Dell™ OpenManage™ Connection for Tivoli Enterprise Console® Version 3.5

User's Guide

## **Notes and Notices**

_	NOTE: A NOTE indicates important information that helps you make better use of your computer.  NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
	NOTICE. A NOTICE indicates entier potential damage to hardware or loss of data and tens you now to avoid the problem.

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# Introduction

This guide is intended for users who manage the Dell™ OpenManage™ Connection for Tivoli Enterprise Console<sup>®</sup> (hereafter referred to as the Connection).

The Connection is a systems management plug-in that extends the management of Dell PowerEdge™ systems and Dell PowerVault™ storage systems to users of the Tivoli Enterprise Console management product. It allows users to integrate the management of Dell systems to make them easier to manage.

The Connection also allows systems management professionals to take corrective action on Dell systems when a Dell-specific alert is received at the enterprise. These alerts include, but are not limited to, temperature, fan speed, and chassis intrusion.



NOTE: Starting with Dell OpenManage 5.0, Dell OpenManage Array Manager is no longer an installable option. If you have an Array Manager installation and need information on how to migrate from Array Manager to Storage Management, refer to the product documentation prior to Storage Management 2.1 or Dell OpenManage 5.1. Support for Array Manager has been withdrawn from the Dell PowerEdge Installation and Server Management CD version 5.0 and later.

# Other Documents You Might Need

Besides this User's Guide, you can find the following guides either on the Dell Support website at **support.dell.com** or on the Documentation CD:

Dell OpenManage Server Administrator User's Guide provides information about server instrumentation.

Dell OpenManage Server Administrator Messages Reference Guide lists the messages that are displayed in your Server Administrator home page alert log or on your operating system's event viewer. This guide explains the text, severity, and cause of each Instrumentation Service alert message that the Server Administrator issues.

Dell OpenManage Storage Management User's Guide provides information about configuring and managing local and remote storage attached to a system. This guide also includes information about the Storage Management Service-specific events

Dell PowerVault Network Attached Storage (NAS) system documentation provides information about using the NAS manager to configure NAS appliances.



**NOTE:** You can find this document only on the Dell Support website at support.dell.com.

# What's New in the Connection 3.5?

Dell™ OpenManage™ Connection for Tivoli Enterprise Console® is hereafter referred to as the Connection.



NOTE: Starting with Dell OpenManage 5.0, Dell OpenManage Array Manager is no longer an installable option. If you have an Array Manager installation and need information on how to migrate from Array Manager to Storage Management, refer to the product documentation prior to Storage Management 2.1 or Dell OpenManage 5.1. Support for Array Manager has been withdrawn from the Dell PowerEdge™ Installation and Server Management CD version 5.0 and later.

# **Before You Begin**

Read the installation requirements to ensure that your system meets or exceeds the minimum requirements. See the "Connection Installation Prerequisites." Read the Connection readme file, which contains the latest information about software, firmware, and driver versions, in addition to information about known issues. The file is posted to the Systems Management documentation page on the Dell Support website at support.dell.com.

# **Connection Installation Prerequisites**

The following are system prerequisites for installing the Connection on a managed system:

- Microsoft® Windows® 2000 operating system or later
- Event Adapter version 3.8 or 3.9
- Dell OpenManage Server Administrator version 1.6 or later
- Event classes loaded into Tivoli Enterprise Console (TEC) rule base from the tecad win.fmt file
- Installation of the following files: dellomam.fmt, dellomsa3.fmt or dellomsa2.fmt, and dellomsm.fmt. Table 2-1 maps the .fmt files with the respective components supported by the Connection.

Table 2-1. File Mapping With Components Supported by the Connection

File Name	Components
dellomam.fmt	Array Manager
dellomsa3.fmt	Server Administrator 1.8 and later
dellomsa2.fmt	Server Administrator 1.6 and 1.7
dellomsm.fmt	Storage Management

The following are system prerequisites for installing the Connection on a management station:

- Windows 2000 operating system or later
- Tivoli Enterprise Console (TEC) version 3.8 or 3.9
- Event classes loaded into TEC rule base from the tecad win.baroc file



NOTE: If there are any configuration changes in the tecad\_win.conf file on the TEC management station, ensure that SpaceReplacement=TRUE is not modified as this affects the ability of the Connection to process events.

## New Features in Connection 3.5

- Supports Dell OpenManage Server Administrator version 5.2, including support for new Serial-Attached SCSI (SAS) events
- Supports Windows Server® 2003, SP2 on the managed system
- Supports Dell OpenManage Server Administrator Storage Management version 2.2

# **Components Supported by the Connection**

Table 2-2. Components Supported by the Connection

Directory Name	Agent Name	Connecti	on Version			
		3.1	3.2	3.3	3.4	3.5
Dell Server Administrator <sup>1</sup>	Dell OpenManage Server Administrator	1.0-1.6	1.0-1.8	1.0-1.9	1.6-3.0	1.6-2.3 and 5.0-5.2
Dell Array Manager <sup>2</sup>	Dell OpenManage Array Manager	2.7-3.5	2.7-3.5	2.7-3.6	3.4-3.7	3.4-3.7
Dell Storage Management <sup>3</sup>	Storage Management	NA	NA	1.0	1.0-2.0	1.0-2.2

#### <sup>1</sup>Server Administrator

For Dell managed systems, Server Administrator places hardware-related events into the Microsoft Windows Event Log for the main system chassis and any attached systems.

The Server Administrator agent can be installed from the latest Dell PowerEdge Installation and Server Management CD.

### <sup>2</sup>Array Manager

Array Manager provides detailed information about storage hardware components and RAID configurations monitored by the Array Manager agent.

The Array Manager agent can be installed from the Dell PowerEdge Installation and Server Management CD version prior to 5.0.

### <sup>3</sup>Storage Management

For Dell managed systems, Storage Management places hardware-related events into the Microsoft Windows Event Log for storage resources such as controllers, channels, array disks, battery, and virtual disks.

This agent can be installed when Server Administrator is installed from the latest Dell PowerEdge Installation and Server Management CD.

# **Installing the Connection**

The following sections describe the requirements for the management station or remote console running Dell™ OpenManage™ Connection for Tivoli Enterprise Console® (hereafter referred to as the Connection).

The procedure for installing the Connection is different for Dell OpenManage Server Administrator, Dell OpenManage Server Administrator Storage Management, and Dell OpenManage Array Manager.



NOTE: Starting with Dell OpenManage 5.0, Dell OpenManage Array Manager is no longer an installable option. If you have an Array Manager installation and need information on how to migrate from Array Manager to Storage Management, refer to the product documentation prior to Storage Management 2.1 or Dell OpenManage 5.1. Support for Array Manager has been withdrawn from the Dell PowerEdge™ Installation and Server Management CD version 5.0 and later.

### Server Administrator

#### Installing the Connection on the Host Where the TEC Event Server is Located



**NOTE:** Before installing the Connection, ensure that you back up the rule base.

1 If you are using Server Administrator version 1.8 and above, copy the dellomsa3.baroc file present in the Dell Server Administrator folder (this folder will be located in the directory to which you downloaded and extracted the contents of the TEC35Axx.exe file) to \Tivoli\bin\w32-ix86\bin.



NOTE: If you are using Server Administrator version 1.7 and below, copy the dellomsa2.baroc present in the Dell Server Administrator folder (this folder will be located in the directory to which you downloaded and extracted the contents of the TEC35Axx.exe file) to \Tivoli\bin\w32-ix86\bin.

- **2** Launch the Tivoli Desktop.
- Stop the event server by right-clicking the EventServer icon and selecting Shut Down.
- Double-click the EventServer icon to open the Event Server Rule Bases GUI.
- Select Create→ Rule Base.
- In the fields provided, type a name for your rule base and the path where the dellomsa3.baroc resides on your system.
  - NOTE: If you are using Server Administrator version 1.7 and below, use the path for dellomsa2.baroc.
- 7 Click Create & Close.
- Right-click the active rule base and select **Copy**.
- Select the new rule base you created as the destination rule base from the list.

- 10 Select both Copy Rules and Copy Classes.
- 11 Click Copy & Close.
- **12** Right-click the rule base you created and select **Import**.
- 13 Select the option to import class definitions and type the path for dellomsa3.baroc and select the file.
  - **NOTE:** If you are using Server Administrator version 1.7 and below, use the path for **dellomsa2.baroc**.
- **14** Select **Insert After** and highlight the last item in the dialog box.
  - **NOTE:** You may have to scroll down to view the last item
- **15** Click **Import & Close** to exit.
- **16** Right-click the rule base you created and select **Compile**.
- 17 When the compilation is complete, click Close to exit.
- **18** Right-click the rule base you created and click **Load**.
- **19** Select Load, but activate only when server restarts.
- **20** Restart the event server.
- **NOTE:** To uninstall the Connection, delete all Server Administrator rule bases. Ensure that the rule bases are not active at the time of deletion. Restore the rule base you used before the Connection was installed.

#### **Installing the Connection on a Managed System**

- 1 Stop the Tivoli Enterprise Console Event Adapter service using the Services Control Panel.
- 2 If you are using Server Administrator version 1.8 and above, copy the dellomsa3.fmt present in the Dell Server Administrator (this folder will be located in the directory to which you downloaded and extracted the contents of the TEC35Axx.exe) to the directory where the TEC Event Adapter configuration file is installed (usually \textit{tecwin}\etc\c).
  - **NOTE:** If you are using Server Administrator version 1.7 and below, copy the **dellomsa2.fmt** file present in the **Dell Server Administrator** folder (this folder will be located in the directory to which you downloaded and extracted the contents of the **TEC35A**xx.exe file) to the directory where the TEC Event Adapter configuration file is installed (such as \text{\text{tecwin}\etc\c)}.
  - **NOTE**: Back up tecad\_win.fmt before performing the following steps.
- **3** Append the dellomsa3.fmt file to the tecad\_win.fmt file using this command:
  - copy /b tecad\_win.fmt+dellomsa3.fmt tecad\_win.fmt
  - **NOTE**: If you are using Server Administrator version 1.7 and below, append the **dellomsa2.fmt** file to the **tecad\_win.fmt** using this command:
    - copy /b tecad\_win.fmt+dellomsa2.fmt tecad\_win.fmt
  - **NOTE:** Ensure that no end-of-file character (little square) exists between the appended file or at the end of the combined tecad\_win.fmt file.

