P3AM-8802-09ENZ0

FUJITSU Storage
ETERNUS LT260 Tape Library

User's Guide -Panel Operation-

FUJITSU

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Preface

Fujitsu would like to thank you for purchasing our FUJITSU Storage ETERNUS LT260 Tape Library (hereinafter referred to as LT260).
The LT260 is designed to be connected to servers (such as PRIMEQUEST, PRIMERGY, or Fujitsu M12/M10).
This manual explains how to perform operation management and settings for the LT260 from the operator panel or the remote panel.
This manual is intended for use of LT260 in regions other than Japan.
Please carefully review the information outlined in this manual.

Ninth Edition
December 2019

About this Manual

Organization

This manual is composed of the following two chapters:

- Chapter 1 Overview

  This chapter provides an overview of the operator panel and the remote panel.

- Chapter 2 Operating the Library

  This chapter provides information about various operations that can be performed with the operator panel and the remote panel.

Warning Notations

Warning signs are shown throughout this manual in order to prevent injury to the user and/or material damage. These signs are composed of a symbol and a message describing the recommended level of caution. The following explains the symbols, their levels of caution, and their meanings as used in this manual.

⚠ WARNING	This symbol indicates the possibility of serious or fatal injury if the LT260 is not used properly.
⚠ CAUTION	This symbol indicates the possibility of minor or moderate personal injury, as well as damage to the LT260 and/or to other users and their property, if the LT260 is not used properly.
IMPORTANT	This symbol indicates IMPORTANT information for the user to note when using the LT260.

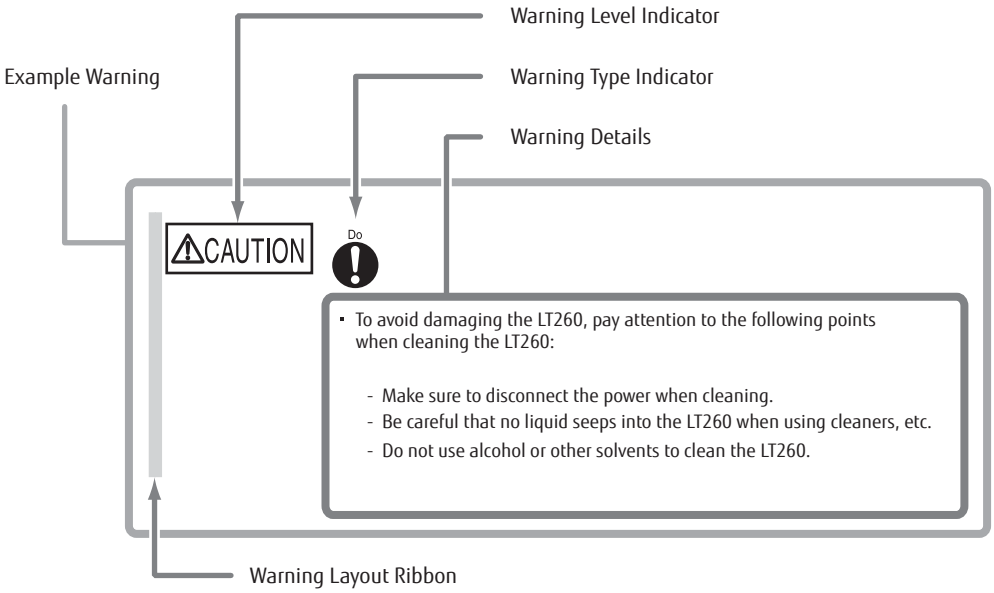
The following symbols are used to indicate the type of warnings or cautions being described.

Electric Shock 	△The triangle emphasizes the urgency of the WARNING and CAUTION contents. Inside the triangle and above it are details concerning the symbol (e.g. Electrical Shock).
No Disassembly 	⃠The barred "Do Not..." circle warns against certain actions. The action which must be avoided is both illustrated inside the barred circle and written above it (e.g. No Disassembly).

● The black "Must Do..." disk indicates actions that must be taken. The required action is both illustrated inside the black disk and written above it (e.g. Unplug).

How Warnings are Presented in this Manual

A message is written beside the symbol indicating the caution level. This message is marked with a vertical ribbon in the left margin, to distinguish this warning from ordinary descriptions.
An example is shown here.



Additional Information

Symbols Used in This Manual

The following symbols are used throughout this manual:

Caution This symbol alerts operators to particularly important information. Be sure to read this information.

Note Functions and know how which can be useful when setting up or operating the LT260.

Abbreviations Used in This Manual

- "LT260" refers to the FUJITSU Storage ETERNUS LT260 Tape Library.
- Trademark symbols such as ™ and ® are omitted in this manual.

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Chapter 1
Overview

This chapter provides an overview of the operator panel and the remote panel.

1.1 Overview of Panel Operations

The library provides two main interfaces:

- Operator panel
  With the operator panel, you can monitor, configure, and control the library from the front panel. All operating menus are displayed on the center pane.
- Remote panel
  With the remote panel, you can monitor, configure, and control the library from a web browser. The remote panel hosts a dedicated, protected Internet site that displays a graphical representation of the library. Except of top menus, operating menu tree are displayed on the right pane.

Although the operator panel is similar to the remote panel in design and functionality, some of the executable operations are different.

1.1.1 Overview of the Operator Panel

The operator panel is positioned on the center of the front panel. It is possible to perform operations such as referencing/setting the library and drive status and opening the magazine or mailslot from the operator panel. By selecting the buttons on the operator panel, operations such as window transition, function selection, and setup value input can be performed.
The windows on the operator panel before login can be roughly divided into the initialization window and login window.

Initialization window

Initialization is started when the library is turned on. In the initialization window, the progress status of the library initializing are displayed.

Figure 1.1 Initialization window

Login window

When initialization operation ends, the login window is displayed on the operator panel.
If the screen saver is on, please tap the screen.

Figure 1.2 Login window

1.1.2 Overview of the Remote Panel

The remote panel can be used to perform operations such as referencing/setting the library and drive status and performing drive cleaning on a Web browser via the LAN.

Note

- The recommended environment for the remote panel is as follows:
  - Web browser
    Microsoft Internet Explorer, Mozilla Firefox, Google Chrome, Safari
- Cookies and Java Script are used for the remote panel. Cookies and Java Script need to be enabled in your browser.

Before using the remote panel, network settings need to be performed on the operator panel to enable the IP address, the subnet mask, and the gateway so that the remote panel can be used. Specify the following URL on a Web browser after performing the settings:

http:// <IP address specified for the LT260>/

or

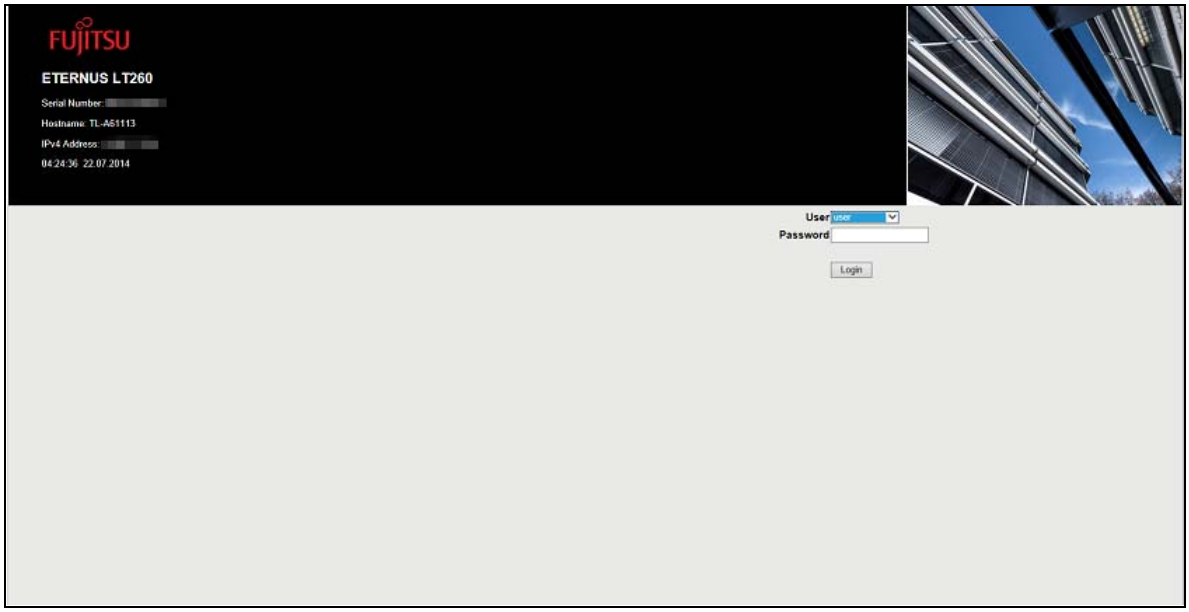
https:// <IP address specified for the LT260>/

Note

Use the https URL to connect to the remote panel for the LT260 when SSL is enabled. For details related to enabling SSL, refer to "2.5.18 Configuring the Access Management Setting to the Remote Panel" (page 68).

The following window is displayed when the LT260 is connected.

Figure 1.3 Remote panel starting window



1.2 Operation Window

1.2.1 Window Layout

The home screen window is displayed after login. See "2.4 Using the Library Home Screen" (page 23) for details.

The library home screen is organized into the following regions:

- Top banner

  Contains the home button and displays the overall status and information about the library and user.

- Left pane

  Displays the library identity and module status.

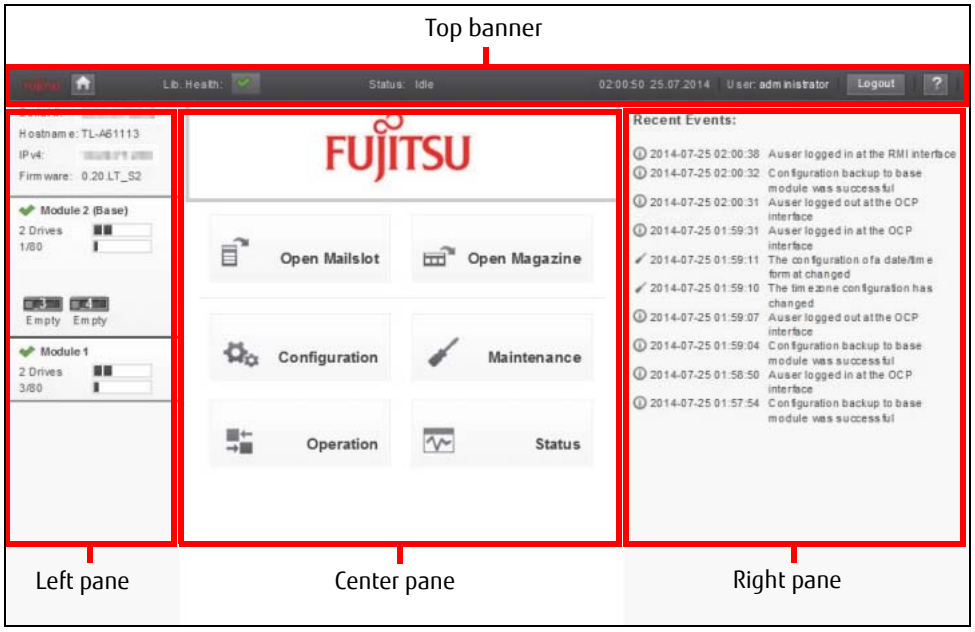
- Center pane

  Provides access to operate and configure the library and to view additional status information.

- Right pane (remote panel only)

  Displays a log of recent events.

Figure 1.4 Home screen configuration



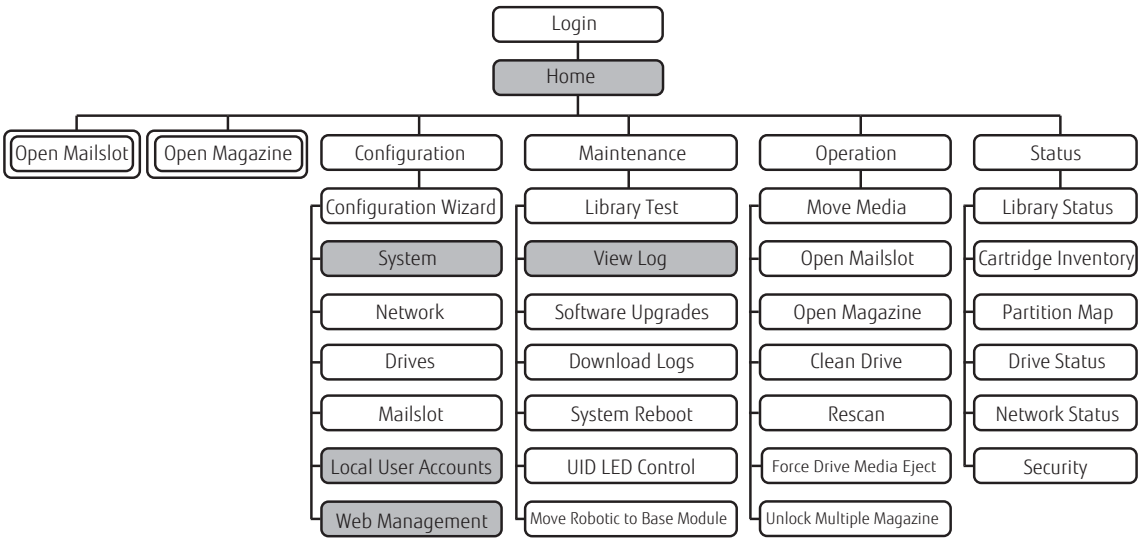
1.3 Menu Layout

This section describes the menu layout of the operator panel and the remote panel.

1.3.1 Menu Layout of the Operator Panel

The menu layout of the operator panel is as follows.

Figure 1.5 Menu layout of the operator panel



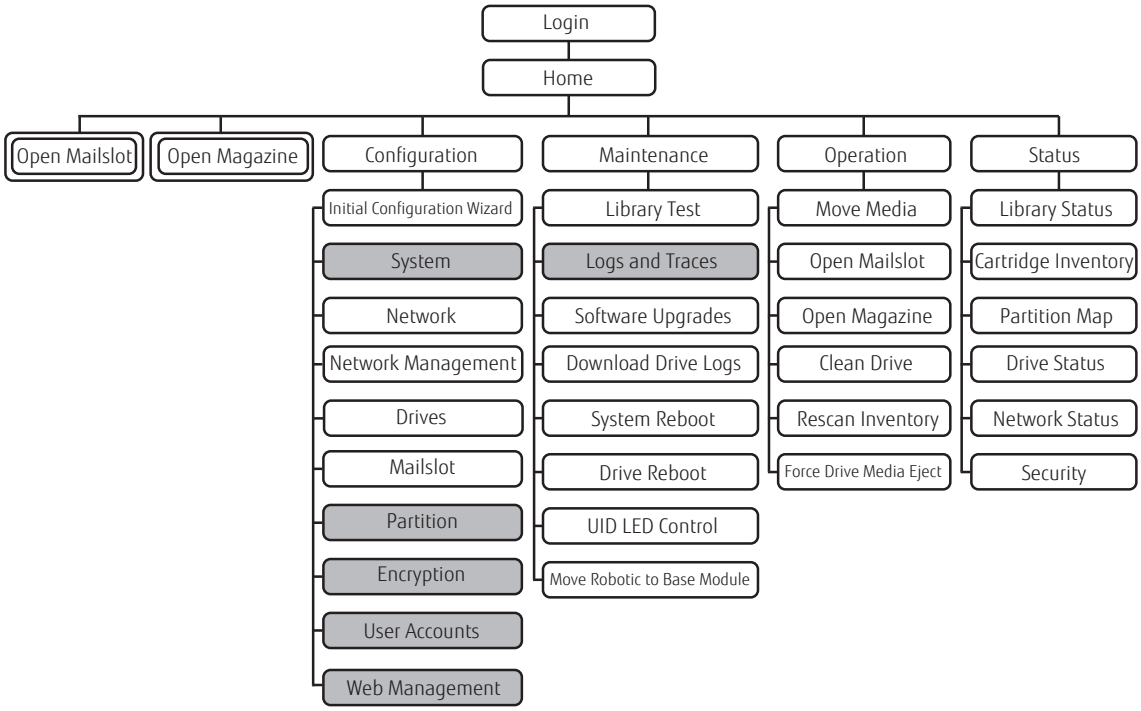
Although the Open Mailslot menu and the Open Magazine menu are in both the Home menu and the Operation menu, they are the same functions.

Menus that have been added or changed for firmware versions 7.90 and later.

1.3.2 Menu Layout of the Remote Panel

The menu layout of the remote panel is as follows.

Figure 1.6 Menu layout of the remote panel



Although the Open Mailslot menu and the Open Magazine menu are in both the Home menu and the Operation menu, they are the same functions.

Menus that have been added or changed for firmware versions 7.90 and later.

Chapter 2
Operating the Library

The library provides two main interfaces:

- Operator panel
  With the operator panel, you can monitor, configure, and control the library from the front panel. All operating menus are displayed on the center pane.
- Remote panel
  With the remote panel, you can monitor, configure, and control the library from a web browser. The remote panel hosts a dedicated, protected Internet site that displays a graphical representation of the library. Except of top menus, operating menu tree are displayed on the right pane.

Although the operator panel is similar to the remote panel in design and functionality, some of the executable operations are different.

Table 2.1 shows the status icons that appear on the panels and the meaning of the icons.

Table 2.1 Status icons

LED	Function
	The green Status OK icon indicates that the library is fully operational and that no user interaction is required.
	The yellow exclamation point Status Warning icon indicates that user attention is necessary, but that the device can still perform most operations.
	The red X Status Error icon indicates that user intervention is required and that the device is not capable of performing some operations.

2.1 Using the Operator Panel

The front panel has a power button, an LCD touch screen, and five LEDs. With the operator panel you can monitor, configure, and operate most library functions from the front panel. To navigate the operator panel, tap on the LCD touch screen.

Table 2.2 Front panel LED indicators

LED	Function
Module ID	Blue when activated. The unit identification (UID) LEDs are controlled by the user through the operator panel and remote panel Maintenance > UID LED Control screen. The UIDs on the operator panel and back panel UID are activated and deactivated together. The UIDs are helpful for locating the library in a data center.
Ready	Green, steady when power is on, blinking with tape Ready drive or library robotic activity.
Clean	Amber when a tape drive cleaning operation is recommended.
Attention	Amber if the library has detected a condition for which user attention is necessary, but that the library can still perform most operations.
Error	Amber if an unrecoverable tape drive or library error occurs. A corresponding error message is displayed on the LCD screen. User intervention is required; the library is not capable of performing some operations.

Note

The operator panel screen may be initialized if time elapses without logging in or during the logout process. As a feature, the operator panel turns white for a few seconds during the initialization of the screen and then login screen appears.

2.2 Using the Remote Panel

With the remote panel, you can monitor, configure, and operate most library functions from a web browser.

When possible, it is recommended that the remote panel be used as the primary library interface because compared to the operations of the operator panel, the web interface provides access to additional features, such as online help, and is easier to use. However, the remote panel is not required to use the product, except to configure advanced features, such as SNMP, IPv6, encryption, and partitions.

Before using the remote panel, you must configure the library network settings and set the administrator password with the operator panel. This can be done with the Initial Configuration Wizard. See "2.5.1 Using the Initial Configuration Wizard" (page 27).

To start the remote panel, open the latest version of a supported web browser and enter the IP address of the library in the browser's address bar. Supported browsers include Internet Explorer (version 10 or later is recommended), Firefox, Chrome and Safari.

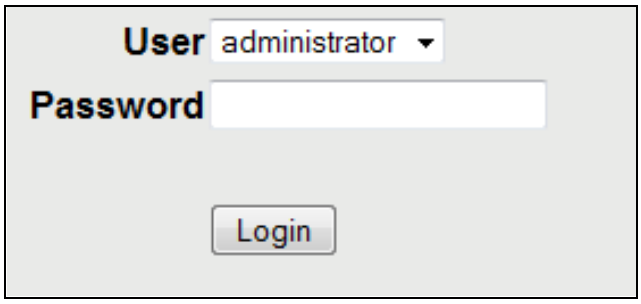
Note

Check the online help in the remote panel for additional information. The help pages are updated with firmware updates and often contain up-to-date technical details that might not be contained in this document.

To access remote panel help, click the  icon on the right side of the remote panel top banner.

2.3 Logging into the Library

Figure 2.1 Login



Procedure

1. Operator panel: If the operator panel screen saver is on, tap the screen.
   Remote panel: Open a supported web browser and enter the IP address of the library in the browser's address bar.
2. Select the User.
3. If required, enter the Password.
4. Click Login.

End of procedure

The user levels are:

- user
  The initial password is "std00001". The user account provides access to status information, but not configuration, maintenance or operation functions. The administrator account can be used to set the user account password, and allow or forbid the use of some of the operation functions by the user account. Based on the firmware version, refer to "2.5.15 Configuring User Account Settings (for Firmware Versions 7.80 and Earlier)" (page 58), or "2.5.16 Configuring User Account Settings (for Firmware Versions 7.90 and Later)" (page 60) for details.
- administrator
  The administrator password is required to login as the administrator user. The same administrator password is used for the remote panel and operator panel. The initial administrator password is "adm00001". The administrator user has access to all functionality except for the log configuration and Service features.

Caution

From a security perspective, changing the default password immediately after starting the library is recommended.
When logging in for the first time, change the password using the Initial Configuration Wizard or change the password with the user account settings.
Refer to "2.5.1 Using the Initial Configuration Wizard" (page 27), "2.5.15 Configuring User Account Settings (for Firmware Versions 7.80 and Earlier)" (page 58), or "2.5.16 Configuring User Account Settings (for Firmware Versions 7.90 and Later)" (page 60) for details.

- service
  Access to this user is by Service personnel only. The service password is set at the factory. The same service password is used for the remote panel and operator panel. Both the administrator and service passwords are required for a service person to enter the service area.

- security
  In addition to the functions that are available when logged in as the administrative user, the key management function can be set. After the Key Management Function Option is purchased, the setting for the key management function is available.
  The initial password is "security". However, this password can only be used to log in from the operator panel.
  After the initial password is changed on the operator panel, the password can then also be used to log in from the remote panel.

Note

Basically, only one user can log in to the library regardless of whether the user logs in from the remote panel or operator panel.
If a user is currently logged in, a warning message appears. Select whether to continue the login process.

- Select Leave to stop the login process.
- Select Login to continue the login process and forcibly log the currently logged in user out.

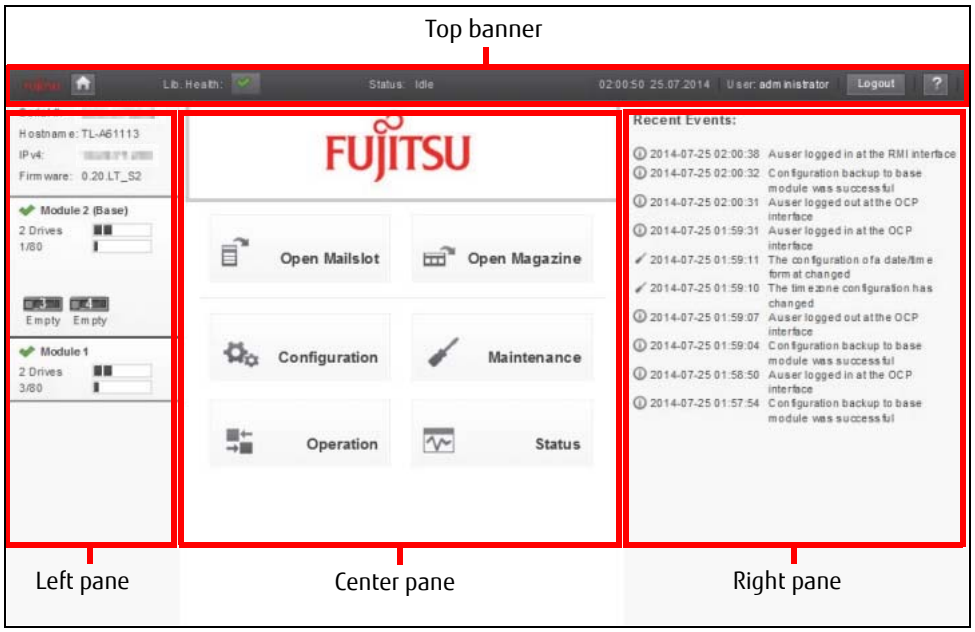
As an exception, only the "user" user account can log in to the library regardless of whether other users are logged in.
Note that if no operation is performed for a certain period of time, the user is forcibly logged out.

