

SAN/iQ™ Software Version

8.0.00.1682 [NSM 160, NSM 260, NSM 2060, NSM 4150, Dell 2950, DL 380, IBM x3650]

8.0.00.1704 [NSM 2120, DL 320s, NSM 2120 G2 and DL 185]

8.0.00.1712 [VSA]

8.0.0.107 [Failover Manager ESX and non-ESX]

Centralized Management Console Version

8.0.00.1704

November 2008

Overview

These Release Notes provide instructions for upgrading your software, and information about what has been fixed in this release.

These Release Notes are current as of the above date. The latest Release Notes are available at the Customer Resource Center at www.LeftHandNetworks.com-> Resources-> Support Library-> Release Notes.

Updated Software Packages

Updated Release 8.0 versions of the Virtual SAN Appliance for VMware® ESX Server (VSA) and the Failover Manager are available. If you have purchased new storage nodes and have received 8.0 DVDs for the SAN/iQ® Management Software or the VSA as part of your purchase, you should download and use the latest software versions of the VSA and Failover Manager from www.LeftHandNetworks.com > Resources-> Software Downloads > SAN/iQ Software.

- Failover Manager - Under the SAN/iQ Software downloads, choose release 8.0 and then download the "Upgrade Failover Manager for SAN/iQ 8.0." Note that this download is actually an installation package for the Failover Manager. Install the Failover Manager as described in the *LeftHand SAN User Manual* in Chapter 10, "Installing and Configuring the Failover Manager, on page 298, or in the corresponding section of the Online Help available from the CMC.
- VSA - Under the SAN/iQ Software downloads, select version 8.0 and the VSA ESX platform, and then download the "VSA for VMware ESX for SAN/iQ 8.0." Next, install the software as instructed in the QuickStart VSA that is included with the software.

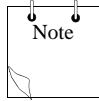
New Features

Be sure to read the summary of new features in the [SAN/iQ 8.0 Feature Summary](#) at www.LeftHandNetworks.com.

Using the New CLI

SAN/iQ software Release 8.0 includes a new Command Line Interface that includes all SAN management functions available for integration, automation or scripting.

Install the Command Line Interface from the SAN/iQ® Management Software DVD.



Note: To use the CLI, all storage nodes in the management group must be upgraded to 8.0. Verify the management group version, as described in [“Verify Management Group Version” on page 7](#), before using the CLI.

Check Compatibility Updates

For a complete list of supported SAN/iQ software releases and application software compatibility, see the Customer Resource Center at www.LeftHandNetworks.com-> Services & Support->Software Downloads->Products-> Compatibility Lists.

Compatibility And Version Information

Platforms supported for this release

Upgrades to Release 8.0 SAN/iQ software are available for the following platforms:

- NSM 160
- NSM 260
- NSM 2060
- NSM 2120
- NSM 4150
- Dell 2950
- DL 320s
- DL 380
- IBM x3650
- VSA

Mixed SAN/iQ Software Versions in Clusters

Clusters can accommodate storage nodes running different versions of the SAN/iQ software. However, you can only add storage nodes running a later software version to a cluster running an earlier software version. For example, you can add a storage node running the 8.0 version software to a cluster currently running the 7.0.0x software. You cannot add a storage node running 7.0.0x software to a cluster running 8.0 software.

If you partially upgrade a cluster, the cluster will continue to run on the earlier software version until the entire cluster is upgraded.

Version Requirements

- To upgrade to Release 8.0 SAN/iQ software, the storage nodes must be at version 7.0 or later. If the storage nodes are at a lower version, please contact Customer Support for access to the interim upgrade files. Go to [“Obtaining Support” on page 12](#), for customer support contact information.

- To upgrade to 8.0, you must first ensure that the appropriate patches and LSMD have been applied. See [“Upgrade Flowcharts” on page 9](#).
- Required version of the Microsoft iSCSI Software Initiator - Version 2.07 (or greater)