- Generate a new .cds file by performing the following steps:
  - Make the TEC Event Adapter \bin directory (usually \texmin\bin) the current directory.
  - Enter the following command from the current directory (the TEC Event Adapter \bin directory): win\_gencds ..\etc\c\tecad\_win.fmt ..\etc\tecad\_win.cds
- **5** Start the TEC Event Adapter service using the Services Control Panel.
- NOTE: Take a backup of the tecad\_win.fmt before installing the Connection. To uninstall the Connection, revert to the original tecad win.fmt. Then, generate the new .cds file by typing the following command from the Event Adapter \bin directory:

win gencds ..\etc\c\tecad win.fmt ..\etc\tecad win.cds

# Storage Management

#### Installing the Connection on the Host Where the Event Server is Located

- **NOTE:** Before installing the Connection, make sure that you backup the rule base.
- 1 Copy dellomsm.baroc present in the Dell Storage Management folder (this folder will be located in the directory to which you downloaded and extracted the contents of TEC35Axx.exe file) to the directory \Tivoli\bin\w32-ix86\bin.
- Launch the Tivoli Desktop.
- **3** Stop the event server by right-clicking the EventServer icon and selecting Shut Down.
- 4 Double-click the EventServer icon to open the Event Server Rule Bases user interface.
- 5 Select Create→ Rule Base.
- In the fields provided, type a name for your rule base and the path where **dellomsm.baroc** resides on your system.
- 7 Click Create & Close.
- Right-click the active rule base and select Copy.
- Select the new rule base you created as the destination rule base from the list.
- 10 Select both Copy Rules and Copy Classes.
- Click Copy & Close.
- **12** Right-click the rule base you created and select **Import**.
- Select the option to import class definitions and type the path for **dellomsm.baroc** and select the file.
- **14** Select **Insert After** and highlight the last item in the dialog box.
  - **NOTE:** You may have to scroll down to view the last item.
- **15** Click **Import & Close** to exit.

- **16** Right-click the rule base you created and select **Compile**. When the compilation has completed, click **Close** to exit.
- 17 Right-click the rule base you created and click Load.
- **18** Select Load, but activate only when server restarts.
- **19** Restart the event server.
- **NOTE:** To uninstall the Connection, delete all Storage Management rule bases. Ensure that the rule bases are not active at the time of deletion. Restore the rule base you used before the Connection was installed.

#### Installing the Connection on a Managed System

- 1 Stop the Tivoli Enterprise Console Event Adapter service using the Services Control Panel on the system to be monitored.
- 2 Copy dellomsm.fmt present in the Dell Storage Management folder (this folder will be located in the directory to which you downloaded and extracted the contents of TEC35Axx.exe) to the directory where the TEC Event Adapter configuration file is installed (such as \text{tecwin\etc\c}).
  - **NOTE:** Back up tecad\_win.fmt before performing the following steps.
- **3** Append dellomsm.fmt to the tecad win.fmt using this command:
  - copy /b tecad\_win.fmt+dellomsm.fmt tecad\_win.fmt
  - **NOTE:** Ensure that no end-of-file character (little square) exists between the appended file or at the end of the combined **tecad** win.fmt.
- **4** Generate a new .cds file by performing the following steps:
  - **a** Make the TEC Event Adapter \bin directory (usually \tecwin\bin) the current directory.
  - **b** Enter the following command from the current directory (the TEC Event Adapter \bin directory): win\_gencds ..\etc\c\tecad\_win.fmt ..\etc\tecad\_win.cds
- **5** Start the TEC Event Adapter service using the Services Control Panel.
- **NOTE:** Take a backup of the **tecad\_win.fmt** before installing the Connection. To uninstall the Connection, revert to the original **tecad\_win.fmt**. Then, generate the new .**cds** file by typing the following command from the Event Adapter \bin directory:

win\_gencds ..\etc\c\tecad\_win.fmt ..\etc\tecad\_win.cds

# **Array Manager**

#### Installing the Connection on the Host Where the Event Server is Located

- **NOTE:** Before installing the Connection, make sure that you backup the rule base.
  - Copy dellomam.baroc from the Dell Array Manager folder (this folder will be located in the directory to which you downloaded and extracted the contents of TEC35Axx.exe file) to the directory \Tivoli\bin\w32-ix86\bin.
  - **2** Launch the Tivoli Desktop.
  - **3** Stop the event server by right-clicking the EventServer icon and selecting Shut Down.
  - 4 Double-click the EventServer icon to open the Event Server Rule Bases user interface.
  - Click Create  $\rightarrow$  Rule Base.
  - 6 In the fields provided, type a name for your rule base and the path where dellomam.baroc resides on your system.
  - 7 Click Create & Close.
  - Right-click the active rule base and select Copy.
  - **9** Select the new rule base that you created as the destination rule base from the list.
- **10** Select both Copy Rules and Copy Classes.
- 11 Click Copy & Close.
- **12** Right-click the rule base you created and select **Import**.
- Select the option to import class definitions and type the path for dellomam.baroc and select the file.
- **14** Select **Insert After** and highlight the last item in the dialog box.
  - **NOTE:** You may have to scroll down to view the last item.
- **15** Click **Import & Close** to exit.
- **16** Right-click the rule base that you created and select Compile. When the compilation has completed, click **Close** to exit.
- 17 Right-click the rule base that you created and click Load.
- **18** Select Load, but activate only when server restarts.
- **19** Restart the event server.
- NOTE: To uninstall the Connection, delete all Array Manager rule bases. Ensure that the rule bases are not active at the time of deletion. Restore the rule base you used before the Connection was installed.

#### **Installing the Connection on a Managed System**

- 1 Stop the TEC Event Adapter service using the Services Control Panel on the system to be monitored.
- 2 Copy dellomam.fmt from the Dell Array Manager folder (this folder will be located in the directory to which you downloaded and extracted the contents of TEC35Axx.exe) to the directory where the TEC Event Adapter configuration file is installed (such as \text{tecwin\etc\c}).
  - **NOTE:** Back up the tecad\_win.fmt file before performing the following step.
- **3** Append **dellomam.fmt** to **tecad\_win.fmt** by entering the following command:

```
copy /b tecad_win.fmt+dellomam.fmt tecad_win.fmt
```

**NOTE:** Ensure that no end-of-file character (little square) exists between the appended file or at the end of the combined **tecad win.fmt**.

- **4** Generate a new .cds file by performing the following steps:
  - **a** Make the TEC Event Adapter \bin directory (usually \tecwin\bin) the current directory.
  - **b** Enter the following command from the current directory (the TEC Event Adapter \bin directory): win\_gencds ..\etc\c\tecad\_win.fmt ..\etc\tecad\_win.cds
- **5** Start the TEC Event Adapter service using the Services Control Panel.
- **NOTE**: Take a backup of the **tecad\_win.fmt** before installing the Connection. To uninstall the Connection, revert to the original **tecad\_win.fmt**. Then, generate the new .cds file by typing the following command from the Event Adapter \bin directory:

win\_gencds ..\etc\c\tecad\_win.fmt ..\etc\tecad\_win.cds

# **Using the Connection**

# **Event Management**

The Tivoli Enterprise Console<sup>®</sup> displays alerts about the health of Dell<sup>™</sup> PowerEdge<sup>™</sup> systems. You can view the Dell OpenManage<sup>™</sup> Server Administrator Storage Management, Dell OpenManage Server Administrator, and Dell OpenManage Array Manager events.



NOTE: Starting with Dell OpenManage 5.0, Array Manager is no longer an installable option. If you have an Array Manager installation and need information on how to migrate from Array Manager to Storage Management, refer to the product documentation prior to Storage Management 2.1 or Dell OpenManage 5.1. Support for Array Manager has been withdrawn from the Dell PowerEdge Installation and Server Management CD version 5.0 and later.

Events are logged in the Tivoli Enterprise Console with three different severities: harmless, warning, and critical. Click the event ID in the Tivoli Enterprise Console for information about the event.

A harmless event is displayed in green and indicates that the component is working as expected.

A warning event is displayed in yellow. A warning event indicates that a probe or another monitoring device has detected a reading for the component that is above or below the acceptable level. The component may still be functioning but it could fail and data maybe lost.

A critical event is displayed in red. A critical event displays an error that indicates that the component has either failed or failure is imminent. The component requires immediate attention and may need to be replaced. Data loss may have occurred.

Based on the level of severity of the event, you can take precautions. You can also find out the type of event from the event viewer. For example, omsm, omam, and omsa.

# **Events Displayed on the Management Station**

- **1** Launch the Tivoli Enterprise Console.
- **2** Select Options→ Reload Events.
- **3** Click on the specific event for more information.

Events from OpenManage instrumentation will have class names prefixed with DELL. For example:

- Storage Management events are prefixed with DELL OMSM
- Server Administrator events are prefixed with DELL OMSA
- Array Manager events are prefixed with DELL OMAM



# **Appendix**

### Overview

This chapter details the events for your Dell™ OpenManage™ Connection for Tivoli Enterprise Console® (hereafter referred to as the Connection) version 3.5 and its support for Dell OpenManage Array Manager events, Dell OpenManage Server Administrator events, and Dell OpenManage Server Administrator Storage Management events.



**NOTE:** Starting with Dell OpenManage 5.0, Array Manager is no longer an installable option. If you have an Array Manager installation and need information on how to migrate from Array Manager to Storage Management, refer to the product documentation prior to Storage Management 2.1 or Dell OpenManage 5.1. Support for Array Manager has been withdrawn from Dell PowerEdge™ Installation and Server Management CD version 5.0 and later.

See the Dell Support website at **support.dell.com** for the most current information.

# Array Manager

Array Manager software places disk-related events in the Microsoft® Windows® event log. These events indicate failures, warnings, and recoveries. These Windows event log messages are converted to Tivoli event classes with the appropriate slot values.

Event classes are defined hierarchically, with child classes inheriting attribute value defaults from the parent. The following Array Manager event classes follow a simple hierarchy.

All events supported in TEC Connection 3.4 are supported in TEC Connection 3.5.

Table A-1. Array Manager Event Classes

Event Class	Derived From	Slots
Dell_OMAM_Base: Array Manager base class	NT_Base	None
Dell_OMAM_Events1: Array Manager events class (variables captured separately)	Dell_OMAM_Base	controller_name: Controller name disk_name: Disk name
Dell_OMAM_Events2: Array Manager events class (whole message text is captured)	Dell_OMAM_Base	message_text: The actual text of the message is captured

### **Events Supported in TEC Connection 3.4 and 3.5**

Table A-2. Events Supported in the Connection for TEC 3.4

Event Class	Derived From	Severity
Dell_OMAM_unsupported_DRIVER_INSTALLED_ERROR: Unsupported driver installed error	Dell_OMAM_Events2	Critical
Dell_OMAM_unsupported_FIRMWARE_INSTALLED_ ERROR: Unsupported firmware installed error	Dell_OMAM_Events2	Critical
Dell_OMAM_unsupported_CONFIGURATION_INSTALLED_ ERROR: Unsupported configuration installed error	Dell_OMAM_Events2	Critical

Table A-3. Events Supported in the Connection for TEC 3.2

Event Class	Derived From	Severity
Dell_OMAM_PERC_ALERT_TASK_BGI: Virtual disk background initialization started	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_CANCEL_BGI:Virtual disk background initialization cancelled	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_FAIL_BGI:Virtual disk background initialization failed	Dell_OMAM_Events2	Critical
Dell_OMAM_PERC_ALERT_COMPLETE_BGI: Virtual disk background initialization completed	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_E_GENERIC_NOT_INSTALLED:PERC generic not installed	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_GENERIC_COMM_TIMEOUT: Communication timeout	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_GENERIC_COMM_LOST: Communication lost	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_COMP_WITH_ERR_DISK_ REBUILD: Rebuild completed with errors	Dell_OMAM_Events2	Critical
Dell_OMAM_PERC_ALERT_CONTROLLER_MISC_ERROR: Miscellaneous controller error	Dell_OMAM_Events	Critical

