# Quantum

## SNMP Reference Guide

## Quantum DXi-Series

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# Preface

This manual provides a reference to using SNMP (Simple Network Management Protocol) with a Quantum DXi™-Series system.

## Audience

This manual is written for DXi™ system administrators and field service engineers.

Note:  It is useful for the audience to have a basic understanding of UNIX® and backup/recovery systems.

## Document Organization

Following is a brief description of chapter contents.

- Chapter 1, Description provides an overview of SNMP.

- Chapter 2, SNMP Agent provides information on the SNMP agent.

- Chapter 3, SNMP Traps provides information on the supported SNMP traps.

## Notational Conventions

This manual uses the following conventions:

> **Note:** Note emphasizes important information related to the main topic.

> **Caution:** Caution indicates potential hazards to equipment or data.

> **WARNING:** Warning indicates potential hazards to personal safety.

- Right side of the system - Refers to the right side as you face the component being described.
- Left side of the system - Refers to the left side as you face the component being described.
- Data sizes are reported in base 1000 rather than base 1024. For example:
  - 1 MB = 1,000,000 bytes
  - 1 GB = 1,000,000,000 bytes
  - 1 TB = 1,000,000,000,000 bytes

## Related Documents

The following Quantum documents are also available for DXi-Series systems:

| Document No. | Document Title | Document Description |
|---|---|---|
| 6-00618 | *System Safety and Regulatory Information - Quantum Products* | Lists all safety and regulatory information for all Quantum products. |

For the most up to date information on the DXi-Series, see:

http://www.quantum.com/ServiceandSupport/Index.aspx

## Contacts

Quantum company contacts are listed below.

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## Worldwide End-User Product Warranty

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http://www.quantum.com/pdf/QuantumWarranty.pdf

# Chapter 1
# Description

Simple Network Management Protocol (SNMP) is a light-weight protocol designed for remote management and monitoring of infrastructure devices. DXi-Series systems (DXi V1000, DXi4000, DXi6500, DXi6700, and DXi8500) provide SNMP support so you can use a framework application to monitor the status of the system. Using SNMP, you can be alerted of numerous system events.

The DXi also provides detailed status reports from its own reporting system, called the Reliability, Availability, and Serviceability (Service) ticket system. Service tickets enable system administrators to diagnose specific system events.

# SNMP Functionality Available to Remote Applications

The DXi supports standard SNMP functionality, including GET queries and unicast traps (which can be sent only to registered recipients), that enables you to monitor system status from a remote application. SET commands are currently not enabled on the DXi.

All DXi MIB variables are supported by Quantum for remote management of the system.

Specific SNMP characteristics include:

- Supports SNMP v1 and v2c.

- Supports SNMP v1 and v2 traps as defined by RFC 1157. You can set the system to report SNMP traps using either v1 or v2 (v1 is the default). The timeout for all SNMP requests to the system must be at 10 seconds or greater (command line parameter-t).

- SMIv2 compliance only.

- Usage of port 161 for GET queries.

- Default community read/trap strings: *publicCmtyStr (see* SNMP Community Strings *on page 6)*.

- Trap Registration interface in the system's remote web client, which enables you to configure application IP addresses, transport protocols, and user-configurable UDP port numbers to receive traps

# Accessing SNMP Information

SNMP information can be obtained from the DXi using traps and GET queries. Using the information contained in this guide, system administrators can configure their framework application to generate alerts to receive SNMP information.

By default, most SNMP information is returned as an integer value (system partition names, however, are returned as string values). For instance, the return value of *system Main Door* might be 2, which indicates that the system door is closed.

You can, however, configure the framework application to return status information as a string value, which provides a description of the status.

**SNMPv3**

The DXi supports SNMP version 1 and version 2c for MIB information retrieval.

To access the system for SNMP support, use the following values as needed in the remote management application:

- **User name** - Admin

- **Context name -** (None. Leave this field blank.)

- **Authentication protocol** - MD5

- **Privacy protocol** - (None. Leave this field blank.)

- **Password** - Your Admin password

For secure access to the system using SNMP, disable SNMPv1 and SNMPv2c access from the remote management console.

# SNMP Traps

Traps enable alerts to be sent automatically to registered hosts when specific events occur. Only one application per UDP port can listen for traps.

The DXi supports SNMP v1 and v2 traps as defined by RFC 1157. The timeout for all SNMP requests to the system must be at 10 seconds or greater (command line parameter-t).

To receive traps, perform the following steps:

1 Configure your framework application to collect traps from the DXi.

2 Access the DXi remote management console and navigate to the **Configuration > Notifications > SNMP > Destinations** page (see Figure 1).

Figure 1  Destinations Page
(DXi8500 Shown)
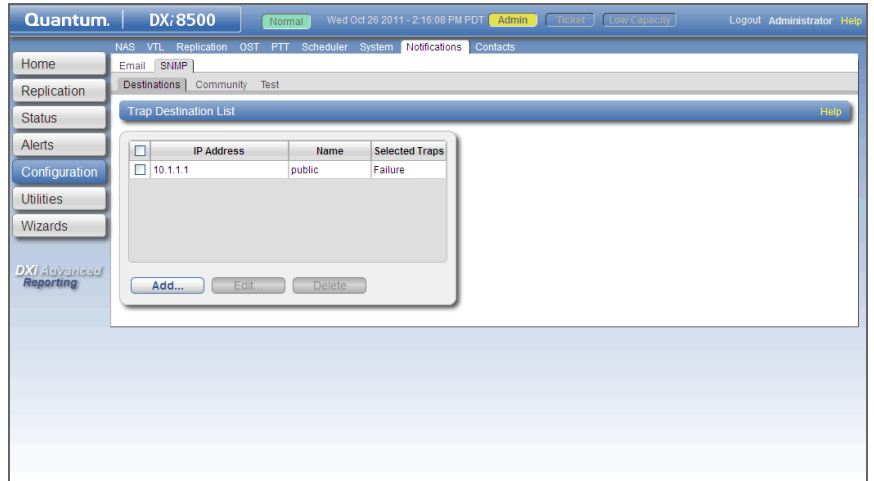


