Dell OpenManage Plug-in Version 1.0 for Nagios Core

Installation Guide

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Notes, cautions, and warnings

(i) **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.**

Contents

Introduction to the Dell OpenManage Plug-in Version 1.0 for Nagios Core

This guide provides information about the software requirements, system requirements, and the steps to install and uninstall the Dell OpenManage Plug-in Version 1.0 for Nagios Core.

This plug-in provides capabilities to monitor 12th and later generations of Dell PowerEdge servers in the data center through the agent-free method by using Integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller (LC).

This plug-in provides features as mentioned in Table 1.

Table 1. Key features

Feature	Functionality
Device Discovery	Discovers 12th and later generations of Dell PowerEdge servers through iDRAC with LC using the agent-free method of monitoring. Once the discovery is complete, host and service definitions are created for each device.
	You can opt for either SNMP or WS-MAN protocol for device discovery based on your requirement.
Device Information	Displays information about the discovered device (service tag, server model, iDRAC firmware version, hostname, operating system name or version, and so on) and its components (Fully Qualified Device Descriptor, and so on) after a device discovery is successful. You can view this information in the **Hosts** or the **Services** view in the Nagios Core console.
	For more information about the device information provided by the plug-in, see **Device Information** in the *Dell OpenManage Plug-in Version 1.0 for Nagios Core User's Guide*.
Monitor overall health of Dell devices	Monitors the overall health of Dell devices in a scheduled or periodic manner.
Component level health of Dell devices	Monitors health of the server components (physical drives, virtual drives, fans, battery, server intrusion status, server network device status, and so on) and displays the information about the Dell device components at scheduled time intervals.
Monitor SNMP alerts	Monitors SNMP alerts for Dell devices. This feature displays only the last received SNMP alert.
Launching iDRAC console	Launches the respective iDRAC console to further troubleshoot and manage the supported Dell devices.

This plug-in supports Nagios Core versions 3.5.0 and later.

Before installing Dell OpenManage Plug-in Version 1.0 for Nagios Core, download the latest documents from **dell.com/ omconnectionsEnterpriseSystemsManagement** or **dell.com/openmanagemanuals** for the latest information about this product.

System requirements

Before you install the plug-in, ensure that you meet the following requirements based on the protocol you are using:

Common prerequisites:

- Nagios Core version 3.5.0 or later is installed and all the Nagios Core components are functional.
- Perl version 5.8.8 or later is installed.
- The Net-IP Perl module version 1.26 or later is installed.
- (Optional) Socket6 Perl module version 0.23 or later is installed for monitoring managed systems using Internet Protocol version 6 (IPv6).
- (Optional) SNMP Trap Translator (SNMPTT) is installed to receive SNMP alerts.

For SNMP:

The Net-SNMP Perl module version 6.0.1 or later is installed.

For WS-MAN:

OpenWSMAN and its Perl binding are installed.

(i) **NOTE:** You can opt for either SNMP or WS-MAN protocol based on your monitoring requirement.

Topics:

- System requirements for management systems
- System requirements for managed systems

System requirements for management systems

The requirements for the management systems are as follows:

- Red Hat Enterprise Linux (RHEL) 7 and RHEL 6.5 (32-bit and 64-bit)
- SUSE Linux Enterprise Server (SLES) 11 and SLES 10 (32-bit and 64-bit)

ESXi running the supported versions of RHEL and SLES guest operating systems is also supported.

System requirements for managed systems

The requirements for the managed systems are as follows:

- Integrated Dell Remote Access Controller (iDRAC) 8 with LC firmware versions 2.05.05.05 and 2.04.02.01
- Integrated Dell Remote Access Controller (iDRAC) 7 with LC firmware versions 1.66.65 and 1.57.57
- If you are using SNMP, ensure that the SNMP service is enabled, configured and the required trap destination is configured. For more information, see **Appendix** in the *Dell OpenManage Plug-in Version 1.0 for Nagios Core User's Guide* at **dell.com/esmmanuals**.
- If you are using WS-MAN protocol, it is recommended that you use a WS-MAN service account other than the default service account. For more information, see **Configuring User Accounts and Privileges** in the *Integrated Dell Remote Access Controller User's Guide* at **dell.com/esmmanuals**.

For the list of supported platforms, see **Support Matrix** in the *Dell OpenManage Plug-in Version 1.0 for Nagios Core User's Guide.*

Downloading and installing the Dell OpenManage Plug-in Version 1.0 for Nagios Core

1. Download the latest Dell OpenManage Plug-in Version 1.0 for Nagios Core installer from the Dell support website at **support.dell.com** or from Nagios exchange at **exchange.nagios.org/**.

   The installer is packaged as a `.tar.gz` file named **Dell_OpenManage_Plugin_v1.0_Nagios_Core_A00.tar.gz**.

2. Save the folder you have downloaded in a desired directory.

3. Navigate to the directory where you have downloaded the folder, and run the following command to extract its contents:

   `tar -zxvf Dell_OpenManage_Plugin_v1.0_Nagios_Core_A00.tar.gz`

   The following folder and files are extracted:
   - `Dell_OpenManage_Plugin` folder
   - `Dell_OM_Plugin_1_0_For_NagiosCore_IG.pdf` file
   - `Dell_OM_Plugin_1_0_For_NagiosCore_ReadMe.txt` file
   - `license_en.txt` file

4. Navigate to the `Dell_OpenManage_Plugin/Install` folder, and then run the following command to invoke the installer:

   `./install.sh`

5. Press **Y** if Nagios Core version 3.5.0 or later is installed in your system, or press any other key to exit the installation process, install Nagios Core version 3.5.0 or later and then begin the installation process once again.

