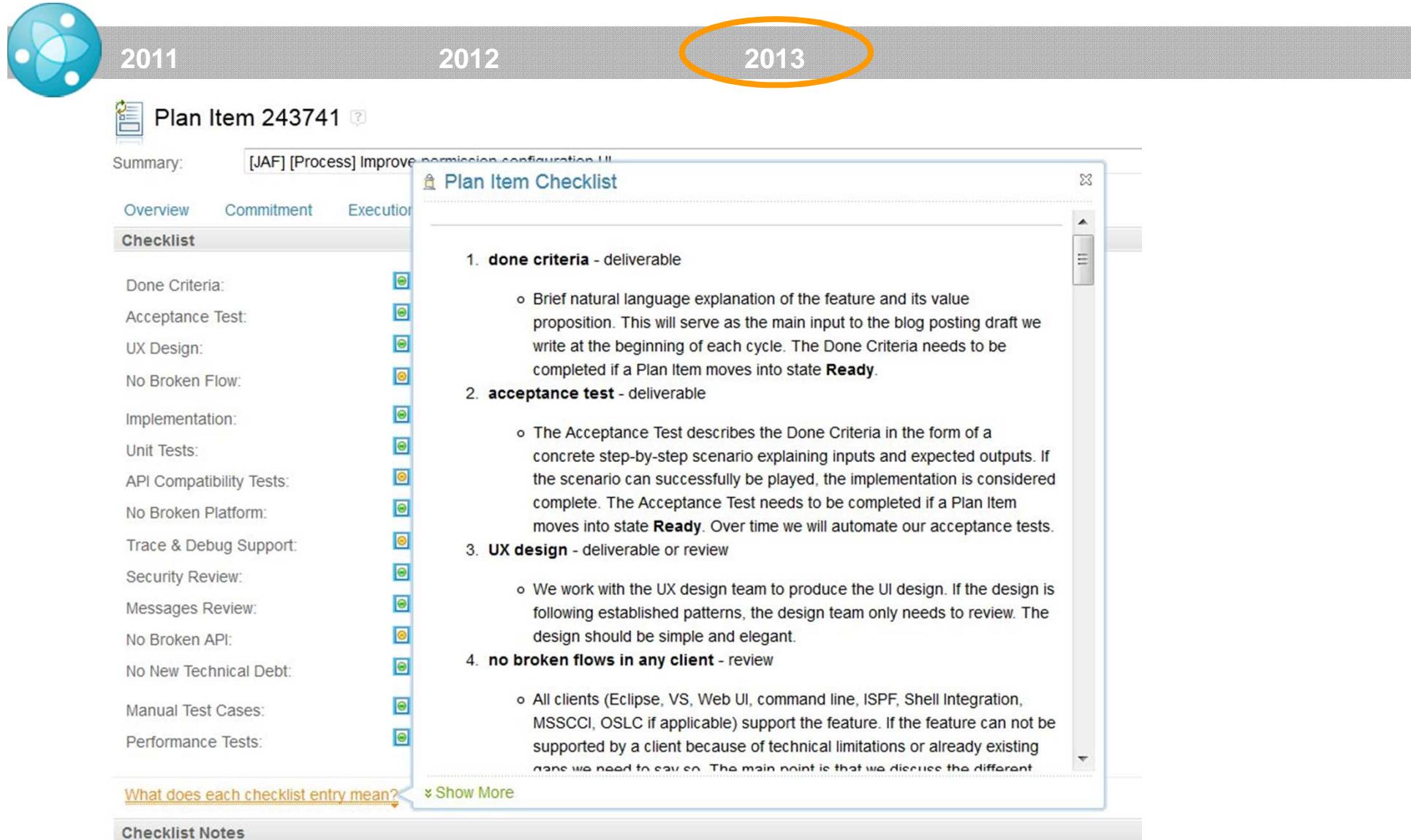
Change by admin (May 21, 2013 10:45 AM)

Role assignments	Curtis added: Stakeholder
------------------	---------------------------------

Change by admin (May 21, 2013 10:45 AM)

Members	added: Curtis
---------	------------------

Process Guidance in Work Items



The screenshot shows a Rational Work Item interface for Plan Item 243741. The year 2013 is circled in orange at the top of the timeline. The interface includes a sidebar with a checklist and a main panel with a detailed checklist description.