Planning the Upgrade

Table 1. Planning Checklist

| Upgrade Task | Information and Instructions |
|---|--|
| Review health of each storage node with Customer Support. | <ol style="list-style-type: none"> 1. Call customer support about 1 week before scheduled maintenance window. 2. Ensure you have Service Console installed and are uploading logs for each storage node. 3. Review logs with customer support. <p>Note - If you do not have Service Console installed, download Service Console for 8.0 from www.lefthandnetworks.com.</p> <ol style="list-style-type: none"> 1. On the LeftHand Networks website, click Services & Support > Software Downloads. 2. Log in to the Resource Center. 3. On the Resources Page, look for the Software Downloads section and click Support Tools & Utilities. 4. Find the Service Console 8.0 download and install it prior to calling Customer Support. |
| Verify the software version you are currently running and the upgrade path to the new release software. | Use Table 2 to determine the appropriate upgrade files for your storage nodes. |
| Are you running iSCSI load balancing? Verify that each cluster has a VIP configured. | If you are running iSCSI load balancing, you must have a Virtual IP Address configured on each cluster. |
| Plan for volume access and the impact to iSCSI sessions that the upgrade will have. | The SAN/iQ software upgrade will reboot the storage node. Therefore, for volumes to remain online during the upgrade process, they must be 2-way replicated or higher (3-way or 4-way). Volumes that are 0-way replicated should be disconnected (logged off) from the application server(s). Rebooting the storage node will cause all iSCSI sessions on that storage node to be terminated and recovered to one of the remaining storage nodes in the cluster. Consequently, application IO to the volume may stop until the iSCSI session is recovered. Consider upgrading during off-peak time (if possible) to avoid application impact. |
| Schedule time for upgrade. | Upgrading a storage node to 8.0 may take 30 to 40 minutes, plus up to 10 minutes for the post install qualification. Actual upgrade time depends on the specific platform and configuration. |
| Apply required Patches | See the Flow Charts and Patches section starting on page 9 . |

Table 1. Planning Checklist (Continued)

| Upgrade Task | Information and Instructions |
|--|--|
| Determine which upgrade components you need to download. Components include: <ul style="list-style-type: none"> ■ Centralized Management Console ■ SAN/iQ software upgrade package ■ LSMD upgrade package – required for all upgrades to 8.0. For more information, see 7.0 SP1 Release Notes. ■ SAN/iQ® Solution Pack for Microsoft® Windows® and Release Notes (if applicable) Ensure that all patches have been applied before upgrading. | The components are available from the LeftHand Networks web site at www.LeftHandNetworks.com . You can determine whether you are using LSMD in the Registration Information on the Registration Tab. See Figure 3, “Verifying the management group version number,” on page 8 . The Release Notes for the SAN/iQ® Solution Pack for Microsoft® Windows® contain upgrade instructions for the Solution Pack components. |
| Follow the prescribed order for upgrading, depending upon the components you are upgrading. <ul style="list-style-type: none"> ■ Upgrade the CMC and the SAN/iQ software only. | Upgrade in the following order: <ol style="list-style-type: none"> 1. CMC 2. SAN/iQ software - Review the upgrade flow charts before proceeding. |
| <ul style="list-style-type: none"> ■ Upgrade the CMC, the SAN/iQ software, and the Solution Pack. | Upgrade in the following order: <ol style="list-style-type: none"> 1. CMC 2. SAN/iQ DSM for MPIO <p style="margin-left: 20px;">If you are running a previous version of the SAN/iQ DSM for MPIO, the installer prompts you to first uninstall that version before installing the current version.</p> 3. SAN/iQ software - Review the upgrade flow charts before proceeding. 4. Remaining Solution Pack components, the SAN/iQ VSS Provider and the Authentication Console as required. |
| Review “Upgrading Software - Requirements and Best Practices” for installing the software packages. These requirements and best practices dictate the order in which you upgrade storage nodes, depending on your particular configuration. | First install the upgrade for the Centralized Management Console. Then install the additional software on storage nodes. <p>Use the Release 8.0 CMC to install the Release 8.0 SAN/iQ software upgrade. If you do not have a direct path (as detailed in Table 2) to the 8.0 release, you may be required to first upgrade the software on the storage node(s) to a version that can then upgrade to Release 8.0. Contact Customer Support for access to the interim upgrade files. Go to “Obtaining Support” on page 12 for customer support contact information.</p> |

Upgrading Software - Requirements and Best Practices

Best Practices

- **LSMD Upgrade** - LSMD upgrade is required for upgrading from 7.x to 8.0.
- **Virtual IP Addresses** - If a Virtual IP (VIP) address is assigned to a storage node in a cluster, the VIP storage node needs to be upgraded last. The VIP storage node is shown on the cluster iSCSI tab, shown in [Figure 1](#).

1. First upgrade the non-VIP storage nodes that are running managers, one at a time.
2. Then upgrade the non-VIP non-manager storage nodes.
3. Lastly, upgrade the VIP storage node.

