

知 HPE StoreVirtual 3200 iSCSI ESXi6.5 主机实施

主机相关

存储配置

孙清雷

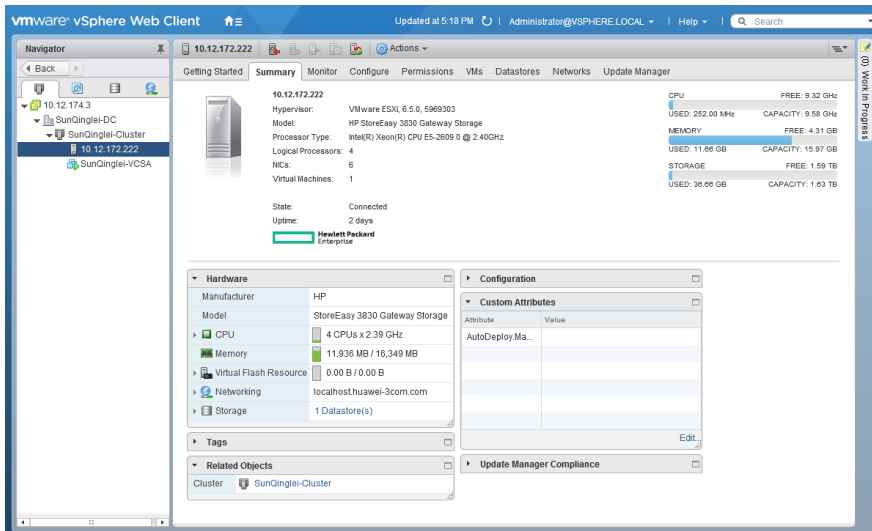
2019-03-26 发表

组网及说明

受测设备为StoreVirtual 3200 iSCSI, LHOS 13.6

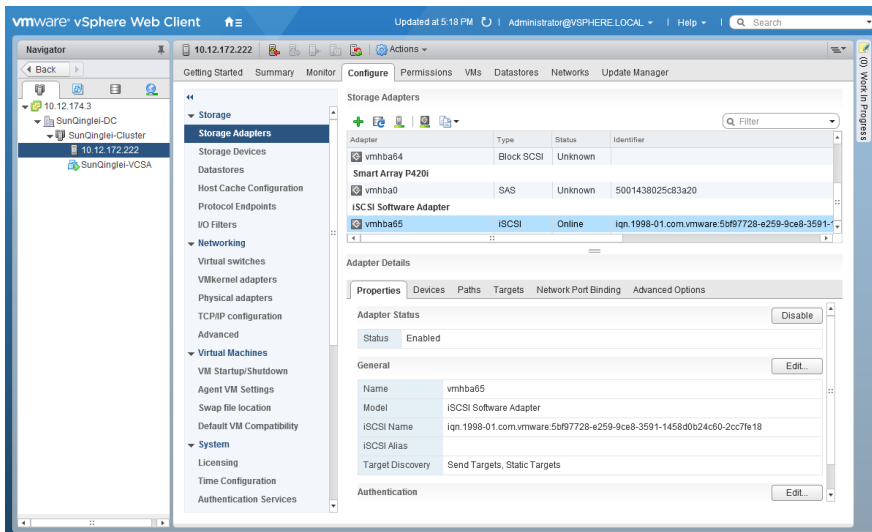
配置步骤

测试环境中主机端为DL380Gen8, 万兆网卡为NC552, VMware ESXi 6.5u1。

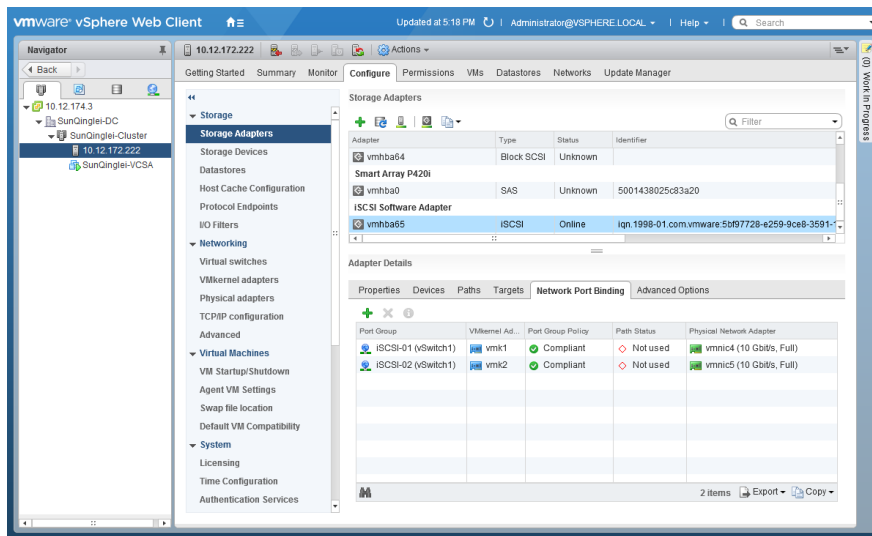


Configure > Storage > iSCSI Software Adapters, 可见IQN。

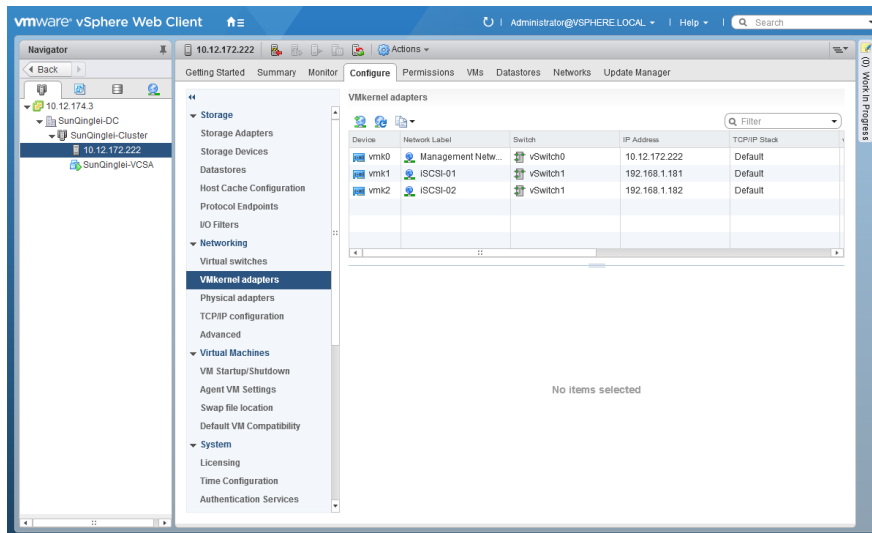
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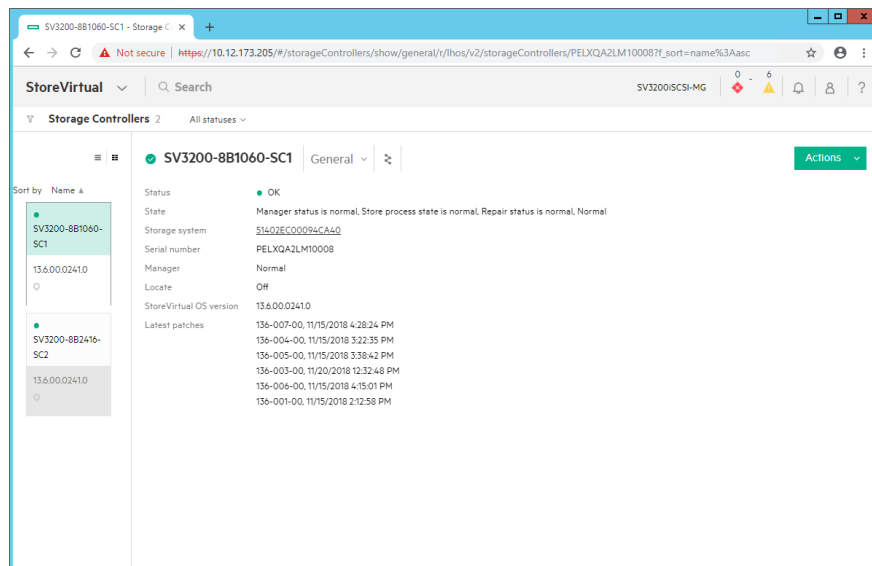
ESXi主机端使用万兆网卡创建Teaming并添加至iSCSI Software Adapter。



