Dell™ PowerVault™ ML6000
Basic SNMP Reference Guide

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About This Guide and Your Product

This guide is for library customers, partners, third party management software developers, and other parties interested in integrating the PowerVault™ ML6000 with commercial management frameworks. It assumes that you have a working knowledge of Simple Network Management Protocol (SNMP), that you can compile a Management Information Base (MIB) on your framework application, that you can perform SNMP GET operations, and that you know how to collect SNMP traps and filter them for information.

This guide describes information that you can obtain from the ML6000 library using SNMP. Using SNMP, you can monitor the library from a network management application rather than—or in addition to—the library's Reliability, Availability, and Serviceability (RAS) ticket system. For information about the ML6000 library itself, refer to the *PowerVault ML6000 Tape Library User's Guide*.

The ML6000 library supports SNMP by publishing a MIB that can be queried to obtain the status of the library and many of its individual components. You can obtain status information automatically by configuring the library to send alerts using SNMP traps, or you can obtain it on an ad-hoc basis by sending SNMP queries from your network management application.

Although the library's MIB contains additional objects that can be monitored via SNMP, this document provides details only about the objects that are most likely to be requested from the MIB. It also identifies the SNMP traps that can provide library status information to you automatically.

For more information about the library MIBs, contact technical support. For information on integrating MIBs with an SNMP management application, contact your network management application vendor.

Explanation of Symbols and Notes

The following symbols appear throughout this document to highlight important information.

WARNING: A WARNING INDICATES A POTENTIAL FOR PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

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

Other Documents You Might Need

The following document is also available for this product. This document can be found on the product documentation CD.

- *Dell PowerVault ML6000 Tape Library User's Guide*

Getting More Information or Help

More information about this product is available at http://support.dell.com.

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Description

Simple Network Management Protocol (SNMP) is a light-weight protocol designed for remote management and monitoring of infrastructure devices. The ML6000 library provides SNMP support so you can use a framework application to monitor the status of the library. Using SNMP, you can be alerted of numerous library events.

The ML6000 library also provides detailed status reports from its own reporting system, called the Reliability, Availability, and Serviceability (RAS) ticket system. RAS tickets enable library administrators to diagnose specific library events.

SNMP Functionality Available to Remote Applications

The ML6000 library supports standard SNMP functionality, including GET queries and unicast traps (which can be sent only to registered recipients), that enables you to monitor library status from a remote application. SET commands are currently not enabled on the ML6000 library.

All ML6000 MIB variables are supported by Dell for remote management of the library.

Specific ML6000 library SNMP characteristics include:

- Supports SNMP v1, v2c, and v3
- Supports SNMP v1 and v2 traps as defined by RFC 1157. You can set the library to report SNMP traps using either v1 or v2 (v1 is the default). The timeout for all SNMP requests to the library 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 5*)*
- Trap Registration interface in the library'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 ML6000 library using traps and GET queries. Using the information contained in this guide, library administrators can configure their framework application to generate alerts to receive ML6000 library SNMP information.

By default, most SNMP information is returned as an integer value (library partition names, however, are returned as string values). For instance, the return value of *Library Main Door* might be 2, which indicates that the library 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. For example, the return value of *Library Main Door* might be *closed(2)*. To do this, you must compile and integrate the library's MIBs with your framework application.

SNMPv3

Although the ML6000 library supports SNMP version 1 and version 2c for MIB information retrieval, we strongly recommend that you access the library using SNMP version 3 (SNMPv3). SNMPv3 is the most secure of the three versions, as it supports message digest 5, or MD5, as its authentication protocol.

To access the library 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 library using SNMP, disable SNMPv1 and SNMPv2c access from the remote Web client and the operator panel. For more information, see either the *Dell PowerVault ML6000 Tape Library User's Guide* or the relevant ML6000 online help topics.

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 ML6000 library supports SNMP v1 and v2 traps as defined by RFC 1157.

You can set the library to report SNMP traps using either v1 or v2 (v1 is the default). The timeout for all SNMP requests to the library must be at 10 seconds or greater (command line parameter-t).

To receive traps, you must perform two steps:

1. Configure your framework application to collect traps from the ML6000 library.
2. Using the library's **SNMP Trap Registrations** feature, register the host's IP address, transport protocol, and UDP port number.

   Registration informs the ML6000 library to send traps to the host.

For additional details about registering a host with the ML6000 library, refer to the *PowerVault ML6000 Tape Library User's Guide*.

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 library. Frequent MIB queries are not required, however, since the SNMP agent is event-driven.

CAUTION: 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 an ML6000 library is online, access the MIB variable for logical library 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.

Use this procedure to configure the SNMP community string.

1. Login to the remote Web client.
2. Go to **Setup > Network Management > SNMP**.
3. Change the community string value.
4. Click **Apply**.

SNMP Authentication Traps

SNMP authentication traps occur in a number of conditions. By default, this option is disabled. In particular, they can occur when the SNMP agent:

- Receives a request that does not contain the correct community name.
- Receives a request not sent from a member of the acceptable host list.
- Receives a request from a bad user name or password when using SNMP Version 3.
- Sends an authentication trap message to one or more trap destinations (management systems), indicating authentication failure.

Use this procedure to configure SNMP authentication traps.

1. Login to the remote Web client.
2. Go to **Setup > Network Management > SNMP**.
3. Do one of the following:
   - Click the **Authentication traps** check box to enable authentication traps.
   - Remove the check from the **Authentication traps** check box to disable authentication traps.
4. Click **Apply**.

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MIB Variables - Drive Information

You can poll the variables in this section to obtain information about drives on the library. The drive variables fall into the following categories:

- Physical Drive Information
- Library Interfaces - Fibre Channel
- Library Interfaces - SAS
- Library Interfaces - SCSI

NOTE: All variables share the same object ID (OID) prefix of: 1.3.6.1.4.1.3764.1.10.10

Physical Drive Information

Physical Drive Readiness

Name: overallPhDriveReadinessStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.1**

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).overallPhDriveReadinessStatus(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDrive

Next sibling: physicalDriveTable

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: OnlineState

Status: current

Max access: read-only

Description: Overall drive readiness.

Physical Drive Serial Number

Name: phDriveSerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveSerialNumber(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveIndex

Next sibling: phDriveModel

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access:read-only

Description: Device serial number as reported in a SCSI INQUIRY command.

Physical Drive Model

Name: phDriveModel

Type:OBJECT-TYPE

OID:1.3.6.1.4.1.3764.1.10.10.**11.3.1.3**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveModel(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveSerialNumber

Next sibling: phDriveVendor

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Device model as would be reported in a SCSI INQUIRY command.

Physical Drive Vendor

Name: phDriveVendor

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.4**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveVendor(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveModel

Next sibling: phDriveType

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Device Vendor as would be reported in a SCSI INQUIRY command.

Physical Drive Type

Name: phDriveType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.5**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveType(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveVendor

Next sibling: phDriveLocation

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Drive generation type.

Physical Drive Location

Name: phDriveLocation

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.6**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveLocation(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveType

Next sibling: phDriveFirmwareVersion

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Location of the drive in the library.

Physical Drive Firmware

Name: phDriveFirmwareVersion

Type: OBJECT-TYPE

OID:1.3.6.1.4.1.3764.1.10.10.**11.3.1.7**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveFirmwareVersion(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveLocation

Next sibling: phDriveLogicalLibraryName

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Device firmware level as would be reported in a SCSI INQUIRY command.

Physical Drive Logical Library Name

Name: phDriveLogicalLibraryName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.8**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveLogicalLibraryName(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: **physicalDriveEntry**

Prev sibling: phDriveFirmwareVersion

Next sibling: phDriveLibrarySerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Name of the logical libary (partition) with which this physical drive is assocated. If the drive is not associated with a logical library, this field will be blank.

Physical Drive Library Serial Number

Name: phDriveLibrarySerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.9**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveLibrarySerialNumber(9)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveLogicalLibraryName

Next sibling: phDriveState

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Serial number of the library that this drive resides in as reported in SCSI INQUIRY command.

Physical Drive State

Name: phDriveState

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.10**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveState(10)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveLibrarySerialNumber

Next sibling: phDriveRasStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: OnlineState

Status: current

Max access: read-only

Description: Device SCSI state.

Physical Drive Health Status

Name: phDriveRasStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.11**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveRasStatus(11)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveState

Next sibling: phDriveNeedsCleaning

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Drive health status.

Physical Drive Cleaning Status

Name: phDriveNeedsCleaning

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.12**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveNeedsCleaning(12)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveRasStatus

Next sibling: phDriveInterfaceType

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: CleaningStatus

Status: current

Max access: read-only

Description:Cleaning status of the drive.

Physical Drive Interface Type

Name: phDriveInterfaceType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.13**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveInterfaceType(13)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveNeedsCleaning

Next sibling: phDriveScsiLun

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: InterfaceType

Status: current

Max access: read-only

Description: Interface type of the drive.

Physical Drive SCSI LUN

Name: phDriveScsiLun

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.14**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveScsiLun(14)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveInterfaceType

Next sibling: phDriveScsiId

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: SCSI LUN of the device.

Physical Drive SCSI ID

Name: phDriveScsiId

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.15**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveScsiId(15)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prevsibling: phDriveScsiLun

Next sibling: phDriveLoads

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: SCSI ID of the device.

Physical Drive Loads

Name: phDriveLoads

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.16**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDriveLoads(16)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveScsiId

Next sibling: phDrivePhysicalSerialNumber

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Total cartridge loads for the drive.

Physical Drive Physical Serial Number

Name: phDrivePhysicalSerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**11.3.1.17**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalDrive(11).physicalDriveTable(3).physicalDriveEntry(1).phDrivePhysicalSerialNumber(17)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalDriveEntry

Prev sibling: phDriveLoads

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Physical drive serial number.

Library Interfaces - Fibre Channel

Fibre Channel Port Type

Name: fcPortType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortType(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortIndex

Next sibling: fcPortWWNodeName

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FCPortType

Status: current

Max access: read-only

Description: Fibre Channel port type.

Fibre Channel Port World Wide Node Name

Name: fcPortWWNodeName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.3**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortWWNodeName(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortType

Next sibling: fcPortWWPortName

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: 8-byte value representing the drive's World Wide Node Name.

Fibre Channel Port World Wide Port Name (WWPN)

Name :fcPortWWPortName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.4**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortWWPortName(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortWWNodeName

Next sibling: fcPortLoopId

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: World Wide Name of a port in the Fibre Channel fabric.

Fibre Channel Port Loop ID

Name: fcPortLoopId

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.5**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortLoopId(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortWWPortName

Next sibling: fcPortLoopIdMode

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Loop ID for Fibre Channel drives; undefined for drives of other interface types.

Fibre Channel Port Loop ID Mode

Name: fcPortLoopIdMode

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.6**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortLoopIdMode(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortLoopId

Next sibling: fcPortId

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FCPortLoopIdMode

Status: current

Max access: read-only

Description: Loop ID mode for Fibre Channel drives; undefined for drives of other interface types. Controls negotiation of the port ID on the Fibre Channel connection.

Fibre Channel Port ID

Name: fcPortId

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.7**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortId(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortLoopIdMode

Next sibling: fcPortNegotiatedSpeed

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Port ID for fabric attached Fibre Channel drives; undefined for drives of other interface types.

Fibre Channel Port Negotiated Speed

Name: fcPortNegotiatedSpeed

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.8**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortNegotiatedSpeed(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortId

Next sibling: fcPortRasStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FCPortSpeed

Status: current

Max access: read-only

Description: The actual speed as negotiated. The numeric value is equal to the port speed in gigabits per second.

Fibre Channel Port RAS Status

Name: fcPortRasStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.9**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortRasStatus(9)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortNegotiatedSpeed

Next sibling: fcPortFWRev

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Currently not applicable.

Fibre Channel Port Firmware Revision

Name: fcPortFWRev

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.10**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortFWRev(10)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortRasStatus

Next sibling: fcPortFrameSize

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description:Firmware revision number/identifier for this Fibre Channel controller.

Fibre Channel Port Frame Size

Name: fcPortFrameSize

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.11**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortFrameSize(11)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortFWRev

Next sibling: fcPortDriveSerialNumber

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Fibre Channel frame size.

Fibre Channel Port Drive Serial Number

Name: fcPortDriveSerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.12**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortDriveSerialNumber(12)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortFrameSize

Next sibling: fcPortLogicalLibrarySerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Tape drive serial number.

Fibre Channel Port Logical Library Serial Number

Name: fcPortLogicalLibrarySerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.1.1.13**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).fcPortTable(1).fcPortEntry(1).fcPortLogicalLibrarySerialNumber(13)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: fcPortEntry

Prev sibling: fcPortDriveSerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Tape drive logical library serial number.

Library Interfaces - SAS

SAS Port Address

Name: sasPortAddress

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.3.1.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).sasPortTable(3).sasPortEntry(1).sasPortAddress(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: sasPortEntry

Prev sibling: sasPortIndex

Next sibling: sasPortRasStatus

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: 8-byte value representing the World Wide Name for this drive.

SAS Port RAS Status

Name: sasPortRasStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.3.1.3**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).sasPortTable(3).sasPortEntry(1).sasPortRasStatus(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: sasPortEntry

Prev sibling: sasPortAddress

Next sibling: sasPortNegotiatedSpeed

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Currently not applicable.

SAS Port Negotiated Speed

Name: sasPortNegotiatedSpeed

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.3.1.4**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).sasPortTable(3).sasPortEntry(1).sasPortNegotiatedSpeed(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: sasPortEntry

Prev sibling: sasPortRasStatus

Next sibling: sasPortFWRev

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: SASPortSpeed

Status: current

Max access: read-only

Description: SAS port speed.

SAS Port Firmware Revision

Name: sasPortFWRev

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.3.1.5**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).sasPortTable(3).sasPortEntry(1).sasPortFWRev(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: sasPortEntry

Prev sibling: sasPortNegotiatedSpeed

Next sibling: sasPortDriveSerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Firmware revision for this tape drive.

SAS Port Drive Serial Number

Name: sasPortDriveSerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.3.1.6**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).sasPortTable(3).sasPortEntry(1).sasPortDriveSerialNumber(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: sasPortEntry

Prev sibling: sasPortFWRev

Next sibling: sasPortLogicalLibrarySN

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Tape drive serial number.

SAS Port Logical Library Serial Number

Name: sasPortLogicalLibrarySN

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**15.3.1.7**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).sasPortTable(3).sasPortEntry(1).sasPortLogicalLibrarySN(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: sasPortEntry

Prev sibling: sasPortDriveSerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Logical library serial number.

SCSI Controller RAS Status

Name: scsiControllerRasStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.2

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerRasStatus(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerIndex

Next sibling: scsiControllerSpeed

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Currently not applicable.

SCSI Controller Speed

Name: scsiControllerSpeed

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.3

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerSpeed(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerRasStatus

Next sibling: scsiControllerRole

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: SCSICtrlSpeed

Status: current

Max access: read-only

Description: SCSI transaction speed.