**3** Click **Add** to add an SNMP destination (see Figure 2).

Figure 2  Add Trap Destination
Page (DXi8500 Shown)
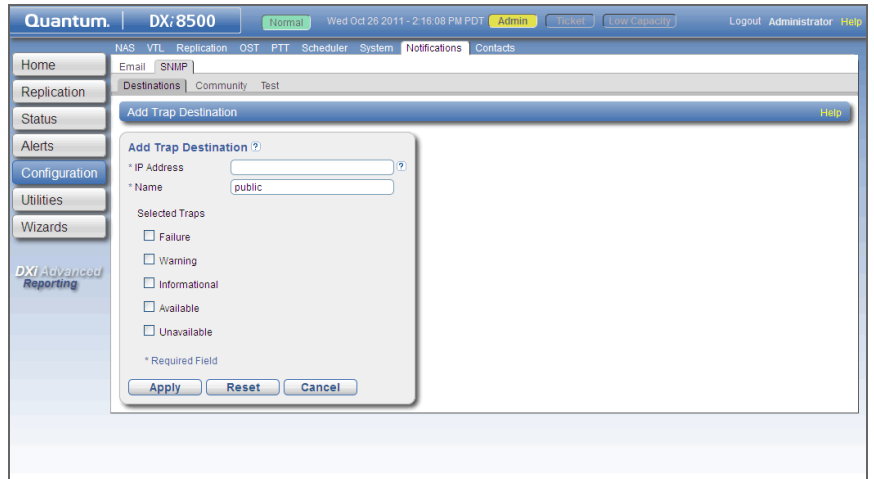


**4** Enter information about the destination:

- **IP Address** - Enter the IP address of the system that will receive the traps generated by the DXi.

> **Note:** When entering IP addresses, never use an address that is in a reserved IP address range. To see a list of reserved IP address ranges, click the quick tip icon **[?]** located near the IP address field.

- **Name** - Enter the name of the destination.

5  Select one or more traps to send to the destination:

- **Failure** - Sends failure traps.

- **Warning** - Sends warning traps.

- **Informational** - Sends informational traps.

- **Available** - Sends a trap when the system transitions from an unavailable to an available state.

- **Unavailable** - Sends a trap when the system transitions from an available to an unavailable state.

6  Click **Apply**.

For more information about registering a host with the DXi, see the *User's Guide* for your DXi system.

# SNMP Queries

SNMP queries, or GET queries, can be initiated on a periodic basis by the framework application. By querying the MIB, hosts can gather status information about specific components of the system. Frequent MIB queries are not required, however, since the SNMP agent is event-driven.

> **Note:** As with any SNMP device, excessive MIB queries can result in performance degradation for the SNMP daemon, as well as for the network.

GETs must also include an instance ID. The instance identifies a specific device from which you can retrieve status information. For example, to determine if the second partition on a DXi is online, access the MIB variable for logical system online status and select the instance for partition 2.

# SNMP Community Strings

An SNMP community string is a text string that acts as a password to authenticate messages sent between the SNMP remote management application and the device (the SNMP agent). SNMP **Get** and **Get-next** requests are valid only if the community string in the request matches the community string at the device. If the community strings do not match, either modify the community string at the device so that it is the string that the management station expects, or modify the management station so that it uses the device's community strings.

The community string is included in every SNMPv1 and SNMPv2C packet transmitted between the SNMP manager and the SNMP agent. This string is case sensitive, cannot be empty, and cannot exceed 32 characters.

To add a community:

**1** Access the DXi remote management console and navigate to the **Configuration > Notifications > SNMP > Community** page (see Figure 3).

Figure 3  Community Page (DXi8500 Shown)
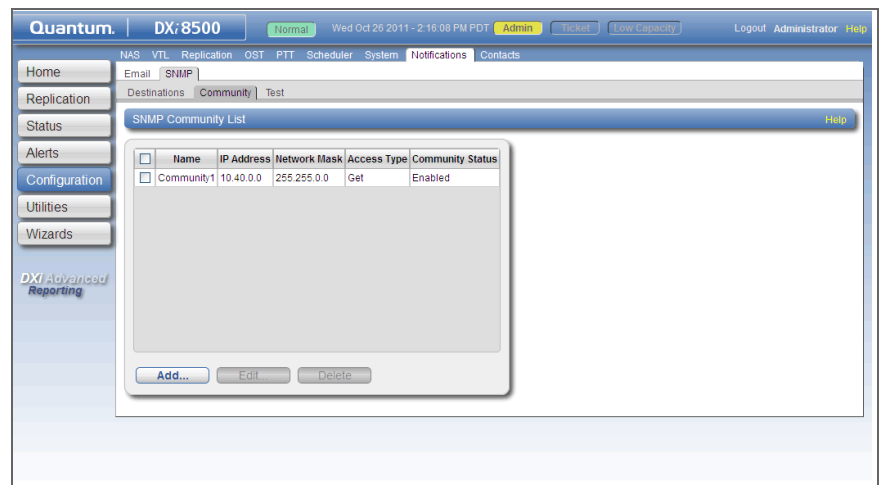


**2** Click **Add** to an SNMP community (see Figure 4).

Figure 4  Add SNMP
Community Page (DXi8500
Shown)
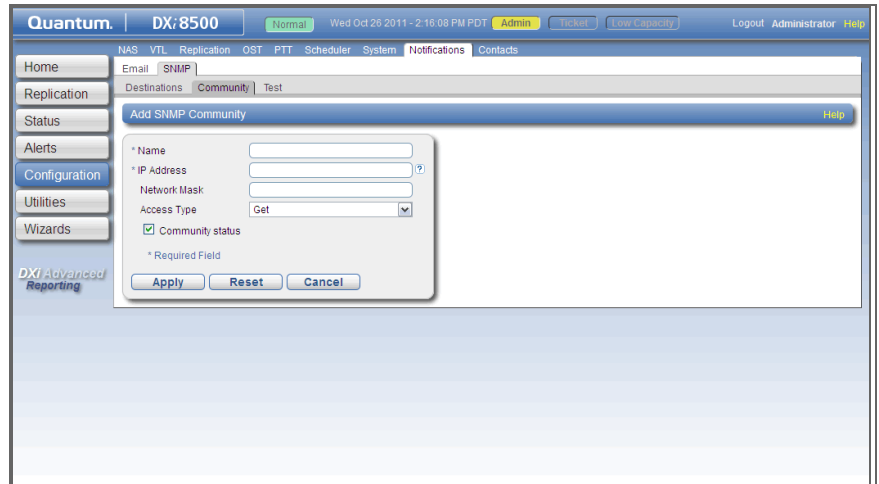


**3** In the **Name** box, enter a unique **Name** for the community (up to 20 characters).

Valid characters are letters, numbers, hyphens, and underscores.

