User Manual for Overland NEOs StorageLoader and NEOs T48 LTO Libraries

Contents

1. Introduction – Document Purpose

This document provides information to install, operate, and upgrade the LTO tape libraries use in XenData systems SXL-8 and SXL-4200. The libraries are the 8-slot NEOs StorageLoader and 48-slot NEOs T48, respectively. The instructions are in this guide are intended for trained system users who need physical and functional knowledge of these libraries.

2. General Warnings

The conventions used in this document are as follows.

Symbol	Text	Meaning
	**WARNING**	Indicates that failure to follow directions could result in bodily harm or death.
	**CAUTION**	Indicates that failure to follow directions could result in damage to equipment or data.
!	**IMPORTANT**	Provides clarifying information or specific instructions.
	**NOTE**	Provides additional information.
	**TIP**	Provides helpful hints or tips.

3. Supported Configurations & Component Overview

3.1 Supported library configurations

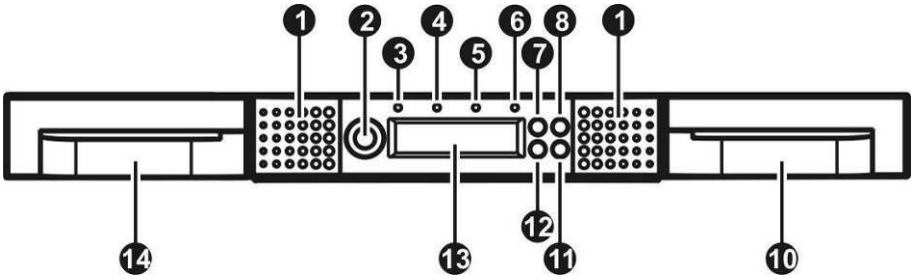
	8-slot library	48-slot library
Form Factor	1U	4U
Number Magazines	2	4
Mail slot options	0,1	0,3
LTO slots (for mail slots=0)	8	48
Max half height drives	1	4
Max power supplies	1	2

3.2 Supported LTO drives

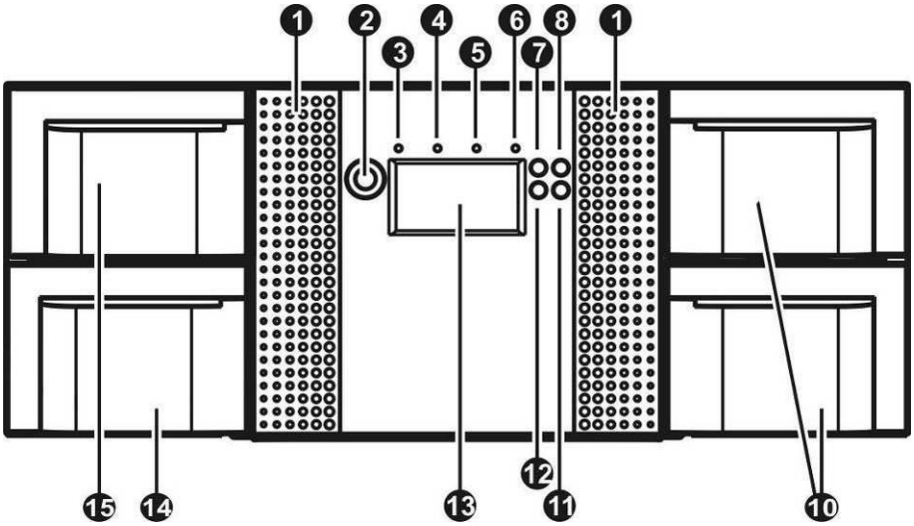
Manufacturer	Type
IBM	LTO-5 half-height FC
IBM	LTO-5 half-height SAS
IBM	LTO-6 half-height FC
IBM	LTO-6 half-height SAS
IBM	LTO-7 half-height FC
IBM	LTO-7 half-height SAS
IBM	LTO-8 half-height FC
IBM	LTO-8 half-height SAS

3.2 Front panel

8-Slot

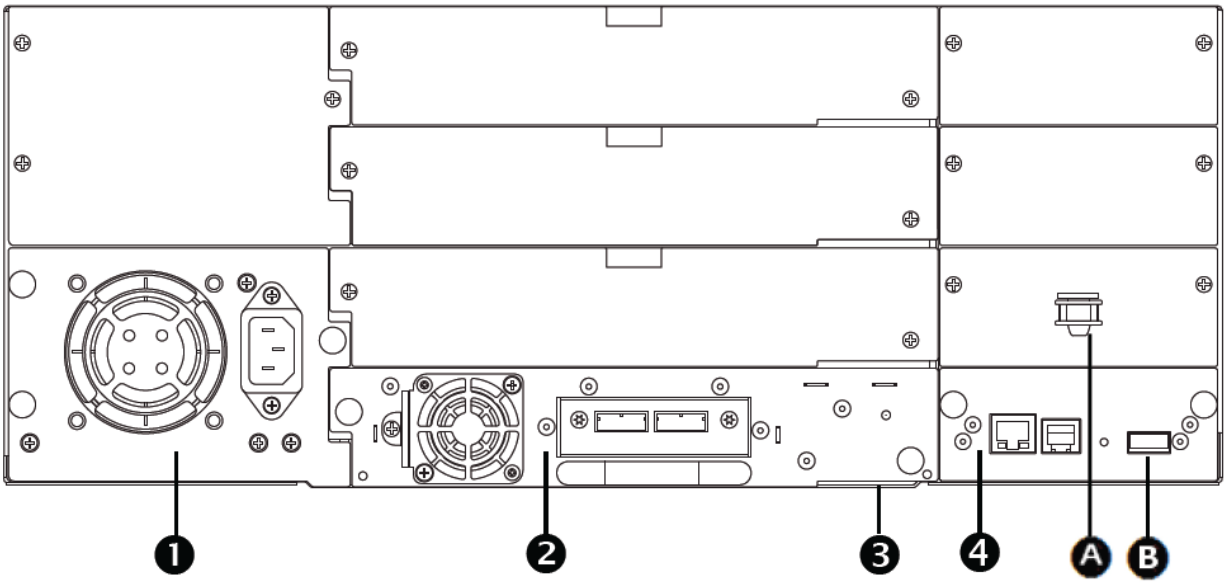


48-Slot



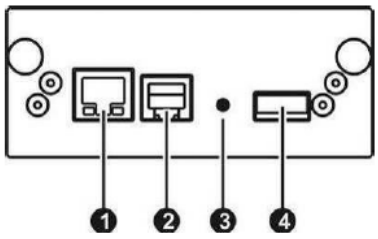
1	Air vents	
2	Power button	Pressing the button will initiate a controlled shut down.
3	Ready LED, green	Illuminated during power on; blinks during drive or library activity.
4	Clean LED, amber	Indicates that a drive needs cleaning.
5	Attention LED, amber	Indicates library requires attention.
6	Error LED, amber	Indicates unrecoverable error. Error message shown on screen.
7	Cancel button	Cancels a user action and returns to previous screen.
8	Previous button	Navigates backwards through menu items.
9	n/a	
10	Right magazines	
11	Enter button	Used to enter a sub menu or execute and action.
12	Next button	Navigates forwards through menu items.
13	Operator control panel	OCP displays actions and status.
14	Left magazine & mail slot	
15	Left magazine	

3.4 Rear Panel



Ref.	Description	Ref.	Description
1	Power supply (lower left)	A	Storage location for shipping lock.
2	Tape drive(s)	B	USB port (firmware upgrades, key storage)
3	Pull-out tab containing the product information (Serial Number/Model/Customer)		
4	Library controller		

3.5 Library controller



1	Ethernet Port (RMI Connection)
2	Serial Port (Engineering Diagnostics)
3	Controller LED (blinking = OK; if not blinking, failure)
3	USB Port (Firmware upgrades, key storage)

4. Installing the Library

4.1 Location Requirement

Criteria	Definition
Rack requirements	Standard 19-inch IT rack
Room temperature	10-35C
Power source	Voltage: 100-127 V AC or 200-240 V AC Frequency: 50-60 Hz
Air Quality	Minimal presence of particulate contamination required.
Humidity	20-80% RH non-condensing
Clearance	Back: 150mm minimum Front: 300mm minimum for mail slot

NOTE

The library must be installed in a 19-inch rack using the rails provided. Installation on a table top or similar surface could result in operational errors.

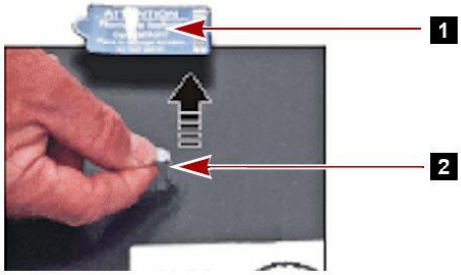
4.2 Prepare the LTO Library for Installation

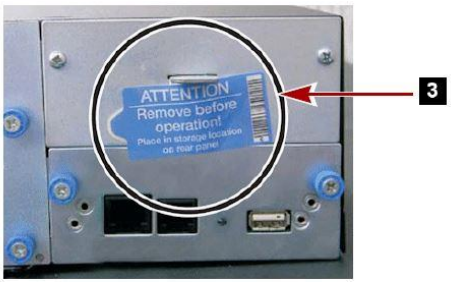
Remove the library from its box and set it on a secure surface. In the case of the 48-slot library, use two people.

CAUTION I

Remove and store the shipping lock. The shipping lock is held in place with a label and is located in the top center of the library. It should be removed and stored as described below.

1. Remove the blue securing label.
2. Lift and remove the shipping lock.
3. Store the shipping lock and blue label at the top right of the rear panel of the library.





4.3 Install the LTO Library in a Rack

Install the library without any LTO drives in a 19 inch rack using the rails provided. Please follow the instructions in the Getting Started Guide.

Install the LTO tape drive(s) into a drive bay accessible from the rear of the library. Each LTO drive should be flush with the back panel of the library. Finger-tighten the captive thumbscrews until the LTO drive is secure.

4.4 Powering On and Off

Power-on the tape library

Power-on the library by depressing the power button on the front of the unit. The library will start to initialize and the green ready light on the front of the library will start to flash. Wait until the tape library has completed its inventory process and the ready light shows as steady green.

Power-Off the tape library

Ensure that all host computer has completed all operations. Power-off the LTO library by pressing the power switch on the front of the library.

5. Using the Library

5.1 Using LTO Cartridges

Follow the guidelines below.

Do not drop a cartridge as excessive shock can damage it, making the cartridge unusable.

Do not expose data cartridges to direct sunlight or sources of heat, including portable heaters and heating ducts.

The operating temperature range for data cartridges is 10 to 35C. The storage temperature range is -40 to +60o C in a dust-free environment in which relative humidity is always between 20 percent and 80 percent (non- condensing).

If the data cartridge has been exposed to temperatures outside the specified ranges, stabilize the cartridge at room temperature for the same length of time it was exposed to extreme temperatures or 24 hours, whichever is less.

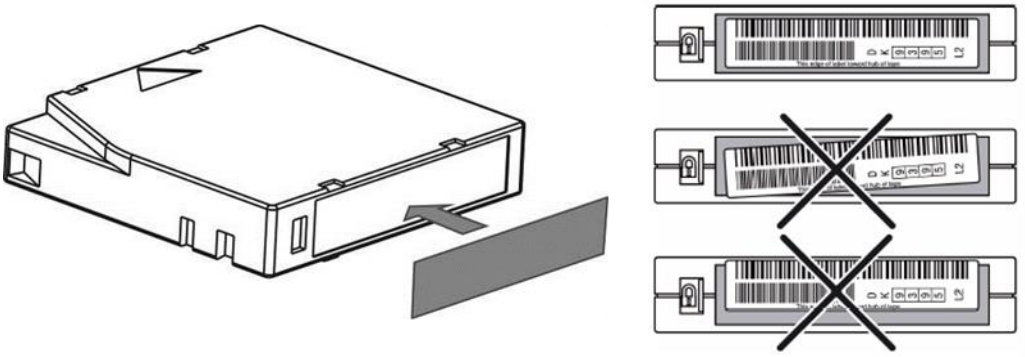
Do not place data cartridges near sources of electromagnetic energy or strong magnetic fields such as computer monitors, electric motors, speakers, or X-ray equipment. Exposure to electromagnetic energy or magnetic fields can destroy data and the embedded servo code written on the media by the cartridge manufacturer, which can render the cartridge unusable.

Place identification labels only in the designated area on the cartridge.

5.2 Barcode Labels

The library contains a barcode reader that reads the tape labels and stores the inventory data in memory. The library then provides the inventory information to the host application, OCP, and RMI. Having a barcode label on each tape cartridge enables the barcode reader to identify the cartridge quickly, thereby speeding up inventory time. Make it a practice to use bar code labels on your tape cartridges.

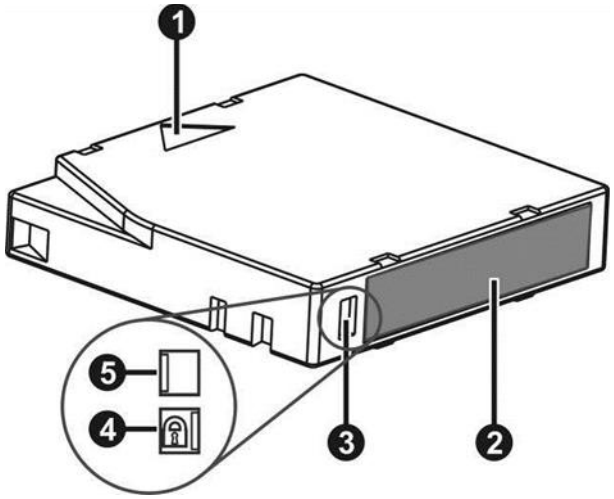
LTO cartridges have a recessed area located on the face of the cartridge next to the write protect switch. Use this area for attaching the adhesive backed barcode label. Carefully apply the label as shown.



5.3 Write Protecting Cartridges

All rewriteable data cartridges have a write-protect switch to prevent accidental erasure or overwriting of data. Before loading a cartridge into the device, make sure the write-protect switch on the front of the cartridge is in the desired position.

- Slide the switch to the left to allow the device to write data to the cartridge.
- Slide the switch to the right to write-protect the cartridge. An indicator, such as a red mark or small padlock, is visible showing that the cartridge is write-protected.



