Notes, cautions, and warnings

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

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

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.
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4 System Event Log Messages for IPMI Systems

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Fan Sensor Events
Processor Status Events
Power Supply Events
Memory ECC Events
BMC Watchdog Events
Memory Events
Hardware Log Sensor Events
Drive Events
Intrusion Events
BIOS Generated System Events
POST Code Table
Operating System Generated System Events
Cable Interconnect Events
Battery Events
Power And Performance Events
Entity Presence Events
Miscellaneous Events
Introduction

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 9.0.1 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.

New in this release

General Messages

- Message ID - 1017
- Message ID - 1018
- Message ID - 1019
- Message ID - 1020

Memory Device Messages

- Message ID - 1425
- Message ID - 1426
- Message ID - 1427
- Message ID - 1428
- Message ID - 1429
- Message ID - 1430
- Message ID - 1431
- Message ID - 1432
- Message ID - 1433
- Message ID - 1434
- Message ID - 1435

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>
<thead>
<tr>
<th>Table 1. Alert Message Change History</th>
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</thead>
<tbody>
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<td><strong>Storage Management 4.4</strong></td>
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</tbody>
</table>
| **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, 1603, 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, 2878, 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 |
|**New Alerts** |                                      |  
|**Deleted Alerts** |                                      |  
|**Modified Alerts** |                                      |  

DOLLEMC
New Alerts

Deleting Alerts

Modified Alerts

Storage Management 3.3

Product Versions to which changes apply

New Alerts

Deleted Alerts

Modified Alerts

Storage Management 3.2

Product Versions to which changes apply

New Alerts

Deleted Alerts

Modified Alerts

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

<table>
<thead>
<tr>
<th>Icon</th>
<th>Alert Severity</th>
<th>Component Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅</td>
<td>OK /Normal / Informational</td>
<td>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.</td>
</tr>
<tr>
<td>⚠️</td>
<td>Warning / Non-critical</td>
<td>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.</td>
</tr>
</tbody>
</table>
Alert Severity | Component Status
--- | ---
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.
4. The System Log window displays a list of recently logged events.
5. 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: 1254
Chassis 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: 1252
Chassis 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.

<table>
<thead>
<tr>
<th>Description Line Item</th>
<th>Explanation</th>
<th>Action performed was: &lt;Action&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation</td>
<td>Specifies the action that was performed, for example: Action performed was: Power cycle</td>
<td></td>
</tr>
<tr>
<td>Description Line Item</td>
<td>Action requested was: &lt;Action&gt;</td>
<td></td>
</tr>
<tr>
<td>Explanation</td>
<td>Specifies the action that was requested, for example: Action requested was: Reboot, shutdown OS first</td>
<td></td>
</tr>
<tr>
<td>Description Line Item</td>
<td>Additional Details: &lt;Additional details for the event&gt;</td>
<td></td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td><strong>Explanation</strong></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies additional details available for the hot plug event, for example: Memory device: DIMM1_A, Serial number: FFFF30B1</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Item</strong></td>
<td><strong>&lt;Additional power supply status information&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>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</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Chassis intrusion state: <strong>&lt;Intrusion state&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies whether the chassis intrusion state is <strong>Open</strong> or <strong>Closed</strong>. For example: Chassis intrusion state: Open</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Chassis location: <strong>&lt;Name of chassis&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies name of the chassis that generated the message, for example: Chassis location: Main System Chassis</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Configuration error type: <strong>&lt;type of configuration error&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies the type of configuration error that occurred, for example: Configuration error type: Revision mismatch</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Current sensor value (in Amps): <strong>&lt;Reading&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies the current sensor value in amps, for example: Current sensor value (in Amps): 7.853</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Date and time of action: <strong>&lt;Date and time&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies the date and time the action was performed, for example: Date and time of action: Sat Jun 12 16:20:33 2004</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Device location: <strong>&lt;Location in chassis&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies the location of the device in the specified chassis, for example: Device location: Memory Card A</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Discrete current state: <strong>&lt;State&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies the state of the current sensor, for example: Discrete current state: Good</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Discrete temperature state: <strong>&lt;State&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies the state of the temperature sensor, for example: Discrete temperature state: Good</td>
<td></td>
</tr>
<tr>
<td><strong>Description Line</strong></td>
<td>Discrete voltage state: <strong>&lt;State&gt;</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Explanation</strong></td>
<td>Specifies the state of the voltage sensor, for example: Discrete voltage state: Good</td>
<td></td>
</tr>
</tbody>
</table>
**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)
<table>
<thead>
<tr>
<th>Description Line Item</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor sensor status: &lt;status&gt;</td>
<td>Specifies the status of the processor sensor, for example: Processor sensor status: Configuration error</td>
</tr>
<tr>
<td>Redundancy unit: &lt;Redundancy location in chassis&gt;</td>
<td>Specifies the location of the redundant power supply or cooling unit in the chassis, for example: Redundancy unit: Fan Enclosure</td>
</tr>
<tr>
<td>SD card device type: &lt;Type of SD card device&gt;</td>
<td>Specifies the type of SD card device, for example: SD card device type: Hypervisor</td>
</tr>
<tr>
<td>SD card state: &lt;State of SD card&gt;</td>
<td>Specifies the state of the SD card, for example: SD card state: Present, Active</td>
</tr>
<tr>
<td>Sensor location: &lt;Location in chassis&gt;</td>
<td>Specifies the location of the sensor in the specified chassis, for example: Sensor location: CPU1</td>
</tr>
<tr>
<td>Temperature sensor value: &lt;Reading&gt;</td>
<td>Specifies the temperature in degrees Celsius, for example: Temperature sensor value (in degrees Celsius): 30</td>
</tr>
<tr>
<td>Voltage sensor value (in Volts): &lt;Reading&gt;</td>
<td>Specifies the voltage sensor value in volts, for example: Voltage sensor value (in Volts): 1.693</td>
</tr>
</tbody>
</table>
Server Management Messages

The following tables list 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Log was cleared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Information</td>
</tr>
<tr>
<td>Cause</td>
<td>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.</td>
</tr>
</tbody>
</table>

Event ID — 0001

<table>
<thead>
<tr>
<th>Description</th>
<th>Log backup created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Information</td>
</tr>
<tr>
<td>Cause</td>
<td>The log was full, copied to backup, and cleared.</td>
</tr>
</tbody>
</table>

Event ID — 1000

<table>
<thead>
<tr>
<th>Description</th>
<th>Server Administrator starting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Information</td>
</tr>
<tr>
<td>Cause</td>
<td>Server Administrator is beginning to initialize.</td>
</tr>
</tbody>
</table>

Event ID — 1001

<table>
<thead>
<tr>
<th>Description</th>
<th>Server Administrator startup complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Information</td>
</tr>
<tr>
<td>Cause</td>
<td>Server Administrator completed initialization.</td>
</tr>
</tbody>
</table>

Event ID — 1002

<table>
<thead>
<tr>
<th>Description</th>
<th>A system BIOS update has been scheduled for the next reboot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Information</td>
</tr>
</tbody>
</table>
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 — 1019

Description: Alert generated from unmonitored sensors
Severity: Warning
**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.

**Event ID — 1017**

**Description**
Server Administrator SNMP agent key is missing

**Severity**
Warning

**Cause**
This event is generated when the operating system is upgraded.

**Action**
Server Administrator repair operation is required to recover the missing SNMP agent key.

**Event ID — 1018**

**Description**
Alert generated from unmonitored sensors

**Severity**
Informational

**Cause and Action**
No response action is required.

**Event ID — 1019**

**Description**
Alert generated from unmonitored sensors

**Severity**
Warning

**Cause and Action**
For more details about the event, check the Server Administrator ESM logs and then contact your service provider for technical support.

**Event ID — 1020**

**Description**
Alert generated from unmonitored sensors

**Severity**
Critical

**Cause and Action**
For more details about the event, check the Server Administrator ESM logs and then contact your service provider for technical support.

**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 provide 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.

Event ID — 1425

Description  
The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, has regained persistency and is available for use.

Severity  
Informational

Cause  
No response action required.

Event ID — 1426

Description  
The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, is about to reach the end of supported life duration.
Severity: Warning

Cause: During the next scheduled maintenance, replace the Non-Volatile Dual In-line Memory Module (NVDIMM) device. For more information about the usage of NVDIMMs, see the system Owner’s Manual on the support site.

Event ID — 1427

Description: The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, is not responding and is disabled.

Severity: Critical

Cause: Remove and reinstall the Non-Volatile Dual In-line Memory Module (NVDIMM) device. If the issue persists, contact your service provider. For information about removing and reinstalling the NVDIMM, see the system Owner’s Manual on the support site.

Event ID — 1428

Description: The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, is unable to save the data during the previous system shutdown operation or power loss.

Severity: Critical

Cause: Remove and reinstall the Non-Volatile Dual In-line Memory Module (NVDIMM) device. If the issue persists, contact your service provider. For information about removing and reinstalling the NVDIMM, see the system Owner’s Manual on the support site.

Event ID — 1429

Description: The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, is unable to restore the data that was saved in the previous ‘save’ operation.

Severity: Critical

Cause: Remove and reinstall the Non-Volatile Dual In-line Memory Module (NVDIMM) device. If the issue persists, contact your service provider. For information about removing and reinstalling the NVDIMM, see the system Owner’s Manual on the support site.

Event ID — 1430

Description: An unsupported Non-Volatile Dual In-line Memory Module (NVDIMM) device is of unsupported configuration and unable to operate as currently configured.

Severity: Critical

Cause: Review the memory configuration and make sure the configuration is as per memory rules defined in the system Owner’s Manual on the support site.

Event ID — 1431

Description: The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, is not responding.

Severity: Critical
Cause
Remove and reinstall the Non-Volatile Dual In-line Memory Module (NVDIMM) device. If the issue persists, contact your service provider. For information about removing and reinstalling the NVDIMM, see the system Owner's Manual on the support site.

Event ID — 1432
Description The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, cannot be configured to save data during a power loss because of an issue in the NVDIMM.
Severity Critical
Cause Remove and reinstall the Non-Volatile Dual In-line Memory Module (NVDIMM) device. If the issue persists, contact your service provider. For information about removing and reinstalling the NVDIMM, see the system Owner's Manual on the support site.

Event ID — 1433
Description The Non-Volatile Dual In-line Memory Module (NVDIMM) devices are placed in write-protect mode because the system may not provide sufficient power to save data in case of power loss.
Severity Critical
Cause TBD

Event ID — 1434
Description The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, has reached the end of supported life duration and is placed in write-protect mode.
Severity Critical
Cause Replace the Non-Volatile Dual In-line Memory Module (NVDIMM) device. For information about removing and reinstalling the NVDIMM, see the system Owner's Manual on the support site.

Event ID — 1435
Description The Non-Volatile Dual In-line Memory Module (NVDIMM) device in the slot mentioned in log, has lost persistency and is placed in write-protect mode.
Severity Critical
Cause Remove and reinstall the Non-Volatile Dual In-line Memory Module (NVDIMM) device. If the issue persists, contact the service provider. For information about removing and reinstalling the NVDIMM, see the system Owner's Manual on the support site.

