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**Dell(TM) PowerVault(TM) 77xN Network Attached Storage (NAS)  
System Release Notes Version 1.2**

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This document contains information updating your "Dell PowerVault 77xN NAS System Administrator's Guide" and any other technical documentation included with this product. It includes the following information:

- \* Adding Network File System (NFS) clients to a NFS share with "No Access"
- \* Setting "All Machines" to "No Access" on NFS Shares
- \* Giving the same rights as "All Machines" on NFS Shares
- \* Downloading the NFS log
- \* Secure socket layer (SSL) connections to PowerVault NAS Manager
- \* Disappearing secondary navigation bar in NAS Manager
- \* "Previous Topic" link in the PowerVault NAS Manager
- \* Preparing Internet Explorer for use with the NAS Manager
- \* Novell(R) NetWare(R) functionality with frame type autonegotiation
- \* IRP stack size when using antivirus software or Cluster Services
- \* Creating AppleTalk shares in the root directory
- \* Administer this server appliance link with user-level access
- \* Deleting shares
- \* Adding domain users or groups to local groups on the NAS system
- \* Japanese character and http shares
- \* Volumes without drive letters
- \* Large volume consistency checks
- \* WMI ADAP issues
- \* Telnet service
- \* MacIntosh clients reporting incorrect file sizes
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- \* Using console redirection after system POST
- \* Maximum persistent images in a cluster environment
- \* Using PXE with your system and Cisco switches
- \* Deleting virtual disks created using Array Manager
- \* Refreshing web page cause Volume name to appear as “((Null)) ((Null))”
- \* Increasing disk performance with Array Manager
- \* Configuring DNS suffixes

- \* Dell Embedded Remote Access for the PV770N
- \* Persistent images are no longer accessible after reinstalling the operating system
- \* Remote Access Controller POST and boot path logs cleared
- \* Reinstalling the 770N system during a RAID reconstruction
- \* Disk quotas for "Administrator" do not display in the NAS Manager
- \* NAS Manager status indicator loses posted events after system shutdown or reboot
- \* Limitation of Cluster support for optional Storage Manager software

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### **Adding NFS Clients to an NFS Share With "No Access"**

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Do not select the "No Access" selection for individual clients available in the "NFS Sharing" tab of the "Sharing Properties" section in the NAS Manager. This option is not supported by Microsoft(R) Services For UNIX(R) 2.1 and is displayed by error. The selections available -- "No Access", "Read-Write", and "Read-Only" -- apply to "All Machines". When adding individual clients, the correct options are "root," "read/write," and "read only." Select only these options. The options will be displayed as available after the client system has been added and OK has been selected.

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### **Setting "All Machines" to "No Access" on NFS Shares**

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In the event that an administrator wants to set "All Machines" to "No Access" on a specific NFS share, Dell recommends that you make this setting through the Microsoft Management Console for Services for UNIX (SFU) 2.1. The share will be disabled if the administrator selects **No Access** for **All Machines** through the NAS Manager.

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### **Giving the Same Rights as "All Machines" on NFS Shares**

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After creating a NFS share, under **NFS Sharing** properties, if you add a client computer and give it the same rights as **All Machines**, then **All Machines** changes its permissions to **No Access**. To correct this, give the client computer a different setting than **All Machines**, or change the permission to root. The root permission might take a few seconds to become available after newly adding a client system.

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### **Downloading the NFS Log**

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When NFS log gets really large, there may be difficulty in downloading it through the NAS Manager. The browser may time out. Instead of downloading the log through the NAS Manager, you can map a share to your NAS system. The log's default location is C:\SFU\log\nfssvr.log.

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### **SSL Connections to the PowerVault NAS Manager**

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An Internal SSL Security Certificate has been generated for

customer use to support SSL encrypted connections to the NAS Manager. However, Dell recommends creating a full certificate using a certificate authority.

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## **Disappearing Secondary Navigation Bar in the PowerVault NAS Manager**

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The secondary navigation bar allows easier browsing through the NAS Manager. It may disappear after performing some steps. If this happens, you can navigate from the top navigation bar.

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## **"Previous Topic" Link in the PowerVault NAS Manager**

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When using Netscape under Red Hat Linux 7.1 in the NAS Manager, the **Previous Topic** link in the help files or in **Take a Tour** may not work properly, and you may receive the error message **Directory Listing Denied**.

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## **Preparing Internet Explorer for Use With the NAS Manager**

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Dell recommends updating your version of Internet Explorer with the latest service packs and security updates before using it to connect to the NAS Manager. See your Internet Explorer documentation for more information.

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## **NetWare Functionality With Frame-Type Autonegotiation**

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Your NAS system automatically negotiates for frame-type settings with clients that want to access the NAS system. However, the NAS system will not properly negotiate these settings without a NetWare server on the network. After the NAS system has been given the correct frame-type from the NetWare server, the NetWare server is no longer necessary on the network.