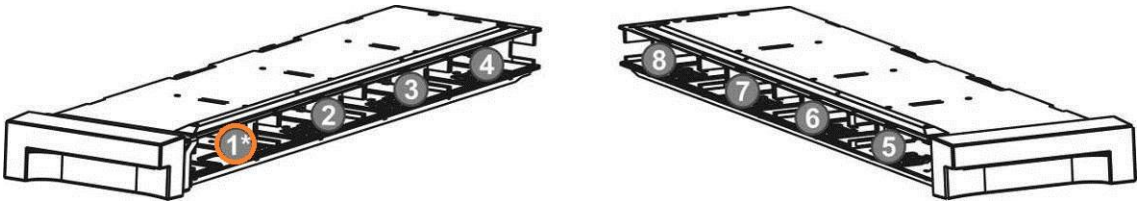
1	Insertion arrow	4	Write-protected
2	Barcode label	5	Write-enabled
3	Write-protect switch		

5.4 Magazines

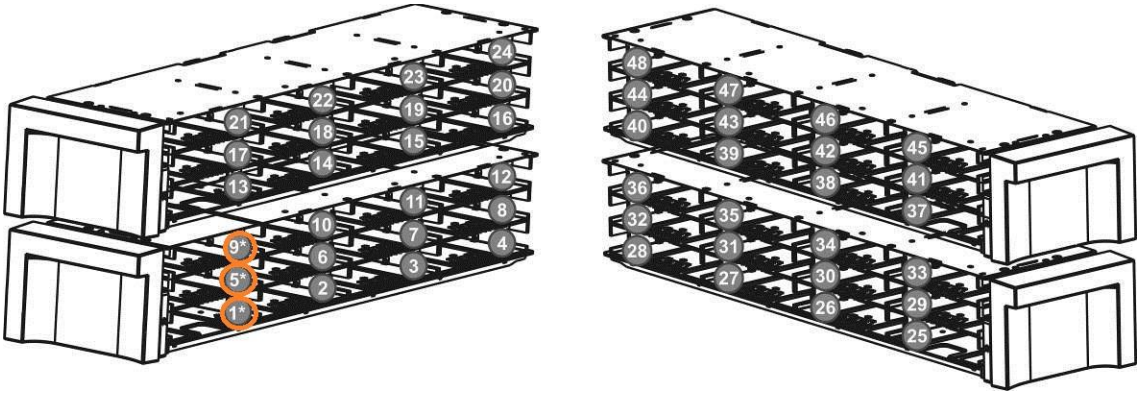
Tape cartridges are stored in magazines which may be removed and inserted individually. Magazines are locked to prevent unauthorized removal when inserted in the library and unlock Magazine access may become password protected. For safety reasons, the robotic motion is stopped whenever when a magazine is removed from the library. This takes the library offline which means it is no longer under control of the host system.

The magazines can be unlocked using the Operator Control Panel (OCP) or the Remote Management Interface (RMI).

Slot numbering for the 8-slot library is shown below.



Slot numbering for the 48-slot library is shown below



5.5 Mail Slot

Mail slots are used to import/export individual tape cartridges without interrupting the library operation. The command to open the mail slot may be denied if the robotics is busy with some operation. In that case “Busy“ is displayed on the OCP and the command has to be repeated once the robotics operation is finished.

The 8-slot library has a single mail slot (magazine slot 1) in the left position.

The 48-slot library has a triple mail slot in the top left side.

6. Operator Control Panel (OCP)

The OCP can be used to monitor, configure, and control the library from the front panel.

6.1 Operating Modes

The OCP operates in two basic modes:

User interaction mode

- This mode is employed when a user is pushing buttons on the operating panel.

System driven mode

- This is the normal mode of operation. In this mode, the operating panel displays status associated with the actions that were caused from commands issued from the host software application. Actions like loading, rewinding or moving tape cartridges will be displayed.

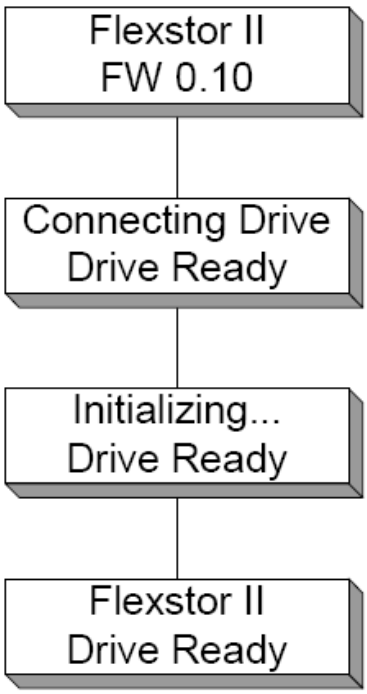
Whenever an operating button is pressed and released, the operating panel automatically transitions to user interaction mode. The user interaction mode will be active until 3 minutes after the user stops pushing buttons, or the requested robotic action stops – whichever is longer. At this time, the operating panel will return to the system driven mode.

In case of administrator programed user security feature the user interaction mode is restricted to the information and login menu item, until a login with correct PIN is done.

6.2 8-Slot OCP

6.2.1 Power-Up Display

When the 8-slot library is powered up, or is reset from power on, it goes through several internally controlled processes that allow it to be initialized and enter normal operation mode. These processes are called Power-On-Self-Test (POST). While the POST is occurring, the OCP will have appropriate progress information displayed to keep the user informed. When the library completes POST, it will display the current drive mount status in the OCP home screen. If the drive is empty, the following status will be displayed.



6.2.2 Note about the LEDs

All LEDs are updated during power up and reset sequences. Upon power up or after software reset, the library will illuminate all LEDs as soon as POST allows. This will help the user to verify if all LEDs are functional. When initialization starts, all LEDs will be extinguished and the ready/activity LED will flash at a rate of approximately 1- second per cycle, 50% duty cycle. When the robot mechanical initialization is complete, the ready/activity LED will stop flashing and be constantly illuminated. The magazine status LED's will also show the appropriate status (locked, unlocked or removed).

If a library failure occurs, the ready/activity LED will be turned off and the error LED will be illuminated. The OCP will also display an appropriate error code to help identify the failure.

6.2.3 Input Modes (OCP Navigation)

There are several modes to enter values in the different menu items within the OCP. These modes differ depending upon the menu item selected. The data entry modes are selectable predefined values, toggle values (e.g. on/off) and numerical value entry like network addresses.

Selectable predefined values

After navigating to the menu item, the various predefined values can be selected with the <PREVIOUS> and <NEXT> button. As soon as the display shows the correct value it can be entered by pressing the <ENTER> button.

Toggle values

Toggle values are used to switch between two different states like on and off. After navigating to the menu item the display shows the actual state. Pressing the <ENTER> button will switch to the possible new state. Pressing the <ENTER> button a second time will take over this new state. This procedure works vice-versa.

Numerical values

Numerical values are used for IP network addresses, PIN numerical entries and other configuration entries. After navigating to the menu item, the actual current value, will be displayed and the cursor stays on the left most significant digit. The single digit can be incremented / decremented with the <PREVIOUS> and <NEXT> buttons. After selecting the correct value pressing the <ENTER> button will enter the selected value and the cursor is moved to the next editable digit to the right. It can be edited in the same way. After pressing the <ENTER> button at the last digit the complete entry will be stored. Pressing the <CANCEL> button any time before the last digit complete entry will cancel the whole edit process and the original value will become valid again.

6.2.4 8-Slot Power Off

The operator control panel contains the power on/off button. Pressing this button will initiate a controlled power down of the unit (soft landing). The following operations will take place before the unit shuts down completely, once the power button is pushed from a power on state.

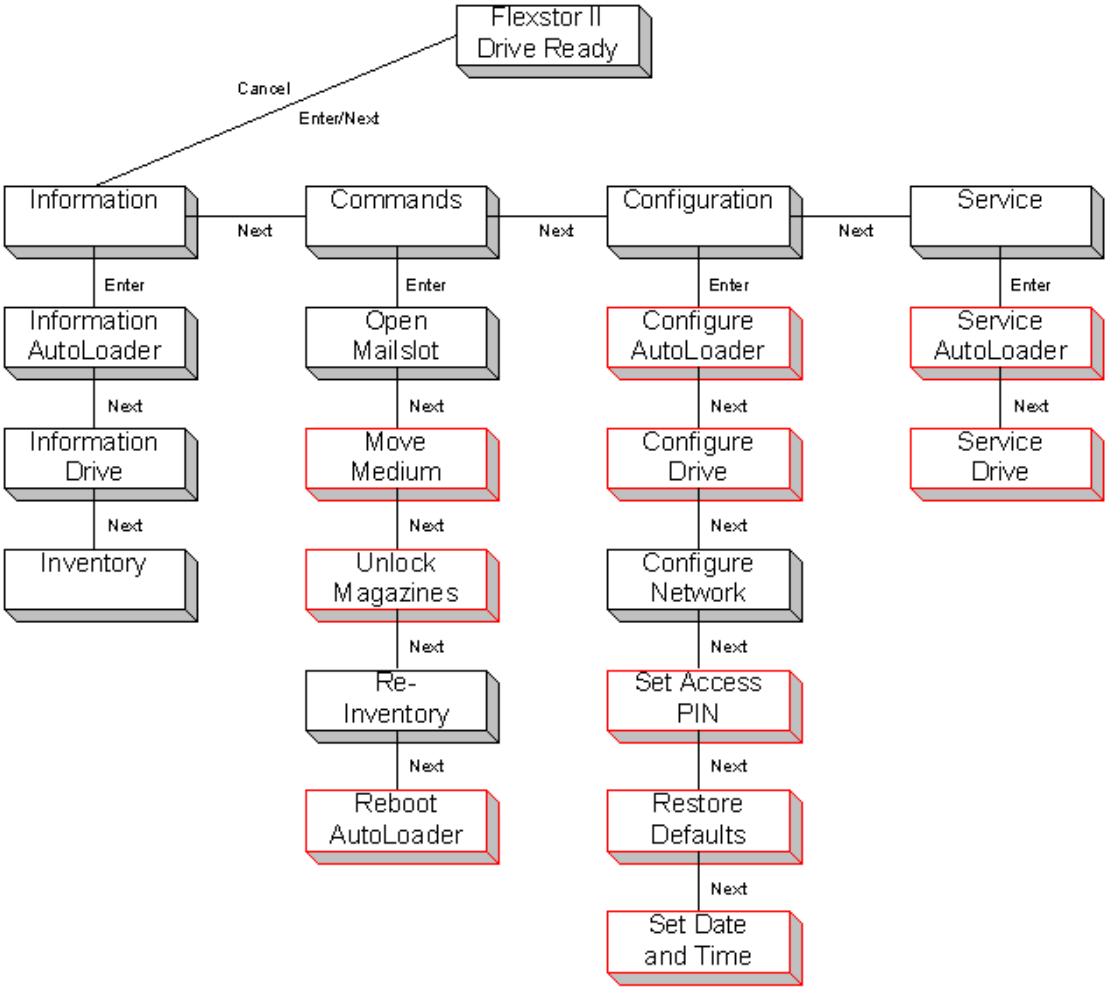
The display indicates with an appropriate message that the shutdown is in progress and provides the opportunity to abort the shutdown by pushing the <CANCEL> button within 3 seconds.

The library controller finishes all ongoing library and drive activities.

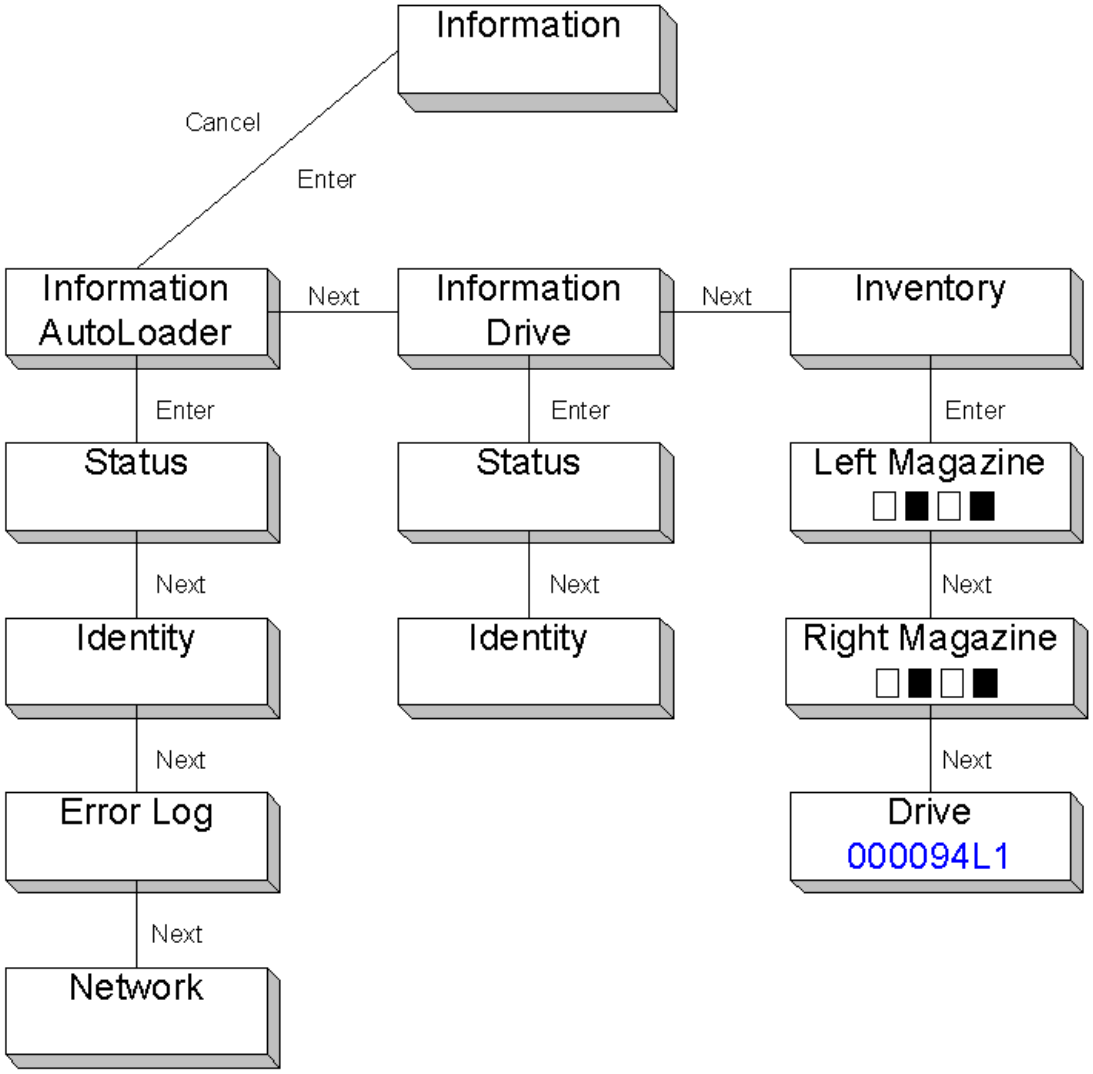
The robotics is moved to its home position.

The library controller switches off the power supply's secondary side.

