



Library Monitor Software for Windows

User's Guide

for Version 2.0

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Revision History

Revisions of this manual include the following:

Revision	Date	Description
000	November 2000	Initial release for software version 2.0

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Introduction

The Exabyte® Library Monitor (*Library Monitor*) program is a Microsoft® Windows® software application that uses Simple Network Management Protocol (SNMP) communications to communicate with the Exabyte library.

Library Monitor provides an easily configurable view of the data contained in the Exabyte Library MIB (*Management Information Base*). A MIB is a database containing definitions of information used to monitor, configure, and control a device on an SNMP-based managed network. In the case of Exabyte libraries, this database includes configuration, state, and statistics information provided by the components and sensors within the library.

Library Monitor organizes the data fields in the MIB into display lists. The program includes several predefined lists that allow you to view specific sets of data. For each display list you can choose which fields to display and their order, assign a name to each field in the list, specify how often the data is updated (the *polling interval*), and specify the font and colors used for each field. In addition, you can define custom display lists based on any of the predefined lists to easily display specific information you want to monitor.

Library Monitor also allows you to download new firmware to the library and upload diagnostic listing (dump) files from the library for troubleshooting.

Important The Library Monitor program is designed for use only with Exabyte libraries that support Exabyte MIB level 2.0 (or later). Using this program with a library that uses an earlier version of the MIB may cause the program to fail or behave unpredictably. The MIB version used by the library is shown in the Library Monitor Summary display list.

About this guide

This guide provides instructions for installing and using the Library Monitor software. It is intended for anyone who wants to use Library Monitor to view the status of, or upgrade the firmware in, an Exabyte library. This guide assumes that you are familiar with library operation.

Note: This User's Guide is also available as Library Monitor's online help.

Conventions used in this guide

This guide uses the following conventions:

Note: Notes provide hints or suggestions about the topic or procedure being discussed.

Important Read the information in “Important” notices to help you successfully complete a procedure or avoid additional steps.

CAUTION

Boxed text under the heading “CAUTION” provides information you must know to avoid losing your data or damaging your library.

When this guide instructs you to press a key, click a button, or make a selection, the key or selection is highlighted in bold type. For example:

“Select **Exit** from the File menu.”

“Click **Browse** to open a File Selection window.”

“Press **F1** for help.”

When this guide instructs you to press and hold a key while pressing another key, the keys are shown in bold type with a hyphen between the key names. For example:

“Press **Alt-F** to display the items under the File menu.”

Contacting Exabyte Technical Support

Exabyte Technical Support is available in the United States from 8:00 a.m. to 6:30 p.m. Mountain Standard Time.

Phone: United States and Canada: 1-800-445-7736 or (303) 417-7792
Europe: +31-30-254-8890

Fax: (303) 417-7160 or +31-30-258-1582 (Europe)

WWW: <http://www.exabyte.com>

E-mail: support@exabyte.com

Getting Started

This chapter provides the following information:

- A list of the equipment and software required for installing and using Library Monitor under Microsoft Windows 95, Windows 98, Windows ME, Windows NT 4.0, or Windows 2000
- Instructions for installing Library Monitor
- Instructions for starting and exiting Library Monitor
- Instructions for using the Library Monitor Windows interface

Required equipment and software

Before you start, make sure that you have the following equipment and software:

- An IBM or compatible computer running Windows 95, Windows 98, Windows ME, Windows NT 4.0, or Windows 2000, and equipped with the following:
 - A 3.5-inch floppy drive (if installing from floppy disk) or CD-ROM drive (if installing from a CD)
 - A hard drive with at least 5 MB of free space available
 - An Ethernet network interface card that is supported by the version of Microsoft Windows used
 - A Category 3 (10BaseT connection) or Category 5 (100BaseT connection) data-grade cable
- A color SVGA monitor (800 x 600 resolution or better)
- A Windows compatible mouse
- The most current version of the Exabyte Library Monitor software is available for download from the Support Services section of Exabyte's web site at www.exabyte.com. You can also obtain the Library Monitor software on a floppy disk or CD-ROM from Exabyte (see "[Contacting Exabyte Technical Support](#)" on [page vi](#)).

Connecting the library to the network

Before you can use your library on an Ethernet network, it must be connected to the network and configured, as follows:

1. Verify that the Ethernet option is installed by looking for an Ethernet connector on your library's back panel. If your library does not include the Ethernet option, contact Exabyte Technical Support for assistance.
2. Connect an Ethernet cable from the library's Ethernet port to the network.
3. Using your library's operator panel, configure the library to use static IP addressing.
4. Set the library's IP, Subnet, and Gateway addresses.

For detailed information about connecting the Ethernet cable and configuring the library, refer to your library installation and operation manual.

Installing the software

Note: You may want to make a copy of your Library Monitor installation disk and store the copy in a safe place.

Software installation is the same for all supported versions of Windows.

Installing from disk or CD

1. Start Windows.
2. Insert the Library Monitor Disk 1 into the appropriate floppy drive or the CD into your CD-ROM drive. If you are installing from a CD, the setup program starts automatically.
3. If you are installing from disk, select **Settings** from the Start menu, then open the **Control Panel** folder.
4. From the Control Panel, select **Add/Remove Programs**.



5. In the “Add/Remove Program Properties” dialog box, click the **Install** button.
6. The setup program locates and runs the file [drive]:\SETUP.EXE, where [drive] is the letter of your floppy disk drive or CD-ROM drive. Follow the instructions as they appear on the screen. By default, the Library Monitor software is installed in the directory c:\Program Files\Exabyte\Library Monitor.

Note: If you are manually installing the software from a CD, run the setupex.exe program to start the installation wizard.

The setup program copies the necessary files to your computer hard drive and places the Library Monitor icon in the program folder of your choice. By default, the program is placed in a folder named Exabyte.

7. When the setup is complete, remove the Library Monitor floppy disk from the floppy drive and store it in a safe location in case you need to install the program again later.
8. If you have microcode (*.out or *.sq5) files for your library, copy them to a directory on your hard drive. For example, place them in a subdirectory of the installation directory c:\Program Files\Exabyte\Library Monitor\Code.

Installing a downloaded file

1. If you are installing the downloaded version of the software, double-click on the file `[drive]:[path]\SETUPEX.EXE`, where `[drive]` is the letter of the drive you are using and `[path]` is the path to the downloaded file. The file self-extracts and then starts the installation wizard. Follow the instructions as they appear on the screen. By default, the Library Monitor software is installed in the directory `c:\Program Files\Exabyte\Library Monitor`.

The setup program copies the necessary files to your computer hard drive and places the Library Monitor icon in the program folder of your choice. By default, the program is placed in a folder named Exabyte.

2. If you have microcode (*.out or *.sqs) files for your library, copy them to a directory on your hard drive. For example, place them in a subdirectory of the installation directory `c:\Program Files\Exabyte\Library Monitor\Code`.

Uninstalling the software

To uninstall the Library Monitor software, select **Add/Remove Programs** from the Control Panel. Select the Library Monitor program name from the list of installed software and click on **Remove**.

Starting and quitting Library Monitor

Library Monitor uses the standard Windows user interface for text entry, option buttons, list boxes, file selection, and help.

Starting Library Monitor

To start Library Monitor, first start Windows, then navigate to the Exabyte folder from the Start menu and click on the Library Monitor icon. The main Library Monitor window appears. For ease of access, you can also place a shortcut to Library Monitor on your desktop.

***Note:** Library Monitor always starts with the Display and Library Device/Group settings that were active when the program was previously closed.*

Quitting Library Monitor

To quit Library Monitor, use any of the following methods:

- Select **Exit** from the File menu.
- Double-click on the system menu box. (This is the mini-icon in the upper left corner of the window.)
- Click once on the system menu box and select **Close**.
- Click once on the **X** in the upper right corner of the screen.
- Press **Alt-F4** or **Alt-F x**.

Accessing online help

You can access Library Monitor online help as follows:

- Select the **Help** menu. The Help menu is available at the top of the main Library Monitor window. From the Help menu, select **Contents** to display the contents of the online help (similar to the table of contents in this guide). From there, you can access information about all aspects of the Library Monitor program.

Note: The Help menu is only available from the main Library Monitor window.

- Press **F1**. Pressing **F1** from anywhere within the program displays the contents of the online help.

Using Library Monitor

Library Monitor allows you to:

- Update the information in the MIB definition
- Configure the information displayed by Library Monitor to meet specific monitoring requirements
- Organize and format the displayed information
- View operating status and configuration information for one or more libraries
- Download new firmware to a library
- Upload diagnostic listings from a library
- Change the SNMP device name and location and FTP username and password for a library

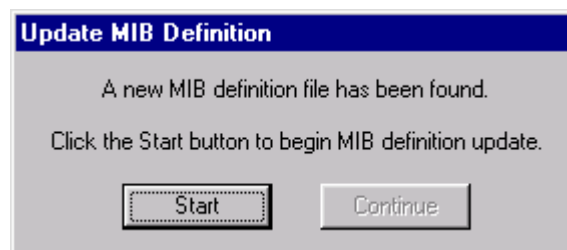
Starting Library Monitor for the first time

When you start Library Monitor for the first time, you must perform two tasks before beginning operation:

- Update the initial MIB definition.
- Configure the software to identify the libraries on the network and, optionally, assign the libraries to groups.

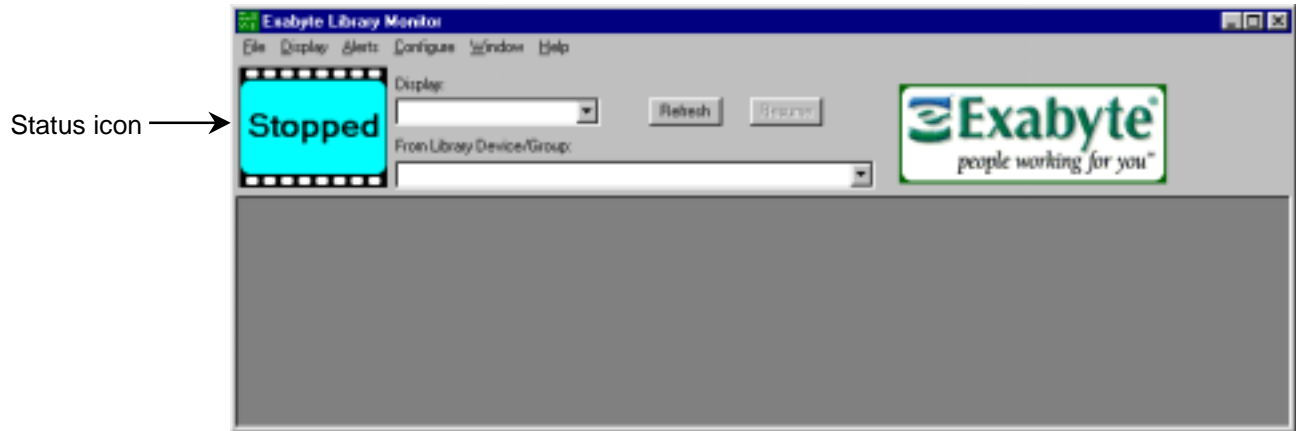
Update the MIB

The first time you run Library Monitor or whenever the software detects an updated MIB definition file, the program displays the “Update MIB Definition” dialog box.



1. Click the **Start** button to update the MIB definition.
2. When the update is complete, click the **Continue** button to display the main Library Monitor window.