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## **IRP Stack Size When Using Antivirus Software or Cluster Services**

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When you access shares on the PowerVault Filer from a Windows client and the IRPStackSize parameter on the Filer is set too low, you may receive the following error message: "Not enough server storage is available to process this command." Or certain services may fail to start during the boot process once Cluster Services or antivirus software is installed. A batch file called IRP.bat (on the Resource CD in the IRP directory) sets the IRPStackSize parameter so that the event log errors associated with a small IRP stack size are corrected. A readme.txt file in the IRP directory contains more information.

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## **Creating AppleTalk Shares in the Root Directory**

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The NAS Manager will not allow you to create AppleTalk shares at the root directory level. Creating shares at the root directory level is considered an advanced option. As with all the other advanced options, the creation of an AppleTalk share at the root directory level is done through a Terminal Services session.

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### **"Administer This Server Appliance" Link With User-Level Access**

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Windows(R) domain users who access the NAS Manager will authenticate automatically with the NAS system when they load the HTTP Shares page. The **Administer This Server Appliance** link, located on the **HTTP Shares** page of the NAS system does not function unless the user is a member of the system's administrators group. Domain users must re-authenticate as an administrator to administer the system. To re-authenticate as an administrator when you are logged in as a non-administrative domain user, you must manually type the address of the NAS Manager, **https://<servername>:1279**, into the browser. The user will be asked to re-authenticate. Enter the administrator user name and password and then you can administer the system.

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### **Deleting Shares**

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In the event that a share needs to be removed from the NAS system, administrators should always first remove the share, then the folder, and finally the volume and disk if necessary. If this procedure is not followed, the administrator must manually remove the share via Terminal Services.

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### **Adding Domain Users or Groups to Local Groups on the NAS System**

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When adding new domain users or domain groups to a local group on the NAS system, you must specify the domain. For example:  
**<domain name>\<user or group name>**.

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### **Japanese Character and HTTP Shares**

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Administrators can create HTTP shares using the Japanese two-byte character set. However, URLs must be named in the English language only. If you use a language other than English, you must switch to another system to type in English when specifying a fully-qualified URL addresses.

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### **Volumes Without Drive Letters**

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Volumes that use a mount point instead of a drive letter cannot be created with the NAS Manager. To create a volume without a drive letter, you must do so through Terminal Services using Dell OpenManage™ Array Manager.

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## Large Volume Consistency Checks

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Resyncing a volume -- confirming the integrity of a large redundant array of independent disks (RAID) set -- can take more than 24 hours depending on the size of the volume. In certain extremely large volume environments, such as a single RAID 5 volume greater than 1 TB, the initial consistency check might require more than 72 hours to complete. System performance will be degraded while the consistency check is being performed.

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## WMI ADAP Issues

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Several issues are possible that can create various error messages relating to Windows(R) Management Interface (WMI) AutoDiscovery/AutoPurge (ADAP). The issues are related to the performance counters in the Windows Powered operating system. You can correct each issue by performing the following steps:

1. Connect to the system through Terminal Services Advanced Client.
2. Go to Task Manager by clicking on **Task Manager** in the Advanced Administration Menu.
3. Click on the **Processes** tab and search for WinMgmt.exe. If you cannot see it, check **Show processes from all users**.

The number in the **PID** column next to **WinMgmt.exe** is the *WinMgmt service PID*. Note this number.

4. Open a local command prompt and enter **WINMGMT /CLEARADAP**.
5. When the prompt returns, enter **WINMGMT /RESYNCPERF <winmgmt service PID**.

See the Microsoft Support Knowledge Base at [www.microsoft.com](http://www.microsoft.com) for additional information.

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## Telnet Service

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If Telnet Service is disabled in the NAS Manager, you can re-enable the service only through the Advanced Administration Menu, which is available through Terminal Services.

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## MacIntosh Clients Reporting Incorrect File Sizes

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Windows 2000-based servers running Services for MacIntosh may report file sizes incorrectly. For example, files may be reported to be larger than they really are. When the server lists incorrect file sizes, MacIntosh clients might report that the volume on the Windows 2000 server is full, and this message might

affect file transfers. Microsoft's Quick Fix Engineering (QFE) Q277862, which is available on the *Resource* CD in the QFE directory, addresses the issue. Double-click the **QFE** executable to extract the files. See **hotfix.txt** in the extracted files for installation instructions.

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### **Computer Associates InnoculateIT 6.0**

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Computer Associates InnoculateIT 6.0 for Windows 2000 has been tested and validated with the PowerVault 77xN system. However, if you choose to install this antivirus software, the performance of the system will be degraded. Also, although most InnoculateIT tasks can be performed using the Terminal Services client, the keyboard and monitor are required to perform some tasks.

