Server Administrator
Version 8.0.1 Messages Reference Guide

Notes, Cautions, and Warnings

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

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Contents

Introduction

Dell OpenManage Server Administrator generates event messages stored primarily in the operating system or Server Administrator event logs and sometimes in Simple Network Management Protocol (SNMP) traps. This document describes the event messages that are created by Server Administrator version 7.1.2 and displayed in the Server Administrator alert log.

Server Administrator creates events in response to sensor status changes and other monitored parameters. The Server Administrator event monitor uses these status change events to add descriptive messages to the operating system event log or the Server Administrator alert log.

Each event message that Server Administrator adds to the alert log consists of a unique identifier called the event ID for a specific event source category and a descriptive message. The event message includes the severity, cause of the event, and other relevant information, such as the event location and the previous state of the monitored item.

The tables in this guide list all Server Administrator event IDs in numeric order. Each entry includes the description, severity level, and cause of the event ID. The message text in angle brackets (for example, (for example, *<State>*) describes the event-specific information provided by the Server Administrator.

What's New in this Release

New Alert messages for Instrumentation Service — 1015 and 1016.

New Alert messages for Non-Volatile Memory Express (NVMe) — 2440, 2441, 2442, 2443 and 2445.

Alert Message Change History

The following table describes the changes made to the Storage Management alerts from the previous release of Storage Management to the current release.

Table 1. Alert Message Change History

Storage Management 4.4	
Product Versions to which changes apply	Storage Management 4.4.0
	Server Administrator 7.4.0
New Alerts	1015, 1016
Deleted Alerts	1250, 1253, 1255, 1350, 1355, 1450, 1451, 1452, 1453, 1454, 1455, 1500, 1501, 1502, 1503, 1504, 1505, 1600, 1605
Modified Alerts	None

Storage Management 4.3

Product Versions to which changes apply	Storage Management 4.3.0 Server Administrator 7.3.0
New Alerts	2699, 2700, 2701, 2702, 2703, 2704, 2705, 2874, 2875, 2876, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2930, 2931, 2932, 2933
Deleted Alerts	None
Modified Alerts	None

Storage Management 4.2

Product Versions to which changes apply	Storage Management 4.2.0 Server Administrator 7.2.0
New Alerts	2433, 2434, 2435, 2436, 2437, 2438
Deleted Alerts	None
Modified Alerts	2359

Storage Management 4.1

Product Versions to which changes apply	Storage Management 4.1.0 Server Administrator 7.1.0
New Alerts	2432
Deleted Alerts	None
Modified Alerts	None

Storage Management 4.0

Product Versions to which changes apply	Storage Management 4.0.0 Server Administrator 7.0.0
New Alerts	2425, 2426, 2429, 2430, 2431
Deleted Alerts	None
Modified Alerts	None

Storage Management 3.5

Product Versions to which changes apply	Storage Management 3.5.0 Server Administrator 6.5.0
New Alerts	None
Deleted Alerts	None

Modified Alerts	2388, 2347, 2081
Storage Management 3.4	
Product Versions to which changes apply	Storage Management 3.4.0
	Server Administrator 6.4.0
New Alerts	2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418
	NOTE: The CacheCade feature is available from calendar year 2011.
Deleted Alerts	None
Modified Alerts	None
Storage Management 3.3	
Product Versions to which changes apply	Storage Management 3.3.0
	Server Administrator 6.3.0
New Alerts	2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404
Deleted Alerts	None
Modified Alerts	Alert severity changed for 1151 and 1351
Storage Management 3.2	
Product Versions to which changes apply	Storage Management 3.2.0
	Server Administrator 6.2.0
New Alerts	2387, 2388, 2389, 2390, 2392, 2393
Deleted Alerts	None
Modified Alerts	None

Messages Not Described in This Guide

This guide describes only event messages logged by Server Administrator and Storage Management that are displayed in the Server Administrator alert log. For information on other messages generated by your system, see one of the following sources:

- The *Installation and Troubleshooting Guide or Hardware Owner's Manual* shipped with your system
- Operating system documentation
- Application program documentation

Understanding Event Messages

Add your section content here.This section describes the various types of event messages generated by the Server Administrator. When an event occurs on your system, Server Administrator sends information about one of the following event types to the systems management console:

Table 2. Understanding Event Messages

Icon	Alert Severity	Component Status
	OK /Normal / Informational	An event that describes the successful operation of a unit. The alert is provided for informational purposes and does not indicate an error condition. For example, the alert may indicate the normal start or stop of an operation, such as power supply or a sensor reading returning to normal.
	Warning / Non-critical	An event that is not necessarily significant, but may indicate a possible future problem. For example, a Warning/Non-critical alert may indicate that a component (such as a temperature probe in an enclosure) has crossed a warning threshold.
	Critical / Failure / Error	A significant event that indicates actual or imminent loss of data or loss of function. For example, crossing a failure threshold or a hardware failure such as an array disk.

Server Administrator generates events based on status changes in the following sensors:

- **Temperature Sensor** — Helps protect critical components by alerting the systems management console when temperatures become too high inside a chassis; also monitors the temperature in a variety of locations in the chassis and in attached system(s).
- **Fan Sensor** — Monitors fans in various locations in the chassis and in attached system(s).
- **Voltage Sensor** — Monitors voltages across critical components in various chassis locations and in attached system(s).
- **Current Sensor** — Monitors the current (or amperage) output from the power supply (or supplies) in the chassis and in attached system(s).
- **Chassis Intrusion Sensor** — Monitors intrusion into the chassis and attached system(s).
- **Redundancy Unit Sensor** — Monitors redundant units (critical units such as fans, AC power cords, or power supplies) within the chassis; also monitors the chassis and attached system(s). For example, redundancy allows a second or nth fan to keep the chassis components at a safe temperature when another fan has failed. Redundancy is normal when the intended number of critical components are operating. Redundancy is degraded when a component fails, but others are still operating. Redundancy is lost when there is one less critical redundancy device than required.
- **Power Supply Sensor** — Monitors power supplies in the chassis and in attached system(s).
- **Memory Prefailure Sensor** — Monitors memory modules by counting the number of Error Correction Code (ECC) memory corrections.
- **Fan Enclosure Sensor** — Monitors protective fan enclosures by detecting their removal from and insertion into the system, and by measuring how long a fan enclosure is absent from the chassis. This sensor monitors the chassis and in attached system(s).

- **AC Power Cord Sensor** — Monitors the presence of AC power for an AC power cord.
- **Hardware Log Sensor** — Monitors the size of a hardware log.
- **Processor Sensor** — Monitors the processor status in the system.
- **Pluggable Device Sensor** — Monitors the addition, removal, or configuration errors for some pluggable devices, such as memory cards.
- **Battery Sensor** — Monitors the status of one or more batteries in the system.
- **SD Card Device Sensor** — Monitors instrumented Secure Digital (SD) card devices in the system.

Sample Event Message Text

The following example shows the format of the event messages logged by Server Administrator.

```
EventID: 1000

Source: Server Administrator

Category: Instrumentation Service

Type: Information

Date and Time: Mon Oct 21 10:38:00 2002

Computer: <computer name>

Description: Server Administrator starting

Data: Bytes in Hex
```

Viewing Alerts and Event Messages

An event log is used to record information about important events.

Server Administrator generates alerts that are added to the operating system event log and to the Server Administrator alert log. To view these alerts in Server Administrator:

1. Select the **System** object in the tree view.
2. Select the **Logs** tab.
3. Select the **Alert** tab.

You can also view the event log using your operating system's event viewer. Each operating system's event viewer accesses the applicable operating system event log.

The location of the event log file depends on the operating system you are using.

- On systems running the Microsoft Windows operating systems, event messages are logged in the operating system event log and the Server Administrator event log.

    NOTE: The Server Administrator event log file is named **dcsys32.xml** and is located in the **<install_path>\omsa\log directory**. The default install_path is **C:\Program Files\Dell\SysMgt**.
- On systems running the Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Citrix XenServer, VMware ESX, and VMware ESXi operating systems, the event messages are logged in the operating system log file and the Server Administrator event log.

NOTE: The default name of the operating system log file is **/var/log/messages**, and you can view the operating system log file using a text editor such as vi or emacs. The Server Administrator event log file is named **dcsys<xx>.xml**,where xx is either **32** or **64** bit depending on the operating system. In the Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Citrix XenServer and VMware ESX operating systems, the Server Administrator event log file is located in the **/opt/dell/srvadmin/var/log/openmanage** directory. In the VMware ESXi operating system, the Server Administrator event log file is located in the **/etc/cim/dell/srvadmin/log/openmanage** directory.

Logging Messages to a Unicode Text File

Logging messages to a Unicode text file is optional. By default, the feature is disabled in the Server Administrator. To enable this feature, modify the **Event Manager** section of the **dcemdy <xx>.ini** configuration file where xx is **32** or **64** bit depending on the operating system, as follows:

- On systems running Microsoft Windows operating systems, you can locate the configuration file in the **<install_path> \dataeng\ini** directory and set the property UnitextLog.enabled=true. The default **install_path** is **C:\Program Files\Dell\SysMgt**. Restart the DSM SA *Event Manager* service to enable the setting. The Server Administrator Unicode text event log file is named **dcsys32.log** and is located in the **<install_path>\omsa\log** directory.
- On systems running the Red Hat Enterprise Linux, SUSE Linux Enterprise Server, Citrix XenServer and VMware ESX operating systems, you can locate the configuration file in the /opt/dell/srvadmin/etc/srvadmin-deng/ini directory and set the property UnitextLog.enabled=true. Run the /etc/init.d/dataeng restart command to restart the Server Administrator Event Manager service and enable the setting. This also restarts the Server Administrator Data Manager and SNMP services. The Server Administrator Unicode text event log file is named dcsys <xx>.log where xx is 32 or 64 bit depending on the operating system and is located in the /opt/dell/srvadmin/var/log/ openmanage directory.
- On systems running the in ESXi operating system the **dcemdy32.ini** file is located under **/etc/cim/dell/srvadmin/srvadmin-deng/ini/** and the **dcsys <xx>.log** where xx is **32** or **64** bit depending on the operating system and is located under **/etc/cim/dell/srvadmin/log/openmanage/**

The following sub-sections explain how to launch the Windows Server 2008, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, VMware ESX, and VMware ESXi event viewers.

Viewing Events in Microsoft Windows Server 2008

1. Click the **Start** button, point to **Settings**, and click Control Panel.
2. Double-click **Administrative Tools**, and then double-click **Event Viewer**.
3. In the **Event Viewer** window, click the Tree tab and then click System Log.

   The **System Log** window displays a list of recently logged events.
4. To view the details of an event, double-click one of the event items.

   NOTE: You can also look up the dcsys <xx>.xml file, in the **<install_path> \omsa\log** directory, to view the separate event log file, where the default *install_path* is **C:\Program Files\Dell \SysMgt** and xx is **32** or **64** depending on the operating system that is installed.

Viewing Events in Red Hat Enterprise Linux and SUSE Linux Enterprise Server

1. Log in as root.
2. Use a text editor such as **vi** or **emacs** to view the file named **/var/log/messages**.

The following example shows the Red Hat Enterprise Linux and SUSE Linux Enterprise Server message log, /var/log/messages. The text in boldface type indicates the message text.

NOTE: These messages are typically displayed as one long line. In the following example, the message is displayed using line breaks to help you see the message text more clearly.

```
Feb 6 14:20:51 server01 Server Administrator: Instrumentation Service EventID:
1000
```

Server Administrator starting

```
Feb 6 14:20:51 server01 Server Administrator: Instrumentation Service EventID:
1001
```

Server Administrator startup complete

```
Feb 6 14:21:21 server01 Server Administrator: Instrumentation Service EventID:
1254Chassis intrusion detected Sensor location: Main chassis intrusion Chassis
location: Main System Chassis Previous state was: OK (Normal) Chassis intrusion
state: Open
```

```
Feb 6 14:21:51 server01 Server Administrator: Instrumentation Service EventID:
1252Chassis intrusion returned to normal Sensor location: Main chassis intrusion
Chassis location: Main System Chassis Previous state was: Critical (Failed)
Chassis intrusion state: Closed
```

Viewing Events in VMware ESX/ESXi

1. Log in to the system running VMware ESX/ESXi with VMware vSphere Client.
2. Click **View → Administration → System Logs**.
3. Select **Server Log → /var/log/messages** entry from the drop-down list.

Viewing the Event Information

The event log for each operating system contains some or all of the following information:

- **Date** — The date the event occurred.
- **Time** — The local time the event occurred.
- **Type** — A classification of the event severity: Information, Warning, or Error.
- **User** — The name of the user on whose behalf the event occurred.
- **Computer** — The name of the system where the event occurred.
- **Source** — The software that logged the event.
- **Category** — The classification of the event by the event source.
- **Event ID** — The number identifying the particular event type.
- **Description** — A description of the event. The format and contents of the event description vary, depending on the event type.

Understanding the Event Description

Table below lists in alphabetical order each line item that may appear in the event description.

Description Line Item	`Action performed was: <Action>`
Explanation	Specifies the action that was performed, for example: `Action performed was: Power cycle`

Description Line Item	`Action requested was: <Action>`
Explanation	Specifies the action that was requested, for example: `Action requested was: Reboot, shutdown OS first`
Description Line Item	`Additional Details: <Additional details for the event>`
Explanation	Specifies additional details available for the hot plug event, for example: `Memory device: DIMM1_A Serial number: FFFF30B1`
Description Line Item	`<Additional power supply status information>`
Explanation	Specifies information pertaining to the event, for example: `Power supply input AC is off, Power supply POK (power OK) signal is not normal, Power supply is turned off`
Description Line Item	`Chassis intrusion state: <Intrusion state>`
Explanation	Specifies whether the chassis intrusion state is **Open** or **Closed**. For example: `Chassis intrusion state: Open`
Description Line Item	`Chassis location: <Name of chassis>`
Explanation	Specifies name of the chassis that generated the message, for example: `Chassis location: Main System Chassis`
Description Line Item	`Configuration error type: <type of configuration error>`
Explanation	Specifies the type of configuration error that occurred, for example: `Configuration error type: Revision mismatch`
Description Line Item	`Current sensor value (in Amps): <Reading>`
Explanation	Specifies the current sensor value in amps, for example: `Current sensor value (in Amps): 7.853`
Description Line Item	`Date and time of action: <Date and time>`
Explanation	Specifies the date and time the action was performed, for example: `Date and time of action: Sat Jun 12 16:20:33 2004`
Description Line Item	`Device location: <Location in chassis>`
Explanation	Specifies the location of the device in the specified chassis, for example: `Device location: Memory Card A`

Description Line Item	`Discrete current state: <State>`
Explanation	Specifies the state of the current sensor, for example: `Discrete current state: Good`
Description Line Item	`Discrete temperature state: <State>`
Explanation	Specifies the state of the temperature sensor, for example: `Discrete temperature state: Good`
Description Line Item	`Discrete voltage state: <State>`
Explanation	Specifies the state of the voltage sensor, for example: `Discrete voltage state: Good`
Description Line Item	`Fan sensor value: <Reading>`
Explanation	Specifies the fan speed in revolutions per minute (RPM) or On/Off, for example: `Fan sensor value (in RPM): 2600` `Fan sensor value: Off`
Description Line Item	`Log type: <Log type>`
Explanation	Specifies the type of hardware log, for example: `Log type: ESM`
Description Line Item	`Memory device bank location: <Bank name in chassis>`
Explanation	Specifies the name of the memory bank in the system that generated the message, for example: `Memory device bank location: Bank_1`
Description Line Item	`Memory device location: <Device name in chassis>`
Explanation	Specifies the location of the memory module in the chassis, for example: `Memory device location: DIMM_A`
Description Line Item	`Number of devices required for full redundancy: <Number>`
Explanation	Specifies the number of power supply or cooling devices required to achieve full redundancy, for example: `Number of devices required for full redundancy: 4`
Description Line Item	`Peak value (in Watts):<Reading>`
Explanation	Specifies the peak value in Watts, for example: `Peak value (in Watts): 1.693`

Description Line Item	`Possible memory module event cause: <list of causes>`

Explanation	Specifies a list of possible causes for the memory module event, for example: `Possible memory module event cause:`
	`Single bit warning error rate exceeded`
	`Single bit error logging disabled`

Description Line Item	`Power Supply type: <type of power supply>`
Explanation	Specifies the type of power supply, for example: `Power Supply type: VRM`
Description Line Item	`Previous redundancy state was: <State>`
Explanation	Specifies the status of the previous redundancy message, for example: `Previous redundancy state was: Lost`
Description Line Item	`Previous state was:<State>`
Explanation	Specifies the previous state of the sensor, for example: `Previous state was: OK (Normal)`
Description Line Item	`Processor sensor status: <status>`
Explanation	Specifies the status of the processor sensor, for example: `Processor sensor status: Configuration error`
Description Line Item	`Redundancy unit: <Redundancy location in chassis>`
Explanation	Specifies the location of the redundant power supply or cooling unit in the chassis, for example: `Redundancy unit: Fan Enclosure`
Description Line Item	`SD card device type: <Type of SD card device>`
Explanation	Specifies the type of SD card device, for example: `SD card device type: Hypervisor`
Description Line Item	`SD card state: <State of SD card>`
Explanation	Specifies the state of the SD card, for example: `SD card state: Present, Active`
Description Line Item	`Sensor location: <Location in chassis>`
Explanation	Specifies the location of the sensor in the specified chassis, for example: `Sensor location: CPU1`

Description Line Item	`Temperature sensor value: <Reading>`
Explanation	Specifies the temperature in degrees Celsius, for example: `Temperature sensor value (in degrees Celsius): 30`
Description Line Item	`Voltage sensor value (in Volts):<Reading>`
Explanation	Specifies the voltage sensor value in volts, for example: `Voltage sensor value (in Volts): 1.693`

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Server Management Messages

The following tables lists in numerical order each event ID and its corresponding description, along with its severity and cause.

📝 **NOTE:** For corrective actions, see the appropriate documentation.

Server Administrator General Messages

The messages below indicate that certain alert systems are up and working.

Event ID — 0000

Description	`Log was cleared`
Severity	Information
Cause	User cleared the log from Server Administrator.
	This operation does not clear the operating system event log. Therefore, this event is not logged in the operating system event log. This is logged in the System Administrator alert log.

Event ID — 0001

Description	`Log backup created`
Severity	Information
Cause	The log was full, copied to backup, and cleared.

Event ID — 1000

Description	`Server Administrator starting`
Severity	Information
Cause	Server Administrator is beginning to initialize.

Event ID — 1001

Description	`Server Administrator startup complete`
Severity	Information
Cause	Server Administrator completed initialization.

Event ID — 1002

Description   `A system BIOS update has been scheduled for the next reboot`

Severity   Information

Cause   The user has chosen to update the flash basic input/output system (BIOS).

Event ID – 1003

Description   `A previously scheduled system BIOS update has been canceled`

Severity   Information

Cause   The user decides to cancel the flash BIOS update, or an error occurs during the flash.

Event ID — 1004

Description   `Thermal shutdown protection has been initiated`

Severity   Error

Cause   This message is generated when a system is configured for thermal shutdown due to an error event. If a temperature sensor reading exceeds the error threshold for which the system is configured, the operating system shuts down and the system powers off. This event may also be initiated on certain systems when a fan enclosure is removed from the system for an extended period of time.

Event ID — 1005

Description   `SMBIOS data is absent`

Severity   Error

Cause   The system does not contain the required systems management BIOS version 2.2 or higher, or the BIOS is corrupted.

Event ID — 1006

Description   `Automatic System Recovery (ASR) action was performed Action performed was: <Action>`

`Date and time of action:<Date and time>`

Severity   Error

Cause   This message is generated when an automatic system recovery action is performed due to a hung operating system. The action performed and the time of action is provided.

Event ID — 1007

Description	User initiated host system control action Action requested was: <Action>
Severity	Information
Cause	User requested a host system control action to reboot, power off, or power cycle the system. Alternatively, the user had indicated protective measures to be initiated in the event of a thermal shutdown.

Event ID — 1008

Description	Systems Management Data Manager Started
Severity	Information
Cause	Systems Management Data Manager services were started.

Event ID — 1009

Description	Systems Management Data Manager Stopped
Severity	Information
Cause	Systems Management Data Manager services were stopped.

Event ID — 1011

Description	RCI table is corrupt
Severity	Error
Cause	This message is generated when the BIOS Remote Configuration Interface (RCI) table is corrupted or cannot be read by the systems management software.

Event ID — 1012

Description	IPMI Status Interface: <the IPMI interface being used>, <additional information if available and applicable >
Severity	Information
Cause	This message is generated to indicate the Intelligent Platform Management Interface (IPMI) status of the system. Additional information, when available, includes Baseboard Management Controller (BMC) not present, BMC not responding, System Event Log (SEL) not present, and SEL Data Record (SDR) not present.

Event ID — 1013

Description	`System Peak Power detected new peak value Peak value (in` `Watts): <Reading>`
Severity	Information
Cause	The system peak power sensor detected a new peak value in power consumption. The new peak value in Watts is provided.

Event ID — 1014

Description	`System software event: <Description>` `Date and time of action: <Date and time>`
Severity	Warning
Cause	This event is generated when the systems management agent detects a critical system software generated event in the system event log which could have been resolved.

Event ID — 1015

Description	`Server Based Management Mode is enabled`
Severity	Information
Cause	This event is generated when the server-based management mode is enabled.

Event ID — 1016

Description	`Server Based Management Mode is disabled`
Severity	Information
Cause	This event is generated when the server-based management mode is disabled.

Temperature Sensor Messages

The temperature sensors listed help protect critical components by alerting the systems management console when temperatures become too high inside a chassis. The temperature sensor messages use more variables: sensor location, chassis location, previous state, and temperature sensor value or state.

Event ID — 1050

Description	`Temperature sensor has failed Sensor location: <Location in`
	`chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`

```
                        If sensor type is not discrete:

                        Temperature sensor value (in degrees Celsius): <Reading>

                        If sensor type is discrete:

                        Discrete temperature state: <State>
```

Severity   Error

Cause   A temperature sensor on the backplane board, system board, or the carrier in the specified system failed. The sensor location, chassis location, previous state, and temperature sensor value are provided.

Event ID — 1051

Description
```
                        Temperature sensor value unknown Sensor location: <Location in
                        chassis>
                        Chassis location: <Name of chassis>

                        If sensor type is not discrete:

                        Temperature sensor value (in degrees Celsius): <Reading>

                        If sensor type is discrete:

                        Discrete temperature state: <State>
```

Severity   Warning

Cause   A temperature sensor on the backplane board, system board, or drive carrier in the specified system could not obtain a reading. The sensor location, chassis location, previous state, and a nominal temperature sensor value information is provided.

Event ID — 1052

Description
```
                        Temperature sensor returned to a normal value Sensor location:
                        <Location in chassis>
                        Chassis location: <Name of chassis>

                        Previous state was: <State>

                        If sensor type is not discrete:

                        Temperature sensor value (in degrees Celsius): <Reading>

                        If sensor type is discrete:

                        Discrete temperature state: <State>
```

Severity   Information

Cause	A temperature sensor on the backplane board, system board, or drive carrier in the specified system returned to a valid range after crossing a failure threshold. The sensor location, chassis location, previous state, and temperature sensor value are provided.

Event ID — 1053

| Description | Temperature sensor detected a warning value Sensor location: <Location in chassis>
Chassis location: <Name of chassis>

Previous state was: <State>

If sensor type is not discrete:

Temperature sensor value (in degrees Celsius): <Reading>

If sensor type is discrete:

Discrete temperature state: <State> |
|---|---|
| Severity | Warning |
| Cause | A temperature sensor on the backplane board, system board, CPU, or drive carrier in the specified system exceeded its warning threshold. The sensor location, chassis location, previous state, and temperature sensor value are provided. |

Event ID — 1054

| Description | Temperature sensor detected a failure value Sensor location: <Location in chassis>
Chassis location: <Name of chassis>

Previous state was: <State>

If sensor type is not discrete:

Temperature sensor value (in degrees Celsius): <Reading>

If sensor type is discrete:

Discrete temperature state: <State> |
|---|---|
| Severity | Error |
| Cause | A temperature sensor on the backplane board, system board, or drive carrier in the specified system exceeded its failure threshold. The sensor location, chassis location, previous state, and temperature sensor value are provided. |

Event ID — 1055

Description	`Temperature sensor detected a non-recoverable value Sensor location: <Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`If sensor type is not discrete:`
	
	`Temperature sensor value (in degrees Celsius): <Reading>`
	
	`If sensor type is discrete:`
	
	`Discrete temperature state: <State>`

Severity	Error
Cause	A temperature sensor on the backplane board, system board, or drive carrier in the specified system detected an error from which it cannot recover. The sensor location, chassis location, previous state, and temperature sensor value information is provided.

