EN English

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1. Introduction

1.1. Safety

All plug-in modules and blank plates are part of the fire enclosure and must only be removed when a replacement can be immediately added. The system must not be run without all units in place. In order to comply with applicable safety, emission and thermal requirements no covers should be removed.

Permanently unplug the unit if you think that it has become damaged in any way and before you move it.

• An enclosure can weigh up to 36kg (79.2lb). Do not try to lift it by yourself.

• The unit must only be operated from a power supply input voltage range of 100–240 VAC, 50-60 Hz.

• The plug on the power supply cord is used as the main disconnect device. Ensure that the socket outlets are located near the equipment and are easily accessible.

• The power connection must always be disconnected prior to removal of a PSU module from the enclosure.

• A safe electrical earth connection must be provided to the power cord. Check the grounding of the enclosure before applying power.

• Provide a suitable power source with electrical overload protection to meet the requirements laid down in the technical specification.

• This equipment is intended to operate with two working PSUs installed in the Power Supply Module. Before removal/replacement of a PSU disconnect all power for isolation.

• A faulty PSU must be replaced with a fully operational one within 24 hours.

CAUTION: If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

WARNING: Do not remove covers from the PSU. Danger of electric shock inside. Return the PSU to your supplier for repair.

CAUTION: The RJ45 sockets on the motherboard/PCI cards are for Ethernet connection only and must not be connected to a telecommunications network.

WARNING: The enclosure top cover must be secured, when the enclosure is in normal use, by rotating the lock 90° to the 'locked' position. This is to prevent users/operators from accessing the service areas.

1.2. Rack System Precautions

The following safety requirements must be considered when the unit is mounted in a rack.

• The rack design should incorporate stabilizing features suitable to prevent the rack from tipping or being pushed over during installation or in normal use.

• When loading a rack with the units, fill the rack from the bottom up and empty from the top down.

• The rack design should take into consideration the maximum operating ambient temperature for the unit, which is 35°C.

• The system must be operated with low pressure rear exhaust installation (back pressure created by rack doors and obstacles not to exceed 5 pascals (0.5mm water gauge)).

• The rack should have a safe electrical distribution system. It must provide over-current protection for the unit and must not be overloaded by the total number of units installed in the rack. Consideration of the electrical power consumption rating shown on the unit's nameplate should be used when addressing these concerns.

• The electrical distribution system must provide a reliable earth for each unit an the rack.

• Each power supply in each unit has an earth leakage current of 0.75mA. The design of the electrical distribution system must take into consideration the total earth leakage current from all the power supplies in all the units. The rack will require labelling with "HIGH LEAKAGE CURRENT. Earth connection essential before connecting supply".

• The rack when configured with the units must meet the safety requirements of UL 60950-1 and IEC 60950-1.

WARNING: Bifurcated power cords must NOT be used with the 12big rack network.

1.3. ESD Precautions

It is recommended that you fit and check a suitable anti-static wrist or ankle strap and observe all conventional ESD precautions when handling plug-in modules and components. Avoid contact with backplane components and module connectors, etc.

2. Installation

2.1. Installation

Fit the modules into the bays defined in *Figure 1*.

WARNING: The removal of the enclosure top cover or a PSU module must only be performed by service personnel. Potential hazards include:
• Rotating fans
• Hot surfaces
The screws or latches securing the enclosure top cover and PSU modules must be firmly tightened to prevent unauthorized access to those areas.
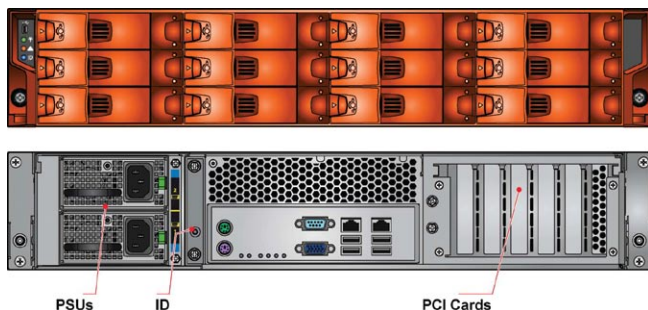
Figure 1: Module Locations

2.2. Fitting PSU's

Two PSUs are installed in the mounting cage at the rear of the enclosure.