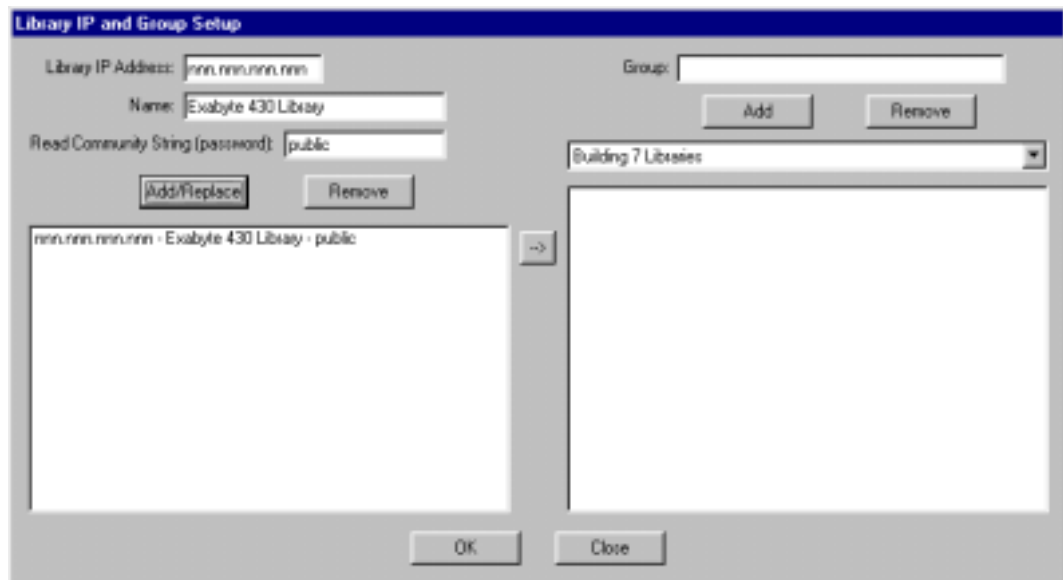
When first displayed, the Library Monitor window does not contain any information and the program Status icon indicates that the program is “Stopped.”



Configure Library Monitor

Before you can view library status or configuration data, you must identify all the libraries that you plan to monitor using the Library Monitor, as follows:

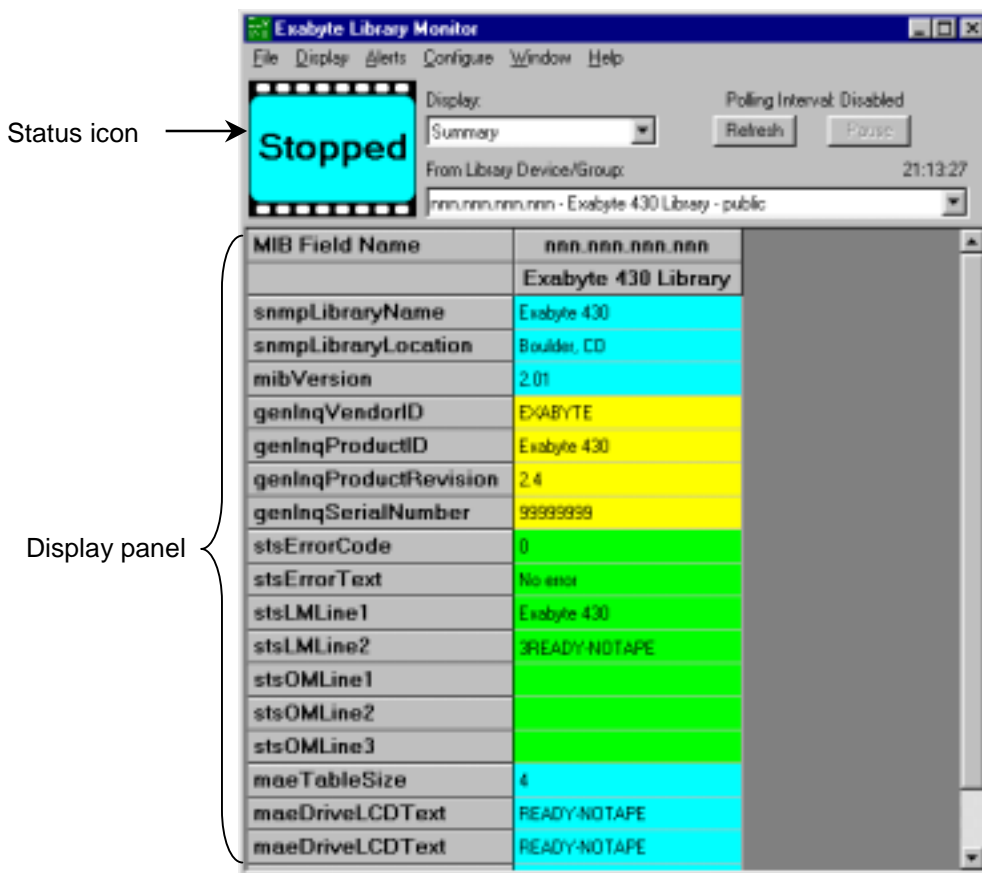
1. From the main Library Monitor window, select **Configure** → **Libraries** from the menu bar to display the “Library IP and Group Setup” dialog box.



- For each library, enter the IP address, a name to identify the library on the display, and the Read Community String (password). The default Read Community String is “public.” Click **Add/Replace** to add the library to the list of libraries to be monitored.

Note: You can view the library’s Read Community String from the Ethernet Menu on the library LCD.

- If you plan to monitor multiple libraries, you can create groups to organize the libraries according to some criteria. For example, you can create a group that contains all of the libraries at a specific location. For each group, type the name in the **Group** text box and click **Add** to add the group to the list of groups.
- To assign a library to a group, select the group name from the pull-down list. Double-click on the name of the library in the list of libraries or use the move arrow to assign it to the selected group.
- After you enter the IP addresses and names for all of the libraries and groups you want to monitor, click **OK** to close the window and redisplay the main Library Monitor window.
- Select one of the predefined display lists from the **Display** pull-down list, then select the library or group name you want to monitor from the **From Library Device/Group** pull-down list. The main Library Monitor window changes to display the data specified in the display list for the selected library or group of libraries.



Features of the Library Monitor main window

The main Library Monitor window includes the following standard features:

- **Status icon** – Indicates the general operating status of the program, as follows:



The data display updates are under manual control, either because no libraries have been configured for monitoring or because the polling interval for the selected display list is set to zero seconds. To update the displayed data with the latest values from the library, click the **Refresh** button or set the polling interval.



The automatic update of the data display has been suspended. When the polling interval is greater than zero seconds, the program automatically updates the displayed data. You can suspend this update by clicking the **Pause** button. To resume polling, click the **Resume** button.



The program is operating in automatic update mode (polling) and is waiting for the update interval to expire. A countdown timer below the “next update” line indicates how many seconds remain until the next automatic update.



The program is obtaining the latest values from the library (or group of libraries). As the data for each library or library element becomes available, the values are immediately displayed on the screen.



The program was unable to obtain any (or all) data items selected for display from the library, due to an Ethernet communication failure or a MIB data lookup failure. An error message displayed in place of the affected field value indicates what caused the error. For example, this error appears if a field is currently undefined in the MIB.



The library reported an error condition. An error message in the stsErrorCode and stsErrorText fields (if they are included in your currently selected display list) indicates what caused the error.

- **Display** – The name of the currently selected display list. The display lists allow you to selectively monitor predefined groups of data fields. Use the pull-down list to select the display list that contains the information you want to display. The data from the selected list appears in the display panel of the Library Monitor window. See “[Appendix A – Standard Display Lists](#),” beginning on [page 31](#), for descriptions of the predefined display lists included with Library Monitor.
- **From Library Device/Group** –The library or group of libraries currently being monitored. Use the pull-down list to select the library or group of libraries you want to monitor.
- **Polling Interval** – The current setting for the polling interval, as follows:
 - **Disabled** indicates that the polling interval for the display list is set to zero.
 - **n seconds**, where *n* is the polling interval defined for the display list.
 - **n seconds – Paused** indicates that polling has been suspended by clicking the Pause button.
- **Clock** (not labeled) – Located immediately above the **From Library Device/Group** list box, the clock display shows the current time of day, using the *hh:mm:ss* format. The clock provides confirmation that the program is running correctly (that is, not hung) even when the Status icon indicates an error.
- **Display Panel** – Contains the information specified in the selected display list for the selected library or group of libraries.

If the columns in the display panel are too narrow for the complete field value to be visible, an ellipsis, “...”, at the end of the field indicates that the displayed value is truncated.

To temporarily display the entire value, place your cursor over a truncated field value.

To resize a column width or row height, drag the separator bar between two columns or rows. Double clicking the separator bar resizes the column to the left or the row above the separator bar, respectively.

See “[Appendix B – Exabyte Library MIB Field Listing](#),” beginning on [page 32](#), for a list of the fields that can appear in the display panel and the possible values for each.

Refresh

Clicking the **Refresh** button causes the Library Monitor to retrieve the current data from the selected library or group of libraries and use it to update the display list values in the display panel. The display list can be updated whenever the program is in the Stopped, Paused, or Sleeping state.

Pause/Resume

Clicking the **Pause** button temporarily suspends the automatic update of the displayed data fields. The Status icon changes to Paused and the Polling Interval timer indicates that polling is paused. To resume automatic polling, click **Resume**.

Library Monitor menu options

The Library Monitor window menu bar provides the following additional program controls and operations.

File menu

The File menu provides the following options:

- **Load Code** – Allows you to select a firmware update file and send it to the library.
- **Write Dump** – Allows you to request a diagnostic dump file from the library.
- **Exit** – Exits Library Monitor.

See “[Updating library firmware,](#)” beginning on [page 23](#), for information about using these menu options.

Display menu

The Display menu provides options for selecting which data fields from the MIB are displayed and specifying how that data is formatted, as follows:

- **Select Fields** – Allows you to select and organize the fields in the display list. For each field you can specify whether the data appears on the display and assign a User Name. You can choose to display the data in columns or rows, change the order in which the fields are displayed, choose to display the raw MIB data, specify whether the MIB field names, user field names, or both are displayed, and restore the default field ordering.
- **Format Fields** – Allows you to select the font, text color, and background color for each field in the display list. You can also choose to have the columns resize automatically to prevent the displayed data from being truncated if the column is too narrow.
- **Custom Lists** – Allows you to create customized display lists based on one of the predefined display lists.
- **Delete List** – Allows you to select and delete a custom display list.
- **Polling Interval** – Allows you to set the polling interval (in seconds) for the automatic update of the data display.
- **Highlights** – Allows you to define the conditions under which selected fields in the data display are highlighted using an alternate font, text color, or background color.
- **Logging** – Allows you to capture the display data in an ASCII text file for future analysis. The options under this menu will be available in a future version of Library Monitor.

See “[Customizing the data display,](#)” beginning on [page 13](#), for information about using these menu options.

Alerts menu

The Alerts menu allows you to define conditions under which alerts are sent to an operator. The options under this menu will be available in a future version of Library Monitor.

Configure menu

The Configure menu provides options for configuring the Library Monitor software, as follows:

- **Libraries** – Allows you to set up the program to monitor individual libraries and groups of libraries. For each library, you specify the IP address, a name, and the Read Community String. You can create named groups of libraries to be monitored simultaneously.
- **Directories** – Allows you specify the default directories for code load files, diagnostic listing (dump) files, and log files.
- **Change Data** – Allows you to change the FTP Username and Password for each library. You can also change the SNMP Management device name and location information for each library.

See “[Configuring Library Monitor](#),” beginning on [page 27](#), for information about using these menu options.

Window menu

The Window menu provides the following options for controlling how the information in a display list fits on the screen:

- **AutoSize Columns** – Automatically resizes the widths of all the columns in the display list so that all of the currently displayed text is visible.
- **AutoSize Rows** – Automatically resizes the heights of all the rows in the display list so that all of the currently displayed text is visible.
- **Fit to Window** – Resizes all column widths and row heights to fit the current window size.
- **Reset** – Restores all column widths and row heights settings to their default values.

