

Dell Smart Plug-in Version 2.0  
For HP Operations Manager  
9.0 For Microsoft Windows  
Quick Installation Guide



# Notes



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

---

**Information in this document is subject to change without notice.**

**© 2011 Dell Inc. All rights reserved.**

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: Dell™, the DELL logo, OpenManage™, PowerEdge™, and PowerVault™ are trademarks of Dell Inc. Microsoft®, and Windows®, are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. VMware® and ESXi Server™ are registered trademarks of VMware, Inc. in the United States and/or other jurisdictions. SUSE® is a registered trademark of Novell, Inc. in the United States and other countries. Red Hat Enterprise Linux® is a registered trademark of Red Hat, Inc. in the United States and other countries. Linux® is a registered trademark of Linus Torvalds.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.


**March 2011**

1	Introduction . . . . .	5
	<b>Pre-requisites</b> . . . . .	5
	Configuring User Authorization for WinRM . . . . .	6
	<b>Accessing Dell Smart Plug-in Installer</b> . . . . .	7
	<b>Installing the Dell SPI</b> . . . . .	7
	<b>Verifying Dell SPI Installation</b> . . . . .	8
	<b>What to do Next?</b> . . . . .	9
	Using the Configuration Utility . . . . .	11
	Setting the Schedule for Auto-grouping Policy . . . . .	12
	<b>Related Documents</b> . . . . .	12



# Introduction

This guide provides quick installation instructions for Dell Smart Plug-in(SPI) Version 2.0 for HP Operations Manager 9.0 for Microsoft Windows.

 **NOTE:** This plug-in is applicable to 64 bit systems.

## Pre-requisites

The pre-requisites for installing the Dell Smart Plug-in are as follows:

- Administrator and HP\_OVE\_ADMIN privileges on the HP Operations Manager (HPOM) management server.
- WinRM privileges to monitor Dell ESXi systems.

Install the following software on the Management server:

**Table 1-1. Software Requirements for Management Server**

Requirement	Description
HPOM 9.0	For more information on installing HPOM, see the <i>HP Operations Manager 9.0 Installation Guide</i> available on the HP Support website.
SNMP Service	Install and enable SNMP. For more information, see <a href="#">Related Documents</a> .
WinRM 2.0 service	Install and configure WinRM version 2.0 or above to establish communication with the Dell ESXi systems that you are monitoring. For more information, see <a href="#">Configuring User Authorization for WinRM</a> .

**Table 1-2. Software Requirements for Managed Systems**

<b>Requirement</b>	<b>Description</b>
Operating Systems	Install the supported Windows or Linux operating systems, or the supported ESXi version. For more information on the supported operating systems, see <a href="#">Related Documents</a> .
SNMP service	Install and enable the SNMP service and ensure that the management server is able to communicate with the managed node. For more information, see <a href="#">Related Documents</a> and <a href="#">What to do Next?</a>
SNMP agent	Configure the SNMP agent to change the community name, enable <b>Get</b> operations, and send traps to the HPOM management server.  For more information on configuring the SNMP agent on Windows and Linux systems, see <a href="#">Related Documents</a> .
Server Administrator	The supported versions of Server Administrator are: <ul style="list-style-type: none"><li>• For Windows systems — versions 5.5 to 6.5.</li><li>• For ESXi and Linux systems — versions 6.1 to 6.5.</li></ul> Install Server Administrator on ESXi and enable the OEM CIM providers and ensure that the management server is able to communicate with the systems.  For more information on configuring SNMP for Windows, ESXi, and Linux systems, or on enabling the OEM CIM providers, see <a href="#">Related Documents</a> .

## **Configuring User Authorization for WinRM**

To configure user authorization for WinRM:

- 1** Click **Start** → **Run** on the **Windows** menu of your system.
- 2** Type `winrm configsddl default` and click **OK**.
- 3** Click **Add** to add the required local or domain users or groups to the list.
- 4** Provide the appropriate permission(s) to the respective users and click **OK**.

