Rational Team Concert

Scrum Project Management Tutorial
Contents

1. Introduction ............................................................................................................. 3
2. Terminology ............................................................................................................. 4
3. Project Area Preparation .......................................................................................... 4
   3.1 Adding Users and specifying Roles ....................................................................... 5
   3.2 Creating Team Areas ........................................................................................... 6
   3.3 Defining Timelines and Sprints .......................................................................... 7
4. Product Backlog ......................................................................................................... 8
   4.1 Opening the Product Backlog .............................................................................. 8
   4.2 Adding User Stories to the Product Backlog ....................................................... 9
5. Planning the Sprint .................................................................................................... 11
   5.1 Opening the Sprint Backlog ................................................................................. 11
   5.2 Adding Stories to the Sprint Backlog .................................................................... 11
   5.3 Adding Tasks ....................................................................................................... 12
6. Working during the Sprint ......................................................................................... 14
   6.1 Viewing the assigned work .................................................................................. 14
   6.2 Tracking work ..................................................................................................... 15
   6.3 Viewing the Sprint Burndown .............................................................................. 17
7. Sprint Retrospective and Planning of the next Sprint ................................................ 18
   7.1 Scheduling a retrospective ................................................................................... 18
   7.2 Changing the current sprint ................................................................................ 18
   7.3 Planning the next sprint ..................................................................................... 19
1. Introduction

IBM Rational Team Concert integrates task tracking, source control, and agile planning with continuous builds and a configurable process to adapt to the way you work. This tutorial is based on version 4.0.1.1 of RTC using the scrum template.

The objective of this tutorial is to explain the basic features of Rational Team Concert focusing on project management using scrum. More information can be found in the online library of Jazz.net: https://jazz.net/library

If you have comments or questions regarding this document, Jazz or Rational Team Concert, please contact catedra.ibm.fiupm@gmail.com
2. Terminology

**Iteration**: Projects are organized into a series of development periods called iterations. Each timeline contains a hierarchy of iterations, which can define start and end dates.

**Process**: the collection of roles, practices, rules, and guidelines that are used to organize and control the flow of work. The project process is defined in a project area and can be further customized in a team area.

**Project area**: A system representation of a software project. The project area defines the project deliverables, team structure, process, and schedule.

**Report**: A set of data deliberately laid out to communicate business information.

**Roles**: Roles identify the functions of team members. Permissions for specific operations can be assigned to roles at the project level or within a team area.

**Sandbox**: An area on a file system where a developer can modify and test source code in isolation, before returning it to the source control component and sharing it with other developers.

**Team area**: The structure of the project teams is defined by a hierarchy of team areas. Use team areas to manage team membership, roles assignments, and team artifacts.

**Timeline**: represents an area of activity within a project that typically has its own schedule, deliverables, teams, and process.

**Sprint**: A sprint is the basic unit of development in Scrum. Sprints last between one week and one month, and are a restricted to a specific duration effort of a constant length (relate to iteration).

**Product Backlog**: an ordered list of "requirements" (user stories) that is maintained for a product.

**Sprint Backlog**: is the list of work (user stories split in tasks) the Development Team must address during the next sprint.

**Sprint Burndown Chart**: is a publicly displayed chart showing remaining work in the sprint backlog. Updated every day, it gives a simple view of the sprint progress.

3. Project Area Preparation

Before the start of a project it is advisable to configure the team and the process. Although these tasks can also be performed in the Eclipse client, this tutorial uses the web client.

All of the following tasks require the user to go to the Application Administration page, which can be done as follows:

1. Click on the Administration icon and then click Manage This Project Area
3.1 Adding Users and specifying Roles

When you create a project area you are the administrator and you can add members and specify the roles of each of these members.

1. On the Application Administration page of the web client, click the Overview tab.

2. Add the members that will be related to your project. To add members do the following:
   a. In the Members pane, click Add.
   b. In the Contributor Selection window, enter the name of a user to search for, or click Show All. Remember to use the name or last name of the user instead of the user id.
   c. In the Matching users pane, select a user.
   d. Click Add.

3. Specify the roles of each member. To specify a role do the following:
   a. Find the user in the Members pane; click the Process Roles icon on the Actions column.
   b. In the Edit Process Roles window, select the desired role(s) in the Available Roles list, click Add -->.
   c. Click OK.
4. Click **Save**.

### 3.2 Creating Team Areas

Team areas can be created to assign users in particular roles for working on a timeline or a particular set of deliverables. You can create a team area within an existing project area or another team area to establish a team hierarchy. Create the team area for the current process with the members that were created in the previous step.