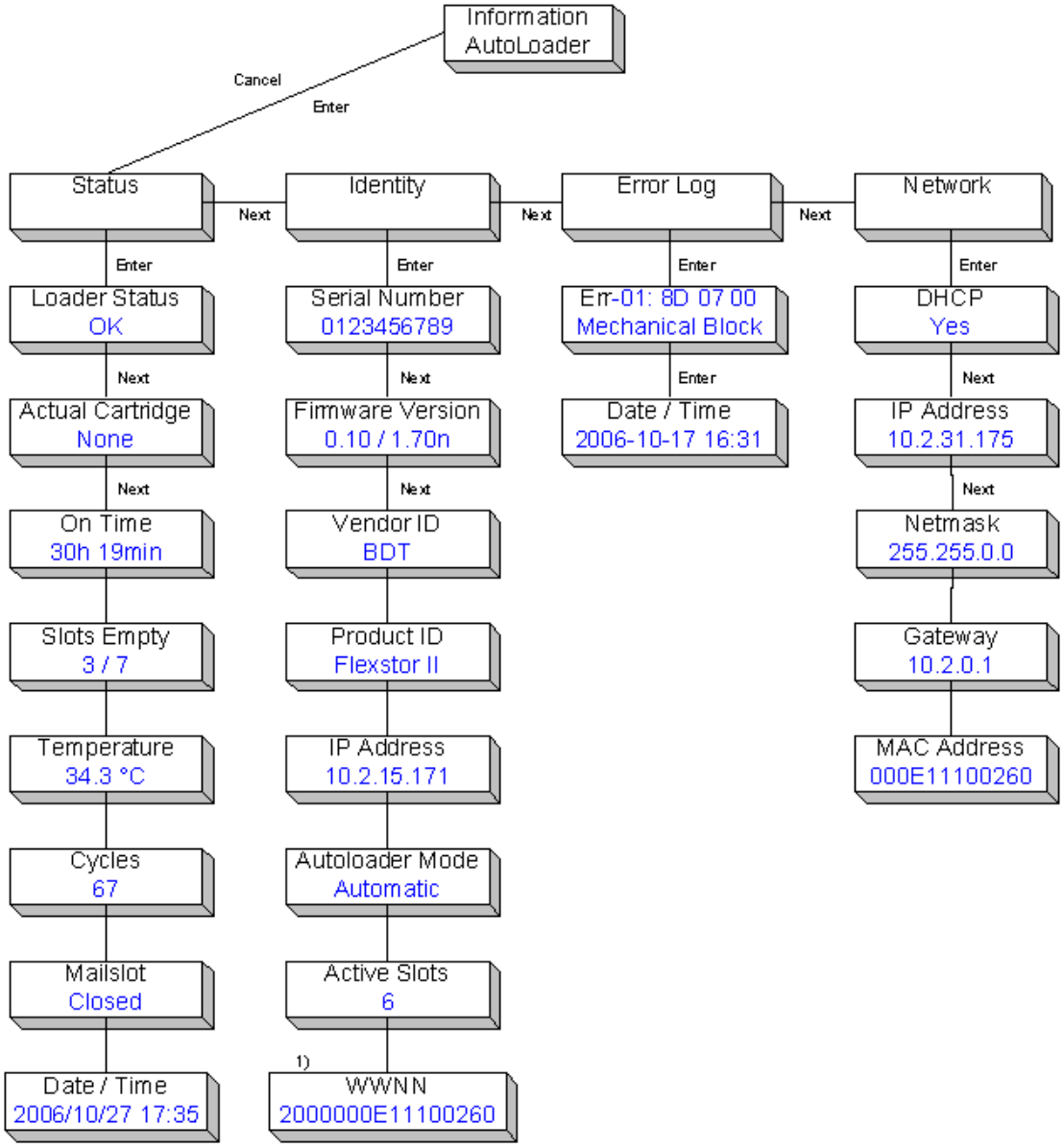
6.2.5 8-Slot Main Menu



6.2.6 8-Slot Information Menu

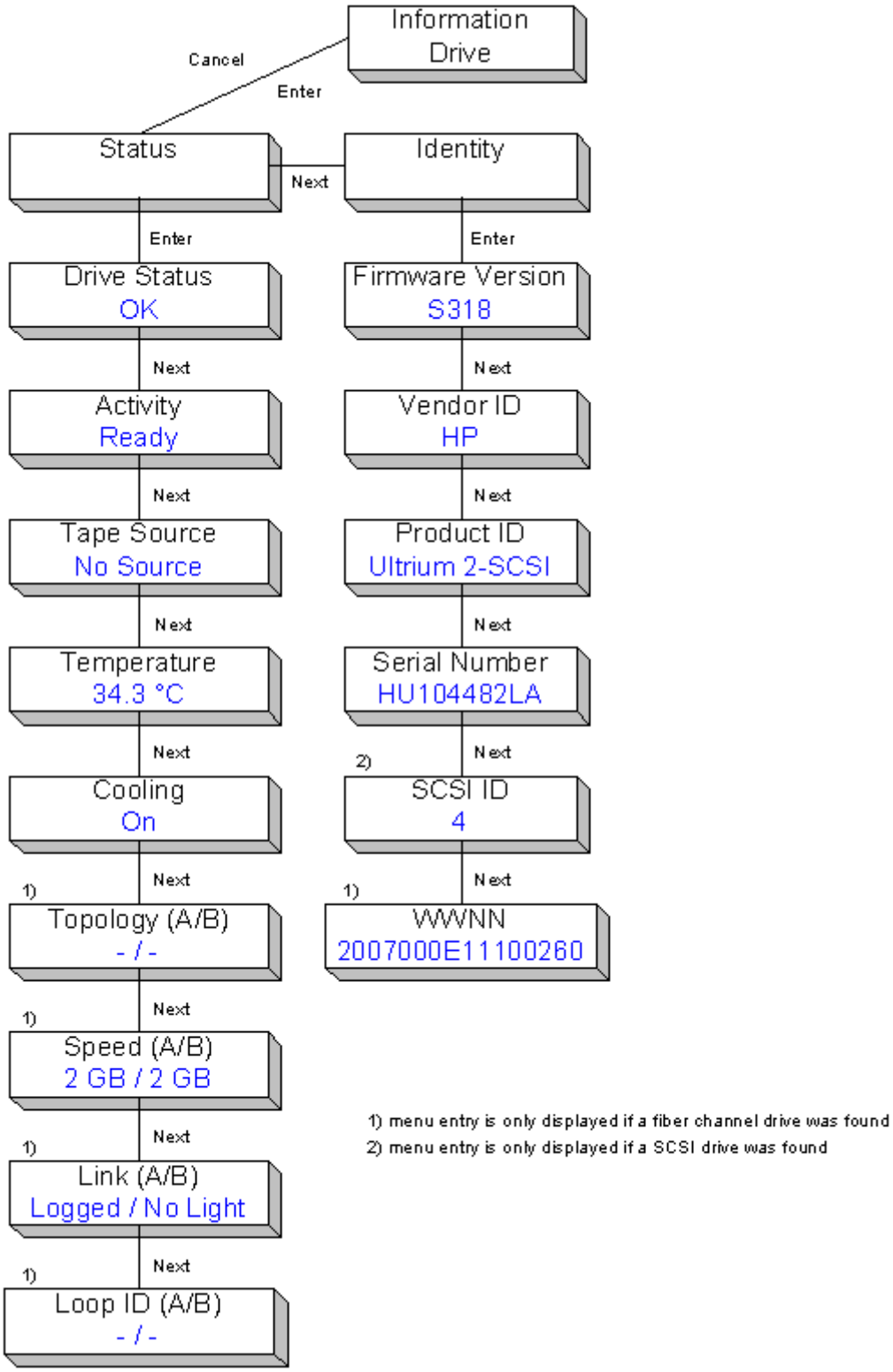


6.2.7 8-Slot Library Information Menu



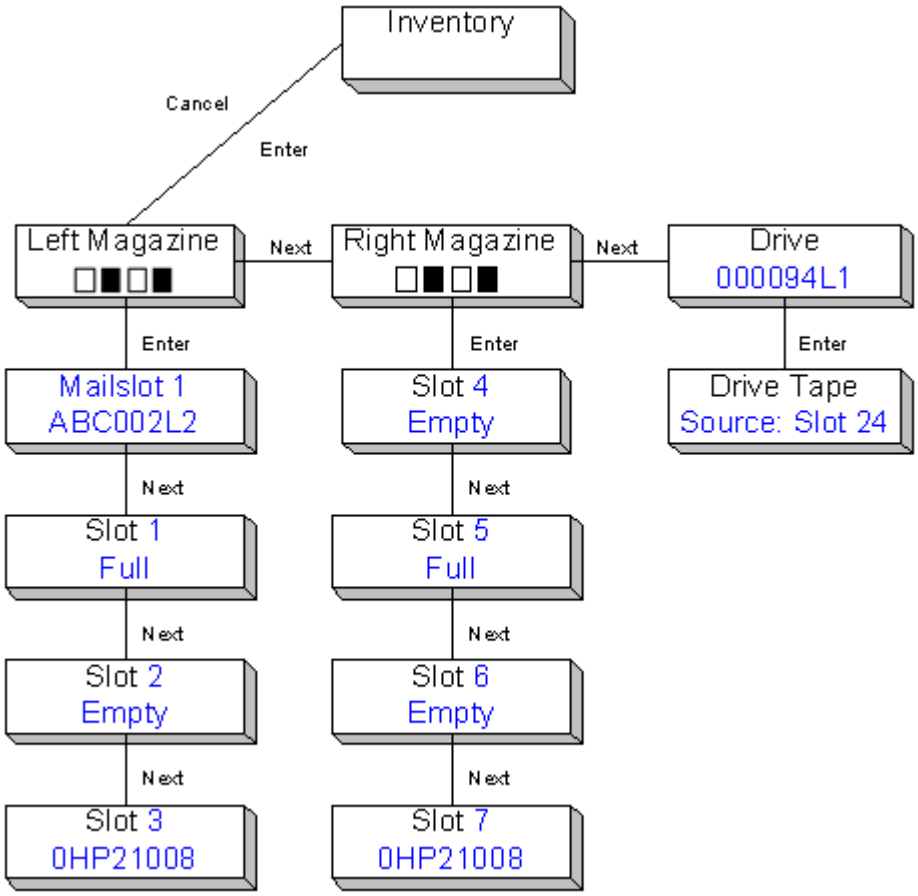
1) menu entry is only displayed if a fiber channel drive was found

6.2.8 8-Slot Drive Information Menu

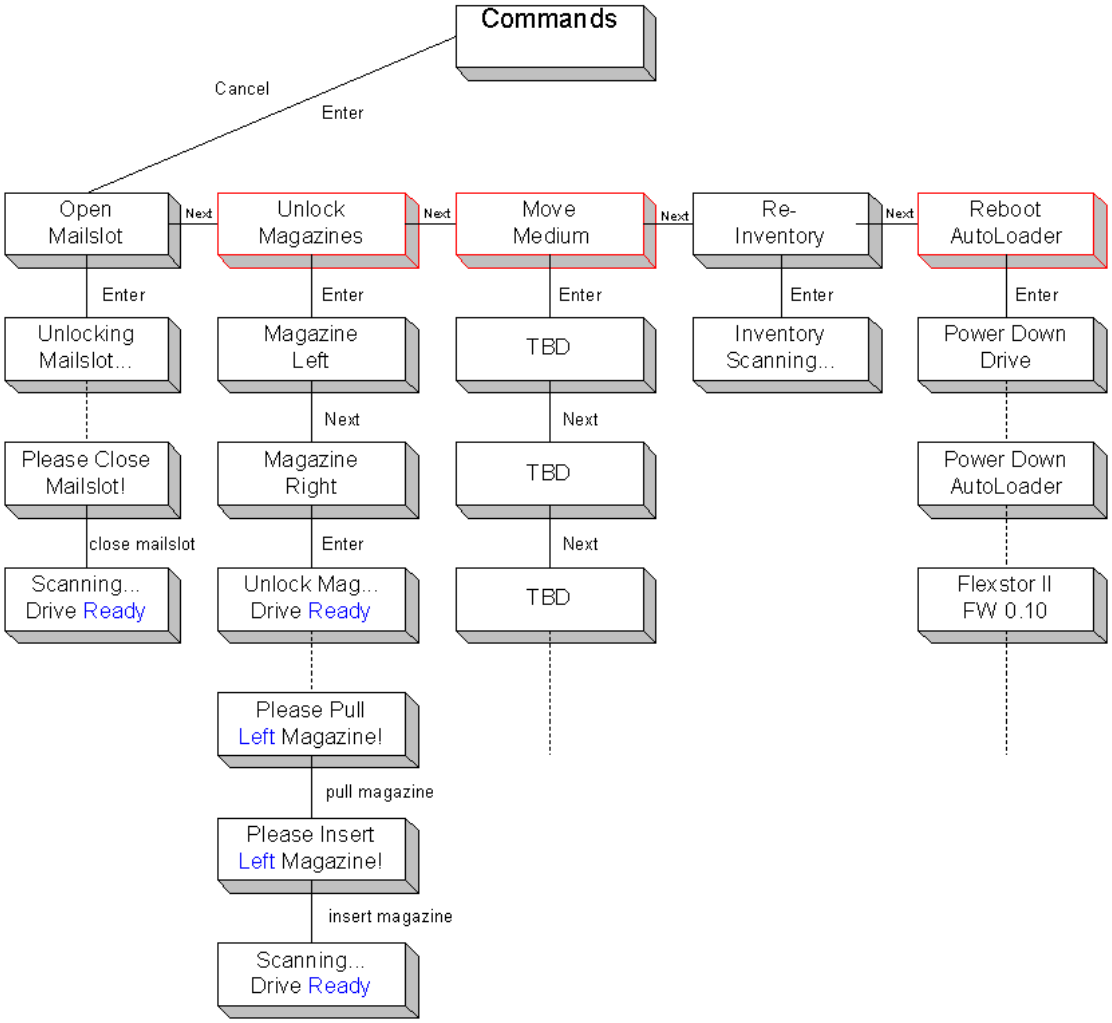


1) menu entry is only displayed if a fiber channel drive was found
2) menu entry is only displayed if a SCSI drive was found

