

Monitoring Cisco UCS Central Using Operations Manager

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About the Monitoring Pane in Operations Manager

After you install and configure the Cisco UCS Central Management Pack, you can use the **Monitoring pane** in the Operations Manager to display a summary and components of monitored Cisco UCS Central. The Cisco UCS Monitoring tab, State, and Alert Dashboards in the Monitoring pane provide a complete view of the health of the UCS Central instances and its components.

Viewing List of Rules in the Management Pack

- **Step 1** From the Operations Manager menu bar, click **Go** and select **Authoring**.
- **Step 2** From the navigation pane, select **Management Pack Templates**.
- **Step 3** Select Cisco UCS Central.
- Step 4 Right-click the Cisco UCS Central instance, and select View Management Pack Objects > Rules.

About the Cisco UCS Central Monitoring

The Cisco UCS Central Monitoring tab displays state and alert dashboards for all discovered Cisco UCS Central instances, and its components.

This folder contains the following subfolders related to Cisco UCS Central:

- Management Pack Events
- Cisco UCS Monitoring Service
- UCS Central Monitoring

Management Pack Events

This view shows any alert related to execution of monitoring scripts in Operations Manager, some of the common errors are listed in the table below:

Serial No.	Error Code	Error Description	What to check
1	19900	Service Connection Error	Verify the service machine entry in the Add Monitoring Wizard
2	19900	Service not found or not running	Check if the monitoring service is up and running on the service machine
3	19900	Error in Application	Verify whether the account is associated to the profile, and the account is authorized to make a connection to the UCS Central Instances

Cisco UCS Monitoring Service

The Cisco UCS Monitoring folder comprises **Monitoring Service Dashboard**, and **Monitoring Service Statistics**. The **Monitoring Service Dashboard** contains health state of all the machines connected in the **Management Group** and have the service installed.

The **Monitoring Service Statistics** contains several statistical graphs for thread count, IO Write Bytes/Sec, Elapsed Time, IO Read Bytes/Sec, % User Time, % Processor Time, and Page Faults/Sec.

Selecting a graph shows you the legends available in the bottom pane. Check or uncheck the instance depending on whether you want to see the statistical values in graphical form.

Start Service

If the Monitoring Service which is used to monitor the Cisco UCS Central is stopped, an alert is generated in the Alert View. Click the Start Service task to remotely start the Monitoring Service from the Operations Manager console.

- **Step 1** Launch Operations Manager console.
- **Step 2** From the menu bar, click the **Go** tab.
- **Step 3** From the drop-down menu, select **Monitoring**.

- Step 4 Navigate to Cisco UCS Monitoring > Cisco UCS Monitoring Service > Monitoring Service Dashboard...
- **Step 5** Select the Monitoring Service.
- **Step 6** From the **Tasks** pane, click **State View**.
- Step 7 Click Start Service.

Stop Service

If the Monitoring Service is no longer used to monitor Cisco UCS Central, then the Monitoring Service could be stopped from Operations Manager console.

- **Step 1** Launch Operations Manager console.
- **Step 2** From the menu bar, click the **Go** tab.
- **Step 3** From the drop-down menu, select **Monitoring**.
- Step 4 Navigate to Cisco UCS Monitoring > Cisco UCS Monitoring Service > Monitoring Service Dashboard...
- **Step 5** Select the Monitoring Service.
- **Step 6** From the **Tasks** pane, click **State View**.
- Step 7 Click Stop Service.



Note

Ensure that all Cisco UCS Monitoring Services added in the Operations Manager are in healthy state. You can verify the health status in the alert dashboard.

Cisco UCS Central Monitoring Dashboards

The Cisco UCS Central Instance folder contains a sub-folder for each Cisco UCS Central instances monitored by Operations Manager. The UCS Central Monitoring folder contains the following sub-folders:

- UCS Central Alert Dashboard—Displays all alerts generated in the UCS Central. The alerts are further categorized into the following views:
 - Active Alerts
 - · Acknowledge Alerts
 - Cleared Alerts
- UCS Central Diagram—Displays a graphical view of the relationship between different UCS Central components for all Instances. It also displays the hierarchal level of all UCS domains and its components, such as chassis, blade, and FI discovered through UCS Central.
- UCS Central State Dashboard—Display health state and other inventory information about Cisco UCS Central.



Note

UCS Manager Management Pack is not required to discover and monitor UCS domains managed by UCS Central.



Note

UCS domain performance metrics is not collected by UCS Central Management Packs.

Launching UCS Central GUI

In order to launch the UCS Central GUI, network connectivity should be available between the computer where the Operations Manager application is running and the Cisco UCS Central.

- **Step 1** In the Operations Manager console menu bar, click the Go tab.
- **Step 2** From the drop-down menu, select **Monitoring**.
- **Step 3** Navigate to Cisco UCS Monitoring > UCS Central Monitoring > UCS Central State Dashboard
- **Step 4** Select the target Cisco UCS Central on which the Cisco UCS Central must be launched.
- Step 5 In the Tasks pane, click Launch UCS Central GUI to launch the web UI.

Loading the UCS Central Inventory Data

- Step 1 In the Monitoring pane, expand Cisco UCS Monitoring > UCS Central Monitoring > UCS Central State Dashboard.
- **Step 2** Select the Cisco UCS Central target for which inventory data is to be loaded.

In the Cisco UCS Central Instance Tasks pane, select the Load UCS Central Inventory Data.

Step 3 Click Load Cisco Central Inventory Data.