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### **Installing the Remote Agent for Computer Associates ARCserve**

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When installing the Remote Agent for ARCserve 7 for Windows 2000 on the NAS system, an installation status dialog box will pop up on the client where the installation is taking place. The dialog box states that installation is in progress. However, occasionally the cursor may remain as an hourglass. You can check the NAS system's Services to see if the Remote Agent installed correctly by right-clicking **My Appliance** and then clicking **Manage**—> **Services**—> **Applications**—> **Services** .

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### **Supported SCSI Card for Tape Devices**

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The 775N supports the Adaptec 39160 dual channel LVD SCSI for tape for connecting to the following PowerVault tape devices:

- 120T DLT1
- 122T
- 128 LTO and SDLT
- 136T LTO and SDLT

The 770N supports the Adaptec 39160 dual channel LVD SCSI for tape for connecting to the following PowerVault tape devices:

- 120T DDS4 and DLT1
- 122T VS80
- 128T
- 136 LTO & SDLT

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### **Supported PCI NICs**

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The 775N supports the following PCI NICs:

- Intel PRO 10/100S
- Intel PRO Dual 10/100+
- Intel PRO/1000F
- Intel PRO/1000XT Cu GigaBit
- Broadcom 10/100/1000 Cu GigaBit

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## Default NetWare supervisor user name

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For the NAS system, the default NetWare supervisor user name is **supervisor**, and the password is **powervault**. Dell recommends that you change the password for this user in addition to the standard *administrator* password to eliminate possible security issues.

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## NAS system security/password rules

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The NAS system ships from the factory with a default set of local security rules. They are:

- Password expires after 90 days
- Password must be a minimum of six characters
- No restrictions on the password complexity
- Password cannot be the same as the past five passwords
- Account is locked-out after five invalid logon attempts
- After 30 minutes the Lockout count is reset to 0
- After a lockout, you must wait 30 minutes for the next logon attempt

**Note:** These security rules may or may not be overwritten if your NAS system is joined to a domain. If your NAS system is part of a domain, contact your IT manager to determine the security rules being used by system.

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## Changing a user/administrator password through the NAS Manager

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When changing a user/administrator password from the NAS Manager UI you may receive the following message: "The new password does not match password complexity rules". This message is generated if the new password does not comply with the password security rules of the NAS system. The default password security rules for the NAS system are:

- Password must be a minimum of 6 characters
- Password cannot be the same as the past 5 passwords

When changing a user/administrator password be sure to follow these rules.

**Note:** These security rules may or may not be overwritten if your NAS system is joined to a domain. If your NAS system is part of a domain, contact your IT manager to determine the security rules being used by system.

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## Support for Spare Memory Row

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Your NAS system has spare memory row support, which allows the system to reserve a memory bank for failover. This feature is only supported on your NAS system with BIOS version A04 or above. Before enabling the spare memory row feature, download and install the latest BIOS available.

Check [support.dell.com](http://support.dell.com) for the latest BIOS release for your system.

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## Configuring the UPS service from NAS manager

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After enabling the Uninterruptible Power Supply (UPS) service from the NAS Manager UI

(Maintenance->UPS), always exit the **UPS Configuration** page by clicking the **OK** or **Cancel** buttons. When the **UPS Configuration** page is loaded, the UPS service is stopped to allow for configuration updates. However, if the **OK** or **Cancel** buttons are not used to exit the page, the service may not be restarted. If the UPS service is disabled by mistake, simply re-enter the **UPS Configuration** page, select **Enable the UPS service on this appliance** and click **OK**.

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### **CD-ROM drive under remote storage marked as a failed device**

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Under certain circumstances, the NAS system may display an extra CD-ROM drive as a failed device under **Removable Storage->Physical Locations**. This error can be ignored and does not indicate a CD-ROM drive defect. You can delete the device by right-clicking the CD-ROM drive marked as failed and selecting **Delete**.

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### **Kick-Start diskette feature does not work**

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When you are running Dell OpenManage Kick-Start, do not use the write diskette option. The Dell OpenManage Kick-start write diskette option is not supported on PowerVault 77xN systems.

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### **Enabling MDM Alerts**

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In order to view alerts from an MDM device, the alerts for that device must be enabled. To enable alerts, go to **Control Device** under the **Controller** tab from the controller NAS Manager. Select a controlled device and click **Properties**. Choose **Yes** from the **Alerts Enabled** drop-down box. Click **OK** and alerts will be enabled for that device.

