Cisco UCS Manager Management Pack User Guide, Release 4.x For Microsoft System Center Operations Manager

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Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
http://www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

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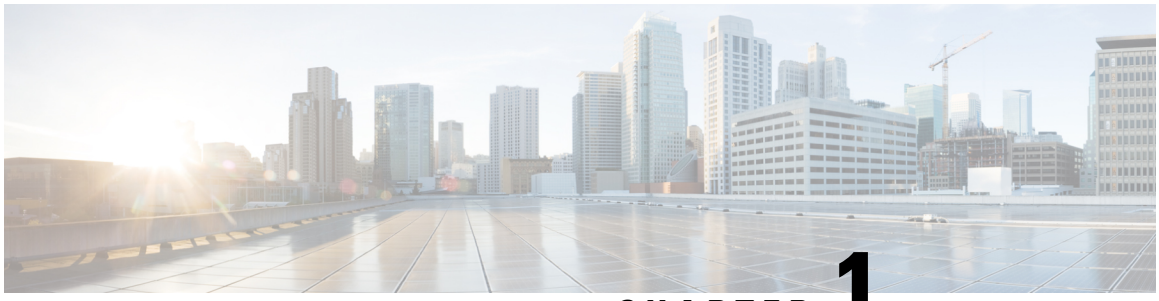


CHAPTER 1

Preface

This preface includes the following sections:

Audience

This guide is intended primarily for data center administrators with responsibilities and expertise in one or more of the following:

- Server administration
- Storage administration
- Network administration
- Network security

Conventions

This document uses the following conventions:

Conventions	Indication
bold font	Commands an keywords and user-entered text appear in bold font.
italic font	Document titles, new or emphasized terms, and arguments for which you supply values are in *italic* font.
[ ]	Elements in square brackets are optional.
{ x | y | z }	Required alternative keywords are grouped in braces and separated by vertical bars.

Conventions	Indication
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marts around the string or the string will include the quotation marks.
`courier` font	Terminal sessions and information the system displays appear in `courier` font.
< >	Nonprinting characters, such as passwords are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!,#	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Note Means reader take a note. Notes contain helpful suggestions or references to material not covered in the manual.

Tip Means the following information will help you solve a problem. The tips information might not be troubleshooting or even an action, buy could be useful information, similar to a Timesaver.

Caution Means reader be careful. In this situation, you might perform an action that could result in equipment damage or loss of data.

Timesaver Means *the described action saves time*. You can save time by performing the action described in the paragraph.

Warning IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

SAVE THESE INSTRUCTIONS

Related Cisco UCS Documentation

Documentation Roadmaps

For more information, you can access the related documents from the following links:

- Cisco UCS Manager Management Pack User Guide, Release 4.x
- Cisco IMC Management Pack User Guide, Release 4.x
- Cisco UCS Central Management Pack User Guide, Release 4.x
- Cisco UCS Management Pack Suite Installation and Deployment Guide, Release 4.x
- Cisco UCS Documentation Roadmap
- Cisco UCS C-Series Documentation Roadmap
- Cisco UCS Central Configuration Guides

Other Documentation Resources

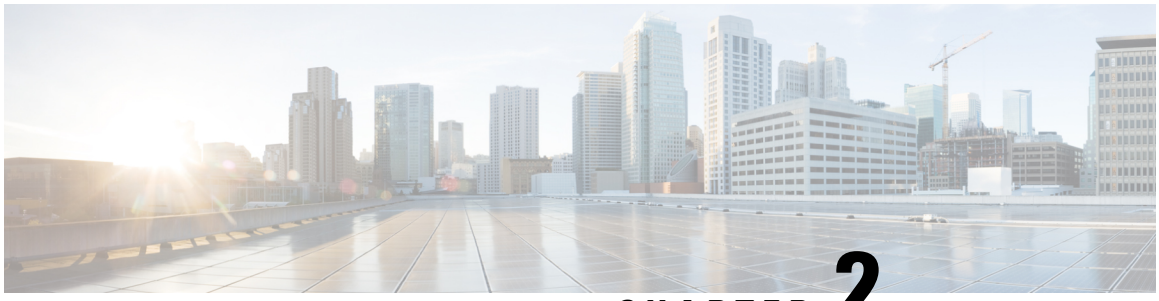
An ISO file containing all B and C-Series documents is available at the following URL:https://software.cisco.com/download/type.html?mdfid=283853163&flowid=25821 From this page, click **Unified Computing System (UCS) Documentation Roadmap Bundle**.

The ISO file is updated after every major documentation release.

Follow Cisco UCS Docs on Twitter to receive document update notifications.

Documentation Feedback

To provide technical feedback on this document, or to report an error or omission, please send your comments to ucs-docfeedback@cisco.com. We appreciate your feedback.



CHAPTER 2

Overview

This chapter contains the following sections:

About the Cisco UCS Management Pack

A management pack is a definition file that contains predefined monitoring settings that enable an agent to monitor a specific service or application in Operations Manager. These predefined settings include discovery information that allows Operations Manager to automatically detect and begin monitoring services and applications. It also consists of a knowledge base that contains error and troubleshooting information, alerts, and reports to help you correct the problems detected in the environment.

The Cisco UCS Management Pack for Microsoft System Center Operations Manager provides visibility into the health, performance, and availability of a Cisco UCS domain through a single, familiar, and easy-to-use interface. The management pack contains rules which monitor, for example, chassis, blade servers, rack servers, and service profiles across multiple Cisco UCS domains.

System Requirements

The following system requirements are for Management Servers, Gateway Servers or Operations Manager Windows Agents (trusted or untrusted boundary) with Cisco UCS Monitoring Service running on them.

Verified versions of System Center Operations Manager are as follows:

- 2019 UR2
- 2019
- 1807
- 1801
- 2016
- 2012 R2
- 2012

Management and Gateway Servers

System requirement for Management Server and Gateway Server are as per the Microsoft recommendations mentioned, see https://docs.microsoft.com/en-us/system-center/scom/system-requirements

Operations Manager Windows Agents

The following are the System requirement for Windows agents, trusted or untrusted boundary running Cisco UCS Monitoring Service:

Hardware

- Processor Architecture—64-bit with Quad-core or higher
- Memory—8 GB or higher
- Free Disk Space — 50 MB or higher
- Network Connection — 1 MBps or faster

Operating System

Ensure that 64-bit version of the following operating systems are installed with the latest service packs:

- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2

Software

Install the following software components before installing the Cisco UCS monitoring service on management servers:

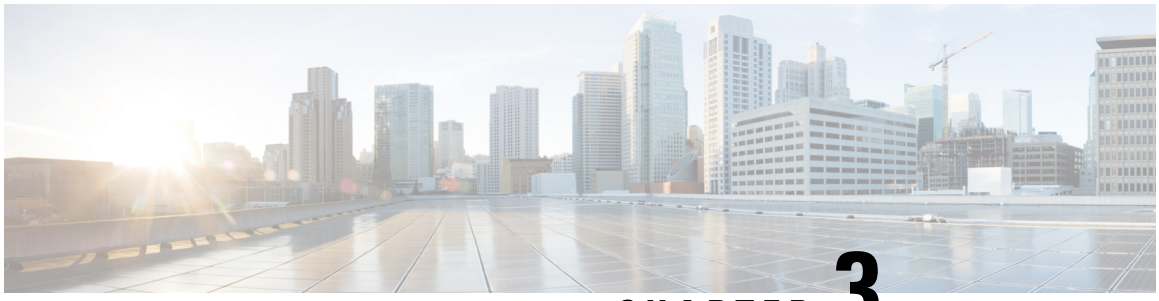
Cisco UCS MP Version	.NET Framework Version	Windows PowerShell Version
4.1.4 or higher	4.7.1 or higher	5.1 or higher
4.1.3 and earlier	4.6 or higher	3.0 or higher

Supported UCS Manager Releases

Cisco UCS Management Pack for Microsoft System Center Operations Manager is compatible with the following Cisco UCS Manager releases:

- Release 4.1
- Release 4.0
- Release 3.2
- Release 3.1
- Release 3.0

- Release 2.5
- Release 2.2
- Release 2.1



CHAPTER 3

Introduction

This chapter contains the following sections:

Key Features

The Cisco UCS Management Pack comprises the following key features. The subsequent chapters in this document elaborate these features further.

Rule(s) per UCS Fault

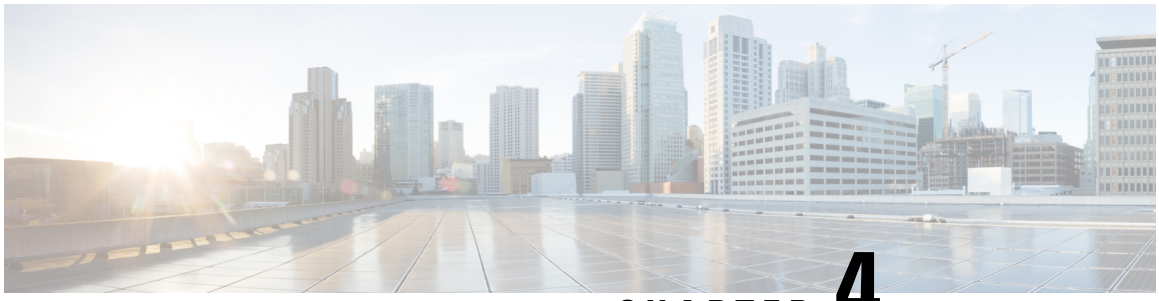
This management pack implements one rule per Cisco UCS domain fault. This provides improved power of customization at the fault level. You can override parameters, such as changing the priority and severity, enabling or disabling rules from the Operations Manager console interface. Apart from the console interface, all these customizations can also be applied using Operations Manager cmdlets. PowerShell scripts could be developed to operate on multiple rules at a time. The rules can be pre configured. You can either enable or disable these rules before adding any UCS templates.

Modularized Management Pack Design

Added common modules and workflows in the Cisco UCS Core Library Management Pack to optimize the Cisco UCS Management Pack.

Additional Features

- Verified on System Center Operations Manager 2019 and 2019 UR2
- Support for System Center Operations Manager 1801 and 1807
- Support for System Center Operations Manager 2016
- Support for monitoring with IPv6 addresses
- Support for C3260/S3260 server



CHAPTER 4

Configuring Cisco UCS Management Pack

This chapter contains the following sections:

Checklist for Configuring the Cisco UCS Manager Management Pack

1. Ensure that the option **Allow this server to act as a proxy and discover managed objects on other computers** is enabled for the following server or computer hosting Cisco UCS Monitoring Service.
   - Agent Managed Computers (trusted boundary)
   - Management Server
   - Agent Managed Computers (Untrusted boundary)
   - Gateway Server
2. Ensure that all the Cisco UCS Monitoring Service are visible in **Operations Manager Console** > **Monitoring** > **Cisco UCS Monitoring** > **Cisco UCS Monitoring Service** > **Monitoring Service Dashboard**.
3. Ensure that all Cisco UCS Monitoring Service are discovered and in Healthy State in **Operations Manager Console** > **Administration** > **Device Management** > **(Management Server / Agent Managed)**.
4. Ensure that after adding UCS domain through Add Monitoring Wizard, appropriate Run As Account has been associated with correct Run As Profile.
5. Ensure, if Run As Account distribution is set to More Secure, the computer hosting Cisco UCS Monitoring Service must appear in the Selected Computers list and it must be same as selected for monitoring UCS domain .
6. If Cisco UCS domain is monitored via Gateway Server or agent managed computer (untrusted boundary), ensure that Cisco UCS domain is reachable from that machine.
7. Ensure that Operations Manager **Action Account** must have read and write privileges on TEMP (%SystemRoot%\Temp) folder.

Adding a Cisco UCS Domain to the Operations Manager

You can add Cisco UCS domains on the servers, where either management pack is imported or the Cisco UCS Management Service is installed.

Step 1 Launch the **Operations Manager** console.

Step 2 Navigate to **Authoring** > **Cisco UCS Manager**.

Step 3 From the **Tasks** pane, click **Add Monitoring Wizard**.

Step 4 On the **Monitoring Type** tab, click **Cisco UCS Manager**.

Step 5 Click **Next**.

Step 6 On the **General Information** tab, review and complete the following:

In the **Connection** area, complete the following:

Name	Description
IP Address/Hostname field	Enter the IP address or the hostname of the UCS domain. You can use either the IPv6 or IPv4 address. **Note** For IPv6, enter the address in the `[2001:DB8::1]` format. You can add IPv6 addresses from the Release 4.1(1)
Port Number field	Enter the port number specified in the HTTP or HTTPS during Cisco UCS configuration. By default, the port number is set to 80 for nonsecure connection, and 443 for secure connection.
Connection Mode check box	If checked, a secure HTTPS connection is established. If unchecked, a nonsecure HTTP connection is established.

In the **Proxy Server** area, complete the following:

Name	Description
Enable Proxy Configuration check box	If checked, enables you to enter the proxy server details. Enter the following details: • **IP Address*/Hostname**—Enter the IP address of the proxy server. The host IP can be either IPv4 or IPv6 addresses • **Port**—Enter the port number which is used to connect to the proxy server

Name	Description
Enable Proxy Authentication check box	If checked, enables you to run authentication for the proxy server. Enter the following details: • **Username**—Enter the username configured on the proxy server • **Password**—Enter the password of the proxy server

In the **Cisco UCS Monitoring Service** area, complete the following:

Name	Description
Machine Type drop-down list	This can be one of the following: • Agent Managed Computer (Trusted Boundary) • Agent Managed Computer (Untrusted Boundary) • Management Server • Gateway Server
Service Machine drop-down list	Select the FQDN of the machine where Cisco UCS Monitoring Service is installed.