1. On the Application Administration page of the web client, click the **Overview** tab.

2. In the Team Area Hierarchy pane, click **Create Team**.
3. In the **Team Area Name** field, enter a team name.

4. To add a user to the team:
   a. In the Members or Administrators pane, click **Add**.
   b. In the Contributor Selection window, enter the name of a user to search for, or click **Show All**. Remember to use the name or last name of the user instead of the user id.
   c. In the Matching users pane, select a user.
   d. Click **Add**.

5. Add an optional summary and description for the team and click **Save**.

### 3.3 Defining Timelines and Sprints

When a project area is created it normally has a default timeline, but you can create additional timelines as well as a hierarchy of iterations for each of them or modify the existing ones.

1. On the Application Administration page of the web client, click the **Timelines** tab.

2. Select Release 1.0, click **Edit properties**. Here you can specify an identifier, which appears in the Process Configuration Source code. You can also enter start and end dates for the timeline, and designate the timeline as the project timeline. Click **OK**.
3. Create a new Sprint (Iteration). To create an iteration, select the timeline or iteration within which to create the iteration in this case Release 1.0, then click **Create Iteration**. Specify an identifier and, a display name in this case **Sprint 3 (1.0)**. Enter start and end dates for the sprint. To enable the iteration for an iteration plan, click **A release is scheduled for this iteration**. Only iterations with scheduled releases are eligible for iteration plans. Click **OK**.

4. Save the project area.

**4 Product Backlog**

**4.1 Opening the Product Backlog**

The product backlog is one of the main artifacts in the Scrum Methodology, and it contains the user stories that are yet to be completed.

1. In the **Project Dashboard** view, expand the Plans Menu, click **Current Plans**.

2. In the Current Plans view, you will see the Backlogs in the granularity of Product Backlog, Release Backlog and Sprint Backlog. Click on **Product Backlog**.
3. On the Product Backlog view you can see and edit the Plan’s Details. You can change the owner of the backlog; it can be a project or a Team Area. You can also change the Iteration this backlog is linked to; in this case it is linked to the overall product backlog. Finally you can change the plan type; in this case it is of type Product Backlog.

4.2 Adding User Stories to the Product Backlog

1. On the Product Backlog view, click Add Work Item and click Story on the submenu.
2. A new User Story will appear on the Planned Items list. On this view, you can write the user story, assign the number of story points (on the Story Points column) and the Priority (on the Priority column).

3. Add all the user stories of the product.

4. Save the product backlog.

5. You can further edit user stories in order to add more attributes, acceptance tests, links to files and other artifacts among other functionalities provided by RTC. To edit a user story, click it on the Planned Items list.

6. On the Story overview you can change the main attributes of the user story, add a description and comments for starting a discussion about the story.

7. You can also add acceptance tests for the story. Click on the Acceptance tab. Here you can add a description of the acceptance criteria. Click Edit on the Acceptance Test section and write the description of the acceptance criteria.

8. You can further link the RTC tool with the Rational Quality Manager (RMQ) tool by creating a test for this user story. Click on the Tested By Test Case button. An add link window will appear, choose your Quality Management project and Create new on the radio button. Click OK.

9. On the New Test case window fill the attributes of the test that you will create for the user story. Among other things you can select the Test Phase in which this test will be
executed. Choose User Acceptance Test. Click OK. A new test will be created and you will be able to further define it on the RQM tool. Also you can add more tests for the user story if needed.

10. Click Save to save your changes.

5 Planning the Sprint

5.1 Opening the Sprint Backlog

When using the Scrum template on RTC, the sprint backlog of the sprint is already created.

1. In the Project Dashboard view, expand the Plans Menu, click Current Plans.

2. In the Current Plans view, you will see the Backlogs in the granularity of Product Backlog, Release Backlog and Sprint Backlog. Click on Sprint Backlog.

3. On the Sprint Backlog view you can see and edit the Plan’s Details. You can change the owner of the backlog; it can be a project or a Team Area. You can also change the Iteration this backlog is linked to; in this case it is linked to the Sprint 1 of Release 1.0. Finally you can change the plan type; in this case it is of type Sprint Backlog. You can also see the Burndown Chart, Progress and Work Load of the sprint.

5.2 Adding Stories to the Sprint Backlog
1. Open the Product Backlog.

2. Choose a user story you want to implement in the 1st Sprint, click the **Actions button** and go to **Plan For** on the dropdown menu and click **Sprint 1 (1.0)**. Repeat this for all the user stories that will be implemented on Sprint 1.