Help menu

The **Contents** option under the Help menu displays the User’s Guide in Windows help format.

Customizing the data display

The information that appears in the display panel of the Library Monitor window is determined by choosing a previously defined display list. A display list takes groups of related data fields from the library MIB and presents them in the display panel. Library Monitor allows you to customize how this data is displayed. You can choose the fields that are of interest from a previously defined display list, change the names of the data fields to be more meaningful to you, use different fonts and colors to make groups of data easier to distinguish, and change the order of the data in the display. If none of the predefined lists contains all of the data you want to see, you can create custom display lists tailored to your specific requirements.

The following sections describe how to customize Library Monitor so that it provides the information you need, formatted the way you want it.

Modifying a display list

Library Monitor includes a number of predefined display lists. These display lists may include data fields that you are not interested in monitoring or the data may not be organized as you would like.

Use the following steps to modify the data included in a display list.

Note: These steps can also be used to further refine the data included in a custom display list.

1. Choose the display list you want to customize from the Display pull-down list on the main Library Monitor window.
2. Select **Display** → **Select Fields** from the menu bar to display the “Select Data Fields for Display List” dialog box.

MIB Field Name	MIB DID	User Field Name	Display
snmpLibraryName	1.3.6.1.2.1.1.5.0	SNMP Mgt Library Name	✓
snmpLibraryLocation	1.3.6.1.2.1.1.6.0	SNMP Mgt Library Location	✓
nibVersion	1.3.6.1.4.1.3073.1.1.0	MIB Version	✓
genInqVendorID	1.3.6.1.4.1.3073.1.2.3.0	Inquiry Vendor ID	✓
genInqProductID	1.3.6.1.4.1.3073.1.2.4.0	Inquiry Product ID	✓
genInqProductRevision	1.3.6.1.4.1.3073.1.2.5.0	Inquiry Product Revision	✓
genInqSerialNumber	1.3.6.1.4.1.3073.1.2.6.0	Library Serial Number	✓
stsErrorCode	1.3.6.1.4.1.3073.1.4.2.1.0	Error Code	✓
stsErrorText	1.3.6.1.4.1.3073.1.4.2.2.0	Error Message	✓
stsLMLine1	1.3.6.1.4.1.3073.1.4.5.2.1.0	Library Message Line 1	✓
stsLMLine2	1.3.6.1.4.1.3073.1.4.5.2.2.0	Library Message Line 2	✓
stsOMLine1	1.3.6.1.4.1.3073.1.4.5.1.1.0	Operator Message Line 1	✓
stsOMLine2	1.3.6.1.4.1.3073.1.4.5.1.2.0	Operator Message Line 2	✓
stsOMLine3	1.3.6.1.4.1.3073.1.4.5.1.3.0	Operator Message Line 3	✓
nseTableSize	1.3.6.1.4.1.3073.1.6.1.0	# Drives Present	✓
nseDriveLCDText	1.3.6.1.4.1.3073.1.6.2.1.19.1	Drive 1 LCD	✓

The “Select Data Fields for Display” data field panel contains the following information:

- **MIB Field Name** – The name of the data field in the MIB. The names in this column cannot be changed.
 - **MIB OID** – The SNMP address of the data field in the MIB. This information is useful if you want to directly access this data field using some other monitoring software.
 - **User Field Name** – A user-specified name for the data field.
 - **Display** – A check box to control whether or not the data field is included in the display list.
3. Use the following options to configure the display list, as desired.

- **Select which fields to display or hide.**

To include the value for a field in the display list, click the check box in the **Display** column for the field. To hide the value for a field, click the Display column check box again to clear the check mark. You can also use the **Display All** or **Hide All** buttons to globally display or hide all of the fields in the list.

See “[Appendix B – Exabyte Library MIB Field Listing](#),” beginning on [page 32](#), for a list of the fields that can appear in the display panel and the possible values for each.

- **Change the order in which the fields appear in the display list and restore the default order.**

To change the display order for a field, click on the field name in the data field panel to select the row, then click the **Move Up** or **Move Down** buttons to change the position of the field. To restore the original display order, click the **Default Field Order** button.

- **Assign a user name to the field.**

To change the User Field Name for any field, click in the **User Field Name** box and type the new name. Each field has a default, “plain-English” name.

Note: Refer to “[Appendix B – Exabyte Library MIB Field Listing](#),” beginning on [page 32](#), if you want to restore the default user name for a field.

- **Choose how the data field names appear in the display list.**

To display only the MIB Field Names for the data fields, click the **MIB Definition** radio button. To display only the User Field Names, click the **User Defined** radio button. To display both names, click the **Both Names** radio button.

Note: This setting affects all display lists, not just the one currently being configured.

Displaying the MIB Field Name is particularly useful during troubleshooting procedures if you changed the default User Field Name for one or more of the data fields.

- **Choose whether to display the numeric value of the data fields in the display list.**

Some of the MIB data fields contain numeric codes. By default, Library Monitor translates these numeric codes to more meaningful alphanumeric character strings. To view the numeric codes for these data fields, click the **Display Raw Data Values** radio button.

Note: This setting affects all display lists, not just the one currently being configured.

For example, the MIB reports the host interface type as a number from 1 to 5. By default, Library Monitor interprets this raw data and displays the corresponding character string; in this case, None, LVD, HVD, LVD-SE mode, or LVD-HVD mode, respectively. Displaying the uninterrupted raw numbers can be useful when troubleshooting problems with a library or Library Monitor.

- **Choose whether you want to display the data fields as rows or columns.**

To display the data fields as rows in a table, click the **In Rows** radio button. To display the data fields in columns, click the **In Columns** radio button.

When you display the data fields as rows, each column contains the selected data fields for the library or libraries you specified in the **From Library/Group** pull-down list. Conversely, when you display the data fields as columns, each row contains the selected data fields for the library or libraries you specified in the **From Library/Group** pull-down list.

- **Choose which elements you want to include.**

For display lists that include multiple elements in a single library, click the **All** radio button to display data for all of the elements. To specify a range of elements for display, click the **From** radio button and enter the number for the first element in the **From** box; enter the number for the last element in the **To** box. If you want to display data for a single element, enter the same element number in the **From** and **To** boxes.

For example, to include only the data fields pertaining to cartridge slots 1 through 20 in the Exabyte 430M in the Cartridge Slots display list, click the **From** radio button and type 1 in the **From** box; type 20 in the **To** box.

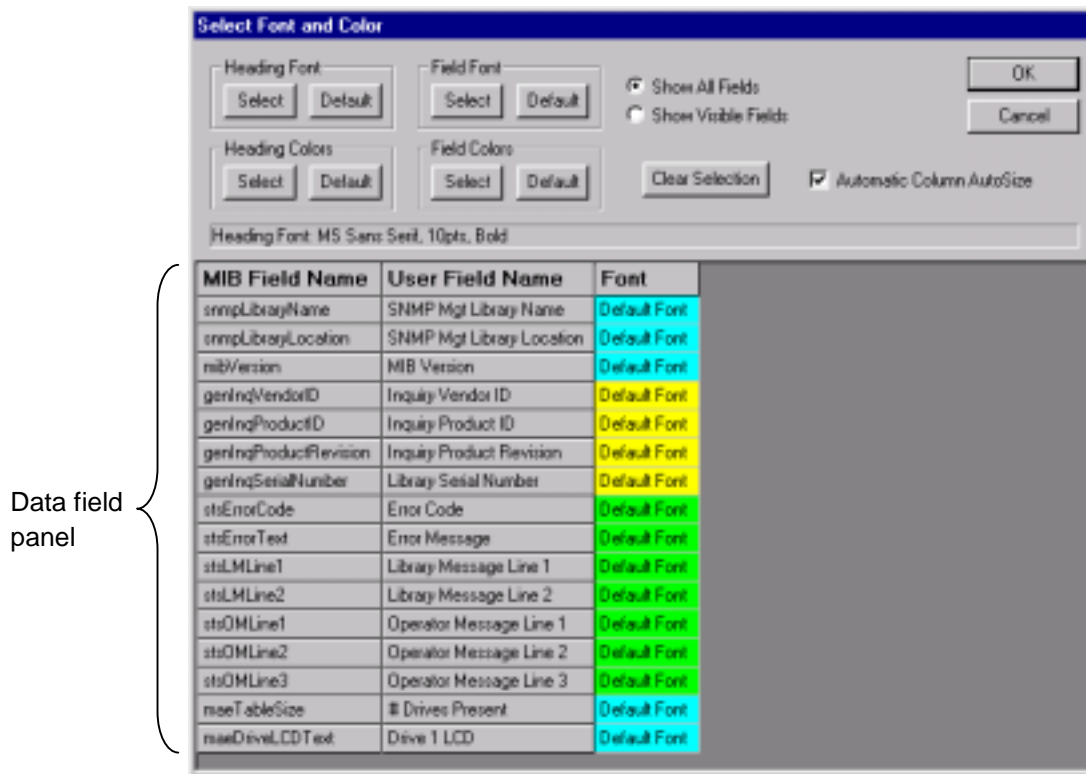
4. After you finish making your selections, click the **OK** button to save the new settings, or the **Cancel** button to discard the changes you made. If you click the **OK** button, the display list is updated to reflect your changes and the values for the data fields are updated. Any changes you make remain in effect until you change them again.

Formatting a display list

In addition to selecting the data fields included in a display list, you can also customize the appearance of the data fields in the display panel of the Library Monitor window.

Use the following steps to customize the appearance of the data fields.

1. Choose the display list you want to format from the **Display** pull-down list on the main Library Monitor window.
2. Select **Display** → **Format Fields** from the menu bar to display the “Select Font and Color” dialog box.



3. From the “Select Font and Color” dialog box, click the **Show All Fields** radio button if you want to format all of the fields in the display list, including the ones that are not currently selected for display. To format only the fields currently selected for display in the “Select Fields” dialog box, click the **Show Visible Fields** radio button.
4. In the data field panel portion of the “Select Font and Color” dialog box, select the field you want to format. To select a range of fields, hold down **Shift** and select the first and last fields in the range. To select multiple, non-adjacent fields, hold down the **Ctrl** button on your keyboard as you select the desired fields.

5. Use the following options to customize the fonts and colors used to display the selected fields.

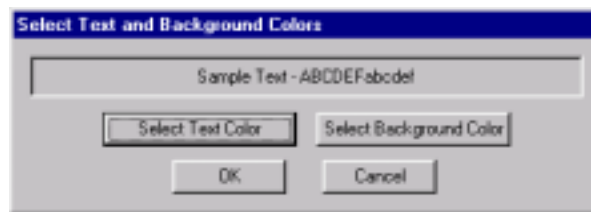
- **Select the font used for the column and row headings.**

To select the font for row and column heading text, click the **Select** button in the “Heading Font” group box. The standard Windows font selection dialog box appears, from which you can select the font name, style, and point size for the headings.

To restore the default font for the column headings, click the **Default** button in the “Heading Font” group box.

- **Select the text and background colors used for the column and row headings.**

To select the colors for the heading font and background, click the **Select** button in the “Heading Colors” group box. The “Select Text and Background Colors” dialog box appears:



To change the color of the text, click the **Select Text Color** button. To change the color of the background, click the **Select Background Color** button. In either case, the standard Windows color selection dialog box appears, from which you can select a predefined basic color or define and apply a custom color definition. After selecting the desired colors, click **OK**.

To remove the selection highlight and view the result of your changes, click the **Clear Selection** button.

To restore the default colors for the headings, click the **Default** button in the **Heading Colors** group box.