Vmk1 IP为192.168.1.181, Vmk2 IP为192.168.1.182。



存储端1号控制器bond0 IP为192.168.1.161。



SV3200-8B1060-SC1 - Storage C

StoreVirtual

Storage Controllers 2 All statuses

SV3200-8B1060-SC1 Network

TCP/IP Settings

Label	Name	Description	MAC	Mode	IP Address	Subnet Mask	Gateway	Traffic Type	Bond Type	Bond Preferred Interface
1G-1	eth0	BCM54618	58:20:81:88:10:60	Disabled	0.0.0.0	0.0.0.0	0.0.0.0			
1G-2	eth1	BCM54618	58:20:81:88:10:61	Disabled	0.0.0.0	0.0.0.0	0.0.0.0			
MGMT	eth2	MGMT	58:20:81:88:10:62	Static	1012.173.205	255.255.252.0	1012.172.1	Management		
	bond0	Logical Fallover Device (balance-alb)		Static	192.168.1.161	255.255.255.0	0.0.0.0	Data	Adaptive Load Balancing	

TCP/IP Routing

Device	Network	Gateway	Mask	Flags
eth2	0.0.0.0	1012.172.1	0.0.0.0	UG
eth2	1012.172.0	0.0.0.0	255.255.252.0	U
bond0	192.168.1.0	0.0.0.0	255.255.255.0	U

TCP/IP Communication Manager IP Addresses

IP Address	Storage Controller Name
169.254.1101	SV3200-8B1060-SC1
169.254.1102	SV3200-8B2416-SC2

存储端1号控制器bond0 IP为192.168.1.162。

SV3200-8B2416-SC2 - Storage C

StoreVirtual

Storage Controllers 2 All statuses

SV3200-8B2416-SC2 General

Status OK

State Manager status is normal, Store process state is normal, StoreVirtual OS Connection, Repair status is normal, Normal

Storage system 51402EC0009ACA40

Serial number PELXQA3LM200FO

Manager Coordinating manager

Locate Off

StoreVirtual OS version 13.6.0.0.02410

Latest patches

- 136-003-00, 11/20/2018 12:23:18 PM
- 136-005-00, 11/15/2018 3:49:03 PM
- 136-007-00, 11/15/2018 4:40:04 PM
- 136-001-00, 11/15/2018 2:23:21 PM
- 136-006-00, 11/15/2018 4:02:16 PM
- 136-004-00, 11/15/2018 2:57:11 PM

SV3200-8B2416-SC2 - Storage C

StoreVirtual

Storage Controllers 2 All statuses

SV3200-8B2416-SC2 Network

TCP/IP Settings

Label	Name	Description	MAC	Mode	IP Address	Subnet Mask	Gateway	Traffic Type	Bond Type	Bond Preferred Interface
1G-1	eth0	BCM54618	58:20:81:88:24:16	Disabled	0.0.0.0	0.0.0.0	0.0.0.0			
1G-2	eth1	BCM54618	58:20:81:88:24:17	Disabled	0.0.0.0	0.0.0.0	0.0.0.0			
MGMT	eth2	MGMT	58:20:81:88:24:18	Static	1012.173.206	255.255.252.0	1012.172.1	Management		
	bond0	Logical Fallover Device (balance-alb)		Static	192.168.1.162	255.255.255.0	0.0.0.0	Data	Adaptive Load Balancing	

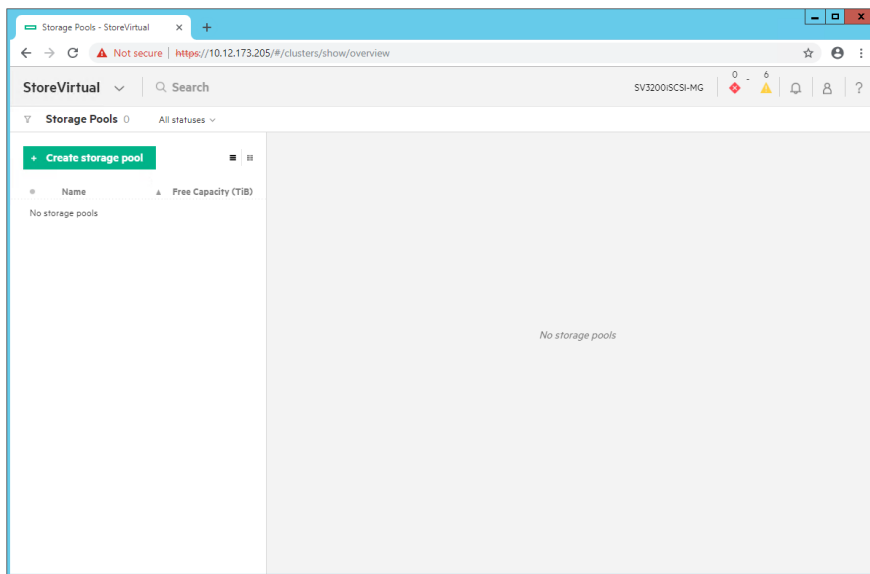
TCP/IP Routing

Device	Network	Gateway	Mask	Flags
eth2	0.0.0.0	1012.172.1	0.0.0.0	UG
eth2	1012.172.0	0.0.0.0	255.255.252.0	U
bond0	192.168.1.0	0.0.0.0	255.255.255.0	U

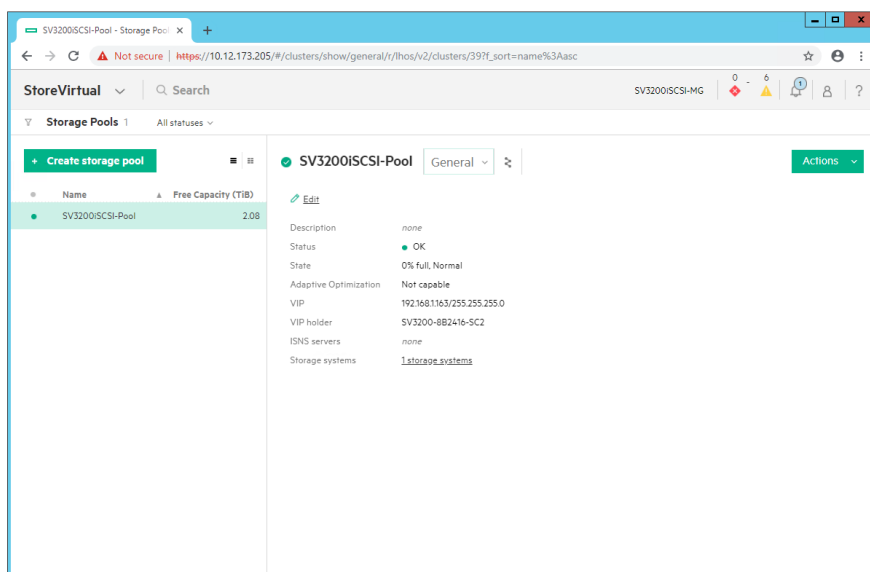
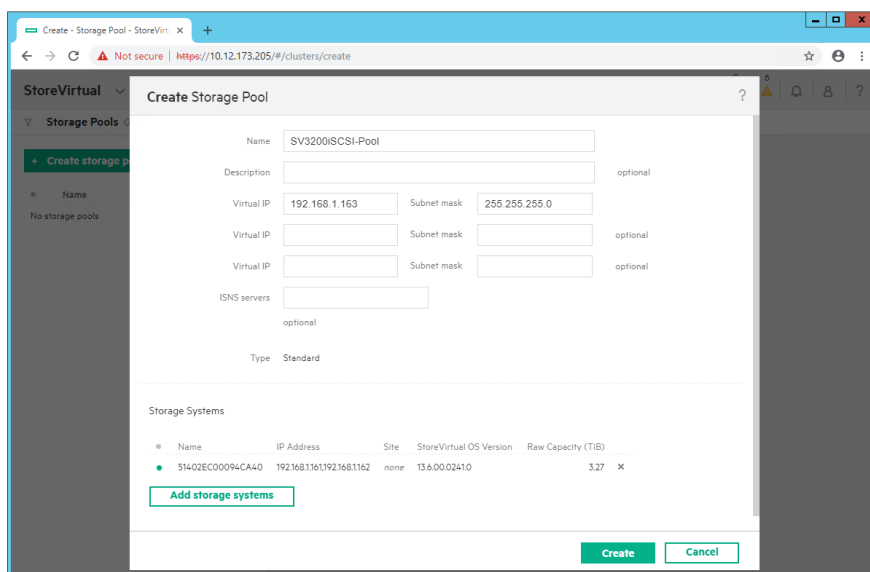
TCP/IP Communication Manager IP Addresses