Cooling Device Messages

The cooling device sensors listed monitor how well a fan is functioning. Cooling device messages provide status and warning information for fans in a particular chassis.

Event ID — 1100

Description	`Fan sensor has failed Sensor location: <Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`Fan sensor value: <Reading>`

Severity	Error
Cause	A fan sensor in the specified system is not functioning. The sensor location, chassis location, previous state, and fan sensor value information is provided.

Event ID — 1101

Description	`Fan sensor value unknown Sensor location: <Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`

```
Fan sensor value: <Reading>
```

Severity	Error
Cause	A fan sensor in the specified system could not obtain a reading. The sensor location, chassis location, previous state, and a nominal fan sensor value information is provided.

Event ID — 1102

Description	Fan sensor returned to a normal value Sensor location: `<Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`Fan sensor value: <Reading>`

Severity	Information
Cause	A fan sensor reading on the specified system returned to a valid range after crossing a warning threshold. The sensor location, chassis location, previous state, and fan sensor value information is provided.

Event ID — 1103

Description	Fan sensor detected a warning value Sensor location: `<Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`Fan sensor value: <Reading>`

Severity	Warning
Cause	A fan sensor reading in the specified system exceeded a warning threshold. The sensor location, chassis location, previous state, and fan sensor value information is provided.

Event ID — 1104

Description	Fan sensor detected a failure value Sensor location: `<Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`Fan sensor value: <Reading>`

Severity	Error
Cause	A fan sensor in the specified system detected the failure of one or more fans. The sensor location, chassis location, previous state, and fan sensor value information is provided.

Event ID — 1105

Description	Fan sensor detected a non-recoverable value Sensor location: \<Location in chassis\> Chassis location: \<Name of chassis\> Previous state was: \<State\> Fan sensor value: \<Reading\>
Severity	Error
Cause	A fan sensor detected an error from which it cannot recover. The sensor location, chassis location, previous state, and fan sensor value information is provided.

Voltage Sensor Messages

The voltage sensors listed monitor the number of volts across critical components. Voltage sensor messages provide status and warning information for voltage sensors in a particular chassis.

Event ID — 1150

Description	Voltage sensor has failed Sensor location: \<Location in chassis\> Chassis location: \<Name of chassis\> Previous state was: \<State\> If sensor type is not discrete: Voltage sensor value (in Volts): \<Reading\> If sensor type is discrete: Discrete voltage state: \<State\>
Severity	Error
Cause	A voltage sensor in the specified system failed. The sensor location, chassis location, previous state, and voltage sensor value information is provided.

Event ID — 1151

Description	Voltage sensor value unknown Sensor location: <Location in chassis> Chassis location: <Name of chassis> Previous state was: <State> If sensor type is not discrete: Voltage sensor value (in Volts): <Reading> If sensor type is discrete: Discrete voltage state: <State>
Severity	Warning
Cause	A voltage sensor in the specified system could not obtain a reading. The sensor location, chassis location, previous state, and a nominal voltage sensor value are provided.

Event ID — 1152

Description	Voltage sensor returned to a normal value Sensor location: <Location in chassis> Chassis location: <Name of chassis> Previous state was: <State> If sensor type is not discrete: Voltage sensor value (in Volts): <Reading> If sensor type is discrete: Discrete voltage state: <State>
Severity	Information
Cause	A voltage sensor in the specified system returned to a valid range after crossing a failure threshold. The sensor location, chassis location, previous state, and voltage sensor value information is provided.

Event ID — 1153

Description	Voltage sensor detected a warning value Sensor location: <Location in chassis> Chassis location: <Name of chassis>

```
                    Previous state was: <State>

                    If sensor type is not discrete:

                    Voltage sensor value (in Volts): <Reading>

                    If sensor type is discrete:

                    Discrete voltage state: <State>
```

Severity	Warning
Cause	A voltage sensor in the specified system exceeded its warning threshold. The sensor location, chassis location, previous state, and voltage sensor value information is provided.

Event ID — 1154

Description	Voltage sensor detected a failure value Sensor location: <Location in chassis>
 Chassis location: <Name of chassis>
 Previous state was: <State>
 If sensor type is not discrete:
 Voltage sensor value (in Volts): <Reading>
 If sensor type is discrete:
 Discrete voltage state: <State>

Severity	Error
Cause	A voltage sensor in the specified system exceeded its failure threshold. The sensor location, chassis location, previous state, and voltage sensor value information is provided.

Event ID — 1155

Description	Voltage sensor detected a non-recoverable value Sensor location: <Location in chassis>
 Chassis location: <Name of chassis>
 Previous state was: <State>
 If sensor type is not discrete:
 Voltage sensor value (in Volts): <Reading>

```
                      If sensor type is discrete:

                      Discrete voltage state: <State>
```

Severity	Error
Cause	A voltage sensor in the specified system detected an error from which it cannot recover. The sensor location, chassis location, previous state, and voltage sensor value information is provided.

Current Sensor Messages

The current sensors listed measure the amount of current (in amperes) that is traversing critical components. Current sensor messages provide status and warning information for current sensors in a particular chassis.

Event ID — 1200

Description	`Current sensor has failed Sensor location: <Location in chassis>`
	
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`If sensor type is not discrete:`
	
	`Current sensor value (in Amps): <Reading> OR`
	
	`Current sensor value (in Watts): <Reading>`
	
	`If sensor type is discrete:`
	
	`Discrete voltage state: <State>`

Severity	Error
Cause	A current sensor in the specified system failed. The sensor location, chassis location, previous state, and current sensor value are provided.

Event ID — 1201

Description	`Current sensor value unknown Sensor location: <Location in chassis>`
	
	`Chassis location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`If sensor type is not discrete:`

```
Current sensor value (in Amps): <Reading> OR

Current sensor value (in Watts): <Reading>

If sensor type is discrete:

Discrete voltage state: <State>
```

Severity	Warning
Cause	A current sensor in the specified system could not obtain a reading. The sensor location, chassis location, previous state, and a nominal current sensor value information is provided.

Event ID — 1202

| Description | ```
Current sensor returned to a normal value Sensor location: <Location in chassis>

Chassis location: <Name of chassis>

Previous state was: <State>

If sensor type is not discrete:

Current sensor value (in Amps): <Reading> OR

Current sensor value (in Watts): <Reading>

If sensor type is discrete:

Discrete voltage state: <State>
``` |

Severity	Information
Cause	A current sensor in the specified system returned to a valid range after crossing a failure threshold. The sensor location, chassis location, previous state, and current sensor value information is provided.

Event ID — 1203

| Description | ```
Current sensor detected a warning value Sensor location: <Location in chassis>

Chassis location: <Name of chassis>

Previous state was: <State>

If sensor type is not discrete:

Current sensor value (in Amps): <Reading> OR
``` |

```
Current sensor value (in Watts): <Reading>

If sensor type is discrete:

Discrete voltage state: <State>
```

Severity	Warning
Cause	A current sensor in the specified system exceeded its warning threshold. The sensor location, chassis location, previous state, and current sensor value are provided.

Event ID — 1204

| Description | ```
Current sensor detected a failure value Sensor location:
<Location in chassis>

Chassis location: <Name of chassis>

Previous state was: <State>

If sensor type is not discrete:

Current sensor value (in Amps): <Reading> OR

Current sensor value (in Watts): <Reading>

If sensor type is discrete:

Discrete voltage state: <State>
``` |
|---|---|

Severity	Error
Cause	A current sensor in the specified system exceeded its failure threshold. The sensor location, chassis location, previous state, and current sensor value are provided.

Event ID — 1205

| Description | ```
Current sensor detected a non-recoverable value Sensor
location: <Location in chassis>

Chassis location: <Name of chassis>

Previous state was: <State>

If sensor type is not discrete:

Current sensor value (in Amps): <Reading> OR

Current sensor value (in Watts): <Reading>
``` |
|---|---|

```
                      If sensor type is discrete:

                      Discrete voltage state: <State>
```

Severity	Error
Cause	A current sensor in the specified system detected an error from which it cannot recover. The sensor location, chassis location, previous state, and current sensor value are provided.

Chassis Intrusion Messages

The chassis intrusion messages listed are a security measure. Chassis intrusion means that someone is opening the cover to a system's chassis. Alerts are sent to prevent unauthorized removal of parts from a chassis.

Event ID — 1251

Description	Chassis intrusion sensor value unknown Sensor location: <Location in chassis>
	Chassis location: <Name of chassis>
	Previous state was: <State>
	Chassis intrusion state: <Intrusion state>

Severity	Warning
Cause	A chassis intrusion sensor in the specified system could not obtain a reading. The sensor location, chassis location, previous state, and chassis intrusion state are provided.

Event ID — 1252

Description	Chassis intrusion returned to normal Sensor location: <Location in chassis>
	Chassis location: <Name of chassis>
	Previous state was: <State>
	Chassis intrusion state: <Intrusion state>

Severity	Information
Cause	A chassis intrusion sensor in the specified system detected that a cover was opened while the system was operating but has since been replaced. The sensor location, chassis location, previous state, and chassis intrusion state information is provided.

Event ID — 1254

Description	`Chassis intrusion detected Sensor location: <Location in chassis>`
	`Chassis location: <Name of chassis>`
	`Previous state was: <State>`
	`Chassis intrusion state: <Intrusion state>`
Severity	Critical
Cause	A chassis intrusion sensor in the specified system detected that the system cover was opened while the system was operating. The sensor location, chassis location, previous state, and chassis intrusion state information is provided.

Redundancy Unit Messages

Redundancy means that a system chassis has more than one of certain critical components. Fans and power supplies, for example, are so important for preventing damage or disruption of a computer system that a chassis may have "extra" fans or power supplies installed. Redundancy allows a second or nth fan to keep the chassis components at a safe temperature when the primary fan has failed. Redundancy is normal when the intended number of critical components are operating. Redundancy is degraded when a component fails but others are still operating. Redundancy is lost when the number of components functioning falls below the redundancy threshold. Lists the redundancy unit messages.

The number of devices required for full redundancy is provided as part of the message, when applicable, for the redundancy unit and the platform. For details on redundancy computation, see the respective platform documentation.

Event ID — 1300

Description	`Redundancy sensor has failed Redundancy unit: <Redundancy Location in chassis>`
	`Chassis location: <Name of chassis>`
	`Previous redundancy state was: <State>`
Severity	Error
Cause	A redundancy sensor in the specified system failed. The redundancy unit location, chassis location, previous redundancy state, and the number of devices required for full redundancy are provided.

Event ID — 1301

Description	`Redundancy sensor value unknown Redundancy unit: <Redundancy Location in chassis>`

```
Chassis location: <Name of chassis>

Previous redundancy state was: <State>
```

Severity	Warning
Cause	A redundancy sensor in the specified system could not obtain a reading. The redundancy unit location, chassis location, previous redundancy state, and the number of devices required for full redundancy are provided.

Event ID — 1302

Description	`Redundancy not applicable Redundancy unit: <Redundancy Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous redundancy state was: <State>`

Severity	Information
Cause	A redundancy sensor in the specified system detected that a unit was not redundant. The redundancy location, chassis location, previous redundancy state, and the number of devices required for full redundancy information is provided.

Event ID — 1303

Description	`Redundancy is offline Redundancy unit: <Redundancy Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous redundancy state was: <State>`

Severity	Information
Cause	A redundancy sensor in the specified system detected that a redundant unit is offline. The redundancy unit location, chassis location, previous redundancy state, and the number of devices required for full redundancy information is provided.

Event ID — 1304

Description	`Redundancy regained Redundancy unit: <Redundancy Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous redundancy state was: <State>`

Severity	Information
Cause	A redundancy sensor in the specified system detected that a "lost" redundancy device has been reconnected or replaced; full redundancy is in effect. The

redundancy unit location, chassis location, previous redundancy state, and the number of devices required for full redundancy information is provided.

Event ID — 1305

Description	`Redundancy degraded Redundancy unit: <Redundancy Location in chassis>`
	
	`Chassis location: <Name of chassis>`
	
	`Previous redundancy state was: <State>`

Severity	Warning
Cause	A redundancy sensor in the specified system detected that one of the components of the redundancy unit has failed but the unit is still redundant. The redundancy unit location, chassis location, previous redundancy state, and the number of devices required for full redundancy information is provided.

Event ID — 1306

Description	`Redundancy lost Redundancy unit: <Redundancy Location in chassis>`
	
	`Chassis location: <Name of chassis>`
	
	`Previous redundancy state was: <State>`

Severity	Error
Cause	A redundancy sensor in the specified system detected that one of the components in the redundant unit has been disconnected, has failed, or is not present. The redundancy unit location, chassis location, previous redundancy state, and the number of devices required for full redundancy are provided.

Power Supply Messages

The power supply sensors monitor how well a power supply is functioning. The power supply messages listed provides status and warning information for power supplies present in a particular chassis.

Event ID — 1351

Description	`Power supply sensor value unknown Sensor Location: <Location in chassis>`
	`Chassis location: <Name of chassis>`
	
	`Previous redundancy state was: <State>`
	
	`Power Supply type: <type of power supply>`
	
	`<Additional power supply status information>`

```
If in configuration error state:

Configuration error type:<type of configuration error>
```

Severity	Warning
Cause	A power supply sensor in the specified system could not obtain a reading. The sensor location, chassis location, previous state, power supply type, additional power supply status, and configuration error type information are provided.

Event ID — 1352

Description	Power supply returned to normal Sensor Location: <Location in chassis>

```
Chassis location: <Name of chassis>

Previous redundancy state was: <State>

Power Supply type: <type of power supply>

<Additional power supply status information>

If in configuration error state:

Configuration error type:<type of configuration error>
```

Severity	Information
Cause	A power supply has been reconnected or replaced. The sensor location, chassis location, previous state, power supply type, additional power supply status, and configuration error type information are provided.

Event ID — 1353

Description	Power supply detected a warning Sensor Location: <Location in chassis>

```
Chassis location: <Name of chassis>

Previous redundancy state was: <State>

Power Supply type: <type of power supply>

<Additional power supply status information>

If in configuration error state:

Configuration error type:<type of configuration error>
```

Severity	Warning
Cause	A power supply sensor reading in the specified system exceeded a user-definable warning threshold. The sensor location, chassis location, previous state, power

supply type, additional power supply status, and configuration error type information are provided.

Event ID — 1354

Description	`Power supply detected a failure Sensor Location: <Location in chassis>`
	
	`Chassis location: <Name of chassis>`
	
	`Previous redundancy state was: <State>`
	
	`Power Supply type: <type of power supply>`
	
	`<Additional power supply status information>`
	
	`If in configuration error state:`
	
	`Configuration error type:<type of configuration error>`

Severity	Error
Cause	A power supply has been disconnected or has failed. The sensor location, chassis location, previous state, power supply type, additional power supply status, and configuration error type information are provided.

Memory Device Messages

The memory device messages listed provides status and warning information for memory modules present in a particular system. Memory devices determine health status by monitoring the ECC memory correction rate and the type of memory events that have occurred.

NOTE: A critical status does not always indicate a system failure or loss of data. In some instances, the system has exceeded the ECC correction rate. Although the system continues to function, you should perform system maintenance as described.

NOTE: The <status> can be either `critical` or `non-critical`.

Event ID — 1400

Description	`Memory device status is <status>`
	`Memory device location: <location in chassis>`
	
	`Possible memory module event cause: <list of causes>`

Severity	Informational
Cause	Memory device monitoring has been disabled. The memory module may not be correctly seated, wrongly configured, or has failed.

Event ID — 1401

Description	`Memory device status is <status>`
	`Memory device location: <location in chassis>`
	`Possible memory module event cause: <list of causes>`
Severity	Informational
Cause	Memory device status is unknown. The memory module may not be correctly seated, wrongly configured, or has failed.

Event ID — 1402

Description	`Memory device status is <status>`
	`Memory device location: <location in chassis>`
	`Possible memory module event cause: <list of causes>`
Severity	Informational
Cause	Memory device status is normal. The memory device identified in the message has returned to a normal state.

Event ID — 1403

Description	`Memory device status is <status>`
	`Memory device location: <location in chassis>`
	`Possible memory module event cause: <list of causes>`
Severity	Warning
Cause	A memory device correction rate exceeded an acceptable value. The memory device status and possible memory module event cause information is provided.

Event ID — 1404

Description	`Memory device status is <status>`
	`Memory device location: <location in chassis>`
	`Possible memory module event cause: <list of causes>`
Severity	Error
Cause	A memory device correction rate exceeded an acceptable value, a memory spare bank was activated, or a multi-bit ECC error occurred. The system continues to function normally (except for a multi-bit error). Replace the memory module identified in the message during the system's next scheduled maintenance. Clear

the memory error on multi-bit ECC error. The memory device status and possible memory module event cause information is provided.

Event ID — 1405

Description	`Memory device status is <status>`
	`Memory device location: <location in chassis>`
	
	`Possible memory module event cause: <list of causes>`

Severity	Informational
Cause	Memory device status is nonrecoverable. The memory module failed because of an irrecoverable error.

Hardware Log Sensor Messages

The hardware logs provide hardware status messages to systems management software. On certain systems, the hardware log is implemented as a circular queue. When the log becomes full, the oldest status messages are overwritten when new status messages are logged. On some systems, the log is not circular. On these systems, when the log becomes full, subsequent hardware status messages are lost. Hardware log sensor messages listed provides status and warning information about the noncircular logs that may fill up, resulting in lost status messages.

Event ID — 1550

Description	`Log monitoring has been disabled` `Log type: <Log type>`
Severity	Warning
Cause	A hardware log sensor in the specified system is disabled. The log type information is provided.

Event ID — 1551

Description	`Log status is unknown` `Log type: <Log type>`
Severity	Information
Cause	A hardware log sensor in the specified system could not obtain a reading. The log type information is provided.

Event ID — 1552

Description	`Log size is no longer near or at capacity`

```
                          Log type: <Log type>
```

Severity	Information
Cause	The hardware log on the specified system is no longer near or at its capacity, usually as the result of clearing the log. The log type information is provided.

Event ID — 1553

Description	Log size is near capacity Log type: <Log type>
Severity	Warning
Cause	The size of a hardware log on the specified system is near or at the capacity of the hardware log. The log type information is provided.

Event ID — 1554

Description	Log status is full Log type: <Log type>
Severity	Error
Cause	The size of a hardware log on the specified system is full. The log type information is provided.

Event ID — 1555

Description	Log sensor has failed Log type: <Log type>
Severity	Error
Cause	A hardware log sensor in the specified system failed. The hardware log status cannot be monitored. The log type information is provided.

Processor Sensor Messages

The processor sensors monitor how well a processor is functioning. Processor messages listed provides status and warning information for processors in a particular chassis.

Event ID — 1601

Description	Processor sensor value unknown Sensor Location: <Location in chassis> Chassis Location: <Name of chassis>

```
                    Previous state was: <State>

                    Processor sensor status: <status>
```

Severity	Warning
Cause	A processor sensor in the specified system could not obtain a reading. The sensor location, chassis location, previous state and processor sensor status information is provided.

Event ID — 1602

Description	Processor sensor returned to a normal value Sensor Location: <Location in chassis>
	Chassis Location: <Name of chassis>
	Previous state was: <State>
	Processor sensor status: <status>

Severity	Information
Cause	A processor sensor in the specified system transitioned back to a normal state. The sensor location, chassis location, previous state and processor sensor status are provided.

Event ID — 1603

Description	Processor sensor detected a warning value Sensor Location: <Location in chassis>
	Chassis Location: <Name of chassis>
	Previous state was: <State>
	Processor sensor status: <status>

Severity	Warning
Cause	A processor sensor in the specified system is in a throttled state. The sensor location, chassis location, previous state and processor sensor status information is provided.

Event ID — 1604

Description	Processor sensor detected a failure value Sensor Location: <Location in chassis>
	Chassis Location: <Name of chassis>
	Previous state was: <State>

```
Processor sensor status: <status>
```

Severity	Error
Cause	A processor sensor in the specified system is disabled, has a configuration error, or experienced a thermal trip. The sensor location, chassis location, previous state and processor sensor status are provided.

Pluggable Device Messages

The pluggable device messages listed provides status and error information when some devices, such as memory cards, are added or removed.

Event ID — 1650

Description	`Device plug event type unknown Device location: <Location in chassis, if available>`
	`Chassis Location: <Name of chassis, if available>`
	
	`Additional details: <Additional details for the events, if available>`

Severity	Information
Cause	A pluggable device event message of unknown type was received. The device location, chassis location, and additional event details, if available, are provided.

Event ID — 1651

Description	`Device added to system Device location: <Location in chassis>`
	`Chassis Location: <Name of chassis>`
	
	`Additional details: <Additional details for the events>`

Severity	Information
Cause	A device was added in the specified system. The device location, chassis location, and additional event details, if available, are provided.

Event ID — 1652

Description	`Device removed from system Device location: <Location in chassis>`
	`Chassis Location: <Name of chassis>`
	
	`Additional details: <Additional details for the events>`

Severity	Information

Cause	A device was removed from the specified system. The device location, chassis location, and additional event details, if available, are provided.

Event ID — 1653

| Description | Device configuration error detected Device location: <Location in chassis>
Chassis Location: <Name of chassis>

Additional details: <Additional details for the events> |
|---|---|
| Severity | Error |
| Cause | A configuration error was detected for a pluggable device in the specified system. The device may have been added to the system incorrectly. |

Battery Sensor Messages

The battery sensors monitor how well a battery is functioning. The battery messages listed provides status and warning information for batteries in a particular chassis.

Event ID — 1700

| Description | Battery sensor has failed Sensor location: <Location in chassis>
Chassis Location: <Name of chassis>

Previous state was: <State>

Battery sensor status: <status> |
|---|---|
| Severity | Critical/ Failure/Error |
| Cause | A battery sensor in the specified system is not functioning. The sensor location, chassis location, previous state, and battery sensor status information is provided. |

Event ID — 1701

| Description | Battery sensor value unknown Sensor location: <Location in chassis>
Chassis Location: <Name of chassis>

Previous state was: <State>

Battery sensor status: <status> |
|---|---|
| Severity | Warning |

Cause	A battery sensor in the specified system could not retrieve a reading. The sensor location, chassis location, previous state, and battery sensor status information is provided.

Event ID — 1702

Description	Battery sensor returned to a normal value Sensor location: `<Location in chassis>` Chassis Location: `<Name of chassis>` Previous state was: `<State>` Battery sensor status: `<status>`
Severity	Information
Cause	A battery sensor in the specified system detected that a battery transitioned back to a normal state. The sensor location, chassis location, previous state, and battery sensor status information is provided.

Event ID — 1703

Description	Battery sensor detected a warning value Sensor location: `<Location in chassis>` Chassis Location: `<Name of chassis>` Previous state was: `<State>` Battery sensor status: `<status>`
Severity	Warning
Cause	A battery sensor in the specified system detected that a battery is in a predictive failure state. The sensor location, chassis location, previous state, and battery sensor status information is provided.

Event ID — 1704

Description	Battery sensor detected a failure value Sensor location: `<Location in chassis>` Chassis Location: `<Name of chassis>` Previous state was: `<State>` Battery sensor status: `<status>`
Severity	Error

Cause	A battery sensor in the specified system detected that a battery has failed. The sensor location, chassis location, previous state, and battery sensor status information is provided.

Event ID — 1705

Description	Battery sensor detected a non-recoverable value Sensor location: <Location in chassis>
	Chassis Location: <Name of chassis>
	Previous state was: <State>
	Battery sensor status: <status>

Severity	Error

Cause	A battery sensor in the specified system could not retrieve a value. The sensor location, chassis location, previous state, and battery sensor status information is provided.

Secure Digital (SD) Card Device Messages

The SD card device sensors monitor instrumented SD card devices in the system. The messages provide the status and error information for SD card devices present in a chassis.

Event ID — 1750

Description	SD card device sensor has failed Sensor location: <Location in chassis>
	Chassis Location: <Name of chassis>
	Previous state was: <State>
	SD card device type: <Type of SD card device>
	SD card state: <State of SD card>

Severity	Error

Cause	An SD card device sensor in the specified system failed. The sensor location, chassis location, previous state, and SD card device type information is provided. The SD card state is provided if an SD card is present in the SD card device.

Event ID — 1751

Description	SD card device sensor value unknown Sensor location: <Location in chassis>
	Chassis Location: <Name of chassis>

```
                   Previous state was: <State>

                   SD card device type: <Type of SD card device>

                   SD card state: <State of SD card>
```

Severity	Information
Cause	An SD card device sensor in the specified system could not obtain a reading. The sensor location, chassis location, previous state, and SD card device type information is provided. The SD card state is provided if an SD card is present in the SD card device.

Event ID — 1752

Description	`SD card device returned to normal Sensor location: <Location in chassis>`
	`Chassis Location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`SD card device type: <Type of SD card device>`
	
	`SD card state: <State of SD card>`

Severity	Information
Cause	An SD card device sensor in the specified system detected that an SD card transitioned back to a normal state. The sensor location, chassis location, previous state, and SD card device type information is provided. The SD card state is provided if an SD card is present in the SD card device.