**4** Enter a valid **IP Address and Network Mask** pair.

A pair is valid if performing a logical bitwise **AND** operation on the IP address and the network mask results in the IP address. See the table below for examples:

| IP Address / Network Mask | Result |
| --- | --- |
| 10.40.166.87<br>255.255.255.255 | Allows access only from 10.40.166.87 |
| 10.40.166.87<br>10.40.166.87 | Allows access only from 10.40.166.87 |
| 10.40.166.87<br>10.40.166.0 | Invalid because the logical bitwise operation (address **AND** mask) is not equal to the address |
| 10.40.166.87<br>255.255.0.0 | Invalid because the logical bitwise operation (address **AND** mask) is not equal to the address |

| IP Address / Network Mask | Result |
|---|---|
| 10.40.0.0<br>255.255.0.0 | Allows access from any client with address 10.40.xx.xx |

**Note:** If you define a single community and set both the IP address and network mask to 0.0.0.0 (or leave both blank), then IP address-based access control is disabled. In this case, the SNMP agent is accessible from any IP address.

**Note:** When entering IP addresses, never use an address that is in a reserved IP address range. To see a list of reserved IP address ranges, click the quick tip icon **[?]** located near the IP address field.

5 In the **Access Type** drop-down box, select the access type for the community:

- **Get** - Allows SNMP get operations.
- **Get/Set** - Allows both SNMP **get** and **put** operations.

6 Select the **Community status** check box to enable the community.

Or clear the **Community status** check box to disable the community.

7 Click **Apply**.

# Chapter 2
# SNMP Agent

The DXi operating system is running Linux and the SNMP Agent residing within the DXi is the Net-SNMP 5.4. Whenever a request comes in to the SNMP Agent, the agent will parse the request and decide how to process. The SNMP Agent responds directly to any requests for non-Quantum specific MIB objects such as the MIB-II (defined in rfc1213) but if the request is for a Quantum specific MIB object, it will pass the data to the SNMP subagent that processes all the Quantum specific MIB objects. The SNMP subagent processes the request and returns the data to the Net-SNMP agent.

## Quantum SNMP MIB

The SNMP agent that supports the DXi system also supports the general Quantum MIB, QUANTUM-SNMP.MIB. The object ID for the Quantum MIB is as follows (see Figure 5):

.1(iso).3(org).6(dod).1(internet).4(private).1(enterprises).2036(atlp).2(quantum).1(quantumsnmp)

**Note:** A copy of the QUANTUM-SNMP.MIB is located on the product documentation CD provided with the DXi.

There are 5 groups under.1(quantumsnmp) tree:

| | |
|---|---|
| qSystemInfo | .1.3.6.1.4.1.2036.2.1.1 |
| qTrapDestination | .1.3.6.1.4.1.2036.2.1.2 |
| qTrapEnable | .1.3.6.1.4.1.2036.2.1.3 |
| qTraps | .1.3.6.1.4.1.2036.2.1.4 |
| qSerialNumber | .1.3.6.1.4.1.2036.2.1.1.12 |

Figure 5  Quantum SNMP
Object ID

root

iso (1)

org (3)

dod (6)

internet (1)

private (4)

enterprises (1)

atlp (2036)

quantum (2)

quantumsnmp (1)

qSystemInfo (1)

qDeviceName (1)
qAssignedName (2)
qLocation (3)
qVendorId (4)
qProdId (5)
qProdRev (6)
qState (7)
qSerialNumber (8)

qTrapDestination (2)

qTrapAddress1 (1)
qTrapAddress2 (2)
qTrapAddress3 (3)
qTrapAddress4 (4)
qTrapAddress5 (5)

qTraps (4)

qInfoTrap (1)
qWarningTrap (2)
qCriticallTrap (3)
qAvailableTrap (4)
qUnavailableTrap(5)
qNoInterventionNeededTrap(6)
qRequestedInterventionTrap(7)
qRequiredInterventionTrap(8)

qTrapEnabled (3)

qInfoEnable (1)
qWarningEnable (2)
qCriticalEnable (3)
qAvailableEnable (4)
qUnavailableEnable (5)
qNoInterventionNeededEnable(6)
qRequestedInterventionEnable(7)
qRequiredInterventionEnable(8)

# qSystemInfo Group

The DXi supports the following 8 of objects of the qSystemInfo group. Some are read-only (RO) objects; some are read-write (RW) objects; and some are "accessible-for-notify" objects. The "accessible-for-notify" objects are objects that will be sent as information when notifications or traps are sent, not readable or writable from a management console. From the management console, only the get request operation can be applied to the RO objects, and both get and set request operations can be applied to the RW objects.

## qDeviceName

qDeviceName is a RO object, with the object ID .1.3.6.1.4.1.2036.2.1.1.1. This is the host name of the device.

## qAssignedName

qAssignedName is a RW object, with the object ID .1.3.6.1.4.1.2036.2.1.1.2. This is the emulated storage library name. If none is given, the default value is the name of the device (qDeviceName).

## qLocation

qLocation is a RW object, with the object ID .1.3.6.1.4.1.2036.2.1.1.3. This is the location of the DXi. If none is provided, the value is an empty string.