2.4 Using the Library Home Screen

The library home screen is organized into the following regions:

- Top banner
  Contains the home button and displays the overall status and information about the library and user.
- Left pane
  Displays the library identity and module status.
- Center pane
  Provides access to operate and configure the library and to view additional status information.
- Right pane (remote panel only)
  Displays a log of recent events.

Figure 2.2 Home screen



2.4.1 Top Banner Elements

-  (Home Icon)
  Returns to the library home screen.
- Library Health
  An icon indicating the overall health status of the library
  - 
    The green check mark Status OK icon indicates that all library components are fully operational and that no user intervention is required.
  - 
    The yellow triangle exclamation point Status Warning icon indicates that user attention is necessary, but that the library can still perform most operations. Click the icon to display the event ticket log.
  - 
    The red circle X Status Error icon indicates that user intervention is required and the library is not capable of performing some operations. Click the icon to display the event ticket log.
- Status
  The status of the library robotic
  - Idle
    The library robotic is ready to perform an action.
  - Moving
    The library robotic is moving a cartridge.
  - Scanning
    The library robotic is performing an inventory of cartridges.
  - Offline
    The robotic assembly is being used by the library or is disabled.
- Library Time & Date
  Helpful when analyzing event logs and support tickets, and might be needed when contacting support.
- User
  The user account for this session
- Logout
  Logs out of this session.
- 
  Accesses online help.

2.4.2 Left Pane Elements

- Library Status
  Overall library confirmation and status
  - Serial #
    The base module serial number
  - Hostname
    The library hostname

- Network Configuration
  The IP version (IPv4 or IPv6) and IP address
- Firmware
  The library firmware version

- Module Status Overviews
  A summary of each module's configuration and health. Click or tap the module status area to select the module.
  - Module Health Icon
    - 
      The green check mark Status OK icon indicates that the module and each of its components are fully operational and that no user intervention is required.
    - 
      The yellow triangle explanation point Status Warning icon indicates that user attention is necessary, but that the library can still perform most operations.
    - 
      The red circle X Status Error icon indicates that user intervention is required and the module is not capable of performing some operations.
  - Module Number
    Modules are numbered based on their location in the physical library. The bottom module is Module 1. The base module is annotated with (Base).
  - Tape Drive Status
    The number of tape drives installed in the module and the health of each tape drive. Click or tap on the tape drive to display the tape drive configuration and status information in the center pane.
    - A black square indicates that the tape drive is fully operational and that no user intervention is required.
    - A yellow square indicates that user attention is necessary, but that the tape drive can still perform most operations.
    - A red square indicates that user intervention is required or the tape drive is not capable of performing some operations.
  - Magazine Slot Usage
    The number of cartridge slots available and the number in use.
  - Tape Drive Operation Status
    The current tape drive activity for each tape drive in the module. The tape drive operation status is only displayed for the selected module.
    - Write
      The tape drive is performing a write operation.
    - Read
      The tape drive is performing a read operation.
    - Idle
      A cartridge is in the tape drive but the tape drive is not performing an operation.
    - Empty
      The tape drive is empty.
    - Encrypt
      The tape drive is writing encrypted data.

2.4.3 Center Panel Elements

- Open Mailslot (Non-user account)
  Click or tap to unlock the mailslot on the selected module. Mailslots must be enabled before the slots can be used as mailslots. See "2.5.12 Enabling or Disabling Mailslots" (page 51).
- Open Magazine (Non-user account)
  Click or tap to unlock a magazine in the selected module. Only one magazine in the library can be open at a time. See "2.7.3 Opening a Magazine" (page 102).
- Configuration (Non-user account)
  Click or tap to configure the library. See "2.5 Configuring the Library" (page 27).
- Maintenance (Non-user account)
  Click or tap to access maintenance functions. See "2.6 Maintaining the Library" (page 82).
- Operation (Non-user account)
  Click or tap to access operation functions. See "2.7 Operating the Library" (page 99).
- Status
  Click or tap to access status information. See "2.8 Viewing Status Information" (page 106).

2.5 Configuring the Library

Click or tap [Configuration] in the home screen to access the library configuration function. From the list displayed in the center pane in the operator panel or the right pane in the remote panel, select the item to configure. Refer to "1.3 Menu Layout" (page 16) for the items.
For items with a sub-menu, click or tap the item to expand the sub-menu.

2.5.1 Using the Initial Configuration Wizard

The wizard guides you through setting the administrator password, configuring the time zone, date and time, and library network settings. When logging in to the remote panel for the first time, performing a configuration using this function is recommended.

Note

The items that can be configure by this function can also be configured individually. To configure an item individually, refer to the following as required.

- Administrator password
  "2.5.15 Configuring User Account Settings (for Firmware Versions 7.80 and Earlier)" (page 58) or "2.5.16 Configuring User Account Settings (for Firmware Versions 7.90 and Later)" (page 60)
- Timezone
  "2.5.3.1 Setting the Time Zone" (page 34)
- Date and time
  "2.5.3.2 Setting the Date and Time Format" (page 35)
- Library network settings
  "2.5.8 Configuring the Library Network Settings" (page 42)

To configure the library, perform the following procedure.

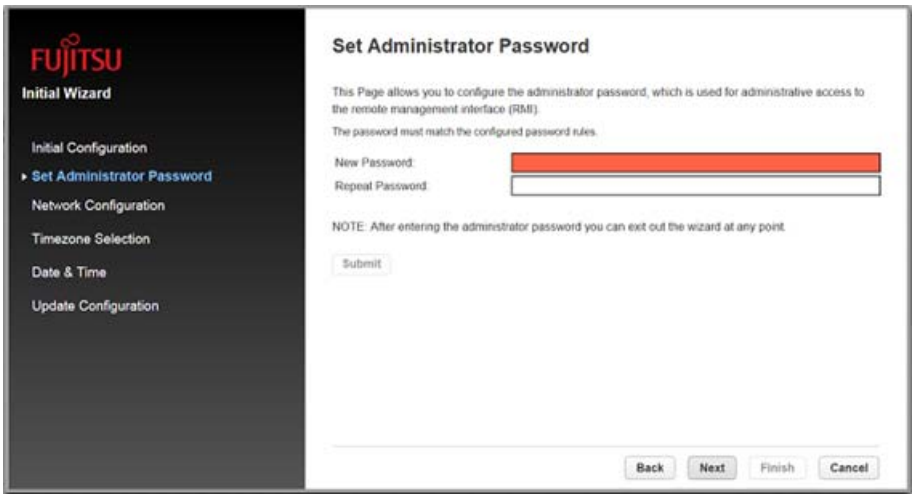
Procedure

1. In the [Configuration > System] screen, click "Initial Configuration Wizard" in the right pane to start the wizard.
2. Click [Next].

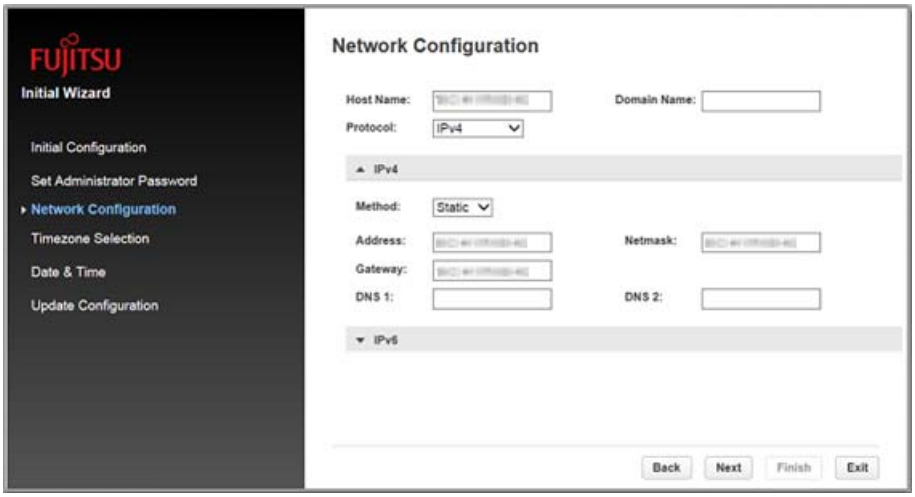
Note

To skip the configuration, click [Next] without entering any information. To go back to the previous item, click [Back]. To cancel the configuration, click [Cancel].

3. Set the administrator password.
Enter the password twice and click [Submit]. When the setting is completed, click [Next].



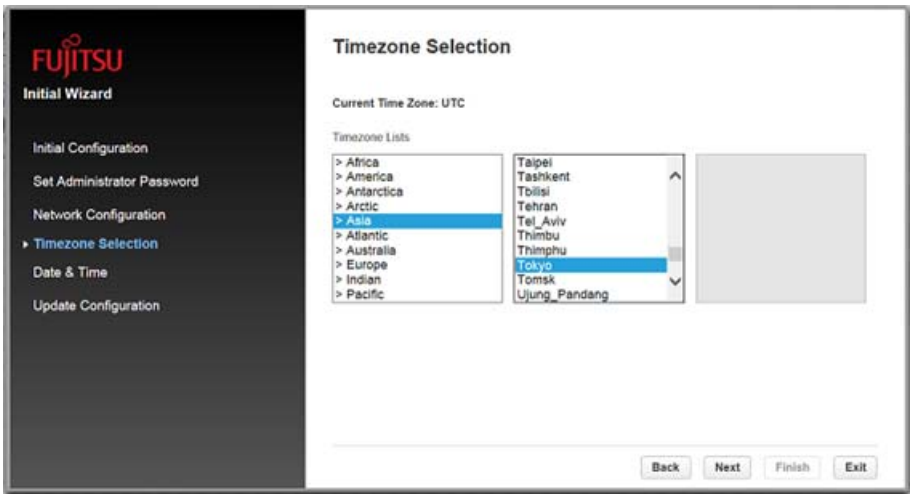
4 Configure the network settings.
Enter a value for the required items and then click [Next].



Note

Enter values according to the selected [Protocol].
When directly entering an Internet address, select Static for [Method] and enter a value in each item.
When automatically obtaining an Internet address from a DHCP server, select DHCP (for IPv4) or Stateless (for IPv6).

5 Configure the timezone
Select a timezone location from [Timezone Lists]. For location names that start with ">", a sub-menu is displayed in the right pane when selected and a more detailed location can be selected. After selecting a timezone, click [Next].



Note

For example, select [Asia > Tokyo] to set the timezone to Japan Standard Time.

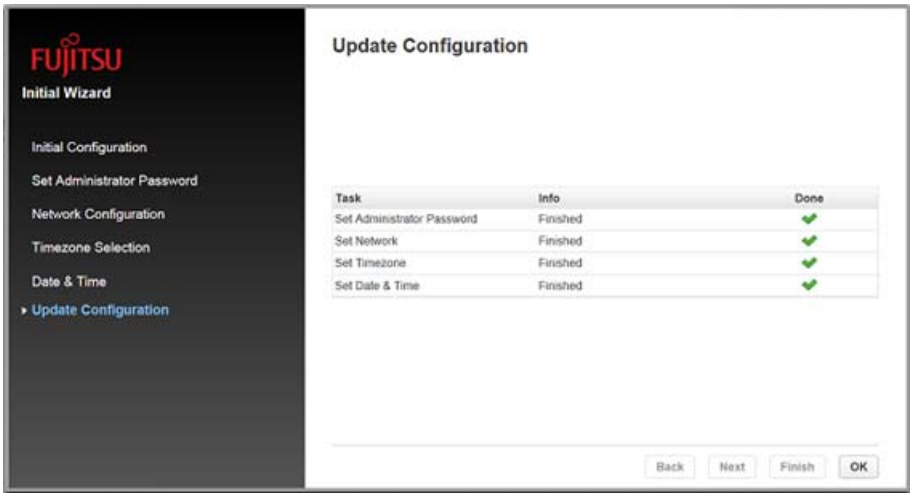
6 Configure the date and time.
Select a time format for [Time Format] and a date format for [Date Format], enter the date and time, and then click [Next].

Note

By pressing the [Now] button, the date and time are synchronized with the PC and automatically entered.

7 Click [Finish].

8 Confirm the result of the configuration and click [OK] to complete the configuration.



End of procedure

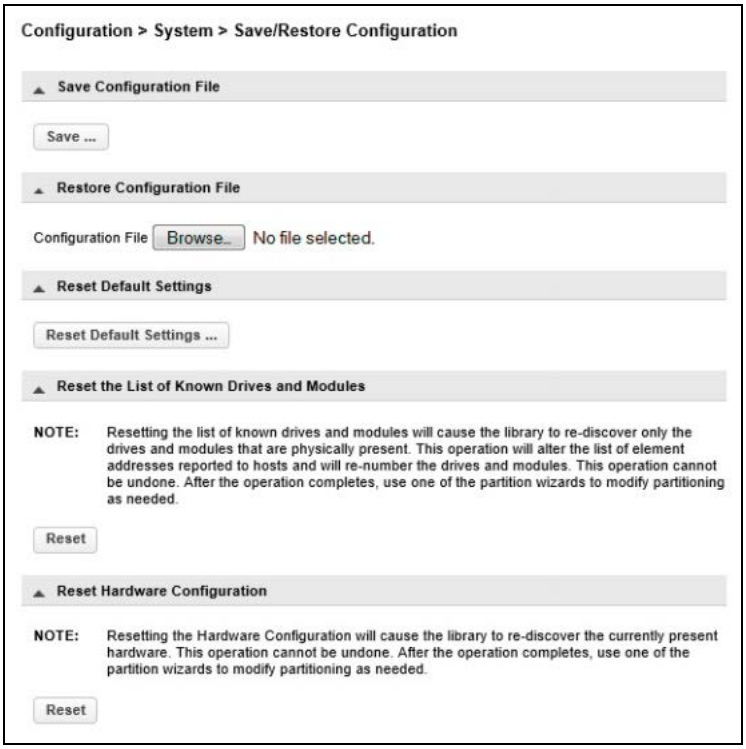
2.5.2 Saving, Restoring and Resetting the Library Configuration

From the Configuration > System > Save/Restore Configuration screen you can save the library configuration settings to a file, restore the settings, or reset the library configuration. The saved configuration database will make it easier it recover the library configuration if you need to replace the base module or base module controller.

Note

When the library is configured or set after purchasing the LT260 or when the library configuration or setting is changed during operation, make sure to save the library configuration settings as a file. The saved library configuration setting file can be restored in the library using the remote panel. Keep the latest library configuration setting file in a safe location. This file may be required for maintenance.

Figure 2.3 Save/Restore configuration



Saving the library configuration to a file

Procedure

1. Navigate to the Configuration > System > Save/Restore Configuration screen as shown above.
2. Under Save Configuration File, click Save.
3. When Download appears, click it and then select the destination location.

End of procedure

Restoring the library configuration from a file

Caution

If the Key Management Function Option is being used, the master key and the encryption key are deleted when the device setting information is restored.
Because encrypted data will become unreadable if the master key and the encryption key are deleted, ask the security administrator to export the master key and the encryption key in advance and store them in a secure location.
Refer to "2.2 Backing Up the Setting Information" of "FUJITSU Storage ETERNUS LT260 Tape Library Key Management Function Option User's Guide" for details.

Procedure

1. Navigate to the Configuration > System > Save/Restore Configuration screen.
2. Under Restore Configuration File, click Browse. Then select the location of the configuration file.
3. Click Upload File & Restore.

Note

If the library configuration is restored, the library is restarted.

End of procedure

Resetting the library configuration information

To reset the library configuration information to the default settings, click Reset Default Settings and select Yes.

Note

If the library configuration information is reset, the library is restarted.

Resetting the list of known drives and modules

To reset the list of known drives and modules, click Reset the List of Known Drives and Modules and select Yes.

Note

Resetting the list of known drives and modules will cause the library to re-discover only the drives and modules that are physically present. This operation will alter the list of element addresses reported to hosts and will re-number the drives and modules. This operation cannot be undone. After the operation completes, use one of the partition wizards to modify partitioning as needed.

Resetting hardware configuration

To reset the hardware configuration, click Reset Hardware Configuration and select Yes.

Note

Resetting the Hardware Configuration will cause the library to re-discover the currently present hardware. This operation cannot be undone. After the operation completes, use one of the partition wizards to modify partitioning as needed.

2.5.3 Configuring the Date and Time Format

To configure date and time format parameters and to use an SNTP server, from the Configuration area, navigate to the System > Date and Time Format screen.

Note

The library does not adjust its time for daylight saving time; the time must be adjusted manually.

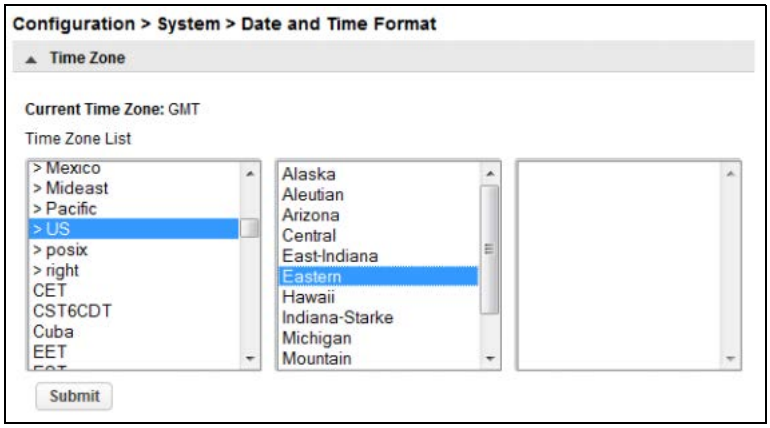
2.5.3.1 Setting the Time Zone

Procedure

1. Click Time Zone.

   A list of continents, countries, and regions is displayed. When an item proceeded with ">", for example "> US", is selected, a submenu is displayed in the next column.

   Figure 2.4 Time zone



2. Expand the time zone list, as necessary, until a location with the appropriate time zone is visible. Select a location with the appropriate time zone.

   Note

   For example, select [Asia > Tokyo] to set the timezone to Japan Standard Time.

3. Click Submit.

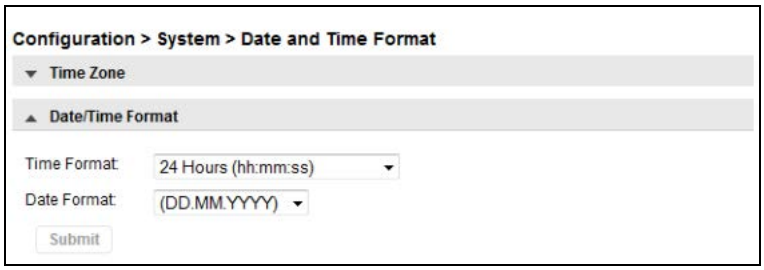
End of procedure

2.5.3.2 Setting the Date and Time Format

Procedure

1. Click Date/Time Format.

   Figure 2.5 Date/Time format

2. Select a time format.
3. Select a date format:
   For example, July 30, 2013 is displayed as:
   - DD.MM.YYYY - 30.07.2013
   - MM/DD/YYYY - 07/30/2013
   - YYYY-MM-DD - 2013-07-30
4. Click Submit.

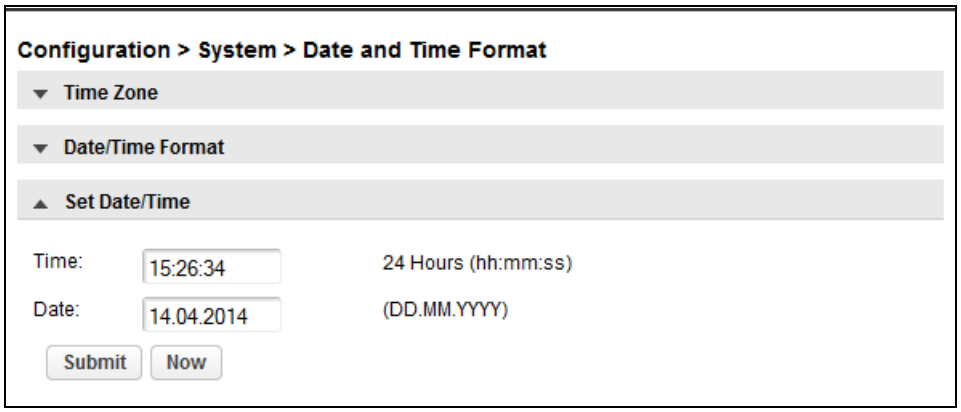
End of procedure

2.5.3.3 Setting the Date and Time

Procedure

1. Click Set Date/Time.

Figure 2.6 Set date/time



2. Enter time and date information.

   Manual Input:
   Enter time and date information directly.
   Automatic Input:
   Click Now. The time and date information is entered automatically by the synchronization to the computer running the remote panel.

3. Click Submit.

End of procedure

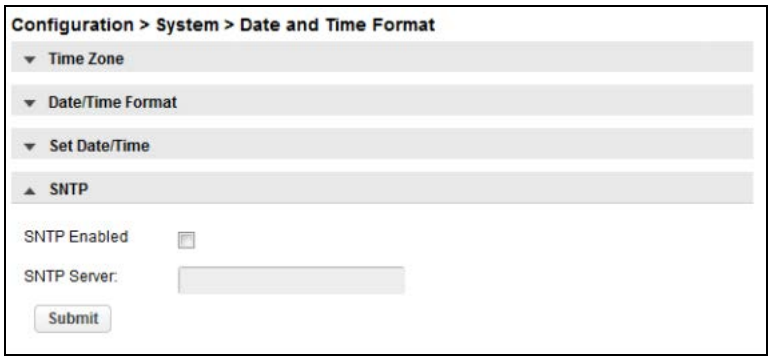
2.5.3.4 Enabling SNTP (Simple Network Time Protocol) Synchronization

The library must have network access to an SNTP server.

Procedure

1. Click SNTP.

   Figure 2.7 SNTP

2. Click SNTP Enabled.
3. Enter the SNTP server address.
4. Click Submit.

End of procedure

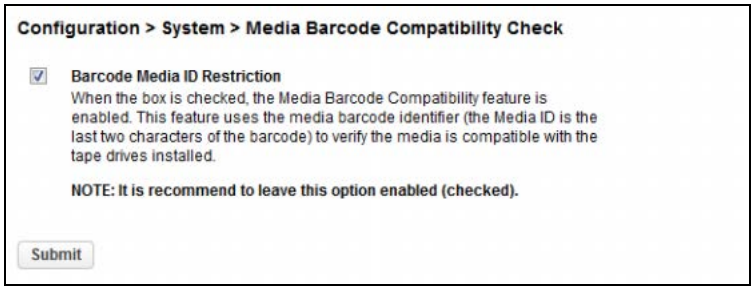
Note

Synchronization to the SNTP server is executed every 8 hours. Depending on the time deviation, the synchronization mode (Step mode/Slew mode) is automatically selected.

2.5.4 Configuring Media Barcode Compatibility Checking

From the Configuration > System > Media Barcode Compatibility Check screen you can enable or disable the barcode media ID check.

Figure 2.8 Media barcode compatibility check



When Barcode Media ID Restriction is enabled, the library will only allow appropriate tape cartridges to be loaded into tape drives. The barcode media ID is the last two characters of the barcode. For example, an LTO-6 labeled cartridge will not be allowed to move into an LTO-5 tape drive.

When disabled, the library will move any tape to any tape drive. If the cartridge is incompatible with the tape drive, the library will display a message.

Caution

- It is strongly recommended that all cartridges have barcode labels with the correct media ID, and that the Barcode Media ID Restriction is enabled.
- If a barcode label with an incorrect media ID is being used, the tape cartridge may be moved to an incompatible tape drive.

