

Before You Begin

CAUTION:
Before you set up and operate your Dell PowerVault system, read and follow the safety instructions in your Product Information Guide.

1. Identify the Solution

- A -- Integrated Solution
 - B -- Dell|EMC Gateway Solution
 - C -- Dell|EqualLogic Gateway Solution
- This page contains steps 1 and 2 of the quick setup. Steps 3 and 4 are overleaf.

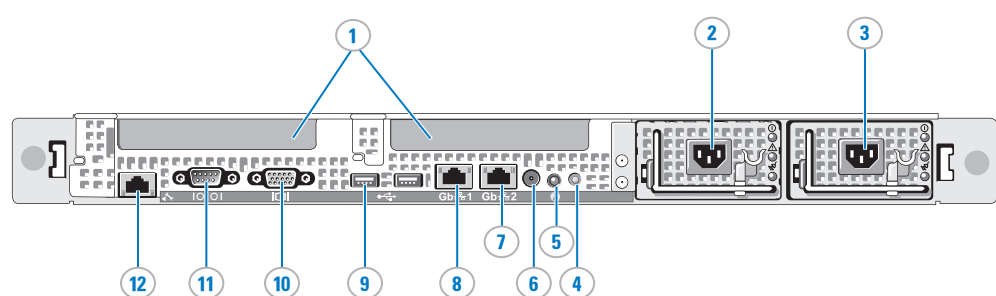
2. Unpack Your System

Unpack the system and save all accessories, documentation, and media.

3. Install the System in a Rack

This system requires a properly grounded electrical outlet, a compatible rack, and a rack installation kit.

NOTE: For information on compatibility of drivers and firmware, see the *Dell PowerVault NX1950 Systems Support Matrix*.



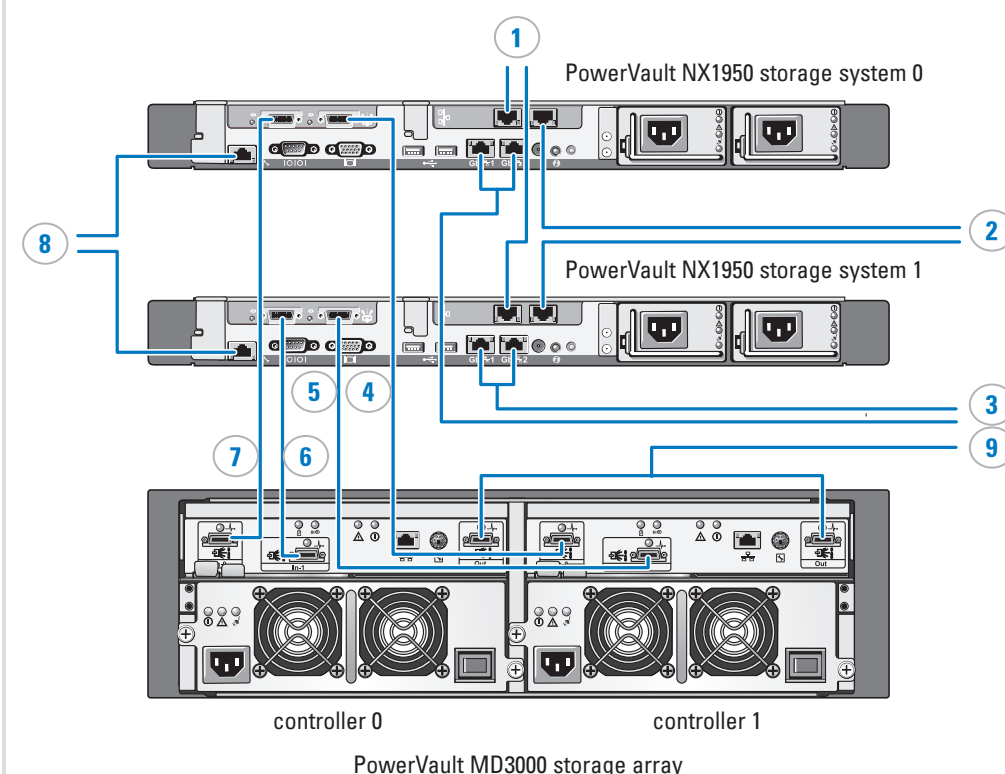
- | | |
|---|--|
| 1. PCI-E (option 1-SAS Controller, option 2-Fibre Channel Controller, option 3-NIC) | 7. Broadcom™ BCM5708C TOE NIC2 connector |
| 2. power supply 1 | 8. Broadcom BCM5708C TOE NIC1 connector |
| 3. power supply 2 | 9. USB connectors (2) |
| 4. system status indicator | 10. video connector |
| 5. system identification button | 11. serial connector |
| 6. system status indicator connector | 12. remote access controller port |

NOTE: The default user name is *administrator* and the default password is *storageserver*.

