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# Management Guide

## NetIQ® AppManager® for Dell OpenManage

September 2019

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# About this Book and the Library

The NetIQ AppManager product (AppManager) is a comprehensive solution for managing, diagnosing, and analyzing performance, availability, and health for a broad spectrum of operating environments, applications, services, and server hardware.

AppManager provides system administrators with a central, easy-to-use console to view critical server and application resources across the enterprise. With AppManager, administrative staff can monitor computer and application resources, check for potential problems, initiate responsive actions, automate routine tasks, and gather performance data for real-time and historical reporting and analysis.

## Intended Audience

This guide provides information for individuals responsible for installing an AppManager module and monitoring specific applications with AppManager.

## Other Information in the Library

The library provides the following information resources:

### **Installation Guide for AppManager**

Provides complete information about AppManager pre-installation requirements and step-by-step installation procedures for all AppManager components.

### **User Guide for AppManager Control Center**

Provides complete information about managing groups of computers, including running jobs, responding to events, creating reports, and working with Control Center. A separate guide is available for the AppManager Operator Console.

### **Administrator Guide for AppManager**

Provides information about maintaining an AppManager management site, managing security, using scripts to handle AppManager tasks, and leveraging advanced configuration options.

### **Upgrade and Migration Guide for AppManager**

Provides complete information about how to upgrade from a previous version of AppManager.

### **Management guides**

Provide information about installing and monitoring specific applications with AppManager.

### **Help**

Provides context-sensitive information and step-by-step guidance for common tasks, as well as definitions for each field on each window.

The AppManager library is available in Adobe Acrobat (PDF) format from the [AppManager Documentation](#) page of the NetIQ Web site.





# About NetIQ Corporation

We are a global, enterprise software company, with a focus on the three persistent challenges in your environment: Change, complexity and risk—and how we can help you control them.

## Our Viewpoint

### **Adapting to change and managing complexity and risk are nothing new**

In fact, of all the challenges you face, these are perhaps the most prominent variables that deny you the control you need to securely measure, monitor, and manage your physical, virtual, and cloud computing environments.

### **Enabling critical business services, better and faster**

We believe that providing as much control as possible to IT organizations is the only way to enable timelier and cost effective delivery of services. Persistent pressures like change and complexity will only continue to increase as organizations continue to change and the technologies needed to manage them become inherently more complex.

## Our Philosophy

### **Selling intelligent solutions, not just software**

In order to provide reliable control, we first make sure we understand the real-world scenarios in which IT organizations like yours operate — day in and day out. That's the only way we can develop practical, intelligent IT solutions that successfully yield proven, measurable results. And that's so much more rewarding than simply selling software.

### **Driving your success is our passion**

We place your success at the heart of how we do business. From product inception to deployment, we understand that you need IT solutions that work well and integrate seamlessly with your existing investments; you need ongoing support and training post-deployment; and you need someone that is truly easy to work with — for a change. Ultimately, when you succeed, we all succeed.

## Our Solutions

- ◆ Identity & Access Governance
- ◆ Access Management
- ◆ Security Management
- ◆ Systems & Application Management
- ◆ Workload Management
- ◆ Service Management

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## Contacting the Online User Community

NetIQ Communities, the NetIQ online community, is a collaborative network connecting you to your peers and NetIQ experts. By providing more immediate information, useful links to helpful resources, and access to NetIQ experts, NetIQ Communities helps ensure you are mastering the knowledge you need to realize the full potential of IT investments upon which you rely. For more information, visit [community.netiq.com](http://community.netiq.com).

# 1 Introducing AppManager for Dell OpenManage

AppManager for Dell OpenManage helps you easily monitor the health and availability of your servers for maximum performance. Featuring monitoring and analyzing tools, this module provides comprehensive functionality and a flexible interface. This version of AppManager for Dell OpenManage offers significant enhancements over the previous versions. It enables more efficient systems monitoring, both locally and remotely.

This module allows you to manage hardware components in your IT infrastructure. In addition to providing support and optimizing performance, this module ensures availability through automated event detection and correction.

This module also maximizes server availability so your enterprise performs at top levels, ensuring business functions remain online. Graphs and reports of key server trends provide up-to-date data so you can proactively solve incidents and decrease application downtime. AppManager also enables you to monitor server attributes and easily manage your hardware from a single console.

Finally, AppManager for Dell OpenManage provides comprehensive management of your Dell OpenManage infrastructure by monitoring events and collecting data for analysis.

The Dell OpenManage Knowledge Scripts allows you to monitor the following data:

- ◆ Adapter SCSI subsystem on a server
- ◆ Amperage level for a server
- ◆ Array logical drives status on servers
- ◆ Array physical drives status on servers
- ◆ Embedded Systems Management (ESM) Event Log for system hardware errors or events
- ◆ Fan status
- ◆ Server-related service
- ◆ Memory devices global status
- ◆ Network interface transmission errors
- ◆ Network interface status
- ◆ Redundancy of power supplies
- ◆ Power supplies
- ◆ Server's thermal environment
- ◆ Voltage level for a server

Using a set of AppManager-specific Report Scripts, you can generate the following reports:

- ◆ Amperage levels for servers
- ◆ Status of the array logical drives and physical drives on servers
- ◆ Status of individual fans
- ◆ Network interface transmission errors

- ◆ Server's thermal environment
- ◆ Voltage levels for servers

The Knowledge Scripts for AppManager for Dell OpenManage raise events in the AppManager Operator Console or Control Center when problems arise. The Knowledge Scripts collect information you can use for data analysis and reporting.

AppManager provides a single location from which you can manage your implementation of AppManager. From the AppManager Operator Console or Control Center, you can monitor the health and activity of your AppManager servers, such as CPU and memory usage. In addition to monitoring, the Operator Console and Control Center provide the means to initiate responsive actions like restarting a stopped service, or paging the necessary personnel when problems arise. You can also use the tools available in the Operator Console and Control Center to generate and view reports based on AppManager information.

# 2 Installing AppManager for Dell OpenManage

This chapter provides installation instructions and describes system requirements for AppManager for Dell OpenManage.

This chapter assumes you have AppManager installed. For more information about installing AppManager or about AppManager system requirements, see the *Installation Guide for AppManager*, which is available on the [AppManager Documentation](#) page.

## 2.1 System Requirements

For the latest information about supported software versions and the availability of module updates, visit the [AppManager Supported Products](#) page. Unless noted otherwise, this module supports all updates, hotfixes, and service packs for the releases listed below.

AppManager for Dell OpenManage has the following system requirements:

Software/Hardware	Version
NetIQ AppManager installed on the AppManager repository (QDB) computers, on the Dell OpenManage computers you want to monitor (agents), and on all console computers	8.0.3, 8.2, 9.1, 9.2, 9.5, or later One of the following AppManager agents are required: <ul style="list-style-type: none"><li>◆ AppManager agent 7.0.4 with hotfix 72616 or later</li><li>◆ AppManager agent 8.0.3, 8.2, 9.1, 9.2, 9.5, or later</li></ul>
Microsoft Windows operating system on the agent computers	One of the following: <ul style="list-style-type: none"><li>◆ Windows Server 2016</li><li>◆ Windows Server 2012 R2</li><li>◆ Windows Server 2012</li><li>◆ Windows Server 2008 R2</li><li>◆ Windows Server 2008 (32-bit or 64-bit)</li></ul>
Dell OpenManage on the agent computers	9.2, 8.5, 8.4, 8.1, 8.0, 7.x, 6.x, or 5.x
Integrated Dell Remote Access Controller (iDRAC)	2.60.60.60
Microsoft Windows SNMP service	1 or 2
AppManager for Microsoft Windows module installed on the AppManager repository (QDB) computer, on the Dell OpenManage computers you want to monitor (agents), and on all console computers	7.6.170.0 or later

Software/Hardware	Version
Microsoft SQL Server Native Client 11.0 (for TLS 1.2 support)	11.3.6538.0 or later <b>NOTE:</b> The SQL Server Native client can be installed from this <a href="#">Microsoft download link</a> .

**NOTE:** If you want TLS 1.2 support and are running AppManager 9.1 or 9.2, then you are required to perform some additional steps. To know about the steps, see the [article](#).

## 2.2 Installing the Module

Run the module installer on the proxy or Dell OpenManage computers you want to monitor (agents) to install the agent components, and run the module installer on all console computers to install the Help and console extensions.

Access the `AM70-Dell-8.x.x.0.msi` module installer from the `AM70-Dell-8.x.x.0` self-extracting installation package on the [AppManager Module Upgrades & Trials](#) page.

For Windows environments where User Account Control (UAC) is enabled, install the module using an account with administrative privileges. Use one of the following methods:

- ◆ Log in to the server using the account named Administrator. Then, run the module installer `Dell.msi` file from a command prompt or by double-clicking it.
- ◆ Log in to the server as a user with administrative privileges and run the module installer `Dell.msi` file as an administrator from a command prompt. To open a command-prompt window at the administrative level, right-click a command-prompt icon or a Windows menu item and select **Run as administrator**.

