

Add an FC adapter to the SCSI disk interface



Overview

Using ESXi with Fibre Channel SAN ESXi supports Fibre Channel (FC), a storage protocol that the SAN uses to transfer data traffic from hosts to shared stor.

Key Takeaways

To connect a SCSI disk to a Fibre Channel network, you need a Fibre Channel Host Bus Adapter (HBA) and proper cabling, with the FC adapter configured as an initiator to access the SCSI storage.

To add an FC adapter to a SCSI disk interface, you need a Fibre Channel HBA installed in your server. The HBA acts as the interface between the server and the storage network, allowing SCSI commands to be transported over Fibre Channel (FCP) rather than traditional parallel SCSI cables . For physical FC drives, a backplane or adapter kit may be required to convert the SCSI connector to the FC interface, such as a 40-pin SCA to standard connectors . Each drive typically requires one adapter kit if not using an enclosure.

Cabling and Connectivity

Fibre Channel uses specific cabling standards, such as Twin-Ax or HSSDC, to connect the HBA to the storage array or SAN switch . The HBA port (N_Port) connects to a switch port (F_Port) to establish a SAN path. Multiple drives can be connected in a loop or fabric topology, depending on the SAN design . Ensure that the cabling supports the required FC speed (e.g., 2 Gbps, 4 Gbps, or higher).

Adapter Configuration

Once the HBA is installed, configure it as an initiator if it will access SCSI disks or tape drives. Target mode is used only when the adapter presents storage to other hosts . In virtualized environments, virtual FC adapters can be created on a Virtual I/O Server (VIOS) to pass through SCSI target devices directly to client partitions, preserving device characteristics and compatibility . Each virtual FC client adapter is assigned unique WWPNs for SAN login.

Software and Driver Considerations

Install the appropriate HBA drivers for your operating system to enable SCSI-over-FC communication. The Fibre Channel Protocol (FCP) handles SCSI command transport, so the OS sees the storage as standard SCSI devices . Multi-pathing software and storage management applications can continue to operate without modification, as the physical device characteristics remain visible.

Summary

- Install a compatible Fibre Channel HBA in your server.
- Connect the HBA to the SAN or storage array using the correct FC cabling.
- Configure the HBA as an initiator to access SCSI disks.
- Install necessary drivers and verify that the SCSI devices are recognized.
- For virtualized setups, consider virtual FC adapters to pass through SCSI targets to client partitions. Following these steps ensures that your SCSI disks can communicate over a Fibre Channel network efficiently and reliably.

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Get statistics for a given FCoE adapter, or all FCoE adapters on the system. --adapter
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AIX® supports dynamic tracking of Fibre Channel (FC) devices. AIX earlier versions required a user to unconfigure FC storage

SCSI Interfaces Guide — The Linux Kernel documentation

SCSI Interfaces Guide ... Introduction Protocol vs bus Once upon a time, the Small Computer Systems Interface defined both a

Fibre Channel (SCSI-FCP and FICON) host adapters and cables

The Fibre Channel host adapters enable the storage system to attach to Fibre Channel (SCSI-FCP) and FICON® servers, and SAN

SCSI connector

SCSI connector A SCSI connector (/ 'skʌzi / SKUZ-ee) is used to connect computer parts that

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SCSI Quick Installation Summary

Connect the SCSI Interface Cable and Power Cable Micropolis uses industry-standard connector sizes and pin assignments. Cables

Serial-Attached SCSI Installation Instructions

Serial-Attached SCSI (SAS) interface disk drives are designed for easy installation. It is not necessary to set any jumpers,

VMware ESXi: Troubleshooting Storage issues within VMware ...

Troubleshooting Storage (iSCSI/Fibre Channel) issues with VMware vSphere ESX/ESXi
How to determine if there is

How to use FC-attached SCSI devices

Chapter 4, "Naming SCSI devices persistently using udev," on page 11 explains how udev can help you with persistent naming of

Step-by-Step to Configure iSCSI Datastores on ESXi

To configure the iSCSI Datastore to ESXi: 1. Create network for iSCSI connectivity In vSphere Client → select host →

How SCSI Works

A SCSI controller coordinates between all of the other devices on the SCSI bus and the computer. Also called a host adapter, the

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How to Install a SCSI Device

The SCSI bus operates independently of the system CPU and the system bus through an integrated or plug-in host bus adapter

9.5. Managing Storage Controllers in a Guest Virtual Machine

Add a new SCSI disk or CD-ROM. The new disk can be added using the methods in sections Section 13.3.1, "Adding File-based

Deciding on a Host Interface Technology

The external interface technologies, as key components of these environments, are the foundation of the overall storage framework's

How to Connect a SCSI Disk to a PC

How to Connect a SCSI Disk to a PC Step 2: Locate an available slot on your PC's motherboard and connect the

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