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> |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Error</td>
</tr>
<tr>
<td>Cause</td>
<td>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.</td>
</tr>
</tbody>
</table>
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>
<thead>
<tr>
<th>Alert ID</th>
<th>Message Text Displayed in the Storage Management Service Documentation</th>
<th>Message Text Displayed in the Alert Log with Variable Information Supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td>2127</td>
<td>Background Initialization started</td>
<td>Background Initialization started: Virtual Disk 3 (Virtual Disk 3) Controller 1 (PERC 5/E Adapter)</td>
</tr>
<tr>
<td>2334</td>
<td>Controller event log %</td>
<td>Controller event log: Current capacity of the battery is above threshold : Controller 1 (PERC 5/E Adapter)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Storage Object</th>
<th>Message Variables</th>
</tr>
</thead>
</table>
| 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 |

                        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  
                        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 |

                        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.  
                                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

<table>
<thead>
<tr>
<th>Description</th>
<th>Device failed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Critical / Failure / Error</td>
</tr>
<tr>
<td>Cause and Action</td>
<td><strong>Cause:</strong> 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. <strong>Action:</strong> 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.</td>
</tr>
<tr>
<td>Clear Alert Number</td>
<td>2121</td>
</tr>
<tr>
<td>Related Alert Number</td>
<td>2095, 2201, 2203</td>
</tr>
<tr>
<td>Local Response Agent (LRA) Number</td>
<td>2051, 2061, 2071, 2081, 2091, 2101</td>
</tr>
<tr>
<td>SNMP Trap Numbers</td>
<td>754, 804, 854, 904, 954, 1004, 1054, 1104, 1154, 1204</td>
</tr>
</tbody>
</table>

Event ID — 2049

<table>
<thead>
<tr>
<th>Description</th>
<th>Physical disk removed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning / Non-critical</td>
</tr>
<tr>
<td>Cause and Action</td>
<td><strong>Cause:</strong> 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. <strong>Action:</strong> 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.</td>
</tr>
<tr>
<td>Clear Alert Number</td>
<td>2052</td>
</tr>
<tr>
<td>Related Alert Number</td>
<td>2054, 2057, 2056, 2076, 2079, 2081, 2083, 2129, 2202, 2204, 2270, 2292, 2299, 2369</td>
</tr>
<tr>
<td>Local Response Agent (LRA) Number</td>
<td>2070</td>
</tr>
<tr>
<td>SNMP Trap Numbers</td>
<td>903</td>
</tr>
</tbody>
</table>
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.
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

Event ID — 2055

Description: Virtual disk configuration changed.
Severity: OK / Normal / Informational

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

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.
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

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

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

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

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

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

Event ID — 2063

Description: Virtual disk reconfiguration started.
Severity: OK / Normal / Informational
<table>
<thead>
<tr>
<th>Event ID — 2064</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2065</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2067</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
### 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

### 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

### 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

### Event ID — 2076

**Description**
Virtual disk Check Consistency failed.
Severity: Critical / Failure / Error

Cause and Action:
- **Cause**: A 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.
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.
- 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.

---

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: None
Local Response Agent (LRA) Number: 2081

SNMP Trap Numbers

904

---

Related Alert Information

Clear Alert Number: None
Related Alert Number: None
Local Response Agent (LRA) Number: 2081

SNMP Trap Numbers

1204
### Event ID — 2083

<table>
<thead>
<tr>
<th>Description</th>
<th>Physical disk rebuild failed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Critical / Failure / Error</td>
</tr>
</tbody>
</table>
| 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 \( \times \) 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 |

### Event ID — 2085

<table>
<thead>
<tr>
<th>Description</th>
<th>Virtual disk check consistency completed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
</table>
| 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    |

### Event ID — 2086

<table>
<thead>
<tr>
<th>Description</th>
<th>Virtual disk format completed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
</table>
| 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 |

### Event ID — 2087

<table>
<thead>
<tr>
<th>Description</th>
<th>Copy of data resumed from physical disk % 2 to physical disk % 1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>OK / Normal / Informational</td>
</tr>
<tr>
<td>Cause and Action</td>
<td><strong>Cause</strong>: This alert is for informational purposes.</td>
</tr>
</tbody>
</table>
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: 901

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: 1201

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

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 unassignments 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
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: 901

---

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: 1053
SNMP Trap Numbers

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

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

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

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**

<table>
<thead>
<tr>
<th>Description</th>
<th>SMART warning temperature.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning / Non-critical</td>
</tr>
</tbody>
</table>
| 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**

<table>
<thead>
<tr>
<th>Description</th>
<th>SMART warning degraded.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning / Non-critical</td>
</tr>
</tbody>
</table>
| 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**

<table>
<thead>
<tr>
<th>Description</th>
<th>Failure prediction threshold exceeded due to test.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning / Non-critical</td>
</tr>
</tbody>
</table>
**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**
903

**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
<table>
<thead>
<tr>
<th>Event ID — 2116</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Action</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2117</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Action</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2118</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Action</strong></td>
</tr>
</tbody>
</table>
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

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

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.
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: 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
**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.

**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

**Clear Alert Number:** 2130  
**Related Alert Number:** None  
**Local Response Agent (LRA) Number:** None

**SNMP Trap Numbers**  
1201

---

**Event ID — 2128**

**Description**  
BGI cancelled.
<table>
<thead>
<tr>
<th>Event ID — 2129</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: BGI failed.</td>
</tr>
<tr>
<td>Severity: Critical / Failure / Error</td>
</tr>
<tr>
<td>Cause and Action: Cause: BGI of a virtual disk has failed.</td>
</tr>
<tr>
<td>Action: None</td>
</tr>
<tr>
<td>Related Alert Information: Clear Alert Number: None</td>
</tr>
<tr>
<td>Related Alert Number: 2340</td>
</tr>
<tr>
<td>Local Response Agent (LRA) Number: 2081</td>
</tr>
<tr>
<td>SNMP Trap Numbers: 1204</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2130</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: BGI completed.</td>
</tr>
<tr>
<td>Severity: OK / Normal / Informational</td>
</tr>
<tr>
<td>Cause and Action: Cause: BGI of a virtual disk has completed. This alert is for informational purposes.</td>
</tr>
<tr>
<td>Action: None</td>
</tr>
<tr>
<td>Related Alert Information: Clear Alert Number: Alert 2130 is a clear alert for alert 2127.</td>
</tr>
<tr>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td>Local Response Agent (LRA) Number: None</td>
</tr>
<tr>
<td>SNMP Trap Numbers: 1201</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2131</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description: Firmware version mismatch.</td>
</tr>
<tr>
<td>Severity: Warning / Non-critical</td>
</tr>
<tr>
<td>Cause and Action: Cause: The firmware on the controller is not a supported version.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Related Alert Information: Clear Alert Number: None</td>
</tr>
<tr>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td>Local Response Agent (LRA) Number: 2060</td>
</tr>
</tbody>
</table>
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

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

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
**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

**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.

**Related Alert Information**  
*Clear Alert 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.

**Related Alert Information**  
*Clear Alert 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.
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.
### 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

### 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

### 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
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/Sl, 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.

- **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

- **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.

**Action:** None

**Related Alert Information**

**Clear Alert Number:** Alert 2172 is a clear alert for alert 2171.

**Related Alert Number:** None
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

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

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:

- Event ID — 2173: 1151
- Event ID — 2174: 853
- Event ID — 2175: 1153
<table>
<thead>
<tr>
<th>Event ID — 2176</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
</tbody>
</table>
| **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 |

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<thead>
<tr>
<th>Event ID — 2177</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
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<tr>
<td><strong>Severity</strong></td>
</tr>
</tbody>
</table>
| **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 |

<table>
<thead>
<tr>
<th>Event ID — 2178</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
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<tr>
<td><strong>Severity</strong></td>
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</tbody>
</table>
| **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 |

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<thead>
<tr>
<th>Event ID — 2179</th>
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<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
</tbody>
</table>
Event ID — 2180

Description: The controller battery Learn cycle starts in %1 days.
Severity: OK / Normal / Informational
Cause and Action: 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: 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 — 2182

Description: An invalid SAS configuration has been detected.
Severity: Critical / Failure / Error
Cause and Action: 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: None
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

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

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

Event ID — 2186

Description: The controller cache has been discarded.

Severity: Warning / Non-critical
### 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
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

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.

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
1151

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

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

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

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

1151

751

854
### 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

### 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

### 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

### 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.
**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

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.
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
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

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

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

Event ID — 2215

Description: Battery charge process interrupted.
Severity: OK / Normal / Informational
Cause and Action
- Cause: This alert is for informational purposes.
**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.
<table>
<thead>
<tr>
<th>Event ID — 2223</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2224</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2225</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>
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.
<table>
<thead>
<tr>
<th>Event ID — 2230</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
</tbody>
</table>
| **Cause and Action** | **Cause:** This alert is for informational purposes.  
*Action:* Change at least one controller property and run the command again. |

<table>
<thead>
<tr>
<th>Event ID — 2231</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
</tbody>
</table>
| **Cause and Action** | **Cause:** This alert is for informational purposes.  
*Action:* Change at least one controller property and run the command again. |

<table>
<thead>
<tr>
<th>Event ID — 2232</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
</tbody>
</table>
| **Cause and Action** | **Cause:** This alert is for informational purposes.  
*Action:* None |

---

For more information, please refer to the Dell EMC documentation.
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.
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.

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

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
<table>
<thead>
<tr>
<th>Event ID — 2240</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>A foreign configuration has been imported.</td>
</tr>
<tr>
<td><strong>Severity</strong></td>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
</table>
| **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 |

<table>
<thead>
<tr>
<th>Event ID — 2241</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>The Patrol Read mode has changed.</td>
</tr>
<tr>
<td><strong>Severity</strong></td>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
</table>
| **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 |

<table>
<thead>
<tr>
<th>Event ID — 2242</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>The Patrol Read operation has started.</td>
</tr>
<tr>
<td><strong>Severity</strong></td>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
</table>
| **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 |

<table>
<thead>
<tr>
<th>Event ID — 2243</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>The Patrol Read operation has stopped.</td>
</tr>
<tr>
<td><strong>Severity</strong></td>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
</table>
| **Cause and Action** | **Cause:** The controller has stopped the Patrol Read operation. This alert is for informational purposes.  
**Action:** None |
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

SNMP Trap Numbers: 751

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

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.

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.
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
- **Event ID — 2259**
  - **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
  - **Clear Alert Number:** 2260
  - **Related Alert Number:** None
  - **Local Response Agent (LRA) Number:** None

### Event ID — 2260
- **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
  - **Clear Alert Number:** None
  - **Related Alert Number:** None
  - **Local Response Agent (LRA) Number:** None

### Event ID — 2261
- **SNMP Trap Numbers:** 751

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

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The physical disk Clear operation has completed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cause and Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cause:</strong> This alert is for informational purposes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

### Related Alert Information

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

### SNMP Trap Numbers

- **901**

---

**Event ID — 2270**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The physical disk Clear operation failed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical / Failure / Error</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cause and Action</th>
</tr>
</thead>
</table>
| **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. |

<table>
<thead>
<tr>
<th>Action</th>
</tr>
</thead>
</table>
| 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**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Patrol Read encountered a media error.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK / Normal / Informational</td>
</tr>
</tbody>
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<thead>
<tr>
<th>Cause and Action</th>
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| **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. |
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

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

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 dedicated hot spare.
Related Alert Information: Clear Alert Number: None
Related Alert Number: None
Local Response Agent (LRA) Number: 2070
SNMP Trap Numbers

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

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**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

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**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

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**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
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

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

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
### 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

751, 851, 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

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**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

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**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

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**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

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**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

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**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.
the Import Foreign Configuration and Clear Foreign Configuration section in the Server Administrator Storage Management User’s Guide for more information.

