

Dell Printer Management Pack
Version 4.1 For Microsoft
System Center Operations
Manager 2007 R2/SP1 and
System Center Essentials 2007
SP1/2010

User's Guide



Notes and Cautions



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.

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Overview

The Dell Printer Management Suite version 4.1 with Microsoft System Center Operations Manager (SCOM) 2007 SP1/R2 and System Center Essentials (SCE) 2007 SP1/2010 environment allows you to manage, monitor, and ensure the availability of the Dell Printers.

 **CAUTION:** To avoid data loss and corruption, ensure that you have knowledge and experience using the product, before attempting the procedures in this document.

 **NOTE:** The readme file packaged in the self-extracting executable **Dell_Printer_Management_Pack_v4.1_A00.exe** file contains the latest information about software and management station requirements, and information about known issues. The readme file is also available at support.dell.com/manuals.

What is New in Dell Printer Management Pack Version 4.1

The Dell Printer Management Pack version 4.1 supports the following:

- Support for new Dell printers. To view the list of supported Dell Printers, see [Supported Dell Printers](#)
- Support for latest firmware

Key Features of Dell Printer Management Pack Version 4.1

Table 1-1 lists the key features and functionalities of the Dell Printer Management Pack version 4.1.

Table 1-1. Key Features and Functionality

Feature	Functionality
Discovery and Monitoring	Supports discovery and monitoring of Dell Printer devices in a network
Inventory of Dell Printers	Performs inventory of the supported Dell Printers, and monitors the health of Dell Printers.
Launching Printer Console	Provides the ability to launch the Printer console remotely from the SCOM console
Display Alerts from Dell Printer devices	Displays the Simple Network Management Protocol (SNMP) based alerts for the monitored Dell Printer devices in the Alerts view of the SCOM Operations Console.

About Dell Management Pack Version 4.1

Table 1-2 below describes the management packs and their dependencies with each other:

Table 1-2. Management Pack Functionalities and Dependencies

Management Pack	Description	Dependency
Dell Base Hardware Library	Management Pack for defining the Dell Hardware Group and Dell folder in the Monitoring pane of the Operations Console.	None
Dell Printer MP 4.1	Management Pack for instrumenting supported Dell Printers	Dell Base Hardware Library 4.0

Supported Dell Printers

The Dell Printer Management Pack version 4.1 supports the following Dell Printers:

Mono Laser Printers

- Dell 1130n
- Dell 1135n
- Dell 1720dn
- Dell 2330dn
- Dell 2350dn
- Dell 2355dn
- Dell 3330dn
- Dell 3333dn
- Dell 3335dn
- Dell 5210n
- Dell 5230n/dn
- Dell 5310n
- Dell 5330dn
- Dell 5350dn
- Dell 5530dn
- Dell 5535dn
- Dell 7330dn

Color Laser Printers

- Dell 1320c
- Dell 1350cnw
- Dell 1355cn/cnw
- Dell 2130cn
- Dell 2150cn/cdn
- Dell 2155cn/cdn

- Dell 3010cn
- Dell 3110cn
- Dell 3130cn
- Dell 5130cdn
- Dell 7130cdn

Mono Laser Multifunction Printer

- Dell 1815n
- Dell 2335dn

Color Laser Multifunction Printer

- Dell 1235cn
- Dell 2135cn
- Dell 2145cn
- Dell 3115cn

Dell Printer Management Pack Operations

Overview

This chapter describes the various operations that you can perform on Microsoft Systems Center Operations Manager (SCOM) or Systems Center Essentials (SCE) using the Dell Printer Management Pack version 4.1.