## qVendorId

qVendorId is a RO object, with the object ID .1.3.6.1.4.1.2036.2.1.1.4. This is the manufacturing vendor ID.

## qProdId

qProdId is a RO object, with the object ID .1.3.6.1.4.1.2036.2.1.1.5. This is the product model number.

**qProdRev**

qProdRev is a RO object, with the object ID .1.3.6.1.4.1.2036.2.1.1.6. This is the product revision number.

**qState**

qState is a RO object, with the object ID .1.3.6.1.4.1.2036.2.1.1.7. This is the current state of the emulated storage library.

**qSerialNumber**

qSerialNumber is a RO object, with the object ID .1.3.6.1.4.1.2036.2.1.1.12. This is the serial number of the Quantum device.

# qTrapDestination Group

There are 5 read-write objects in the qTrapDestination group. They are the IP addresses of the Management Consoles that are allowed to receive traps from the SNMP Agent. The maximum number of trap destination IP addresses that can be set in the agent is 5. Currently the DXi implements these as Read Only objects and the trap addresses are configurable only through the remote management console.

**qTrapAddress1**

qTrapAddress1 has an object ID of .1.3.6.1.4.1.2036.2.1.2.1. This object is the IP address of the Management Console the traps will be sent to.

**qTrapAddress2**

qTrapAddress2 has an object ID of .1.3.6.1.4.1.2036.2.1.2.2. This object is the IP address of the Management Console the traps will be sent to.

**qTrapAddress3**

qTrapAddress3 has an object ID of .1.3.6.1.4.1.2036.2.1.2.3. This object is the IP address of the Management Console the traps will be sent to.

**qTrapAddress4**　　　　　　qTrapAddress4 has an object ID of .1.3.6.1.4.1.2036.2.1.2.4. This object is the IP address of the Management Console the traps will be sent to.

**qTrapAddress5**　　　　　　qTrapAddress5 has an object ID of .1.3.6.1.4.1.2036.2.1.2.5. This object is the IP address of the Management Console the traps will be sent to.

# qTrapEnable Group

There are 8 read-write objects in the qTrapEnable group. Each object determines whether the specific type of trap should be sent to the defined management station(s) or not. If the object value is 1(disabled), the trap will not be sent. If the object value is 2(enabled), the trap will be sent.

**qInfoEnable**　　　　　　qInfoEnable has an object ID of .1.3.6.1.4.1.2036.2.1.3.1. This object determines whether the device should send the Informational notification to the Management Console.

**qWarningEnable**　　　　　　qWarningEnable has an object ID of .1.3.6.1.4.1.2036.2.1.3.2. This object determines whether the device should send the Warning notification to the Management Console.

**qCriticalEnable**　　　　　　qCriticalEnable has an object ID of .1.3.6.1.4.1.2036.2.1.3.3. This object determines whether the device should send the Critical notification to the Management Console.

**qAvailableEnable**　　　　　　qAvailableEnable has an object ID of .1.3.6.1.4.1.2036.2.1.3.4. This object determines whether the device should notify the management console when the library is available.

**qUnavailableEnable**

qUnavailableEnable has an object ID of .1.3.6.1.4.1.2036.2.1.3.5. This object determines whether the device should notify the management console when the library is unavailable.

**qNoInterventionNeede dEnable**

qNoInterventionNeededEnable has an object ID of.1.3.6.1.4.1.2036.2.1.3.6. This object determines whether the device should send the "No User Intervention Needed" notification to the Management Console. This object is not used by the DXi.

**qRequestedInterventio nEnable**

qRequestedInterventionEnable has an object ID of .1.3.6.1.4.1.2036.2.1.3.7. This object determines whether the device should send the "Requested User Intervention" notification to the Management Console. This object is not used by the DXi.

**qRequiredInterventionE nable**

qRequiredInterventionEnable has an object ID of .1.3.6.1.4.1.2036.2.1.3.8. This object determines whether the device should send the "Required User Intervention" notification to the Management Console. This object is not used by the DXi.

# qTraps Group

There are 8 objects in the qTraps group, representing the 8 different types of traps. They are v2 traps with information includes: qAssignedName, qSenseKey, qAsc, qAscq, and qTrapDescription.

**qInfoTrap**

qInfoTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.1. The informational traps will be sent if qInfoEnable is set to enabled.

**qWarningTrap**

qWarningTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.2. The warning traps will be sent if qWarningEnable is set to enabled.

**qCriticalTrap**

qCriticalTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.3. The critical traps will be sent if qCriticalEnable is set to enabled.

**qAvailableTrap**

qAvailableTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.4. The available traps will be sent if qAvailableEnable is set to enabled.

**qUnavailableTrap**

qUnavailableTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.5. The unavailable traps will be sent if qUnavailableEnable is set to enabled.

**qNoInterventionNeededTrap**

qNoInterventionNeededTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.6. The "No User Intervention Needed" traps will be sent if qNoInterventionNeededEnable is set to enabled. This object is not used by the DXi.

**qRequestedInterventionTrap**

qRequestedInterventionTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.7. The "Requested User Intervention" traps will be sent if qRequestedInterventionEnable is set to enabled. This object is not used by the DXi.

**qRequiredInterventionTrap**

qRequiredInterventionTrap has an object ID of .1.3.6.1.4.1.2036.2.1.4.8. The "Required User Intervention" traps will be sent if qRequiredInterventionEnable is set to enabled. This object is not used by the DXi.

# Other Supported MIBs

The Net-SNMP agent also supports MIBII, SNMPv2, and UCD MIBs by default.

Chapter 3
# SNMP Traps

An SNMP trap is generated by an individual component in the DXi device when there is a change or failure in the component and is triggered by the creation of a Service ticket.

A Service ticket event is always reported against the violating FRU. The reporting FRU can be the violating FRU itself, or a peer FRU which determines the violating FRU is in a bad state. In the current interface, it is sometimes necessary to report the violating FRU instance, as well as the parent (of the violating FRU) instance.

The following tables show the list of FRUs and the events that can generate Service tickets.