Plan Item Checklist

Checklist

Done Criteria: (all items are checked)

- Acceptance Test: (checked)
- UX Design: (checked)
- No Broken Flow: (checked)
- Implementation: (checked)
- Unit Tests: (checked)
- API Compatibility Tests: (checked)
- No Broken Platform: (checked)
- Trace & Debug Support: (checked)
- Security Review: (checked)
- Messages Review: (checked)
- No Broken API: (checked)
- No New Technical Debt: (checked)
- Manual Test Cases: (checked)
- Performance Tests: (checked)

What does each checklist entry mean?

Checklist Notes

Plan Item Checklist

- done criteria** - deliverable
 - Brief natural language explanation of the feature and its value proposition. This will serve as the main input to the blog posting draft we write at the beginning of each cycle. The Done Criteria needs to be completed if a Plan Item moves into state **Ready**.
- acceptance test** - deliverable
 - The Acceptance Test describes the Done Criteria in the form of a concrete step-by-step scenario explaining inputs and expected outputs. If the scenario can successfully be played, the implementation is considered complete. The Acceptance Test needs to be completed if a Plan Item moves into state **Ready**. Over time we will automate our acceptance tests.
- UX design** - deliverable or review
 - We work with the UX design team to produce the UI design. If the design is following established patterns, the design team only needs to review. The design should be simple and elegant.
- no broken flows in any client** - review
 - All clients (Eclipse, VS, Web UI, command line, ISPF, Shell Integration, MSSCCI, OSLC if applicable) support the feature. If the feature can not be supported by a client because of technical limitations or already existing gaps we need to say so. The main point is that we discuss the different

RTC 4.0.3 Plans – Complex Cross Project Plans



2011

2012

2013

- Increased hierarchy levels for drill down
 - Previously cross-project plans displayed a single hierarchy level. Now, they support multiple hierarchy levels for items that are tracked in the plan. The level is configurable.

▶ Plan Details

Planned Items Links Snapshots Dashboard Notes

| View As: Project Schedule Exclude Type to Filter

Summary

- Track effort for development of the Diagnostic tool administration
- Track tasks for diagnostic tool administration
 - Implement additional screens for administration of the diagnostic tool
- Track effort for development of the Diagnostic tool 1.0
 - Track tasks for Diagnostic tool 1.0
 - Implement web ui for the diagnostic tool
 - Implement the back-end query and logging support for diagnostic tool
 - Inventory list for diagnostic tool

Multi-level drill down on cross project plans

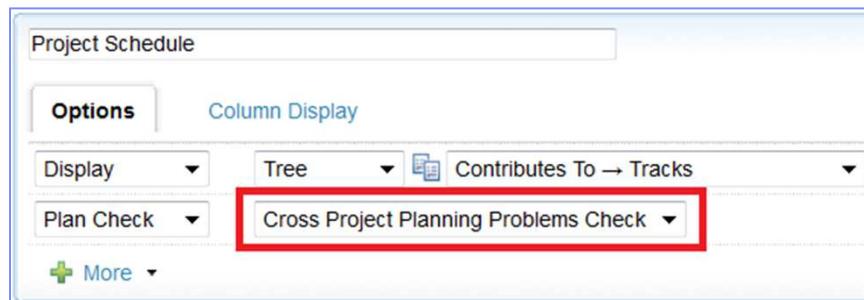
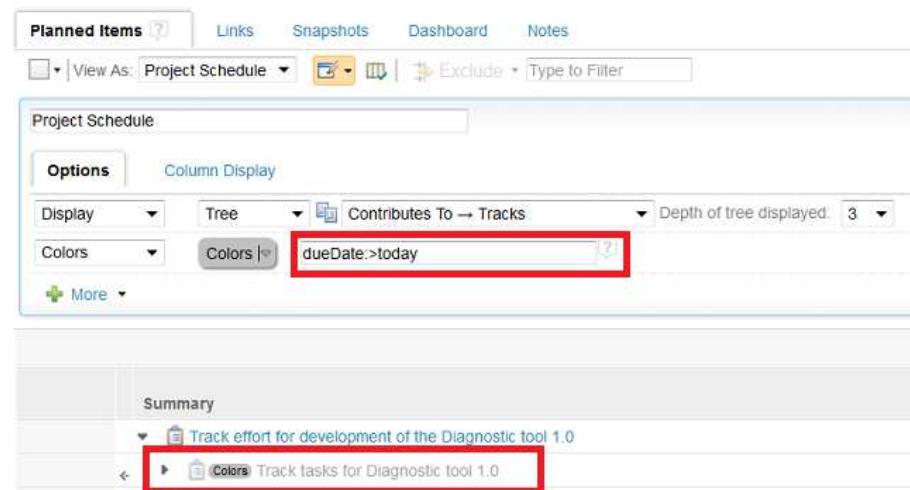
Level 1