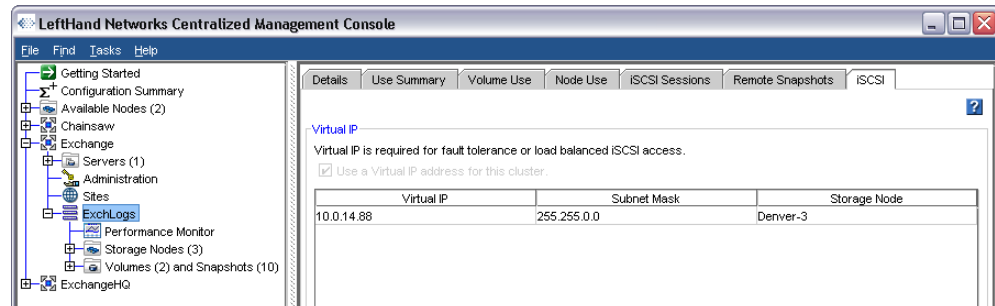


Figure 1. Find the storage node running the VIP

- **Remote Copy** - If you are upgrading management groups with Remote Copy associations, you should upgrade the remote management groups first. If you upgrade the primary group first, Remote Copy may stop working temporarily, until both the primary management group and the remote group have finished upgrading. Upgrade the primary site to 8.0 immediately after upgrading the remote site to 8.0. Refer to [“How to Verify Management Group Version”](#) on page 8.
- **smGenWatch** - Do not install any version of smGenWatch on the storage node. smGenWatch is pre-installed and pre-configured in SAN/iQ software versions 7.0 and later.
- **Stride Resize** - SAN/iQ software version 7.0 changed the default stride size (the amount of data in an individual volume page, used for Network RAID) for newly created volumes. This change has been shown to improve IO performance on volumes. We recommend converting existing volumes to the new stride size. See the article [“HOWTO_Stride_Resize”](#) in the Support Library at www.LeftHandNetworks.com. This is not required if you have upgraded to 7.0 and converted your volumes to the new stride size at that time.

Selecting the type of upgrade

The Release 8.0 SAN/iQ software CMC supports two methods of upgrades, as shown in [Figure 2](#).

- One-at-a-time (recommended) - this is the **default and only method that should be used if the storage nodes exist in a management group**.
- Simultaneous (advanced) - this allows you to upgrade multiple storage nodes at the same time if they are not in a management group. Use this only for storage nodes in the Available pool.



Caution: Do not select “Simultaneous (advanced)” if your storage nodes are in a production cluster.

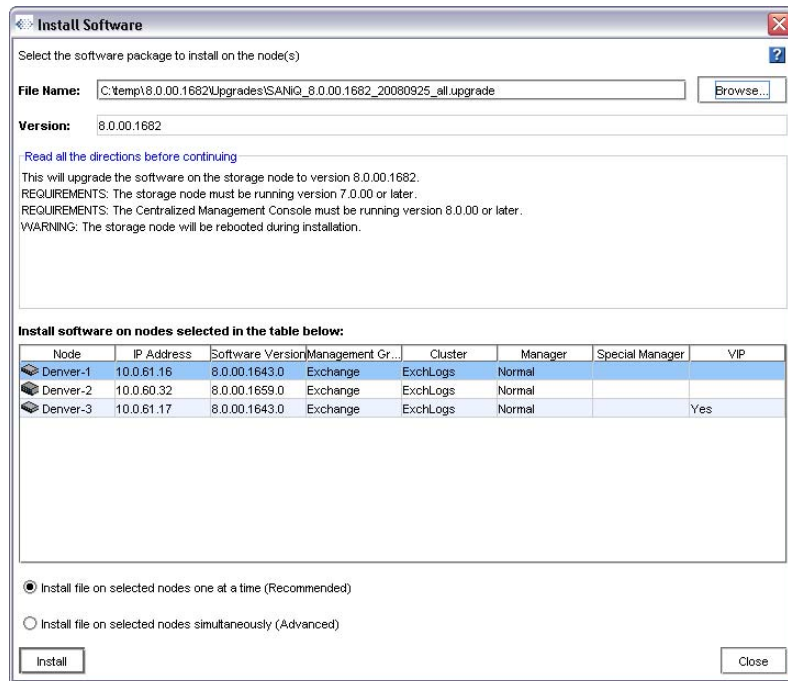


Figure 2. Viewing the CMC upgrade/installation window

Procedures for Upgrading

Use the following procedures to upgrade storage nodes to the Release 8.0 SAN/iQ software. Review the [Table 1, “Planning Checklist,” on page 3](#) before starting the upgrade. Verify the LSMD Upgrade is installed before starting the upgrade to Release 8.0.

- [“Download the upgrade components” on page 6](#)
- [“Upgrade Software on Storage Nodes” on page 7](#)
- [“Verify Management Group Version” on page 7](#)
- [“Run the 8.0 Service Console Scheduled Task” on page 8](#)
- [“Check for Patches” on page 8](#)
- [“Converting Volumes to New Stride Size” on page 9](#)

This only applies to pre-7.0 created volumes.