IP Address	Storage Controller Name
169.254.1101	SV3200-8B1060-SC1
169.254.1102	SV3200-8B2416-SC2

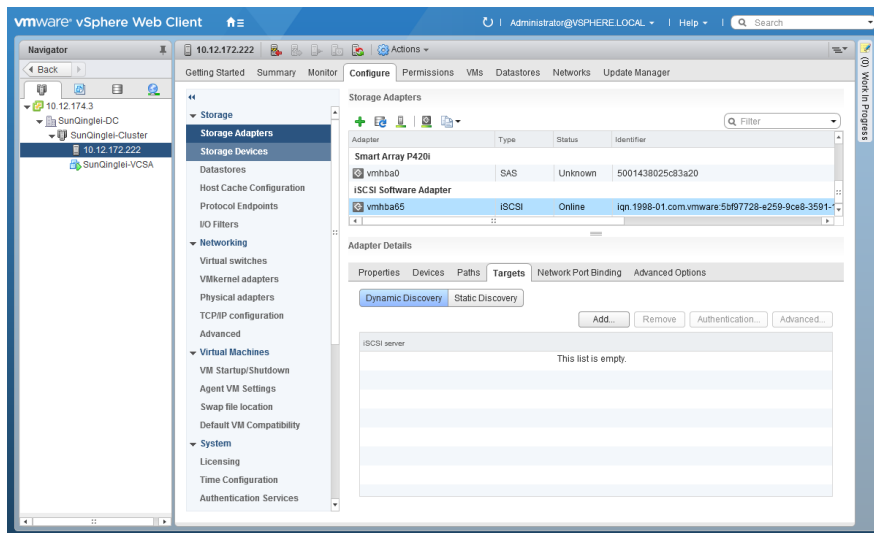
创建存储池。



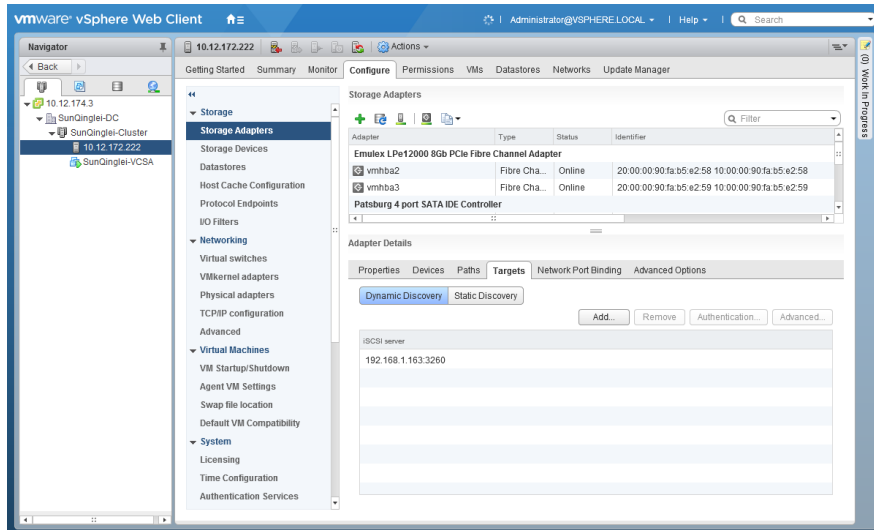
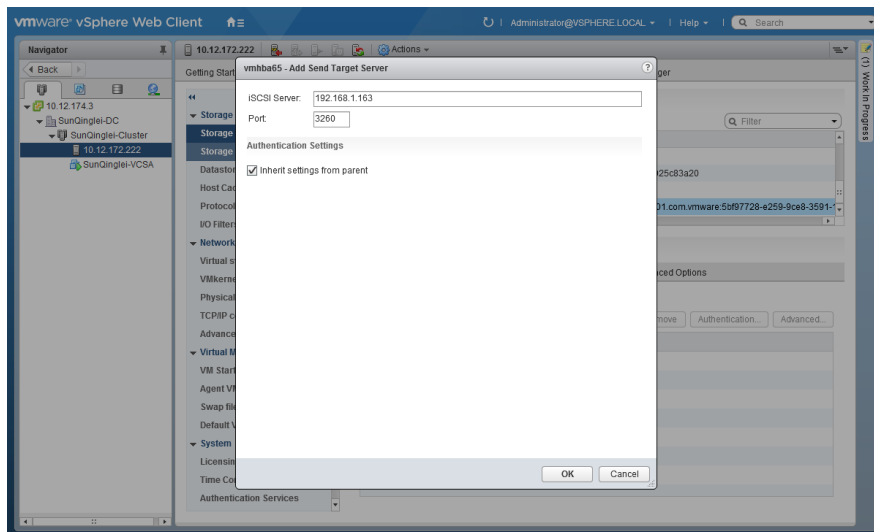
设置存储池VIP为192.168.1.163。



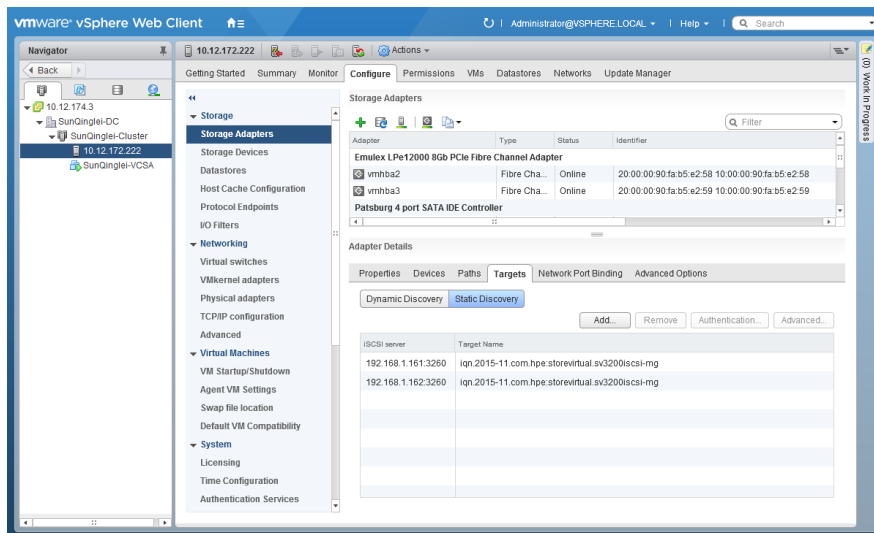
主机端iSCSI Software Adapter, Targets > Dynamic Discovery, 点击Add。