# Accessing the Dell Smart Plug-in Installer

The Dell SPI installer (Dell Smart Plug-in v2.0\_x64.msi), Readme file, and the Quick Installation guide are packaged in the self-extracting executable Dell Smart Plug-in v2.0\_A00.exe file.

## Installing the Dell SPI



**NOTE:** You must close the HPOM console before you install or uninstall the Dell SPI or use the **Repair**, or **Modify** options on the Dell SPI installer.

To install the Dell SPI on the HPOM management server:

- 1 Download the Dell SPI installer from the Dell Support website at [support.dell.com](http://support.dell.com).
- 2 Extract the contents of the **Dell Smart Plug-in v2.0\_A00.exe** on the management server.
- 3 Run the **Dell Smart Plug-in v2.0\_x64.msi**.
- 4 In the **Welcome** screen, click **Next**.
- 5 Select the **I accept the terms in the license agreement** option and click **Next**.
- 6 In the custom screen, select any one or all options — **Monitor Dell Windows Servers**, **Monitor Dell ESXi Servers**, or **Monitor Dell Linux Servers** as per your requirement.



**NOTE:** You can monitor the servers related to your selection. For example, if you choose **Monitor Dell ESXi Servers**, you can monitor only the ESXi systems.

- 7 Select **Yes** to auto-deploy the policy files during installation. To deploy them manually on the management server, select **No**.

The Summary screen displays information about the Dell SPI installation location, deployed policy files, tools that are installed, and the systems that are monitored by the Dell SPI.


- 8 Click **Install**.

When the installation process completes, click **Finish**.

# Verifying Dell SPI Installation

To verify the Dell SPI installation:

- 1 Launch the HPOM console and verify that the policies are installed.  
Navigate to **Policy Management**→**Policy Groups**→**SPI for Dell Devices**.  
Verify the following policies are present under the **SPI for Dell Devices**:
  - Dell\_Autogroup\_Servers
  - Dell\_Process\_SNMPTraps
  - Dell\_Process\_SNMPTraps\_AckManual
  - Dell\_Sched\_Status\_Update
- 2 Verify the auto-deployed policies are present in the Policy Inventory.  
Under **Nodes**, right-click on the management server, and select **View**→**Policy Inventory** to view the following policies:
  - Dell\_Autogroup\_Servers
  - Dell\_Process\_SNMPTraps
  - Dell\_Sched\_Status\_Update
- 3 Verify that the following tools are displayed under **Tools**→**Dell OpenManage**:
  - Server Administrator
  - DWS Server Administrator

 **NOTE:** The DWS Server Administrator tool is available only when you select **Monitor Dell ESXi Servers** in the custom screen during installation.
- 4 Verify that the config utility is installed in the default or the custom directory. The default location is:  
**C:\Program Files\Dell\OpenManage Connection for HP**

If any of the above step fails, check the pre-requisites and try again. To use the **Modify**, **Repair**, and **Remove** options in the installer, see *Dell Smart Plug-in Version 2.0 For HP Operations Manager 9.0 For Microsoft Windows User's Guide* at [support.dell.com/manuals](http://support.dell.com/manuals).



## What to do Next?

The Dell SPI installer includes the **DellSPIConfigUtility.exe**, which is a command line utility that you must run to configure the communication parameters. After you complete installing the Dell SPI, configure the SNMP parameters for Windows and Linux systems and WSMAN parameters for ESXi systems to ensure that communication between the management server and the Dell systems is established correctly.

You can configure the following parameters:

- WSMAN Connection Parameters:
  - Username
  - Password
  - Timeout
  - Security options that include Certificate Authority check, Common Name check, and Revocation check
- SNMP timeout and retries
- DWS URL

You can use WSMAN specific options only if you enable ESXi systems monitoring when you install the Dell SPI.

Table 1-3 lists the options that the command line utility uses to set the different values for WSMAN, SNMP, and DWS.

