

Monitoring C-Series Rack Servers using SCOM

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Accessing the Monitoring Pane

After installing and configuring Cisco UCS C-Series Management Pack, you can use the **Monitoring** pane in SCOM to view the summary and the components of the Cisco C-Series rack server.

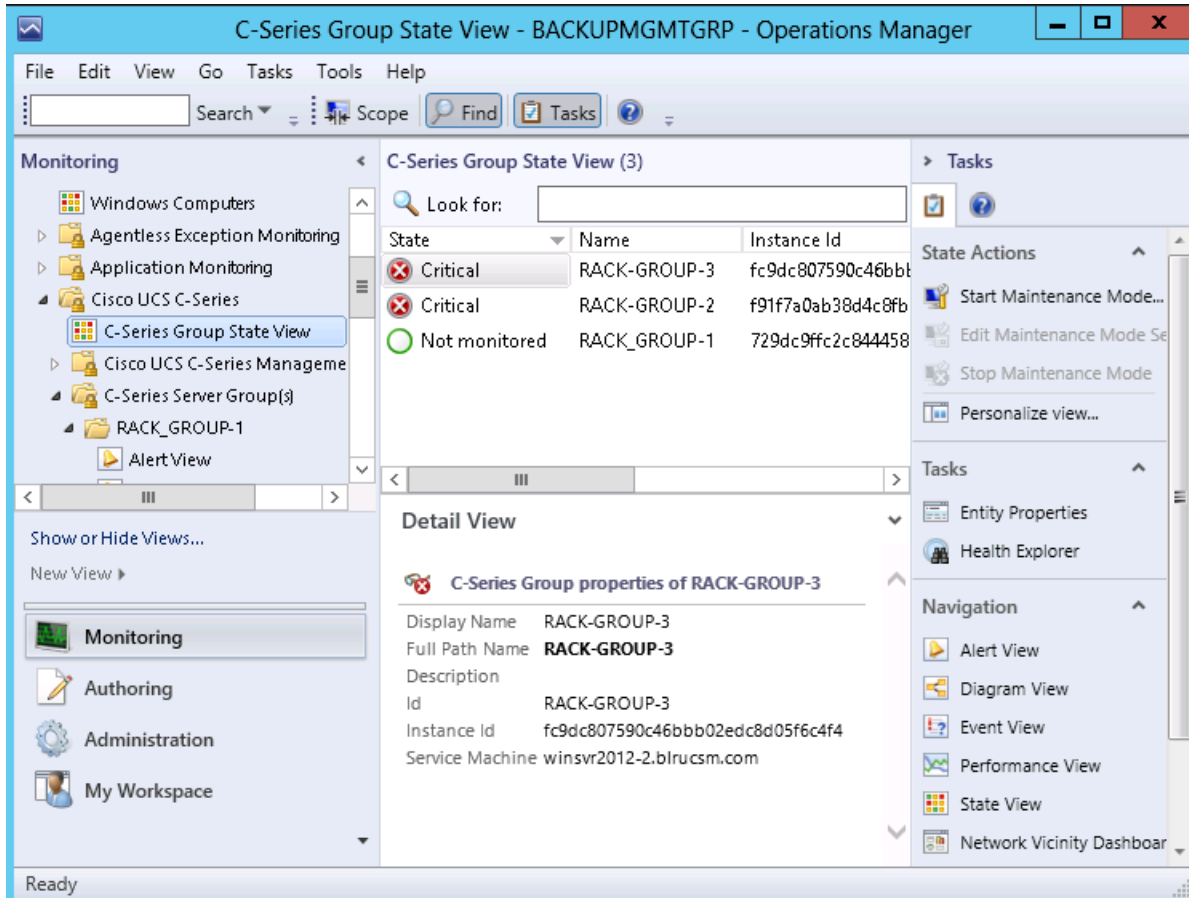
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- Step 1** In the SCOM application menu bar, click the **Go** tab.
 - Step 2** From the drop-down menu, choose **Monitoring**.
 - Step 3** Expand the **Cisco UCS C-Series** folder.
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C-Series Group State View

You can use the C-Series **Group State View** to provide a dashboard view of all the groups of rack servers that are monitored by this management pack. This view also provides information about the service machine where the agent is hosted for the group. The **State** column in the C-Series **Group State View** signifies the health of that group, and the following are the available states:

- **Critical**—Indicates that the health of one or more rack servers within that group is critical.