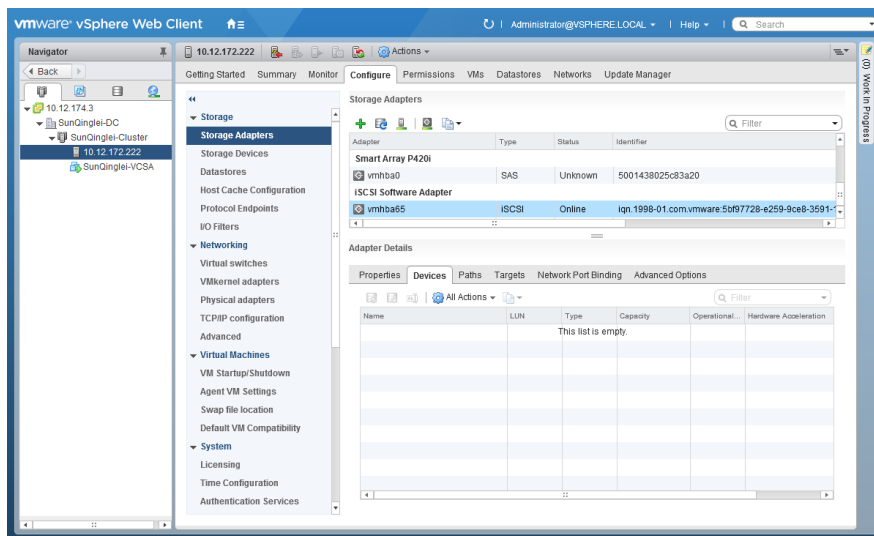
输入存储池VIP。



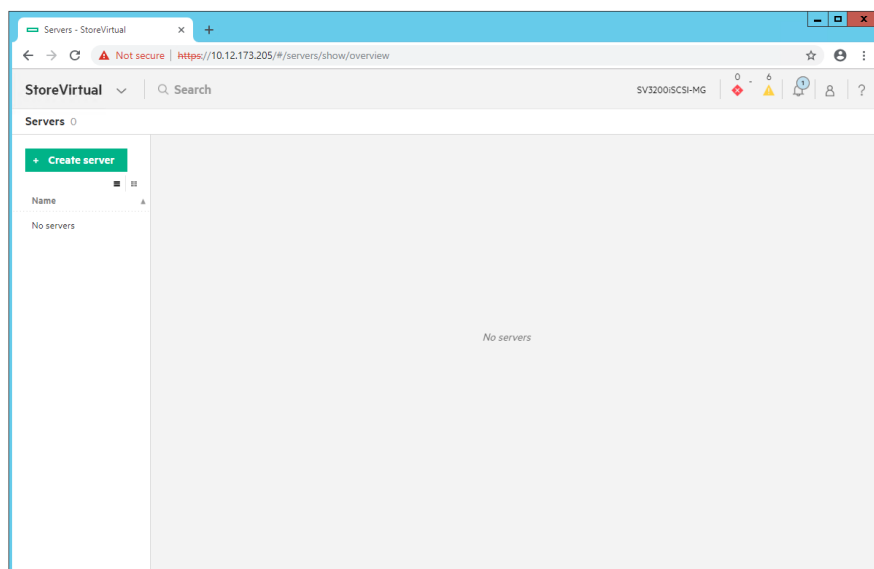
Static Discovery可见存储端双控的bond IP以及设备名称。



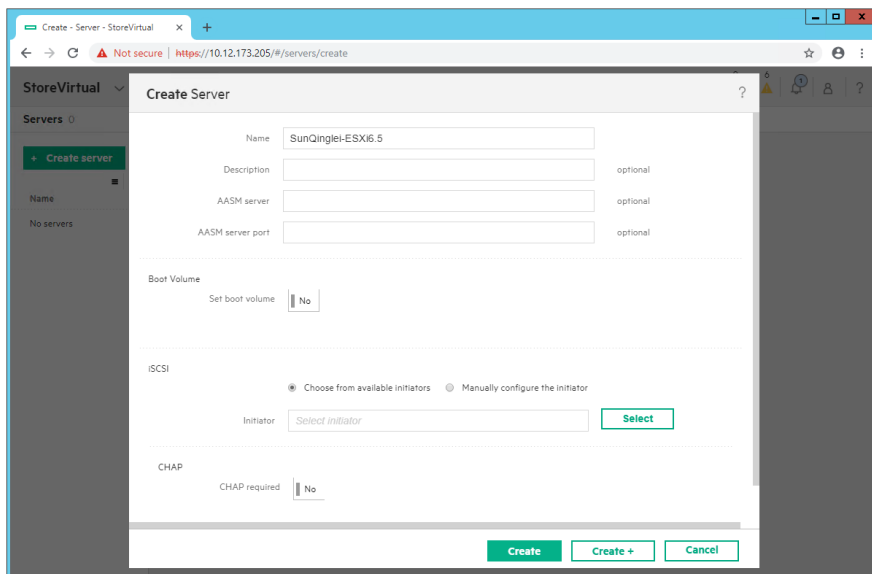
Devices暂未发现设备。



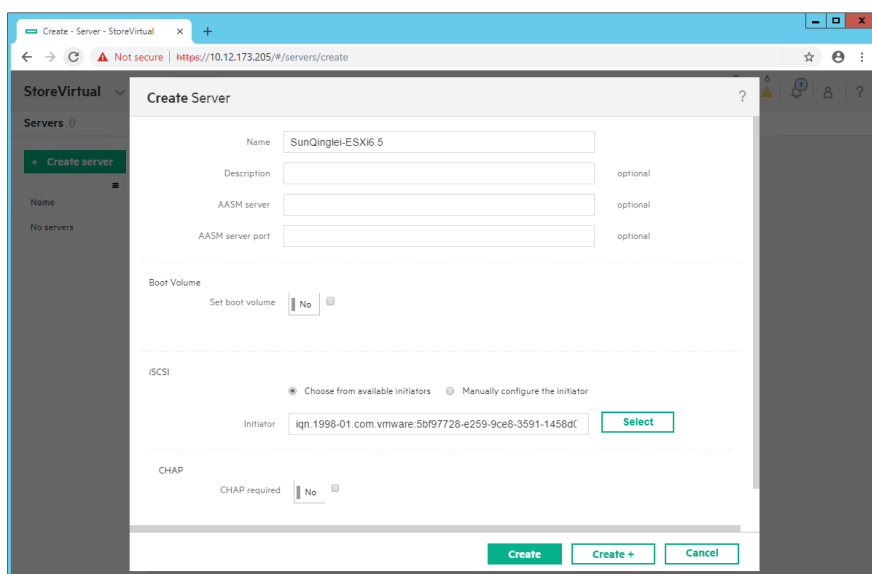
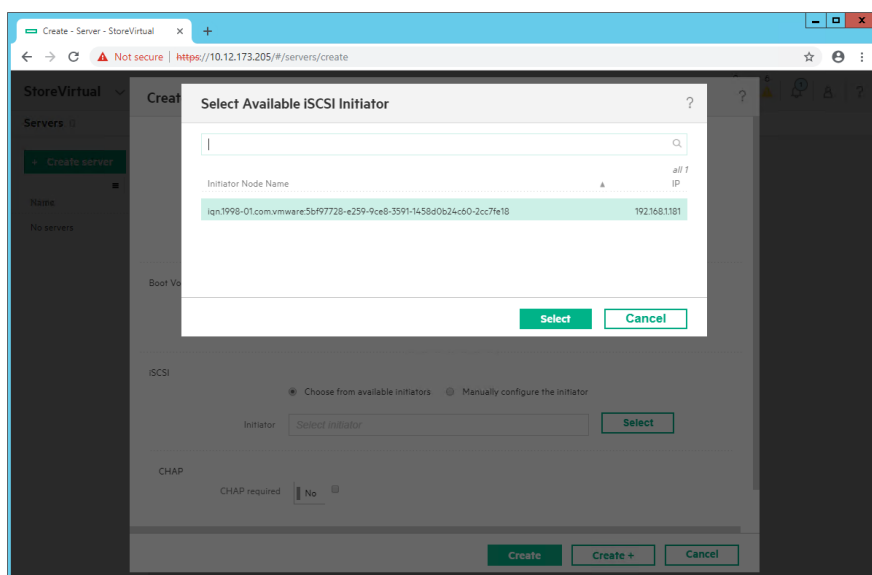
StoreVirtual > Servers，创建服务器。