- **Select the font used for the individual data fields.**

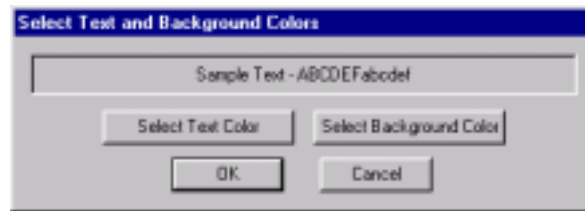
To select the font for a data field, select the desired field, then click the **Select** button in the “Field Font” group box. The standard Windows font selection dialog box appears, from which you can select the font name, style, and point size for the field. When you specify a font for a field, the font is applied to both the heading text and the field value text for the field.

To restore the default font for the selected field, click the **Default** button in the “Field Font” group box.

***Note:** If you specify both a heading font and a field font, the field font overrides the heading font for the field name text.*

- **Select the text and background colors used for a selected data field.**

To select the colors for a heading font and background, click the **Select** button in the “Heading Colors” group box. The “Select Text and Background Colors” dialog box appears.



To change the color of the text, click the **Select Text Color** button. To change the color of the background, click the **Select Background Color** button. In either case, the standard Windows color selection dialog box appears, from which you can select a pre-defined basic color or define and apply a custom color definition. After selecting the desired colors, click **OK**.

To remove the selection highlight and view the result of you changes, click the **Clear Selection** button.

To restore the default colors for the column headings, click the **Default** button in the **Field Colors** group box.

- **Choose whether you want to automatically adjust the column widths.**

To have the column widths change to automatically adjust to the width of the data each time the data field is updated, click the **Automatic Column AutoSize** radio button.

By default, Library Monitor automatically sets the width of the columns the first time a new display list is selected. Choosing this option causes Library Monitor to resize the columns whenever the value in a field is updated.

If the width of a column is too narrow for the complete field value to be visible, an ellipsis, “...”, appears at the end of the field to indicate that the displayed value is truncated. To temporarily display the entire value, place your cursor over a truncated field value.

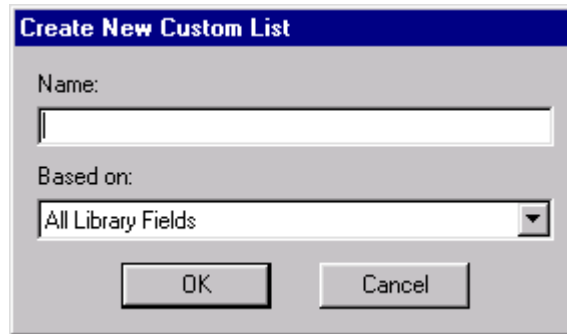
6. After you finish making your selections, click the **OK** button to save the new settings, or the **Cancel** button to discard the changes you made. If you click the **OK** button, the display list is updated to reflect your changes and the values for the data fields are updated. Any changes you make remain in effect until you change them again.

Creating custom display lists

If none of the predefined display lists contains the right combination of data that you want to monitor, you can create custom display lists tailored to your specific requirements. These custom display lists are based either on an existing display list, or on a special list called **All Library Fields**. The All Library Fields list contains all of the data fields included in the General, Configuration, Status, and System Components display lists.

Use the following steps to create a custom display list.

1. Select **Display** → **Custom Lists** from the Library Monitor menu bar to display the “Create New Custom List” dialog box.



2. Type a name for the new display list in the **Name** text box. Select a previously defined display list from the **Based on** pull-down list. This display list will be used as the basis for the new display list. See “[Appendix A – Standard Display Lists](#),” beginning on [page 31](#), for descriptions of the predefined display lists included with Library Monitor. An additional list called **All Library Fields** contains all of the data fields included in the General, Configuration, Status, and System Components display lists.
3. Click the **OK** button. The **Select Fields** dialog box is displayed. Using this dialog box, you specify which data fields you want to include in your custom display, as described in “[Modifying a display list](#),” beginning on [page 13](#).

By default, none of the fields in the new display list are selected for display. To select all of the fields, click the **Display All** button.

See “[Appendix B – Exabyte Library MIB Field Listing](#),” beginning on [page 32](#), for a list of the fields that can appear in the display panel and the possible values for each.

4. After you configure the new display list, click **OK**. The data from the new list appears in the display panel of the Library Monitor window.
5. If desired, format the new display list as described in “[Formatting a display list](#),” beginning on [page 16](#).

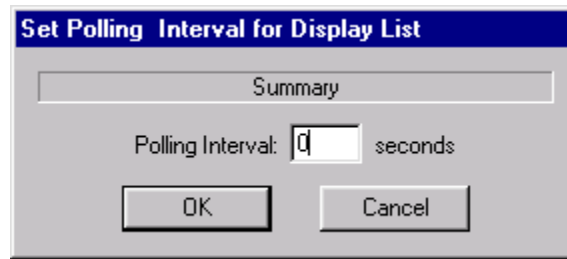
Updating display list information automatically

When you first start Library Monitor, all of the data for the selected library or group of libraries is automatically updated one time and then remains static until you click either the **Refresh** or **Resume** button. If desired, you can configure Library Monitor to automatically update the information in the selected display list at regular time intervals (the *polling interval*). Each display list can have a different polling interval.

Use the following steps to establish a polling interval for a display list.

1. Choose the display list for which you want to set up automatic polling from the **Display** pull-down list on the main Library Monitor window.

2. Select **Display → Polling Interval** from the menu bar to display the “Set Polling Interval” dialog box. The name of the active display list appears above the polling interval edit box.



3. Type a number from 1 to 3600 in the **Polling Interval** box to specify how often, in seconds, the display values are updated. To disable automatic updates, set the polling interval value to zero.

Highlighting selected operating conditions

Library Monitor allows you to configure custom highlights for a data field when the field value meets specific criteria. These visual indicators provide an easy way to quickly identify an error condition or a value that is outside an expected operating range. Each data field can have its own set of highlight conditions.

When you enable highlighting, Library Monitor compares the current value for a data field against a set of criteria defined for the field and highlights the field if the current value meets those criteria. This comparison occurs every time the display is updated, either automatically or manually. The characteristics of a highlight can include an alternate font, text, and background color for the displayed value. If desired, you can also define conditions under which the highlight is removed for a field value.

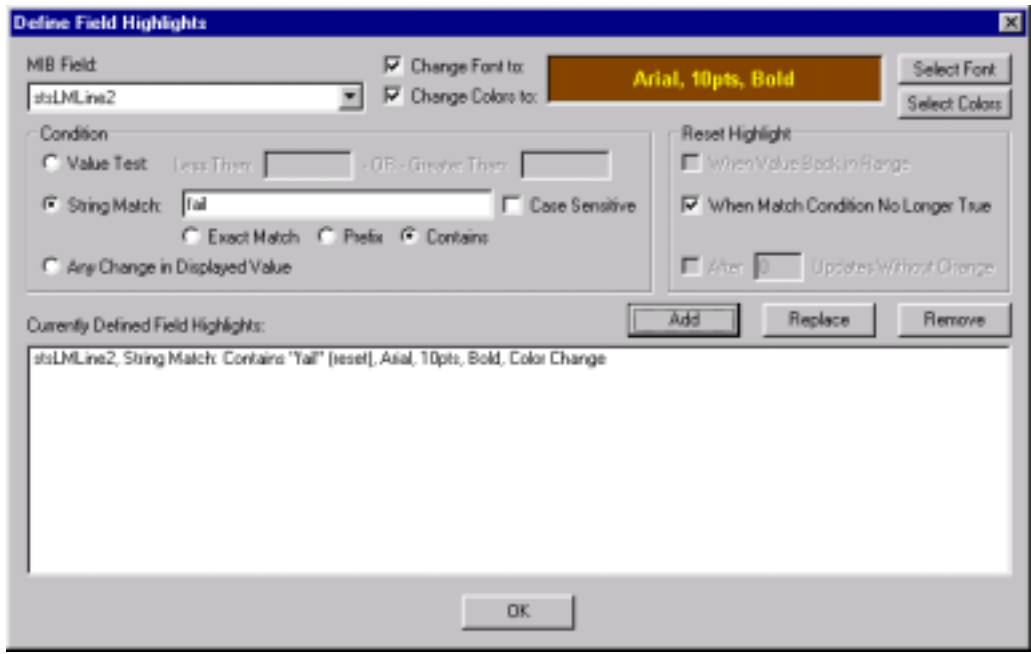
Note: Setting up highlights only affects the displayed data. The monitored conditions are not saved in a history or log file. If you are not watching the main Library Monitor window when a highlight occurs, and you have defined a reset condition for the highlight, you may completely miss the occurrence.

Creating a new highlight condition

Use the following steps to set up highlights for a specific data field.

1. Select **Display → Highlights** from the Library Monitor menu bar to display the “Define Field Highlights” dialog box.

*Note: To make identifying the data fields you want to highlight easier, use the **Select Fields** option under the **Display** menu to turn on the **display MIB field names** option, if it is not already turned on (see [page 13](#)).*



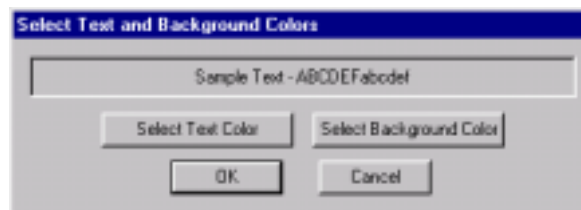
2. Select the MIB field for which you want to specify highlight criteria.
3. Use the following options to customize the font, display text, background color, test conditions, and reset condition for the field highlight, as desired.

- **Select the font used for the highlighted data field.**

To use a different font for a highlighted data field, click the **Change Font to** check box, then click the **Select Font** button. The standard Windows font selection dialog box appears, from which you can select the font name, style, and point size for the field.

- **Select the text and background colors used for the highlighted data field.**

To select the text and background colors used to highlight a data field, click the **Change Colors to** check box, then click the **Select Colors** button. The “Select Text and Background Colors” dialog box appears.



To change the color of the text, click the **Select Text Color** button. To change the color of the background, click the **Select Background Color** button. In either case, the standard **Windows** color selection dialog box appears, from which you can select a pre-defined basic color or define and apply a custom color definition. After selecting the desired colors, click **OK**.

- **Define the condition required to activate the highlight.**

The “Condition” group box provides three different types of test criteria that can be used to activate a highlight:

Value Test – Allows you to specify a value or range of values to be matched in a numeric data field. To activate the highlight whenever the field value is less than a specified value, enter the threshold number in the **Less Than** box and leave the **Greater Than** box blank. To activate the highlight whenever the field value is greater than a specified value, enter the threshold value in the **Greater Than** box and leave the **Less Than** box blank. To activate the highlight whenever the field value is either less than a specified value or greater than another value, enter the two threshold values in the **Less Than** and **Greater Than** boxes, respectively.

String Match – Allows you to specify an alphanumeric string to be matched in a text data field. Enter the alphanumeric string to be matched into the text box. Select **Exact Match** if the selected data field must exactly match the string you entered. Select **Prefix** if only the first part of the selected data field needs to match the string you entered (that is, there can be additional characters following the matched string). Select **Contains** if the string you entered can appear anywhere in the data field value. To further constrain the matched data field string to use the same case for all the characters as you entered in the text box, click the **Case Sensitive** check box. By default, the string comparisons are not case sensitive.

Any Change in Displayed Value – Allows you to highlight a field whenever the displayed value changes from one update to the next.

- **Define the condition required to reset the highlight.**

The “Reset Highlight” group box provides three different types of test criteria that can be used to turn off (reset) a highlight:

Value Test – The highlight is reset when the numeric value specified for a Value test is back in range.

String Match – The highlight is reset when the data field string no longer matches the specified string.