The Printer Management Pack allows you to perform the following operations to manage Dell Printers:

- Discover and group Dell Printers
- Discover attribute information for Dell Printers
- Provide health status of Dell Printers through periodic polling
- Launch the Printer console remotely
- Process SNMP traps and provide knowledge base for printer traps

Web Console

The Web console enables you to monitor and manage your Dell devices with Dell Printer Management Pack using a browser instead of the **Operations Manager 2007** console. You can use the Web console without installing the Operations console. Using the Web console has the following limitations:

- Provides only the **Monitoring** feature for all Management Packs
- Console launch tasks are not available
- Administration, Authoring, and Reporting are not available
- The **Personalize** view is not available
- Tool tip is not available

Discovery and Grouping

Discovering a Dell Printer

Dell printers can be classified as network devices. To discover Dell Printer devices, ensure that the devices appear in the **Network Devices** view under the **Administration** section of the **SCOM Operations Console**.

To add a Dell Printer to the **Network Devices** list:

- 1 Log on to the system with an account that has the System Centers Operations Manager(SCOM) Administrators role, for the SCOM or SCE management groups.
- 2 In the **Operations Console**, click **Administration**.
- 3 Right-click on **Administration** and select **Discovery** wizard from the pop-up menu.

The **Introduction** screen appears.

- 4 Read the instructions and click **Next**.
- 5 On the **Computer and Device Management Wizard** menu, select **Network Devices**, and click **Next**.
- 6 Select **Advanced Computer Discovery**, select **Network Devices** in the **Computer & Device Types** menu, and click **Next**.



NOTE: In SCOM 2007 R2, select **Network Devices** in the **Computer & Device Types** menu, and click **Next**.

- 7 Type the **Start** and **End** of the IP address range that you want to scan, type the SNMP community string, and select the SNMP version.
- 8 Click **Discover**.
The **Discovery Progress** page is displayed.
- 9 On the **Select Objects to Manage** page, select the devices you want to manage and click **Next**.
- 10 Click **Finish**.

Monitoring

The Dell Printer Management Pack v4.1 enables you to monitor the discovered Dell Printer devices. The Health Status Indicators help you to monitor the health of your Dell Printer devices on the network.






You can monitor the Dell Client systems using the following views:

- [Alerts View](#)
- [Diagram View](#)
- [State View](#)

Health Status Indicators

Table 2-1 lists the icons that indicate the health status of the discovered Dell Printer devices on the Operations Console. For more information on severity propagation, see [State View](#).

Table 2-1. Severity Level Indicators

Icon	Severity Level
	Normal/OK. The component is working as expected.
	Warning/Noncritical. A probe or other monitoring device has detected a reading for the component that is above or below the acceptable level. The component may still be functioning, but it could fail. The component may also be functioning in an impaired state.
	Critical/Failure/Error. The component has either failed or failure is imminent. The component requires immediate attention and may need to be replaced. Data loss may have occurred.
	The specific component is not monitored.
	The service is unavailable.

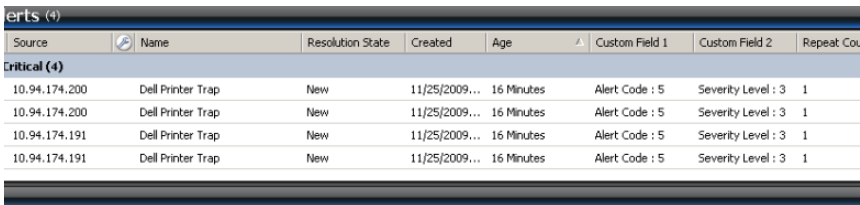
Alerts View

The Alerts View displays alerts for the Simple Network Management Protocol (SNMP) traps received from the Dell printers that are managed by SCOM or SCE.

Figure 2-1 displays the Alerts processed by SCOM from the SNMP traps received from the printers.