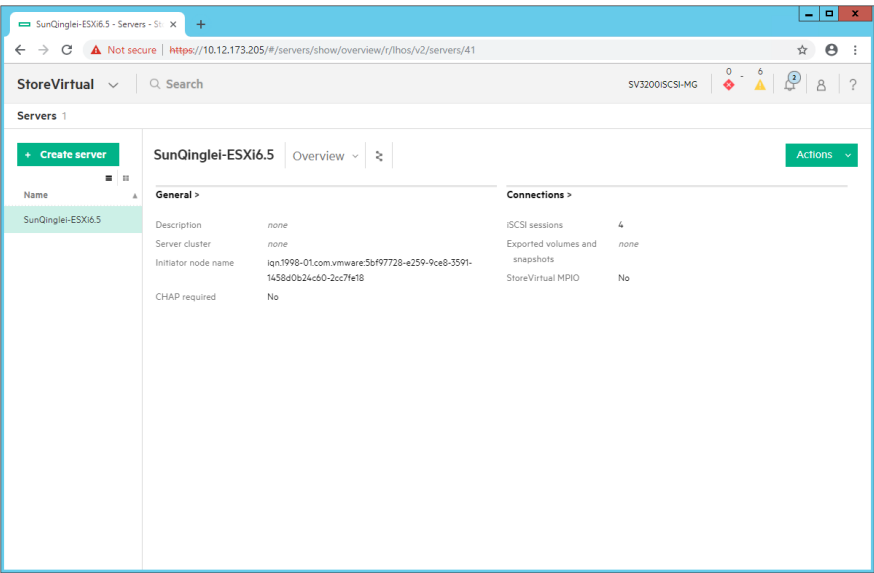
由于主机端已添加存储池VIP，即进行了Iscsi Discovery操作，故存储端创建服务器时，可选择Choose from available initiators。



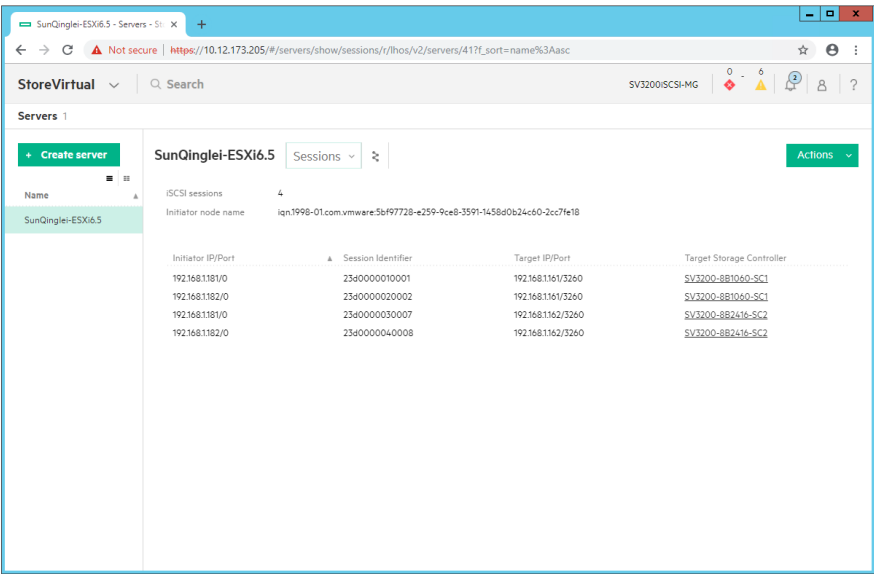
其中可见主机端IQN。



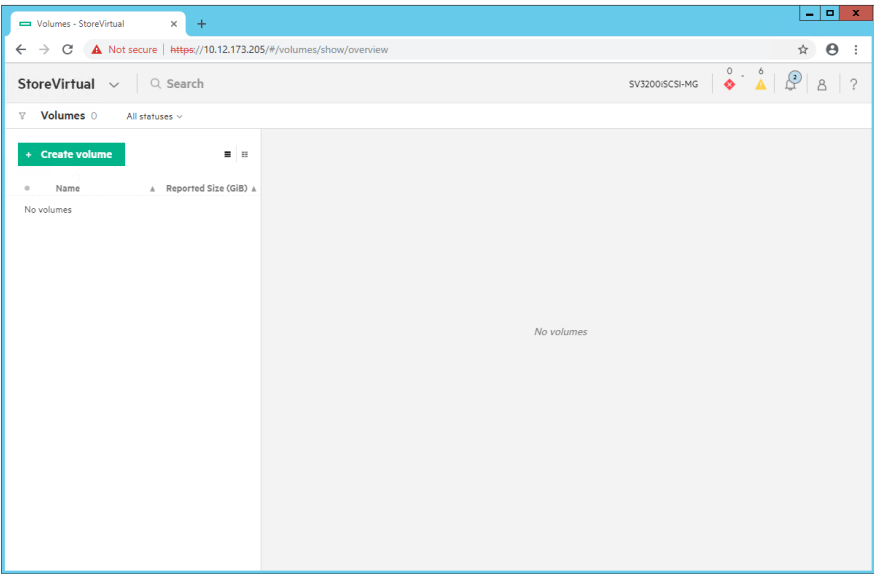
服务器创建完成。



服务器的会话视图可见主机端网卡与存储端控制器端口bond形成的四条路径。



StoreVirtual > Volumes, 点击Create Volume, 创建存储卷。



设置存储卷大小为500GiB, 精简配置模式, 数据保护级别为NR0。

StoreVirtual - Create Volume

Storage pool: SV3200iSCSI-Pool

Name: TestVolume

Description: optional

Size: 500 GiB

Quantity: 1

Advanced Options

Allocation: Thinly provisioned

Data protection level: Network RAID-0 (None)

Adaptive Optimization: Permitted

Type: Primary

After volume creation, the amount of free capacity in the storage pool will be 2130.17 GiB (99%).