WARNING: Do not remove covers from the PSU. Danger of electric shock inside. Return the PSU to your supplier for repair.

1. Check for damage, especially to the rear connector on the PSU.

2. Handle the PSU carefully and avoid damaging the connector pins. Do not install the PSU if any pins appear to be bent.

3. Slide the PSU into the mounting cage.

4. Push firmly until a click is heard as the securing spring engages.

NOTE: This module must only be removed by service personnel.

5. You are now ready to connect the power supply cords to the power sources and switch the power supply ON.

2.3. Removing PSU's

WARNING: Prior to removing the PSU from the mounting cage, please disconnect the power from the power supply, by either the switch (where present) or by physically removing the power source, to ensure your system has warning of an imminent power shutdown. Do not remove the faulty PSU unless you have a replacement ready for insertion.

You can continue working while replacing the faulty PSU.

1. Make sure you identify the faulty PSU correctly from the two installed.

2. Switch off and disconnect the power supply cord.

3. Squeeze retaining handle to the left to release.
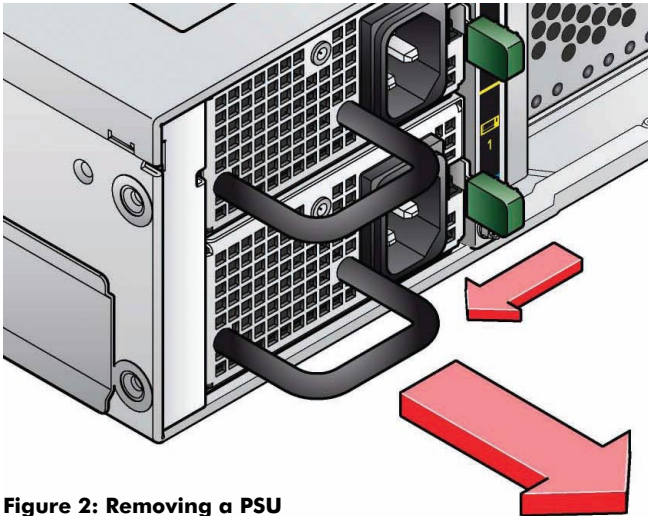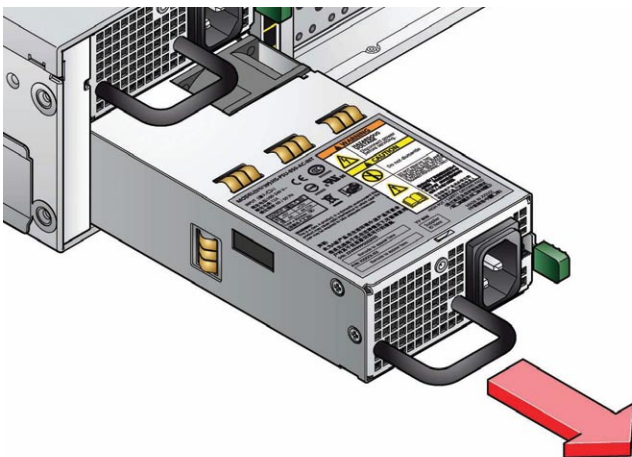
4. Grip the handle and withdraw the PSU.

Figure 2: Removing a PSU

2.4. Replacing a Fan

WARNING: The cover must only be opened by service personnel.

1. Release the enclosure top cover by turning the lock mechanism to the 'Unlocked' position and slide the cover back until it stops (*see Figure 3*).

2. Grip the faulty Fan module with finger and thumb and pull it upwards in order to unplug it, and remove it from the enclosure (*see Figure 4*).

WARNING: To avoid injury, ensure that the blades have stopped rotating before handling the fan.