Level 2

RTC 4.0.3 Plans – Complex Cross Project Plans



- Cross-project plans support three new plan checks for items that are tracked in a plan.
 - Visual warnings are displayed when the following situations occur:
 - The rolled-up schedule for an item in the plan exceeds the end date of the iteration that the plan is associated with.
 - The "planned for" date of a plan item exceeds the plan's iteration end date.
 - The rolled-up schedule for an item in the plan exceeds the due date that is specified for the item.
- Colorizers and filters now support date expressions
 - To highlight or hide items in the plan by date

RTC 4.0.3 Enterprise Build – Static Link support



2011

2012

2013

Translator

Name: Link-edit

General

Description:

Link-edit

Ignore changes during dependency build

Call Method

Called program

Data set definition: Link-editor

Default options: MAP,RENT,SSI(@{ssi_info})

- A new host module reads a program object and reads Compile Unit Information (CUI) to analyze the dependencies created by link-edit

RTC 4.0.3 Enterprise Build – Build Subsets



2011

2012

2013

- Use cases

- Personal build: You have already accepted other developers' changes into your repository workspace, but you only want to build the programs you are currently working on.
- Integration: Your program is part of a larger application, and you require a build that only compiles your piece.

- Create a build subset associated to a Build Definition

- Subsets process control (new in 4.0.3):

- Creation/Deletion controlled by process role permissions
- Ownership: can be owned by the user or the team
- Visibility: Private or project shared subsets

Build Subset

ID: dave.personal.mortgage.subset

Build Definition: mortgage.prod

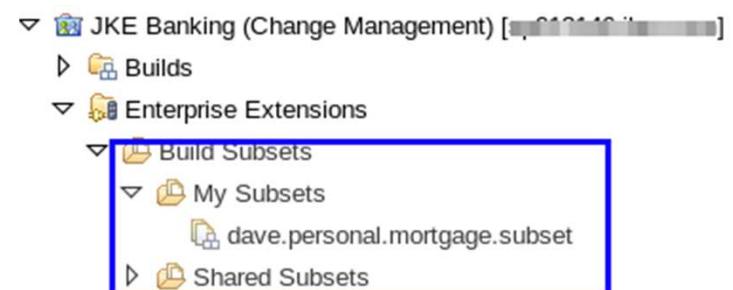


▼ Details

Owned by: * Dave

Visibility: * Scoped

Description:



RTC 4.0.3 Enterprise Build – Build Subsets



2011

2012

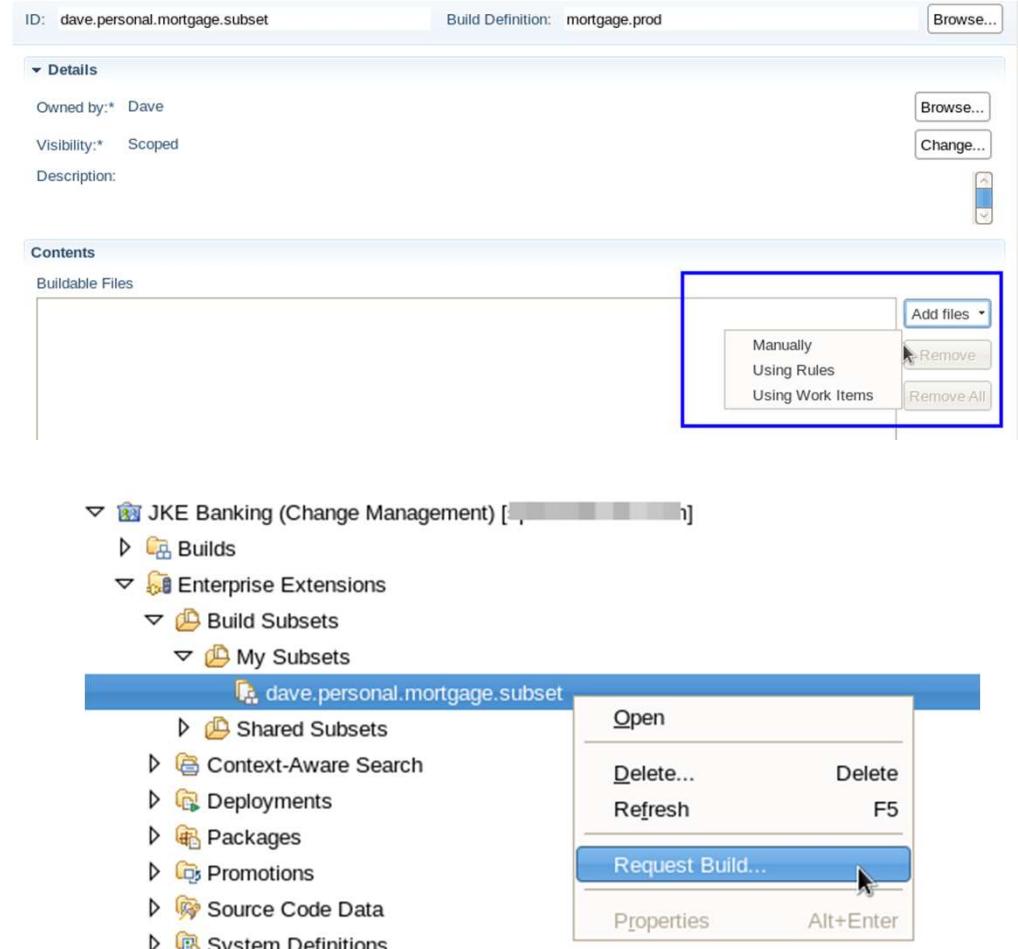
2013

- **Subset Contents:**

- Manually: individual picked files from workspace
- Using Rules: load rules
- Using work items: calculation based on associated change sets
- Revisited editor for 4.0.3

- **Using a subset in a build:**

- When requesting the build, choose to use a subset
- (4.0.3) Directly request build from the subset itself



ID: dave.personal.mortgage.subset Build Definition: mortgage.prod

Owned by: * Dave

Visibility: * Scoped

Description:

Contents

Buildable Files

Manually
Using Rules
Using Work Items

JKE Banking (Change Management) []

Builds

Enterprise Extensions

Build Subsets

My Subsets

dave.personal.mortgage.subset

Open

Delete... F5

Refresh F5

Request Build...

