

IBM® TotalStorage® Virtualization Family
SAN Volume Controller



Host Attachment Guide

Version 1 Release 2
Errata April 29, 2004

Contents

About this guide	5
Who should use this guide	5
Last Update	5
Chapter 5. Attaching to a Sun host	7
Installing the JNI PCI adapter driver	7
Installing the JNI SBUS adapter driver	9

About this guide

This guide provides errata information that pertains to the second release of the IBM TotalStorage Virtualization Family SAN Volume Controller Host Attachment Guide.

This guide contains the corrections and additions on a per chapter basis. The chapter numbers in this guide correspond directly with the chapter numbers in the Host Attachment Guide supplied with your SAN Volume Controller.

Who should use this guide

Before using the IBM TotalStorage SAN Volume Controller, you should review the errata contained within this guide and note the details with respect to the copy of the Host Attachment Guide supplied with your SAN Volume Controller.

Last Update

This document was last updated: April 29, 2004

Chapter 5. Attaching to a Sun host

Installing the JNI PCI adapter driver

This information provides the procedure for installing the JNI PCI adapter driver.

Prerequisites:

Before installing the JNI PCI adapter driver, make sure that you have downloaded the driver.

Steps:

Perform the following steps to install the JNI PCI adapter driver:

Note: You will need access to the host system using either the direct console or an xhost remote console.

1. Install JNI HBA Driver and Fcode per JNI instructions. For the /kernel/drv/jnic146x.conf file, settings should be initially set to:
automap=1; (dynamic binding)
FcLoopEnabled=0;
FcFabricEnabled=1;
LunDiscoveryMethod=1; (should be default)
LunRecoveryInterval=10000;
2. Restart the host using the `reboot -- -r` command
3. Register and map the vdisks to the Sun host.
 - a. Use the SAN Volume Controller command line interface or graphical user interface to register the HBA ports with the SAN Volume Controller.
 - b. Create the necessary VDisks and map them to the host.
Note: You can obtain the HBA WWPN from the /var/adm/messages file, the EZFibre tool, or the SAN Volume Controller candidate HBA port
4. Restart the host and scan for disks.
 - a. `reboot -- -r`
 - b. Run `format` to determine whether you can see all of the disks, then quit `format`.
 - c. Verify you can view all of the expected disks
5. Install the EZFibre tool following the JNI instructions. Follow the on-screen instructions when running `install.sh` and select the default settings.

6. Start the EZFibre tool and load it. This does not require restarting the host.

Note: If a monitor is attached to the host, the user interface will display. If no monitor is attached, you must use an xhost capable client with an attached monitor.

- a. Logon to the attached console of the Sun or Remote Host with xhost capability.
 - b. Start the EZFibre tool by entering: `/opt/jni/ezfibre/standalone/ezf`.
 - c. The user interface will display a list with both adapters listed, and all of the connected remote ports listed as targets.
7. Map the SAN Volume Controller to the host with persistent bindings
 - a. Select an HBA.
 - b. Select the third tab on the HBA panel.
 - c. Click **Select All**.
 - d. Click **Commit**.
 - e. Click **Activate Changes**.
 - f. Select the same HBA.
 - g. On the first panel, change the **Dynamic Binding** tab to Disabled.
 - h. Click **Commit**.
 - i. Click **Activate Changes**.
 - j. Repeat steps 7a through 7j until performed on all of the HBAs. If you add or delete LUNs at a later date, repeat this procedure to acquire the new adapters.

Attention: The EZFibre tool will append any changes to the end of the `jnic146x.conf` file. After multiple reconfigurations, this file can become very large. It is recommended that you make a copy of the `JNIC146x.conf` file after install and restore it before making any configuration changes.

8. Add the following line to the `/kernel/drv/jnic146x.conf`
`TargetOfflineEnable=0;`
9. Restart the host using the `reboot` command.

Note: The `TargetOfflineEnable=0` setting in the `jnic146x.conf` file has been observed to produce unexpected behavior when utilizing EZFibre to perform static binding. If changes are to be made to the static binding using EZFibre, it is recommended that `TargetOfflineEnable=1` is set in `jnic146x.conf` and the host restarted. Steps 6, 7, 8 and 9 from above can then be performed.

Installing the JNI SBUS adapter driver

This information provides the procedure for installing the JNI SBUS adapter driver.

Prerequisites:

Before installing the JNI SBUS adapter driver, make sure that you have downloaded the driver.

Steps:

Perform the following steps to install the JNI SBUS adapter driver:

Note: You will need access to the host system using either the direct console or an xhost remote console.

1. Install JNI HBA Driver and Fcode per JNI instructions. For the `/kernel/drv/jnic146x.conf` file, settings should be initially set to:
automap=1; (dynamic binding)
FcLoopEnabled=0;
FcFabricEnabled=1;
LunDiscoveryMethod=1; (should be default)
LunRecoveryInterval=10;
2. Restart the host using the `reboot -- -r` command
3. Register and map the vdisks to the Sun host.
 - a. Use the SAN Volume Controller command line interface or graphical user interface to register the HBA ports with the SAN Volume Controller.
 - b. Create the necessary VDisks and map them to the host.
Note: You can obtain the HBA WWPN from the `/var/adm/messages` file, the EZFibre tool, or the SAN Volume Controller candidate HBA port
4. Restart the host and scan for disks.
 - a. `reboot -- -r`
 - b. Run `format` to determine whether you can see all of the disks, then quit `format`.
 - c. Verify you can view all of the expected disks
5. Install the EZFibre tool following the JNI instructions. Follow the on-screen instructions when running `install.sh` and select the default settings.

6. Start the EZFibre tool and load it. This does not require restarting the host.

Note: If a monitor is attached to the host, the user interface will display. If no monitor is attached, you must use an xhost capable client with an attached monitor.

- a. Logon to the attached console of the Sun or Remote Host with xhost capability.
 - b. Start the EZFibre tool by entering: `/opt/jni/ezfibre/standalone/ezf`.
 - c. The user interface will display a list with both adapters listed, and all of the connected remote ports listed as targets.
7. Map the SAN Volume Controller LUNs to the host with persistent bindings
 - a. Select an HBA.
 - b. Select the third tab on the HBA panel.
 - c. Click **Select All**.
 - d. Click **Commit**.
 - e. Click **Activate Changes**.
 - f. Select the same HBA.
 - g. On the first panel, change the **Dynamic Binding** tab to Disabled.
 - h. Click **Commit**.
 - i. Click **Activate Changes**.
 - j. Repeat steps 7a through 7j until performed on all of the HBAs. If you add or delete LUNs at a later date, repeat this procedure to acquire the new adapters.

Attention: The EZFibre tool will append any changes to the end of the `jnic146x.conf` file. After multiple reconfigurations, this file can become very large. It is recommended that you make a copy of the `JNIC146x.conf` file after install and restore it before making any configuration changes.

8. Add the following line to the `/kernel/drv/jnic146x.conf`

`TargetOfflineEnable=0;`

9. Restart the host using the `reboot` command.

Note: The `TargetOfflineEnable=0` setting in the `jnic146x.conf` file has been observed to produce unexpected behavior when utilizing EZFibre to perform static binding. If changes are to be made to the static binding using EZFibre, it is recommended that `TargetOfflineEnable=1` is set in `jnic146x.conf` and the host restarted. Steps 6, 7, 8 and 9 from above can then be performed.