Download the upgrade components

Use [Table 2](#) to determine the appropriate upgrade files for your storage nodes.

| Platform | For SAN/iQ Software Version | Use Upgrade File |
|-----------|--------------------------------|---|
| NSM 160 | ■ 7.0 (7.0.xx.xxxx) or greater | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |
| NSM 260 | | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |
| NSM 2060 | | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |
| NSM 2120 | | ■ SANiQ_8.0.00.1704_20081022_DL320S_NSM2120.upgrade |
| NSM 4150 | | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |
| Dell 2950 | | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |
| DL 320s | | ■ SANiQ_8.0.00.1704_20081022_DL320S_NSM2120.upgrade |
| DL 380 | | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |
| IBM x3650 | | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |
| VSA | | ■ SANiQ_8.0.00.1682_20080925_all.upgrade |

Table 2. Upgrade paths available for SAN/iQ software version 8.0

Upgrade Software on Storage Nodes

If you see the following type of message during the upgrade process

ERROR: 8.0.xx.xxxx-- Upgrade will now be aborted.

or if you encounter any other problems during the upgrade, please run the 8.0 Service Console scheduled task to upload a new set of SAN logs and then call customer support based on your support contract.

1. Right-click the first storage node to upgrade and select Install Software. The Install Software window opens.
2. Select from the list which storage nodes to upgrade.
3. Select the upgrade.
4. Click Install.

Upgrade Failover Manager

There is no upgrade from release 7.0 to Release 8.0 Failover Manager. You must uninstall the 7.0 Failover Manager and then install the 8.0 Failover Manager.

Verify Management Group Version

- The management group version will not move to Release 8.0 until all storage nodes in the management group (and in the remote management group if a Remote Copy relationship exists) are upgraded to Release 8.0 SAN/iQ software.
- The upgrade process validates the hardware identity of all of the storage nodes in the management group. If this validation fails for any reason, the management group version will not be upgraded to 8.0.

How to Verify Management Group Version

1. In the CMC navigation window, select the management group.
The management group tab window opens.
2. Select the Registration tab.
The management group version number is at the top of the Registration Information section, as shown in [Figure 3](#).

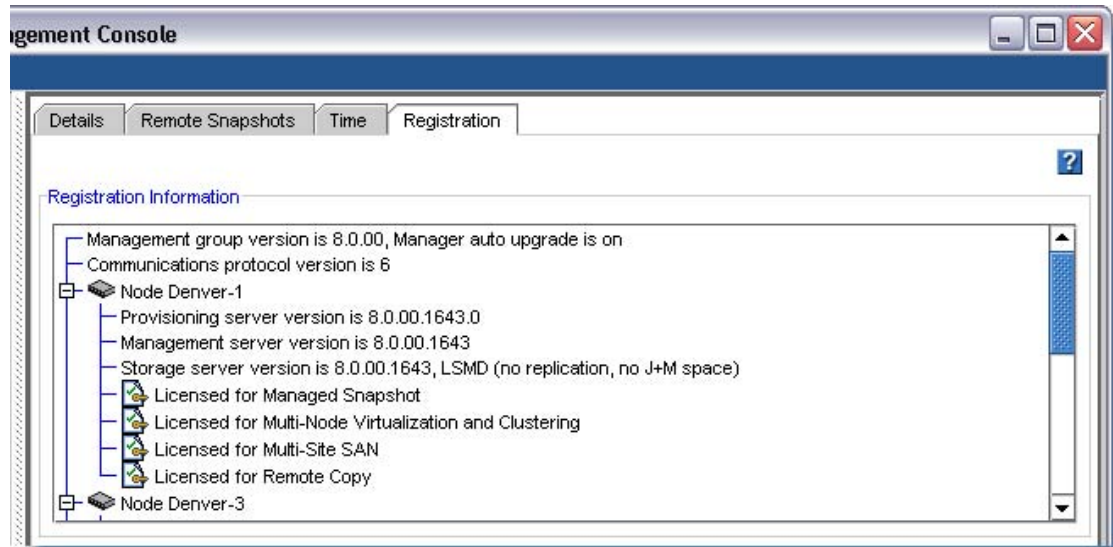


Figure 3. Verifying the management group version number

Run the 8.0 Service Console Scheduled Task

This uploads a new set of SAN logs.

Check for Patches

After you have upgraded to Release 8.0, check the Customer Resource Center for applicable patches.