Step 7 To check Operations Manager connectivity to UCS Manager, click **Test Connection**.

Note If the test connection fails, contact your network administrator.

Note For certification error, follow the instruction provided in the alert dialog box.

Step 8 In the **Authentication** dialog box, enter the username and password, and click **OK**.

If the UCS domain is configured for the domain authentication, enter the username in the <username@domainname> format. The <*domainname*> is the UCS authentication domain configured in **Administration** > **User Management** > **Authentication in UCS**.

Note When you select Management Server at the same Active Directory level as the Operations Manager console machine, the dialog box validates the state of Monitoring Service. You can start the Monitoring Service if it stops.

You can add a UCS domain on the Management Server if you have local admin privileges. The local admin privileges are required to analyze the state of the Monitoring Service and remotely start the Monitoring Service.

Step 9 Click **Next**.

Step 10 On the **Instance Name** tab, complete the following:

Name	Description
Name field	A UCS domain name is set by default.

Name	Description
Description field	Enter a description for the UCS domain.

In the Configuration area, complete the following:

Note The following options are available from Cisco UCS Manager Management Pack, Release 4.1 onwards.

Name	Description
Org Discovery level drop-down list	Sets the Org level up to which the Orgs can be discovered. By default, the value is set to 3. This option is available from Release 4.1(1)
Show Unassociated Profiles check box	Whether to discover unassociated service profiles. It is unchecked by default. This option is available from Release 4.1(1)
Collect Performance Statistics check box	Whether to collect performance statistics for the domain. It is checked by default. This option is available from Release 4.1(1)

In the **Management Pack** area, you can continue with the default settings or use one of the following options:

Name	Description
Use Existing Management Pack or Create new check box	If checked, you can select an existing Management Pack to save this instance or create a new Management Pack by clicking **New**. **Note** We recommend not to select the Default Management Pack from the drop-down list

Step 11 Click **Next**.

Step 12 On the **Run As Account** tab, click **Add**.

Step 13 If you want to associate a new run-as account to the UCS domain instance, click **New**.

Note If you have access to read-only privileges in the UCS domain, you can collect inventory data and monitor faults of a UCS domain.

For privileges to perform actions, such as Acknowledge Fault and Launch KVM Console, see:

https://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-manager/products-installation-and-configuration-guides-list.html

Step 14 Click **Next**.

Step 15 On the Summary tab, review the configuration summary, and click **Create**.
The template for monitoring the UCS domain is created.

Creating an Account

Configure a Cisco UCS Instance account if you did not associate a Run-As Account with the UCS instance while adding the template in the **Add Monitoring Wizard** or if you want to modify the current account association for the UCS Instance.

To create an account for the Cisco UCS domain, create a Run-As Account with the Cisco UCS instance username and password which is used by the management pack. See, How to Create a Run As Account for detailed instruction on how to create a Run As Account.

Note On the **General Properties** page, select **Simple Authentication** as the **Run-As Account Type**.

Note If Cisco UCS Manager is configured for domain authentication, enter the username in the <*username@domainname*> format. The <*domainname*> is the UCS authentication domain name, configured in **Administration** > **User Management** > **Authentication in Cisco UCS Manager**. These credentials are used for all communication with the Cisco UCS Manager.

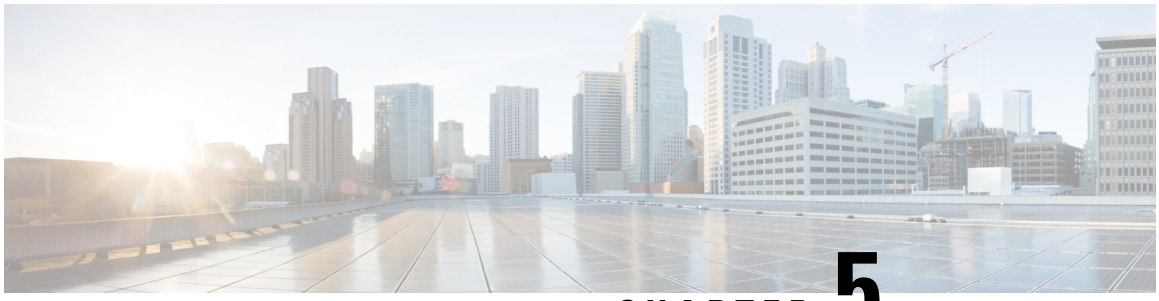
Associating a Run As Account with a Profile

Once Run As Account is created, associate the account with the Cisco UCS domain Run-As Profile. A Run-As Profile is created with UCS domain name in the Operations Manager. See, https://docs.microsoft.com/en-us/system-center/scom/manage-security-create-runas-link-profile for detailed instructions on how to associate an account with a Run-As Profile.

Note For inventory collection and fault monitoring of UCS domain , read-only privileges in the Cisco UCS Manager is required.

To perform the actions, such as Acknowledge Fault and Launch KVM Console, see:

https://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-manager/products-installation-and-configuration-guides-list.html



CHAPTER 5

Configuring Fault Acknowledgment

This chapter contains the following sections:

Overview of Fault Acknowledgment

You can use the Operations Manager console to acknowledge the faults in a Cisco UCS domain . This configuration helps to communicate with Cisco UCS for acknowledging alerts from the Operations Manager console. You can configure this from any management server in the same management group.

Note If you have configured fault acknowledgment for UCS Central Management Pack, then do not perform these tasks for UCS Manager Management Pack.

Creating a Resolution State

See https://docs.microsoft.com/en-us/system-center/scom/manage-alert-set-resolution-states to create a resolution state.

Note Provide a resolution state name which describes the resolution state. For example, *UCS Acknowledged*.

Creating a Channel

Step 1 In the **Operations Manager** console, click the **Go** tab in the menu bar.

Step 2 From the drop-down list, select **Administration** > **Notification**.

Step 3 Right-click **Channels**, and select **New Channel** > **Command**.
A **Command Notification Channel** dialog box is displayed.

Step 4 In the **Description** tab, enter a name and description for the channel.

Step 5 Click **Next**.