2.5.5 Configuring Allow Unlabeled Media Setting

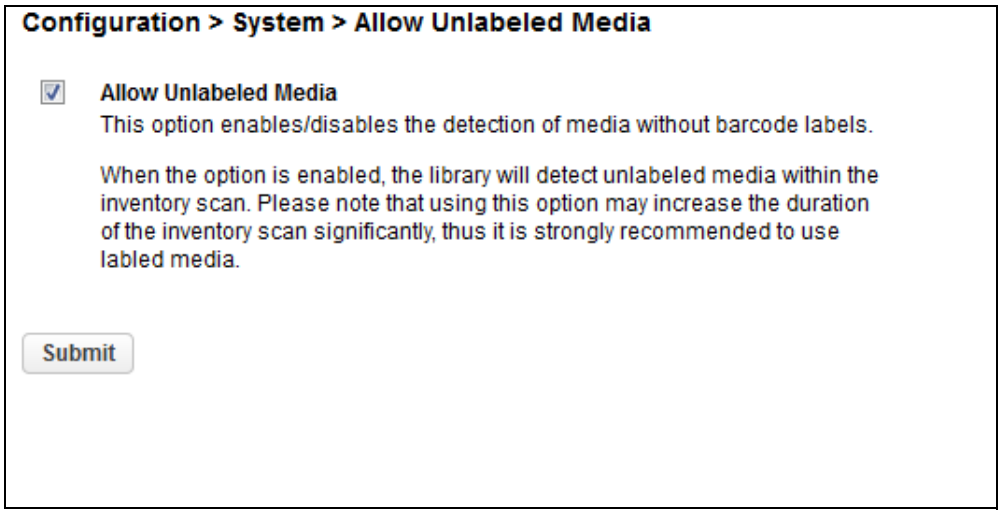
Although it is strongly recommended to use labeled media, the tape library is capable to detect cartridges without barcode label within the inventory scan. This function enables the library to detect and use cartridges unlabeled or difficult to read labels.

To enable detection of cartridges unlabeled or difficult to read labels navigate to Configuration > System > Allow Unlabeled Media.

Procedure

1. Set the checkbox.
2. Click Submit.

Figure 2.9 Allow unlabeled media



End of procedure

Note

Using this option may increase the duration of the inventory time, thus it is strongly recommended to use correctly labeled media!

2.5.6 Configuring License Key Handing

When adding a license key, navigate to the System > License Key Handling screen.

Figure 2.10 License key handing

Procedure

1. Enter license key.
   The license key needs to have a length of 15 characters.
2. Click Add License.

End of procedure

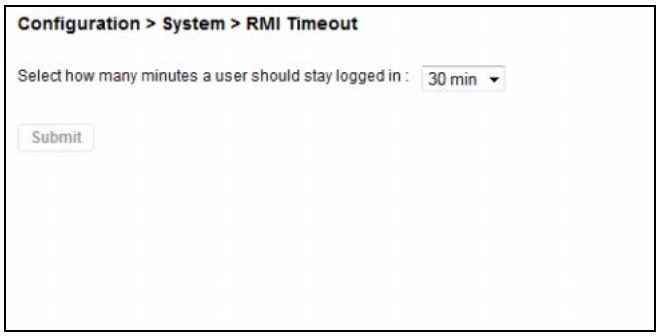
2.5.7 Configuring the RMI Timeout Setting (for Firmware Versions 7.80 and Earlier)

To set the timeout for the remote panel, navigate to the System > RMI Timeout screen.

Procedure

1. Select timeout value (5 or 30 minutes).
2. Click Submit.

Figure 2.11 RMI timeout



End of procedure

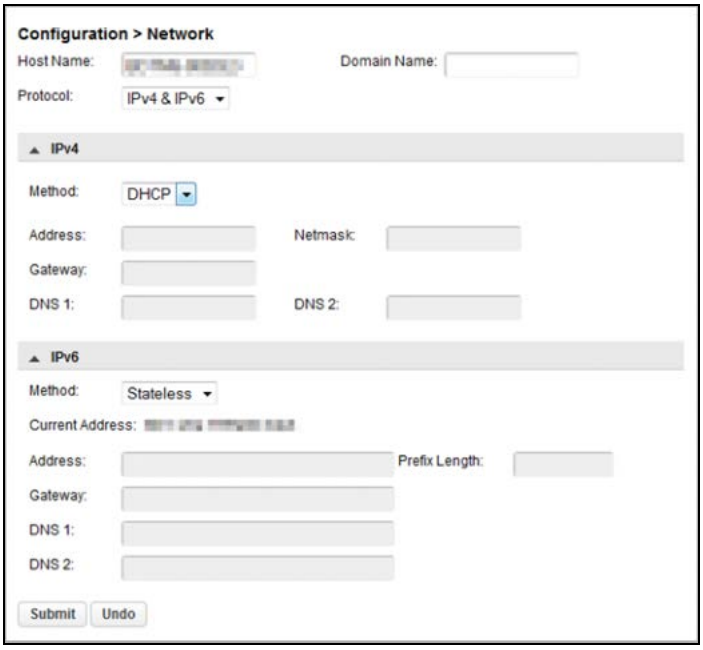
Note

For firmware versions 7.90 and later, this setting has been integrated in the [Configuration > Web Management] menu.
To set the remote panel timeout for firmware versions 7.90 and later, refer to "2.5.18.5 Setting the Session Timeout Period of the Remote Panel (for Firmware Versions 7.90 and Later)" (page 79).

2.5.8 Configuring the Library Network Settings

From the Configuration > Network screen you can configure the library network settings.

Figure 2.12 Network setting



Procedure

1. Navigate to the Configuration > Network screen.
2. Configure or update the Host Name and Domain Name. The remote panel URL is <*Host Name*>.<*Domain Name*>.
3. Select the Internet protocol to use for the library.
4. Configure the settings for the selected Internet protocol.
   To have the library obtain an Internet address from a DHCP server, select the DHCP or Stateless method.
5. Click Submit.

End of procedure

Note

Use "Reset internal IP Range" in case that the network conflict is occurred. This function should not be used in other case.
Refer to "User's Guide -Installation & Operation- 3.1 Powering On/Off" about how to use the function.

2.5.9 Configuring the SNMP

This operation can be executed from only remote panel operation.

Use the Configuration > Network Management screen to enable and configure SNMP (Simple Network Management Protocol), which allows applications to manage the device. The library supports both SNMP configuration and SNMP traps.

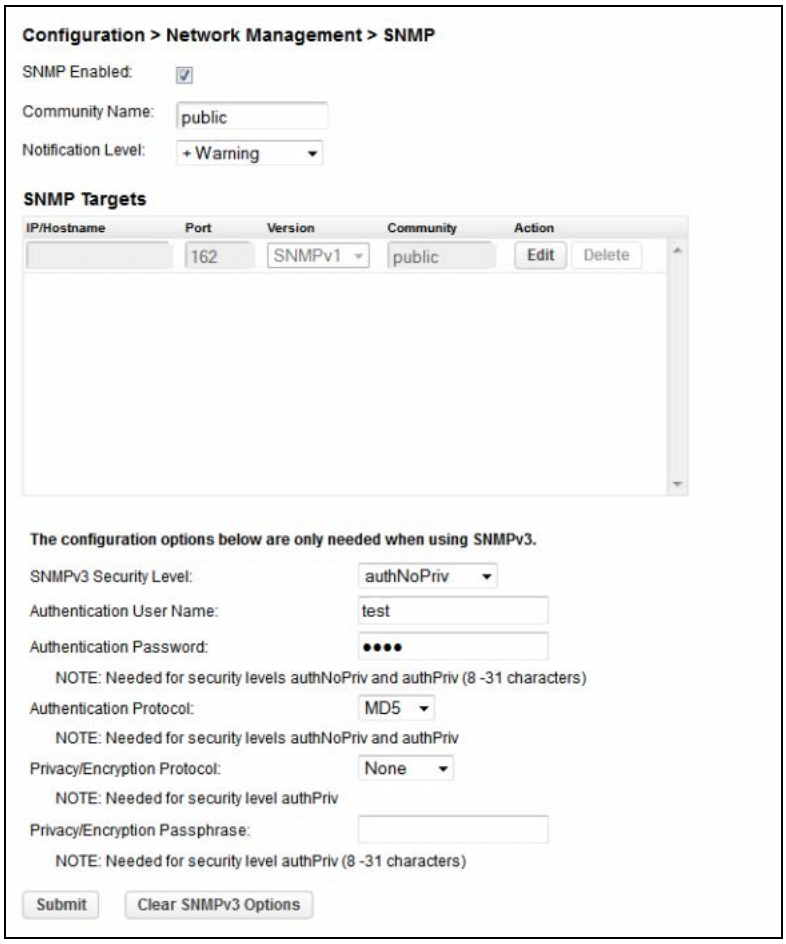
The monitoring server can receive SNMP traps if the "ETERNUS SF Storage Cruiser" management software is set up on the server. Refer to the ETERNUS SF Storage Cruiser manuals for details.

Table 2.3 Management software

Software name	Supported function
FUJITSU Storage ETERNUS SF Storage Cruiser	SAN management, fault monitoring

For information about the versions of ETERNUS SF Storage Cruiser that support the LT260, contact our sales representative.

Figure 2.13 SNMP



- SNMP Enabled
  When checked, the library can be managed by computers listed in the SNMP Target IP Addresses field.
- Community Name
  A string used to match the SNMP management station and library. It must be set to the same name on both the management station and the library. The default community name is *public*.
- Notification Level
  The types of events for which the library should send.
  - Inactive
    No events are sent.
  - Critical
    Only critical events are sent.
  - + Warnings
    Only critical and warning events are sent.
  - + Configuration
    Only critical, warning, and configuration events are sent.
  - + Information
    All events are sent.
- SNMP Targets
  List of configured SNMP targets.

The following are the optional settings for SNMPv3. When using SNMPv3, perform these settings.

- Limit all library SNMP communication to SNMPv3
  If the checkbox is selected, the usable SNMP version is limited to SNMPv3. If this setting is enabled, the SNMP Targets set with SNMPv1 and SNMPv2 are deleted. When the checkbox is selected, a confirmation screen is displayed. Click [Yes] to proceed.
- SNMPv3 Security Level
  SNMPv3 security level for SNMP communication
  - noAuthNoPriv
    Authentication and encryption are not used for SNMP communication.
  - AuthNoPriv
    Authentication is used for SNMP communication.
  - AuthPriv
    Authentication and encryption are used for SNMP communication.
- Authentication User Name
  The username used for communication using SNMPv3. Required when using SNMPv3.
- Authentication Password
  A password with eight or more characters used for SNMP communication authentication. Required when AuthNoPriv and AuthPriv are selected for SNMPv3 Security Level.

- To add an SNMP target or edit information for an SNMP target

Procedure

1. Click Edit for the appropriate SNMP target. When adding an SNMP target, click Edit next to a target without an IP/Hostname.
2. Enter the target IP address or hostname.
3. Enter the port.
4. Select the SNMP version.
5. Enter the SNMP community string for the target.
6. Enter the optional setting for SNMPv3. (When using SNMPv3)
7. Click Submit.

End of procedure

- To delete an SNMP target

Procedure

1. Click Delete for the target to be deleted.
2. Click Submit.

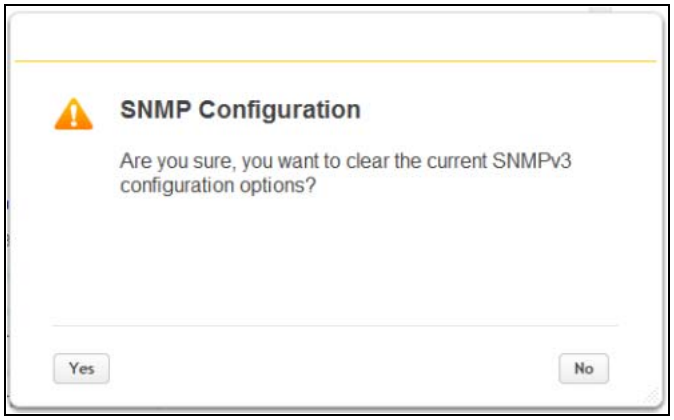
End of procedure

To clear SNMPv3 Options

Procedure

1 Click Clear SNMPv3 Options.
To confirm that you want to clear the SNMPv3 Options, click Yes.

Figure 2.14 SNMPv3



2 Click the [Yes] button.

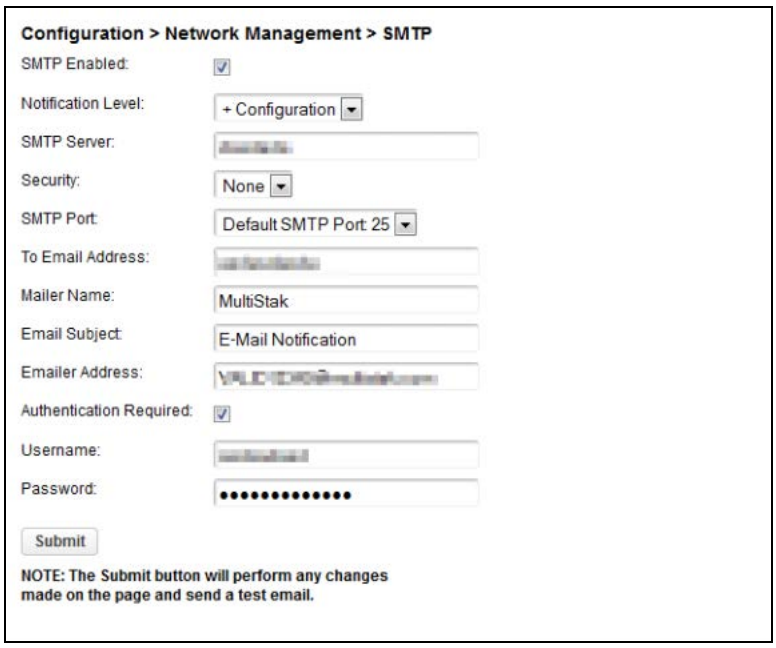
End of procedure

2.5.10 Configuring the SMTP

This operation can be executed from only remote panel operation.

From the Configuration > Network Management > SMTP screen you can enable SMTP (Simple Mail Transfer Protocol) functionality and configure E-mail notification of library events. The library must have network access to an SMTP server.

Figure 2.15 SMTP



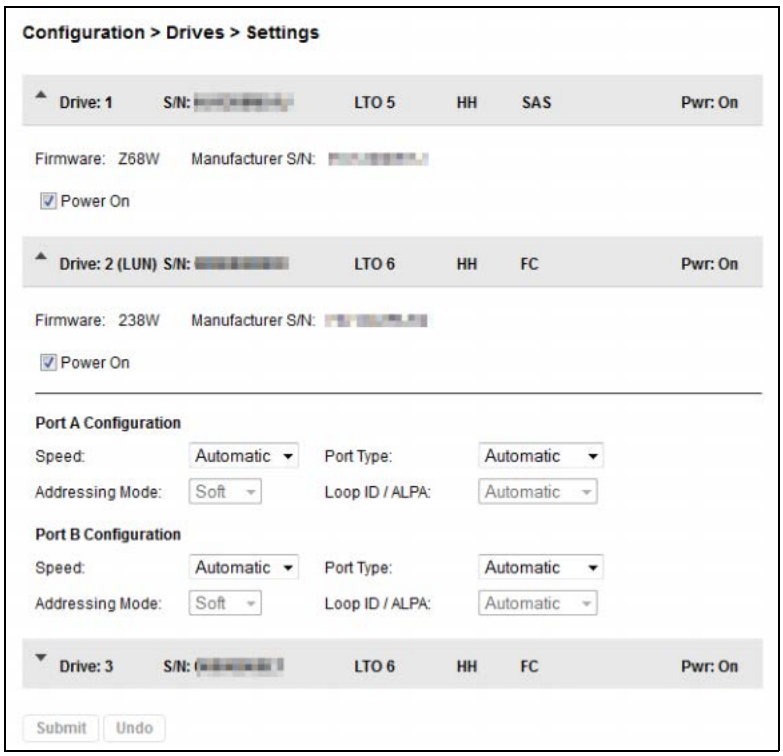
- SMTP Enabled
  Check to enable SMTP. When checked, the remaining configurations are active.
- Notification Level
  The types of events for which the library should send E-mail
  - Inactive
    No events are sent.
  - Critical
    Only critical events are sent.
  - + Warnings
    Only critical and warning events are sent.
  - + Configuration
    Only critical, warning, and configuration events are sent.
  - + Information
    All events are sent.
- SMTP Server
  Hostname or IP address of the SMTP server

- Security
  Security protocol for accessing the SMTP server
  - None
  - SSL
  - TLS
- SMTP Port
  SMTP server port. The default port for the selected protocol will be selected. You can choose one of the default ports or configure a custom port.
- To Email Address
  The address to receive the reported events (for example firstname.lastname@example.com). Only one email address can be configured.
- Mailer Name
  Name of the sender of the E-mail
- Email Subject
  Subject line for the E-mail message
- Emailer Address
  Return address to use for the E-mail message
- Authentication Required
  When checked, a username and password are required to access the SMTP server.
- Username
  User account for logging into the SMTP server when authentication is required.
- Password
  Password associated with the Username when authentication is required.

2.5.11 Configuring Tape Drives

From the Configuration > Drives screen you can see and modify the tape drive configuration.

Figure 2.16 Tape drive settings



- Tape drive number
  Tape drives are numbered from the bottom of the library up beginning with one. The tape drive currently hosting the SCSI communication for the library is designated with (LUN).
- Serial number
  The serial number assigned to the tape drive by the library. This serial number is reported to host applications. The serial number cannot be modified.
  This is not the serial number assigned to the tape drive by the manufacturer; the serial number assigned by the manufacturer is shown in Manufacturer S/N.
- LTO generation
  - LTO 5
    Ultrium 3000, Ultrium 3280
  - LTO 6
    Ultrium Tape Drive, Ultrium 6250
  - LTO 7
    Ultrium Tape Drive
  - LTO 8
    Ultrium Tape Drive

- Tape drive form factor
  - HH
    Half height
- Tape drive interface
  - FC
    Fibre Channel
  - SAS
    Serial Attached SCSI
- (Modified)
  When present indicates that a setting has been changed. To apply the changes, click Submit. To reset all changed fields to their previously saved values, click Undo.
- Pwr
  Indicates whether the tape drive is currently powered on or off.
- Firmware
  The version of firmware currently installed on the tape drive.
- Manufacturer S/N
  The serial number assigned to the tape drive when it was manufactured. Use this serial number when working with your Service.
- Power On
  Checked when the tape drive is powered on.

Note

Always power off a tape drive before removing it from the library or moving it to a new location within the library.

- Port X configuration (FC only)
  Tape drive port configuration.
  - Speed
    The currently selected speed. The default is Automatic.
  - Port Type
    - Automatic
    - Loop
      Enables selection of the Addressing Mode.
    - Fabric
  - Addressing Mode
    When Port Type is set to Loop, Addressing Mode can be set to Soft, Hard, or Hard Autoselect.
  - Loop ID/ALPA
    When Addressing Mode is set to Hard, you can choose an ALPA address from the drop down list.

To modify the configuration of one or more tape drives

Procedure

1. Modify any of the configurable values.
2. Click Submit.

End of procedure

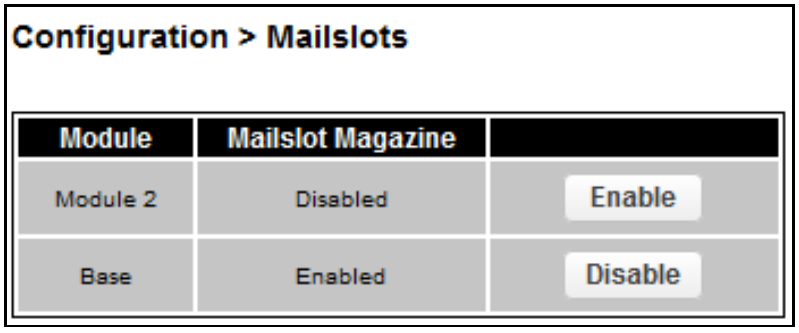
Note

To configure the number of barcode characters to report to the host application and whether to report them from the left or right end of the label, use either the Basic Partition Wizard or Expert Partition Wizard. See "2.5.13.1 Using the Basic Partition Wizard" (page 53) or "2.5.13.2 Using the Expert Partition Wizard" (page 55).

2.5.12 Enabling or Disabling Mailslots

The Configuration > Mailslot screen lists each of the mailslots and shows whether each is enabled or disabled. To change the state, click the button for the mailslot and then click Submit. Slots not enabled as mailslots are available as storage slots.

Figure 2.17 Enabling or disabling mailslots



Caution

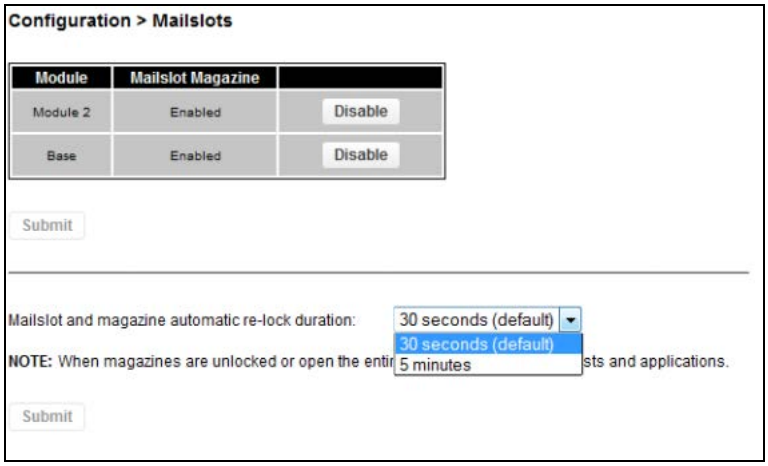
Do not change the mailslot setting (enable or disable) while the backup software is in use. If a change is required, stop the backup software before performing any changes.

The mailslot and magazine automatic re-lock duration can be selected.

Procedure

1. Selection duration: 30 seconds (default) or 5 minutes.
2. Click Submit.

Figure 2.18 Setting re-lock time



End of procedure

2.5.13 Configuring Library Partitions

This operation can be executed from only remote panel operation.

The library has a flexible partitioning scheme with a few key constraints:

- The license option is necessary to create more than 2 partitions.
- Each partition must have at least one tape drive. One tape drive in each partition will host the library LUN for the partition.
- The maximum number of partitions is 20.
- Magazine slots are allocated in five-slot groups.
- Mailslots must be enabled for a module before they can be allocated to a partition.
  A partition does not need to have a mailslot. If a partition does not have a mailslot, the magazine must be accessed to import or export cartridges. Opening a magazine takes the library off line.
  Although the mailslot magazine is shared between partitions, the mailslot elements are assigned individually to partitions.

Wizards guide you through the partition configuration process. The wizards are only accessible from the remote panel.

- Basic Partition Wizard
  You specify the number of partitions and the wizard removes the current partition configuration and assigns the tape drives and storage slots as evenly as possible to the partitions. Any extra tape drives or slots are assigned to the first partition.

  Use the Basic Partition Wizard to configure partitions that will have similar resources or to configure the number of barcode characters to report to the host application and whether to report them from the left or right end of the label for a library with a single partition.

- Expert Partition Wizard
  You add or remove partitions from the current partitions configuration and then edit each partition configuration to add or remove library resources.

  Use the Expert Partition Wizard to configure partitions that will have different resources or to adjust resource assignments for existing partitions or those created with the Basic Partition Wizard.

Caution

- The library will go off line while partitions are being configured. Ensure that all host operations are idle before running a partition wizard.
- To use backup software, leave the automatic cleaning function disabled (default setting). Enabling the setting causes a conflict error between the automatic cleaning function and the cleaning function of the backup software.
  For operations with the LTFS option, the automatic cleaning function can be enabled. Refer to "3.8 Cleaning the Tape Drive" in "FUJITSU Storage ETERNUS LT series Tape Libraries LTFS Option User's Guide" for details.

2.5.13.1 Using the Basic Partition Wizard

Procedure

1. Click Configuration > Partition > Basic Wizard to start the wizard.
   The Information screen displays the existing partitions, which will be deleted by the wizard.
2. Click Proceed.
3. Click Next.
   The Create Partition Scheme screen displays the number of slots, mailslots, tape drives, and maximum available partitions for the library.

   Note

   If you want to enable or disable the mailslots, Cancel out of the wizard and update the mailslot configuration before configuring partitioning.

4. Select the number of partitions.

5 Select the number of barcode characters reported to the host application.

This option provides interchange compatibility with libraries with more limited barcode reading capabilities. The maximum length is 15 and the default is 8. This configuration will apply to all partitions.

Note

The industry standard length for LTO barcode labels is eight characters. Barcode labels longer than eight characters might scan incorrectly, particularly if they are not high quality labels.