- **Warning**—Indicates that the health of one or more rack servers within that group is unhealthy and requires attention.
- **Healthy**—Indicates that all the rack servers in that group are healthy.



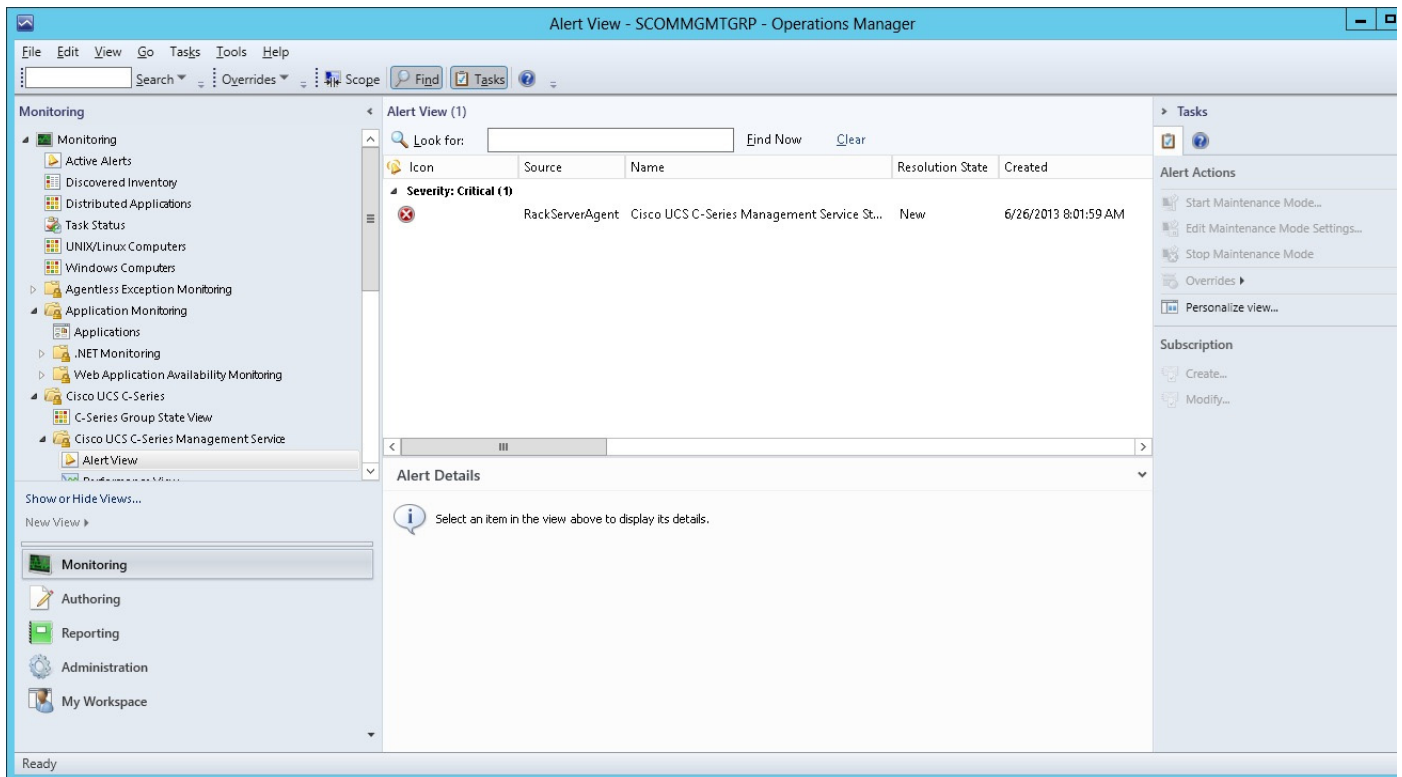
Manually loading Cisco C-Series data

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- Step 1** In the SCOM application, choose **Cisco UCS C-Series > C-Series Group State View**.
 - Step 2** Choose the group for which the C-Series server data must be loaded.