NOTE: It is recommended that you configure iSCSI traffic and the public Ethernet traffic on separate networks.

Integrated Solution MD3000 (Solution A)

1-A Cabling the Integrated Solution – Highly-Available (Two-Node Cluster) Configuration



NOTE: For single node configuration, the cabling for the PowerVault NX1950 storage system 1 does not apply.

NOTE: The default password for your PowerVault NX1950 storage solution is *storageserver*.

1. NIC port A to Gb Ethernet switch for cluster (optional)
2. NIC port B to Gb Ethernet switch (optional)
3. Gb1 and Gb2 to Gb Ethernet switch(es)
4. Port 1 on PowerVault NX1950 storage system 0 SAS HBA to In-0 on controller 1
5. Port 1 on PowerVault NX1950 storage system 1 SAS HBA to In-1 on controller 1
6. Port 0 on PowerVault NX1950 storage system 1 SAS HBA to In-1 on controller 0
7. Port 0 on PowerVault NX1950 storage system 0 SAS HBA to In-0 on controller 0
8. DRAC port to Ethernet switch for lights-out management (optional)
9. Connection to PowerVault MD1000 expansion enclosure (optional)

2-A Power-Up Procedure

Power-Up Procedure

- 1 Turn on the PowerVault MD1000 expansion enclosure(s). The expansion status LED must display steady blue.
- 2 Turn on the PowerVault MD3000 storage array. The status LED indicates that the unit is ready. The following list indicates several states of the storage array:
 - If the status LED displays a solid amber light, the PowerVault MD3000 storage array is initializing.
 - If the status LED displays blinking amber, there is an error in initialization. You can view the error in PowerVault Modular Disk Storage Manager.
 - If the status LED displays a solid blue light, the PowerVault MD3000 storage array is completely initialized.
- 3 Turn on the PowerVault NX1950 storage system.

NOTE: If you turn on the PowerVault NX1950 storage system before the PowerVault MD3000 storage array has initialized, the storage system is not recognized by the PowerVault NX1950 storage solution.

Configuring IP Address Network Settings on a PowerVault NX1950 Storage System

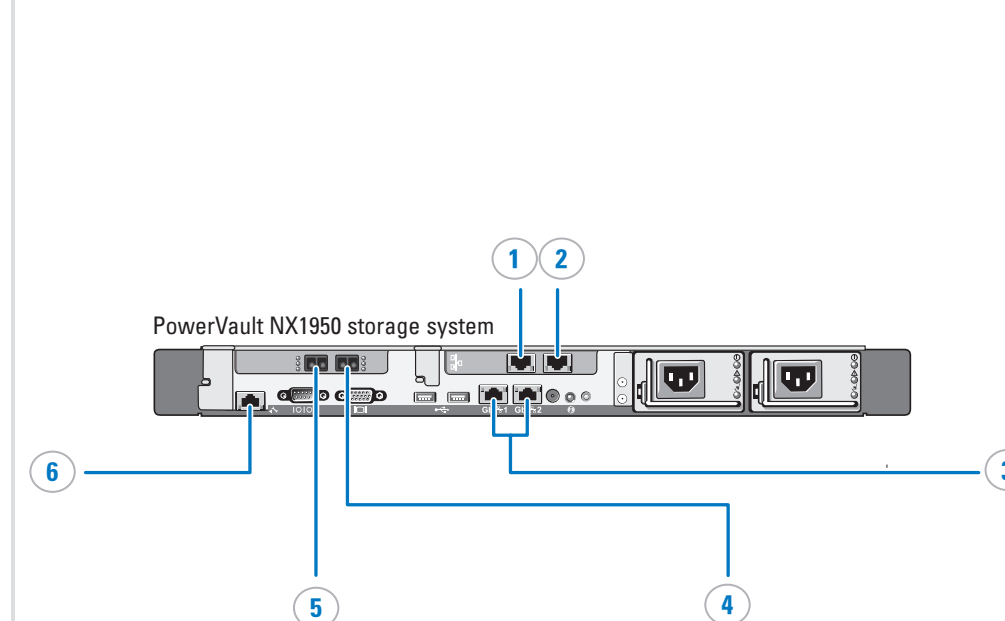
You can configure IP address network settings on the PowerVault NX1950 storage system using one of the following methods:

- Special Administration Console
- Direct connection using keyboard, video, and mouse

NOTE: It is recommended that you use a static IP address for network connection.

