

I inherited a Lefthand SAN installation and have been working to figure out how it works and configure it correctly. I hope that someone here can assist me with the configuration for our VMWare configuration. We are running VMWare 3.5 and we need to sort out this storage solution before we upgrade to the latest version.

We need a single volume or two that can be seen by the two existing hosts we have in a VMWare cluster. We need to add another machine to the cluster eventually, but right now we have the problem where there is not enough disk space to do anything until we expand one existing volume that is connected to the two hosts. Also, there is a second volume that should span two hosts but doesn't. I can't quite understand why because it looks like it should be configured correctly.

I have attached screen shots from the Lefthand and VMWare configurations with the hope that someone can quickly tell why this isn't set up right and tell me the errors that prevent the two hosts don't both see the two volumes.

Additionally, I need to know if I can simply expand one or both of the volumes (I do have space on the SAN) and also how to connect a future VMWare host to the two existing volumes.

I would be grateful if you could point me towards the best sections of documentation to read, or any other good sources of instruction.

Thanks in advance for your help.



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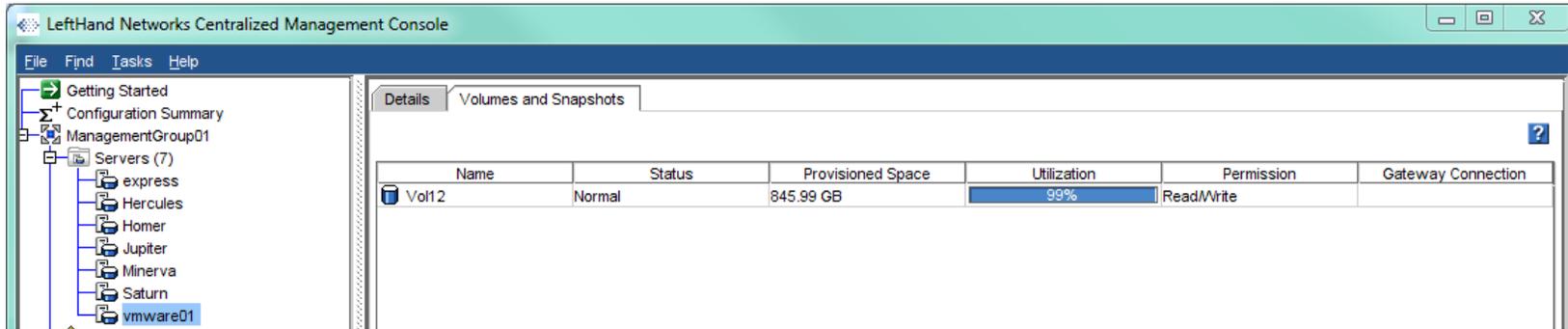
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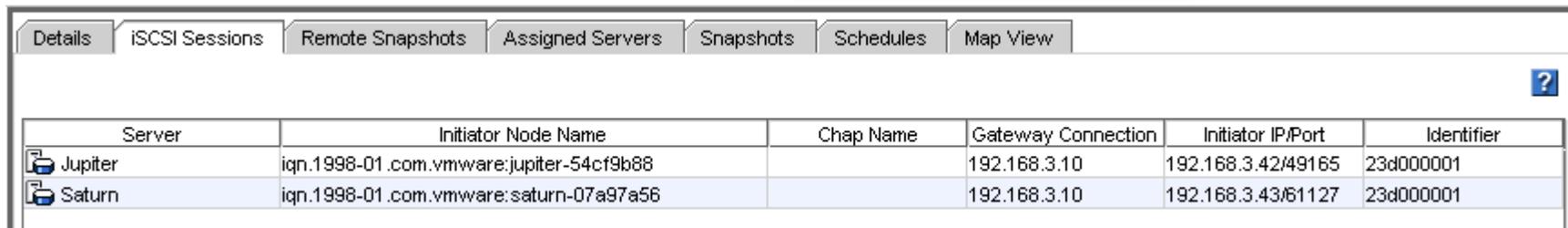
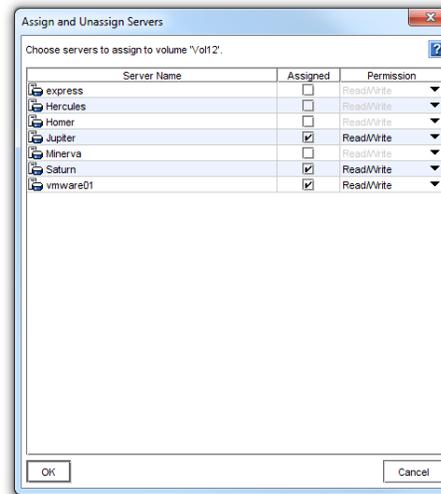
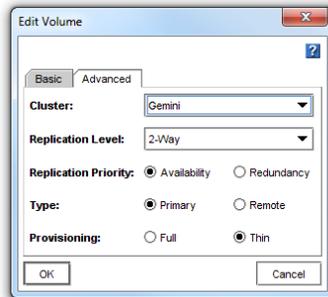
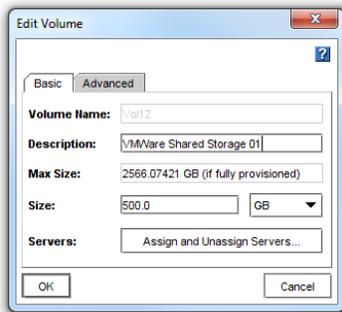
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<http://www.strategicedge.com>