SCSI Controller Role

Name: scsiControllerRole

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.4

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerRole(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerSpeed

Next sibling: scsiControllerIoCard

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: current

Max access: read-only

Value list:

1: target(0)

2: initiator(1)

Description: SCSI role of the drive (target or initiator).

SCSI Controller I/O Card

Name: scsiControllerIoCard

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.5

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerIoCard(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerRole

Next sibling: scsiControllerMaxIds

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: SCSICtrlCardType

Status: current

Max access: read-only

Description: Type of SCSI controller hardware.

SCSI Controller Maximum IDs

Name: scsiControllerMaxIds

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.6

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerMaxIds(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerIoCard

Next sibling: scsiControllerMaxLuns

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: current

Max access: read-only

Description: Maximum Number of IDs for this SCSI controller.

SCSI Controller Maximum LUNs

Name: scsiControllerMaxLuns

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.7

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerMaxLuns(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerMaxIds

Next sibling: scsiControllerMaxWidth

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: current

Max access: read-only

Description: Maximum Number of LUNs for this SCSI controller.

SCSI Controller Maximum Width

Name: scsiControllerMaxWidth

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.8

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerMaxWidth(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerMaxLuns

Next sibling: scsiControllerFWRev

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: current

Max access: read-only

Description: Maximum transfer width in bits.

SCSI Controller Firmware Revision

Name: scsiControllerFWRev

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.9

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerFWRev(9)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerMaxWidth

Next sibling: scsiControllerDriveSerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Firmware revision for this SCSI controller.

SCSI Controller Drive Serial Number

Name: scsiControllerDriveSerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.10

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerDriveSerialNumber(10)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerFWRev

Next sibling: scsiControllerLogicalLibrarySN

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Serial number of tape drive.

SCSI Controller Logical Library Serial Number

Name: scsiControllerLogicalLibrarySN

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.15.2.1.11

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).libraryInterfaces(15).scsiControllerTable(2).scsiControllerEntry(1).scsiControllerLogicalLibrarySN(11)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: scsiControllerEntry

Prev sibling: scsiControllerDriveSerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Logical library serial number.

4

MIB Variables - Library System Information

You can poll the variables in this section to obtain information about the library. The Library System Information variables contain the following subsystems:

- Tape Library System
- Physical Library
- Logical Library
- Fibre Channel I/O Blade Interfaces

NOTE: All variables share the same object ID (OID) prefix of: 1.3.6.1.4.1.3764.1.10.10

Tape Library System

Library IP Address

Name: libraryIpAddress

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.1**

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryIpAddress(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Next sibling: librarySNMPAgentDescription

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: The IP address this SNMP agent. If the library has only an IPv4 address, or both an IPv4 and an IPv6 address, then the IP address is displayed in IPv4 format (xxx.xxx.xxx.xxx). If the library only has an IPv6 address, then it will report an IPv6 format address.

Library SNMP Agent Description

Name: librarySNMPAgentDescription

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).librarySNMPAgentDescription(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryIpAddress

Next sibling: libraryName

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Description of the library SNMP agent.

Library Name

Name: libraryName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.3**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryName(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: librarySNMPAgentDescription

Next sibling: libraryVendor

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: The host name for the system hosting the SNMP agent.

Library Vendor

Name: libraryVendor

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.4**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryVendor(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryName

Next sibling: librarySerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Name of library vendor

Library Serial Number

Name: librarySerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10**.1.5**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).librarySerialNumber(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryVendor

Next sibling: libraryDescription

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Library serial number.

Library Description

Name: libraryDescription

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.6**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryDescription(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: librarySerialNumber

Next sibling: libraryModel

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Description of library.

Library Model

Name: libraryModel

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.7**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryModel(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryDescription

Next sibling: libraryGlobalStatus

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Model of the library.

Library Global Status

Name: libraryGlobalStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.1**.8**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryGlobalStatus(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryModel

Next sibling: libraryURL

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Current status of the entire library system (including all attached drives).

Library URL

Name: libraryURL

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.9**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryURL(9)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryGlobalStatus

Next sibling: libraryProductName

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: URL of the library's management application.

Library Product Name

Name: libraryProductName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.10**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryProductName(10)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryURL

Next sibling: libraryFirmwareVersion

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Product name of the library.

Library Firmware Version

Name: libraryFirmwareVersion

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**1.11**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).tapeLibrarySystem(1).libraryFirmwareVersion(11)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: tapeLibrarySystem

Prev sibling: libraryProductName

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Library firmware version.

Physical Library

Physical Library State

Name: physicalLibraryState

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**14.1**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalLibrary(14).physicalLibraryState(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalLibrary

Next sibling: aggregatedMainDoorStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: OnlineState

Status: current

Max access: read-only

Description: Physical library's overall online status.

Aggregated Main Door Status

Name: aggregatedMainDoorStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**14.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalLibrary(14).aggregatedMainDoorStatus(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalLibrary

Prev sibling: physicalLibraryState

Next sibling: aggregatedIEDoorStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: LibraryDoorStatus

Status: current

Max access: read-only

Description: The status is "open" if any door is open.

Aggregated Import Export (I/E) Door Status

Name: aggregatedIEDoorStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**14.3**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalLibrary(14).aggregatedIEDoorStatus(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalLibrary

Prev sibling: aggregatedMainDoorStatus

Next sibling: numStorageSlots

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: IEDoorStatus

Status: current

Max access: read-only

Description: Reports "open" if any door is open. Otherwise, reports "closedandLocked" or "closedandUnlocked."

Number of Storage Slots

Name: numStorageSlots

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**14.4**

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalLibrary(14).numStorageSlots(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalLibrary

Prev sibling: aggregatedIEDoorStatus

Next sibling: numIESlots

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Number of storage slots.

Number of I/E Slots

Name: numIESlots

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**14.5**

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalLibrary(14).numIESlots(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalLibrary

Prev sibling: numStorageSlots

Next sibling: numPhDrives

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Number of I/E slots.

Number of Physical Drives

Name: numPhDrives

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**14.6**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalLibrary(14).numPhDrives(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: physicalLibrary

Prev sibling: numIESlots

Next sibling: robot

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Number of drives.

Robot State

Name: robotState

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**14.30.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).physicalLibrary(14).robot(30).robotState(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: robot

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RoboticsReadiness

Status: current

Max access: read-only

Description: Device SCSI state.

Logical Library

Number of Logical Libraries

Name: numLogicalLibraries

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.1**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).numLogicalLibraries(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibrary

Next sibling: logicalLibraryTable

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Number of existing logical libraries (partitions).

Logical Library Name

Name: logicalLibraryName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryName(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryIndex

Next sibling: logicalLibrarySerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Logical library name.

Logical Library Serial Number

Name: logicalLibrarySerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.3**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibrarySerialNumber(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryName

Next sibling: logicalLibraryModel

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Logical library serial number.

Logical Library Model

Name: logicalLibraryModel

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.4**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryModel(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibrarySerialNumber

Next sibling: logicalLibraryAssignedLun

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Logical Library Model

Logical Library Assigned LUN

Name: logicalLibraryAssignedLun

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.5**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryAssignedLun(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryModel

Next sibling: logicalLibraryMediaDomain

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Assigned LUN of this library's (virtual) SCSI media changer.

Logical Library Media Domain

Name: logicalLibraryMediaDomain

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.6**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryMediaDomain(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryAssignedLun

Next sibling: logicalLibrarySupportedMediaTypes

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Supported media domain.

Logical Library Supported Media Types

Name: logicalLibrarySupportedMediaTypes

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.7**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibrarySupportedMediaTypes(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryMediaDomain

Next sibling: logicalLibraryState

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: current

Max access: read-only

Description: Supported media types.

Logical Library State

Name: logicalLibraryState

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.8**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryState(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibrarySupportedMediaTypes

Next sibling: logicalLibraryNumSlots

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: OnlineState

Status: current

Max access: read-only

Description: Status of logical library.

Logical Library Number of Slots

Name: logicalLibraryNumSlots

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.9**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryNumSlots(9)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryState

Next sibling: logicalLibraryNumIE

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Number of storage elements.

Logical Library Number of I/E Slots

Name: logicalLibraryNumIE

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.10**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryNumIE(10)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryNumSlots

Next sibling: logicalLibraryNumTapeDrives

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Number of Import/Export (I/E) elements.

Logical Library Number of Tape Drives

Name: logicalLibraryNumTapeDrives

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.11**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryNumTapeDrives(11)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryNumIE

Next sibling: logicalLibraryStorageElemAddr

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: Number of tape drives in the partition.

Logical Library Storage Element Address

Name: logicalLibraryStorageElemAddr

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.12**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryStorageElemAddr(12)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryNumTapeDrives

Next sibling: logicalLibraryIEElemAddr

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access:read-only

Description: First storage element address of the partition.

Logical Library I/E Element Address

Name: logicalLibraryIEElemAddr

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.13**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryIEElemAddr(13)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryStorageElemAddr

Next sibling: logicalLibraryTapeDriveElemAddr

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: First import/export element address of the partition.

Logical Library Tape Drive Element Address

Name: logicalLibraryTapeDriveElemAddr

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.14**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryTapeDriveElemAddr(14)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryIEElemAddr

Next sibling: logicalLibraryChangerDeviceAddr

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax: Integer32

Status: current

Max access: read-only

Description: First data transfer element address of the partition.

Logical Library Changer Device Address

Name: logicalLibraryChangerDeviceAddr

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**13.2.1.15**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).logicalLibrary(13).logicalLibraryTable(2).logicalLibraryEntry(1).logicalLibraryChangerDeviceAddr(15)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: logicalLibraryEntry

Prev sibling: logicalLibraryTapeDriveElemAddr

Numerical syntax: Integer (32 bit)

Base syntax: Integer32

Composed syntax :Integer32

Status: current

Max access: read-only

Description: First medium transport element address of the partition.

Fibre Channel I/O Blade Interfaces

Blade Table

Blade Index

Name: bladeIndex

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.1

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeIndex(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Next sibling: bladeLocation

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: Blade index.

Blade Location

Name: bladeLocation

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.2

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeLocation(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeIndex

Next sibling: bladeIP

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Description: Blade location.

Blade IP

Name: bladeIP

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.3

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeIP(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeLocation

Next sibling: bladeWWNodeName

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Description: Blade IP address.

Blade World Wide Node Name

Name: bladeWWNodeName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.4

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeWWNodeName(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeIP

Next sibling: bladeHealthCheckValue

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: OCTET STRING

Status: mandatory

Max access: read-only

Description: Blade World Wide Node Name.

Blade Health Check Value

Name: bladeHealthCheckValue

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.5

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeHealthCheckValue(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeWWNodeName

Next sibling: bladeHealthCheckLevel

Numerical syntax: Gauge (32 bit)

Base syntax: Gauge

Composed syntax: Gauge

Status: mandatory

Max access: read-only

Description: Value in percent of health check tests passed.

Blade Health Check Level

Name: bladeHealthCheckLevel

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.6

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeHealthCheckLevel(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeHealthCheckValue

Next sibling: bladeHealthCheckInterval

Numerical syntax: Gauge (32 bit)

Base syntax: Gauge

Composed syntax: Gauge

Status: mandatory

Max access: read-only

Value list:

1: none(0)

2: system(1)

3: interface(2)

4: simpleDevice(3)

5: deviceReady(4)

Description: Scrutiny level of health check function.

Blade Health Check Interval

Name: bladeHealthCheckInterval

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.7

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeHealthCheckInterval(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeHealthCheckLevel

Next sibling: bladeFWRev

Numerical syntax: Gauge (32 bit)

Base syntax: Gauge

Composed syntax: Gauge

Status: mandatory

Max access: read-only

Description: Health check interval in minutes.

Blade Firmware Revision

Name: bladeFWRev

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.8

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeFWRev(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeHealthCheckInterval

Next sibling: bladeSerialNumber

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 0..64

Description: Blade firmware revision information.

Blade Serial Number

Name: bladeSerialNumber

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.9

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeSerialNumber(9)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeFWRev

Next sibling: bladeEVPSEnabled

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 0..64

Description: Blade serial number.

Blade EVPS Enabled

Name: bladeEVPSEnabled

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.10

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeEVPSEnabled(10)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeSerialNumber

Next sibling: bladeMaxHostLun

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description:

Bit 0: EVPS active if 1, inactive if 0.

Bit 1: EVPS licensed if 1, unlicensed if 0.

Blade Maximum Host Lun

Name: bladeMaxHostLun

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.11

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeMaxHostLun(11)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeEVPSEnabled

Next sibling: bladeState

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: The number of devices one host can see.

Blade State

Name: bladeState

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.12

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).bladeState(12)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeMaxHostLun

Next sibling: blHPFLinkDownThreshold

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: BladeState

Status: mandatory

Max access: read-only

Description: Blade state.

Blade Host Port Failover Link Down Threshold

Name: blHPFLinkDownThreshold

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.13

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).blHPFLinkDownThreshold(13)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: bladeState

Next sibling: blHPFErrorRecoveryMode

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: Used to set the Link Down threshold delay period in seconds. The failover is triggered when the delay period ends.

Blade Host Port Failover Error Recovery Mode

Name: blHPFErrorRecoveryMode

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.14

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).blHPFErrorRecoveryMode(14)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: blHPFLinkDownThreshold

Next sibling: blHPFLinkDownRecoveryMode

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FcHPFRecoveryType

Status: mandatory

Max access: read-only

Description: Used to set the global recovery mode for failures that happen due to FC cable errors. Values: returnToActive(0), returnToStandby(1), requiresIntervention(2).

Blade Host Port Failover Link Down Recovery Mode

Name: blHPFLinkDownRecoveryMode

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.1.1.15

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).bladeTable(1).bladeEntry(1).blHPFLinkDownRecoveryMode(15)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: bladeEntry

Prev sibling: blHPFErrorRecoveryMode

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FcHPFRecoveryType

Status: mandatory

Max access: read-only

Description: Used to set the global recovery mode for failures that happen due to Link Down errors. Values: returnToActive(0), returnToStandby(1), requiresIntervention(2).

Blade Dev Entry

Blade Device Index

Name: blDevIndex

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.1

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevIndex(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Next sibling: blDevUID

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: MIB table index.

Blade Device Universal Identifier

Name: blDevUID

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.2

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevUID(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevIndex

Next sibling: blDevType

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 16

Description: Universal identifier of the blade.

Blade Device Type

Name: blDevType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.3

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevType(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevUID

Next sibling: blDevVendor

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: DeviceType

Status: mandatory

Max access: read-only

Description: Device type.

Blade Device Vendor

Name: blDevVendor

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.4

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevVendor(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevType

Next sibling: blDevProduct

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 8

Description: Device vendor.

Blade Device Product

Name: blDevProduct

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.5

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevProduct(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevVendor

Next sibling: blDevSerial

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 16

Description: Device product identifier.

Blade Device Serial

Name: blDevSerial

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.6

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevSerial(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevProduct

Next sibling: blDevInterfaceType

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 0..32

Description: Device serial number.