Properties Alt+Enter

RTC 4.0.3 – User Build with Rational Developer for System z

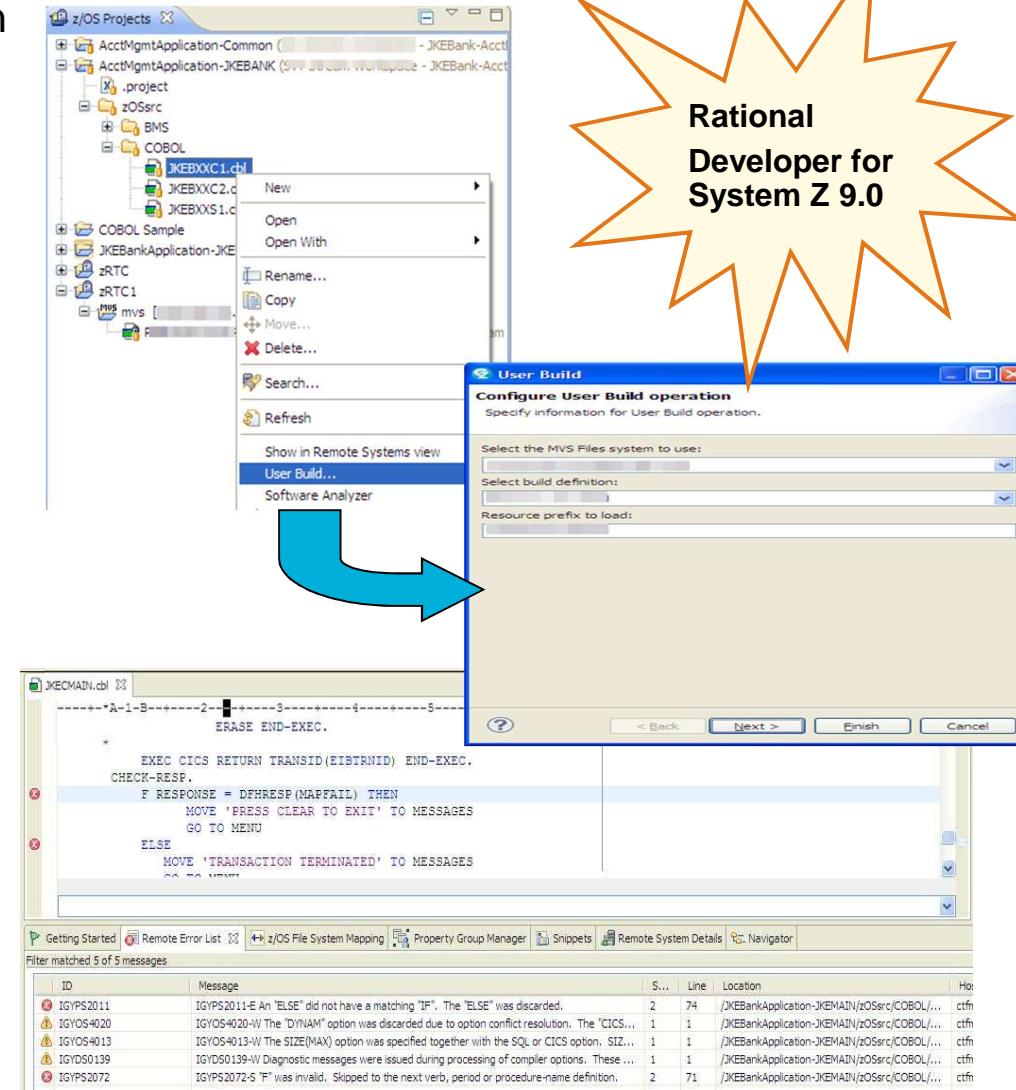


2011

2012

2013

- New build feature based on JCL submission
- Generation of JCL based on RTC information
 - File must have a Language Definition assigned
 - At least one translator for the LD
 - Build Definition information used
- Building using submitted job, **not** RTC build infrastructure
- Supported for COBOL and PL/I
- User specifies on execution
 - MVS system where to build
 - Build Definition
 - Load Prefix
 - Dependencies to load from workspace
- Seamless error feedback support via RDz Remote Error List



Personal Build vs. User Build

Personal Build

1. Builds changed checked in programs from user personal RTC workspace
2. Uses Build Engine and Build Definition for building
3. ANT build script based on Lang Defs and Translators
4. Primary Use Case: build application without impacting team
5. Error feedback based on Build Definition parameterization

User Build

1. Builds just single selected program
2. Uses JES and generated JCL for building
3. Generated JCL based on Lang Defs and Translators
4. Primary Use Case: lightweight unit compilation and link-edit
5. Out-of-the-box build error feedback

Updated Platform Support

RTC 4.0.2:

- FF17 ESR, VMware ESx 5.1

RTC 4.0.3:

- Eclipse 4.2.x supported
 - RAD 9.0 will require Eclipse 4.2.x
 - For customers who need a mix of RAD 8 and RAD 9 on a single RTC deployment, they can migrate their server to RTC 4.0.3 and run both RAD 8 (RTC 3.x, or 4.0.1, 4.0.2) and RAD 9 (RTC 4.0.3 clients) against the same server.
 - WAS 8.5 support
 - DB2 10.1

More Information: Demo Videos

Simpler, faster agile ranking video:

[Attachment134393](#)

RTC Client for Microsoft Visual Studio IDE – My dashboard video:

[Create a Demo Video for My Dashboard \(242294\)](#)

New cross project plan feature demo video:

[Demo video for cross project plans feature \(253403\)](#)

Improved ClearCase history importer for multi-branch scenarios:

[\[CCM\] Improve multi-stream / multi-branch-type CC importing - Demo Video \(244404\)](#)

