

ERUC 2008

Collaborative Application Lifecycle Management

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GDD and C/ALM

Collaborative Application Lifecycle Management

- Introduction

- **Application Lifecycle Management is an integral part of the Ericsson development processes.** IBM Rational tools form a key component in the Ericsson ALM development process and tool chain.
- Rational is using a scenario based approach, the Greenthreads, to **drive our Solution Strategy** and to identify, document and test our end-to-end workflows and cross-product integrations
- Green Threads is an approach to solution management and validation that; **'Captures workflows across a set of products to solve a complex customer problem'** and move our organization beyond point product thinking
- This presentation will team discuss the **benefits of Collaborative ALM.** Examples will be taken from the new Rational ALM Redbook covering continuous integration between stakeholders, integration between distributed team roles and team functions, and integration between development teams and the enterprise software delivery chain using an agile at scale approach.

What is Collaborative ALM

What is application life-cycle management?

- ▶ *The coordination of development life-cycle activities, including requirements, modeling, development, build, and testing, through:*
 - 1) *Enforcement of processes that span these activities.*
 - 2) *Management of relationships between development artifacts used or produced by these activities.*
 - 3) *Reporting on progress of the development effort as a whole.*

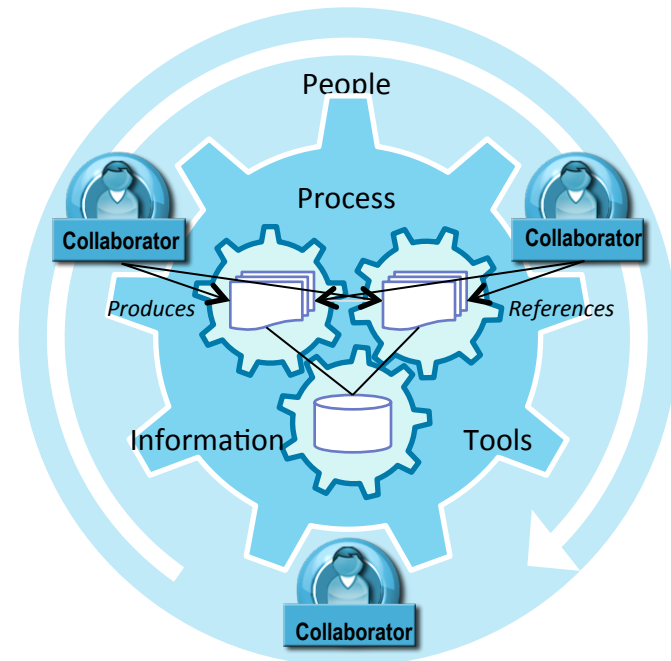
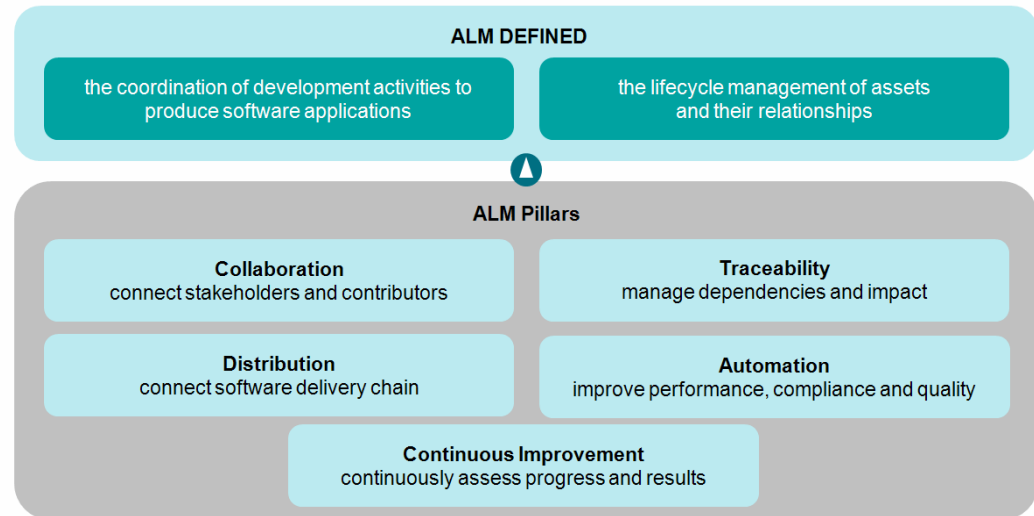
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FORRESTER

- Forester defined the ALM 1.0 space using the dimensions of
 - Process
 - Traceability
 - Reporting
- For next generation ALM 2.0 additional dimensions are required

What is Collaborative ALM

- C/ALM identify the importance of both the coordination of development activities and the management of assets
- C/ALM also identify the continuous contributions by collaborators to assets over the lifecycle
- Collaboration, Distribution and Continuous improvement of the delivery process are key additions to the ALM space



Rational Green Threads Team

Green Threads is an approach to solution management and validation that; 'Captures workflows across a set of products to solve a complex customer problem' and move our organization beyond point product thinking

Core team

- Lead the Green Thread initiative
- Driving Solution and Product requirements

Extended team

- SVT Green Thread Team ensure comprehensive testing of the Green Thread
- Field representatives feed experience and practices to the Green Threads
- Continuous customer validation





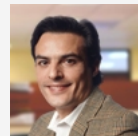
- "I'm Bob the AccountOpening **Product Owner**."

I own the release requirements I need to know what was delivered in the release, and what is in-plan for next



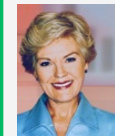
- "I'm Patricia the AccountOpening **Project Manager**."

To lead my project I need manage change, plan the project iterations, track health and quality by collaborating with my team and stakeholders



- "I'm Marco, **Dev Lead** in a component team."

