Detecting Job Event Conditions

Overview

Using Enteprise Scheduler job events allows you to automatically trigger actions whenever certain event triggers (job conditions) arise. Actions include user notification via email, console alert messages, launching new jobs, job control commands, variable updates, log message posting and SNMP traps to HP OpenView or other network managers. This chapter describes how to:

- Define an operator alert action
- Add the action to the job by using the **Job Events** dialog
- Submit the job to production and watch the operator alert action occur

Caution To complete the exercises in this tutorial, you need to:
Install Enteprise Scheduler in the default directory Scheduler (or the examples in this tutorial will not work properly)
Select the Super User option in your User definition
Configure a default agent
Create and have available the work day calendar

Understanding Actions

An *action* is a predefined response to a job event that is triggered by a job in the production schedule. You define event triggers for jobs in the **Job Events** dialog and associate them to actions. Actions can be linked to multiple jobs and job groups.

There are different types of actions that can be defined within Enteprise Scheduler. Some of these actions Each type of action can be triggered based on any job's status, job control by an operator and/or an event triggered by the system. Furthermore, you can personalize actions from a set of included variables such as system, job, job event, action and user-defined information.

Creating an Alert Action

In the following exercise, you define an action that sends an alert to the **Job Activity** pane when the job **Unix_Download** (created in the previous chapter) ends with a **Completed Abnormally** status.

To create an Alert action:

Step 1 From the **Navigator** pane, select **Definitions>Actions>Alert** to display the **Alert Actions** pane.

Step 2 Click the **Add Action** button on the Scheduler toolbar or right-click the **Alert Actions** pane and select **Add Action** from the context menu to display the **Action Definition: Alert** dialog.

Step 3 In the **Action Name** field, enter **Job Failed**.

Step 4 In the **Severity Level** section, check **Error**.

Step 5 Type the following message and select the variables shown in angle brackets from the **Variables** list. The variables appear between the brackets as **<variable>**.

Note This dialog does not accept carriage returns. Text automatically wraps to the next line.

```
The Job <Jobname>, owned by <JobOwner> went to <JobStatus> status on
<SysDate.M/d/yy>. <JobOwner>'s pager number is <JobPager>
```

Table 7-1 Variables Used in Step 7

Variable	Path	Description
<JobName>	Job Variables\JobNAME	The name of the job that triggered the action.
<JobOwner>	Job Variables\JobOWNER	The name of the user that owns the job.
<JobStatus>	Job variable\JobSTATUS	The status the Job is in at the time of the message.
<SysDate.M/d/yy>	System Variables\ System Date\M/d/yy	The day, month, date, year action was triggered
<Job Pager>	Job Variables\ Owner's Pager Number	The pager number of the owner

Step 6 This action is triggered, and an alert record is sent to the **Job Activity** pane for the operator to take action. Click **OK** to accept the action. The action is displayed in the **Actions** pane.

Creating a Job to Trigger an Event with an Alert Action

To create a job to trigger an event with an Alert action:

Step 1 From the **Navigator** pane, select **Definitions>Jobs** to display the **Jobs** pane.

Step 2 Click the **Add Job** button or right-click and select **Add Job** from the context menu to display the **Job Definition** dialog.

Step 3 In the **Job Name** field, enter **Unix Test JEVENT.**

Step 4 In the **Command** field, enter the full path to the file:

```
/UNIX_TEST_JEVENT.sh
```

Step 5 Click the **Schedule** tab to display the **Schedule** tab.

Step 6 From the **Calendar Name** list, select **Daily**.

Step 7 Click the **Run** tab to display the **Run** tab.

Step 8 From the **Runtime User** list, select a user with access to the Unix agent.

Step 9 Click **OK** to save the job definition.

Step 10 In the **Effective Date** dialog, click **Cancel**.

Associating the Action to the Job

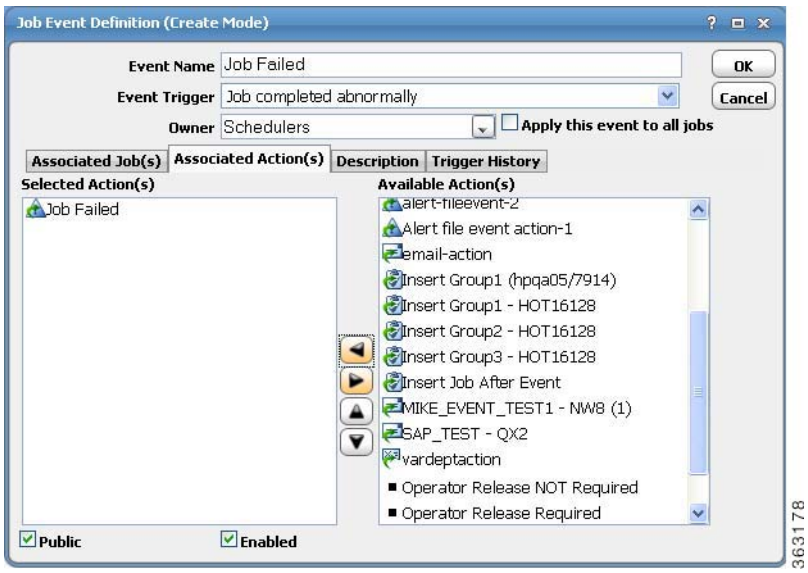
You can assign the action to the **Unix_Download** job through the **Job Events** dialog.

To associate the action to the job:

Step 1 From the **Navigator** pane, select **Definitions>Events>Job Events** to display the **Job Events** pane.

Step 2 Click the **Add Event** button on the Scheduler toolbar or right-click the **Events** pane and select **Add Event** from the context menu to display the **Job Event Definition** dialog.

Figure 7-1 Associating a Defined Action with a Job Event



Step 3 In the **Job Event Name** field, enter **Job Failed**.

Step 4 From the **Event Trigger** list, select **Job Completed Abnormally**.

Step 5 In the **Available Action(s)** list, highlight **Job Failed** and click the left arrow button the **Job Failed** action to the **Selected Action(s)** field.

Now, you can associate the **Unix Test Event** job to the job event.

Step 6 Click the **Associated Job(s)** tab.

Step 7 Display the available jobs in the **Command** list and select the **Unix_Download** job by double-clicking it.

Step 8 Select the **Public** option, if not already selected. This makes your event available to other Enteprise Scheduler users.

Step 9 Click **Add** and then click **OK.**

The **Unix Test Event** job is now linked to the **Job Failed** alert action through the **Job Failed** job event.

Insert Unix Test Event

To insert the Unix Test Event job:

Step 1 In the **Jobs** pane, right-click the **Unix Test Event** job and select **Insert Job Into Schedule**.

Step 2 Click **OK** in the **Insert Job Into Schedule** dialog.

Step 3 Click **OK** in the **Information** dialog.

Step 4 From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

The job goes into the **Active** state and runs. Then the job terminates with an **Completed Abnormally** status, initiating the action and changing the **Alerts** light to red.

Changing the Status of the Alert

To change the status of the alert:

Step 1 On the Navigator pane, select **Operations>Alerts** to display the **Alerts** pane.

Step 2 Double-click the alert to display its **Alert Detail** dialog.

Step 3 Select the **Acknowledged** option.

Step 4 You can enter a response or comment in the **Response** field.

Step 5 Click **OK** to close the dialog.

The **Alerts** light at the bottom of the Scheduler window changes to yellow.