For software and platform-specific patches

Check our website www.lefthandnetworks.com-> Services & Support->Software Downloads

Converting Volumes to New Stride Size

After you have finished upgrading, consider converting your volumes to the new stride size. See the article “HOWTO_Stride_Resize” at the Customer Resource Center at www.LeftHandNetworks.com. This only applies to pre-7.0 created volumes and is not required if you have upgraded from 7.0 and converted your volumes to the new stride size at that time.

Obtain the Feature Key

Until the management group is upgraded to Release 8.0, you will not be able to take advantage of all the Release 8.0 features, such as SmartClone technology or Performance Monitoring.

To obtain the Feature Key

1. Go to <http://support.lefthandnetworks.com/>
2. Select “Generate License Keys” from the right side bar and log in with your Customer Portal credentials to generate License Keys
3. Apply the license key(s) to the storage node(s).

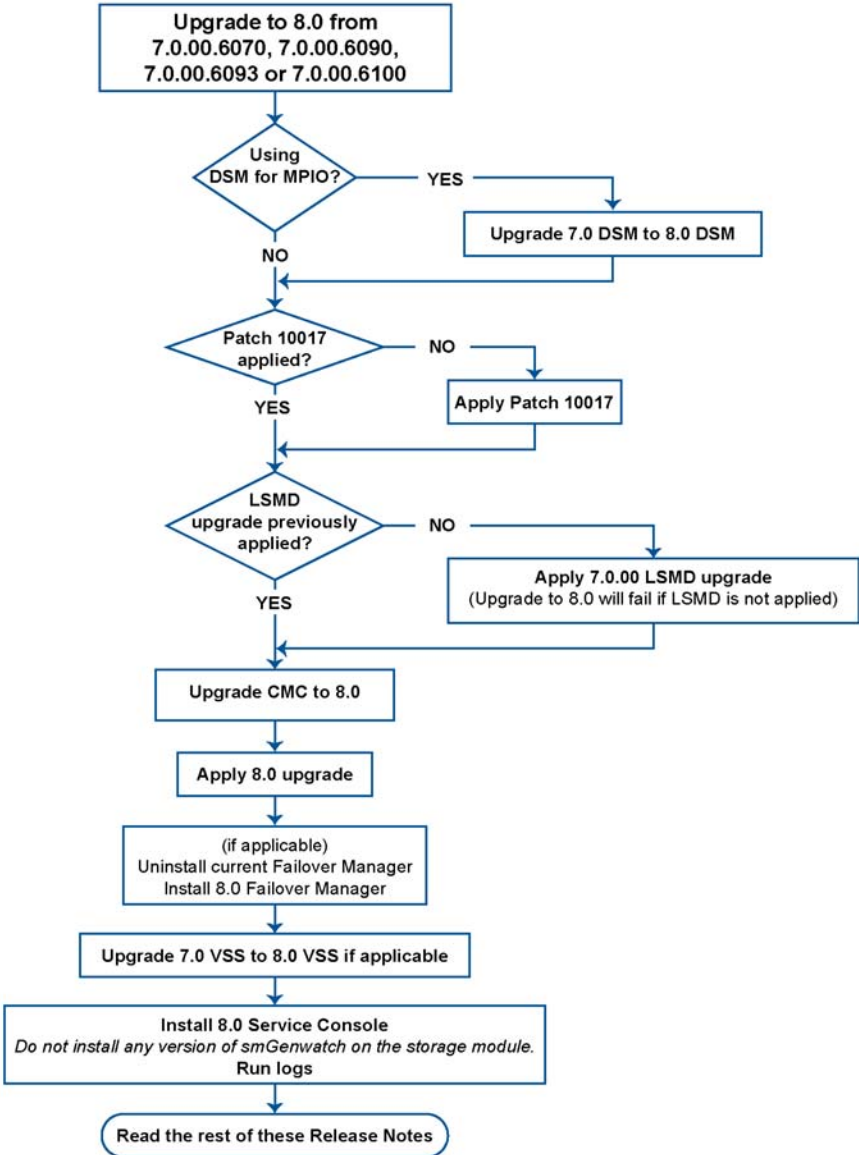
For assistance, go to “[Obtaining Support](#)” on page 12 for customer support contact information.

Upgrade Flowcharts

The following upgrade flowcharts illustrate the specific requirements, by platform, for upgrading to Release 8.0. Be sure to review the flowchart specific to your platform and software versions.