Alerts View

Figure 2-1. Alerts View



Source	Name	Resolution State	Created	Age	Custom Field 1	Custom Field 2	Repeat Count
Critical (4)							
10.94.174.200	Dell Printer Trap	New	11/25/2009...	16 Minutes	Alert Code : 5	Severity Level : 3	1
10.94.174.200	Dell Printer Trap	New	11/25/2009...	16 Minutes	Alert Code : 5	Severity Level : 3	1
10.94.174.191	Dell Printer Trap	New	11/25/2009...	16 Minutes	Alert Code : 5	Severity Level : 3	1
10.94.174.191	Dell Printer Trap	New	11/25/2009...	16 Minutes	Alert Code : 5	Severity Level : 3	1

Click on an item in the view above to display its details.

To view the Alerts for the printers you are monitoring:

- 1 In the **Operations Console**, click **Monitoring**.
- 2 In the Monitoring pane on the left side, navigate to the **Dell** folder and click the folder to display the different views.
- 3 Click **Alerts Views** → **Printer Alerts**.

The **Operations Console** displays the alerts for all the Dell Printer devices that you are monitoring in the Printer Alerts pane.

- 4 Select an item in the view to display its details in the **Details View** pane.



NOTE: Refer to the **Reference Guide** for printer traps using the link provided in the **Details** view to troubleshoot. Copy the link and paste it on your browser to access the guide.

Diagram View

The **Diagram View** displays a hierarchical and graphical representation of all Dell printers on your network that SCOM or SCE manages. The **Diagram View** offers the following:

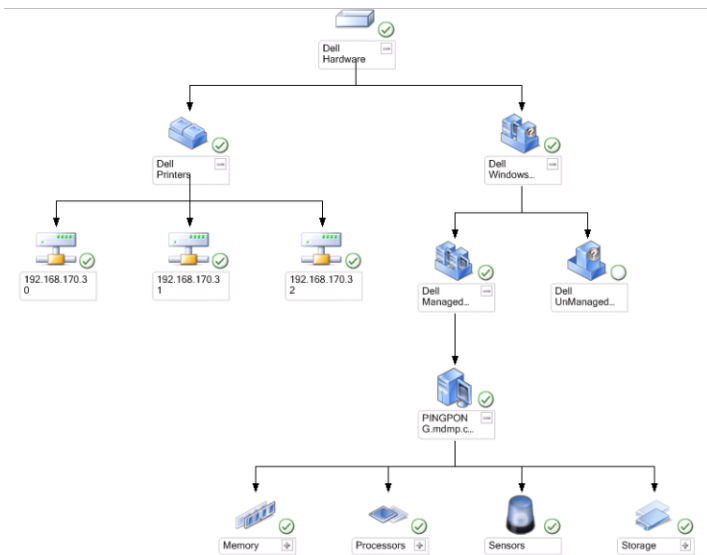
- Complete Diagram View
- Printer Group



NOTE: You can launch device or component specific tasks from the **Actions** pane of the Operations Console. For more information on launching tasks, see [Tasks](#).

Complete Diagram View

Figure 2-2. Complete Diagram View



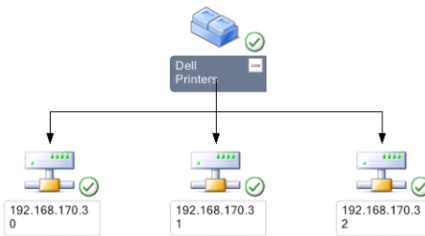
The **Complete Diagram View** offers a graphical representation of all Dell devices that SCOM or SCE manages and allows you to expand and verify the status of individual devices and their components in the diagram. You can view details for Dell printers with the **Complete Diagram** view.

To access the **Complete Diagram View**:

- 1 In the **Operations Console**, click **Monitoring**.
- 2 In the Monitoring pane on the left side, navigate to the **Dell** folder and click the folder to display the different views.
- 3 Click **Diagram View**→ **Complete Diagram View**.
- 4 Select a component in the diagram to view its details in the **Detail View** pane.

Dell Printer Group View


Figure 2-3. Dell Printer Group Diagram



The **Printer Group** view offers a graphical representation of all Dell Printers that SCOM/SCE manages and allows you to expand and verify the status of individual printers in the diagram. The root node for this view is the **Dell Printers** group.