 - Step 3** In the **Tasks** pane, choose **C-Series Group (<Group Name>) Tasks**.
 - Step 4** Click **Load Cisco C-Series Data** to launch the task and run it.
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Cisco UCS C-Series Management Service

The Cisco UCS C-Series Management Service folder provides the following views:

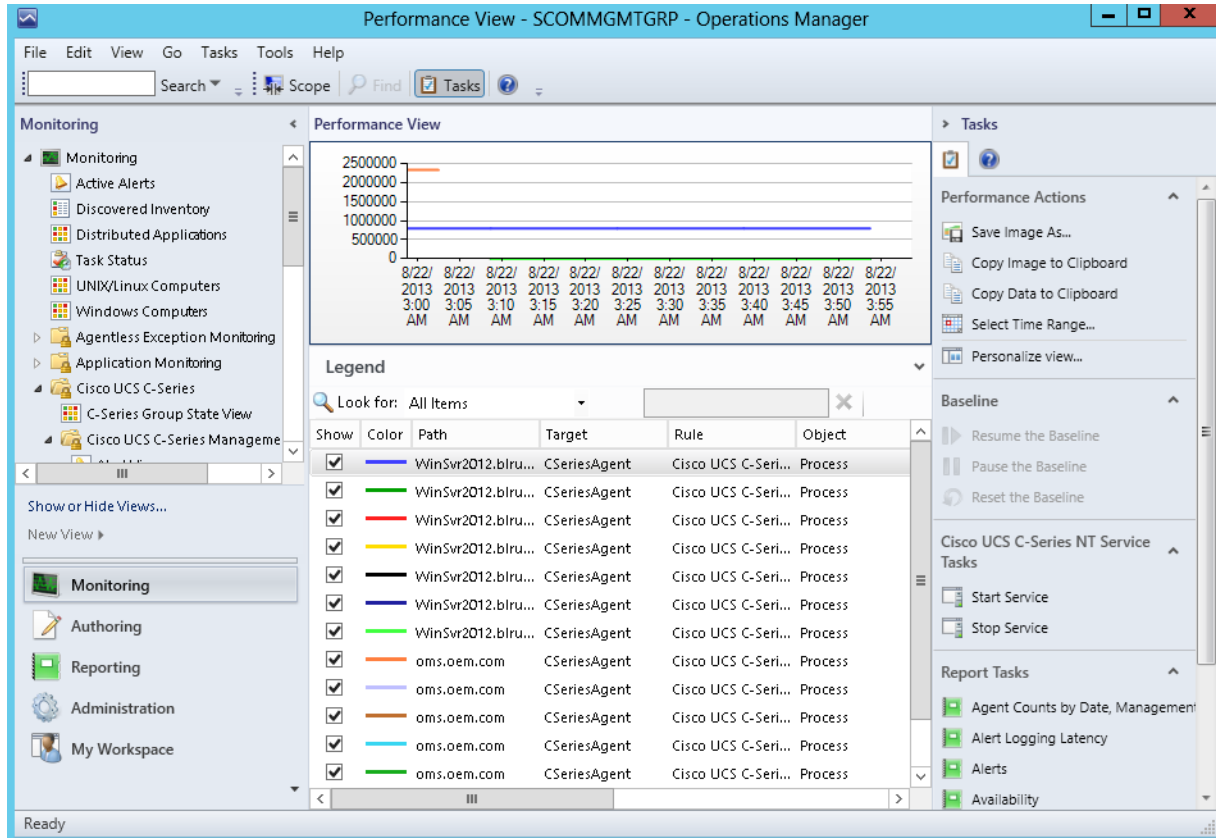
- **Alert View**—Displays the alerts that are generated if any faults or service disruptions occur in any of the Cisco UCS C-Series Management Services.



