

# **Dell EMC OpenManage Operations Connector for Micro Focus Operations Bridge Manager Version 2.0.1**

User's Guide

## Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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# Introduction

The Dell EMC Operations Connector for Micro Focus Operations Bridge Manager (OBM) enables the integration of OpenManage Essentials or OpenManage Enterprise (OME) with Micro Focus OBM. The Operations Connector for OpenManage Enterprise or OpenManage Essentials helps system and IT administrators to get a comprehensive view of the Dell EMC devices in a data center by collecting the systems management data about the events and topology from OpenManage Enterprise or OpenManage Essentials, and transferring it to Micro Focus OBM. It also enables you to launch OME directly from the Micro Focus OBM environment to troubleshoot, configure, and manage activities for the Dell EMC devices.

The Operations Connector enables you to create a connection between the OME environment for life-cycle management of the Dell EMC devices and Business Service Management in Micro Focus OBM by providing the following:

- Synchronization of Topology information from OME to Micro Focus OBM
- Synchronization of Event information from OME to Micro Focus OBM

The Operations Connector for OME installer, installation guide, and release notes are packaged in the self-extracting executable **Dell EMC OpenManage Operations Connector Micro Focus OBM v2.0.1\_A00.exe** file. Before installing this version of Operations Connector for OME, Dell Technologies recommends downloading the latest documents from [dell.com/openmanagemanuals](http://dell.com/openmanagemanuals) or [Dell.com/omconnectionsEnterpriseSystemsManagement](http://Dell.com/omconnectionsEnterpriseSystemsManagement).

This document provides information about the usage of Dell EMC OpenManage Operations Connector for Micro Focus OBM featuring event activation, topology policies, to view and monitor devices using Micro Focus OBM console.

## Key features

The key features of the Dell EMC OpenManage Operations Connector for Micro Focus OBM Version 2.0.1 are described in the following table:

**Table 1. Key features**

Feature	Functionality
Topology collection and forwarding	The Operations Connector for OME collects the device topology from OME and makes it available to Micro Focus OBM. For more information, see <a href="#">Topology collection and forwarding</a> .
Event collection and forwarding	The Operations Connector for OME collects the events and alerts from OME and make them available to Micro Focus OBM. For more information, see <a href="#">Event collection and forward</a> .
Node count collection and forwarding	The Operations Connector for OME collects the total number of nodes collected from OME after each topology task scheduler cycle and makes it available to Micro Focus OBM. For more information, see <a href="#">Node count collection and forward</a> .
Launching OME consoles for a specific node	The Operations Connector for OME enables you to launch the OME console from a node in the Micro Focus OBM console. This helps the admin to further troubleshoot and manage the supported Dell devices. For more information, see <a href="#">To launch OME console from a node</a> .
Launching OME consoles for an Event	The Operations Connector for OME enables you to launch the OME console from an event in the Micro Focus OBM console. This helps the admin to further troubleshoot and manage the supported Dell devices. For more information, see <a href="#">To launch OME console from an event</a> .

# Topology collection and forwarding

The Operations Connector for OME synchronizes the Topology information from OME to Micro Focus OBM by performing the following steps:

1. The Topology information is collected from OME using the REST API.
2. In Operations Connector for OME, the collected Topology information by REST API is stored in an XML file.
3. The Topology Integration policy processes the stored Topology information and then forwards to Micro Focus OBM.

OME Topology structure is mapped to an equivalent structure in Micro Focus OBM. The Operations Connector collects the scope of objects from OME and imports to Micro Focus OBM which depends on the Dell EMC devices. You can view all the imported devices and their basic properties on the Micro Focus OBM console once the initial Topology collection and forwarding process are complete.

**NOTE:** Deleting any node in OME does not synchronize in Micro Focus OBM immediately.

**NOTE:** Any changes that are explicitly made in Micro Focus OBM on nodes or relationships does not affect the nodes in OME.

**NOTE:** If you do not want to monitor a specific node in Micro Focus OBM, and then add the node to the exclusion filter in OME or remove the node from OME.