Blade Device Interface Type

Name: blDevInterfaceType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.7

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevInterfaceType(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevSerial

Next sibling: blDevLun

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: InterfaceType

Status: mandatory

Max access: read-only

Description: This device's type of communication interface.

Blade Device LUN

Name: blDevLun

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.8

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevLun(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevInterfaceType

Next sibling: blDevCtlrIndex

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: SCSI logical unit number of the device.

Blade Device Controller Index

Name: blDevCtlrIndex

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.9

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevCtlrIndex(9)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevLun

Next sibling: blDevFWRev

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: Index of this device's controller in the controller's MIB table and type-specific controller tables.

Blade Device Firmware Revision

Name: blDevFWRev

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.10

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevFWRev(10)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevCtlrIndex

Next sibling: blDevTargetLun

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 0..32

Description:Device firmware revision number/identifier.

Blade Device Target LUN

Name: blDevTargetLun

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.2.1.11

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blDevTable(2).blDevEntry(1).blDevTargetLun(11)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blDevEntry

Prev sibling: blDevFWRev

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: This target device's logical unit number as seen from attached host.

Blade Controller Table

Blade Controller Index

Name: blCtlrIndex

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.3.1.1

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blCtlrTable(3).blCtlrEntry(1).blCtlrIndex(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blCtlrEntry

Next sibling: blCtlrType

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: MIB table index.

Blade Controller Type

Name: blCtlrType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.3.1.2

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blCtlrTable(3).blCtlrEntry(1).blCtlrType(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blCtlrEntry

Prev sibling: blCtlrIndex

Next sibling: blCtlrChannelMask

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: InterfaceType

Status: mandatory

Max access: read-only

Description: Communication interface type.

Blade Controller Channel Mask

Name: blCtlrChannelMask

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.3.1.3

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blCtlrTable(3).blCtlrEntry(1).blCtlrChannelMask(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blCtlrEntry

Prev sibling: blCtlrType

Numerical syntax: Gauge (32 bit)

Base syntax: Gauge

Composed syntax: Gauge

Status: mandatory

Max access: read-write

Description: Specifies access permissions for this initiator in bits 0 through 18, as follows:

****

-* SCSI Channels *-

Bit 0 => Is access DISALLOWED to SCSI channel 1 ?

Bit 1 => Is access DISALLOWED to SCSI channel 2 ?

Bit 2 => Is access DISALLOWED to SCSI channel 3 ?

Bit 3 => Is access DISALLOWED to SCSI channel 4 ?

-* Ultra SCSI Channels *-

Bit 4 => Is access DISALLOWED to Ultra SCSI channel 1 ?

Bit 5 => Is access DISALLOWED to Ultra SCSI channel 2 ?

Bit 6 => Is access DISALLOWED to Ultra SCSI channel 3 ?

Bit 7 => Is access DISALLOWED to Ultra SCSI channel 4 ?

Bit 8 => Is access DISALLOWED to Ultra SCSI channel 5 ?

Bit 9 => Is access DISALLOWED to Ultra SCSI channel 6 ?

-* Fibre Channel *-

Bit 10 => Is access DISALLOWED to Fibre Channel 1 ?

Bit 11 => Is access DISALLOWED to Fibre Channel 2 ?

Bit 12 => Is access DISALLOWED to Fibre Channel 3 ?

Bit 13 => Is access DISALLOWED to Fibre Channel 4 ?

Bit 14 => Is access DISALLOWED to Fibre Channel 5 ?

Bit 15 => Is access DISALLOWED to Fibre Channel 6 ?

-* SSA Channels *-

Bit 16 => Is access DISALLOWED to SSA channel 1 ?

Bit 17 => Is access DISALLOWED to SSA Channel 2 ?

Bit 18 => Is access DISALLOWED to SSA Channel 3 ?

==========

Blade Fibre Channel Controller Entry

Blade Fibre Channel Controller Status

Name: blFcCtlrStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.4.1.1

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blFcCtlrTable(4).blFcCtlrEntry(1).blFcCtlrStatus(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blFcCtlrEntry

Next sibling: blFcCtlrMaxSpeed

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FcStatus

Status: mandatory

Max access: read-only

Description: Status of the Fibre Channel blade ports.

Blade Fibre Channel Controller Maximum Speed

Name: blFcCtlrMaxSpeed

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.4.1.2

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blFcCtlrTable(4).blFcCtlrEntry(1).blFcCtlrMaxSpeed(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blFcCtlrEntry

Prev sibling: blFcCtlrStatus

Next sibling: blFcCtlrWWPortName

Numerical syntax: Gauge (32 bit)

Base syntax: Gauge

Composed syntax: Gauge

Status: mandatory

Max access: read-only

Description: Maximum transfer speed in MBytes per second.

Blade Fibre Channel Controller World Wide Port Name

Name: blFcCtlrWWPortName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.4.1.3

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blFcCtlrTable(4).blFcCtlrEntry(1).blFcCtlrWWPortName(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blFcCtlrEntry

Prev sibling: blFcCtlrMaxSpeed

Next sibling: blFcCtlrLoopID

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 17

Description: World Wide Name of the blade’s ports.

Blade Fibre Channel Controller Loop ID

Name: blFcCtlrLoopID

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.4.1.4

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blFcCtlrTable(4).blFcCtlrEntry(1).blFcCtlrLoopID(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blFcCtlrEntry

Prev sibling: blFcCtlrWWPortName

Next sibling: blFcCtlrLoopIDMode

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Size list:1: -1..127

Description: Fibre Channel Loop ID.

Blade Fibre Channel Controller Loop ID Mode

Name: blFcCtlrLoopIDMode

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.4.1.5

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blFcCtlrTable(4).blFcCtlrEntry(1).blFcCtlrLoopIDMode(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blFcCtlrEntry

Prev sibling: blFcCtlrLoopID

Next sibling: blFcCtlrPortMode

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FCPortLoopIdMode

Status: mandatory

Max access: read-only

Description: Fibre Channel Loop ID mode (soft or hard).

Blade Fibre Channel Controller Port Mode

Name: blFcCtlrPortMode

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.4.1.6

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blFcCtlrTable(4).blFcCtlrEntry(1).blFcCtlrPortMode(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blFcCtlrEntry

Prev sibling: blFcCtlrLoopIDMode

Next sibling: blFcCtlrConnectionOptions

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FibrePortMode

Status: mandatory

Max access: read-only

Description: Fibre Channel port mode.

Blade Fibre Channel Controller Connection Options

Name: blFcCtlrConnectionOptions

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.4.1.7

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blFcCtlrTable(4).blFcCtlrEntry(1).blFcCtlrConnectionOptions(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blFcCtlrEntry

Prev sibling: blFcCtlrPortMode

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FibreConnOptions

Status: mandatory

Max access: read-only

Description: Connection options for ISP2200 FC chip. Values 4 – 8 are reserved.

Blade Host Table

Blade Host Index

Name: blHostIndex

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.5.1.1

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHostTable(5).blHostEntry(1).blHostIndex(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHostEntry

Next sibling: blHostWWName

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: Index into Host Initiator table.

Blade Host World Wide Name

Name: blHostWWName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.5.1.2

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHostTable(5).blHostEntry(1).blHostWWName(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHostEntry

Prev sibling: blHostIndex

Next sibling: blHostName

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-write

Size list: 1: 0..32

Description: World Wide Name of this initiator.

Blade Host Name

Name: blHostName

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.5.1.3

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHostTable(5).blHostEntry(1).blHostName(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHostEntry

Prev sibling: blHostWWName

Next sibling: blHostType

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 0..32

Description: Name for this initiator.

Blade Host Type

Name: blHostType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.5.1.4

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHostTable(5).blHostEntry(1).blHostType(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHostEntry

Prev sibling: blHostName

Next sibling: blHostPortID

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 0..32

Description: The type of host that is connected to the blade.

Blade Host Port ID

Name: blHostPortID

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.5.1.5

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHostTable(5).blHostEntry(1).blHostPortID(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHostEntry

Prev sibling: blHostType

Next sibling: blHostITLData

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: DisplayString

Status: mandatory

Max access: read-only

Size list: 1: 0..32

Description: The ID of the port that is connected to the host.

Blade Host ITL Data

Name: blHostITLData

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.5.1.6

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHostTable(5).blHostEntry(1).blHostITLData(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHostEntry

Prev sibling: blHostPortID

Next sibling: blHostLunMap

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: OCTET STRING

Status: mandatory

Max access: read-only

Size list: 1: 256

Description: Initiator-target-logical unit nexus (ITL) access control data for this host. There are 256 possible LUNs with 1 byte of data per LUN.

Blade Host LUN Map

Name: blHostLunMap

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.5.1.7

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHostTable(5).blHostEntry(1).blHostLunMap(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHostEntry

Prev **sibling**: blHostITLData

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: OCTET STRING

Status: mandatory

Max access: read-only

Size list: 1: 512

Description: EVPS Map data. There are 256 possible LUNs with 2 bytes of data for each LUN.

Blade Host Port Failover Map Entry

Blade Host Port Failover Map Virtual Port

Name: blHPFMapVirtualPort

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.6.1.1

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFMapTable(6).blHPFMapEntry(1).blHPFMapVirtualPort(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFMapEntry

Next sibling: blHPFMapPrimaryPort

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: The virtual port index. The value is usually the same as the physical port index (see Blade Host Port Failover Map Primary Port), but will be zero if host port failover is not configured.

Blade Host Port Failover Map Primary Port

Name: blHPFMapPrimaryPort

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.6.1.2

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFMapTable(6).blHPFMapEntry(1).blHPFMapPrimaryPort(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFMapEntry

Prev sibling: blHPFMapVirtualPort

Next sibling: blHPFMapStandbyList

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: The physical port index that acts as the default standby.

Blade Host Port Failover Map Standby List

Name: blHPFMapStandbyList

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.6.1.3

Full path: iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFMapTable(6).blHPFMapEntry(1).blHPFMapStandbyList(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFMapEntry

Prev sibling: blHPFMapPrimaryPort

Next sibling: blHPFMapActivePort

Numerical syntax: Octets

Base syntax: OCTET STRING

Composed syntax: OCTET STRING

Status: mandatory

Max access: read-only

Size list: 1: 256

Description: The comma-seperated list of ports that are configured as standbys for the virtual port (excluding the primary port).

Blade Host Port Failover Map Active Port

Name: blHPFMapActivePort

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.6.1.4

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFMapTable(6).blHPFMapEntry(1).blHPFMapActivePort(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFMapEntry

Prev sibling: blHPFMapStandbyList

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: The physical port that is active on this virtual port.

Blade Host Port Failover Physical Table

Blade Host Port Failover Physical Port

Name: blHPFPhysicalPort

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.7.1.1

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFPhysicalTable(7).blHPFPhysicalEntry(1).blHPFPhysicalPort(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFPhysicalEntry

Next sibling: blHPFPhysicalPortFailureType

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: mandatory

Max access: read-only

Description: The physical FC port index.

Blade Host Port Failover Physical Port Failure Type

Name: blHPFPhysicalPortFailureType

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.7.1.2

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFPhysicalTable(7).blHPFPhysicalEntry(1).blHPFPhysicalPortFailureType(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFPhysicalEntry

Prev sibling: blHPFPhysicalPort

Next sibling: blHPFPhysicalPortCurrentState

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FcHPFPortFailType

Status: mandatory

Max access: read-only

Description: If this physical port failed, this field provides the type of failure. Values: 0 = None; 1 = Link Down; 2 = Link Error.

Blade Host Port Failover Physical Port Current State

Name: blHPFPhysicalPortCurrentState

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.7.1.3

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFPhysicalTable(7).blHPFPhysicalEntry(1).blHPFPhysicalPortCurrentState(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFPhysicalEntry

Prev sibling: blHPFPhysicalPortFailureType

Next sibling: blHPFPhysicalPortIntervention

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: FcHPFPortState

Status: mandatory

Max access: read-only

Description: The current state of this physical port. Values: 0 = Online; 1 = Offline.

Blade Host Port Failover Physical Port Intervention

Name: blHPFPhysicalPortIntervention

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.16.7.1.4

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).bladeInterfaces(16).blHPFPhysicalTable(7).blHPFPhysicalEntry(1).blHPFPhysicalPortIntervention(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: blHPFPhysicalEntry

Prev sibling: blHPFPhysicalPortCurrentState

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: Boolean

Status: mandatory

Max access: read-only

Description: Does this physical port require intervention? Values: 1 = true; 2 = false.

5

MIB Variables - RAS Subsystem

You can poll the following variables to obtain information about the RAS subsystem on the library.

NOTE: All variables share the same object ID (OID) prefix of:
1.3.6.1.4.1.3764.1.10.10

Power Status

Name: powerStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.1**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).powerStatus(1)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Next sibling: coolingStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Indicates overall power supply status.

Cooling Status

Name: coolingStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.2**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).coolingStatus(2)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Prev sibling: powerStatus

Next sibling: controlStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Indicates overall cooling fans status.

Control Status

Name: controlStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.3**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).controlStatus(3)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Prev sibling: coolingStatus

Next sibling: connectivityStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Indicates overall control subsystem status.

Connectivity Status

Name: connectivityStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.4**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).connectivityStatus(4)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Prev sibling: controlStatus

Next sibling: roboticsStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Indicates overall connectivity status.

Robotics Status

Name: roboticsStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.5**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).roboticsStatus(5)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Prev sibling: connectivityStatus

Next sibling: mediaStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Indicates overall robotics status.

Media Status

Name: mediaStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.6**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).mediaStatus(6)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Prev sibling: roboticsStatus

Next sibling: driveStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Indicates overall media status.

Drive Status

Name: driveStatus

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.7**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).driveStatus(7)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Prev sibling: mediaStatus

Next sibling: operatorActionRequest

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: RASSubSystemStatus

Status: current

Max access: read-only

Description: Indicates overall drive status.

Operator Action Request

Name: operatorActionRequest

Type: OBJECT-TYPE

OID: 1.3.6.1.4.1.3764.1.10.10.**12.8**

Full path:
iso(1).org(3).dod(6).internet(1).private(4).enterprises(1).adic(3764).storage(1).library(10).tapeLibraryMIB(10).rasSubSystem(12).operatorActionRequest(8)

Module: ADIC-TAPE-LIBRARY-MIB

Parent: rasSubSystem

Prev sibling: driveStatus

Numerical syntax: Integer (32 bit)

Base syntax: INTEGER

Composed syntax: INTEGER

Status: current

Max access: read-only

Value list: 1: yes(1); 2: no(2).

Description: Yes, if operator action is required.

6

SNMP Traps

This section describes the basic set of Simple Network Management Protocol (SNMP) system status traps issued by the library. Traps pertain to the entire library, not specific modules or partitions.

NOTE: The ML6000 library supports SNMP v1 and v2 traps as defined by RFC 1157.

Traps defined in the Tape Library Management Information Base (MIB) are issued with enterprise OID “Dell Tape Library MIB”, which resolves to 1.3.6.1.4.1.3764.1.10.10.

