Dell Printer Management Pack Suite Version 5.0 For Microsoft System Center Operations Manager And Microsoft System Center Essentials

User's 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.

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Overview

The Dell Printer Management Pack Suite version 5.0 for Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, Microsoft System Center 2012 Operations Manager, Microsoft System Center Operations Manager 2007 R2, and Microsoft System Center Essentials (SCE) 2010 environment allows you to monitor, and ensure the availability of the Dell printers.

CAUTION: Perform the procedures in this document only if you have proper knowledge and experience in using Microsoft Windows operating system and System Center 2012 R2 Operations Manager, System Center 2012 SP1 Operations Manager, System Center 2012 Operations Manager, System Center Operations Manager 2007 R2, and System Center Essentials 2010, to avoid data corruption and/or data loss.

NOTE: The readme file packaged in the self-extracting executable **Dell_Printer_Management_Pack_v5.0_A00.exe** contains the latest information about software management pack and information about known issues. The latest readme file is available at **dell.com/support/manuals**.

NOTE: All references to OpsMgr in this guide are applicable to Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, Microsoft System Center 2012 Operations Manager, Microsoft System Center Operations Manager 2007 R2, and Microsoft System Center Essentials 2010, unless otherwise specified.

NOTE: This document contains information on the prerequisites and supported software necessary for installing the Dell Printer Management Pack Suite version 5.0. If you are installing this version of Dell Printer Management Pack Suite version 5.0 after a long time after its release date, check to see if there is an updated version of this document at **dell.com/support/manuals**.

What Is New In This Release

- Support for latest Dell printers. To view the list of supported Dell printers, see Supported Dell Printers.
- Support for Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager and Microsoft System Center 2012 Operations Manager.
- Support for Microsoft Windows Server 2012 R2 as management server operating system.

Key Features Of Dell Printer Management Pack

The following table lists the key features and functionality of the Dell Printer Management Pack Suite version 5.0.

Table 1. Features And Functionality

Feature	Functionality
Discovery	Supports discovery of Dell printers in a network.
Inventory	Performs inventory of the supported Dell printers.
Monitoring	Supports health monitoring of Dell printers in a network.
Launching printer console	Launches the printer console from the OpsMgr console.

Feature	Functionality
Display alerts from Dell printer	Displays the Simple Network Management Protocol (SNMP) based alerts for the monitored Dell printer in the **Alerts Views** of the OpsMgr console.

About Dell Printer Management Pack Suite Version 5.0

The following table describes the printer management packs and their dependencies with each other:

Table 2. Management Pack Functionality And Dependencies Management Pack

Supported OpsMgr Version	Management Pack/Utility	Description	Dependency
OpsMgr 2007 R2 and SCE 2010	**Dell Printer (SCOM 2007 R2/SCE 2010) MP** — Dell.NetworkDevice.Printer.mp	Management Pack for instrumenting supported Dell printers.	Dell Base Hardware Library 4.0 — Dell.Connections.Hardware Library.mp
OpsMgr 2012 and OpsMgr 2012 SP1	**Dell Printer (SCOM 2012) MP** — Dell.Printer.OM12.mp	Management Pack for instrumenting supported Dell printers.	Dell Base Hardware Library 4.0 — Dell.Connections.Hardware Library.mp

Supported Dell Printers

The Dell Printer Management Pack Suite version 5.0 supports the following Dell printers:

Mono Laser Printers

The supported mono laser printers are:

- Dell 1130n
- Dell 1135n
- Dell 1720dn
- Dell 2330dn
- Dell 2350d/dn
- Dell 2355dn
- Dell 3330dn
- Dell 3333dn
- Dell 3335dn
- Dell 5210n
- Dell 5230dn
- Dell 5310n
- Dell 5330dn
- Dell 5350dn
- Dell 5530dn
- Dell 5535dn
- Dell 7330dn
- Dell B1160w wireless

- Dell B1265dnf
- Dell B2360d/dn
- Dell B2365dnf
- Dell B3460dn
- Dell B3465 dn/dnf
- Dell B5460dn
- Dell B5465dnf
- Dell B1260dn

Color Laser Printers

The supported color laser printers are:

- Dell 1320c
- Dell 1350cnw
- Dell 1355cn/cnw
- Dell 2130cn
- Dell 2150cn/cdn
- Dell 2155cn/cdn
- Dell 3110cn
- Dell 3130cn/cdn
- Dell 5130cdn
- Dell 7130cn/cdn
- Dell C1660W
- Dell C1760 cnw
- Dell C1765 cn/cnw
- Dell C3760dn
- Dell C3760n
- Dell C3765dnf

Mono Laser Multifunction Printer

The supported mono laser multifunction printers are:

- Dell 2335dn
- Dell B1265dnf

Color Laser Multifunction Printer

The supported color laser mutifunction printers are:

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

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Dell Printer Management Pack Operations

This chapter describes the various operations that you can perform on Microsoft System Center 2012 R2 Operations Manager, Microsoft System Center 2012 SP1 Operations Manager, Microsoft System Center 2012 Operations Manager, Microsoft System Center Operations Manager 2007 R2, and Microsoft System Center Essentials 2010, using the Dell Printer Management Pack Suite version 5.0.