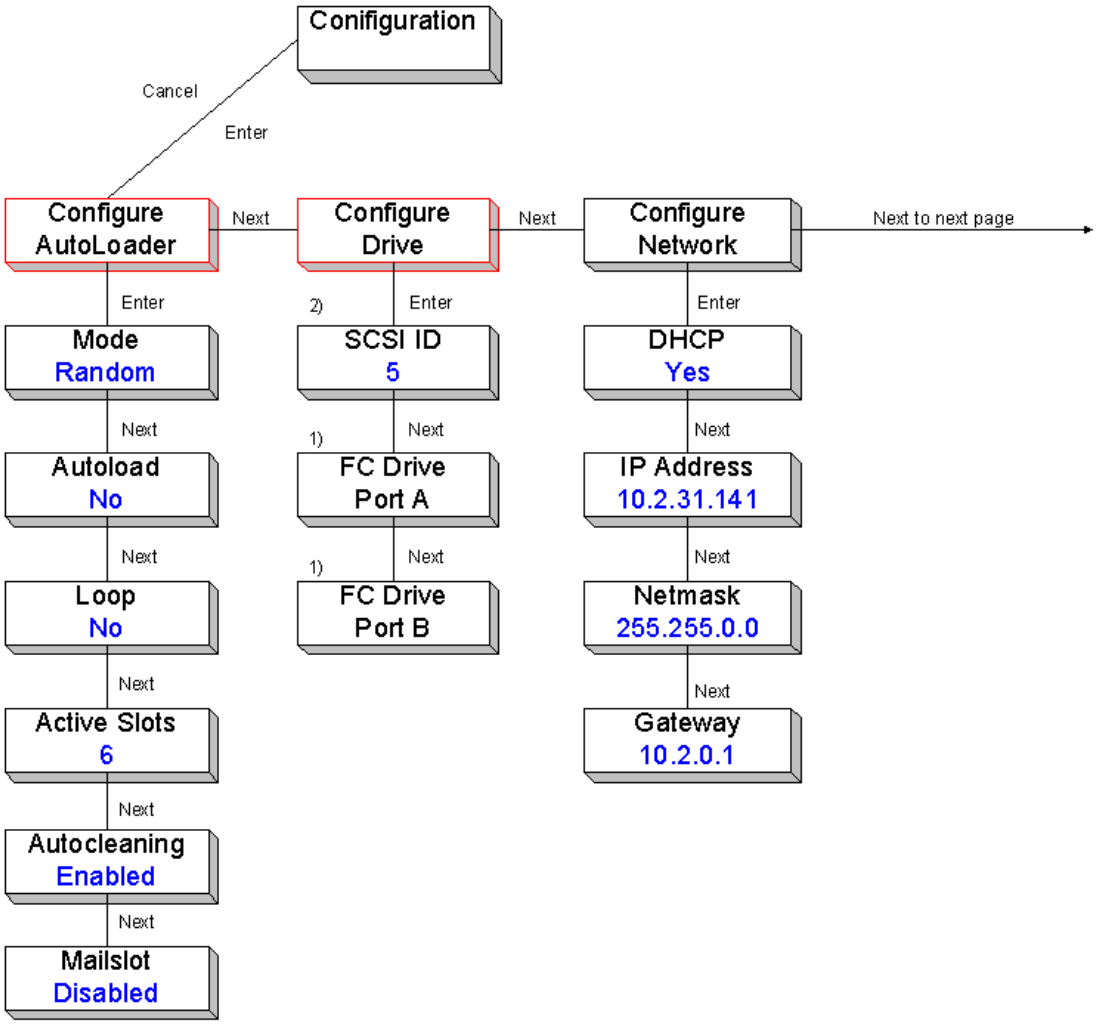
6.2.9 8-Slot Inventory Menu



6.2.10 8-Slot Commands Menu

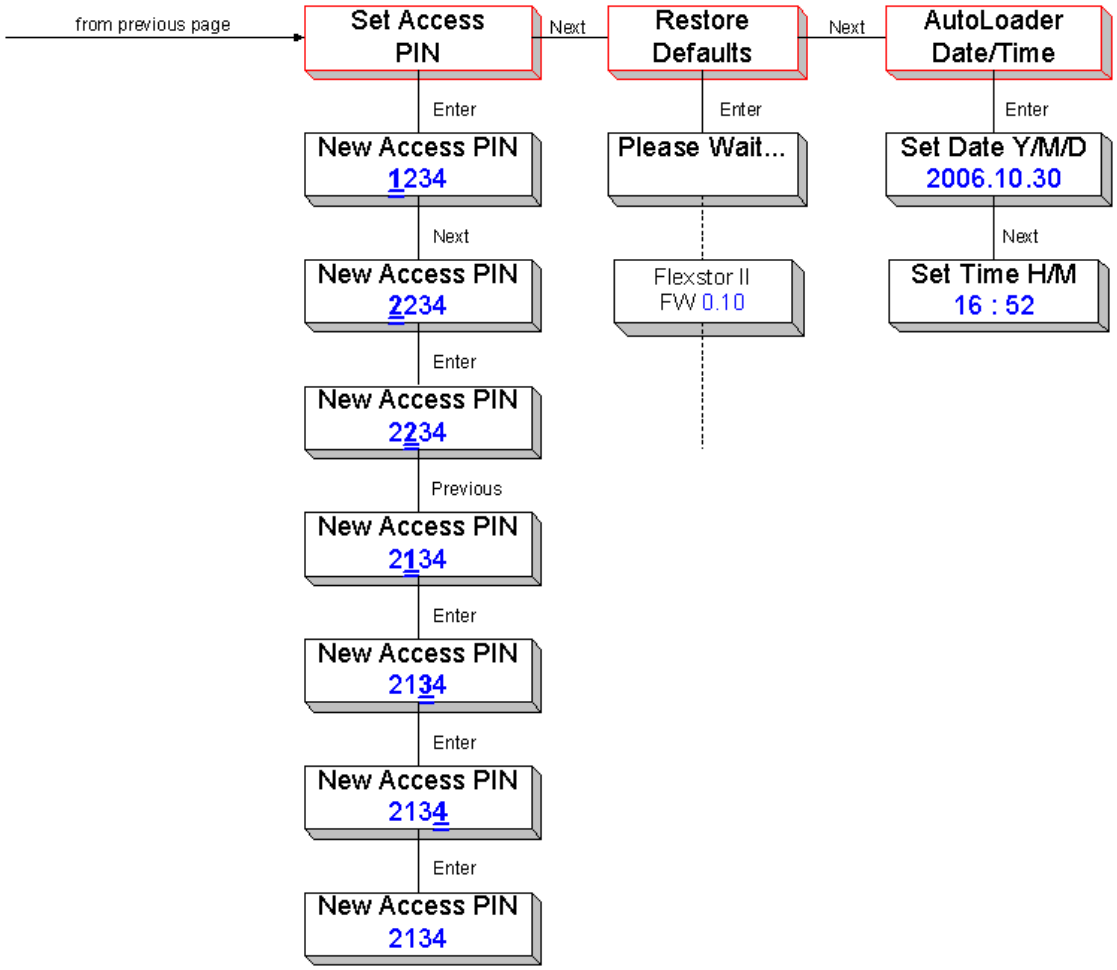


6.2.11 8-Slot Configuration Menu

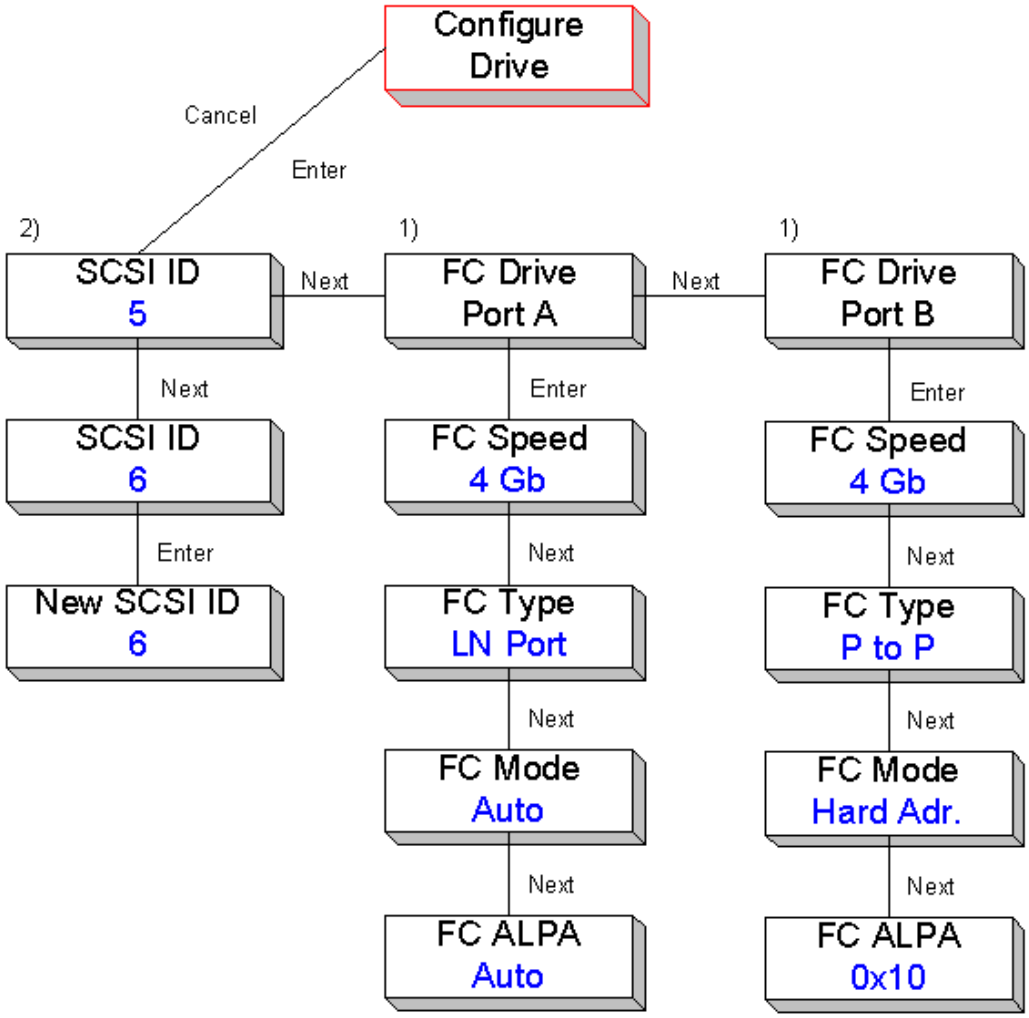


1) menu entry is only displayed if a fiber channel drive was found
2) menu entry is only displayed if a SCSI drive was found

8-Slot Configuration Menu continued:



6.2.12 8-Slot Drive Configuration Menu

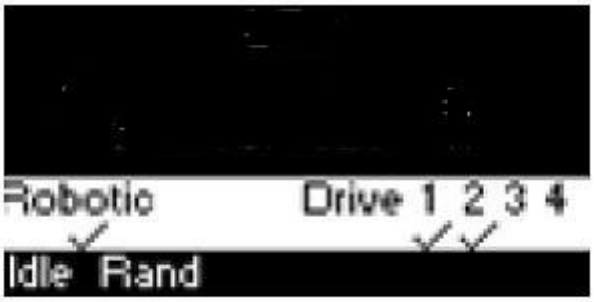


6.3 48-Slot OCP

6.3.1 48-Slot Power-Up Display

When the library powers up, or resets, it goes through several internally controlled processes that initialize and prepare the unit for normal operation. These processes are called Power-On-Self-Test (POST). While the POST is in process, the OCP will have appropriate information displayed to keep the user informed. When the library finishes POST, it will display the current library status for a defined time or until a front panel key is pressed.

After this initial status screen the home screen will be displayed until, any key is pressed. This home screen shows the overall health of the library, indicating the status of the robotic and the connected drives.



6.3.2 48-Slot: Note about LEDs

All LEDs are updated during power up and reset sequences. Upon power-up or software reset, the library will illuminate all LEDs as soon as POST allows. This will help the user to verify if all LEDs are functional. When initialization starts, all LEDs will be extinguished and the ready/activity LED will flash at a rate of approximately 1- second per cycle, 50% duty cycle. When the mechanical initialization is complete, the ready/activity LED will stop flashing and remain constantly illuminated.

If a library failure occurs, the ready/activity LED will be turned off and the error LED will be illuminated. The OCP will also display a specific error code to help identify the failure.

The following are additional operational details of LEDs.

The <Ready/Activity> LED will be lit any time the unit is powered on and functional (i.e. successfully completed the power-on self-test). The LED will blink whenever there is any tape library or drive activity. The LED will also blink when the unit is offline.

The <Clean> LED will only be lit when a cleaning required has been issued by one of the drives. The LED will be turned off after a successful drive cleaning operation is performed to the requesting drive.

The <Media Attention> LED will indicate that there is a piece of LTO media which is bad/marginal, or invalid. The LED will be cleared when all marginal and invalid cartridges have been exported from the tape library.

The <Error> LED will be lit when there is an unrecoverable (i.e. hard) drive or tape library failure. This will occur simultaneously with the hard error message displayed on the screen; the LED will remain illuminated until the error state is resolved.

6.3.3 48-Slot Input Modes

There are several modes to enter values in the different menu items. These values are selectable predefined values, toggle values (e.g. on/off) and numerical values like network addresses.

Selectable predefined values

After navigating to the menu item, the various predefined values can be selected with the <NEXT> and <PREVIOUS> button. As soon as the display shows the correct value, it may be confirmed by pressing the <ENTER> button.

Toggle values

Toggle values are used to switch between two different states like on and off. After navigating to the menu item the display shows the actual state. Pressing the <ENTER> button will switch to the possible new state. Pressing <ENTER> button a second time will take over this new state.

Numerical values

Numerical values are needed for network addresses, PIN entries, and other configuration entries. After navigating to the menu item to be changed, the actual value will be displayed and the cursor stays on the first digit. The value may be incremented / decremented with the <NEXT> and <PREVIOUS> button. After pressing the <ENTER> button the cursor is set to the next editable digit. It can be changed in the same way. After pressing the <ENTER> button at the last digit the complete entry will be stored. Pressing the <CANCEL> button will cancel the whole edit process and the old value is valid again.

6.3.4 48-Slot Power Off

Part of the operator control panel is the power on/off button. Pressing this button will initiate a controlled power down of the library (soft landing).