You can install the Knowledge Scripts into local or remote AppManager repositories (QDBs). The module installer now installs Knowledge Scripts for each module directly into the QDB instead of to the `\AppManager\qdb\kp` folder as in previous releases of AppManager.

You can install the module manually, or you can use Control Center to deploy the module on a remote computer where an agent is installed. For more information, see [Section 2.3, “Deploying the Module with Control Center,” on page 15](#). However, if you do use Control Center to deploy the module, Control Center only installs the *agent* components of the module. The module installer installs the QDB and console components as well as the agent components on the agent computer.

### To install the module manually:

- 1 Double-click the module installer `.msi` file.
- 2 Accept the license agreement.
- 3 Review the results of the pre-installation check. You can expect one of the following three scenarios:
  - ◆ **No AppManager agent is present:** In this scenario, the pre-installation check fails, and the installer does not install agent components.
  - ◆ **An AppManager agent is present, but some other prerequisite fails:** In this scenario, the default is to not install agent components because of one or more missing prerequisites. However, you can override the default by selecting **Install agent component locally**. A missing application server for this particular module often causes this scenario. For example, installing the AppManager for Microsoft SharePoint module requires the presence of a Microsoft SharePoint server on the selected computer.

- ♦ **All prerequisites are met:** In this scenario, the installer installs the agent components.
- 4 To install the Knowledge Scripts into the QDB:
    - 4a Select **Install Knowledge Scripts** to install the repository components, including the Knowledge Scripts, object types, and SQL stored procedures.
    - 4b Specify the SQL Server name of the server hosting the QDB, as well as the case-sensitive QDB name.
  - 5 (Conditional) If you use Control Center 7.x, run the module installer for each QDB attached to Control Center.
  - 6 (Conditional) If you use Control Center 8.x or later, run the module installer only for the primary QDB. Control Center automatically replicates this module to secondary QDBs.
  - 7 Run the module installer on all console computers to install the Help and console extensions.
  - 8 Run the module installer on the Dell OpenManage computers you want to monitor (agents) to install the agent components.
  - 9 (Conditional) If you have not discovered Dell OpenManage resources, run the `Discovery_Dell Knowledge Script` on all agent computers where you installed the module. For more information, see [Section 2.5, “Discovering Dell OpenManage or iDRAC Resources,” on page 17](#).
  - 10 To get the updates provided in this release, upgrade any running Knowledge Script jobs. For more information, see [Section 2.7, “Upgrading Knowledge Script Jobs,” on page 19](#).

After the installation has completed, the `Dell_Install.log` file, located in the `\NetIQ\Temp\NetIQ_Debug\<ServerName>` folder, lists any problems that occurred.

## 2.3 Deploying the Module with Control Center

You can use Control Center to deploy the module on a remote computer where an agent is installed. This topic briefly describes the steps involved in deploying a module and provides instructions for checking in the module installation package. For more information, see the *Control Center User Guide for AppManager*, which is available on the [AppManager Documentation](#) page.

### 2.3.1 Deployment Overview

This section describes the tasks required to deploy the module on an agent computer.

#### To deploy the module on an agent computer:

- 1 Verify the default deployment credentials.
- 2 Check in an installation package. For more information, see [Section 2.3.2, “Checking In the Installation Package,” on page 16](#).
- 3 Configure an email address to receive notification of a deployment.
- 4 Create a deployment rule or modify an out-of-the-box deployment rule.
- 5 Approve the deployment task.
- 6 View the results.

## 2.3.2 Checking In the Installation Package

You must check in the installation package, `AM70-Dell-8.x.x.0.xml`, before you can deploy the module on an agent computer.

**To check in a module installation package:**

- 1 Log in to Control Center using an account that is a member of a user group with deployment permissions.
- 2 Navigate to the **Deployment** tab (for AppManager 8.x or later) or **Administration** tab (for AppManager 7.x).
- 3 In the Deployment folder, select **Packages**.
- 4 On the Tasks pane, click **Check in Deployment Packages** (for AppManager 8.x or later) or **Check in Packages** (for AppManager 7.x).
- 5 Navigate to the folder where you saved `AM70-Dell-8.x.x.0.xml` and select the file.
- 6 Click **Open**. The Deployment Package Check in Status dialog box displays the status of the package check in.
- 7 To get the updates provided in this release, upgrade any running Knowledge Script jobs. For more information, see [Section 2.7, "Upgrading Knowledge Script Jobs," on page 19](#).

## 2.4 Silently Installing the Module

To silently (without user intervention) install a module, create an initialization file (`.ini`) for this module that includes the required property names and values to use during the installation.

**To create and use an initialization file for a silent installation:**

- 1 Create a new text file and change the filename extension from `.txt` to `.ini`.
- 2 To specify the community string required to access hardware resources, include the following text in the `.ini` file:

```
MO_CommunityString=string name
```

where *string name* is the name of the community string, such as `public`.

- 3 Save and close the `.ini` file.
- 4 Run the following command from the folder in which you saved the module installer:

```
msiexec.exe /i "AM70-Dell-8.x.x.0.msi" /qn MO_CONFIGOUTINI="full path to the initialization file"
```

where *x.x* is the actual version number of the module installer.

To create a log file that describes the operations of the module installer, add the following flag to the command noted above:

```
/L* "AM70-Dell-8.x.x.0.msi.log"
```

The log file is created in the folder in which you saved the module installer.



## 2.5 Discovering Dell OpenManage or iDRAC Resources

Use the Discovery\_Dell Knowledge Script to discover Dell server configuration and resources. This Knowledge Script requires SNMP and the Dell OpenManage agent, that is, Hardware Instrumentation Program (HIP), to be running on the computer you are discovering. If a required service is not found or is not running, the Discovery job fails with a Not a Dell server event.

Run Discovery\_Dell on Dell server objects. By default, this script is only run once for each computer.

Use the Discovery\_Dell Knowledge Script to discover Dell server configuration and resources. This Knowledge Script requires SNMP and the Dell OpenManage agent (Hardware Instrumentation Program or HIP) to be running on the computer you are discovering. If a required service is not found or is not running, the Discovery job fails with a “Not a Dell server” event.

By default, this script is only run once for each computer.

Set the **Values** tab parameters as needed.

Description	How To Set It
Raise event if discovery succeeds?	This Knowledge Script always raises an event when the job fails for any reason. In addition, you can set this parameter to y to raise an event when the job succeeds. The default is n.
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-IDRAC resources:</p> <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or IDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> <p>If community string is not configured in the security manager, then by default, <code>Public</code> will be used as the community string.</p>
Event severity when discovery...	<p>Set the event severity level, from 1 to 40, to reflect the importance when the job:</p> <ul style="list-style-type: none"><li>◆ <b>...succeeds.</b> If you set this Knowledge Script to raise an event when the job succeeds, set the event severity level for a successful discovery. The default is 25.</li><li>◆ <b>...partially succeeds.</b> Set the event severity level for a discovery that returns some data but also generates warning messages. The default is 10.</li><li>◆ <b>...fails.</b> The default is 5.</li><li>◆ <b>...is not applicable.</b> Set the event severity level for a discovery that fails when the target computer does not have a Dell Server installed. The default is 15.</li></ul> <p><b>NOTE:</b> If the required services, such as SNMP or Dell OpenManage HIP are not running on the computer you are discovering, you might see a severity 15 event (Not a Dell server). If you see this type of event, see the detail message for more information about what caused the discovery to fail.</p>
<b>Discovery options</b>	

Description	How To Set It
Discover only physical interfaces (for Dell OpenManage)?	<p>Select Yes to only discover interfaces associated with the physical NIC cards that are on the target computer.</p> <p>Microsoft Windows Server 2008 and Microsoft Windows Server 2008 R2 provide virtual interfaces, which are interfaces that are not associated with a physical NIC card. Other software programs, such as VMware, also provide virtual interfaces to emulate NIC cards.</p> <p>If you do not select this parameter, AppManager discovers physical and virtual interfaces.</p> <p>The default is selected, which results in discovering only physical NIC cards and not discovering virtual interfaces.</p>
<b>Discover using IDRAC?</b>	Select Yes to use IDRAC resources. The default is unselected.
Comma separated list of servers to discover	<p>You can use this parameter to provide IP addresses of Dell-IDRAC resources. Use commas to separate more than one name or address.</p> <p>For example:</p> <p>10.71.112.101,10.71.112.102</p>

## 2.6 Permissions for Running Knowledge Scripts

AppManager for Dell OpenManage requires that the NetIQ AppManager Client Resource Monitor (`netiqmc`) and the NetIQ AppManager Client Communication Manager (`netiqccm`) agent services have the following permissions:

- ◆ Ability to log on as a service
- ◆ Membership in the Domain Admin Group

By default, the setup program configures the agent to use the Windows Local System account.

### To update the agent services:

- 1 Start the Services Administrative Tool. You can open the Administrative Tools folder in the Control Panel.
- 2 Right-click the **NetIQ AppManager Client Communication Manager** (`netiqccm`) service in the list of services, and select **Properties**.
- 3 On the Logon tab, specify the appropriate account to use.
- 4 Click **OK**.
- 5 Repeat steps 2 through 4 for the **NetIQ AppManager Client Resource Monitor** (`netiqmc`) service.
- 6 Restart both services.

