



## CHAPTER 12

# Workflow Administration Tasks

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These topics briefly describe workflows and how to administer the stored workflows and templates in Prime Network Administration:

- [Workflows and the Workflow Engine Windows, page 12-1](#)
- [Viewing and Deleting Templates, page 12-3](#)
- [Viewing and Administering Workflows, page 12-4](#)

For more information about the Workflow Engine window elements, see [Workflow Engine Windows, page 1-31](#).

## Workflows and the Workflow Engine Windows

*Workflows* are logical flows of atomic tasks (activation commands) that often include complex rollback scenarios. The logic enables you to define relationships between tasks, the sequence of tasks, when to branch to other tasks, and what to do if a task fails.

You can create workflows using the Prime Network Workflow Editor. You can also use the service activation workflows that are provided with Prime Network Activation. For more information on these tools, see the [Cisco Prime Network 3.8 Customization User Guide](#) and the [Cisco Prime Network 3.8 Activation Customization Guide](#). You do not have to perform any special tasks to allow users to manage workflows.

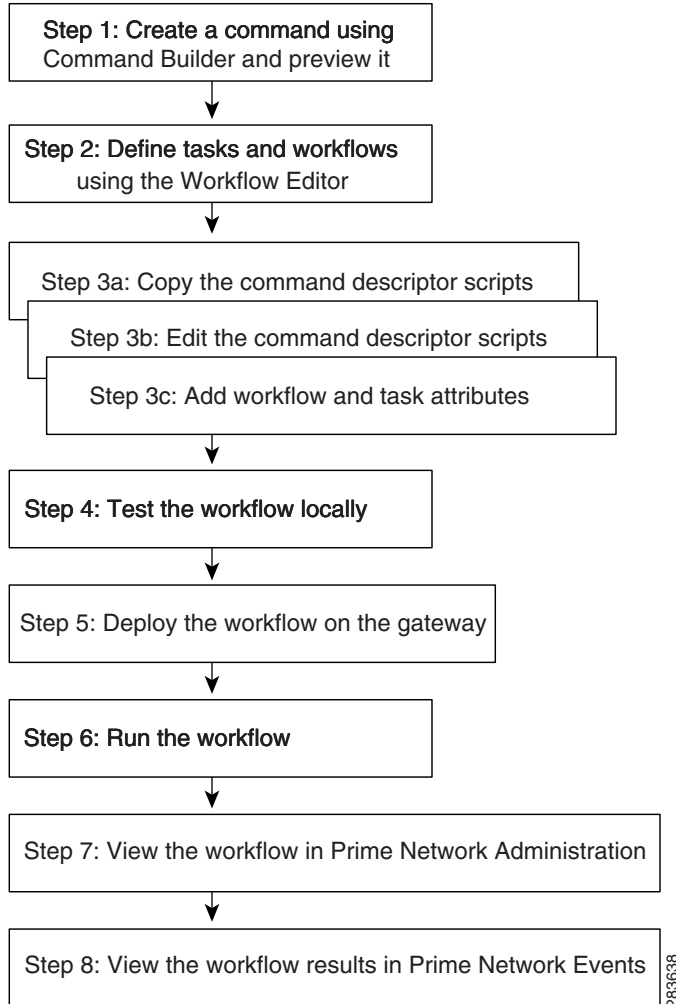
Once they are created, all templates and workflows are displayed in the Workflow Engine windows in Prime Network Administration. The Workflow engine resides on the Prime Network gateway using AVM 66.

By default, base workflows (as opposed to Prime Network Activation workflows) are saved for seven days and are then purged from Prime Network by the integrity service. Templates and workflows are saved in the database under the *network-user\_dwe* schema. For information on how long Prime Network Activation workflows are saved, see the information on purging workflows in the [Cisco Prime Network 3.8 Activation User Guide](#).

The Workflow Engine windows include the following:

- **Templates**—Displays a list of the deployed workflow templates and enables you to view the properties of a workflow template.
- **Workflows**—Displays a search window from which you can locate and display the workflows in which you are interested, including workflow properties and output.