Table A-4. Events Supported in the Connection for TEC 3.1

Event Class	Derived From	Severity
Dell_OMAM_PERC_ALERT_CHANGE_WRITE_POLICY: PERC alert change write policy	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_PERC_ALERT_RENAME_VD:PERC alert rename virtual disk</pre>	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_PERC_E_GENERIC_READY:PERC in ready state</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_COMM_TIMEOUT:SES communication timeout	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_COMM_FAILURE:SES communication lost	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_COMM_RESTORED:SES communication restored	Dell_OMAM_Events2	Harmless
Diagnostic Events of Array Manager		
Dell_OMAM_Diag_Invalid_Device: Invalid device	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Inquiry_Failed: Inquiry failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Test_Unit_Ready_Failed: Test Unit Ready failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Read_Wrt_Buffer_Failed: Read- write buffer failed</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Send_Diagnostic_Failed: Send diagnostic failed	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Smart_Failed: SMART failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Low_Level_Failed: Format corruption test failed</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Physical_Head_Failed: Physical head test failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Error_Log_Failed: Error log test failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Random_Verify_Failed: Random verify failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Verify_First_Failed: Verification of front area failed.</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Verify_Last_Failed: Verification of back area failed</pre>	Dell_OMAM_Events2	Critical

Table A-4. Events Supported in the Connection for TEC 3.1 (continued)

Event Class	Derived From	Severity
Dell_OMAM_Diag_Full_Scan_Failed: Full surface scan failed.	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Dst_Test_Failed: DST test failed	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Unknown_Disk_Failure: Unknown disk failure	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Quick_Start: Quick diagnostics started</pre>	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_Diag_Quick_Complete: Quick diagnostics completed</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_Diag_Quick_Fail: Quick diagnostics failed	Dell_OMAM_Diag_Quick _Fail: Quick diagnostics failed	Critical
<pre>Dell_OMAM_Diag_Quick_Cancel: Quick diagnostics cancelled</pre>	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_Diag_Extended_Start: Extended diagnostics started</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_Diag_Extended_Complete: Extended diagnostics completed	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_Diag_Extended_Fail: Extended diagnostics failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Extended_Cancel: Extended diagnostics cancelled</pre>	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_Diag_Battery_Start: Battery diagnostics started</pre>	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_Diag_Battery_Complete: Battery diagnostics completed</pre>	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_Diag_Battery_Fail: Battery diagnostics failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Battery_Cancel: Battery diagnostics cancelled</pre>	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_Diag_Battery_Presence_Test_Failed: Battery presence test failed</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Battery_Voltage_Test_Failed: Battery voltage test failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Battery_Temp_Test_Failed: Battery temperature test failed</pre>	Dell_OMAM_Events2	Critical

Table A-4. Events Supported in the Connection for TEC 3.1 (continued)

Event Class	Derived From	Severity
Dell_OMAM_Diag_Get_Bios_Version_Failed: Get BIOS version failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Get_FW_Version_Failed: Get firmware version failed</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Get_Num_Channels_Failed: Get number of channels failed.	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Get_Rebuild_Rate_Failed: Get rebuild rate failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Timer_Test_Failed: Timer test failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Config_Test_Failed: Configuration test failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Invalid_Device_Ref: Invalid device reference</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Get_Nvram_Size_Failed: Get NVRAM size failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Nvram_Test_Failed: NVRAM test failed</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Failed_Open_Device: Failed to open device	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Comm_Test_Failed: Communication test failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Diag_Rescan_Test_Failed: Rescan test failed</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Start: Diagnostics started	Dell_OMAM_Events2	Harmless
Dell_OMAM_Diag_Complete: Diagnostics completed	Dell_OMAM_Events2	Harmless
Dell_OMAM_Diag_Fail: Diagnostics failed	Dell_OMAM_Events2	Critical
Dell_OMAM_Diag_Cancel: Diagnostics cancelled	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_MEGALIB_TIMEOUT: Lost communication with RAID controller and subsystem	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_PERC_ALERT_DIAG_INVALID_DEVICE1: Could not be opened for diagnostics</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_PERC_ALERT_SCSI_SENSE_FORMAT_FAIL: Format unit operation interrupted.	Dell_OMAM_Events2	Warning

Table A-4. Events Supported in the Connection for TEC 3.1 (continued)

Event Class	Derived From	Severity
Dell_OMAM_PERC_ALERT_SCSI_SENSE_SECTOR_ REASSIGN: Sector reassign	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_EMM_FW_MISMATCH: EMM firmware mismatch	Dell_OMAM_Events2	Warning
Dell_OMAM_PERC_ALERT_CONSERVE_CACHE_MODE_ ENABLE: Conservative cache mode enabled	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_CONSERVE_CACHE_MODE_ DISABLE: Conservative cache mode disabled	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_ENCLOSURE_FW_DOWNLOAD: Firmware version downloaded successfully	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_ENCLOSURE_ALARM_ENABLE: Enclosure alarm enabled	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_ENCLOSURE_ALARM_DISABLE: Enclosure alarm disabled	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_CONTROLLER_ALARM_ENABLE: Controller alarm enabled	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_CONTROLLER_ALARM_DISABLE: Controller alarm disabled	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_CONTROLLER_REBUILD_RATE: Rebuild rate changed	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_ARRAY_DISK_FORCE_ONLINE: Array disk forced online	Dell_OMAM_Events2	Harmless
Dell_OMAM_PERC_ALERT_ARRAY_DISK_FORCE_OFFLINE: Array disk forced offline	Dell_OMAM_Events2	Warning

Table A-5. Events Supported in the Connection for TEC 3.0

Event Class	Derived From	Severity
Array Disk Messages		
Dell_OMAM_Disk_Inserted: Array disk inserted	Dell_OMAM_Events2	Harmless
Dell_OMAM_Disk_Created: Array disk created	Dell_OMAM_Events2	Harmless
Dell_OMAM_Disk_Fail: Array disk failed	Dell_OMAM_Events2	Critical
Dell_OMAM_Disk_Removed: Array disk removed	Dell_OMAM_Events2	Warning
Dell_OMAM_Disk_Offline: Array disk offline	Dell OMAM Events2	Warning

Table A-5. Events Supported in the Connection for TEC 3.0 (continued)

Event Class	Derived From	Severity
Dell_OMAM_Disk_Degraded: Array disk degraded	Dell_OMAM_Events2	Warning
Dell_OMAM_VDisk_Configchanged: Virtual disk configuration changed	Dell_OMAM_Events2	Harmless
Dell_OMAM_VDisk_InitializeStarted: Virtual disk initialization started	Dell_OMAM_Events2	Harmless
Dell_OMAM_vdInitialize_Completed: Virtual disk initialization completed	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_VDisk_FormatStarted: Virtual disk formatting started</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_VdFormat_Completed: Virtual disk formatting completed.	Dell_OMAM_Events2	Harmless
Dell_OMAM_VDisk_ConsistencyStarted: Virtual disk consistency check started	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_VDisk_Reconfigstarted: Virtual disk reconfiguration started</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_vdReconfig_Completed: Virtual disk reconfiguration completed	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_Vdisk_Rebuildstarted: Virtual disk rebuild started</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_vdRebuild_Completed: Virtual disk rebuild completed	Dell_OMAM_Events2	Harmless
Dell_OMAM_VDisk_Deleted: Virtual disk deleted	Dell_OMAM_Events2	Warning
Dell_OMAM_VDisk_Failed: Virtual disk failed	Dell_OMAM_Events2	Critical
Dell_OMAM_VDisk_Degraded: Virtual disk degraded	Dell_OMAM_Events2	Warning
Dell_OMAM_VDisk_NotRedundant: Virtual disk failed redundancy	Dell_OMAM_Events2	Warning
Dell_OMAM_Adisk_Initialize: Array disk initialized	Dell_OMAM_Events2	Harmless
Dell_OMAM_adInitialize_Completed: Array disk initialization completed	Dell_OMAM_Events2	Harmless
Dell_OMAM_AD_FormatStarted: Array disk formatting started	Dell_OMAM_Events2	Harmless
Dell_OMAM_adFormat_Completed: Array disk formatting completed	Dell_OMAM_Events2	Harmless

Table A-5. Events Supported in the Connection for TEC 3.0 (continued)

Event Class	Derived From	Severity
Dell_OMAM_Adisk_Rebuildstarted: Array disk rebuild started	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_adRebuild_Completed: Array disk rebuild completed</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_Adisk_Diagstarted: Array disk diagnostics started	Dell_OMAM_Events2	Harmless
Dell_OMAM_adDiag_Completed: Array disk diagnostics completed	Dell_OMAM_Events2	Harmless
Dell_OMAM_Check_Consistency_Completed: Array disk consistency check completed	Dell_OMAM_Events2	Harmless
Task Cancellation Events		
Dell_OMAM_VDisk_CheckCancel: Virtual disk check consistency cancelled	Dell_OMAM_Events	Warning
<pre>Dell_OMAM_VDisk_FormatCancel: Virtual disk format cancelled</pre>	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_Disk_FormatCancel: Array disk format cancelled</pre>	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_VDisk_InitCancel: Virtual disk initialization cancelled</pre>	Dell_OMAM_Events2	Warning
Dell_OMAM_Disk_InitCancel: Array disk initialization cancelled	Dell_OMAM_Events2	Warning
Dell_OMAM_VDisk_ReconfigCancel: Virtual disk reconfiguration cancelled	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_VDisk_RebuildCancel: Virtual disk rebuild cancelled</pre>	Dell_OMAM_Events2	Warning
Dell_OMAM_Disk_RebuildCancel: Array disk rebuild cancelled	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_Disk_DiagnosticCancel: Array disk diagnostics cancelled</pre>	Dell_OMAM_Events2	Warning
Task Failure Events		
Dell_OMAM_VDisk_CheckFail: Virtual disk consistency check failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_VDisk_FormatFail: Virtual disk format failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Disk_FormatFail: Array disk format failed</pre>	Dell_OMAM_Events2	Critical

Table A-5. Events Supported in the Connection for TEC 3.0 (continued)

