Release Notes

HP ProLiant Storage Server iSCSI Feature Pack

Product Version: Version 1.51

First Edition (November 2004)

Part Number: T3669-90902

This document provides information not covered elsewhere in user documentation for the HP ProLiant Storage Server iSCSI Feature Pack (V1.51). Refer to this document if you plan to install, configure, and use this application.

For other related documentation, access the HP storage web site at: http://www.hp.com/country/us/eng/prodserv/storage.html.



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HP ProLiant Storage Server iSCSI Feature Pack Release Notes First Edition (November 2004) Part Number: T3669-90902 This document is intended for customers who purchased the HP ProLiant Storage Server iSCSI Feature Pack Version 1.51.

These release notes cover the following major topics:

- Installation issues, page 4
- iSCSI Feature Pack issues, page 7
- Application Storage Manager issues, page 9
- Troubleshooting Tips, page 12

For general information on using the iSCSI Feature Pack, please refer to:

- Online Help (accessible through the software)
- iSCSI Feature Pack User Guide (on the Documentation CD)
- Application Storage Manager User Guide (on the Documentation CD)

White papers and best practices documents are available on the HP web site at: http://www.hp.com/support/storage, under NAS Upgrades/ Options/Accessories.

Installation issues

This section provides information related to the installation of the HP ProLiant Storage Server iSCSI Feature Pack programs.

The HP ProLiant Storage Server iSCSI Feature Pack Installer

The iSCSI Feature Pack installer presents only those software options that are compatible with the operating system of the destination server. HP-recommended features are checked during the installation process. See the description of each feature to find out more information and to see if the installer detects any previous installations of this feature.

Supported Configurations

The Installation CD contains both the iSCSI Feature Pack target software and Application Storage Manager (ASM) software. The software is supported on the following HP storage servers:

Software	Supported servers
iSCSI Feature Pack	HP StorageWorks NAS 1200
	HP StorageWorks NAS 2000
	HP StorageWorks NAS 4000
	HP ProLiant DL100 Storage Server/HP StorageWorks NAS 1500
	HP ProLiant DL380 G4 Storage Server (SAN and direct attach storage models)
	HP ProLiant ML110 Storage Server/HP StorageWorks NAS 500
	HP ProLiant ML350 G4 Storage Server
	HP ProLiant ML370 G4 Storage Server
Application Storage Manager	HP StorageWorks NAS 2000
	HP ProLiant DL100 Storage Server/HP StorageWorks NAS 1500
	HP ProLiant DL380 G4 Storage Server (except SAN storage models)
	HP ProLiant ML110 Storage Server/HP StorageWorks NAS 500
	HP ProLiant ML350 G4 Storage Server
	HP ProLiant ML370 G4 Storage Server

Table 1: Supported servers

Installing Application Storage Manager

Using the installation program on the CD, install iSCSI Feature Pack first, before installing ASM.

ASM installs software on both the HP Windows Storage Server (WSS) as well as any Exchange servers in your environment whose Exchange data (Mail Stores, Public Stores, and Logs) you plan to host on the WSS.

During the installation process:

- If your storage server is not compatible with ASM, the Select Features section of the installer is blank. Click **Next** to continue the installation.
- You are prompted for an administrator user name and password. This user account can be a local administrator or a domain administrator. Entering a domain administrator account provides the additional ability for ASM to automatically detect all Exchange servers in your domain.
- While installing the ASM Exchange Agent on your Exchange server, select the iSCSI Snapshot components only if you have purchased and obtained license keys to enable them.
- If you receive the message, Service Already Exists, ASM is already installed. Uninstall ASM using Start > Control Panel > Add or Remove Programs, and then reinstall it.

After installing ASM, access it from the Start menu of your storage server by selecting Start > Programs > HP Application Storage Manager > HP Application Storage Manager.

Licensing the iSCSI Feature Pack

Before running ASM, license the iSCSI Feature Pack. A License Key Entitlement Certificate is included in your iSCSI Feature Pack software kit.

To install the license:

- 1. Load the Windows Storage Server WebUI.
- 2. Log in (if necessary).
- 3. Click the **iSCSI** tab.
- 4. Select Configuration.
- 5. Select License and Version Information.
- 6. Enter your license key, and then click **OK**.

After installing ASM, access it from within the Start menu on the Windows Storage Server (**Start > Programs > HP Application Storage Manager > HP Application Storage Manager**.