## Topics:

- [View Dell EMC devices](#)
- [Mapping used in Topology integration](#)

## View Dell EMC devices

**NOTE:** Ensure to create a custom view for the Dell EMC devices. For more information about how to create a custom view, see the Dell EMC OpenManage Operations Connector for Micro Focus OBM Installation Guide [Dell.com/openmanagemanuals](https://www.dell.com/openmanagemanuals)

1. Launch the **Micro Focus OBM** console.
2. Click **Workspaces > Operations Console > Event Perspective**.
3. In **View Explorer**, select the custom view.  
In the Micro Focus OBM console, you can view all the Dell EMC devices that are grouped under the OME.

## Device attributes in Micro Focus OBM console

The following are the device attributes collected from OME, for the Dell EMC devices in the MicroFocus OBM console:

- BiosAssetTag
- Display Label
- Monitored By
- Name
- NodeModel
- OsDescription
- PrimaryDnsName
- PrimaryIPAddress
- SerialNumber

# Mapping used in Topology integration

The following are the CI type in the Micro Focus OBM console corresponding to the device type in the OME console:

**Table 2. OMEEnterprise device type—Micro Focus OBM CI type**

<b>OMEEnterprise Device Type</b>	<b>Micro Focus OBM CI Type</b>
Server	Node
Chassis Device	Chassis
Dell Storage	Storage Array
Network Switch	Switch
NETWORK IO Module Device	Node
Storage IOM Device	Node


**Table 3. OMEssential device type—Micro Focus OBM CI type**

<b>OMEssential Device Type</b>	<b>Micro Focus OBM CI Type</b>
Others	Node
CMC	Chassis
Tape	Storage Array
EMC	Storage Array
MD Storage	Storage Array
EqualLogic Group	Storage Array
EqualLogic Member	Storage Array
Dell Compellent	Storage Array
NAS Appliance	Storage Array
Dell Networking	Switch
FC Switch	Switch

## Event collection and forward

The Operations Connector for OME synchronizes the Event information from OME to Micro Focus OBM by performing the following steps:

1. The Event information is collected from OME using the REST API.
2. In Operations Connector for OME, the collected events by REST API are stored in an XML file.
3. Event Integration policy processes stored Event information and then forwards to Micro Focus OBM.

 **NOTE:** If more number of nodes and alerts are present in domain manager, OBM console may take time to process and display all the alerts during initial sync.

You can view all the events that are associated with respective device. Also provides you an overview of active events that needs to be resolved.

The following are the event status in the Micro Focus OBM console corresponding to the event status in OME:

**Table 4. Event status in OME and Micro Focus OBM**

Status in OME	Status in Micro Focus OBM
Not Acknowledged	Open
Acknowledged	Closed







### Topics:

- [Events mapping in OME and Micro Focus OBM](#)
- [View device Events](#)





## Events mapping in OME and Micro Focus OBM

The following are the health status of Events in the Micro Focus OBM console corresponding to the health status of events in OME:

**Table 5. Events mapping in OME and Micro Focus OBM**

Events in OME	Events in Micro Focus OBM
 <b>Figure 1. Normal event icon</b>	 <b>Figure 2. Normal event icon</b>
 <b>Figure 3. Information event icon</b>	 <b>Figure 4. Information event icon</b>
 <b>Figure 5. Warning event icon</b>	 <b>Figure 6. Warning event icon</b>

**Table 5. Events mapping in OME and Micro Focus OBM (continued)**


Events in OME	Events in Micro Focus OBM
 Figure 7. Critical event icon	 Figure 8. Critical event icon
 Figure 9. Unknown event icon	 Figure 10. Unknown event icon

## View device Events

1. Launch the **Micro Focus OBM** console.
2. Click **Workspace > Event perspective**.
3. In **View Explorer**, select the custom view.  
The devices that are monitored by the Operations Connector for OME are listed.
4. Click the device.  
Events that are associated with the selected device are listed in the **Event Browser** window.

# Node count collection and forward

After every Topology collection and forwarding cycle, Operations Connector for OME counts the number of nodes that collects from OME and forwards to Micro Focus OBM. Operation Connector for OME forwards node count information as an informational event to Micro Focus OBM and can be viewed in **Event Perspective**

 **NOTE:** Ensure that the node count policy is activated.

## Topics:

- [View node count events](#)

## View node count events

To view the node count information, perform the following steps:

1. Launch the **Micro Focus OBM** console.
2. Click **Workspace > Event perspective**.
3. To view the node count message, select the Operations Connector node under **View Explorer**.
4. To view more information about the node count events, right-click the node count event and click **Properties**. The **Event Details** window displays the basic information such as Application, Object, Policy Name, and so on.