A Run Task- Load UCS Inventory Data dialog box appears.

- **Step 4** Click **Run** to load the inventory data output.
- **Step 5** Click **Close** to exit the dialog box.

Ping UCS Central

Use **Ping** to check the connectivity between Operations Manager console and the Cisco UCS Central.

- **Step 1** On the menu bar of the Operations Manager, click the **Go** tab.
- **Step 2** From the drop-down menu, select **Monitoring**.
- Step 3 Navigate to Cisco UCS Monitoring > UCS Central Monitoring > UCS Central State Dshboard.
- **Step 4** Select a UCS Central instance.

- **Step 5** On the **Tasks** pane, select **State View**.
- Step 6 On the Cisco UCS Tasks pane, select Ping UCS Central.
- **Step 7** Review the output details, and click **Close**to exit.

Ping UCS Central Continuously

Use **Ping Continuously** (**ping-t**) to check the connectivity between Operations Manager console and the Cisco UCS Central.

- **Step 1** On the menu bar of the Operations Manager, click the **Go** tab.
- **Step 2** From the drop-down menu, select **Monitoring**.
- **Step 3** From the list, select a UCS Central.
- Step 4 On the Cisco UCS Tasks pane, select Ping UCS Manager Continuously (ping-t).
- **Step 5** Review the output details, and click **Close** to exit.

Logical Inventory

The logical inventory provides different views and insight to health state, inventory, fault information, and components of Cisco UCS Central.

The following dashboards can be viewed for each UCS components:

- Alert Dashboard
- · Diagram View
- · State Dashboard

Viewing Organization Details

Different views and folders in the Organization folder provides an insight to health state, inventory and fault information about various logical components of UCS Central. You can view the following views and subfolder:

- Organization Alert Dashboard—Displays all active, acknowledged and cleared alerts in different views
 for all organizations and its components. This Alert view also displays the alerts from objects which are
 not directly monitored by the management pack. The alerts are further categorized into the following
 views:
 - Active Alerts
 - Acknowledge Alerts
- Organization State Dashboard—Displays Health State of organization and other related information of Cisco UCS Central.



Note

By default, the management pack discovers three levels of organization and its components (service profile). To discover more than three levels, override the Discovery level in Cisco UCS Central Instance Object Discovery.

Service Profile

You can view the following details related to the service profiles:

- Service Profile Alert Dashboard—Displays active, acknowledged and cleared alerts of all service profiles in different views.
- Global Service Profile State Dashboard—Displays Health State of all global service profiles and related information
- Local Service Profile State Dashboard—Displays all the local service profiles and related information



Note

This dashboard only lists the Service Profiles of UCS Domain registered via UCS Central, and does not collect related faults. Therefore, the health state is always healthy.



Note

UCS domains and its components, such as chassis, blade, and fabric interconnect, discovered through UCS Central are displayed under UCS Domain folder in the corresponding views.

Additional parameters like UCS Central name, description and so on, are added for UCS Central discovered components to distinguish them as UCS Central managed components.



Note

UCS Manager Management Pack is not required to discover and monitor UCS domains managed by UCS Central.

UCS domain performance metrics are not collected by UCS Central Management Packs.

Alert Operations

Acknowledging the UCS Manager Faults

This operation could be performed on an Operation Manager alert created by the Management Pack due to a fault on Cisco UCS Central. Using this operation, user can acknowledge an Cisco UCS Central fault from the Operations Manager Console itself.

- **Step 1** Select an alert in Operations Manager which belongs to a Cisco UCS Central.
- **Step 2** Right click on the alert and choose **Set Resolution State**.

Step 3 Click UCS Acknowledged which is in configured resolution state.

Note UCS domains which are monitored through Central, such domains faults are not acknowledged.

Viewing the Knowledge Article of Alerts

Knowledge Articles provide more information about an alert generated in Operations Manager. This Management Pack supports knowledge articles for every UCS fault generated as alert in Operations Manager. Knowledge articles will help the user to get additional information about the alert like Fault Cause, Explanations and Resolution steps. Resolution Steps should be followed to resolve the alerts.

- **Step 1** Select UCS Central alert in Operations Manager.
- **Step 2** Right click on the alert and select **Properties**.
- **Step 3** On the properties window, click the **Product Knowledge** tab.

Note Local UCSM Organization and their faults are not displayed in UCS Central Alert dashboard.

Clearing of Alerts

When a fault or condition is cleared in Cisco UCS Central, the corresponding alert in operations manager is set to cleared state. There is no manual activity required to close an alert in the Operations Manager console.

By, default, for every 90 seconds interval all alerts are cleared. However, you can modify the interval period.

Rule Name: Cisco UCS Update and Close Alert Rule

Target: All Management Servers Resource Pool

Overridable Parameters:

- Enabled: This parameter can be used to enable or disable the rule (default value: true)
- EventQueryIntervalInSeconds : This parameter is used to set the desired time interval for which the events should be queries (default value : 120 seconds)



Note

If this parameter value is set to **0**, then the rule processes all the older events every time it runs. Hence, to avoid timeout and overlapping between consecutive runs of this rule, you should also set the parameters **Interval Seconds** and **Timeout Seconds** accordingly to higher values.

- Interval Seconds: This parameter is used to set the frequency to run the rule (default value : 90 seconds)
- Logging: set the logging (default value : false)
- Timeout Seconds: Set the time out interval for the rule (default value : 60 seconds)

Clearing of Alerts