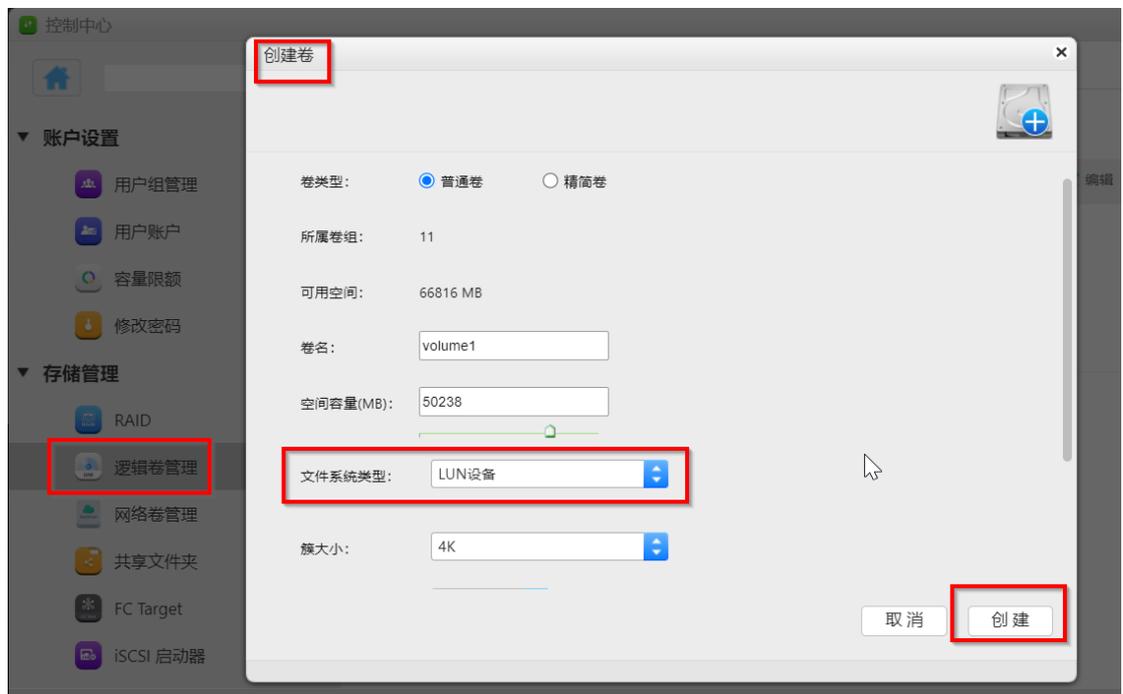


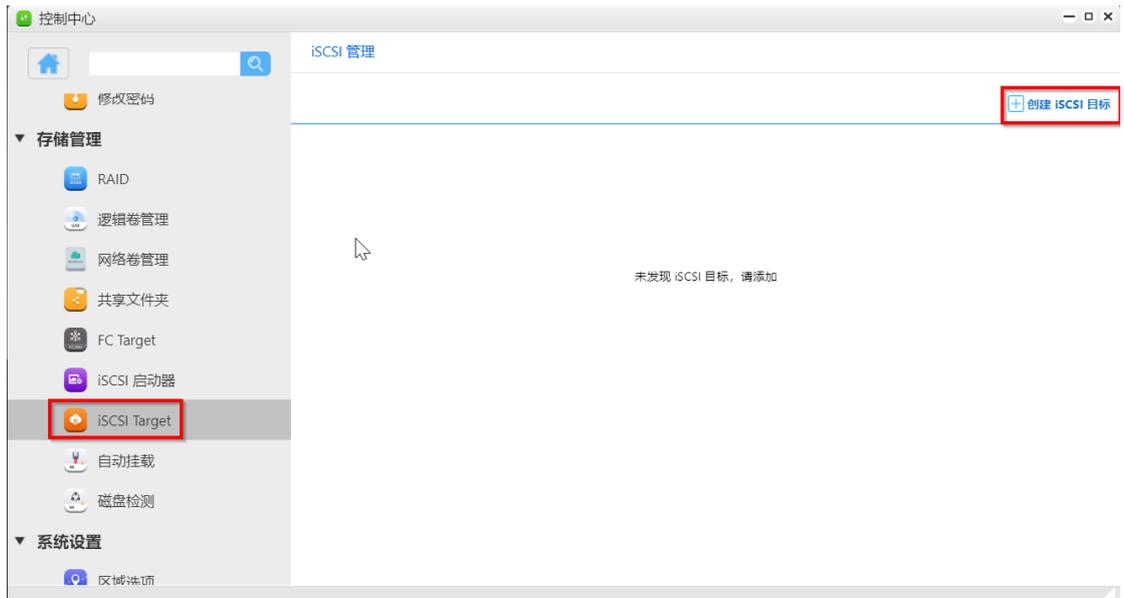
vSphere 虚拟化平台 iSCSI 访问百代存储操作说明

ESX 环境访问百代存储按照块存储（FC/iSCSI 协议）和文件存储（NFS 协议）有两种不同的方法，以下以 iSCSI 访问举例说明：

- 一、 登录百代存储管理界面，根据磁盘数量及容量规划，创建 Raid：
- 二、 根据 Raid 创建卷组：
- 三、 创建逻辑卷（注意系统类型选择 LUN 设备）：