I lead my team using Agility at Scale practices. We manage our 2 week iterations, and deliver to daily integration.



- "I'm Tammy, a **Test Lead** for JKE."

I have a globally distributed quality team responsible for conducting solution testing, or investigative testing in Agile terms.

Rational RequisitePro & Composer



Create Sketch
Manage Requirements

Rational Team Concert



Plan Iteration w/ WorkItem



Develop, Test, Build and Deliver changes

Recently acquired team

Rational ClearQuest



Triage Requests
Plan Iterations
Align work



Alternate UCM workflow

Track work / plan status

Track build content

Track solution health

Deliver

Rational Quality Manager



Plan Tests w/ WorkItem

Rational Build Forge



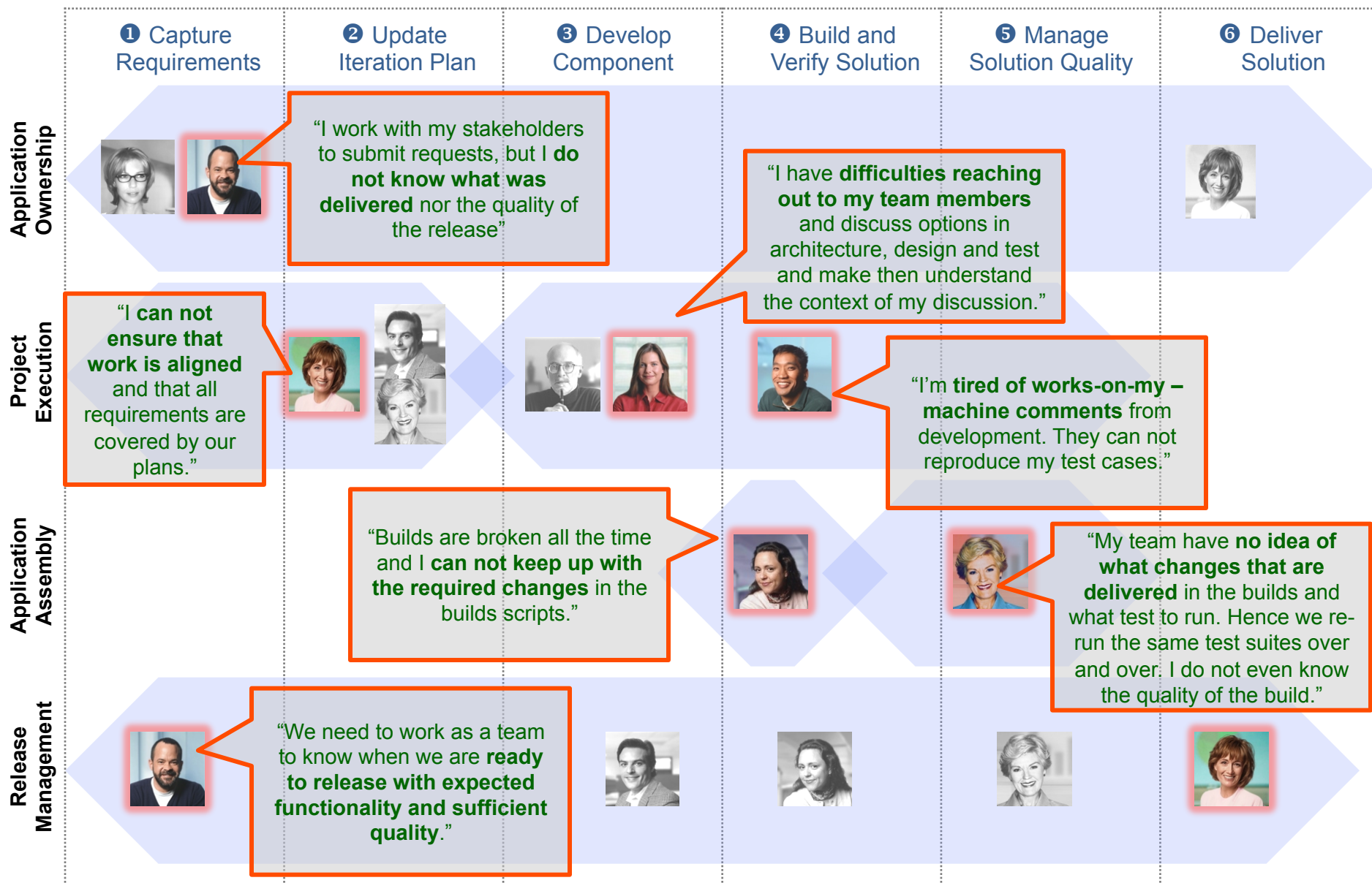
Integrate and automate development

Rational Quality Manager

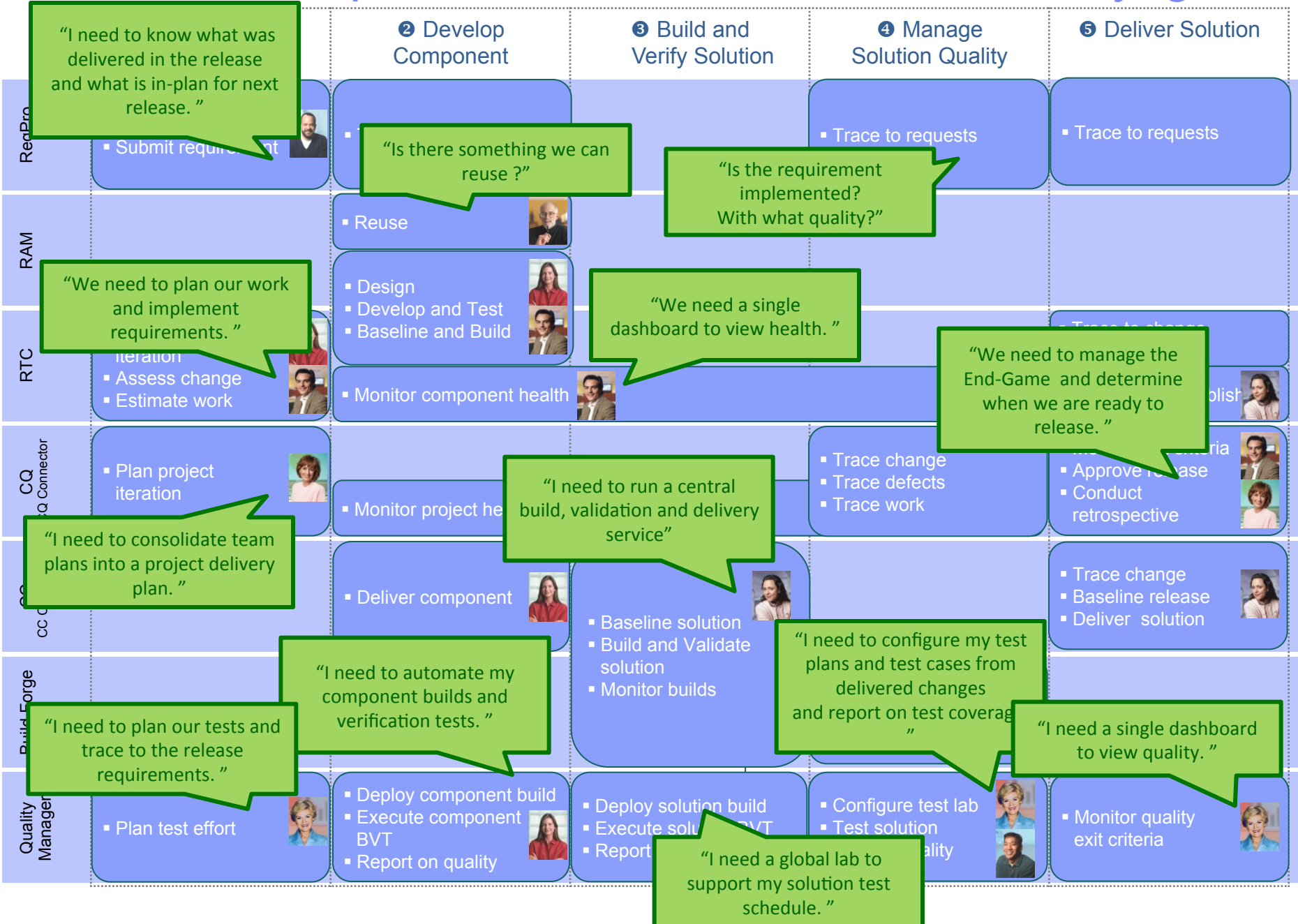


Test integration build
Submit defect

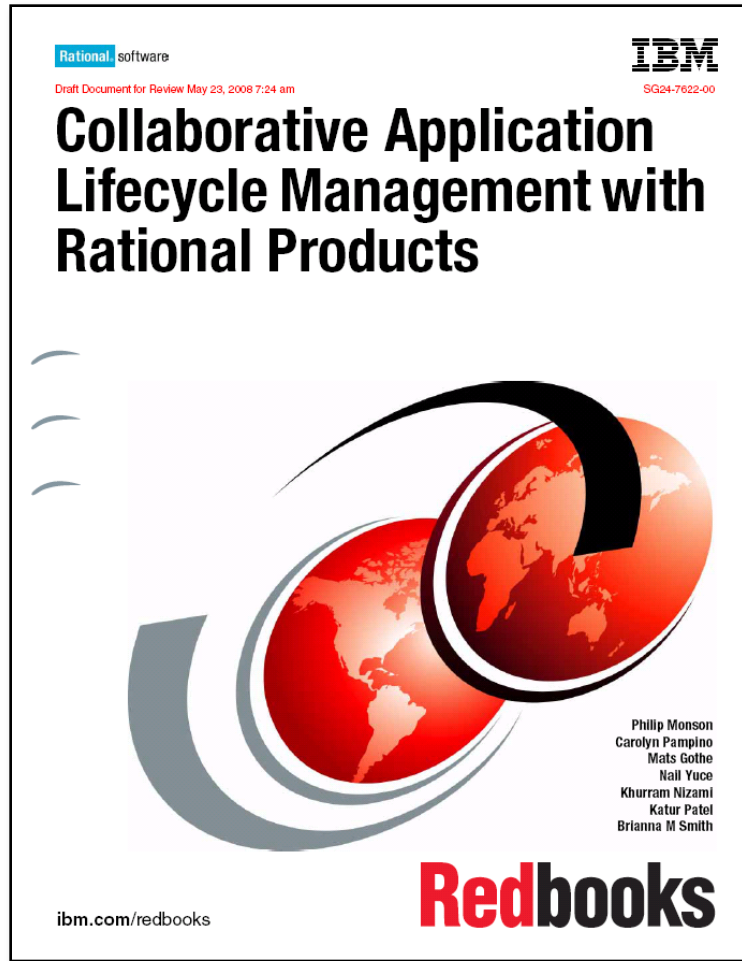
3rd Party Provider



GDALM Requirements - What makes the story 'green'



Collaborative Application Lifecycle Management Redbook

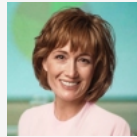
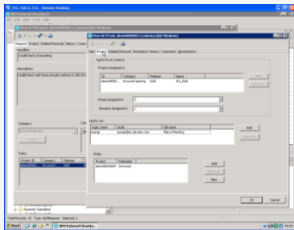


