

Agile Development with Rational Team Concert

Giles Davies

Technical Consultant, IBM Rational

giles.davies@uk.ibm.com



IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



What is Agile?

- An iterative and incremental (evolutionary) approach performed in a highly collaborative and self-organizing manner with just the right amount of ceremony to frequently produce high quality software in a cost effective and timely manner which meets the changing needs of its stakeholders.

- Core principles
 - ▶ “Fits just right” process
 - ▶ Continuous testing and validation
 - ▶ Consistent team collaboration
 - ▶ Rapid response to change
 - ▶ Ongoing customer involvement
 - ▶ Frequent delivery of working software



Fair enough, so what do I get with Team Concert?

Rational Team Concert Process Templates

- Scrum
- Eclipse Way
- Open UP
- Agile
- Simple Team
- Cloudburst Sample

- Where's XP?
 - XP provides a set of values and practices
 - Many of these are incorporated into the other processes (e.g. Velocity, Continuous Integration, Iterations)

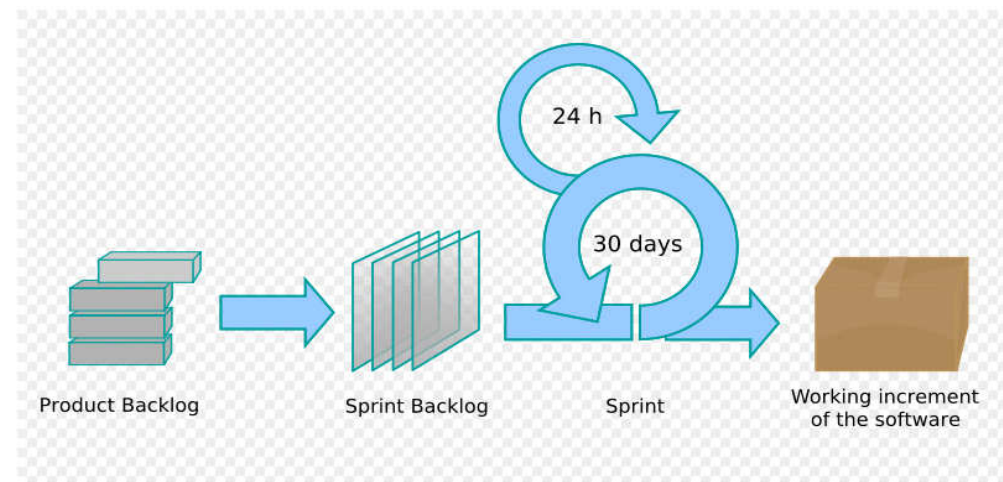
What does process support really mean?

- Client-side and server-side project initialization
- Predefined project reports and queries
- Work item types, workflows, and enumerations
- Roles available for a team
- Team and role-specific permissions for client and server-side operations
- Team and role-specific preconditions
- Team and role-specific follow-up actions

Scrum Process

Scrum Overview

- Product Backlog
 - All user stories
 - Owned by Product Owner
- Sprint Backlog
 - User stories to delivered for the sprint delivered as working software
 - Controlled by Scrum Master
- Sprint
 - Timeboxed iteration to deliver Sprint Backlog
- Daily Scrum
 - Daily review of progress and impediments.
 - Tracked as burndown chart
 - Pigs vs Chickens



A pig and a chicken are walking down a road. The chicken looks at the pig and says, "Hey, why don't we open a restaurant?" The pig looks back at the chicken and says, "Good idea, what do you want to call it?" The chicken thinks about it and says, "Why don't we call it 'Ham and Eggs'?" "I don't think so," says the pig, "I'd be committed but you'd only be involved"