Gateway Solution Dell|EMC (Solution B)

1-B Cabling the Gateway Solution Dell|EMC



NOTE: The default password for your PowerVault NX1950 storage solution is *storageserver*.

NOTE: This illustration depicts the default configuration of the Dell|EMC Gateway solution. The actual configuration of solution you have purchased may vary.

- | | |
|--|--|
| 1. NIC port A to Gb Ethernet switch (optional) | 5. Port 1 on HBA to SAN. |
| 2. NIC port B to Gb Ethernet switch (optional) | 6. DRAC port to Ethernet switch for lights-out management (optional) |
| 3. Gb1 and Gb2 to Gb Ethernet switch(es) | |
| 4. Port 2 on HBA to SAN. | |

2-B Power-Up Procedure

Power-Up Procedure

- 1 Ensure that the Dell|EMC storage array is turned on.
- 2 Turn on the PowerVault NX1950 storage system.

NOTE: If you turn on the PowerVault NX1950 storage system before the Dell|EMC storage array has initialized, the storage system is not recognized by the PowerVault NX1950 storage solution.

Configuring IP Address

Network settings on PowerVault NX1950 storage system can be configured using the following methods:

- Special Administration Console
- Direct connection using keyboard, video, and mouse

NOTE: It is recommended that you use a static IP address for network settings.

Configure Dell|EMC Storage Array Zoning

Zoning determines the mapping from PowerVault NX1950 storage systems to the storage arrays. Configure zoning to the Dell|EMC storage arrays on your SAN switches. For more information, see your switch documentation.

Enter EMC PowerPath License Key

Enter the EMC PowerPath license key when prompted. The license key is required only for EMC CX-series storage arrays.

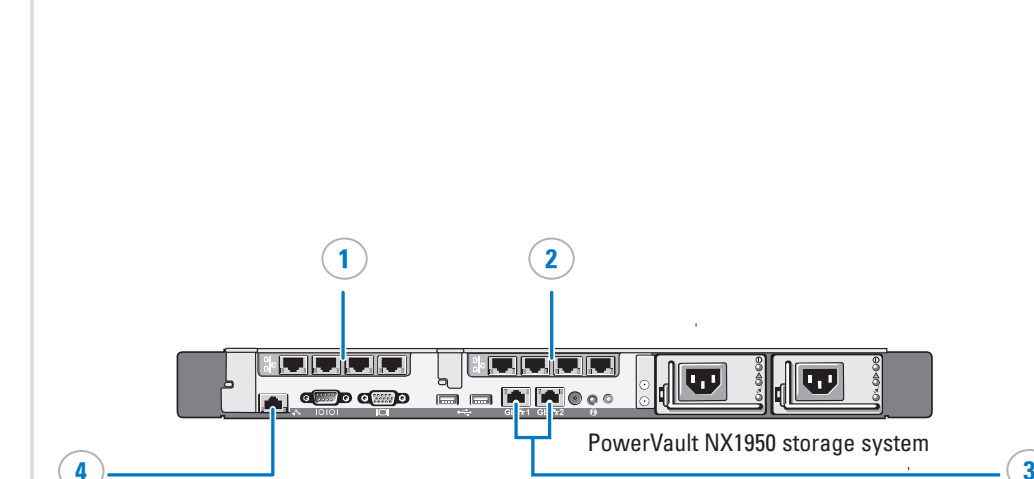
NOTE: The PowerPath key is optional and only required to enable load balancing.

Install EMC Navisphere Agent

The EMC Navisphere Agent installer is launched automatically the first time you log into the server. Privileged Users list should be left empty after installation because the **Dell Storage Initialization Wizard** populates it.