Any Changes in Displayed Value – The highlight is reset whenever the value for the selected field does not change for a specified number of update intervals. For example, if you enter zero in the **After** box, the highlight is reset the next time the display is updated, if the value did not change. If you enter 10 in the **After** box, the highlight is reset only if the value does not change for the next ten times the display is updated. This reset option applies to either automatic or manual updates.

4. After you define the highlight characteristics for the MIB field you want to track, click the **Add** button to add the highlight definition to the “Currently Defined Field Highlights” list.
5. If desired, repeat steps 2 through 4 to set up highlights for additional MIB fields.
6. Click **OK** to activate the highlight definitions.

Modifying or deleting an existing highlight definition

Use the following steps to modify a highlight definition or to create a new highlight definition based on an existing definition.

1. Select the **Display → Highlights** from the Library Monitor menu bar to display the “Define Field Highlights” dialog box.
2. Double-click the highlight definition you want to change in the **Currently Defined Field Highlights** list box. The settings for the highlight are displayed in the upper part of the dialog box. Change the settings as desired.
3. To replace the previous definition with the new one, click the **Replace** button. If you want to save the new settings as a new definition, click the **Add** button.
4. To remove a highlight definition, click once on the highlight definition in the **Currently Defined Field Highlights** list box, then click the **Remove** button.
5. Click **OK** to activate the updated highlight definitions.

Updating library firmware

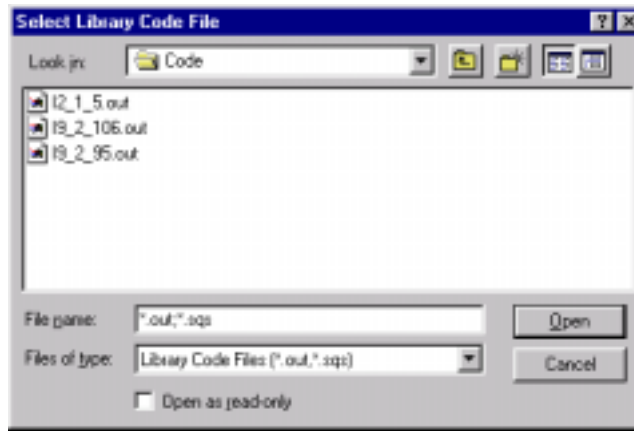
From time to time, Exabyte releases updates to the library firmware. These updates add new features or correct errors. You can use Library Monitor to load new firmware into your library.

CAUTION

Do not update firmware unless Exabyte Technical Support has advised you to do so. If performed improperly, the upgrade procedure can render your library inoperable. Consult with Exabyte Technical Support before performing an upgrade.

To upgrade the library firmware:

1. Obtain new firmware for the library. You can download new firmware from Exabyte’s web site (www.exabyte.com), or you can contact Exabyte Technical Support (see [page vi](#)).
2. Select the library that you want to upgrade from the **Library Device/Group** pull-down list. You can only update one library at a time.
3. Select **File → Load Code** from the Library Monitor menu bar to display the “Select Library Code File” dialog box.

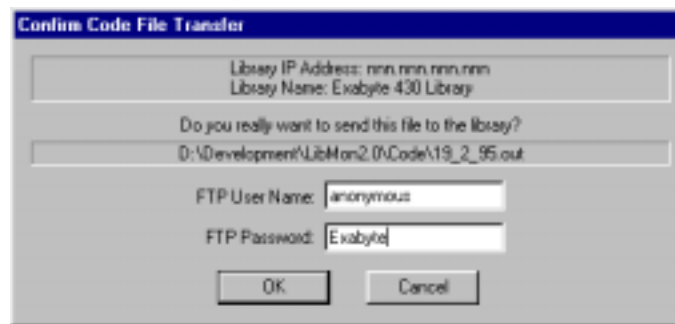


4. Navigate to the directory where you stored the firmware update file. By default, Library Monitor expects the file to be located in the directory you specified using the **Configure** → **Directories** option (see “[Specifying default file locations](#)” on [page 29](#)).
5. Select the name of the code file you want to use, then click the **Open** button.

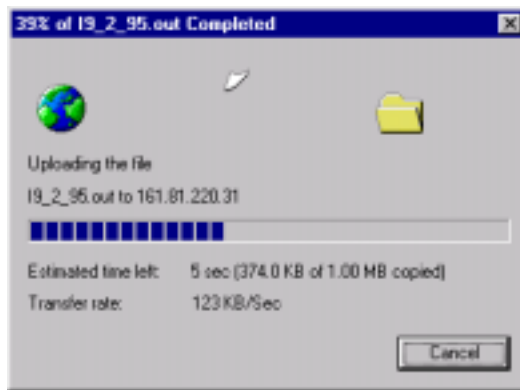
After you select the file, the **Confirm Code File Transfer** dialog box appears. This dialog box displays the target library and source code file. Enter the **FTP User Name** and **Password** for the target library.

The default FTP user name is “anonymous.” The default FTP password is “Exabyte.” You can change these values from the **Configure** → **Change Data** dialog box (see “[Changing a MIB data field](#)” on [page 29](#)). If you do not know the current settings, you can view them from the library’s operator panel. Refer to your library’s documentation for information.

Note: Both the FTP user name and password are case-sensitive.



6. Click **OK**. A progress message box shows the progress of the update process.



7. When the file transfer is complete, the progress message box closes automatically. Wait for 60 to 90 seconds while the library erases the old firmware, reprograms flash memory, and performs a power-on self-test.

CAUTION

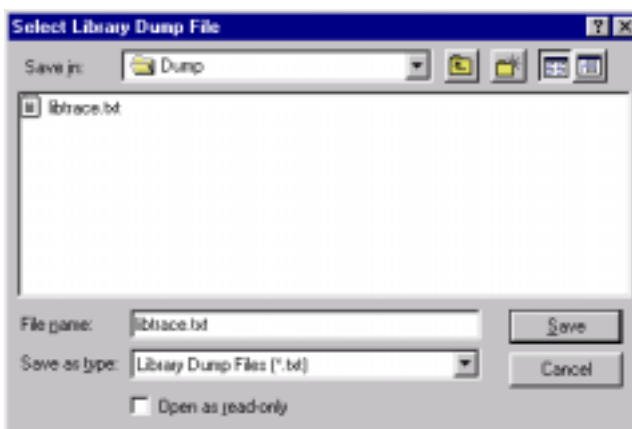
Do not attempt to perform library operations or power down the library until after the library automatically resets.

Creating a diagnostic listing (dump) file

If you report a problem to Exabyte Technical Support, you may be asked to create a library diagnostic listing (also called a *dump* or *trace*). A diagnostic listing is created when you use Library Monitor to send an ASCII text copy of the library's diagnostic buffer from the library to the host computer. This buffer information can be used by support personnel to troubleshoot incidents with the library.

Use the following steps to create a diagnostic listing file from the library.

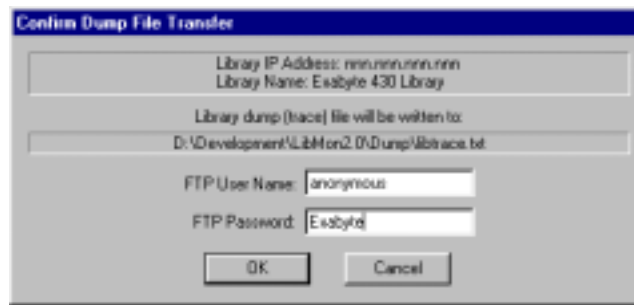
1. Select the library from which you want to obtain the diagnostic listing using the **Library Device/Group** pull-down list.
2. Select **File** → **Write Dump** from the Library Monitor menu bar to display the "Select Library Dump File" dialog box.



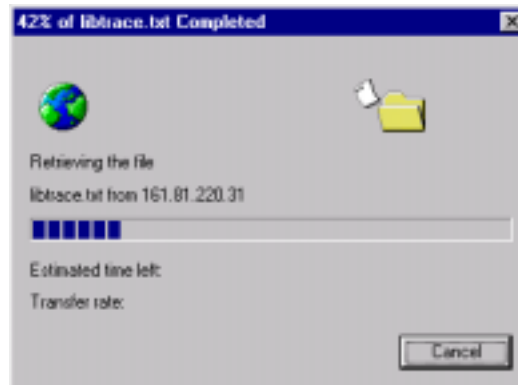
- Navigate to the directory where you want to store the diagnostic listing. By default, Library Monitor expects the file to be located in the directory you specified using the **Configure** → **Directories** option (see “[Specifying default file locations](#)” on page 29).
- Enter a name for the file to contain the diagnostic listing or select the name of an existing file. The default filename is libtrace.txt.
- Click the **Save** button. The “Confirm Dump File Transfer” dialog box appears. This dialog box displays the source library and the name of the diagnostic listing file. Enter the **FTP User Name** and **Password** for the target library.

The default FTP User Name is “anonymous,” the default FTP password is “Exabyte.” You can change the FTP Username and Password from the **Configure** → **Change Data** dialog box (see “[Changing a MIB data field](#)” on page 29). If you do not know the current settings, you can view them from the library’s operator panel. Refer to your library’s documentation for information.

Note: Both the FTP user name and password are case-sensitive.



- Click **OK**. A progress message box shows the progress of the file transfer.



- When the diagnostic data transfer from the library is complete and data is written to the specified file, the progress message box closes automatically. The diagnostic listing is saved in ASCII format and can be viewed in any text editor. Diagnostic listing files are approximately 300 KB in size.

Configuring Library Monitor

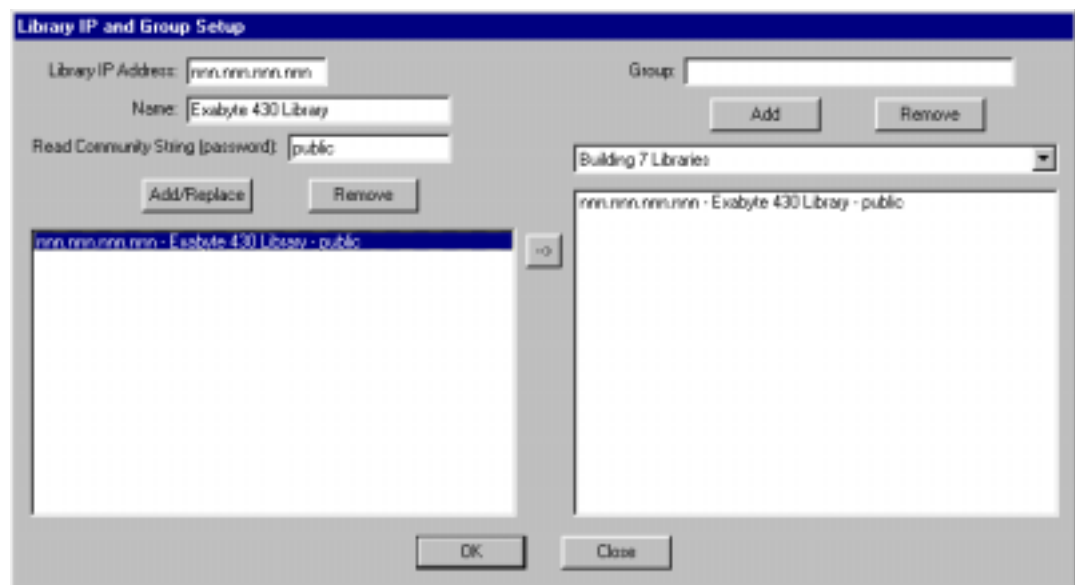
Before you can use Library Monitor to monitor a library, you must add it to the list of libraries you set up when you first started the program (see “[Configure Library Monitor](#),” beginning on [page 7](#)). You can also create named groups of libraries and assign libraries to those groups. The groups can then be monitored simultaneously for those display lists that support multiple libraries.

