Rational Build Forge

Tutorial 1: Creating, running, and scheduling a Rational Build Forge project

Version 7.1.3

Note
Before using this information and the product it supports, read the information in "Notices," on page 5.

This edition applies to version 7.1.3 of Rational Build Forge and to all subsequent releases and modifications until otherwise indicated in new editions.

Tutorial 1: Creating, running, and scheduling a Rational Build Forge project

Use this tutorial to learn how to create a basic "Hello World" project in IBM® Rational® Build Forge®.

The tutorial shows you how to do the following tasks:

- Create a server authentication
- Create a selector and server
- Create a project
- Run a project
- Schedule a project

Time required: 30 minutes

Creating a server authentication

When a server is authenticated, the same login information can be used for running Rational Build Forge jobs from more than one computer.

1. Start Rational Build Forge and log in.
2. Click the **Console** tab.
3. In the menu on the left, click the **Server** and then click **Server Auth**.
4. In the **Name** field, type `localhost auth` or a name of your choice.
5. In the **Access** list, set an access level. For more information, see Tutorial 3: Rational Build Forge administration: Controlling user access.
6. Enter the login information for this computer. This information is the credentials you normally use to log in to the computer.
7. Click **Save Server Authentication**. The login information is saved so that a project can later be run on other computers by using the same login information.

Creating a selector and server

Specifying a selector allows you to pick the appropriate server on which to run your project. It can specify a server by name or by a property that a collector collects and stores in the manifest.

1. In the menu on the left, click **Server** and then click **Selectors**.
2. In the **Name** field, type `build selector` or a name of your choice.
3. Click **Save**.
4. In the **Name** field, type `BF_NAME`.
5. Set **Required** to **Yes**.
6. Set **Operator** to **EQ** (equals).
7. Set **Value** to **build_server**.
8. Click **Save**.

You have specified that a server with the name BF_NAME can be used as a build server.

Creating a project

A project is a set of command-line commands that is run on the selected servers.

The only difference between a library (see Tutorial 2: Creating and using Rational Build Forge libraries) and a project is that a project uses a selector to find the correct server on which to run the commands.

1. In the menu on the left, click**Projects**.
2. In the **Name** field, type "Hello World".
3. In the **Selector** list, select the build selector you created in "Creating a selector and server." Selectors are used for matching the configuration information, which is found using a Collector, of a particular server with the information specified by you. In this example, you are matching any server with the BF_NAME of build_server.
4. In the rest of the fields, leave the default settings.
5. Click **Save**.
6. On the Details page for **Add New Step**, in the **Name** field, type a name. For example, type "echo".
7. In the **Command** field, type "echo Hello World".
8. Click **Save Step**.

You have created a new project named Hello World that specifies a step named echo. Each project holds a collection of steps. A project uses a certain selector to decide on which servers it should be run. Steps are one or more system commands that run in the shell of the selected servers.

Running the project

1. In the menu on the left, click **Projects**.
2. Next to Hello World, click the blue Play button. In the yellow bar at the top, a message is displayed: "Job Build_1 Started." The build number changes depending on how many times you have run the project. The first time is Build_1, the second Build_2, and so on.
3. Select the **Jobs** tab. The Hello World project e build was successful.
4. To see more details about the execution of the build, click on the build name ("Build_X", where x is the build number) and then select a step.

Scheduling a project

With Rational Build Forge, you can schedule your jobs to run at regular intervals, such as every day or every week at a particular time. Suppose you want to run this program every day at 1:30 p.m. To do so, use the Rational Build Forge scheduling capability.

1. In the menu on the left, select **Schedules**.
2. In the **Description** field type a name, such as "Hello World Daily Scheduler".
3. In the **Project** list, select the "Hello World" project that you created earlier.
4. In the **Selector** list, select the "build selector" selector that you created earlier.
5. In the **Minutes** field, type "30".
6. In the **Hours** field, type "13". The entry must be a value in 24 hour time.
7. Click **Save Schedule**.

Tip: To see a visual representation of when your scheduled projects will run, click the **Calendar** tab.

A number on each date on the calendar indicates the number of projects running on that day. If you move your mouse over this number, a list of the projects scheduled for that day is shown.

Tutorial summary

Now that you have completed this tutorial, you can:

- Create selectors that determine which servers run your Rational Build Forge projects.
- Create a Rational Build Forge project with a specific collection of steps.
- Schedule the projects to run at regular intervals.

Appendix. Notices

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