Action: None

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.

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.

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.

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

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.

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
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

SNMP Trap Numbers: 751

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: None

SNMP Trap Numbers: 751, 801, 851, 901, 951, 1001, 1051, 1101, 1151, 1201

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.
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.

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

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
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

<table>
<thead>
<tr>
<th>Description</th>
<th>The Check Consistency logging of inconsistent parity data is disabled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning / Non-critical</td>
</tr>
</tbody>
</table>
| 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

<table>
<thead>
<tr>
<th>Description</th>
<th>The virtual disk initialization terminated.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning / Non-critical</td>
</tr>
</tbody>
</table>
| 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

<table>
<thead>
<tr>
<th>Description</th>
<th>The virtual disk initialization failed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Critical / Failure / Error</td>
</tr>
</tbody>
</table>
| 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Error occurred: %1.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning / Non-critical</td>
</tr>
</tbody>
</table>

**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:** 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 — 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
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

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

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

SNMP Trap Numbers

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

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

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

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
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
### 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

### 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

### 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

### 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

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

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

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**: To clear these bad blocks, execute the Clear Virtual Disk Bad Blocks task.

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

SNMP Trap Numbers

1201

Event ID — 2390

Description: The Cryptographic 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:
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:
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:
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.
### 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.

<table>
<thead>
<tr>
<th>Related Alert Information</th>
<th>Clear Alert Number: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td></td>
<td>Local Response Agent (LRA) Number: None</td>
</tr>
</tbody>
</table>

**SNMP Trap Numbers**
751

### 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.

<table>
<thead>
<tr>
<th>Related Alert Information</th>
<th>Clear Alert Number: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td></td>
<td>Local Response Agent (LRA) Number: None</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Related Alert Information</th>
<th>Clear Alert Number: None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td></td>
<td>Local Response Agent (LRA) Number: None</td>
</tr>
</tbody>
</table>

**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.
| 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). |

| 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. |

| 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. |
**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

**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

**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

**Event ID — 2413**

**Description**  
Controller CacheCade is created.

**Severity**  
Informational

**Cause and Action**  
**Cause:** This alert is provided for informational purposes.
Event ID — 2414

Description: Controller CacheCade is deleted.
Severity: Informational
Cause and Action: Cause: This alert is provided for informational purposes.
Action: None

Event ID — 2415

Description: Controller battery is discharging.
Severity: Informational
Cause and Action: Cause: The battery learn cycle has started.
Action: None

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.
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

SNMP Trap Numbers

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

SNMP Trap Numbers

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

SNMP Trap Numbers

Event ID — 2437

Description
The physical device blink has initiated.

Severity
Informational

Cause and Action
Cause: User triggered task.
Action: None.

Related Alert Information

SNMP Trap Numbers
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 available space is below threshold.

Severity: Warning

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.
<table>
<thead>
<tr>
<th>Event ID — 2443</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Severity</td>
</tr>
</tbody>
</table>
| 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 |

<table>
<thead>
<tr>
<th>Event ID — 2444</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Severity</td>
</tr>
</tbody>
</table>
| 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 |

<table>
<thead>
<tr>
<th>Event ID — 2445</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Severity</td>
</tr>
</tbody>
</table>
| 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 — 2446

Description
The controller identified in the message has been changed to a new personality mode (HBA or RAID).

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
751

Event ID — 2447

Description
The Auto Configure operation is successfully completed on the controller 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
751

Event ID — 2448

Description
The Remaining Rated Write Endurance (RRWE) Threshold for SAS and SATA SSD is set to <value>.

Severity
Informational

Cause and Action
Cause: The Remaining Rated Write Endurance (RRWE) Threshold for SAS and SATA solid-state drives has been modified.
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
101

Event ID — 2449

Description
The Remaining Rated Write Endurance (RRWE) Threshold for PCIe SSDs is set to <value>.

Severity
Informational

Cause and Action
Cause: The Remaining Rated Write Endurance (RRWE) Threshold for PCIe solid-state drives has been modified.
Event ID — 2450

Description
The disk write cache policy is changed for Non-RAID disks.

Severity
Informational

Cause and Action
Cause: The disk write cache policy of non-RAID physical disk drives on the <controller name> is changed.
Action: No response action is required.

Event ID — 2451

Description
The disk write cache policy is changed.

Severity
Informational

Cause and Action
Cause: The disk write cache policy of physical disk drive <drive name> is changed.
Action: No response action is required.

Event ID — 2454

Description
Unable to complete the Cryptographic erase operation on the physical disk drive <drive name>.

Severity
Warning

Cause and Action
Cause: The cryptographic erase operation cannot be completed on the physical disk drive identified in the message.
Action: No response action is required.
### Event ID — 2699

<table>
<thead>
<tr>
<th>Description</th>
<th>Connection to CFM lost! : FluidCache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Error</td>
</tr>
<tr>
<td>Cause and Action</td>
<td>No action required.</td>
</tr>
<tr>
<td>Related Alert Information</td>
<td></td>
</tr>
<tr>
<td>Clear Alert Number: None</td>
<td></td>
</tr>
<tr>
<td>Related Alert Number: None</td>
<td></td>
</tr>
<tr>
<td>Local Response Agent (LRA) Number</td>
<td>None</td>
</tr>
<tr>
<td>SNMP Trap Numbers</td>
<td>1604</td>
</tr>
</tbody>
</table>

### Event ID — 2700

<table>
<thead>
<tr>
<th>Description</th>
<th>The following journal mirror is available. %1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Information</td>
</tr>
<tr>
<td>Cause and Action</td>
<td>No action required.</td>
</tr>
<tr>
<td>Related Alert Information</td>
<td>Clear Alert Number: None</td>
</tr>
<tr>
<td>Clear Alert Number: None</td>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td>Related Alert Number: None</td>
<td>Local Response Agent (LRA) Number: None</td>
</tr>
<tr>
<td>SNMP Trap Numbers</td>
<td>1601</td>
</tr>
</tbody>
</table>

### Event ID — 2701

<table>
<thead>
<tr>
<th>Description</th>
<th>The following journal mirror is being replaced. (wwn) %1 : FluidCache.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Information</td>
</tr>
<tr>
<td>Cause and Action</td>
<td>No action required.</td>
</tr>
<tr>
<td>Related Alert Information</td>
<td>Clear Alert Number: None</td>
</tr>
<tr>
<td>Clear Alert Number: None</td>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td>Related Alert Number: None</td>
<td>Local Response Agent (LRA) Number: None</td>
</tr>
<tr>
<td>SNMP Trap Numbers</td>
<td>1601</td>
</tr>
</tbody>
</table>

### Event ID — 2702

<table>
<thead>
<tr>
<th>Description</th>
<th>The following journal mirror has failed. (wwn) %1 : FluidCache.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Warning</td>
</tr>
<tr>
<td>Cause and Action</td>
<td>No action required.</td>
</tr>
<tr>
<td>Related Alert Information</td>
<td>Clear Alert Number: None</td>
</tr>
<tr>
<td>Clear Alert Number: None</td>
<td>Related Alert Number: None</td>
</tr>
<tr>
<td>Related Alert Number: None</td>
<td>Local Response Agent (LRA) Number: None</td>
</tr>
</tbody>
</table>
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

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 Technical Support.
Related Alert Information:

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

Event ID — 2705
Description: The journal could not be read/written. : FluidCache.
Severity: Error
Cause and Action: Service is required. Contact Technical Support.
Related Alert Information:

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

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

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

903

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.
### 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

**SNMP Trap Numbers:** 1204, 1504

### Event ID — 2903

**Description:** The following cache device has been registered. (wwn) %1 (path) %2 : FluidCache.

**Severity:** Information

**Cause and Action:** No action required.

**Related Alert Information:** Clear Alert 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

**SNMP Trap Numbers:** 901

### Event ID — 2905

**Description:** The following cache device is being removed. (wwn) %1 (path) %2 : FluidCache.

**Severity:** Information
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: 901

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, 1601

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.
<table>
<thead>
<tr>
<th>Event ID — 2910</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2911</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event ID — 2912</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Severity</strong></td>
</tr>
<tr>
<td><strong>Cause and Action</strong></td>
</tr>
<tr>
<td><strong>Related Alert Information</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>SNMP Trap Numbers</strong></td>
</tr>
</tbody>
</table>
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

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

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

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

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

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

Event ID — 2924

Description: All cache devices have been found and registered.: FluidCache.
Severity: Information
Cause and Action: No action required.
Event ID — 2930

Description: Even though caching was enabled in write-back mode, it is currently operating in write-through mode.

Severity: Warning

Cause and Action: To resolve the issue, add a PCIe SSD to the cache pool.

Event ID — 2931

Description: Even though caching was enabled in write-back or write-through mode, it is currently operating in pass-through mode.

Severity: Warning

Cause and Action: To resolve the issue, add one or more PCIe SSDs to the cache pool.

Event ID — 2932

Description: Caching is no longer degraded to write-through mode and is now operating in write-back mode.