To access the **Printer Group View**:

- 1 In the **Operations Console**, click **Monitoring**.
- 2 In the Monitoring pane on the left side, navigate to the **Dell** folder and click the folder to display the different views.
- 3 Click **Diagram Views**→ **Printer Group**.
- 4 Select a printer in the diagram to view its details in the **Detail View** pane.

 **NOTE:** For security reasons, SCOM or SCE displays the Community String attribute as an encoded string value.

State View

The State view displays the status of each Dell device managed by SCOM or SCE on your network. The Dell Printers Management Pack provides a list of severity level indicators to help you monitor the health of the Dell printers on the network.

To access the **State View**:

- 1 In the **Operations Console**, click **Monitoring**.
- 2 In the **Monitoring** pane on the left side, navigate to the **Dell** folder and click the folder to display the different views.,
- 3 Click **State View**→ **Printer**.

The Operations Console displays the status of all the Dell printers that you are monitoring on the right pane.

- 4 Select a state to view its details in the **Detail** view.

Tasks

Tasks are available in the **Actions** pane of the Operations Console. When you select a Printer device or a component in any of the Dell diagram views, the relevant tasks appear in the **Actions** pane.



NOTE: You can run the tasks from the Diagram view, State view, or the Alert view.


Dell Printer Tasks

Launch Printer Console

- 1 In the Operations Console, navigate to a **Dell Diagram** view.
- 2 Expand the diagram and select the desired Dell printer.
- 3 In the **Actions** pane, select **SNMP Network Device Tasks**→ **Launch Printer Console**.


Customizing the Dell Printer Management Pack

The Dell Printer Management Pack allows you to customize discovery and monitoring of your Dell devices. You can customize the following components:

- **Monitors:** Assesses various conditions that can occur in monitored objects. The result of this assessment determines the health state of a target and the alerts that are generated.
 - **Object Discoveries:** Find objects on a network that need to be monitored.
-  **NOTE:** For more information, see SCOM 2007 SP1/ R2 documentation.

Unit Monitors

You can customize the following parameters of the Dell Printer Management Pack unit monitors by using overrides:

- **Enabled:** Allows you to enable or disable Monitors. You can set the **Override Setting** to **True** or **False**.
-  **NOTE:** The default setting is **True**.
- **Interval in Seconds:** The frequency (in seconds) with which the Dell Management Pack polls the Dell device to check the health of a component. The default is 3600 seconds (60 minutes).
 - **Unit Monitor:** Monitor triggered by a periodic poll configured as **IntervalSeconds**. The default value for this attribute is 21600 seconds (6 hours).

This is a Unit Monitor for printer availability and it indicates the health of your Dell printer.

Object Discoveries

You can customize the Dell Printer Management Pack discovery parameters, using the overrides

- **Enabled:** Allows you to enable or disable discoveries. You can set the **Override Setting** to **True** or **False**.



NOTE: The default setting is **True**.

- **Interval in Seconds:** Specifies the frequency in seconds that the Dell Management Pack discovers the component instance and attributes of your Dell Client system. The default value for this attribute is 86400 seconds (24 hours).

Customising Alert Rules

You can customize the Alert rules by setting override parameters for the rules. To customize the rules:

- 1** In the **Operations Console**, click the **Authoring** tab.
- 2** Select **Rules** under **Management Packs** in the **Authoring** pane.
- 3** In the **Rules** pane, select **Dell Printer instance** and select a rule.
- 4** Right-click the rule and select the **Overrides** option.
- 5** Select **Disable the Rule** and any of the sub-options to disable the rule.
- 6** Select **Override the Rule** and any of the sub-options to set the override parameters for the rule.
You can also change the severity setting for the rule.
- 7** Click **OK** to apply the override parameter to your rule or click **Cancel** to cancel the changes.