Event Class	Derived From	Severity
Dell_OMAM_VDisk_InitFail: Virtual disk initialization failed	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_Disk_InitFail: Array disk initialization failed</pre>	Dell_OMAM_Events1	Critical
<pre>Dell_OMAM_VDisk_ReconfigFail: Virtual disk reconfiguration failed</pre>	Dell_OMAM_Events2	Critical
<pre>Dell_OMAM_VDisk_RebuildFail: Virtual disk rebuild failed</pre>	Dell_OMAM_Events2	Critical
Dell_OMAM_Disk_RebuildFail: Array disk rebuild failed	Dell_OMAM_Events2	Critical
Dell_OMAM_Disk_DiagnosticFail: Array disk diagnostics failed	Dell_OMAM_Events2	Critical
PERC, PERC 2/SC, and PERC 2/DC Self-Monitoring Analysis Alert-Related Messages	and Reporting Technolog	y (SMART)
Dell_OMAM_Predictive_Failure: Predictive failure reported	Dell_OMAM_Events2	Warning
Dell_OMAM_SCSI_SenseData: Small computer system interface (SCSI) sense data	Dell_OMAM_Events2	Warning
Dell_OMAM_IO_Pause: Input/output (I/O) paused	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_IO_Resume: Input/output (I/O) resumed</pre>	Dell_OMAM_Events2	Harmless
PERC 2 and PERC 2/Di Controller Battery-Related Messages		
Dell_OMAM_Battery_Condition: PERC 2 battery needs reconditioning	Dell_OMAM_Events2	Severity: Warning
Dell_OMAM_Battery_Low: PERC 2 battery low	Dell_OMAM_Events2	Warning
Controller Operations Related Message		
Dell_OMAM_IO_Paused: I/O operations are paused due to a user action. The I/O operations will automatically resume after the indicated period of time	Dell_OMAM_Events2	Warning
Dell_OMAM_cntrlBattery_Recondition: This event is provided for informational purposes	Dell_OMAM_Events2	Harmless
Dell_OMAM_cntrlBattery_Recon_Complete: This event is provided for informational purposes	Dell_OMAM_Events2	Harmless
Dell_OMAM_cntrlResumeIO: The controller I/O has resumed	Dell_OMAM_Events2	Harmless

Table A-5. Events Supported in the Connection for TEC 3.0 (continued)

Event Class	Derived From	Severity
Dell_OMAM_Hotspare_Assign: Hot spare assigned	Dell_OMAM_Events2	Harmless
Dell_OMAM_Hotspare_Unassign: Hot spare unassigned	Dell_OMAM_Events2	Harmless
Dell_OMAM_Paused_Check_Consistency: A consistency check on a virtual disk has been paused (suspended)	Dell_OMAM_Events2	Harmless
Dell_OMAM_Resumed_Check_Consistency: A consistency check on a virtual disk has been resumed	Dell_OMAM_Events2	Harmless
<pre>Dell_OMAM_Virtual_Disk_Split_Mirror: A virtual disk and its mirror have been split</pre>	Dell_OMAM_Events2	Harmless
Dell_OMAM_Virtual_Disk_Unmirror: A mirrored virtual disk has been unmirrored	Dell_OMAM_Events2	Harmless
SMART Alerts		
Dell_OMAM_SMART_FTP_Exceeded: SMART file transfer protocol (FTP) exceeded	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_Config_Change: SMART configuration change	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_Warning: SMART warning	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_TempWarning: SMART warning temperature	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_WarningDegraded: SMART warning degraded	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_WarningExceeded: SMART configuration change	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_enclosureAlert_Temp_Warn_Max: SMART enclosure maximum temperature warning	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_enclosureAlert_Temp_Warn_Min: SMART enclosure minimum temperature warning	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_enclosureAlert_Temp_Err_Max: SMART enclosure maximum temperature error	Dell_OMAM_Events2	Critical
Dell_OMAM_SMART_enclosureAlert_Temp_Err_Min: SMART enclosure minimum temperature error	Dell_OMAM_Events2	Critical
Dell_OMAM_SMART_enclosureGeneric_Failed: SMART enclosure failed	Dell_OMAM_Events2	Critical

Table A-5. Events Supported in the Connection for TEC 3.0 (continued)

Event Class	Derived From	Severity
Dell_OMAM_SMART_enclosureGeneric_Degraded: SMART enclosure degraded	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_enclosureGeneric_Offline: SMART enclosure offline	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_enclosureGeneric_Unknown: SMART enclosure unknown	Dell_OMAM_Events2	Critical
Dell_OMAM_SMART_enclosureGeneric_Warning: SMART enclosure warning	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_enclosureGeneric_Degraded: SMART enclosure degraded	Dell_OMAM_Events2	Warning
<pre>Dell_OMAM_SMART_alertShutdownEnclosure: SMART shutdown enclosure</pre>	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_alertShutdownServer: SMART shutdown server	Dell_OMAM_Events2	Warning
Dell_OMAM_SMART_genericEvent_Database_Up: SMART event database is up	Dell_OMAM_Events2	Harmless
Dell_OMAM_SMART_generic_Event_Database_Down: SMART event database is down	Dell_OMAM_Events2	Harmless
Dell_OMAM_fsysPro_DISK_CAPACITY_WARNING: Event disk capacity warning	Dell_OMAM_Events1	Critical
Dell_OMAM_fsysPro_DISK_CAPACITY_ERROR: Event disk capacity error	Dell_OMAM_Events1	Critical

### Server Administrator

Server Administrator places hardware-related events into the Windows Event Log for the main system chassis, and any attached systems, as well as for storage resources such as controllers, channels, array disks, and virtual disks. The events indicate failures, warnings, and recoveries. The Windows Event Log messages are converted to Tivoli event classes with the appropriate slot values.

Server Administrator event classes are divided into two sections, with classes related to commonly occurring events listed in the first section. Event classes are defined hierarchically, with child classes inheriting attribute value defaults from the parent.



**NOTE**: The events in Server Administrator version 1.7 and below have Dell\_OMSA2 prefixed to the class names, and the events in Server Administrator version 1.8 and above have Dell OMSA3 prefixed to the class names.

#### **Server Administrator Event Classes**

Table A-6. Server Administrator Event Classes

Event Class	Derived From	Slots
Dell_OMSA2_Base: Specifies the base level class for Server Administrator events version 1.0 - 1.7	NT_Base	Source: Windows Subsource: Dell_Baseboard_Agent
Dell_OMSA3_Base: Specifies the base level class for Server Administrator events version 1.8 and above	NT_Base	Source: Windows Subsource: Dell_Baseboard_Agent

Table A-7. Events Supported in the Connection for TEC 3.4

Event Class	Derived From	Severity
Dell_OMSA3_System_Management_RCI_Struct_Corrupted: RCI table is corrupted	Dell_OMSA3_Misc	Warning
Dell_OMSA3_System_Management_IPMI_Status_Host_ Interface: IPMI status	Dell_OMSA3_Misc	Harmless
<pre>Dell_OMSA3_Device_Added: Device is added to the system</pre>	Dell_OMSA3_Misc	Harmless
<pre>Dell_OMSA3_Device_Removed: Device is removed from the system</pre>	Dell_OMSA3_Misc	Harmless
<pre>Dell_OMSA3_Device_Configuration_Error: Device has configuration Error</pre>	Dell_OMSA3_Misc	Critical
<pre>Dell_OMSA3_Battery_Status_Other: Battery sensor has failed</pre>	Dell_OMSA3_Misc	Harmless
Dell_OMSA3_Battery_Status_Unknown: Battery sensor value is unknown	Dell_OMSA3_Misc	Harmless
<pre>Dell_OMSA3_Battery_Status_Normal: Battery status has returned to normal</pre>	Dell_OMSA3_Misc	Harmless
Dell_OMSA3_Battery_Status_Warning: Battery has detected a warning	Dell_OMSA3_Misc	Warning
Dell_OMSA3_Battery_Status_Failure: Battery has detected a failure	Dell_OMSA3_Misc	Critical
Dell_OMSA3_Battery_Status_Non_Recoverable: Battery status is non-recoverable	Dell_OMSA3_Misc	Critical

### **Events Supported in TEC Connection 3.3**

Table A-8. Events Supported in the Connection for TEC 3.3

Event Class	Derived From	Severity
Dell_OMSA3_Processor_Device_Status_Failed: Processor sensor has failed	Dell_OMSA3_Misc	Harmless
<pre>Dell_OMSA3_Processor_Device_Value_Unknown: Processor sensor value unknown</pre>	Dell_OMSA3_Misc	Harmless
<pre>Dell_OMSA3_Processor_Device_Status_Normal: Processor device status has returned to normal</pre>	Dell_OMSA3_Misc	Harmless
Dell_OMSA3_Processor_Device_Status_Warning: Processor device status has detected a warning	Dell_OMSA3_Misc	Warning
Dell_OMSA3_Processor_Device_Status_Failure: Processor device status has detected a failure	Dell_OMSA3_Misc	Critical
Dell_OMSA3_Processor_Device_Status_Nonrecoverable: Processor sensor detected a non-recoverable value	Dell_OMSA3_Misc	Critical

### **Events Supported in TEC Connection 3.2**

Table A-9. Events Supported in TEC Connection 3.2

Event Class	Derived From	Severity
Dell_OMSA2_User_Host_System_Reset: User has initiated host system reset	Dell_OMSA2_Misc	Harmless
<pre>Dell_OMSA2_Processor_Device_Status_Normal: Processor device status has returned to normal</pre>	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_Processor_Device_Status_Warning: Processor device status has detected a warning	Dell_OMSA2_Misc	Warning
Dell_OMSA2_Processor_Device_Status_Failure: Processor device status has detected a failure	Dell_OMSA2_Misc	Critical

Table A-10. Events Supported in TEC Connection 3.1

Event Class	Derived From	Severity
Dell_OMSA2_Automatic_System_Recovery: Indicates that the Automatic System Recovery (ASR) has been performed	Dell_OMSA2_Misc	Critical

Table A-11. Events supported in TEC Connection 3.0

Event Class	Derived From	Severity
Environmental Classes		
Dell_OMSA2_Env: Specifies the parent class	Dell_OMSA2_Base	NA
for Server Administrator environmental events related to temperature, voltage, fan, and		Slots:
current probes		Display: The string logged by the Server Agent in the Windows Event Log, that contains: sensor location, chassis location name, previous state of the sensor, and sensor value
Common Event Classes		
Dell_OMSA2_Env_Warn: Indicates that a sensor reading has crossed a warning threshold	Dell_OMSA2_Env	Warning
Dell_OMSA2_Env_Normal: Indicates that a sensor reading has returned to normal after crossing a failure/warning threshold	Dell_OMSA2_Env	Harmless
Dell_OMSA2_Env_Failed: Indicates that a sensor reading has crossed a failure threshold	Dell_OMSA2_Env	Critical
Rare Event Classes		
<pre>Dell_OMSA2_Env_Unit_Failed: Indicates that a sensor unit has failed</pre>	Dell_OMSA2_Env	Critical
Dell_OMSA2_Env_Unknown: Indicates that a sensor could not obtain a reading	Dell_OMSA2_Env	Harmless
Dell_OMSA2_Env_Nonrecover: Indicates that a sensor detected an error from which it cannot recover	Dell_OMSA2_Env	Critical

Table A-12. Chassis Intrusion Events

Event Class	Derived From	Severity
Dell_OMSA2_Intrusion: The parent class	Dell_OMSA2_Base	NA
for chassis intrusion events indicating		Slots:
that a chassis has been opened or closed		Display: A string logged by Server Administrator in the Windows Event Log that contains: chassis location name, previous state, and chassis intrusion state
Common Event Classes		
Dell_OMSA2_Chassis_Open: Indicates that a chassis has been opened	Dell_OMSA2_Intrusion	Critical
Dell_OMSA2_Chassis_Closed: Indicates that a chassis has been closed	Dell_OMSA2_Intrusion	Harmless
Rare Event Classes		
Dell_OMSA2_Chassis_Failed: Indicates that a chassis intrusion sensor unit has failed	Dell_OMSA2_Intrusion	Harmless
Dell_OMSA2_Chassis_Unknown: Indicates that a chassis sensor unit could not obtain a reading	Dell_OMSA2_Intrusion	Harmless
Dell_OMSA2_Chassis_Open_Progress: Indicates that the chassis is currently being opened	Dell_OMSA2_Intrusion	Warning
Dell_OMSA2_Chassis_Non_recoverable: Indicates that the chassis sensor has detected an error from which it cannot recover	Dell_OMSA2_Intrusion	Harmless