6 Select whether to report the barcode characters from the left or right end of the barcode label to the host application when reporting fewer than the maximum number of characters.

For example, when reporting only six characters of the barcode label "12345678", if alignment is left, the device will report 123456. If alignment is right, the device will report 345678. The default is left. Click Next.

7 For operations with the backup software, the automatic cleaning function of the tape drive must not be used. Leave the Auto Clean checkbox unselected.

Note

For operations with the LTFS option, the automatic cleaning function can be enabled. Refer to "3.8 Cleaning the Tape Drive" in "FUJITSU Storage ETERNUS LT series Tape Libraries LTFS Option User's Guide" for details.

8 Click Next.

9 The Finish Configuration screen displays the proposed allocation of library resources into partitions.

- To update the configuration, click Back.
- To have the wizard configure partition as shown, click Finish.

  After the wizard reconfigures the partition, the library will come on line automatically.
- To exit the wizard, click Cancel or Exit.

End of procedure

Note

You can use the Expert Partition Wizard to adjust the allocation of resources after creating the partitions with the Basic Partition Wizard.

2.5.13.2 Using the Expert Partition Wizard

Use the wizard to configure one partition at a time.

Note

If you want to enable or disable the mailslots, Cancel out of the wizard and update the mailslot configuration before configuring partitioning.

To add/modify a partition

Procedure

1. Click Configuration > Partition > Expert Wizard to start the wizard.
   The Create Partition Scheme screen lists the current partitions, if any, and the free resources.
2. To add a partition, click Add.

   Note

   The Add button will only be active if there are available resources. If there are no available resources, either edit a partition and release resources from it or remove a partition that contains extra resources.
3. Click Next.
4. Enter a partition name in "Partition Name".
5. In "Barcode Label Length Reported To Host", select the number of barcode characters reported to the host application.
   This option provides interchange compatibility with libraries with more limited barcode reading capabilities. The maximum length is 15 and the default is 8. This configuration will apply to all partitions.

   Note

   The industry standard length for LTO barcode labels is eight characters. Barcode labels longer than eight characters might scan incorrectly, particularly if they are not high quality labels.
6. In "Barcode Label Alignment Reported To Host", select whether to report the barcode characters from the left end or right end of the barcode label to the host application when reporting fewer than the maximum number of characters.
   For example, when reporting only six characters of the barcode label "12345678", if alignment is left, the device will report 123456. If alignment is right, the device will report 345678. The default is left.

7 When enabling the key management function for partitions, select the [Encryption Mode] checkbox (only when the key management function option is used).

Note

This setting can only be changed by the security administrator account.
As an exception, administrator accounts that are granted privileges by the security administrator can change this setting. For details, refer to "2.1.3.2 Setting the Key Management Function (Firmware Version 7.90 or Later)" in "FUJITSU Storage ETERNUS LT260 Tape Library Key Management Function Option User's Guide".

8 Click Next.

9 In the Assign Storage Slots screen, use the >> and << buttons to assign slots to the new partition and then click Next.

10 In the Assign Mail Slots screen, use the >> and << buttons to assign mailslots to the new partition and then click Next.
Individual mailslot elements cannot be shared between partitions. Importing or exporting cartridges in a partition without an assigned mailslot will require magazine access, which will take the library off line.

11 In the Assign Drives screen, use the >> and << buttons to assign tape drives to the new partition and then click Next.

12 If the partition has multiple tape drives, select the tape drive that will host the SCSI communication for the partition and then click Next.
The lowest numbered tape drive in the partition is the default.

13 Verify the partition configuration and then click Finish.
After the wizard reconfigures the partition, the library will come on line automatically.

End of procedure

To remove a partition

Procedure

1 Select the partition, click Remove, and then click Next.

2 Verify that you want to remove the partition and then click Finish.
After the wizard removes the partition, the library will come on line automatically.

End of procedure

Caution

When deleting a partition that has the key management function enabled, perform it with the Security role. The relevant partition cannot be deleted with the Administrator role.

2.5.14 Configuring Key Management Function

After logging in with the security account, the Configuration > Encryption screen can be selected. For the default library state, the hardware encryption function of the tape drive is set to be used according to the backup software. To use the hardware encryption function of a tape drive with a single library, the Key Management Function Option is required.
When using the Key Management Function Option, refer to "FUJITSU Storage ETERNUS LT260 Tape Library Key Management Function Option User's Guide".

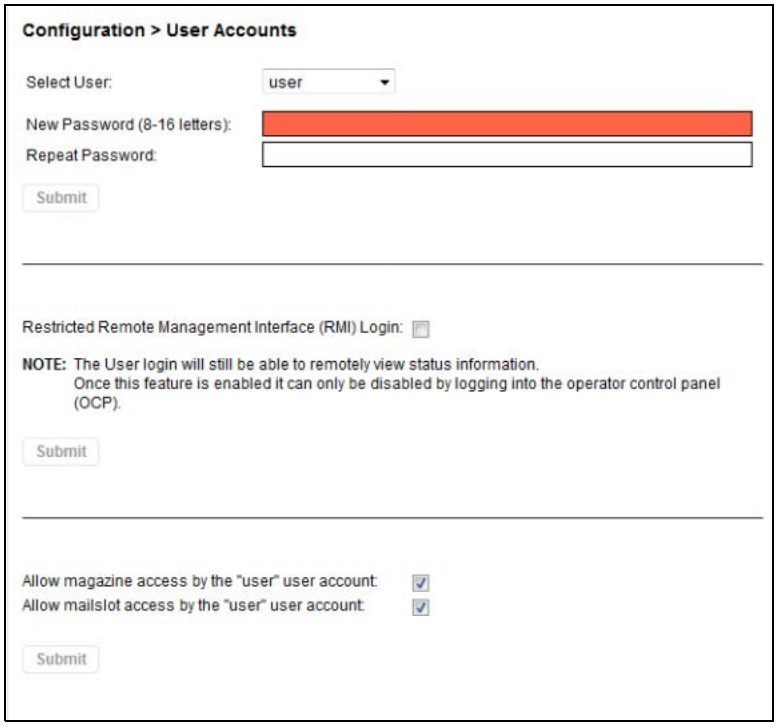
2.5.15 Configuring User Account Settings (for Firmware Versions 7.80 and Earlier)

From the Configuration > User Accounts screen, you can set the password for the user or administrator accounts.
Select the user and then enter the new password twice. The password must contain 8-16 characters, which can include upper and lowercase letters, numbers, and special characters.

Note

For firmware versions 7.90 and later, the settings related to remote panel access have been integrated in the [Configuration > Web Management] menu. When performing a configuration, refer to "2.5.18 Configuring the Access Management Setting to the Remote Panel" (page 68).
In addition, when performing user account settings with firmware versions 7.90 and later, refer to "2.5.16 Configuring User Account Settings (for Firmware Versions 7.90 and Later)" (page 60).

Figure 2.19 User accounts settings



- user
  The user account allows access to library status information and does not allow access to configuration, maintenance, or operation features. The initial password is "std00001". Setting a user password restricts access to status information to only those who know the user password.
- administrator
  Setting an administrator password provides access to the administrator functions with the remote panel or operator panel, and restricts access to the administrator functions to only those who know the administrator password. The initial administrator password is "adm00001".

- security
  In addition to the functions that are available when logged in as the administrative user, the key management function can be set. After the Key Management Function Option is purchased, the setting for the key management function is available.
  The initial password is "security". Before the password is changed, all the management functions can be used without limitations from the operator panel, but they cannot be used from the remote panel. After the security administrator password is changed on the operator panel, the password can be set from both panels.

Restricted RMI login

The administrator has the possibility to set login restrictions for administrator and security login. To enable the restriction mode, select the "Restricted Remote Management Interface (RMI) Login:" checkbox. If the restriction mode is enabled the administrator and the security are not allowed to login via the remote panel. The administrator has to disable the restriction mode by logging into the operator panel.

Only the administrator is allowed to set and reset the restricted the remote panel login.

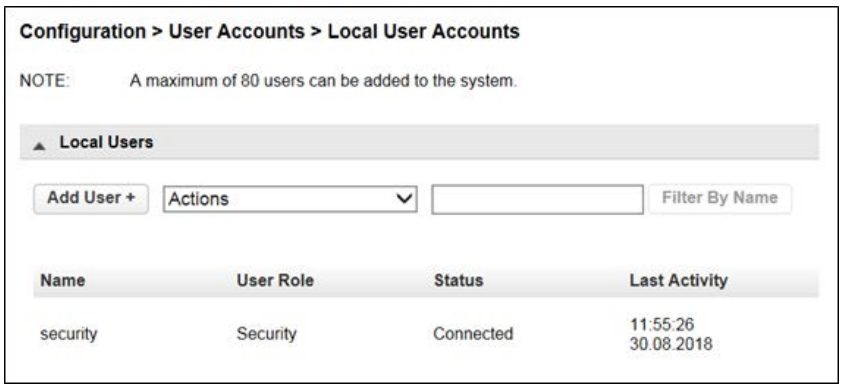
Allow magazine and mailslot access

The administrator can give users access permission to magazines by selecting the "Allow magazine access by the "user" user account:" checkbox.
The administrator can give users access permission to mailslots by selecting the "Allow mailslot access by the "user" user account:" checkbox.

2.5.16 Configuring User Account Settings (for Firmware Versions 7.90 and Later)

From the Configuration > User Accounts > Local User Accounts screen, you can add accounts, change roles, and configure user accounts such as the password.

Figure 2.20 User account settings



In the Configuration > User Accounts > Local User Accounts screen, a list of configurable accounts among those who are logged in are displayed. The displayed contents are as follows.

- Name
  Account name
- User Role
  Account type
  - User
    The user account allows access to library status information and does not allow access to configuration, maintenance, or operation features. The initial password is "std00001". Setting a user password restricts access to status information to only those who know the user password.
  - Administrator
    An administrator account provides access to almost all the administrator functions of the library from the remote panel or operator panel. By setting a password, access to the administrator functions is restricted to only users who know the administrator password.
    The default administrator password of the library is "adm00001".
  - Security
    In addition to the functions that the Administrator account can use, the security administrator can enable/disable SSL and set the key management function. The key management function can be used by purchasing the Key Management Function Option.
    The default password is "security".
- Status
  Login state of the account.
  - Connected
    The account is logged in.
  - Disconnected
    The account is not logged in.
  - Disconnected/Locked
    The account is locked and cannot be used to log in.

- Last Activity
  The last day and time the account logged in.

Note

The configurable account type differs depending on the account used to log in. The Administrator account can configure the "User" and "Administrator" accounts and the Security Administrator account can configure the "Security" account. In addition, for the password setting, passwords that do not satisfy the specified requirements cannot be used. This requirement can be changed to meet your security requirements. For details, refer to "2.5.17 Configuring Password Requirements (for Firmware Versions 7.90 and Later)" (page 66).

2.5.16.1 Adding an Account

Procedure

1. Click [Add User+].
2. Enter an account name to add in [Name] and select an account type for "Role" in the expanded input window.
3. Enter the password twice.
4. Click [Add].

Figure 2.21 Adding an Account

End of procedure

Note

The password set here is for the initial login. For newly added accounts, the password must be changed by the user the first time they log in. Perform the password setting as instructed.

Caution

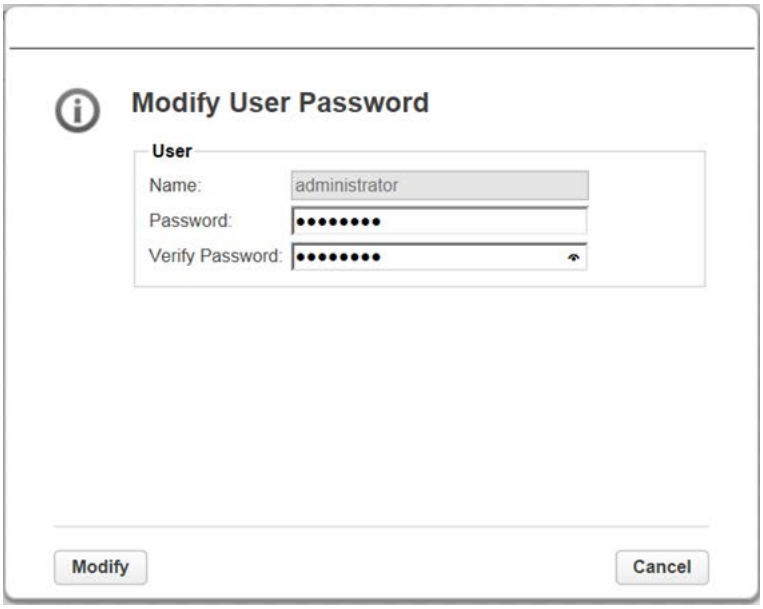
For accounts whose User Role is Administrator or Security, most of the library functions can be used. From a security perspective, add a limited number of accounts and issue those accounts to trusted users only.

2.5.16.2 Changing the Account Password

Procedure

1. Click an account to change its password.
2. From [Actions], select [Modify Password].
3. Enter the new password twice in the expanded input window.
4. Click [Modify].

Figure 2.22 Changing the Account Password



End of procedure

Note

When changing the password of a locked account, the lock is released when the password is changed. For details about locked accounts, refer to "2.5.17 Configuring Password Requirements (for Firmware Versions 7.90 and Later)" (page 66).
If the user account whose password is to be changed and the account used to change it is different (for example, when the administrator changes the password of a user account), the user must set a password again when logging in for the first time after the password is changed. Follow the instruction to set the password.

2.5.16.3 Changing the User Account Role

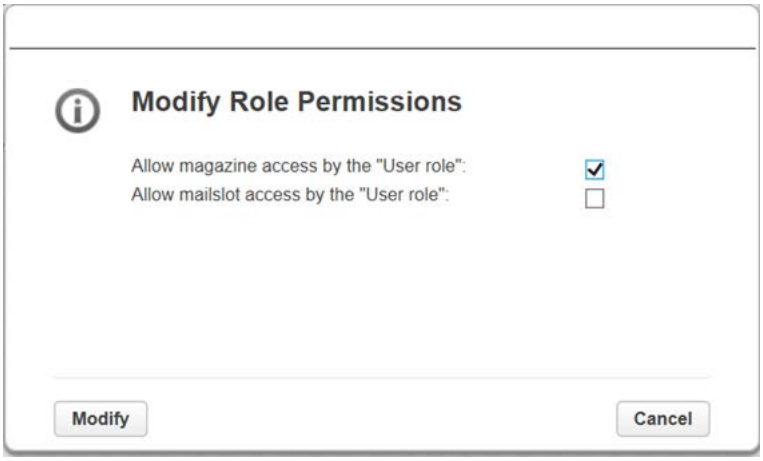
Caution

By giving permission to operate the magazine/mailslot, tape cartridges can be removed from the library even with a User account.
For security purposes, give permission only to reliable users.

Procedure

1. From [Actions], select [Modify Role Permissions].
2. Select the role to change in the expanded input window.
   - Allow magazine access by the "User role"
     Allow the User account to operate the magazine.
   - Allow mailslot access by the "User role"
     Allow the User account to operate the mailslot.
3. Click [Modify].

Figure 2.23 Changing the User Account Role



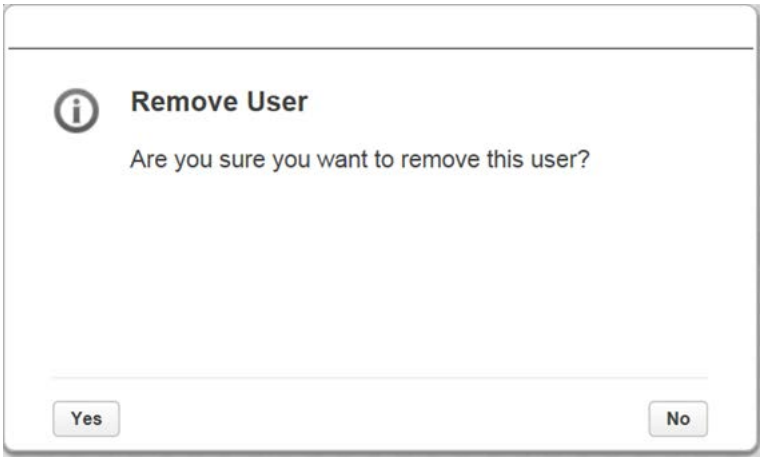
End of procedure

2.5.16.4 Deleting an Account

Procedure

1. Select the account to delete.
2. From [Actions], select [Remove User].
3. In the expanded confirmation window, click [Yes].

Figure 2.24 Deleting an account



End of procedure

Note

The only accounts that can be deleted are the ones that have been added. The default accounts (user, administrator, security) cannot be deleted.

2.5.17 Configuring Password Requirements (for Firmware Versions 7.90 and Later)

This operation can only be executed from the remote panel.

The settings requirements used when the account password is set can be configured in the [Configuration > User Accounts > User Accounts Settings] screen.
The requirements that can be configured are as follows. After selecting a requirement, click [Submit] to reflect the setting.

- Minimum Number Of Characters
  Sets the minimum number of characters for the password. The range of characters that can be set is 8 to 20.

- Minimum Number Of Upper Case Alphabetic Characters (A-Z)
  Sets the minimum number of uppercase letters. The range of uppercase letters that can be set is 0 to 3.

- Minimum Number Of Lower Case Alphabetic Characters (a-z)
  Sets the minimum number of lowercase letters. The range of lowercase letters that can be set is 0 to 3.

- Minimum Number Of Numeric Characters (0-9)
  Sets the minimum number of numeric characters. The range of numeric characters that can be set is 0 to 3.

- Minimum Number Of Special Characters (!@#$%^&*()_+-={}|[]\;':"<>?,./)
  Sets the minimum number of special characters. The range of special characters that can be set is 0 to 3.

- Maximum Number Of Identical Consecutive Characters
  Sets the maximum number of consecutive identical characters that can be used. The range of consecutive identical characters that can be set is 1 to 3. If Unlimited is selected, there is no limit.

- Maximum Number Of Failed Logins Before Password Is Locked
  Sets the maximum number of failed login attempts before the account is locked. The range of login attempts that can be set is 1 to 10. If Unlimited is selected, there is no limit.

- Maximum Number Of Days Before Password Must Be Changed
  Sets the maximum number of days the same password can be used. The password must be changed within the period. The range of days that can be set is up to 365. If Unlimited is selected, there is no limit.

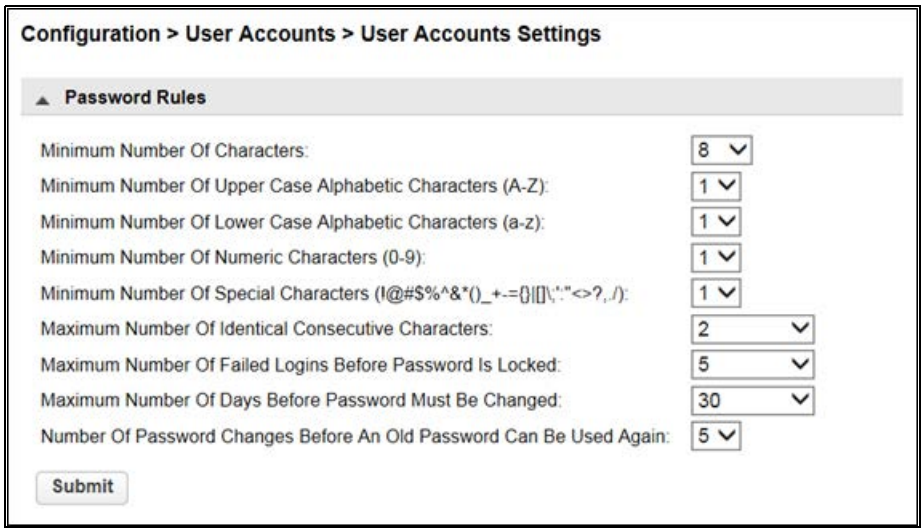
- Number Of Password Changes Before An Old Password Can Be Used Again
  Sets the number of password changes before a previously used password can be reused. The range of password changes that can be set is up to 6. If 0 is set, there is no limit.

CAUTION

Do

- If "Maximum Number Of Failed Logins Before Password Is Locked" is not set to Unlimited, the account is locked if the number of failed login attempts reaches the set value.
  Locked accounts cannot log in to the remote panel, so make sure to enter the correct password.
  If an account is locked or cannot be login into due to a lost password, take the following action for each account:
  - user
    Contact the Administrator and request a new password.
  - administrator
    A one-time password must be issued. Contact the maintenance engineer.
  - security
    Because the security account is the highest ranking security account, the password cannot be reissued. If the security account cannot log in, a factory reset is required.
    Save the setting information and export the encryption key before contacting your maintenance engineer.

Figure 2.25 Password setting requirements



2.5.18 Configuring the Access Management Setting to the Remote Panel

Configure the settings for access management to the remote panel on the [Configuration > Web Management screen.

Note

- The functions related to certificates can only be used in the remote panel.
- For firmware versions 7.90 and later, the setting items related to access management of the remote panel have been revised and more detailed settings are available to further enhance the security. For details, check the setting method for each item. The items added for 7.90 and later are listed with "for firmware versions 7.90 and later".

Figure 2.26 Access management setting to the remote panel (for firmware versions 7.80 and earlier)

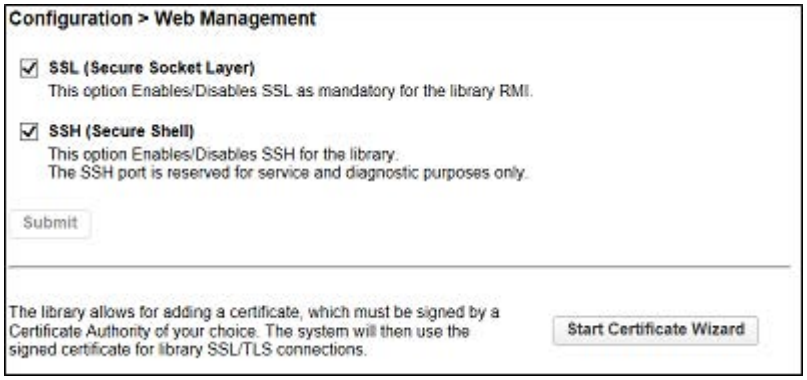
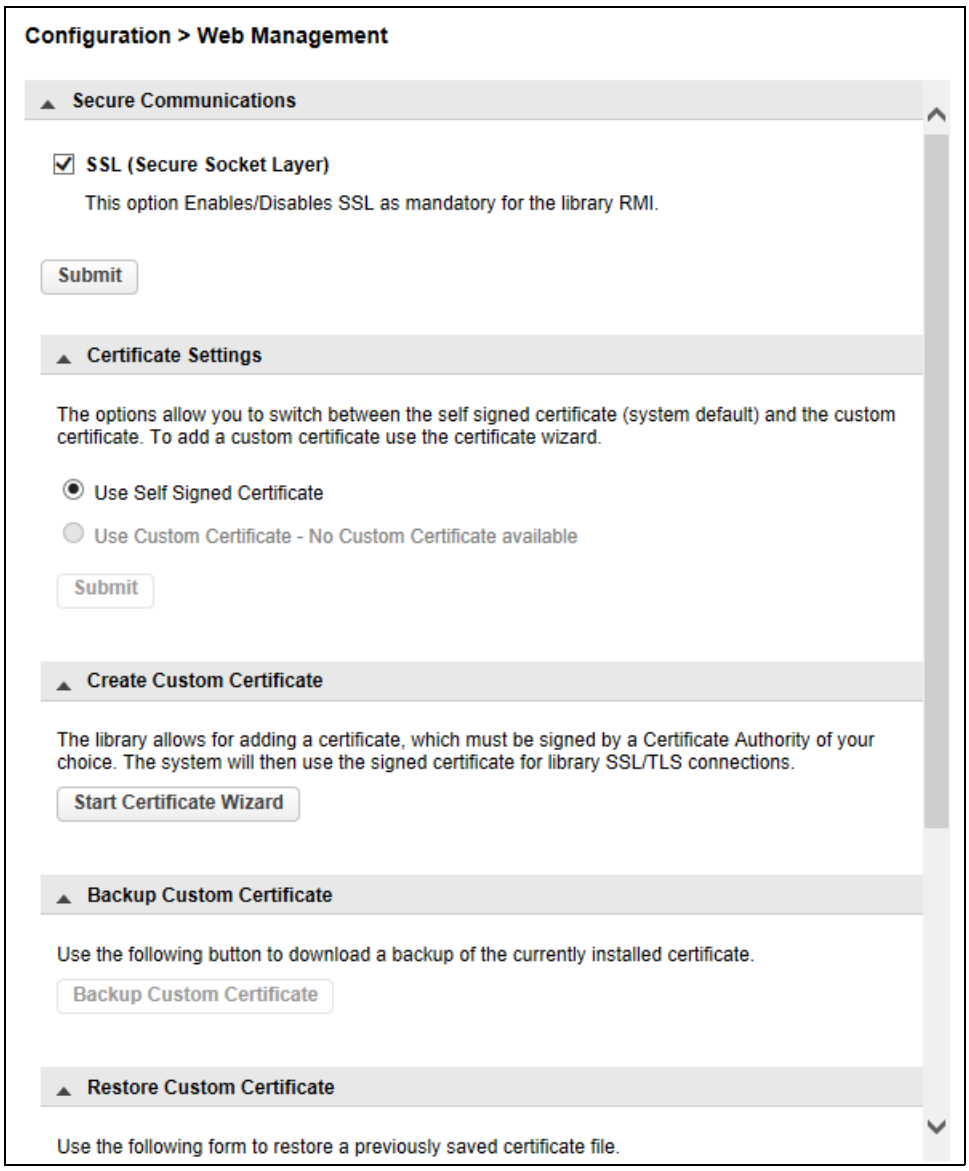


Figure 2.27 Access management setting to the remote panel (for firmware versions 7.90 and later)



2.5.18.1 Enabling SSL

Access to the remote panel using Secure Socket Layer (SSL) encrypted communication can be enabled or disabled in [Secure Communications] on the [Configuration > Web Management] screen. The default is disable.