- The Redbook provides a blueprint for Collaborative Application Lifecycle Management by using an end-to-end reference scenario for deploying the new Rational products and 'Agility at Scale' into an existing enterprise environment.
- Outline
 - Part A – Application Life Cycle Defined
 - Part B – Responding to a change request
 - Part C – Collaborative Development
 - Part D – Enterprise Integration Builds
 - Part E – Manage Quality
 - Part F – Solution Delivery
 - Part G - Measuring Team Success in ALM
- PDF available for download

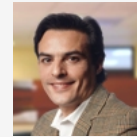
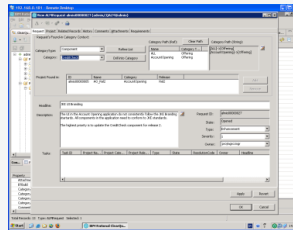
Go to www.redbooks.ibm.com and search for "ALM"
Or browse to >
<http://www.redbooks.ibm.com/redpieces/abstracts/sg247622.html>



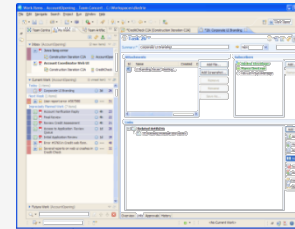
Bob submits a request



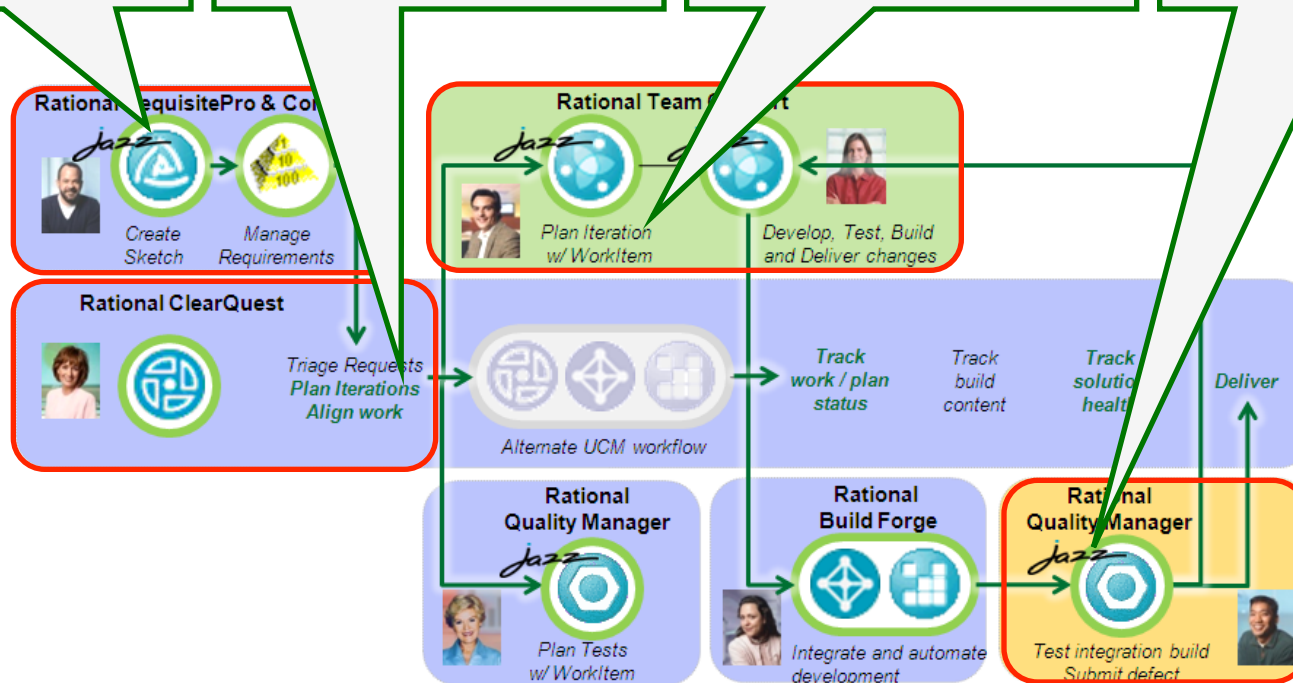
Patricia plan and align work



Marco and Diedrie collaborate on design and delivery



Tanuj tests the quality of the delivery

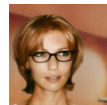
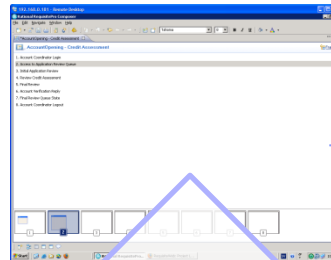


Defining Business and Release Requirements



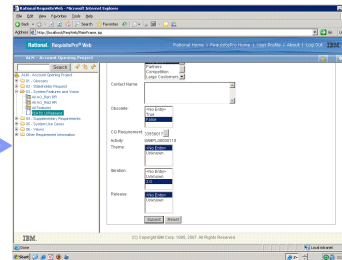
- ▶ Bob is the application owner and the key stakeholders for the application.
- ▶ Bob has a focus on business requests for the application translated to release requirements.
- ▶ Bob refactors and elaborates his requirements in Requirements Composer and manages his requirements in ReqPro
- ▶ Bob uses a web interface to define, review, manage and submit his requirements.
- ▶ He traces his ALM Requests to his requirements.

- Bob uses the Requirements Composer to capture business requests and collaborate with stakeholders.