In addition to configuring the libraries and groups of libraries monitored by the software, you can specify default file locations for library firmware update files, diagnostic listing files, and log files. You can also change the FTP Username and Password for the library.

Adding, modifying, or removing a library to Library Monitor

Use the following steps to add a library to the list of libraries being monitored.

1. Select **Configure** → **Libraries** from the Library Monitor menu bar to display the “Library IP and Group Setup” dialog box.



2. For each library, enter the IP address, a name to identify the library on the display, and the Read Community String (password). The default Read Community String is “public.” Click **Add/Replace** to add the library to the list of libraries to be monitored.
3. After you enter the IP Addresses and Names for all of the libraries you want to monitor, click **OK** to close the window and redisplay the main Library Monitor window. Any libraries that you defined can now be selected from the **From Library Device/Group** pull-down list on the main Library Monitor window.

Use the following steps to remove a library from the list.

1. Select **Configure** → **Libraries** from the menu bar to display the “Library IP and Group Setup” dialog box.
2. Click once on the name of the library you want to remove from the list of libraries.
3. Click the **Remove** button.

Use the following steps to modify the definition of a library entry.

1. Select **Configure** → **Libraries** from the menu bar to display the “Library IP and Group Setup” dialog box.
2. Double-click on the name of the library you want to modify. The settings for that library are displayed in the upper portion of the dialog box.
3. Click the **Add/Replace** button.

If you change the IP Address, clicking the Add/Replace button adds a new entry to the list. If you change either the **Name** or **Read Community String** fields, but leave the IP Address unchanged, clicking the **Add/Replace** button modifies the previous definition for the selected library.

Whenever you add or modify a library in the list, Library Monitor performs a quick test to determine whether the library can be contacted on the network. If the software receives a response from the library, it is added to the list. If the library does not respond, the program notifies you that the library cannot be contacted. You are then given the option to add the library entry to the list anyway.

Defining, modifying, or deleting a library group

If you plan to monitor multiple libraries, you can create groups to organize the libraries according to some criteria. For example, you could create a group that contains all of the libraries at a specific location.

1. Select **Configure** → **Libraries** from the Library Monitor menu bar to display the “Library IP and Group Setup” dialog box.
2. For each group, type the name in the Group text box and click **Add** to add the group to the list of groups.
3. To assign a library to a group, select the group name from the pull-down list. Double-click the name of the library in the list of libraries or use the move arrow to assign it to the selected group. A library can be added to multiple groups or it can be added to a single group multiple times.
4. To remove a library from a group, select the library entry from the group list and click the **Remove** button.

5. To delete a library group, you must first select and remove all of the individual library entries in the list, and then click the **Remove** button to delete the group.
6. After you set up all of the library groups you want to monitor, click **OK** to close the window and redisplay the main Library Monitor window. Any of the library groups that you defined can now be selected from the **From Library Device/Group** pull-down list on the main Library Monitor window.

Specifying default file locations

In addition to its monitor functions, Library Monitor allows you to load new firmware into the library and capture diagnostic and logging information. For each of these activities, you can specify a default directory for the files used.

Use the following steps to specify the default directory locations for code files, diagnostic listing (dump) files, and log files.

1. Select **Configure → Directories** from the Library Monitor menu bar to display the “Select Default Directories” dialog box.



2. For each file type, type the full directory path into the text box or click the **Browse** button and navigate to the desired directory.
3. After specifying the default directory for each file type, click **OK**.

Changing a MIB data field

Library Monitor allows you to change the FTP Username and Password for each library. You can also change the SNMP Management device name and location information for each library.

Use the following steps to change the information stored in the MIB for a specific library.

1. Select the library you want to modify from the **Library Device/Group** pull-down list.
2. Select **Configure → Change Data** from the Library Monitor menu bar to display the “Change Field Data” dialog box.



3. Select the field you want to change from the **Select Field** pull-down list. The current value for the field is displayed in the **Field Value** text box. The following four fields in the MIB can be changed:
 - **cfgFTPPassword** – The FTP Password for the library. The default password is “Exabyte.” If you do not know the current FTP Password, you can view it from the library’s operator panel. Refer to your library’s documentation for information.
 - **cfgFTUserName** – The FTP Username for the library. The default user name is “anonymous.” If you do not know the current FTP Username, you can view it from the library’s operator panel. Refer to your library’s documentation for information.
 - **snmpLibraryLocation** – The physical location of the library. The default location is “Boulder, CO.” This field is defined as part of the standard SNMP management MIB. It is not uniquely defined in the Exabyte library MIB.
 - **snmpLibraryName** – The name used to identify the library. The default name is the same as the product name displayed on the library front panel. This field is defined as part of the standard SNMP management MIB. It is not uniquely defined in the Exabyte library MIB.

Note: Both the FTP user name and password are case-sensitive.

4. Type the new value for the selected field in the **Field Value** text box.
5. Type the library’s Write Community String in the **Write Community String (password)** text box. The default Write Community String is “public.”

Note: The Write Community String is case-sensitive.

6. Click the **Write** button to save your changes. As the new field values are written to the library’s MIB, the message box above the buttons displays the status. If an error occurs, the status displays a message to indicate what failed.

Appendix A – Standard Display Lists

Library Monitor includes the following predefined standard display lists:

- **Summary** – Lists identification and status information for each library or group of libraries. The status includes information displayed on the library's LCD for the library itself and each of its tape drives.
- **General** – Lists the Inquiry data, community strings, and code versions for each library or group of libraries. This list includes all of the MIB data fields that have a **gen** prefix.
- **Configuration** – Lists configuration information for each library or group of libraries. The list includes all of the MIB data fields that have a **cfg** prefix.
- **Status** – Lists the status information currently displayed on the library LCD. This list also includes the library statistics and the status of the library sensors. The Status list includes all of the MIB data fields that have an **sts** prefix.
- **System Components** – Lists the number and status of the system components in each library or group of libraries. These components include the power supply, door and entry/exit port sensors, and fans.
- **Cartridge Slots** – Lists the MIB data fields associated with the data storage elements (the cartridge slots) in a selected library. This list cannot be used with a group of libraries. The list includes all of the MIB data fields that have an **mse** (media storage elements) prefix.
- **Tape Drives** – Lists the MIB data fields associated with the tape drives in a selected library. This list cannot be used with a group of libraries. The list includes all of the MIB data fields that have an **mae** (media access elements) prefix.
- **Robots** – Lists the MIB data fields associated with the robots in a selected library. This list cannot be used with a group of libraries. The list includes all of the MIB data fields that have an **mte** (media transfer elements) prefix.
- **Entry-Exit Slots** – Lists the MIB data fields associated with the entry/exit port for a selected library. If the library does not include an entry/exit port, these fields are blank. This list cannot be used with a group of libraries. The list includes all of the MIB data fields that have an **mie** (media import/export elements) prefix.
- **Power Supply Detail** – Lists the status information for all of the power supplies in the selected library. This list cannot be used with a group of libraries. The list includes all of the MIB data fields that have a **pst** (power supply status) prefix.
- **Fan Detail** – Lists the status information for all of the fans in the selected library. This list cannot be used with a group of libraries. The list includes all of the MIB data fields that have a **sf** (system fan) prefix.
- **Product Specific Sensors** – Lists status information for any other library sensors that are not included in one of the other lists. This list cannot be used with a group of libraries. The list includes all of the MIB data fields that have a **pss** (product specific sensors) prefix.

Appendix B – Exabyte Library MIB Field Listing

This appendix lists only the fields unique to the Exabyte library MIB. It does not include fields that are defined in the standard SNMP management MIB. If a library does not include a particular element or sensor, the MIB field either contains all zeros or is blank. Product specific sensors depend on the library being monitored and library firmware version.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
mibVersion	MIB Version	Alphanumeric string, up to 11 characters	String	The Exabyte Library MIB version number.
General Library Information				
genDataStatus	Data Status	Uninitialized (0) Initializing (1) Initialized (2)	4-byte Boolean integer	The status of the MIB data fields
genLibraryName	Library Name	Alphanumeric string (upper or lower case)	String	The product name displayed on the library LCD. ^a
genInqVendorID	Inquiry Vendor ID	Alphanumeric string, up to 8 characters (upper or lower case)	String	The ASCII representation of the Vendor ID returned when you issue an INQUIRY command to the library.
genInqProductID	Inquiry Product ID	Alphanumeric string, up to 16 characters (upper or lower case)	String	The ASCII representation of the Product ID returned when you issue an INQUIRY command to the library.
genInqProductRevision	Inquiry Product Revision	Alphanumeric string, up to 4 characters (upper or lower case)	String	The ASCII representation of the Product Revision returned when you issue an INQUIRY command to the library.
genInqSerialNumber	Library Serial Number	Alphanumeric string, up to 10 characters (upper or lower case)	String	The ASCII representation of the library serial number.
genNativeID	Native Product ID	Alphanumeric string, up to 16 characters (upper or lower case)	String	The Product ID returned when you issue an INQUIRY command to the library when the library is not operating in emulation mode.
genReadCommunityString	Read Community String	Alphanumeric string, up to 20 characters	String	One of the community strings contained in the SNMP administration framework. (You can view the Read Community String from the library's LCD.) ^b
genWriteCommunityString	Write Community String	Alphanumeric string, up to 20 characters	String	One of the community strings contained in the SNMP administration framework. (You can view the Write Community String from the library's LCD.) ^b