# Launch OME console from Micro Focus OBM

The Operations Connector for OME enables you to launch the OME console from a node and an Event. By launching the OME console, you can troubleshoot, configure, and manage activities for the Dell EMC devices.

To launch the OME console, configure the OME URL tool in Micro Focus OBM. For more information, see the Configuring the OME URL tool in Micro Focus OBM console section in the *Dell EMC OpenManage Micro Focus OBM Operations Connector Installation Guide* at [Dell.com/openmanagemanuals](https://Dell.com/openmanagemanuals)

## Topics:

- [Launch OME console from a node](#)
- [Launch OME console from an Event](#)

## Launch OME console from a node

To launch OME console for a selected node in Micro Focus OBM, perform the following steps:

1. Launch the **Micro Focus OBM** console.
2. Click **Workspaces > Event Perspective**.
3. In **Browse Views**, search for the view created.
4. Right-click the node, and then select **Launch Tool**.
5. Select the OME console launch tool, click **Next**, and then click **Run**.  
The OME console is successfully launched.

## Launch OME console from an Event

To launch OME console for a selected node in Micro Focus OBM, perform the following steps:

1. Launch the **Micro Focus OBM** console.
2. Click **Workspaces > Event Perspective**.
3. Right-click the event, and select **Launch Tool**.
4. Select the OME console launch tool, click **Next**, and then click **Run**.  
The OME console is successfully launched.

# Configuration

To configure the Operations connector for OME, involve the following:

- To configure the Topology and Event integration using the Operations Connector Task Schedulers. For more information, see [Dell EMC OpenManage Micro Focus OBM Operations Connector Task Schedulers](#).
- To activate the Operations Connector policies. For more information, see [Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1 policies](#).

For detailed information about installation and configuration of the Operations connector for OME, see the Dell EMC OpenManage Micro Focus OBM Operations Connector Installation Guide at [Dell.com/openmanagemanuals](http://Dell.com/openmanagemanuals).

## Topics:

- [Dell EMC OpenManage Micro Focus OBM Operations Connector Task Schedulers](#)
- [Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1 policies](#)

## Dell EMC OpenManage Micro Focus OBM Operations Connector Task Schedulers

Following are the two task schedulers available for Operations Connector for OME:

- Dell EMC Topology Scheduler—collects the topology information from OME.
- Dell EMC Event Scheduler—collects the event information from OME.

Run the task schedulers to collect system management data from OME. For information about configuring the task scheduler parameters, see the Dell EMC OpenManage Micro Focus OBM Operations Connector Installation Guide at [Dell.com/openmanagemanuals](http://Dell.com/openmanagemanuals)

## Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1 policies

Following are the policies available for Operations Connector for OME:

- **Topology Integration policy:**  
Synchronizes the device information from OME to Micro Focus OBM
- **Event Integration policy:**  
Synchronizes the event information from OME to Micro Focus OBM
- **Node Count Information policy:**  
Provides the count of nodes collected by the Operations connector for OME.

**Table 6. Operations Connector for OME policies**

Policy	Description
Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1—Topology Integration	Integrates the devices detected in OME into Run-time Service Model (RTSM).
Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1—Event Integration	Sends the event information available in OME to Micro Focus

**Table 6. Operations Connector for OME policies (continued)**

<b>Policy</b>	<b>Description</b>
Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1—Node Count Information	Sends an event with node count information of the collected nodes from OME.

# Troubleshooting

This section lists the problems that you may encounter while using the Operations Connector for OME and their workaround.

The following are the error scenarios:

## Alerts sync at the rate of 1 alert/5 sec when synchronizing 50,000 alerts from Operations Connector (OpCx) to Operations Bridge Manager (OBM).


Follow the below steps to disable reverse lookup at Operations Connector to load events faster .

- ovc -kill
- ovconfchg -ns xpl.net -set DISABLE\_DNS true
- ovc -start
- opcagt -cleanstart
- Verify if all service are started by using command ovc.