Create Cancel

存储卷已创建完成。

StoreVirtual - TestVolume - Overview

Volumes

Name	Reported Size (GiB)
TestVolume	500

TestVolume Overview

General

Description: none

Storage pool: SV3200iSCSI-Pool

Status: OK

State: Normal

Data protection level: Network RAID-0 (None)

Allocation: Thinly provisioned

Adaptive Optimization: Permitted

Exports

Server: none

Exports: none

Snapshot Summary

Snapshots: none

Utilization

Allocation: Thinly provisioned

Reported size: 500 GiB

Consumed capacity: 0.5 GiB

Shared capacity: 0 GiB

Snapshot Schedules

Schedules: none

选择存储卷，Action - Export to server or server cluster，将存储卷导出至服务器，即映射操作。

StoreVirtual - TestVolume - Overview

Volumes

Name	Reported Size (GiB)
TestVolume	500

TestVolume Overview

General

Description: none

Storage pool: SV3200iSCSI-Pool

Status: OK

State: Normal

Data protection level: Network RAID-0 (None)

Allocation: Thinly provisioned

Adaptive Optimization: Permitted

Exports

Server: none

Exports: none

Snapshot Summary

Snapshots: none

Utilization

Allocation: Thinly provisioned

Reported size: 500 GiB

Consumed capacity: 0.5 GiB

Shared capacity: 0 GiB

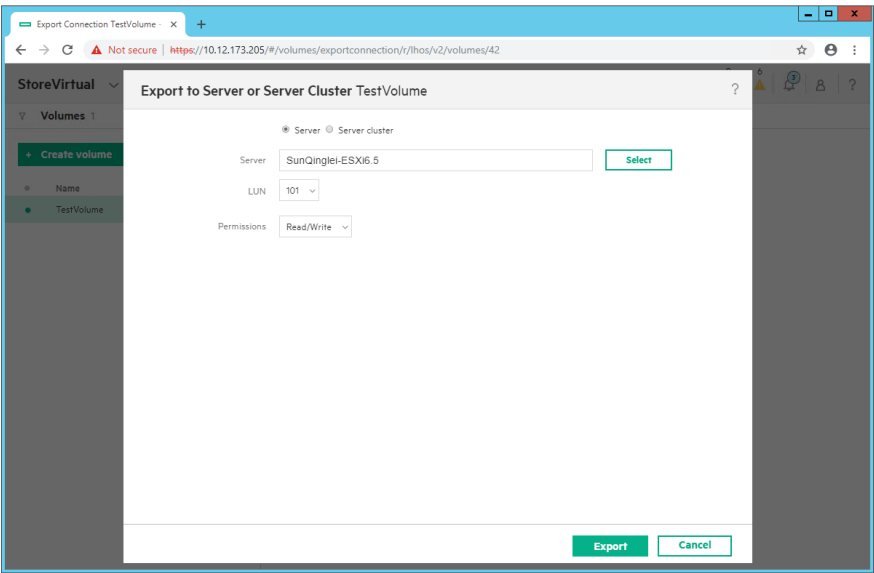
Snapshot Schedules

Schedules: none

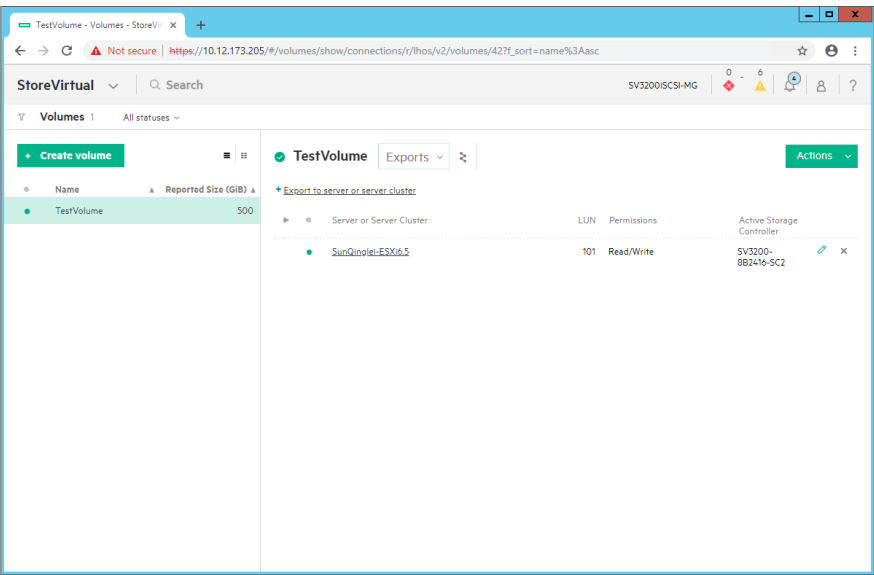
Actions

- Create
- Create snapshot
- Create snapshot schedule
- Create remote snapshot schedule
- Edit
- Export to server or server cluster
- Rollback
- Download performance report
- Delete

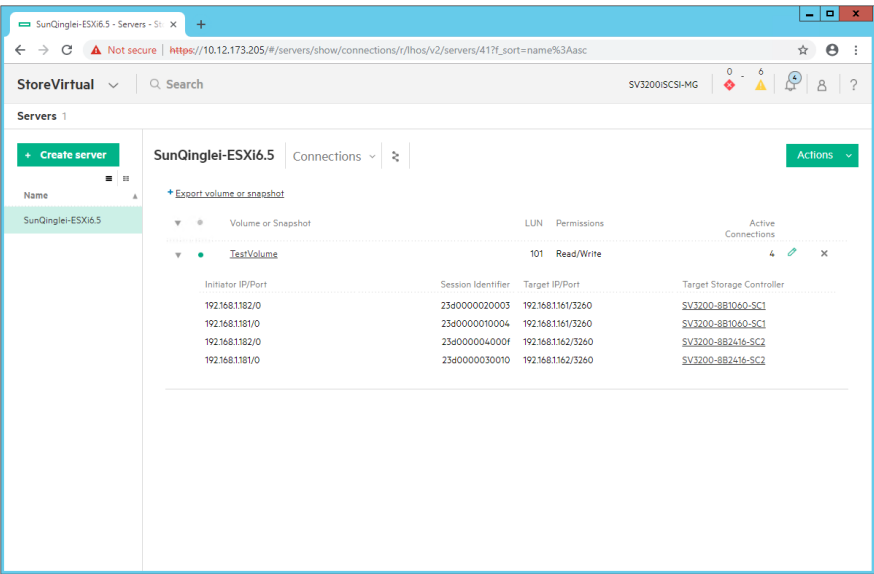
点击Select，选择已创建的服务器，测试中为方便区分，设置LUN为101。



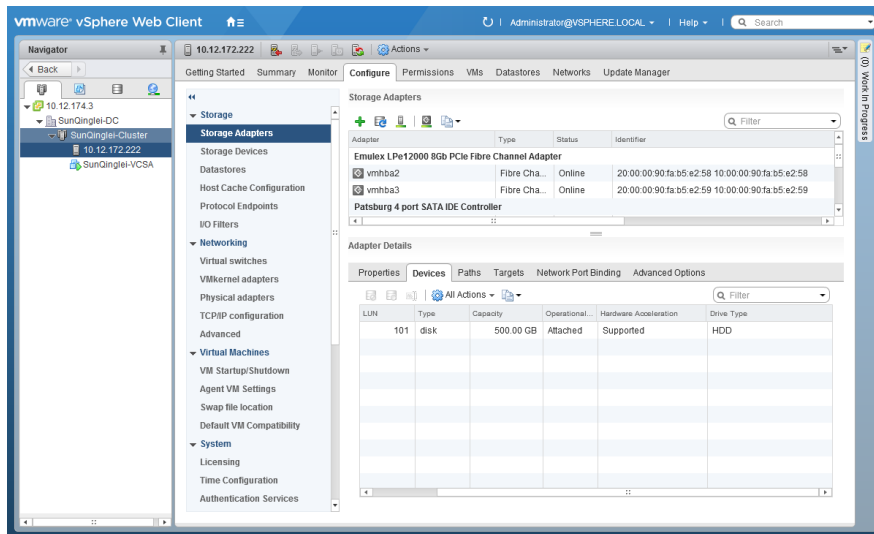
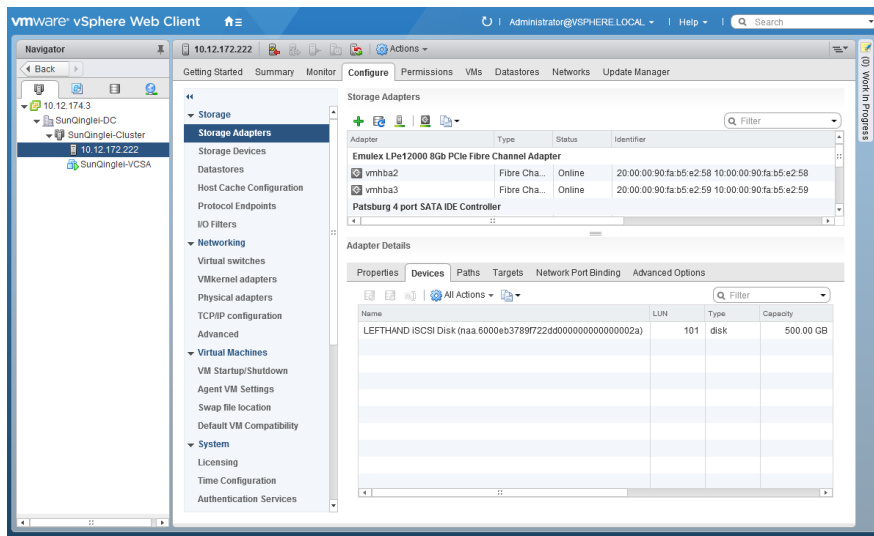
存储卷导出至服务器后，选择存储卷的导出视图，可见存储卷的导出信息，目前存储卷的活动存储控制器为2号控制器。