Event ID — 1753

Description	`SD card device detected a warning Sensor location: <Location in chassis>`
	`Chassis Location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`SD card device type: <Type of SD card device>`
	
	`SD card state: <State of SD card>`

Severity	Warning
Cause	An SD card device sensor in the specified system detected a warning condition. The sensor location, chassis location, previous state, and SD card device type information is provided. The SD card state is provided if an SD card is present in the SD card device.

Event ID — 1754

Description	`SD card device detected a failure Sensor location: <Location in chassis>`
	
	`Chassis Location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`SD card device type: <Type of SD card device>`
	
	`SD card state: <State of SD card>`

Severity	Error
Cause	An SD card device sensor in the specified system detected an error. The sensor location, chassis location, previous state, and SD card device type information is provided. The SD card state is provided if an SD card is present in the SD card device.

Event ID — 1755

Description	`SD card device sensor detected a non-recoverable value Sensor location: <Location in chassis>`
	`Chassis Location: <Name of chassis>`
	
	`Previous state was: <State>`
	
	`SD card device type: <Type of SD card device>`
	
	`SD card state: <State of SD card>`

Severity	Error
Cause	An SD card device sensor in the specified system detected an error from which it cannot recover. The sensor location, chassis location, previous state, and SD card device type information is provided. The SD card state is provided if an SD card is present in the SD card device.

Chassis Management Controller Messages

The Alerts sent by M1000e Chassis Management Controller (CMC) are organized by severity. That is, the event ID of the CMC trap indicates the severity (informational, warning, critical, or non-recoverable) of the alert. Each CMC alert includes the originating system name, location, and event message text. The alert message text matches the corresponding Chassis Event Log message text that is logged by the sending CMC for that event.

Event ID — 2000

Description	CMC generated a test trap.

Severity	Informational
Cause	A user-initiated test trap was issued, through the CMC GUI or RACADM CLI.

Event ID — 2002

Description	CMC reported a return-to-normal or informational event.
Severity	Informational
Cause	CMC informational event, as described in the **drsCAMessage** variable binding supplied with the alert.

Event ID — 2003

Description	CMC reported a warning.
Severity	Warning
Cause	CMC warning event, as described in the **drsCAMessage** variable supplied with the alert.

Event ID — 2004

Description	CMC reported a critical event.
Severity	Critical
Cause	CMC critical event, as described in the **drsCAMessage** variable binding supplied with the alert.

Event ID — 2005

Description	CMC reported a non-recoverable event.
Severity	Non-Recoverable
Cause	CMC non-recoverable event, as described in the **drsCAMessage** variable binding supplied with the alert.

3

Storage Management Message Reference

The Server Administrator Storage Management's alert or event management features let you monitor the health of storage resources such as controllers, enclosures, physical disks, and virtual disks.

Alert Monitoring and Logging

The Storage Management Service performs alert monitoring and logging. By default, the Storage Management service starts when the managed system starts up. If you stop the Storage Management Service, then alert monitoring and logging stops. Alert monitoring does the following:

- Updates the status of the storage object that generated the alert.
- Propagates the storage object's status to all the related higher objects in the storage hierarchy. For example, the status of a lower-level object is propagated up to the status displayed on the **Health** tab for the top-level **Storage** object.
- Logs an alert in the alert log and the operating system application log.
- Sends an **SNMP** trap if the operating system's **SNMP** service is installed and enabled.

    NOTE: Server Administrator Storage Management does not log alerts regarding the data I/O path. These alerts are logged by the respective RAID drivers in the system alert log.

See the *Server Administrator Storage Management Online Help* for updated information.

Alert Message Format with Substitution Variables

When you view an alert in the Server Administrator alert log, the alert identifies the specific components such as the controller name or the virtual disk name to which the alert applies. In an actual operating environment, a storage system can have many combinations of controllers and disks as well as user-defined names for virtual disks and other components. Each environment is unique in its storage configuration and user-defined names. To receive an accurate alert message, that the Storage Management service must be able to insert the environment-specific names of storage components into an alert message.

This environment-specific information is inserted after the alert message text as shown for alert 2127.

For other alerts, the alert message text is constructed from information passed directly from the controller (or another storage component) to the alert log. In these cases, the variable information is represented with a *percent symbol* in the Storage Management documentation. An example of such an alert is shown for alert 2334.

Table 3. Alert Message Format

Alert ID	Message Text Displayed in the Storage Management Service Documentation	Message Text Displayed in the Alert Log with Variable Information Supplied
2127	Background Initialization started	Background Initialization started: Virtual Disk 3 (Virtual Disk 3) Controller 1 (PERC 5/E Adapter)
2334	Controller event log %	Controller event log: Current capacity of the battery is above threshold : Controller 1 (PERC 5/E Adapter)

The variables required to complete the message vary depending on the type of storage object and whether the storage object is in a SCSI or SAS configuration. The following table identifies the possible variables used to identify each storage object.

NOTE: Some alert messages relating to an enclosure or an enclosure component, such as a fan or EMM, are generated by the controller when the enclosure or enclosure component ID cannot be determined.

NOTE: A, B, C and X, Y, Z in the following examples are variables representing the storage object name or number.

Table 4. Message Format with Variables for Each Storage Object

Storage Object	Message Variables
Controller	Message Format: Controller A (Name)
	Message Format: Controller A
	For example, 2326 A foreign configuration has been detected: Controller 1 (PERC 5/E Adapter)
	NOTE: The controller name is not always displayed.
Battery	Message Format: Battery X Controller A
	For example, 2174 The controller battery has been removed: Battery 0 Controller 1
SCSI Physical Disk	Message Format: Physical Disk X:Y Controller A, Connector B
	For example, 2049 Physical disk removed: Physical Disk 0:14 Controller 1, Connector 0
SAS Physical Disk	Message Format: Physical Disk X:Y:Z Controller A, Connector B
	For example, 2049 Physical disk removed: Physical Disk 0:0:14 Controller 1, Connector 0
Virtual Disk	Message Format: Virtual Disk X (Name) Controller A (Name)
	Message Format: Virtual Disk X Controller A

Storage Object	Message Variables
	For example, 2057 Virtual disk degraded: Virtual Disk 11 (Virtual Disk 11) Controller 1 (PERC 5/E Adapter)
	NOTE: The virtual disk and controller names are not always displayed.
Enclosure	Message Format: Enclosure X:Y Controller A, Connector B
	For example, 2112 Enclosure shutdown: Enclosure 0:2 Controller 1, Connector 0
SCSI Power Supply	Message Format: Power Supply X Controller A, Connector B, Target ID C
	where "C" is the SCSI ID number of the enclosure management module (EMM) managing the power supply.
	For example, 2122 Redundancy degraded: Power Supply 1, Controller 1, Connector 0, Target ID 6
SAS Power Supply	Message Format: Power Supply X Controller A, Connector B, Enclosure C
	For example, 2312 A power supply in the enclosure has an AC failure: Power Supply 1, Controller 1, Connector 0, Enclosure 2
SCSI Temperature Probe	Message Format: Temperature Probe X Controller A, Connector B, Target ID C
	where C is the SCSI ID number of the EMM managing the temperature probe.
	For example, 2101 Temperature dropped below the minimum warning threshold: Temperature Probe 1, Controller 1, Connector 0, Target ID 6
SAS Temperature Probe	Message Format: Temperature Probe X Controller A, Connector B, Enclosure C
	For example, 2101 Temperature dropped below the minimum warning threshold: Temperature Probe 1, Controller 1, Connector 0, Enclosure 2
SCSI Fan	Message Format: Fan X Controller A, Connector B, Target ID C
	where C is the SCSI ID number of the EMM managing the fan.
	For example, 2121 Device returned to normal: Fan 1, Controller 1, Connector 0, Target ID 6
SAS Fan	Message Format: Fan X Controller A, Connector B, Enclosure C
	For example, 2121 Device returned to normal: Fan 1, Controller 1, Connector 0, Enclosure 2
SCSI EMM	Message Format: EMM X Controller A, Connector B, Target ID C
	where C is the SCSI ID number of the EMM.

Storage Object	Message Variables
	For example, 2121 Device returned to normal: EMM 1, Controller 1, Connector 0, Target ID 6
SAS EMM	Message Format: EMM X Controller A, Connector B, Enclosure C
	For example, 2121 Device returned to normal: EMM 1, Controller 1, Connector 0, Enclosure 2

Alert Descriptions and Corrective Actions

The following sections describe alerts generated by the RAID or SCSI controllers supported by Storage Management. The alerts are displayed in the Server Administrator Alert tab or through Windows Event Viewer. These alerts can also be forwarded as SNMP traps to other applications.

SNMP traps are generated for the alerts listed in the following sections. These traps are included in the Server Administrator Storage Management, management information base (MIB). The SNMP traps for these alerts use all of the SNMP trap variables. For more information on SNMP support and the MIB, see the *SNMP Reference Guide*.

To locate an alert, scroll through the following table to find the alert number displayed on the Server Administrator Alert tab or search this file for the alert message text or number. See Understanding Event Messages for more information on severity levels.

For more information regarding alert descriptions and the appropriate corrective actions, see the online help.

Event ID — 2048

Description	Device failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A storage component such as a physical disk or an enclosure has failed. The failed component may have been identified by the controller while performing a task such as a rescan or a check consistency.
	Action: Replace the failed component. You can identify which disk has failed by locating the disk that has a red "X" for its status. Perform a rescan after replacing the failed component.
Related Alert Information	**Clear Alert Number**: 2121
	Related Alert Number: 2095, 2201, 2203
	Local Response Agent (LRA) Number: 2051, 2061, 2071, 2081, 2091, 2101
SNMP Trap Numbers	754, 804, 854, 904, 954, 1004, 1054, 1104, 1154, 1204

Event ID — 2049

Description	Physical disk removed.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A physical disk has been removed from the disk group. This alert can also be caused by loose or defective cables or by problems with the enclosure. **Action**: If a physical disk was removed from the disk group, either replace the disk or restore the original disk. On some controllers, a removed disk has a red **X** for its status. On other controllers, a removed disk may have an `Offline` status or is not displayed on the user interface. Perform a rescan after replacing or restoring the disk. If a disk has not been removed from the disk group, then check for problems with the cables. See the online help for more information on checking the cables. Ensure that the enclosure is powered on. If the problem persists, check the enclosure documentation for further diagnostic information.
Related Alert Information	**Clear Alert Number**: 2052 **Related Alert Number**: 2054, 2057, 2056, 2076, 2079, 2081, 2083, 2129, 2202, 2204, 2270, 2292, 2299, 2369 **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2050

Description	Physical disk offline.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A physical disk in the disk group is offline. The user may have manually put the physical disk offline. **Action**: Perform a rescan. You can also select the offline disk and perform a **Make Online** operation.
Related Alert Information	**Clear Alert Number**: 2158 **Related Alert Number**: 2099, 2196 **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2051

Description	Physical disk degraded.

Severity	Warning / Non-critical
Cause and Action	**Cause**: A physical disk has reported an error condition and may be degraded. The physical disk may have reported the error condition in response to a SMART Trip (Predictive Failure). **Action**: Replace the degraded physical disk. You can identify which disk is degraded by locating the disk that has a Yellow Triangle for its status. Perform a rescan after replacing the disk.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2094 **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2052

Description	Physical disk inserted.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2065, 2305, 2367 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2053

Description	Virtual disk created.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1201

Event ID — 2054

Description	Virtual disk deleted.
Severity	Informational
Cause and Action	**Cause**: A virtual disk has been deleted. Performing a **Reset** Configuration may detect that a virtual disk has been deleted. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2080
SNMP Trap Numbers	1201

Event ID — 2055

Description	Virtual disk configuration changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2056

Description	Virtual disk failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: One or more physical disks included in the virtual disk have failed. If the virtual disk is non-redundant (does not use mirrored or parity data), then the failure of a single physical disk can cause the virtual disk to fail. If the virtual disk is redundant, then more physical disks have failed than can be rebuilt using mirrored or parity information.

Action: Create a new virtual disk and restore from a backup.

Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2048, 2049, 2050, 2076, 2079, 2081, 2129, 2346 **Local Response Agent (LRA) Number**: 2081
SNMP Trap Numbers	1204

Event ID — 2057

Description	Virtual disk degraded.
Severity	Warning / Non-critical
Cause and Action	**Cause 1**: This alert message occurs when a physical disk included in a redundant virtual disk fails. Because the virtual disk is redundant (uses mirrored or parity information) and only one physical disk has failed, the virtual disk can be rebuilt. **Action 1**: Replace the failed drive. Rebuild of the virtual disk starts automatically.

> **NOTE:** If you put the drive in a different slot, you need to assign it as a hot spare for the rebuild to start automatically.

If you put the drive in a different slot, you need to assign it as a hot spare for the rebuild to start automatically.

Cause 2: A physical disk in the disk group has been removed.

Action 2: If a physical disk was removed from the disk group, either replace the disk or restore the original disk. You can identify which disk has been removed by locating the disk that has a red "**X**" for its status. Perform a rescan after replacing the disk.

Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2048, 2049, 2050, 2076, 2079, 2081, 2123, 2129, 2346 **Local Response Agent (LRA) Number**: 2080
SNMP Trap Numbers	1203

Event ID — 2058

Description	Virtual disk check consistency started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 1201 |

Event ID — 2059

Description	Virtual disk format started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: 2086
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 1201 |

Event ID — 2060

Description	Copy of data started from physical disk % 2 to physical disk % 1.
Severity	OK / Normal /Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2075
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 1201 |

Event ID — 2061

Description	Virtual disk initialization started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: 2088
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2062

Description	Physical disk initialization started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: 2089
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2063

Description	Virtual disk reconfiguration started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: 2090
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2064

Description	Virtual disk rebuild started.
Severity	OK / Normal / Informational

Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: 2091
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2065

Description	Physical disk rebuild started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: 2092
	Related Alert Number: 2099, 2121, 2196
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2067

Description	Virtual disk check consistency cancelled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The check consistency operation was cancelled because a physical disk in the array has failed or because a user cancelled the check consistency operation.
	Action: If the physical disk failed, then replace the physical disk. You can identify which disk failed by locating the disk that has a red "X" for its status. Perform a rescan after replacing the disk. The consistency check can take a long time. The time it takes depends on the size of the physical disk or the virtual disk.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2070

Description	Virtual disk initialization cancelled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The virtual disk initialization cancelled because a physical disk included in the virtual disk has failed or because a user cancelled the virtual disk initialization. **Action**: If a physical disk failed, then replace the physical disk. You can identify which disk has failed by locating the disk that has a red "**X**" for its status. Perform a rescan after replacing the disk. Restart the format physical disk operation. Restart the virtual disk initialization.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2074

Description	Physical disk rebuild cancelled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The user has cancelled the rebuild operation. **Action**: Restart the rebuild operation.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2075

Description	Copy of data completed from physical disk % 2 to physical disk % 1.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None

Related Alert Number: 2060

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2076

Description	Virtual disk Check Consistency failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: AA physical disk included in the virtual disk failed or there is an error in the parity information. A failed physical disk can cause errors in parity information.
	Action: Replace the failed physical disk. You can identify which disk has failed by locating the disk that has a red "**X**" for its status. Rebuild the physical disk. When finished, restart the check consistency operation.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2081
SNMP Trap Numbers	1204

Event ID — 2077

Description	Virtual disk format failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A physical disk included in the virtual disk failed.
	Action: Replace the failed physical disk. You can identify which physical disk has failed by locating the disk that has a red **X** for its status. Rebuild the physical disk. When finished, restart the virtual disk format operation.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2081
SNMP Trap Numbers	1204

Event ID — 2079

Description	Virtual disk initialization failed.

Severity	Critical / Failure / Error
Cause and Action	**Cause**: A physical disk included in the virtual disk has failed or a user has cancelled the initialization. **Action**: If a physical disk has failed, then replace the physical disk
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2081
SNMP Trap Numbers	1204

Event ID — 2080

Description	Physical disk initialization failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The physical disk has failed or is not functioning. **Action**: Replace the failed or non-functional disk. You can identify a disk that has failed by locating the disk that has a red "X" for its status. Restart the initialization.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2071
SNMP Trap Numbers	904

Event ID — 2081

Description	Virtual disk reconfiguration failed.
Severity	Critical / Failure / Error
Cause and Action	**Hardware RAID**: **Cause**: A physical disk included in the virtual disk has failed or is not functioning. A user may also have cancelled the reconfiguration. **Action**: Replace the failed or non-functional disk. You can identify a disk that has failed by locating the disk that displays a red X in the status field. If the physical disk is part of a redundant array, then rebuild the physical disk. When finished, restart the reconfiguration. **Software RAID**: • Perform a backup with the Verify option.

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- If the file backup fails, try to restore the failed file from a previous backup.
- When the backup with the Verify option is complete without any errors, delete the Virtual Disk.
- Recreate a new Virtual Disk with new drives.
- Restore the data from backup.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2081
SNMP Trap Numbers	1204

Event ID — 2082

Description	Virtual disk rebuild failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A physical disk included in the virtual disk has failed or is not functioning. A user may also have cancelled the rebuild.
	Action: Replace the failed or non-functional disk. You can identify a disk that has failed by locating the disk that has a red **X** for its status. Restart the virtual disk rebuild.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2048
	Local Response Agent (LRA) Number: 2081
SNMP Trap Numbers	1204

Event ID — 2083

Description	Physical disk rebuild failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A physical disk included in the virtual disk has failed or is not functioning. A user may also have cancelled the rebuild.
	Action: Replace the failed or non-functional disk. You can identify a disk that has failed by locating the disk that has a red **X** for its status. Rebuild the virtual disk rebuild.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None

Local Response Agent (LRA) Number: 2071

SNMP Trap Numbers	904

Event ID — 2085

Description	Virtual disk check consistency completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2085 is a clear alert for alert 2058. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2086

Description	Virtual disk format completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2086 is a clear alert for alert 2059. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2087

Description	Copy of data resumed from physical disk % 2 to physical disk % 1.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2060
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 901 |

Event ID — 2088

Description	Virtual disk initialization completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: Alert 2088 is a clear alert for alerts 2061 and 2136.
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 1201 |

Event ID — 2089

Description	Physical disk initialization completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: Alert 2089 is a clear alert for alert 2062.
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 901 |

Event ID — 2090

Description	Virtual disk reconfiguration completed
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: Alert 2090 is a clear alert for alert 2063. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2091

Description	Virtual disk rebuild completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2091 is a clear alert for alert 2064. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2092

Description	Physical disk rebuild completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2092 is a clear alert for alert 2065. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2094

Description	Predictive Failure reported.
Severity	Warning / Non-critical

Cause and Action	**Cause**: The physical disk is predicted to fail. Many physical disks contain Self Monitoring Analysis and Reporting Technology (SMART). When enabled, SMART monitors the health of the disk based on indications such as the number of write operations that have been performed on the disk.
	Action: Replace the physical disk. Even though the disk may not have failed yet, it is strongly recommended that you replace the disk.
	If this disk is part of a redundant virtual disk, perform the **Offline** task on the disk; replace the disk; the rebuild starts automatically.
	✐ NOTE: If you put the drive in a different slot, you need to assign it as a hot spare for the rebuild to start automatically.
	If this disk is a hot spare, then unassign the hot spare; perform the **Prepare to Remove** task on the disk; replace the disk; and assign the new disk as a hot spare.
	⚠ CAUTION: If this disk is part of a non-redundant disk, back up your data immediately. If the disk fails, you cannot recover the data.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070
SNMP Trap Numbers	903

Event ID — 2095

Description	SCSI sense data %1.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A SCSI device experienced an error, but may have recovered.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2273
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	751, 851, 901

Event ID — 2098

Description	Global hot spare assigned.
Severity	OK / Normal / Informational

Cause and Action	**Cause**: A user has assigned a physical disk as a global hot spare. This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2277
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2099

Description	Global hot spare unassigned.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A physical disk that was assigned as a hot spare has been unassigned and is no longer functioning as a hot spare. The physical disk may have been unassigned by a user or automatically unassigned by Storage Management. Storage Management unassigns hot spares that have been used to rebuild data. Once data is rebuilt, the hot spare becomes a member of the virtual disk and is no longer assigned as a hot spare. You need to assign a new hot spare to maintain data protection in this situation. On the CERC SATA1.5/6 ch, and CERC SATA1.5/2s controllers, if you use another application such as the BIOS to include a hot spare in a virtual disk, then Storage Management unassigns the physical disk as a hot spare.
	Action: Although this alert is provided for informational purposes, you may need to assign a new hot spare to the virtual disk.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2100

Description	Temperature exceeded the maximum warning threshold.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The physical disk enclosure is too hot. A variety of factors can cause the excessive temperature. For example, a fan may have failed, the thermostat may be set too high, or the room temperature may be too hot.

Action: Check for factors that may cause overheating. For example, verify that the enclosure fan is working. You should also check the thermostat settings and examine whether the enclosure is located near a heat source. Make sure the enclosure has enough ventilation and that the room temperature is not too hot. See the physical disk enclosure documentation for more diagnostic information.

Related Alert Information	**Clear Alert Number**: 2353 **Related Alert Number**: 2112 **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	1053

Event ID — 2101

Description	Temperature exceeded the maximum warning threshold.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The physical disk enclosure is too cool. **Action**: Check if the thermostat setting is too low and if the room temperature is too cool.
Related Alert Information	**Clear Alert Number**: 2353 **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	1053

Event ID — 2102

Description	Temperature exceeded the maximum failure threshold.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The physical disk enclosure is too hot. A variety of factors can cause the excessive temperature. For example, a fan may have failed, the thermostat may be set too high, or the room temperature may be too hot. **Action**: Check for factors that may cause overheating. For example, verify that the enclosure fan is working. You should also check the thermostat settings and examine whether the enclosure is located near a heat source. Make sure the enclosure has enough ventilation and that the room temperature is not too hot. See the physical disk enclosure documentation for more diagnostic information.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: 2091

SNMP Trap Numbers	1054

Event ID — 2103

Description	Temperature dropped below the minimum failure threshold.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The physical disk enclosure is too cool. **Action**: Check if the thermostat setting is too low and if the room temperature is too cool.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2112 **Local Response Agent (LRA) Number**: 2091
SNMP Trap Numbers	1054

Event ID — 2104

Description	Controller battery is reconditioning.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: 2105 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2105

Description	Controller battery recondition is completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: Alert 2105 is a clear alert for alert 2104.
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1151

Event ID — 2106

Description	SMART FPT exceeded.
Severity	Warning / Non-critical
Cause and Action	**Cause**: 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.
	Action: Replace the disk that has received the SMART alert. If the physical disk is a member of a non-redundant virtual disk, then back up the data before replacing the disk.
	⚠ **CAUTION: Removing a physical disk that is included in a non-redundant virtual disk causes the virtual disk to fail and may cause data loss.**
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2107

Description	SMART configuration change.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A disk has received a SMART alert (predictive failure) after a configuration change. The disk is likely to fail in the near future.
	Action: Replace the disk that has received the SMART alert. If the physical disk is a member of a non-redundant virtual disk, then back up the data before replacing the disk.
	⚠ **CAUTION: Removing a physical disk that is included in a non-redundant virtual disk causes the virtual disk to fail and may cause data loss.**
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2071

SNMP Trap Numbers	904

Event ID — 2108

Description	SMART warning.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A disk has received a SMART alert (predictive failure). The disk is likely to fail in the near future.
	Action: Replace the disk that has received the SMART alert. If the physical disk is a member of a non-redundant virtual disk, then back up the data before replacing the disk.
	⚠ **CAUTION: Removing a physical disk that is included in a non-redundant virtual disk causes the virtual disk to fail and may cause data loss.**
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070
SNMP Trap Numbers	903

Event ID — 2109

Description	SMART warning temperature.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A disk has reached an unacceptable temperature and received a SMART alert (predictive failure). The disk is likely to fail in the near future.
	Action 1: Determine why the physical disk has reached an unacceptable temperature. A variety of factors can cause the excessive temperature. For example, a fan may have failed, the thermostat may be set too high, or the room temperature may be too hot or cold. Verify that the fans in the server or enclosure are working. If the physical disk is in an enclosure, you should check the thermostat settings and examine whether the enclosure is located near a heat source.
	Make sure the enclosure has enough ventilation and that the room temperature is not too hot. See the physical disk enclosure documentation for more diagnostic information.
	Action 2 : If you cannot identify why the disk has reached an unacceptable temperature, then replace the disk. If the physical disk is a member of a non-redundant virtual disk, then back up the data before replacing the disk.