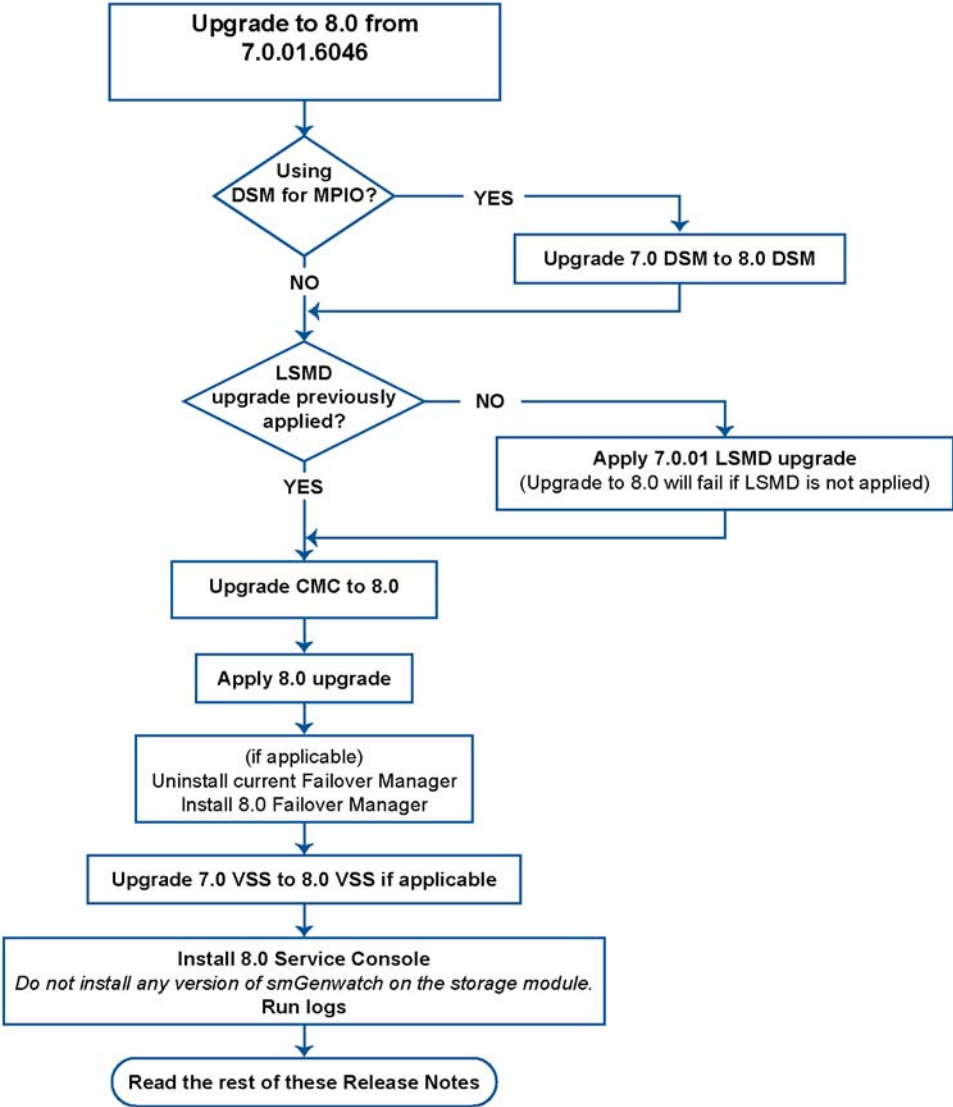
Upgrade From 7.0.00

- NSM 160
- NSM 2060
- NSM 4150
- DL 320s
- IBM x3650
- NSM 260
- NSM 2120
- Dell 2950
- DL 380
- VSA



Upgrade From 7.0.01

- NSM 160
- NSM 2060
- NSM 4150
- DL 320s
- IBM x3650
- NSM 260
- NSM 2120
- Dell 2950
- DL 380
- VSA



Obtaining Support

If you are a current customer with a valid support contract and are in need of product support, have your serial number ready and contact us at:

North America

Basic Contract Customers

1-866-LEFT-NET (1-866-533-8638)
303-217-9010
<http://support.lefthandnetworks.com/>

Premium Contract Customers

1-888-GO-SANIQ (1-888-467-2647)
303-625-2647
<http://support.lefthandnetworks.com/>

EMEA

All Customers

00.800.5338.4263 (International Toll-Free number)
+1.303.625.2647 (US number)
<http://support.lefthandnetworks.com/>

Support Upgrades

To upgrade your current support contract, contact us at:

1-866-4-IPSANs (1-866-447-7267)
sales@lefthandnetworks.com

After You Upgrade

Additional information about using the Release 8.0 SAN/iQ software.

New Utilization Computations

The formulas for computing snapshot and volume utilization have changed to more accurately reflect the amount of space being used on the SAN.