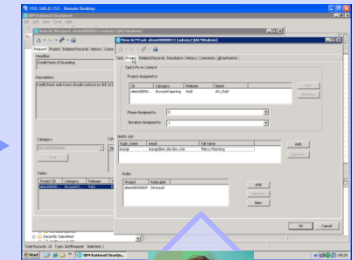


Stakeholders
review business
needs

- Bob uses ReqWeb to manage, organize and trace/submit his requirements (using the CQI integration)



- Bob submits his release requirements in ClearQuest and link to the business requests in ReqPro



Assigning the
category will put
the request in
the queue for
the project

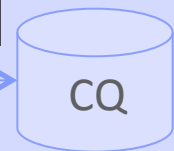


RPC: Storyboard



RP: Requirement

CQ: Requirement



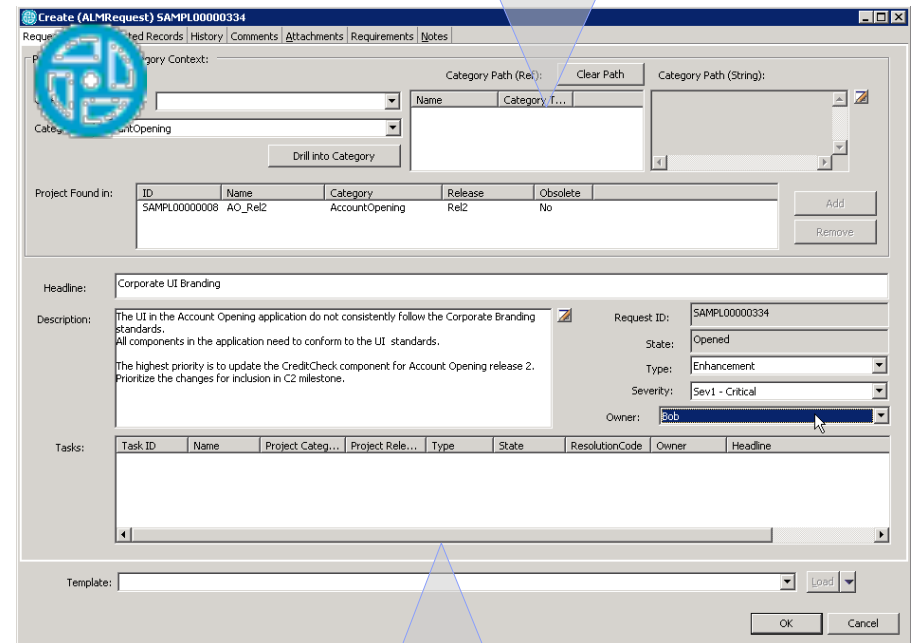
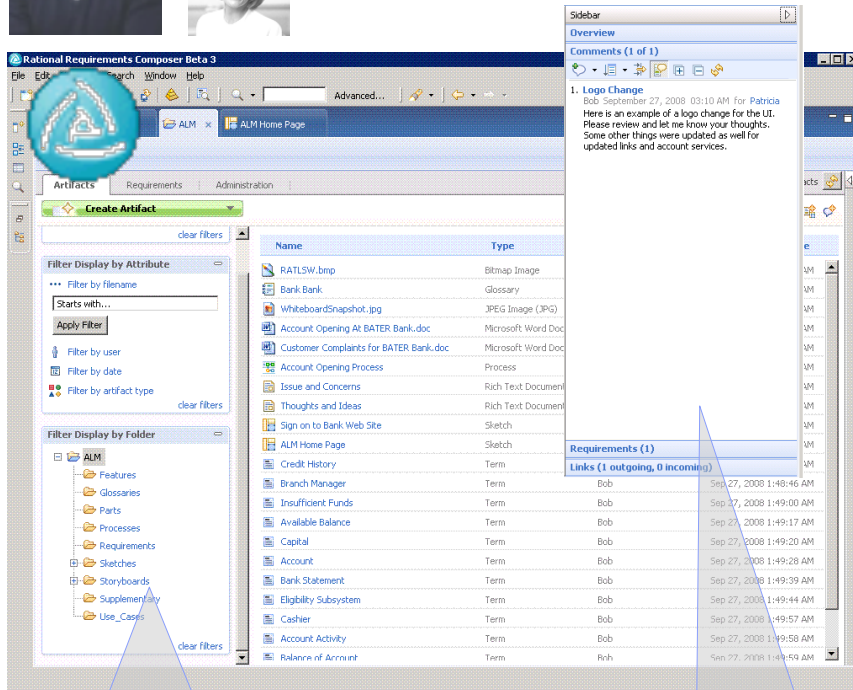
ALMRequest

Defining Requirements



- ▶ The teams align on the estimates, the agreed delivery iteration by using in-context collaboration

Interoperability on the ALM platform help stakeholders track plans and delivery of the requests



Compose a variety of **artifact types, links and requirements**.
Refactor and establish traceability.

Conduct in-context **discussions with stakeholders** to review and validate requirements.