	⚠	CAUTION: Removing a physical disk that is included in a non-redundant virtual disk causes the virtual disk to fail and may cause data loss.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2110

Description	SMART warning degraded.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A disk is degraded and has received a SMART alert (predictive failure). The disk is likely to fail in the near future.
	Action: Replace the disk that has received the SMART alert. If the physical disk is a member of a nonredundant virtual disk, then back up the data before replacing the disk.

	⚠	CAUTION: Removing a physical disk that is included in a non-redundant virtual disk causes the virtual disk to fail and may cause data loss.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2111

Description	Failure prediction threshold exceeded due to test.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A disk has received a SMART alert (predictive failure) due to test conditions.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2112

Description	Enclosure was shut down.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The physical disk enclosure is either hotter or cooler than the maximum or minimum allowable temperature range. **Action**: Check for factors that may cause overheating or excessive cooling. For example, verify that the enclosure fan is working. You should also check the thermostat settings and examine whether the enclosure is located near a heat source. Make sure the enclosure has enough ventilation and that the room temperature is not too hot or too cold. See the enclosure documentation for more diagnostic information.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2091
SNMP Trap Numbers	854

Event ID — 2114

Description	A consistency check on a virtual disk has been paused (suspended).
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The check consistency operation on a virtual disk was paused by a user. **Action**: To resume the check consistency operation, right-click the virtual disk in the tree view and select **Resume Check Consistency**.
Related Alert Information	**Clear Alert Number**: 2115 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2115

Description	A consistency check on a virtual disk has been resumed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The check consistency operation on a virtual disk has resumed processing after being paused by a user. This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: Alert 2115 is a clear alert for alert 2114.
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2116

Description	A virtual disk and its mirror have been split.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has caused a mirrored virtual disk to be split. When a virtual disk is mirrored, its data is copied to another virtual disk in order to maintain redundancy. After being split, both virtual disks retain a copy of the data although the mirror is no longer intact. The updates to the data are no longer copied to the mirror. This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1201

Event ID — 2117

Description	A mirrored virtual disk has been unmirrored.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has caused a mirrored virtual disk to be unmirrored. When a virtual disk is mirrored, its data is copied to another virtual disk in order to maintain redundancy. After being unmirrored, the disk formerly used as the mirror returns to being a physical disk and becomes available for inclusion in another virtual disk. This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2118

Description	Change write policy.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has changed the write policy for a virtual disk. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2120

Description	Enclosure firmware mismatch.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The firmware on the EMM is not the same version. It is required that both modules have the same version of the firmware. This alert may be caused when a user attempts to insert an EMM module that has a different firmware version than an existing module. **Action**: Download the same version of the firmware to both EMM modules.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	853

Event ID — 2121

Description	Device returned to normal.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A device that was previously in an error state has returned to a normal state. For example, if an enclosure became too hot and subsequently cooled down, you may receive this alert. This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: Alert 2121 is a clear alert for alert 2048. **Related Alert Number**: 2050, 2065, 2158 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	752,802, 852, 902, 952, 1002,1052, 1102, 1152, 1202

Event ID — 2122

Description	Redundancy degraded.
Severity	Warning / Non-critical
Cause and Action	**Cause**: One or more of the enclosure components has failed. For example, a fan or power supply may have failed. Although the enclosure is currently operational, the failure of additional components could cause the enclosure to fail. **Action**: Identify and replace the failed component. To identify the failed component, select the enclosure in the tree view and click the **Health** subtab. Any failed component is identified with a red **X** on the enclosure's **Health** subtab. Alternatively, you can select the Storage object and click the **Health** subtab. The controller status displayed on the **Health** subtab indicates whether a controller has a **Failed** or **Degraded** component. See the enclosure documentation for information on replacing enclosure components and for other diagnostic information.
Related Alert Information	**Clear Alert Number**: 2124 **Related Alert Number**: 2048 **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	1305

Event ID — 2123

Description	Redundancy lost.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A virtual disk or an enclosure has lost data redundancy. In the case of a virtual disk, one or more physical disks included in the virtual disk have failed. Due to the failed physical disk or disks, the virtual disk is no longer maintaining redundant (mirrored or parity) data. The failure of an additional physical disk results in lost data. In the case of an enclosure, more than one enclosure component has

failed. For example, the enclosure may have suffered the loss of all fans or all power supplies.

Action: Identify and replace the failed components. To identify the failed component, select the Storage object and click the **Health** subtab. The controller status displayed on the **Health** subtab indicates whether a controller has a **Failed** or **Degraded** component.

Click the controller that displays a Warning or Failed status. This action displays the controller Health subtab which displays the status of the individual controller components. Continue clicking the components with a **Warning** or **Health** status until you identify the failed component.

See the online help for more information. See the enclosure documentation for information on replacing enclosure components and for other diagnostic information.

Related Alert Information	**Clear Alert Number**: 2353 **Related Alert Number**: 2112 **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	1053

Event ID — 2124

Description	Redundancy normal.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Data redundancy has been restored to a virtual disk or an enclosure that previously suffered a loss of redundancy. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2124 is a clear alert for alerts 2122 and 2123. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1304

Event ID — 2125

Description	Controller cache preserved for missing or offline virtual disk.
Severity	Warning / Non-critical
Cause and Action	**Cause**: Virtual disk controller was disconnected, during I/O operation.

Action: Import foreign disks, if any. Check if the enclosure containing the virtual disk is disconnected from the controller.

Related Alert Information	**Clear Alert Number**: 2186, 2240
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1203

Event ID — 2126

Description	SCSI sense sector reassign.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A sector of the physical disk is corrupted and data cannot be maintained on this portion of the disk. This alert is for informational purposes.

⚠ **CAUTION: Any data residing on the corrupt portion of the disk may be lost and you may need to restore your data from backup.**

Action: If the physical disk is part of a non-redundant virtual disk, then back up the data and replace the physical disk.

⚠ **CAUTION: Removing a physical disk that is included in a non-redundant virtual disk causes the virtual disk to fail and may cause data loss.**

If the disk is part of a redundant virtual disk, then any data residing on the corrupt portion of the disk is reallocated elsewhere in the virtual disk.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	903

Event ID — 2127

Description	Background initialization (BGI) started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: BGI of a virtual disk has started. This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: 2130

Related Alert Number: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2128

Description	BGI cancelled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: BGI of a virtual disk has been cancelled. A user or the firmware may have stopped BGI. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2129

Description	BGI failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: BGI of a virtual disk has failed. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2340 **Local Response Agent (LRA) Number**: 2081
SNMP Trap Numbers	1204

Event ID — 2130

Description	BGI completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: BGI of a virtual disk has completed. This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: Alert 2130 is a clear alert for alert 2127.
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 1201 |

Event ID — 2131

Description	Firmware version mismatch.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The firmware on the controller is not a supported version.
	Action: Install a supported version of the firmware. If you do not have a supported version of the firmware available, check with your support provider for information on how to obtain the most current firmware.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060

| SNMP Trap Numbers | 753 |

Event ID — 2132

Description	Driver version mismatch.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller driver is not a supported version.
	Action: Install a supported version of the driver. If you do not have a supported driver version available, you can check with your support provider for information on how to obtain the most current driver.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060

| SNMP Trap Numbers | 753 |

Event ID — 2135

Description	Array Manager is installed on the system.
	NOTE: This is not supported on Server Administrator version 6.0.1.
Severity	Warning / Non-critical
Cause and Action	**Cause**: Storage Management has been installed on a system that has an Array Manager installation. **Action**: Installing Storage Management and Array Manager on the same system is not a supported configuration. Uninstall either Storage Management or Array Manager.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2050
SNMP Trap Numbers	103

Event ID — 2136

Description	Virtual disk initialization.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Virtual disk initialization is in progress. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: 2088 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2137

Description	Communication time-out.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller is unable to communicate with an enclosure. There are several reasons why communication may be lost. For example, there may be a bad or loose cable. An unusual amount of I/O may also interrupt communication with the enclosure. In addition, communication loss may be caused by software,

hardware, or firmware problems, bad or failed power supplies, and enclosure shutdown.

When viewed in the alert log, the description for this event displays several variables. These variables are: controller and enclosure names, type of communication problem, return code, and SCSI status.

Action: Check for problems with the cables. See the online help for more information on checking the cables. You should also check to see if the enclosure has degraded or failed components. To do so, select the enclosure object in the tree view and click the **Health** subtab. The **Health** subtab displays the status of the enclosure components. Verify that the controller has supported driver and firmware versions installed and that the EMMs are each running the same version of supported firmware.

Related Alert Information	**Clear Alert Number**: 2162
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2090
SNMP Trap Numbers	853

Event ID — 2138

Description	Enclosure alarm enabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has enabled the enclosure alarm. This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	851

Event ID — 2139

Description	Enclosure alarm disabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has disabled the enclosure alarm.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	851

Event ID — 2140

Description	Dead disk segments restored.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Disk space that was formerly "dead" or inaccessible to a redundant virtual disk has been restored. This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2141

Description	Physical disk dead segments removed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Portions of the physical disk were formerly inaccessible. The disk space from these dead segments has been recovered and is now usable. Any data residing on these dead segments has been lost. This alert is for informational purposes.
	Action: Check for factors that may cause overheating. For example, verify that the enclosure fan is working. You should also check the thermostat settings and examine whether the enclosure is located near a heat source. Make sure the enclosure has enough ventilation and that the room temperature is not too hot. See the physical disk enclosure documentation for more diagnostic information.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2142

Description	Controller rebuild rate has changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has changed the controller rebuild rate. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2143

Description	Controller alarm enabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has enabled the controller alarm. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2144

Description	Controller alarm disabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has disabled the controller alarm. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2145

Description	Controller battery low.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller battery charge is low. **Action**: Recondition the battery. See the online help for more information.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2100
SNMP Trap Numbers	1153

Event ID — 2146

Description	Bad block replacement error.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A portion of a physical disk is damaged. **Action**: See the *Server Administrator Storage Management* online help for more information.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event ID — 2147

Description	Bad block sense error.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A portion of a physical disk is damaged. **Action**: See the *Server Administrator Storage Management* online help for more information.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060

| SNMP Trap Numbers | 753 |

Event ID — 2148

Description	Bad block medium error.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A portion of a physical disk is damaged. **Action**: See the *Server Administrator Storage Management* online help for more information.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060
SNMP Trap Numbers	753

Event ID — 2149

Description	Bad block extended sense error.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A portion of a physical disk is damaged. **Action**: See the *Server Administrator Storage Management* online help for more information.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060
SNMP Trap Numbers	753

Event ID — 2150

| Description | Bad block extended medium error. |
| Severity | Warning / Non-critical |

Cause and Action	**Cause**: A portion of a physical disk is damaged.
	Action: See the *Server Administrator Storage Management* online help for more information.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060

SNMP Trap Numbers	753

Event ID — 2151

Description	Enclosure asset tag changed

Severity	OK / Normal / Informational

Cause and Action	**Cause**: A user has changed the enclosure asset tag. This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	851

Event ID — 2152

Description	Enclosure asset name changed.

Severity	OK / Normal / Informational

Cause and Action	**Cause**: A user has changed the enclosure asset name. This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	851

Event ID — 2153

Description	Enclosure service tag changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: An enclosure service tag was changed. In most circumstances, this service tag should only be changed by your service provider. **Action**: Ensure that the tag was changed under authorized circumstances.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	851

Event ID — 2154

Description	Maximum temperature probe warning threshold value changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has changed the value for the maximum temperature probe warning threshold. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1051

Event ID — 2155

Description	Minimum temperature probe warning threshold value changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has changed the value for the minimum temperature probe warning threshold. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

SNMP Trap Numbers	1051

Event ID — 2156

Description	Controller alarm has been tested.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The controller alarm test has run successfully. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2157

Description	Controller configuration has been reset.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has reset the controller configuration. See the online help for more information. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2158

Description	Physical disk online.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: An offline physical disk has been made online. This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: Alert 2158 is a clear alert for alert 2050. **Related Alert Number**: 2048, 2050, 2065, 2099, 2121, 2196, 2201, 2203 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2159

Description	Virtual disk renamed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has renamed a virtual disk. When renaming a virtual disk on a PERC 4/SC, 4/DC, 4e/DC, 4/Di, CERC ATA100/4ch, PERC 5/E, PERC 5/i or SAS 5/iR controller, this alert displays the new virtual disk name. On the PERC 4/SC, 4/DC, 4e/DC, 4/Di, 4/IM, 4e/Si, 4e/Di, and CERC ATA 100/4ch controllers, this alert displays the original virtual disk name. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2160

Description	Dedicated hot spare assigned.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A user has assigned a physical disk as a dedicated hot spare to a virtual disk. This alert is provided for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: 2161 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	901

Event ID — 2161

Description	Dedicated hot spare unassigned.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A physical disk that was assigned as a hot spare has been unassigned and is no longer functioning as a hot spare. The physical disk may have been unassigned by a user or automatically unassigned by Storage Management. Storage Management unassigns hot spares that have been used to rebuild data. Once data is rebuilt onto the hot spare, the hot spare becomes a member of the virtual disk and is no longer assigned as a hot spare. You need to assign a new hot spare to maintain data protection in this situation. On the CERC SATA1.5/6ch, and CERC SATA1.5/2s controllers, if you use another application such as the BIOS to include a hot spare in a virtual disk, then Storage Management unassigns the physical disk as a hot spare. **Action**: Although this alert is provided for informational purposes, you may need to assign a new hot spare to the virtual disk.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2162

Description	Communication regained.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Communication with an enclosure has been restored. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2162 is a clear alert for alerts 2137 and 2292. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	851

Event ID — 2163

Description	Rebuild completed with errors.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: During a rebuild one or more blocks of data was not recoverable due to missing parity information. Some data loss may have occurred. **Action**: Perform a check to verify the built array. Any files that are impacted should be restored from a backup. See the *Storage Management* online help for more information.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2071
SNMP Trap Numbers	904

Event ID — 2164

Description	See the Readme file for a list of validated controller driver versions.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Storage Management is unable to determine whether the system has the minimum required versions of the RAID controller drivers. This alert is for informational purposes. **Action**: See the Readme file for driver and firmware requirements. In particular, if Storage Management experiences performance problems, you should verify that you have the minimum supported versions of the drivers and firmware installed.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	101

Event ID — 2165

Description	The RAID controller firmware and driver validation was not performed. The configuration file cannot be opened.
Severity	Warning / Non-critical
Cause and Action	**Cause**: Storage Management is unable to determine whether the system has the minimum required versions of the **RAID** controller firmware and drivers. This

situation may occur for a variety of reasons. For example, the installation directory path to the configuration file may not be correct. The configuration file may also have been removed or renamed.

Action: Reinstall Storage Management

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060
SNMP Trap Numbers	753

Event ID — 2166

Description	The RAID controller firmware and driver validation was not performed. The configuration file is out of date, missing the required information, or not properly formatted to complete the comparison.
Severity	Warning / Non-critical
Cause and Action	**Cause**: Storage Management is unable to determine whether the system has the minimum required versions of the RAID controller firmware and drivers. This situation has occurred because a configuration file is out of date, missing the required information, or not properly formatted to complete the comparison.
	Action: Reinstall Storage Management.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060
SNMP Trap Numbers	753

Event ID — 2167

Description	The current kernel version and the non-RAID SCSI driver version are older than the minimum required levels. See readme.txt for a list of validated kernel and driver versions.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The version of the kernel and the driver do not meet the minimum requirements. Storage Management may not be able to display the storage or perform storage management functions until you have updated the system to meet the minimum requirements.

Action: See the Readme file for a list of validated kernel and driver versions. Update the system to meet the minimum requirements and then reinstall Storage Management.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2050
SNMP Trap Numbers	103

Event ID — 2168

Description	The non-RAID SCSI driver version is older than the minimum required level. See **readme.txt** for the validated driver version.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The version of the driver does not meet the minimum requirements. Storage Management may not be able to display the storage or perform storage management functions until you have updated the system to meet the minimum requirements.
	Action: See the Readme file for the validated driver version. Update the system to meet the minimum requirements and then reinstall Storage Management.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2050
SNMP Trap Numbers	103

Event ID — 2169

Description	The controller battery needs to be replaced.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller battery cannot be recharged. The battery may be old or it may have been already recharged the maximum number of times. In addition, the battery charger may not be working.
	Action: Replace the battery pack.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2118

Local Response Agent (LRA) Number: 2101

SNMP Trap Numbers	1154

Event ID — 2170

Description	The controller battery charge level is normal.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2171

Description	The controller battery temperature is above normal.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The battery may be recharging, the room temperature may be too hot, or the fan in the system may be degraded or failed. **Action**: If this alert was generated due to a battery recharge, the situation is corrected when the recharge is complete. You should also check if the room temperature is normal and that the system components are functioning properly.
Related Alert Information	**Clear Alert Number**: 2172 **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2100
SNMP Trap Numbers	1153

Event ID — 2172

Description	The controller battery temperature is normal.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

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Action: None

Related Alert Information	**Clear Alert Number**: Alert 2172 is a clear alert for alert 2171.
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1151

Event ID — 2173

Description	Unsupported configuration detected. The SCSI rates of the enclosure management modules (EMMs) are not the same. EMM 0 % 1 EMM 1 % 2
Severity	Warning / Non-critical
Cause and Action	**Cause**: An unsupported configuration was detected.
	Action: Replace one of the EMMs with the matching SCSI rate EMM.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2090
SNMP Trap Numbers	853

Event ID — 2174

Description	The controller battery has been removed.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller cannot communicate with the battery. The battery may be removed, or the contact point between the controller and the battery may be burnt or corroded.
	Action: Replace the battery if it has been removed. If the contact point between the battery and the controller is burnt or corroded, you must replace either the battery or the controller, or both. See the hardware documentation for information on how to safely access, remove, and replace the battery.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2188, 2318
	Local Response Agent (LRA) Number: 2100
SNMP Trap Numbers	1153

Event ID — 2175

Description	The controller battery has been replaced.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2176

Description	The controller battery Learn cycle has started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: 2177 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2177

Description	The controller battery Learn cycle has completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2177 is a clear alert for alert 2176. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1151

Event ID — 2178

Description	The controller battery Learn cycle has timed out.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller battery must be fully charged before the Learn cycle can begin. The battery may be unable to maintain a full charge causing the Learn cycle to timeout. Additionally, the battery must be able to maintain cached data for a specified period of time in the event of a power loss. For example, some batteries maintain cached data for 24 hours. If the battery is unable to maintain cached data for the required period of time, then the Learn cycle timeout occurs. **Action**: Replace the battery pack as the battery is unable to maintain a full charge.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2100
SNMP Trap Numbers	1153

Event ID — 2179

Description	The controller battery Learn cycle has been postponed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2180

Description	The controller battery Learn cycle starts in % 1 days.
Severity	OK / Normal / Informational

Cause and Action	**Cause**: This alert is for informational purposes. The %1 indicates a substitution variable. The text for this substitution variable is displayed with the alert in the alert log and can vary depending on the situation.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1151

Event ID — 2181

Description	The controller battery learn cycle starts in % 1 hours.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The % 1 indicates a substitution variable. The text for this substitution variable is displayed with the alert in the alert log and can vary depending on the situation. This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1151

Event ID — 2182

Description	An invalid SAS configuration has been detected.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller and attached enclosures are not cabled correctly.
	Action: See the hardware documentation for information on correct cabling configurations.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2061

SNMP Trap Numbers	754

Event ID — 2183

Description	Replace Member Operation failed on physical disk % 1 from physical disk % 2.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The physical disk participating in the **Replace Member Operation**, operation has failed. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2060 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	904

Event ID — 2184

Description	Physical disk Replace Member Operation cancelled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: User cancelled the Replace Member Operation. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2060 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2185

Description	Physical disk Replace Member Operation stopped for spare.
Severity	Warning / Non-critical
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2060

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	903

Event ID — 2186

Description	The controller cache has been discarded.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller has flushed the cache and any data in the cache has been lost. This may happen if the system has memory or battery problems that cause the controller to distrust the cache. Although user data may have been lost, this alert does not always indicate that relevant or user data has been lost. **Action**: Verify that the battery and memory are functioning properly.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event ID — 2187

Description	Single-bit ECC error limit exceeded on the controller DIMM.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The system memory is malfunctioning. **Action**: Contact technical support to replace the controller memory.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event ID — 2188

Description	The controller write policy has been changed to Write Through.
Severity	Warning
Cause and Action	**Cause**: The controller battery is unable to maintain cached data for the required period of time. For example, if the required period of time is 24 hours, the battery is

unable to maintain cached data for 24 hours. It is normal to receive this alert during the battery Learn cycle as the Learn cycle discharges the battery before recharging it. When discharged, the battery cannot maintain cached data.

Action: Check the health of the battery. If the battery is weak, replace the battery pack.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1153

Event ID — 2189

Description	The controller write policy has been changed to Write Back.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1151

Event ID — 2190

Description	The controller has detected a hot-add of an enclosure.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	751

Event ID — 2191

Description	Multiple enclosures are attached to the controller. This is an unsupported configuration.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: There are too many enclosures attached to the controller port. When the enclosure limit is exceeded, the controller loses contact with all enclosures attached to the port.
	Action: Remove the last enclosure. You must remove the enclosure that has been added last and is causing the enclosure limit to exceed.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2211
	Local Response Agent (LRA) Number: 2091
SNMP Trap Numbers	854

Event ID — 2192

Description	The virtual disk Check Consistency has made corrections and completed.
Severity	Informational
Cause and Action	**Cause**: The virtual disk **Check Consistency** has identified errors and made corrections. For example, the **Check Consistency** may have encountered a bad disk block and remapped the disk block to restore data consistency. This alert is for informational purposes.
	Action: None. As a precaution, monitor the alert log for other errors related to this virtual disk. If problems persist, contact Technical Support.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1203

Event ID — 2193

Description	The virtual disk reconfiguration has resumed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2194

Description	The virtual disk Read policy has changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2195

Description	Dedicated hot spare assigned. Physical disk % 1
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: 2196
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2196

Description	Dedicated hot spare unassigned. Physical disk % 1
Severity	OK / Normal / Informational

| Cause and Action | **Cause**: This alert is for informational purposes. |
| | **Action**: None |

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 1201 |

Event ID — 2197

Description	Physical disk Replace Member Operation stopped for rebuild.
Severity	Warning
Cause and Action	**Cause**: This alert is provided for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2060
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 903 |

Event ID — 2198

Description	The physical disk is too small to be used for Replace member operation.
Severity	Warning
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 903 |

Event ID — 2199

| Description | The virtual disk cache policy has changed. |

Severity	Informational
Cause and Action	**Cause**: User has provided invalid input for the chosen operation. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2200

Description	Replace Member Operation not possible as SAS/SATA is not supported in the same virtual disk.
Severity	Warning/ Non-critical
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	903

Event ID — 2201

Description	A global hot spare failed.
Severity	Warning/ Non-critical
Cause and Action	**Cause**: The controller is not able to communicate with a disk that is assigned as a dedicated hot spare. The disk may have been removed. There may also be a bad or loose cable. **Action**: Check if the disk is healthy and that it has not been removed. Check the cables. If necessary, replace the disk and reassign the hot spare.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2048 **Local Response Agent (LRA) Number**: 2070

SNMP Trap Numbers	903

Event ID — 2202

Description	A global hot spare has been removed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The controller is unable to communicate with a disk that is assigned as a global hot spare. The disk may have been removed. There may also be a bad or loose cable. **Action**: Check if the disk is healthy and that it has not been removed. Check the cables. If necessary, replace the disk and reassign the hot spare.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2203

Description	A dedicated hot spare failed.
Severity	Warning/ Non-critical
Cause and Action	**Cause**: The controller is unable to communicate with a disk that is assigned as a dedicated hot spare. The disk may have failed or been removed. There may also be a bad or loose cable. **Action**: Check if the disk is healthy and that it has not been removed. Check the cables. If necessary, replace the disk and reassign the hot spare.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2048 **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2204

Description	A dedicated hot spare has been removed.
Severity	OK / Normal / Informational

Cause and Action	**Cause**: The controller is unable to communicate with a disk that is assigned as a dedicated hot spare. The disk may have been removed. There may also be a bad or loose cable.
	Action: Check if the disk is healthy and that it has not been removed. Check the cables. If necessary, replace the disk and reassign the hot spare.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2205

Description	A dedicated hot spare has been automatically unassigned.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The hot spare is no longer required because the virtual disk it was assigned to has been deleted.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2098, 2161, 2196
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2206

Description	The only hot spare available is a SATA disk. SATA disks cannot replace SAS disks.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The only physical disk available to be assigned as a hot spare is using SATA technology. The physical disks in the virtual disk are using SAS technology. Because of this difference in technology, the hot spare cannot rebuild data if one of the physical disks in the virtual disk fails.
	Action: Add a SAS disk that is large enough to be used as the hot spare and assign it as a hot spare.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None

Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2207

Description	The only hot spare available is a SAS disk. SAS disks cannot replace SATA disks.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The only physical disk available to be assigned as a hot spare is using SAS technology. The physical disks in the virtual disk are using SATA technology. Because of this difference in technology, the hot spare cannot rebuild data if one of the physical disks in the virtual disk fails. **Action**: Add a SATA disk that is large enough to be used as the hot spare and assign the new disk as a hot spare.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2210

Description	Battery requires reconditioning. Initiate the battery learn cycle.
Severity	Warning / Non-critical
Cause and Action	**Cause**: Battery is in warn only mode and requires reconditioning. **Action**: Initiate the battery learn cycle.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1153

Event ID — 2211

Description	The physical disk is not supported.
Severity	Warning / Non-critical

Cause and Action	**Cause**: The physical disk may not have a supported version of the firmware or the disk may not be supported by your service provider.
	Action: If the disk is supported, update the firmware to a supported version. If the disk is not supported by your service provider, replace the disk with one that is supported.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2212

Description	The controller battery temperature is above normal.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1151

Event ID — 2213

Description	Recharge count maximum exceeded.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The battery has been recharged more times than the battery recharge limit allows.
	Action: Replace the battery pack.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2100

SNMP Trap Numbers	1153

Event ID — 2214

Description	Battery charge in progress.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2215

Description	Battery charge process interrupted.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2216

Description	The battery learn mode has changed to auto.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1151

Event ID — 2217

Description	The battery learn mode has changed to warn.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2218

Description	None of the Controller Property are set.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: You should change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2219

Description	Abort Check Consistency on Error, Replace Member Operation, Auto Replace Member Operation on Predictive Failure and Loadbalance changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None

Related Alert Number: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2220

Description	Replace Member Operation, Auto Replace Member Operation on Predictive Failure and Loadbalance changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2221

Description	Auto Replace Member Operation on Predictive Failure, Abort CC on Error and Loadbalance changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2222

Description	Loadbalance and Auto Replace Member Operation on Predictive Failure changed.
Severity	OK / Normal / Informational

Cause and Action	**Cause**: This alert is for informational purposes.
	Action: Change at least one controller property and run the command again.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2223

Description	Abort Check Consistency on Error, Replace Member Operation and Loadbalance changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: Change at least one controller property and run the command again.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2224

Description	Replace Member Operation and Loadbalance changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: Change at least one controller property and run the command again.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2225

Description	Abort Check Consistency on Error and Load balance changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2226

Description	Load balance changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2227

Description	Abort Check Consistency on Error, Replace Member Operation and Auto Replace Member Operation on Predictive Failure changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	751

Event ID — 2228

Description	Replace Member Operation and Auto Replace Member Operation on Predictive Failure changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2229

Description	Abort Check Consistency on Error and Auto Replace Member Operation on Predictive Failure changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2230

Description	Auto Replace Member Operation on Predictive Failure changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None

Related Alert Number: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2231

Description	Replace Member Operation and Abort Check Consistency on Error changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2232

Description	The controller alarm is silenced.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2233

Description	The Background initialization (BGI) rate has changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2234

Description	The Patrol Read rate has changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2235

Description	The Check Consistency rate has changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2236

Description	Replace Member Operation modified.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: Change at least one controller property and run the command again.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	751

Event ID — 2237

Description	Abort Check Consistency on Error modified.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: Change at least one controller property and run the command again.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	751

Event ID — 2238

Description	The controller debug log file has been exported.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The user has attempted to export the controller debug log. This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	751

Event ID — 2239

Description	A foreign configuration has been cleared.