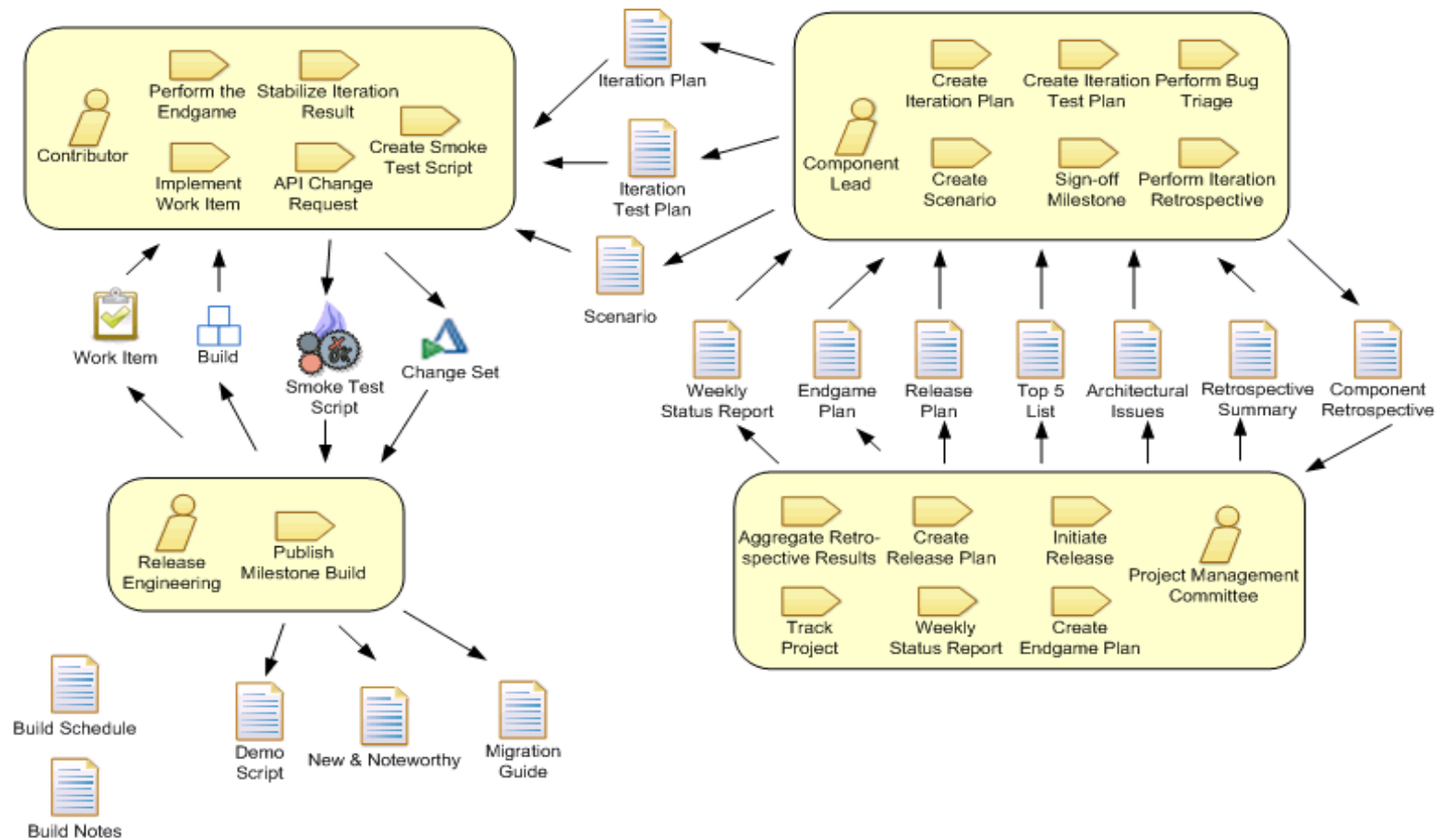
Let's have a look...

Eclipse Way Process

Eclipse Way Overview

- Shipping - Even if features have to be dropped
- Predictability - Continuous Risk Mitigation through Iterative Development
- Transparency - All Involved in all stages
- Feedback - Continuous test and build
- Dynamic Teams – Work on many different area
- End Game
- Live Betas
- Milestones First
- New and Noteworthy Document
- Build To Last
- APIs first
- Continuous Integration and Testing