3. Check the Fan for damage. Do not install it if there are any visible signs of damage.

4. Replace the Fan by pushing it all the way into the enclosure until it fits firmly and is level with the other Fans.

5. Ensure that the Fan module LED extinguishes within 10 seconds of installation.

6. Close the enclosure cover and secure by turning the lock mechanism to the 'Locked' position.
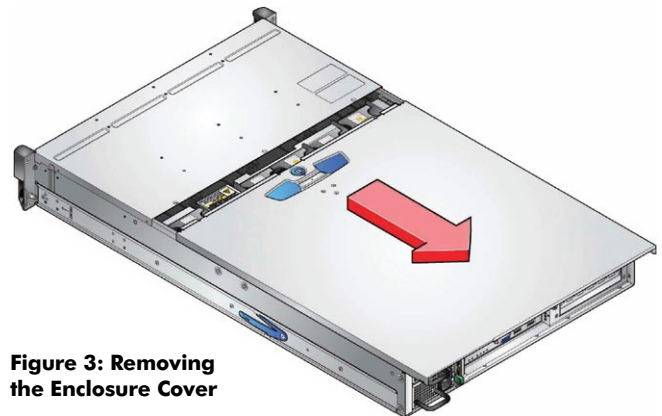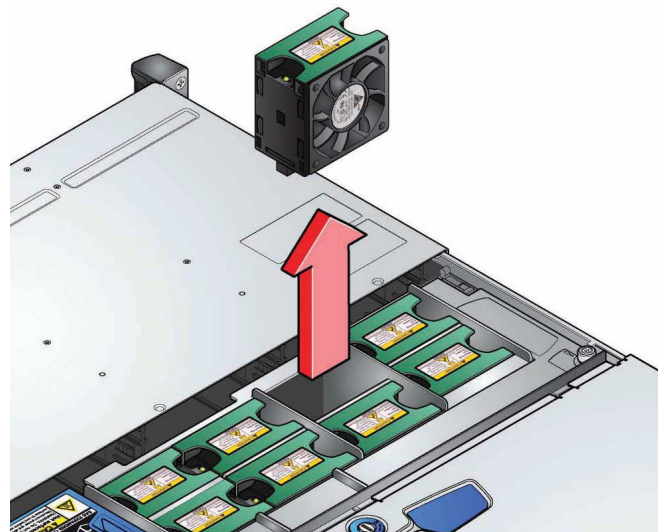

Figure 3: Removing the Enclosure Cover

Figure 4: Removing a Fan

2.5. Battery Safety

Replacing batteries on the motherboard.

Please refer to the battery replacement procedure in the 12big rack network User Guide supplied with your system.

WARNING: There is a danger of explosion if the battery is replaced by an incorrect type.

Dispose of used batteries in accordance with the manufacturer's instructions and national regulations.

CAUTION: The batteries on the NVRAM Card are not replaceable; the complete card assembly must be replaced in the event of battery failure. Refer to the 12big rack network User Guide for the card replacement procedure.

2.6. Fitting Drives

WARNING: Operation of the enclosure with ANY drive carrier modules missing will disrupt the airflow and the drives will not receive sufficient cooling. It is essential that all apertures are filled before operating the unit. Dummy drive carrier modules are available for fitting to unused drive bays.

1. Release the carrier handle by pressing the latch in the handle towards the right and insert the carrier into the enclosure.

IMPORTANT: Ensure that the carrier is orientated so that the drive is uppermost and the handle opens from the left *(See Figure 5)*.

2. Slide the carrier, gently, all the way into the enclosure.

3. Cam the carrier home - the camming foot on the base of the carrier will engage into the slot in the enclosure.

4. When the carrier is fully home, close the handle - a click should be heard as the latch engages.

IMPORTANT: Ensure that all drive carriers are fully engaged in the enclosure by firmly pushing each one home fully into the slot *(See Figure 6)*.
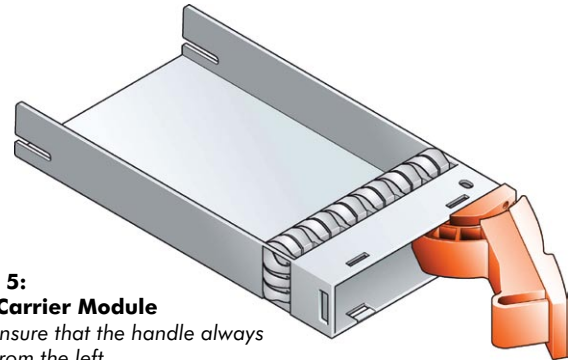