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### **MDM Device Status**

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When an MDM device is powered down or inaccessible from the network, it may take the controller several minutes to show the device as missing. If a system is inaccessible and the device status is not yet reported as missing, any jobs run on the system may show a pending status. These jobs may never complete. Also, when the device is once again accessible, it may take several minutes for the controller to report the device as active.

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### **MDM Quick Run**

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If an MDM job already exists, the Quick Run feature allows you to execute the job on another device or set. Click on **Run Jobs** under the **Controller** tab. Select a job and click **Quick Run**.

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### **MDM Location Field**

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In the Job Template Wizard on an MDM controller, there is a location field. This field is used to specify if a script is on the controller or device. Select either **controller** or **device** then browse to the desired script on the specified system.

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### **Using Console redirection after System POST**

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To display your system output in console redirection after your system's POST, you must have



the **Redirection After Boot** option in the System Setup utility set to **Enabled**. To access the System Setup utility press **F2** during POST.

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### Maximum Persistent Images in a Cluster Environment

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A maximum of 250 persistent images can be stored on a NAS system. Therefore, in order to avoid having over 250 persistent images on a cluster node after a volume fails over, limit each node in a cluster to less than 125 persistent images.

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### Using PXE with your system and Cisco switches

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When using PXE, PowerVault 77xN systems are incompatible with Cisco switches. If you are unable to successfully perform PXE boot using your system and it is connected to a Cisco switch, try a non-Cisco switch.

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### Deleting virtual disks created using Array Manager

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Always use Array Manager to delete any virtual disks that you created using the Array Manager (i.e. RAID-10 and RAID-50).

Also, remember to remove any shares, persistent images, and volumes before deleting a virtual disk. If you delete a virtual disk using Array Manager without first deleting the volume that resides on the virtual disk, creating a new volume in the NAS Manager may fail.

If this happens perform the following steps:

- 1) Start Array Manager
- 2) Click on the **Disk View** tab. If the virtual disk is labeled as **Dynamic and Unknown Group**, right-click the virtual disk and click **Convert to Basic**.
- 3) Follow the wizard to convert the disk to basic.
- 4) In the left pane, expand **Arrays** and browse to the newly created virtual disk.
- 5) Delete the virtual disk.
- 6) Go back to the NAS Manager and try to create the volume.

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### Refreshing web page causes volume name to appear as “((Null)) ((Null))”

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If you refresh the web page while you are creating a volume using the Web based Disks and Volumes, the volume name may display as **(Null) ((Null))** . This is because the volume has not yet been formatted. Wait a few moments, and the volume name will display correctly.

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## **Increasing disk performance with Array Manager**

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To improve disk performance, use Array Manager to change the Read policy for the virtual disk to Adaptive Read Ahead. See your Array Manager help for more information on how to change the Read policy.

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## **Configuring DNS Suffixes**

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When configuring DNS Resolution using the NAS Manager's Network Global Settings task, configured suffixes may not display on the **DNS Resolution** menu. You can verify configured DNS suffixes by using Terminal Services to view the network adapter's advanced properties.

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## **Dell Embedded Remote Access for the PV770N**

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When the Dell Embedded Remote Access (ERA) controller is installed after the initial setup of the 770N system, you must manually install the ERA software. You can install the ERA software components from the source directory **C:\Dell\OMRac** . The **mt\_pkg** and **vnc\_pkg** components must be installed using the **setup.exe** file located in their corresponding subdirectory.

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## **Persistent Images are No Longer Accessible After Reinstalling the Operating System**

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Persistent images are not valid after you reinstall the operating system. If the operating system is accessible before you reinstall, delete all persistent images before you reinstall the operating system. If you cannot delete the persistent images because of an operating system failure, there may be links to previous persistent images after a reinstall, but these links will not be valid.

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## **Remote Access Controller POST and Boot Path Logs Cleared**

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Reconfiguring the remote access controller will clear the POST and boot path analysis logs.

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## **Reinstalling the 770N System During a RAID Reconstruction**

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Always allow any RAID reconstruction operation occurring on the onboard PERC 4/Di controller to complete before starting the reinstallation process on the 770N system. The PERC 4/Di constructs a RAID virtual disk during a NAS Manager-> "Prepare to Expand" operation or when adding a member in Array Manager. Wait until the reconstruction process completes before reinstalling.

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## **Disk Quotas for “Administrator” Do Not Display in the NAS Manager**

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To create a disk quota for the user administrator you must access the Disk Quota tool by using a KVM or through the Terminal Services Client.

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## **NAS Manager Status Indicator Loses Posted Events After System Shutdown or Reboot**

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The NAS Manager status indicator loses posted events after performing a system shutdown or reboot. However, the events are still logged in the system’s event log.

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## **Limitation of Cluster support for optional Storage Manager software**

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Storage Manager software is not supported on clustered Dell™ PowerVault™ NAS systems.

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