

Dell OpenManage Plug-in Version 1.0 For Nagios XI

Installation 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

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 XI.

This plug-in provides capabilities to monitor the supported Dell devices in environments managed by Nagios XI. This plug-in gives you complete hardware-level visibility of Dell devices, including overall and component-level health monitoring. The plug-in enables you to view the basic inventory information and conduct event monitoring of Dell devices. The plug-in also supports one-to-one web console launch of the Dell devices for further troubleshooting, configuration, and management activities.

The Dell OpenManage Plug-in Version 1.0 for Nagios XI supports the following Dell devices:

- Dell 12th and later generations of Dell PowerEdge servers through the agent-free method by using Integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller (LC)
- Dell Datacenter Scalable Solutions (DSS)
- Dell PowerEdge FX2/FX2s chassis, Dell PowerEdge VRTX chassis, and Dell PowerEdge M1000e chassis
- Dell EqualLogic PS-Series Storage Arrays, Dell PowerVault MD 34/38 Series Storage Arrays, and Dell Compellent Storage Arrays

For more details on the supported Dell device models, see Support matrix in the “*Dell OpenManage Plug-in Version 1.0 for Nagios XI User’s Guide*.”

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

System requirements

To discover iDRAC devices by using the Dell OpenManage Plug-in, you can opt for either SNMP or WS-MAN protocol based on your requirement. However, to discover Dell storage devices, you must use the SNMP protocol and to discover Dell chassis, you must use WS-MAN protocol.

Table 1. Dell devices and their supported protocols.

Protocol	Dell Servers	Dell Chassis	Dell Storage
Simple Network Management Protocol (SNMPv1, and SNMPv2c)			
Web Services-Management (WS-MAN)			

Topics:

- [System requirements for management systems](#)
- [System requirements for managed systems](#)

System requirements for management systems

A management system is the server where Nagios XI is installed. The requirements for the management systems are as follows:

General requirements

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

Common prerequisites:

- Any Nagios XI version between 5.2.0 to 5.2.7 is installed.
- The Net-IP Perl module version 1.26 or later is installed.
- (Optional) Java version 1.6 or later is installed to view Dell warranty information.
- (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. It is recommended to use the latest version.
- (Optional) The supported Dell Remote RACADM utility is installed to monitor component attribute information of Dell chassis such as:
 - **Speed(RPM)** of the **Dell Chassis Fan Status**.
 - **InputCurrent(A)** of the **Dell Chassis PowerSupply Status**.
 - **InputVoltage(V)** of the **Dell Chassis PowerSupply Status**.
 - **OutputPower(W)** of the **Dell Chassis PowerSupply Status**.
 - Health of the **Dell Chassis I/O Module Status**.

For more information on downloading and installing the supported Dell Remote RACADM utility, go to ["en.community.dell.com/techcenter/systems-management/w/wiki/3205.racadm-command-line-interface-for-drac"](http://en.community.dell.com/techcenter/systems-management/w/wiki/3205.racadm-command-line-interface-for-drac)

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.

Operating system requirements

- Red Hat Enterprise Linux (RHEL) version 7.2 (32-bit and 64-bit)
- Red Hat Enterprise Linux (RHEL) version 6.7 (64-bit)

System requirements for managed systems

A managed system is a supported Dell device that you are monitoring. The requirements for the managed systems are as follows:

Table 2. Supported firmware versions for Dell servers

Dell Servers	iDRAC Firmware Versions
Dell 12th generation of PowerEdge servers	2.30.30.30 and 2.21.21.21
Dell 13th generation of PowerEdge servers	2.30.30.30 and 2.21.21.21
Dell 13th generation of PowerEdge servers (R830)	2.35.35.35 and 2.30.30.30
Dell Datacenter Scalable Solutions (DSS 1500, DSS 1510 and DSS 2500)	2.30.30.30

Table 3. Supported firmware versions for Dell chassis

Dell Chassis	CMC Firmware Versions
Dell PowerEdge M1000e Chassis	5.1 and 5.0
Dell PowerEdge VRTX Chassis	2.1 and 2.0
Dell PowerEdge FX2/FX2s Chassis	1.3 and 1.2

Table 4. Supported firmware versions for Dell storage arrays

Dell Storage Arrays	Firmware Versions
Dell Compellent Storage Arrays	6.6 and 6.5
Dell EqualLogic PS-Series Storage Arrays	8.0.4 and 7.1.7
Dell PowerVault MD 34/38 Series Storage Arrays	08.25.04.60 and 08.20.12.60

Downloading and installing the Dell OpenManage Plug-in

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

The installer is packaged as a `.tar.gz` file named `Dell_OpenManage_Plugin_v1.0_Nagios_XI_A00.tar.gz`.

2. Navigate to the location where you have downloaded the file, and extract its contents.

The following files are extracted:

- `Dell_OM_NagiosXI_monitoring_wizard.zip` file
- `Dell_OM_Plugin_1_0_For_NagiosXI_IG.pdf` file
- `Dell_OM_Plugin_1_0_For_NagiosXI_ReadMe.txt` file
- `license_en.txt` file

3. Login to Nagios XI console with your credentials.

The Nagios XI home page is displayed.

4. Click the **Admin** tab.

5. In the left pane, under **System Extensions**, click **Manage Config Wizards**.

The **Manage Configuration Wizards** page is displayed.

6. In the **Upload a Wizard** menu, click **Browse**.

The **File Upload** window is displayed.