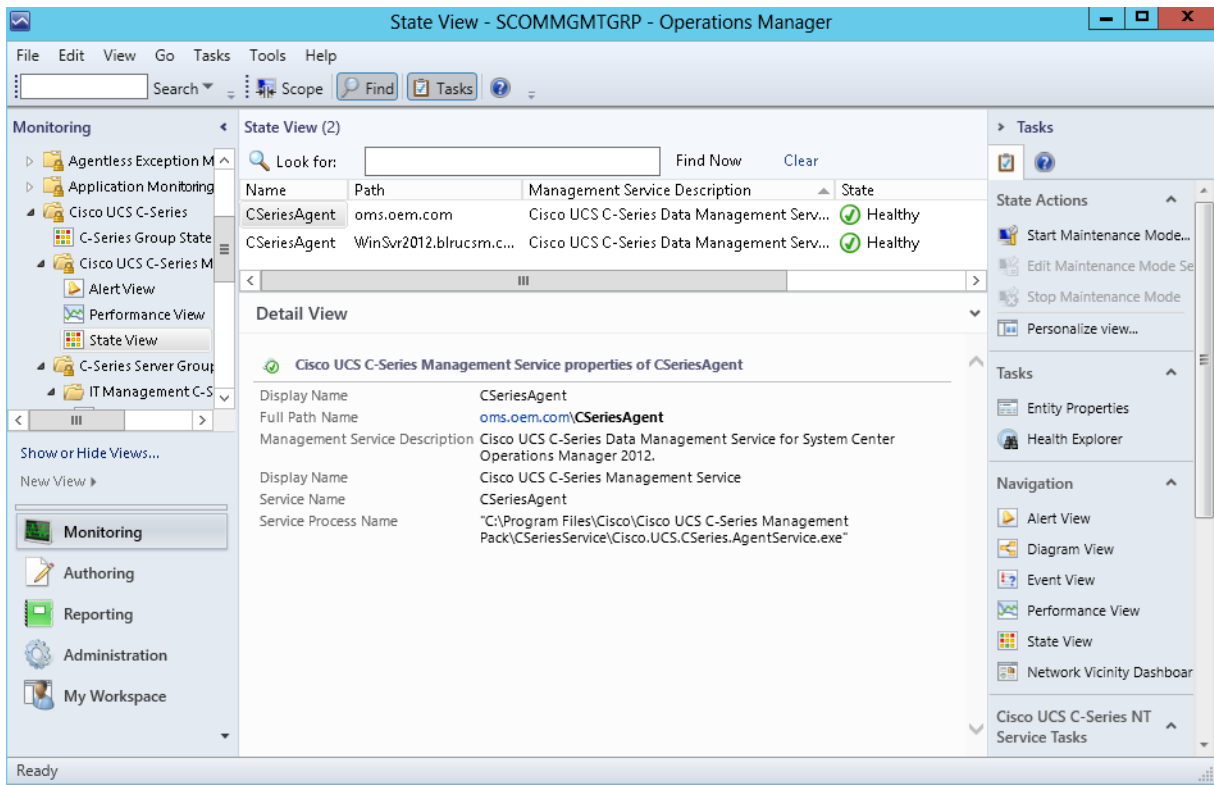
- **Performance View**—Displays the performance of a Cisco UCS C-Series Management Service that is based on various counters such as processor time, user time, and threads.


Note

The **Performance View** does not show the performance of the Cisco C-Series rack servers.