Table 1 Status Traps

Trap ID	Trap	Description
1	**tapeLibNotifyStart**	**Starting** Indicates that the tape library has started running.
2	**tapeLibNotifyShutdown**	**Shutting down** Indicates that the library is in the process of being shut down.
3	**tapeLibNotifyRestart**	**Restarting** Indicates that the library has been restarted. This does not imply anything about whether the configuration has changed or not (unlike the standard coldStart or warmStart traps).
101	**startupSequenceCompleted**	**Startup Sequence Completed** Indicates that the library startup sequence has completed.
102	**shutdownSequenceInitiated**	**Shutdown Sequence Initiated** Indicates that the library has started its shutdown sequence.

a. The library issues a trap whenever the aggregate state of one of the Reliability, Availability, and Serviceability (RAS) status groups changes. Listening for these traps (rather than querying for them) is the preferred method of monitoring the health of the library.

Table 1 Status Traps (Continued)

Trap ID	Trap	Description
103	**phLibraryStateChange**	**Change in Online State** Indicates that the online state of the physical library has changed.
104	**moduleDoorStatusChange**	**Module Door Status Change** Indicates that a library access door has been opened, closed, locked, or unlocked, interrupting or enabling power to the robot.
105	**ieDoorStatusChange**	**I/E Door Status Change** Indicates that an I/E station door has been opened or closed.
106	**roboticsReady**	**Robotics Ready** Indicates that the library's robotics system has transitioned from a "not ready" to "ready" state. Traps 106 and 107 may occur as part of a startup or shutdown procedure. If they occur at another time, a library door may be open.
107	**roboticsNotReady**	**Robotics Not Ready** Indicates that the library's robotics system has transitioned from a "ready" to "not ready" state. Traps 106 and 107 may occur as part of a startup or shutdown procedure. If they occur at another time, a library door may be open.
108	**logicalLibraryStateChange**	**Logical Library State Change** Indicates that a logical library, also known as a partition, has been taken online or offline.
109	**connectivityStatusChange**	**RAS Status Change: Connectivity**[a] Indicates that the status of the connectivity subsystem (which includes the I/O management unit and other components) has changed. This may indicate a change to "good" status, so refer to the return value to determine what action you should take. If the return value indicates that a problem exists, use the operator panel or remote web client to determine how to resolve the issue.

a. The library issues a trap whenever the aggregate state of one of the Reliability, Availability, and Serviceability (RAS) status groups changes. Listening for these traps (rather than querying for them) is the preferred method of monitoring the health of the library.

Table 1 Status Traps (Continued)

Trap ID	Trap	Description
110	**controlStatusChange**	**RAS Status Change: Control**[a] Indicates that a library control problem has been detected. Indicates that the status of the control subsystem (which includes system firmware, the operator panel, and the Library Control Blade) has changed. If the return value indicates that a problem exists, use the operator panel or remote web client to determine how to resolve the issue.
111	**coolingStatusChange**	**RAS Status Change: Cooling**[a] Indicates that the status of the cooling subsystem has changed. If the return value indicates that a problem exists, use the operator panel or remote web client to determine how to resolve the issue.
112	**drivesStatusChange**	**RAS Status Change: Drives**[a] Indicates that the status of the drives and/or media has changed. If the return value indicates that a problem exists, use the operator panel or remote web client to determine how to resolve the issue.
113	**mediaStatusChange**	**RAS Status Change: Media**[a] Indicates that the status of the media has changed. If the return value indicates that a problem exists, use the operator panel or remote web client to determine how to resolve the issue.
114	**powerStatusChange**	**RAS Status Change: Power**[a] Indicates that the status of the power subsystem has changed. If the return value indicates that a problem exists, use the operator panel or remote web client to determine how to resolve the issue.
115	**roboticsStatusChange**	**RAS Status Change: Robotics**[a] Indicates that the status of the robotics subsystem has changed. If the return value indicates that a problem exists, use the operator panel or remote web client to determine how to resolve the issue.
116	**operatorInterventionRequired**	**RAS Status Change: Operator Intervention Required**[a] Indicates that an error has occurred and that operator intervention is required in order to resolve the issue.
117	**driveOnlineStateChange**	**Drive Online State Change** Indicates that a tape drive has been taken online or offline.

a. The library issues a trap whenever the aggregate state of one of the Reliability, Availability, and Serviceability (RAS) status groups changes. Listening for these traps (rather than querying for them) is the preferred method of monitoring the health of the library.

Table 1 Status Traps (Continued)

Trap ID	Trap	Description
121	**libraryTapeAlert1**	**Drive Communication Failure** The library set TapeAlert 1, indicating a drive communication failure.
122	**libraryTapeAlert2**	**Library Hardware Failure** The library set TapeAlert 2, indicating a library hardware failure.
124	**libraryTapeAlert4**	**Non-mechanical Hardware Failure** The library set TapeAlert 4, indicating a non-mechanical hardware failure.
133	**libraryTapeAlert13**	**Cartridge Pick Problem** The library set TapeAlert 13, indicating a problem when picking a tape cartridge.
134	**libraryTapeAlert14**	**Cartridge Placement Problem** The library set TapeAlert 14, indicating a problem when placing a tape cartridge.
135	**libraryTapeAlert15**	**Drive Load Problem** The library set TapeAlert 15, indicating a problem when loading a tape drive.
136	**libraryTapeAlert16**	**Library Main Access Door Open** The library set TapeAlert 16, indicating an open library access door.
137	**libraryTapeAlert17**	**Mailbox Mechanical Problem** The library set TapeAlert 17, indicating a mailbox station mechanical problem.
143	**libraryTapeAlert23**	**Excessive Scan Retries** The library set TapeAlert 23, indicating that excessive scan retries occurred.
152	**libraryTapeAlert32**	**Barcode Label Unreadable** The library set TapeAlert 32, indicating that a tape cartridge barcode label could not be read.

a. The library issues a trap whenever the aggregate state of one of the Reliability, Availability, and Serviceability (RAS) status groups changes. Listening for these traps (rather than querying for them) is the preferred method of monitoring the health of the library.

A

MIBs Implemented

The library requires five Management Information Bases (MIBs): the Dell Tape Library MIB and four standard SNMP MIBs.

Dell Tape Library MIB

The Dell Tape Library MIB provides the following information:

- System identification (library model and serial number)
- Notifications for a changed configuration (added and removed components)
- Library startup and shutdown traps
- Library online and offline status
- Library composition
  - Drives
  - Robotics
  - Fibre Channel I/O Blades
- Library partitioning
- Advanced status information: Reliability, Availability and Serviceability (RAS) functionality

Reference MIBs

The library MIBs reference the following SNMP standard MIBs:

- IPV6-MIB of MIB II
- IP-MIB of MIB II
- RFC 1155-SMI
- RFC 1212
- RFC 1213-MIB
- RFC 1215

These MIBs must be included with your framework application. They are required for accurate compilation of the library MIBs.

```
-- ************************************************
-- ADIC-TAPE-LIBRARY-MIB.mib: Tape Library Platform Specific MIB
--
-- $Date: 2010-03-05 11:07:06 -0700 (Fri, 05 Mar 2010) $
--
-- Copyright (c) 2005-2010 by Quantum Corporation
-- All rights reserved.
--
-- ************************************************

-- Glossary of terms
--
-- RAS : Reliability, Accessibility  and Serviceability
-- EVPS: Extended Virtual Private SAN (the Quantum/ADIC
--       Masking and Mapping Feature)
--



ADIC-TAPE-LIBRARY-MIB DEFINITIONS ::= BEGIN

IMPORTS
    NOTIFICATION-TYPE, MODULE-IDENTITY, enterprises,
    Integer32, OBJECT-TYPE FROM SNMPv2-SMI
    TEXTUAL-CONVENTION, DisplayString, TruthValue FROM SNMPv2-TC
    NOTIFICATION-GROUP, MODULE-COMPLIANCE,
    OBJECT-GROUP FROM SNMPv2-CONF;


    tapeLibraryMIB MODULE-IDENTITY
    LAST-UPDATED "201003040000Z"
    ORGANIZATION "Quantum Corporation"
    CONTACT-INFO
           " Quantum Corporation
             1650 Technology Drive, Suite 700
             San Jose, CA 95110-1382
```

```
            Tel: +1 800 284-5101

            E-mail: support@quantum.com"
    DESCRIPTION
        "This MIB provides Tape Library product information."
    REVISION    "201003040000Z"
    DESCRIPTION
        "MIB update as of March 2010"
    ::= { library 10 }

    adic OBJECT IDENTIFIER ::= { enterprises 3764 }

    storage OBJECT IDENTIFIER ::= { adic 1 }

    library OBJECT IDENTIFIER ::= { storage 10 }

    tapeLibrarySystem OBJECT IDENTIFIER ::= { tapeLibraryMIB 1 }

-- the following two OBJECT IDENTIFIERS are used to define SNMPv2 Notifications
-- that are backward compatible with SNMPv1 Traps.
    tapeLibraryMIBNotificationPrefix OBJECT IDENTIFIER ::= { tapeLibraryMIB 3 }
    tapeLibraryMIBNotifications OBJECT IDENTIFIER ::= {
tapeLibraryMIBNotificationPrefix 0 }
    tapeLibraryMIBNotificationOnlyData OBJECT IDENTIFIER ::= {
tapeLibraryMIBNotificationPrefix 1 }

--
-- Textual conventions
--

    FCPortType ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION
        "Port type qualifier."
    SYNTAX INTEGER {
           nPort( 1 ),
           nlPort( 2 ),
           fPort( 3 ),
           flPort( 4 ),
```

```
       unknown( 5 )
}

SCSICtrlSpeed ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "SCSI Speed."
SYNTAX INTEGER {
    async(0),
    fast(1),
    ultra(2) ,
    ultra80(3) ,
    ultra160(4) ,
    ultra320(5),
    ultra640(6),
    unknown(7)
}

SCSICtrlCardType ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "SCSI Card type."
SYNTAX INTEGER {
     none(0), differentialNoTermination(1),
     differentialTerminated(2), singleEndedNoTermination(3),
     singleEndedTerminated(4), unknown(5), lowVoltageSingleEnded(6),
     lowVoltageDifferential(7), lowVoltageMultiFunction(8),
     highVoltageDifferential(9)
 }

FCPortLoopIdMode ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "Fibre Channel Loop ID mode."
SYNTAX INTEGER {
       soft( 1 ),
       hard( 2 )
}
```

```
FCPortSpeed ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "Different port speeds in Gigabits per second."
SYNTAX INTEGER {
    auto( 1 ),
    oneGbps( 2 ),
    twoGbps( 3 ),
    fourGbps( 4 ),
    eightGbps( 5 )
}

LoopIdMode ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "Loop modes."
SYNTAX INTEGER {
     soft( 1 ),
     hard( 2 )
}

CleaningStatus ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "Cleaning Status."
SYNTAX INTEGER {
     required( 1 ),
     notRequired( 2 ),
     immediate( 3 )
}

InterfaceType ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "Types of interfaces."
SYNTAX INTEGER {
    scsi( 1 ),
```

```
    fibreChannel( 2 ),
    sas (3),
    iscsi(4)
}

IEDoorStatus ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "Import Export Station Door Status."
SYNTAX INTEGER {
    opened( 1 ),
    closedAndLocked( 2 ),
    closedAndUnLocked( 3 )
}

RASSubSystemStatus ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "RAS status"
SYNTAX INTEGER {
    good( 1 ),
    failed( 2 ),
    degraded( 3 ),
    warning( 4 ),
    informational( 5 ),
    unknown( 6 ),
    invalid( 7 )
}

LibraryDoorStatus ::= TEXTUAL-CONVENTION
STATUS      current
DESCRIPTION
    "Library Door Status."
SYNTAX INTEGER {
     open( 1 ),
     closed( 2 ),
     unknown( 3 )
}
```

```
    RoboticsReadiness ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION
        "Robotics  State."
    SYNTAX INTEGER {
         ready( 1 ),
         notReady( 2 )
    }

    OnlineState ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION
        "online status."
    SYNTAX INTEGER {
         online( 1 ),
         onlinePending( 2 ),
         offline( 3 ),
         offlinePending( 4 ),
         shutdownPending( 5 )
    }

    SASPortSpeed ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION
        "Different port speeds in Gigabits per second."
    SYNTAX INTEGER {
        auto( 1 ),
        threeGbps( 2 ),
        sixGbps( 3 )
    }

--
-- Tape Library parameters
--


    libraryIpAddress OBJECT-TYPE
```

```
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "The IP address of this SNMP agent.  If the
                        library has only an IPV4 address, or both an
                        IPV4 and an IPV6 address, the the IP address is
                        displayed in IPV4 format (xxx.xxx.xxx.xxx).  If
                        the library only has an IPV6 address, then it
                        will report an IPV6 address."
    ::= { tapeLibrarySystem 1 }

librarySNMPAgentDescription OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Description of the library SNMP agent."
    ::= { tapeLibrarySystem 2 }

libraryName OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "The host name for the system hosting the SNMP
                        agent."
    ::= { tapeLibrarySystem 3 }

libraryVendor OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Name of Library vendor"
    ::= { tapeLibrarySystem 4 }

librarySerialNumber OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Library Serial Number."
```

```
    ::= { tapeLibrarySystem 5 }

libraryDescription OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Description of Library."
    ::= { tapeLibrarySystem 6 }

libraryModel OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Model of the Library."
    ::= { tapeLibrarySystem 7 }

libraryGlobalStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
  DESCRIPTION       "Current status of the entire library system (including
                        all attached drive)."
    ::= { tapeLibrarySystem 8 }

libraryURL OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "URL of the library's management application."
    ::= { tapeLibrarySystem 9 }

libraryProductName OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Product name of the library."
    ::= { tapeLibrarySystem 10 }
```

```
libraryFirmwareVersion OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Library firmware version."
    ::= { tapeLibrarySystem 11 }

physicalDrive OBJECT IDENTIFIER ::= { tapeLibraryMIB 11 }

overallPhDriveReadinessStatus OBJECT-TYPE
    SYNTAX              OnlineState
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Overall Drives readiness."
    ::= { physicalDrive 1 }

physicalDriveTable OBJECT-TYPE
    SYNTAX              SEQUENCE OF PhysicalDriveEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "A table of all tape drive devices in the domain
                        of this SNMP agent."
    ::= { physicalDrive 3 }

physicalDriveEntry OBJECT-TYPE
    SYNTAX              PhysicalDriveEntry
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "A single physical drive"
    INDEX               { phDriveIndex }
    ::= { physicalDriveTable 1 }

PhysicalDriveEntry ::= SEQUENCE {
    phDriveIndex
        Integer32,
    phDriveSerialNumber
        DisplayString,
    phDriveModel
```

```
        DisplayString,
    phDriveVendor
        DisplayString,
    phDriveType
        DisplayString,
    phDriveLocation
        DisplayString,
    phDriveFirmwareVersion
        DisplayString,
    phDriveLogicalLibraryName
        DisplayString,
    phDriveLibrarySerialNumber
        DisplayString,
    phDriveState
        OnlineState,
    phDriveRasStatus
        RASSubSystemStatus,
    phDriveNeedsCleaning
        CleaningStatus,
    phDriveInterfaceType
        InterfaceType,
    phDriveScsiLun
        Integer32,
    phDriveScsiId
        Integer32,
    phDriveLoads
        Integer32,
    phDrivePhysicalSerialNumber
        DisplayString
}

phDriveIndex OBJECT-TYPE
    SYNTAX              Integer32 (1..1000)
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Table entry index value. Index of this Drive"
    ::= { physicalDriveEntry 1 }
```

```
phDriveSerialNumber OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Device serial number as reported in SCSI Inquiry
                        command."
    ::= { physicalDriveEntry 2 }

phDriveModel OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
   DESCRIPTION         "Device Model as would be reported in a SCSI Inquiry
                        command."
    ::= { physicalDriveEntry 3 }

phDriveVendor OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
   DESCRIPTION         "Device Vendor as would be reported in a SCSI Inquiry
                        command."
    ::= { physicalDriveEntry 4 }

phDriveType OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Drive generation type."
    ::= { physicalDriveEntry 5 }

phDriveLocation OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Location of the Drive in the Library"
    ::= { physicalDriveEntry 6 }
```

```
phDriveFirmwareVersion OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Device firmware level as would be reported in
                        a SCSI Inquiry command."
    ::= { physicalDriveEntry 7 }

phDriveLogicalLibraryName OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Name of the logical library (partition)
                        to which this physical drive is associated.
                        If the drive is not associated with a logical
                        library, this field will be blank."
    ::= { physicalDriveEntry 8 }

phDriveLibrarySerialNumber OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Serial Number of the library that this drive is
                        in as reported in SCSI Inquiry command,"
    ::= { physicalDriveEntry 9 }

phDriveState OBJECT-TYPE
    SYNTAX              OnlineState
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Device SCSI State."
    ::= { physicalDriveEntry 10 }

phDriveRasStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Drive health status."
```

```
    ::= { physicalDriveEntry 11 }

phDriveNeedsCleaning OBJECT-TYPE
    SYNTAX              CleaningStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Cleaning status of the Drive."
    ::= { physicalDriveEntry 12 }

phDriveInterfaceType OBJECT-TYPE
    SYNTAX              InterfaceType
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Interface Type of the drive."
    ::= { physicalDriveEntry 13 }


phDriveScsiLun OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "SCSI Lun of the device."
    ::= { physicalDriveEntry 14 }

phDriveScsiId OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "SCSI ID of the device."
    ::= { physicalDriveEntry 15 }

phDriveLoads OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Total cartridge loads for the drive."
    ::= { physicalDriveEntry 16 }
```

```
phDrivePhysicalSerialNumber OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Physical Drive serial number."
    ::= { physicalDriveEntry 17 }

rasSubSystem OBJECT IDENTIFIER ::= { tapeLibraryMIB 12 }

powerStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Indicates overall power supply Status"
    ::= { rasSubSystem 1 }

coolingStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Indicates overall cooling fans Status."
    ::= { rasSubSystem 2 }

controlStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Indicate overall control subsystem status."
    ::= { rasSubSystem 3 }

connectivityStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Indicates overall connectivity Status"
    ::= { rasSubSystem 4 }

roboticsStatus OBJECT-TYPE
```

```
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Indicates overall robotics Status"
    ::= { rasSubSystem 5 }

mediaStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Indicates overall media Status"
    ::= { rasSubSystem 6 }

driveStatus OBJECT-TYPE
    SYNTAX              RASSubSystemStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Indicates overall drive Status"
    ::= { rasSubSystem 7 }

operatorActionRequest OBJECT-TYPE
    SYNTAX              INTEGER {
                            yes( 1 ),
                            no( 2 )
                        }
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "yes, if operator Action is required."
    ::= { rasSubSystem 8 }

logicalLibrary OBJECT IDENTIFIER ::= { tapeLibraryMIB 13 }
numLogicalLibraries OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
   DESCRIPTION        "Number of existing logical libraries (partitions)."
    ::= { logicalLibrary 1 }
```

```
logicalLibraryTable OBJECT-TYPE
    SYNTAX              SEQUENCE OF LogicalLibraryEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "Logical Library Table."
    ::= { logicalLibrary 2 }

logicalLibraryEntry OBJECT-TYPE
    SYNTAX              LogicalLibraryEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "A single logical library"
    INDEX               { logicalLibraryIndex }
    ::= { logicalLibraryTable 1 }

LogicalLibraryEntry ::= SEQUENCE {
    logicalLibraryIndex
        Integer32,
    logicalLibraryName
        DisplayString,
    logicalLibrarySerialNumber
        DisplayString,
    logicalLibraryModel
        DisplayString,
    logicalLibraryAssignedLun
        Integer32,
    logicalLibraryMediaDomain
        DisplayString,
    logicalLibrarySupportedMediaTypes
        DisplayString,
    logicalLibraryState
        OnlineState,
    logicalLibraryNumSlots
        Integer32,
    logicalLibraryNumIE
        Integer32,
    logicalLibraryNumTapeDrives
        Integer32,
```

```
    logicalLibraryStorageElemAddr
        Integer32,
    logicalLibraryIEElemAddr
        Integer32,
    logicalLibraryTapeDriveElemAddr
        Integer32,
    logicalLibraryChangerDeviceAddr
        Integer32
}

logicalLibraryIndex OBJECT-TYPE
    SYNTAX              Integer32 (1..16)
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Table entry index value. Each unique partition
                        has a unique partitionIndex."
    ::= { logicalLibraryEntry 1 }

logicalLibraryName OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Logical Library Name"
    ::= { logicalLibraryEntry 2 }

logicalLibrarySerialNumber OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Logical Library Serial Number"
    ::= { logicalLibraryEntry 3 }

logicalLibraryModel OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Logical Library Model"
    ::= { logicalLibraryEntry 4 }
```

```
    logicalLibraryAssignedLun OBJECT-TYPE
        SYNTAX              Integer32
        MAX-ACCESS          read-only
        STATUS              current
   DESCRIPTION    "Assigned LUN of this library's (virtual) SCSI media
changer."
        ::= { logicalLibraryEntry 5 }

    logicalLibraryMediaDomain OBJECT-TYPE
        SYNTAX              DisplayString
        MAX-ACCESS          read-only
        STATUS              current
        DESCRIPTION         "Supported Media Domain."
        ::= { logicalLibraryEntry 6 }

    logicalLibrarySupportedMediaTypes OBJECT-TYPE
        SYNTAX              DisplayString
        MAX-ACCESS          read-only
        STATUS              current
        DESCRIPTION         "Supported Media Types."
        ::= { logicalLibraryEntry 7 }



    logicalLibraryState OBJECT-TYPE
        SYNTAX              OnlineState
        MAX-ACCESS          read-only
        STATUS              current
        DESCRIPTION         "Status of logical library."
        ::= { logicalLibraryEntry 8 }

    logicalLibraryNumSlots OBJECT-TYPE
        SYNTAX              Integer32
        MAX-ACCESS          read-only
        STATUS              current
        DESCRIPTION         "Number of Storage Elements."
        ::= { logicalLibraryEntry 9 }
```

```
logicalLibraryNumIE OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Number of Import/Export Elements."
    ::= { logicalLibraryEntry 10 }

logicalLibraryNumTapeDrives OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Number of tape drives in the partition."
    ::= { logicalLibraryEntry 11 }

logicalLibraryStorageElemAddr OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "First Storage Element Address of the partition."
    ::= { logicalLibraryEntry 12 }

logicalLibraryIEElemAddr OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
  DESCRIPTION       "First Import/Export Element Address of the partition."
    ::= { logicalLibraryEntry 13 }

logicalLibraryTapeDriveElemAddr OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
  DESCRIPTION       "First Data Transfer Element Address of the partition."
    ::= { logicalLibraryEntry 14 }

logicalLibraryChangerDeviceAddr OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
```

```
    STATUS              current
    DESCRIPTION         "First Medium Transport Element Address."
    ::= { logicalLibraryEntry 15 }


physicalLibrary OBJECT IDENTIFIER ::= { tapeLibraryMIB 14 }

physicalLibraryState OBJECT-TYPE