The Printer Management Pack enables the following operations to manage Dell printers:

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

Discovery And Grouping

Discovering A Dell Printer

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

Discovering Network Devices

For more information on discovering network devices:

- System Center 2012 Operations Manager, see **technet.microsoft.com/en-us/library/hh278846.aspx.**
- System Center Operations Manager 2007 R2, see **technet.microsoft.com/en-us/library/cc950509.aspx.**
- System Center Essentials 2010, see **technet.microsoft.com/en-us/library/ff603567.aspx.**

Monitoring

The Dell Printer Management Pack version 5.0 enables you to monitor the discovered Dell printers. The health status indicators help you to monitor the health of your Dell printers on the network.

Health Status Indicators

The following table lists the icons that indicate the health status of the discovered Dell printers on the OpsMgr console.

Table 3. Health Status 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.

Views

You can monitor the Dell printers using the following views:

- Alerts Views
- Diagram Views
- State Views

Alerts Views

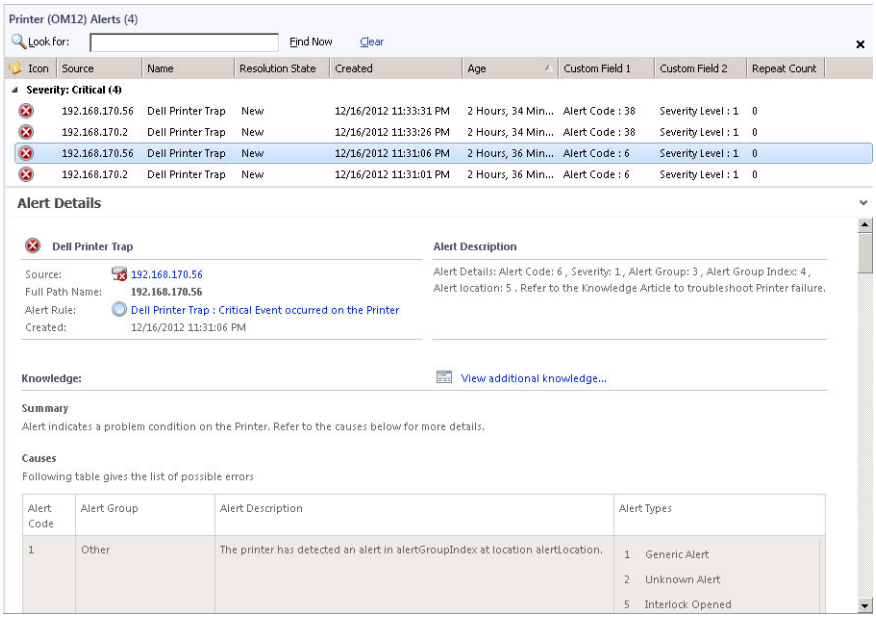

Figure 1. Alerts Views

To view the alerts for the printers you are monitoring:

1. In the OpsMgr console, click **Monitoring**.
2. In the **Monitoring** pane, navigate to the **Dell** folder and click the folder to display the different views.
3. Click **Alerts Views** → **Printers (OM07) Alerts** or **Printers (OM12) Alerts.**
   The OpsMgr console displays the alerts for all the Dell printers that you are monitoring in the printer alerts pane.
4. Select an alert to view the details in the **Alert Details** pane.

Diagram Views

The **Diagram Views** displays a hierarchical and graphical representation of all Dell printers on your network that OpsMgr manages. The **Diagram Views** offers the following:

- **Complete Diagram View**
- **Printers (OM07) Diagram or Printers (OM12) Diagram**

NOTE: You can launch device or component specific tasks from the **Actions/Tasks** pane of the OpsMgr console. For more information on launching tasks, see Tasks.

Complete Diagram View

The **Complete Diagram View** offers a graphical representation of all Dell devices that OpsMgr 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.