- **State View**—Displays the health of the Cisco UCS C-Series Management Services.

**Note**

You can start or stop the services monitored from the Cisco UCS C-Series NT Service Tasks section.

C-Series Server Group(s)

The C-Series Server Group(s) folder contains a list of all the rack servers groups that are monitored by this management pack. Each group listed in this section has the following views:

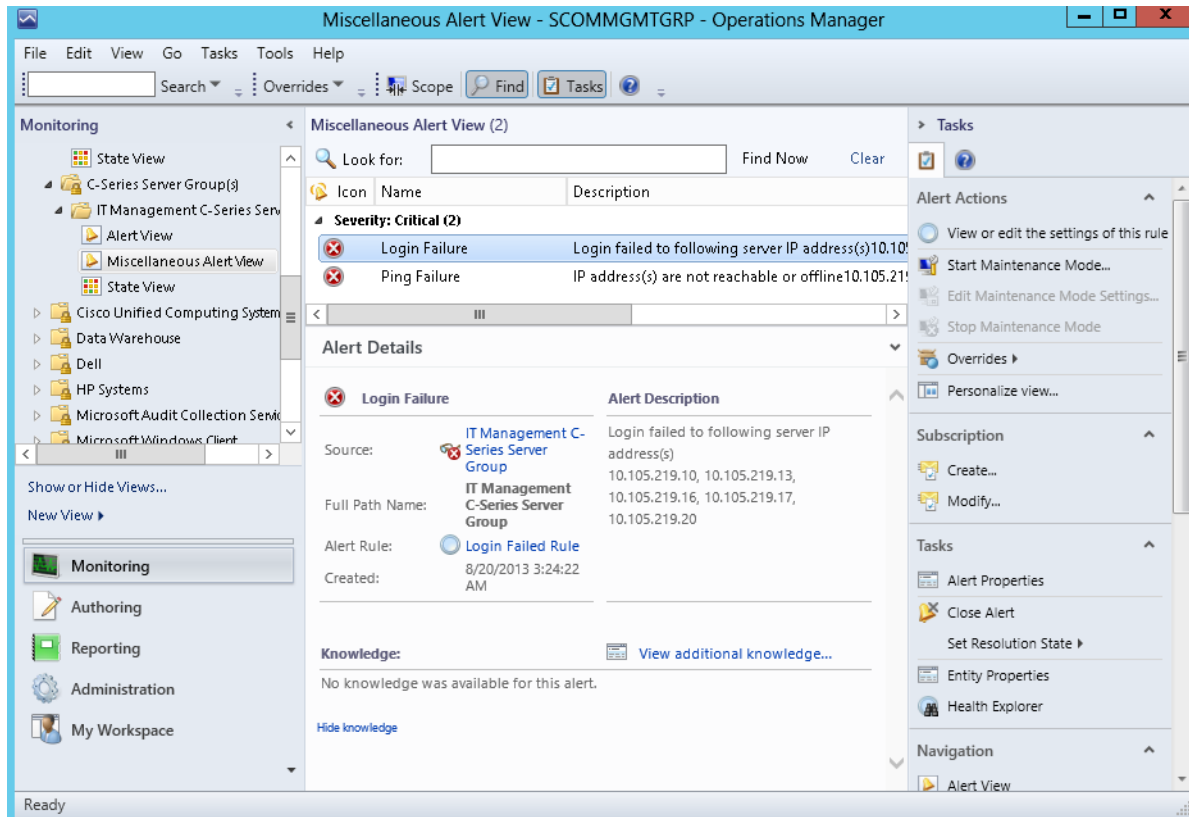
- **Alert View**—Displays the alerts that are related to all the Cisco UCS C-Series rack servers in a group. Various alert parameters such as the icon, source, name, description, and custom fields provide more information about the fault.

**Note**

The **Knowledge** section of the alert provides information about the resolution of the fault.