Table A-13. Redundancy Events

Event Class	Derived From	Severity
Common Event Classes		
Dell_OMSA2_Redundancy: The parent class for all redundancy events	Dell_OMSA2_Base	NA
		Slots:
		Display: The string logged by the Server Administrator in the Windows Event Log that contains: redundancy unit location, chassis location name, previous redundancy state, and number of devices required for full redundancy
Dell_OMSA2_Redundancy_Lost: Indicates that the chassis no longer has redundant power supplies	Dell_OMSA2_Redundancy	Critical
<pre>Dell_OMSA2_Redundancy_Regained: Indicates that the full redundancy is in effect</pre>	Dell_OMSA2_Redundancy	Harmless
Dell_OMSA2_Redundancy_Degraded: Indicates that the chassis has crossed a power utilization threshold	Dell_OMSA2_Redundancy	Warning
Rare Event Classes		
Dell_OMSA2_Redundancy_Failed: Indicates that the redundancy sensor unit has failed	Dell_OMSA2_Redundancy	Harmless
Dell_OMSA2_Redundancy_Unknown: Indicates that the redundancy sensor unit could not obtain a reading	Dell_OMSA2_Redundancy	Harmless
Dell_OMSA2_Redundancy_NotApplicable: Indicates that the redundancy is not applicable	Dell_OMSA2_Redundancy	Harmless
Dell_OMSA2_Redundancy_Offline: Indicates that the redundant power supply is offline	Dell_OMSA2_Redundancy	Harmless

Table A-14. Power Supply Events

Event Class	Derived From	Severity
Common Event Classes		
Dell_OMSA2_Power: The parent class for all power supply events	Dell_OMSA2_Base	NA
		Slots:
		Display: The string logged by Server Administrator in the Windows Event Log that contains: power supply sensor location, chassis location name, previous state, and additional power supply status information
Dell_OMSA2_PowerSupply_Fail_Detect: Indicates that the power supply has been disconnected or has failed	Dell_OMSA2_Power	Critical
Dell_OMSA2_PowerSupply_Warn_Detect: Indicates that the power supply exceeded user-settable warning threshold	Dell_OMSA2_Power	Warning
Dell_OMSA2_PowerSupply_Normal: Indicates that the power supply unit has been reconnected or replaced	Dell_OMSA2_Power	Harmless
Rare Event Classes		
Dell_OMSA2_PowerSupply_Failed: Indicates that the power supply sensor unit has failed	Dell_OMSA2_Power	Harmless
Dell_OMSA2_PowerSupply_Unknown: Indicates that a power supply could not obtain a reading	Dell_OMSA2_Power	Harmless
Dell_OMSA2_PowerSupply_Non_recoverable: Indicates that a power supply sensor in the specified system detected an error from which it cannot recover	Dell_OMSA2_Power	Harmless

Table A-15. AC Power Cord Events

Event Class	Derived From	Severity
Common Event Classes		
Dell_OMSA2_ACP_LOST_1503: Indicates that an AC power cord has lost its power, but there is sufficient redundancy to classify this as a warning	Dell_OMSA2_Misc	Warning
Dell_OMSA2_ACP_LOST_1504: Indicates that an AC power cord has lost its power, and lack of redundancy requires this to be classified as an error	Dell_OMSA2_Misc	Critical
Dell_OMSA2_ACP_LOST_1505: Indicates that an AC power cord sensor in the specified system failed. The AC power cord status cannot be monitored	Dell_OMSA2_Misc	Critical
Dell_OMSA2_ACP_RESTORED: Indicates that AC power has been restored	Dell_OMSA2_Misc	Harmless
Rare Event Classes		
Dell_OMSA2_ACP_SENSOR_FAILED: Indicates that an AC power cord sensor has failed	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_ACP_NOT_MONITORED: Indicates that an AC power cord is not being monitored	Dell_OMSA2_Misc	Harmless

Table A-16. Memory Device Pre Failure (MDP) Events

Event Class	Derived From	Severity
Common Event Classes		
Dell_OMSA2_MDP: The parent class of all	Dell_OMSA2_Base	NA
the memory device pre failure events		Slots:
		Display: The string logged by Server Administrator in the Windows Event Log that contains: memory device location, memory device bank location, chassis location, previous state, and pre failure sensor error count value
Dell_OMSA2_MDP_Warn: Indicates that an MDP sensor has exceeded its warning range	Dell_OMSA2_MDP	Warning
Dell_OMSA2_MDP_Error: Indicates that an MDP sensor has exceeded its failure range	Dell_OMSA2_MDP	Warning
Dell_OMSA2_MDP_Normal: Indicates that an MDP sensor has returned to a valid range	Dell_OMSA2_MDP	Harmless
Rare Event Classes		
Dell_OMSA2_MDP_Disabled: Indicates that an MDP sensor unit has failed	Dell_OMSA2_MDP	Harmless
Dell_OMSA2_MDP_Unknown: Indicates that an MDP sensor could not obtain a reading	Dell_OMSA2_MDP	Harmless
Dell_OMSA2_MDP_Non_recoverable: Indicates that an MDP sensor has detected an error from which it cannot recover	Dell_OMSA2_MDP	Critical

**Table A-17.** Fan Enclosure Events

Event Class	Derived From	Severity
Common Event Classes		
Dell_OMSA2_Fan: The parent class of	Dell_OMSA2_Base	NA
all the fan enclosure events		Slots:
		Display: The string logged by Server Administrator in the Windows event log that contains: fan enclosure sensor location and chassis location
Dell_OMSA2_Fan_Inserted: Indicates that a fan has been inserted in the system	Dell_OMSA2_Fan	Harmless
Dell_OMSA2_Fan_Removed: Indicates that a fan has been removed from the system	Dell_OMSA2_Fan	Warning
Dell_OMSA2_Fan_Removed_Extended: Indicates that a fan has been removed from the system for an extended (user-definable) time	Dell_OMSA2_Fan	Critical
Rare Event Classes		
Dell_OMSA2_Fan_Failed: Indicates that a fan intrusion sensor unit has failed	Dell_OMSA2_Fan	Harmless
Dell_OMSA2_Fan_Unknown: Indicates that a fan enclosure sensor unit could not obtain a reading	Dell_OMSA2_Fan	Harmless
Dell_OMSA2_Fan_Non_recoverable: Indicates that a fan enclosure sensor unit detected an error from which it cannot recover	Dell_OMSA2_Fan	Error

Table A-18. Miscellaneous Events

Event Class	Derived From	Severity
Dell_OMSA2_Misc: The parent class of	Dell_OMSA2_Base	NA
all the miscellaneous events		Slots:
		Display: The string logged by Server Administrator in the Windows event log that contains the actual event message
Dell_OMSA2_Starting: Indicates that the Server Administrator software is initializing	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_Startup_Complete: Indicates that the Server Administrator initialization is complete	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_BIOS_Update: Indicates that the user has chosen to upgrade the flash basic input/output system (BIOS)	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_Cancel_BIOS_Update: Indicates that the previously scheduled update is cancelled	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_Init_Thermal_Shutdown: Indicates that the system is configured for thermal shutdown for a failure (warning) event	Dell_OMSA2_Misc	Critical
Dell_OMSA2_SMBIOS_Absent: Indicates that the SMBIOS version should be version 2.3 or later	Dell_OMSA2_Misc	Warning

Table A-19. Log Events

Event Class	Derived From	Severity
Dell_OMSA2_LOG_DISABLED: Indicates that a hardware log has been disabled	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_LOG_UNKNOWN: Indicates that a hardware log is unknown	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_LOG_NORMAL: Indicates that a hardware log is normal	Dell_OMSA2_Misc	Harmless
Dell_OMSA2_LOG_WARNING: Indicates a warning for a hardware log	Dell_OMSA2_Misc	Warning
Dell_OMSA2_LOG_CRITICAL: Indicates that a hardware log is critical	Dell_OMSA2_Misc	Critical
Dell_OMSA2_LOG_FAILED: Indicates that ahardware log has failed	Dell_OMSA2_Misc	Critical

# **Storage Management**

Storage Management places significant hardware-related events into the Windows Event Log for storage resources such as controllers, channels, array disks, and virtual disks. The events indicate failures, warnings, and recoveries. The Windows Event Log messages are converted to Tivoli event classes with the appropriate slot values.

Storage Management event classes are divided into two sections, with classes related to commonly occurring events listed in the first section. Event classes are defined hierarchically, with child classes inheriting attribute value defaults from the parent.



**NOTE:** Storage Management events have **Dell\_OMSM** prefixed to the class names.

Table A-20. Event Classes

Event Class	Derived From	Slots
Dell_OMSM_Base: Specifies the base level class for Storage Management events	NT_Base	None
<pre>Dell_OMSM_Events2: Storage Management events class (whole message text is captured)</pre>	Dell_OMSM_Base	Message_text: The actual text of the message is captured

# **Events supported in TEC Connection 3.5**

Table A-21. New Events Supported in the Connection for TEC 3.5

Event Class	Derived From	Severity
Dell_OMSM_SCSI_SenseData: An array disk has failed, is corrupt, or is otherwise experiencing a problem	Dell_OMSM_Events2	Harmless
Dell_OMSM_Service_Tag_Changed: An enclosure service tag was changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Write_Policy_Changed_To_Write Through: The controller write policy has changed to write- through	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Global_Hot_Spare_Removed: A global hot spare has been removed</pre>	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Dedicated_Hot_Spare_Removed: A dedicated hot spare has been removed</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Dedicated_Hot_Spare_Auto_Unassigned: A dedicated hot spare has been removed	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_PD_Too_Small_For_Auto_Rebuild: The array disk is too small to be used for a rebuild</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_SATA_Bad_Block_Remapped: A bad disk block is reassigned</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_NoRebuild_SAS_SATA_MixNotAllowed: Rebuild not possible as SAS/SATA is not supported in the same virtual disk	Dell_OMSM_Events2	Warning
<b>NOTE:</b> The severity of the events listed <i>above</i> in this table have changed frowersion 2.2 and conforms only to Storage Management version 2.2.	m releases prior to Storag	e Management
Dell_OMSM_Physical_Disk_Initialization_Started: Physical disk initialization has started	Dell_OMSM_Events2	Harmless
Dell_OMSM_Unsupported_Config_EMMs_SCSIRate_NotSame: Unsupported configuration detected. The SCSI rate of the enclosure management modules (EMMs) are not the same.	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Dedicated_Hot_Spare_Assigned: A dedicated hot spare is assigned</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Dedicated_Hot_Spare_UnAssigned: A dedicated hot spare is not assigned	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_Temperature_Above_Normal: The controller battery temperature is above normal	Dell_OMSM_Events2	Harmless