## 2.7 Upgrading Knowledge Script Jobs

If you are using AppManager 8.x or later, the module upgrade process now *retains* any changes you might have made to the parameter settings for the Knowledge Scripts in the previous version of this module. Before AppManager 8.x, the module upgrade process *overwrote* any settings you might have made, changing the settings back to the module defaults.

As a result, if this module includes any changes to the default values for any Knowledge Script parameter, the module upgrade process ignores those changes and retains all parameter values that you updated. Unless you review the management guide or the online Help for that Knowledge Script, you will not know about any changes to default parameter values that came with this release.

You can push the changes for updated scripts to running Knowledge Script jobs in one of the following ways:

- ◆ Use the AMAdmin\_UpgradeJobs Knowledge Script.
- ◆ Use the Properties Propagation feature.

### 2.7.1 Running AMAdmin\_UpgradeJobs

The AMAdmin\_UpgradeJobs Knowledge Script can push changes to running Knowledge Script jobs. Your AppManager repository (QDB) must be at version 7.0 or later. Upgrading jobs to use the most recent script version allows the jobs to take advantage of the latest script logic while maintaining existing parameter values for the job.

For more information, see the **Help** for the AMAdmin\_UpgradeJobs Knowledge Script.

### 2.7.2 Propagating Knowledge Script Changes

You can propagate script changes to jobs that are running and to Knowledge Script Groups, including recommended Knowledge Script Groups and renamed Knowledge Scripts.

Before propagating script changes, verify that the script parameters are set to your specifications. You might need to appropriately set new parameters for your environment or application.

If you are not using AppManager 8.x or later, customized script parameters might have reverted to default parameters during the installation of the module.

You can choose to propagate only properties (specified in the **Schedule** and **Values** tabs), only the script (which is the logic of the Knowledge Script), or both. Unless you know specifically that changes affect only the script logic, you should propagate the properties and the script.

For more information about propagating Knowledge Script changes, see the “Running Monitoring Jobs” chapter of the *Control Center User Guide for AppManager*.

## 2.7.3 Propagating Changes to Ad Hoc Jobs or Knowledge Script Groups

You can propagate the properties and the logic (script) of a Knowledge Script to ad hoc jobs started by that Knowledge Script. Corresponding jobs are stopped and restarted with the Knowledge Script changes.

You can also propagate the properties and logic of a Knowledge Script to corresponding Knowledge Script Group members. After you propagate script changes to Knowledge Script Group members, you can propagate the updated Knowledge Script Group members to associated running jobs. Any monitoring jobs started by a Knowledge Script Group member are restarted with the job properties of the Knowledge Script Group member.

### To propagate changes to ad hoc Knowledge Script jobs or Knowledge Script Groups:

- 1 In the Knowledge Script view, select the Knowledge Script or Knowledge Script Group for which you want to propagate changes.
- 2 Right-click the script or group and select **Properties propagation > Ad Hoc Jobs**.
- 3 Select the components of the Knowledge Script that you want to propagate to associated ad hoc jobs or groups and click **OK**:

Select	To propagate
Script	The logic of the Knowledge Script.
Properties	Values from the Knowledge Script Schedule and Values tabs, such as schedule, monitoring values, actions, and advanced options. If you are using AppManager 8.x or later, the module upgrade process now <i>retains</i> any changes you might have made to the parameter settings for the Knowledge Scripts in the previous version of this module.

## 2.8 Configuring SNMP

You need to configure SNMP based on the type of server you are using:

### 2.8.1 Configuring SNMP for Dell Open Manage

If a Dell server needs to be monitored using Dell OpenManage, then AppManager requires SNMP access to the Dell OpenManage computers to monitor hardware resources. Configure SNMP community string information in AppManager Security Manager to allow access to the Dell OpenManage computer.

On the SNMP tab of Security Manager, type the appropriate read-only community string value, such as `private` or `public`, for the Dell OpenManage computers you want to monitor.

## 2.8.2 Configuring SNMP for iDRAC Resources

If a Dell server needs to be monitored using iDRAC, then AppManager requires SNMP access to the Dell-iDRAC to monitor hardware resources. Configure SNMP community string information in AppManager Security Manager to allow access to the Dell iDRAC resources or by default it will use `public` as community string.

On the Custom tab of Security Manager, type the appropriate read-only community string value, such as `private` or `public`, for the Dell OpenManage computers you want to monitor.

See the table below:

Field	Description
Label	Dell-iDRAC
Sub-label	Indicate whether the community string information will be used for a single device or for all devices: <ul style="list-style-type: none"><li>◆ For a single device, type the &lt;IP Address&gt;</li><li>◆ For all devices, type <code>default</code></li></ul>
Value 1	The appropriate community string value, such as <code>private</code> or <code>public</code> .



# 3 Dell OpenManage Knowledge Scripts

The AppManager for Dell OpenManage module provides the following Knowledge Scripts for monitoring Dell PowerEdge servers that run Dell OpenManage.

From the Knowledge Script view of Control Center, you can access more information about any NetIQ-supported Knowledge Script by selecting it and clicking **Help**. In the Operator Console, click any Knowledge Script in the Knowledge Script pane and press **F1**.

Knowledge Script	What It Does
<a href="#">AdapterSCSI</a>	Monitors the status of the Adapter SCSI subsystem on Dell servers.
<a href="#">AmperageProbe</a>	Monitors the amperage level for a Dell server.
<a href="#">ArrayLogicalDrive</a>	Monitors the status of the array logical drives on Dell servers.
<a href="#">ArrayPhysicalDrive</a>	Monitors the status of the array physical drives on Dell servers.
<a href="#">EventLog</a>	Monitors the Dell Embedded Systems Management (ESM) Event Log for system hardware errors or events.
<a href="#">FanProbe</a>	Monitors the status of individual fans.
<a href="#">HealthCheck</a>	Monitors all Dell server-related services.
<a href="#">MemCheck</a>	Monitors the global status of the Dell memory devices.
<a href="#">NICError</a>	Monitors network interface transmission errors.
<a href="#">NICFail</a>	Monitors the status of the network interface.
<a href="#">PowerRedundancy</a>	Monitors the redundancy status of Dell power supplies.
<a href="#">PowerSupply</a>	Monitors the status of the Dell power supplies.
<a href="#">Report_AmperageProbe</a>	Generates a report about the amperage levels for Dell servers.
<a href="#">Report_ArrayLogicalDrives</a>	Generates a report about the status of the array logical drives on Dell servers.
<a href="#">Report_ArrayPhysicalDrives</a>	Generates a report about the status of the array physical drives on Dell servers.
<a href="#">Report_FanProbe</a>	Generates a report about the status of individual fans.
<a href="#">Report_NICErrorRate</a>	Generates a report about network interface transmission errors.
<a href="#">Report_TemperatureProbe</a>	Generates a report about the Dell server's thermal environment.
<a href="#">Report_VoltageProbe</a>	Generates a report about the voltage levels for Dell servers.
<a href="#">TempProbe</a>	Monitors the Dell server's thermal environment.
<a href="#">VoltageProbe</a>	Monitors the voltage level for a Dell server.

## 3.1 AdapterSCSI

Use this Knowledge Script to monitor the status of the Adapter SCSI subsystem on Dell servers. If the subsystem is not operational, an event is raised. The Dell server defines the characteristics of normal operation, degraded operation, and subsystem failure.

### 3.1.1 Resource Object

Adapter SCSI icon

### 3.1.2 Default Schedule

The default interval is **Every 10 minutes**.

### 3.1.3 Setting Parameter Values

Set the following parameters as needed.

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**NOTE:** Dell hardware monitoring using iDRAC is not applicable for this Knowledge Script.

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Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script returns: <ul style="list-style-type: none"><li>◆ <b>100</b> if the SCSI subsystem is operating properly.</li><li>◆ <b>50</b> if the SCSI operation has degraded.</li><li>◆ <b>0</b> if the SCSI subsystem has failed.</li></ul> The default is <b>n</b> .
Community	Set the community string in Security Manager for Dell OpenManage server Agent: <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.
Raise only one event if SNMP down?	Set to <b>y</b> to only raise a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node fails. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when SCSI subsystem critical condition	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SCSI subsystem is in critical condition. The default is 10.



Description	How To Set It
Event severity when SCSI subsystem degraded condition	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SCSI subsystem is in a degraded condition. The default is 20.

## 3.2 AmperageProbe

Use this Knowledge Script to monitor the amperage level for a Dell server. This Knowledge Script raises an event if the amperage drops below or exceeds the normal operating threshold. The Dell server defines the amperage levels for normal and degraded operation.

### 3.2.1 Resource Object

Amperage icon

### 3.2.2 Default Schedule

The default interval is **Every 10 minutes**.