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
genBroadcastCommunityString	Broadcast Community String	Alphanumeric string, up to 20 characters	String	One of the community strings contained in the SNMP administration framework. (You can view the Broadcast Community String from the library's LCD.) ^b
genEthernetBootCodeVersion	Ethernet Boot Code Version	Alphanumeric string, up to 11 characters	String	The version level of the boot code for the library's Ethernet card. For more information about the latest Ethernet boot code version for your library, refer to Exabyte Firmware Upgrades in the Support Services section of the Exabyte web site. ^c
genEthernetCodeVersion	Ethernet Code Version	Alphanumeric string, up to 11 characters	String	The version level Ethernet flash code for the library's Ethernet card. For more information about the latest Ethernet flash version for your library, refer to Exabyte Firmware Upgrades in the Support Services section of the Exabyte web site. ^c
genLibraryBootCodeVersion	Library Boot Code Version	Alphanumeric string, up to 11 characters	String	The version level of the library's boot code. For more information about the latest boot code version for your library, refer to Exabyte Firmware Upgrades in the Support Services section of the Exabyte web site.
genLibraryCodeVersion	Library Code Version	Alphanumeric string, up to 11 characters	String	The version level of the library's flash code. For more information about the latest flash code version, refer to Exabyte Firmware Upgrades in the Support Services section of the Exabyte web site.
genLCDorInquiryProductName	Library or Inquiry Name	Alphanumeric string, up to 20 characters (upper or lower case)	String	The text displayed on line 1 of the library LCD when there are no other messages. If the library is operating in an emulation mode, this field contains the Product ID returned when you issue a SCSI INQUIRY command to the library.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
Library Configuration Information				
cfgIPCurrent	Library IP Address	<i>n.n.n.n</i> Where <i>n</i> is a three-digit number (0-255)	4-byte integer	The IP address of the SNMP device (in this case, the library). This value can be changed from the library operator panel.
cfgIPFixed	IP Address Fixed	Yes (static IP address) No (assigned dynamically)	4-byte Boolean integer	Indicates whether the library's IP address is fixed (static) or has been assigned dynamically through DHCP. To change this value, use the library's operator panel. ^d
cfgIPSubnet	IP Subnet	<i>n.n.n.n</i> Where <i>n</i> is a three-digit number (0-255)	4-byte integer	The library's IP Subnet address. To change this value, use the library's operator panel.
cfgIPMask	IP Mask	<i>n.n.n.n</i> Where <i>n</i> is a three-digit number (0-255)	4-byte integer	The library's IP Mask address. To change this value, use the library's operator panel.
cfgIPGateway	IP Gateway Address	<i>n.n.n.n</i> Where <i>n</i> is three-digit number (0-255)	4-byte integer	The library's IP gateway address. To change this value, use the library's operator panel.
cfgMACAddress	MAC Address	<i>h</i> Where <i>h</i> is a hexadecimal number.	6-byte hexadecimal number	The library's Ethernet physical address, which is assigned by the Ethernet adapter's manufacturer.
cfgFTPProtocol	File Transfer Protocol	Alphanumeric string, up to 20 characters (upper or lower case)	String	The protocol used for file transfer. Exabyte libraries use FTP.
cfgFTUserName	File Transfer User Name	Alphanumeric string, up to 20 characters (upper or lower case)	String	The user name and password allow secure transfer of library and Ethernet firmware upgrades via FTP.
cfgFTPPassword	File Transfer Password	Alphanumeric string, up to 20 characters (upper or lower case)	String	The default User Name is "anonymous." The default password is "Exabyte." The user name and password can be changed using Library Monitor (see page 29).
cfgSCSISecurityOn	SCSI Security Enabled	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether security has been enabled using a SCSI command.
cfgFrontPanelSecurityOn	Front Panel Security Enabled	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether security has been enabled from the library's front panel.
cfgFrontPanelPassword	Front Panel Password	<i>nnnn</i> Where <i>n</i> is an integer (0-9)	4-byte integer	The library's security password that was entered from the operator panel when front panel security was enabled. The default front panel password is 000.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
cfgBCSPresent	Bar Code Scanner Present	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether a bar code scanner is installed in the library.
cfgBCSVerifyChecksum	Bar Code Scanner Verify Checksum	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Verify Barcode Checksums option is enabled.
cfgBCSScanDuringPost	Scan Bar Codes during POST	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Post Bar Code scan option is enabled.
cfgMAMPresent	MAM Reader Present	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether Memory Auxiliary Memory (MAM) is implemented in the library.
cfgMSEFirstElementIndex	Cartridge Slot First Element Index	n Where n is an integer	4-byte integer	The element index of the first data storage element (cartridge slot).
cfgMSELastElementIndex	Cartridge Slot Last Element Index	n Where n is an integer	4-byte integer	The element index of the last data storage element (cartridge slot). If desired, the library can be configured to use fewer than the maximum number of data storage elements using the Max Addressable Slot option on the LCD Configuration menu.
cfgMSEMaxCount	# Cartridge Slots Max	n Where n is an integer	4-byte integer	The maximum number of data storage elements (cartridge slots) in the library.
cfgMSEInstalledCount	# Cartridge Slots Installed	n Where n is an integer	4-byte integer	The number of data storage elements (cartridge slots) currently installed in the library. ^e
cfgMAEFirstElementIndex	Drive First Element Index	n Where n is an integer	4-byte integer	The element index of the first data access element (tape drive).
cfgMAELastElementIndex	Drive Last Element Index	n Where n is an integer	4-byte integer	The element index of the last data access element (tape drive).
cfgMAEMaxCount	# Drives Max	n Where n is an integer	4-byte integer	The maximum number of data access elements (tape drives) in the library.
cfgMIEFirstElementIndex	Entry-Exit Port First Element Index	n Where n is an integer	4-byte integer	The element index of the first entry/exit port element.
cfgMIELastElementIndex	Entry-Exit Port Last Element Index	n Where n is an integer	4-byte integer	The element index of the last entry/exit port element.
cfgMIEMaxCount	# Entry-Exit Ports Max	n Where n is an integer	4-byte integer	The maximum number of entry/exit port elements in the library.
cfgMTEFirstElementIndex	Robot First Element Index	n Where n is an integer	4-byte integer	The element index of the first transport element (robot).
cfgMTELastElementIndex	Robot Last Element Index	n Where n is an integer	4-byte integer	The element index of the last transport element (robot).

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
cfgMTEMaxCount	# Robots Max	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The maximum number of transport elements (robots) in the library.
cfgHostInterfaceType	Host Interface Type	None (1) SCSI (2) Fibre Channel (3)	4-byte integer	The type of interface connecting the host to the library.
cfgSCSIType	SCSI Type	None (1) HVD (2) LVD, LVD Mode (3) LVD, SE Mode (4) LVD, HVD Mode (5)	4-byte integer	The type of SCSI interface the library is attached.
cfgSCSIid	SCSI ID	<i>n</i> Where <i>n</i> is an integer (0 – 15)	4-byte integer	The SCSI ID for the library.
cfgFCWorldWideNameNode	Library FC Node WWN	<i>iiiiiiiFFFFhhhhh</i> Where <i>iiiiiii</i> is the hexadecimal representation of the manufacturer's IEEE company ID and <i>h</i> is a hexadecimal number (0 – F) representing the individual device ID	8 byte hexadecimal number	The worldwide name of the library on a Fibre Channel network.
cfgFCWorldWideNamePort1	Library FC port 1 WWN	<i>iiiiiiiFFFFhhhhh</i> Where <i>iiiiiii</i> is the hexadecimal representation of the manufacturer's IEEE company ID and <i>h</i> is a hexadecimal number (0 – F) representing the individual device ID	8 byte hexadecimal number	The worldwide name for library port 1 on a Fibre Channel network.
cfgFCWorldWideNamePort2	Library FC port 2 WWN	<i>iiiiiiiFFFFhhhhh</i> Where <i>iiiiiii</i> is the hexadecimal representation of the manufacturer's IEEE company ID and <i>h</i> is a hexadecimal number (0 – F) representing the individual device ID	8 byte hexadecimal number	The worldwide name for library port 2 on a Fibre Channel network.
cfgAutoCleanEnabled	Auto Clean Enabled	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Autoclean option is enabled.
cfgCSRRemainingCleanCount	Remaining Clean Count	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The number of cleaning cycles remaining on the installed cleaning cartridge.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
cfgCSEnabled	Clean Slot Enabled	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Clean Slot option is enabled. ^f
cfgCSStorageElementIndex	Clean Slot Element Index	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The element index of the cartridge slot assigned to the cleaning cartridge.
Library Statistics				
stsCurrentDate	Current Date	<i>mm/dd/yyyy</i> , numeric string, up to 10 characters	String	The current date (set from the library's front panel). ^g
stsCurrentTime	Current Time	<i>hh:mm:ss</i> , numeric string, up to 8 characters	String	The current time (set from the library's front panel). ^g
stsPowerOnSeconds	Power On Time (sec)	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total power-on time of the library in seconds. ^h
stsErrorCode	Error Code	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The numeric error code displayed on the library LCD. A value of zero indicates that there is no error code displayed on the LCD.
stsErrorText	Error Message	Alphanumeric string, up to 20 characters	String	The error code text displayed on the library LCD.
stsIsReserved	Library Reserved	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the library has been reserved by a host.
stsHOSTSCSIid	SCSI ID of Reserving Host	<i>n</i> Where <i>n</i> is an integer (0 – 15)	4-byte integer	The SCSI ID of the host that issued a RESERVE command.
stsTotalMoveCount	Total Moves	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total number of times the robot has picked a cartridge and placed it in a slot or a drive.
stsTotalPickRetryCount	Total Pick Retries	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total number of times the robot retried picking a cartridge from a slot or a drive.
stsTotalPutRetryCount	Total Put Retries	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total number of times the robot retried placing a cartridge into a slot or a drive.
stsTotalScanCount	Total Bar Code Scans	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total number of times the robot scanned a bar code label.
stsTotalScanRetryCount	Total Bar Code Scan Retries	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total number of times the robot retried scanning a bar code label.
stsTotalScanFailureCount	Total Bar Code Scan Failures	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total number of times the library failed to scan a bar code.
stsTotalIEPortCycleCount	Total Entry-Exit Port Cycles	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The total number of times the entry/exit port has extended and retracted or locked and unlocked.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
stsTotalSnugRetryCount	Total Snug Retries	n Where n is an integer	4-byte integer	The total number of times the robot squared up the cartridge in the gripper before placing it in a slot or a drive. ⁱ
stsPowerUpCycleCount	Power Up Cycle Count	n Where n is an integer	4-byte integer	The total number of times the library has been power cycled.
stsOMLine1	Operator Message Line 1	Alphanumeric string, up to 20 characters (upper and lower case)	String	The text that the library displays for the first user-writable line of the LCD Status screen. ⁹
stsOMLine2	Operator Message Line 2	Alphanumeric string, up to 20 characters (upper and lower case)	String	The text that the library displays for the second user-writable line of the LCD Status screen. ⁹
stsOMLine3	Operator Message Line 3	Alphanumeric string, up to 20 characters (upper and lower case)	String	The text that the library displays for the third user-writable line of the LCD Status screen. ⁹
stsLMLine1	Library Message Line 1	Alphanumeric string (upper and lower case)	String	The text that the library displays for the first message line of the LCD Status screen. ^a
stsLMLine2	Library Message Line 2	Alphanumeric string (upper and lower case)	String	The text that the library displays for the second message line of the LCD Status screen. ^a
Cartridge Slot (Storage Element) Information				
mseTableSize	# Cartridge Slots	n Where n is an integer	4-byte integer	The total number of cartridge slots configured in the library. This value can be changed using Max Addressable Slot option.
mseIndex	Cartridge Slot Element Index	n Where n is an integer	4-byte integer	The element index for the cartridge slot.
mseAddress	Cartridge Slot Element Address	n Where n is an integer	4-byte integer	The element address for the cartridge slot.
msePresent	Cartridge Slot Present	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the cartridge slot is present. If a magazine is installed, its cartridge slots are always present.
mseOccupied	Cartridge Slot Occupied	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether there is a cartridge in the cartridge slot.
mseAccessible	Cartridge Slot Accessible	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the robot can access the cartridge. The cartridge storage location is accessible if the cartridge magazine is installed.
msePrimaryVolumeTag	Volume ID of Cartridge in Slot	Alphanumeric string, up to 36 characters	String	The volume tag (bar code label) information of the cartridge in this storage location.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
msePrimaryVolumeTagValid	Volume ID of Cartridge is Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Volume ID for the cartridge is valid.
mseSourceAddress	Cartridge Source Address	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The element index of the element from which the cartridge was last moved.
mseSourceAddressValid	Cartridge Source Address Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the cartridge source address is valid.
mseReserved	Cartridge Slot Reserved	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the cartridge slot is reserved.
mseReserveHostSCSIid	SCSI ID of Reserving Host	<i>n</i> Where <i>n</i> is an integer (0 – 15)	4-byte integer	Displays the SCSI ID of the host that issued a RESERVE command.
mseReserveValueKey	Reservation Key	<i>n</i> Where <i>n</i> is an integer	4-byte integer	A number assigned by a host when it reserved the element.