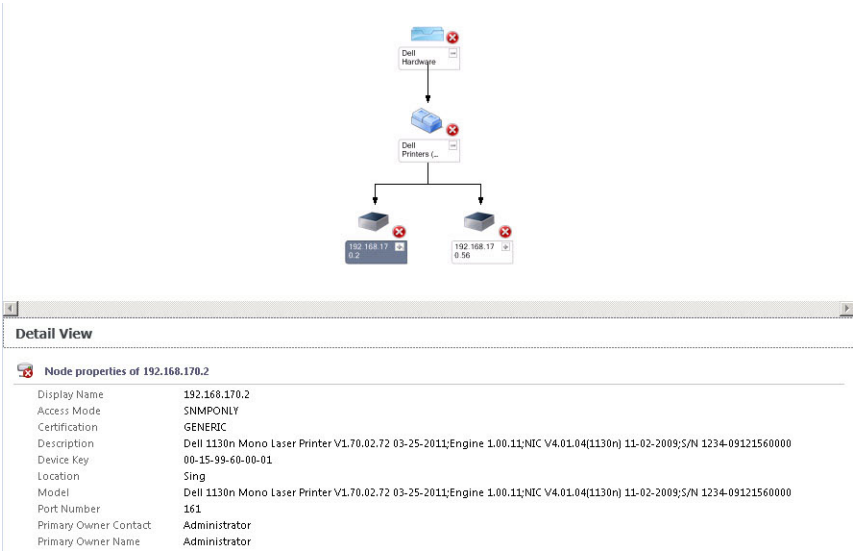

Figure 2. Complete Diagram View

To access the **Complete Diagram View**:

1. In the OpsMgr console, click **Monitoring**.
2. In the **Monitoring** pane, navigate to the **Dell** folder and click the folder to display the different views.
3. Click **Diagram Views** → **Complete Diagram View**.
4. Select a component in the diagram to view the details in the **Detail View** pane.

Printers (OM07) Diagram Or Printers (OM12) Diagram View

The **Dell Printers (OM07) Diagram** or **Dell Printers (OM12 Diagram** view offers a graphical representation of all Dell printers that OpsMgr manages. You can expand and verify the status of individual printers in the diagram. The root node for this view is the **Dell Printers (OM07)** or **Dell Printers (OM12)** group.

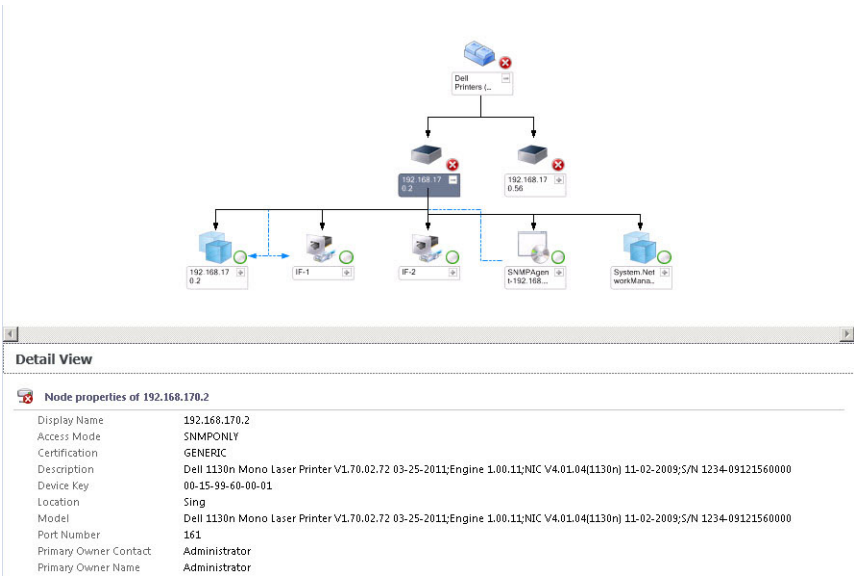

Figure 3. Printers (OM07) Diagram Or Printers (OM12) Diagram View

To access the **Printers (OM07) Diagram** or **Printers (OM12) Diagram** view:

1. In the OpsMgr, click **Monitoring**.
2. In the **Monitoring** pane, navigate to the **Dell** folder and click the folder to display the different views.
3. Click **Diagram Views** → **Printers (OM07) Diagram** or **Printers (OM12) Diagram** view.
4. Select a component in the diagram to view its details in the **Detail View** pane.

State Views

The **State Views** displays the status of each Dell printer managed by OpsMgr on your network. The Dell Printer 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 Views**:

1. In the OpsMgr console, click **Monitoring**.
2. In the **Monitoring** pane, navigate to the **Dell** folder and click the folder to display the different views.
3. Click **State Views** → **Printers (OM07) State** or **Printers (OM12) State** view.
   The OpsMgr console displays the status of all the Dell printers that you are monitoring on the right pane.
4. Select a state to view the details in the **Detail View** pane.