Gateway Solution Dell|Equallogic (Solution C)

1-C Cabling the Gateway Dell|Equallogic Solution



NOTE: The default password for your PowerVault NX1950 storage solution is *storageserver*.

NOTE: This illustration depicts the default configuration of the Dell|Equallogic Gateway solution. The actual configuration of the solution you have purchased may vary.

- | | |
|---|---|
| 1. Quad-port Gigabit NICs connected to iSCSI SAN or public Ethernet network | 3. Dual-port Gigabit NICs connected to iSCSI SAN or public Ethernet network |
| 2. Quad-port Gigabit NICs connected to iSCSI SAN or public Ethernet network | 4. DRAC port to Ethernet switch for lights-out management (optional) |

NOTE: Networking Requirement—During configuration—you must configure the server and the storage array on the same network. Do not block the layer-2 Multicasting between the server and the storage array.

2-C Power-Up Procedure

Power-Up Procedure

- 1 Ensure that the Dell|Equallogic storage array is turned on.
- 2 Turn on the PowerVault NX1950 storage system.

NOTE: Turn on the PowerVault NX1950 storage system only after the Dell|Equallogic storage array has initialized to ensure that the storage system is recognized by the PowerVault NX1950 storage solution.

Configuring IP Address

Use one of the following methods to configure network settings on the PowerVault NX1950 storage system:

- Special Administration Console
- Direct connection using keyboard, video, and mouse

NOTE: It is recommended that you use a static IP address for the network settings.

Configure Networking on Dell|Equallogic Storage Array

Configure your network for the Dell|Equallogic storage arrays on your Ethernet switches. For more information, see your switch documentation.

Initialize Dell|Equallogic storage Array if not Initialized Already

The Equallogic remote installer is launched automatically the first time you log into the server. Initialize your array if not already initialized.

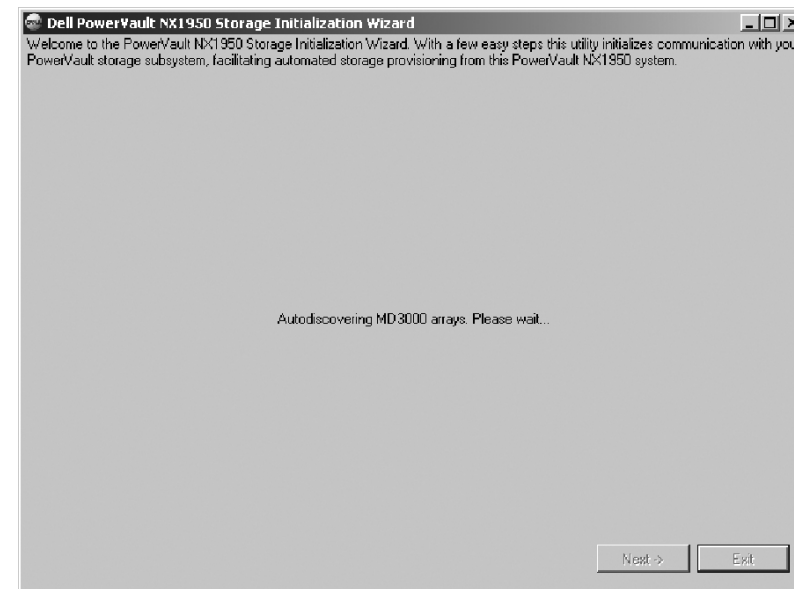
Setting Up Your Dell™ PowerVault™ NX1950 Storage Solution (continued)