Step 6 On the Settings tab, complete the following:

Name	Description
Full path of the command file field	Enter the path to the command file. For example, *C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe*
Command line parameters field	Enter the command line parameters for the channel. For example, *-Command "& 'C:\ProgramData\Cisco\Scripts\AcknowledgeFault.ps1'" -instanceId '$Data[Default='Not Present']/Context/DataItem/Custom1$' -serviceMachineName '$Data[Default='Not Present']/Context/DataItem/Custom9$' -dn '$Data[Default='Not Present']/Context/DataItem/Custom10$' -faultCode '$Data[Default='Not Present']/Context/DataItem/Custom4$' -faultId '$Data[Default='Not Present']/Context/DataItem/Custom6$'* **Note** Configure the command line parameters correctly for acknowledging the UCS faults from the Operations Manager.
Startup folder for the command file field	Enter the startup folder name. For example, `C:\ProgramData\Cisco\Scripts` **Note** Before adding the folder, verify the path and the location of the scripts.

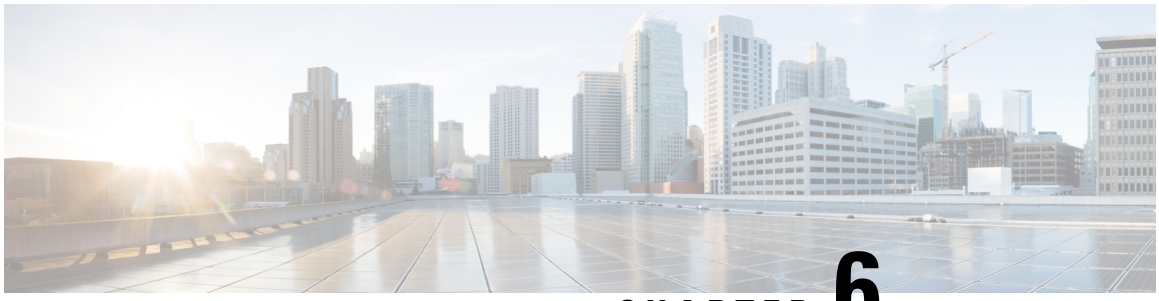
Step 7 Click **Finish**.

Creating a Subscriber and Subscription

To create a subscriber and subscription, see https://docs.microsoft.com/en-us/system-center/scom/manage-notifications-create-subscriptions.

Creating a Windows Firewall Inbound Rule

Create a Windows firewall inbound rule to open port 8732 in all the machine running Cisco UCS Monitoring service. This enables the Acknowledge Fault PowerShell script to communicate with the Cisco UCS Monitoring Service.



CHAPTER 6

Customizing Cisco UCS Management Pack

This chapter contains the following sections:

Overview of Customizing Cisco UCS domain Management Pack

For each UCS domain added for monitoring in Operations Manager, a Management Pack Template is created in the Management Pack Templates tab of the Cisco Unified Computing System. It is important to understand the components of the Management Pack to perform any customization.

Cisco UCS Instance Object Discoveries

All the object discoveries are interval based and they can be periodically run to get the discovery data from monitoring service. To view the list of object discoveries in the pack, complete the following steps:

Step 1 In the **Operations Manager** console, click the **Go** tab in the menu bar.

Step 2 From the drop-down list, select **Authoring**.

Step 3 Select **Management Pack Templates** > **Cisco UCS Manager**

Step 4 Select the template pack for which you want to view the object discoveries.

Step 5 Right click and select**View Management Pack Objects** > **Object Discoveries**.

Cisco UCS Instance (Object Discovery)

This is the top level Object Discovery and the first discovery to run for an UCS domain . It discovers an instance of Cisco UCS domain into Operations Manager. This discovery runs to fetch the inventory and monitoring information from Cisco UCS domain using the Cisco UCS Monitoring Service. These discoveries can be overridden. The later sections shows how to override the object discoveries.

The following are the set of Overrides available for this Object Discovery:

- CacheClass–Defines the managed object for an inventory or monitoring information to be collected from the UCS domain
- Discovery Level–Defines the level up to which Organizations and Service Profiles from the UCS domain should be discovered in the Operations Manager
- Enabled–Defines the enabled state of the object discovery
- Interval Seconds–Defines the interval of execution
- ShowUnassociatedProfiles–Defines whether or not the associated or unassociated Service Profiles should be discovered in Operations Manager.

  The default value is **False** which means an unassociated service profile is not shown.
- Logging Level–Defines if the logging is enabled or disabled for this object discovery
- Timeout Seconds–Defines the timeout period for the discovery script to execute

Note By default the Cisco UCS Instance discovery is programmed to execute every two hours (7200 seconds) to get any modifications from the Cisco UCS domain .

Overriding Object Discoveries

Step 1 Go to **Object Discovery** page of the Cisco UCS domain instance.

Step 2 Select the object for which you want to override the properties.

Step 3 Right-click and select**Override** > **Override the Object Discovery** > **For All Objects of Class**.

Step 4 In the **Override Properties** dialog box, complete the following:

- Check the Override check box
- Modify the override values
- Click **OK** > **Apply**.

Note When an object discovery is enabled using override, all its target class discoveries up to the top level (Cisco UCS Instance) must be enabled. If not, enable them. When disabled, all the class discoveries targeted at this class to the leaf levels are not monitored by the Operations Manager.

Note If you enabled an object discovery from the Disabled state, for all such object discoveries, discovery events must be generated using the Generate Discovery Event task from Cisco UCS Instance Tasks. This is used to retrieve old updates from the Management Service when the discovery was turned off.

Overriding Object Discoveries using PowerShell Cmdlets

You can disable or override object discoveries using PowerShell Cmdlets. For more details, see Retrieving, enabling, or disabling UCS Manager Object Discoveries.

Rules

Cisco UCS Core Library Management Pack has rule or rules for each UCS fault . The rules are inherited whenever the UCS Manager templates instance is create from **Add Monitoring Wizard**.

Note Rules are included for faults with Severity equal to Critical, Major, Minor, Warning, and Type, and not equal to FSM or Configuration.

Depending on the UCS Manager component on which a fault can occur, there can be one or multiple rules defined per UCS fault.

For example, Fault F0174 can occur on the following UCS components:

"sys/chassis-[id]/blade-[slotId]/board/cpu-[id]"/>

"sys/rack-unit-[id]/board/cpu-[id]"/>

In the given example, parsing from the back side of the DN, rack-unit, and blade are the discovered components. They are from the same base class, so one rule is available. For example, Fault Rule: Server.F0174.