Severity: Warning

Cause and Action: No action required.
**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

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> temperature sensor detected a failure <code>&lt;Reading&gt;</code></td>
<td>Critical</td>
<td>Temperature of the backplane board, system board, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> exceeded the critical threshold.</td>
</tr>
<tr>
<td>where <code>&lt;Sensor Name/Location&gt;</code> is the entity that this sensor is monitoring. For example, &quot;PROC Temp&quot; or &quot;Planar Temp.&quot; Reading is specified in degree Celsius. For example 100 C.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> temperature sensor detected a warning <code>&lt;Reading&gt;</code>.</td>
<td>Warning</td>
<td>Temperature of the backplane board, system board, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> exceeded the non-critical threshold.</td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> temperature sensor returned to warning state <code>&lt;Reading&gt;</code></td>
<td>Warning</td>
<td>Temperature of the backplane board, system board, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> returned from critical state to non-critical state.</td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> temperature sensor returned to normal state <code>&lt;Reading&gt;</code>.</td>
<td>Information</td>
<td>Temperature of the backplane board, system board, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> returned to normal operating range.</td>
</tr>
<tr>
<td>The <code>&lt;Sensor Name/Location&gt;</code> temperature is less than the lower warning threshold.</td>
<td>Warning</td>
<td>Temperature of the backplane, system board, system inlet, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> entered into non-critical state.</td>
</tr>
<tr>
<td>The <code>&lt;Sensor Name/Location&gt;</code> temperature is less than the lower critical threshold.</td>
<td>Critical</td>
<td>Temperature of the backplane, system board, system inlet, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> entered into critical state.</td>
</tr>
<tr>
<td>The <code>&lt;Sensor Name/Location&gt;</code> temperature is greater than the upper warning threshold.</td>
<td>Warning</td>
<td>Temperature of the backplane, system board, system inlet, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> entered into non-critical state.</td>
</tr>
<tr>
<td>The <code>&lt;Sensor Name/Location&gt;</code> temperature is greater than the upper critical threshold.</td>
<td>Critical</td>
<td>Temperature of the backplane, system board, system inlet, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> entered into critical state.</td>
</tr>
<tr>
<td>The <code>&lt;Sensor Name/Location&gt;</code> temperature is outside of range.</td>
<td>Critical</td>
<td>Temperature of the backplane, system board, system inlet, or the carrier in the specified system <code>&lt;Sensor Name/Location&gt;</code> is outside of normal operating range.</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Sensor Name/Location&gt; voltage sensor detected a failure &lt;Reading&gt; where &lt;Sensor Name/Location&gt; is the entity that this sensor is monitoring. Reading is specified in volts. For example, 3.860 V.</td>
<td>Critical</td>
<td>The voltage of the monitored device has exceeded the critical threshold.</td>
</tr>
<tr>
<td>&lt;Sensor Name/Location&gt; voltage sensor state asserted.</td>
<td>Critical</td>
<td>The voltage specified by &lt;Sensor Name/Location&gt; is in critical state.</td>
</tr>
<tr>
<td>&lt;Sensor Name/Location&gt; voltage sensor state de-asserted.</td>
<td>Information</td>
<td>The voltage of a previously reported &lt;Sensor Name/Location&gt; is returned to normal state.</td>
</tr>
<tr>
<td>&lt;Sensor Name/Location&gt; voltage sensor detected a warning &lt;Reading&gt;.</td>
<td>Warning</td>
<td>Voltage of the monitored entity &lt;Sensor Name/Location&gt; exceeded the warning threshold.</td>
</tr>
<tr>
<td>&lt;Sensor Name/Location&gt; voltage sensor returned to normal &lt;Reading&gt;.</td>
<td>Information</td>
<td>The voltage of a previously reported &lt;Sensor Name/Location&gt; is returned to normal state.</td>
</tr>
<tr>
<td>The &lt;Sensor Name/Location&gt; voltage is less than the lower warning threshold.</td>
<td>Warning</td>
<td>Voltage of the monitored Entity &lt;Sensor Name/Location&gt; exceeded the warning threshold.</td>
</tr>
<tr>
<td>The &lt;Sensor Name/Location&gt; voltage is less than the lower critical threshold.</td>
<td>Critical</td>
<td>Voltage of the monitored Entity &lt;Sensor Name/Location&gt; exceeded the critical threshold.</td>
</tr>
<tr>
<td>The &lt;Sensor Name/Location&gt; voltage is greater than the upper warning threshold.</td>
<td>Warning</td>
<td>Voltage of the monitored Entity &lt;Sensor Name/Location&gt; exceeded the warning threshold.</td>
</tr>
<tr>
<td>The &lt;Sensor Name/Location&gt; voltage is greater than the upper critical threshold.</td>
<td>Critical</td>
<td>Voltage of the monitored Entity &lt;Sensor Name/Location&gt; exceeded the critical threshold.</td>
</tr>
<tr>
<td>The &lt;Sensor Name/Location&gt; voltage is outside of range.</td>
<td>Critical</td>
<td>Voltage of the monitored Entity &lt;Sensor Name/Location&gt; is outside of normal operating range.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>The <code>&lt;Sensor Name/Location&gt;</code> voltage is within range.</td>
<td>Information</td>
<td>Voltage of the monitored Entity <code>&lt;Sensor Name/Location&gt;</code> returned to a normal operating range.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> Fan sensor detected a failure <code>&lt;Reading&gt;</code> where <code>&lt;Sensor Name/Location&gt;</code> is the entity that this sensor is monitoring. For example &quot;BMC Back Fan&quot; or &quot;BMC Front Fan.&quot; Reading is specified in RPM. For example, 100 RPM.</td>
<td>Critical</td>
<td>The speed of the specified <code>&lt;Sensor Name/Location&gt;</code> fan is not sufficient to provide enough cooling to the system.</td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> Fan sensor returned to normal state <code>&lt;Reading&gt;</code></td>
<td>Information</td>
<td>The fan specified by <code>&lt;Sensor Name/Location&gt;</code> has returned to its normal operating speed.</td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> Fan sensor detected a warning <code>&lt;Reading&gt;</code></td>
<td>Warning</td>
<td>The speed of the specified <code>&lt;Sensor Name/Location&gt;</code> fan may not be sufficient to provide enough cooling to the system.</td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> Fan Redundancy sensor redundancy degraded.</td>
<td>Information</td>
<td>The fan specified by <code>&lt;Sensor Name/Location&gt;</code> may have failed and hence, the redundancy has been degraded.</td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> Fan Redundancy sensor redundancy lost.</td>
<td>Critical</td>
<td>The fan specified by <code>&lt;Sensor Name/Location&gt;</code> may have failed and hence, the redundancy that was degraded previously has been lost.</td>
</tr>
<tr>
<td><code>&lt;Sensor Name/Location&gt;</code> Fan Redundancy sensor redundancy regained</td>
<td>Information</td>
<td>The fan specified by <code>&lt;Sensor Name/Location&gt;</code> may have started functioning again and hence, the redundancy has been regained.</td>
</tr>
<tr>
<td>Fan <code>&lt;number&gt;</code> RPM is less than the lower warning threshold.</td>
<td>Warning</td>
<td>The speed of the specified fan might not provide enough cooling to the system.</td>
</tr>
<tr>
<td>Fan <code>&lt;number&gt;</code> RPM is less than the lower critical threshold.</td>
<td>Critical</td>
<td>The speed of the specified fan is not sufficient to provide enough cooling to the system.</td>
</tr>
<tr>
<td>Fan <code>&lt;number&gt;</code> RPM is greater than the upper warning threshold.</td>
<td>Warning</td>
<td>The speed of the specified fan exceeded the warning threshold.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Fan &lt;number&gt; RPM is greater than the upper critical threshold.</td>
<td>Critical</td>
<td>The speed of the specified fan exceeded the critical threshold.</td>
</tr>
<tr>
<td>Fan &lt;number&gt; RPM is outside of range.</td>
<td>Critical</td>
<td>The speed of the specified fan might not provide enough cooling to the system.</td>
</tr>
<tr>
<td>Fan &lt;number&gt; RPM is within range.</td>
<td>Information</td>
<td>The speed of the specified fan is operating in a normal range.</td>
</tr>
<tr>
<td>Fan &lt;number&gt; is removed.</td>
<td>Critical</td>
<td>A required fan was removed.</td>
</tr>
<tr>
<td>Fan &lt;number&gt; was inserted.</td>
<td>Information</td>
<td>A fan was added.</td>
</tr>
<tr>
<td>Fan &lt;number&gt; is present.</td>
<td>Information</td>
<td>The total number of fans present.</td>
</tr>
<tr>
<td>Fan &lt;number&gt; is absent.</td>
<td>Critical</td>
<td>A required fan is missing.</td>
</tr>
<tr>
<td>The fans are redundant.</td>
<td>Information</td>
<td>One or more fans may have started functioning or installed and the redundancy has been regained.</td>
</tr>
<tr>
<td>Fan redundancy is lost.</td>
<td>Critical</td>
<td>One or more required fans may have failed or removed and hence, the redundancy was lost.</td>
</tr>
<tr>
<td>Fan redundancy is degraded.</td>
<td>Warning</td>
<td>One or more fans may have failed or removed and hence, the redundancy has been degraded.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Processor Entity&gt; status processor sensor IERR, where &lt;Processor Entity&gt; is the processor that generated the event. For example, PROC for a single processor system and PROC # for multiprocessor system.</td>
<td>Critical</td>
<td>IERR internal error generated by the &lt;Processor Entity&gt;. This event is generated due to processor internal error.</td>
</tr>
<tr>
<td>&lt;Processor Entity&gt; status processor sensor Thermal Trip.</td>
<td>Critical</td>
<td>The processor generates this event before it shuts down because of excessive heat caused by lack of cooling or heat synchronization.</td>
</tr>
<tr>
<td>&lt;Processor Entity&gt; status processor sensor recovered from IERR.</td>
<td>Information</td>
<td>This event is generated when a processor recovers from the internal error.</td>
</tr>
<tr>
<td>&lt;Processor Entity&gt; status processor sensor disabled.</td>
<td>Warning</td>
<td>This event is generated for all processors that are disabled.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> status processor sensor terminator not present.</td>
<td>Information</td>
<td>This event is generated if the terminator is missing on an empty processor slot.</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> presence was deasserted.</td>
<td>Critical</td>
<td>This event is generated when the system could not detect the processor.</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> presence was asserted.</td>
<td>Information</td>
<td>This event is generated when the earlier processor detection error was corrected.</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> thermal tripped was deasserted.</td>
<td>Information</td>
<td>This event is generated when the processor has recovered from an earlier thermal condition.</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> configuration error was asserted.</td>
<td>Critical</td>
<td>This event is generated when the processor configuration is incorrect.</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> configuration error was deasserted.</td>
<td>Information</td>
<td>This event is generated when the earlier processor configuration error was corrected.</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> throttled was asserted.</td>
<td>Warning</td>
<td>This event is generated when the processor slows down to prevent overheating.</td>
</tr>
<tr>
<td><code>&lt;Processor Entity&gt;</code> throttled was deasserted.</td>
<td>Information</td>
<td>This event is generated when the earlier processor throttled event was corrected.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; has an internal error (IERR).</td>
<td>Critical</td>
<td>The specified CPU generated an internal error.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; has a thermal trip (over-temperature) event.</td>
<td>Critical</td>
<td>The CPU generates this event before it shuts down because of excessive heat caused by lack of cooling or heat synchronization.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; configuration is unsupported.</td>
<td>Warning</td>
<td>The specified CPU is not support for this system.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; is present.</td>
<td>Information</td>
<td>The specified CPU is present.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; terminator is present.</td>
<td>Information</td>
<td>This event is generated if the terminator is present on a processor slot.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; terminator is absent.</td>
<td>Warning</td>
<td>This event is generated if the terminator is missing on an empty processor slot.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; is throttled.</td>
<td>Warning</td>
<td>This event is generated when the processor slows down to prevent overheating.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; is absent.</td>
<td>Critical</td>
<td>This event is generated when the system could not detect the processor.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; is operating correctly.</td>
<td>Information</td>
<td>This event is generated when the processor recovered from an error.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; is configured correctly.</td>
<td>Information</td>
<td>The specified CPU is configured correctly.</td>
</tr>
</tbody>
</table>
# 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