Here's my Management group:



Volume 12 is the "VMWare Shared Volume" and here's the Volume 12 info. Note that vmware01 is an assigned server. We don't have such a server. It may have been from a former ESXi host that is no longer.



<span>Details</span> <span>ISCSI Sessions</span> <span>Remote Snapshots</span> <span>Assigned Servers</span> <span>Snapshots</span> <span>Schedules</span> <span>Map View</span>						
Name	Description	iSCSI Mode	Initiator Node Name	CHAP Name	Load Bala...	Permission
vmware01		No CHAP required	iqn.1998-01.com.vmware:vmware01-...		Enabled	Read/Write
Jupiter	VMWare ESX on DELL POWEREDGE 1950	No CHAP required	iqn.1998-01.com.vmware:jupiter-54cf...		Enabled	Read/Write
Saturn	VMWare ESX on DELL POWEREDGE 2950	No CHAP required	iqn.1998-01.com.vmware:saturn-07a...		Enabled	Read/Write

Here's volume 13.

**Edit Volume**

Basic Advanced

Volume Name: Vol13

Description: VMWare Shared Storage 02

Max Size: 2183.90283 GB (if fully provisioned)

Size: 500.0 GB

Servers: Assign and Unassign Servers...

OK Cancel

**Edit Volume**

Basic Advanced

Cluster: Gemini

Replication Level: 2-Way

Replication Priority:  Availability  Redundancy

Type:  Primary  Remote

Provisioning:  Full  Thin

OK Cancel

**Assign and Unassign Servers**

Choose servers to assign to volume 'Vol13'.

Server Name	Assigned	Permission
express	<input type="checkbox"/>	Read/Write
Hercules	<input type="checkbox"/>	Read/Write
Homer	<input type="checkbox"/>	Read/Write
Jupiter	<input checked="" type="checkbox"/>	Read/Write
Minerva	<input type="checkbox"/>	Read/Write
Saturn	<input checked="" type="checkbox"/>	Read/Write
vmware01	<input type="checkbox"/>	Read/Write

OK Cancel

Note that the vmware01 server is not selected.