The following tables describe the system events:

**Note:** Only Table 2, Table 5, and Table 8 apply to the DXi V1000.

- Table 1 - Server (Node) Hardware Events
- Table 2 - Server (Node) Software Events
- Table 3 - RAID Array Events (DXi8500 Only)
- Table 4 - Ethernet Switch Events (DXi8500 Only)
- Table 5 - Network Interface Card Events
- Table 6 - Fibre Channel Switch Events (DXi8500 Only)
- Table 7 - Fibre Channel HBA Events (DXi6500, Model 6540 and 6550, DXi6700, and DXi8500 only)
- Table 8 - Software Events

Table 1  Server (Node)
Hardware Events

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Boot Drive | Not present | SL_FRU_IOS_DRV/ 0102 | SL_EVT_NOT_PRESENT/9 | High | Failed |
| | IO Error | SL_FRU_IOS_DRV/ 0102 | SL_EVT_IO_ERR/24 | High | Warning |
| | Configuration mismatch | SL_FRU_IOS_DRV/ 0102 | SL_EVT_CONFIGURATION_MISMATCH/ 77 | High | Failed |
| | Drive Failure | SL_FRU_IOS_DRV/ 0102 | SL_EVT_DRV_FAIL/ 22 | High | Failed |
| | Drive rebuild failure | SL_FRU_IOS_DRV/ 0102 | SL_EVT_DRV_RBLD_ FAIL/46 | High | Failed |
| BUS Communication | Communication failure (internal bus) | | SL_EVT_COMM_BUS_FAIL/29 | High | Failed |
| Chassis temperature | The temperature rises Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_OVERTEMP /36 | Middle | Warning |
| | The temperature rises Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_HIGHTEMP/ 34 | High | Failed |
| | The temperature rises Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_TEMP_DEGRADE/95 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| CPU temperature | The temperature rises Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_OVERTEMP /36 | Middle | Warning |
| | The temperature rises Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_HIGHTEMP/ 34 | High | Failed |
| | The temperature rises Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_TEMP_DEG RADE/95 | High | Failed |
| Fan speed status, RPM | The speed rises Non-Critical level | SL_FRU_IOS_FAN/ 0107 | SL_EVT_FAN_LOW_ SPEED/18 | High | Degraded |
| | The speed rises Critical level | SL_FRU_IOS_FAN/ 0107 | SL_EVT_SPEED_CRI TICAL/98 | High | Failed |
| | The speed rises Non-Recoverable level | SL_FRU_IOS_FAN/ 0107 | SL_EVT_SPEED_DE GRADE/99 | High | Failed |
| | Not present | SL_FRU_IOS_FAN/ 0107 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| Intrusion | Cover removed | SL_FRU_IO_SERVER/ 0101 | SL_EVT_INTRUSION /100 | Middle | Warning |
| IPMI | | SL_FRU_IPMI/0806 | | | |
| MB NIC | Link Down | SL_FRU_IO_SERVER/ 0101 | SL_EVT_LINK_FAIL/ 14 | Middle | Warning |
| Node | Stopped | SL_FRU_IO_SERVER/ 0101 | SL_EVT_STOPPED/ 101 | High | Failed |
| | Unavailable | SL_FRU_IO_SERVER/ 0101 | SL_EVT_COMM_FAI L/25 | Middle | Warning |
| | Node is down | SL_FRU_CLUSTER/ 0115 | SL_EVT_STOPPED/ 101 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| PCI NIC | Not Present | SL_FRU_NIC_ETHER _PORT/0116 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| Power supply | Failure | SL_FRU_IOS_PWR/ 0106 | SL_EVT_PWR_FAIL/ 17 | High | Failed |
| | Power supply not present | SL_FRU_IOS_PWR/ 0106 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| Serial | Serial communication failure | | SL_EVT_COMM_SE RIAL_FAIL/27 | High | Failed |
| Voltage status of 1.5v CPU Cores | The voltage rises upper Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_OVERVOLT AGE/10 | Middle | Warning |
| | The voltage rises upper Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_HIGHVOLTA GE/32 | High | Failed |
| | The voltage rises upper Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |
| | The voltage rises lower Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_UNDERVOL TAGE/11 | Middle | Warning |
| | The voltage rises lower Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_LOWVOLTA GE/31 | High | Failed |
| | The voltage rises lower Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Voltage status of 3.3v Power Supply | The voltage rises upper Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_OVERVOLT AGE/10 | Middle | Warning |
| | The voltage rises upper Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_HIGHVOLTA GE/32 | High | Failed |
| | The voltage rises upper Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |
| | The voltage rises lower Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_UNDERVOL TAGE/11 | Middle | Warning |
| | The voltage rises lower Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_LOWVOLTA GE/31 | High | Failed |
| | The voltage rises lower Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Voltage status of 5v Power Supply | The voltage rises upper Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_OVERVOLT AGE/10 | Middle | Warning |
| | The voltage rises upper Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_HIGHVOLTA GE/32 | High | Failed |
| | The voltage rises upper Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |
| | The voltage rises lower Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_UNDERVOL TAGE/11 | Middle | Warning |
| | The voltage rises lower Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_LOWVOLTA GE/31 | High | Failed |
| | The voltage rises lower Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Voltage status of 12v Power Supply | The voltage rises upper Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_OVERVOLT AGE/10 | Middle | Warning |
| | The voltage rises upper Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_HIGHVOLTA GE/32 | High | Failed |
| | The voltage rises upper Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |
| | The voltage rises lower Non-Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_UNDERVOL TAGE/11 | Middle | Warning |
| | The voltage rises lower Critical level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_LOWVOLTA GE/31 | High | Failed |
| | The voltage rises lower Non-Recoverable level | SL_FRU_IO_SERVER/ 0101 | SL_EVT_VOLTAGE_ DEGRADE | High | Failed |

