

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.



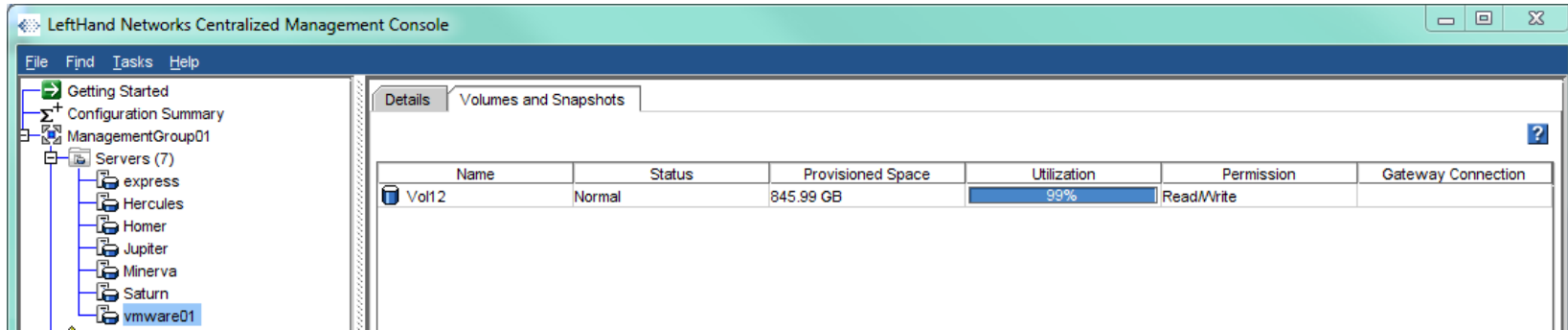
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Bill Darron
Director, Information Systems

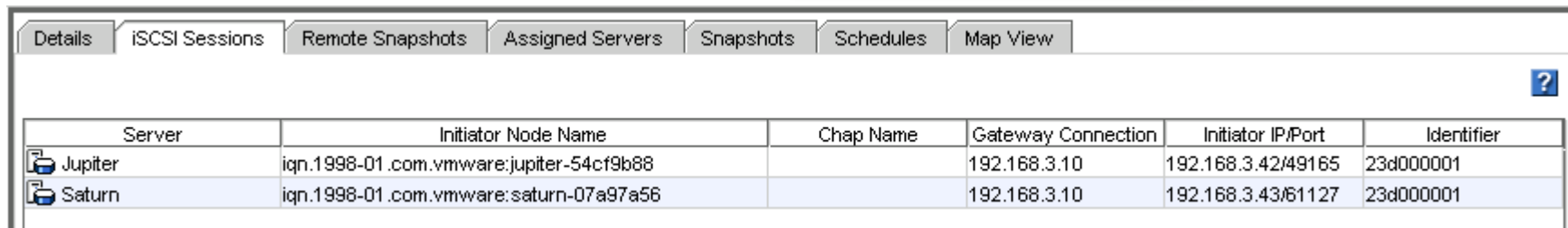
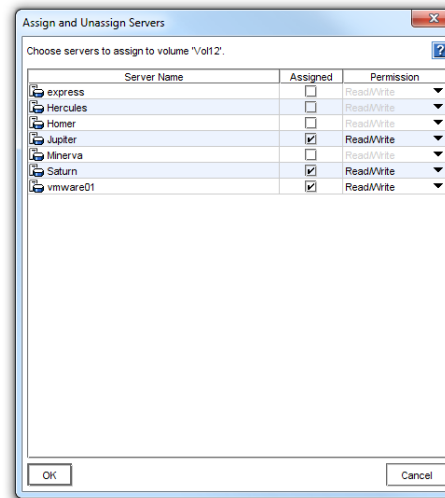
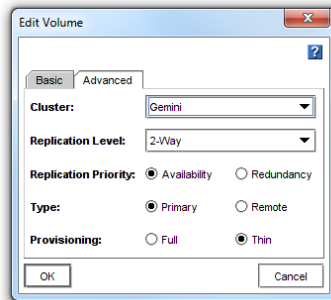
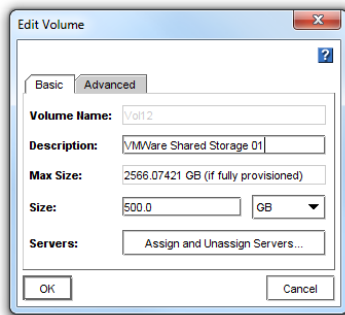


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Here's my Management group:



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.



Details ISCSI Sessions Remote Snapshots Assigned Servers Snapshots Schedules Map View						
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.

Details ISCSI Sessions Remote Snapshots Assigned Servers Snapshots Schedules Map View					
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