Related Documentation and Resources

This chapter gives the details of documents and references to help you work with Dell Printer Management Pack version 4.1

Microsoft Guidelines for Performance and Scalability for Operations Manager 2007 SP1/R2

For optimal performance, deploy device-specific Dell Management Packs on different management servers.

For information on Microsoft's recommendations for scalability, see the Microsoft website at support.microsoft.com/kb/975057



NOTE: For improved performance, make sure that the **Autogrow Option** is enabled in Operations Manager Database.

Obtaining Technical Assistance

If at any time you do not understand a procedure described in this guide, or if your product does not perform as expected, different types of help are available. For more information see "Getting Help" in your system's *Hardware Owner's Manual*.

Additionally, Dell Enterprise Training and Certification is available. For more information, see dell.com/training. This service might not be offered in all locations.

Appendix

Issues and Resolutions

The following table lists the known issues, resolutions, and where the issues are applicable to.

Table A-1. Issues and Resolutions

Issue	Resolution	Applicable To
Dell alerts are not sorted according to their age.	<p>Check the registry on the managed system that has this problem. There could be a left-over view definition that has set the sorting flags to 'false'. In some instances, when you import a management pack with changes to the sorting flags, the sorting flags may not get updated in the registry. If you delete the settings for the view in the registry, they are recreated from the new management pack when you navigate to that view again. You can also edit the sorting flags in the registry for the view.</p> <p>Registry edit:</p> <pre> HKEY_CURRENT_USER\Software \Microsoft\Microsoft Operations Manager\3.0\Console\%GUID. ViewTitle%AlertsView\Age </pre> <p>To enable sorting of alerts, ensure the keys IsSortable and IsSorted are set to 1.</p>	SCOM 2007 SP1, SCE 2007 SP1

Table A-1. Issues and Resolutions

Issue	Resolution	Applicable To
Under certain conditions, alerts related to Handle Count Threshold and Private Bytes Threshold are displayed on the Operations console of the management server.	Microsoft KB968760 available at support.microsoft.com resolves this.	SCOM 2007 SP1, SCE 2007 SP1
Under certain conditions, an error message is displayed on the Operations Console of the management server with the Event ID – 623 and Event Source – Health Service ESE Store .	Microsoft KB975057 available at support.microsoft.com resolves this.	SCOM 2007 SP1, SCE 2007 SP1
The System Center Operations Manager 2007 console may crash on certain operating systems.	Microsoft KB951327 , KB951526 available at support.microsoft.com resolves this.	SCOM 2007 SP1, SCE 2007 SP1
You may experience one or more of the following situations:	Microsoft KB954049 available at support.microsoft.com resolves this	SCOM 2007 SP1, SCE 2007 SP1
<ul style="list-style-type: none">• The Web Console does not open.• The My Workspace page does not display.• Performance and Power Monitoring Views do not display.• Health Service may not start up on the system.		

Table A-1. Issues and Resolutions

Issue	Resolution	Applicable To
The reports do not appear as expected in the Reporting space of the Administration console.	Microsoft KB954643 available at support.microsoft.com resolves this.	SCOM 2007 SP1, SCE 2007 SP1
The SCOM console intermittently displays the following error message - "Health service Host Process encountered a problem and needed to close" as a result of this Health Service crash. You may notice unexpected behavior in the discovery and monitoring of Dell devices.	Microsoft KB951526 available at support.microsoft.com resolves this.	SCOM 2007 SP1, SCE 2007 SP1
SCOM 2007 cannot receive SNMP trap data when you use a Windows Server 2008-based computer or a Windows Vista-based computer as a proxy agent for SNMP devices.	Microsoft KB958936 available at support.microsoft.com resolves this.	SCOM 2007 SP1, SCE 2007 SP1
Tables in Alert KB are shown without borders	Select View Alert Properties in the Alert section to view the tables with borders in the Alert Properties pane	SCOM 2007 SP1, SCE 2007 SP1

