Document and automate processes with Rational Method Composer and Jazz: Part 2. Adopting existing processes

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Many teams find it challenging to get a project started quickly, to get team members oriented, to set up and configure tools, and to take advantage of proven patterns of success to do their jobs. Many other teams are required to document their process for compliance reasons and show that they follow that process. In this series of three articles, we describe a way to overcome these challenges by taking a process defined in Rational Method Composer and automating it in Rational Team Concert.

View more content in this series

Introduction

In Part 1 of this series of articles (see "More content in this series"), Bruce MacIsaac explained the value of software development methods. This article describes how to take a process defined in IBM® Rational® Method Composer and automate it in IBM® Rational Team Concert™.

Rational Method Composer is for managing, tailoring, and communicating process descriptions. It consists of two components:

- Process assets in the form of the IBM Processes Library, which is composed of practices and pre-created processes that you can adopt or adapt.
- A tool to author, tailor, configure, and publish process descriptions

See the Resources section in this article for where to get more information. You can also download a free trial version of Rational Method Composer from developerWorks.

Rational Team Concert is for collaborative planning, work item management, source control management, and continuous builds. It provides highly configurable process support to adapt to the way you want to work, thus enabling team members to work together effectively. (Also see Resources for links to more information.)

Rational Method Composer process *descriptions* provide the human-readable guidance that team members need to work together effectively and efficiently as a team. Rational Team Concert process *templates* provide the machine-readable rules that configure the tool to support your process. Together, these two applications provide a powerful solution for process management, process enactment, and measured improvement.

To explain the integration between Rational Method Composer and Rational Team Concert, we draw on the Rational solution for Collaborative Lifecycle Management (CLM, also cited in Resources), which includes Rational Method Composer process assets (such as process descriptions, tool guidance, and metrics) and other process assets (such as a Rational Team Concert process template). These assets provide all of the guidance that a project team needs to install and configure the CLM tools and to get a project running.

Scenario: Using available process assets

To illustrate the Rational Method Composer and Rational Team Concert integration capabilities, we use a scenario where the team uses available (as-is) process assets.

In this scenario, we introduce the Rational solution for **CLM process asset**. This process asset was developed by IBM to support the installation and configuration of the CLM tools and to add process guidance on how to use the tools as part of a complete software development lifecycle.

To illustrate the use of this process asset, we draw on a fictitious project team – the Business Recovery Matters™ project team, a project under the Money That Matters™ program of the JKE financial organization. The Business Recovery Matters project consists of a project leadership team and includes a feature team, a deployment team, and an independent testing team. This scenario focuses on the project leadership team that is setting up the environment and getting staff started on the team. The following project leadership team members are involved in this scenario:

Pam, project manager
Peter, process engineer
Todd, tool specialist
Ursula, business analyst

Decide which tools to use

The project leadership team is considering adopting proven development practices and tools that can expedite starting their project and help them work effectively and efficiently.

Peter and Todd investigate available process assets and tools. They decide to use Rational Method Composer for process documentation and Rational Team Concert for the team members to use to collaborate. The JKE organization purchases the right amount of licenses for the team to use.

Based on their research, the leadership team also decides to adopt the CLM process assets for these purposes:

- To quickly configure tools and a lifecycle project to get the team started

- To use proven patterns of success
- To provide relevant and contextual guidance for team members to quickly get up to speed on the team's process

Tips:

- You can read the complete Money that Matters lifecycle scenario for more guidance on installing, setting up, and using the CLM tools. (Requires free registration on Jazz.net.)
- To use Rational Method Composer for authoring content, you need the appropriate licenses. These are available as Authorized User license, Floating license, or Tokens.
- To browse Rational Method Composer published content, you need an Authorized User license or Rational Method Composer Content Reader license.

The following subsections explain how they start and run their project.

Install and configure the CLM tools and assets

Todd follows instructions on the IBM information center for CLM, under the Installing the Rational solution for CLM topic.

1. He has administrator privileges on the systems, so he installs and configures the CLM tools, which includes installing and configuring the servers, licenses, users, and so forth.
   Note: He also has the option to install client tools.
2. After he has installed and configured the tools, Todd confirms that the Jazz Team Server (JTS) is running so he can continue to the next steps.