### 3.2.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script records the amperage at each monitoring interval. The default is <b>n</b> .
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"> <li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, "Configuring SNMP," of Management Guide to know how to configure the security manager.</li> </ul> <p>If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.</p>
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which SNMP or Dell Managed Node fails. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when amperage exceeded normal threshold	Set the event severity, from 1 to 40, to indicate the importance of an event in which the amperage exceeded the normal threshold. The default is 10.
Event severity when amperage degraded	Set the event severity, from 1 to 40, to indicate the importance of an event in which the amperage is at a level for degraded operation. The default is 20.

Description	How To Set It
Event severity when amperage not known or not monitored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the amperage is not known or not monitored. The default is 30.

## 3.3 ArrayLogicalDrive

Use this Knowledge Script to monitor the status of the array logical drives on Dell servers. This Knowledge Script raises an event if the drive is not operational. The Dell server defines the characteristics of normal operation, degraded operation, and logical drive failure.

### 3.3.1 Resource Object

Array Logical Drive icon

### 3.3.2 Default Schedule

The default interval is **Every 10 minutes**.

### 3.3.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	<p>Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b>, this Knowledge Script returns:</p> <ul style="list-style-type: none"> <li>◆ <b>100</b> if the array logical drive is operating properly.</li> <li>◆ <b>50</b> if drive operation has degraded.</li> <li>◆ <b>0</b> if the array logical drive has failed.</li> </ul> <p>The default is <b>n</b>.</p>
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"> <li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, "Configuring SNMP," of Management Guide to know how to configure the security manager.</li> </ul> <p>If community string is not configured in the security manger, then by default, <code>public</code> will be used as the community string.</p>
Raise only one event if SNMP down?	Set to <b>y</b> to only raise a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node fails. The default is 10.

Description	How To Set It
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when array logical drive failed	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array logical drive fails. The default is 10.
Event severity when array logical drive degraded	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array logical drive is in a degraded condition. The default is 20.
Event severity when array logical drive rebuilding or recovering	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array logical drive is rebuilding or recovering. The default is 25.
Event severity when array logical drive offline	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array logical drive is offline. The default is 25.

## 3.4 ArrayPhysicalDrive

Use this Knowledge Script to monitor the status of the array physical drives on Dell servers. This Knowledge Script raises an event if the drive is not operational. The Dell server defines the characteristics of normal operation, degraded operation, and physical drive failure.

### 3.4.1 Resource Object

Array Physical Drive icon

### 3.4.2 Default Schedule

The default interval is **Every 10 minutes**.

### 3.4.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script returns: <ul style="list-style-type: none"> <li>◆ <b>100</b> if the array physical drive is operating properly.</li> <li>◆ <b>50</b> if drive operation has degraded.</li> <li>◆ <b>40</b> if the array physical drive is rebuilding or recovering.</li> <li>◆ <b>0</b> if the array physical drive has failed or has been removed.</li> </ul> <p>The default is <b>n</b>.</p>

Description	How To Set It
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"> <li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li> </ul> <p>If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.</p>
Raise only one event if SNMP down?	Set to <code>y</code> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <code>y</code> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node fails. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when array physical drive failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array physical drive fails. The default is 10.
Event severity when array physical drive degraded condition	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array physical drive is in a degraded condition. The default is 20.
Event severity when array physical drive removed	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array physical drive has been removed. The default is 15.
Event severity when array physical drive rebuilding or recovering	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array physical drive is rebuilding or recovering. The default is 25.
Event severity when array physical drive offline	Set the event severity, from 1 to 40, to indicate the importance of an event in which the array physical drive is offline. The default is 25.

## 3.5 EventLog

Use this Knowledge Script to monitor the Dell Embedded Systems Management (ESM) Event Log for system hardware errors or events. This Knowledge Script raises an event for each new log entry since the previous iteration.

### 3.5.1 Resource Object

Dell Event Log

### 3.5.2 Default Schedule

The default interval is **Every 10 minutes**.

### 3.5.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Community	Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources: <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity when SNMP or Dell Server Agent failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Server Agent failed. The default is 9.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when hardware events detected	Set the event severity, from 1 to 40, to indicate the importance of an event in which hardware events were detected. The default is 8.

## 3.6 FanProbe

Use this Knowledge Script to monitor the status of individual fans. This Knowledge Script raises an event for each fan being monitored that is not operating properly or if its status is unknown.

### 3.6.1 Resource Object

Dell Fan icon

### 3.6.2 Default Schedule

The default interval is **Every 10 minutes**.

### 3.6.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .

Description	How To Set It
Collect data?	<p>Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b>, this Knowledge Script returns:</p> <ul style="list-style-type: none"> <li>◆ The number of revolutions per minute (rpm) of the fan.</li> <li>◆ The status of the fan at each interval. If the fan status is monitored, the script returns a value of 1 if the fan is On, or a value of 0 if the fan is Off.</li> </ul> <p>The default is <b>n</b>.</p>
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"> <li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, "Configuring SNMP," of Management Guide to know how to configure the security manager.</li> </ul> <p>If community string is not configured in the security manager, then by default, <code>Public</code> will be used as the community string.</p>
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP or Dell Managed Node failed. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when fan critical	Set the event severity, from 1 to 40, to indicate the importance of an event in which the fan has a status of critical. The default is 10.
Event severity when fan degraded	Set the event severity, from 1 to 40, to indicate the importance of an event in which the fan is in a degraded status. The default is 20.
Event severity when fan not known or not monitored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the status of the fan is not known or the fan is not monitored. The default is 20.

## 3.7 HealthCheck

Use this Knowledge Script to monitor all Dell server-related services. This Knowledge Script raises an event if any service is not running and automatically re-starts the stopped services. In addition, this Knowledge Script raises an event if SNMP is not operating or cannot get a MIB variable value.

### 3.7.1 Resource Objects

Dell server, any Dell Service icons

### 3.7.2 Default Schedule

The default interval is **Every 5 minutes**.

### 3.7.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script records the status of Dell server-related services. The default is <b>n</b> .
Community	Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources: <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.
Event severity when service down or cannot get MIB value	Set the event severity, from 1 to 40, to indicate the importance of an event in which the service is down or cannot get the MIB variable value. The default is 5.
<b>Dell Open Manage service</b>	
Auto-start service?	Set to <b>y</b> to automatically restart the stopped services. The default is <b>y</b> .
Event severity when service down; restart failed	Set the event severity, from 1 to 40, to indicate the importance of an event in which a service is down and restart failed. The default is 5.
Event severity when service down; restart succeeded	Set the event severity, from 1 to 40, to indicate the importance of an event in which a service is down and restart succeeded. The default is 25.
Event severity when service down; do not restart	Set the event severity, from 1 to 40, to indicate the importance of an event in which a service is down and will not be restarted. The default is 18.

## 3.8 MemCheck

Use this Knowledge Script to monitor the global status of Dell memory devices. This Knowledge Script raises an event if any memory device is not operational. The Dell server defines the conditions for normal operation internally.

### 3.8.1 Resource Object

Memory Check icon

### 3.8.2 Default Schedule

The default interval is **Every 10 minutes**.

## 3.8.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script returns the status of memory devices at each monitoring interval: <ul style="list-style-type: none"><li>◆ <b>100</b> if memory devices are operating properly.</li><li>◆ <b>50</b> if operation has degraded.</li><li>◆ <b>0</b> if memory devices have failed.</li></ul> The default is <b>n</b> .
Community	Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources: <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node failed. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when memory device failed	Set the event severity, from 1 to 40, to indicate the importance of an event in which the memory device failed. The default is 10.
Event severity when memory device degraded	Set the event severity, from 1 to 40, to indicate the importance of an event in which the memory device has a status of degraded. The default is 20.
Event severity when memory device not known or not monitored.	Set the event severity, from 1 to 40, to indicate the importance of an event in which the condition of the memory device is not known or not monitored. The default is 30.

## 3.9 NICError

Use this Knowledge Script to monitor network interface transmission errors. This Knowledge Script reports both input and output errors and compares them to respective thresholds. This Knowledge Script raises an event if the number of network interface errors per minute exceeds the set threshold.

### 3.9.1 Resource Object

Dell Network Interface icon



## 3.9.2 Default Schedule

The default interval is **Every 30 minutes**.

## 3.9.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script records the operational status of the network interface subsystem at each monitoring interval. The default is <b>n</b> .
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> <p>If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.</p>
Input errors per minute maximum threshold	Type a threshold for the maximum number of input errors per minute. The default is 2 errors per minute.
Output errors per minute maximum threshold	Type a threshold for the maximum number of output errors per minute. The default is 4 errors per minute.
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node failed. The default is 9.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when input errors per minute exceeded threshold	Set the event severity, from 1 to 40, to indicate the importance of an event in which input errors per minute exceeded the threshold. The default is 10.
Event severity when output errors per minute exceeded threshold	Set the event severity, from 1 to 40, to indicate the importance of an event in which output errors per minute exceeded threshold. The default is 10.

## 3.10 NICFail

Use this Knowledge Script to monitor the status of the network interface. This Knowledge Script checks whether the network interface subsystem is down when the administrator has indicated it should be in the up state. The event detail message includes the time at which the interface was discovered as down.

### 3.10.1 Resource Object

Dell Network Interface icon

### 3.10.2 Default Schedule

The default interval is **Every 5 minutes**.