Table 2  Server (Node) Software Events

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Configuration | Configuration not recommended | | SL_EVT_CFG_NOT_REC/40 | Low | Warning |
| | Configuration not supported | | SL_EVT_BADCFG_NOT_SUP/41 | Low | Warning |
| | Bad EVPS configuration | | SL_EVT_BADCFG_EVPS/42 | Low | Warning |
| | Configuration not recommended | | SL_EVT_CFG_NOT_REC/40 | Low | Warning |
| Database | Database corruption | | SL_EVT_DB_CORRUPT/61 | High | Failed |
| Filesystem | File not found | | SL_EVT_FILE_NOT_PRESENT/69 | Low | Warning |
| | File system not found | | SL_EVT_FILESYS_NOT_PRESENT/70 | High | Failed |
| Keep Alive | Cluster task failed | SL_FRU_CLUSTER/0115 | SL_EVT_FAILOVER_ERROR/79 | High | Failed |
| | Application task failed | SL_FRU_CLUSTER/0115 | SL_EVT_TASK_DIED/1 | High | Failed |
| Maintenance | Maintenance operation has failed | | SL_EVT_MAINT_FAIL/56 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Media | Media has expired | | SL_EVT_MEDIA_EX PIRED/57 | Low | Warning |
| | Tape alert | | SL_EVT_TAPE_ALER T/58 | Low | Warning |
| | Duplicate barcode | | SL_EVT_MEDIA_DU PLICATE/63 | Low | Warning |
| | Unknown media | | SL_EVT_MEDIA_UN KNOWN/64 | Low | Warning |
| | No media found to satisfy the request. | | SL_EVT_NO_MEDIA /75 | Low | Warning |
| Mode | System taken offline | | SL_EVT_TAKEN_OFF LINE/71 | Low | Warning |
| Operation | Operation failure | | SL_EVT_OP_FAIL/51 | High | Failed |
| Performan ce | Performance degraded | | SL_EVT_PERF_DEGR ADED/50 | Low | Warning |
| Reporting | Error reported | | SL_EVT_REPORT_ER R/53 | Low | Warning |
| | Warning reported | | SL_EVT_REPORT_W ARN/66 | Low | Warning |
| Response | Not responding | | SL_EVT_NO_RESPO NSE/52 | Low | Warning |
| | Not supported | | SL_EVT_NOT_SUP/ 67 | Low | Warning |
| Resource | System resource warning | | SL_EVT_SYS_RES_W ARN/65 | Low | Warning |
| Vaulting | Vaulting operation failed | | SL_EVT_VAULT_FAIL /74 | High | Failed |

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| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Virtual Volume | Virtual volume error | | SL_EVT_VIRT_VOL_ERR/49 | Low | Warning |

Table 3  RAID Array Events (DXi8500 Only)

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Alarm | RAID alarm | SL_FRU_RAID_ALARM/0312 | | | |
| Battery | Battery failure | SL_FRU_RAID_BATTERY/030F | | High | Failed |
| Chassis | Hardware fault | SL_FRU_RAID_CHASSIS/0303 | SL_EVT_HW_FAULT/7 | High | Failed |
| Drives | | SL_FRU_RAID_DRV/0302 | | | |
| Fan | Fan failure | SL_FRU_RAID_FAN/0305 | SL_EVT_FAN_FAIL/19 | High | Failed |
| | Not present | SL_FRU_RAID_FAN/0305 | SL_EVT_NOT_PRESENT/9 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| General | Invalid RAID type (non-ADIC) | SL_FRU_RAID_SENSOR/030C | SL_EVT_RAID_INVALID/21 | High | Failed |
| | Hardware fault | SL_FRU_RAID_SENSORL | SL_EVT_HW_FAULT/7 | High | Failed |
| | Communication failure | SL_FRU_RAID_SENSORL | SL_EVT_COMM_FAIL/25 | High | Failed |
| | Wrong firmware level | SL_FRU_RAID_SENSORL | SL_EVT_WRONG_FW_LEVEL/30 | High | Failed |
| | LUN communication failure | SL_FRU_RAID_SENSORL | SL_EVT_COMM_LUN_FAIL/48 | High | Failed |
| | Drive failure | SL_FRU_RAID_SENSORL | SL_EVT_DRV_FAIL/22 | High | Failed |
| | Drive removed | SL_FRU_RAID_SENSORL | SL_EVT_DRV_REMOVED/23 | High | Failed |
| | Global spare not detected | SL_FRU_RAID_SENSORL | SL_EVT_NO_GLOB_SPARE/45 | High | Degraded |
| | Drive rebuild failure | SL_FRU_RAID_SENSORL | SL_EVT_DRV_RBLD_FAIL | High | Failed |
| | Logical drive failure (data loss) | SL_FRU_RAID_SENSORL | SL_EVT_LOGDRV_FAIL/47 | High | Failed |
| Power fan canister | Power supply fan failure | SL_FRU_RAID_CRU/0313 | | | |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Power supply | Power supply failure | SL_FRU_RAID_PWR/ 0304 | SL_EVT_PWR_FAIL/ 17 | High | Failed |
| | Not present | SL_FRU_RAID_PWR/ 0304 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| Sensors | Under temperature | SL_FRU_RAID_SENS OR/030C | SL_EVT_UNDERTEM P/35 | Low | Warn |
| | Over temperature | SL_FRU_RAID_SENS OR/030C | SL_EVT_OVERTEMP /36 | Low | Warn |
| SFP | SFP failure | SL_FRU_RAID_SFP/ 030E | | Low | Warn |
| Volume | RAID volume has failed | SL_FRU_RAID_VOL/ 030B | SL_EVT_FAILED/120 | High | High |
| | RAID volume is degraded | SL_FRU_RAID_VOL/ 030B | SL_EVT_DEGRADED /115 | High | Degraded |
| | RAID volume is impaired | SL_FRU_RAID_VOL/ 030B | SL_EVT_IMPAIRED/ 121 | High | Warning |

Table 4  Ethernet Switch Events
(DXi8500 Only)

