



# Orchestration Workflow Operations

---

This chapter contains the following sections:

- [Hyper-V Orchestration Tasks, page 1](#)
- [Validating and Executing an Orchestration Workflow, page 2](#)
- [Managing Triggers, page 3](#)

## Hyper-V Orchestration Tasks

Cisco UCS Director includes orchestration features that allow you to automate the configuration and management of tasks performed by SCVMM in one or more workflows. The same workflow can include Hyper-V VM, Hyper-V host, network, and storage tasks.

For more information about orchestration in Cisco UCS Director, see the [Cisco UCS Director Orchestration Guide](#).

### Location of Orchestration Tasks

A complete list of the orchestration tasks is available in Workflow Designer, in the Task Library and the **Virtualization** folder. The Task Library, which includes a description of the orchestration tasks, can be accessed from the following locations in Cisco UCS Director:

- **Policies > Orchestration > Workflows**
- `http://IP_address/app/cloudmgr/online/docs/cloupiatasklib.html` where *IP\_address* is the IP address of Cisco UCS Director.

### Types of Orchestration Tasks

The Hyper-V orchestration tasks include tasks to configure and manage the following:

- VM
- Host
- Virtual network
- Logical network

- Logical network definition
- Host network adapter
- Virtual network adapter
- PNIC
- Storage
- Logical unit network (LUN)
- Logical switch
- Standard switch
- Uplink port profile
- Storage classification
- File share
- Storage logical unit
- Storage provider

## Accessing Task Documentation

- 
- Step 1** On the menu bar, choose **Policies > Orchestration**.
- Step 2** Click the **Task Library** icon.
- Step 3** Check the **Regenerate document** check box to view a list of all new tasks and those by open automation.
- Step 4** Click **Submit**.  
The orchestration task library appears. Click an entry to see more information about specific inputs and outputs that are available.
- 

## Validating and Executing an Orchestration Workflow

After you validate all the tasks in a workflow and bind them to the local environment, the entire workflow must be validated.

- 
- Step 1** At the top right corner of Workflow Designer, click the **Validate** button. Workflow Designer confirms if the workflow is valid with a "Completed (Success)" message.
- Step 2** Click **Execute Now** to activate the orchestration workflow.
-

# Managing Triggers

Triggers are used to execute workflows based on specified conditions. Once those conditions are met, a workflow is automatically executed.

**Step 1** On the menu bar, choose **Policies > Orchestration**.

**Step 2** Click the **Triggers** tab.

The triggers created in the Cisco UCS Director are displayed. The **Triggers** tab provides the following actions:

Action	Description
Refresh	Refreshes the current page.
Favorite	Adds this page to the <b>Favorites</b> tab which displays the page that you go to most often.
Add	Creates a trigger in the Cisco UCS Director.

When you choose a trigger, the following actions appear:

Action	Description
Edit	Edits a trigger.
Delete	Deletes a trigger after confirmation.
Clone	Clones a trigger.
Reset	Resets the selected trigger after confirmation.
View Log	Displays the log information of the triggers.

## Adding a Trigger

**Step 1** Navigate to the **Triggers** tab.

For more information about how to navigate to the **Triggers** tab, see .

**Step 2** Click **Add**.

**Step 3** In the **Add Trigger** dialog box, complete the following field:

Name	Description
Trigger Name field	The name of the trigger.
Is Enabled check box	Check this check box to enable the trigger.
Description field	The description of trigger.
Frequency drop-down list	Choose the frequency at which the trigger rule is verified.
Trigger Type drop-down list	Choose one of the following as the trigger type: <ul style="list-style-type: none"><li>• <b>Stateful</b>—Executes the action only when there is a change in the state of the trigger.</li><li>• <b>Stateless</b>—Executes the trigger condition at a frequency provided in the frequency field irrespective of the trigger state.</li></ul>

**Step 4** Click **Next**.

**Step 5** In the **Specify Conditions** pane, complete the following fields:

Name	Description
<b>Conditions</b> field	<p>Click the + icon to add a condition.</p> <p>In the <b>Add Entry To Conditions</b> dialog box, complete the following fields:</p> <ul style="list-style-type: none"> <li>• <b>Types of Objects to Monitor</b> drop-down list—Choose <b>Hyper V Host</b> as the type of object to be monitored.</li> <li>• <b>Object</b> drop-down list—Choose a Hyper-V host to monitor.</li> <li>• <b>Parameter</b> drop-down list—Choose one of the following parameters: <ul style="list-style-type: none"> <li>• CPU Usage % (Last Day Avg)</li> <li>• CPU Usage % (Last Hour Avg)</li> <li>• Memory Usage % (Last Day Avg)</li> <li>• Memory Usage % (Last Hour Avg)</li> <li>• Power Status</li> </ul> </li> <li>• <b>Operation</b> drop-down list—Choose an operator from the list of operators that appear according to the selected parameter.</li> <li>• <b>Value</b> drop-down list—Choose a value from the list of values that appear according to the selected parameter.</li> </ul>
<b>Trigger When</b> drop-down list	<p>Choose one of the following conditions: Any Condition(s) Satisfied or trigger type:</p> <ul style="list-style-type: none"> <li>• <b>All Condition(s) Satisfied</b>—To trigger the workflow only when all set conditions are met.</li> <li>• <b>Any Condition(s) Satisfied</b>—To trigger the workflow if any one of the set conditions is met.</li> </ul>

**Step 6** Click **Next**.

**Step 7** In the **Specify Workflow** pane, complete the following fields:

Name	Description
<b>Maximum Invocations</b> field	The number of times that the trigger is invoked.
<b>(When Trigger State Becomes Active) Select Workflow</b> drop-down list	Choose the workflow to be executed when the trigger is activated.

Name	Description
(When Trigger State Become Clear) Select Workflow drop-down list	This field is optional. Choose the workflow to be executed when the trigger is cleared.

**Step 8** Click **Next**.

**Step 9** In the **Specify Workflow Inputs** pane, provide the input for the selected workflows.

**Step 10** Click **Submit**.

---