Table A-21. New Events Supported in the Connection for TEC 3.5 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Recharge_Count_Maximum_Exceeded: The recharge count is exceeded	Dell_OMSM_Events2	Warning
Dell_OMSM_Battery_Charge_Progress: The battery charge is in progress	Dell_OMSM_Events2	Harmless
Dell_OMSM_Battery_Charge_Progress_Interrupted: The battery charge is interrupted	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Virtual_Disk_Degraded: Virtual disk has been degraded</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Foreign_Configuration_Force_Imported: Foreign configuration has been force imported	Dell_OMSM_Events2	Harmless
Dell_OMSM_Attempted_Import_Unsupported_virtual_Disk: Attempted import of unsupported virtual disk type	Dell_OMSM_Events2	Harmless

# **Events Supported in TEC Connection 3.4**

Table A-22. Events Supported in the Connection for TEC 3.4

Event Class	Derived From	Severity
Dell_OMSM_Controller_Battery_Replacement_Needed: The controller battery needs to be replaced	Dell_OMSM_Events2	Critical
Dell_OMSM_Controller_Battery_Voltage_Normal:The controller battery charge level is normal	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_Temperature_High: The controller battery temperature is above normal	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Controller_Battery_Temperature_Normal: The controller battery temperature is normal</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_Removed:The controller battery has been removed	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Battery_Replaced:The controller battery has been replaced	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_ReLearn_Started: The controller battery learn cycle has started	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_ReLearn_Complete: The controller battery learn cycle is complete	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_ReLearn_Timeout: The controller battery learn cycle has timed out	Dell_OMSM_Events2	Warning

Table A-22. **Events Supported in the Connection for TEC 3.4** *(continued)* 

Event Class	Derived From	Severity
Dell_OMSM_Controller_Battery_ReLearn_Postponed: The controller battery learn cycle is postponed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_ReLearn_Will_Start_ In_4_days:The controller battery learn cycle will start in %1 days	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_ReLearn_Will_Start_ In_Hours: The controller battery learn cycle will start in %1 hours	Dell_OMSM_Events2	Harmless
Dell_OMSM_SAS_Invalid_Configuration_Detected: An invalid SAS configuration is detected	Dell_OMSM_Events2	Critical
Dell_OMSM_Controller_Cache_Discarded: The controller cache has been discarded	Dell_OMSM_Events2	Warning
Dell_OMSM_Memory_EccSingleBitError_Exceeded_Limit: Single-bit ECC error limit exceeded on the controller dual in-line memory module (DIMM)	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Write_Policy_Changed_To_ WriteBack:The controller write policy has changed to write-back	Dell_OMSM_Events2	Harmless
Dell_OMSM_Max_Enclosure_Per_Port_Exceeded: There are too many enclosures attached to the controller. This is an unsupported configuration		Critical
Dell_OMSM_LD_CC_Corrected_Medium_Error: Virtual disk check consistency has made corrections and is complete	Dell_OMSM_Events2	Harmless
Dell_OMSM_LD_Reconfiguration_Resumed: Virtual disk reconfiguration has resumed	Dell_OMSM_Events2	Harmless
Dell_OMSM_LD_Read_Policy_Changed:The virtual disk read policy has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_LD_Cache_Policy_Changed:The virtual disk cache policy has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Global_Hot_Spare_Failed:A global hot spare failed	Dell_OMSM_Events2	Warning
Dell_OMSM_Dedicated_Hot_Spare_Failed:A dedicated hot spare failed	Dell_OMSM_Events2	Warning
Dell_OMSM_Hot_Spare_Cannot_Replace_SataToSas:The only hot spare available is a SATA disk. SATA disks cannot replace SAS disks	Dell_OMSM_Events2	Warning

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Hot_Spare_Cannot_Replace_SasToSata:The only hot spare available is a SAS disk. SAS disks cannot replace SATA disks.	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_PD_Not_Supported:The physical disk is not supported</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Clustering_Enabled: Clustering is enabled on the controller	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Clustering_Disabled: Clustering is disabled on the controller	Dell_OMSM_Events2	Harmless
Dell_OMSM_Peer_Node_Down_In_Cluster_Config:A peer node in a cluster configuration is down	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Peer_Node_Restarted_In_Cluster_Config: A peer node in a cluster configuration has restarted</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_LD_Cluster_Ownership_Changed: The owner of a virtual disk in a cluster configuration has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Ctrl_Redundant_Path_Broken:There is a communication failure on one path between nodes in a cluster configuration	Dell_OMSM_Events2	Dell_OMSM_ Events2
Dell_OMSM_Controller_Alarm_Silenced:The controller alarm is silenced	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_BGI_Rate_Changed:The background initialization rate has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Patrol_Read_Rate_Changed: The patrol read rate has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Check_Consistency_Rate_ Changed:The check consistency rate has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Rescan_Initiated:A controller rescan has been initiated	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Debug_Log_File_Exported:The controller debug log file has been exported	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Foreign_Configuration_ Cleared:A foreign configuration is cleared	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Foreign_Configuration_ Imported:A foreign configuration is imported	Dell_OMSM_Events2	Harmless

Table A-22. **Events Supported in the Connection for TEC 3.4** *(continued)* 

Event Class	Derived From	Severity
Dell_OMSM_Controller_Patrol_Read_Mode_Changed: Patrol read mode has changed	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Controller_Patrol_Read_Started:Patrol read has started</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_LD_Blink_Initiated:A virtual disk blink is initiated	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_LD_Blink_Ceased:A virtual disk blink has ceased</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_Degraded:The controller battery has degraded	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Battery_Charging:The controller battery is charging	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Executing_ReLearn_Cycle:The controller battery is executing a learn cycle	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Clear_Operation_Started:The array disk clear operation has started	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_PD_Blink_Initiated:The array disk blink has initiated</pre>	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_PD_Blink_Ceased:The array disk blink has ceased</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Clear_Operation_Aborted: The clear operation is cancelled	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_PD_State_Changed:The array disk has started</pre>	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_OEM_Drive_Detected:An OEM drive is detected</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_Enclosure_Blink_Operation_Initiated:An enclosure blink operation has initiated	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Blink_Operation_Ceased:An enclosure blink operation has ceased	Dell_OMSM_Events2	Harmless
Dell_OMSM_Global_Rescan_Initiated:A global rescan has initiated	Dell_OMSM_Events2	Harmless
Dell_OMSM_SMART_Thermal_Shutdown_Enabled:Smart thermal shutdown is enabled	Dell_OMSM_Events2	Harmless
Dell_OMSM_SMART_Thermal_Shutdown_Disabled:Smart thermal shutdown is disabled	Dell_OMSM_Events2	Harmless

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Device_Is_Missing: The controller cannot communicate with a device. The device is missing.	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Device_State_Unknown:A device is in an unknown state</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Controller_Log_File_Entry:Controller log file entry</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Reconstruct_Rate_Changed: The controller reconstruct rate has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Lost_Communication_With_Controller: Storage Management has lost communication with the controller. An immediate reboot is strongly recommended to avoid further problems	Dell_OMSM_Events2	Critical
Dell_OMSM_PD_Clear_Operation_Completed: The array disk clear operation has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Clear_Operation_Failed:The array disk clear operation failed	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_Patrol_Read_Corrected_Media_Error: Patrol read corrected a media error</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Patrol_Read_Found_Uncorrectable_Media_ Error:Patrol read found an uncorrectable media error	Dell_OMSM_Events2	Warning
Dell_OMSM_PD_Puncture:Bad media. A redundant virtual disk is using an array disk that has a bad disk block	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_PD_RebuildResumed:The array disk rebuild has resumed</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Rebuild_Stop_By_Ownership_Loss:The array disk rebuild has failed because ownership in a cluster configuration is lost	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_PD_Hot_Spare_Too_Small:The dedicated hot spare is too small</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_PD_Global_Hot_Spare_Too_Small:The global hot spare is too small	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Battery_ChargeLevel_Below_ Normal:The controller battery charge level is below the normal threshold	Dell_OMSM_Events2	Harmless

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Controller_Battery_ChargeLevel_Above_ Normal:The controller battery charge level is above the normal threshold	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_LD_Corrected_Medium_Error:A disk media error is corrected</pre>	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_LD_Inconsistent_Data:Virtual disk has inconsistent data</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Hot_Spare_SMART_Polling_Failed:Hot spare SMART polling failed	Dell_OMSM_Events2	Critical
Dell_OMSM_PD_Redundant_Path_Broken:A redundant path is broken	Dell_OMSM_Events2	Warning
Dell_OMSM_PD_Redundant_Path_Restored:A redundant path is restored	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Media_Error_Corrected:A disk media error was corrected during recovery	Dell_OMSM_Events2	Harmless
Dell_OMSM_Relearn_Start_Pending:A learn cycle start is pending while the battery charges	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Patrol_Read_Paused:Patrol read has paused	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Patrol_Read_Resumed:Patrol read has resumed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Memory_Ecc_MultiBit_Error:Multi-bit ECC error on the controller DIMM	Dell_OMSM_Events2	Critical
Dell_OMSM_Memory_Ecc_SingleBit_Error:Single-bit ECC error on the controller DIMM	Dell_OMSM_Events2	Warning
Dell_OMSM_Enclosure_EMM_Discovered:An enclosure management module is discovered	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Communication_Lost: Communication with the enclosure is lost	Dell_OMSM_Events2	Critical
Dell_OMSM_Enclosure_EMM_Failed: The enclosure management module has failed	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_Enclosure_Device_Inserted:A device is inserted</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Device_Removed:A device is removed	Dell_OMSM_Events2	Critical

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Enclosure_EMM_Inserted:An enclosure management module is inserted	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_EMM_Removed:An enclosure management module is removed	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_Enclosure_Bad_Sensor:The enclosure has a bad sensor</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_Enclosure_Bad_PHY: There is a problem with a physical connection or PHY	Dell_OMSM_Events2	Critical
Dell_OMSM_Enclosure_Unstable: The enclosure is unstable	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_Enclosure_HW_Error:The enclosure has a hardware error</pre>	Dell_OMSM_Events2	Critical
Dell_OMSM_Enclosure_Not_Responding: The enclosure is not responding	Dell_OMSM_Events2	Critical
Dell_OMSM_Enclosure_SAS_SATA_Mixing_Detected: The enclosure cannot support both SAS and SATA array disks. Array disks may be disabled	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_EMM_Hot_Plug_Detected:An attempt to hot plug an enclosure management module is detected	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_PD_BadBlock_Table_80_Percent_Full:Bad block table is 80% full</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_PD_BadBlock_Table_Full:Bad block table is full. Unable to log block	Dell_OMSM_Events2	Critical
Dell_OMSM_CheckConsistency_Aborted_By_Ownership_ Loss:Check consistency is terminated due to loss of ownership in a cluster configuration	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_PD_Incompatible:An array disk is incompatible</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_LD_Permanently_Degraded:A virtual disk is permanently degraded</pre>	Dell_OMSM_Events2	Critical
Dell_OMSM_Enclosure_EMM_Firmware_Mismatch: The firmware on the enclosure management modules is not of the same version	Dell_OMSM_Events2	Warning
Dell_OMSM_Enclosure_Power_AC_Fail:A power supply in the enclosure has an AC failure	Dell_OMSM_Events2	Warning