3. Click **Save**. The user stories will disappear from the Product Backlog, because they are now in the Sprint 1 (1.0) Backlog.

4. Open the Sprint 1 (1.0) Backlog. You will see the user stories of the 1st sprint as unassigned items on the Planned Items List.

5.2 Adding Tasks

1. Now the user stories need to be split into tasks. Choose a user story you want to split, click the **Actions button** and go to **Create Child Work Item** on the dropdown menu and click **Task**.
2. Write the summary of the task. Add all the tasks of the user stories of the sprint.

3. The team can specify estimates of effort for each of the tasks. To estimate the time for a task, go to the **Effective Estimate** column and choose the desired number of hours. Add estimations for all the tasks of the sprint backlog.

4. In order to assign tasks to the different users grab the task from the moving action control and drop it under the team member that is assigned to perform the task. Assign all the tasks of the sprint to the different users.
5. Next to each user you can see the Progress and Work Load graphs. Click on the graph to go through all the kinds of graphs provided.

6 Working during the Sprint

6.1 Viewing the assigned work

RTC allows the users to perform queries over the Work Items of the project. In this tutorial we will just focus on seeing the assigned work in order to perform the assigned tasks.

1. In the Project Dashboard view, expand the Work Items Menu, click Shared Queries.

2. In the Shared Queries view, you will see a lot of useful predefined queries. Click on Open Assigned to me. You will see a list of the current tasks that are currently open and assigned to you.
6.2 Tracking work

Team members should start working on the tasks and track their progress using the RTC tool. They can do this first by reporting the time remaining to finish the task and then by reporting the status of the task.

1. In the **Open and assigned to me View**, click one of the assigned tasks.

2. In the Task view, you will be able to edit the attributes of the task; important for this part of the tutorial are the status, the estimate correction, the time remaining, the due date and the discussion and comments. First of all Click on the **Status dropdown list** and change the status to **Start working**.
3. Click **Save**. You will see that the status of the task is changed to **In progress**.

4. At this moment you can change some values like correcting the initial estimation and/or reporting the remaining hours to finish. Simulate a work process; click **Save** every time you change a value.

5. RTC also allows you to see the history of the Task. Go to the History Tab by clicking **History**. In the History tab you can see the tracking of the changes you have done during the work process. Note that when you change the time remaining, the history tracks it as time spent.
6. Go back to the Overview Tab. Change the due date to today and change the status to Complete.

7. Click Save. You will see that the status of the task is changed to Done.

8. Simulate the working of the other tasks of the sprint.

6.3 Viewing the Sprint Burndown

RTC offers a number of reports that are created and updated continuously with historical data of the project. The Sprint Burndown is one of the most important reports in a Scrum project.

1. In the Project Dashboard view, expand the Reports Menu, click Shared Reports.

2. In the Shared Reports view, you will see a lot of useful predefined reports. Click on Burndown. You will see the Burndown report, which is based on the data provided by the team members as they update and complete the work items assigned to them.
7 Sprint Retrospective and Planning the next Sprint

7.1 Scheduling a retrospective

When the sprint is finished a sprint retrospective must be scheduled. In this meeting the team members discuss what went well, what went wrong and how to improve on the next sprint.

1. In the **Project Dashboard** view, expand the Work Items Menu, click **Retrospective**.

2. In the Retrospective view, you can fill the attributes of the Retrospective. Fill the general data of the retrospective, on Planned For choose Sprint 2 because this meeting will be hold during the beginning of the next sprint, and this makes this work item visible during sprint 2.

3. Team members can use the discussion area of the retrospective work item and post comments in order to keep track of the ideas that were shared during the meeting.

7.2 Changing the current sprint

After Sprint 1 is finished, we need to change the current sprint to Sprint 2, and start planning the work for this sprint.

1. On the Application Administration page of the web client, click the **Timelines** tab.
2. As you can see, the current iteration is marked by a blue arrow. In order to change the current sprint select **Sprint 2 (1.0)** and press the button of **set the selected iteration as current**.

3. Click **Save**.

### 7.3 Planning the next sprint

1. In the **Project Dashboard** view, expand the Plans Menu, click **Current Plans**.

2. You will see that now the Sprint Backlog is under the section called **Sprint 2 (1.0)** because this is the new current sprint. Also it should have one work item that is the retrospective.
3. Click on **Release Backlog**. You can see the tasks here divided by the sprints of the Release.

4. Go back to the Plans View and follow the steps of Section 5 in order to plan this new sprint.