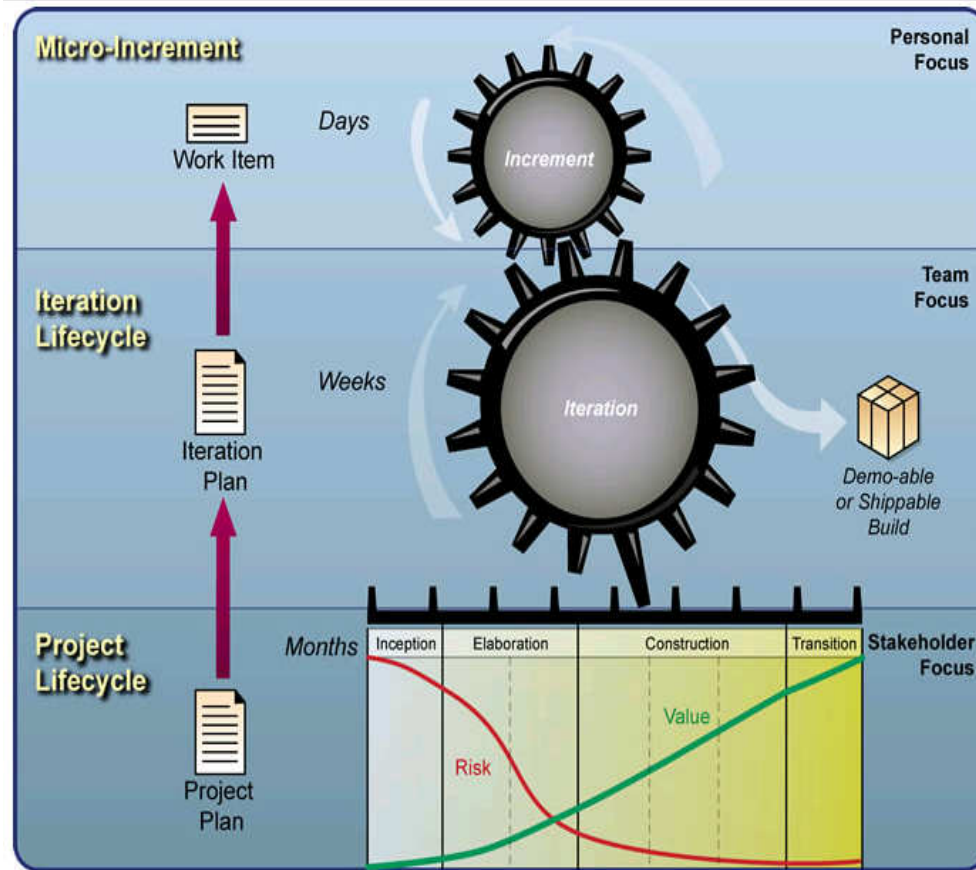
Eclipse Way Roles and Tasks



Let's have a look...

Open UP Process

OpenUP Overview



These represent short units of work that produce a steady, measurable pace of project progress

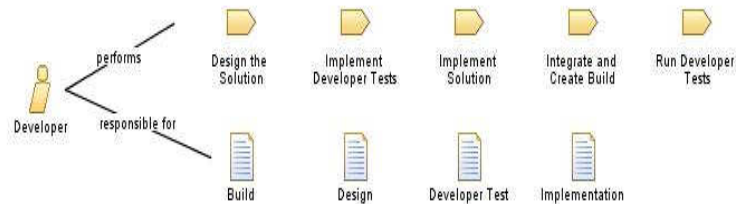
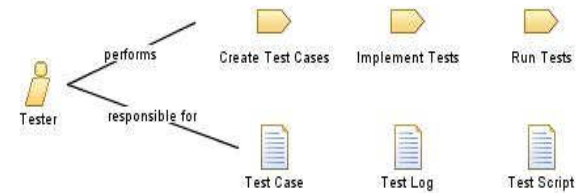
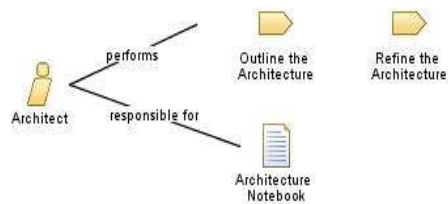
These are planned, time-boxed intervals that focus the team on delivering incremental value to stakeholders in a predictable manner.