Virtual Disk Service (VDS) does not start on Exchange server after installation

Occasionally, after installing the ASM Agent on the Exchange server, the Microsoft Virtual Disk Service does not start. The VDS should always be running if the ASM Agent is running.

To verify the service is running:

- 1. Select Start > Programs > Administrative Tools > Services.
- 2. Scroll down and select Virtual Disk Service.
- 3. Verify that the service is running. If it is not running, right-click **Virtual Disk Service**, and select **Start**.

Unsigned driver installation

During the installation of the iSCSI Feature Pack, you must install the *unsigned driver*. This driver is a SCSI HBA emulation driver and is necessary for the proper operation of the iSCSI Feature Pack.

If you do not install this driver, the iSCSI Feature Pack installation fails. To correct this situation, go to the Support/Tools directory on your iSCSI Feature Pack Installation CD and run the FSRepair.exe utility. Then, reboot the storage server, and reinstall the iSCSI Feature Pack with the unsigned driver.

iSCSI Feature Pack issues

The following section provides information related to the iSCSI Feature Pack target software.

Shadow Copy Web UI page does not display properly

After installing the iSCSI Feature Pack target software, the Windows Storage Server (WSS) 2003 Web UI shadow copy page may not display properly. To correct this, exit the WSS Web UI, and use the standard Microsoft shadow copy tools in Windows Explorer or in My Computer.

iSCSI Oracle 10g Snapshot Agent availability

Oracle snapshot agents are currently available for Oracle versions 8i and 9i only. Oracle 10g snapshot agents will be available at a later date after the full quality assurance program is complete.

Logical drive is not displayed as available iSCSI storage

A new logical drive may not be displayed in the iSCSI Logical Unit or storage pool tabs. This occurs after a logical drive is deleted through the *hp Array Configuration Utility* before deleting the logical unit or storage pool information in the iSCSI tab. iSCSI is unable to use this logical drive until the administrator removes the information from the logical drive.

Complete the following steps from a DOS prompt to correct this problem:

- 1. Change directory to C:\Program Files\HP\ProLiant Server iSCSI Feature Pack.
- 2. Run StopiSCSIServer.bat.
- 3. Use Disk Manager to initialize the new logical drive.
- 4. Change directory to C:\Program Files\HP\ProLiant Server iSCSI Feature Pack\etc\<Computer Name>.
- 5. Copy ipstor.conf to ipstor.conf.bak.
- 6. Edit ipstor.conf to remove the Physical Devices marked Residual Virtual Device.

```
<PhysicalDev name="HP:LOGICAL" wwid=""
type="Direct-Access" isNew="false" owner="ELECTRA"
devName="" category="Residual Virtual Device"
quid="00000000-0000-0000-0000-000000000000"
fsid="fa1c0300-7414-3a66-2fee-863220bb3dbb"
key="1096304998" fsidRelianceEnabled="true" poolID="0"
queueDepth="8" connectionType=""
controllerType="generic" primaryID="" alternateID=""
isFsidReliable="true" ntDiskID="3">
<IPStorPartition checksum="">
<DynamicDiskSegment
guid="91be8fde-66f8-7146-86cf-7894bcbfb952"
firstSector="14336" lastSector="20479" owner="ELECTRA"
dataset="1096065190" seqNo="0" isLastSegment="true"
sectorSize="512" type="Umap" timestamp="1096065190"
deviceName="LU9"/>
<DynamicDiskSegment
guid="91be8fde-66f8-7146-86cf-7894bcbfb952"
firstSector="20480" lastSector="2048159"
owner="ELECTRA" dataset="1096065190" seqNo="1"
isLastSegment="true" sectorSize="512" type="SAN"
timestamp="1096065190" deviceName="LU9"/>
</IPStorPartition>
<SCSIAddress adapter="3" channel="0" id="10" lun="0"/>
<SCSIAliasing/>
<Geometry startingSector="14336"
endingSector="6144479" sectorSize="512"/>
<InquiryString>000000233000002HP LOGICAL VOLUME
1.92</InquiryString>
<Comments/>
</PhysicalDev>
Figure 1: Example of a Residual Physical Device Entry
```

7. Change directory to C:\Program Files\HP\ProLiant Server iSCSI Feature Pack.

8. Run StartiSCSIServer.bat.

Application Storage Manager issues

The following section provides information related to the ASM component of the iSCSI Feature Pack.