Note

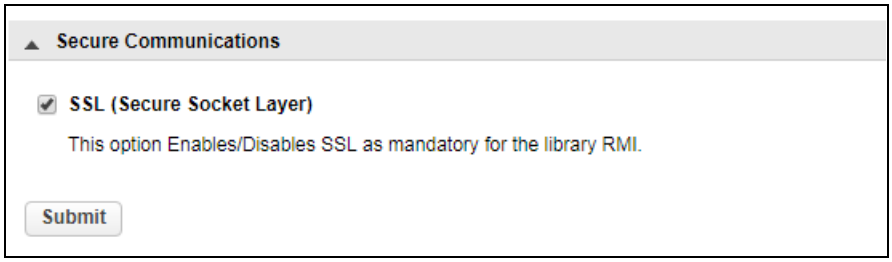
For firmware versions 7.80 and earlier, the [Secure Communications] item is not available.
Direct operation is available on the [Configuration > Web Management] screen.

To enable SSL, select the checkbox and click [Submit].
If SSL is enabled, https must be used to connect to the remote panel.

Note

SSH is used for maintenance work. It cannot be used by the customer.

Figure 2.28 Enabling the SSL setting



2.5.18.2 Certificate Settings (for Firmware Version 7.90 and Later)

In [Certificate Settings] on the [Configuration > Web Management] screen, enable SSL and select the self signed certificate to use for https connections.

- Use Self Signed Certificate
  Uses the default self signed certificate of the library.
- Use Custom Certificate
  Uses the self signed certificate created by the user. If a self signed certificate is not created, this item cannot be selected.
  For information about creating a self signed certificate, refer to "2.5.18.3 Creating a Self Signed Certificate" (page 72).

Figure 2.29 Certificate settings

2.5.18.3 Creating a Self Signed Certificate

Create a self signed certificate for the LT260 in [Create Custom Certificate] on the [Configuration > Web Management screen.

Note

For firmware versions 7.80 and earlier, the [Create Custom Certificate] item is not available.
Direct operation is available on the [Configuration > Web Management] screen.

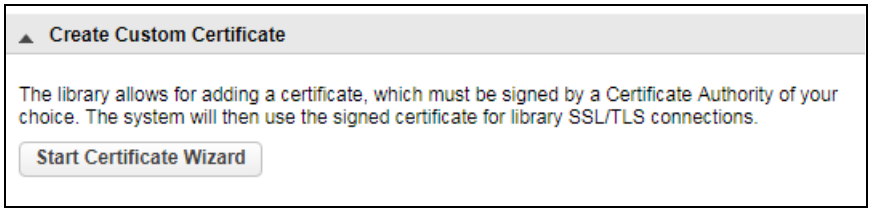
Caution

- Set the RMI timeout value to 30 minutes. For information about setting the RMI timeout value, refer to "2.5.7 Configuring the RMI Timeout Setting (for Firmware Versions 7.80 and Earlier)" (page 41) for firmware versions 7.80 and earlier, and "2.5.18.5 Setting the Session Timeout Period of the Remote Panel (for Firmware Versions 7.90 and Later)" (page 79) for 7.90 and later.
- For https connections to RMI using the created self signed certificate, the signed CA public certificate (root certificate) in the LT260 self signed certificate must be saved to the trusted Root Certification Authorities store of the client computer.

Procedure

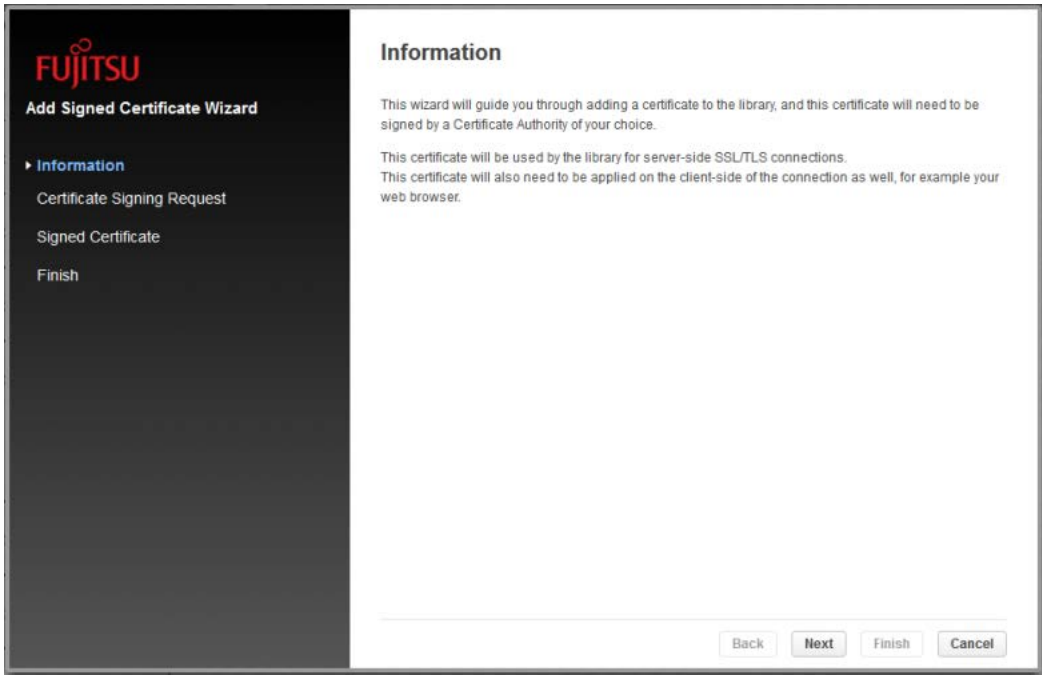
1 On the [Create Custom Certificate] screen, click [Start Certificate Wizard].

Figure 2.30 Self signed certificate creation screen



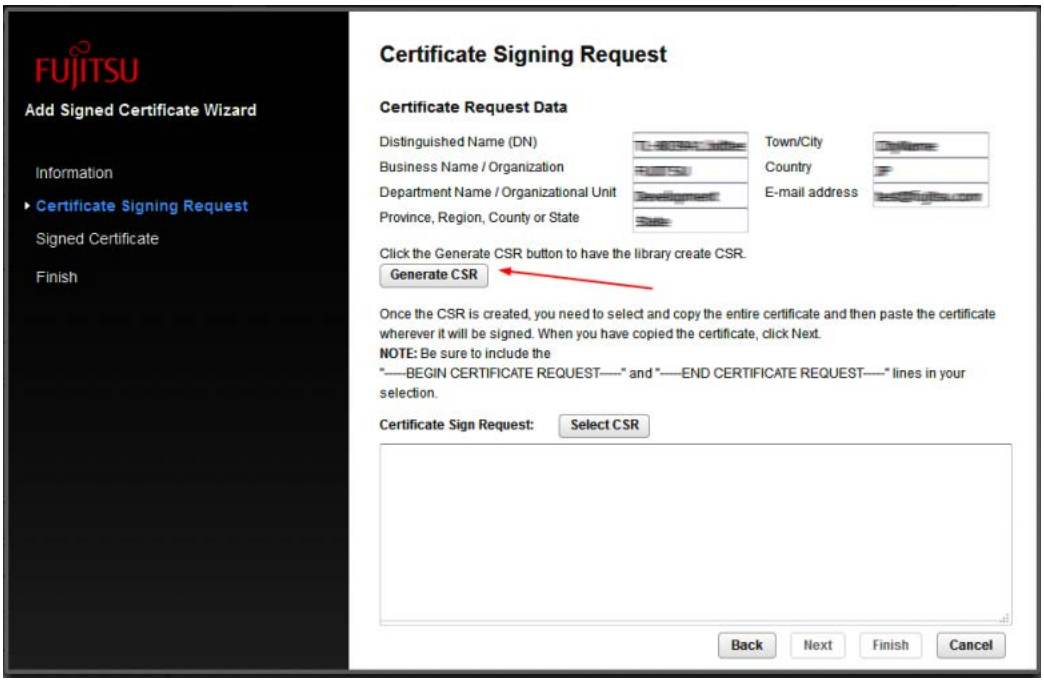
2 Start the wizard and when the [Information] screen is displayed, click [Next].

Figure 2.31 Information screen



3 On the [Certificate Signing Request] screen (Figure 2.32), enter the appropriate data in the seven fields and generate a Certificate Sign Request (CSR).
For the data to be entered, contact the security administrator. When all seven fields are entered, [Generate CSR] becomes selectable. Click [Generate CSR] to generate the CSR.

Figure 2.32 Certificate Signing Request screen 1



4 Copy the entire contents of the generated CSR displayed in the "Certificate Sign Request:" field.

5 Create a Signed Certificate from the copied CSR.
Contact the security administrator for information about creating a Signed Certificate.

6 Click [Next].

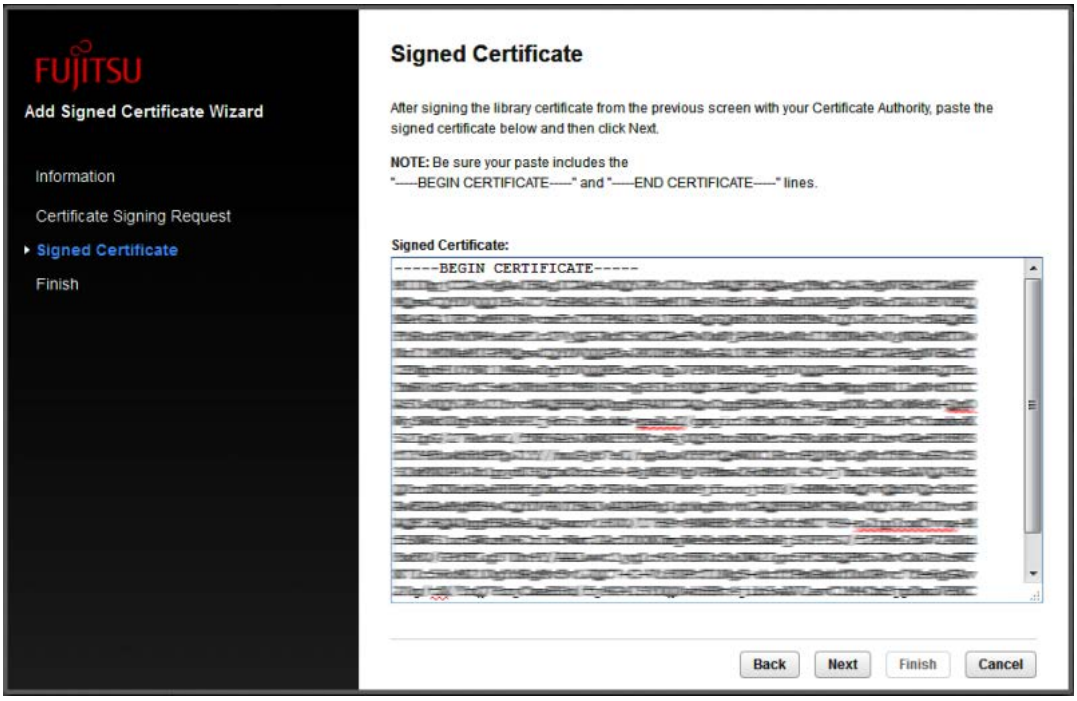
Caution

If the Signed Certificate is created from the Certificate Signing Request, make sure to complete this procedure up to Step 7 within 30 minutes. After 30 minutes, the RMI timeout setting is activated and the CSR information generated in Step 3 becomes invalid. Once the CSR information becomes invalid, it cannot be used again and the process must be started again from Step 3.

Figure 2.33 Certificate Signing Request screen 2

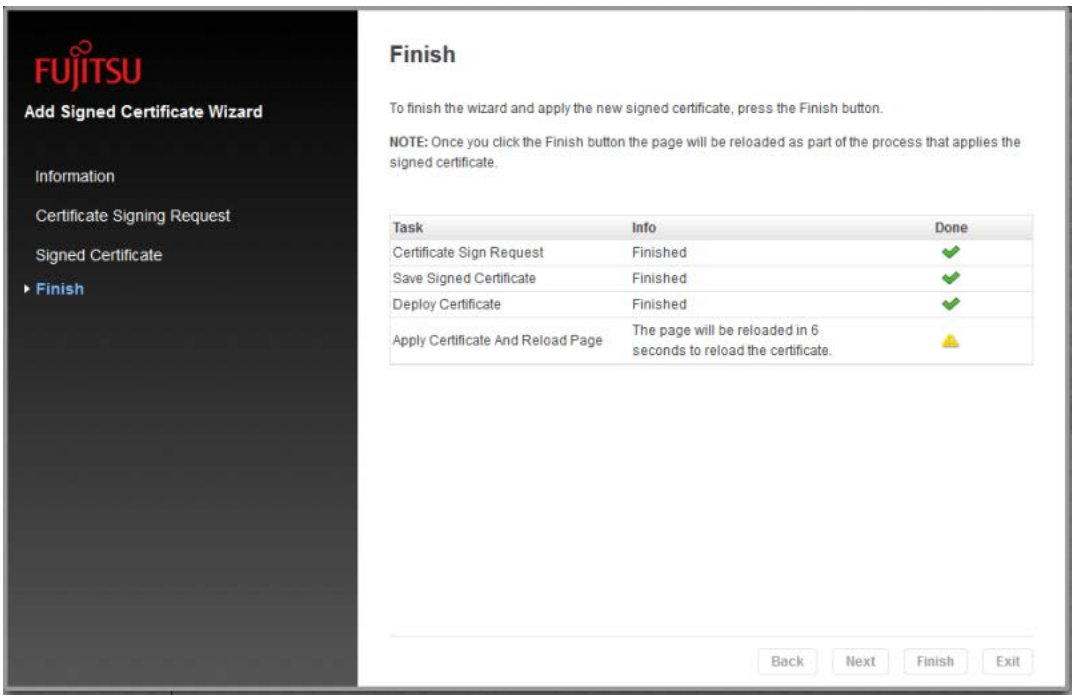
7 Paste the Signed Certificate in the "Signed Certificate:" field and click [Next].

Figure 2.34 Signed Certificate screen



8 When the application process of the self signed certificate is displayed on the [Finish] screen (Figure 2.35), click [Finish].
Part of the [Apply Certificate And Reload Page] task is executed when [Finish] is clicked.

Figure 2.35 Finish screen



End of procedure

2.5.18.4 Backing Up and Restoring the Self Signed Certificate (for Firmware Versions 7.90 and Later)

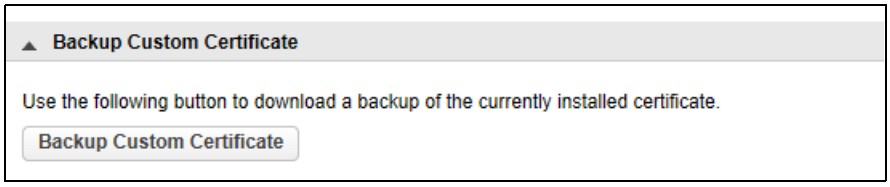
The self signed certificate created for the LT260 can be backed up and restored using [Backup Custom Certificate] and [Restore Custom Certificate] on the [Configuration > Web Management] screen.

Backing up the self signed certificate

Procedure

1. Click [Backup Custom Certificate].

   Figure 2.36 Backing up the self-signed certificate

2. Specify the save destination and save the self signed certificate as a file.

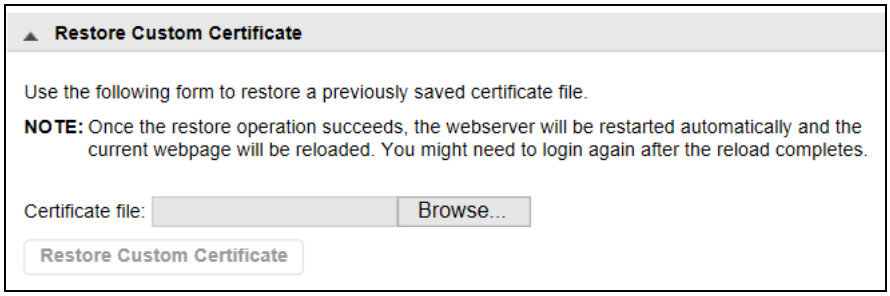
End of procedure

Restoring the self signed certificate

Procedure

1. In [Restore Custom Certificate], click [Browse] to select the location of the saved self signed certificate.

   Figure 2.37 Restoring the self signed certificate

2. Click [Restore Custom Certificate].

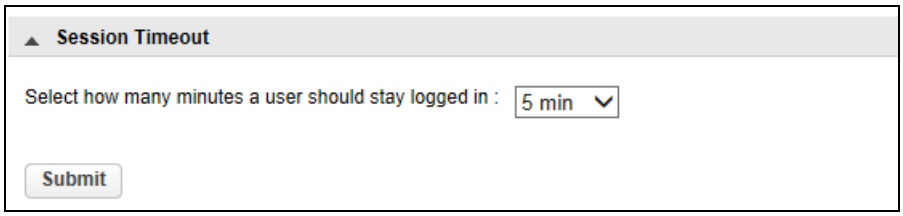
End of procedure

2.5.18.5 Setting the Session Timeout Period of the Remote Panel (for Firmware Versions 7.90 and Later)

Set the session timeout period of the remote panel from [Session Timeout] on the [Configuration > Web Management] screen.

To change the session timeout period, select a time from the [Select how many minutes a user should stay logged in] dialog box and click [Submit]. The available selections are "5 min" and "30 min".

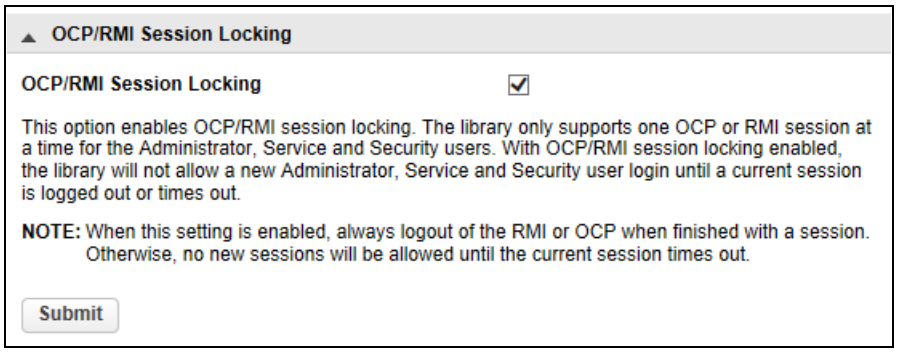
Figure 2.38 Setting the session timeout



2.5.18.6 Setting Login Session Locking Function (for Firmware Versions 7.90 and Later)

Enable or disable session locking to the remote panel and operator panel from [OCP/RMI Session Locking] on the [Configuration > Web Management] screen. The default is disable. To enable the session locking function, select the checkbox and click [Submit].
If the login session locking function is enabled, logins to the remote panel and operator panel are not allowed until the currently logged in user is logged out.

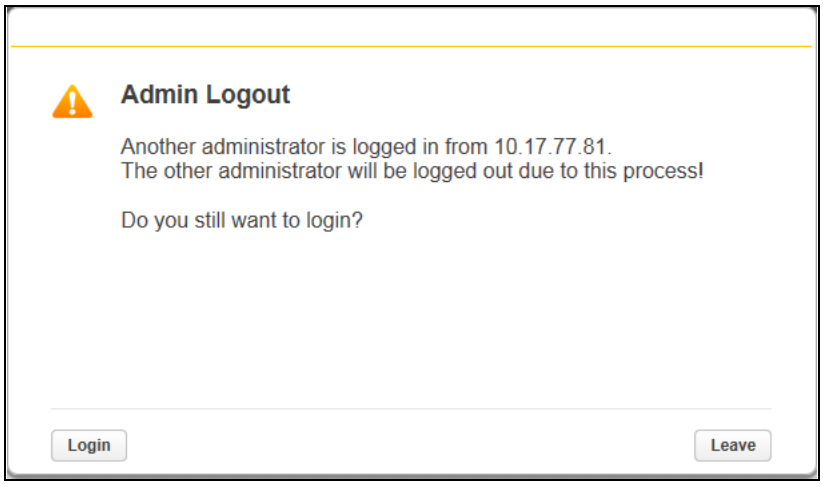
Figure 2.39 Setting login session locking function



When the login session locking function is disabled

If a login is performed while another user is logged in, a warning message is displayed indicating that another user is logged in. If [Login] is clicked, the logged in user is forcibly logged out and a login can be performed.

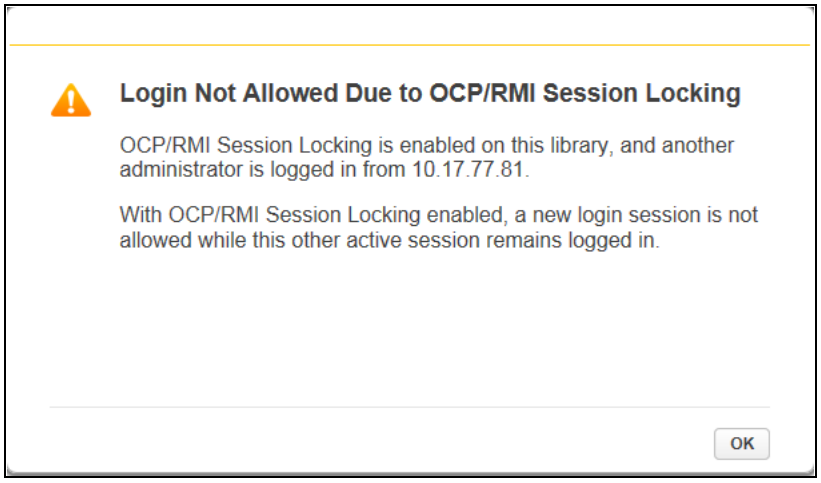
Figure 2.40 Disabled login session locking function



When the login session locking function is enabled

If a login is performed while another user is logged in, a warning message is displayed indicating that another user is logged in. A login cannot be performed until the currently logged in user logs out.

Figure 2.41 Enabled login session locking function



2.5.18.7 Remote Panel Restriction Setting (for Firmware Versions 7.90 and Later)

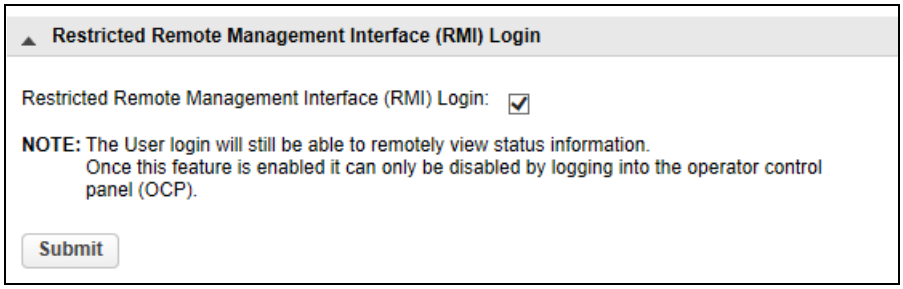
Enable the remote panel restriction setting from [Restricted Remote Management Interface (RMI) Login] on the [Configuration > Web Management] screen. The default is disable. To enable the remote panel restriction setting, select the checkbox and click [Submit].

