

FC420 Fibre Channel Bridge Quick Reference Guide

This Quick Reference Guide explains how to install one FC420 Fibre Channel bridge in an ATL M1500 library, or up to three FC420 bridges in an ATL M2500 library.

If you are unfamiliar with any of the information or procedures in this document, the Quantum Help Desk is ready to assist you 24 hours a day, 7 days a week. To reach the Help Desk, call the number for your area listed in the *Quantum ATL M-Series User's Guide* (PN 6423002).

This document and others related to the ATL M-Series libraries are provided in PDF format on the *Quantum ATL M-Series Library User's Documentation CD* (PN 6423013).

Note: Adobe Acrobat Reader is required to view and print PDF documents. To download a free copy of Adobe Acrobat Reader, go to www.adobe.com.

Step 1: Prepare for Installation

- 1 Make sure your system meets the following requirements:
 - Point-to-point/fabric or arbitrated public or private loop topology
 - For fabric configurations, a Quantum-approved Fibre Channel switch
 - Quantum-approved network management software package
 - Windows® NT 4.0 SP6 or later, Windows 2000 SP2 or later, Solaris® 8 and 9, or other Quantum-approved operating system

Note: For a complete list of Quantum-approved networking hardware, software, and operating systems, contact the Quantum Help Desk or an authorized Quantum sales representative.

Note: The FC420 Fibre Channel bridge can only be used in LVD-configured libraries.

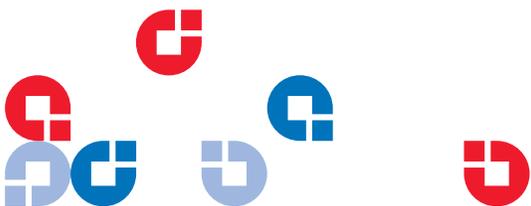
Make sure you have the tools recommended for this procedure:

- #1 PHILLIPS® screwdriver
 - Flat blade screwdriver
- 2 Verify the contents of the FC420 Bridge Upgrade Kit, referring to the *Quantum FC420 Upgrade Kit Contents List* (PN 6473023).

Caution: The small form-factor pluggable (SFP) connector on the FC420 bridge is removable; however, the SFP connector should only be removed by authorized repair personnel. Removal of the SFP connector may void the warranty.

- 3 Take precautions to prevent electrostatic discharge (ESD). These precautions include:
 - Wearing a properly grounded antistatic wrist strap
 - Wearing other antistatic apparel (smock, footwear, etc.)
 - Handling library components with care and keeping the FC420 bridge in its antistatic packaging until you are ready to install it

Caution: Failure to take adequate antistatic precautions may result in damage to the FC420 bridge or other library components.



Step 2: Install FC420 Bridge(s)

- 1 Turn off the library by pressing the power switch on each power supply at the back of the library.
- 2 Remove the power cable from the back of the library.
- 3 If you are installing the first FC420 bridge in the library, use a flat blade screwdriver to loosen the two large thumbscrews securing the primary electronics module to the back of the library (see figure 1), then pull the primary electronics module from the chassis using the round handles.
- 4 If you are installing a second or third FC420 bridge in an ATL M2500 library, remove the six screws that secure the secondary electronics module to the back of the library.

Save the six screws for reinstallation of the secondary electronics module.