Severity	OK / Normal / Informational
Cause and Action	**Cause**: The user has attempted to clear a foreign configuration. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2240

Description	A foreign configuration has been imported.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The user has attempted to import a foreign configuration. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2241

Description	The Patrol Read mode has changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The controller has changed the patrol read mode. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2242

Description	The Patrol Read operation has started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The controller has started the Patrol Read operation. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: 2243 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2243

Description	The Patrol Read operation has stopped.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The controller has stopped the Patrol Read operation. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: Alert 2243 is a clear alert for alert 2242. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2244

Description	A virtual disk blink has been initiated.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

SNMP Trap Numbers	1201

Event ID — 2245

Description	A virtual disk blink has ceased.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2246

Description	Warning / Non-critical
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The temperature of the battery is high. This maybe due to the battery being charged. **Action**: As the charge weakens, the charger should automatically recharge the battery. If the battery has reached its recharge limit, replace the battery pack. Monitor the battery to make sure that it recharges successfully.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2100
SNMP Trap Numbers	1153

Event ID — 2247

Description	The controller battery is charging.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: 2358
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1151

Event ID — 2248

Description	The controller battery is executing a Learn cycle.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1151

Event ID — 2249

Description	The physical disk Clear operation has started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	901

Event ID — 2250

Description	Redundant Path is broken.
Severity	Warning /Non-critical

| Cause and Action | **Cause**: The redundant path is broken. |
| | **Action**: Check the connection to the enclosure, which is degraded. |

Related Alert Information	**Clear Alert Number**: 2370
	Related Alert Number: 2370
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2251

Description	The physical disk blink has initiated.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 901 |

Event ID — 2252

Description	The physical disk blink has ceased.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 901 |

Event ID — 2253

| Description | Redundant path restored. |

Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2254

Description	The Clear operation has cancelled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2255

Description	The physical disk has been started.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2048, 2050, 2065, 2099, 2121, 2196, 2201, 2203 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2257

Description	Controller preserved cache is discarded.
Severity	Warning /Non-critical
Cause and Action	**Cause**: The controller cache is discarded by the user. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	753

Event ID — 2258

Description	Controller has preserved cache.
Severity	Warning /Non-critical
Cause and Action	**Cause**: I/O interrupted for a virtual disk which is connected to the controller. **Action**: Check for foreign configuration and import if any. Check for cable fault. Recover any virtual disk lost by the controller.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	753

Event ID — 2259

Description	An enclosure blink operation has initiated.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: 2260 **Related Alert Number**: None

	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	851

Event ID — 2260

Description	An enclosure blink has ceased.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	851

Event ID — 2261

Description	A global rescan has initiated.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2262

Description	SMART thermal shutdown is enabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	101

Event ID — 2263

Description	SMART thermal shutdown is disabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	101

Event ID — 2264

Description	A device is missing.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller cannot communicate with a device. The device may be removed. There may also be a bad or loose cable.
	Action: Check if the device is in and not removed. If it is in, check the cables. Also check the connection to the controller battery and the battery health. A battery with a weak or depleted charge may cause this alert.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2050, 2060, 2070, 2080, 2090, 2100

SNMP Trap Numbers	753, 803, 853, 903, 953, 1003, 1053, 1103, 1153, 1203

Event ID — 2265

Description	A device is in an unknown state.

Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller cannot communicate with a device. The state of the device cannot be determined. There may be a bad or loose cable. The system may also be experiencing problems with the application programming interface (API). There could also be a problem with the driver or firmware. **Action**: Check the cables. Check if the controller has a supported version of the driver and firmware. You can download the current version of the driver and firmware from the support site. Rebooting the system may also resolve this problem.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2048, 2050 **Local Response Agent (LRA) Number**: 2050, 2060, 2070, 2080, 2090, 2100
SNMP Trap Numbers	753, 803, 853, 903, 953, 1003, 1053, 1103, 1153, 1203

Event ID — 2266

Description	Controller log file entry: %1
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The %1 indicates a substitution variable. The text for this substitution variable is generated by the controller and is displayed with the alert in the alert log. This text can vary depending on the situation. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751, 801, 851, 901, 951, 1001, 1051, 1101, 1151, 1201

Event ID — 2267

Description	The controller reconstruct rate has changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2268

Description	%1, Storage Management has lost communication with the controller. An immediate reboot is strongly recommended to avoid further problems. If the reboot does not restore communication, then contact technical support for more information.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: Storage Management has lost communication with a controller. This may occur if the controller driver or firmware is experiencing a problem. The %1 indicates a substitution variable. The text for this substitution variable is displayed with the alert in the alert log and can vary depending on the situation.
	Action: Reboot the system. If the problem is not resolved, contact technical support. See your system documentation for information about contacting technical support by using telephone, fax, and Internet services.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2051

| SNMP Trap Numbers | 104 |

Event ID — 2269

Description	The physical disk Clear operation has completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2270

Description	The physical disk Clear operation failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A Clear task was being performed on a physical disk but the task was interrupted and did not complete successfully. The controller may have lost communication with the disk. The disk may have been removed or the cables may be loose or defective. **Action**: Verify that the disk is present and not in a **Failed** state. Make sure the cables are attached securely. See the online help for more information on checking the cables. Restart the Clear task.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2071
SNMP Trap Numbers	904

Event ID — 2271

Description	The Patrol Read encountered a media error.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The Patrol Read task has encountered an error such as a bad disk block that cannot be remapped. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2272

Description	Patrol Read found an uncorrectable media error.
Severity	Critical / Failure / Error

Cause and Action	**Cause**: The Patrol Read task has encountered an error that cannot be corrected. There may be a bad disk block that cannot be remapped.
	Action: Back up your data. If you are able to back up the data successfully, then fully initialize the disk and then restore from back up.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2071

SNMP Trap Numbers	904

Event ID — 2273

Description	A block on the physical disk has been punctured by the controller.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller encountered an unrecoverable medium error when attempting to read a block on the physical disk and marked that block as invalid. If the error was encountered on a source physical disk during a rebuild or reconfigure operation, it also punctures the corresponding block on the target physical disk. The invalid block is cleared during a write operation.
	Action: Back up your data. If you are able to back up the data successfully, initialize the disk and restore from the back up.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2095, 2350
	Local Response Agent (LRA) Number: 2071

SNMP Trap Numbers	904

Event ID — 2274

Description	The physical disk rebuild has resumed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2276

Description	The dedicated hot spare is too small.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The dedicated hot spare is not large enough to protect all virtual disks that reside on the disk group. **Action**: Assign a larger disk as the dedicated hot spare.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2277

Description	The global hot spare is too small.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The global hot spare is not large enough to protect all virtual disks that reside on the controller. **Action**: Assign a larger disk as the global hot spare.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2278

Description	The controller battery charge level is below a normal threshold.
Severity	Warning
Cause and Action	**Cause**: The battery is discharging. A battery discharge is a normal activity during the battery Learn cycle. The battery Learn cycle recharges the battery. You should receive alert 2179 when the recharge occurs.

Action 1: Check if the battery Learn cycle is in progress. The battery also displays the Learn state while the Learn cycle is in progress.

Action 2: If a Learn cycle is not in progress, replace the battery pack.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2199
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1153

Event ID — 2279

Description	The controller battery charge level is operating within normal limits.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert indicates that the battery is recharging during the battery Learn cycle. This alert is provided for informational purposes.
	Action: None
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1151

Event ID — 2280

Description	A disk media error has been corrected.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A disk media error was detected while the controller was completing a background task. A bad disk block was identified. The disk block has been remapped.
	Action: Consider replacing the disk. If you receive this alert frequently, be sure to replace the disk. You should also routinely back up your data.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2281

Description	Virtual disk has inconsistent data.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The virtual disk has inconsistent data. This may be caused when a power loss or system shutdown occurs while data is being written to the virtual disk. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2127 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2282

Description	Hot spare SMART polling failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller firmware attempted a SMART polling on the hot spare but was unable to complete it. The controller has lost communication with the hot spare. **Action**: Check the health of the disk assigned as a hot spare. You may need to replace the disk and reassign the hot spare. Make sure the cables are attached securely. See the *Server Administrator Storage Management User's Guide,* for more information on checking the cables.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2071
SNMP Trap Numbers	904

Event ID — 2283

Description	A redundant path is broken.
Severity	Warning / Non-critical

Cause and Action	**Cause**: The controller has two connectors that are connected to the same enclosure. The communication path on one connector has lost connection with the enclosure. The communication path on the other connector is reporting this loss.
	Action: Make sure the cables are attached securely and both enclosure management modules (EMMs) are healthy. See the Cables Attached Correctly section for more information on checking the cables.

Related Alert Information	**Clear Alert Number**: 2284
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2284

Description	A redundant path has been restored.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: Alert 2284 is a clear alert for alert 2283.
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2071

SNMP Trap Numbers	901

Event ID — 2285

Description	A disk media error was corrected during recovery.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2286

Description	A Learn cycle start is pending while the battery charges.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2287

Description	Protection policy has been changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A new protection policy has been created / existing protection policy has been modified. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2384 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	101

Event ID — 2288

Description	The patrol read has resumed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2289

Description	Multi-bit ECC error on controller DIMM.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: An error involving multiple bits has been encountered during a read or write operation. The error correction algorithm recalculates parity data during read and write operations. If an error involves only a single bit, it may be possible for the error correction algorithm to correct the error and maintain parity data. An error involving multiple bits, however, usually indicates data loss. In some cases, if the multi-bit error occurs during a read operation, the data on the disk may be OK. If the multi-bit error occurs during a write operation, data loss has occurred. **Action**: Replace the dual in-line memory module (DIMM). The DIMM is a part of the controller battery pack. See your hardware documentation for information on replacing the DIMM. You may need to restore data from backup.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2061
SNMP Trap Numbers	754

Event ID — 2290

Description	Single-bit ECC error on controller DIMM.
Severity	Warning / Non-critical
Cause and Action	**Cause**: An error involving a single bit has been encountered during a read or write operation. The error correction algorithm has corrected this error. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event ID — 2291

Description	An enclosure management module (EMM) has been discovered.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	851

Event ID — 2292

Description	Communication with the enclosure has been lost.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller has lost communication with an EMM. The cables may be loose or defective. **Action**: Make sure the cables are attached securely. Reboot the system.
Related Alert Information	**Clear Alert Number**: 2162 **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2091
SNMP Trap Numbers	854

Event ID — 2293

Description	The EMM has failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The failure may be caused by a loss of power to the EMM. The EMM self test may also have identified a failure. There could also be a firmware problem or a multi-bit error. **Action**: Replace the EMM. See the hardware documentation for information on replacing the EMM.
Related Alert Information	**Clear Alert Number**: None

Related Alert Number: None

Local Response Agent (LRA) Number: 2091

SNMP Trap Numbers	854

Event ID — 2294

Description	A device has been inserted.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	851

Event ID — 2295

Description	A device has been removed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A device has been removed and the system is no longer functioning in optimal condition. **Action**: Replace the device.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2091
SNMP Trap Numbers	854

Event ID — 2296

Description	An EMM has been inserted.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	951

Event ID — 2297

Description	An EMM has been removed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: An EMM has been removed.
	Action: Reinsert the EMM. See the hardware documentation for information on replacing the EMM.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2091
SNMP Trap Numbers	854, 954

Event ID — 2298

Description	The enclosure has a bad sensor %1.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The enclosure has a bad sensor. The enclosure sensors monitor the fan speeds, temperature probes, and so on. The % indicates a substitution variable. The text for this substitution variable is displayed with the alerts in the alert log and can vary depending on the situation.
	Action: See the hardware documentation for more information.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2090
SNMP Trap Numbers	853

Event ID — 2299

Description	Bad PHY %1
Severity	Critical / Failure / Error
Cause and Action	**Cause**: There is a problem with a physical connection or PHY. The %1 indicates a substitution variable. The text for this substitution variable is displayed with the alert in the alert log and can vary depending on the situation. **Action**: Contact your technical support.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2091
SNMP Trap Numbers	854

Event ID — 2300

Description	The enclosure is unstable.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller is not receiving a consistent response from the enclosure. There could be a firmware problem or an invalid cabling configuration. If the cables are too long, they degrade the signal. **Action**: Power down all enclosures attached to the system and reboot the system. If the problem persists, upgrade the firmware to the latest supported version. You can download the most current version of the driver and firmware from the support site. Make sure the cable configuration is valid. See the hardware documentation for valid cabling configurations.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2091
SNMP Trap Numbers	854

Event ID — 2301

Description	The enclosure has a hardware error.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The enclosure or an enclosure component is in a **Failed** or **Degraded** state.

Action: Check the health of the enclosure and its components. Replace any hardware that is in a **Failed** state. See the hardware documentation for more information.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2091

SNMP Trap Numbers	854

Event ID — 2302

Description	The enclosure is not responding.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The enclosure or an enclosure component is in a **Failed** or **Degraded** state.
	Action: Check the health of the enclosure and its components. Replace any hardware that is in a **Failed** state. See the hardware documentation for more information.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2091

SNMP Trap Numbers	854

Event ID — 2303

Description	The enclosure cannot support both SAS and SATA physical disks. Physical disks may be disabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	851

Event ID — 2304

Description	An attempt to hot plug an EMM has been detected. This type of hot plug is not supported.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2211 **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2305

Description	The physical disk is too small to be used for a rebuild.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The physical disk is too small to rebuild the data. **Action**: Remove the physical disk and insert a new physical disk that is the same size or larger than the disk that is being rebuilt. The new physical disk must also use the same technology (for example, SAS or SATA) as the disk being rebuilt. If the rebuild does not start automatically after you have inserted a suitable physical disk, then run the Rebuild task. See the *Server Administrator Storage Management User's Guide* for more information.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2326 **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2306

Description	Bad block table is 80% full.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The bad block table is used for remapping bad disk blocks. This table fills, as bad disk blocks are remapped. When the table is full, bad disk blocks can no longer be remapped, and disk errors can no longer be corrected. At this point, data loss can occur. The bad block table is now 80% full.

Action: Back up your data. Replace the disk generating this alert and restore from back up.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2307
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2307

Description	Bad block table is full. Unable to log block %1.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The bad block table is used for remapping bad disk blocks. This table fills, as bad disk blocks are remapped. When the table is full, bad disk blocks can no longer be remapped and disk errors can no longer be corrected. At this point, data loss can occur. The %1 indicates a substitution variable. The text for this substitution variable is displayed with the alert in the alert log and can vary depending on the situation.
	Action: Replace the disk generating this alert. If necessary, restore your data from backup.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2048
	Local Response Agent (LRA) Number: 2071

SNMP Trap Numbers	904

Event ID — 2309

Description	A physical disk is incompatible.
Severity	Warning / Non-critical
Cause and Action	**Cause**: You have attempted to replace a disk with another disk that is using an incompatible technology. For example, you may have replaced one side of a mirror with a SAS disk when the other side of the mirror is using SATA technology.
	Action: See the hardware documentation for information on replacing disks.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None

Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2310

Description	A virtual disk is permanently degraded.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A redundant virtual disk has lost redundancy. This may occur when the virtual disk suffers the failure of multiple physical disks. In this case, both the source physical disk and the target disk with redundant data have failed. A rebuild is not possible because there is no redundancy. **Action**: Replace the failed disks and restore from backup.
Related Alert Information	**Clear Alert Number**: 1204 **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2081
SNMP Trap Numbers	1204

Event ID — 2311

Description	The firmware on the EMMs is not the same version. EMM0 %1 EMM1 %2.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The firmware on the EMM modules is not the same version. It is required that both modules have the same version of the firmware. This alert may be caused if you attempt to insert an EMM module that has a different firmware version than an existing module. The %1 and %2 indicate a substitution variable. The text for these substitution variables is displayed with the alert in the alert log and can vary depending on the situation. **Action**: Upgrade to the same version of the firmware on both EMM modules.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	853

Event ID — 2312

Description	A power supply in the enclosure has an AC failure.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The power supply has an AC failure. **Action**: Replace the power supply.
Related Alert Information	**Clear Alert Number**: 1003 **Related Alert Number**: 2122, 2324 **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	1003

Event Id — 2313

Description	A power supply in the enclosure has a DC failure.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The power supply has a DC failure. **Action**: Replace the power supply.
Related Alert Information	**Clear Alert Number**: 2323 **Related Alert Number**: 2122, 2333 **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	1003

Event ID — 2314

Description	The initialization sequence of SAS components failed during system startup. SAS management and monitoring is not possible.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: Storage Management is unable to monitor or manage SAS devices. **Action**: Reboot the system. If problem persists, make sure you have supported versions of the drivers and firmware. Also, you may need to reinstall Storage Management or Server Administrator because of some missing installation components.
Related Alert Information	**Clear Alert Number**: None

Related Alert Number: None

Local Response Agent (LRA) Number: 2051

SNMP Trap Numbers	104

Event Id — 2315

Description	Diagnostic message %1
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The %1 indicates a substitution variable. The text for this substitution variable is generated by the utility that ran the diagnostics and is displayed with the alert in the alert log. This text can vary depending on the situation. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2316

Description	Diagnostic message %1
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A diagnostics test failed. The %1 indicates a substitution variable. The text for this substitution variable is generated by the utility that ran the diagnostics and is displayed with the alert in the alert log. This text can vary depending on the situation. **Action**: See the documentation for the utility that ran the diagnostics for more information
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2061
SNMP Trap Numbers	754

Event ID — 2318

Description	Problems with the battery or the battery charger have been detected. The battery health is poor.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The battery or the battery charger is not functioning properly. **Action**: Replace the battery pack.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2188 **Local Response Agent (LRA) Number**: 2100
SNMP Trap Numbers	1153

Event ID — 2319

Description	Single-bit ECC error. The DIMM is degrading.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The DIMM is beginning to malfunction. **Action**: Replace the DIMM to avoid data loss or data corruption. The DIMM is a part of the controller battery pack. See your hardware documentation for information on replacing the DIMM or contact technical support.
Related Alert Information	**Clear Alert Number**: 753 **Related Alert Number**: 2320 **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event Id — 2320

Description	Single-bit ECC error. The DIMM is critically degraded.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The DIMM is malfunctioning. Data loss or data corruption may be imminent. **Action**: Replace the DIMM immediately to avoid data loss or data corruption. The DIMM is a part of the controller battery pack. See your hardware documentation for information on replacing the DIMM or contact technical support.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2321
	Local Response Agent (LRA) Number: 2061

| SNMP Trap Numbers | 754 |

Event ID — 2321

Description	Single-bit ECC error. The DIMM is critically nonfunctional. There is no further reporting.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The DIMM is malfunctioning. Data loss or data corruption is imminent. No further alerts are generated.
	Action: Replace the DIMM immediately. The DIMM is a part of the controller battery pack. See your hardware documentation for information on replacing the DIMM.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2061

| SNMP Trap Numbers | 754 |

Event ID — 2322

Description	The DC power supply is switched off.
Severity	Informational
Cause and Action	**Cause**: The power supply unit is switched off. Either a user switched off the power supply unit or it is defective.
	Action: Check if the power switch is turned off. If it is turned off, turn it on. If the problem persists, check if the power cord is attached and functional. If the problem is still not corrected or if the power switch is already turned on, replace the power supply unit.

Related Alert Information	**Clear Alert Number**: 2323
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2091

| SNMP Trap Numbers | 1001 |

Event ID — 2323

Description	The power supply is switched on.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Status**: Alert 2323 is a clear alert for alerts 2313 and 2322. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1001

Event ID — 2324

Description	The AC power supply cable has been removed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The power cable may be pulled out or removed. The power cable may also have overheated and become warped and nonfunctional. **Action**: Replace the power cable.
Related Alert Information	**Clear Alert Number**: 2325 **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2091
SNMP Trap Numbers	1004

Event ID — 2325

Description	The power supply cable has been inserted.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Status**: Alert 2325 is a clear alert for alerts 2324 and 2312. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1001

Event ID — 2326

Description	A foreign configuration has been detected.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. The controller has physical disks that were moved from another controller. These physical disks contain virtual disks that were created on the other controller. See the Import Foreign Configuration and Clear Foreign Configuration section in the *Server Administrator Storage Management User's Guide* for more information. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2327

Description	The NVRAM has corrupted data. The controller is reinitializing the NVRAM.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The nonvolatile random access memory (NVRAM) is corrupt. This may occur after a power surge, a battery failure, or for other reasons. The controller is reinitializing the NVRAM. The controller properties reset to the default settings after the reinitialization is complete. **NOTE:** The controller is taking the required corrective action. If this alert is generated often (such as during each reboot), replace the controller.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2266 **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event ID — 2328

Description	The NVRAM has corrupt data.
Severity	Warning / Non-critical

Cause and Action	**Cause**: The NVRAM has corrupt data. The controller is unable to correct the situation.
	Action: Replace the controller.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 20601
SNMP Trap Numbers	753

Event ID — 2329

Description	SAS port report: %1
Severity	Warning / Non-critical
Cause and Action	**Cause**: The text for this alert is generated by the controller and can vary depending on the situation. The %1 indicates a substitution variable. The text for this substitution variable is generated by the controller and is displayed with the alert in the alert log. This text can vary depending on the situation.
	Action: Run the PHY integrity test diagnostic. Make sure the cables are attached securely. If the problem persists, replace the cable with a valid cable according to SAS specifications. If the problem still persists, you may need to replace some devices such as the controller or EMM. See the hardware documentation for more information.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2060
SNMP Trap Numbers	753

Event ID — 2330

Description	SAS port report: %1
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The %1 indicates a substitution variable. The text for this substitution variable is generated by the controller and is displayed with the alert in the alert log. This text can vary depending on the situation. This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2331

Description	A bad disk block has been reassigned.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The disk has a bad block. Data has been readdressed to another disk block and no data loss has occurred.
	Action: Monitor the disk for other alerts or indications of poor health. For example, you may receive alert 2306. Replace the disk if you suspect there is a problem.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 901 |

Event ID — 2332

Description	A controller hot plug has been detected.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2334

Description	Controller event log: %1
Severity	OK / Normal / Informational

Cause and Action	**Cause**: The %1 indicates a substitution variable. The text for this substitution variable is generated by the controller and is displayed with the alert in the alert log. This text is from events in the controller event log that were generated while Storage Management was not running. This text can vary depending on the situation. This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751, 801, 851, 901, 951, 1001, 1051, 1101, 1151, 1201

Event ID — 2335

Description	Controller event log: %1.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The %1 indicates a substitution variable. The text for this substitution variable is generated by the controller and is displayed with the alert in the alert log. This text is from events in the controller event log that were generated while Storage Management was not running. This text can vary depending on the situation. **Action**: If there is a problem, review the controller event log and the Server Administrator alert log for significant events or alerts that may assist in diagnosing the problem. Check the health of the storage components. See the hardware documentation for more information.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event ID — 2336

Description	Controller event log: %1.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The %1 indicates a substitution variable. The text for this substitution variable is generated by the controller and is displayed with the alert in the alert log. This text is from events in the controller event log that were generated while Storage Management was not running. This text can vary depending on the situation.