- **Miscellaneous Alert View**—Displays all the alerts encountered during C-Series server discovery group. The type of alerts are:
 - **Ping Failure**—Displays all the IPs for which the ping has failed.
 - **Login Failure**—Displays all the IPs for which the login has failed.
 - **Unsupported UCS C-Series Server Model**—Displays all the IPs which are not the supported C-Series standalone servers.

- **Unsupported UCS CIMC Version**—Displays all the IPs which do not have the supported Cisco IMC version.



- **State View**—Displays all the C-Series Rack Servers. The **Details View** pane displays the rack server details such as the model, serial number, available memory, IP address, and rack unit name.

Rack Server Views

The Rack Server Views are specific to a particular rack server in a group.

The following views are available and can be launched for each C-Series rack server:

- **Diagram View**—Displays the health and detailed information about the rack server.

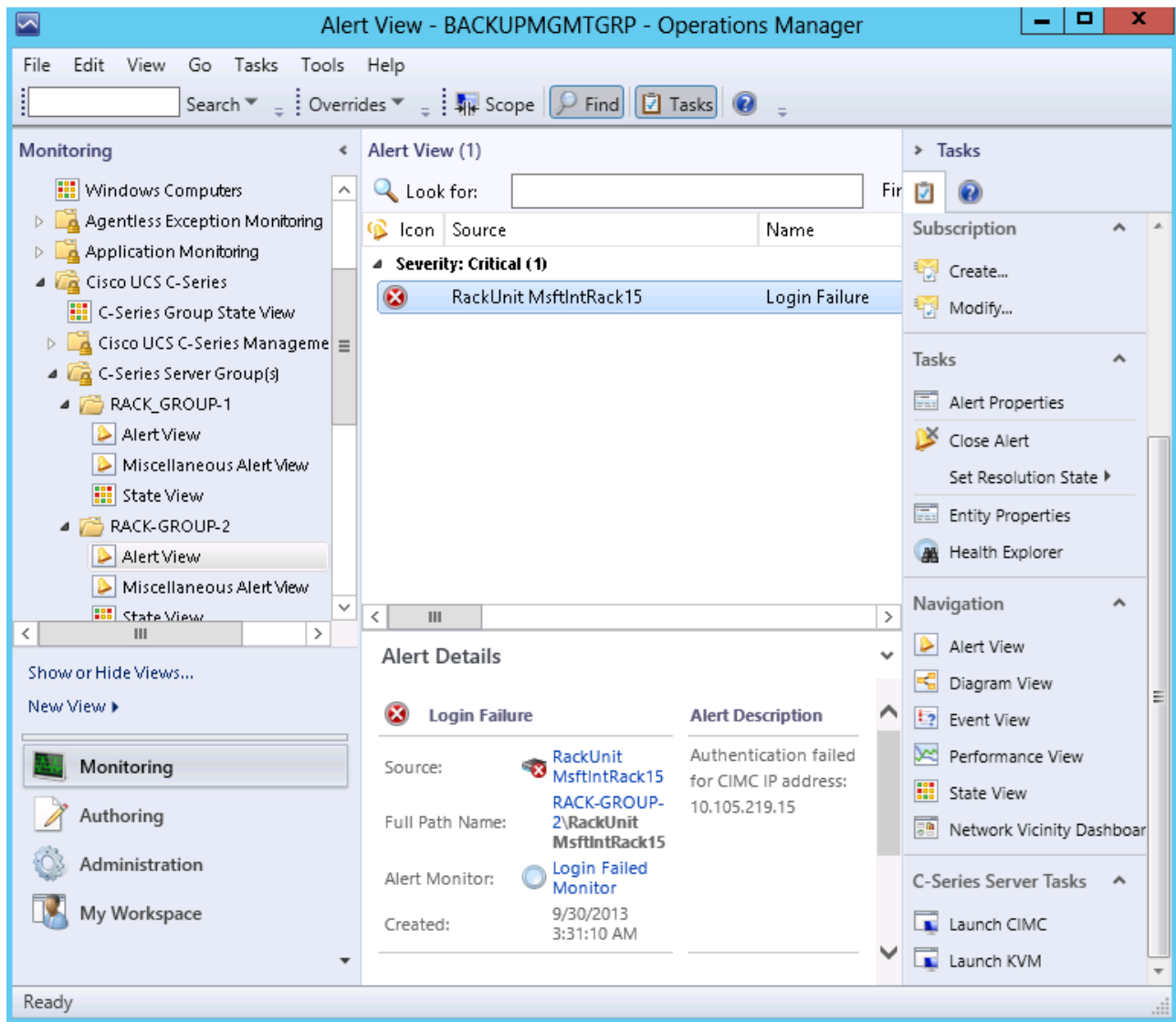
The screenshot displays the SCOM Operations Manager interface for a RackUnit ucs-c240-m3 server. The main window is titled "Diagram View - BACKUPMGMTGRP - Operations Manager". The interface is divided into several sections:

- Diagram View:** Shows a server icon with a red 'X' indicating a health issue. The label below the icon reads "RackUnit ucs-c240-m3".
- Detail View:** Displays the "C-Series Server properties of RackUnit ucs-c240-m3". The properties are as follows:

| | |
|-----------------------|--|
| Display Name | RackUnit ucs-c240-m3 |
| Description | |
| Distinguished Name | sys/rack-unit-1 |
| Modified Moniker | EFF58BE1-F2B0-479A-98D8-84154152ECA4/sys/rack-unit-1 |
| Model | UCSC-C240-M35 |
| Serial Number | FCH1623V124 |
| Vendor | Cisco Systems Inc |
| Available Memory (MB) | 32768 |
| Firmware Version | 1.5(3) |
| Server Id | 1 |
| IP Address | 10.104.255.240 |
| Memory Speed (MHz) | 1333 |
| C-Series Name | UCS C240 M35 |
- Tasks:** A list of tasks including "Maintenance Mode" (Start, Edit, Stop), "Entity Properties", and "Health Explorer".
- Navigation:** A list of navigation options including "Alert View", "Diagram View", "Event View", "Performance View", "State View", and "Network Vicinity Dashboard".
- C-Series Server Tasks:** A list of tasks including "Launch CIMC" and "Launch KVM".

The status bar at the bottom of the window shows "Ready".

- **Alert View**—Displays the alerts for a specific Cisco UCS C-Series Rack Server. The Knowledge section of Alert Details provides information about the fault summary, fault code, fault description, and how to resolve the fault.



Launching the CIMC Web Interface on a Rack Server

- Step 1** In the SCOM application, choose **C-Series server group(s) > Rack Group > State View**.
- Step 2** Choose the target rack server on which the CIMC web interface must be launched.
- Step 3** In the **Tasks** pane, choose **C-Series Server Tasks**.
- Step 4** Click **Launch CIMC** to launch the CIMC web interface.

Launching the KVM Console on a Rack Server


Note

The KVM console requires Java Version 1.6 Update (14) or higher and Cisco IMC version 1.5(2) or higher.


Note

To launch the KVM console, you must have valid Cisco IMC user credentials with admin or user role privileges and must be associated with a group profile.

Step 1 In the SCOM application, choose **C-Series server group(s) > Rack Group > State View**.

Step 2 Choose the target rack server on which the KVM console must be launched.

Step 3 In the **Tasks** pane, choose **C-Series Server Tasks**.

Step 4 Click **Launch KVM** to launch the KVM console.


Note

It is recommend to set the power shell execution policy to **AllSigned** or **RemoteSigned**. The user can then choose either **[R] Run once** or **[A] Always run** option to set the execution policy.


Caution

The KVM console cannot be launched on a C-Series server, if the connection to the C-Series server is established using a proxy server.

Adjusting the Object Discovery Interval

The discovery interval is the specified time interval for polling the details of Cisco UCS C-Series servers in a group. This section describes the steps required to change the polling intervals for the objects.