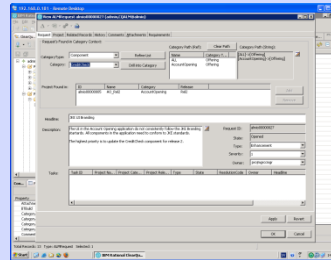
Manage **release requirements** in the context of projects and releases.
Trace to managed requirements in ReqPro and Requirements Composer

Assign and Align Work

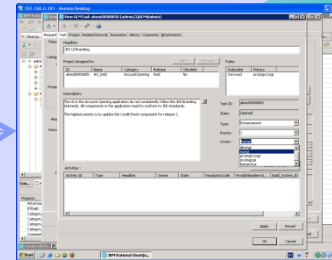


- ▶ Patricia triage the ALMRequest release requirements for the current project
- ▶ She create a new ALMTask, based on the configured development process
- ▶ She assign the Tasks to the next planned iteration, and assigns it to Marco and Tammy
- ▶ Marco receive the task in his work queue for the assigned iteration
- ▶ Tammy receive the task in her queue for the release
- ▶ The teams align on the estimates, the agreed delivery iteration by using in-context collaboration

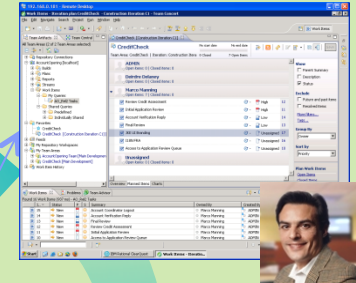
- Patricia triage the queue of new ALMRequests in ClearQuest



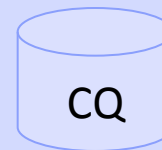
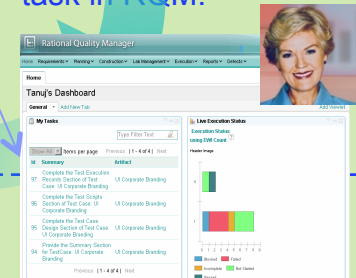
- Patricia plan the work by creating new ALMTasks. She assigns implementation to Marco and test to Tammy.



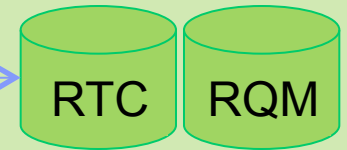
- Marco receive the task in his RTC triage queue



- Tammy receive her test task in RQM.



CQ Connector



CQ: ALMRequest

CQ: ALMProject

CQ: ALMCategory

CQ: ALMTask

CQ: ALMIteration

WorkItem

Category

Assign and Align Work



- ▶ The teams align on the estimates, the agreed delivery iteration by using in-context collaboration

The screenshot shows the IBM Rational ClearQuest interface. On the left, a list of tasks is displayed with columns for Name, Status, Priority, and Estimated. The main pane shows details for 'Task 51: Corporate UI Branding', including a description, a list of comments, and a 'Quick Information' section.

Transparency to work make the team **self configure on plan, priorities, assignments and estimates**

In-context discussions, cross platforms, help the component teams discuss iteration planning, delivery risks, and align with others depending on the delivery.

Interoperability on the ALM platform help team stay in sync on aligned iterations

The screenshot shows the IBM Rational ClearQuest interface. The top pane displays a table of tasks with columns for ID, Type, Headline, Owner, State, Iteration, and Priority. The bottom pane shows a 'New Note' dialog box with a text area for entering a note.

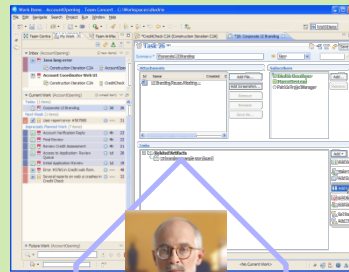
Interoperability on the ALM platform help team stay in sync and contribute to a plan alignment.

Develop and Deliver Work



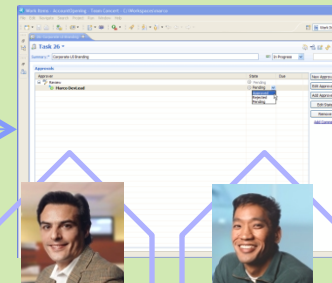
- ▶ Diedrie start the work on her task. The state change on the work item will transparently synchronize with CQ and make the team aware of the progress.
- ▶ Collaborating with AI she identifies a reuse component that she import into a sandbox workspace for prototyping. She can share the sandbox with Marco for review
- ▶ Finalizing the change she request Marco and AI to review and approve the changes.
- ▶ She build a Private Build, a deliver for Component Build and deliver for daily integration Solution Builds.
- ▶ She collaborate with Rebecca to update build dependencies and BVT tests.

- Diedrie plan the task in the MyWork view. She collaborate with AI on reuse opportunities



Collaborate with AI in RAM

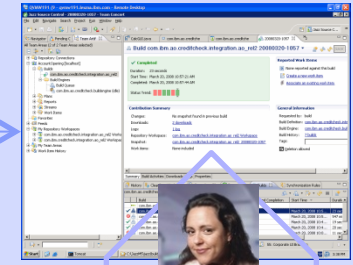
- Diedrie review the change set with Marco and get approval for delivery.



Collaborate with Marco on code

Collaborate with Tanuj on test

- Diedrie deliver to component and solution integration using CC Synchronized Streams