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Fan | Ethernet switch fan speed low | SL_FRU_NWS_FAN/ 0809 | SL_EVT_FAN_LOW_ SPEED/18 | Middle | Warning |
| | Ethernet switch fan speed high | SL_FRU_NWS_FAN/ 0809 | SL_EVT_FAN_HIGH_ SPEED/97 | High | Failed |
| | Ethernet switch fan fail | SL_FRU_NWS_FAN/ 0809 | SL_EVT_FAN_FAIL/ 19 | High | Failed |
| | Ethernet switch fan not present. | SL_FRU_NWS_FAN/ 0809 | SL_EVT_NOT_PRESE NT/9 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| General | Switch is unavailable | SL_FRU_NW_SWITCH | SL_EVT_COMM_FAIL/25 | High | Failed |
| | Invalid configuration (connection, VLANs) | SL_FRU_NW_SWITCH | SL_EVT_CONFIG_FAIL/102 | High | Failed |
| | Wrong firmware level | SL_FRU_NW_SWITCH | SL_EVT_WRONG_FW_LEVEL/30 | High | Failed |
| | Authentification problems | SL_FRU_NW_SWITCH | SL_EVT_AUTH_FAILED/103 | High | Failed |
| | EGP is broken | SL_FRU_NW_SWITCH | SL_EVT_EGP_FAIL/104 | High | Failed |
| | Link down | SL_FRU_NW_SWITCH | SL_EVT_LINK_FAIL/14 | High | Failed |
| | MAC address variation in table | SL_FRU_NW_SWITCH | SL_EVT_MAC_CHANGED/105 | High | Failed |
| | Port type changed | SL_FRU_NW_SWITCH | SL_EVT_PORT_FAIL/15 | High | Failed |
| | Cold/warm start | SL_FRU_NW_SWITCH | SL_EVT_REBOOT/106 | Middle | Warning |
| | Ethernet communication failure | | SL_EVT_COMM_ETHER_FAIL | High | Failed |
| | Ethernet switch not present | SL_FRU_NWS/0803 | SL_EVT_NOT_PRESENT/9 | High | Failed |
| | Ethernet switch invalid | SL_FRU_NWS/0803 | SL_EVT_SWITCH_INVALID/20 | High | Failed |
| | Ethernet switch hardware fault | SL_FRU_NWS/0803 | SL_EVT_HW_FAULT/7 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Power Supply | Ethernet switch power supply undervolt. | SL_FRU_NWS_PWR/ 0810 | SL_EVT_UNDERVOL TAGE/11 | Middle | Warning |
| | Ethernet switch power supply overvolt | SL_FRU_NWS_PWR/ 0810 | SL_EVT_OVERVOLT AGE/10 | High | Failed |
| | Ethernet switch power supply fail | SL_FRU_NWS_PWR/ 0810 | SL_EVT_PWR_FAIL/ 17 | High | Failed |
| | Ethernet switch power supply not present. | SL_FRU_NWS_PWR/ 0810 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| Temperatu re | Ethernet switch not present | FRU_NWS_TEMP/ 0808 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Ethernet switch under temperature | FRU_NWS_TEMP/ 0808 | SL_EVT_UNDERTEM P/35 | Middle | Warning |
| | Ethernet switch over temperature | FRU_NWS_TEMP/ 0808 | SL_EVT_OVERTEMP /36 | High | Failed |
| | Ethernet switch hardware fault | FRU_NWS_TEMP/ 0808 | SL_EVT_HW_FAULT/ 7 | High | Failed |

Table 5  Network Interface
Card Events

| Sub-system | Event Description | FRU-ID/Code | Event-ID | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Ethernet port | Ethernet port not present | SL_FRU_NIC_ETHER _PORT/0116 | SL_EVT_NOT_PRESE NT/9 | High | Failed |

Table 6  Fibre Channel Switch
Events (DXi8500 Only)

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Chassis | Removed | SL_FRU_FCS/0201 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Invalid | SL_FRU_FCS/0201 | SL_EVT_HW_FAULT/ 7 | High | Failed |
| Communic ation | FC communication failure | | SL_EVT_COMM_FC _FAIL/28 | | Failed |
| Control Processor (CP) | Removed | SL_FRU_FCS_CP/ 0205 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Invalid | SL_FRU_FCS_CP/ 0205 | SL_EVT_HW_FAULT/ 7 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Fan | Absent | SL_FRU_FCS_FAN/ 0203 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Below minimal | SL_FRU_FCS_FAN/ 0203 | SL_EVT_FAN_LOW_ SPEED/18 | Middle | Warning |
| | Above maximum | SL_FRU_FCS_FAN/ 0203 | SL_EVT_FAN_HIGH_ SPEED/97 | High | Failed |
| | Failed | SL_FRU_FCS_FAN/ 0203 | SL_EVT_FAN_FAIL/ 19 | High | Failed |
| General | Cold/warm start | SL_FRU_FCS/0201 | SL_EVT_REBOOT/ 106 | Middle | Warning |
| | Licence required | SL_FRU_FCS/0201 | SL_EVT_LICENSE_F AIL/72 | High | Failed |
| | Switch is unavailable (FC link broken) | SL_FRU_FCS/0201 | SL_EVT_LINK_FAIL/ 14 | High | Failed |
| | Switch management is broken | SL_FRU_FCS/0201 | SL_EVT_COMM_FAI L/25 | High | Failed |
| | Invalid configuration (connection, zones) | SL_FRU_FCS/0201 | SL_EVT_BADCFG_F C_PORT/43 | High | Failed |
| | Wrong firmware level | SL_FRU_FCS/0201 | SL_EVT_WRONG_F W_LEVEL/30 | High | Failed |
| | SFP is down | SL_FRU_FCS/0201 | SL_EVT_NOT_PRESE NT/9 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Power Supply | Absent | SL_FRU_FCS_PWR/ 0202 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Below minimal | SL_FRU_FCS_PWR/ 0202 | SL_EVT_UNDERVOL TAGE/11 | Middle | Warning |
| | Above maximum | SL_FRU_FCS_PWR/ 0202 | SL_EVT_OVERVOLT AGE/10 | High | Failed |
| | Failed | SL_FRU_FCS_PWR/ 0202 | SL_EVT_PWR_FAIL/ 17 | High | Failed |
| SFP | | SL_FRU_FCS_SFP/ 0204 | | | |
| Switchnod e | Removed | SL_FRU_FCS_SB/ 0206 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Invalid | SL_FRU_FCS_SB/ 0206 | SL_EVT_HW_FAULT/ 7 | High | Failed |
| Temperatu re Sensor | Absent | SL_FRU_FCS_TEMP/ 0208 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Below minimal | SL_FRU_FCS_TEMP/ 0208 | SL_EVT_UNDERTEM P/35 | Middle | Warning |
| | Above maximum | SL_FRU_FCS_TEMP/ 0208 | SL_EVT_OVERTEMP /36 | High | Degraded |
| | Failed | SL_FRU_FCS_TEMP/ 0208 | SL_EVT_HW_FAULT/ 7 | High | Failed |
| WWN | Removed | SL_FRU_FCS_WWN/ 0207 | SL_EVT_NOT_PRESE NT/9 | High | Failed |
| | Invalid | SL_FRU_FCS_WWN/ 0207 | SL_EVT_HW_FAULT/ 7 | High | Failed |