Pre-8.0 Utilization Formulas

Utilization was computed as

$$\frac{(\text{Used Space of snapshot} + \text{Used Space of Temp Space})}{(\text{Provisionable Space of snapshot} + \text{Provisionable Space of Temp Space})}$$

8.0 Utilization Changes

Snapshot utilization is now calculated as the used space of the snapshot divided by the provisioned space of the snapshot:

$$\text{Used Space of snapshot} / \text{Provisioned Space of snapshot.}$$

Volume utilization is calculated as the used space of the volume divided by the provisioned space of the volume:

$$\text{Used Space of volume} / \text{Provisioned Space of volume.}$$

For thinly provisioned volumes, utilization will vary because the volume “autogrows” as data is written to it. As utilization approaches 100%, the volume will autogrow and the utilization percent will decrease. This pattern of increasing utilization, autogrow, and decreasing utilization repeats over time and volume use.

Compatibility Matrix for the Failover Manager, Windows, and VMware Server

In the Release 8.0 SAN/iQ software, the Failover Manager can be installed in the following configurations.

Note that VMware Server version 1.x does not support Windows 2008.

Table 1.1. Matrix of VMware Server and Windows compatibility

| Failover Manager | Windows 2003 x86 | Windows 2003 x64 | Windows 2008 x86 | Windows 2008 x64 |
|--------------------------------|------------------|------------------|-------------------------|-------------------------|
| VMware Server 1.x | Supported | Supported | Not supported by VMware | Not supported by VMware |
| VMware Server 2.x ^a | Supported | Supported | Supported | Supported |

a. Special instructions are required to add the Failover Manager virtual machine to the virtual machine list in VMware Server 2.0.

Adding the Failover Manager to VMware Server 2.0

1. Install VMware Server 2.0.
2. Install Failover Manager with the default options.
By default, the Failover Manager is installed into C:\Program Files \LeftHand Networks\Failover Manager.
3. Open the VMware Server Home page and log in as administrator.
4. In the Commands section, select Add Datastore.
5. In the Add Datastore window, type the name of the datastore, Failover Manager.
6. Next, select Local Datastore and type the directory path for the Failover Manager.
7. Click OK to save the new Datastore.
The datastore now shows up in the Inventory panel as FOM.
8. In the Commands pane, select Add Virtual Machine to Inventory.

9. In the Add Existing Virtual Machine window, select the Failover Manager in the Inventory pane.
10. Select the FOM.vmx in the Contents pane and click OK.
11. Now, power on the FOM virtual machine (FOM.vmx).

Current Limitations in this Release

For information about current limitations and workarounds for those limitations, see the Service Notes for Release 8.0 SAN/iQ software on the Customer Resource Center at www.LeftHandNetworks.com-> Services & Support.

Fixed in SAN/iQ Software Version 8.0 Release

- 2754 - Upgrade Post-Qualification May Grab Focus Every 20 Seconds
- 5885/8067 - Tunable TCP Discovery Timeout Setting In The CMC
- 7082 - Mixed Data Schemas May Occur
- 7167 - The Next Occurrence Of A Snapshot Schedule May Show A Time In The Past
- 7331/7480 - Drive Shows As "Off or Removed" If The Storage Node Is Powered On With A Missing Drive [NSM 160, NSM 260, NSM 2120, DL 380, DL 320s]
- 7363/7161 - Volumes With Degraded Replication Are Not Apparent
- 7396 - New User Unable To Change Original Password
- 7367 - Cannot Start Virtual Manager
- 7433 - Repair Storage Node Procedure Generates "Will Cause Restripe" Warning Message
- 7485/7470 - MS Cluster Failovers When Migrating A Large Number Of Volumes Concurrently
- 7531 - CMC Has Memory Problem After Deleting Many Remote Snapshots
- 7545/7542 - Converting A Volume From Remote To Primary With Thin Provisioning Makes The Volume Un-editable
- 7558 - Remote Copy "New Volume" Selection Opens Management Group Wizard With Back Button Enabled
- 7575/7565 - Flow Control Behavior Is Erratic On Bonded NICs
- 7594 - Resync Complete Percentage Decreases
- 7640 - When One Drive Is Removed Or Rebuilding In RAID 6, The Safe To Remove Status Indicates No [DL 320s, NSM 2120]
- 7642/7655 - Management Group Configuration Information Cannot Be Saved Without Specifying The File Extension
- 7681/7660 - False Alerts May Be Generated While Remote Copy Is In Progress.
- 7684/7705 - Load Balancing Is Enabled In A Cluster That Does Not Have A Virtual IP
- 7694/7662 - The Volume Edit Dialog Uses Existing Snapshot's Autogrow Value