    SYNTAX              OnlineState
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Physical library's overall online
                        status"
    ::= { physicalLibrary 1 }

aggregatedMainDoorStatus OBJECT-TYPE
    SYNTAX              LibraryDoorStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "The status is 'open' if any door is open."
    ::= { physicalLibrary 2 }

aggregatedIEDoorStatus OBJECT-TYPE
    SYNTAX              IEDoorStatus
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "The status is 'open' if any door is open."
    ::= { physicalLibrary 3 }

numStorageSlots OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Number of storage slots."
    ::= { physicalLibrary 4 }

numIESlots OBJECT-TYPE
    SYNTAX              Integer32
```

```
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Number of Import Export slots."
    ::= { physicalLibrary 5 }

numPhDrives OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Number of drives."
    ::= { physicalLibrary 6 }


robot OBJECT IDENTIFIER ::= { physicalLibrary 30 }

robotState OBJECT-TYPE
    SYNTAX              RoboticsReadiness
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Device SCSI state."
    ::= { robot 2 }

libraryInterfaces OBJECT IDENTIFIER ::= { tapeLibraryMIB 15 }

fcPortTable OBJECT-TYPE
    SYNTAX              SEQUENCE OF FcPortEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "FC Port Table"
    ::= { libraryInterfaces 1 }

fcPortEntry OBJECT-TYPE
    SYNTAX              FcPortEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "FC Port Table"
    INDEX               { fcPortIndex }
    ::= { fcPortTable 1 }
```

```
    FcPortEntry ::= SEQUENCE {
        fcPortIndex
            Integer32,
        fcPortType
            FCPortType,
        fcPortWWNodeName
            DisplayString,
        fcPortWWPortName
            DisplayString,
        fcPortLoopId
            Integer32,
        fcPortLoopIdMode
            FCPortLoopIdMode,
        fcPortId
            Integer32,
        fcPortNegotiatedSpeed
            FCPortSpeed,
        fcPortRasStatus
            RASSubSystemStatus,
        fcPortFWRev
            DisplayString,
        fcPortFrameSize
            Integer32,
        fcPortDriveSerialNumber
            DisplayString,
        fcPortLogicalLibrarySerialNumber
            DisplayString
    }

    fcPortIndex OBJECT-TYPE
        SYNTAX              Integer32 (1..1000)
        MAX-ACCESS          not-accessible
        STATUS              current
        DESCRIPTION         "Table entry index value."
        ::= { fcPortEntry 1 }

  fcPortType  OBJECT-TYPE
```

```
    SYNTAX  FCPortType
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Fibre Channel Port Type"
::= { fcPortEntry 2 }


fcPortWWNodeName OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "8-byte value representing the drive's World Wide
                        Node Name."
    ::= { fcPortEntry 3 }


fcPortWWPortName OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION          "World Wide Name of a port in the fibre channel
                         fabric."
    ::= { fcPortEntry 4 }


fcPortLoopId OBJECT-TYPE
    SYNTAX              Integer32
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "Loop ID for Fibre Channel drives,
                         undefined for other interface type drive."
    ::= { fcPortEntry 5 }

fcPortLoopIdMode OBJECT-TYPE
    SYNTAX              FCPortLoopIdMode
    MAX-ACCESS          read-only
    STATUS              current
```

```
       DESCRIPTION        "Loop ID Mode for Fibre Channel drives, undefined for
                      other interface types. Controls negotiation of the port ID
                              on the Fibre Channel connection."
        ::= { fcPortEntry 6 }

    fcPortId OBJECT-TYPE
        SYNTAX              Integer32
        MAX-ACCESS          read-only
        STATUS              current
        DESCRIPTION         "Port ID for fabric attached Fibre Channel drive,
undefined
                              for other interface types."
        ::= { fcPortEntry 7 }

    fcPortNegotiatedSpeed OBJECT-TYPE
        SYNTAX              FCPortSpeed
        MAX-ACCESS          read-only
        STATUS              current
        DESCRIPTION          "Actual speed as negotiated .
                              The numeric value of this object is equal to the
port speed in gigabits per second."
        ::= { fcPortEntry 8 }

    fcPortRasStatus    OBJECT-TYPE
        SYNTAX  RASSubSystemStatus
        MAX-ACCESS read-only
        STATUS    current
        DESCRIPTION
            "Currently not applicable"
    ::= { fcPortEntry 9 }

    fcPortFWRev OBJECT-TYPE
        SYNTAX  DisplayString
        MAX-ACCESS read-only
        STATUS    current
        DESCRIPTION
            "Firmware revision number/identifier for this
            Fibre Channel Controller."
    ::= { fcPortEntry 10 }
```

```
fcPortFrameSize OBJECT-TYPE
    SYNTAX  Integer32
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION "Fibre Channel frame size."
::= { fcPortEntry 11 }

fcPortDriveSerialNumber OBJECT-TYPE
    SYNTAX  DisplayString
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Tape drive serial number."
::= { fcPortEntry 12 }

fcPortLogicalLibrarySerialNumber OBJECT-TYPE
    SYNTAX  DisplayString
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Tape drive logical library serial number."
::= { fcPortEntry 13 }

scsiControllerTable OBJECT-TYPE
    SYNTAX              SEQUENCE OF ScsiControllerEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "SCSI Controller Table"
    ::= { libraryInterfaces 2 }

scsiControllerEntry OBJECT-TYPE
    SYNTAX              ScsiControllerEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "SCSI Controller Table"
    INDEX               { scsiControllerIndex }
    ::= { scsiControllerTable 1 }
```

```
 ScsiControllerEntry ::= SEQUENCE {
    scsiControllerIndex
        Integer32,
    scsiControllerRasStatus
        RASSubSystemStatus,
    scsiControllerSpeed
        SCSICtrlSpeed,
    scsiControllerRole
        INTEGER,
    scsiControllerIoCard
        SCSICtrlCardType,
    scsiControllerMaxIds
        INTEGER,
    scsiControllerMaxLuns
        INTEGER,
    scsiControllerMaxWidth
        INTEGER,
    scsiControllerFWRev
        DisplayString,
    scsiControllerDriveSerialNumber
        DisplayString,
    scsiControllerLogicalLibrarySN
        DisplayString
 }

 scsiControllerIndex OBJECT-TYPE
    SYNTAX              Integer32 (1..1000)
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Table entry index value."
    ::= { scsiControllerEntry 1 }

scsiControllerRasStatus  OBJECT-TYPE
    SYNTAX  RASSubSystemStatus
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION "Currently not applicable."
```

```
::= { scsiControllerEntry 2 }

scsiControllerSpeed   OBJECT-TYPE
    SYNTAX  SCSICtrlSpeed
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "SCSI Transaction speed."
::= { scsiControllerEntry 3 }

scsiControllerRole    OBJECT-TYPE
    SYNTAX INTEGER{ target(0) , initiator(1) }
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION "SCSI role of the drive (target or initiator)"
::= { scsiControllerEntry 4 }

scsiControllerIoCard  OBJECT-TYPE
    SYNTAX  SCSICtrlCardType
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Type of SCSI controller hardware."
::= { scsiControllerEntry 5 }

scsiControllerMaxIds  OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Maximum Number of IDs for this
        SCSI controller."
::= { scsiControllerEntry 6 }

scsiControllerMaxLuns OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS read-only
    STATUS    current
```

```
    DESCRIPTION
        "Maximum Number of LUNs for this
        SCSI controller."
::= { scsiControllerEntry 7 }

scsiControllerMaxWidth OBJECT-TYPE
    SYNTAX  INTEGER
    MAX-ACCESS read-only
    STATUS    current
   DESCRIPTION "Maximum transfer width in bits."
::= { scsiControllerEntry 8 }

scsiControllerFWRev OBJECT-TYPE
    SYNTAX  DisplayString
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Firmware revision for this
        SCSI controller."
::= { scsiControllerEntry 9 }

scsiControllerDriveSerialNumber OBJECT-TYPE
    SYNTAX  DisplayString
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Serial Number of Tape Drive."
::= { scsiControllerEntry 10 }

scsiControllerLogicalLibrarySN OBJECT-TYPE
    SYNTAX  DisplayString
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Logical library serial number."
::= { scsiControllerEntry 11 }

sasPortTable OBJECT-TYPE
```

```
    SYNTAX              SEQUENCE OF SasPortEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "SAS Port Table"
    ::= { libraryInterfaces 3 }

sasPortEntry OBJECT-TYPE
    SYNTAX              SasPortEntry
    MAX-ACCESS              not-accessible
    STATUS              current
    DESCRIPTION         "SAS Port Table"
    INDEX               { sasPortIndex }
    ::= { sasPortTable 1 }

 SasPortEntry ::= SEQUENCE {
    sasPortIndex
        Integer32,
    sasPortAddress
        DisplayString,
    sasPortRasStatus
        RASSubSystemStatus,
    sasPortNegotiatedSpeed
        SASPortSpeed,
    sasPortFWRev
        DisplayString,
    sasPortDriveSerialNumber
        DisplayString,
    sasPortLogicalLibrarySN
        DisplayString
}

sasPortIndex OBJECT-TYPE
    SYNTAX              Integer32 (1..1000)
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Table entry index value."
::= { sasPortEntry 1 }
```

```
sasPortAddress OBJECT-TYPE
    SYNTAX              DisplayString
    MAX-ACCESS          read-only
    STATUS              current
    DESCRIPTION         "8-byte value representing the World Wide Name
                        for this drive"
::= { sasPortEntry 2 }

sasPortRasStatus  OBJECT-TYPE
    SYNTAX  RASSubSystemStatus
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION "Currently not applicable"
::= { sasPortEntry 3 }

sasPortNegotiatedSpeed   OBJECT-TYPE
    SYNTAX  SASPortSpeed
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "SAS port speed."
::= { sasPortEntry 4 }

sasPortFWRev OBJECT-TYPE
    SYNTAX  DisplayString
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Firmware revision for this
         tape drive."
::= { sasPortEntry 5 }

sasPortDriveSerialNumber OBJECT-TYPE
    SYNTAX  DisplayString
    MAX-ACCESS read-only
    STATUS    current
    DESCRIPTION
        "Tape drive serial number."
```

```
    ::= { sasPortEntry 6 }

    sasPortLogicalLibrarySN OBJECT-TYPE
        SYNTAX  DisplayString
        MAX-ACCESS read-only
        STATUS    current
        DESCRIPTION
            "Logical library serial number."
    ::= { sasPortEntry 7 }

-- start blade additions

-- Reboot Image Agent and Reset Controllers
    Reset ::= INTEGER { run(0) , reset(1) , reboot(2) }

-- Device types
    DeviceType ::= INTEGER{ directAccess(0), sequentialAccess(1),
        printer(2),
        processor(3), worm(4), cd(5), scanner(6), opticalMemory(7),
        mediumChanger(8), communications(9), ascIt81(10), ascIt82(11),
        storageArrayController(12), enclosure(13), simplifiedDirectAccess(14),
        opticalCardReader(15), unknown(31) }

-- a truth value
   Boolean ::=   INTEGER { true(1), false(2) }

-- FC Status
   FcStatus ::= INTEGER { configWait(0), loopInit(1), login(2), ready(3),
   lostSync(4), error(5), reinit(6), nonPart(7), failed(8) }

-- Fibre Channel Port Type
    FibrePort ::= INTEGER{ nodeLoop(0) , node(1) , fabricLoop(3), fabric(4),
none( 255 ) }

-- Fibre Port Mode
    FibrePortMode   ::= INTEGER{ privateTargetOnly(1),
                                 privateInitiatorOnly(2),
                                 privateTargetAndInitiator(3),
```

```
                                publicTargetOnly(17),
                                publicInitiatorOnly(18),
                                publicTargetAndInitiator(19) }

-- Fibre Channel Connection options
    FibreConnOptions ::= INTEGER{ loopOnly(0),
                                  pointToPointOnly(1),
                                  loopPreferred(2),
                                  pointToPointPreferred(3) }

-- SCSI ANSI Level
    ScsiAnsiLevel ::= INTEGER{ notScsi(0) , scsi-1(1), scsi-2(2) , scsi-3(3) }

-- Blade Status
    BladeState ::= INTEGER{ unknown(0), notReady(1), booting(2),
autoleveling(3), autolevelcomplete(4), autolevelfailed(5), ready(6),
powereddown(7) }

-- *** FC Host Port Failover ***
    FcHPFRecoveryType ::= INTEGER {returnToActive(0), returnToStandby(1),
requiresIntervention(2)}
    FcHPFPortState    ::= INTEGER {onLine(0), offLine(1)}
    FcHPFPortFailType ::= INTEGER {none(0), linkDown(1), linkError(2)}

-- blade top-level

    bladeInterfaces OBJECT IDENTIFIER ::= { tapeLibraryMIB 16 }

    bladeTable OBJECT-TYPE
        SYNTAX              SEQUENCE OF BladeEntry
        MAX-ACCESS              not-accessible
        STATUS              current
        DESCRIPTION         "Data Appliance Blade Table"
        ::= { bladeInterfaces 1 }

    bladeEntry OBJECT-TYPE
        SYNTAX              BladeEntry
        MAX-ACCESS          not-accessible
        STATUS              current
```

```
        DESCRIPTION         "Data Appliance Blade Entry"
        INDEX               { bladeIndex }
        ::= { bladeTable 1 }

    BladeEntry ::= SEQUENCE {
        bladeIndex                      INTEGER,
        bladeLocation                   DisplayString,
        bladeIP                         DisplayString,
        bladeWWNodeName                 OCTET STRING,
        bladeHealthCheckValue           Gauge,
        bladeHealthCheckInterval        Gauge,
        bladeHealthCheckLevel           INTEGER,
        bladeFWRev                      DisplayString,
        bladeSerialNumber               DisplayString,
        bladeEVPSEnabled                INTEGER,
        bladeMaxHostLun                 INTEGER,
        bladeState                      BladeState,
        blHPFLinkDownThreshold               INTEGER ,
        blHPFErrorRecoveryMode               FcHPFRecoveryType ,
        blHPFLinkDownRecoveryMode            FcHPFRecoveryType
    }

--
-- Begin definitions
--
    bladeIndex   OBJECT-TYPE
        SYNTAX INTEGER
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION
            "Blade index"
        ::= { bladeEntry 1 }

    bladeLocation   OBJECT-TYPE
        SYNTAX DisplayString
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION
```

```
            "Blade location"
        ::= { bladeEntry 2 }

    bladeIP   OBJECT-TYPE
        SYNTAX DisplayString
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION
            "Blade IP address"
        ::= { bladeEntry 3 }

    bladeWWNodeName   OBJECT-TYPE
        SYNTAX OCTET STRING
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION
            "Blade World Wide Node Name"
        ::= { bladeEntry 4 }

    bladeHealthCheckValue OBJECT-TYPE
       SYNTAX Gauge
       ACCESS read-only
       STATUS mandatory
       DESCRIPTION
           "Value in percent of health check
           tests passed."
       ::= { bladeEntry 5 }

    bladeHealthCheckLevel OBJECT-TYPE
       SYNTAX INTEGER{ none(0), system(1) , interface(2) , simpleDevice(3),
deviceReady(4) }
       ACCESS read-only
       STATUS mandatory
       DESCRIPTION
           "Scrutiny level of health check function."
       ::= { bladeEntry 6 }

    bladeHealthCheckInterval OBJECT-TYPE
```

```
    SYNTAX Gauge
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Health Check interval in minutes."
    ::= { bladeEntry 7 }

bladeFWRev OBJECT-TYPE
     SYNTAX DisplayString (SIZE (0..64))
     ACCESS read-only
     STATUS mandatory
     DESCRIPTION "Blade Firmware Revision information."
     ::= { bladeEntry 8 }

bladeSerialNumber OBJECT-TYPE
     SYNTAX DisplayString (SIZE (0..64))
     ACCESS read-only
     STATUS mandatory
     DESCRIPTION "Blade Serial Number."
     ::= { bladeEntry 9 }

 bladeEVPSEnabled    OBJECT-TYPE
     SYNTAX  INTEGER
     ACCESS  read-only
     STATUS  mandatory
     DESCRIPTION  "Bit 0:  EVPS active if 1, inactive if 0
                   Bit 1:  EVPS licensed if 1, unlicensed if 0"
     ::= { bladeEntry 10 }

 bladeMaxHostLun     OBJECT-TYPE  -- C.R. 2370
     SYNTAX  INTEGER
     ACCESS  read-only
     STATUS  mandatory
     DESCRIPTION  "The number of devices one host can see"
     ::= { bladeEntry 11 }

 bladeState  OBJECT-TYPE
     SYNTAX  BladeState
     ACCESS read-only
```

```
        STATUS mandatory
        DESCRIPTION "Blade state"
        ::= { bladeEntry 12 }

    blHPFLinkDownThreshold  OBJECT-TYPE
        SYNTAX  INTEGER
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "Used to set the Link Down threshold delay period in
                    seconds. The failover is triggered when the delay period
                    ends."
    ::= { bladeEntry 13 }

    blHPFErrorRecoveryMode  OBJECT-TYPE
        SYNTAX FcHPFRecoveryType
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "Used to set the global recovery mode for
                     failures that happen due to FC cable errors
                     Values: returnToActive(0), returnToStandby(1),
                     requiresIntervention(2)"
    ::= { bladeEntry 14 }

    blHPFLinkDownRecoveryMode  OBJECT-TYPE
        SYNTAX FcHPFRecoveryType
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "Used to set the global recovery mode for
                     failures that happen due to Link Down Errors
                     Values: returnToActive(0), returnToStandby(1),
                     requiresIntervention(2)"
    ::= { bladeEntry 15 }

    -- One Level down
    -- Blade Device Info
blDevTable OBJECT-TYPE
        SYNTAX              SEQUENCE OF BlDevEntry
        MAX-ACCESS              not-accessible
```

```
    STATUS              current