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Enclosure_Power_DC_Fail:A power supply in the enclosure has a DC failure	Dell_OMSM_Events2	Warning
Dell_OMSM_InitSequence_Of_SAS_Component_Fail:The initialization sequence of SAS components failed during system startup	Dell_OMSM_Events2	Critical
Dell_OMSM_Diagnostic_Retention_Test_Passed:A diagnostics test has passed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Diagnostic_Retention_Test_Failed:A diagnostics test failed	Dell_OMSM_Events2	Critical
Dell_OMSM_LD_BGI_Ownership_Loss_Aborted: Background initialization terminated due to loss of ownership in a cluster configuration	Dell_OMSM_Events2	Harmless
Dell_OMSM_Battery_Charger_Problem_Detected: Problems with the battery or the battery charger have been detected. The battery health is poor	Dell_OMSM_Events2	Warning
Dell_OMSM_Memory_Ecc_SingleBit_Warning:Singlebit ECC error on the controller DIMM	Dell_OMSM_Events2	Warning
Dell_OMSM_Memory_Ecc_SingleBit_Critical:Singlebit ECC error. The controller DIMM is critically degraded	Dell_OMSM_Events2	Critical
Dell_OMSM_Memory_Ecc_SingleBit_NonFunctional: Single-bit ECC error. The controller DIMM is non-functional. There will be no further reporting	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_Enclosure_Power_Switched_Off:DC power supply is switched off</pre>	Dell_OMSM_Events2	Critical
Dell_OMSM_Enclosure_Power_Switched_On:Power supply is switched on	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Power_Cable_Removed:The AC power supply cable is removed	Dell_OMSM_Events2	Critical
Dell_OMSM_Enclosure_Power_Cable_Inserted:The power supply cable is inserted	Dell_OMSM_Events2	Harmless
Dell_OMSM_Foreign_Configuration_Detected:A foreign configuration is detected	Dell_OMSM_Events2	Harmless
Dell_OMSM_Memory_NVRAM_Corrupted: The NVRAM has corrupted data. The controller is reinitializing the NVRAM	Dell_OMSM_Events2	Warning

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Memory_NVRAM_Mismatch: The NVRAM has corrupt data	Dell_OMSM_Events2	Warning
Dell_OMSM_SAS_Wide_Port_Link_Lost:SAS wide port link is lost. The message for this alert is generated by the controller	Dell_OMSM_Events2	Warning
Dell_OMSM_SAS_Wide_Port_Link_Restored:SAS wide port link is restored. The message for this alert is generated by the controller	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_HotPlug_Detected:A controller hot plug is detected	Dell_OMSM_Events2	Harmless
Dell_OMSM_Temperature_Sensor_Differential_ Detected:An enclosure temperature sensor differential is detected	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Event_Log_Information:Event log information is generated by the controller	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Event_Log_Warning:Event log warning generated by the controller	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Event_Log_Critical:Event log critical generated by the controller	Dell_OMSM_Events2	Critical
Dell_OMSM_Controller_Cache_Data_Recover_Failed: The controller is unable to recover cached data from the battery backup unit	Dell_OMSM_Events2	Critical
Dell_OMSM_Controller_Cache_Data_Recovered: The controller has recovered cached data from the battery backup unit	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Factory_Setting_Restored: The factory default settings are restored	Dell_OMSM_Events2	Harmless
Dell_OMSM_LD_BGI_Uncorrectable_Error: The background initialization is complete with uncorrectable errors	Dell_OMSM_Events2	Critical
Dell_OMSM_LD_CC_Correction_Completed:Check consistency made corrections and is complete	Dell_OMSM_Events2	Harmless
Dell_OMSM_LD_CC_Inconsistent_Parity_Data:Check consistency found inconsistent parity data. Data redundancy may be lost	Dell_OMSM_Events2	Warning

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_LD_CC_Inconsistent_Parity_Log_Disabled: Check consistency logging of inconsistent parity data is disabled	Dell_OMSM_Events2	Warning
Dell_OMSM_LD_Initialization_Terminated:Virtual disk initialization terminated	Dell_OMSM_Events2	Warning
Dell_OMSM_LD_Initialization_Failed:Virtual disk initialization failed	Dell_OMSM_Events2	Critical
Dell_OMSM_PD_Error_Warning:Error occurred: %1. The text for this alert is generated by the firmware	Dell_OMSM_Events2	Warning
Dell_OMSM_PD_Rebuild_Failed_Bad_Source:Rebuild failed due to errors on the source physical disk	Dell_OMSM_Events2	Critical
Dell_OMSM_PD_Rebuild_Failed_Bad_Target:Rebuild failed due to errors on the target physical disk	Dell_OMSM_Events2	Critical
Dell_OMSM_PD_Reassigned_Write_Failed:A bad disk block could not be reassigned during a write operation	Dell_OMSM_Events2	Critical
Dell_OMSM_PD_Rebuild_Medium_Error:There was an unrecoverable disk media error during the rebuild	Dell_OMSM_Events2	Critical
Dell_OMSM_PD_Mark_Missing:A physical disk is marked missing	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Mark_Missing_Replaced:A physical disk that was marked missing is replaced	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Temperature_Normal:The enclosure temperature has returned to normal	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Firmware_Download_Progress: Enclosure firmware download in progress	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Firmware_Download_Failed: Enclosure firmware download failed	Dell_OMSM_Events2	Warning
Dell_OMSM_SAS_SMP_Communication_Error:SAS SMP communications error	Dell_OMSM_Events2	Critical
Dell_OMSM_SAS_Expander_Error:SAS expander error	Dell_OMSM_Events2	Critical
Dell_OMSM_Battery_Charge_Complete:The battery charge cycle is complete	Dell_OMSM_Events2	Harmless

Table A-22. Events Supported in the Connection for TEC 3.4 (continued)

Event Class	Derived From	Severity
Dell_OMSM_PD_Not_Certified:A non-Dell supplied disk drive is detected	Dell_OMSM_Events2	Warning
Dell_OMSM_Controller_Cache_Discard_By_User:A user has discarded data from the controller cache	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Boot_Missing_PDS:Array disk(s) that are part of a virtual disk were removed while the system was shutting down. This removal was discovered during system start-up	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Boot_LDS_Will_Go_Offline: Array disk(s) have been removed from a virtual disk. The virtual disk will be in "Failed" state during the next system reboot	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Boot_LDS_Missing:A virtual disk and all of its member array disks were removed while the system was shutting down. This removal was discovered during system start-up	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Boot_Config_Missing:All virtual disks are missing from the controller. This situation was discovered during system start-up	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Fan_Speed_Changed: The speed of the enclosure fan has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_PD_Dedicated_Spare_Imported:Dedicated spare imported as global due to missing arrays	Dell_OMSM_Events2	Harmless
Dell_OMSM_SEP_Is_Being_Rebooted: The SEP has been rebooted as part of the firmware download operation and will be unavailable until the operation is complete	Dell_OMSM_Events2	Harmless

# **Events Supported in TEC Connection 3.3**

Table A-23. Events Supported in the Connection for TEC 3.3

Event Class	Derived From	Severity
Dell_OMSM_Device_Failed: A physical disk in the array failed	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_Array_Disk_Removed: A physical disk has been removed from the array</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Array_Disk_Offline: A physical disk in the array is offline</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Array_Disk_Degraded: A physical disk in the array had degraded</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Array_Disk_Inserted: An array disk has been inserted</pre>	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Virtual_Disk_Created: A virtual disk has been created</pre>	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Virtual_Disk_Deleted: A virtual disk has been deleted</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_Virtual_Disk_Configuration_Changed: The virtual disk configuration has changed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Failed: One or more physical disks included in the virtual disk have failed	Dell_OMSM_Events2	Critical
Dell_OMSM_Virtual_Disk_Degraded: A physical disk included in a redundant virtual disk has failed or has been removed from the array	Dell_OMSM_Events2	Warning
Dell_OMSM_Virtual_Disk_Check_Consistency_Started: The virtual disk consistency check has started	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Virtual_Disk_Format_Started: The virtual disk format has started</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Initialization_Started: The virtual disk initialization has started	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Reconfiguration_Started: The virtual disk reconfiguration has started	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Rebuild_Started: The virtual disk rebuild has started	Dell_OMSM_Events2	Harmless
Dell_OMSM_Array_Disk_Rebuild_Started: The array disk rebuild has started	Dell_OMSM_Events2	Harmless

Table A-23. Events Supported in the Connection for TEC 3.3 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Virtual_Disk_Check_Consistency_Cancelled: The check consistency operation has been cancelled because a physical disk in the array has failed or because a user cancelled the operation	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Initialization_Cancelled: The virtual disk initialization has been cancelled because a physical disk included in the virtual disk has failed or because a user has cancelled the operation	Dell_OMSM_Events2	Harmless
Dell_OMSM_Array_Disk_Rebuild_Cancelled: The array disk rebuild has been cancelled	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Check_Consistency_Failed: An array disk included in the virtual disk failed or there is an error in the parity information	Dell_OMSM_Events2	Critical
<pre>Dell_OMSM_Virtual_Disk_Format_Failed: The virtual disk format has failed</pre>	Dell_OMSM_Events2	Critical
Dell_OMSM_Virtual_Disk_Initialization_Failed: An array disk included in the virtual disk has failed or a user has cancelled the operation	Dell_OMSM_Events2	Critical
Dell_OMSM_Array_Disk_Initialize_Failed: The array disk failed or is corrupt	Dell_OMSM_Events2	Critical
Dell_OMSM_Virtual_Disk_Reconfiguration_Failed: An array disk included in the virtual disk has failed or is corrupt. A user may also have cancelled the reconfiguration	Dell_OMSM_Events2	Critical
Dell_OMSM_Virtual_Disk_Rebuild_Failed: An array disk included in the virtual disk has failed or is corrupt. A user may also have cancelled the rebuild	Dell_OMSM_Events2	Critical
Dell_OMSM_Array_Disk_Rebuild_Failed: An array disk included in the virtual disk has failed or is corrupt. A user may also have cancelled the rebuild		Critical
Dell_OMSM_Virtual_Disk_Check_Consistency_Completed: The virtual disk consistency check has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Format_Completed: The virtual disk format has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Initialization_Completed: The virtual disk initialization has completed	Dell_OMSM_Events2	Harmless