The CLM solution process assets are available for download from the IBM Rational solution process assets page.

There are two main components to download: either published content or content from the Rational Method Composer library.

3. For the purposes of this scenario, the leadership team decides to use the standard process content, so Todd downloads the published Rational Method Composer process content (available as a **clm.war** file).

Deploy published Rational Method Composer content to the Jazz Team Server

1. To access Rational Method Composer process guidance from the Rational Team Concert project area, Todd deploys the clm.war file to the Jazz™ Team Server (JTS), which is using the default Tomcat server that comes with the tool.
2. Todd deploys (the equivalent of unzipping) the clm.war file under the following directory (where the part in italics is according to your system):
   Jazz_server_install_folder\server\tomcat\webapps\rmc

The other process assets available in this solution, such as the Rational Team Concert process template and Lifecycle Project Administration template, are embedded within the published process content.

3. After Todd deploys the clm.war file, he accesses the process description from their web browser at the following URL:
   http://JTS:9443/rmc/clm/index.htm

Download and import the templates

In the process description, Todd navigates to **Getting Started > Tools Setup and Configuration** page to find the Rational Team Concert and Lifecycle Project Administration templates.

Download and import the process template into Rational Team Concert

1. He downloads the Rational Team Concert process template:
   clm.process.ibm.com.zip
2. He imports the process by following instructions on the information center under the Working with process templates topic.

The template is then available to create new project areas.

Download and import the Lifecycle Project Administration template

1. Finally, Todd selects **Getting Started > Tools Setup and Configuration** and then downloads the Lifecycle Project Administration template:
   rational.clm_sol.integrated.template.xml
2. Next, he imports the Lifecycle Project Administration template by following information center instructions under Importing lifecycle project templates.

Create a lifecycle project

Now that the tools are installed and configured, the server is running, and templates are available, Pam, the project manager on the leadership team, can create a lifecycle project using the Lifecycle Project Administration template.

She follows the instructions under Creating lifecycle projects from a template. The results are integrated project areas in Rational Team Concert, Rational Quality Manager, and Rational Requirements Composer for the team to start running the project.

For the purposes of this scenario, Pam focuses on the Rational Team Concert project area.

Note:

This article does not cover the use of Rational Team Concert in detail nor explore the integration of Rational Team Concert, Rational Quality Manager, and Rational Requirements Composer. The

CLM tools integration is covered in detail on Jazz.net through a sample scenario called Money that Matters Lifecycle Scenario (free Jazz.net registration required).

Run the project

Pam is ready to start running the project. She adds an iteration plan for the first project iteration, adds work items to the plan, and assigns work items to the team. The subsections that follow elaborate on these steps.

Add team members to the project area and assign them to the available roles

Each role in the Rational Team Concert process has a brief description extracted from the Rational Method Composer content. You can access the published content any time to find more information about each role, such as required skills, tasks performed, work products that the person in that role is responsible for, and additional guidance.

Pam finds the information center guidance under Adding members to projects.

She adds her Rational Team Concert user ID to the project team members area and assigns the Project Manager role to her ID. This way, she is able to create plans, work items, and such in the project area.

Assign work item categories to team areas

When the project area is created, it contains four default team areas. Pam must associate the work item categories with actual team areas before she can create work items.

To perform these actions, Pam finds more information in the IBM information center under Creating team areas and associating work item categories.

1. In the **Project Area** editor, **Work Item Categories** tab, she renames the work item categories to the same names given to the team areas.
2. Then, as Figure 1 shows, she associates team areas and work item categories.