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Power Supply Sensor Name&gt; power supply sensor removed.</td>
<td>Critical</td>
<td>This event is generated when the power supply sensor is removed.</td>
</tr>
<tr>
<td>&lt;Power Supply Sensor Name&gt; power supply sensor AC recovered.</td>
<td>Information</td>
<td>This event is generated when the power supply has been replaced.</td>
</tr>
<tr>
<td>&lt;Power Supply Sensor Name&gt; power supply sensor returned to normal state.</td>
<td>Information</td>
<td>This event is generated when the power supply that failed or removed was replaced and the state has returned to normal.</td>
</tr>
<tr>
<td>&lt;Entity Name&gt; PS Redundancy sensor redundancy degraded.</td>
<td>Information</td>
<td>Power supply redundancy is degraded if one of the power supply sources is removed or failed.</td>
</tr>
<tr>
<td>&lt;Entity Name&gt; PS Redundancy sensor redundancy lost.</td>
<td>Critical</td>
<td>Power supply redundancy is lost if only one power supply is functional.</td>
</tr>
<tr>
<td>&lt;Entity Name&gt; PS Redundancy sensor redundancy regained.</td>
<td>Information</td>
<td>This event is generated if the power supply has been reconnected or replaced.</td>
</tr>
<tr>
<td>&lt;Power Supply Sensor Name&gt; predictive failure was asserted.</td>
<td>Critical</td>
<td>This event is generated when the power supply is about to fail.</td>
</tr>
<tr>
<td>&lt;Power Supply Sensor Name&gt; input lost was asserted.</td>
<td>Critical</td>
<td>This event is generated when the power supply is unplugged.</td>
</tr>
<tr>
<td>&lt;Power Supply Sensor Name&gt; predictive failure was deasserted.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier predictive failure event.</td>
</tr>
<tr>
<td>&lt;Power Supply Sensor Name&gt; input lost was deasserted.</td>
<td>Information</td>
<td>This event is generated when the power supply is plugged in.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, presence was asserted.</td>
<td>Information</td>
<td>This event is generated when the power supply is plugged in.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, presence was deasserted.</td>
<td>Critical</td>
<td>This event is generated when the power supply is removed.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, failure was asserted.</td>
<td>Critical</td>
<td>This event is generated when the power supply has failed.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, failure was deasserted.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier failure event.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, predictive failure was asserted.</td>
<td>Warning</td>
<td>This event is generated when the power supply is about to fail.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, predictive failure was deasserted.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier predictive failure event.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, input lost was asserted.</td>
<td>Critical</td>
<td>This event is generated when AC power is removed from the power supply.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, input lost was deasserted.</td>
<td>Information</td>
<td>This event is generated when the power supply is plugged in.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, configuration error was asserted.</td>
<td>Warning/Critical</td>
<td>This event is generated when an invalid power supply configuration is detected.</td>
</tr>
<tr>
<td>PS 1 Status: Power supply sensor for PS 1, configuration error was deasserted.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier invalid configuration.</td>
</tr>
<tr>
<td>Power supply &lt;number&gt; is present.</td>
<td>Information</td>
<td>This event is generated when the power supply is plugged in.</td>
</tr>
<tr>
<td>Power supply &lt;number&gt; is absent.</td>
<td>Critical</td>
<td>This event is generated when the power supply is removed.</td>
</tr>
<tr>
<td>Power supply &lt;number&gt; failed.</td>
<td>Critical</td>
<td>This event is generated when the power supply has failed.</td>
</tr>
<tr>
<td>A predictive failure detected on power supply &lt;number&gt;.</td>
<td>Warning</td>
<td>This event is generated when the power supply is about to fail.</td>
</tr>
<tr>
<td>The power input for power supply &lt;number&gt; is lost.</td>
<td>Critical</td>
<td>This event is generated when input power is removed from the power supply.</td>
</tr>
<tr>
<td>The input power for power supply &lt;number&gt; has been restored.</td>
<td>Information</td>
<td>This event is generated if the power supply has been reconnected or replaced.</td>
</tr>
<tr>
<td>Power supply &lt;number&gt; is incorrectly configured.</td>
<td>Critical/Warning</td>
<td>This event is generated when an invalid power supply configuration is detected.</td>
</tr>
<tr>
<td>Power supply &lt;number&gt; is correctly configured.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier invalid configuration.</td>
</tr>
<tr>
<td>Power supply &lt;number&gt; is operating normally.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier failure event.</td>
</tr>
<tr>
<td>Cannot communicate with power supply &lt;number&gt;.</td>
<td>Critical</td>
<td>The power supply may operate, however power supply monitoring is degraded.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The temperature for power supply &lt;number&gt; is in a warning range.</td>
<td>Warning</td>
<td>Temperature of specified power supply entered into non-critical state.</td>
</tr>
<tr>
<td>The temperature for power supply &lt;number&gt; is outside of range.</td>
<td>Critical</td>
<td>Temperature of specified power supply entered into critical state.</td>
</tr>
<tr>
<td>An under voltage fault detected on power supply &lt;number&gt;.</td>
<td>Critical</td>
<td>The specified power supply detected inefficient voltage.</td>
</tr>
<tr>
<td>An over voltage fault detected on power supply &lt;number&gt;.</td>
<td>Critical</td>
<td>The specified power supply detected an over voltage condition.</td>
</tr>
<tr>
<td>An over current fault detected on power supply &lt;number&gt;.</td>
<td>Critical</td>
<td>The specified power supply detected an over current condition.</td>
</tr>
<tr>
<td>Fan failure detected on power supply &lt;number&gt;.</td>
<td>Critical</td>
<td>The specified power supply fan has failed.</td>
</tr>
<tr>
<td>Communication has been restored to power supply &lt;number&gt;.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier communication problem.</td>
</tr>
<tr>
<td>A power supply wattage mismatch is detected; power supply &lt;number&gt; is rated for &lt;value&gt; watts.</td>
<td>Critical</td>
<td>This event is generated when there is more than one power supplies in the system and the power supply wattage do not match.</td>
</tr>
<tr>
<td>Power supply &lt;number&gt; wattage mismatch corrected.</td>
<td>Information</td>
<td>This event is generated when the power supply has recovered from an earlier power supply wattage mismatch.</td>
</tr>
<tr>
<td>Power supply redundancy is lost.</td>
<td>Critical</td>
<td>Power supply redundancy is lost if only one power supply is functional.</td>
</tr>
<tr>
<td>Power supply redundancy is degraded.</td>
<td>Warning</td>
<td>Power supply redundancy is degraded if one of the power supply sources is removed or failed.</td>
</tr>
<tr>
<td>The power supplies are redundant.</td>
<td>Information</td>
<td>This event is generated if the power supply has been reconnected or replaced.</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECC error correction detected on Bank # DIMM [A/B].</td>
<td>Information</td>
<td>This event is generated when there is a memory error correction on a particular Dual Inline Memory Module (DIMM).</td>
</tr>
<tr>
<td>ECC uncorrectable error detected on Bank # [DIMM].</td>
<td>Critical</td>
<td>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.</td>
</tr>
<tr>
<td>Correctable memory error logging disabled.</td>
<td>Critical</td>
<td>This event is generated when the chipset in the ECC error correction rate exceeds a predefined limit.</td>
</tr>
<tr>
<td>Persistent correctable memory errors detected on a memory device at location(s) &lt;DIMM number&gt;.</td>
<td>Warning</td>
<td>This event is generated when there is a memory error correction on a particular Dual Inline Memory Module (DIMM).</td>
</tr>
<tr>
<td>Multi-bit memory errors detected on a memory device at location(s) &lt;location&gt;.</td>
<td>Critical</td>
<td>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.</td>
</tr>
<tr>
<td>Correctable memory error logging disabled for a memory device at location &lt;location&gt;.</td>
<td>Critical</td>
<td>This event is generated when the chipset in the ECC error correction rate exceeds a predefined limit.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC OS Watchdog timer expired.</td>
<td>Information</td>
<td>This event is generated when the BMC watchdog timer expires and no action is set.</td>
</tr>
<tr>
<td>BMC OS Watchdog performed system reboot.</td>
<td>Critical</td>
<td>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.</td>
</tr>
<tr>
<td>BMC OS Watchdog performed system power off.</td>
<td>Critical</td>
<td>This event is generated when the BMC watchdog detects that the system has power off.</td>
</tr>
</tbody>
</table>
### 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**

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory RAID redundancy degraded.</td>
<td>Warning</td>
<td>This event is generated when there is a memory failure in a RAID-configured memory configuration.</td>
</tr>
<tr>
<td>Memory RAID redundancy lost.</td>
<td>Critical</td>
<td>This event is generated when redundancy is lost in a RAID-configured memory configuration.</td>
</tr>
<tr>
<td>Memory RAID redundancy regained.</td>
<td>Information</td>
<td>This event is generated when the redundancy lost or degraded earlier is regained in a RAID-configured memory configuration.</td>
</tr>
<tr>
<td>Memory Mirrored redundancy degraded.</td>
<td>Warning</td>
<td>This event is generated when there is a memory failure in a mirrored memory configuration.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Memory Mirrored redundancy lost.</td>
<td>Critical</td>
<td>This event is generated when redundancy is lost in a mirrored memory configuration.</td>
</tr>
<tr>
<td>Memory Mirrored redundancy regained.</td>
<td>Information</td>
<td>This event is generated when the redundancy lost or degraded earlier is regained in a mirrored memory configuration.</td>
</tr>
<tr>
<td>Memory Spared redundancy degraded.</td>
<td>Warning</td>
<td>This event is generated when there is a memory failure in a spared memory configuration.</td>
</tr>
<tr>
<td>Memory Spared redundancy lost.</td>
<td>Critical</td>
<td>This event is generated when redundancy is lost in a spared memory configuration.</td>
</tr>
<tr>
<td>Memory Spared redundancy regained.</td>
<td>Information</td>
<td>This event is generated when the redundancy lost or degraded earlier is regained in a spared memory configuration.</td>
</tr>
<tr>
<td>Memory RAID is redundant.</td>
<td>Information</td>
<td>This event is generated when the memory redundancy mode has change to RAID redundant.</td>
</tr>
<tr>
<td>Memory RAID redundancy is lost. Check memory device at location(s) &lt;DIMM number&gt;.</td>
<td>Critical</td>
<td>This event is generated when redundancy is lost in a RAID-configured memory configuration.</td>
</tr>
<tr>
<td>Memory RAID redundancy is degraded. Check memory device at location(s) &lt;DIMM number&gt;.</td>
<td>Warning</td>
<td>This event is generated when there is a memory failure in a RAID-configured memory configuration.</td>
</tr>
<tr>
<td>Memory is not redundant.</td>
<td>Information</td>
<td>This event is generated when the memory redundancy mode has change to nonredundant.</td>
</tr>
<tr>
<td>Memory mirror is redundant.</td>
<td>Information</td>
<td>This event is generated when the memory redundancy mode has change to mirror redundant.</td>
</tr>
<tr>
<td>Memory mirror redundancy is lost. Check memory device at location(s) &lt;DIMM number&gt;.</td>
<td>Critical</td>
<td>This event is generated when redundancy is lost in a mirror-configured memory configuration.</td>
</tr>
<tr>
<td>Memory mirror redundancy is degraded. Check memory device at location &lt;DIMM number&gt;.</td>
<td>Warning</td>
<td>This event is generated when there is a memory failure in a mirror-configured memory configuration.</td>
</tr>
<tr>
<td>Memory spare is redundant.</td>
<td>Information</td>
<td>This event is generated when the memory redundancy mode has change to spare redundant.</td>
</tr>
<tr>
<td>Memory spare redundancy is lost. Check memory device at location &lt;DIMM number&gt;.</td>
<td>Critical</td>
<td>This event is generated when redundancy is lost in a spared-configured memory configuration.</td>
</tr>
</tbody>
</table>
Memory spare redundancy is degraded. Check memory device at location <DIMM number>.