Figure 5:
Drive Carrier Module
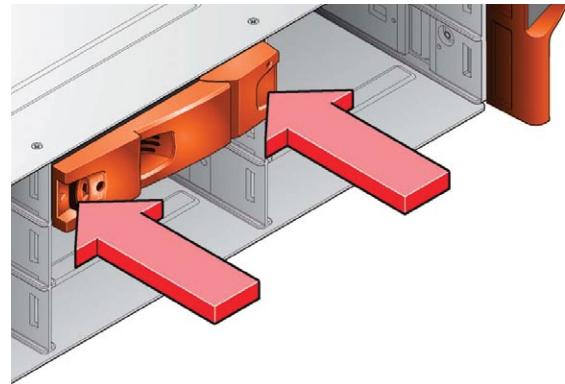*Note: Ensure that the handle always opens from the left.*

Figure 6: Fitting Drives
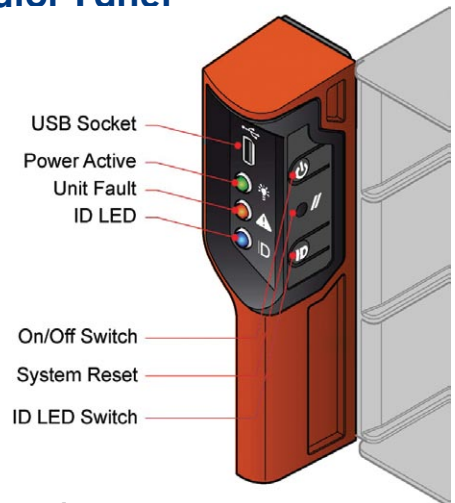*Note: Ensure that the carriers are fully engaged in the enclosure.*

2.7. Operator Panel

USB Socket
Power Active
Unit Fault
ID LED

On/Off Switch
System Reset
ID LED Switch

Figure 7: Operator Panel

| LED	Color	Normal	Fault
Power On	Green	On	On
Fault	Amber	Off	On
Enclosure ID	Blue	N/A	N/A

3. Creating a RAID Array and Setting Up Sharing

3.1. Start up and log in

1. Connect a monitor, mouse, and keyboard to the 12big Network and boot the system.

2. Follow the steps in the Set Up Windows wizard, then log on as an administrator.
   Password: LaCie12big *(case sensitive)*

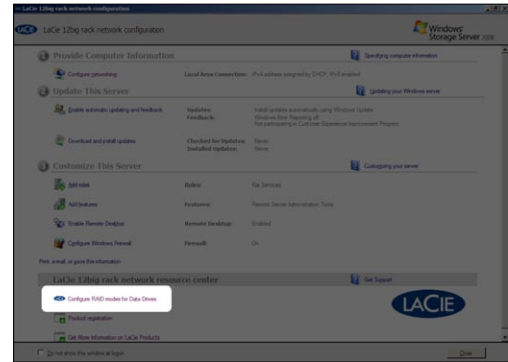3. The Initial Configuration window will appear. Click the *Configure network* button.
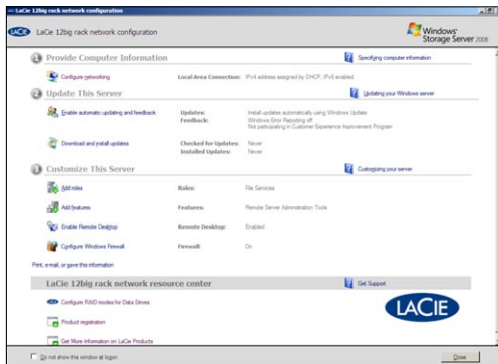
4. Verify that a local area connection with the heading *LaCie* is established.
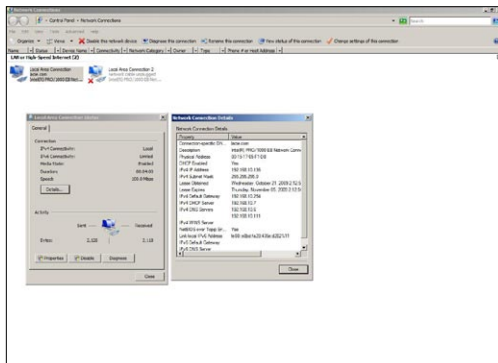
3.2. Create a RAID protected disk array