7. Navigate to the location where you have extracted the contents of the

`Dell_OpenManage_Plugin_v1_Nagios_XI_A00.tar.gz` file, select the `Dell_OM_NagiosXI_monitoring_wizard.zip` file and click **Open**.

8. Click the **Upload & Install** button.

The Dell OpenManage Plug-in for Nagios XI is successfully installed in your system and is displayed under the **Wizard Information** menu along with its copyright and version information as depicted in the image below.

The screenshot shows the Nagios XI interface. The top navigation bar includes Home, Views, Dashboards, Reports, Configure, Tools, Help, and Admin. The left sidebar shows the 'System Extensions' menu with 'Manage Config Wizards' selected. The main content area is titled 'Manage Configuration Wizards' and contains a table of installed wizards.

Wizard Information	Type	Actions	Version	Status
 Dell OpenManage Plug-in for Nagios XI Discover and Monitor Dell servers through an agent-free method using Integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller, Dell chassis, and Dell storage devices. Version: 1.0, Copyright © 2016 Dell Inc. All rights reserved.	Configuration	 	1.0	
 Auto-Discovery Monitor servers, devices, and services found by auto-discovery jobs. Version: 1.4.0	Configuration	 	1.4.0	
 BPI Wizard Create service checks for your Nagios BPI groups. Version: 1.1.1, Date: 07/23/2015, Author: Nagios Enterprises, LLC, Copyright © 2008-2015 Nagios Enterprises, LLC.	Configuration	 	1.1.1	

Post installation requirements

This section lists the optional steps that you need to perform based on your monitoring requirements.

Once you have successfully installed the Dell OpenManage Plug-in, you must perform the steps listed in the sections below based on your monitoring requirement.

- Configuring alerts or events if you want to monitor traps.
- Configuring Dell Knowledge Base (KB) articles to be able to view more information about the alerts or events (traps) received.

If you have installed Nagios XI in a non default location, then perform the steps listed in the section [Configuring Nagios XI installed \(non default\) path](#).

Topics:

- [Configuring alerts or events \(traps\)](#)
- [Configuring Dell Knowledge Base \(KB\) articles](#)
- [Configuring Nagios XI installed \(non default\) path](#)

Configuring alerts or events (traps)

Monitoring SNMP traps is an optional prerequisite. To configure SNMPTT to receive SNMP alerts, perform the following steps:

1. Navigate to `cd <NagiosXI installed path>/html/includes/configwizards/Dell_OM_NagiosXI_monitoring_wizard/script` and run the following command:

```
./postinstall.sh trap
```

The default location for Nagios XI is `/usr/local/nagiosxi`.

2. Provide the path where the `snmptt.ini` file is installed and then press **ENTER**.
Alternatively, you can press **Enter** to continue with the default file path, `/etc/snmp/snmptt.ini`.
3. Provide the path where trap configuration files are installed and then press **ENTER** to continue. Alternatively, you can press **Enter** to continue with the default file path, `'/usr/local/nagios/libexec'`.
4. Restart the SNMPTT services by running the following command:

```
service snmptt restart
```

You will now be able to receive alerts or events (traps).

Configuring Dell Knowledge Base (KB) articles

Dell KB articles are associated with alerts or events generated by the discovered Dell devices. To be able to view KB articles in the Nagios XI console, you must configure it.

Navigate to `cd <Nagios XI installed path>/html/includes/configwizards/Dell_OM_NagiosXI_monitoring_wizard/script` and run the following command:

```
./postinstall.sh dellkb
```

The default location for Nagios XI is `/usr/local/nagiosxi`.

The Dell KB articles are now configured. You will now be able to view the KB articles.

Configuring Nagios XI installed (non default) path

By default, Nagios is installed in the following path:

```
/usr/local/nagios/
```

If you have installed Nagios XI in a non default path, then, perform the following steps to integrate this path:

1. Navigate to `cd <Nagios XI installed path>/html/includes/configwizards/Dell_OM_NagiosXI_monitoring_wizard/script` and run the following command:
`./postinstall.sh nagiosinstallpath`
2. Provide the path where the `submit_check_result.sh` script file is installed and then press **ENTER**.
3. Restart the SNMPTT services by running the following command:
`service snmptt restart`

The Nagios XI installed path is now configured.

Uninstalling the Dell OpenManage Plug-in

1. Login to Nagios XI console with your credentials.
The Nagios XI home page is displayed.
2. Click the **Admin** tab.
3. In the left pane, under **System Extensions**, click **Manage Config Wizards**.
The **Manage Configuration Wizards** page is displayed.
4. Locate the Dell Plug-in under **Wizard Information** and click the  (Delete) button under **Actions** , to uninstall the Dell OpenManage Plug-in for Nagios XI wizard.
The Dell OpenManage Plug-in is successfully uninstalled from your system.

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 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 8 with Lifecycle Controller User's Guide*
- *Dell Integrated Remote Access Controller 7 User's Guide*
- *Dell Chassis Management Controller for Dell PowerEdge M1000e User's Guide*
- *Dell Chassis Management Controller for Dell PowerEdge VRTX User's Guide*
- *Dell Chassis Management Controller for Dell PowerEdge FX2/FX2s User's Guide*
- *Dell Compellent Storage Arrays User's Guide*
- *Dell EqualLogic PS-Series Storage Arrays User's Guide*
- *Dell PowerVault MD Storage Arrays User's Guide*

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