   Alternatively, you can press **Enter** to continue with the default value (Y).

6. When prompted for the installed Nagios Core location, provide the path, and then press **Enter**.

   Alternatively, you can press **Enter** to continue with the default location, `/usr/local/nagios`.

   An invalid entry will display an error and exit the installation process.

   (i) **NOTE:** If Net-IP or both Net-SNMP and OpenWSMAN are not installed in your system, then the installation process will exit. Ensure that the prerequisites are met and then begin the installation process once again.

   If any of the other prerequisites are not met, then the installation procedure will display an appropriate message and continue with the installation.

7. Press **Y** if you accept the **End User License Agreement**, or any other key to exit the installation.

   Alternatively, you can press **Enter** to continue with the default value (Y).

8. Press **Y** to set the attribute **escape_html_tags** to '0', or press **N** to continue with the default setting, '1'.

   Alternatively, you can press **Enter** to continue with the default value (N).

   (i) **NOTE:** It is recommended that you continue the installation with the attribute **escape_html_tags** set to '0' for better readability (multiline view) in order to distinguish the different instances or entities in the Dell plug-in.

9. If you have installed SNMPTT, provide the path where SNMPTT is installed, and then press **Y** to continue with the installation.

   Alternatively, you can press **Enter** to continue with the default file path, `/etc/snmp/snmptt.ini`. If you have not installed SNMPTT and want to skip this step, press **Enter**.

   The plug-in is now installed.

   (i) **NOTE:** If SNMPTT was not installed while installing this plug-in, but you later want to receive SNMP alerts, perform the following actions:
   - Install SNMPTT.
   - Navigate to `<NAGIOS_HOME>/dell/install`, and then run the following command:

```
install.sh trap
```

<NAGIOS_HOME> is the installed location of Nagios Core and by default, the location of <NAGIOS_HOME> is /usr/
local/nagios.

10. To verify the Nagios Core configuration entry, run the following command:

    <NAGIOS_HOME>/bin/nagios -v <NAGIOS_HOME>/etc/nagios.cfg

    A successful configuration update will display zero errors or warnings. If you receive any errors or warnings during this step,
    resolve them manually.

11. If you have installed SNMPTT and want to verify the SNMPTT configuration entry, navigate to the path where
    snmptt.ini is installed and verify that the following entry is present:

    <NAGIOS_HOME>/dell/config/templates/Dell_Agent_free_Server_Traps.conf

12. Restart the Nagios Core services by running the following command:

    service nagios restart

13. If you have installed SNMPTT, then restart the SNMPTT services by running the following command:

    service snmptt restart

Uninstalling the Dell OpenManage Plug-in Version 1.0 for Nagios Core

1. Navigate to the `<NAGIOS_HOME>/dell/Install` folder, and run the following command:

   `./uninstall.sh`

2. When prompted for confirmation of uninstallation, press **Y** to uninstall or **N** to quit the uninstallation process.

   Alternatively, you can press **Enter** to exit the uninstallation.

3. When prompted to continue with the uninstallation process, press **Y** to continue or **N** to quit the uninstallation process.

   Alternatively, you can press **Enter** to exit.

   ⓘ **NOTE:** If you have set the value of the attribute **escape_html_tags** to '0' during installation, then you can reset it back to its default value, '1' by navigating to the `<NAGIOS_HOME>/etc/cgi.cfg` file and editing this value.

   The plug-in is now uninstalled.

4. To verify the uninstallation of the Dell OpenManage Plug-in, navigate to the `<NAGIOS_HOME>` folder and ensure that the `dell` folder has been removed.

5. To verify the Nagios Core configuration entry, navigate to the path where Nagios Core is installed and then run the following command:

   ```
   <NAGIOS_HOME>/bin/nagios -v <NAGIOS_HOME>/etc/nagios.cfg
   ```

   A successful configuration update will display zero errors or warnings. If you receive any errors or warnings during this step, resolve them manually.

6. If you have installed SNMPTT, navigate to the path where the `snmptt.ini` file is present and verify that the entry `<NAGIOS_HOME>/dell/config/templates/Dell_Agent_free_Server_Traps.conf` has been removed.

7. Restart the Nagios Core services by running the following command:

   `service nagios restart`

8. If you have installed SNMPTT, restart the SNMPTT services by running the following command:

   `service snmptt restart.`

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.

Related Documentation

In addition to this guide, you can access the following guides available on the Dell EMC Support website at **Dell.com/support/ manuals**. On the Manuals page, click **Software & Security** and click the appropriate product link to access the documents:

- *Integrated Dell Remote Access Controller 9 (iDRAC9) Version 3.00.00.00 User's Guide*
- *Dell EMC XC Series Hyperconverged Appliances manuals*
- *Dell EMC VxRail Appliance Series manuals*
- *Integrated Dell Remote Access Controller 8 with Lifecycle Controller User's Guide*
- *Integrated Remote Access Controller 7 User's Guide*
- *Dell EMC Chassis Management Controller for Dell PowerEdge M1000e User's Guide*
- *Dell EMC Chassis Management Controller for Dell PowerEdge VRTX User's Guide*
- *Dell EMC Chassis Management Controller for Dell PowerEdge FX2/FX2s User's Guide*
- *Compellent SC-Series Storage Arrays User's Guide*
- *EqualLogic PS-Series Storage Arrays User's Guide*
- *PowerVault MD-Series Storage Arrays User's Guide*
- *Dell EMC Network Switch User's Guide*

Also see **www.nagios.org/documentation** for any Nagios XI related documentation.