1. Click on the *Configure the raid for Data Drives* link and log on as administrator.

By default the credentials are:
Login: administrator
Password: 3ware

2. The 3ware 3DM2 administration page will open. Click on *Management* and then *Maintenance*. Note that the page may take several seconds to load.
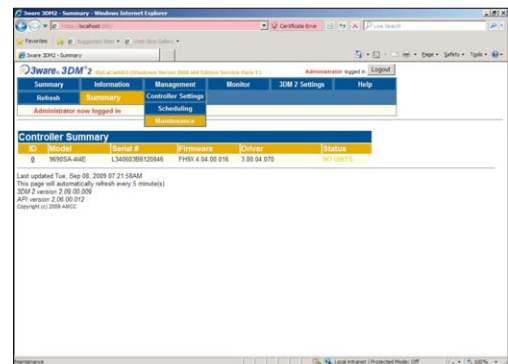
3. Beneath the list of available drives:
   a. Select the drives you wish to include, then click the *Create Unit* button.
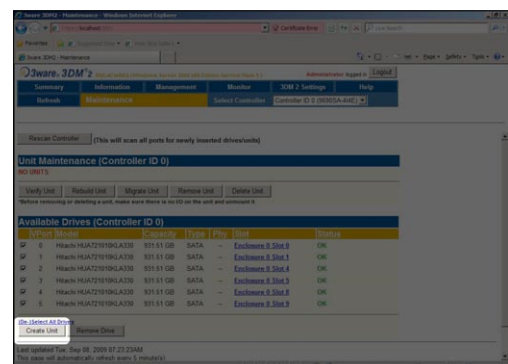
b. Next, choose a RAID type (LaCie recommends RAID6 for best protection and RAID5 for the best protection/cost-per-TB ratio).
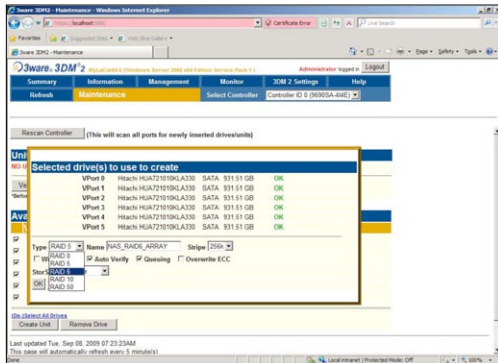
c. Next, type a name for the array (example: NAS RAID 6 Array).

d. Next, choose a stripe (LaCie recommends 64K).

e. If you don't have a backup battery, uncheck the *Write Cache* button.

f. Click the *OK* button. The new array is now available and will be listed under *Unit Maintenance*.

g. The RAID protected disk array is now set up. You can close the window or keep it open for further reference.