### 3.10.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> <p>If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.</p>
Collect data?	<p>Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b>, this Knowledge Script returns the operational status of the network interface subsystem at each monitoring interval. The default is <b>n</b>.</p>
Raise event if NIC is disabled?	<p>Set to <b>y</b> to raise event if you choose to alert for a disabled NIC, else set to <b>n</b>. The default is <b>y</b>.</p>
Raise only one event if SNMP down?	<p>Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b>.</p>
Event severity for SNMP or Managed Node failure	<p>Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Managed Node failed. The default is 9.</p>
Event severity when SNMP restored	<p>Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.</p>
Event severity when network interface down	<p>Set the event severity, from 1 to 40, to indicate the importance of an event in which the network interface is down. The default is 6</p>

## 3.11 PowerRedundancy

Use this Knowledge Script to monitor the redundancy status of Dell power supplies. This Knowledge Script raises an event if power redundancy is not operational. The Dell server defines the characteristics of normal power redundancy, degraded redundancy, and redundancy failure.

### 3.11.1 Resource Object

Power Redundancy icon

## 3.11.2 Default Schedule

The default interval is **Every 10 minutes**.

## 3.11.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script returns: <ul style="list-style-type: none"><li>◆ <b>100</b> if the redundant power supply is operating properly.</li><li>◆ <b>50</b> if its operation has degraded.</li><li>◆ <b>0</b> if the redundant power supply has failed.</li></ul> The default is <b>n</b> .
Community	Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources: <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, "Configuring SNMP," of Management Guide to know how to configure the security manager.</li></ul> If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node failed. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when not redundant or status unknown	Set the event severity, from 1 to 40, to indicate the importance of an event in which the status of the power supply redundancy is not redundant or unknown. The default is 30.
Event severity when redundancy offline	Set the event severity, from 1 to 40, to indicate the importance of an event in which the status of the power supply redundancy is offline. The default is 20.
Event severity when redundancy degraded	Set the event severity, from 1 to 40, to indicate the importance of an event in which the status of the power supply redundancy is degraded. The default is 20.
Event severity when redundancy lost	Set the event severity, from 1 to 40, to indicate the importance of an event in which the status of the power supply redundancy is lost. The default is 10.

## 3.12 PowerSupply

Use this Knowledge Script to monitor the status of the Dell power supplies. This Knowledge Script raises an event if the power supply is not operational. The Dell server defines the status for normal, degraded, and failed operation.

### 3.12.1 Resource Object

Power Supply icon

### 3.12.2 Default Schedule

The default interval is **Every 10 minutes**.

### 3.12.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script returns: <ul style="list-style-type: none"><li>◆ <b>100</b> if the power supply is operating properly.</li><li>◆ <b>50</b> if its operation has degraded.</li><li>◆ <b>0</b> if the power supply has failed.</li></ul> The default is <b>n</b> .
Community	Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources: <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, "Configuring SNMP," of Management Guide to know how to configure the security manager.</li></ul> If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node failed. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 10.
Event severity when power supply failed	Set the event severity, from 1 to 40, to indicate the importance of an event in which the power supply failed. The default is 10.
Event severity when power supply degraded	Set the event severity, from 1 to 40, to indicate the importance of an event in which the power supply has a status of degraded. The default is 20.

## 3.13 Report\_AmperageProbe

Use this Dell\_Report script to generate a report about the amperage levels for Dell servers. You can use this report to make a statistical analysis of the data point values over the time range you define for the report.

The [AmperageProbe](#) Knowledge Script collects data for this report.

### 3.13.1 Resource Objects

Report agent

### 3.13.2 Default Schedule

The default schedule is **Run once**.

### 3.13.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
<b>Data source</b>	
Select computers	Select the computers for your report.
Select time range	Set a specific or sliding time range for data included in your report.
Select peak weekdays	Select the days of the week to include in your report.
Select the style	Select the style for the report: <ul style="list-style-type: none"><li>◆ <b>By computer</b> shows one value for each computer you selected.</li><li>◆ <b>By legend</b> shows one value for each different legend (the legend is a truncated form of the data stream legend visible in the Operator Console).</li><li>◆ <b>By computer and legend</b> shows one value for each unique legend from each computer.</li></ul>
<b>Data settings</b>	

Description	How To Set It
Statistics to show	<p>Select a statistical method by which to display data in the report:</p> <ul style="list-style-type: none"> <li>◆ <b>Average:</b> The average value of data points for the time range of the report.</li> <li>◆ <b>Minimum:</b> The minimum value of data points for the time range of the report.</li> <li>◆ <b>Maximum:</b> The maximum value of data points for the time range of the report.</li> <li>◆ <b>Min/Avg/Max:</b> The minimum, average, and maximum values of data points for the time range of the report.</li> <li>◆ <b>Range:</b> The range of values in the data stream (maximum - minimum = range).</li> <li>◆ <b>StandardDeviation:</b> The measure of how widely values are dispersed from the mean.</li> <li>◆ <b>Sum:</b> The total value of data points for the time range of the report.</li> <li>◆ <b>Close:</b> The last value for the time range of the report.</li> <li>◆ <b>Change:</b> The difference between the first and last values for the time range of the report (close - open = change).</li> <li>◆ <b>Count:</b> The number of data points for the time range of the report.</li> </ul>
Select sorting/display option	<p>Select whether data is sorted, or the method of display:</p> <ul style="list-style-type: none"> <li>◆ <b>No sort:</b> Data is not sorted.</li> <li>◆ <b>Sort:</b> Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right).</li> <li>◆ <b>Top%:</b> Chart only the top N% of selected data (sorted by default).</li> <li>◆ <b>Top N:</b> Chart only the top N of selected data (sorted by default).</li> <li>◆ <b>Bottom%:</b> Chart only the bottom N% of data (sorted by default).</li> <li>◆ <b>Bottom N:</b> Chart only the bottom N of selected data (sorted by default).</li> </ul>
Percentage/count for top/bottom	<p>Type a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.</p>
Truncate top/bottom?	<p>If set to <b>yes</b>, then the data table shows only the top or bottom N or % (for example, only the top 10%). Otherwise, the table shows all data.</p> <p>The default is no.</p>
Show totals on the table?	<p>If set to <b>yes</b>, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:</p> <ul style="list-style-type: none"> <li>◆ <b>Report Average:</b> An average of all values in a column.</li> <li>◆ <b>Report Minimum:</b> The minimum value in a column.</li> <li>◆ <b>Report Maximum:</b> The maximum value in a column.</li> <li>◆ <b>Report Total:</b> The total of all values in a column.</li> </ul> <p>The default is no.</p>
<b>Report settings</b>	

Description	How To Set It
Include parameter help card?	Set to <b>yes</b> to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to <b>yes</b> to include a table of data stream values in the report. The default is yes.
Include chart?	Set to <b>yes</b> to include a chart of data stream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set properties for the output folder.
Add job ID to output folder name?	Set to <b>yes</b> to append the job ID to the name of the output folder.  A job ID helps you correlate a specific instance of a Report Script with the corresponding report.  The default is no.
Select properties	Set the miscellaneous report properties.
Add time stamp to title?	Set to <b>yes</b> to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.  A time stamp lets you run consecutive iterations of the same report without overwriting previous output.  The default is no.
<b>Event notification</b>	
Event for report success?	Set to <b>yes</b> to raise an event when the report is successfully generated. The default is yes.
Event severity for report success	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report is successfully generated. The default is 35.
Event severity for report with no data	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report contains no data. The default is 25.
Event severity for report failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report failed to generate. The default is 5.

## 3.14 Report\_ArrayLogicalDrives

Use this Dell\_Report script to generate a report about the status of the array logical drives on Dell servers. You can use this report to make a statistical analysis of the data point values over the time range you define for the report.

The [ArrayLogicalDrive](#) Knowledge Script collects data for this report.

### 3.14.1 Resource Objects

Report agent

## 3.14.2 Default Schedule

The default schedule is **Run once**.