    DESCRIPTION         "Data Appliance Blade Device Table"
    ::= { bladeInterfaces 2 }

blDevEntry OBJECT-TYPE
    SYNTAX              BlDevEntry
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Data Appliance Blade Device Entry"
    INDEX               { bladeIndex, blDevIndex }
    ::= { blDevTable 1 }

BlDevEntry ::= SEQUENCE {
    blDevIndex              INTEGER,
    blDevUID                DisplayString,
    blDevType               DeviceType,
    blDevVendor             DisplayString,
    blDevProduct            DisplayString,
    blDevSerial             DisplayString,
    blDevInterfaceType      InterfaceType,
    blDevLun                INTEGER,
    blDevCtlrIndex          INTEGER,
    blDevFWRev              DisplayString,
    blDevTargetLun          INTEGER
    }

blDevIndex  OBJECT-TYPE
    SYNTAX INTEGER
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "MIB table index"
::= { blDevEntry 1 }
blDevUID  OBJECT-TYPE
    SYNTAX  DisplayString(SIZE(16))
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Universal Identifier"
::= { blDevEntry 2 }
```

```
blDevType OBJECT-TYPE
    SYNTAX DeviceType
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Device Type."
::= { blDevEntry 3 }
blDevVendor OBJECT-TYPE
    SYNTAX DisplayString(SIZE(8))
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Device Vendor"
::= { blDevEntry 4 }
blDevProduct OBJECT-TYPE
    SYNTAX DisplayString(SIZE(16))
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Device Product Identifier"
::= { blDevEntry 5 }
blDevSerial    OBJECT-TYPE
    SYNTAX DisplayString( SIZE(0..32))
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Device Serial Number"
::= { blDevEntry 6 }
blDevInterfaceType OBJECT-TYPE
    SYNTAX InterfaceType
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "This device's type of communication interface."
::= { blDevEntry 7 }
blDevLun OBJECT-TYPE
    SYNTAX  INTEGER
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "SCSI Logical Unit Number of the device."
::= { blDevEntry 8 }
blDevCtlrIndex OBJECT-TYPE
    SYNTAX  INTEGER
```

```
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "Index of this device's controller in the
        Controllers MIB table and type-specific
        controller tables"
::= { blDevEntry 9 }
blDevFWRev OBJECT-TYPE
    SYNTAX  DisplayString( SIZE(0..32))
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Device firmware revision number/identifier"
::= { blDevEntry 10 }
blDevTargetLun  OBJECT-TYPE
    SYNTAX INTEGER
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "This target device's Logical Unit Number as
                seen from attached host."
::= { blDevEntry 11 }

-- Blade Controller Info
blCtlrTable OBJECT-TYPE
    SYNTAX              SEQUENCE OF BlCtlrEntry
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Data Appliance Blade Controller Table"
    ::= { bladeInterfaces 3 }

blCtlrEntry OBJECT-TYPE
    SYNTAX              BlCtlrEntry
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Data Appliance Blade Controller Entry"
    INDEX               { bladeIndex, blCtlrIndex }
    ::= { blCtlrTable 1 }

BlCtlrEntry ::= SEQUENCE {
```

```
    blCtlrIndex             INTEGER,
    blCtlrType              InterfaceType,
    blCtlrChannelMask       Gauge
    }

blCtlrIndex OBJECT-TYPE
    SYNTAX  INTEGER
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "MIB Table index."
::= { blCtlrEntry 1 }
blCtlrType  OBJECT-TYPE
    SYNTAX  InterfaceType
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Communication Interface type."
::= { blCtlrEntry 2 }
blCtlrChannelMask OBJECT-TYPE
    SYNTAX  Gauge
    ACCESS read-write
    STATUS mandatory
    DESCRIPTION
        "Specifies access permissions for this initiator
        in bits 0 through 18
        ************************************************
                    -* SCSI Channels *-
        Bit 0 => Is access DISALLOWED to SCSI channel 1 ?
        Bit 1 => Is access DISALLOWED to SCSI channel 2 ?
        Bit 2 => Is access DISALLOWED to SCSI channel 3 ?
        Bit 3 => Is access DISALLOWED to SCSI channel 4 ?
                   -* Ultra SCSI Channels *-
        Bit 4 => Is access DISALLOWED to Ultra SCSI channel 1 ?
        Bit 5 => Is access DISALLOWED to Ultra SCSI channel 2 ?
        Bit 6 => Is access DISALLOWED to Ultra SCSI channel 3 ?
        Bit 7 => Is access DISALLOWED to Ultra SCSI channel 4 ?
        Bit 8 => Is access DISALLOWED to Ultra SCSI channel 5 ?
        Bit 9 => Is access DISALLOWED to Ultra SCSI channel 6 ?
                     -* Fibre Channel *-
```

```
        Bit 10 => Is access DISALLOWED to Fibre Channel 1 ?
        Bit 11 => Is access DISALLOWED to Fibre Channel 2 ?
        Bit 12 => Is access DISALLOWED to Fibre Channel 3 ?
        Bit 13 => Is access DISALLOWED to Fibre Channel 4 ?
        Bit 14 => Is access DISALLOWED to Fibre Channel 5 ?
        Bit 15 => Is access DISALLOWED to Fibre Channel 6 ?
                    -* SSA Channels *-
        Bit 16 => Is access DISALLOWED to SSA channel 1 ?
        Bit 17 => Is access DISALLOWED to SSA Channel 2 ?
        Bit 18 => Is access DISALLOWED to SSA Channel 3 ?"
::= { blCtlrEntry 3 }

-- Blade FC Controllers
blFcCtlrTable OBJECT-TYPE
    SYNTAX              SEQUENCE OF BlFcCtlrEntry
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Data Appliance Blade Controller Table"
    ::= { bladeInterfaces 4 }

blFcCtlrEntry OBJECT-TYPE
    SYNTAX              BlFcCtlrEntry
    MAX-ACCESS          not-accessible
    STATUS              current
    DESCRIPTION         "Data Appliance Blade FC Controller Information"
    INDEX               { bladeIndex, blCtlrIndex }
    ::= { blFcCtlrTable 1 }

BlFcCtlrEntry ::= SEQUENCE {
    blFcCtlrStatus          FcStatus,
    blFcCtlrMaxSpeed        Gauge,
    blFcCtlrWWPortName      DisplayString,
    blFcCtlrLoopID          INTEGER,
    blFcCtlrLoopIDMode          FCPortLoopIdMode ,
    blFcCtlrPortMode        FibrePortMode,
    blFcCtlrConnectionOptions       FibreConnOptions
    }
```

```
blFcCtlrStatus    OBJECT-TYPE
    SYNTAX  FcStatus
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "Status of the Fibre Channel blade ports."
::= { blFcCtlrEntry 1 }
blFcCtlrMaxSpeed  OBJECT-TYPE
    SYNTAX  Gauge
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Maximum Transfer Speed in MBytes per second."
::= { blFcCtlrEntry 2 }
blFcCtlrWWPortName  OBJECT-TYPE
    SYNTAX  DisplayString(SIZE(17))
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "World Wide Name of the blade's ports."
::= { blFcCtlrEntry 3 }
blFcCtlrLoopID    OBJECT-TYPE
    SYNTAX  INTEGER(-1..127)
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "Fibre Channel Loop ID.
        soft = -1"
::= { blFcCtlrEntry 4 }
blFcCtlrLoopIDMode   OBJECT-TYPE
    SYNTAX FCPortLoopIdMode
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION
        "Fibre Channel loop ID mode (soft or hard)"
::= { blFcCtlrEntry 5 }
blFcCtlrPortMode OBJECT-TYPE
    SYNTAX  FibrePortMode
    ACCESS read-only
```

```
        STATUS mandatory
        DESCRIPTION
            "Fibre Channel port mode."
    ::= { blFcCtlrEntry 6 }
    blFcCtlrConnectionOptions OBJECT-TYPE
        SYNTAX  FibreConnOptions
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION
            "Connection options for ISP2200 FC chip.
            Values 4 - 8 are reserved."
    ::= { blFcCtlrEntry 7 }

  -- EVPS/Host mapping/management
    blHostTable OBJECT-TYPE
        SYNTAX SEQUENCE OF BlHostEntry
        ACCESS not-accessible
        STATUS mandatory
        DESCRIPTION
            ""
        ::= { bladeInterfaces 5 }

    blHostEntry OBJECT-TYPE
       SYNTAX BlHostEntry
       ACCESS not-accessible
       STATUS mandatory
       DESCRIPTION " "
        INDEX { bladeIndex, blHostIndex }
       ::= { blHostTable 1 }

    BlHostEntry ::= SEQUENCE {
        blHostIndex          INTEGER ,
        blHostWWName         DisplayString ,
        blHostName           DisplayString ,
        blHostType           DisplayString ,
        blHostPortID         DisplayString ,
        blHostITLData        OCTET STRING ,
        blHostLunMap         OCTET STRING
```

```
}

blHostIndex  OBJECT-TYPE
    SYNTAX  INTEGER
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Index into Host Initiator table "
::= { blHostEntry 1 }

blHostWWName  OBJECT-TYPE
    SYNTAX  DisplayString( SIZE( 0 .. 32 ) )
    ACCESS read-write
    STATUS mandatory
    DESCRIPTION "World Wide name of this Initiator. "
::= { blHostEntry 2 }

blHostName  OBJECT-TYPE
    SYNTAX  DisplayString( SIZE( 0 .. 32 ) )
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "Name for this Initiator. "
::= { blHostEntry 3 }

blHostType  OBJECT-TYPE
    SYNTAX  DisplayString( SIZE( 0 .. 32 ) )
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "The type of host that is connected to the blade."
::= { blHostEntry 4 }

blHostPortID  OBJECT-TYPE
    SYNTAX  DisplayString( SIZE( 0 .. 32 ) )
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "The ID of the host port "
::= { blHostEntry 5 }

blHostITLData  OBJECT-TYPE
```

```
        SYNTAX  OCTET STRING ( SIZE( 256 ) )
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "Initiator-Target-Logical Unit nexus (ITL) Access
                     Control data for this host.  There are 256 possible LUNs
                     with 1 byte of data per LUN. "
    ::= { blHostEntry 6 }

    blHostLunMap  OBJECT-TYPE
        SYNTAX  OCTET STRING ( SIZE( 512  ) )
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "EVPS Map data.  There are 256 possible LUNs
                     with 2 bytes of data for each lun"
    ::= { blHostEntry 7 }

-- Host Port failover mapping
    blHPFMapTable OBJECT-TYPE
        SYNTAX SEQUENCE OF BlHPFMapEntry
        ACCESS not-accessible
        STATUS mandatory
        DESCRIPTION
            ""
        ::= { bladeInterfaces 6 }

    blHPFMapEntry OBJECT-TYPE
       SYNTAX BlHPFMapEntry
       ACCESS not-accessible
       STATUS mandatory
       DESCRIPTION
            " SNMP table for FC Host Port Failover
              Mappings "
       INDEX {  bladeIndex, blHPFMapVirtualPort }
       ::= { blHPFMapTable 1 }

    BlHPFMapEntry ::= SEQUENCE {
        blHPFMapVirtualPort   INTEGER,     -- The Virtual Port Index,
```

```
 blHPFMapPrimaryPort  INTEGER,   -- The port index of the active port

    blHPFMapStandbyList   OCTET STRING ,
                                  -- Comma separated list of standby Ports

    blHPFMapActivePort    INTEGER   -- The port index of the active port
}

blHPFMapVirtualPort  OBJECT-TYPE
    SYNTAX INTEGER
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "The virtual port index. The value is usually the same
                as the physical port index, but will be zero if HPF
                is not configured."
::= { blHPFMapEntry 1 }

blHPFMapPrimaryPort  OBJECT-TYPE
    SYNTAX INTEGER
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "The physical port index that acts as the
                 default standby"
::= { blHPFMapEntry 2 }

blHPFMapStandbyList OBJECT-TYPE
    SYNTAX OCTET STRING (SIZE(256))
    ACCESS read-only
    STATUS mandatory
    DESCRIPTION "The comma separated list of ports that are
                 configured as standbys for the virtual port
                 (excluding the primary port)."
::= { blHPFMapEntry 3 }

blHPFMapActivePort OBJECT-TYPE
    SYNTAX INTEGER
    ACCESS read-only
    STATUS mandatory
```

```
        DESCRIPTION "The physical port that is active on this virtual port"
    ::= { blHPFMapEntry 4 }

    blHPFPhysicalTable OBJECT-TYPE
        SYNTAX SEQUENCE OF BlHPFPhysicalEntry
        ACCESS not-accessible
        STATUS mandatory
        DESCRIPTION
            ""
        ::= { bladeInterfaces 7 }

    blHPFPhysicalEntry OBJECT-TYPE
       SYNTAX BlHPFPhysicalEntry
       ACCESS not-accessible
       STATUS mandatory
       DESCRIPTION
           " SNMP table for FC Host Port Failover
              Port Settings "
       INDEX { bladeIndex, blHPFPhysicalPort }
       ::= { blHPFPhysicalTable 1 }

    BlHPFPhysicalEntry ::= SEQUENCE {
     blHPFPhysicalPort INTEGER,           -- The physical FC port index
        blHPFPhysicalPortFailureType   FcHPFPortFailType,
                                         -- If failed, then the type of failure
                                            -- Link-Error/Link-Down/None
        blHPFPhysicalPortCurrentState  FcHPFPortState,
                                              -- The state of this physical port
                                            -- online/offline


        blHPFPhysicalPortIntervention  Boolean -- If the port requires
intervention?
    }

    blHPFPhysicalPort  OBJECT-TYPE
        SYNTAX INTEGER
        ACCESS read-only
        STATUS mandatory
```

```
        DESCRIPTION "The physical FC port Index.  The available ports are 1,2."
    ::= { blHPFPhysicalEntry 1 }

    blHPFPhysicalPortFailureType  OBJECT-TYPE
        SYNTAX FcHPFPortFailType
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "If this physical port failed, this field provides the
                     type of failure.Values 0 = None, 1 = Link Down
                     2 = Link Error"
    ::= { blHPFPhysicalEntry 2 }

    blHPFPhysicalPortCurrentState OBJECT-TYPE
        SYNTAX FcHPFPortState
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "The current state of this physical port. The values
                     0 = Online, 1 = Offline"
    ::= { blHPFPhysicalEntry 3 }

    blHPFPhysicalPortIntervention OBJECT-TYPE
        SYNTAX Boolean
        ACCESS read-only
        STATUS mandatory
        DESCRIPTION "Does this physical port require intervention? Values
                     1 = true, 2 = false"
    ::= { blHPFPhysicalEntry 4 }

-- end blade additions

--
-- NotificationOnlyData is a way to get the payload data across without
-- relating it to other MIB OID's, a dummy OID
    faultyLibLocation OBJECT-TYPE
    SYNTAX     DisplayString
    MAX-ACCESS accessible-for-notify
    STATUS     current
    DESCRIPTION
```

```
        "Place holder for the tape alert traps"
    ::= { tapeLibraryMIBNotificationOnlyData 1 }

--
--  Notifications relating to the basic operation of the agent
--  These are generated by the net-snmp code, so we mirror them here so that it
--  has an equivalent for our enterprise OID.
--
    tapeLibNotifyStart        NOTIFICATION-TYPE
    STATUS      current
    DESCRIPTION
        "An indication that the tape library agent has started running."
    ::= { tapeLibraryMIBNotifications 1 }

    tapeLibNotifyShutdown     NOTIFICATION-TYPE
    STATUS current
    DESCRIPTION
        "An indication that the tape library agent is in the process of
        being shut down."
    ::= { tapeLibraryMIBNotifications 2 }

    tapeLibNotifyRestart      NOTIFICATION-TYPE
    STATUS      current
    DESCRIPTION
        "An indication that the tape library agent has been restarted.
         This does not imply anything about whether the configuration has
         changed or not (unlike the standard coldStart or warmStart traps)"
    ::= { tapeLibraryMIBNotifications 3 }


    startupSequenceCompleted NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            libraryGlobalStatus
        }
        STATUS              current
        DESCRIPTION         "Notify that the library has completed
                             its boot sequence."
```

```
                            --#TYPE "Startup Sequence Completed"
                           --#SUMMARY "The library %s has completed its bootup
sequence and is at status %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
    ::= { tapeLibraryMIBNotifications 101 }

    shutdownSequenceInitiated NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            libraryGlobalStatus
        }
        STATUS              current
        DESCRIPTION         "Notify that the library has started its
                             reboot sequence."
                            --#TYPE "Shutdown Sequence Initiated"
                            --#SUMMARY "The library %s has initiated shutdown
sequence and is at status %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 102 }

    phLibrayStateChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            physicalLibraryState
        }
        STATUS              current
       DESCRIPTION        "Notify that the online state of the physical library
changed."
                         --#TYPE "Change in Online state of the Physical Library"
                            --#SUMMARY "The library %s has changed its online
state and is at state %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 103 }

    moduleDoorStatusChange NOTIFICATION-TYPE
```

```
        OBJECTS           {
            librarySerialNumber,
            aggregatedMainDoorStatus
        }
        STATUS              current
       DESCRIPTION         "Notify that the status of the module door changed."
                            --#TYPE "Change in main Chassis door status"
                           --#SUMMARY "The Main chassis door of the library %s
has changed status to %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 104 }

    ieDoorStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            aggregatedIEDoorStatus
        }
        STATUS              current
      DESCRIPTION       "Notify that the status of IE Door of a module changed."
                            --#TYPE "Change in IE door status"
                         --#SUMMARY "The IE door of the library %s has changed
status to %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 105 }

    roboticsReady NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber
        }
        STATUS              current
        DESCRIPTION         "Notify that the robot is ready."