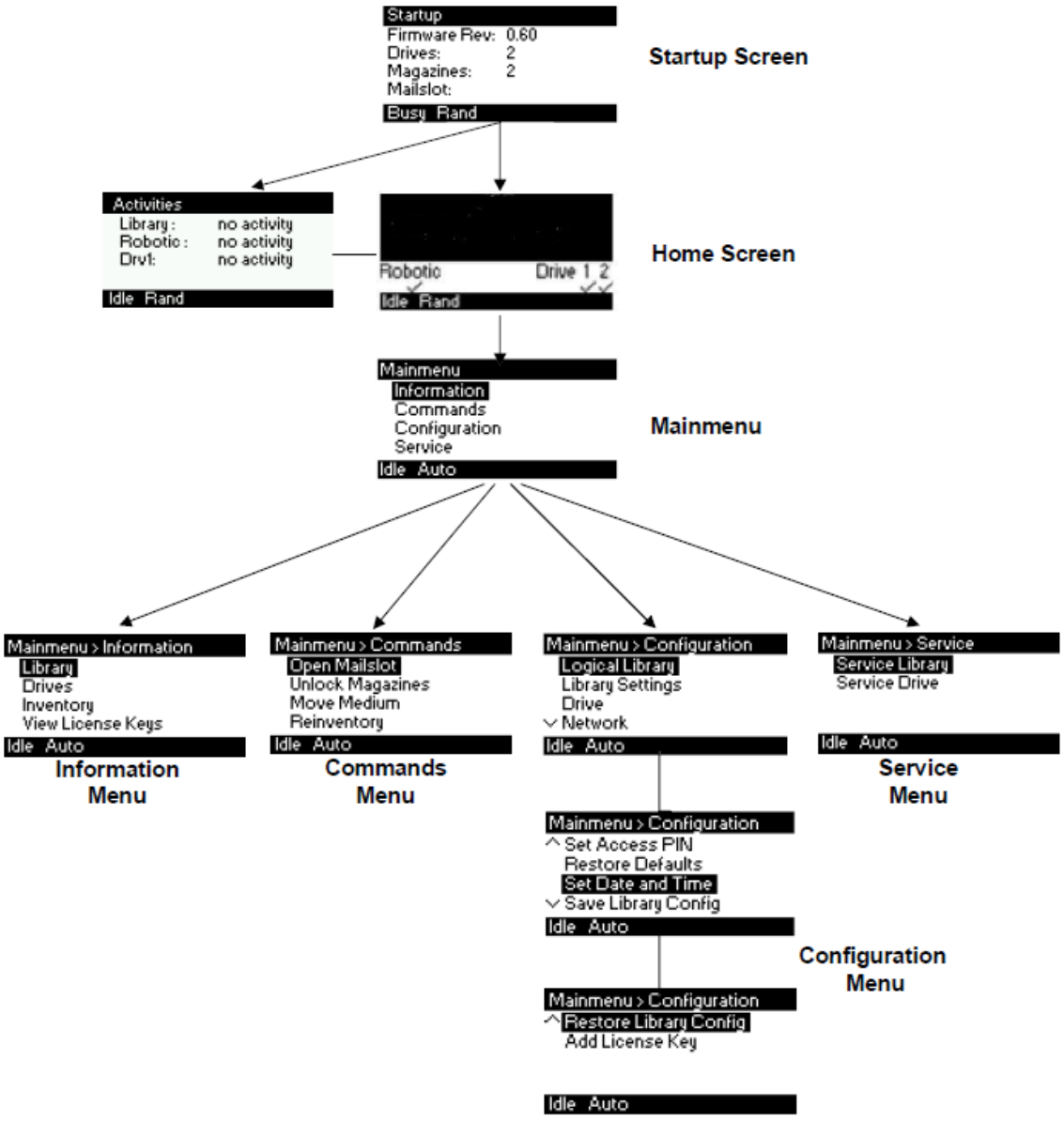
The following operations will take place before the unit shuts down completely:

- The display indicates with an appropriate message that the shutdown is in progress.
- The library controller finishes all ongoing loader and drive activities.
- The robotics is moved to its home position.
- The library controller switches off the power supply's secondary side.
- To abort the shutdown process the user has to press the <CANCEL> button within the first 3 seconds.

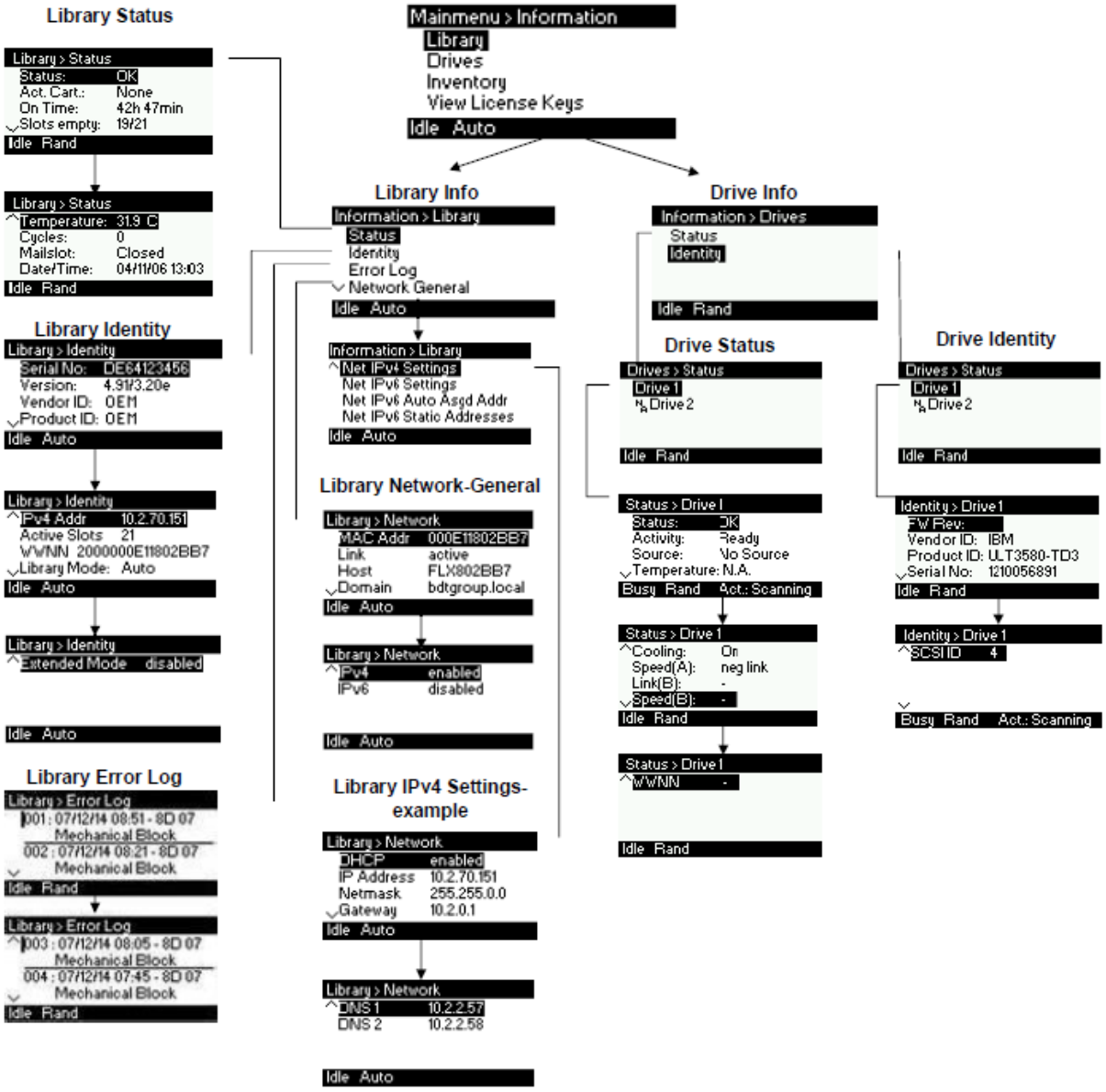
NOTE

The shutdown process may be aborted by pressing the cancel button within the first 3 seconds.

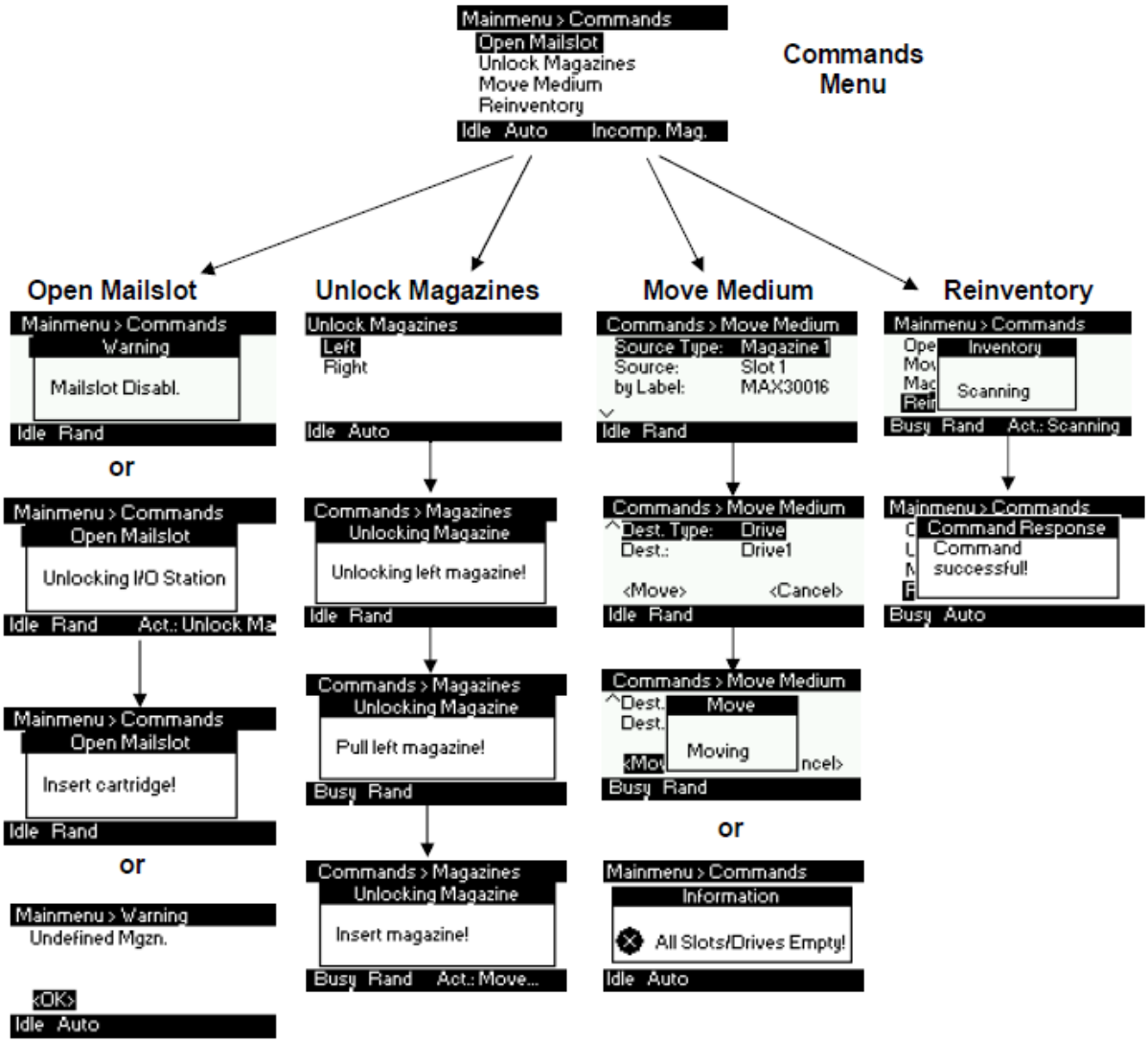
6.3.5 48-Slot Main Menu Flow Chart



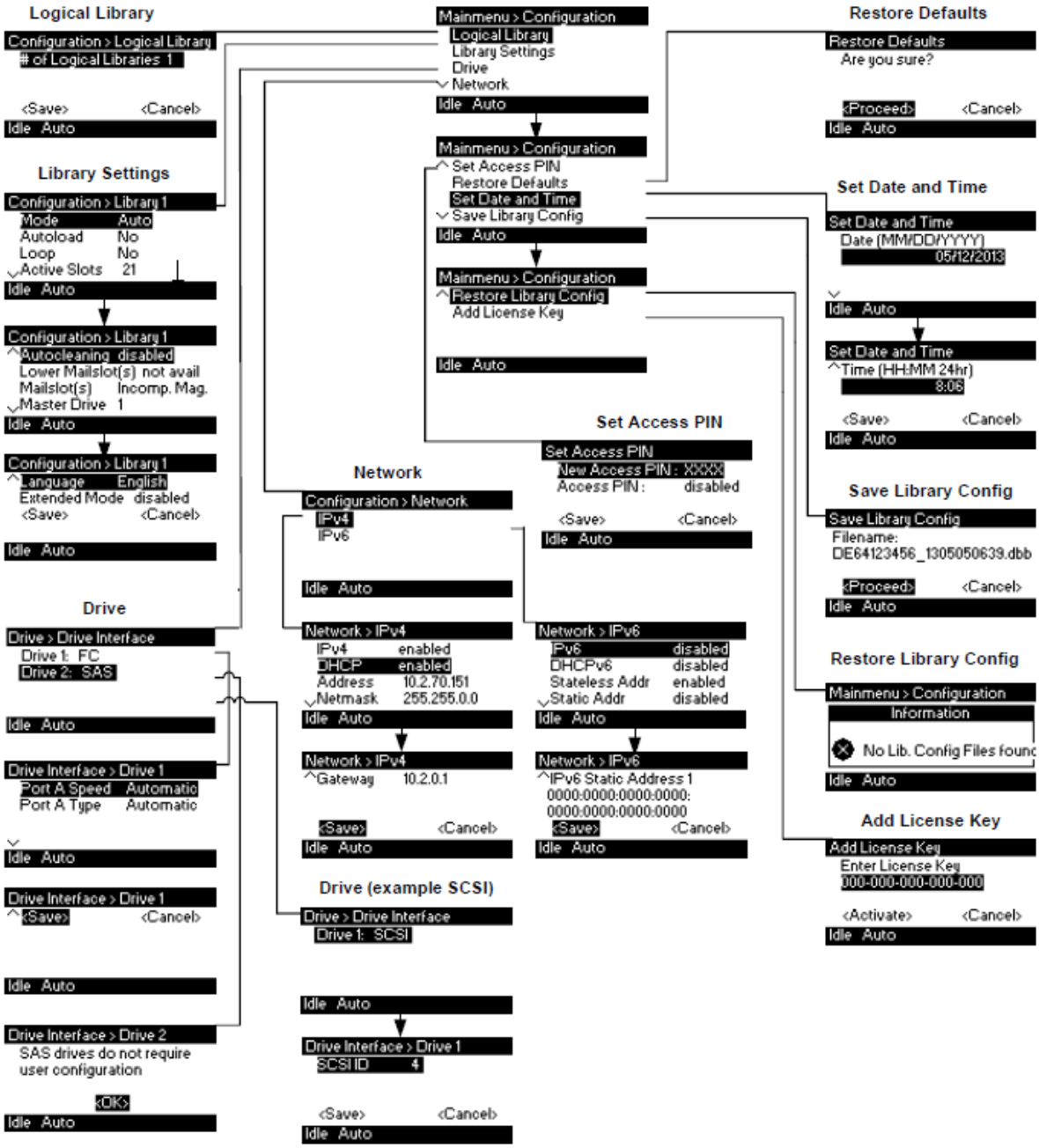
6.3.6 48-Slot Information Menu



6.3.6 48-Slot Commands Menu



6.3.7 48-Slot Configuration Menu



7. Remote Management Interface (RMI)

7.1 Overview

Many of the same operations performed locally from the operator control panel can also be performed remotely using the network connected Remote Management Interface (RMI).