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory spare redundancy is degraded. Check memory device at location &lt;DIMM number&gt;.</td>
<td>Warning</td>
<td>This event is generated when there is a memory failure in a spare-configured memory configuration.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log full detected.</td>
<td>Critical</td>
<td>This event is generated when the SEL device detects that only one entry can be added to the SEL before it is full.</td>
</tr>
<tr>
<td>Log cleared.</td>
<td>Information</td>
<td>This event is generated when the SEL is cleared.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive &lt;Drive #&gt; asserted fault state.</td>
<td>Critical</td>
<td>This event is generated when the specified drive in the array is faulty.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; de-asserted fault state.</td>
<td>Information</td>
<td>This event is generated when the specified drive recovers from a faulty condition.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; drive presence was asserted.</td>
<td>Information</td>
<td>This event is generated when the drive is installed.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; predictive failure was asserted.</td>
<td>Warning</td>
<td>This event is generated when the drive is about to fail.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; predictive failure was deasserted.</td>
<td>Information</td>
<td>This event is generated when the drive from earlier predictive failure is corrected.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; hot spare was asserted.</td>
<td>Warning</td>
<td>This event is generated when the drive is placed in a hot spare.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; hot spare was deasserted.</td>
<td>Information</td>
<td>This event is generated when the drive is taken out of hot spare.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; consistency check in progress was asserted.</td>
<td>Warning</td>
<td>This event is generated when the drive is placed in consistency check.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; consistency check in progress was deasserted.</td>
<td>Information</td>
<td>This event is generated when the consistency check of the drive is completed.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; in critical array was asserted.</td>
<td>Critical</td>
<td>This event is generated when the drive is placed in critical array.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; in critical array was deasserted.</td>
<td>Information</td>
<td>This event is generated when the drive is removed from critical array.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; in failed array was asserted.</td>
<td>Critical</td>
<td>This event is generated when the drive is placed in the fail array.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; in failed array was deasserted.</td>
<td>Information</td>
<td>This event is generated when the drive is removed from the fail array.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; rebuild in progress was asserted.</td>
<td>Information</td>
<td>This event is generated when the drive is rebuilding.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; rebuild aborted was asserted.</td>
<td>Warning</td>
<td>This event is generated when the drive rebuilding process is aborted.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; is installed.</td>
<td>Information</td>
<td>This event is generated when the drive is installed.</td>
</tr>
<tr>
<td>Drive &lt;Drive #&gt; is removed.</td>
<td>Critical</td>
<td>This event is generated when the drive is removed.</td>
</tr>
<tr>
<td>Fault detected on drive &lt;Drive #&gt;.</td>
<td>Critical</td>
<td>This event is generated when the specified drive in the array is faulty.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Intrusion sensor Name&gt; sensor detected an intrusion.</td>
<td>Critical</td>
<td>This event is generated when the intrusion sensor detects an intrusion.</td>
</tr>
<tr>
<td>&lt;Intrusion sensor Name&gt; sensor returned to normal state.</td>
<td>Information</td>
<td>This event is generated when the earlier intrusion has been corrected.</td>
</tr>
<tr>
<td>&lt;Intrusion sensor Name&gt; sensor intrusion was asserted while system was ON.</td>
<td>Critical</td>
<td>This event is generated when the intrusion sensor detects an intrusion while the system is on.</td>
</tr>
<tr>
<td>&lt;Intrusion sensor Name&gt; sensor intrusion was asserted while system was OFF.</td>
<td>Critical</td>
<td>This event is generated when the intrusion sensor detects an intrusion while the system is off.</td>
</tr>
<tr>
<td>The chassis is open.</td>
<td>Critical</td>
<td>This event is generated when the intrusion sensor detects an intrusion.</td>
</tr>
<tr>
<td>The chassis is closed.</td>
<td>Information</td>
<td>This event is generated when the earlier intrusion has been corrected.</td>
</tr>
<tr>
<td>The chassis is open while the power is on.</td>
<td>Critical</td>
<td>This event is generated when the intrusion sensor detects an intrusion while the system is on.</td>
</tr>
</tbody>
</table>
### 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**