Collaborate Rebecca on build changes



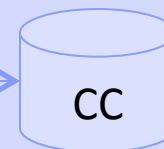
WorkItem

Change Set

Approval

Stream

Synchronized Stream



CC: Stream

BF: Build

BF: BOM

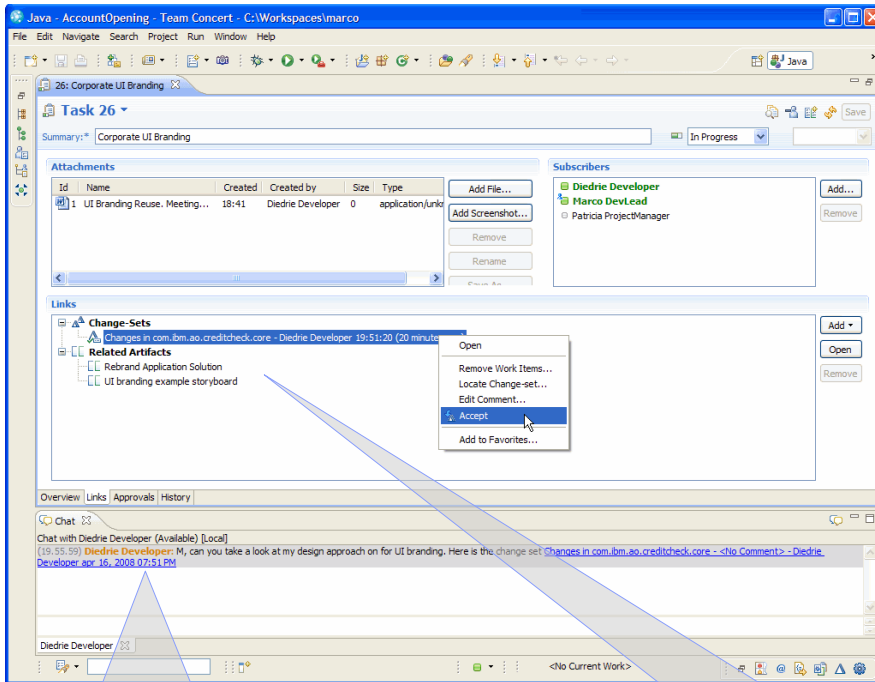
CQ: BT Build

Develop and Deliver Work



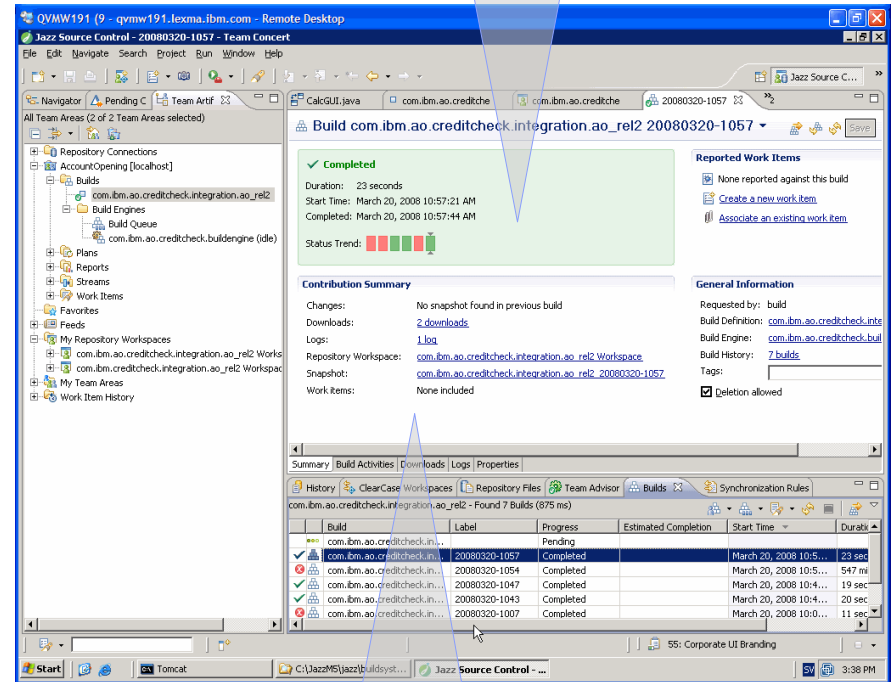
- ▶ Finalizing the change she request Marco and AI to review and approve the changes.
- ▶ She collaborate with Rebecca to update build dependencies and BVT tests.

Transparency to baseline stability help the teams to focus



Integrating change management with change sets and reviews enables the team to collaborate and improve productivity and code stability

Change sets can be used to quickly recreate workspaces



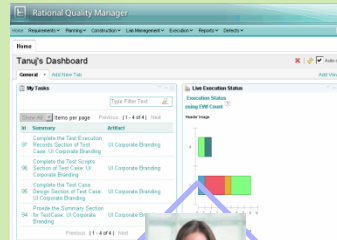
Easy access to delivered changes, code snapshots and quality reports.

Test and Manage Quality



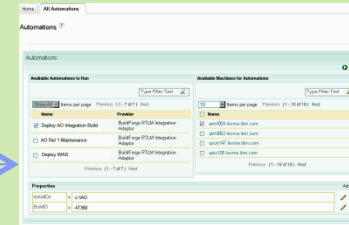
- ▶ Tanuj and Diedrie finalize the test cases on the new request. Diedrie already have unit tests. Sharing child tasks of the same parent help them collaborate in-context of the request.
- ▶ Using the Lab Management function, Tammy schedule test resources, configure test systems, and deploy builds to servers. She collaborate with lab engineers that deliver the resources.
- ▶ Tanuj run his test cases and collaborate with Diedrie on submitted defects.
- ▶ Tammy and the team use the quality dashboards to monitor project health and application quality.
- ▶ Personalized dashboards, presence awareness, and contextual URL links help the global team improve performance