Tape Drive (Access Element) Information

maeTableSize	# Drives	<i>n</i> Where <i>n</i> is an integer		The maximum number of tape drives in the library.
maeIndex	Drive Element Index	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The element index for the tape drive.
maeAddress	Drive Element Address	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The element address for the tape drive.
maePresent	Drive Present	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the tape drive is present.
maeOccupied	Drive has a Cartridge	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether there is a cartridge in the tape drive.
maeAccessible	Drive Accessible	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the robot can pick or place a cartridge at the tape drive location. The tape drive is accessible if a cartridge is not loaded or the tape drive is empty.
maePrimaryVolumeTag	Volume ID of Cartridge in Drive	Alphanumeric string, up to 36 characters	String	The volume tag (bar code label) information of the cartridge in the tape drive.
maePrimaryVolumeTagValid	Volume ID of Cartridge is Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Volume ID for the cartridge is valid.
maeSourceAddress	Cartridge Source Address	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The element index of the element from which the cartridge was last moved.
maeSourceAddressValid	Cartridge Source Address Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the cartridge source address is valid.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
maeReserved	Drive Reserved	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the cartridge slot is reserved.
maeReserveHostSCSIid	SCSI ID of Reserving Host	<i>n</i> Where <i>n</i> is an integer (0 – 15)	4-byte integer	The SCSI ID of the host that issued a RESERVE command.
maeReserveValueKey	Reservation Key	<i>n</i> Where <i>n</i> is an integer	4-byte integer	A number assigned by a host when it reserved the element.
maeSCSIid	Drive SCSI ID	<i>n</i> Where <i>n</i> is an integer (0 – 15)	4-byte integer	The SCSI ID of the tape drive.
maeDriveType	Drive Type	Unknown (0) Sony 4mm (1) HP 4mm (2) Conner 4mm (3) Mammoth (4) DLT-4000 (5) DLT-7000 (6) EXB-8505 (7) EXB-8205 (8) EXB-8505XL (9) EXB-8205XL (10) Eliant-820 (11) Blank (12) Sony AIT (13) Mammoth-2 (14) Seagate LTO (15) HP LTO (16) IBM LTO (17) DLT-8000 (18) Fujitsu LTO (19) SuperDLT (20)	4-byte integer	The type of tape drive installed.
maeInqVendorID	Drive Vendor ID	Alphanumeric string, up to 8 characters	String	The ASCII representation of the Vendor ID returned by the tape drive in response to an INQUIRY command. ⁹
maeInqProductID	Drive Product ID	Alphanumeric string, up to 16 characters	String	The ASCII representation of the tape drive Product ID returned by the tape drive in response to an INQUIRY command. ⁹
maeInqProductRevision	Drive Product Revision	Alphanumeric string, up to 4 characters	String	The ASCII representation of the Product Revision level returned by the tape drive in response to an INQUIRY command.
maeInqSerialNumber	Drive Serial Number	Alphanumeric string, up to 10 characters	String	The ASCII representation of the tape drive's serial number.
maeDriveLCDText	Drive LCD Text	Alphanumeric string, up to 20 characters	String	The message displayed on the tape drive LCD.
maeLoadCount	Drive Load Count	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The number of times the robot loaded a cartridge into the tape drive.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
maeReloadCount	Drive Reload Count	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The number of times the robot reloaded a cartridge into the tape drive.
maeDoublePickCount	Drive Double Pick Count	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The number of times the robot had to grab a cartridge twice to remove it from the tape drive. ¹
maeFCWorldWideNameNode	Drive FC Node WWN	<i>iiiiiiiFFFFhhhhh</i> Where <i>iiiiiii</i> is the hexadecimal representation of the manufacturer's IEEE company ID and <i>h</i> is a hexadecimal number (0 – F) representing the individual device ID	8 byte hexadecimal number	The worldwide name of the tape drive on a Fibre Channel network.
maeFCWorldWideNamePort1	Drive FC Port 1 WWN	<i>iiiiiiiFFFFhhhhh</i> Where <i>iiiiiii</i> is the hexadecimal representation of the manufacturer's IEEE company ID and <i>h</i> is a hexadecimal number (0 – F) representing the individual device ID	8 byte hexadecimal number	The worldwide name for tape drive port 1 on a Fibre Channel network.
maeFCWorldWideNamePort2	Drive FC Port 2 WWN	<i>iiiiiiiFFFFhhhhh</i> Where <i>iiiiiii</i> is the hexadecimal representation of the manufacturer's IEEE company ID and <i>h</i> is a hexadecimal number (0 – F) representing the individual device ID	8 byte hexadecimal number	The worldwide name for tape drive port 2 on a Fibre Channel network.
maeCVFLASHVersion	Drive Firmware Version	Alphanumeric string, up to 20 characters	String	The tape drive flash code version. For more information about the latest flash code for your tape drive, refer to Exabyte Firmware Upgrades in the Support Services section of the Exabyte web site.
maeCVEEPROMVersion	Drive EEPROM Version	Alphanumeric string, up to 20 characters	String	The tape drive firmware version. For more information about the latest firmware version for your tape drive, refer to Exabyte Firmware Upgrades in the Support Services section of the Exabyte web site.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
maeCVBOOTVersion	Drive Boot Version	Alphanumeric string, up to 20 characters	String	The tape drive boot code version. For more information about the latest boot code for your tape drive, refer to Exabyte Firmware Upgrades in the Support Services section of the Exabyte web site.
Entry/Exit Port (Import/Export Element) Information				
mieTableSize	# Entry-Exit Ports	n Where n is an integer	4-byte integer	The number of entry/exit port elements in the library. ^j
mieIndex	Entry-Exit Port Element Index	n Where n is an integer	4-byte integer	The element index of each slot in the entry/exit port. ^j
mieAddress	Entry-Exit Port Element Address	n Where n is an integer	4-byte integer	The element address of each slot in the entry/exit port. ^j
miePresent	Entry-Exit Port Present	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the entry/exit port is present.
mieOccupied	Entry-Exit Port has a Cartridge	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether there is a cartridge in the selected entry/exit port slot.
mieAccessible	Entry-Exit Port Accessible	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the robot can access the entry/exit port. ^k
miePrimaryVolumeTag	Volume ID of Cartridge in Entry-Exit Port	Alphanumeric string, up to 36 characters	String	The volume tag (bar code label) information of the cartridge in the entry/exit port.
miePrimaryVolumeTagValid	Volume ID of Cartridge is Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Volume ID for the cartridge is valid.
mieSourceAddress	Cartridge Source Address	n Where n is an integer	4-byte integer	The element index of the element from which the cartridge was last moved.
mieSourceAddressValid	Cartridge Source Address is Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the cartridge source address is valid.
mieReserved	Entry-Exit Port Reserved	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the entry/exit port slot is reserved.
mieReserveHostSCSIid	SCSI ID of Reserving Host	n Where n is an integer (0 – 15)	4-byte integer	The SCSI ID of the host that issued a RESERVE command.
mieReserveValueKey	Reservation Key	n Where n is an integer	4-byte integer	A number assigned by a host when it reserved the element.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
Robot (Media Transport) Information				
mteTableSize	# Robots	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The number of robots installed in the library.
mteIndex	Robot Element Index	<i>n</i> Where <i>n</i> is an integer	4-byte integer	Indicates the element index of the robot.
mteAddress	Robot Element Address	<i>n</i> Where <i>n</i> is an integer	4-byte integer	Indicates the element address of the robot.
mtePresent	Robot Present	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the robot is present.
mteOccupied	Robot has a Cartridge	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether there is a cartridge in the robot.
mteAccessible	Robot Accessible	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the robot contains a cartridge. The robot is not accessible if it contains a cartridge.
mtePrimaryVolumeTag	Volume ID of Cartridge in Robot	Alphanumeric string, up to 36 characters	String	The volume tag (bar code label) information of the cartridge in the robot.
mtePrimaryVolumeTagValid	Volume ID of Cartridge is Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the Volume ID for the cartridge is valid.
mteSourceAddress	Cartridge Source Address	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The element index of the element from which the cartridge was last moved.
mteSourceAddressValid	Cartridge Source Address is Valid	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the cartridge source address is valid.
mteReserved	Robot is Reserved	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the robot is reserved.
mteReserveHostSCSIid	SCSI ID of Reserving Host	<i>n</i> Where <i>n</i> is an integer (0 – 15)	4-byte integer	The SCSI ID of the host that issued a RESERVE command.
mteReserveValueKey	Reservation Key	<i>n</i> Where <i>n</i> is an integer	4-byte integer	A number assigned by a host when it reserved the element.
Power Supply Information				
pstTableSize	# Power Supply Sensors	<i>n</i> Where <i>n</i> is an integer	4-byte integer	The number of power supply sensors installed in the library. ⁱ
pstStatus	Power Supply Status	Unknown (0) OK (1) Failed (2)	4-byte Boolean integer	The status of each installed power supply.

MIB Field Name	Default User Field Name	Display Value (Raw Data)	SNMP Data Type	Description
Fan Information				
sfTableSize	# Fans in System	n Where n is an integer	4-byte integer	The number of fans installed in the library.
sfStatus	Fan Status	Unknown (0) OK (1) Failed (2)	4-byte Boolean integer	The status of each installed fan.
sfFanString	Fan Name	Alphanumeric string, up to 20 characters	String	The name of the fan (for example, library fan or tape drive fan).
System Sensors				
seDoorPresent	Door Present	Yes (2)	4-byte Boolean integer	Indicates whether the library door is present. This value is always "yes."
seDoorLocked	Door Locked	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the library door is locked.
seDoorClosedSensor1	Door Closed - Sensor 1	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the first front door sensor is activated.
seDoorClosedSensor2	Door Closed - Sensor 2	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the second front door sensor is activated.
sslERetracted	Entry-Exit Port Retracted/ Locked	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the entry/exit port is locked (or retracted).
sslEExtended	Entry-Exit Port Extended/ Unlocked	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the entry/exit port is unlocked (or extended).
sslEDoorOpen	Entry-Exit Port Door Open	Unknown (0) No (1) Yes (2)	4-byte Boolean integer	Indicates whether the entry/exit port door is open. ¹
pssTableSize	# Product Specific Sensors	n Where n is an integer	4-byte integer	The total number of sensors in the library.
pssSensorType	Sensor Type	1 = Boolean 2 = Integer	4-byte integer	The type of sensor.
pssSensorValue	Sensor Value	Boolean sensors: Unknown (0) No (1) Yes (2) Integer sensors: n , where n is an integer	4-byte integer	The value returned by each sensor in the library.
pssSensorString	Sensor Name	Alphanumeric string, up to 20 characters	String	The name of each sensor in the library.

Table Footnotes

- ^a For the Exabyte 110L, 215M, 221L, and 430M libraries, the product name can be up to 16 characters. For the Exabyte 230D, 690D, X80, and X200 libraries, the product name can be up to 20 characters.
- ^b For the Exabyte 110L, 215M, 221L, and 430M libraries, this field is read-only. For the Exabyte 230D, 690D, X80, and X200 libraries, this field is read/write.
- ^c For the Exabyte 110L, 215M, 221L, and 430M libraries, this field is always blank. For the Exabyte 230D, 690D, X80, and X200 libraries, this field shows the current boot or flash version stored in the library Ethernet card.
- ^d The Exabyte 110L, 215M, 221L, and 430M libraries currently only support static IP addressing.
- ^e The maximum number of slots in the Exabyte 110L, 215M, 221L, and 430M libraries cannot be changed. For the Exabyte 230D, 690D, X80, and X200 libraries, the number of installed slots can be changed.
- ^f The cleaning slot is always enabled (cfgCSEnabled=1) for the Exabyte 230D, 690D, X80, and X200 libraries.
- ^g For the Exabyte 110L, 215M, 221L, and 430M libraries, this field is blank.
- ^h For the Exabyte 230D, 690D, X80, and X200 libraries, this field is zero.
- ⁱ For the Exabyte 110L, 215M, 221L, and 430M libraries, the value for this field is zero.
- ^j For the Exabyte 221L, and 430M libraries, there is only one slot (element) in the entry exit port. For the Exabyte 690D, X80, and X200 libraries there are five slots (elements) in the entry/exit port. The Exabyte 230D, 110L, and 215M libraries do not have an entry exit port.
- ^k For the Exabyte 110L, 215M, 221L, and 430M libraries, the entry/exit port is accessible if the cartridge magazine or caddy is installed and locked. For the Exabyte 230D, 690D, X80, and X200 libraries, the entry/exit port is accessible if it is retracted.
- ^l For the Exabyte 110L, 215M, 221L, and 430M libraries, the value for this field is one.

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