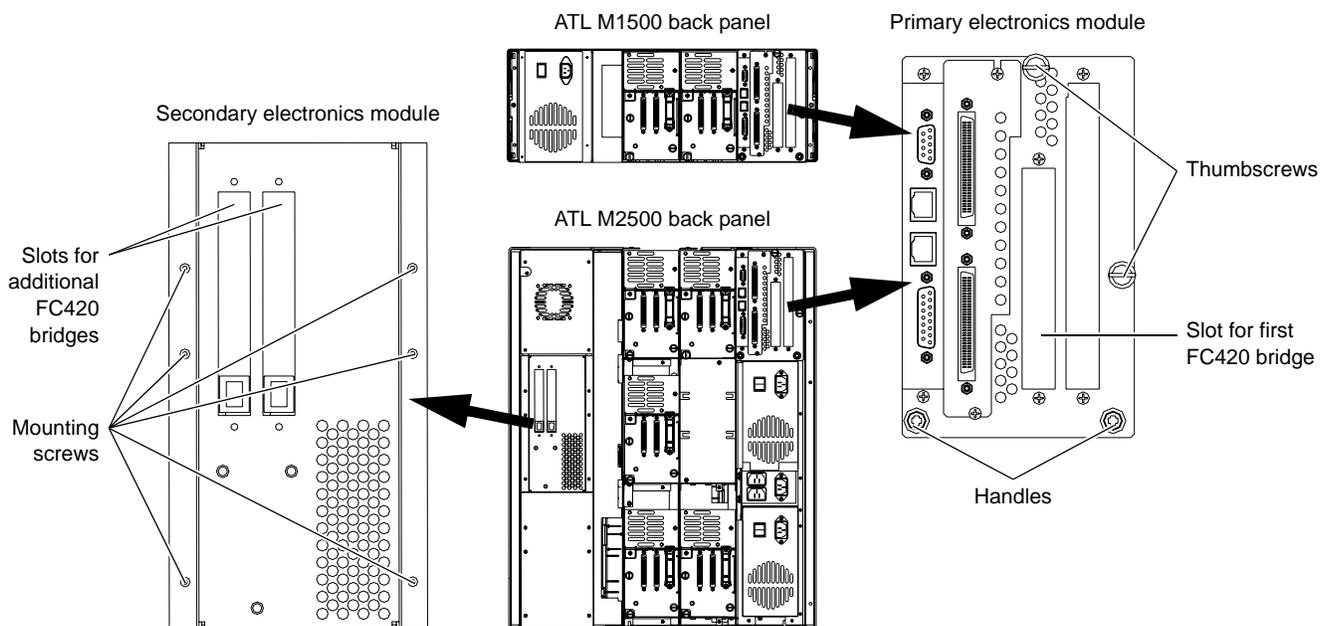


Figure 1 Removing the Primary and Secondary Electronics Modules

- 5 Remove the two screws securing the expansion slot cover plate to the back of the electronics module and remove the cover plate.
Save the screws for use later in this installation. Save the cover plate for future use.
- 6 Remove the screws securing the hold-down clamp.
Save the clamp for use later in this installation.
- 7 Carefully remove the new FC420 bridge from its antistatic packaging.

Caution: Hold the FC420 bridge by the edges, avoiding contact with the components and connectors.

- 8 Insert the FC420 bridge into the expansion slot and press it down gently until it is seated securely.
- 9 Secure the FC420 bridge to the electronics module using the two mounting screws you removed in step 5.
- 10 Repeat steps 5 through 9 to install any additional FC420 bridges.
- 11 Reattach the hold-down clamp to secure the FC420 bridge in the slot.
- 12 Slide the electronics module back into the library chassis until it is fully seated.
- 13 Secure the electronics module to the chassis. To secure:
 - The primary electronics module, use a flat blade screwdriver to tighten the two thumbscrews.
 - The secondary electronics module, reinstall the six screws you removed in step 4.

Step 3: Cabling the FC420 Bridge(s)

Each FC420 bridge has 2 SCSI ports and 1 Fibre Channel port. Follow these guidelines to establish SCSI and Fibre cabling:

- If the library is equipped with DLT8000 tape drives, the FC420 bridge can accommodate up to four drives per SCSI port.
- If the library is equipped with SDLT 220, SDLT 320, or HP LTO Gen 1 drives, the FC420 bridge can accommodate up to two drives per SCSI port when the bridge is set for 2 Gb data transfers, or one drive per SCSI port when the bridge is set for 1 Gb data transfers.
- If the library is equipped with HP LTO Gen 2 or SDLT 600 drives, the FC420 bridge can accommodate one drive per SCSI port when the bridge is set for 2 Gb data transfers.

Note: HP LTO Gen 2 and SDLT 600 drives cannot be used when the bridge is set for 1 Gb data transfers.

- To maximize data throughput, reduce the number of tape drives per FC420 SCSI port.
- The open connector on each drive must be terminated.
- Because of the physical characteristics of the SCSI cable connectors, attach a SCSI cable from the upper SCSI port on the SCSI controller in the primary electronics module to a SCSI connector on drive 1 first, then attach a SCSI cable from SCSI port 0 on the FC420 bridge (the left VHDC1 connector) to the lower SCSI port on the library SCSI controller.
- To ensure access to the library robotics, all Fibre Channel cables from the library should connect to a switch or similar device serving the storage area network (SAN).

For complete cabling instructions, refer to the *FC420 Fibre Channel Bridge Option User's Guide* (PN 6473031).

Step 4: Configure FC420 Bridge Firmware

A command-line interface (CLI) is provided to assist with FC420 bridge configuration, maintenance, and system diagnostics. Specifically, you can use the CLI to:

- Configure the Ethernet, Fibre Channel, and SCSI ports
- Create device maps
- Obtain FC420 bridge status information
- Log FC420 bridge events
- Report SCSI and Fibre Channel device information

For complete configuration instructions, refer to the *FC420 Fibre Channel Bridge Option User's Guide* (PN 6473031).

Note: If your library is equipped with an MC300 Prism Management Card, you can change the configuration of the FC420 bridge, you can do so using the Prism Management Console Web pages (see the *MC300 Prism Management Card User's Guide*, PN 6311631).

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