The RMI lets you monitor and control the library from any computer connected to your network or through the World Wide Web (WWW). The RMI hosts a dedicated, protected internet site that displays a graphical representation of the library.

After establishing a connection to the library, open any HTML browser and enter the IP address of the library. To access the RMI, you must first set the desired static IP address at OCP or configure to use DHCP.

7.2 Operations through the RMI

The following operations are available through the RMI as explained below:

1. Identity (refer to section 7.5)

- Viewing the static library identity
- Viewing the static drive identity
- Viewing the Network identity

2. Status (refer to section 7.6)

- Viewing the dynamic library identity
- Viewing the dynamic drive identity
- Viewing the tape cartridge inventory

3. Configuration (refer to section 7.7)

- Changing the System Configuration
- Changing the Drive configuration
- Changing the Network configuration
- Setting Date/Time
- Setting error Log mode
- Setting event for Email Notification parameters
- Restoring factory

4. Operations (refer to section 7.8)

- Move Media within the library
- Determining current media
- Releasing and replacing

5. Service (not described in this guide)

- Performing General library
- Determining and updating firmware
- Reboot of the library
- Viewing Library
- Cleaning tape drive(s)

7.3 Status icons as shown by the RMI:

Symbol	Description
	The green check mark for status <Ok> indicates that the library is fully operational and that no user intervention is required.
	The yellow exclamation point for status <Warning> indicates that user intervention is necessary, but that the library is still capable of performing operations.
	The red x for status <Error> indicates that user intervention is required and that the library is not capable of performing operations.

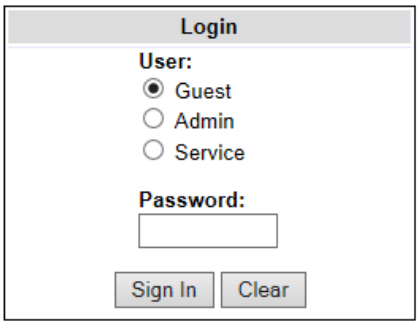
7.4 Login

To login, select the access type and enter the correct password. There are three levels of access:

- Guest (standard user level).
- Admin (administrator user level).
- Service (service user level - access by service personnel only).

Each level affects which areas you have access to and what actions you can initiate from those areas.

When provides as a library that is not shipped with a server, the Admin password is: adm001

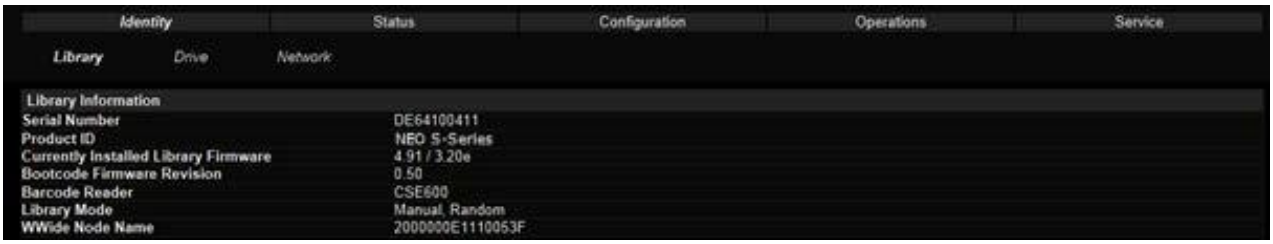


NOTE Some options of the RMI take the library offline. This inactive mode can interfere with host-based application software, causing data loss. Make sure the library is idle before attempting to perform any remote operations that will take the library offline.

7.5 Identity

7.5.1 Viewing the Static Library Identity

This page provides access to the static information about the system. No changes can be made from this page.



The following information is displayed:

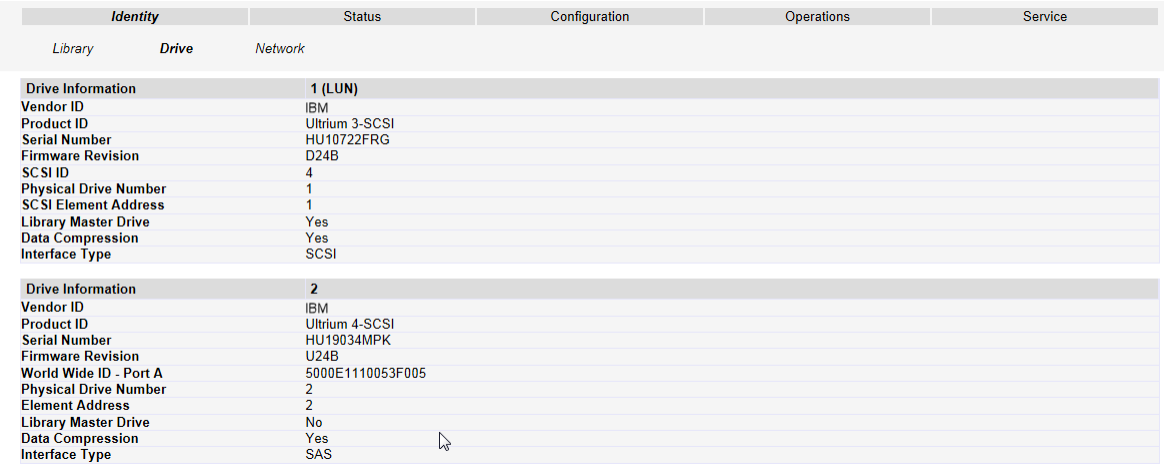
- Serial Number
- Product ID
- Currently Installed Library Firmware
- Bootcode Firmware Revision

- Bar Code Reader
- WWide Node Name
- Extended Logical Library information

If the unit has more than one partition, the properties shown in above figure will display for each partition.

7.5.2 Viewing the Static Drive Identity

This page provides access to the static information about the drive(s). No changes can be made from this page. If more than 1 tape drives are installed in the library, the information will be shown by selecting it from the pull-down menu.

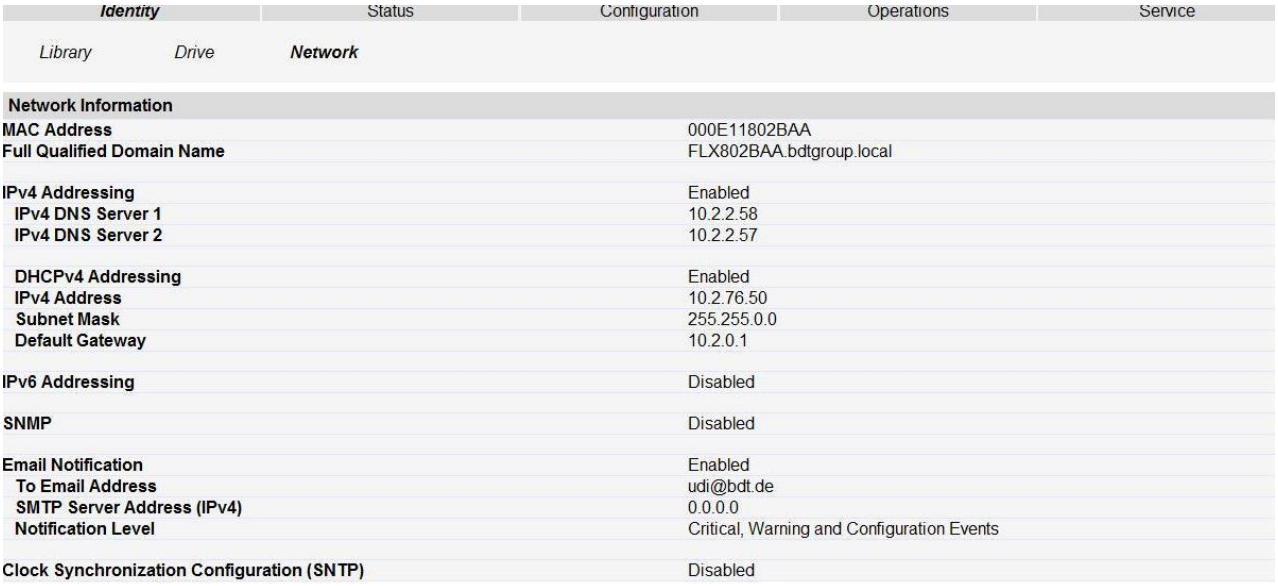


The following information is displayed:

- Vendor ID= Manufacturer identification of the drive
- Product ID= Model identification of the drive
- Serial Number= Serial number of the drive
- Firmware Revision= Operating firmware level of the drive
- World Wide ID (SCSI ID)= Unique unit identifier of the drive
- Physical Drive Number= Number indicating drives physical position within the library
- Element Address= Number indicating the logical identification of the drive
- Library Master Drive= Indicates if library interface is hosted by drive
- Data Compression= Indicates if drive hardware data compression is enabled
- Interface Type (SAS; SCSI; FC) =Indicates drives physical interface connection style

7.5.3 Viewing the Network Identity

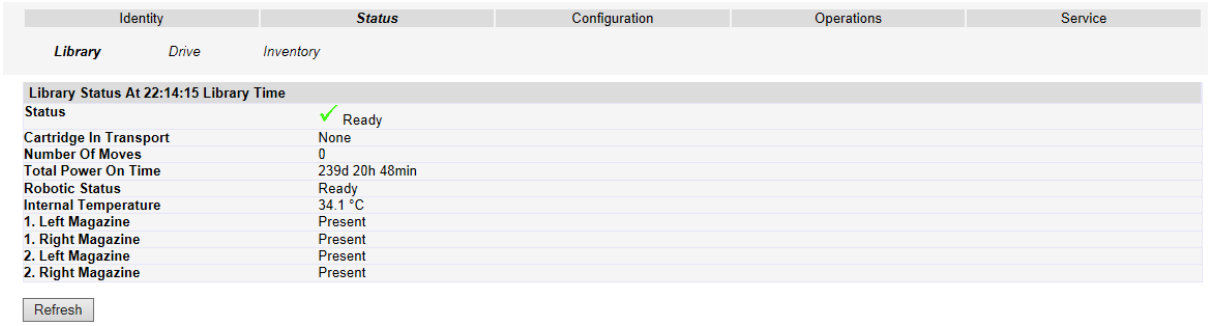
This page provides access to the network information about the connections of the library. No changes can be made from this page.



7.6 Status

7.6.1 Viewing the Dynamic Library Identity

This page displays the dynamic information about the library, such as the current status of the components.



Library status:

- Status =Indicates library is ready to accept commands
- Cartridge in Transport=Indicates robot has a cartridge
- Number Of Moves (Odometer)=Indicates total number of moves
- Total Power On Time= Indicates total library power on time
- Robotic Status=Indicates robot is ready to accept commands
- Internal Temperature= Indicates internal unit temperature in degrees centigrade
- Presence of Magazine(s)= Indicates presence of tape magazines

System status:

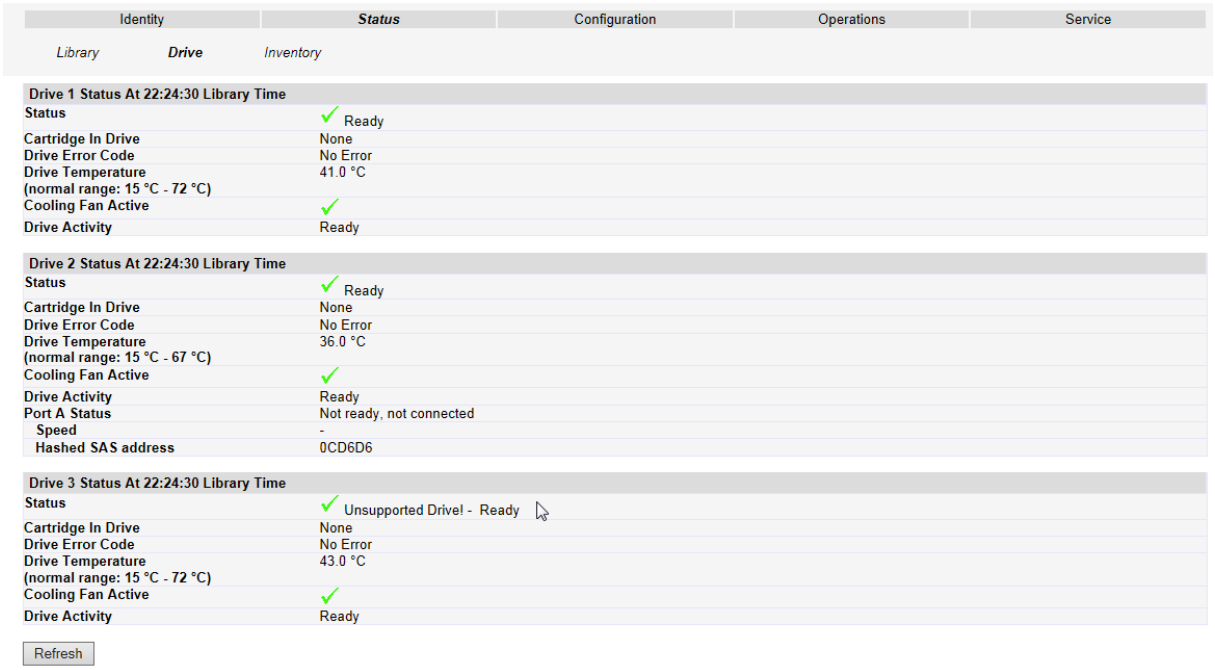
- Status= Overall library status
- Drive Status= Individual drive status (there will be one entry for each installed drive).
- Slots (Free/Total) = Shows the free and total slots of the library
- Mail slot= Indicates if an Import/Export mail slot is configured
- Library Time= Time stamp displayed in 24-hour format
- Auto Clean Status= Only if the Auto Clean Option enabled the status will be displayed here
- Power Supply Status= If optional redundant power supply is installed status will be displayed

7.6.2 Viewing the Dynamic Drive Identity

This page provides detailed information about all drives that are present in the library. If multiple tape drives are installed in the library, the information will be shown by selecting it from the pull-down menu.