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>The chassis is closed while the power is on.</td>
<td>Information</td>
<td>This event is generated when the earlier intrusion has been corrected while the power is on.</td>
</tr>
<tr>
<td>The chassis is open while the power is off.</td>
<td>Critical</td>
<td>This event is generated when the intrusion sensor detects an intrusion while the system is off.</td>
</tr>
<tr>
<td>The chassis is closed while the power is off.</td>
<td>Information</td>
<td>This event is generated when the earlier intrusion has been corrected while the power is off.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event Message</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Event I/O channel chk.</td>
<td>Critical</td>
<td>This event is generated when a critical interrupt is generated in the I/O Channel.</td>
</tr>
<tr>
<td>System Event PCI Parity Err.</td>
<td>Critical</td>
<td>This event is generated when a parity error is detected on the PCI bus.</td>
</tr>
<tr>
<td>System Event Chipset Err.</td>
<td>Critical</td>
<td>This event is generated when a chip error is detected.</td>
</tr>
<tr>
<td>System Event PCI System Err.</td>
<td>Information</td>
<td>This event indicates historical data, and is generated when the system has crashed and recovered.</td>
</tr>
<tr>
<td>System Event PCI Fatal Err.</td>
<td>Critical</td>
<td>This error is generated when a fatal error is detected on the PCI bus.</td>
</tr>
<tr>
<td>System Event PCIE Fatal Err.</td>
<td>Critical</td>
<td>This error is generated when a fatal error is detected on the PCIE bus.</td>
</tr>
<tr>
<td>POST Err.</td>
<td>Critical</td>
<td>This event is generated when an error occurs during system boot. See the system documentation for more information on the error code.</td>
</tr>
<tr>
<td>POST fatal error #&lt;number&gt; or &lt;error description&gt;.</td>
<td>Critical</td>
<td>This event is generated when a fatal error occurs during system boot. For more information, see POST Code Errors.</td>
</tr>
<tr>
<td>Memory Spared redundancy lost.</td>
<td>Critical</td>
<td>This event is generated when memory spare is no longer redundant.</td>
</tr>
<tr>
<td>Memory Mirrored redundancy lost.</td>
<td>Critical</td>
<td>This event is generated when memory mirroring is no longer redundant.</td>
</tr>
<tr>
<td>Memory RAID redundancy lost.</td>
<td>Critical</td>
<td>This event is generated when memory RAID is no longer redundant.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Err Reg Pointer OEM Diagnostic data event was asserted.</td>
<td>Information</td>
<td>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.</td>
</tr>
<tr>
<td>System Board PFault Fail Safe state asserted.</td>
<td>Critical</td>
<td>This event is generated when the system board voltages are not at normal levels.</td>
</tr>
<tr>
<td>System Board PFault Fail Safe state deasserted</td>
<td>Information</td>
<td>This event is generated when earlier PFault Fail Safe system voltages return to a normal level.</td>
</tr>
<tr>
<td>Memory Add (BANK# DIMM#) presence was asserted.</td>
<td>Information</td>
<td>This event is generated when memory is added to the system.</td>
</tr>
<tr>
<td>Memory Removed (BANK# DIMM#) presence was asserted.</td>
<td>Information</td>
<td>This event is generated when memory is removed from the system.</td>
</tr>
<tr>
<td>Memory Cfg Err configuration error (BANK# DIMM#) was asserted.</td>
<td>Critical</td>
<td>This event is generated when memory configuration is incorrect for the system.</td>
</tr>
<tr>
<td>Mem Redun Gain redundancy regained.</td>
<td>Information</td>
<td>This event is generated when memory redundancy is regained.</td>
</tr>
<tr>
<td>Mem ECC Warning transition to non-critical from OK.</td>
<td>Warning</td>
<td>This event is generated when correctable ECC errors have increased from a normal rate.</td>
</tr>
<tr>
<td>Mem ECC Warning transition to critical from less severe.</td>
<td>Critical</td>
<td>This event is generated when correctable ECC errors reach a critical rate.</td>
</tr>
<tr>
<td>Mem CRC Err transition to non-recoverable.</td>
<td>Critical</td>
<td>This event is generated when CRC errors enter a non-recoverable state.</td>
</tr>
<tr>
<td>Mem Fatal SB CRC uncorrectable ECC was asserted.</td>
<td>Critical</td>
<td>This event is generated while storing CRC errors to memory.</td>
</tr>
<tr>
<td>Mem Fatal NB CRC uncorrectable ECC was asserted.</td>
<td>Critical</td>
<td>This event is generated while removing CRC errors from memory.</td>
</tr>
<tr>
<td>Mem Overtemp critical over temperature was asserted.</td>
<td>Critical</td>
<td>This event is generated when system memory reaches critical temperature.</td>
</tr>
<tr>
<td>USB Over-current transition to non-recoverable</td>
<td>Critical</td>
<td>This event is generated when the USB exceeds a predefined current level.</td>
</tr>
<tr>
<td>Hdwr version err hardware incompatibility (BMC/iDRAC Firmware and CPU mismatch) was asserted.</td>
<td>Critical</td>
<td>This event is generated when there is a mismatch between the BMC and iDRAC firmware and the processor in use or vice versa.</td>
</tr>
<tr>
<td>Hdwr version err hardware incompatibility (BMC/iDRAC Firmware and CPU mismatch) was deasserted.</td>
<td>Information</td>
<td>This event is generated when an earlier mismatch between the BMC and iDRAC firmware and the processor is corrected.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SBE Log Disabled correctable memory error logging disabled was asserted.</td>
<td>Critical</td>
<td>This event is generated when the ECC single bit error rate is exceeded.</td>
</tr>
<tr>
<td>CPU Protocol Err transition to non-recoverable.</td>
<td>Critical</td>
<td>This event is generated when the processor protocol enters a non-recoverable state.</td>
</tr>
<tr>
<td>CPU Bus PERR transition to non-recoverable.</td>
<td>Critical</td>
<td>This event is generated when the processor bus PERR enters a non-recoverable state.</td>
</tr>
<tr>
<td>CPU Init Err transition to non-recoverable.</td>
<td>Critical</td>
<td>This event is generated when the processor initialization enters a non-recoverable state.</td>
</tr>
<tr>
<td>CPU Machine Chk transition to non-recoverable.</td>
<td>Critical</td>
<td>This event is generated when the processor machine check enters a non-recoverable state.</td>
</tr>
<tr>
<td>Logging Disabled all event logging disabled was asserted.</td>
<td>Critical</td>
<td>This event is generated when all event logging is disabled.</td>
</tr>
<tr>
<td>LinkT/FlexAddr: Link Tuning sensor, device option ROM failed to support link tuning or flex address (Mezz XX) was asserted</td>
<td>Critical</td>
<td>This event is generated when the PCI device option ROM for a NIC does not support link tuning or the Flex addressing feature.</td>
</tr>
<tr>
<td>LinkT/FlexAddr: Link Tuning sensor, failed to program virtual MAC address (&lt;location&gt;) was asserted</td>
<td>Critical</td>
<td>This event is generated when BIOS fails to program virtual MAC address on the given NIC device.</td>
</tr>
<tr>
<td>PCIE NonFatal Er: Non Fatal IO Group sensor, PCie error (&lt;location&gt;)</td>
<td>Warning</td>
<td>This event is generated in association with a CPU IERR.</td>
</tr>
<tr>
<td>I/O Fatal Err: Fatal IO Group sensor, fatal IO error (&lt;location&gt;)</td>
<td>Critical</td>
<td>This event is generated in association with a CPU IERR and indicates the PCI/PCIe device that caused the CPU IERR.</td>
</tr>
<tr>
<td>Unknown system event sensor unknown system hardware failure was asserted.</td>
<td>Critical</td>
<td>This event is generated when an unknown hardware failure is detected.</td>
</tr>
<tr>
<td>An I/O channel check error was detected.</td>
<td>Critical</td>
<td>This event is generated when a critical interrupt is generated in the I/O Channel.</td>
</tr>
<tr>
<td>A PCI parity error was detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Critical</td>
<td>This event is generated when a parity error is detected on the PCI bus.</td>
</tr>
<tr>
<td>A PCI parity error was detected on a component at slot &lt;number&gt;.</td>
<td>Critical</td>
<td>This event is generated when a parity error is detected on the PCI bus.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>A PCI system error was detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Critical</td>
<td>This is generated when the system has crashed and recovered.</td>
</tr>
<tr>
<td>A PCI system error was detected on a component at slot &lt;number&gt;.</td>
<td>Critical</td>
<td>This is generated when the system has crashed and recovered.</td>
</tr>
<tr>
<td>A bus correctable error was detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Critical</td>
<td>This is generated when the system has detected bus correctable errors.</td>
</tr>
<tr>
<td>A bus correctable error was detected on a component at slot &lt;number&gt;.</td>
<td>Critical</td>
<td>This is generated when the system has detected bus correctable errors.</td>
</tr>
<tr>
<td>A bus uncorrectable error was detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Critical</td>
<td>This is generated when the system has detected bus uncorrectable errors.</td>
</tr>
<tr>
<td>A bus uncorrectable error was detected on a component at slot &lt;number&gt;.</td>
<td>Critical</td>
<td>This is generated when the system has detected bus uncorrectable errors.</td>
</tr>
<tr>
<td>A fatal error was detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Critical</td>
<td>This error is generated when a fatal error is detected on the PCI bus.</td>
</tr>
<tr>
<td>A fatal error was detected on a component at slot &lt;number&gt;.</td>
<td>Critical</td>
<td>This error is generated when a fatal error is detected on the PCI bus.</td>
</tr>
<tr>
<td>A fatal IO error detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Critical</td>
<td>This error is generated when a fatal IO error is detected.</td>
</tr>
<tr>
<td>A fatal IO error detected on a component at slot &lt;number&gt;.</td>
<td>Critical</td>
<td>This error is generated when a fatal IO error is detected.</td>
</tr>
<tr>
<td>A non-fatal PCIe error detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Warning</td>
<td>This event is generated in association with a CPU IERR.</td>
</tr>
<tr>
<td>A non-fatal PCIe error detected on a component at slot &lt;number&gt;.</td>
<td>Warning</td>
<td>This event is generated in association with a CPU IERR.</td>
</tr>
<tr>
<td>A non-fatal IO error detected on a component at bus &lt;number&gt; device &lt;number&gt; function &lt;number&gt;.</td>
<td>Warning</td>
<td>This event is generated in association with a CPU IERR and indicates the PCI/PCIe device that caused the CPU IERR.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Memory device was added at location &lt;location&gt;.</td>
<td>Information</td>
<td>This event is generated when memory is added to the system.</td>
</tr>
<tr>
<td>Memory device is removed from location &lt;location&gt;.</td>
<td>Information</td>
<td>This event is generated when memory is removed from the system.</td>
</tr>
<tr>
<td>Unsupported memory configuration; check memory device at location &lt;location&gt;.</td>
<td>Critical</td>
<td>This event is generated when memory configuration is incorrect for the system.</td>
</tr>
<tr>
<td>Correctable memory error rate exceeded for &lt;location&gt;.</td>
<td>Warning</td>
<td>This event is generated when correctable ECC errors have increased from a normal rate.</td>
</tr>
<tr>
<td>Correctable memory error rate exceeded for &lt;location&gt;.</td>
<td>Critical</td>
<td>This event is generated when correctable ECC errors reach a critical rate.</td>
</tr>
<tr>
<td>Memory device at location &lt;location&gt; is overheating.</td>
<td>Critical</td>
<td>This event is generated when system memory reaches critical temperature.</td>
</tr>
<tr>
<td>An OEM diagnostic event occurred.</td>
<td>Information</td>
<td>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.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; protocol error detected.</td>
<td>Critical</td>
<td>This event is generated when the processor protocol enters a non-recoverable state.</td>
</tr>
<tr>
<td>CPU bus parity error detected.</td>
<td>Critical</td>
<td>This event is generated when the processor bus PERR enters a non-recoverable state.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; initialization error detected.</td>
<td>Critical</td>
<td>This event is generated when the processor initialization enters a non-recoverable state.</td>
</tr>
<tr>
<td>CPU &lt;number&gt; machine check error detected.</td>
<td>Critical</td>
<td>This event is generated when the processor machine check enters a non-recoverable state.</td>
</tr>
<tr>
<td>All event logging is disabled.</td>
<td>Critical</td>
<td>This event is generated when all event logging is disabled.</td>
</tr>
<tr>
<td>Logging is disabled.</td>
<td>Critical</td>
<td>This event is generated when the ECC single bit error rate is exceeded.</td>
</tr>
<tr>
<td>The system board fail-safe voltage is outside of range.</td>
<td>Critical</td>
<td>This event is generated when the system board voltages are not at normal levels.</td>
</tr>
<tr>
<td>The system board fail-safe voltage is within range.</td>
<td>Information</td>
<td>This event is generated when earlier Fail-Safe system voltages return to a normal level.</td>
</tr>
<tr>
<td>A hardware incompatibility detected between BMC/iDRAC firmware and CPU.</td>
<td>Critical</td>
<td>This event is generated when there is a mismatch between the BMC and iDRAC firmware and the processor in use or vice versa.</td>
</tr>
<tr>
<td>Event Message</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>A hardware incompatibility was corrected between BMC/iDRAC firmware and CPU.</td>
<td>Information</td>
<td>This event is generated when an earlier mismatch between the BMC and iDRAC firmware and the processor is corrected.</td>
</tr>
<tr>
<td>Device option ROM on embedded NIC failed to support Link Tuning or FlexAddress.</td>
<td>Critical</td>
<td>This event is generated when the PCI device option ROM for a NIC does not support link tuning or the Flex addressing feature.</td>
</tr>
<tr>
<td>Device option ROM on mezzanine card &lt;number&gt; failed to support Link Tuning or FlexAddress.</td>
<td>Critical</td>
<td>This event is generated when the PCI device option ROM for a NIC does not support link tuning or the Flex addressing feature.</td>
</tr>
<tr>
<td>Failed to program virtual MAC address on a component at bus &lt;bus&gt; device &lt;device&gt; function &lt;function&gt;.</td>
<td>Critical</td>
<td>This event is generated when BIOS fails to program virtual MAC address on the given NIC device.</td>
</tr>
<tr>
<td>Failed to get Link Tuning or FlexAddress data from iDRAC.</td>
<td>Critical</td>
<td>This event is generated when BIOS could not obtain virtual MAC address or Link Tuning data from iDRAC.</td>
</tr>
<tr>
<td>An unknown system hardware failure detected.</td>
<td>Critical</td>
<td>This event is generated when an unknown hardware failure is detected.</td>
</tr>
<tr>
<td>POST fatal error &lt;error description&gt;</td>
<td>Critical</td>
<td>This event is generated when a fatal error occurs during system boot. For more information, see POST Code Errors.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Fatal Error Code</th>
<th>Description</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>No memory detected.</td>
<td>This error code implies that no memory is installed.</td>
</tr>
<tr>
<td>81</td>
<td>Memory detected but is not configurable.</td>
<td>This error code indicates memory configuration error that could be a result of bad memory, mismatched memory or bad socket.</td>
</tr>
<tr>
<td>82</td>
<td>Memory configured but not usable.</td>
<td>This error code indicates memory sub-system failure.</td>
</tr>
<tr>
<td>83</td>
<td>System BIOS shadow failure.</td>
<td>This error code indicates system BIOS shadow failure.</td>
</tr>
<tr>
<td>84</td>
<td>CMOS failure.</td>
<td>This error code indicates that CMOS RAM is not working.</td>
</tr>
<tr>
<td>85</td>
<td>DMA controller failure.</td>
<td>This error code indicates DMA controller failure.</td>
</tr>
</tbody>
</table>
### Fatal Error Code

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>86</td>
<td>Interrupt controller failure.</td>
<td>This error code indicates interrupt controller failure.</td>
</tr>
<tr>
<td>87</td>
<td>Timer refresh failure.</td>
<td>This error code indicates timer refresh failure.</td>
</tr>
<tr>
<td>88</td>
<td>Programmable interval timer error.</td>
<td>This error code indicates a programmable interval timer error.</td>
</tr>
<tr>
<td>89</td>
<td>Parity error.</td>
<td>This error code indicates a parity error.</td>
</tr>
<tr>
<td>8A</td>
<td>SIO failure.</td>
<td>This error code indicates SIO failure.</td>
</tr>
<tr>
<td>8B</td>
<td>Keyboard controller failure.</td>
<td>This error code indicates keyboard controller failure.</td>
</tr>
<tr>
<td>8C</td>
<td>SMI initialization failure.</td>
<td>This error code indicates SMI initialization failure.</td>
</tr>
<tr>
<td>C0</td>
<td>Shutdown test failure.</td>
<td>This error code indicates a shutdown test failure.</td>
</tr>
<tr>
<td>C1</td>
<td>POST Memory test failure.</td>
<td>This error code indicates bad memory detection.</td>
</tr>
<tr>
<td>C2</td>
<td>RAC configuration failure.</td>
<td>Check screen for the actual error message.</td>
</tr>
<tr>
<td>C3</td>
<td>CPU configuration failure.</td>
<td>Check screen for the actual error message.</td>
</tr>
<tr>
<td>C4</td>
<td>Incorrect memory configuration.</td>
<td>Memory population order not correct.</td>
</tr>
<tr>
<td>FE</td>
<td>General failure after video.</td>
<td>Check screen for the actual error message.</td>
</tr>
</tbody>
</table>

### Operating System Generated System Events

**Table 18. Operating System Generated System Events**

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Event: OS stop event OS graceful shutdown detected</td>
<td>Information</td>
<td>The operating system was shutdown/restarted normally.</td>
</tr>
<tr>
<td>OEM Event data record (after OS graceful shutdown/restart event)</td>
<td>Information</td>
<td>Comment string accompanying an operating system shutdown/restart.</td>
</tr>
<tr>
<td>System Event: OS stop event runtime critical stop</td>
<td>Critical</td>
<td>The operating system encountered a critical error and was stopped abnormally.</td>
</tr>
<tr>
<td>OEM Event data record (after OS bugcheck event)</td>
<td>Information</td>
<td>Operating system bugcheck code and parameters.</td>
</tr>
<tr>
<td>A critical stop occurred during OS load.</td>
<td>Critical</td>
<td>The operating system encountered a critical error and was stopped abnormally while loading.</td>
</tr>
</tbody>
</table>
A runtime critical stop occurred.