Figure 1. Table of work item categories associated with team areas

Visibility	Associated Team Area
☑ Unassigned <Root Category>	<Project Area>
☑ BRM	<Project Area> [inherited]
☑ Dividend Deposit Team Area	Dividend DepositTeam Area
☑ Feature B Team Area	<Project Area> [inherited]
☑ Independent Testing Team Area	Independent Testing Team Area
☑ Project Leadership Team Area	Project Leadership Team Area

Fine-tune the project timeline

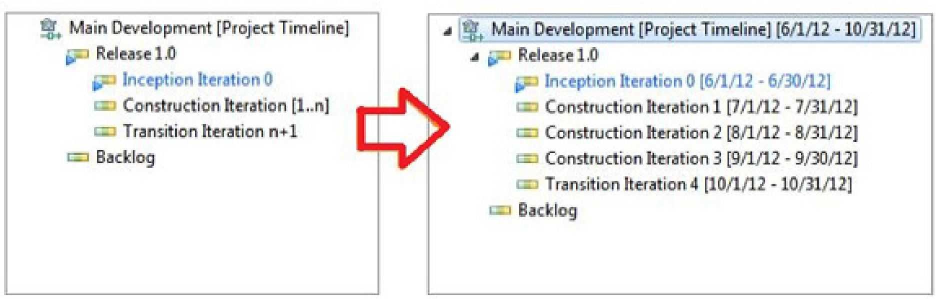
The default set of iterations provided when Pam created the project area is considered a starting point.

To perform these actions, Pam follows guidance from the information center under Creating timelines and iterations.

1. Pam changes the iteration numbers to specify occurrences of iterations within a phase (based on initial planning and estimates of how many iterations can fit into the overall project schedule).
2. She adds specific start and end dates for each iteration and the main timeline, based on that estimated schedule.

Figure 2 shows the before and after timelines.

Figure 2. Default timeline (left) and modified timeline (right)



Create a plan for the first iteration and add work items to the plan

The project area created by using the CLM process template contains work item templates that resemble different pieces of the work breakdown structure defined in Rational Method Composer. So for each type of team (development team, project leadership team, and independent testing team), there are recommended tasks documented in the process description that are available to be instantiated in Rational Team Concert.

Pam finds guidance on how to create an iteration plan in the information center under Creating plans.

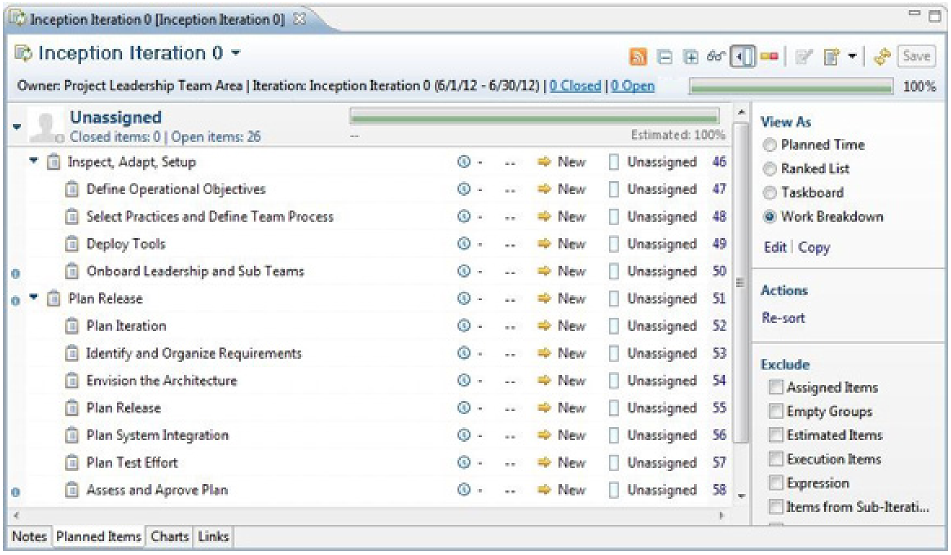
1. As part of planning and scheduling tasks for the first iteration, she creates an iteration plan for Inception Iteration 0.
2. She assigns the plan to the project leadership team.

The resulting plan has no tasks (or planned items) in it yet. Pam follows instructions under Creating work items from a template

3. To add tasks to this plan, Pam uses the Project Leadership Team – Inception Iteration work item template.
4. She files the work items against the project leadership team area and specifies that those items must be completed in Inception Iteration 0.

The resulting plan looks like the one shown on Figure 3. It contains tasks that the project leadership team performs to start the project, get the team onboard, initiate requirements elicitation, and so forth.