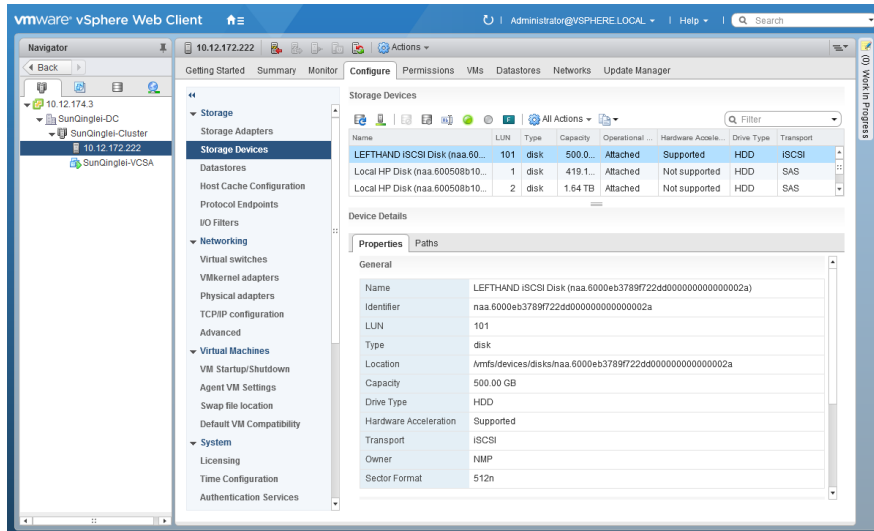
服务器的连接视图中可见存储卷与服务器之间的4条路径。



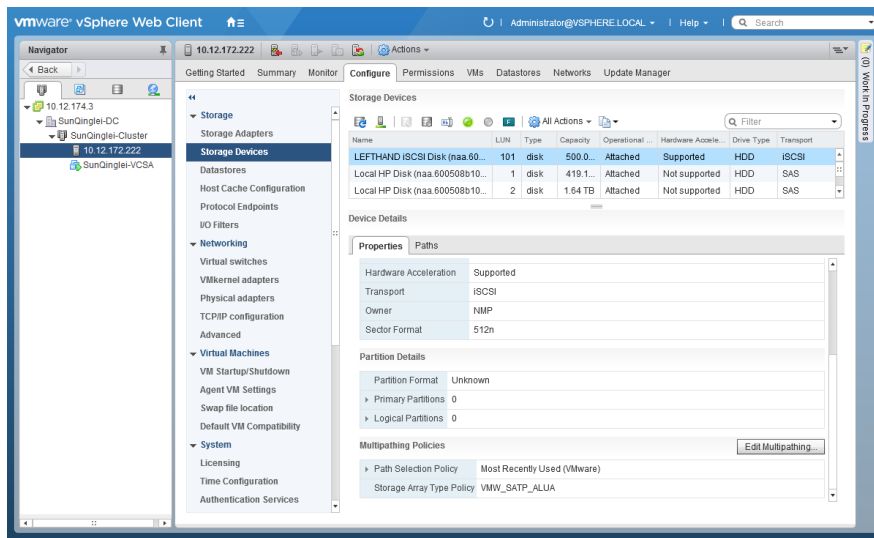
主机端iSCSI Software Adapter下可见存储卷对应的设备。



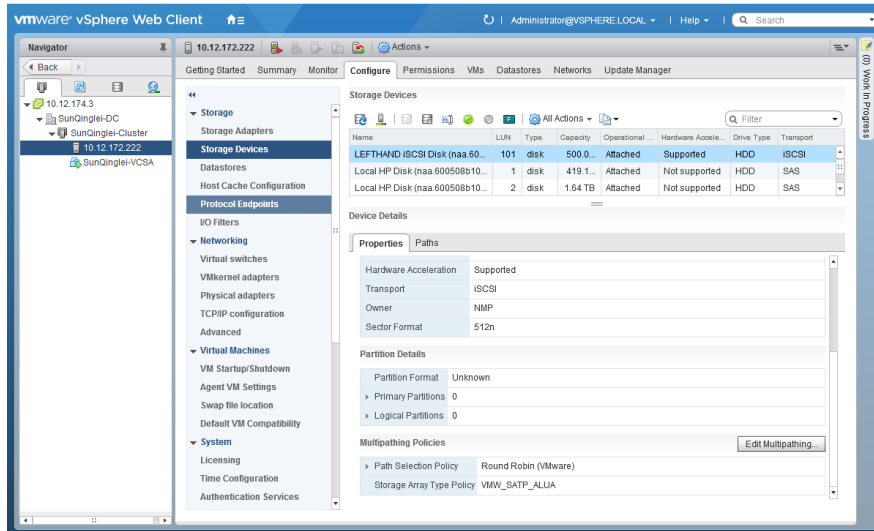
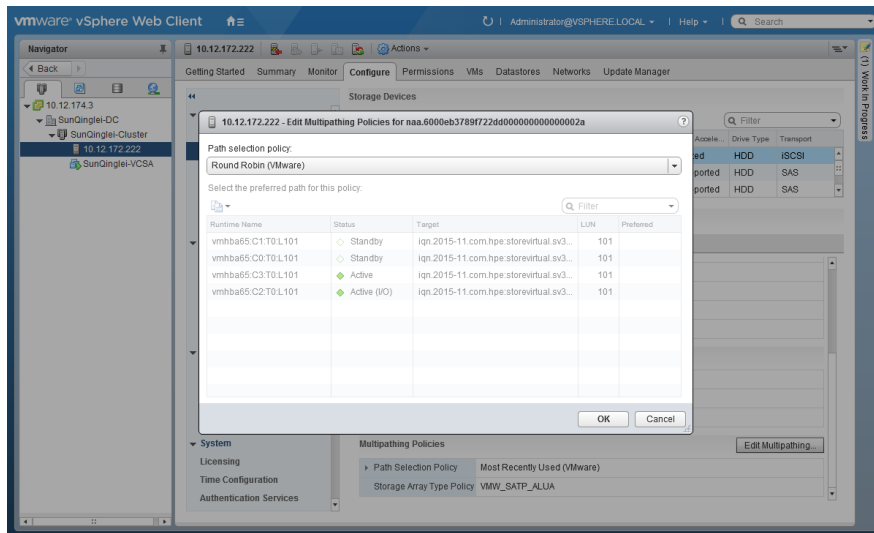
Storage Devices可见存储卷对应的磁盘设备。