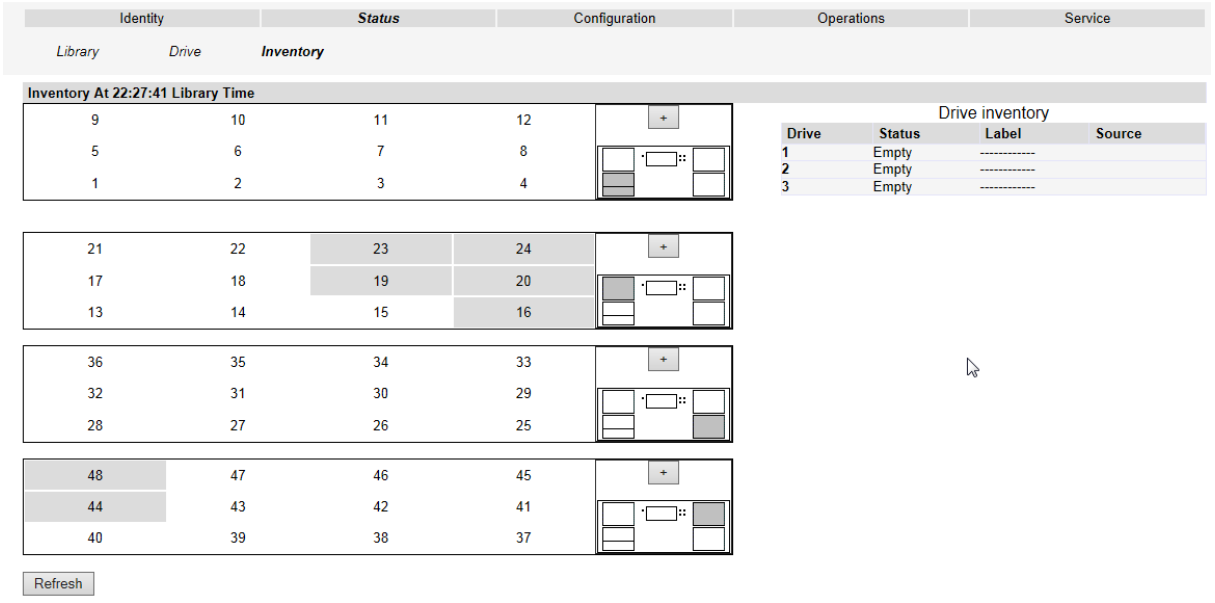
The following information is displayed:

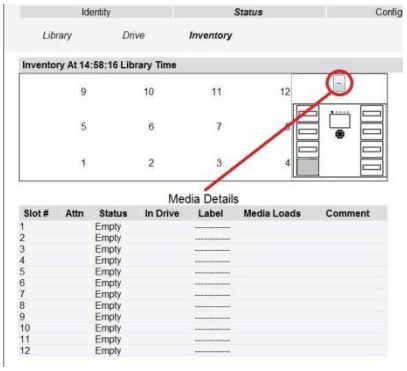
- Drive status (up to 4 full-high or 8 half-height tape drives):
- Status
- Cartridge in Drive
- Drive Error Code
- Cooling Fan Active
- Drive Activity
- Drive Port (if present)



7.6.3 Viewing the LTO Cartridge Inventory

This page provides detailed information about the tape inventory in the library. A summary of each magazine is shown. To get detailed information, click on the <+> button. This will expand the display for the specified magazine and provide detailed cartridge information. If more magazines are installed in the library, the information will be shown by selecting it from the pull-down menu.



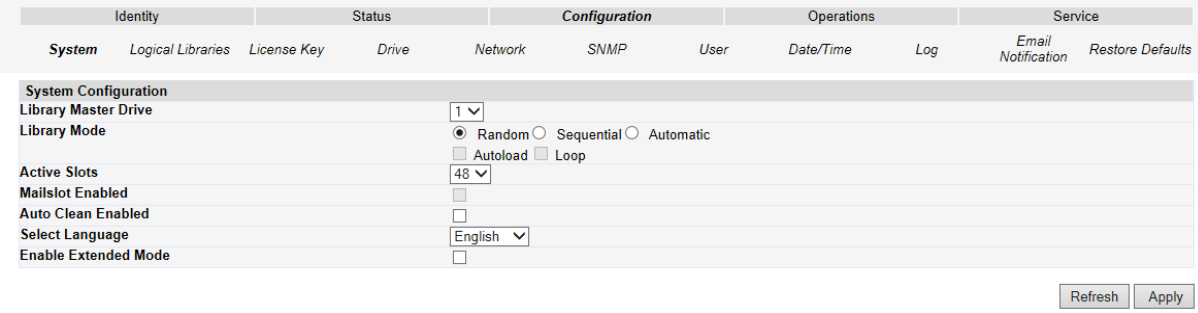


<+> button activated

7.7 Configuration

7.7.1 Changing the System Configuration

This page allows the user to change the system configuration.



The following information is displayed:

1 Library Master Drive

- This is the drive number the library LUN will be hosted by (appear as a LUN of)

2 Library Mode

- Specifies the library mode for the library. The library supports three behavior modes: Random, Sequential, and Automatic.

  <Random> In random mode, the library does not automatically load tapes into the tape drives. The random mode is used with a full featured or a robotics-aware backup application and is the most common mode of operation.

  <Sequential> In sequential mode, the library automatically loads and unloads tapes from the tape drive. The sequential mode is used when the backup software is not robotics-

aware or was designed for standalone drives only.

<Automatic> This is the default mode. In automatic mode, the library switches from sequential mode into random mode when it receives library SCSI commands through its unique LUN ID. In sequential mode, the user can set the <Loop> and <Autoload> options. In the auto load mode, the library automatically loads the tapes from the lowest-numbered full slot into the tape drive. In loop mode, the original first tape in the sequence is reloaded after the library has cycled through all available tapes.

3 Active Slots

- In this field the user can select the number of slots in the library that are available to the backup software.

4 Mail slot Enabled

- Enabling the mail slot in the library will reduce the total number of storage slots.

5 Auto Clean Enabled

- When auto clean is enabled, the library automatically loads a cleaning cartridge when a tape drive needs to be cleaned. The library identifies a tape as a cleaning tape if it has a bar code label that starting with CLN or after an unlabeled cleaning tape has been loaded into the tape drive.

6 Select Language:

- The select language menu allows the user to specify the language displayed by the RMI. The default display language is English. Possible alternate language selections are German, Italian, Spanish, and French. For the selection to take affect the desired language must be selected in the drop-down menu and the apply button pushed. The web screen must then be refreshed.

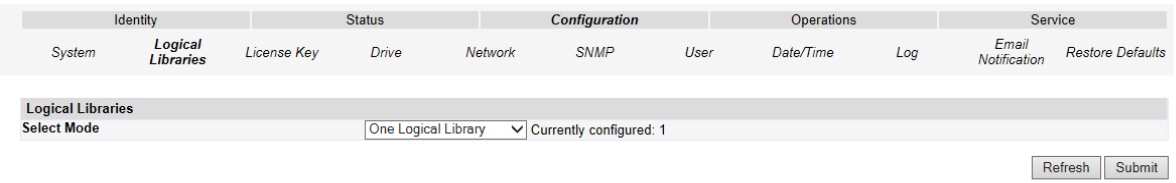
7 Enable Extended Mode.

- Is for use with the hardware based library extender option, which is not applicable for OEM's.

Changes will only be applied after the <Apply> button is selected. After selecting, a warning page will inform the user of the impact of their proposed change. In some cases, a pop-up screen will ask the operator to confirm their change. Many changes will also require a reboot.

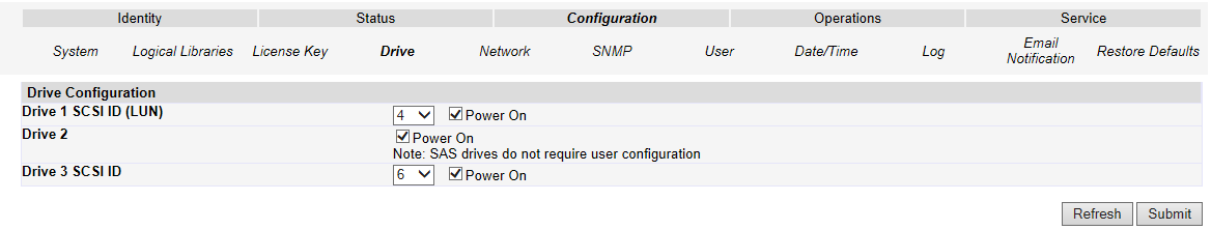
7.7.2 Logical Libraries

The logical libraries drop down allows the user to partition one library into smaller “logical libraries”. Each logical library must contain at least one tape drive.



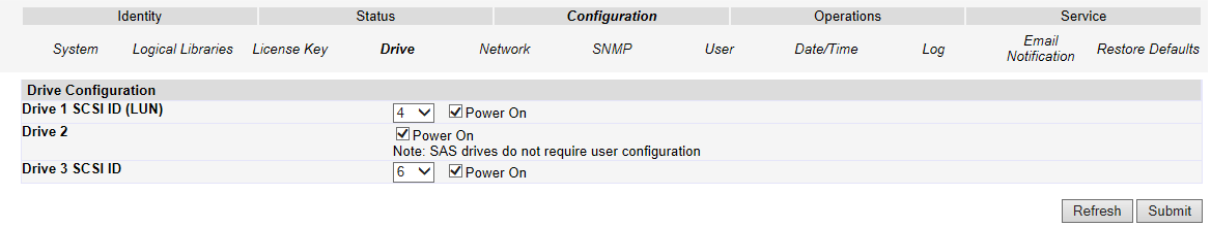
7.7.3 Changing the License Key Configuration

This page allows the user to add additional functionality to the unit by entering license key information. Please contact your supplier to see if this functionality is applicable in your model.



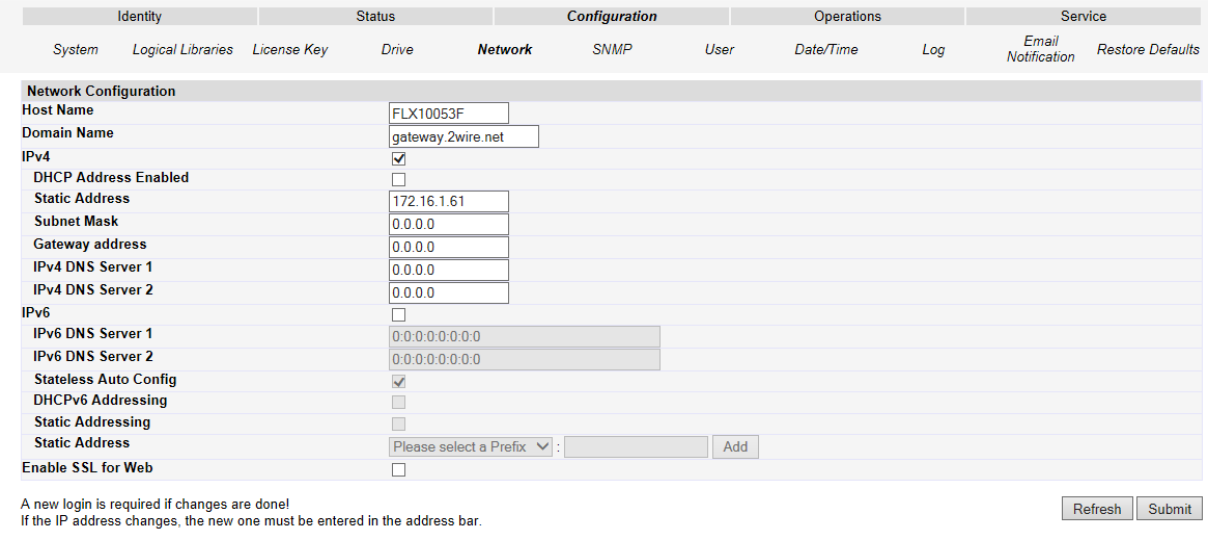
7.7.4 Changing the Drive Configuration

This page shows the current configuration of all tape drives in the library and allows modification to the configuration. The user is also able to select the <Power On> check box through this page that activates the drive. In the following figure example tape drive are shown. Drive ID can be changed by using the drop-down menu and selection of another ID. By pressing <Submit> the id is changed.



7.7.5 Changing the Network Configuration

This page shows the current network configuration of the library related to the RMI access and allows modification to the configuration. When a change is requested, a pop-up window will ask to confirm the changes. Changes in this menu may affect the ability to access the RMI unless the correct IP address is resolved.



Changes that can be made are:

- Host Name: In this box enter the name you wish to use to use to address this library in the future. It is recommended that you use a name that is relevant to its location and or its purpose. The Host Name may be up to 15 characters long. allowed characters are: [A-Z], [a-z], [0-9], hyphen [-] and period [.] not allowed characters are: hyphen [-] as the first character, blanks or consecutive hyphens [-]

- Domain Name: In this box is the domain the library is registered in and may be updated by editing the name and submitting the changes. The Domain Name may be up to 39 characters long.
    - Allowed characters are: [A-Z], [a-z], [0-9], hyphen [-] and period [.]
    - Characters that are not allowed are: hyphen [-] as the first character, blanks or consecutive hyphens [-], blanks or consecutive hyphens [-] as the first or last character of a label (A period [.] is the delimiter of domain name labels!)
    - The sum of characters of the Host Name and the Domain Name may not exceed 15+39=54 characters.
- IPv4
    - DHCP Address Enabled-Used to set the RMI to seek an assigned IP address from the network's DHCP server.
    - Static Address-This field is only active with DHCP address off (unchecked), a static IP address may be programmed in this field.
    - Subnet Mask-Used to set the Network Mask, contact your Network administrator to receive this setting address if required.
    - Gateway address- Used to set the Gateway Address, contact your Network administrator to receive this setting address if required (used when an IP address does not match any other routes in the routing table)
    - IPv4 DNS Server 1 This is the IP address of your name server (DNS server). A DNS server allows the library to communicate with other network clients via their host name. If

you have a DNS Server on your network, enter the IP address in this field.

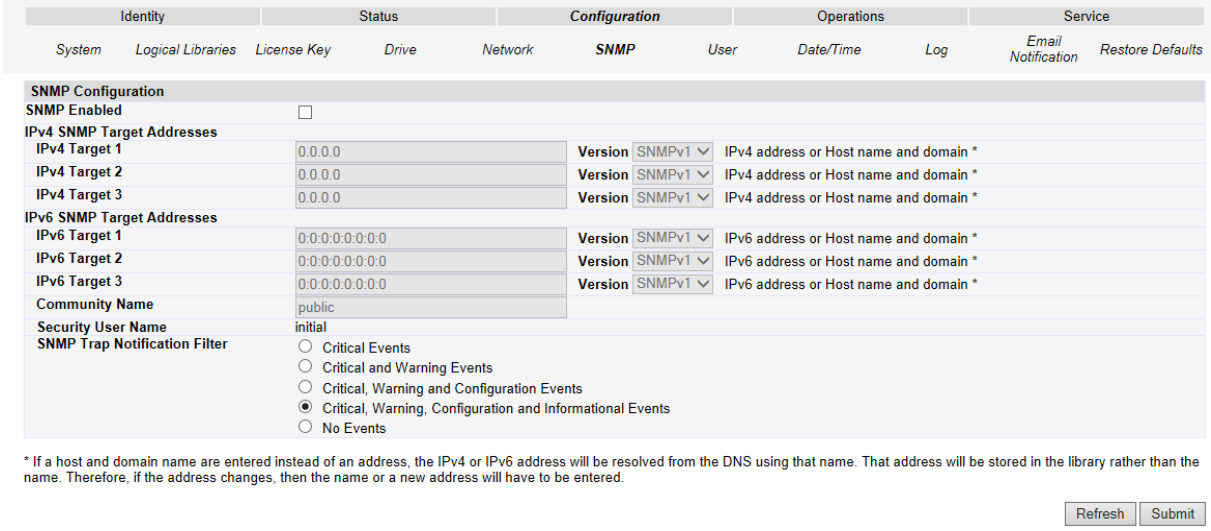
- IPv4 DNS Server 2 This is the alternate IP address of your name server (DNS server). A DNS server allows the library to communicate with other network clients via their host name. If you have a DNS server on your network, enter the IP address in this field.