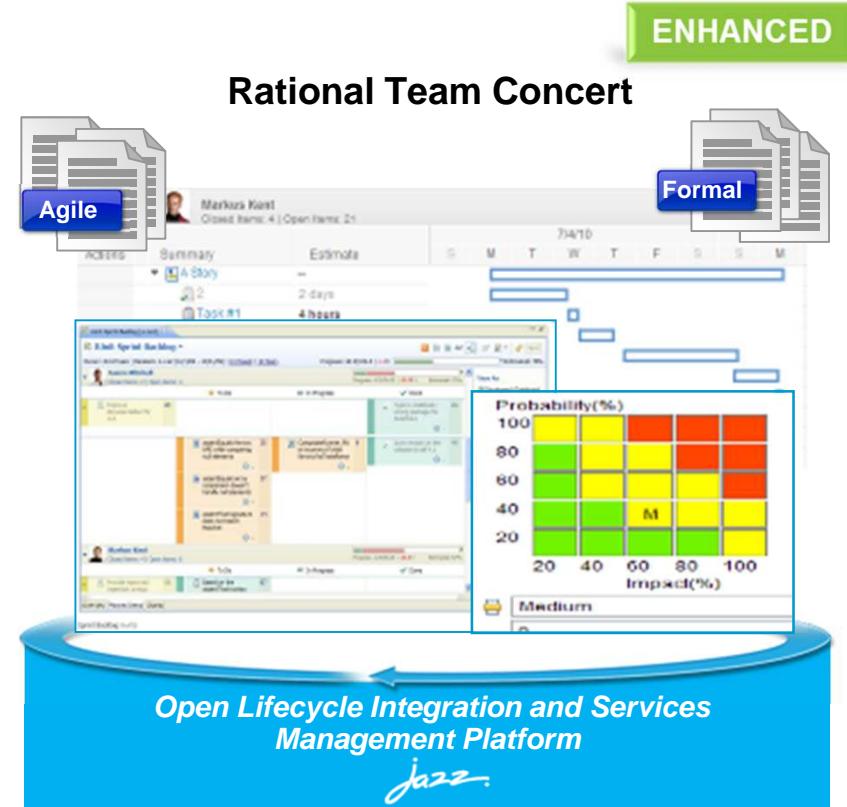
RTC 4.0.3 : Additional enhancements

- **Re-work how attributes are handled in the web UI for work items**
 - Improve quality and future ability to extend. This is a re-implementation of existing features
- **ISPF improvements: Usability enhancements to the ISPF client**
 - New Actions
 - Disassociate Work Items
 - View/Compare from History

IBM Rational Team Concert v4.0.3

Build better software and products with an all-in-one development environment

- Deliver faster with improved performance
 - Load plans in the web UI up to 50% faster
- Focus on developer productivity
 - Rank plans simpler and faster with explicit ranking options
 - New customizable developer view across all projects for Visual Studio developers. Track my to do list and approvals
- Report and act on more data
 - Out of the box reports to track time spent
 - Ability to report on approval descriptions and complex attributes such as team structure, components and iterations
- Get started quicker than ever
 - New Jenkins plug-in with traceability to Rational Team Concert work items and SCM to allow faster adoption without having to change your existing build tooling.
 - Easier importing of ClearCase data with support for multi-branch, multi-baseline version history.



“Plans load much faster, ranking is simpler and now I can expand our adoption of Rational Team Concert to teams using Jenkins”

Development Team Lead



www.ibm.com/software/rational

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Other RFE's of interest in RTC 4.0.3

- [Process enable add/remove work item from change set \(57870\)](#)
- [Provide a permission that non-creator of a change set can edit the comment of the change set. \(235561\)](#)

What about RTC 4.0.2? (Q1 2013)

A defect only release, with some new platform support
for FireFox 17 ESR and VMware 5.1

For details and a link to a list of defects fixed see:

[Release-blog RTC 4.0.2](#)

Notice: Proposed Platform Removal – 1H 2014

- **Important note on future RTC platform support for Windows XP, Windows Vista and Internet Explorer 8:**
- Microsoft has officially announced that it will no longer support Windows XP after April 8, 2014 including no security fixes or updates. IBM Rational CLM based Jazz products, intend to drop support for Windows XP, Internet Explorer 8 and Windows Vista on or about this same 2014 time frame. To give customers time to plan for this, we are making this announcement now. Customers who still need to run Rational Team Concert on these platforms can continue to run existing releases, such as RTC 4.0.3 and others that will continue to provide this support. However, to gain access to new 2014 feature releases of RTC and CLM products customers will need to plan for moving off Windows XP, Windows Vista and IE8.
- See: [Microsoft to end Windows XP support](#)