Action: See the hardware documentation for more information.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2061

SNMP Trap Numbers	754

Event ID — 2337

Description	The controller is unable to recover cached data from the battery backup unit (BBU).
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller was unable to recover data from the cache. This may occur when the system is without power for an extended period when the battery is discharged.
	Action: Check if the battery is charged and in good health. When the battery charge is unacceptably low, it cannot maintain cached data. Check if the battery has reached its recharge limit. The battery may need to be recharged or replaced.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2101

SNMP Trap Numbers	1154

Event ID — 2338

Description	The controller has recovered cached data from the BBU.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1151

Event ID — 2339

Description	The factory default settings have been restored.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2340

Description	The BGI completed with uncorrectable errors.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The BGI task encountered errors that cannot be corrected. The virtual disk contains physical disks that have unusable disk space or disk errors that cannot be corrected. **Action**: Replace the physical disk that contains the disk errors. Review other alert messages to identify the physical disk that has errors. If the virtual disk is redundant, you can replace the physical disk and continue using the virtual disk. If the virtual disk is non-redundant, you may need to recreate the virtual disk after replacing the physical disk. After replacing the physical disk, run **Check Consistency** to check the data.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2081
SNMP Trap Numbers	1204

Event ID — 2341

Description	The Check Consistency made corrections and completed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 1201 |

Event ID — 2342

Description	The Check Consistency found inconsistent parity data. Data redundancy may be lost.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The data on a source disk and the redundant data on a target disk is inconsistent.
	Action: Restart the **Check Consistency** task. If you receive this alert again, check the health of the physical disks included in the virtual disk. Review the alert messages for significant alerts related to the physical disks. If you suspect that a physical disk has a problem, replace it and restore from backup.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2341, 2343
	Local Response Agent (LRA) Number: 2080
SNMP Trap Numbers	1203

Event ID — 2343

Description	The Check Consistency logging of inconsistent parity data is disabled.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The **Check Consistency** can no longer report errors in the parity data.
	Action: See the hardware documentation for more information.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2080
SNMP Trap Numbers	1203

Event ID — 2344

Description	The virtual disk initialization terminated.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A user has cancelled the virtual disk initialization. **Action**: Restart the initialization.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2080
SNMP Trap Numbers	1203

Event ID — 2345

Description	The virtual disk initialization failed.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The controller cannot communicate with attached devices. A disk may be removed or contain errors. Cables may also be loose or defective. **Action**: Verify the health of attached devices. Review the Alert Log for significant events. Make sure the cables are attached securely. See the Cables Attached Correctly section for more information on checking the cables.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2081
SNMP Trap Numbers	1204

Event ID — 2346

Description	Error occurred: %1.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A physical device may have an error. The %1 indicates a substitution variable. The text for this substitution variable is generated by the firmware and is displayed with the alert in the alert log. This text can vary depending on the situation. **Action**: Verify the health of attached devices. Review the alert log for significant events. Run the PHY integrity diagnostic tests. You may need to replace faulty

hardware. Make sure that the cables are attached securely. See the hardware documentation for more information.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2048, 2050, 2056, 2057, 2076, 2079, 2081, 2083, 2095, 2129, 2201, 2203, 2270, 2282, 2369
	Local Response Agent (LRA) Number: 2070
SNMP Trap Numbers	903

Event ID — 2347

Description	The rebuild failed due to errors on the source physical disk.
Severity	Critical / Failure / Error
Cause and Action	**Hardware RAID: Cause and Action**
	Cause: You are attempting to rebuild data that resides on a defective disk.
	Action: Replace the source disk and restore from backup.
	Software RAID:
	• Perform a backup with the Verify option. • If the file backup fails, try to restore the failed file from a previous backup. • When the backup with the Verify option is complete without any errors, delete the Virtual Disk. • Recreate a new Virtual Disk with new drives. • Restore the data from backup.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2195, 2346
	Local Response Agent (LRA) Number: 2071
SNMP Trap Numbers	904

Event ID — 2348

Description	The rebuild failed due to errors on the target physical disk.
Severity	Critical / Failure / Error
Cause and Action	**Cause**:You are attempting to rebuild data on a disk that is defective.
	Action: Replace the target disk. If a rebuild does not automatically start after replacing the disk, initiate the Rebuild task. You may need to assign the new disk as a hot spare to initiate the rebuild.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2195, 2346
	Local Response Agent (LRA) Number: 2071
SNMP Trap Numbers	904

Event ID — 2349

Description	A bad disk block could not be reassigned during a write operation.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: A write operation could not complete because the disk contains bad disk blocks that could not be reassigned. Data loss may have occurred and data redundancy may also be lost.
	Action: Replace the disk.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2346
	Local Response Agent (LRA) Number: 2071
SNMP Trap Numbers	904

Event ID — 2350

Description	There was an unrecoverable disk media error during the rebuild or recovery operation.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The rebuild or recovery operation encountered an unrecoverable disk media error.
	Action: Replace the disk.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: 2095, 2273
	Local Response Agent (LRA) Number: 2071
SNMP Trap Numbers	904

Event ID — 2351

Description	A physical disk is marked as missing.

Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: 2352 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2352

Description	A physical disk that was marked as missing has been replaced.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Status**: Alert 2352 is a clear alert for alert 2351. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2353

Description	The enclosure temperature has returned to normal.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Status**: Alert 2353 is a clear alert for alerts 2100 and 2101. **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1051

Event ID — 2354

Description	Enclosure firmware download in progress.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	851

Event ID — 2355

Description	Enclosure firmware download failed.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The system was unable to download firmware to the enclosure. The controller may have lost communication with the enclosure. There may have been problems with the data transfer or the download media may be corrupt. **Action**: Attempt to download the enclosure firmware again. If problems continue, verify that the controller can communicate with the enclosure. Make sure that the enclosure is powered on. Check the cables. See the Cables Attached Correctly section for more information on checking the cables. Verify the health of the enclosure and its components. To verify the health of the enclosure, select the enclosure object in the tree view. The Health subtab displays a red X or yellow exclamation point for enclosure components that are failed or degraded.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2090
SNMP Trap Numbers	853

Event ID — 2356

Description	SAS SMP Communications error %1.
Severity	Critical / Failure / Error

Cause and Action	**Cause**: The text for this alert is generated by the firmware and can vary depending on the situation. The reference to SMP in this text refers to SAS Management Protocol.
	Action: There may be a SAS topology error. See the hardware documentation for information on correct SAS topology configurations. There may be problems with the cables such as a loose connection or an invalid cabling configuration. See the Cables Attached Correctly section for more information on checking the cables. See the hardware documentation for information on correct cabling configurations. Verify that the firmware is a supported version.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2061
SNMP Trap Numbers	754

Event ID — 2357

Description	SAS expander error: %1.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The %1 indicates a substitution variable. The text for this substitution variable is generated by the firmware and is displayed with the alert in the alert log. This text can vary depending on the situation.
	Action: There may be a problem with the enclosure. Check the health of the enclosure and its components by selecting the enclosure object in the tree view. The Health subtab displays a red X or yellow exclamation point for enclosure components that are **Failed** or **Degraded**. See the enclosure documentation for more information.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2061
SNMP Trap Numbers	754

Event ID — 2358

Description	The battery charge cycle is complete.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1151

Event ID — 2359

Description	Disk found is not supplied by an authorized hardware provider.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The physical disk does not comply with the standards set and is not supported.
	Action: Replace the physical disk with a physical disk that is supported.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2070

SNMP Trap Numbers	903

Event ID — 2360

Description	A user has discarded data from the controller cache.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2361

Description	Physical disk(s) that are part of a virtual disk have been removed while the system was shut down. This removal was discovered during system start-up.

Severity	Warning
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	753

Event ID — 2362

Description	Physical disk(s) have been removed from a virtual disk. The virtual disk is in Failed state during the next system reboot.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2364

Description	All virtual disks are missing from the controller. This situation was discovered during system start-up.
Severity	Warning
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	753

Event ID — 2366

Description	Dedicated spare imported as global due to missing arrays.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2367

Description	Rebuild is not possible because mixing of different media type (SSD/HDD) and bus protocols (SATA/SAS) is not supported on the same virtual disk.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The physical disk is using an incompatible technology. **Action**: All physical disks in the virtual disk must use the same technology. You cannot use both SAS and SATA physical disks in the same virtual disk. Remove the physical disk and insert a new physical disk that uses the correct technology. If the rebuild does not start automatically after you have inserted a suitable physical disk, then run the Rebuild task.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2326 **Local Response Agent (LRA) Number**: 2070
SNMP Trap Numbers	903

Event ID — 2368

Description	The SCSI Enclosure Processor (SEP) has been rebooted as part of the firmware download operation and is unavailable until the operation completes.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: 2049, 2052, 2162, 2292
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	851

Event ID — 2369

Description	Virtual Disk Redundancy has been degraded.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: A physical disk in a RAID 6 virtual disk has either failed or been removed. **Action**: Replace the missing or failed physical disk.

Related Alert Information	**Clear Alert Number**: 2121 **Related Alert Number**: 2048, 2049, 2050, 2076, 2346
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2370

Description	Redundant Path View cleared.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes. **Action**: None

Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2371

Description	Attempted import of Unsupported Virtual Disk type RAID%1.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is for informational purposes.

Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2372

Description	Attempted import of Virtual Disk exceeding the limit supported on the controller.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes.
	Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2373

Description	Attempted import of unsupported Virtual Disk type RAID %1.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. User is attempting to import a foreign virtual disk with unsupported RAID level on the controller.
	Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 751 |

Event ID — 2374

| Description | Attempted import of Virtual Disk with missing span. |

Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes and is displayed when you attempt to import a foreign virtual disk with a missing span. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2375

Description	Attempted import of Virtual Disk with missing physical disk.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: User is attempting to import a foreign virtual disk with a missing physical disk. This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2376

Description	Attempted import of Virtual Disk with stale physical disk.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: User is attempting to import a foreign virtual disk with a stale physical disk. This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2377

Description	Attempted import of an orphan drive.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: User is attempting to import an orphan drive. This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2378

Description	Attempted import of an incompatible physical drive.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: User is attempting to import an incompatible physical drive. This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2379

Description	An overflow of the foreign configuration has occurred. You can import the foreign configuration in multiple attempts.
Severity	Warning
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

SNMP Trap Numbers	753

Event ID — 2380

Description	Foreign configuration has been partially imported. Some configuration failed to import.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2381

Description	Controller preserved cache is recovered.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2382

Description	An unsupported configuration was detected. The controller does not support physical disks of type SSD: *<Physical DiskID>, <controller- ID>, <connector- ID>*
Severity	Warning / Non-critical
Cause and Action	**Cause**: A physical disk of media type SSD is attached to a controller that does not support SSD disks.

Action: Replace the unsupported physical disk with a physical disk of media type HDD.

Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	903

Event ID — 2383

Description	The Information level set for the hot spare protection policy is violated for the Virtual Disk.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The number of physical disks you specified for the hot spare protection policy is violated. **Action**: Reassign the number of hot spares as specified in the protection policy for that RAID level.
Related Alert Information	**Clear Alert Number**: 2195 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2384

Description	The Warning level set for the hot spare protection policy is violated for the Virtual Disk.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The number of physical disks you specified for the hot spare protection policy is violated. **Action**: Reassign the number of hot spares as specified in the protection policy for that RAID level.
Related Alert Information	**Clear Alert Number**: 2195 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1203

Event Id — 2385

Description	The Critical level set for the hot spare protection policy is violated for the Virtual Disk.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The number of physical disks you specified for the hot spare protection policy is violated. **Action**: Reassign the number of hot spares as specified in the protection policy for that RAID level.
Related Alert Information	**Clear Alert Number**: 2195 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1204

Event ID — 2386

Description	Drive could not be assigned as Dedicated Hot Spare.
Severity	Informational
Cause and Action	**Cause**: The assignment of a Dedicated Hot Spare fails as the disk is invalid. **Action**: None.
Related Alert Information	**Clear Alert Number**: 2195 **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2387

Description	A virtual disk bad block medium error is detected.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: Virtual disk bad blocks are due to presence of unrecoverable bad blocks on one or more member physical disks. **Action**:

1. Perform a backup of the virtual disk with the **Verify** option selected. One of the following can occur:
   - Backup operation fails. In this case, restore the file from a previous backup. After restoring the file, run **Patrol Read** and check for bad blocks. If more bad blocks exist, proceed to step 2.
   - Backup operation completes without error. This indicates that there are no bad blocks on your virtual disk.
   - Backup operation displays bad blocks. This indicates that the bad blocks are located in a nondata area. Proceed to step 2.
2. To clear these bad blocks, execute the **Clear Virtual Disk Bad Blocks** task.
3. Run **Patrol Read** to ensure no new bad blocks are found.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: 2081
SNMP Trap Numbers	1204

Event ID — 2388

Description	The Controller Encryption Key is destroyed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The Controller Encryption Key is destroyed.
	Action: None.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	751

Event ID — 2389

Description	The virtual disk bad block medium error is cleared.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Virtual disk bad blocks are cleared.
	Action: None.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

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SNMP Trap Numbers	1201

Event ID — 2390

Description	The Instant Encrypt Erase operation is performed on the physical disk.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: Instant Encrypt Erase operation is successful on Self Encryption Disks (SEDs.) **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2392

Description	The drive Encryption Key is invalid.
Severity	Warning / Non-critical
Cause and Action	**Cause**: The controller failed to verify the specified Passphrase. **Action**: Enter a correct Passphrase.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: 2060
SNMP Trap Numbers	753

Event ID — 2393

Description	The virtual disk is encrypted.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The Encrypted virtual disk operation on normal virtual disk (created using Self encrypting disks only) is successful. **Action**: None.
Related Alert Information	**Clear Alert Number**: None

Related Alert Number: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2394

Description	Persistent Hot Spare is enabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The Persistent Hot Spare option is enabled. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2395

Description	Persistent Hot Spare is disabled.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The Persistent Hot Spare option is disabled. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2396

Description	The Check Consistency detected uncorrectable multiple medium errors.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The **Check Consistency** task detects uncorrectable multiple errors.

Action: Replace the failed physical disk. You can identify the failed disk by locating the disk that has a red "X" for its status. Rebuild the physical disk. When finished, restart the check consistency operation.

Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1204

Event ID — 2397

Description	The Check Consistency completed with uncorrectable errors.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: The **Check Consistency** task detected uncorrectable multiple errors. **Action**: Replace the failed physical disk. You can identify the failed disk by locating the disk that has a red "X" for its status. Rebuild the physical disk. When finished, restart the check consistency operation.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1204

Event ID — 2398

Description	The Manage Physical Disk Power property(s) changed.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The Manage Physical Disk Power properties are changed. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2399

Description	The Physical Disk Power status changed from 1% to 2%.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The physical disk power status is changed from one state to another. A physical disk can have the following power statuses: spun down, transition, and spun up. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2400

Description	Physical disk configuration data updated as it was stale.
Severity	Informational
Cause and Action	**Cause**: The physical disk configuration data is updated because it was outdated. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2401

Description	Configuration command could not be committed to disk. Configuration has to be re applied.
Severity	Failure / Error
Cause and Action	**Cause**: The virtual disk configuration command did not succeed. **Action**: Check for the recent configuration that has not taken effect. Re-apply the configuration.
Related Alert Information	**Clear Alert Number**: None

	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	754

Event ID — 2402

Description	Changing the Physical Disk Power status from 1% to 2% failed.
Severity	Failure / Error
Cause and Action	**Cause**: When changing the Physical Disk Power status fails. **Action**: Replace the physical disk.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	904

Event ID — 2403

Description	Virtual Disk is available.
Severity	OK / Normal / Informational
Cause and Action	**Cause**: The operating system detects the newly created virtual disk. **Action**: None. ✐ NOTE: This alert also appears when a CacheCade is created but is not available for the operating system (as it is a CacheCade and not a Virtual Disk).
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2404

Description	Virtual Disk is not available.
Severity	OK / Normal / Informational

Cause and Action	**Cause**: The operating system does not detect the newly created virtual disk.
	Action: Wait for some time.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2405

Description	Command timeout on physical disk.
Severity	Warning
Cause and Action	**Cause**: The spundown physical disks take more time than the timeout period and the configuration commands are timed out.
	Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	903

Event ID — 2407

Description	Controller Encryption mode is enabled in LKM.
Severity	Informational
Cause and Action	**Cause**: The Local Key Management (LKM) encryption mode is enabled.
	Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	751

Event ID — 2411

Description	Controller LKM Encryption key is changed.
Severity	Informational
Cause and Action	**Cause**: Using Manage Encryption Key operations, encryption key is changed. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	751

Event ID — 2412

Description	Controller CacheCade is resized.
Severity	Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2413

Description	Controller CacheCade is created.
Severity	Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1201

Event ID — 2414

Description	Controller CacheCade is deleted.
Severity	Informational
Cause and Action	**Cause**: This alert is provided for informational purposes. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201

Event ID — 2415

Description	Controller battery is discharging.
Severity	Informational
Cause and Action	**Cause**: The battery learn cycle has started. **Action**: None
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1151

Event ID — 2416

Description	Disk medium error detected.
Severity	Warning / Non-critical
Cause and Action	**Cause**: A part of the physical disk is damaged. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

SNMP Trap Numbers	903

Event ID — 2417

Description	There is an unrecoverable medium error detected on virtual disk.
Severity	Critical / Failure / Error
Cause and Action	**Cause**: Unrecoverable medium error found on one or more member physical disks of a virtual disk.

Action: Perform a backup of the virtual disk with the Verify option selected. If the Backup operation is successful, it indicates that the un-recoverable medium did not affect user data.

If the Backup operation fails, restore the file from a previous backup. After restoring the file, run check consistency operation:

- If the consistency check is successful, no further action is required.
- If the consistency check finds and unrecoverable medium error, it means that the medium error is located in non-user data. No further action is required as, writing data to the location of the medium error fixes the problem.

> **NOTE:** If the unrecoverable medium error has not been corrected, it may be reported again by the system. This error can be fixed by writing data on the affected area or deleting and recreating the Virtual Disk as demonstrated in the following procedure.
>
> 1. Back up the data.
> 2. Delete the Virtual Disk.
> 3. Recreate the Virtual Disk using the same parameters like size, RAID level, disks, etc.
> 4. Restore data.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1204

Event ID — 2418

Description	Disk medium error on virtual disk has been corrected
Severity	Informational

Cause and Action	**Cause**: This alert is for informational purposes.
	Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1201

Event ID — 2425

Description	State change on Physical disk from READY to Non-RAID.
Severity	Informational
Cause and Action	**Cause**: User triggered action.
	Action: Configure the drive to be non-raid using CLI/GUI.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2426

Description	State change on Physical disk from Non- RAID to READY.
Severity	Informational
Cause and Action	**Cause**: User triggered action.
	Action: Configure the drive to be ready using CLI/GUI.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2429

Description	Drive Prepared for Removal.

Severity	Informational
Cause and Action	**Cause**: User triggered action. **Action**: Execute "Prepare to Remove" task from UI in a PCIeSSD setup
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2430

Description	Physical Device Log Exported.
Severity	Informational
Cause and Action	**Cause**: User triggered action. **Action**: Execute export log for physical device.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2431

Description	Physical Device Full Initialization completed.
Severity	Informational
Cause and Action	**Cause**: User triggered task. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2432

Description	The PCIeSSD device was found to be in security locked state. Full initialization has to be done on the security locked drive to recover the drive in usable state.
Severity	Warning
Cause and Action	**Cause**: Last full initialization was stopped for some reason and hence the device is in security locked state. **Action**: Run full initialization to recover the device.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	902

Event ID — 2433

Description	Physical Device is at %1% of warranted device wear-out limit.
Severity	Informational
Cause and Action	**Cause**: User triggered task. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2434

Description	Physical Device has reached or exceeded its warranted device wear-out limit.
Severity	Warning
Cause and Action	**Cause**: User triggered task. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	903

Event ID — 2435

Description	Physical Device is approaching read-only mode.
Severity	Informational
Cause and Action	**Cause**: User triggered task. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2436

Description	Physical Device is in read-only mode.
Severity	Critical
Cause and Action	**Cause**: User triggered task. **Action**: None.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	904

Event ID — 2437

Description	The physical device blink has initiated.
Severity	Informational
Cause and Action	**Cause**: User triggered task. **Action**: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2438

Description	The physical device blink has ceased.
Severity	Informational
Cause and Action	**Cause**: User triggered task.
	Action: None.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	901

Event ID — 2440

Description	The physical device volatile memory backup device failed.
Severity	Error
Cause and Action	**Cause**: None
	Action: None

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

SNMP Trap Numbers	904

Event ID — 2441

Description	The PCIe solid state device identified in the message has turned off because the critical temperature threshold of the device was exceeded.
Severity	Error

| Cause and Action | **Cause**: None |
| | **Action**: Contact your service provider. |

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 904 |

Event ID — 2442

Description	The reliability of the PCIe solid state device identified in the message degraded. Data loss is possible.
Severity	Error
Cause and Action	**Cause**: None
	Action: Back up the data on the device, and contact your service provider for further instructions.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 904 |

Event ID — 2443

Description	The volatile memory backup device on the PCIe solid state device identified in the message is no longer functional. Data loss is possible.
Severity	Error
Cause and Action	**Cause**: None
	Action: Back up the data on the device, and contact your service provider for further instructions.

Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None

| SNMP Trap Numbers | 904 |

Event ID — 2444

Description	The Patrol Read operation was manually stopped before completion.
Severity	Informational
Cause and Action	**Cause**: User Triggered Task **Action**: If desired, restart the Patrol Read operation at a later time.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2445

Description	Cryptographic Erase operation is successfully completed on the physical disk drive identified in the message.
Severity	Informational
Cause and Action	**Cause**: User Triggered Task **Action**: No response action is required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2699

Description	Connection to CFM lost! : FluidCache
Severity	Error
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

| SNMP Trap Numbers | 1604 |

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Event ID — 2700

Description	The following journal mirror is available. %1
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1601

Event ID — 2701

Description	The following journal mirror is being replaced.(wwn) %1 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1601

Event ID — 2702

Description	The following journal mirror has failed. (wwn) %1 : FluidCache.
Severity	Warning
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1603

Event ID — 2703

Description	There are not enough journal mirrors available to operate. : FluidCache.
Severity	Error
Cause and Action	To resolve the issue, you must ensure that there are at least two journal mirrors that are accessible. You must activate either one or more failed cache devices or use the fldc_restore utility to rebuild the node.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1604

Event ID — 2704

Description	The cluster ID in the journal does not match the cluster ID in the configuration file. : FluidCache.
Severity	Error
Cause and Action	Service is required. Contact Dell Technical Support.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1604

Event ID — 2705

Description	The journal could not be read/written. : FluidCache.
Severity	Error
Cause and Action	Service is required. Contact Dell Technical Support.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1604

Event ID — 2874

Description	The following Cache Device has no associated server in the configuration: %1 : FluidCache.
Severity	Warning
Cause and Action	There is a cache device specified in the configuration with no associated cache server configured.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	903

Event ID — 2875

Description	The following Disk is beginning flushing.(wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2876

Description	The following Disk has finished flushing. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	901

Event ID — 2900

Description	The following cache device has failed. (wwn) %1 (path) %2 : FluidCache.
Severity	Error
Cause and Action	Replace the failed device.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	904

Event ID — 2901

Description	The following storage device is either inaccessible or failed. (wwn) %1 (path) %2 : FluidCache.
Severity	Error
Cause and Action	If the device is inaccessible, restore connectivity. If the device has failed, replace it.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1204, 1504

Event ID — 2902

Description	The following storage device has had transient failures. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

| SNMP Trap Numbers | 1201, 1501 |

Event ID — 2903

Description	The following cache device has been registered. (ww n) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2904

Description	The following cache device has been removed. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2905

Description	The following cache device is being removed. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	901

Event ID — 2906

Description	Caching is being removed for the following storage device. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201, 1501, 1601

Event ID — 2907

Description	Caching has been enabled on the following storage device. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1201, 1501

Event ID — 2908

Description	The following cache device has been disconnected. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None	

SNMP Trap Numbers	901

Event ID — 2909

Description	The following journal mirror is available. %1The following storage device is in an unknown state.(wwn) %1 (path) %2 : FluidCache.
Severity	Warning
Cause and Action	Service is required. Contact Dell Technical Support.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1203, 1503

Event ID — 2910

Description	Caching has been disabled for the following storage device. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None
	Local Response Agent (LRA) Number: None
SNMP Trap Numbers	1201, 1501, 1601

Event ID — 2911

Description	The following cached LUN has had a failure. (wwn) %1 (path) %2 : FluidCache.
Severity	Error
Cause and Action	Service is required. Contact Dell Technical Support.
Related Alert Information	**Clear Alert Number**: None
	Related Alert Number: None

SNMP Trap Numbers	1404

Event ID — 2912

Description	Resilvering for the following cache device is complete .(wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2913

Description	The following failed cache device has completed recovery. (wwn) %1 (path) %2 : FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	901

Event ID — 2914

Description	A valid permanent license is installed.: FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1601

Event ID — 2915

Description	No valid license is installed.: FluidCache.
Severity	Error
Cause and Action	A valid license must be installed.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1604

Event ID — 2916

Description	Running on an evaluation license. Days remaining %1 (days): FluidCache.
Severity	Information
Cause and Action	A permanent license should be purchased.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1601

Event ID — 2917

Description	Running on an expired evaluation license. No configuration changes will be allowed. Expired days: % 1: FluidCache.
Severity	Error
Cause and Action	A permanent license must be installed.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1604

Event ID — 2918

Description	Running on an expired evaluation license. Caching functionality is disabled. Expired days: % 1: FluidCache
Severity	Error
Cause and Action	A permanent license must be installed.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1604

Event ID — 2919

Description	Running on an expired/invalid license. Configuration changes are disabled.: FluidCache.
Severity	Error
Cause and Action	A valid permanent license must be installed.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1604

Event ID — 2920

Description	A license has been installed.: FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1601

Event ID — 2921

Description	A license has been removed.: FluidCache.
Severity	Information
Cause and Action	A license should be installed.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1601

Event ID — 2922

Description	Not enough memory to run necessary services.: FluidCache.
Severity	Error
Cause and Action	You must run on a system with adequate memory.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1604

Event ID — 2923

Description	One or more cache devices are missing. Cache is hung.: FluidCache.
Severity	Error
Cause and Action	To resolve the issue, insert the missing cache device. If the cache device was unplugged, reactivate it.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None

SNMP Trap Numbers	1604

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Event ID — 2924

Description	All cache devices have been found and registered.: FluidCache.
Severity	Information
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1601

Event ID — 2930

Description	Even though caching was enabled in write-back mode, it is currently operating in write-through mode.: FluidCache.
Severity	Warning
Cause and Action	To resolve the issue, add a PCIe SSD to the cache pool.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1203, 1503, 1603

Event ID — 2931

Description	Even though caching was enabled in write-back or write-through mode, it is currently operating in pass-through mode.: FluidCache.
Severity	Warning
Cause and Action	To resolve the issue, add one or more PCIe SSDs to the cache pool.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None

Local Response Agent (LRA) Number: None

SNMP Trap Numbers	1203, 1503, 1603

Event ID — 2932

Description	Caching is no longer degraded to write-through mode and is now operating in write-back mode.: FluidCache.
Severity	Warning
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1203, 1503, 1603

Event ID — 2933

Description	Caching is no longer degraded to pass-through mode and is now operating in its configured mode.: FluidCache.
Severity	Warning
Cause and Action	No action required.
Related Alert Information	**Clear Alert Number**: None **Related Alert Number**: None **Local Response Agent (LRA) Number**: None
SNMP Trap Numbers	1203, 1503, 1603

System Event Log Messages for IPMI Systems

The tables in this chapter list the system event log (SEL) messages, their severity, and cause.

> **NOTE:** For corrective actions, see the appropriate documentation.

Temperature Sensor Events

The temperature sensor event messages help protect critical components by alerting the systems management console when the temperature rises inside the chassis. These event messages use additional variables, such as sensor location, chassis location, previous state, and temperature sensor value or state.

Table 5. Temperature Sensor Events

Event Message	Severity	Cause
`<Sensor Name/Location> temperature sensor detected a failure <Reading> where <Sensor Name/Location> is the entity that this sensor is monitoring. For example, "PROC Temp" or "Planar Temp." Reading is specified in degree Celsius. For example 100 C.`	Critical	Temperature of the backplane board, system board, or the carrier in the specified system <Sensor Name/Location> exceeded the critical threshold.
`<Sensor Name/Location> temperature sensor detected a warning <Reading>.`	Warning	Temperature of the backplane board, system board, or the carrier in the specified system <Sensor Name/Location> exceeded the non-critical threshold.
`<Sensor Name/Location> temperature sensor returned to warning state <Reading>.`	Warning	Temperature of the backplane board, system board, or the carrier in the specified system <Sensor Name/Location> returned from critical state to non-critical state.
<Sensor Name/Location> temperature sensor returned to normal state <Reading>.	Information	Temperature of the backplane board, system board, or the carrier in the specified system <Sensor Name/Location> returned to normal operating range.
The <Sensor Name/ Location> temperature is less than the lower warning threshold.	Warning	Temperature of the backplane, system board, system inlet, or the carrier in the specified system <Sensor Name/Location> entered into non-critical state.

Event Message	Severity	Cause
The <Sensor Name/ Location> temperature is less than the lower critical threshold.	Critical	Temperature of the backplane, system board, system inlet, or the carrier in the specified system <Sensor Name/Location> entered into critical state.
The <Sensor Name/ Location> temperature is greater than the upper warning threshold.	Warning	Temperature of the backplane, system board, system inlet, or the carrier in the specified system <Sensor Name/Location> entered into non-critical state.
The <Sensor Name/ Location> temperature is greater than the upper critical threshold.	Critical	Temperature of the backplane, system board, system inlet, or the carrier in the specified system <Sensor Name/Location> entered into critical state.
The <Sensor Name/ Location> temperature is outside of range.	Critical	Temperature of the backplane, system board, system inlet, or the carrier in the specified system <Sensor Name/Location> is outside of normal operating range.
The <Sensor Name/ Location> temperature is within range.	Information	Temperature of the backplane, system board, system inlet, or the carrier in the specified system <Sensor Name/Location> returned to a normal operating range.

Voltage Sensor Events

The voltage sensor event messages monitor the number of volts across critical components. These messages provide status and warning information for voltage sensors for a particular chassis.

Table 6. Voltage Sensor Events

Event Message	Severity	Cause
<Sensor Name/Location> voltage sensor detected a failure <Reading> where <Sensor Name/Location> is the entity that this sensor is monitoring. Reading is specified in volts. For example, 3.860 V.	Critical	The voltage of the monitored device has exceeded the critical threshold.
<Sensor Name/Location> voltage sensor state asserted.	Critical	The voltage specified by <Sensor Name/Location> is in critical state.
<Sensor Name/Location> voltage sensor state de-asserted.	Information	The voltage of a previously reported <Sensor Name/ Location> is returned to normal state.

Event Message	Severity	Cause
`<Sensor Name/Location> voltage sensor detected a warning <Reading>.`	Warning	Voltage of the monitored entity <Sensor Name/Location> exceeded the warning threshold.
`<Sensor Name/Location> voltage sensor returned to normal <Reading>.`	Information	The voltage of a previously reported <Sensor Name/Location> is returned to normal state.
`The <Sensor Name/ Location> voltage is less than the lower warning threshold.`	Warning	Voltage of the monitored Entity <Sensor Name/ Location> exceeded the warning threshold.
`The <Sensor Name/ Location> voltage is less than the lower critical threshold.`	Critical	Voltage of the monitored Entity <Sensor Name/ Location> exceeded the critical threshold.
`The <Sensor Name/ Location> voltage is greater than the upper warning threshold.`	Warning	Voltage of the monitored Entity <Sensor Name/ Location> exceeded the warning threshold.
`The <Sensor Name/ Location> voltage is greater than the upper critical threshold.`	Critical	Voltage of the monitored Entity <Sensor Name/ Location> exceeded the critical threshold.
`The <Sensor Name/ Location> voltage is outside of range.`	Critical	Voltage of the monitored Entity <Sensor Name/ Location> is outside of normal operating range.
`The <Sensor Name/ Location> voltage is within range.`	Information	Voltage of the monitored Entity <Sensor Name/ Location> returned to a normal operating range.

Fan Sensor Events

The cooling device sensors monitor how well a fan is functioning. These messages provide status warning and failure messages for fans for a particular chassis.

Table 7. Fan Sensor Events

Event Message	Severity	Cause
`<Sensor Name/Location> Fan sensor detected a failure <Reading> where <Sensor Name/ Location>`	Critical	The speed of the specified <Sensor Name/Location> fan is not sufficient to provide enough cooling to the system.

Event Message	Severity	Cause
is the entity that this sensor is monitoring. For example "BMC Back Fan" or "BMC Front Fan." Reading is specified in RPM. For example, 100 RPM.		
`<Sensor Name/Location> Fan sensor returned to normal state <Reading>.`	Information	The fan specified by <Sensor Name/ Location> has returned to its normal operating speed.
`<Sensor Name/Location> Fan sensor detected a warning <Reading>.`	Warning	The speed of the specified <Sensor Name/Location> fan may not be sufficient to provide enough cooling to the system.
`<Sensor Name/Location> Fan Redundancy sensor redundancy degraded.`	Information	The fan specified by <Sensor Name/ Location> may have failed and hence, the redundancy has been degraded.
`<Sensor Name/Location> Fan Redundancy sensor redundancy lost.`	Critical	The fan specified by <Sensor Name/ Location> may have failed and hence, the redundancy that was degraded previously has been lost.
`<Sensor Name/Location> Fan Redundancy sensor redundancy regained`	Information	The fan specified by <Sensor Name/ Location> may have started functioning again and hence, the redundancy has been regained.
`Fan <number> RPM is less than the lower warning threshold.`	Warning	The speed of the specified fan might not provide enough cooling to the system.
`Fan <number> RPM is less than the lower critical threshold.`	Critical	The speed of the specified fan is not sufficient to provide enough cooling to the system.
`Fan <number> RPM is greater than the upper warning threshold.`	Warning	The speed of the specified fan exceeded the warning threshold.
`Fan <number> RPM is greater than the upper critical threshold.`	Critical	The speed of the specified fan exceeded the critical threshold.
`Fan <number> RPM is outside of range.`	Critical	The speed of the specified fan might not provide enough cooling to the system.

Event Message	Severity	Cause
`Fan <number> RPM is within range.`	Information	The speed of the specified fan is operating in a normal range.
`Fan <number> is removed.`	Critical	A required fan was removed.
`Fan <number> was inserted.`	Information	A fan was added.
`Fan <number> is present.`	Information	The total number of fans present.
`Fan <number> is absent.`	Critical	A required fan is missing.
`The fans are redundant.`	Information	One or more fans may have started functioning or installed and the redundancy has been regained.
`Fan redundancy is lost.`	Critical	One or more required fans may have failed or removed and hence, the redundancy was lost.
`Fan redundancy is degraded.`	Warning	One or more fans may have failed or removed and hence, the redundancy has been degraded.

Processor Status Events

The processor status messages monitor the functionality of the processors in a system. These messages provide processor health and warning information of a system.

Table 8. Processor Status Events

Event Message	Severity	Cause
`<Processor Entity> status processor sensor IERR, where <Processor Entity> is the processor that generated the event. For example, PROC for a single processor system and PROC # for multiprocessor system.`	Critical	IERR internal error generated by the *<Processor Entity>*. This event is generated due to processor internal error.
`<Processor Entity> status processor sensor Thermal Trip.`	Critical	The processor generates this event before it shuts down because of excessive heat caused by lack of cooling or heat synchronization.
`<Processor Entity> status processor sensor recovered from IERR.`	Information	This event is generated when a processor recovers from the internal error.

Event Message	Severity	Cause
`<Processor Entity> status processor sensor disabled.`	Warning	This event is generated for all processors that are disabled.
`<Processor Entity> status processor sensor terminator not present.`	Information	This event is generated if the terminator is missing on an empty processor slot.
`<Processor Entity> presence was deasserted.`	Critical	This event is generated when the system could not detect the processor.
`<Processor Entity> presence was asserted.`	Information	This event is generated when the earlier processor detection error was corrected.
`<Processor Entity> thermal tripped was deasserted.`	Information	This event is generated when the processor has recovered from an earlier thermal condition.
`<Processor Entity> configuration error was asserted.`	Critical	This event is generated when the processor configuration is incorrect.
`<Processor Entity> configuration error was deasserted.`	Information	This event is generated when the earlier processor configuration error was corrected.
`<Processor Entity> throttled was asserted.`	Warning	This event is generated when the processor slows down to prevent overheating.
`<Processor Entity> throttled was deasserted.`	Information	This event is generated when the earlier processor throttled event was corrected.
`CPU <number> has an internal error (IERR).`	Critical	The specified CPU generated an internal error.
`CPU <number> has a thermal trip (over-temperature) event.`	Critical	The CPU generates this event before it shuts down because of excessive heat caused by lack of cooling or heat synchronization.
`CPU <number> configuration is unsupported.`	Warning	The specified CPU is not support for this system.
`CPU <number> is present.`	Information	The specified CPU is present.
`CPU <number> terminator is present.`	Information	This event is generated if the terminator is present on a processor slot.

Event Message	Severity	Cause
`CPU <number> terminator is absent.`	Warning	This event is generated if the terminator is missing on an empty processor slot.
`CPU <number> is throttled.`	Warning	This event is generated when the processor slows down to prevent overheating.
`CPU <number> is absent.`	Critical	This event is generated when the system could not detect the processor.
`CPU <number> is operating correctly.`	Information	This event is generated when the processor recovered from an error.
`CPU <number> is configured correctly.`	Information	The specified CPU is configured correctly.

Power Supply Events

The power supply sensors monitor the functionality of the power supplies. These messages provide status and warning information for power supplies for a particular system.

Table 9. Power Supply Events

Event Message	Severity	Cause
`<Power Supply Sensor Name> power supply sensor removed.`	Critical	This event is generated when the power supply sensor is removed.
`<Power Supply Sensor Name> power supply sensor AC recovered.`	Information	This event is generated when the power supply has been replaced.
`<Power Supply Sensor Name> power supply sensor returned to normal state.`	Information	This event is generated when the power supply that failed or removed was replaced and the state has returned to normal.
`<Entity Name> PS Redundancy sensor redundancy degraded.`	Information	Power supply redundancy is degraded if one of the power supply sources is removed or failed.
`<Entity Name> PS Redundancy sensor redundancy lost.`	Critical	Power supply redundancy is lost if only one power supply is functional.
`<Entity Name> PS Redundancy sensor redundancy regained.`	Information	This event is generated if the power supply has been reconnected or replaced.

Event Message	Severity	Cause
`<Power Supply Sensor Name> predictive failure was asserted.`	Critical	This event is generated when the power supply is about to fail.
`<Power Supply Sensor Name> input lost was asserted.`	Critical	This event is generated when the power supply is unplugged.
`<Power Supply Sensor Name> predictive failure was deasserted.`	Information	This event is generated when the power supply has recovered from an earlier predictive failure event.
`<Power Supply Sensor Name> input lost was deasserted.`	Information	This event is generated when the power supply is plugged in.
`PS 1 Status: Power supply sensor for PS 1, presence was asserted.`	Information	This event is generated when the power supply is plugged in.
`PS 1 Status: Power supply sensor for PS 1, presence was deasserted.`	Critical	This event is generated when the power supply is removed.
`PS 1 Status: Power supply sensor for PS 1, failure was asserted.`	Critical	This event is generated when the power supply has failed.
`PS 1 Status: Power supply sensor for PS 1, failure was deasserted.`	Information	This event is generated when the power supply has recovered from an earlier failure event.
`PS 1 Status: Power supply sensor for PS 1, predictive failure was asserted.`	Warning	This event is generated when the power supply is about to fail.
`PS 1 Status: Power supply sensor for PS 1, predictive failure was deasserted.`	Information	This event is generated when the power supply has recovered from an earlier predictive failure event.
`PS 1 Status: Power supply sensor for PS 1, input lost was asserted.`	Critical	This event is generated when AC power is removed from the power supply.
`PS 1 Status: Power supply sensor for PS 1, input lost was deasserted.`	Information	This event is generated when the power supply is plugged in.

Event Message	Severity	Cause
`PS 1 Status: Power supply sensor for PS 1, configuration error was asserted.`	Warning/Critical	This event is generated when an invalid power supply configuration is detected.
`PS 1 Status: Power supply sensor for PS 1, configuration error was deasserted.`	Information	This event is generated when the power supply has recovered from an earlier invalid configuration.
`Power supply <number> is present.`	Information	This event is generated when the power supply is plugged in.
`Power supply <number> is absent.`	Critical	This event is generated when the power supply is removed.
`Power supply <number> failed.`	Critical	This event is generated when the power supply has failed.
`A predictive failure detected on power supply <number>.`	Warning	This event is generated when the power supply is about to fail.
`The power input for power supply <number> is lost.`	Critical	This event is generated when input power is removed from the power supply.
`The input power for power supply <number> has been restored.`	Information	This event is generated if the power supply has been reconnected or replaced.
`Power supply <number> is incorrectly configured.`	Critical/Warning	This event is generated when an invalid power supply configuration is detected.
`Power supply <number> is correctly configured.`	Information	This event is generated when the power supply has recovered from an earlier invalid configuration.
`Power supply <number> is operating normally.`	Information	This event is generated when the power supply has recovered from an earlier failure event.
`Cannot communicate with power supply <number>.`	Critical	The power supply may operate, however power supply monitoring is degraded.
`The temperature for power supply <number> is in a warning range.`	Warning	Temperature of specified power supply entered into non-critical state.

Event Message	Severity	Cause
`The temperature for power supply <number> is outside of range.`	Critical	Temperature of specified power supply entered into critical state.
`An under voltage fault detected on power supply <number>.`	Critical	The specified power supply detected inefficient voltage.
`An over voltage fault detected on power supply <number>.`	Critical	The specified power supply detected an over voltage condition.
`An over current fault detected on power supply <number>.`	Crotoca;	The specified power supply detected an over current condition.
`Fan failure detected on power supply <number>.`	Critical	The specified power supply fan has failed.
`Communication has been restored to power supply <number>.`	Information	This event is generated when the power supply has recovered from an earlier communication problem.
`A power supply wattage mismatch is detected; power supply <number> is rated for <value> watts.`	Critical	This event is generated when there is more than one power supplies in the system and the power supply wattage do not match.
`Power supply <number> wattage mismatch corrected.`	Information	This event is generated when the power supply has recovered from an earlier power supply wattage mismatch.
`Power supply redundancy is lost.`	Critical	Power supply redundancy is lost if only one power supply is functional.
`Power supply redundancy is degraded.`	Warning	Power supply redundancy is degraded if one of the power supply sources is removed or failed.
`The power supplies are redundant.`	Information	This event is generated if the power supply has been reconnected or replaced.

Memory ECC Events

The memory ECC event messages monitor the memory modules in a system. These messages monitor the ECC memory correction rate and the type of memory events that occurred.

Table 10. Memory ECC Events

Event Message	Severity	Cause
`ECC error correction detected on Bank # DIMM [A/B].`	Information	This event is generated when there is a memory error correction on a particular Dual Inline Memory Module (DIMM).
`ECC uncorrectable error detected on Bank # [DIMM].`	Critical	This event is generated when the chipset is unable to correct the memory errors. Usually, a bank number is provided and DIMM may or may not be identifiable, depending on the error.
`Correctable memory error logging disabled.`	Critical	This event is generated when the chipset in the ECC error correction rate exceeds a predefined limit.
`Persistent correctable memory errors detected on a memory device at location(s) <DIMM number>.`	Warning	This event is generated when there is a memory error correction on a particular Dual Inline Memory Module (DIMM).
`Multi-bit memory errors detected on a memory device at location(s) <location>.`	Critical	This event is generated when the chipset is unable to correct the memory errors. Usually, more than on DIMM is listed because a single DIMM may or may not be identifiable, depending on the error.
`Correctable memory error logging disabled for a memory device at location <location>.`	Critical	This event is generated when the chipset in the ECC error correction rate exceeds a predefined limit.

BMC Watchdog Events

Enter a short description for your reference topic. This should be one or two sentences that describes the topic content.

Table 11. BMC Watchdog Events

Event Message	Severity	Cause
`BMC OS Watchdog timer expired.`	Information	This event is generated when the BMC watchdog timer expires and no action is set.
`BMC OS Watchdog performed system reboot.`	Critical	This event is generated when the BMC watchdog detects that the system has crashed (timer expired because no response was received from Host) and the action is set to reboot.
`BMC OS Watchdog performed system power off.`	Critical	This event is generated when the BMC watchdog detects that the system has crashed (timer expired because no response was received from Host) and the action is set to power off.
`BMC OS Watchdog performed system power cycle.`	Critical	This event is generated when the BMC watchdog detects that the system has crashed (timer expired because no response was received from Host) and the action is set to power cycle.
`The OS watchdog timer reset the system.`	Critical	This event is generated when the BMC watchdog detects that the system has crashed (timer expired because no response was received from Host) and the action is set to reboot.
`The OS watchdog timer powered cycle the system.`	Critical	This event is generated when the BMC watchdog detects that the system has crashed (timer expired because no response was received from Host) and the action is set to power cycle.
`The OS watchdog timer powered off the system.`	Critical	This event is generated when the BMC watchdog detects that the system has crashed (timer expired because no response

Event Message	Severity	Cause
		was received from Host) and the action is set to power off.
`The OS watchdog timer expired.`	Critical	This event is generated when the BMC watchdog timer expires and no action is set.

Memory Events

The memory modules can be configured in different ways in particular systems. These messages monitor the status, warning, and configuration information about the memory modules in the system.

Table 12. Memory Events

Event Message	Severity	Cause
`Memory RAID redundancy degraded.`	Warning	This event is generated when there is a memory failure in a RAID-configured memory configuration.
`Memory RAID redundancy lost.`	Critical	This event is generated when redundancy is lost in a RAID-configured memory configuration.
`Memory RAID redundancy regained.`	Information	This event is generated when the redundancy lost or degraded earlier is regained in a RAID-configured memory configuration.
`Memory Mirrored redundancy degraded.`	Warning	This event is generated when there is a memory failure in a mirrored memory configuration.
`Memory Mirrored redundancy lost.`	Critical	This event is generated when redundancy is lost in a mirrored memory configuration.
`Memory Mirrored redundancy regained.`	Information	This event is generated when the redundancy lost or degraded earlier is regained in a mirrored memory configuration.
`Memory Spared redundancy degraded.`	Warning	This event is generated when there is a memory failure in a spared memory configuration.
`Memory Spared redundancy lost.`	Critical	This event is generated when redundancy is lost in a spared memory configuration.

Event Message	Severity	Cause
`Memory Spared redundancy regained.`	Information	This event is generated when the redundancy lost or degraded earlier is regained in a spared memory configuration.
`Memory RAID is redundant.`	Information	This event is generated when the memory redundancy mode has change to RAID redundant.
`Memory RAID redundancy is lost. Check memory device at location(s) <DIMM number>.`	Critical	This event is generated when redundancy is lost in a RAID-configured memory configuration.
`Memory RAID redundancy is degraded. Check memory device at location(s) <DIMM number >.`	Warning	This event is generated when there is a memory failure in a RAID-configured memory configuration.
`Memory is not redundant.`	Information	This event is generated when the memory redundancy mode has change to nonredundant.
`Memory mirror is redundant.`	Information	This event is generated when the memory redundancy mode has change to mirror redundant.
`Memory mirror redundancy is lost. Check memory device at location(s) <DIMM number>.`	Critical	This event is generated when redundancy is lost in a mirror-configured memory configuration.
`Memory mirror redundancy is degraded. Check memory device at location <DIMM number >.`	Warning	This event is generated when there is a memory failure in a mirror-configured memory configuration.
`Memory spare is redundant.`	Information	This event is generated when the memory redundancy mode has change to spare redundant.
`Memory spare redundancy is lost. Check memory device at location <DIMM number>.`	Critical	This event is generated when redundancy is lost in a sparer-configured memory configuration.
`Memory spare redundancy is degraded. Check memory device at location <DIMM number>.`	Warning	This event is generated when there is a memory failure in a spare-configured memory configuration.