Figure 3. Iteration plan populated with tasks from the work item template



Later, Pam can use other work item templates to populate Construction Iterations and assign work items to the feature teams to further analyze requirements, design and implement a solution for each requirement, test the implemented solution, and so on.

Create additional work items of predefined types

The project area that Pam created contains different work item types readily available to be instantiated. Each of the work items contain a link to relevant information in the Rational Method Composer content, such as a state machine showing which actions move a work item from state to state and links to what tasks in the process content will trigger the action -- or the state transition -- to occur.

As the first iteration of the project moves on, one of the tasks shown in the plan in Figure 3 is Identify and Organize Requirements.

1. Pam assigns this task to the team's business analyst, Ursula.

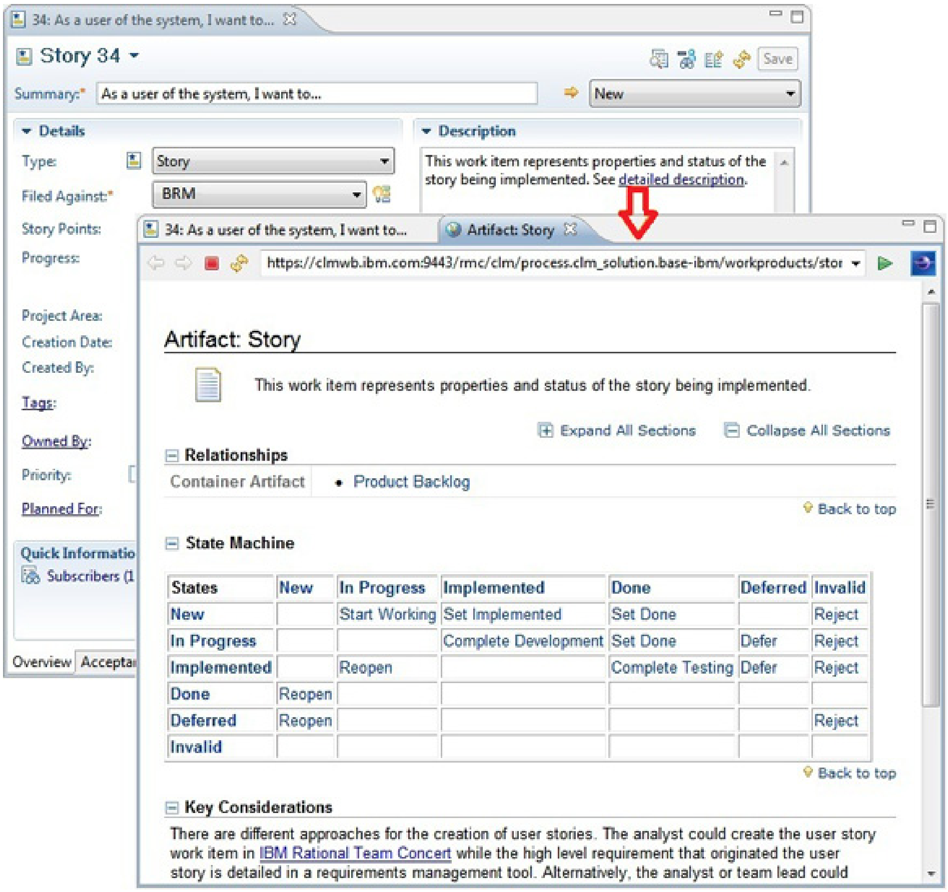
Ursula finds information on creating work items in the information center under Creating work items.

2. She decides to document the work associated with detailing, developing, and unit testing the implementation of a user story by creating a Story type of work item.

3. After the story work item is created, Ursula accesses the detailed process description through the link provided on the work item (see Figure 4).

Then the iteration work proceeds. Each team member performs the tasks assigned to them and accesses the links on the work items to get up to speed on the team's process.

Figure 4. Accessing process guidance from a link in the work item



Summary

In this article, you saw how the Business Recovery Matters leadership team quickly configured a lifecycle project and got started in hours, not days. You saw how the team took advantage of proven patterns of success to create plans and work items. You also saw how each work item provides links to relevant and contextual guidance so team members are able to quickly come up to speed on the team's process.