Now, consider fault F0371, which can occur on the following UCS Components:

"sys/chassis-[id]/fan-module-[tray]-[id]/fan-[id]"/>

"sys/fex-[id]/fan-[id]"/>

"sys/rack-unit-[id]/fan-module-[tray]-[id]/fan-[id]"/>

"sys/switch-[id]/fan-[id]"/>

"sys/switch-[id]/fan-module-[tray]-[id]/fan-[id]"/>

In the above example, parsing each DN from back side, chassis, FEX, rack-unit, fabric interconnect are the discovered components which are of different base class. So, the list of rules available for the above UCS fault is as follows:

- Fault Rule: Chassis.F0371
- Fault Rule: Fex.F0371
- Fault Rule: FabricInterconnect.F0371

- Fault Rule: Server.F0371

Rules are event-based. Each rule can generate multiple alerts in the Operations Manager based on the event raised by the Cisco UCS Monitoring Service.

Note Currently, the Cisco UCS Manager Management Pack does not support display of informational faults from the Cisco UCS domain in Operations Manager.

Note UCS Manager FSM faults are transient faults. So, the running version of the management pack does not support such faults.

For a complete list of FSM faults not supported in the Management Pack, see FSM Faults.

PreConfigure Rule

When all the Management Packs are imported, before Cisco UCS Manager templates are created, configure (Enable/Disable) the rule from UI or Cmdlets. Once configured, you can import the templates and the configuration takes effect on all the templates which are added later. If you want to change the configuration of rules after the templates are imported, re-configure the rule. This automatically takes effect on the existing templates and for all the future templates they are to be added.

Enabling Rules using PowerShell Cmdlets

You can enable rules using PowerShell Cmdlets. For more details, see retrieving, enabling or disabling UCS Manager Fault Rules.

Severity Mapping

This section describes the mapping between the severity of faults in the UCS domain and the alert severity rules in Operations Manager console.

The following table shows the mapping of severity levels between the Cisco UCS domain and rules.

Severity Level	Cisco UCS (Severity)	Rules (Alert Severity)
2	Critical, Major	Critical
1	Minor, Warning	Warning

Note All Rules are enabled by default.

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 Manager**.
Step 4 Right-click the Cisco UCS instance, and select **View Management Pack Objects** > **Rules**.

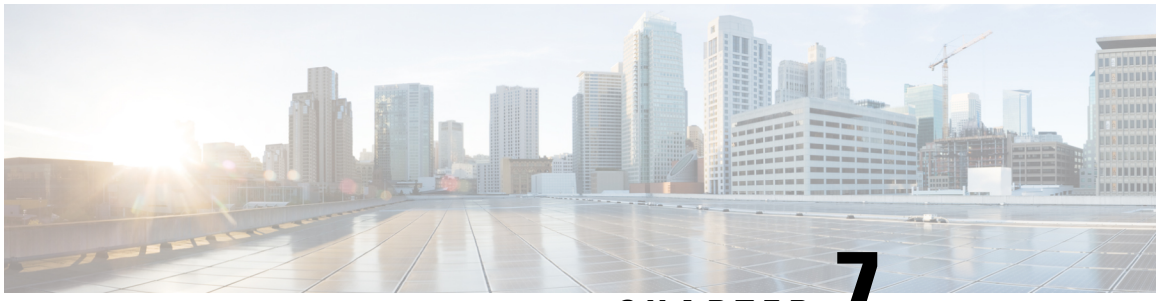
Overriding a Rule

Step 1 From Operations Manager menu bar, click **Go** and select **Authoring**.
Step 2 From the navigation pane, select **Management Pack Templates**.
Step 3 Select **Cisco UCS Manager**.
Step 4 Right-click the Cisco UCS instance, and select **View Management Pack Objects** > **Rules**.
Step 5 On the **Rules** page, select the rule which you want to override.
Step 6 Right-click the rule and click **Overrides** > **Override the Rule** > **For all objects of class**.
Step 7 On the **Override Properties** page, check the parameter you want to override and then modify the override value.
Step 8 Click **OK** to close the Override page.
Step 9 Close the **Rules** page.

Migrating the UCS Domain to a Different Monitoring Service

In a deployment where multiple Operations Manager Management Servers and Agent Managed Computers are present, Cisco UCS Monitoring Service could be installed on more than one computer to monitor multiple Cisco UCS domain . This helps in sharing the load of monitoring multiple Cisco UCS domain among different Management Servers and Agent Managed Computers. While doing so, sometimes it may be required to assign the monitoring of Cisco UCS domain from one Cisco UCS Monitoring Service to another Monitoring Service.

Step 1 From the menu bar of the Operations Manager console, click the **Go** tab.
Step 2 From the drop-down menu, select **Authoring**.
Step 3 Select **Management Pack Templates**.
Step 4 Select **Cisco UCS Manager**.
Step 5 Right-click one of the Cisco UCS instances and click **Properties**.
Step 6 From the drop-down list, Select a different machine type or service machine or both.
Step 7 Click **OK** > **Apply**.



CHAPTER 7

Monitoring Cisco UCS Domains Using Operations Manager

This chapter contains the following sections:

About the Monitoring Pane in Operations Manager

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

Viewing Cisco UCS Domains Monitoring Pane

Step 1 Launch **Operations Manager** console.

Step 2 Click the **Monitoring** tab.

Step 3 Expand the **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring** folder.

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 domain 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 domain, 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 Manager Monitoring Dashboards

The UCS Domain(s) Monitoring folder contains the following views:

- **Ucs Domain Alert Dashboard**—Displays all alerts generated in the UCS domain. The alerts are further categorized into the following views:

- Active Alerts
- Acknowledge Alerts
- Cleared Alerts

- **UCS Domain Diagram**—Displays a graphical view of the relationship between different Cisco UCS Domain(s) components for all Instances.
- **UCS Domain State Dashboard**—Displays the list of domains added and its health state and other inventory information.

  When you select a UCS domain from the State dashboard, you can perform the tasks listed in the following sections.

Generating Cisco UCS Domain Technical Support Bundle

Step 1 Launch the Operations Manager console.

Step 2 Click **Monitoring**.

Step 3 Navigate to **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring** > **UCS Domain State Dashboard**.

Step 4 Select a UCS domain.

Step 5 On the **Tasks** pane, select **Create and Download UCS Tech Support File** from the **Cisco UCS Instance Tasks** list. **Create and Download UCS Tech Support File** dialog box appears.

Step 6 Select the path where the downloaded support file is to be stored.

Step 7 In the **Options** area, select the one of the following:

- **ucsm**—Saves a file containing technical support data for the entire Cisco UCS domain in the specified directory
- ucsm-mgmt—Saves a file containing technical support data for the Cisco UCS management services, excluding the fabric interconnects, in the specified directory.
- **chassis**—Saves a file containing technical support data for either the CIMCs or I/O modules in a given chassis. When you select this option, UI displays the following:
  - **Chassis ID**—The chassis for which you want technical support data
  - **CIMC**— Select this option to get CIMC technical support data. To get the data for a single server within the chassis, enter that server ID in the CIMC ID field. To get the CIMC data for all servers in the chassis, enter all in this field
  - **IOM**— Select this option to get I/O module technical support data. To get the data for a single I/O module within the chassis, enter that module's ID in the IOM ID field. To get the data for all I/O modules in the chassis, enter all in this field
- **fabric-extender**— Saves a file containing technical support data for a fabric extender in the specified directory. When you select this option, UI displays the FEX ID field that lets you enter the unique identifier of the FEX for which you want technical support data

Note While monitoring from Gateway or Untrusted agent , you cannot generate the technical support file.