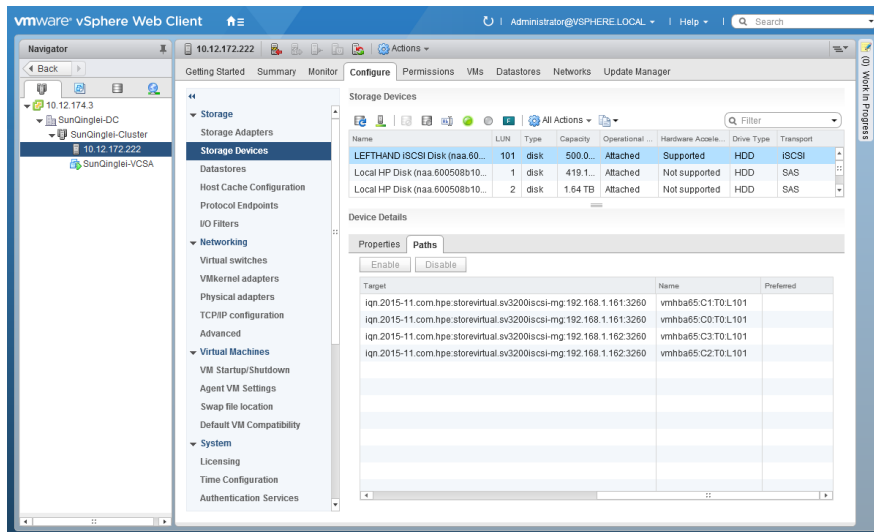
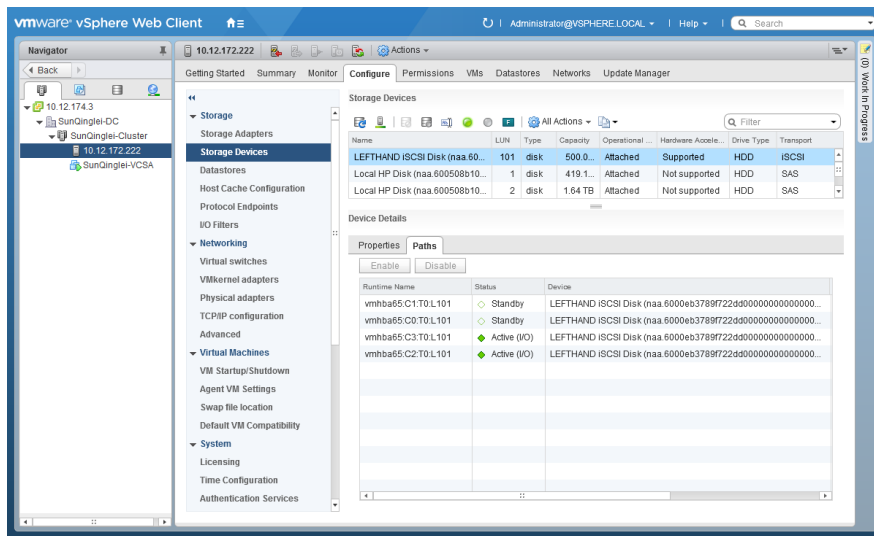
PSP默认为MRU。



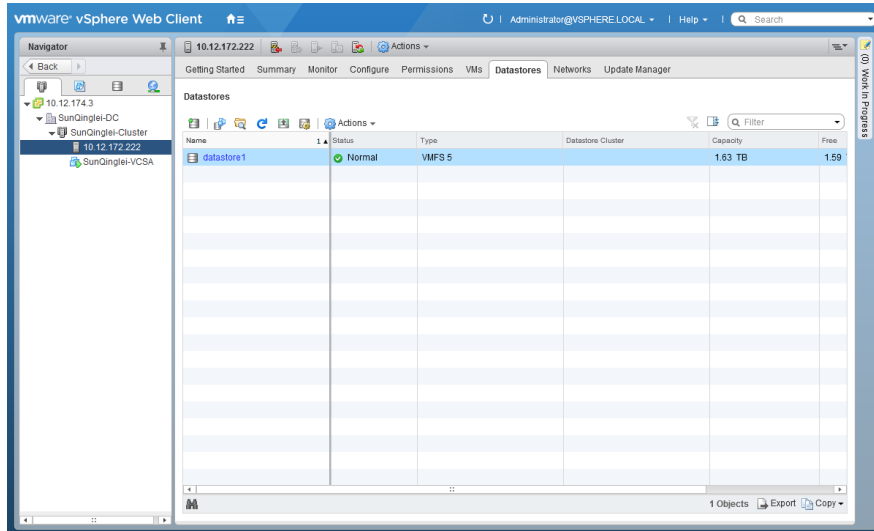
编辑多路径，将PSP设置为RR。

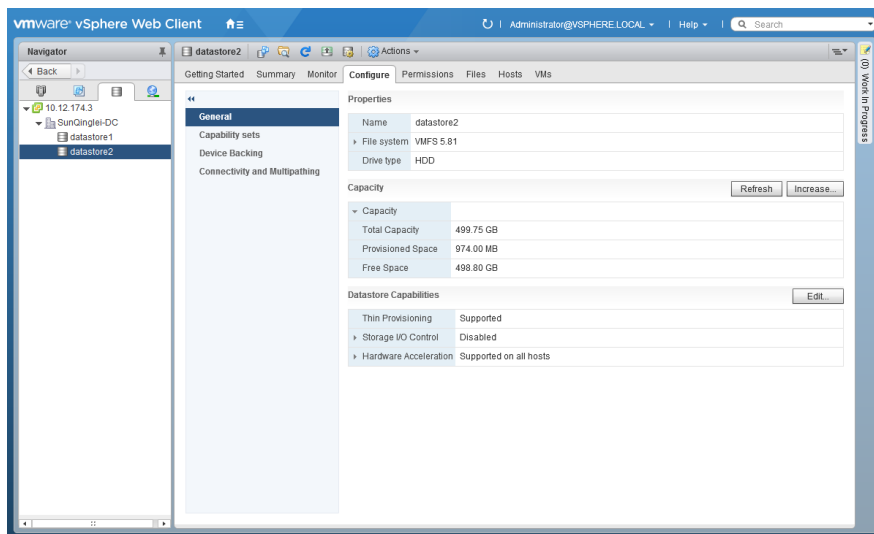
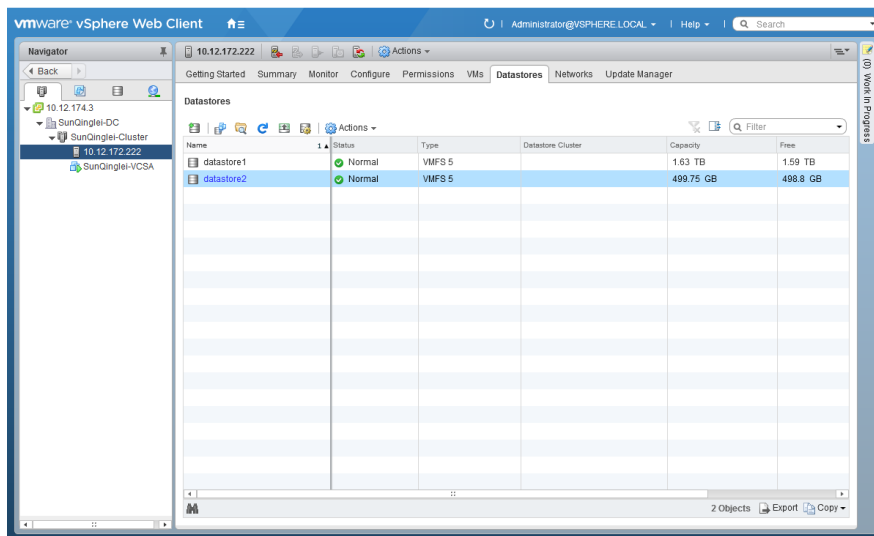


查看路径信息，2条路径为活动路径Active (I/O)，其余2条路径为待机Standby。



基于存储卷创建datastore2，过程略。





配置关键点