[Figure 12-1](#) presents the process required when working with and managing workflows. The tasks are described in the order in which they must be performed.

**Figure 12-1** Flow For Creating, Testing, Deploying, Running, and Viewing a Workflow

# Viewing and Deleting Templates

You can perform the following template management tasks from Prime Network Administration:

- [Viewing Available Workflow Templates and Their Properties, page 12-3](#)
- [Deleting a Workflow Template, page 12-3](#)

You must have Administrator privileges (user access role) to use this and all other functions in Prime Network Administration.

## Viewing Available Workflow Templates and Their Properties

To view the list of templates and template properties:

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- Step 1** Choose **Workflow Engine > Templates**. The list of all workflow templates is displayed in the table.
  - Step 2** Right-click a template, then choose **Properties**. The Workflow Template window displays an alphabetical list of the templates in the system.
  - Step 3** Click in the top right-hand corner to close the Template Properties dialog box.
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## Deleting a Workflow Template

Deleting a workflow template permanently removes the template from the Prime Network system. To delete a workflow template:

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- Step 1** Choose **Workflow Engine > Templates**. The list of workflow templates is displayed in the table.
  - Step 2** Right-click a workflow template, then choose **Delete**. A warning message is displayed.
  - Step 3** Click **Yes**. The selected workflow template is deleted and no longer appears in the table.
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# Viewing and Administering Workflows

When you perform workflow operations from Prime Network Administration, you have access to all workflows that are stored in the system. This is different from performing these same operations from Prime Network Vision, where you can only access Prime Network Activation workflows.

These topics describe how to search for and manage the workflows that are in the Prime Network Administration system.

- [Searching for Workflows, page 12-4](#)
- [Viewing Workflows, Workflow Properties, and Workflow Output, page 12-5](#)
- [Aborting and Deleting Workflows, page 12-6](#)
- [Adjusting the Performance of Workflow Searches, page 12-6](#)

You must have Administrator privileges (user access role) to use this and all other functions in Prime Network Administration.

## Searching for Workflows

When you choose **Workflow Engine > Workflows**, Prime Network displays a workflow search tool you can use to view specific workflows. This tool is useful because the system can easily contain thousands of workflows. (The actual number of workflows in the system is indicated by the counter in the top left of the workflow search window.)

To improve performance, you can adjust the total number workflows that are returned in any search result. By default the value is set to 5,000 workflows. To change this value, use the procedure described in [Adjusting the Performance of Workflow Searches, page 12-6](#).

This procedure explains how to use the workflow search tool.

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- Step 1** Choose **Workflow Engine > Workflows** to display the workflow search tool.
- Step 2** In the Execution Time area, enter the time period you want to search. By default the current day is selected. (This is a required field.)
- Step 3** In the Match area, enter the criteria you want to the search to match.




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**Note** If you want to search by date only, choose **None** from the Match drop-down list.

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- Select the Match operator:
  - None—Return the workflow if it does not match any of the rules. This is normally used if you want to perform a search based only on a time frame.
  - Any—Return the workflow if it matches any of the rules.
  - All—Return the workflow if it matches all of the rules. You must enter
- Create a rule by selecting an attribute, operator, and value. The operators and values that are displayed depend on the attribute you select. Values are case-insensitive; wild cards are not supported.



**Note** Fully-populated results are returned only if the utility can match an attribute with information in the database. If the search results table contains empty fields (for example, some IP address fields are empty), this means the attributes were either not included in the workflow/service (and are not in the database), or the attribute search criteria was not correctly entered (with an operator and value).

**Step 4** Click **Search** to display the results. The timestamp above the table indicates when the query was executed (the results are a snapshot of the data at that time and are not updated unless the search is rerun). You can filter the table of results by using the tools that are directly above the table.

The table information is described in [Viewing Workflows, Workflow Properties, and Workflow Output, page 12-5](#).

The following buttons are also provided:

- **Previous Criteria**—Displays the criteria settings from the previous search.
- **Clear**—Clears all table data and criteria from the previous search.