If the remote panel restriction setting is enabled, only the User account can log in to the remote panel. However, the library status information can be checked by logging in with the User account.

Caution

Other than using the remote panel for a status check, all other operations are restricted. Execute library operations from the operator panel. The same function also removes the restriction.

Figure 2.42 Remote panel restriction setting



2.6 Maintaining the Library

Click or tap [Maintenance] in the home screen to access the library maintenance function. From the list displayed in the center pane in the operator panel or the right pane in the remote panel, select the item to configure. Refer to "1.3 Menu Layout" (page 16) for the items.
For items with a sub-menu, click or tap the item to expand the sub-menu.

2.6.1 Library Tests

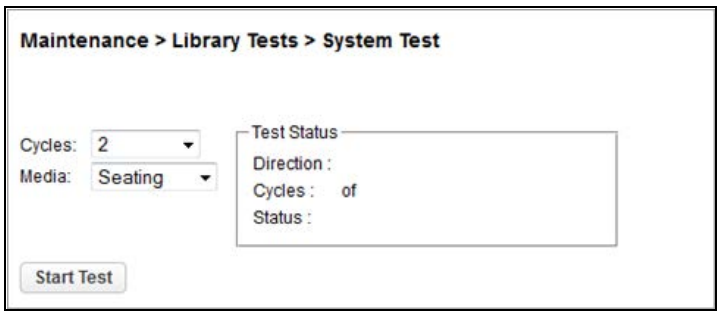
2.6.1.1 System Test

The system test exercises overall library functionality by moving the tape cartridges within the library.

- During each cycle the library will move a tape cartridge from a configured slot to an empty slot and then return it to its original slot. You can set the number of cycles for the test. If the test is canceled, the library will return the cartridge to its original slot.
- The library will not move cleaning cartridges during the test.
- The test operates over the whole library and does not take into account partition configuration.
- During the test the library is off line.

To run the system test, navigate to the Maintenance > Library Tests > System Test screen, select the number of cycles and then click Start Test.

Figure 2.43 System test



2.6.1.2 Slot to Slot Test

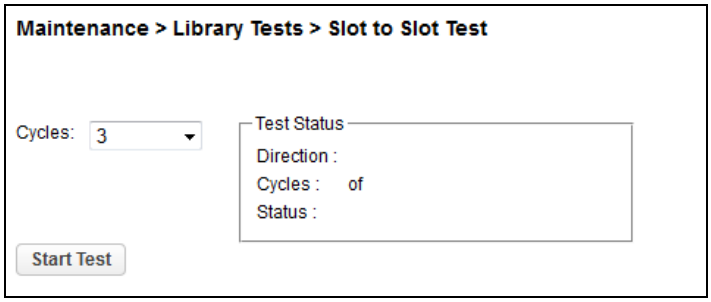
The slot to slot test randomly exchanges cartridges between slots to verify that the library is operating correctly. At the end of the test the cartridges are NOT returned to their original slots. If a tape cartridge is moved to an incompatible tape drive, the tape drive will reject the tape cartridge.

Caution

The test can move cartridges between partitions.

To run the slot to slot test, navigate to the Maintenance > Library Tests > Slot to Slot Test screen, select the number of cycles and click Start Test.

Figure 2.44 Slot to slot test

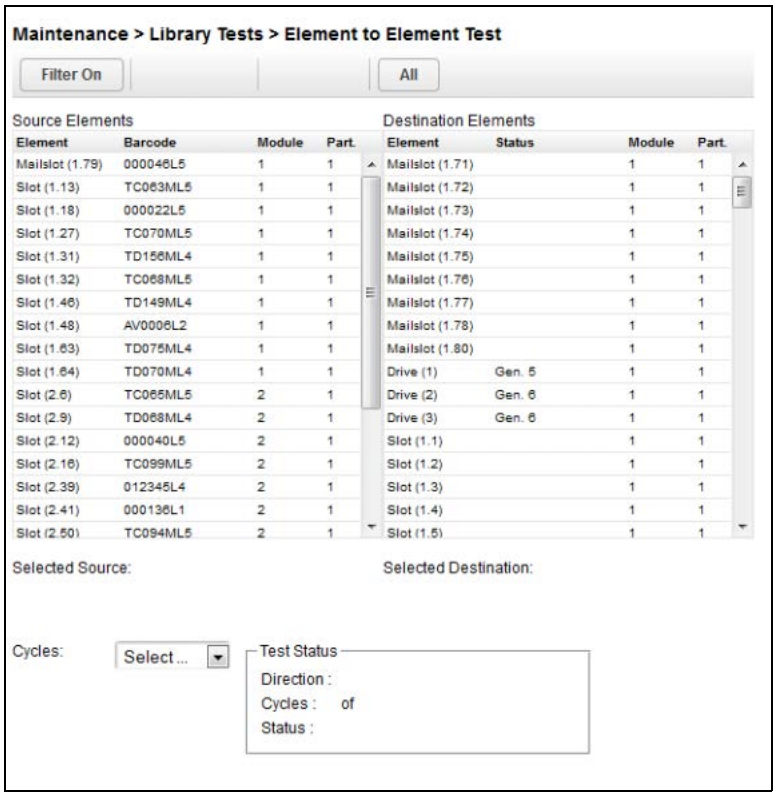


2.6.1.3 Element to Element Test

The element to element test moves a selected cartridge to a selected slot or tape drive, and then returns it to the original slot. You can select the number of times to move the selected cartridge to the destination location and back.

The element to element test is intended to show that the library is operating correctly. To diagnose problems with the robotic assembly or verify that it has been correctly replaced, use the robotic test.

Figure 2.45 Element to element test



To run the element test

Procedure

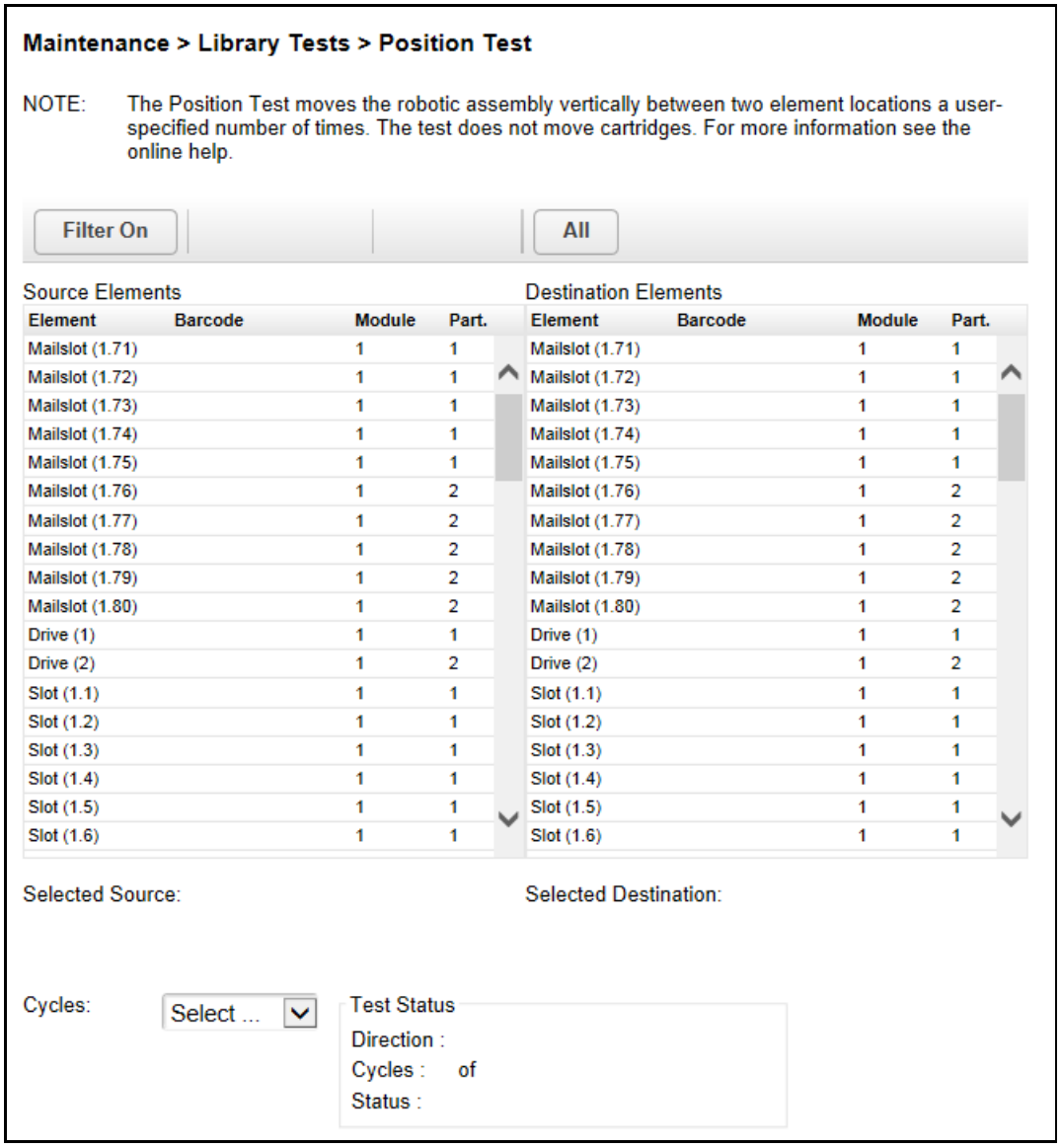
1. Navigate to the Maintenance > Library Tests > Element to Element Test screen.
2. Select a cartridge from the Source Elements list.
   To select from a subset of the cartridges:
   - 2-1 Click Filter On.
   - 2-2 Enter characters into the search box and then click Search.
     The Source Elements list is updated to only include cartridges with a barcode label including the search characters.
3. Select a location from the Destination Elements list.
4. Select the number of cycles.
5. Click Start Test.

End of procedure

2.6.1.4 Position Test

The position test moves the robotic assembly vertically between two elements. The number of movements can be specified.
This test does not move cartridges.

Figure 2.46 Position test



To run the position test

Procedure

1. Navigate to the Maintenance > Library Tests > Position Test screen.
2. Select a cell from the Source Elements list.
   To select from a subset of the cell:

   (1) Click Filter On.

   (2) Enter characters into the search box and then click Search.
   The Source Elements list is updated to only include cartridges with a barcode label including the search characters.
3. Select a destination cell from the Destination Elements list.
4. Select the number of cycles.
5. Click Start Test.

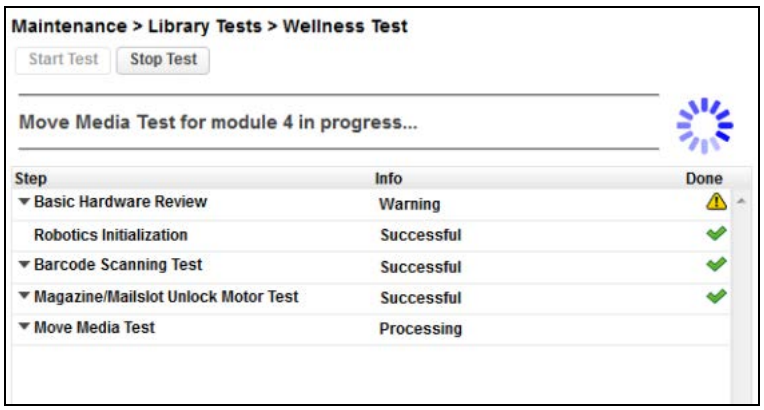
End of procedure

2.6.1.5 Wellness Test

- The wellness test exercises a general health check on the library functionality by running the following partial tests:
  - Basic Hardware Review
  - Robotics Initialization Test
  - Barcode Scanning Test
  - Magazine/Mailslot Unlock Motor Test
  - Move Media Test
- Running the test requires at least one drive and one tape carting in the library.
- After the test has been started the Stop Test button is active. Clicking the button will abort the wellness test but not before the current partial test has been completed.
- The test operates over the whole library and does not take into account partition configuration.
- During the test the library is off line.
- The Info column notifies the user about the status and result of each partial test.

To run the wellness test, navigate to the Maintenance > Library Tests > Wellness Test screen, and then click Start Test.

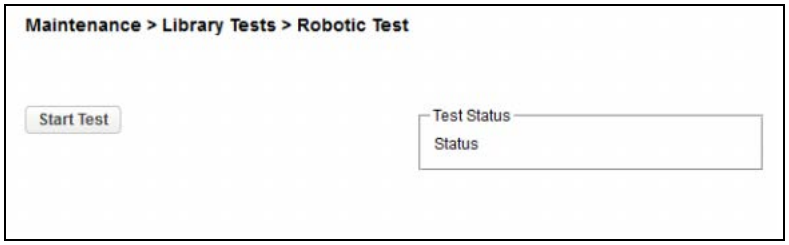
Figure 2.47 Wellness test



2.6.1.6 Robotic Test

The robotic test performs a full inventory and exercises all robotic assembly movements and sensors.
To run the robotic test, navigate to the Maintenance > Library Tests > Robotic Test screen, then click Start Test.

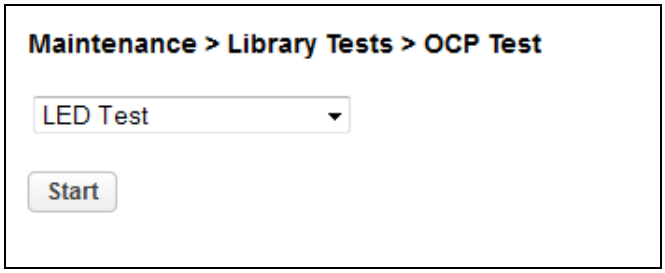
Figure 2.48 Robotic test



2.6.1.7 Operator Panel Test and Calibration

To perform a test or maintenance operation for the operator panel, navigate to the Maintenance > Library Tests > Operator Panel Test screen, select the operation, and then click Start. Follow the instructions on the screen.

Figure 2.49 OCP test



- LED test
  Illuminates each of the front panel LEDs.
- Touch panel calibration test
  Allows you to calibrate the front panel touch screen.
- OCP Reboot
  Restarts the operator panel.

2.6.2 Viewing Log Files

- Operate from the operator panel

  To view the library log files, navigate to the Maintenance > View Logs screen and then select one of the logs.

- Operate from the remote panel

  To view the library log files, navigate to the Maintenance > Logs and Traces > View Logs screen and then select one of the logs.

The available logs are as follows. In addition, for firmware versions 7.90 and later, all the following logs are shown at once if [Show All] is selected.

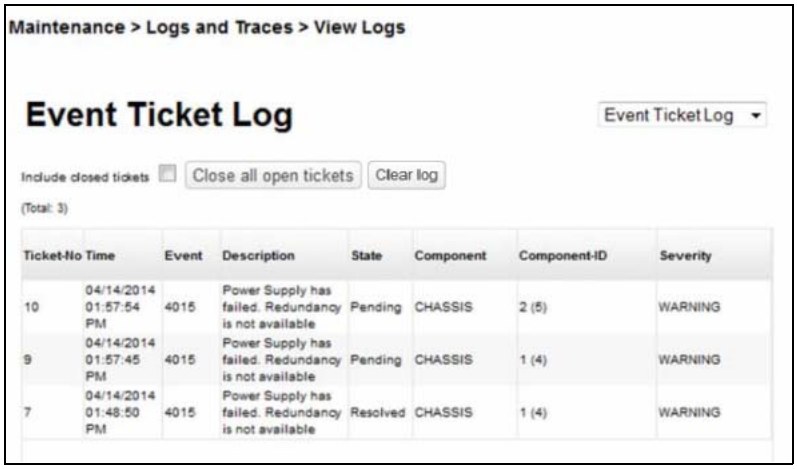
- Event Ticket Log
  Records library error and warning events.
- Information Log
  Records library information warnings.
- Configuration Log
  Records configuration changes.

If [Close all open tickets] is clicked, all the logs that are being displayed become hidden.
After the [Include closed tickets] checkbox is selected, the logs that were hidden by clicking [Close Ticket] or [Close all open tickets] are also displayed.
If the Attention LED is on, clicking [Close ticket] or [Close all open tickets] turns the Attention LED off.

Caution

Do not click [Clear log]. If [Clear log] is clicked, all the required information for a maintenance is cleared.

Figure 2.50 View logs

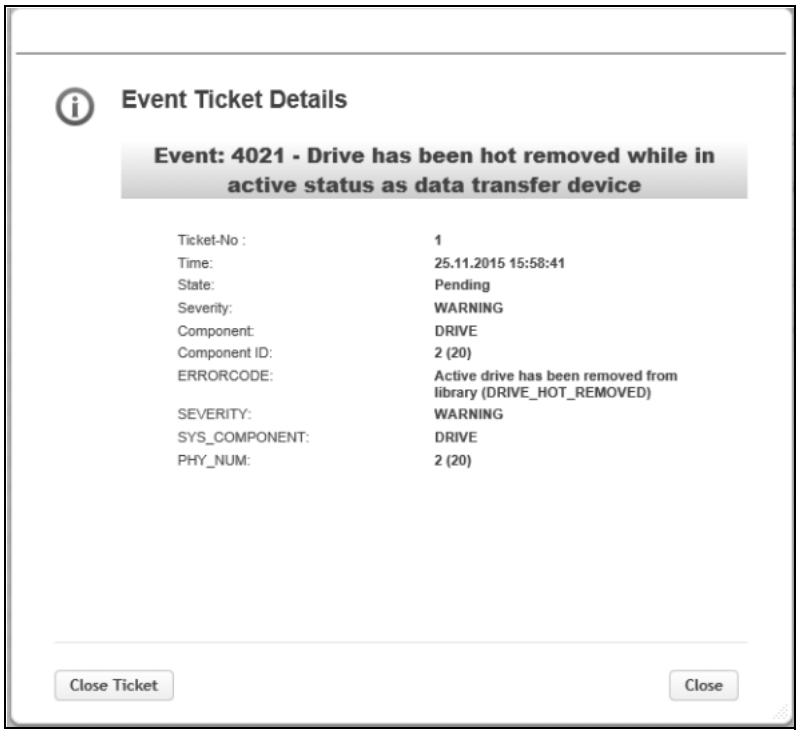


The log entries are displayed in order of most recent to oldest. The log entries contain a date and time code, event code, severity, component identifier and event details.
The format for the date and time is: *DD.MM.YYYY HH.MM.SS*

- DD.MM.YYYY
  The date displayed as Day.Month.Year
- HH.MM.SS
  The time displayed as Hour.Minute.Second

After the log that is being displayed is clicked, the detailed information is displayed.

Figure 2.51 Detailed view example for logs

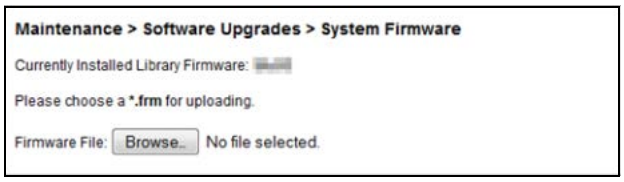


After [Close Ticket] is clicked, this log is hidden.
After [Close] is clicked, the detailed view screen is closed.

2.6.3 Managing System Firmware

The firmware version currently installed on the library is displayed in the library status area on the Home page. You update the library firmware from the Maintenance > Software Upgrades > System Firmware screen.

Figure 2.52 Upgrades system firmware



To update library firmware from the remote panel, click Browse and select the firmware file from the local computer.

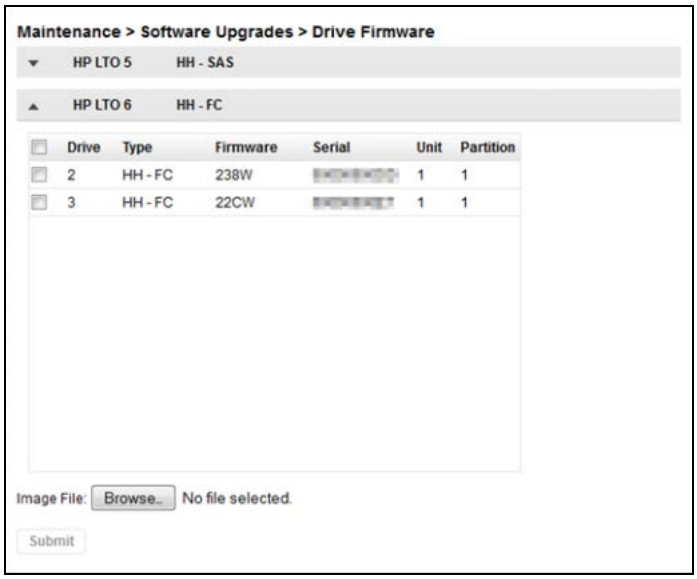
When you update the library firmware, the library will update the firmware of the expansion modules to a compatible version.

2.6.4 Managing Drive Firmware

Drive firmware can be updated on multiple tape drives of the same type at the same time. Drive firmware can only be updated from the remote panel. Each tape drive will only accept appropriate firmware.

To see the firmware version currently installed in the tape drives, navigate to the Status > Drive Status screen.

Figure 2.53 Upgrades drive firmware



To update drive firmware from the remote panel

Procedure

1. Navigate to the Maintenance > Software Upgrades > Drive Firmware screen. The tape drives are organized by drive type.
2. Select the type of tape drive to update and then select one or more of the tape drives from the expanded list.
3. Click Browse, and then select the file from the local computer.
4. Click Submit.

End of procedure

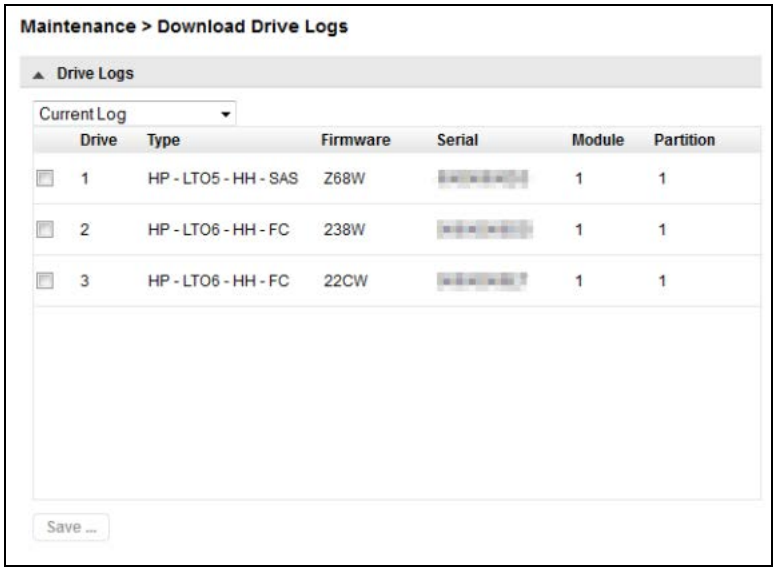
2.6.5 Downloading Drive Logs

From the Maintenance > Download Drive Logs screen, logs can be downloaded from any tape drive.

Note

Customers may be asked by maintenance personnel to acquire logs for troubleshooting.

Figure 2.54 Download drive logs



Procedure

1 Select a tape drive to download the log.

The following items are displayed in the list of drive logs.

- Drive
  The tape drive number. Tape drives are numbered starting with one from the physical bottom of the library to the top.
- Type
  The drive form factor (half height) and interface
- Firmware
  The current drive firmware version
- Serial
  The tape drive serial number
- Unit
  The module containing the tape drive
- Partition
  The logical library (or partition) associated with the tape drive

2 Select a log to download.

- Current Log (*1)
  Creates and saves a new log from the tape drive.
- Log From Last Unload (*1)
  Saves the log that was automatically created after the last cartridge was unloaded from the tape drive.
- Regular Dump (*2)
  Saves the tape drive error information that is stored in the nonvolatile memory. The errors that occur just before saving may not be saved.
- Forced Dump (*2)
  Saves the error information up to the point when the Dump was executed. Since the size of the memory that is used for recording is small, if a considerable amount of time elapses after the error occurred, there may be cases when the error information is not saved.

