Rational Build Forge

Tutorial 4: Using log filters in Rational Build Forge for Ant builds

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 4: Using log filters in Rational Build Forge for Ant builds

In IBM® Rational® Build Forge®, log filters specify the success criteria for a step by using regular expression matching.

This tutorial utilizes an Ant file. A common use case for log filters is the execution of commands regarding Ant files, because these commands do not always return useful exit codes.

The tutorial shows you how to do the following tasks:

- Create a log filter
- Use a log filter in a project
- Set a project to continue even when a step fails

Time required: 30 minutes

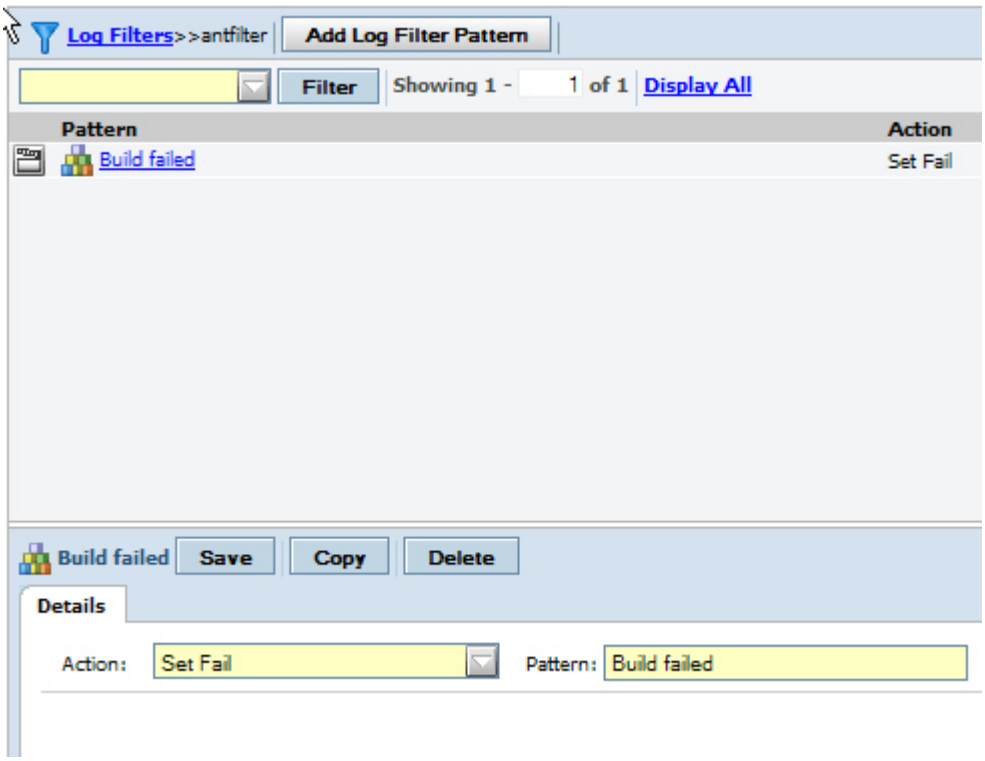
Creating a log filter

With Ant, the system return code is not always indicative of the success or failure of the build. A log filter is needed to determine whether the step actually worked.

1. Create an Ant file. A sample Ant file named build.xml is included in the e-kit, in the AntSample sample.
2. In the Rational Build Forge Console, in the menu on the left, click **Projects** > **Log Filters**.
3. In the **Name** field, type `antfilter`.
4. Click **Save**.
5. Click **Add Log Filter Pattern**.
6. On the Details page, in the **Action** drop-down list, select **Set Fail**. This means that if the regular expression entered in the Pattern field is found, the step will have the result of fail.
7. In the **Pattern** field, enter `Build failed`. If the Ant build command does not work, these words will be displayed in the log.
8. In the **Notify** list, select a group to notify, for example **Build Engineer**.
9. Click **Save**.

You have created a log filter that notifies the Build Engineer user group when a build fails. In the next step, you will use the log filter in a project.

The following image shows the Build failed pattern in the antfilter log filter.



Using a log filter in a project

1. In the menu on the left, click **Projects**.
2. Create a project named "anttutorial."
3. Create a step, named "failbuild," and then in the **Command** field, type the following code:

   ```
   ant -f C:temp/buildDNExml compile
   ```

   where *buildDNExml* is a build file that does not exist. Later in the tutorial, when you run the project, you will see the result of this command.
4. Scroll down in the bottom-center pane, beneath the field in which you entered the command.
5. In the **Result** list, select **antfilter**. You might need to scroll down the page, past the **Command** field.

   Note: Setting the **Result** field ensures that the Rational Build Forge step uses the log filter named antfilter that you created earlier.
6. Set the **On Fail** field to **Continue**.

   Note: Setting the **On Fail** field ensures that the project keeps running and runs the subsequent steps, even if this step fails. You are doing this because you expect this step to fail (since the file buildDNExml does not exist) and you are going to put the working build step as the next step.
7. Create a step, named "passbuild", and then in the **Command** field, type the following code:

   ```
   ant -f <path to buildfile>/build.xml compile
   ```

This command assumes that you have a build.xml file with a compile target.

8. In the **Result** list, select **antfilter**.
9. Run the **anttutorial** project and view the results.

10. Click **failbuild**. At the end of the log, you should see something like the following image:

```
SCRIPT  ant -f /home/emredmil/antFiles/ElissaAntSample/ElissaAntSample/buildDNExml compi
EXEC    start [/home/emredmil/anttutorial/BUILD_6@rightmeow]
EXEC    Buildfile: /home/emredmil/antFiles/ElissaAntSample/ElissaAntSample/buildDNExml c
EXEC    Build failed
EXEC    end [/home/emredmil/anttutorial/BUILD_6@rightmeow]
RESULT  1 (1)
```

11. Click **passbuild**. At the end of the log, you should see something like the following image:

```
SCRIPT  ant -f /home/emredmil/antFiles/ElissaAntSample/ElissaAntSample/build.xml compile
EXEC    start [/home/emredmil/anttutorial/BUILD_6@rightmeow]
EXEC    Buildfile: /home/emredmil/antFiles/ElissaAntSample/ElissaAntSample/build.xml
EXEC
EXEC    init:
EXEC
EXEC    compile:
EXEC        [javac] Compiling 1 source file to /home/emredmil/antFiles/ElissaAntSample/E
EXEC
EXEC    BUILD SUCCESSFUL
EXEC    Total time: 1 second
EXEC    end [/home/emredmil/anttutorial/BUILD_6@rightmeow]
RESULT  0 (0)
```

Tutorial summary

Now that you have completed this tutorial, you can:

- Create a log filter
- Use a log filter in a project
- Set a project to continue On Fail

Appendix. Notices

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