PowerVault NX1950 Documentation available at support.dell.com

- **Dell PowerVault NX1950 Systems Hardware Owner's Manual** for physical, firmware, software interface features, and troubleshooting for your PowerVault NX1950 storage system.
- **Dell PowerVault NX1950 Systems Getting Started Guide** for features and installation of your PowerVault NX1950 storage system.
- **Dell PowerVault NX1950 Systems Deployment Guide** for configuration procedures on your system and a general overview of the Windows Unified Data Storage Server 2003 operating systems.
- **Dell PowerVault NX1950 Systems Installation Guide** for deployment, cabling, configuring, and localizing your PowerVault NX1950 storage solution.
- **Dell PowerVault NX1950 Systems Cluster Installation and Troubleshooting Guide** for configuring cluster.
- **Dell PowerVault NX1950 Systems Important Information** for known issues.
- **Dell PowerVault NX1950 Systems Upgrading Your Operating System** for instructions to upgrade your operating system.
- **Dell PowerVault NX1950 Systems Support Matrix** for information about supported software and hardware versions for Dell PowerVault NX1950 storage solution.
- **Dell PowerVault MD Systems Support Matrix** for information about supported software and hardware versions for Dell PowerVault MD3000 and Dell PowerVault MD1000 storage arrays.
- Additional documentation for Dell PowerVault MD3000 and Dell PowerVault MD1000 storage arrays is located at support.dell.com.
- **Dell iSCSI Storage for VMWare** for using iSCSI with virtual servers.
- **Dell PowerVault NX1950 Systems End-To-End Deployment Guide for iSCSI** for instructions on configuring the iSCSI features of the PowerVault NX1950 and connected iSCSI hosts.
- **Dell PowerVault NX1950 Cluster Systems with EqualLogic PS Series Installation and Troubleshooting Guide**.

Integrated Solution MD3000 (Solution A) (continued)

3-A Configuring the PowerVault NX1950 Storage System



The Dell Storage Initialization Wizard runs every time you log on to the PowerVault NX1950 storage system to verify that all system settings are correct and no new storage arrays are attached.

The Dell Storage Initialization Wizard performs the following tasks:

- Set the name of the storage array.
- Configure the PowerVault NX1950 storage system for a single-node or a two-node cluster configuration.
- Synchronize PowerVault MD3000 storage array clocks.

NOTE: You must use the Dell Storage Initialization Wizard to configure your storage solution and avoid unexpected behavior.

Gateway Dell|EMC (Solution B) (continued)

3-B Dell Storage Initialization Wizard



The Dell Storage Initialization Wizard runs every time you log on to the PowerVault NX1950 storage system to verify that all system settings are correct and no new storage arrays have been attached.

The following tasks are performed by the Dell Storage Initialization Wizard:

- Initialize new Dell|EMC storage arrays.
- Configure network ports used to communicate with storage array.
- Configure privileged users who can access the array.

NOTE: You must use the Dell Storage Initialization Wizard to configure your storage solution and avoid unexpected behavior.

Gateway Dell|Equallogic (Solution C) (continued)

3-C Equallogic Remote Setup Wizard

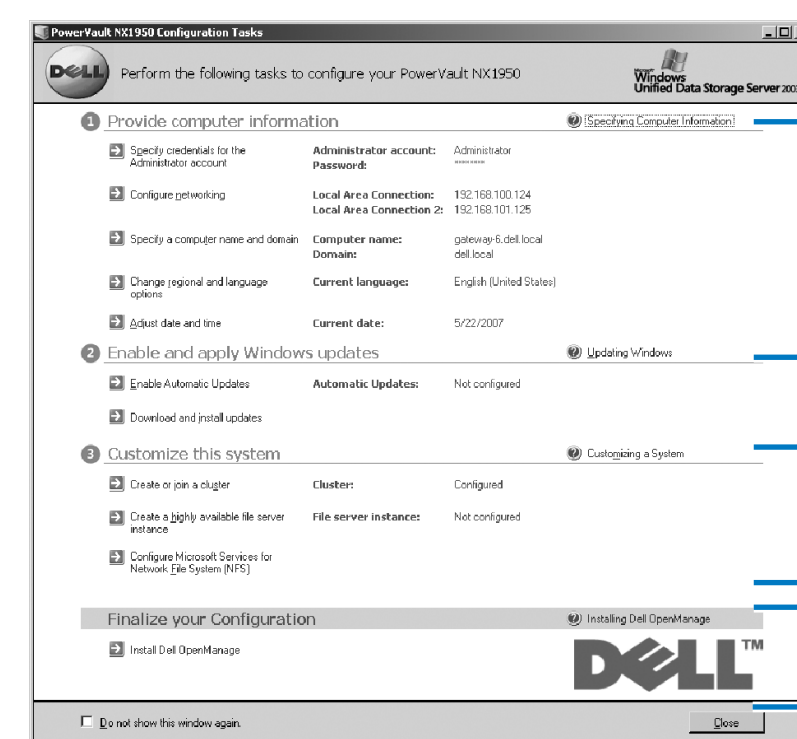


The Equallogic Remote Setup Wizard performs the following tasks:

- Initializes a PS Series array.
- Configures the storage system to access a PS Series SAN.
- Configures MPIO settings for the system.