- **rack-server**— Saves a file containing technical support data for a C-Series server to the specified directory. When you select this option, UI displays the following:
  - **Rack Server ID**— The unique identifier of the rack server for which you want technical support data
  - **Rack Server Adapter ID**— The unique identifier of the adapter for which you want technical support data. To get the data for all adapters in the server, enter all in this field.

Step 8 Click **OK**.
The UCS Manager Tech Support File for the selected options is created and downloaded. The file can be viewed at the following location `%ProgramData%\Cisco\UCS Manager\TechSupportFile` on the machine where the service is running and monitoring the UCS Domain. The filename is in the `yyyyMMddhhmmss_UCSMhostname_Optiontype.tar` format. For example, 20160614063207_Tcs-tpi01_UCSM.tar.

Launching UCS GUI

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

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 Domain(s) Monitoring** > **UCS Domain State Dasboard**
Step 4 Select the target Cisco UCS domain on which the Cisco UCS domain must be launched.
Step 5 In the **Tasks** pane, click **Launch UCS GUI** to launch the web UI.

Loading the UCS Inventory Data

Step 1 In the **Monitoring** pane, expand **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring** > **UCS Domains State Dashboard**.
Step 2 Select the group for which Cisco UCS server data must be loaded.
In the **Cisco UCS Instance Tasks** pane, select the **Load UCS Inventory Data**.
Step 3 Click **Load Cisco 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

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

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 Domain(s) Monitoring** > **UCS Domain State Dashboard**.
Step 4 Select a UCS domain .
Step 5 On the **Tasks** pane, select **State View**.
Step 6 On the **Cisco UCS Tasks** pane, select **Ping UCS**.
Step 7 Review the output details, and click **Close**to exit.

Ping UCS Continuously

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

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 Domain(s) Monitoring** > **UCS Domain State Dashboard**.
Step 4 From the list, select a UCS domain .
Step 5 On the **Cisco UCS Tasks** pane, select **Ping UCS Manager Continuously (ping-t)**.
Step 6 Review the output details, and click **Close** to exit.

Physical and Logical Inventory

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

The following dashboards can be viewed for each UCS components:

- Alert Dashboard
- Diagram View
- State Dashboard

Viewing Chassis Details

Step 1 Launch the Operations Manager console.
Step 2 From the drop-down menu, select the **Go** tab, and click **Monitoring**.
Step 3 Navigate to **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring** > **Chassis**.

Review the following details of each components of the chassis:

- Chassis Alert Dashboard

- Chassis State Dashboard
- Chassis Performance
  - Chassis Fan Statistics
  - Chassis Power Statistics
  - Chassis PSU Statistics
- **IO Modules**
  - IO Module Alert Dashboard
  - IO Module State Dashboard
  - IO Module Performance
    - IO Module Rx Port Statistics
    - IO Module Temperature Statistics
    - IO Module Tx Port Statistics
- **Blade**
  - Blade Server Alert Dashboard
  - Blade State Dashboard
  - Blade Performance
    - Blade CPU Statistics
    - Blade Memory Unit/Array Statistics
    - Blade Motherboard Statistics
- **Cartridges**
  - Cartridge Alert Dashboard
  - Cartridge State Dashboard
  - Server Unit
    - Server Unit Alert Dashboard
    - Server Unit State Dashboard
  - Server Unit Performance
    - Server Unit CPU Statistics
    - Server Unit Memory Unit/Array Statistics
    - Unit Motherboard Statistics

Viewing Fabric Extender Details

Step 1 Launch the Operations Manager console.

Step 2 From the drop-down menu, select the **Go** tab, and click **Monitoring**.

Step 3 Navigate to **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring** > **Fabric Extender**.

Review the following details of each components of the Fabric Extender:

- Fex Alert Dashboard
- Fex State Dashboard
- Fex Performance
    - FexStatistics
- **IO Modules**
    - IO Module Alert Dashboard
    - IO Module State Dashboard
    - IO Module Performance
        - IO Module Statistics

Viewing Fabric Interconnect Details

Step 1 Launch the Operations Manager console.

Step 2 From the drop-down menu, select the **Go** tab, and click **Monitoring**.

Step 3 Navigate to **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring** > **Fabric Interconnect**.

Review the following details of each components of the Fabric Interconnect:

- Fabric Interconnect Alert Dashboard
- Fabric Interconnect State Dashboard
- Fabric Interconnect Performance
    - Fabric Interconnect Fan Statistics
    - Fabric Interconnect PSU Statistics
    - Switch System Statistics
- **Port Channel Performance**
    - Ethernet Port Channel Performance
        - Eth Rx Port Channel Statistics
        - Eth Tx Port Channel Statistics

- FC Port Channel Performance
  - FC Rx Port Channel Statistics
  - FC Tx Port Channel Statistics
- FCOE Port Channel Performance
  - FCoE Rx Port Channel Statistics
  - FCOe Tx Port Channel Statistics

- **Port Performance**
  - Appliance Port Performance
    - Appliance Rx Port Statistics
    - Appliance Tx Port Statistics
  - FC Port Performance
    - FC Rx Port Statistics
    - FC Tx Port Statistics
  - FCoE Storage Port Performance
    - FCOe Storage Rx Port Statistics
    - FCoE Storage Tx Port Statistics
  - FCoE Uplink Port Performance
    - FCOe Uplink Rx Port Statistics
    - FCoE Uplink Tx Port Statistics
  - Server Port Performance
    - Server Rx Port Statistics
    - Server Tx Port Statistics
  - Uplink Port Performance
    - Uplink Rx Port Statistics
    - Uplink Tx Port Statistics

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 domain . 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
  - Cleared Alerts
  - Acknowledge Alerts
- **Organization State Dashboard**—Displays Health State of organization and other related information of Cisco UCS domain .

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 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.
- **Service Profile State Dashboard**—Displays Health State of all service profiles and related information for all Cisco UCS Manager .
- **Service Profile Performance**—Displays performance statistics related to the following components:
  - **Service Profile Rx Port Statistics**
  - **Service Profile Tx Port Statistics**

Viewing Rack Unit Details

Step 1 Launch the Operations Manager console.

Step 2 From the drop-down menu, select the **Go** tab, and click **Monitoring**.

Step 3 Navigate to **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring** > **Rack Unit**.