- IPv6
  - IPv6 DNS Server 1 This is the IP address of your name server (DNS server). A DNS server allows the library to communicate with other network clients via their host name. If you have a DNS Server on your network, enter the IP address in this field.
  - IPv6 DNS Server 2 IPv4 DNS Server 2 This is the alternate IP address of your name server (DNS server). A DNS server allows the library to communicate with other network clients via their host name. If you have a DNS server on your network, enter the IP address in this field.
  - Stateless Auto Config o DHCPv6 Addressing- Used to enable DHCP addressing assignment from network name server o Static Addressing-Used to enable a static IP address for the RMI access
  - Static Address- Setting of the static IP address for the RMI

- Enable SSL for Web

7.7.6 Changing the SNMP Settings

If a host and domain name are entered instead of an address, the IPv4 or IPv6 address will be resolved from the DNS using that name. That address will be stored in the library rather than the name. Therefore, if the address changes, then the name or a new address must be entered.



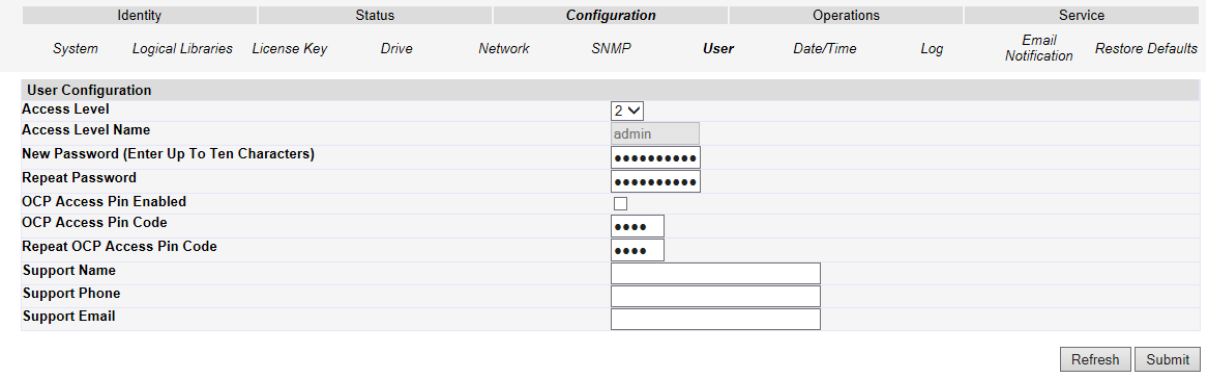
Changes that can be made are:

- SNMP
- SNMP Enabled
- IPv4 SNMP Target Addresses
    - IPv4 Target 1
    - IPv4 Target 2
    - IPv4 Target 3
- IPv6 SNMP Target Addresses
    - IPv6 Target 1
    - IPv6 Target 2
    - IPv6 Target 3
- Community name
- Security User Name
- SNMP Notification Filter
    - Critical Events
    - Critical and Warning Events
    - Critical, Warning and Configuration Events
    - Critical, Warning Configuration and Information Events
    - No Events

7.7.7 Changing User Accounts

This page allows the user to modify the user accounts for the 3 different access levels as follows:

- **Guest:** allows viewing of the tabs status and identity
- **Admin:** allows viewing and modification of all possible entries beside the ones mentioned on Service
- **Service:** allows viewing and modification of all possible entries incl. on the configuration tab the Trace level and Trace filter selection options. In any other log level these are disabled.

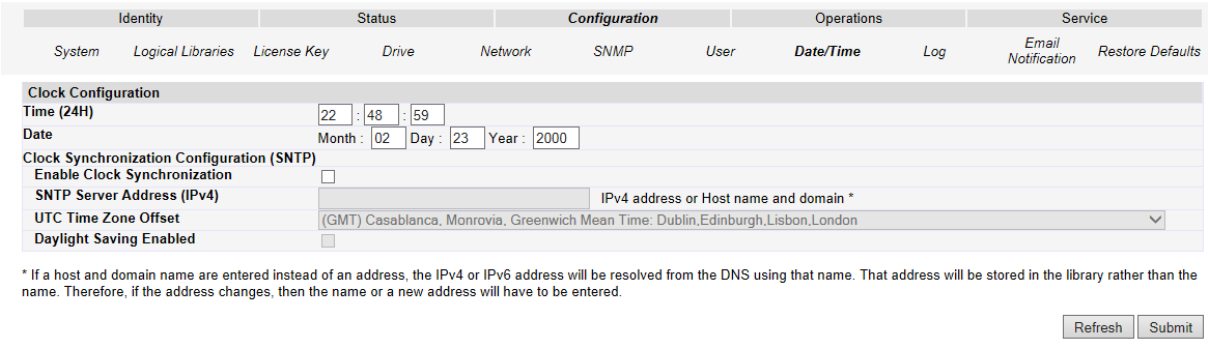


Changes that can be made are:

- Access Level: Choose from 1 (Standard), 2 (Admin), or 3 (Service).
- Access Level Name: The name associated with the chosen access level.
- New Password: The password can be a maximum of ten characters.
- Repeat Password: Enter the new password again.
- OCP Access PIN Enabled: Select this item, if you would like the Operator Control Panel display to be password protected.
- OCP Access PIN Code: The password for accessing the OCP when the OCP Access PIN is enabled; max 4 characters
- Repeat OCP Access PIN Code: Enter the OCP Access PIN Code again.
- Support Name: The name of the individual within your company to contact for RMI or library support; max 30 characters
- Support Phone: The phone number of the individual within your company to contact for RMI or library support; max 30 characters
- Support Email: The email address of the individual within your company to contact for RMI or library support; max 30 characters

7.7.8 Setting Date/Time

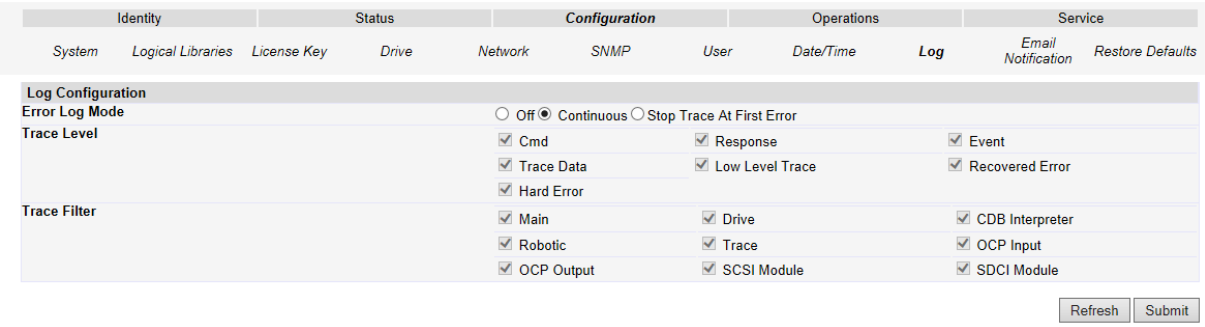
This page allows the user to set the time and date, and how it will be displayed.



Changes that can be made are:

- Clock Configuration
- Time (24 hour format) : hh:mm:ss
- Date: MM:DD:YYYY
- Clock Synchronization Configuration (SNTP):
    - Enable Clock Synchronization: check box=checked status means enabled and the unit will attempt to synchronize its clock with an external time source, the following apply;
    - SNTP Server Address (IPv4): This is the IP address of the network SNTP time server, also Host name and domain can be used and may be a maximum of 40 characters
    - UTC Time Zone Offset: This drop down menu allows the administrator to select the appropriate time zone offset from so the time is displayed in the actual local time.
    - Daylight Saving Enabled: Provides for automatic offset of daylight savings time

7.7.9 Setting Error Log Mode

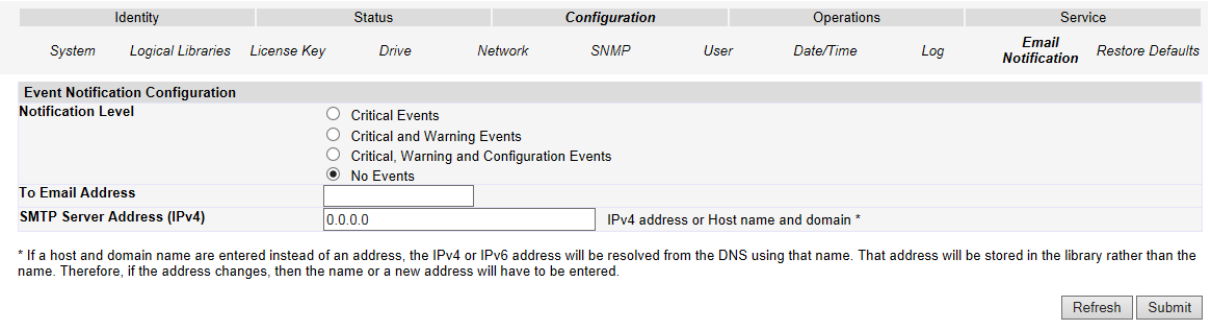


Selections that can be made are:

- Error Log Mode
- Trace Level
- Trace Filter

7.7.10 Setting Email Notification Parameters

This page allows the user to modify the event notification parameters.

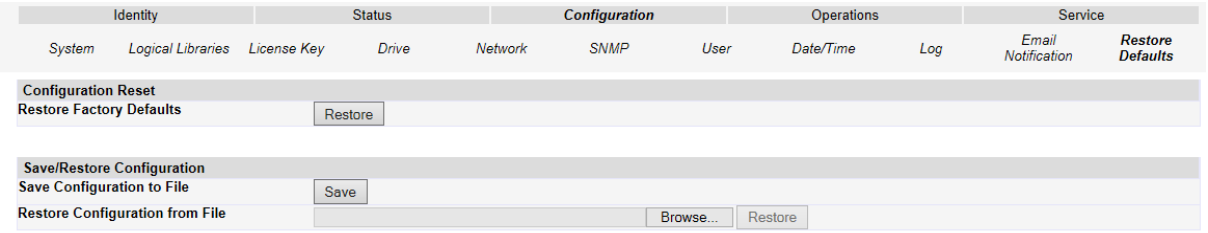


Changes that can be made are:

- Notification Level: Critical / Warning / Configuration events
- To Email Address: max 40 characters
- SMTP Server Address: IPv4 address or Host name and domain

7.7.11 Restoring factory Defaults

This page allows the user to reset the configuration to the factory defaults, restore vital product data, and save vital product data.



Selections that can be made are:

Configuration Reset

- Restore factory defaults: Selection of this button will restore all factory default settings. Please note that OEM library applications may require operational settings which differ from the factory default settings. Please consult your system vendor to verify proper operational settings of the unit after a restore to factory defaults.

Save/Restore Configuration

- Save Configuration to File: The save configuration button will save the current library settings to a file which can later be uploaded back to the library to restore the settings. Library configuration files have a ".dbb" file extension with a file name format structure consisting of the unique 10 character library unit serial number followed by a space, followed by a date time stamp formatted "YYMMDDTTTT" (YY= last two digits of current year, MM = month number, DD = date, TTTT= Hour/minute time stamp (24 hour time format)).

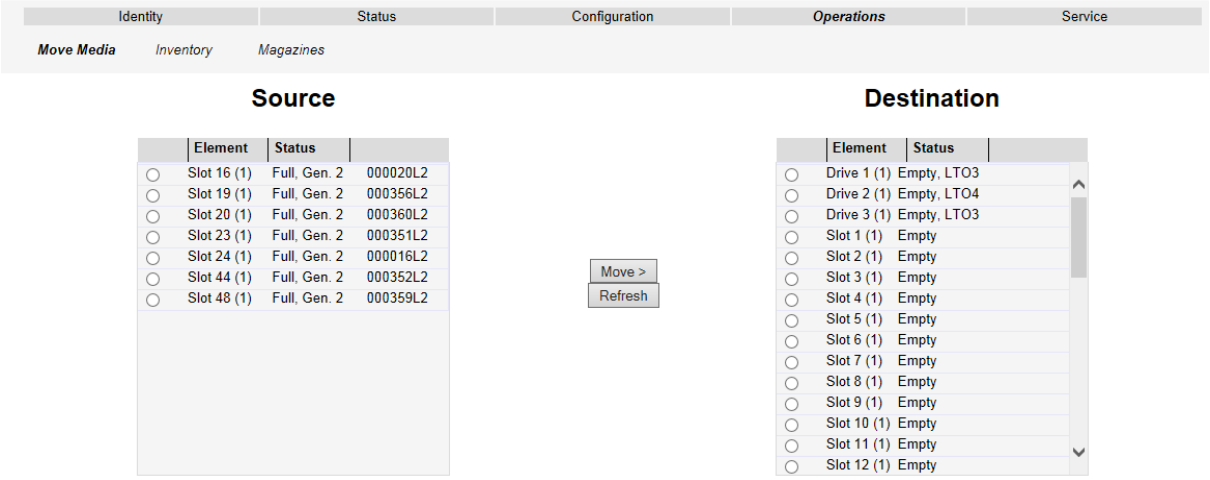
- Restore Configuration from File: The restore configuration allows the administrator to use the

browse button to select a path to a previously generated configuration file. Once the correct file is located the restore button is used to upload the file back to the library.

7.8 Operations

7.8.1 Moving Cartridges within Library

This page allows the user to move tape cartridges within the library.



Select the source and destination and then click the <Move> button to move a tape cartridge.

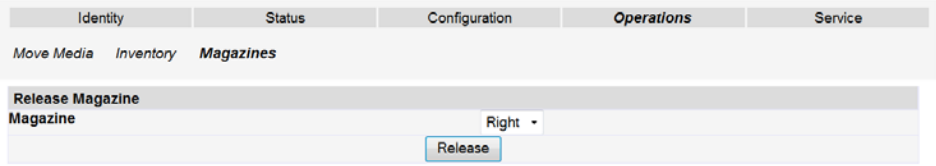
7.8.2 Determining the Current Cartridge Inventory

This page allows the user to rescan the library to determine the current media inventory.

Inventory scan will only be applied after the <Rescan> button is selected.

7.8.3 Releasing and Replacing Magazines

This page allows the user to release the right or left magazine(s) from the library. All magazines will be released for the side selected.



Select the magazine in the pull-down menu and then click the <Release> button.