- Tanuj construct the test cases and test scripts

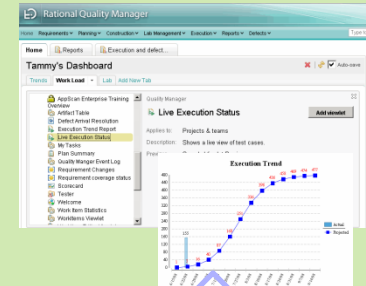


Collaborate with Diedrie on test

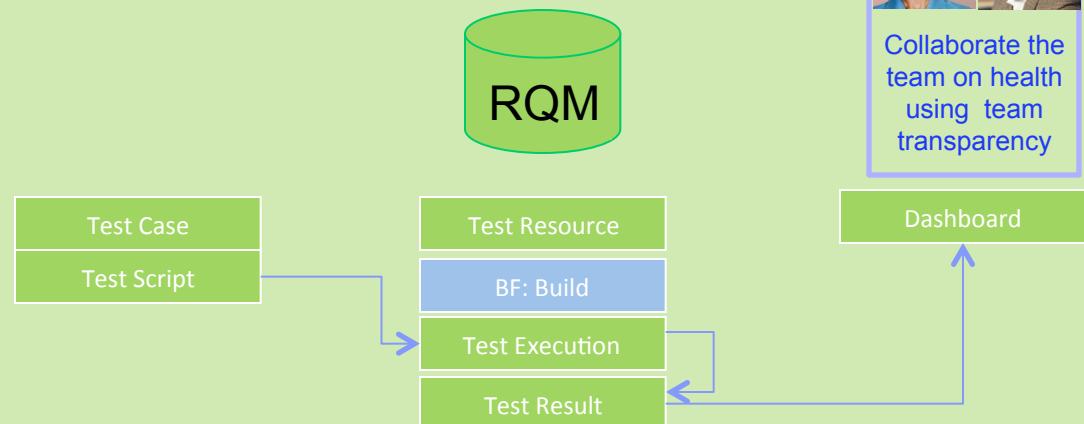
- Tammy deploy the build to the Test Lab
- Tanuj run the test plan



- Tammy monitors the quality metrics



Collaborate the team on health using team transparency



Collaborative ALM - Assets



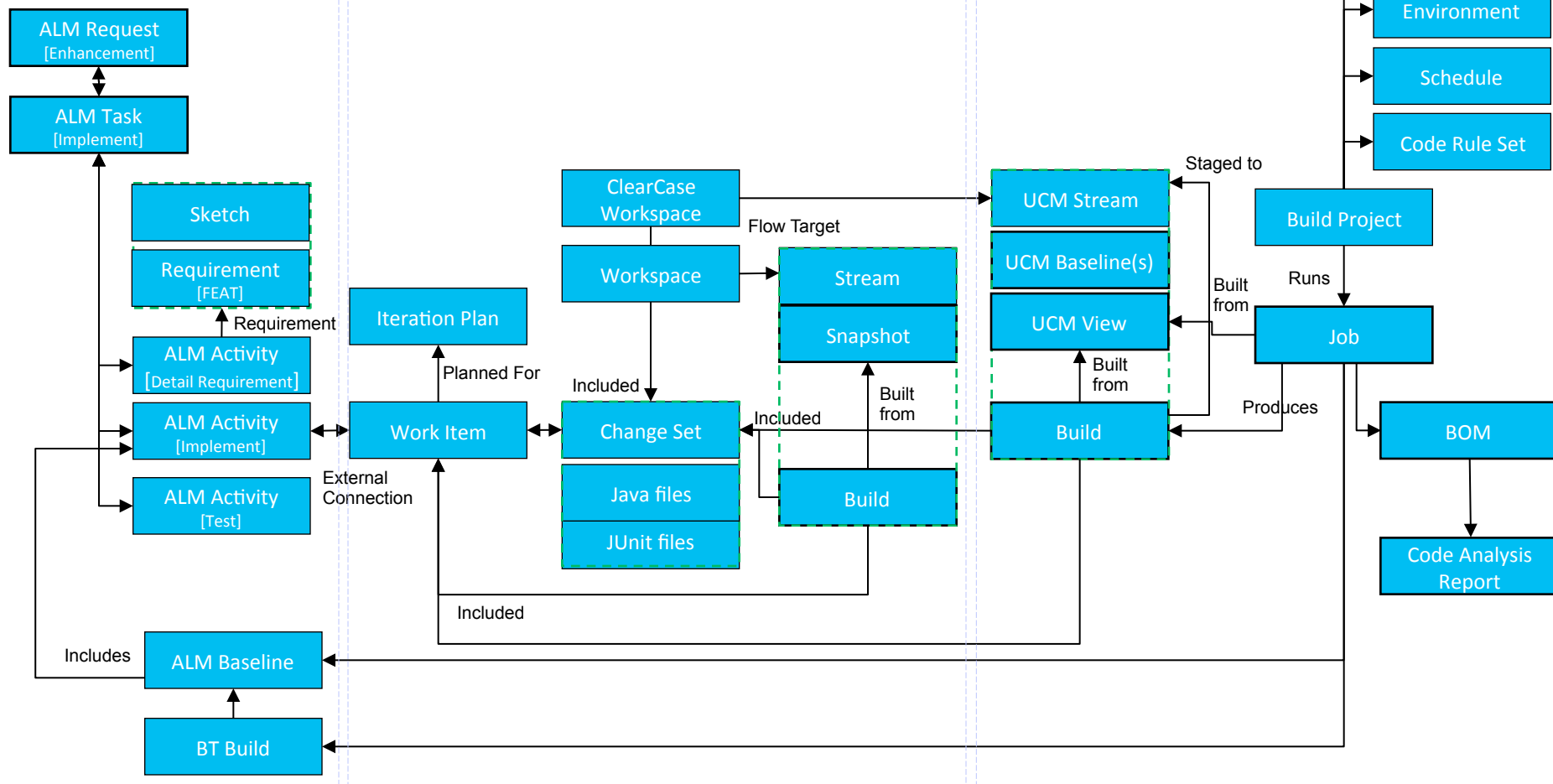
Rational ClearQuest
Rational RP and Composer



Rational Team Concert



Rational ClearCase
Rational Build Forge



Conclusion/Summary

- New integrated C/ALM capabilities are key to unleash capacity of global delivery teams
- New C/ALM Redbook helps by documenting practices using the 2008 product ALM integrations
- Greenthread scenarios are continuing to shape the requirements for the 2009 releases of the Jazz C/ALM solution integrations

The Configuration for this Scenario



Web



IDE



Repository