Review the following details of each components of the rack unit:

- Rack Unit Alert Dashboard
- Rack Unit State Dashboard
- Rack Unit Performance

- Rack Unit CPU Statistics
- Rack Unit Fan Statistics
- Rack Unit Memory Unit/Array Statistics
- Rack Unit Motherboard Statistics
- Rack Unit PSU Statistics

Launching KVM Console

The Cisco UCS Management Pack provides capability to launch KVM console from the Operations Console. KVM console launch action is available for following UCS components:

- Blade
- Rack Unit
- Service Profile

Step 1 In the Operations Manager console, click the **Go** tab.

Step 2 From the drop-down menu list, click **Monitoring**.

Step 3 Navigate to **Cisco UCS Monitoring** > **UCS Domain(s) Monitoring**.

Step 4 To launch KVM on one of the following UCS components, do the following:

a) Navigate to **Chassis** > **Blade** > **Blade State Dashboard**. Select a blade server, and from the Tasks pane, click **Launch KVM**.

b) Navigate to **Chassis** > **Rack Unit** > **Rack Unit State Dashboard**. Select a rack unit, and from the Tasks pane, click **Launch KVM**.

c) Navigate to **Chassis** > **Service Profile** > **Service Profile State Dashboard**. Select a service profile, and from the Tasks pane, click **Launch KVM**.

Step 5 A list of configured in-band management and out-of-band management IP addresses are displayed.

Step 6 Select the IP address through which you want to launch the KVM, and click **OK**.

While monitoring from Gateway server and untrusted agent, you cannot launch the KVM console.

Note To launch the KVM console, you must have valid Cisco UCSM user credentials with administrator or user role privileges, and must be associated with the Cisco UCS Domain Profile.

Important The KVM console cannot be launched on a Blade/Rack Unit/Service Profile, if the connection to the UCS Domain is established using a proxy server. The KVM console being a console task cannot be launched on a Blade/Rack Unit/Service Profile, when there is no direct connectivity between Operations Console machine and the Service Machine where the Cisco UCS Monitoring Service is running. This could occur when the Operations Console machine belongs to a different Active Directory Domain than the Service Machine.

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 domain . Using this operation, user can acknowledge an Cisco UCS domain fault from the Operations Manager Console itself.

Step 1 Select an alert in Operations Manager which belongs to a Cisco UCS domain .

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 domain 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 domain , 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

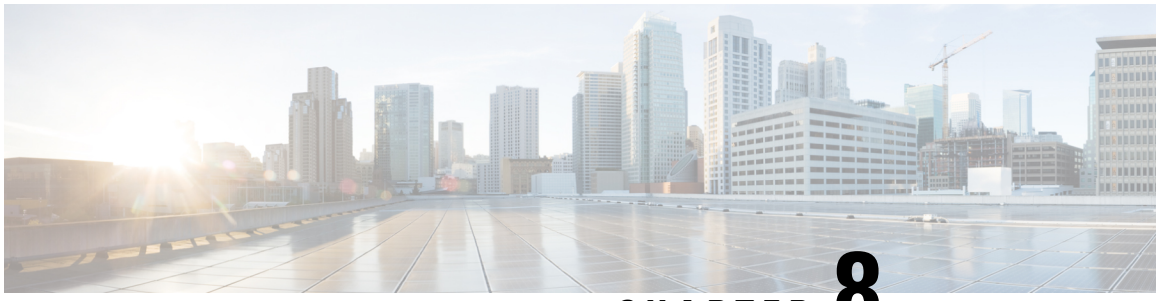
Target: All Management Servers Resource Pool

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)



CHAPTER 8

PowerShell Cmdlets for Cisco UCS Management Pack

This chapter contains the following sections:

Importing Cmdlets from the PowerShell Module

Step 1 On a Management Server open Operations Manager Shell.

The Cisco PowerShell module is shared across all the Management Servers in the Management Group.

Note The **CiscoUcsScomPs** module is installed in `%PROGRAMDATA%\Cisco\Modules`.

Step 2 Import the CiscoUcsScomPs module.

Step 3 To see all cmdlets in CiscoUcsScomPs module, use the Get-Command -Module CiscoUcsScomPs command in the PowerShell window.

Note If you are using another PowerShell session, import the OperationsManager module before importing the CiscoUcsScomPs module.

Adding or Updating UCS Instances

Add-UcsScomInstance

Provide either an existing management pack or name for new management pack to add this instance. If none is provided, a new management pack is created with the same name as that of instance.

```
Add-UcsScomInstance -UcsIPAddress <string> -MachineType <string>
{Agent Managed Computer (Trusted Boundary) |
Agent Managed Computer (Untrusted Boundary) | Management Server |
```

```
Gateway Server} -MachineName <string>
-InstanceName <string> [-Port <int>] [-ManagementPackName <string>]
[-Description <string>] [-NoSsl] [-ProxyHos
<string>] [-ProxyPort <int>] [-ProxyUsername <string>]
[-ProxyPassword <string>] [-ExistingRunAsAccount <string
[-OrgDiscoveryLevel <int>] [-ShowUnassociatedProfiles]
[-SuspendPerformanceStatsCollection]  [<CommonParameters
```

```
Add-UcsScomInstance -UcsIPAddress <string> -MachineType <string>
{Agent Managed Computer (Trusted Boundary) |
Agent Managed Computer (Untrusted Boundary) | Management Server |
Gateway Server} -MachineName <string>
-InstanceName <string> -RunAsAccount <string> -RunAsCredential
<pscredential> [-Port <int>] [-ManagementPackNam
string>] [-Description <string>] [-NoSsl] [-ProxyHost <string>]
[-ProxyPort <int>] [-ProxyUsername <string>]
[-ProxyPassword <string>] [-OrgDiscoveryLevel <int>]
[-ShowUnassociatedProfiles]
[-SuspendPerformanceStatsCollection]  [<CommonParameters>]
```

```
Add-UcsScomInstance -UcsIPAddress <string> -MachineType
<string> {Agent Managed Computer (Trusted Boundary) |
Agent Managed Computer (Untrusted Boundary) |
Management Server | Gateway Server} -MachineName <string>
-InstanceName <string> -ExistingManagementPack <ManagementPack>
-Description <string> -RunAsAccount <string>
-RunAsCredential <pscredential> [-Port <int>] [-NoSsl]
[-ProxyHost <string>] [-ProxyPort <int>] [-ProxyUsername
<string>] [-ProxyPassword <string>]
[-OrgDiscoveryLevel <int>] [-ShowUnassociatedProfiles]
[-SuspendPerformanceStatsCollection]  [<CommonParameters>]
```

```
 Add-UcsScomInstance -UcsIPAddress <string>
-MachineType <string> {Agent Managed Computer (Trusted Boundary) |
Agent Managed Computer (Untrusted Boundary) |
Management Server | Gateway Server} -MachineName <string>
-InstanceName <string> -ExistingManagementPack
<ManagementPack> -Description <string> [-Port <int>] [-NoSsl]
[-ProxyHost <string>] [-ProxyPort <int>]
[-ProxyUsername <string>] [-ProxyPassword <string>]
[-ExistingRunAsAccount <string>] [-OrgDiscoveryLevel <int>]
[-ShowUnassociatedProfiles]
[-SuspendPerformanceStatsCollection]  [<CommonParameters>]
```