Table A-23. Events Supported in the Connection for TEC 3.3 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Array_Disk_Initialize_Completed: The array disk initialization has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Reconfiguration_Completed: The virtual disk reconfiguration has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Virtual_Disk_Rebuild_Completed: The virtual disk rebuild has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Array_Disk_Rebuild_Completed: The array disk rebuild has completed	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Predictive_Failure_Reported: The array disk is predicted to fail</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_Global_Hot_Spare_Assigned: A user has assigned an array disk as a global hot spare	Dell_OMSM_Events2	Harmless
Dell_OMSM_Global_Hot_Spare_Unassigned: A user has unassigned an array disk as a global hot spare	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Temperature_Max_Exceeded_Warning_Thresho ld: The array disk enclosure is too hot</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_Temperature_Dropped_Min_Warning_Threshold: The array disk enclosure is too cold	Dell_OMSM_Events2	Warning
Dell_OMSM_Temperature_Exceeded_Max_Failure_Threshold: The array disk enclosure is too hot	Dell_OMSM_Events2	Critical
Dell_OMSM_Temperature_Dropped_Min_Failure_Threshold: The array disk enclosure is too cold	Dell_OMSM_Events2	Critical
Dell_OMSM_Controller_Battery_Reconditioning: The controller battery is reconditioning	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_Reconditioning_ Completed: The controller battery reconditioning has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_SMART_FPT_Exceeded: A disk on the specified controller has received a SMART alert (predictive failure) indicating that the disk is likely to fail in the near future	Dell_OMSM_Events2	Warning
Dell_OMSM_SMART_Configuration_Change: A disk has received a SMART alert (predictive failure) after a configuration change. The disk is likely to fail in the near future	Dell_OMSM_Events2	Critical

Table A-23. Events Supported in the Connection for TEC 3.3 (continued)

Event Class	Derived From	Severity
Dell_OMSM_SMART_Warning: A disk has received a SMART alert (predictive failure). The disk is likely to fail in the near future	Dell_OMSM_Events2	Warning
Dell_OMSM_SMART_Warning_Temperature: A disk has reached an unacceptable temperature and received a SMART alert (predictive failure). The disk is likely to fail in the near future	Dell_OMSM_Events2	Warning
Dell_OMSM_SMART_Warning_Degraded: A disk is degraded and has received a SMART alert (predictive failure). The disk is likely to fail in the near future.	Dell_OMSM_Events2	Warning
Dell_OMSM_Failure_Prediction_Threshold_Exceeded: A disk has received a SMART alert (predictive failure) due to test conditions	Dell_OMSM_Events2	Warning
Dell_OMSM_Enclosure_Shut_Down: The array disk enclosure is either hotter or cooler than the maximum or minimum allowable temperature range	Dell_OMSM_Events2	Critical
Dell_OMSM_Consistency_Check_Virtual_Disk_Paused: The check consistency operation on a virtual disk was paused by a user.	Dell_OMSM_Events2	Harmless
Dell_OMSM_Consistency_Check_Virtual_Disk_Resumed: The check consistency operation on a virtual disk has been resumed after being paused by a user.	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Virtual_Disk_And_Mirror_Split: A user has caused a mirrored virtual disk to be split</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Mirrored_Virtual_Disk_Unmirrored: A user has caused a mirrored virtual disk to be unmirrored		Harmless
Dell_OMSM_Change_Write_Policy: A user has changed the write policy for a virtual disk.	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Firmware_Mismatch: The firmware on the EMM modules is not the same version	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Device_Normal: A device that was previously in an error state has returned to a normal state</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Redundancy_Degraded: One or more of the enclosure components has failed	Dell_OMSM_Events2	Warning
Dell_OMSM_Redundancy_Lost: A virtual disk or an enclosure has lost data redundancy	Dell_OMSM_Events2	Warning

Table A-23. Events Supported in the Connection for TEC 3.3 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Redundancy_Normal: Data redundancy has been restored to a virtual disk or an enclosure that previously suffered a loss of redundancy	Dell_OMSM_Events2	Harmless
Dell_OMSM_SCSI_Sense_Sector_Reassign: A sector of the disk is corrupted and data cannot be maintained on this portion of the disk	Dell_OMSM_Events2	Warning
Dell_OMSM_Background_Initialization_Started: Background initialization of a virtual disk has started	Dell_OMSM_Events2	Harmless
Dell_OMSM_Background_Initialization_Cancelled: Background initialization of a virtual disk has been cancelled	Dell_OMSM_Events2	Harmless
Dell_OMSM_Background_Initialization_Failed: Background initialization of a virtual disk has failed	Dell_OMSM_Events2	Critical
Dell_OMSM_Background_Initialization_Completed: Background initialization of a virtual disk has completed	Dell_OMSM_Events2	Harmless
Dell_OMSM_Firmware_Version_Mismatch: The firmware on the controller is not a supported version	Dell_OMSM_Events2	Warning
Dell_OMSM_Driver_Version_Mismatch: The controller driver is not a supported version	Dell_OMSM_Events2	Warning
Dell_OMSM_Array_Manager_Installed: Storage Management has been installed on a system that has an Array Manager installation	Dell_OMSM_Events2	Warning
Dell_OMSM_Virtual_Disk_Initialization_Progress: The virtual disk is being initialized	Dell_OMSM_Events2	Harmless
Dell_OMSM_Communication_Timeout: The controller is unable to communicate with an enclosure	Dell_OMSM_Events2	Warning
Dell_OMSM_Enclosure_Alarm_Enabled: A user has enabled the enclosure alarm	Dell_OMSM_Events2	Harmless
Dell_OMSM_Enclosure_Alarm_Disabled: A user has disabled the enclosure alarm	Dell_OMSM_Events2	Harmless
Dell_OMSM_Dead_Disk_Segments_Restored: Disk space that was formerly "dead" or inaccessible to a redundant virtual disk has been restored	Dell_OMSM_Events2	Harmless

Table A-23. Events Supported in the Connection for TEC 3.3 (continued)

Event Class	Derived From	Severity
Dell_OMSM_Array_Disk_Dead_Segments_Recovered: Portions of the array disk that were formerly inaccessible have been recovered	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Controller_Rebuild_Rate_Changed: A user has changed the controller rebuild rate</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Alarm_Enabled: A user has enabled the controller alarm	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Alarm_Disabled: A user has disabled the controller alarm	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Battery_Low: The controller battery charge is low.	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Bad_Block_Replacement_Error: A portion of an array disk is damaged</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Bad_Block_Sense_Error: A portion of an array disk is damaged</pre>	Dell_OMSM_Events2	Warning
<pre>Dell_OMSM_Bad_Block_Medium_Error: A portion of an array disk is damaged.</pre>	Dell_OMSM_Events2	Warning
Dell_OMSM_Bad_Block_Extended_Sense_Error: A portion of an array disk is damaged	Dell_OMSM_Events2	Warning
Dell_OMSM_Bad_Block_Extended_Medium_Error: A portion of an array disk is damaged	Dell_OMSM_Events2	Warning
Dell_OMSM_Asset_Tag_Changed: A user has changed the enclosure asset tag	Dell_OMSM_Events2	Harmless
Dell_OMSM_Asset_Name_Changed: A user has changed the enclosure asset name	Dell_OMSM_Events2	Harmless
Dell_OMSM_Communication_Regained: Communication with an enclosure has been restored	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Rebuild_Completed_With_Errors: A rebuild has been completed with errors</pre>	Dell_OMSM_Events2	Critical
Dell_OMSM_Check_ReadMe_Controller_Driver_Versions: Storage Management is unable to determine whether the system has the minimum required versions of the RAID controller drivers. See the "readme.txt" for a list of validated controller driver versions.	Dell_OMSM_Events2	Harmless

Table A-23. Events Supported in the Connection for TEC 3.3 (continued)

Event Class	Derived From	Severity
Dell_OMSM_RAID_Controller_Configuration_File_Cannot_Opened: Storage Management is unable to determine whether the system has the minimum required versions of the RAID controller firmware and drivers. The configuration file cannot be opened.	_ Dell_OMSM_Events2	Warning
Dell_OMSM_RAID_Controller_Configuration_File_Corrupted: Storage Management is unable to determine whether the system has the minimum required versions of the RAID controller firmware and drivers. The configuration file is unreadable or is corrupted	Dell_OMSM_Events2	Warning
Dell_OMSM_Current_Kernel_And_Version_Older_Than_ Minimum: The current kernel and version is older than the minimum version supported	Dell_OMSM_Events2	Warning
Dell_OMSM_NON_RAID_SCSI_Driver_Version_Older_Than_Minimum: The non-RAID SCSI driver version is older than the minimum version supported	Dell_OMSM_Events2	Warning
Dell_OMSM_Max_Temperature_Probe_Warning_Changed: A user has changed the value for the maximum temperature probe warning threshold.	Dell_OMSM_Events2	Harmless
Dell_OMSM_Min_Temperature_Probe_Warning_Changed: A user has changed the value for the minimum temperature probe warning threshold	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Alarm_Tested: The controller alarm test has run successfully.	Dell_OMSM_Events2	Harmless
Dell_OMSM_Controller_Configuration_Reset: A user has reset the controller configuration.	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Array_Disk_Online: An offline array disk has been made online.</pre>	Dell_OMSM_Events2	Harmless
<pre>Dell_OMSM_Virtual_Disk_Renamed: A user has renamed a virtual disk.</pre>	Dell_OMSM_Events2	Harmless
Dell_OMSM_Dedicated_Hotspare_Assigned: A user has assigned an array disk as a dedicated hot spare to a virtual disk.	Dell_OMSM_Events2	Harmless
Dell_OMSM_Dedicated_Hotspare_Unassigned: A user has unassigned an array disk as a dedicated hot spare to a virtual disk.	Dell_OMSM_Events2	Harmless

# **Glossary**

The following list defines or identifies technical terms, abbreviations, and acronyms used in this document.

#### baroc

Acronym for Basic Recorder of Objects in C.

## Dell OpenManage Array Manager

A storage management tool that provides a common user interface for configuring and remotely managing all host-based redundant array of independent disks (RAID) controllers, allowing administrators to use a central console to manage multiple RAID controllers in a single system and across multiple systems.

## Dell OpenManage Server Administrator

A one-to-one systems management solution that provides a consolidated and consistent way to monitor, configure, update, and manage Dell systems. Dell OpenManage instrumentation is also one of the prerequisites for using the Connection to discover managed systems.

## event management

An enterprise function for managing and monitoring events.

#### event server

A server that handles all events in a distributed system.

#### fmt

Acronym for format files.

#### managed system

A managed system is any system that is monitored and managed using Server Administrator. Systems running Server Administrator can be managed locally or remotely through a supported Web browser.

# modular system \*

A system that can include multiple server modules. Each server module functions as an individual system. To function as a system, a server module is inserted into a chassis that includes power supplies, fans, a system management module, and at least one network switch module. The power supplies, fans, system management module, and network switch module are shared resources of the server modules in the chassis. See server module

#### readme file

A text file included with a software package or hardware product that contains information supplementing or updating the documentation for the software or hardware. Typically, readme files provide installation information, describe new product enhancements or corrections that have not yet been documented, and list known problems or other things you need to be aware of as you use the software or hardware.

#### server module

A modular system component that functions as an individual system. To function as a system, a server module is inserted into a chassis that includes power supplies, fans, a system management module, and at least one network switch module. The power supplies, fans, system management module, and network switch module are shared resources of the server modules in the chassis. See modular system \*.

### slot

Important elements of a message that are separated into pieces of information

#### status

Refers to the health or functioning of an object. For example, a temperature probe can have a normal status if the probe is measuring acceptable temperatures. When the probe begins reading temperatures that exceed limits set by the user, it reports a critical status.

## **Storage Management Service**

A storage management solution that is incorporated as part of Server Administrator to provide a common user interface for configuring and remotely managing storage components including RAID and non-RAID controllers and the attached channels, enclosures, and disks.