The project lifecycle provides stakeholders and team members with visibility and decision points (go no-go)

OpenUP Disciplines

- Architecture
- Configuration and Change Management
- Development
- Project Management
- Test

OpenUP Roles



Let's have a look...

Agile Process

Agile Process Overview

- A mix of Agile practices
- Simple approach
- Team Member and Project Lead are the only pre-defined roles

Let's have a look...

Simple Team Process

Simple Team Process Overview

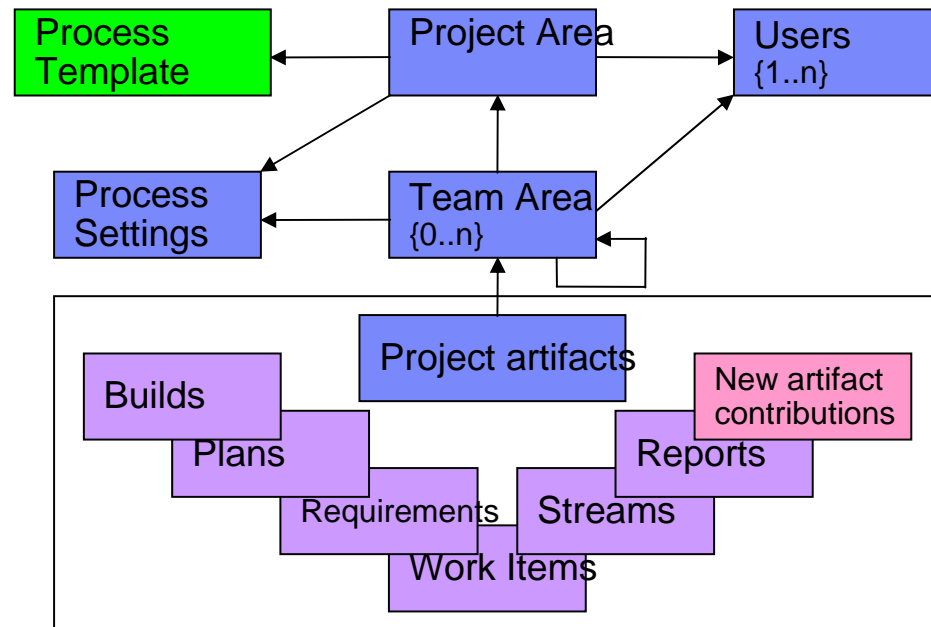
- Very simple approach
- Team members have full permissions
- Non team members cannot do anything
- The only pre-defined role is Team Member
- Only iteration type is a Development Iteration

Let's have a look...

But I don't want to use one of those templates...
(or, can I pimp my process?)

Configuring the Team's Process

- A team's process is initialized by the process template specified when a project area is created