Tasks

Tasks are available in the **Actions/Tasks** pane of the OpsMgr console. When you select a printer or a component in any of the **State Views**, **Diagram Views**, or **Alerts Views**, the relevant tasks appear in the **Actions/Tasks** pane.

Launching Printer Console

1. In the OpsMgr console, navigate to a **Diagram Views**.
2. Expand the diagram and select the desired Dell printer.
3. In the **Actions/Tasks** pane, select **SNMP Network Device Tasks** for OpsMgr 2007 R2/SCE 2010 or **Node Tasks** for OpsMgr 2012.
4. Click **Launch Printer Console**.

Customizing The Dell Printer Management Pack

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

- **Monitors** — Assess 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.
- **Rules** — Collects data, such as events generated by managed objects.

Unit Monitors

You can customize the Dell Printer Management Pack unit monitors parameters by using the following 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** — Indicates the interval between each periodic poll that monitors the availability and health of your printer. The default value for this attribute is 21600 seconds (6 hours).

Object Discoveries

You can customize the Dell Printer Management Pack discovery parameters, using the following 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 printer. The default value for this attribute is 86400 seconds (24 hours).

Customizing Alert Rules

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

1. In the OpsMgr console, click **Authoring**.
2. In the **Authoring** pane, navigate to **Management Pack Objects** and click **Rules**.
3. In the **Rules** pane, expand the Dell printer instance and select a rule.
4. Right-click the rule and select **Overrides**.
5. Select **Disable the Rule** and any of the sub-options to disable the rule.

   Or

   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.
6. Click **OK** to apply the override parameter to your rule or click **Cancel** to cancel the changes.

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Related Documentation And Resources

This chapter gives the details of the documents and references to help you work with the Dell Printer Management Pack Suite version 5.0.

Microsoft Guidelines For Performance And Scalability For Operations Manager

For information on recommendations from Microsoft:

- For scalability, see **support.microsoft.com/kb/975057**.
- For scalability and performance for System Center 2012 Operations Manger, see **technet.microsoft.com/en-US/library/hh473583.aspx**.
- For scalability and performance for System Center Operations Manger 2007, see **microsoft.com/en-us/download/details.aspx?id=6909**.

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

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

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.

Contacting Dell

NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Visit **dell.com/support**.
2. Select your support category.
3. If you are not a U.S. customer, select your country code at the bottom of the **dell.com/support** page, or select **All** to see more choices.
4. Select the appropriate service or support link based on your need.

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Troubleshooting

Issues And Resolutions

The following table lists the known issues and resolutions.

Table 4. Known Issues And Resolutions

Issue	Resolution
Dell alerts are not sorted chronologically.	Check the registry on the managed system that has this problem. The sorting flags in the left overview definition may have been set to false. In some instances, when you import a management pack with changes already done to the sorting flags, the sorting flags may not get updated in the registry of the managed system. If you delete these 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. Registry edit: HKEY_CURRENT_USER\Software\Microsoft\Microsoft Operations Manager\3.0\Console\% *GUID.ViewTitle* %AlertsView\Age To enable sorting of alerts, ensure that the keys **IsSortable** and **IsSorted** are set to **1.**
Under certain conditions, alerts related to **Handle Count Threshold** and **Private Bytes Threshold** are displayed on the OpsMgr console of the management server.	Microsoft **KB968760** available at **support.microsoft.com** resolves this issue.
Under certain conditions, an error message is displayed on the OpsMgr 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 issue.
The OpsMgr 2007 R2 console may crash on certain operating systems.	Microsoft **KB951327** and **KB951526** available at **support.microsoft.com** resolves this issue.
You may experience one or more of the following situations: • 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.	Microsoft **KB954049** available at **support.microsoft.com** resolves this issue.
The reports do not appear as expected in the **Reporting** space of the **Administration** console.	Microsoft **KB954643** available at **support.microsoft.com** resolves this issue.

Issue	Resolution
The OpsMgr 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 issue.
OpsMgr 2007 R2 cannot receive SNMP trap data when you use a Microsoft Windows Server 2008-based computer or a Microsoft Windows Vista-based computer as a proxy agent for SNMP devices.	Microsoft **KB958936** available at **support.microsoft.com** resolves this issue.
Tables in Alert KB are shown without borders.	Right-click an alert and select **Properties** in the **Alerts** pane to view the tables with borders in the **Alert Properties** window.