Table 3-1 details the default discovery interval for the various Cisco UCS C-Series objects.

Table 3-1 Default Discovery Interval for Cisco UCS C-Series Objects

| Serial Number | Object Name | Default Discovery Interval (seconds) |
|---------------|---|--------------------------------------|
| 1 | C-Series Group (<Group Name>) Discovery | 3600 |
| 2 | C-Series Server Discovery | 5400 |

Step 1 In the SCOM application menu bar, click the **Go** tab.

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

Step 3 In the **Authoring** column, choose **Authoring > Management Pack templates > Cisco UCS C-Series**.

Step 4 Choose the template pack and right-click to choose **View Management Pack Objects > Object Discoveries**.

- Step 5** In the **Object Discovery** page, choose the object and right-click **Override**.
- Step 6** Choose **Override > Override the Object Discovery > For All Objects of Class**.
- Step 7** In the **Override Properties** page, do the following:
- Check the **Override** checkbox in the Interval seconds parameter option.
 - Modify the Override value.
 - Click **OK**.



Note The *C-Series Server Discovery* and *C-Series Group (<Group Name>) Discovery* interval values can be overridden by any value. However, it is not recommend to have interval values lower than 720 and 600 seconds for the *C-Series Server Discovery* and *C-Series Group (<Group Name>) Discovery* objects respectively.

Adjusting the Fault Polling Interval

The Fault Polling Interval is used to poll the faults from the Cisco UCS C-Series Rack server.

[Table 3-2](#) shows the default polling interval setting.

Table 3-2 Fault Polling Interval in Cisco UCS C-Series

| Rule Name | Polling Interval |
|------------|------------------|
| Load Fault | 720 |

- Step 1** In the SCOM application menu bar, click the **Go** tab.
- Step 2** From the drop-down list, choose **Authoring**.
- Step 3** In the **Authoring** column, choose **Authoring > Management Pack templates > Cisco UCS C-Series**.
- Step 4** Right-click the template pack and choose **View Management Pack Objects > Rules**.
- Step 5** In the **Rules** page, choose the **Load Fault Rule** and choose **Overrides > Override the Rule > For All Objects of Class**.
- Step 6** In the **Override Properties** page, do the following:
- In the Interval Seconds row, check the **Override** checkbox.
 - In the Interval Seconds row, modify the value in the **Override Value** column.
 - Click **OK**.

Remapping the Severity

This section describes how to modify the fault rule properties in the Cisco UCS C-Series Rack Servers.

[Table 3-3](#) shows the default severity mapping between Cisco UCS C-Series Rack Servers and SCOM.

Table 3-3 Severity Mapping Values

| Cisco UCS C-Series Servers | SCOM |
|----------------------------|-------------|
| Critical, Major | Critical |
| Minor, Warning | Warning |
| Info, Cleared | Information |

Step 1 In the SCOM application, launch the **Fault Rule Properties** page for the specific fault in one of the following ways:

- From the **Alerts View** page, do the following:
 1. In the **Alert View** page, choose the fault.
 2. Identify the Alert Rule and click the link to launch the **Fault Properties** page.
- From the fault group template, do the following:
 1. In the SCOM application menu bar, click the **Go** tab.
 2. From the drop-down menu, choose **Authoring**.
 3. In the Authoring column, choose **Authoring > Management Pack templates > Cisco UCS C-Series**.
 4. Right-click the template pack and choose **View Management Pack Objects > Rules**.
 5. In the **Rules** page, right-click a rule and choose **Properties**.

Step 2 In the **Rule Properties** page, check the **Enable** checkbox to enable the rule.

Step 3 Click the **Overrides** tab, and check the **Enabled** checkbox in the **Override** column.

**Note**

Repeat all the steps for every object of the class.

**Tip**

You can also set the priority and severity of the fault by checking the override checkbox.