## 3.14.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
<b>Data source</b>	
Select computers	Select the computers for your report.
Select time range	Set a specific or sliding time range for data included in your report.
Select peak weekdays	Select the days of the week to include in your report.
Select the style	Select the style for the report: <ul style="list-style-type: none"><li>◆ <b>By computer</b> shows one value for each computer you selected.</li><li>◆ <b>By legend</b> shows one value for each different legend (the legend is a truncated form of the data stream legend visible in the Operator Console).</li><li>◆ <b>By computer and legend</b> shows one value for each unique legend from each computer.</li></ul>
<b>Data settings</b>	
Statistics to show	Select a statistical method by which to display data in the report: <ul style="list-style-type: none"><li>◆ <b>Average</b>: The average value of data points for the time range of the report.</li><li>◆ <b>Minimum</b>: The minimum value of data points for the time range of the report.</li><li>◆ <b>Maximum</b>: The maximum value of data points for the time range of the report.</li><li>◆ <b>Min/Avg/Max</b>: The minimum, average, and maximum values of data points for the time range of the report.</li><li>◆ <b>Range</b>: The range of values in the data stream (maximum - minimum = range).</li><li>◆ <b>StandardDeviation</b>: The measure of how widely values are dispersed from the mean.</li><li>◆ <b>Sum</b>: The total value of data points for the time range of the report.</li><li>◆ <b>Close</b>: The last value for the time range of the report.</li><li>◆ <b>Change</b>: The difference between the first and last values for the time range of the report (close - open = change).</li><li>◆ <b>Count</b>: The number of data points for the time range of the report.</li></ul>



Description	How To Set It
Select sorting/display option	<p>Select whether data is sorted, or the method of display:</p> <ul style="list-style-type: none"> <li>◆ <b>No sort:</b> Data is not sorted.</li> <li>◆ <b>Sort:</b> Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right).</li> <li>◆ <b>Top%:</b> Chart only the top N% of selected data (sorted by default).</li> <li>◆ <b>Top N:</b> Chart only the top N of selected data (sorted by default).</li> <li>◆ <b>Bottom%:</b> Chart only the bottom N% of data (sorted by default).</li> <li>◆ <b>Bottom N:</b> Chart only the bottom N of selected data (sorted by default).</li> </ul>
Percentage/count for top/bottom	Type a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	<p>If set to <b>yes</b>, then the data table shows only the top or bottom N or % (for example, only the top 10%). Otherwise, the table shows all data.</p> <p>The default is no.</p>
Show totals on the table?	<p>If set to <b>yes</b>, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:</p> <ul style="list-style-type: none"> <li>◆ <b>Report Average:</b> An average of all values in a column.</li> <li>◆ <b>Report Minimum:</b> The minimum value in a column.</li> <li>◆ <b>Report Maximum:</b> The maximum value in a column.</li> <li>◆ <b>Report Total:</b> The total of all values in a column.</li> </ul> <p>The default is no.</p>
<b>Report settings</b>	
Include parameter help card?	Set to <b>yes</b> to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to <b>yes</b> to include a table of data stream values in the report. The default is yes.
Include chart?	Set to <b>yes</b> to include a chart of data stream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set properties for the output folder.
Add job ID to output folder name?	<p>Set to <b>yes</b> to append the job ID to the name of the output folder.</p> <p>A job ID helps you correlate a specific instance of a Report Script with the corresponding report.</p> <p>The default is no.</p>
Select properties	Set the miscellaneous report properties.

Description	How To Set It
Add time stamp to title?	Set to <b>yes</b> to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.  A time stamp lets you run consecutive iterations of the same report without overwriting previous output.  The default is no.
<b>Event notification</b>	
Event for report success?	Set to <b>yes</b> to raise an event when the report is successfully generated. The default is yes.
Event severity for report success	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report is successfully generated. The default is 35.
Event severity for report with no data	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report contains no data. The default is 25.
Event severity for report failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report failed to generate. The default is 5.

## 3.15 Report\_ArrayPhysicalDrives

Use this Dell\_Report script to generate a report about the status of the array physical drives on Dell servers. You can use this report to make a statistical analysis of the data point values over the time range you define for the report.

The [ArrayPhysicalDrive](#) Knowledge Script collects data for this report.

### 3.15.1 Resource Objects

Report agent

### 3.15.2 Default Schedule

The default schedule is **Run once**.

### 3.15.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
<b>Data source</b>	
Select computers	Select the computers for your report.
Select time range	Set a specific or sliding time range for data included in your report.
Select peak weekdays	Select the days of the week to include in your report.

Description	How To Set It
Select the style	Select the style for the report: <ul style="list-style-type: none"> <li>◆ <b>By computer</b> shows one value for each computer you selected.</li> <li>◆ <b>By legend</b> shows one value for each different legend (the legend is a truncated form of the data stream legend visible in the Operator Console).</li> <li>◆ <b>By computer and legend</b> shows one value for each unique legend from each computer.</li> </ul>
<b>Data settings</b>	
Statistics to show	Select a statistical method by which to display data in the report: <ul style="list-style-type: none"> <li>◆ <b>Average:</b> The average value of data points for the time range of the report.</li> <li>◆ <b>Minimum:</b> The minimum value of data points for the time range of the report.</li> <li>◆ <b>Maximum:</b> The maximum value of data points for the time range of the report.</li> <li>◆ <b>Min/Avg/Max:</b> The minimum, average, and maximum values of data points for the time range of the report.</li> <li>◆ <b>Range:</b> The range of values in the data stream (maximum - minimum = range).</li> <li>◆ <b>StandardDeviation:</b> The measure of how widely values are dispersed from the mean.</li> <li>◆ <b>Sum:</b> The total value of data points for the time range of the report.</li> <li>◆ <b>Close:</b> The last value for the time range of the report.</li> <li>◆ <b>Change:</b> The difference between the first and last values for the time range of the report (close - open = change).</li> <li>◆ <b>Count:</b> The number of data points for the time range of the report.</li> </ul>
Select sorting/display option	Select whether data is sorted, or the method of display: <ul style="list-style-type: none"> <li>◆ <b>No sort:</b> Data is not sorted.</li> <li>◆ <b>Sort:</b> Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right).</li> <li>◆ <b>Top%:</b> Chart only the top N% of selected data (sorted by default).</li> <li>◆ <b>Top N:</b> Chart only the top N of selected data (sorted by default).</li> <li>◆ <b>Bottom%:</b> Chart only the bottom N% of data (sorted by default).</li> <li>◆ <b>Bottom N:</b> Chart only the bottom N of selected data (sorted by default).</li> </ul>
Percentage/count for top/bottom	Type a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	If set to <b>yes</b> , then the data table shows only the top or bottom N or % (for example, only the top 10%). Otherwise, the table shows all data.  The default is no.

Description	How To Set It
Show totals on the table?	<p>If set to <b>yes</b>, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:</p> <ul style="list-style-type: none"> <li>◆ <b>Report Average:</b> An average of all values in a column.</li> <li>◆ <b>Report Minimum:</b> The minimum value in a column.</li> <li>◆ <b>Report Maximum:</b> The maximum value in a column.</li> <li>◆ <b>Report Total:</b> The total of all values in a column.</li> </ul> <p>The default is no.</p>
<b>Report settings</b>	
Include parameter help card?	Set to <b>yes</b> to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to <b>yes</b> to include a table of data stream values in the report. The default is yes.
Include chart?	Set to <b>yes</b> to include a chart of data stream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set properties for the output folder.
Add job ID to output folder name?	<p>Set to <b>yes</b> to append the job ID to the name of the output folder.</p> <p>A job ID helps you correlate a specific instance of a Report Script with the corresponding report.</p> <p>The default is no.</p>
Select properties	Set the miscellaneous report properties.
Add time stamp to title?	<p>Set to <b>yes</b> to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.</p> <p>A time stamp lets you run consecutive iterations of the same report without overwriting previous output.</p> <p>The default is no.</p>
<b>Event notification</b>	
Event for report success?	Set to <b>yes</b> to raise an event when the report is successfully generated. The default is yes.
Event severity for report success	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report is successfully generated. The default is 35.
Event severity for report with no data	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report contains no data. The default is 25.
Event severity for report failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report failed to generate. The default is 5.

## 3.16 Report\_FanProbe

Use this Dell\_Report script to generate a report about the status of individual fans. You can use this report make a statistical analysis of the data point values over the time range you define for the report.

The [FanProbe](#) Knowledge Script collects data for this report.

### 3.16.1 Resource Objects

Report agent

### 3.16.2 Default Schedule

The default schedule is **Run once**.

### 3.16.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
<b>Data source</b>	
Select computers	Select the computers for your report.
Select time range	Set a specific or sliding time range for data included in your report.
Select peak weekdays	Select the days of the week to include in your report.
Select the style	Select the style for the report: <ul style="list-style-type: none"><li>◆ <b>By computer</b> shows one value for each computer you selected.</li><li>◆ <b>By legend</b> shows one value for each different legend (the legend is a truncated form of the data stream legend visible in the Operator Console).</li><li>◆ <b>By computer and legend</b> shows one value for each unique legend from each computer.</li></ul>
<b>Data settings</b>	