### Viewing Workflows, Workflow Properties, and Workflow Output

When you choose **Workflow Engine > Workflows**, Prime Network displays a tabular list of all workflows sorted according to their Workflow ID. The total number of workflows in the Prime Network system is listed at the top left of the window. This counter that is updated whenever a workflow is deleted or added to the system.

**Step 1** Choose **Workflow Engine > Workflows** to display the workflow search tool.

**Step 2** Perform a query as described in [Searching for Workflows, page 12-4](#).

The table of workflows lists the following data. To filter the table data, use the tool buttons provided above the table.

Field	Description
Workflow ID	Unique identifier for the workflow (assigned by Prime Network).
Template Name	Name of the template used by this workflow. (All Prime Network Activation templates are indicated by the prefix NSA_.)
Template Display Name	Name as displayed in Prime Network.
State	Current state of the workflow.
Execution Time	When the workflow was started.
User	User that executed the workflow.
Device Name	Devices affected by the workflow. This data is gathered from workflows that contain any DeviceName* attributes.
Device IP	IP address of devices affected by the workflow. This data is gathered from workflows that contain any DeviceIP* or IPAddress* attributes.
Information	Informational data supplied when the workflow was created. This data is gathered from workflows that contain any *Info* attributes.

- Step 3** To view a workflow's properties, right-click the workflow, then choose **Properties**. The Properties window displays *all* of the workflow attributes and their values. (This is different from viewing Prime Network Activation workflow output from Prime Network Vision, where only a limited number of attributes are displayed.)
- Step 4** To view a workflow's output, right-click the workflow, then choose **Show Output**. The Output window displays the commands that were sent, progress messages, script results, and so forth.

### Aborting and Deleting Workflows

When a workflow is *aborted*, Prime Network rolls back all activation scripts that have already been run (by Execute BQL tasks). A workflow rollback has the following characteristics:

- The commands that are executed are those that are defined in the rollback section of the script (defined in Command Builder).
- Scripts are rolled back in the reverse order of their execution.



#### Note

Gateway commands do not support rollback.

A workflow is also aborted automatically if any of its tasks are aborted.

Rollback can be disabled for specific BQL tasks by setting the RollbackEnabled value task attribute to false in the respective BQL task. This is useful for a BQL task executing a script that does not have an appropriate rollback, or a BQL task executing a gateway command.

When a workflow is *deleted*, it is removed from the database.

To abort a running workflow, or delete a workflow:

- Step 1** Choose **Workflow Engine > Workflows** to display the workflow search tool.
- Step 2** Use the workflow search tool to locate the workflows in which you are interested. For more information, see [Searching for Workflows, page 12-4](#).
- Step 3** Right-click the workflow and perform the appropriate action:
- **Abort** to roll back all scripts that have run to that point. The workflow remains in the system but its state is changed to Aborted.
  - **Delete** to remove the workflow from the system.
- Step 4** Click **Yes** in response to the confirmation message.

### Adjusting the Performance of Workflow Searches



#### Note

Changes to the registry should only be carried out with the support of Cisco. For details, contact your Cisco account representative.

By default, the maximum number of search results displayed is 5,000. You can adjust this to a lower number to get faster results. We do not recommend entering a value higher than 5,000 because this can negatively impact the performance of the search tool.

For information on the format of the **runRegTool** command, see [Changing Registry Settings Using runRegTool, page D-3](#).

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**Step 1** Log into the gateway server as *network-user* (where *network-user* is the operating system account for the Prime Network application, created when Prime Network is installed; an example of *network-user* is **network38**).

**Step 2** Change to the Main directory:

```
# cd $ANAHOME/Main
```

**Step 3** Enter the following command to adjust the total workflow search results that are displayed by the GUI client:

```
runRegTool.sh -gs gw-IP set unit-IP "site/cvm/management/workflow/searchResultMaxRawSize" value
```

This example changes the maximum results 1,000 workflows:

```
# runRegTool.sh -gs 127.0.0.1 set 0.0.0.0 "site/cvm/management/workflow/searchResultMaxRawSize" 1000
```

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The change is applied to all GUI clients that connect to the gateway. For open GUI clients, close and reopen them to apply the change.