3.3. Mount the array

1. From the Start Menu, select *Server Manager*.

2. Expand the Storage listing, then click on *Disk Management*.
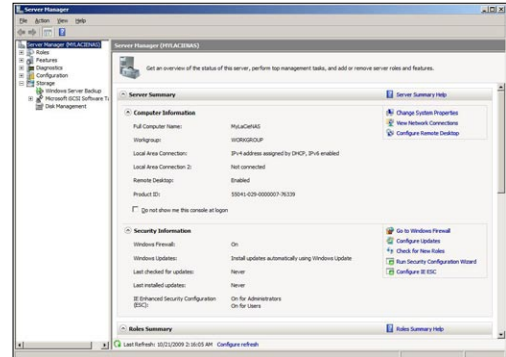
3. The *Initialize Disk* window should appear. If not, right-click the row titled *Disk 1* and select *Initialize Disk*.
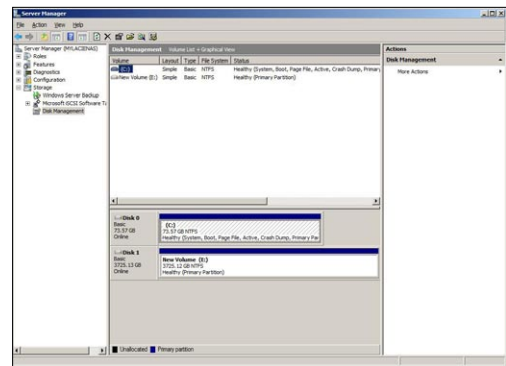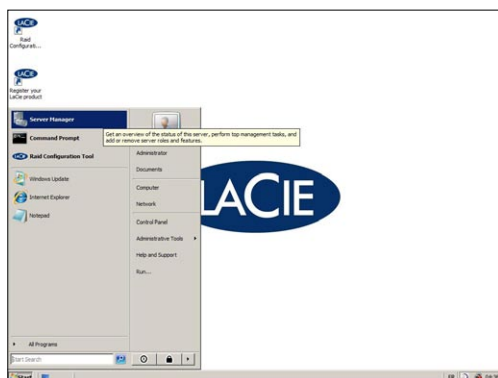

4. Select *GPT* if your volume is greater than 2TB (GUID Partition Table) and click *OK*.

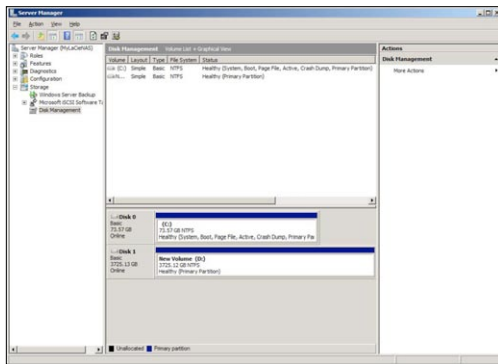5. The *New Simple Volume* wizard should appear. If not, right-click the row titled *Disk1* and select *New simple volume*.
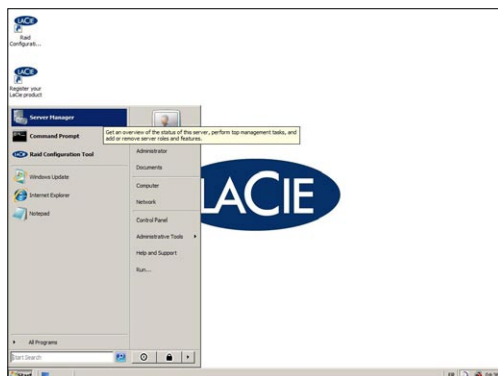
6. Click *Next*.

7. Click *Next*.

8. Click *Next*.

9. Click *Next*. You may choose to select *Quick Format*.

10. Click *Finish*.

11. Wait for Quick Format to finish. When completed, below the disk capacity will be printed *Healthy (Primary Partition)*.
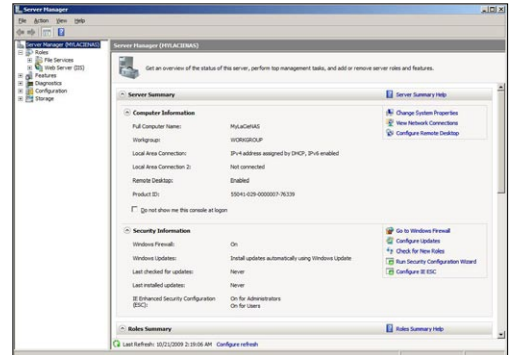