<span>Details</span> <span>ISCSI Sessions</span> <span>Remote Snapshots</span> <span>Assigned Servers</span> <span>Snapshots</span> <span>Schedules</span> <span>Map View</span>					
Server	Initiator Node Name	Chap Name	Gateway Connection	Initiator IP/Port	Identifier
Saturn	iqn.1998-01.com.vmware:saturn-07a97a56		192.168.3.10	192.168.3.43/61126	23d000001

Details   ISCSI Sessions   Remote Snapshots   Assigned Servers   Snapshots   Schedules   Map View							
Name	Description	iSCSI Mode	Initiator Node Name	CHAP Name	Load Bala...	Permission	
Saturn	VMWare ESX on DELL POWEREDGE 2950	No CHAP required	iqn.1998-01.com.vmware:saturn-07a...		Enabled	Read/Write	
Jupiter	VMWare ESX on DELL POWEREDGE 1950	No CHAP required	iqn.1998-01.com.vmware:jupiter-54cf...		Enabled	Read/Write	

The two VMWare Hosts are called SATURN and JUPITER and they are in a cluster. Here's JUPITER:

Details | Volumes and Snapshots

Name: Jupiter

Description: VMWare ESX on DELL POWEREDGE 1950

iSCSI Security

Allow access via iSCSI: Yes

Enable load balancing: Yes

Authentication

CHAP not required: Yes

Initiator Node Name: iqn.1998-01.com.vmware:jupiter-54cf9b88

CHAP required: No

CHAP Name:

Note that Volume 13 does not have a Gateway Connection on JUPITER.

Details   Volumes and Snapshots						
Name	Status	Provisioned Space	Utilization	Permission	Gateway Connection	
Vol12	Normal	845.99 GB	99%	Read/Write	192.168.3.10	
Vol13	Normal	81.65 GB	99%	Read/Write		

Here's SATURN:

Details | Volumes and Snapshots

Name: Saturn

Description: VMWare ESX on DELL POWEREDGE 2950

iSCSI Security

Allow access via iSCSI: Yes

Enable load balancing: Yes

Authentication

CHAP not required: Yes

Initiator Node Name: iqn.1998-01.com.vmware:saturn-07a97a56

CHAP required: No

CHAP Name:

Note that Volume 13 does have a Gateway Connection on SATURN:

Details		Volumes and Snapshots				
Name	Status	Provisioned Space	Utilization	Permission	Gateway Connection	
Vol12	Normal	845.99 GB	99%	Read/Write	192.168.3.10	
Vol13	Normal	81.65 GB	99%	Read/Write	192.168.3.10	

Over on the VMWare side we see this for JUPITER:

**Details**

**vmhba32** [Properties...](#)

Model: iSCSI Software Adapter IP Address:

iSCSI Name: iqn.1998-01.com.vmware:jupiter-54cf9b88 Discovery Methods: Send Targets

iSCSI Alias: jupiter.strategicedgecom.com Targets: 1

**SCSI Target 0**

iSCSI Name: iqn.2003-10.com.lefthandnetworks.managementgroup01:90:vol12

iSCSI Alias:

Target LUNs: 1 [Hide LUNs](#)

Path	Canonical Path	Type	Capacity	LUN ID
vmhba32:0:0	vmhba32:0:0	disk	500.00 GB	0

We just see one LUN. But on SATURN as you would expect you see two LUNS:

**Details**

**vmhba32** [Properties...](#)

Model: iSCSI Software Adapter IP Address:

iSCSI Name: iqn.1998-01.com.vmware:saturn-07a97a56 Discovery Methods: Send Targets

iSCSI Alias: saturn.strategicedgecom.com Targets: 2

**SCSI Target 0**

iSCSI Name: iqn.2003-10.com.lefthandnetworks.managementgroup01:90:vol12

iSCSI Alias:

Target LUNs: 1 [Hide LUNs](#)

Path	Canonical Path	Type	Capacity	LUN ID
vmhba32:0:0	vmhba32:0:0	disk	500.00 GB	0

**SCSI Target 1**

iSCSI Name: iqn.2003-10.com.lefthandnetworks.managementgroup01:176:vol13

iSCSI Alias:

Target LUNs: 1 [Hide LUNs](#)

Path	Canonical Path	Type	Capacity	LUN ID
vmhba32:1:0	vmhba32:1:0	disk	500.00 GB	0