*1: Displayed if the model name of the tape drive is in the following list:
LT26ASHE, LT26ASHL (LTO-5 SAS HH drive option)
LT26AFHE, LT26AFHL (LTO-5 FC HH drive option)
LT26ASJE, LT26ASJL (LTO-6 SAS HH drive option)
LT26AFJE, LT26AFJL (LTO-6 FC HH drive option)

*2: Displayed if the model name of the tape drive is in the following list:
LT26BSKE, LT26BSKL (LTO-6 SAS HH drive option -I)
LT26BFKE, LT26BFKL (LTO-6 FC HH drive option -I)
LT26BSME, LT26BSML (LTO-7 SAS HH drive option -I)
LT26BFME, LT26BFML (LTO-7 FC HH drive option -I)
LT26BSNE, LT26BSNL (LTO-8 SAS HH drive option -I)
LT26BFNE, LT26BFNL (LTO-8 FC HH drive option -I)

3 Check the tape drive, and then click Save.

End of procedure

2.6.6 Downloading Log and Trace Files

This operation can be executed from only remote panel operation.

Figure 2.55 Download logs and traces

To download the library log and trace files from the remote panel, navigate to the Maintenance > Logs and Traces > Download Logs and Traces screen and then click Save.

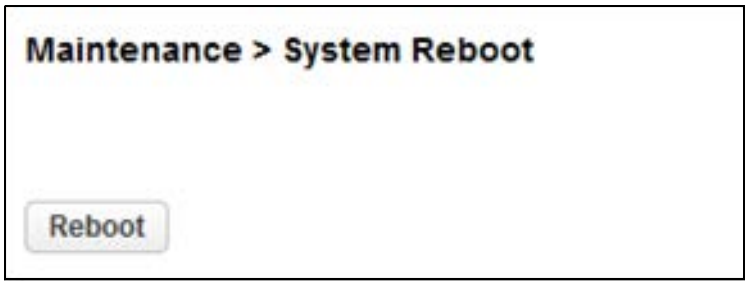
Note

Customers may be asked by maintenance personnel to acquire logs for troubleshooting.

2.6.7 Rebooting the Library

From the Maintenance > System Reboot screen, click Reboot.

Figure 2.56 Rebooting the library



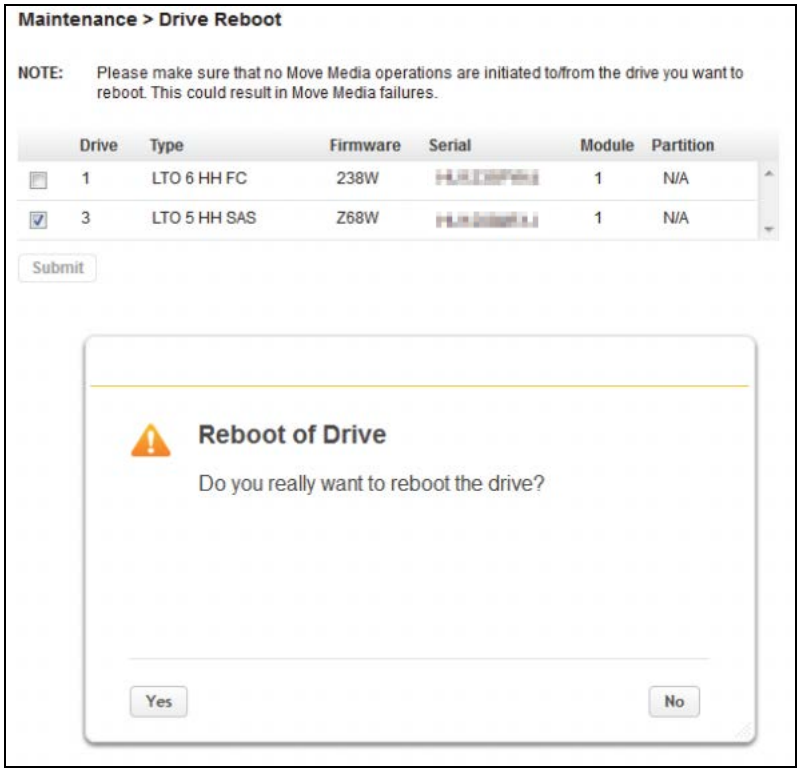
2.6.8 Tape Drive Reboot

From the Maintenance > Drive Reboot screen, you can reboot the tape drives.
Only one tape drive can be selected for reboot.

Procedure

1 Select the tape drive you want to reboot.

Figure 2.57 Tape drive reboot



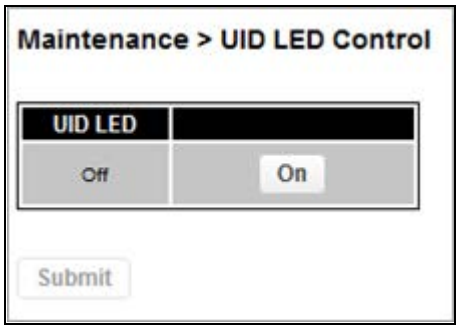
2 Click Yes on the dialog popup to start the reboot process.

End of procedure

2.6.9 Controlling the UID LED

The UID LEDs are a pair of blue LEDs – one on the operator panel and the other on the base module controller. The UID LEDs are useful for identifying the library in a data center. The UID LEDs are operated synchronously and controlled by the user. From the Maintenance > UID LED Control screen you can see whether the LEDs are lit, and toggle the status.

Figure 2.58 UID LED control

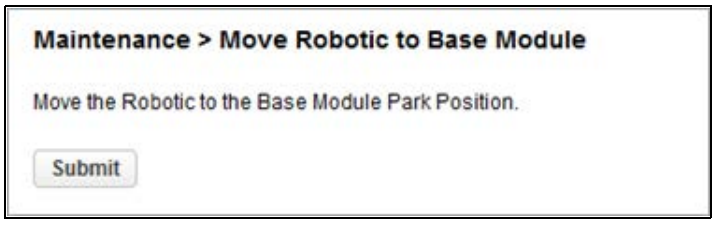


2.6.10 Moving the Robotic to the Base Module

Before extending a module from the rack, the robotic assembly must return to its park position in the base module. Under normal circumstances, when the library is powered off using the front power button the robot automatically parks and locks into the base module behind the operator panel. After powering off the library and before proceeding with extending a module from the rack, look inside the base module window to verify that the robotic assembly is behind the operator panel.

If the library did not move the robotic assembly to its park position, you can do so from the Maintenance > Move Robotic to Base Module screen.

Figure 2.59 Move robotic to base module



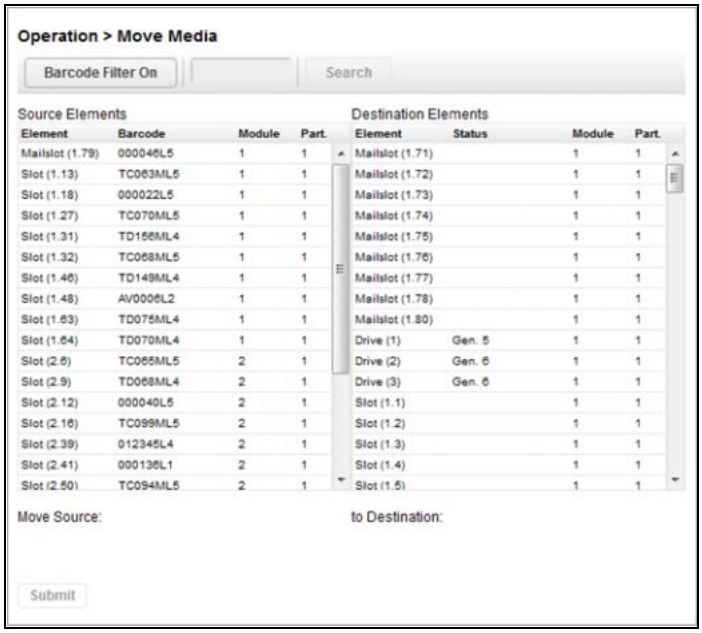
2.7 Operating the Library

Click or tap [Operation] in the home screen to use the library operation function. From the list displayed in the center pane in the operator panel or the right pane in the remote panel, select the item to configure. Refer to "1.3 Menu Layout" (page 16) for the items.
For items with a sub-menu, click or tap the item to expand the sub-menu.

2.7.1 Moving Media

From the Operation > Move Media screen you can move a tape cartridge located in a source element to an available destination element within the same partition.

Figure 2.60 Move media



- Source Elements
  Tape drives, enabled mailslots, and storage slots that contain a tape cartridge
- Destination Elements
  Tape drives, enabled mailslots, and storage slots that do not contain a tape cartridge

Tape drives are listed at the top of each element list and listed in the order of their drive numbers.
Tape drives are numbered from the physical bottom of the library starting with Drive (1).
Slots are listed in the order of the slot numbers. Slots are numbered *m.s*, where m is the module number and s is the slot within the module.

Filtering Based on Barcode

This function can be used from only remote panel operation.
To see a subset of the cartridges in the library, enter some or all of the barcode label characters in the search area and click Search. The Source Element list updates to display only the cartridges with labels that include the characters in the search box.

To perform a different search or display all of the available cartridges, click Barcode Filter Off.

Moving a Cartridge

Procedure

1. Select the cartridge from Source Elements.
2. Select the destination location from Destination Elements.
3. Click Submit.

End of procedure

2.7.2 Opening the Mailslot

From the Operation > Open Mailslot screen you can see the status and unlock any enabled mailslots in the library.

Note

This function can be accessed directly from [Open Mailslot] on the home screen without going through the [Operation] screen.

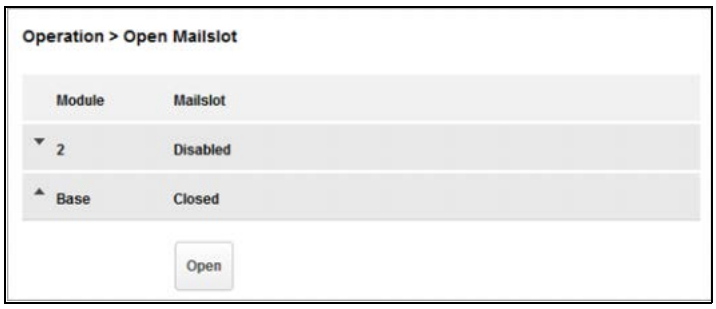
Caution

Be careful not to remove the wrong tape cartridge or install a tape cartridge in the wrong partition slot.
For this reason, check the following points before opening the mailslot.

- Number and position of the mailslot to open
- Number and position of the slot to load or unload the tape cartridge
- Slot allocation of each partition

For details on how to check the above information, refer to "2.8.3 Using Inventory Graphical View" (page 111) and "2.8.4 Partition Map Graphical View" (page 113).

Figure 2.61 Open mailslot



To open a mailslot, click Open for the appropriate mailslot. The library will release the lock. You can then pull the mailslot out of the library to access the mailslot.

Note

The mailslot must be enabled before it can be opened and the mailslot will relock after 30 seconds. To enable a mailslot or to change the relock time, see "2.5.12 Enabling or Disabling Mailslots" (page 51).

WARNING

Do Not

Hazardous moving parts exist inside this product. Do not insert tools or any portion of your body into the interior of the library through the mailslot safety door.

2.7.3 Opening a Magazine

From the Operation > Open Magazine screen you can unlock any magazines.

Note

This function can be accessed directly from [Open Magazine] on the home screen without going through the [Operation] screen.

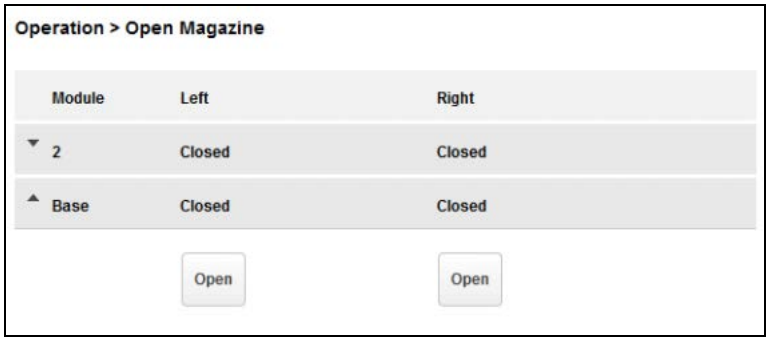
Caution

Be careful not to remove the wrong tape cartridge or install a tape cartridge in the wrong partition slot. For this reason, check the following points before opening the mailslot.

- Number and position of the magazine to open
- Number and position of the slot to load or unload the tape cartridge
- Slot allocation of each partition

For details on how to check the above information, refer to "2.8.3 Using Inventory Graphical View" (page 111) and "2.8.4 Partition Map Graphical View" (page 113).

Figure 2.62 Open magazine



To unlock a magazine, click Open for the magazine. The library will release the lock. You can then open the door and pull the magazine out of the library to access the storage slots.

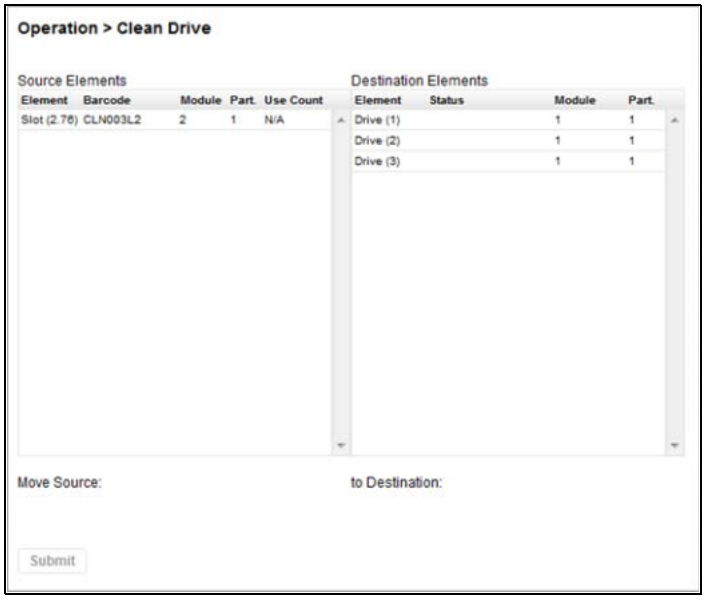
Note

- The status of the library will become Offline when a magazine is opened.
- The magazines will relock after 30 seconds.
- To change the relock time, see "2.5.12 Enabling or Disabling Mailslots" (page 51).

2.7.4 Cleaning a Tape Drive

From the Operation > Clean Drive screen you can initiate a manual tape drive cleaning operation.
To use the auto-cleaning function, see "2.5.13 Configuring Library Partitions" (page 52) and "5.5.1 Auto-Cleaning Function" in "FUJITSU Storage ETERNUS LT260 Tape Library Overview".

Figure 2.63 Clean drive



Procedure

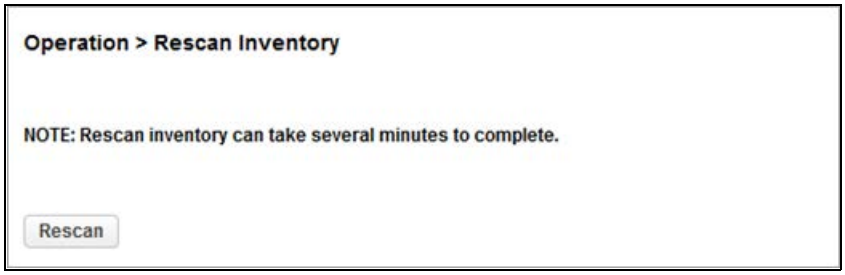
1. Select a cleaning cartridge from the Source Elements list. The library uses the barcode label to identify cleaning cartridges.
   If no cleaning cartridges are available, load one into a mailslot or magazine slot.
2. Select the tape drive to be cleaned from the Destination Elements list.
   Tape drives currently containing a cartridge are not listed. To clean a tape drive not listed, move the cartridge out of the drive.
3. Click Submit.

End of procedure

2.7.5 Rescanning the Cartridge Inventory

To have the library rescan the cartridges, navigate to the Operation > Rescan screen and click Rescan. The library will change to Scanning status and will be unavailable to perform other operations until the scan is complete.

Figure 2.64 Rescan inventory



2.7.6 Forcing a Tape Drive to Eject a Cartridge

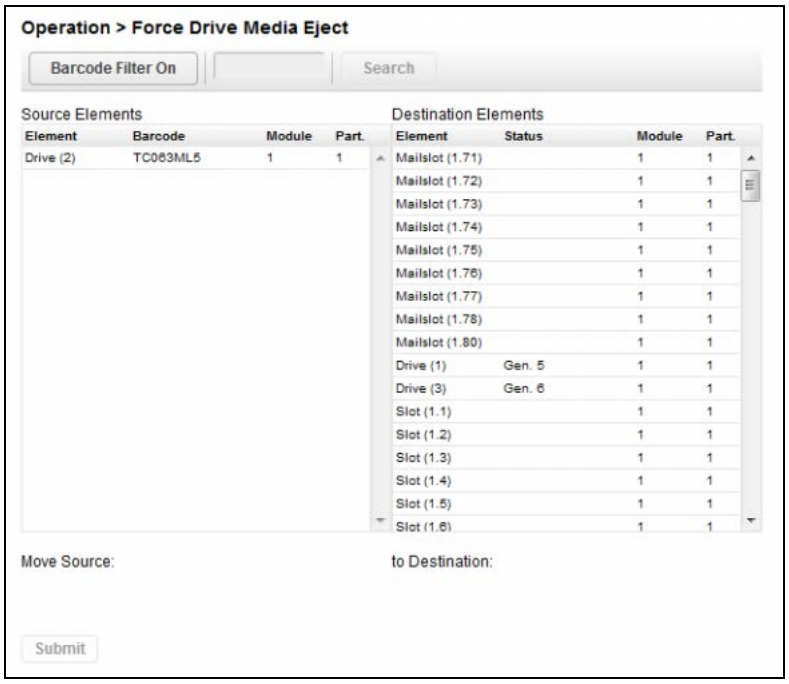
The force drive media eject operation attempts to force the tape drive to eject the cartridge and place it into an open slot. Access to this feature requires the administrator password.

Before performing this option, it is recommended that you attempt to eject the tape using the backup software or library move media operation. While a drive is being force ejected, a window indicating the process is ongoing should appear. No operations will be available until the force eject completes.

Note

If the drive has difficulty ejecting the cartridge, the media is possibly bad or damaged.

Figure 2.65 Force drive media eject



Procedure

1. Navigate to the Operation > Force Drive Media Eject screen.
2. Select the drive in the Source Elements list.
3. Select the destination in the Destination Elements list.
4. Click Submit.

End of procedure

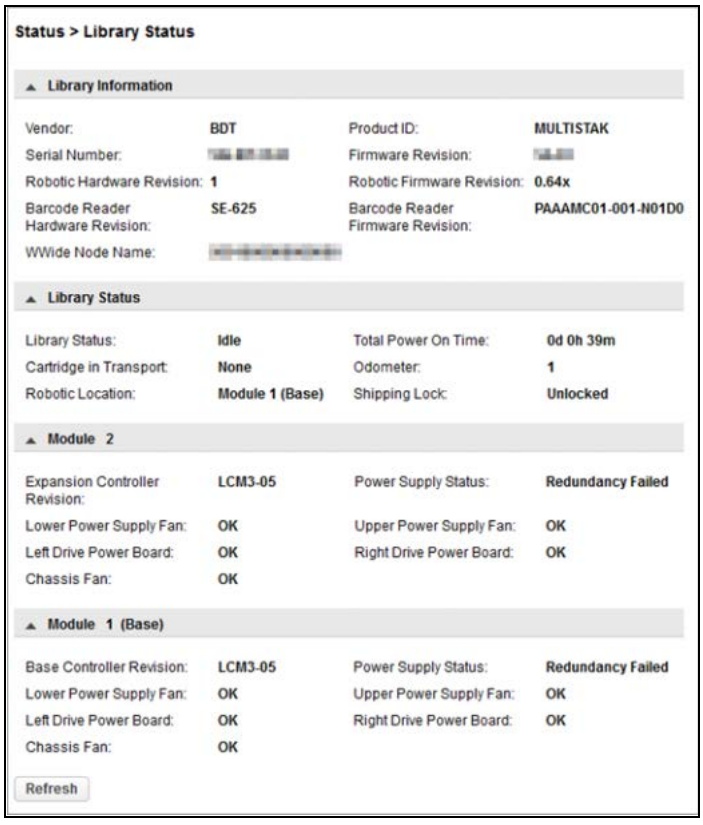
2.8 Viewing Status Information

Click or tap [Status] in the home screen to access the status area. From the list displayed in the center pane in the operator panel or the right pane in the remote panel, select the item to configure. Refer to "1.3 Menu Layout" (page 16) for the items.
For items with a sub-menu, click or tap the item to expand the sub-menu.

2.8.1 Viewing Library and Module Status

Summary information and status is displayed in the top banner and left side bar. For additional library module configuration and status information navigate to the Status > Library Status screen.

Figure 2.66 Library status



Library information

- Vendor
  Vendor information of the library. The vendor is FUJITSU.
- Product ID
  Inquiry information of the library. This does not indicate the name of the library itself.
- Serial Number
  Library serial number
- Firmware Revision
  Version of the currently installed library firmware
- Robotic Hardware Revision
  Hardware version of the robotic assembly installed in the current library.
- Robotic Firmware Revision
  Version of the currently installed robotic assembly firmware. The robotic assembly firmware is bundled and installed with the library firmware.
- Barcode Reader Hardware Revision
  Hardware version of the barcode reader installed in the current library.
- Barcode Reader Firmware Revision
  Version of the currently installed barcode reader firmware. The barcode reader firmware is bundled and installed with the library firmware.
- WWide Node Name
  World Wide Node Name (WWNN) that is a unique identifier of the library.

Library Status

- Library Status
  - Idle
    The library robotic is ready to perform an action.
  - Moving
    The library robotic is moving a cartridge.
  - Scanning
    The library robotic is performing an inventory of cartridges.
  - Offline
    The robotic assembly is being used by the library or is disabled.
- Cartridge in Transport
  When applicable, displays the barcode label of the cartridge currently in the robotic assembly.
- Total Power On Time
  Total time that the base module has been powered on since it was manufactured
- Odometer
  Robotic assembly move count
- Robotic Location
  Displays the module where the robotic is currently located.

- Shipping Lock
  Indicates whether the robotic is unlocked or locked for shipment.

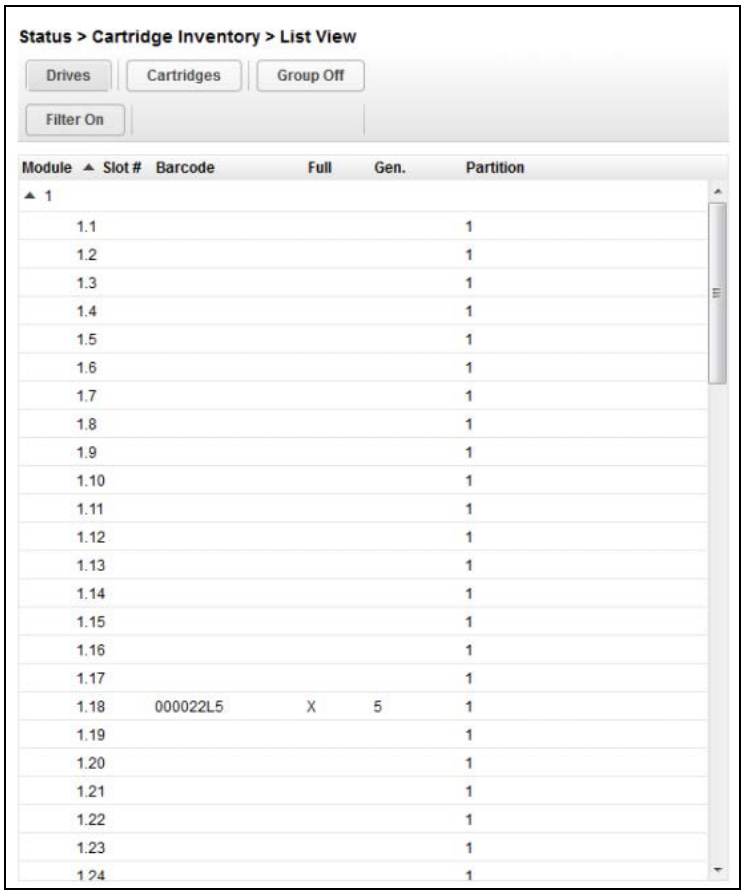
Module status

- Base Controller Revision or Expansion Controller Revision
  Hardware revision of the controller board currently installed in the module.
- Left Drive Power Board
  Status of the drive power board (DC-DC converter) for the top three half-height drive slots in the module.
- Right Drive Power Board
  Status of the drive power board (DC-DC converter) for the lower three half-height drive slots in the module.
- Power Supply Status
  Displays the status of power redundancy.
- Lower/Upper Power Supply Fan
  Displays the status of power supply fans.
- Chassis Fan
  Displays the status of the chassis fan.