Parameter	Description
UcsIPAddress	IP address or host name of the UCS to register
MachineType	Type of Operations Manager machine to register the UCS
MachineName	FQDN of the machine on which UCS is registered (all scripts related to this UCS MP will be run on this machine)
InstanceName	Name to be given to this UCS instance
Port	Port number

Parameter	Description
ManagementPackName	Name of the new management pack to be created (if not specified, InstacneName will be used for management pack)
Description	Optional description string for the UCS instance
NoSsl	Switch parameter to specify non-secure (http) connectivity with UCS
ProxyHost	IP address or hostname of proxy server to be used for communicating with UCS
ProxyPort	Proxy port number
ProxyUsername	Username for proxy server
ProxyPassword	Password for proxy server
ExistingRunAsAccount	Name of the existing Run-As account to be used for this instance
RunAsAccount	Name of new Run-As account to be created for this instance
RunAsCredential	UCS credentials for the new Run-As account to be created
ExistingManagementPack	Existing management pack object to which the instance is to be added

Note You can either add an UCS instance on a new Management Pack or on an existing pack name, but you cannot do both for a single instance.

Example

```
$secureString = ConvertTo-SecureString "PASSWORD" -AsPlainText -Force
$credentials = New-Object System.Management.Automation.PSCredential
("USERNAME",$secureString)

Add-UcsScomInstance -UcsIPAddress 10.10.10.10 –InstanceName
‘UCSNAME_10’ –MachineType ‘Management Server’ –MachineName
FQDN of ‘SCOM_MS1’ –Secure –ProxyHost ’10.10.10.2’
–ProxyPort 58 –RunAsAccount ‘UCS10’ –RunAsCredential $credentials
```

Update-UcsScomInstance

```
Update-UcsScomInstance [-InstanceName] <string>
[[-UcsIPAddress] <string>] [[-Port] <string>] [[-MachineType]
```

```
<string> {Agent Managed Computer (Trusted Boundary) |
Agent Managed Computer (Untrusted Boundary) | Management
Server | Gateway Server}] [[-MachineName] <string>]
[[-Description] <string>] [[-Secure] <bool>] [[-ProxyHost]
<string>] [[-ProxyPort] <int>] [[-ProxyUsername] <string>]
[[-ProxyPassword] <string>] [[-OrgDiscoveryLevel]
<int>] [[-ShowUnassociatedProfiles] <bool>]
[[-SuspendPerformanceStatsCollection] <bool>]  [<CommonParameters>]
```

Parameter	Description
UcsIPAddress	IP address or host name of the UCS to register
MachineType	Type of Operations Manager machine to register the UCS
MachineName	FQDN of the machine on which UCS is registered (all scripts related to this UCS MP will be run on this machine)
Port	Port number
Description	Optional description string for the UCS instance
ProxyHost	IP address or hostname of proxy server to be used for communicating with UCS
ProxyPort	Proxy port number
ProxyUsername	Username for proxy server
ProxyPassword	Password for proxy server

Get-UcsmScomAllInstances

Gets all existing UCS instances.

```
Get-UcsmScomAllInstances
[available in MP v4.1.5]
```

Update-UcsScomAllInstances Cmdlet

Updates all the existing UCS instances after upgrade from version 4.0(1) or higher.

Get-UcsScomDiscovery

```
Get-UcsScomDiscovery -InstanceName <string>
Get-UcsScomDiscovery -InstanceName <string> -ClassName <string[]>
Get-UcsScomDiscovery -InstanceName <string> -DiscoveryName <string[]>
```

Enable-UcsScomDiscovery

```
Enable-UcsScomDiscovery [-Discovery] <ManagementPackDiscovery[]>
```

Disable-UcsScomDiscovery

```
Disable-UcsScomDiscovery [-Discovery] <ManagementPackDiscovery[]>
```

Get-UcsScomRule

```
Get-UcsScomRule [[-Class] <string[]>] [[-FaultID] <string[]>]
```

Enable-UcsScomRule

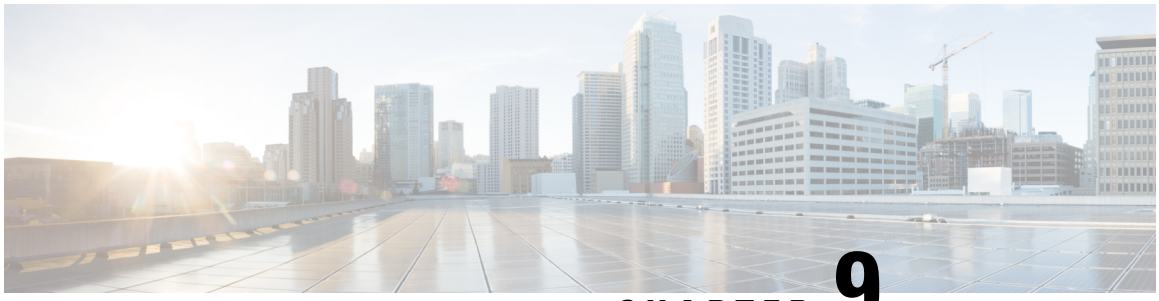
Provide a name of management pack to which the override is added.

```
Enable-UcsScomRule [-Rule] <ManagementPackRule[]>
[-ManagementPackName] <string>
```

Disable-UcsScomRule

Provide a name of management pack to which the override is added.

```
Disable-UcsScomRule [-Rule] <ManagementPackRule[]>
[-ManagementPackName] <string>
```



CHAPTER 9

Performance Reports for Cisco UCS Management Pack

This chapter contains the following section:

Generating the Reports for Various Objects and Counters

Step 1 Open **Operation Console**, and click **Reporting**.

Step 2 On the left navigation tree, click **Cisco UCS Manager Management Pack**.

All the reports for various objects and counters are displayed in the **Reports** section.

Step 3 From the Task panel on the right-side, select a report to be generated, and click **Open**.

A **Report** window is launched.

Step 4 To add the UCS domains for which you want to generate the report, click either **Add Object** or **Add Group**

Step 5 Select the time window.

By default, the current month is selected.

Step 6 Click **Run**.

The report is generated and launched.