Description	How To Set It
Statistics to show	<p>Select a statistical method by which to display data in the report:</p> <ul style="list-style-type: none"> <li>◆ <b>Average:</b> The average value of data points for the time range of the report.</li> <li>◆ <b>Minimum:</b> The minimum value of data points for the time range of the report.</li> <li>◆ <b>Maximum:</b> The maximum value of data points for the time range of the report.</li> <li>◆ <b>Min/Avg/Max:</b> The minimum, average, and maximum values of data points for the time range of the report.</li> <li>◆ <b>Range:</b> The range of values in the data stream (maximum - minimum = range).</li> <li>◆ <b>StandardDeviation:</b> The measure of how widely values are dispersed from the mean.</li> <li>◆ <b>Sum:</b> The total value of data points for the time range of the report.</li> <li>◆ <b>Close:</b> The last value for the time range of the report.</li> <li>◆ <b>Change:</b> The difference between the first and last values for the time range of the report (close - open = change).</li> <li>◆ <b>Count:</b> The number of data points for the time range of the report.</li> </ul>
Select sorting/display option	<p>Select whether data is sorted, or the method of display:</p> <ul style="list-style-type: none"> <li>◆ <b>No sort:</b> Data is not sorted.</li> <li>◆ <b>Sort:</b> Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right).</li> <li>◆ <b>Top%:</b> Chart only the top N% of selected data (sorted by default).</li> <li>◆ <b>Top N:</b> Chart only the top N of selected data (sorted by default).</li> <li>◆ <b>Bottom%:</b> Chart only the bottom N% of data (sorted by default).</li> <li>◆ <b>Bottom N:</b> Chart only the bottom N of selected data (sorted by default).</li> </ul>
Percentage/count for top/bottom	<p>Type a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.</p>
Truncate top/bottom?	<p>If set to <b>yes</b>, then the data table shows only the top or bottom N or % (for example, only the top 10%). Otherwise, the table shows all data.</p> <p>The default is no.</p>
Show totals on the table?	<p>If set to <b>yes</b>, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:</p> <ul style="list-style-type: none"> <li>◆ <b>Report Average:</b> An average of all values in a column.</li> <li>◆ <b>Report Minimum:</b> The minimum value in a column.</li> <li>◆ <b>Report Maximum:</b> The maximum value in a column.</li> <li>◆ <b>Report Total:</b> The total of all values in a column.</li> </ul> <p>The default is no.</p>
<b>Report settings</b>	

Description	How To Set It
Include parameter help card?	Set to <b>yes</b> to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to <b>yes</b> to include a table of data stream values in the report. The default is yes.
Include chart?	Set to <b>yes</b> to include a chart of data stream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set properties for the output folder.
Add job ID to output folder name?	Set to <b>yes</b> to append the job ID to the name of the output folder.  A job ID helps you correlate a specific instance of a Report Script with the corresponding report.  The default is no.
Select properties	Set the miscellaneous report properties.
Add time stamp to title?	Set to <b>yes</b> to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.  A time stamp lets you run consecutive iterations of the same report without overwriting previous output.  The default is no.
<b>Event notification</b>	
Event for report success?	Set to <b>yes</b> to raise an event when the report is successfully generated. The default is yes.
Event severity for report success	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report is successfully generated. The default is 35.
Event severity for report with no data	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report contains no data. The default is 25.
Event severity for report failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report failed to generate. The default is 5.

## 3.17 Report\_NICErrorRate

Use this Dell\_Report script to generate a report about network interface transmission errors. You can use this report to make a statistical analysis of the data point values over the time range you define for the report.

The [NICError](#) Knowledge Script collects data for this report.

### 3.17.1 Resource Objects

Report agent

## 3.17.2 Default Schedule

The default schedule is **Run once**.

## 3.17.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
<b>Data source</b>	
Select computers	Select the computers for your report.
Select time range	Set a specific or sliding time range for data included in your report.
Select peak weekdays	Select the days of the week to include in your report.
Select the style	Select the style for the report: <ul style="list-style-type: none"><li>◆ <b>By computer</b> shows one value for each computer you selected.</li><li>◆ <b>By legend</b> shows one value for each different legend (the legend is a truncated form of the data stream legend visible in the Operator Console).</li><li>◆ <b>By computer and legend</b> shows one value for each unique legend from each computer.</li></ul>
<b>Data settings</b>	
Statistics to show	Select a statistical method by which to display data in the report: <ul style="list-style-type: none"><li>◆ <b>Average</b>: The average value of data points for the time range of the report.</li><li>◆ <b>Minimum</b>: The minimum value of data points for the time range of the report.</li><li>◆ <b>Maximum</b>: The maximum value of data points for the time range of the report.</li><li>◆ <b>Min/Avg/Max</b>: The minimum, average, and maximum values of data points for the time range of the report.</li><li>◆ <b>Range</b>: The range of values in the data stream (maximum - minimum = range).</li><li>◆ <b>StandardDeviation</b>: The measure of how widely values are dispersed from the mean.</li><li>◆ <b>Sum</b>: The total value of data points for the time range of the report.</li><li>◆ <b>Close</b>: The last value for the time range of the report.</li><li>◆ <b>Change</b>: The difference between the first and last values for the time range of the report (close - open = change).</li><li>◆ <b>Count</b>: The number of data points for the time range of the report.</li></ul>



Description	How To Set It
Select sorting/display option	<p>Select whether data is sorted, or the method of display:</p> <ul style="list-style-type: none"> <li>◆ <b>No sort:</b> Data is not sorted.</li> <li>◆ <b>Sort:</b> Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right).</li> <li>◆ <b>Top%:</b> Chart only the top N% of selected data (sorted by default).</li> <li>◆ <b>Top N:</b> Chart only the top N of selected data (sorted by default).</li> <li>◆ <b>Bottom%:</b> Chart only the bottom N% of data (sorted by default).</li> <li>◆ <b>Bottom N:</b> Chart only the bottom N of selected data (sorted by default).</li> </ul>
Percentage/count for top/bottom	Type a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	<p>If set to <b>yes</b>, then the data table shows only the top or bottom N or % (for example, only the top 10%). Otherwise, the table shows all data.</p> <p>The default is no.</p>
Show totals on the table?	<p>If set to <b>yes</b>, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:</p> <ul style="list-style-type: none"> <li>◆ <b>Report Average:</b> An average of all values in a column.</li> <li>◆ <b>Report Minimum:</b> The minimum value in a column.</li> <li>◆ <b>Report Maximum:</b> The maximum value in a column.</li> <li>◆ <b>Report Total:</b> The total of all values in a column.</li> </ul> <p>The default is no.</p>
<b>Report settings</b>	
Include parameter help card?	Set to <b>yes</b> to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to <b>yes</b> to include a table of data stream values in the report. The default is yes.
Include chart?	Set to <b>yes</b> to include a chart of data stream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set properties for the output folder.
Add job ID to output folder name?	<p>Set to <b>yes</b> to append the job ID to the name of the output folder.</p> <p>A job ID helps you correlate a specific instance of a Report Script with the corresponding report.</p> <p>The default is no.</p>
Select properties	Set the miscellaneous report properties.

Description	How To Set It
Add time stamp to title?	Set to <b>yes</b> to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.  A time stamp lets you run consecutive iterations of the same report without overwriting previous output.  The default is no.
<b>Event notification</b>	
Event for report success?	Set to <b>yes</b> to raise an event when the report is successfully generated. The default is yes.
Event severity for report success	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report is successfully generated. The default is 35.
Event severity for report with no data	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report contains no data. The default is 25.
Event severity for report failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report failed to generate. The default is 5.

## 3.18 Report\_TemperatureProbe

Use this Dell\_Report script to generate a report about the Dell server's thermal environment. You can use this report to make a statistical analysis of the data point values over the time range you define for the report.

The [TempProbe](#) Knowledge Script collect data for this report.

### 3.18.1 Resource Objects

Report agent

### 3.18.2 Default Schedule

The default schedule is **Run once**.

### 3.18.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
<b>Data source</b>	
Select computers	Select the computers for your report.
Select time range	Set a specific or sliding time range for data included in your report.
Select peak weekdays	Select the days of the week to include in your report.

Description	How To Set It
Select the style	<p>Select the style for the report:</p> <ul style="list-style-type: none"> <li>◆ <b>By computer</b> shows one value for each computer you selected.</li> <li>◆ <b>By legend</b> shows one value for each different legend (the legend is a truncated form of the data stream legend visible in the Operator Console).</li> <li>◆ <b>By computer and legend</b> shows one value for each unique legend from each computer.</li> </ul>
<b>Data settings</b>	
Statistics to show	<p>Select a statistical method by which to display data in the report:</p> <ul style="list-style-type: none"> <li>◆ <b>Average:</b> The average value of data points for the time range of the report.</li> <li>◆ <b>Minimum:</b> The minimum value of data points for the time range of the report.</li> <li>◆ <b>Maximum:</b> The maximum value of data points for the time range of the report.</li> <li>◆ <b>Min/Avg/Max:</b> The minimum, average, and maximum values of data points for the time range of the report.</li> <li>◆ <b>Range:</b> The range of values in the data stream (maximum - minimum = range).</li> <li>◆ <b>StandardDeviation:</b> The measure of how widely values are dispersed from the mean.</li> <li>◆ <b>Sum:</b> The total value of data points for the time range of the report.</li> <li>◆ <b>Close:</b> The last value for the time range of the report.</li> <li>◆ <b>Change:</b> The difference between the first and last values for the time range of the report (close - open = change).</li> <li>◆ <b>Count:</b> The number of data points for the time range of the report.</li> </ul>
Select sorting/display option	<p>Select whether data is sorted, or the method of display:</p> <ul style="list-style-type: none"> <li>◆ <b>No sort:</b> Data is not sorted.</li> <li>◆ <b>Sort:</b> Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right).</li> <li>◆ <b>Top%:</b> Chart only the top N% of selected data (sorted by default).</li> <li>◆ <b>Top N:</b> Chart only the top N of selected data (sorted by default).</li> <li>◆ <b>Bottom%:</b> Chart only the bottom N% of data (sorted by default).</li> <li>◆ <b>Bottom N:</b> Chart only the bottom N of selected data (sorted by default).</li> </ul>
Percentage/count for top/bottom	<p>Type a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.</p>
Truncate top/bottom?	<p>If set to <b>yes</b>, then the data table shows only the top or bottom N or % (for example, only the top 10%). Otherwise, the table shows all data.</p> <p>The default is no.</p>