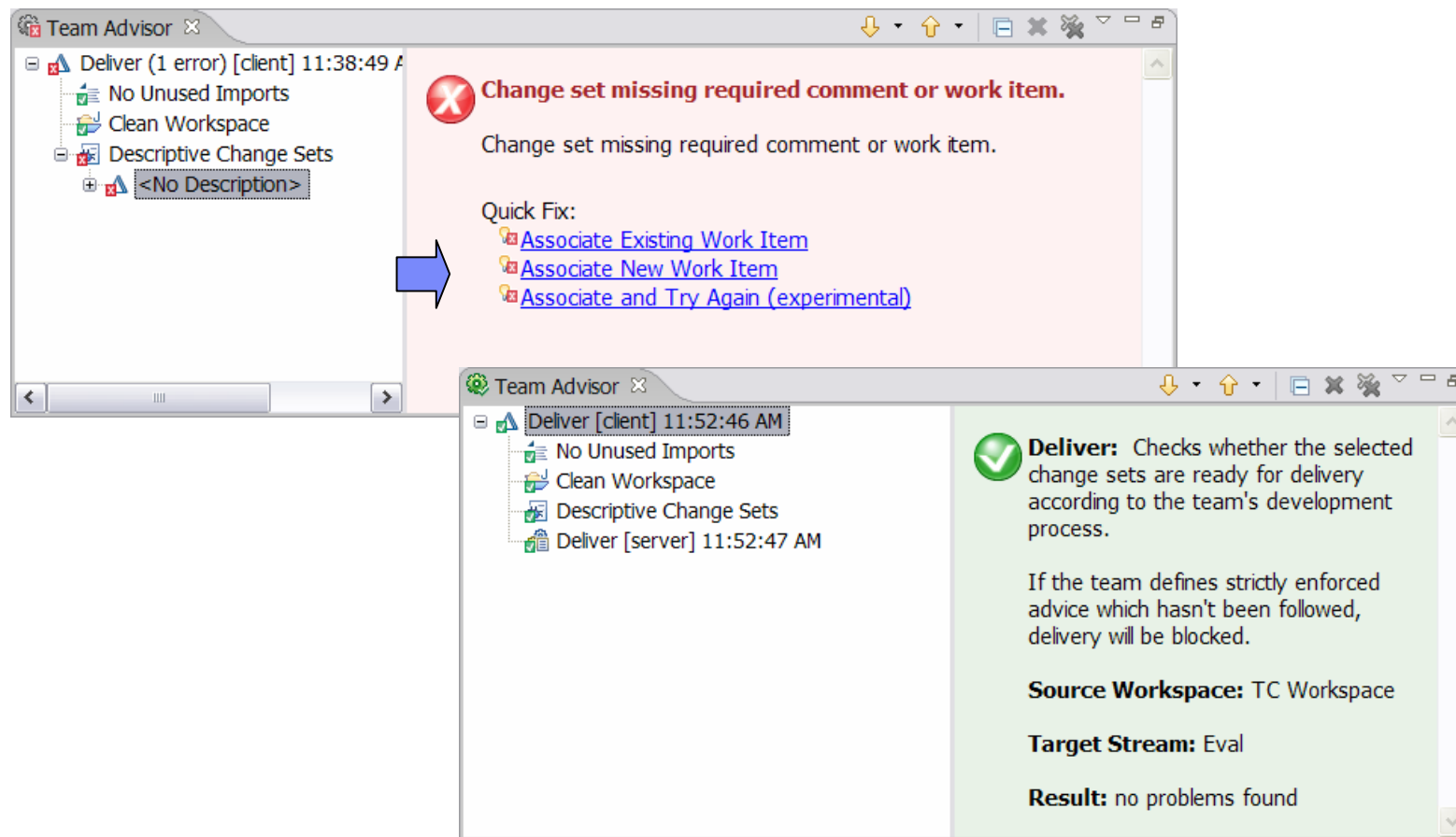
Thereafter, the team customizes their processes within their project area and team areas

Recommended Process Definition Workflow

- Shaping your process is an inherently iterative activity and requires thorough testing: Testing is most easily done in a running project.
- We therefore recommend the following workflow:
 - ▶ Create a project area with one of the predefined process templates or one that you imported into your repository.
 - ▶ Modify the process of the project area
 - ▶ Test and refine continuously
 - ▶ When you reach a point at which you are happy turn the process of your project area into process template.
 - ▶ Export the process template and share it with others
 - ▶ Start the next cycle.

Process shows through in the **Team Advisor** View

- Incomplete code delivery and later success



Configuring a Process

- Process templates
 - Provide a starting point and guide for a project area process configuration and iteration structure.
 - Include process documentation in HTML format.
 - Apply a process template when you create a project area
 - Process can be configured in project areas and team areas
 - Allows teams to refine, override, and augment the parent process (project area or team area)
 - Process enforcement can be encouraged or strictly enforced
 - A team can overrule their parent's process specification
 - > Unless the parent specifies the configuration for the operation as final
 - Can create templates from scratch or from existing project areas.
 - You can edit templates using source and high-level editors

Let's have a look...

Summary

- Rational Team Concert is process neutral
- The main Agile processes and practices are supported
- Processes can be customised or created from scratch

Resources

- Rational Team Concert
 - <http://jazz.net>
- Work Item Customisation
 - <https://jazz.net/learn/LearnItem.jsp?href=content/docs/work-items-cust/index.html>
- Work Item Editor Presentations
 - <https://jazz.net/learn/LearnItem.jsp?href=content/docs/work-items-cust/workitem-editor-presentations.html>