Hardware Log Sensor Events

The hardware logs provide hardware status messages to the system management software. On particular systems, the subsequent hardware messages are not displayed when the log is full. These messages provide status and warning messages when the logs are full.

Table 13. Hardware Log Sensor Events

Event Message	Severity	Cause
Log full detected.	Critical	This event is generated when the SEL device detects that only one entry can be added to the SEL before it is full.
Log cleared.	Information	This event is generated when the SEL is cleared.

Drive Events

The drive event messages monitor the health of the drives in a system. These events are generated when there is a fault in the drives indicated.

Table 14. Drive Events

Event Message	Severity	Cause
Drive <Drive #> asserted fault state.	Critical	This event is generated when the specified drive in the array is faulty.
Drive <Drive #> de-asserted fault state.	Information	This event is generated when the specified drive recovers from a faulty condition.
Drive <Drive #> drive presence was asserted.	Information	This event is generated when the drive is installed.
Drive <Drive #> predictive failure was asserted.	Warning	This event is generated when the drive is about to fail.
Drive <Drive #> predictive failure was deasserted.	Information	This event is generated when the drive from earlier predictive failure is corrected.
Drive <Drive #> hot spare was asserted.	Warning	This event is generated when the drive is placed in a hot spare.
Drive <Drive #> hot spare was deasserted.	Information	This event is generated when the drive is taken out of hot spare.
Drive <Drive #> consistency check in progress was asserted.	Warning	This event is generated when the drive is placed in consistency check.

Event Message	Severity	Cause
`Drive <Drive #> consistency check in progress was deasserted.`	Information	This event is generated when the consistency check of the drive is completed.
`Drive <Drive #> in critical array was asserted.`	Critical	This event is generated when the drive is placed in critical array.
`Drive <Drive #> in critical array was deasserted.`	Information	This event is generated when the drive is removed from critical array.
`Drive <Drive #> in failed array was asserted.`	Critical	This event is generated when the drive is placed in the fail array.
`Drive <Drive #> in failed array was deasserted.`	Information	This event is generated when the drive is removed from the fail array.
`Drive <Drive #> rebuild in progress was asserted.`	Information	This event is generated when the drive is rebuilding.
`Drive <Drive #> rebuild aborted was asserted.`	Warning	This event is generated when the drive rebuilding process is aborted.
`Drive <Drive #> is installed.`	Information	This event is generated when the drive is installed.
`Drive <Drive #> is removed.`	Critical	This event is generated when the drive is removed.
`Fault detected on drive <Drive #>.`	Critical	This event is generated when the specified drive in the array is faulty.

Intrusion Events

The chassis intrusion messages are a security measure. Chassis intrusion alerts are generated when the system's chassis is opened. Alerts are sent to prevent unauthorized removal of parts from the chassis.

Table 15. Intrusion Events

Event Message	Severity	Cause
`<Intrusion sensor Name> sensor detected an intrusion.`	Critical	This event is generated when the intrusion sensor detects an intrusion.
`<Intrusion sensor Name> sensor returned to normal state.`	Information	This event is generated when the earlier intrusion has been corrected.

Event Message	Severity	Cause
<Intrusion sensor Name> sensor intrusion was asserted while system was ON.	Critical	This event is generated when the intrusion sensor detects an intrusion while the system is on.
<Intrusion sensor Name> sensor intrusion was asserted while system was OFF.	Critical	This event is generated when the intrusion sensor detects an intrusion while the system is off.
The chassis is open.	Critical	This event is generated when the intrusion sensor detects an intrusion.
The chassis is closed.	Information	This event is generated when the earlier intrusion has been corrected.
The chassis is open while the power is on.	Critical	This event is generated when the intrusion sensor detects an intrusion while the system is on.
The chassis is closed while the power is on.	Information	This event is generated when the earlier intrusion has been corrected while the power is on.
The chassis is open while the power is off.	Critical	This event is generated when the intrusion sensor detects an intrusion while the system is off.
The chassis is closed while the power is off.	Information	This event is generated when the earlier intrusion has been corrected while the power is off.

BIOS Generated System Events

The BIOS-generated messages monitor the health and functionality of the chipsets, I/O channels, and other BIOS-related functions.

Table 16. BIOS Generated System Events

Event Message	Severity	Cause
System Event I/O channel chk.	Critical	This event is generated when a critical interrupt is generated in the I/O Channel.
System Event PCI Parity Err.	Critical	This event is generated when a parity error is detected on the PCI bus.
System Event Chipset Err.	Critical	This event is generated when a chip error is detected.

Event Message	Severity	Cause
`System Event PCI System Err.`	Information	This event indicates historical data, and is generated when the system has crashed and recovered.
`System Event PCI Fatal Err.`	Critical	This error is generated when a fatal error is detected on the PCI bus.
`System Event PCIE Fatal Err.`	Critical	This error is generated when a fatal error is detected on the PCIE bus.
`POST Err.`	Critical	This event is generated when an error occurs during system boot. See the system documentation for more information on the error code.
`POST fatal error #<number> or <error description>.`	Critical	This event is generated when a fatal error occurs during system boot. For more information, see POST Code Errors.
`Memory Spared redundancy lost.`	Critical	This event is generated when memory spare is no longer redundant.
`Memory Mirrored redundancy lost.`	Critical	This event is generated when memory mirroring is no longer redundant.
`Memory RAID redundancy lost.`	Critical	This event is generated when memory RAID is no longer redundant.
`Err Reg Pointer OEM Diagnostic data event was asserted.`	Information	This event is generated when an OEM event occurs. OEM events can be used by the service team to better understand the cause of the failure.
`System Board PFault Fail Safe state asserted.`	Critical	This event is generated when the system board voltages are not at normal levels.
`System Board PFault Fail Safe state deasserted`	Information	This event is generated when earlier PFault Fail Safe system voltages return to a normal level.
`Memory Add (BANK# DIMM#) presence was asserted.`	Information	This event is generated when memory is added to the system.

Event Message	Severity	Cause
`Memory Removed (BANK# DIMM#) presence was asserted.`	Information	This event is generated when memory is removed from the system.
`Memory Cfg Err configuration error (BANK# DIMM#) was asserted.`	Critical	This event is generated when memory configuration is incorrect for the system.
`Mem Redun Gain redundancy regained.`	Information	This event is generated when memory redundancy is regained.
`Mem ECC Warning transition to non-critical from OK.`	Warning	This event is generated when correctable ECC errors have increased from a normal rate.
`Mem ECC Warning transition to critical from less severe.`	Critical	This event is generated when correctable ECC errors reach a critical rate.
`Mem CRC Err transition to non-recoverable.`	Critical	This event is generated when CRC errors enter a non-recoverable state.
`Mem Fatal SB CRC uncorrectable ECC was asserted.`	Critical	This event is generated while storing CRC errors to memory.
`Mem Fatal NB CRC uncorrectable ECC was asserted.`	Critical	This event is generated while removing CRC errors from memory.
`Mem Overtemp critical over temperature was asserted.`	Critical	This event is generated when system memory reaches critical temperature.
`USB Over-current transition to non-recoverable`	Critical	This event is generated when the USB exceeds a predefined current level.
`Hdwr version err hardware incompatibility (BMC/ iDRAC Firmware and CPU mismatch) was asserted.`	Critical	This event is generated when there is a mismatch between the BMC and iDRAC firmware and the processor in use or vice versa.
`Hdwr version err hardware incompatibility (BMC/ iDRAC Firmware and CPU mismatch) was deasserted.`	Information	This event is generated when an earlier mismatch between the BMC and iDRAC firmware and the processor is corrected.

Event Message	Severity	Cause
SBE Log Disabled correctable memory error logging disabled was asserted.	Critical	This event is generated when the ECC single bit error rate is exceeded.
CPU Protocol Err transition to non-recoverable.	Critical	This event is generated when the processor protocol enters a non-recoverable state.
CPU Bus PERR transition to non-recoverable.	Critical	This event is generated when the processor bus PERR enters a non-recoverable state.
CPU Init Err transition to non-recoverable.	Critical	This event is generated when the processor initialization enters a non-recoverable state.
CPU Machine Chk transition to non-recoverable.	Critical	This event is generated when the processor machine check enters a non-recoverable state.
Logging Disabled all event logging disabled was asserted.	Critical	This event is generated when all event logging is disabled.
LinkT/FlexAddr: Link Tuning sensor, device option ROM failed to support link tuning or flex address (Mezz XX) was asserted	Critical	This event is generated when the PCI device option ROM for a NIC does not support link tuning or the Flex addressing feature.
LinkT/FlexAddr: Link Tuning sensor, failed to program virtual MAC address (<location>) was asserted.	Critical	This event is generated when BIOS fails to program virtual MAC address on the given NIC device.
PCIE NonFatal Er: Non Fatal IO Group sensor, PCIe error(<location>)	Warning	This event is generated in association with a CPU IERR.
I/O Fatal Err: Fatal IO Group sensor, fatal IO error (<location>)	Critical	This event is generated in association with a CPU IERR and indicates the PCI/PCIe device that caused the CPU IERR.
Unknown system event sensor unknown system hardware failure was asserted.	Critical	This event is generated when an unknown hardware failure is detected.

Event Message	Severity	Cause
An I/O channel check error was detected.	Critical	This event is generated when a critical interrupt is generated in the I/O Channel.
A PCI parity error was detected on a component at bus <number> device <number> function <number>.	Critical	This event is generated when a parity error is detected on the PCI bus.
A PCI parity error was detected on a component at slot <number>.	Critical	This event is generated when a parity error is detected on the PCI bus.
A PCI system error was detected on a component at bus <number> device <number> function <number>.	Critical	This is generated when the system has crashed and recovered.
A PCI system error was detected on a component at slot <number>.	Critical	This is generated when the system has crashed and recovered.
A bus correctable error was detected on a component at bus <number> device <number> function <number>.	Critical	This is generated when the system has detected bus correctable errors.
A bus correctable error was detected on a component at slot <number>.	Critical	This is generated when the system has detected bus correctable errors.
A bus uncorrectable error was detected on a component at bus <number> device <number> function <>number>.	Critical	This is generated when the system has detected bus uncorrectable errors.
A bus uncorrectable error was detected on a component at slot <number>.	Critical	This is generated when the system has detected bus uncorrectable errors.
A fatal error was detected on a component at bus <number> device <number> function <number>.	Critical	This error is generated when a fatal error is detected on the PCI bus.

Event Message	Severity	Cause
A fatal error was detected on a component at slot <number>.	Critical	This error is generated when a fatal error is detected on the PCI bus.
A fatal IO error detected on a component at bus <number> device <number> function <number>.	Critical	This error is generated when a fatal IO error is detected.
A fatal IO error detected on a component at slot <number>.	Critical	This error is generated when a fatal IO error is detected.
A non-fatal PCIe error detected on a component at bus <number> device <number> function <number>.	Warning	This event is generated in association with a CPU IERR.
A non-fatal PCIe error detected on a component at slot <number>.	Warning	This event is generated in association with a CPU IERR.
A non-fatal IO error detected on a component at bus <number> device <number> function <number>.	Warning	This event is generated in association with a CPU IERR and indicates the PCI/PCIe device that caused the CPU IERR.
Memory device was added at location <location>.	Information	This event is generated when memory is added to the system.
Memory device is removed from location <location>.	Information	This event is generated when memory is removed from the system.
Unsupported memory configuration; check memory device at location <location>.	Critical	This event is generated when memory configuration is incorrect for the system.
Correctable memory error rate exceeded for <location>.	Warning	This event is generated when correctable ECC errors have increased from a normal rate.
Correctable memory error rate exceeded for <location>.	Critical	This event is generated when correctable ECC errors reach a critical rate.
Memory device at location <location> is overheating.	Critical	This event is generated when system memory reaches critical temperature.

Event Message	Severity	Cause
An OEM diagnostic event occurred.	Information	This event is generated when an OEM event occurs. OEM events can be used by the service team to better understand the cause of the failure.
CPU <number> protocol error detected.	Critical	This event is generated when the processor protocol enters a non-recoverable state.
CPU bus parity error detected.	Critical	This event is generated when the processor bus PERR enters a non-recoverable state.
CPU <number> initialization error detected.	Critical	This event is generated when the processor initialization enters a non-recoverable state.
CPU <number> machine check error detected.	Critical	This event is generated when the processor machine check enters a non-recoverable state.
All event logging is disabled.	Critical	This event is generated when all event logging is disabled.
Logging is disabled.	Critical	This event is generated when the ECC single bit error rate is exceeded.
The system board fail-safe voltage is outside of range.	Critical	This event is generated when the system board voltages are not at normal levels.
The system board fail-safe voltage is within range.	Information	This event is generated when earlier Fail-Safe system voltages return to a normal level.
A hardware incompatibility detected between BMC/iDRAC firmware and CPU.	Critical	This event is generated when there is a mismatch between the BMC and iDRAC firmware and the processor in use or vice versa.
A hardware incompatibility was corrected between BMC/iDRAC firmware and CPU.	Information	This event is generated when an earlier mismatch between the BMC and iDRAC firmware and the processor is corrected.
Device option ROM on embedded NIC failed to support Link Tuning or FlexAddress.	Critical	This event is generated when the PCI device option ROM for a NIC does not support link tuning or the Flex addressing feature.

Event Message	Severity	Cause
`Device option ROM on mezzanine card <number> failed to support Link Tuning or FlexAddress.`	Critical	This event is generated when the PCI device option ROM for a NIC does not support link tuning or the Flex addressing feature.
`Failed to program virtual MAC address on a component at bus <bus> device <device> function <function>.`	Critical	This event is generated when BIOS fails to program virtual MAC address on the given NIC device.
`Failed to get Link Tuning or FlexAddress data from iDRAC.`	Critical	This event is generated when BIOS could not obtain virtual MAC address or Link Tuning data from iDRAC.
`An unknown system hardware failure detected.`	Critical	This event is generated when an unknown hardware failure is detected.
`POST fatal error <error description>`	Critical	This event is generated when a fatal error occurs during system boot. For more information, see POST Code Errors.

POST Code Table

The following table lists the POST Code errors that are generated when a fatal error occurs during system boot.

Table 17. POST Code Table

Fatal Error Code	Description	Cause
80	No memory detected.	This error code implies that no memory is installed.
81	Memory detected but is not configurable.	This error code indicates memory configuration error that could be a result of bad memory, mismatched memory or bad socket.
82	Memory configured but not usable.	This error code indicates memory sub-system failure.
83	System BIOS shadow failure.	This error code indicates system BIOS shadow failure.
84	CMOS failure.	This error code indicates that CMOS RAM is not working.

Fatal Error Code	Description	Cause
85	DMA controller failure.	This error code indicates DMA controller failure.
86	Interrupt controller failure.	This error code indicates interrupt controller failure.
87	Timer refresh failure.	This error code indicates timer refresh failure.
88	Programmable interval timer error.	This error code indicates a programmable interval timer error.
89	Parity error.	This error code indicates a parity error.
8A	SIO failure.	This error code indicates SIO failure.
8B	Keyboard controller failure.	This error code indicates keyboard controller failure.
8C	SMI initialization failure.	This error code indicates SMI initialization failure.
C0	Shutdown test failure.	This error code indicates a shutdown test failure.
C1	POST Memory test failure.	This error code indicates bad memory detection.
C2	RAC configuration failure.	Check screen for the actual error message.
C3	CPU configuration failure.	Check screen for the actual error message.
C4	Incorrect memory configuration.	Memory population order not correct.
FE	General failure after video.	Check screen for the actual error message.

Operating System Generated System Events

Table 18. Operating System Generated System Events

Description	Severity	Cause
`System Event: OS stop event OS graceful shutdown detected`	Information	The operating system was shutdown/restarted normally.
`OEM Event data record (after OS graceful shutdown/restart event)`	Information	Comment string accompanying an operating system shutdown/restart.
`System Event: OS stop event runtime critical stop`	Critical	The operating system encountered a critical error and was stopped abnormally.
`OEM Event data record (after OS bugcheck event)`	Information	Operating system bugcheck code and parameters.
`A critical stop occurred during OS load.`	Critical	The operating system encountered a critical error and was stopped abnormally while loading.
`A runtime critical stop occurred.`	Critical	The operating system encountered a critical error and was stopped abnormally.
`An OS graceful stop occurred.`	Information	The operating system was stopped.
`An OS graceful shut-down occurred.`	Information	The operating system was shut down normally.

Cable Interconnect Events

The cable interconnect messages in the table are used for detecting errors in the hardware cabling.

Table 19. Cable Interconnect Events

Description	Severity	Cause
`Cable sensor <Name/ Location>Configuration error was asserted.`	Critical	This event is generated when the cable is not connected or is incorrectly connected.
`Cable sensor <Name/ Location>Connection was asserted.`	Information	This event is generated when the earlier cable connection error was corrected.
`The <name> cable or interconnect is not`	Critical	This event is generated when the named cable or interconnect is

Description	Severity	Cause
connected or is improperly connected.		not connected or is incorrectly connected.
The <name> cable or interconnect is connected.	Information	This event is generated when named cable or interconnect earlier cable or interconnect connection error was corrected.

Battery Events

Table 20. Battery Events

Description	Severity	Cause
<Battery sensor Name/ Location>Failed was asserted	Critical	This event is generated when the sensor detects a failed or missing battery.
<Battery sensor Name/ Location>Failed was deasserted	Information	This event is generated when the earlier failed battery was corrected.
<Battery sensor Name/ Location>is low was asserted	Warning	This event is generated when the sensor detects a low battery condition.
<Battery sensor Name/ Location>is low was deasserted	Information	This event is generated when the earlier low battery condition was corrected.
The <Battery sensor Name/ Location> battery is low.	Warning	This event is generated when the sensor detects a low battery condition.
The <Battery sensor Name/ Location> battery is operating normally.	Information	This event is generated when an earlier battery condition was corrected.
The <Battery sensor Name/ Location> battery has failed.	Critical	This event is generated when the sensor detects a failed or missing battery.

Power And Performance Events

The power and performance events are used to detect degradation in system performance with change in power supply.

Table 21. Power And Performance Events

Description	Severity	Cause
`System Board Power Optimized: Performance status sensor for System Board, degraded, <description of why> was deasserted`	Normal	This event is generated when system performance was restored.
`System Board Power Optimized: Performance status sensor for System Board, degraded, <description of why> was asserted`	Warning	This event is generated when change in power supply degrades system performance.
`System Board Power Optimized: Performance status sensor for System Board, degraded, power capacity changed was asserted`	Warning	This event is generated when change in power supply degrades system performance.
`System Board Power Optimized: Performance status sensor for System Board, degraded, power capacity changed was deasserted`	Normal	This event is generated when the system performance is restored.
`System Board Power Optimized: Performance status sensor for System Board, degraded, user defined power capacity was asserted`	Warning	This event is generated when a change in power supply degrades system performance.
`System Board Power Optimized: Performance status sensor for System Board, degraded, user defined power capacity was deasserted`	Normal	This event is generated when the system performance is restored.

Description	Severity	Cause
`System Board Power Optimized: Performance status sensor for System Board, Halted, system power exceeds capacity was asserted`	Critical	This event is generated when a change in power supply degrades system performance.
`System Board Power Optimized: Performance status sensor for System Board, Halted, system power exceeds capacity was deasserted`	Normal	This event is generated when system performance was restored.
`The system performance degraded.`	Warning	This event is generated when a change degrades system performance.
`The system performance degraded because of thermal protection.`	Warning	This event is generated when a change in thermal protection degrades system performance.
`The system performance degraded because cooling capacity has changed.`	Warning	This event is generated when a change in cooling degrades system performance.
`The system performance degraded because power capacity has changed.`	Warning	This event is generated when change in power supply degrades system performance.
`The system performance degraded because of user-defined power capacity has changed.`	Warning	This event is generated when change in power supply degrades system performance.
`The system halted because system power exceeds capacity.`	Critical	This event is generated when there is inefficient power for the system.
`The system performance degraded because power exceeds capacity.`	Warning	This event is generated when system power is inefficient causing system performance to degrade.
`The system performance degraded because power draw exceeds the power threshold.`	Critical	This event is generated when system power is inefficient causing system performance to degrade.
`The system performance restored`	Information	This event is generated when system performance was restored.

Entity Presence Events

The entity presence messages are used for detecting different hardware devices.

Table 22. Entity Presence Events

Description	Severity	Cause
`<Device Name> presence was asserted`	Information	This event is generated when the device was detected.
`<Device Name> absent was asserted`	Critical	This event is generated when the device was not detected.
`The <Device Name> is present.`	Information	This event is generated when the device was detected.
`The <Device Name> is absent.`	Critical	This event is generated when the device was not detected.

Miscellaneous Events

The following table provides events related to hardware and software components like mezzanine cards, sensors, firmware etc. and compatibility issues.

Table 23. Miscellaneous Events

Description	Severity	Cause
`System Board Video Riser: Module sensor for System Board, device removed was asserted`	Critical	This event is generated when the required module is removed.
`Mezz B<slot number> Status: Add-in Card sensor for Mezz B<slot number>, install error was asserted`	Critical	This event is generated when an incorrect Mezzanine card is installed for I/O fabric.
`Mezz C<slot number> Status: Add-in Card sensor for Mezz C<slot number>, install error was asserted`	Critical	This event is generated when an incorrect Mezzanine card is installed for I/O fabric.
`Hdwar version err: Version Change sensor, hardware incompatibility was asserted`	Critical	This event is generated when an incompatible hardware is detected.
`Hdwar version err: Version Change sensor, hardware incompatibility`	Critical	This event is generated when a hardware is incompatible with the firmware.

Description	Severity	Cause
(BMC firmware) was asserted		
Hdwar version err: Version Change sensor, hardware incompatibility (BMC firmware and CPU mismatch) was asserted	Critical	This event is generated when the CPU and firmware are not compatible.
Link Tuning: Version Change sensor, successful software or F/W change was deasserted	Warning	This event is generated when the link tuning setting for proper NIC operation fails to update.
Link Tuning: Version Change sensor, successful hardware change <device slot number> was deasserted	Warning	This event is generated when the link tuning setting for proper NIC operation fails to update.
LinkT/FlexAddr: Link Tuning sensor, failed to program virtual MAC address (Bus # Device # Function #) was asserted	Critical	This event is generated when Flex address can be programmed for this device.
LinkT/FlexAddr: Link Tuning sensor, device option ROM failed to support link tuning or flex address (Mezz <location>) was asserted	Critical	This event is generated when ROM does not support Flex address or link tuning.
LinkT/FlexAddr: Link Tuning sensor, failed to get link tuning or flex address data from BMC/ iDRAC was asserted	Critical	This event is generated when link tuning or Flex address information is not obtained from BMC/iDRAC.
The <name> is removed.	Critical	This event is generated when the device was removed.
The <name> is inserted.	Information	This event is generated when the device was inserted or installed.
A fabric mismatch detected between IOM and mezzanine card <number>.	Critical	This event is generated when an incorrect Mezzanine card is installed for I/O fabric.
Hardware incompatibility detected with mezzanine card <number>.	Critical	This event is generated when an incorrect Mezzanine card is installed in the system.

Description	Severity	Cause
The QuickPath Interconnect (QPI) width degraded.	Warning	This event is generated when the bus is not operating at maximum speed or width.
The QuickPath Interconnect (QPI) width regained.	Information	This event is generated when the bus is operating at maximum speed or width.
BIOS detected an error configuring the Intel Trusted Execution Technology (TXT).	Critical	This event is generated when TXT initialization failed.
Processor detected an error while performing an Intel Trusted Execution Technology (TXT) operation.	Critical	This event is generated when TXT CPU microcode boot failed.
BIOS Authenticated Code Module detected an Intel Trusted Execution Technology (TXT) error during POST.	Critical	This event is generated when TXT Post failed.
SINIT Authenticated Code Module detected an Intel Trusted Execution Technology (TXT) error at boot.	Critical	This event is generated when the Authenticated Code Module detected a TXT initialization failure.
Intel Trusted Execution Technology (TXT) is operating correctly.	Information	This event is generated when the TXT returned from a previous failure.
Failure detected on Removable Flash Media <name>.	Critical	This event is generated when the SD card module is installed but improperly configured or failed to initialize.
Removable Flash Media <name> is write protected.	Warning	This event is generated when the module is write-protected. Changes may not be written to the media.
Internal Dual SD Module is redundant.	Information	This event is generated when both SD cards are functioning properly.
Internal Dual SD Module redundancy is lost.	Critical	This event is generated when either one of the SD cards or both the SD cards are not functioning properly.