Description	How To Set It
Show totals on the table?	<p>If set to <b>yes</b>, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:</p> <ul style="list-style-type: none"> <li>◆ <b>Report Average:</b> An average of all values in a column.</li> <li>◆ <b>Report Minimum:</b> The minimum value in a column.</li> <li>◆ <b>Report Maximum:</b> The maximum value in a column.</li> <li>◆ <b>Report Total:</b> The total of all values in a column.</li> </ul> <p>The default is no.</p>
<b>Report settings</b>	
Include parameter help card?	Set to <b>yes</b> to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to <b>yes</b> to include a table of data stream values in the report. The default is yes.
Include chart?	Set to <b>yes</b> to include a chart of data stream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set properties for the output folder.
Add job ID to output folder name?	<p>Set to <b>yes</b> to append the job ID to the name of the output folder.</p> <p>A job ID helps you correlate a specific instance of a Report Script with the corresponding report.</p> <p>The default is no.</p>
Select properties	Set the miscellaneous report properties.
Add time stamp to title?	<p>Set to <b>yes</b> to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.</p> <p>A time stamp lets you run consecutive iterations of the same report without overwriting previous output.</p> <p>The default is no.</p>
<b>Event notification</b>	
Event for report success?	Set to <b>yes</b> to raise an event when the report is successfully generated. The default is yes.
Event severity for report success	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report is successfully generated. The default is 35.
Event severity for report with no data	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report contains no data. The default is 25.
Event severity for report failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report failed to generate. The default is 5.

## 3.19 Report\_VoltageProbe

Use this Dell\_Report script to generate a report about the voltage levels for Dell servers. You can use this report to make a statistical analysis of the data point values over the time range you define for the report.

The [VoltageProbe](#) Knowledge Script collects data for this report.

### 3.19.1 Resource Objects

Report agent

### 3.19.2 Default Schedule

The default schedule is **Run once**.

### 3.19.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
<b>Data source</b>	
Select computers	Select the computers for your report.
Select time range	Set a specific or sliding time range for data included in your report.
Select peak weekdays	Select the days of the week to include in your report.
Select the style	Select the style for the report: <ul style="list-style-type: none"><li>◆ <b>By computer</b> shows one value for each computer you selected.</li><li>◆ <b>By legend</b> shows one value for each different legend (the legend is a truncated form of the data stream legend visible in the Operator Console).</li><li>◆ <b>By computer and legend</b> shows one value for each unique legend from each computer.</li></ul>
<b>Data settings</b>	

Description	How To Set It
Statistics to show	<p>Select a statistical method by which to display data in the report:</p> <ul style="list-style-type: none"> <li>◆ <b>Average:</b> The average value of data points for the time range of the report.</li> <li>◆ <b>Minimum:</b> The minimum value of data points for the time range of the report.</li> <li>◆ <b>Maximum:</b> The maximum value of data points for the time range of the report.</li> <li>◆ <b>Min/Avg/Max:</b> The minimum, average, and maximum values of data points for the time range of the report.</li> <li>◆ <b>Range:</b> The range of values in the data stream (maximum - minimum = range).</li> <li>◆ <b>StandardDeviation:</b> The measure of how widely values are dispersed from the mean.</li> <li>◆ <b>Sum:</b> The total value of data points for the time range of the report.</li> <li>◆ <b>Close:</b> The last value for the time range of the report.</li> <li>◆ <b>Change:</b> The difference between the first and last values for the time range of the report (close - open = change).</li> <li>◆ <b>Count:</b> The number of data points for the time range of the report.</li> </ul>
Select sorting/display option	<p>Select whether data is sorted, or the method of display:</p> <ul style="list-style-type: none"> <li>◆ <b>No sort:</b> Data is not sorted.</li> <li>◆ <b>Sort:</b> Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right).</li> <li>◆ <b>Top%:</b> Chart only the top N% of selected data (sorted by default).</li> <li>◆ <b>Top N:</b> Chart only the top N of selected data (sorted by default).</li> <li>◆ <b>Bottom%:</b> Chart only the bottom N% of data (sorted by default).</li> <li>◆ <b>Bottom N:</b> Chart only the bottom N of selected data (sorted by default).</li> </ul>
Percentage/count for top/bottom	<p>Type a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.</p>
Truncate top/bottom?	<p>If set to <b>yes</b>, then the data table shows only the top or bottom N or % (for example, only the top 10%). Otherwise, the table shows all data.</p> <p>The default is no.</p>
Show totals on the table?	<p>If set to <b>yes</b>, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:</p> <ul style="list-style-type: none"> <li>◆ <b>Report Average:</b> An average of all values in a column.</li> <li>◆ <b>Report Minimum:</b> The minimum value in a column.</li> <li>◆ <b>Report Maximum:</b> The maximum value in a column.</li> <li>◆ <b>Report Total:</b> The total of all values in a column.</li> </ul> <p>The default is no.</p>
<b>Report settings</b>	

Description	How To Set It
Include parameter help card?	Set to <b>yes</b> to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to <b>yes</b> to include a table of data stream values in the report. The default is yes.
Include chart?	Set to <b>yes</b> to include a chart of data stream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set properties for the output folder.
Add job ID to output folder name?	Set to <b>yes</b> to append the job ID to the name of the output folder.  A job ID helps you correlate a specific instance of a Report Script with the corresponding report.  The default is no.
Select properties	Set the miscellaneous report properties.
Add time stamp to title?	Set to <b>yes</b> to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.  A time stamp lets you run consecutive iterations of the same report without overwriting previous output.  The default is no.
<b>Event notification</b>	
Event for report success?	Set to <b>yes</b> to raise an event when the report is successfully generated. The default is yes.
Event severity for report success	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report is successfully generated. The default is 35.
Event severity for report with no data	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report contains no data. The default is 25.
Event severity for report failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the report failed to generate. The default is 5.

## 3.20 TempProbe

Use this Knowledge Script to monitor the Dell server's thermal environment. If any component is operating out of normal temperature range, this Knowledge Script generates a warning event. If any component overheats beyond an acceptable temperature range, this Knowledge Script raises a critical condition event.

### 3.20.1 Resource Object

Temperature icon

## 3.20.2 Default Schedule

The default interval is **Every 10 minutes**.

## 3.20.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script records the temperature (in degrees Celsius) at each monitoring interval. The default is <b>n</b> .
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> <p>If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.</p>
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node failed. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when temperature critical	Set the event severity, from 1 to 40, to indicate the importance of an event in which the temperature condition is critical. The default is 10.
Event severity when temperature warning	Set the event severity, from 1 to 40, to indicate the importance of an event in which the temperature condition is warning. The default is 20.
Event severity when temperature not known or not monitored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the temperature is not known or not monitored. The default is 30.

## 3.21 VoltageProbe

Use this Knowledge Script to monitor the voltage level for a Dell server. This Knowledge Script raises an event if the voltage drops below or exceeds the normal operating threshold. The Dell server defines the voltage levels for normal operation.

### 3.21.1 Resource Objects

Voltage icon



## 3.21.2 Default Schedule

The default interval is **Every 10 minutes**.

## 3.21.3 Setting Parameter Values

Set the following parameters as needed.

Description	How To Set It
Event?	Set to <b>y</b> to raise events. The default is <b>y</b> .
Collect data?	Set to <b>y</b> to collect data for charts and reports. If set to <b>y</b> , this Knowledge Script records the voltage (in volts) at each monitoring interval. The default is <b>n</b> .
Community	<p>Set the community string in Security Manager for Dell OpenManage server Agent or Dell-iDRAC resources:</p> <ul style="list-style-type: none"><li>◆ Provide the SNMP community string that is required to access Dell OpenManage or iDRAC resources. If it is empty, then the community string configured in the security manager will be used. Refer Section 2.8, “Configuring SNMP,” of Management Guide to know how to configure the security manager.</li></ul> <p>If community string is not configured in the security manger, then by default, <code>Public</code> will be used as the community string.</p>
Raise only one event if SNMP down?	Set to <b>y</b> to raise only a single event rather than an event for each monitored object when the SNMP service is down. The default is <b>y</b> .
Event severity for SNMP or Dell Managed Node failure	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service or Dell Managed Node failed. The default is 10.
Event severity when SNMP restored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the SNMP service has been restored. The default is 30.
Event severity when voltage level exceed critical threshold	Set the event severity, from 1 to 40, to indicate the importance of an event in which the voltage level exceeded the critical threshold. The default is 10.
Event severity when voltage level near critical threshold	Set the event severity, from 1 to 40, to indicate the importance of an event in which the voltage level is near the critical threshold. The default is 20.
Event severity when voltage not known or not monitored	Set the event severity, from 1 to 40, to indicate the importance of an event in which the voltage level is not known or not monitored. The default is 30.

