

# Dell OpenManage Plug-in Version 1.0 for Nagios Core Installation Guide



# Notes, Cautions, and Warnings

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

 **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.

**Copyright © 2015 Dell Inc. All rights reserved.** This product is protected by U.S. and international copyright and intellectual property laws. Dell™ and the Dell logo are trademarks of Dell Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

2015 - 01

Rev. A00

# Contents

<b>1 Introduction to the Dell OpenManage Plug-in Version 1.0 for Nagios Core.....</b>	<b>4</b>
<b>2 System requirements.....</b>	<b>6</b>
System requirements for management systems.....	6
System requirements for managed systems.....	6
<b>3 Downloading and installing the Dell OpenManage Plug-in Version 1.0 for Nagios Core.....</b>	<b>8</b>
<b>4 Uninstalling the Dell OpenManage Plug-in Version 1.0 for Nagios Core.....</b>	<b>10</b>
<b>5 Accessing documents from Dell support site.....</b>	<b>11</b>
<b>6 Related Documentation.....</b>	<b>12</b>

# 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	<p>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.</p> <p>You can opt for either SNMP or WS-MAN protocol for device discovery based on your requirement.</p>
Device Information	<p>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 <b>Hosts</b> or the <b>Services</b> view in the Nagios Core console.</p> <p>For more information about the device information provided by the plug-in, see <b>Device Information</b> in the <i>Dell OpenManage Plug-in Version 1.0 for Nagios Core User's Guide</i>.</p>
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.

Feature	Functionality
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](http://dell.com/omconnectionsEnterpriseSystemsManagement) or [dell.com/openmanagemanuals](http://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.

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

## 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](http://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](http://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](http://support.dell.com) or from Nagios exchange at [exchange.nagios.org/](http://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.

 **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).




 **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.

 **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 SNMPPTT, navigate to the path where the `snmpptt.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 SNMPPTT, restart the SNMPPTT services by running the following command:  
`service snmpptt restart.`

# Accessing documents from Dell support site

You can access the required documents in one of the following ways:

- Using the following links:
  - For all Enterprise Systems Management documents — [dell.com/softwaresecuritymanuals](https://dell.com/softwaresecuritymanuals)
  - For Enterprise Systems Management documents — [dell.com/openmanagemanuals](https://dell.com/openmanagemanuals)
  - For Remote Enterprise Systems Management documents — [dell.com/esmmanuals](https://dell.com/esmmanuals)
  - For OpenManage Connections Enterprise Systems Management documents — [dell.com/OMConnectionsEnterpriseSystemsManagement](https://dell.com/OMConnectionsEnterpriseSystemsManagement)
  - For Serviceability Tools documents — [dell.com/serviceabilitytools](https://dell.com/serviceabilitytools)
  - For Client Systems Management documents — [dell.com/clientsystemsmanagement](https://dell.com/clientsystemsmanagement)
  - For OpenManage Connections Client Systems Management documents — [dell.com/connectionsclientsystemsmanagement](https://dell.com/connectionsclientsystemsmanagement)
- From the Dell Support site:
  - a. Go to [dell.com/support/home](https://dell.com/support/home).
  - b. Under **General support** section, click **Software & Security**.
  - c. In the **Software & Security** group box, click the required link from the following:
    - **Enterprise Systems Management**
    - **Remote Enterprise Systems Management**
    - **Serviceability Tools**
    - **Client Systems Management**
    - **Connections Client Systems Management**
  - d. To view a document, click the required product 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](http://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 User's Guide*

Also see <http://www.nagios.org/documentation> for any Nagios Core related documentation.