2.8.2 Using Inventory Lists

The inventory lists display each of the elements, such as slots and tape drives, with information about the cartridge stored in the element. To see the elements organized by module, from Status, navigate to Cartridge Inventory > List View. To see the elements organized by logical library (or partition), from Status, navigate to Partition map > List View.

Figure 2.67 Inventory list



In the Inventory List you can see:

- Module
  The module number
- Slot #
  The slot number in the form <module>.<slot>, where module is the module number and slot is the slot number
- Barcode
  Barcode label
- Full
  X if a cartridge is using the element
- Gen.
  LTO generation of the cartridge

- Partition
  The partition number

Filtering by Barcode Label

To filter the list based on barcode label, enter characters in the filter box and then click Search.

Procedure

1. Click Filter On.
   The search box is displayed.
2. Enter characters into the search box and then click Search.
   The characters can be anywhere in the barcode label. The search characters are not case sensitive. There are no wildcards.

End of procedure

To disable filtering, click Filter Off.

Listing Just Drives or Cartridges

To limit the list to tape drives, click Drives.

To limit the list to cartridges, click Cartridges.

To see all elements, click Partition or Slots.

Viewing Elements by Group

When the list is grouped, you can expand or contract the list for each group by clicking the triangle next to the number in the first column. Grouping is enabled by default.

To disable grouping, click Group Off.

To enable grouping, click Group On.

2.8.3 Using Inventory Graphical View

The inventory graphical view displays each of the elements, such as slots and tape drives, with information about the cartridge stored in the element. To see the elements organized by module, from Status, navigate to Cartridge Inventory > Graphical View. To see the elements organized by logical library (or partition), from Status, navigate to Partition Map > Graphical View.

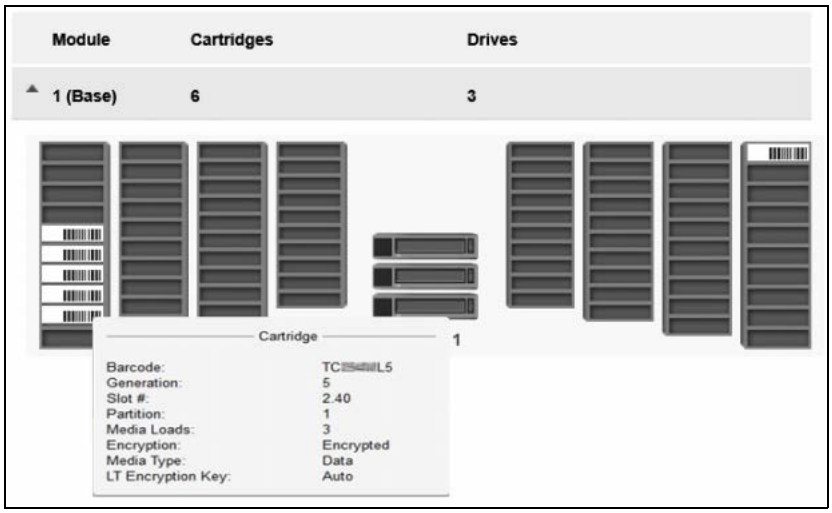
Inventory Graphical View

To see the elements with the graphical view, from Status, navigate to Cartridge Inventory > Graphical View.

Figure 2.68 Inventory graphical view

When the mouse pointer is moved over a tape drive or cartridge, the following additional information is displayed.

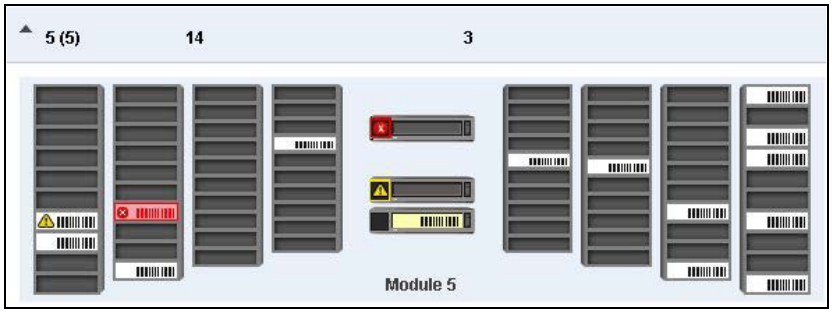
Figure 2.69 Inventory graphical view (display status)



- Drive
  LTO generation and format of the tape drive
- Drive #
  The tape drive number
- Serial #
  Serial number of the tape drive
- Slot #
  The slot number in the form <module>.<slot>, where module is the module number and slot is the slot number
- Barcode
  Barcode data on label
- Generation
  LTO generation of cartridge
- Partition
  The partition number
- Media Loads
  The number of media loads
- Encryption
  Indicates whether data on this media is encrypted.
- Media Type
  The type of the media that is applicable
- LT Encryption Key
  The type of the encryption key when the Key Management Function Option is used

Warning state and error state for a specific tape drive or cartridge are indicated with icons.

Figure 2.70 Inventory graphical view (display error status)

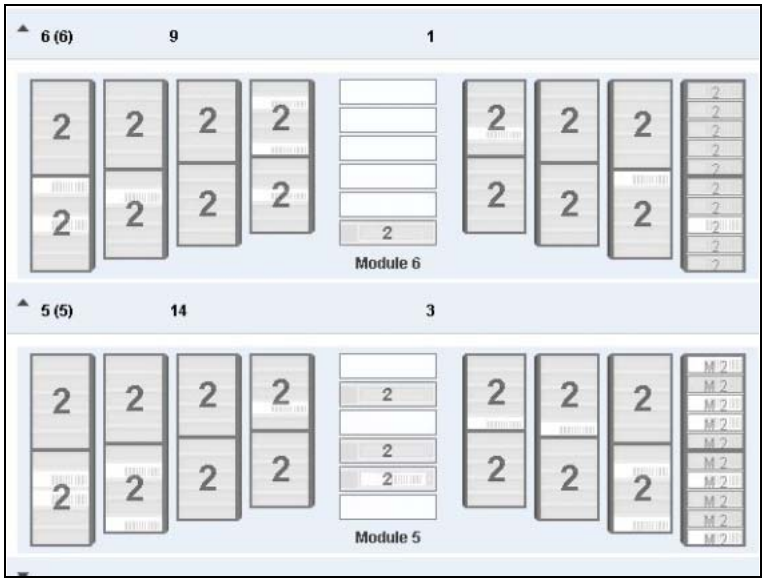


2.8.4 Partition Map Graphical View

To see the elements organized by logical library (or partition), from Status, navigate to Partition Map > Graphical View.

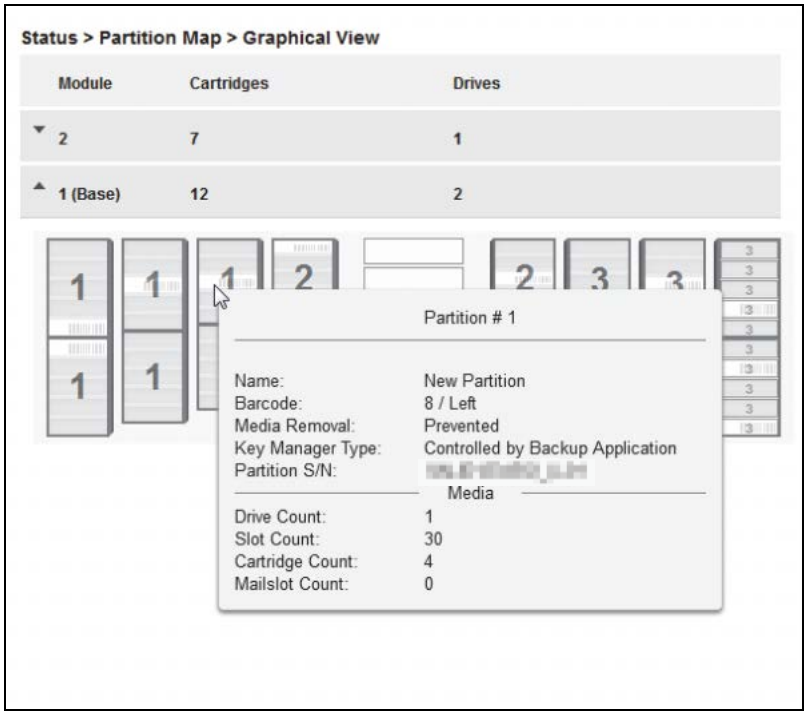
The graphical view of the partition map displays all the elements for each partition number. For normal slots, a partition number is displayed for every five slots. If mailslots are enabled, the partition number is displayed with an "M" for each mailslot.
Even if the mailslot is disabled, the partition number is displayed for each slot.

Figure 2.71 Partition map graphical view



When the mouse pointer is moved over a partition layer, the following additional information is displayed.

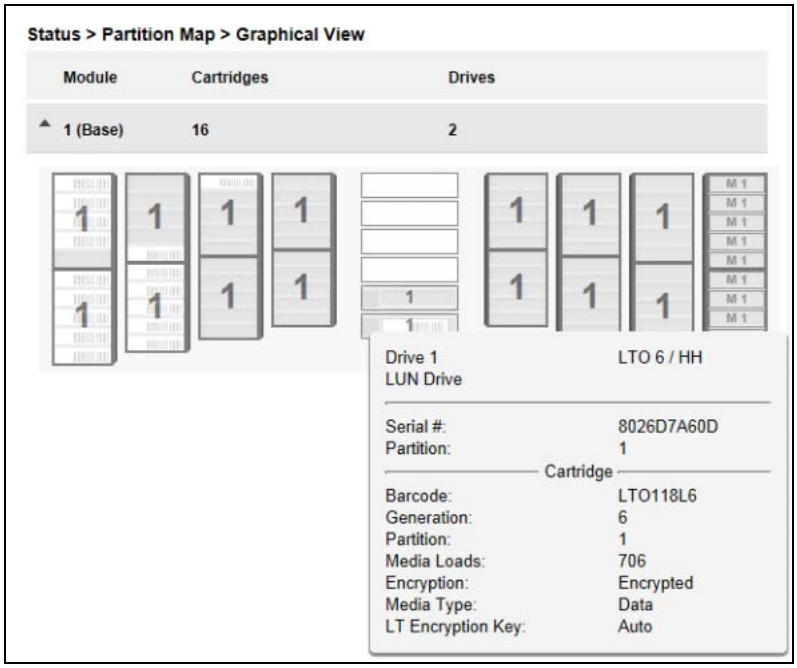
Figure 2.72 Partition map graphical view (display partition information)



- Name
  Partition name
- Barcode
  Barcode orientation
- Media Removal
  Indicates whether media removal is allowed or prevented by the host.
- Key Manager Type
  Encryption type
- Partition S/N
  Serial number of the partition
- Drive Count
  Number of tape drives in this partition
- Slot Count
  Number of slots in this partition
- Cartridge Count
  Number of cartridges in this partition
- Mailslot Count
  Number of mailslots in this partition

When the mouse pointer is moved over a tape drive, the following additional information is displayed.

Figure 2.73 Partition map graphical view (tape drive information display)



- Drive
  LTO generation and format of the tape drive
- Drive #
  The tape drive number
- Serial #
  Serial number of the tape drive
- Partition
  The partition number

If a cartridge is loaded in this tape drive, additional information for the cartridge is displayed as follows:

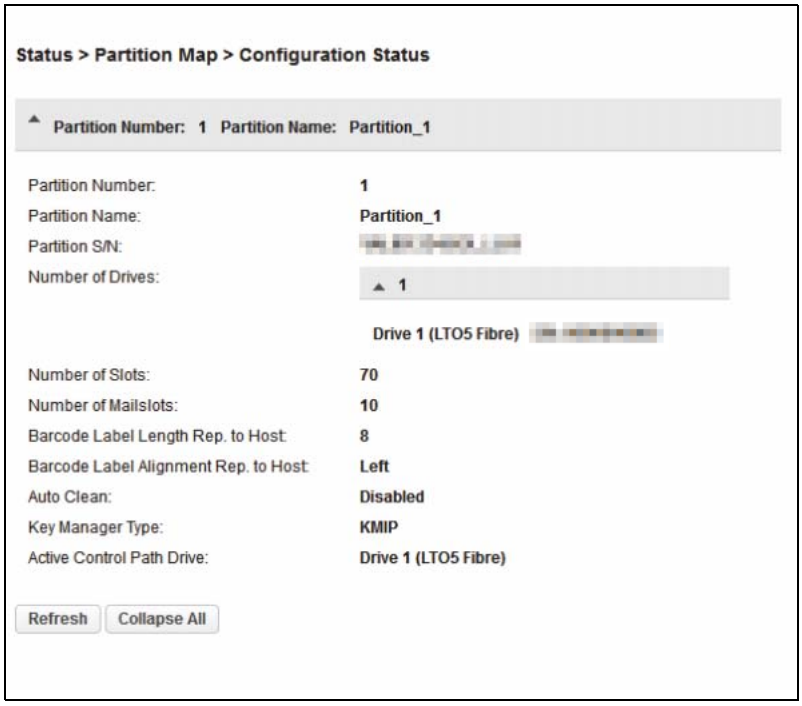
- Barcode
  Barcode data on label
- Generation
  LTO generation of cartridge
- Partition
  The partition number
- Media Loads
  The number of media loads
- Encryption
  Indicates whether data on this media is encrypted.
- Media Type
  The type of the media that is applicable

- LT Encryption Key
  The type of the encryption key when the Key Management Function Option is used

2.8.5 Using Partition Map Configuration Status

To see the configuration of a partition, the elements and their status, from Status, navigate to Partition Map > Configuration Status.

Figure 2.74 Using partition map configuration status



In the configuration status list you can see:

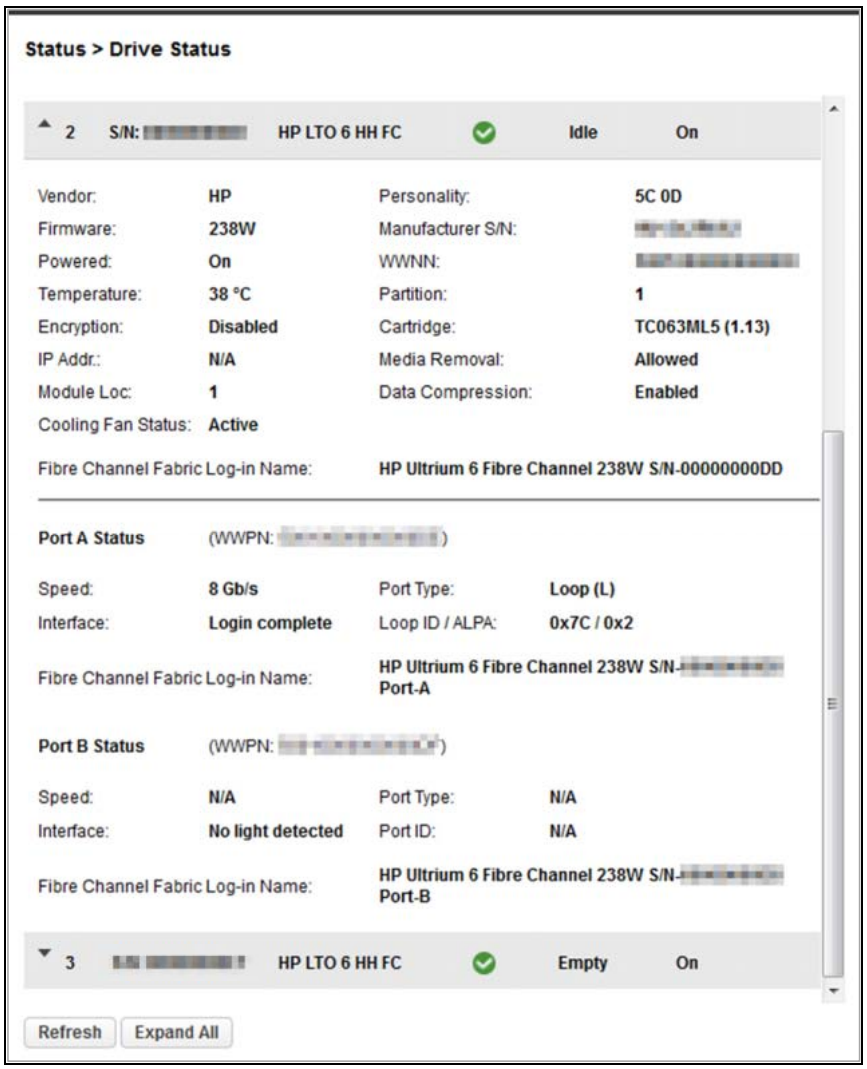
- Partition Number
  The partition number
- Partition Name
  The partition name
- Partition S/N
  The partition serial number
- Number of Drives
  Number of tape drives allocated in this partition. If the number is clicked, the detailed information of the tape drive is expanded.
- Number of Slots
  Number of slots allocated in this partition
- Number of Mailslots
  Number of mailslots allocated in this partition

- Barcode Label Length Rep. to Host
  Barcode length reported to the host
- Barcode Label Alignment Rep. to Host
  Barcode alignment reported to the host
- Auto Clean
  Indicates whether automatic cleaning of tape drives is enabled or disabled.
- Key Manager Type
  Encryption type
- Active Control Path Drive
  LUN drive for this partition
- LTO7+ Multi-initiator SCSI Conflict Detection
  The setting value related to multiple SCSI connections. The default is Disable and cannot be changed.

2.8.6 Viewing Tape Drive Status

In the Status> Drive Status screen you can see the configuration and status of each tape drive installed in the library.

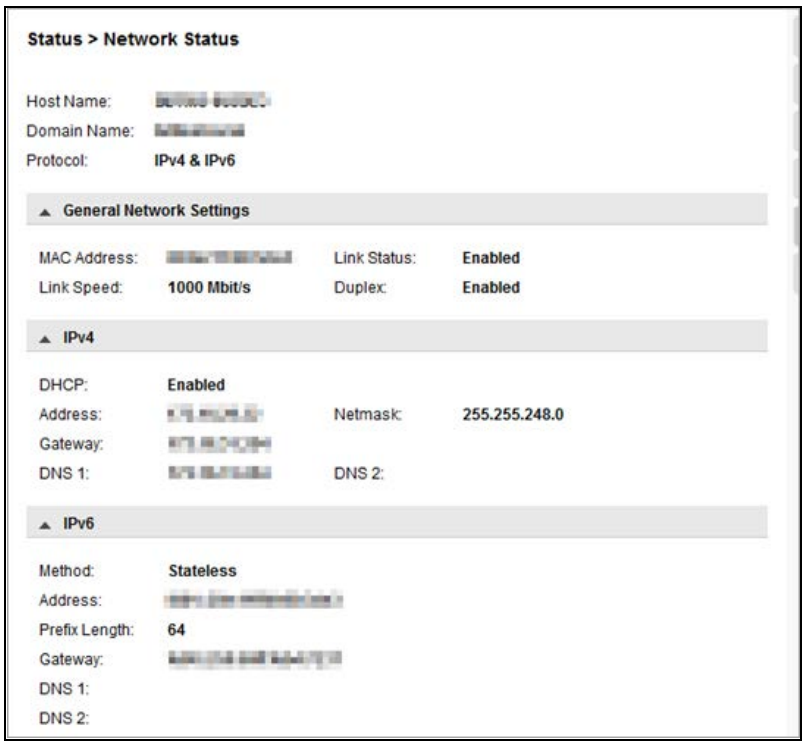
Figure 2.75 Tape drive status



2.8.7 Viewing Network Status

In the Status > Network Status screen you can see the network configuration and status.

Figure 2.76 Network status



The following can be found in the Network Status screen.

- Host Name
  Library hostname
- Domain Name
  The domain name set for the library
- Protocol
  IPV4 or IPv6
- MAC Address
  A unique identifier for the library controller network interface
- Link Status
  Enabled or disabled
- Link Speed
  Speed of the Ethernet connection to the library
- Duplex
  Enabled or disabled

IPv4 settings

- DHCP
  When Enabled, the library requests an IP address from a DHCP server each time the library is powered on.
- Address
  IP address in use by the library. If DHCP is enabled, this address was obtained from the DHCP server. When DHCP is not enabled, the address was configured.
- Netmask
  The network mask of the library controller used when DHCP is not enabled.
- Gateway
  The gateway used when DHCP is not enabled.
- DNS 1
  IP address of the DNS server.
- DNS 2
  IP address of the alternate DNS server. Used when DNS 1 is not responding.

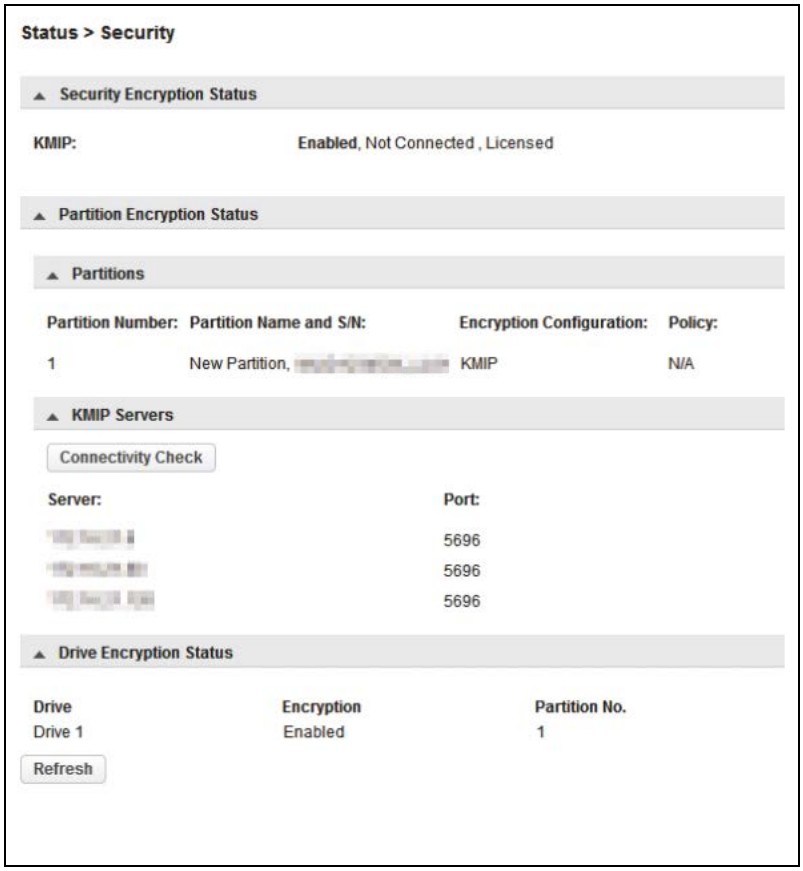
IPv6 settings

- Stateless
  When Enabled, the device will generate an address for itself based on the routing information obtained from a router advertisement and the MAC address. The device can manage up to five global addresses at the same time, which can be assigned from different routers.
- Static
  When Enabled, the library will use a statically-configured address.
- Address
  The IPv6 address when Static Addressing Enabled is On.
- DNS 1
  IP address of the DNS server.
- DNS 2
  IP address of the alternate DNS server. Used when DNS 1 is not responding.

2.8.8 Viewing Security Status

In the Status > Security screen, the encryption status of the library is displayed in a list.
For details on the displayed contents of the Key Management Function Option, refer to "FUJITSU Storage ETERNUS LT260 Tape Library Key Management Function Option User's Guide".

Figure 2.77 Viewing security status



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