**Table 1-3. Command Line Options**

<b>Option</b>	<b>Description</b>
-wsmanusername	Specifies user name of a local or a domain account on the ESXi system. This property determines the user name for authentication to access the ESXi system.
-wsmanpassword	Specifies the password for the user name you specified.
-wsmancheck	Skips the authentication of Certificate Authority that issued the certificate. The value is either <i>yes</i> or <i>no</i> . The default value is <i>no</i> . If you set the value to <i>yes</i> , then the authentication of Certificate Authority is checked.
-wsmancncheck	Skips authentication of the Common Name (CN). The value is either <i>yes</i> or <i>no</i> . The default value is <i>no</i> . If you set the value to <i>yes</i> , then the common name is checked.
-wsmanrevocationcheck	Specifies a value to indicate whether the WSMAN connection should validate the revocation status of the server certificate or not. The value is either <i>yes</i> or <i>no</i> . The default value is <i>no</i> . If you set the value to <i>yes</i> , then the revocation status of the server certificate is checked.
-wsmantimeout	Specifies WSMAN timeout value in milliseconds. The default value is 30000 (30 seconds). Set a value between 500 milliseconds to 4294967290 milliseconds.
-snmptimeout	Specifies the SNMP timeout in milliseconds. The default value is 5000 (5 seconds). Set a value between 100 milliseconds to 4294967290 milliseconds.
-snmpretries	Specifies the number of SNMP retries. The default value is 1.
-dwsurl	Specifies the DWS URL. You cannot specify an invalid URL or leave the URL blank.

**Table 1-3. Command Line Options**

Option	Description
-getall	Specifies the values of all the options and display them on the screen. This option gets all the values for all the individual parameters except <b>wsmusername</b> and <b>wsmpassword</b> .
-resetdefaults	Resets all the configurable values to the default values. <b>NOTE:</b> This option does not reset the values for the <b>-wsmusername</b> and <b>-wsmpassword</b> options.
-help	Displays the help for using this tool.

## Using the Configuration Utility


To use the configuration utility:

- 1 Launch the command prompt on the management server.
- 2 Navigate to **DellSPICongigUtility.exe**. The default location is **C:\Program Files\Dell\OpenManage Connection for HP**.
- 3 Type the following command:

```
DellSPICongigUtility.exe -<option>=<value> and press Enter.
```

For example, if you want to set the WSMAN timeout, type the following command:


```
DellSPICongigUtility.exe -wsmantimeout=500
```

 **NOTE:** If you enter invalid values, the utility displays the error message with the help text.

If you do not specify new values for any of the options, the utility uses the default values. However, you must set the values for **wsmusername** and **wsmpassword** if you are monitoring the ESXi systems. You must also set the value for the DWS URL.


When you specify the value for **wsmpassword**, type the following command **DellSPICongigUtility.exe -wsmpassword** and press **Enter**. You do not need to specify **=** after **-wsmpassword**. When you specify the

password for the first time, you need to enter the password twice. When you modify the password, the utility prompts you to enter the old password and then the new password twice.

 **NOTE:** The utility prompts you to change the password even when you change the username.

To view the values for each option other than the values for `wsmanusername` and `wsmanpassword`, type the following command:

```
DellSPIConfigUtility.exe -<option>
```

 **NOTE:** After migrating from HPOM 8.1x to 9.0 with Dell SPI v1.1, when you install the Dell SPI v2.0, first perform auto-grouping to group the Dell systems, and then set the auto-grouping schedule as required, say 23 hours.

## Setting the Schedule for Auto-grouping Policy

To set the schedule for auto-grouping policy:

- 1 Navigate to **Policy Management** → **Policy Groups** → **SPI for Dell Devices**.
- 2 Select `Dell_Autogroup_Servers`.
- 3 In the **Schedule** tab, select *any* of the options in the drop-down menu and input the desired schedule.
- 4 Click **Save and Close**.

## Related Documents

In addition to this guide, you can access the following guides available on the Dell Support website at [support.dell.com/manuals](http://support.dell.com/manuals). On the **Manuals** page, click **Software** → **Systems Management**. On the right-side, click on the product to access the documents pertaining to it.

- *Dell Smart Plug-in Version 2.0 For HP Operations Manager 9.0 For Microsoft Windows User's Guide*
- *Dell OpenManage Server Administrator User's Guide*
- *Dell OpenManage With VMware ESX/ESXi 4 Systems Management Guide*