Running the Host Storage Groups Wizard

The Host Storage Groups Wizard instructions on the Mailstore Database Capacity Planning screen should read: Enter the amount of space needed for the Mailstore database. Also, on the same screen, the number of mailbox and mailbox size values are theoretical extremes for informational purposes only. The actual number of mailboxes and their sizes are not changed by ASM.

Task View dialog

The Task View dialog is displayed automatically for any task that takes longer than two seconds to complete. You can manually launch it at any time from the ASM toolbar (**Tools** > **Task Viewer**). After storage system changes are made, the Task Viewer window opens (if the task is longer than two seconds) and displays the task list that the system is running, and the status of those tasks.

iSCSI license key error

If ASM is launched before installing the iSCSI license key, a warning box displays that iSCSI is not licensed. A hyperlink to the iSCSI License Key web page is provided. Click the link to install the license.

After the license is installed, clicking **OK** displays an error page stating that the web page has timed out or you might have opened this page without opening the default home page. If you receive this error, the iSCSI license key installed successfully. You can ignore the error and begin using ASM.

Dynamic Disks are not supported

ASM and iSCSI Feature Pack software do not support Windows Dynamic Disks configured on the storage server.

Migrated Exchange Storage Group components display as size zero

After migrating Exchange Storage Group components to the storage server, ASM displays the component size as zero. This occurs because the actual size of the component data has not been determined.

To update the component size display, perform one of the following:

- Restart ASM.
- From the menu bar, select Actions > Refresh.
- Wait up to one hour until a refresh occurs automatically.

Hot Spare Disk gets assigned to all virtual arrays

In order to migrate Exchange Storage Group components to the storage server, ASM may configure a virtual array with a Hot Spare Disk. If the Hot Spare Disk is assigned to the newly created virtual array, it is assigned to all existing virtual arrays on the same controller not just the virtual array that was created.

To remove the Hot Spare Disk from virtual arrays where it is not wanted:

- 1. Select Start > Programs > Compaq System Tools > hp Array Configuration Utility.
- 2. After running hp Array Configuration Utility, remove unwanted assignments.

Duplicate Exchange Storage Group components displayed

If Exchange Storage Group components are migrated to the storage server, then migrated off the storage server, and then back onto the storage server a second time, ASM displays duplicate components.

To remove the duplicate Exchange components from view:

- 1. Right-click the component to remove from view.
- 2. Select **Remove from view**.
- 3. Click **OK** to confirm the action.

Stacked bar chart error in Allocate Space Advanced Storage Attributes dialog box

After you make changes to Allocated Space and click **Advanced** to access the Advanced Storage Attributes, the dialog box may contain the following error message: Stacked bar chart error: there must be at least one row and one numeric column, and data should be all positive or negative. This occurs if the system is attempting to display boundary storage size values.

To correct the error:

- 1. Click Cancel on the Advanced Storage Attributes dialog box.
- 2. Change the allocated size slightly in the Allocate Space Wizard.
- 3. Click Advanced again.

ML110 and DL100 systems do not support creating and growing storage space

ASM does not support creating and growing RAID sets and logical drives on HP ProLiant ML110 and DL100 Storage Servers containing the Adaptec 2410 storage controller. These systems are shipped with the storage pre-configured.

To work around this issue, delete the factory storage configuration and reconfigure all RAID sets and logical drives manually.

Attaching disks with different capacities on a controller is not supported

ASM does not support disks with different capacities attached to the same controller where they could be shared by the same RAID set or virtual array.

To work around this issue, move disks of the same size to the same controller.

Note: For systems with SmartArray 6404 controllers that act as two 2-port controllers, same sized disks need only be moved to their own 2-port pair to work correctly.

ASM sets warning and critical thresholds for the directory quotas

The warning threshold value that is entered for an application area corresponds to the WSS WebUI Directory Quotas warning and critical threshold values. ASM sets both the warning value and the critical value to the number entered in the ASM warning threshold field.

To separate the warning and critical values, set the critical value in the WSS WebUI Directory Quotas page rather than setting it in ASM.

Note: Only the warning value is displayed in the ASM user interface.

Troubleshooting Tips

ASM Errors

All ASM-detected errors are logged to the Windows Event Manager. Examine the Event Manager contents while looking for additional error information by selecting **Start > Programs > Administrative Tools > Event Viewer**.