## If your time zone is behind UTC by 4:00 hours, the timestamp for the time created field is displayed incorrectly

If the time zone is behind UTC by 4:00 hours, a difference of 1:00 hour is shown between the timestamp for the Dell EMC events in the OBM console and the Dell EMC events in the OME console. To resolve this issue, perform the following steps:

1. Deactivate the **Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1 - Event Integration** policy by following the below steps:
  - a. Open a Command Prompt window as an administrator and change the current directory to %OvDataDir%\installation\HPOprBSMC
  - b. Run the following command `bsmc-policy.bat --list`. This lists all the policies with their Name, Policy ID and other details.
  - c. To deactivate the policy, run the following command `bsmc-policy.bat -activate -id a09bceb7-1b42-4305-8097-8f95e76f90cf` by providing the appropriate Policy ID.
2. Navigate to %OvDataDir%\datafiles\policymanagement\store directory
 

 **NOTE:** <OvDataDir> is the data directory of Micro Focus OBM Operations Agent. The <OvDataDir> default value for the windows operating system is C:\ProgramData\HP\HP BTO Software.
3. Open the Event Integration policy file(a09bceb7-1b42-4305-8097-8f95e76f90cf\_data)
4. The default value for **TIMECREATED** is <\$DATA:/event/Time>. Modify the default value <\$DATA:/event/Time> to <\$DATA:/event/Time> -3 and save the file.
5. Open a Command Prompt window as an administrator and change the current directory to %OvDataDir%\installation\HPOprBSMC.
6. Activate the policy by running the following command `bsmc-policy.bat -activate -id a09bceb7-1b42-4305-8097-8f95e76f90cf` by providing the appropriate Policy ID.
7. To verify if the policy is activated, run the following command `bsmc-policy.bat -list`. **Activation State** for **Dell EMC OpenManage Operations Connector for Micro Focus OBM v2.0.1 - Event Integration** policy should be **active**

After the policy is activated the events that are forwarded to the Micro Focus OBM console, displays the correct timestamp.

## The devices, events, and node count information are not displayed in the Micro Focus OBM console

To resolve this issue, perform the following steps:

1. Ensure too activated the following Operations Connector for OME policies:
  - Topology Integration policy
  - Event Integration policy
  - Node Count Information policy
2. Run the task scheduler.

## Unable to launch the OME console by using Micro Focus OBM

Ensure that the OME URL provided is in the format—`https://<OME IP address or OME FQDN>:<OME Port Number>`.

For more information about creating the OME URL tool in the Micro Focus OBM console, see the Configuring the OME URL tool in Micro Focus OBM console section in the *Dell EMC OpenManage Operations Connector for Micro Focus OBM Installation Guide* available at [Dell.com/openmanagemanuals](http://Dell.com/openmanagemanuals)

# Licensing for Dell EMC OpenManage Micro Focus OBM Operations Connector

The OpenManage Micro Focus OBM Operations Connector is a licensed product and implements an honor-based licensing structure. Licenses must be purchased based on the number of devices you need to monitor. For information about licenses, contact the Dell EMC Sales representative.

# Accessing support content from the Dell EMC support site

Access supporting content related to an array of systems management tools using direct links, going to the Dell EMC support site, or using a search engine.

- Direct links:
  - For Dell EMC Enterprise Systems Management and Dell EMC Remote Enterprise Systems Management—<https://www.dell.com/esmmanuals>
  - For Dell EMC Virtualization Solutions—<https://www.dell.com/SoftwareManuals>
  - For Dell EMC OpenManage—<https://www.dell.com/openmanagemanuals>
  - For iDRAC—<https://www.dell.com/idracmanuals>
  - For Dell EMC OpenManage Connections Enterprise Systems Management—<https://www.dell.com/OMConnectionsEnterpriseSystemsManagement>
  - For Dell EMC Serviceability Tools—<https://www.dell.com/serviceabilitytools>
- Dell EMC support site:
  1. Go to <https://www.dell.com/support>.
  2. Click **Browse all products**.
  3. From the **All products** page, click **Software**, and then click the required link.
  4. Click the required product and then click the required version.

Using search engines, type the name and version of the document in the search box.