12. The logical volume is now mounted and should appear in Windows Explorer.
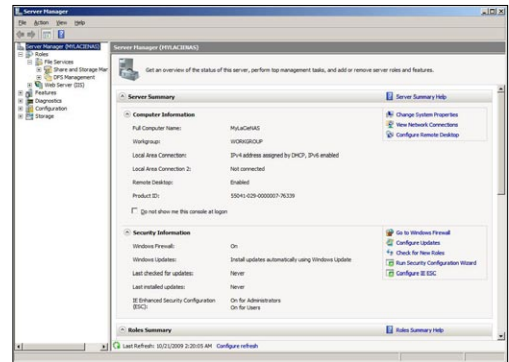
3.4. Share the volume
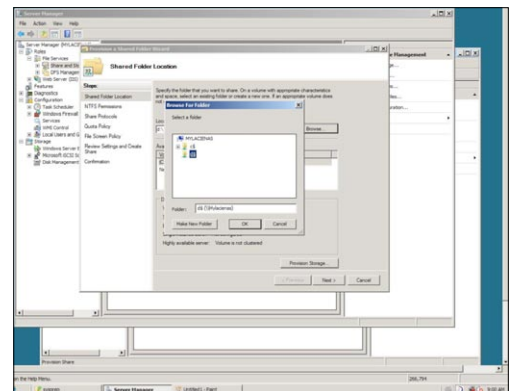
1. From the Start Menu, select *Server Manager*.

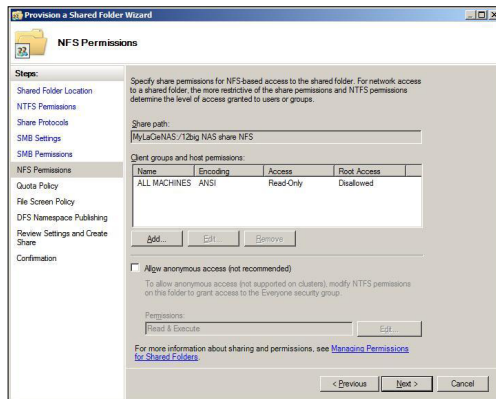2. In the navigation column at left, expand the *Roles* listing, then *File Services*.

3. Right-click *Share* and *Storage Management* and select *Provision Share*.
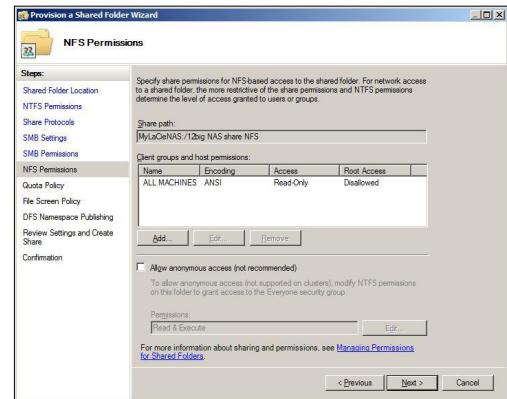

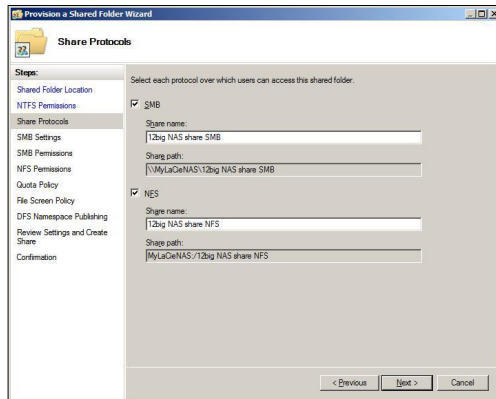4. In the window that opens, click *Browse*, select *d$* and click *OK*. Click *Next*.

5. Set NTFS permissions and click *Next*.

6. Type a name for the SMB and NFS share and click *Next*.

7. Enter a description (optional) and click *Next*.

8. Set SMB permissions and click *Next*.

9. Set NFS Permissions.

10. Click *Next*.

11. Click *Next*.

12. Click *Next*.

13. Click *Create*. Volume sharing has been successfully set up. You should now be able to use this share as a shared directory.