Table 7  Fibre Channel HBA
Events (DXi6500, Model 6540
and 6550, DXi6700, and
DXi8500 only)

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| Device mapper connection | Multi-path is broken | SL_FRU_IOS_FC_HBA/0118 | | High | Failed |
| Device connection | Path is broken | SL_FRU_IOS_FC_HBA/0118 | SL_EVT_LINK_FAIL/14 | High | Failed |
| Hotplug | Absent | SL_FRU_IOS_FC_HBA/0118 | SL_EVT_NOT_PRESENT/9 | High | Failed |
| | Failed | SL_FRU_IOS_FC_HBA/0118 | SL_EVT_HW_FAULT/7 | High | Failed |
| | SCSI device unavailable | SL_FRU_IOS_FC_HBA_DEVICE/0118 | SL_EVT_NOT_PRESENT/9 | High | Failed |

Table 8  Software Events

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| NDMP | License is required | SL_FRU_DXI_SOFTWARE/0804 | SL_EVT_LICENCE_REQUIRED/80 | High | Failed |
| | License failed | SL_FRU_DXI_SOFTWARE/0804 | SL_EVT_LICENSE_FAIL/72 | High | Failed |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| NAS | Operation failure | SL_FRU_NAS_SERVICES/0119 | SL_EVT_OP_FAIL/51 | High | Failed |
| | Delayed | SL_FRU_NAS_SERVICES/0119 | SL_EVT_DELAYED/131 | High | Informational |
| SNFS | LUN communication failure | SL_FRU_SNFS/010D | SL_EVT_COMM_LUN_FAIL/48 | High | Failed |
| | Filesystem not found | SL_FRU_SNFS/010D | SL_EVT_FILESYS_NOT_PRESENT/70 | High | Failed |
| | Label validation failure | SL_FRU_SNFS/010D | SL_EVT_INVALID_LABEL/82 | High | Degraded |
| | System resource failure | SL_FRU_SNFS/010D | SL_EVT_SYS_RES_FAIL/2 | High | Warning |
| | Communication failure | SL_FRU_SNFS/010D | SL_EVT_COMM_FAIL/25 | Middle | Warning |
| | LUN mapping changed | SL_FRU_SNFS/010D | SL_EVT_LUN_CHANGE/88 | Low | Warning |
| | IO Error | SL_FRU_SNFS/010D | SL_EVT_IO_ERR/24 | High | Warning |
| | Configuration not supported | SL_FRU_SNFS/010D | SL_EVT_BADCFG_NOT_SUP/41 | High | Failed |
| | Failed to allocate disk space | SL_FRU_SNFS/010D | SL_EVT_DISK_ALLOC_FAIL/89 | High | Failed |
| | Metadata error | SL_FRU_SNFS/010D | SL_EVT_META_ERR/90 | High | Warning |
| | Journaling error | SL_FRU_SNFS/010D | SL_EVT_JOURNAL_ERR/91 | High | Failed |
| | Connection rejected | SL_FRU_SNFS/010D | SL_EVT_CONNECTION_FAIL/93 | High | Degraded |

| Sub-system | Event Description | FRU-ID/Code | Event-ID/Code | Alert (High, Middle, Low) | State (Failed, Degraded, Warning, Info, Good) |
|---|---|---|---|---|---|
| SNFS | Missing LUNs | SL_FRU_SNFS/010D | SL_EVT_LUN_NOT_FOUND/94 | High | Failed |
| | Initialization failure | SL_FRU_SNFS/010D | SL_EVT_INITIALIZATION_FAIL/78 | High | Failed |
| | Server not responding | SL_FRU_SNFS/010D | SL_EVT_NO_RESPONSE/52 | High | Failed |
| Software | Metadump failed | SL_FRU_BLOCKPOOL/0802 | SL_EVT_OP_FAIL/51 | High | Failed |
| | Namespace replication failed | SL_FRU_BLOCKPOOL/0802 | SL_EVT_REPL_FAIL/108 | High | Failed |
| | Replication paused by system | SL_FRU_BLOCKPOOL/0802 | SL_EVT_REPL_PAUSE/109 | High | Failed |
| | Replication qbfs failure | SL_FRU_BLOCKPOOL/0802 | SL_EVT_REPL_QBFS_FAIL/110 | High | Failed |
| | Emergency truncation activated | | SL_EVT_EMERG_TRUNCATION/68 | Middle | Warning |
| | Process/Task died (not restarted) | SL_FRU_SNFS/010D | SL_EVT_TASK_DIED/1 | High | Failed |
| | Performance degraded | SL_FRU_SNFS/010D | SL_EVT_PERF_DEGRADED/50 | High | Degraded |
| | SL_EVT_NO_RESPONSE | SL_FRU_SNFS/010D | Not responding | High | Failed |
| Space Management | Ingest Throttled to slow IO | SL_FRU_SPACE_MGR/0807 | SL_EVT_THROTTLE/112 | Middle | Warning |
| | Stop IO due to no space | SL_FRU_SPACE_MGR/0807 | SL_EVT_NOSPACE/113 | High | Failed |