NOTE: You must use the Equallogic Remote Setup Wizard to configure your storage solution and avoid unexpected behaviour.

4-A & 4-B Additional System Configuration And Managing Your Storage

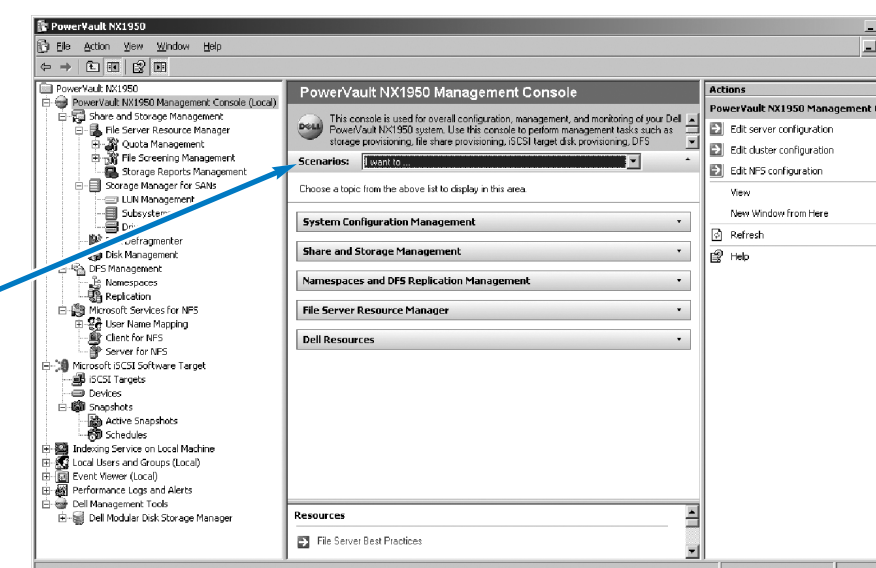


Allows you to review and make required changes to the system configuration.

System Configuration Tasks (optional) include:

- Configuring or joining a cluster
- Setting up identity mapping for Microsoft Services for Network File System
- Setting up a highly available file server instance

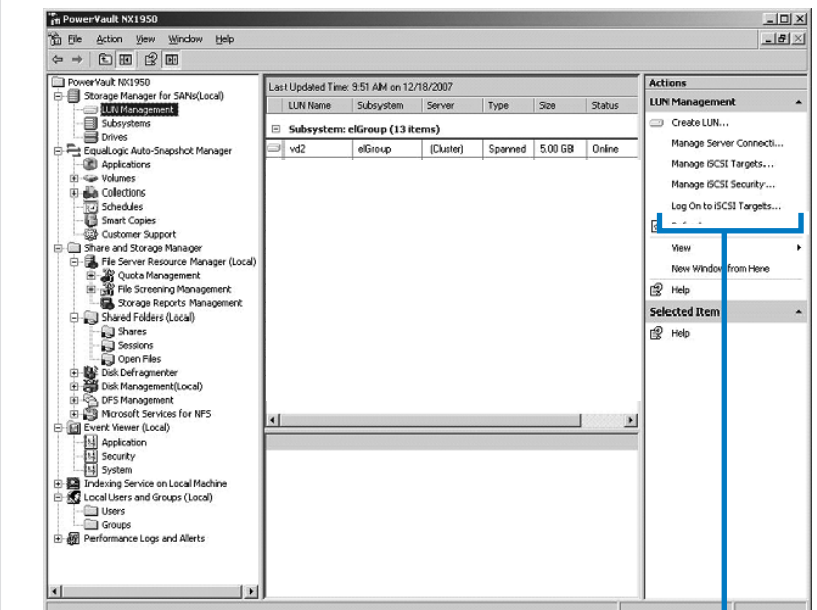
Installs Dell OpenManage™ (recommended).



Use the **Scenarios** menu to perform common tasks, such as:

- Create a volume for file sharing.
- Create an iSCSI target.
- Extend an existing volume.

4-C Additional System Configuration



You can also perform the following actions using the **PowerVault NX1950 Management Console**:

- Creating a Target
- Creating a LUN
- Logging in to the Target.

For Cluster configuration, see the **Dell™ PowerVault™ NX1950 Cluster Systems with EqualLogic PS Series Installation and Troubleshooting Guide**.