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>The operating system encountered a critical error and was stopped abnormally.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An OS graceful stop occurred.

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>The operating system was stopped.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An OS graceful shut-down occurred.

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>The operating system was shut down normally.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Cable Interconnect Events

The cable interconnect messages in the table are used for detecting errors in the hardware cabling.

#### Table 19. Cable Interconnect Events

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable sensor <code>&lt;Name/Location&gt;</code> Configuration error was asserted.</td>
<td>Critical</td>
<td>This event is generated when the cable is not connected or is incorrectly connected.</td>
</tr>
<tr>
<td>Cable sensor <code>&lt;Name/Location&gt;</code> Connection was asserted.</td>
<td>Information</td>
<td>This event is generated when the earlier cable connection error was corrected.</td>
</tr>
<tr>
<td>The <code>&lt;name&gt;</code> cable or interconnect is not connected or is improperly connected.</td>
<td>Critical</td>
<td>This event is generated when the named cable or interconnect is not connected or is incorrectly connected.</td>
</tr>
<tr>
<td>The <code>&lt;name&gt;</code> cable or interconnect is connected.</td>
<td>Information</td>
<td>This event is generated when named cable or interconnect earlier cable or interconnect connection error was corrected.</td>
</tr>
</tbody>
</table>

### Battery Events

#### Table 20. Battery Events

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;Battery sensor Name/Location&gt;</code> Failed was asserted</td>
<td>Critical</td>
<td>This event is generated when the sensor detects a failed or missing battery.</td>
</tr>
<tr>
<td><code>&lt;Battery sensor Name/Location&gt;</code> Failed was deasserted</td>
<td>Information</td>
<td>This event is generated when the earlier failed battery was corrected.</td>
</tr>
<tr>
<td><code>&lt;Battery sensor Name/Location&gt;</code> is low was asserted</td>
<td>Warning</td>
<td>This event is generated when the sensor detects a low battery condition.</td>
</tr>
<tr>
<td><code>&lt;Battery sensor Name/Location&gt;</code> is low was deasserted</td>
<td>Information</td>
<td>This event is generated when the earlier low battery condition was corrected.</td>
</tr>
<tr>
<td>The <code>&lt;Battery sensor Name/Location&gt;</code> battery is low.</td>
<td>Warning</td>
<td>This event is generated when the sensor detects a low battery condition.</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board Power Optimized: Performance status sensor for System Board, degraded, &lt;description of why&gt; was deasserted</td>
<td>Normal</td>
<td>This event is generated when system performance was restored.</td>
</tr>
<tr>
<td>System Board Power Optimized: Performance status sensor for System Board, degraded, &lt;description of why&gt; was asserted</td>
<td>Warning</td>
<td>This event is generated when change in power supply degrades system performance.</td>
</tr>
<tr>
<td>System Board Power Optimized: Performance status sensor for System Board, degraded, power capacity changed was asserted</td>
<td>Warning</td>
<td>This event is generated when change in power supply degrades system performance.</td>
</tr>
<tr>
<td>System Board Power Optimized: Performance status sensor for System Board, degraded, power capacity changed was deasserted</td>
<td>Normal</td>
<td>This event is generated when the system performance is restored.</td>
</tr>
<tr>
<td>System Board Power Optimized: Performance status sensor for System Board, degraded, user defined power capacity was asserted</td>
<td>Warning</td>
<td>This event is generated when a change in power supply degrades system performance.</td>
</tr>
<tr>
<td>System Board Power Optimized: Performance status sensor for System Board, degraded, user defined power capacity was deasserted</td>
<td>Normal</td>
<td>This event is generated when the system performance is restored.</td>
</tr>
<tr>
<td>System Board Power Optimized: Performance status sensor for System Board, Halted, system power exceeds capacity was asserted</td>
<td>Critical</td>
<td>This event is generated when a change in power supply degrades system performance.</td>
</tr>
</tbody>
</table>
System Board Power Optimized: Performance status sensor for System Board, Halted, system power exceeds capacity was deasserted

The system performance degraded.

The system performance degraded because of thermal protection.

The system performance degraded because cooling capacity has changed.

The system performance degraded because power capacity has changed.

The system performance degraded because of user-defined power capacity has changed.

The system halted because system power exceeds capacity.

The system performance degraded because power exceeds capacity.

The system performance degraded because power draw exceeds the power threshold.

The system performance restored

Entity Presence Events

The entity presence messages are used for detecting different hardware devices.

Table 22. Entity Presence Events

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Device Name&gt; presence was asserted</td>
<td>Information</td>
<td>This event is generated when the device was detected.</td>
</tr>
<tr>
<td>&lt;Device Name&gt; absent was asserted</td>
<td>Critical</td>
<td>This event is generated when the device was not detected.</td>
</tr>
<tr>
<td>The &lt;Device Name&gt; is present.</td>
<td>Information</td>
<td>This event is generated when the device was detected.</td>
</tr>
<tr>
<td>Description</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>The &lt;Device Name&gt; is absent.</td>
<td>Critical</td>
<td>This event is generated when the device was not detected.</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Description</th>
<th>Severity</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Board Video Riser: Module sensor for System Board, device removed was asserted</td>
<td>Critical</td>
<td>This event is generated when the required module is removed.</td>
</tr>
<tr>
<td>Mezz B&lt;slot number&gt; Status: Add-in Card sensor for Mezz B&lt;slot number&gt;, install error was asserted</td>
<td>Critical</td>
<td>This event is generated when an incorrect Mezzanine card is installed for I/O fabric.</td>
</tr>
<tr>
<td>Mezz C&lt;slot number&gt; Status: Add-in Card sensor for Mezz C&lt;slot number&gt;, install error was asserted</td>
<td>Critical</td>
<td>This event is generated when an incorrect Mezzanine card is installed for I/O fabric.</td>
</tr>
<tr>
<td>Hdwar version err: Version Change sensor, hardware incompatibility was asserted</td>
<td>Critical</td>
<td>This event is generated when an incompatible hardware is detected.</td>
</tr>
<tr>
<td>Hdwar version err: Version Change sensor, hardware incompatibility (BMC firmware) was asserted</td>
<td>Critical</td>
<td>This event is generated when a hardware is incompatible with the firmware.</td>
</tr>
<tr>
<td>Hdwar version err: Version Change sensor, hardware incompatibility (BMC firmware and CPU mismatch) was asserted</td>
<td>Critical</td>
<td>This event is generated when the CPU and firmware are not compatible.</td>
</tr>
<tr>
<td>Link Tuning: Version Change sensor, successful software or F/W change was deasserted</td>
<td>Warning</td>
<td>This event is generated when the link tuning setting for proper NIC operation fails to update.</td>
</tr>
<tr>
<td>Link Tuning: Version Change sensor, successful hardware change &lt;device slot number&gt; was deasserted</td>
<td>Warning</td>
<td>This event is generated when the link tuning setting for proper NIC operation fails to update.</td>
</tr>
<tr>
<td>LinkT/FlexAddr: Link Tuning sensor, failed to program virtual MAC address (Bus # Device # Function #) was asserted</td>
<td>Critical</td>
<td>This event is generated when Flex address can be programmed for this device.</td>
</tr>
<tr>
<td>Description</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>LinkT/FlexAddr: Link Tuning sensor, device option ROM failed to support link tuning or flex address (Mezz &lt;location&gt;) was asserted</td>
<td>Critical</td>
<td>This event is generated when ROM does not support Flex address or link tuning.</td>
</tr>
<tr>
<td>LinkT/FlexAddr: Link Tuning sensor, failed to get link tuning or flex address data from BMC/iDRAC was asserted</td>
<td>Critical</td>
<td>This event is generated when link tuning or Flex address information is not obtained from BMC/iDRAC.</td>
</tr>
<tr>
<td>The &lt;name&gt; is removed.</td>
<td>Critical</td>
<td>This event is generated when the device was removed.</td>
</tr>
<tr>
<td>The &lt;name&gt; is inserted.</td>
<td>Information</td>
<td>This event is generated when the device was inserted or installed.</td>
</tr>
<tr>
<td>A fabric mismatch detected between IOM and mezzanine card &lt;number&gt;.</td>
<td>Critical</td>
<td>This event is generated when an incorrect Mezzanine card is installed for I/O fabric.</td>
</tr>
<tr>
<td>Hardware incompatibility detected with mezzanine card &lt;number&gt;.</td>
<td>Critical</td>
<td>This event is generated when an incorrect Mezzanine card is installed in the system.</td>
</tr>
<tr>
<td>The QuickPath Interconnect (QPI) width degraded.</td>
<td>Warning</td>
<td>This event is generated when the bus is not operating at maximum speed or width.</td>
</tr>
<tr>
<td>The QuickPath Interconnect (QPI) width regained.</td>
<td>Information</td>
<td>This event is generated when the bus is operating at maximum speed or width.</td>
</tr>
<tr>
<td>BIOS detected an error configuring the Intel Trusted Execution Technology (TXT).</td>
<td>Critical</td>
<td>This event is generated when TXT initialization failed.</td>
</tr>
<tr>
<td>Processor detected an error while performing an Intel Trusted Execution Technology (TXT) operation.</td>
<td>Critical</td>
<td>This event is generated when TXT CPU microcode boot failed.</td>
</tr>
<tr>
<td>BIOS Authenticated Code Module detected an Intel Trusted Execution Technology (TXT) error during POST.</td>
<td>Critical</td>
<td>This event is generated when TXT Post failed.</td>
</tr>
<tr>
<td>SINIT Authenticated Code Module detected an Intel Trusted Execution Technology (TXT) error at boot.</td>
<td>Critical</td>
<td>This event is generated when the Authenticated Code Module detected a TXT initialization failure.</td>
</tr>
<tr>
<td>Intel Trusted Execution Technology (TXT) is operating correctly.</td>
<td>Information</td>
<td>This event is generated when the TXT returned from a previous failure.</td>
</tr>
<tr>
<td>Failure detected on Removable Flash Media &lt;name&gt;.</td>
<td>Critical</td>
<td>This event is generated when the SD card module is installed but improperly configured or failed to initialize.</td>
</tr>
<tr>
<td>Description</td>
<td>Severity</td>
<td>Cause</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Removable Flash Media <code>&lt;name&gt;</code> is write protected.</td>
<td>Warning</td>
<td>This event is generated when the module is write-protected. Changes may not be written to the media.</td>
</tr>
<tr>
<td>Internal Dual SD Module is redundant.</td>
<td>Information</td>
<td>This event is generated when both SD cards are functioning properly.</td>
</tr>
<tr>
<td>Internal Dual SD Module redundancy is lost.</td>
<td>Critical</td>
<td>This event is generated when either one of the SD cards or both the SD cards are not functioning properly.</td>
</tr>
</tbody>
</table>