                            --#TYPE "Robotics changed state to ready"
                          --#SUMMARY "The Robotics of the library %s has become
ready."
                            --#ARGUMENTS {0}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 106 }
```

```
    roboticsNotReady NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber
        }
        STATUS              current
        DESCRIPTION         "Notify when robot is not ready."
                            --#TYPE "Robotics changed state to not ready"
                           --#SUMMARY "The Robotics of the library %s has become
not ready."
                            --#ARGUMENTS {0}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 107 }

    logicalLibraryStateChange NOTIFICATION-TYPE
        OBJECTS           {
            logicalLibraryName,
            librarySerialNumber,
            logicalLibraryState
        }
        STATUS              current
        DESCRIPTION         "Notify when logical library online state changed."
                            --#TYPE "Partition changed online state"
                           --#SUMMARY "The Partition %s of the library %s has
changed the online state and online state is at %d."
                            --#ARGUMENTS {0,1,2}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 108 }

    connectivityStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            connectivityStatus
        }
        STATUS              current
        DESCRIPTION         "Notify when connectivity health status changed."
                      --#TYPE "RAS status of the Connectivity SubSystem Changed"
                         --#SUMMARY "The Connectivity Subsystem of the library
%s has changed the RAS status and the RAS status is at %d."
```

```
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 109 }

    controlStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            controlStatus
        }
        STATUS              current
        DESCRIPTION         "Notify when control health status changed."
                           --#TYPE "RAS status of the Control SubSystem Changed"
                            --#SUMMARY "The Control Subsystem of the library %s
has changed the RAS status and the RAS status is at %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 110 }

    coolingStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            coolingStatus
        }
        STATUS              current
        DESCRIPTION         "Notify on cooling health status change."
                           --#TYPE "RAS status of the Cooling SubSystem Changed"
                            --#SUMMARY "The Cooling Subsystem of the library %s
has changed the RAS status and the RAS status is at %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 111 }

    driveStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            phDriveRasStatus
        }
        STATUS              current
        DESCRIPTION         "Notify on drive health status change."
```

```
                            --#TYPE "RAS status of the Drive SubSystem Changed"
                             --#SUMMARY "The Drive Subsystem of the library %s
has changed the RAS status and the RAS status is at %d."
                             --#ARGUMENTS {0,1}
                             --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 112 }

    mediaStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            mediaStatus
        }
        STATUS             current
        DESCRIPTION        "Notify on media health status change."
                           --#TYPE "RAS status of the Media SubSystem Changed"
                            --#SUMMARY "The Media Subsystem of the library %s
has changed the RAS status and the RAS status is at %d."
                             --#ARGUMENTS {0,1}
                             --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 113 }

    powerStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            powerStatus
        }
        STATUS             current
        DESCRIPTION        "Notify voltage health status change."
                           --#TYPE "RAS status of the Power SubSystem Changed"
                            --#SUMMARY "The Power Subsystem of the library %s
has changed the RAS status and the RAS status is at %d."
                             --#ARGUMENTS {0,1}
                             --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 114 }

    roboticsStatusChange NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            roboticsStatus
```

```
        }
        STATUS              current
        DESCRIPTION         "Notify robotics health status change."
                          --#TYPE "RAS status of the Robotics SubSystem Changed"
                            --#SUMMARY "The Robotics Subsystem of the library
%s has changed the RAS status and the RAS status is at %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 115 }

    operatorInterventionRequired NOTIFICATION-TYPE
        OBJECTS           {
            librarySerialNumber,
            libraryGlobalStatus
        }
        STATUS              current
        DESCRIPTION         "Notify that a operator intervention required."
                            --#TYPE "Operator intervention is required"
                            --#SUMMARY "The library %s requires operator's
intervention and the global RAS status is at %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY CRITICAL
        ::= { tapeLibraryMIBNotifications 116 }

    driveOnlineStateChange NOTIFICATION-TYPE
        OBJECTS        {
            phDriveVendor,
            phDriveModel,
            phDriveSerialNumber,
            phDriveLocation,
            librarySerialNumber,
            phDriveState
        }
        STATUS              current
        DESCRIPTION         "Notify when drive online state changed."
                            --#TYPE "Drive changed online state"
                          --#SUMMARY "The Drive %s %s %s in location %s of the
library %s has changed the online state and online state is at %d."
                            --#ARGUMENTS {0,1,2,3,4,5}
```

```
                            --#SEVERITY INFORMATIONAL
        ::= { tapeLibraryMIBNotifications 117 }

    libraryTapeAlert1 NOTIFICATION-TYPE
        OBJECTS {
            faultyLibLocation,
            librarySerialNumber
        }
        STATUS       current
        DESCRIPTION  "Notification that the library set Tape Alert 1,
                     indicating a drive communication failure."
                     --#TYPE "Drive communication failure"
                     --#SUMMARY "A tape drive communication failure occurred
drive %s in library %s."
                     --#ARGUMENTS {0,1}
                     --#SEVERITY CRITICAL
        ::= { tapeLibraryMIBNotifications 121 }

    libraryTapeAlert2 NOTIFICATION-TYPE
        OBJECTS {
            librarySerialNumber,
            libraryGlobalStatus
        }
        STATUS              current
        DESCRIPTION         "Notification that the library set Tape Alert 2,
                             indicating a hardware failure."
                          --#TYPE "Library hardware failure"
                         --#SUMMARY "Library %s encountered a hardware failure.
Global RAS status = %d."
                          --#ARGUMENTS {0,1}
                          --#SEVERITY CRITICAL
        ::= { tapeLibraryMIBNotifications 122 }

    libraryTapeAlert4 NOTIFICATION-TYPE
        OBJECTS {
            librarySerialNumber,
            libraryGlobalStatus
        }
        STATUS              current
```

```
        DESCRIPTION         "Notification that the library set Tape Alert 4,
                             indicating a non-mechanical hardware failure."
                      --#TYPE "A non-mechanical library hardware failure occurred"
                            --#SUMMARY "Library %s encountered a non-mechanical
hardware failure. Global RAS status = %d."
                            --#ARGUMENTS {0,1}
                            --#SEVERITY CRITICAL
        ::= { tapeLibraryMIBNotifications 124 }

    libraryTapeAlert13 NOTIFICATION-TYPE
        OBJECTS {
            faultyLibLocation,
            librarySerialNumber
        }
        STATUS        current
        DESCRIPTION   "Notification that the library set Tape Alert 13,
                       indicating a problem when picking a tape cartridge."
                    --#TYPE "Cartridge pick problem"
                    --#SUMMARY "A cartridge pick retry occurred at location %s
in library %s."
                    --#ARGUMENTS {0,1}
                    --#SEVERITY WARNING
        ::= { tapeLibraryMIBNotifications 133 }

    libraryTapeAlert14 NOTIFICATION-TYPE
        OBJECTS {
            faultyLibLocation,
            librarySerialNumber
        }
        STATUS        current
        DESCRIPTION   "Notification that the library set Tape Alert 14,
                       indicating a problem when placing a tape cartridge."
                     --#TYPE "Cartridge placement problem"
                    --#SUMMARY "A cartridge placement retry occurred at location
%s in library %s."
                     --#ARGUMENTS {0,1}
                     --#SEVERITY WARNING
        ::= { tapeLibraryMIBNotifications 134 }
```

```
    libraryTapeAlert15 NOTIFICATION-TYPE
        OBJECTS {
            faultyLibLocation,
            librarySerialNumber
        }
        STATUS        current
        DESCRIPTION   "Notification that the library set Tape Alert 15,
                       indicating a problem when loading a drive."
                    --#TYPE "Drive load problem"
                    --#SUMMARY "A drive load problem occurred at drive %s in
library %s."
                    --#ARGUMENTS {0,1}
                    --#SEVERITY CRITICAL
        ::= { tapeLibraryMIBNotifications 135 }

    libraryTapeAlert16  NOTIFICATION-TYPE
        OBJECTS {
            librarySerialNumber
        }
        STATUS       current
        DESCRIPTION  "Notification that the library set Tape Alert 16,
                      indicating an open library access door."
                  --#TYPE "Library main access door open"
                  --#SUMMARY "A main access door is open in library %s."
                  --#ARGUMENTS {0}
                  --#SEVERITY CRITICAL
        ::= { tapeLibraryMIBNotifications 136 }

    libraryTapeAlert17 NOTIFICATION-TYPE
        OBJECTS {
            faultyLibLocation,
            librarySerialNumber
        }
        STATUS              current
        DESCRIPTION         "Notification that the library set Tape Alert 17,
                             indicating a mailbox station mechanical problem."
                          --#TYPE "Mailbox mechanical problem"
                          --#SUMMARY "A mechanical mailbox problem occurred at
location %s of library %s."
```

```
                        --#ARGUMENTS {0,1}
                        --#SEVERITY CRITICAL
        ::= { tapeLibraryMIBNotifications 137 }

    libraryTapeAlert23 NOTIFICATION-TYPE
        OBJECTS {
            faultyLibLocation,
            librarySerialNumber
        }
        STATUS              current
        DESCRIPTION         "Notification that the library set Tape Alert 23,
                             indicating that excessive scan retries occurred."
                        --#TYPE "Excessive scan retries"
                        --#SUMMARY "Scan retries occurred in location %s of
library %s."
                        --#ARGUMENTS {0,1}
                        --#SEVERITY WARNING
        ::= { tapeLibraryMIBNotifications 143 }

    libraryTapeAlert32 NOTIFICATION-TYPE
        OBJECTS {
            faultyLibLocation,
            librarySerialNumber
        }
        STATUS              current
        DESCRIPTION         "Notification that the library set Tape Alert 32,
                             indicating that a tape cartridge barcode label
                             could not be read."
                        --#TYPE "Barcode label un-readable"
                       --#SUMMARY "A tape cartridge barcode label in location
%s of library %s cannot be read."
                        --#ARGUMENTS {0,1}
                        --#SEVERITY INFORMATIONAL
         ::= { tapeLibraryMIBNotifications 152 }

-- conformance information

tapeLibraryMIBConformance OBJECT IDENTIFIER ::= { tapeLibraryMIB 4 }
tapeLibraryMIBCompliances OBJECT IDENTIFIER ::= { tapeLibraryMIBConformance 1 }
```

```
tapeLibraryMIBGroups     OBJECT IDENTIFIER ::= { tapeLibraryMIBConformance 2 }


-- compliance statements

tapeLibraryMIBCompliance MODULE-COMPLIANCE
        STATUS  current
        DESCRIPTION
                "The compliance statement for entities which implement
                Tape Library MIB"
        MODULE  -- this module
                MANDATORY-GROUPS { tapeLibraryMIBGroup,
                                   tapeLibraryMIBNotifGroup }
        ::= { tapeLibraryMIBCompliances 1 }

-- units of conformance



tapeLibraryMIBGroup OBJECT-GROUP
OBJECTS {
        libraryIpAddress,
        librarySNMPAgentDescription,
        libraryName,
        libraryVendor,
        librarySerialNumber,
        libraryDescription,
        libraryModel,
        libraryGlobalStatus,

        overallPhDriveReadinessStatus,
        numPhDrives,

        phDriveSerialNumber,
        phDriveModel,
        phDriveVendor,
        phDriveType,
        phDriveLocation,
```

```
phDriveFirmwareVersion,
phDriveLogicalLibraryName,
phDriveLibrarySerialNumber,
phDriveState,
phDriveRasStatus,
phDriveNeedsCleaning,
phDriveInterfaceType,
phDriveScsiLun,
phDriveScsiId,
phDriveLoads,
phDrivePhysicalSerialNumber,

logicalLibraryName,
logicalLibrarySerialNumber,
logicalLibraryModel,
logicalLibraryAssignedLun,
logicalLibraryMediaDomain,
logicalLibrarySupportedMediaTypes,
logicalLibraryState,
logicalLibraryNumSlots,
logicalLibraryNumIE,
logicalLibraryNumTapeDrives,
logicalLibraryStorageElemAddr,
logicalLibraryIEElemAddr,
logicalLibraryTapeDriveElemAddr,
logicalLibraryChangerDeviceAddr,

powerStatus,
coolingStatus,
controlStatus,
connectivityStatus,
roboticsStatus,
mediaStatus,
driveStatus,
operatorActionRequest,

numLogicalLibraries,
```

```
physicalLibraryState,
aggregatedMainDoorStatus,
aggregatedIEDoorStatus,
numStorageSlots,
numIESlots,
robotState,

fcPortType,
fcPortWWNodeName,
fcPortWWPortName,
fcPortLoopId,
fcPortLoopIdMode,
fcPortId,
fcPortNegotiatedSpeed,
fcPortRasStatus,
fcPortFWRev,
fcPortFrameSize,
fcPortDriveSerialNumber,
fcPortLogicalLibrarySerialNumber,

scsiControllerRasStatus,
scsiControllerSpeed,
scsiControllerRole,
scsiControllerIoCard,
scsiControllerMaxIds,
scsiControllerMaxLuns,
scsiControllerMaxWidth,
scsiControllerFWRev,
scsiControllerDriveSerialNumber,
scsiControllerLogicalLibrarySN,

sasPortIndex,
sasPortAddress,
sasPortRasStatus,
sasPortNegotiatedSpeed,
sasPortFWRev,
sasPortDriveSerialNumber,
sasPortLogicalLibrarySN,
```

```
-- start blade additions
-- blade top-level
bladeIndex,
bladeLocation,
bladeIP,
bladeWWNodeName,
bladeHealthCheckValue,
bladeHealthCheckInterval,
bladeHealthCheckLevel,
bladeFWRev,
bladeSerialNumber,
bladeEVPSEnabled,
bladeMaxHostLun,
bladeState,
blHPFLinkDownThreshold,
blHPFErrorRecoveryMode,
blHPFLinkDownRecoveryMode,

-- devices /blade level
blDevIndex,
blDevUID,
blDevType,
blDevVendor,
blDevProduct,
blDevSerial,
blDevInterfaceType,
blDevLun,
blDevCtlrIndex,
blDevFWRev,
blDevTargetLun,

-- controllers /blade level
blCtlrIndex,
blCtlrType,
blCtlrChannelMask,

-- FC controllers /blade/controllers level
```

```
        blFcCtlrStatus,
        blFcCtlrMaxSpeed,
        blFcCtlrWWPortName,
        blFcCtlrLoopID,
        blFcCtlrLoopIDMode ,
        blFcCtlrPortMode,
        blFcCtlrConnectionOptions,

        -- EVPS
        blHostIndex,
        blHostWWName,
        blHostName,
        blHostType,
        blHostPortID,
        blHostITLData,
        blHostLunMap,

        -- HPF
        blHPFMapVirtualPort,
        blHPFMapPrimaryPort,
        blHPFMapStandbyList,
        blHPFMapActivePort,

        blHPFPhysicalPort,
        blHPFPhysicalPortFailureType,
        blHPFPhysicalPortCurrentState,
        blHPFPhysicalPortIntervention,

        -- end blade additions
        faultLibLocation
}
        STATUS  current
        DESCRIPTION
                "A collection of objects providing Tape Library Management
                capability."
        ::= { tapeLibraryMIBGroups 1 }
```

```
tapeLibraryMIBNotifGroup NOTIFICATION-GROUP
NOTIFICATIONS {

        tapeLibNotifyStart,
        tapeLibNotifyShutdown,
        tapeLibNotifyRestart,
        startupSequenceCompleted,
        shutdownSequenceInitiated,
        phLibrayStateChange,
        moduleDoorStatusChange,
        ieDoorStatusChange,
        roboticsReady,
        roboticsNotReady,
        logicalLibraryStateChange,
        connectivityStatusChange,
        controlStatusChange,
        coolingStatusChange,
        driveStatusChange,
        mediaStatusChange,
        powerStatusChange,
        roboticsStatusChange,
        operatorInterventionRequired,
        driveOnlineStateChange,
        libraryTapeAlert1,
        libraryTapeAlert2,
        libraryTapeAlert4,
        libraryTapeAlert13,
        libraryTapeAlert14,
        libraryTapeAlert15,
        libraryTapeAlert16,
        libraryTapeAlert17,
        libraryTapeAlert23,
        libraryTapeAlert32
}
        STATUS  current
        DESCRIPTION
                "A collection of objects providing Tape Library Management
```

```
                capability."
        ::= { tapeLibraryMIBGroups 2 }


END

--
```

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