- 7719/7750 - Configuration Process May Cause Store Restarts Under Heavy SNMP Load Setting Email Alerts (In Set Threshold Actions) For CPU Temperature Or Motherboard Temperature Removes The Shutdown From The Critical Temperature Variable.
- 7734/7934 - SNMP Reports Incorrect Speed For A Bonded Interface
- 7795 - Storage Node May Reboot Again Before Current Reboot Completes [DL 320s, NSM 2120, IBM x3650, Dell 2950, NSM 2060 Or NSM 4150]
- 8071/8056 - In the Dell 2950, NSM 2060, NSM 2120, NSM 4150, and DL 320s, the Drive Temperature in the Alerts Log Is Not Accurate
- 8082/8328 - Configuration Process May Cause Store Restarts Under Heavy SNMP Load
- 8087 - Volume Lists Must Only Contain Multiple Authentication Groups With Same Load Balancing Configurations
- 8100/8205 - When Changing IP Address Of Failover Manager, Search Network Window Does Not Open
- 8235 - USB Devices can Cause Storage Node to Become Unresponsive [NSM 2060, NSM 4150, Dell 2950]
- 8332/8351 - False Alert May Be Received When Virtual IP Is Enabled On More Than One Cluster
- 8497 - Creating An 802.3ad Bond On The Storage Node May Fail [NSM 2060, NSM 4150, Dell 2950]
- 8770 - When Uninstalling the CMC, A Directory Remains Installed After Uninstall Process Completes
- 8783/8971 - After Upgrading to Release 7.0 Service Pack 1, Unable to Create Bond on NSM 260
- 8800/8953 - Available Volumes Appear As Unavailable In The CMC
- 8828 - License Key Displayed In The Registration Tab Is Incorrect [NSM 160]
- 8882/8952 - While Installing A Failover Manager, USB Driver Error Message Is Displayed
- 8883 - Linux Boot Up Messages Are Displayed In The Failover Manager's VMware Console Window
- 9106/9161 - After Upgrade To SAN/iQ Software Version 7.0.01, Automatic Deletion Of Primary Snapshot Fails
- 9115 - Centralized Management Console Version 7.0 Incorrectly Allows Creating A Management Group With Storage Nodes Running SAN/iQ Software Version 7.0.01
- 9344 - Centralized Management Console Incorrectly Allows Adding and Removing A Failover Manager To A Single Storage Node Management Group
- 9561 - Receive Error Message When Attempting To Edit The Flow Control Settings On A Bonded Interface
- 9649/9666/9685/9745 - Centralized Management Console Status For RAID Controller Or Drives May Become Stale Under Extreme I/O Load [DL 320s, DL 380, NSM 2120]
- 8017 - (Patch 10015) Large Memory Utilization By The Manager Process When Snapshots Are Deleting

- 7736/7738 - (Patch 10017) Storage Node Restart Can Cause Volume/Cluster To Become Unresponsive Until It Is Restarted
- 8297 - (Patch 10017) Monitoring Can Be Temporarily Disabled On The DL 320s and NSM 2120
- 8300 - (Patch 10017) Adjust RAID Rebuild Defaults On The DL 320s And NSM 2120 To Low And Remove High Rebuild Rate
- 8149 - (Patch 10017) Fix To Prevent An Unnecessary Storage Services Restart.
- 8173/8138 - (Patch 10017) Prevent Deletion Of Log Files Under Certain Circumstances
- 8845 - (Patch 10023) The Hardware Report For An NSM 200 Will Not Display When Some Drive Models Are Used
- 9298 - (Patch 10026) USB Disconnections Can Cause The Storage Node To Become Unresponsive
- 9788 - (Patch 10027) Disables The Audible Alarm On The NSM 4150
- 9376/9813/9822 - (Patch 10028) After Upgrading To SAN/iQ Software Version 7.0, Snapshots Generated By Snapshot Schedules Created Before The Upgrade To v 7.0 Will Not Get The Full Benefit Of The 7.0 Provisioning, And Use More Space Than Is Necessary
- 8249 - (Patch 10031) The Internal Message Protocol Has An Artificial Limitation Causing Messages Not To Get Sent Under Certain Loads Or Failing To Retransmit, Resulting In LUN Resets
- 10028 - (Patch 10031) Spurious LUN Resets, Session Disconnects, And Heartbeat Failures
- 10057 - (Patch 10031) Need To Hold Off Issuing Incomplete Writes Until All Data From The Initiator Was Received, Thereby Improving I/O Performance In Some Platforms
- 10069 - (Patch 10031) Windows 2008 Logs Timeouts That Lead To SCSI RESET During Large Writes