- 四、 打开 iSCSI Target 程序，点击窗体右上角的【创建 iSCSI 目标】，弹出创建对话框：

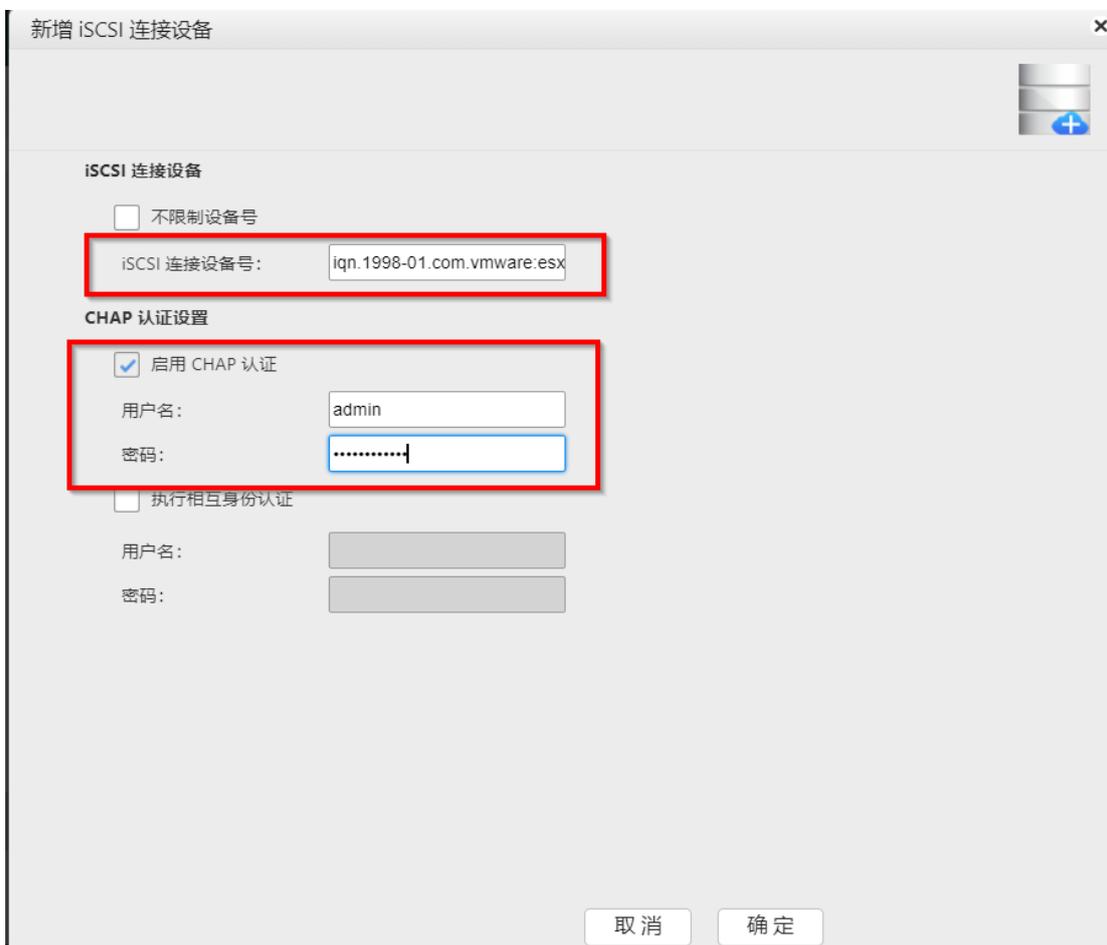


在创建 iSCSI 目标对话框中，填写必要的信息：



iSCSI 连接设备号管理：

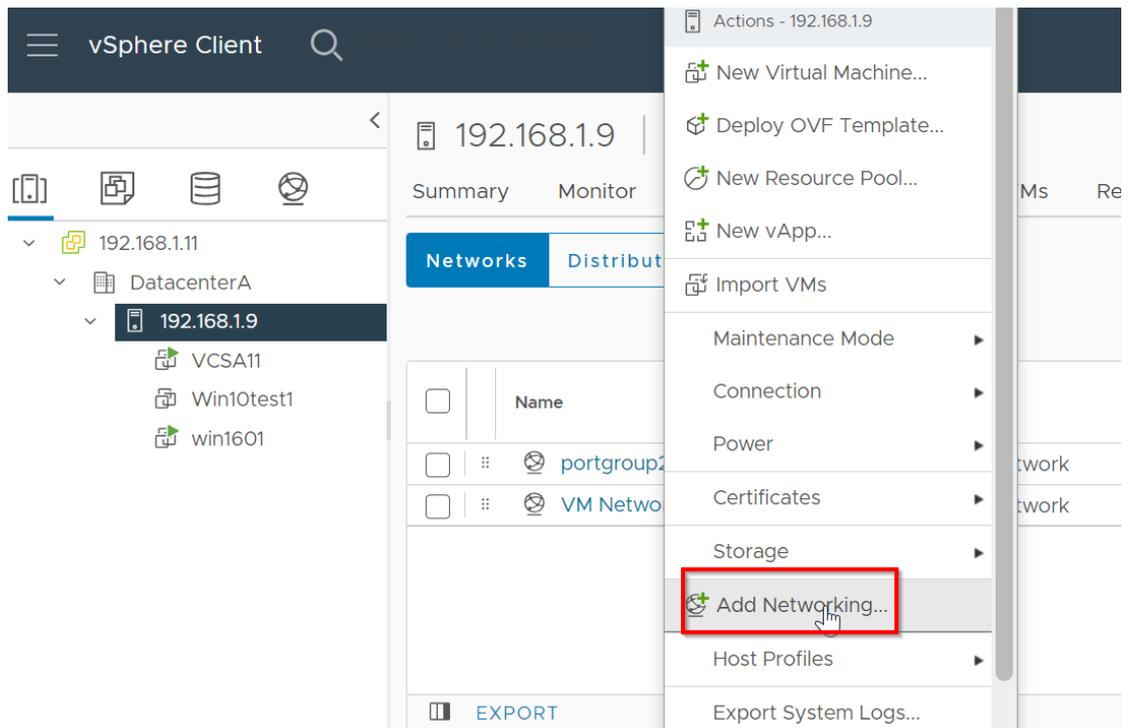
点击“添加”，进入到配置页面



注：iSCSI 连接设备号可通过主机 iSCSI 发起程序获取相关信息，CHAP 认证以及执行相互身份认证的账号和密码必须和 iSCSI 发起程序端发现门户认证方式保持一致。

五、 确保 ESX 服务器有一个专门的网络端口连接 iSCSI (注：确保主机的网络

端口和存储前端端口在同一子网), 登录 vCenter 设定 VMkernel 网卡, 为连接 iSCSI 做准备:



192.168.1.9 - Add Networking

1 Select connection type

2 Select target device

3 Port properties

4 IPv4 settings

5 Ready to complete

Select connection type

Select a connection type to create.

VMkernel Network Adapter

The VMkernel TCP/IP stack handles traffic for ESXi services such as vSphere vMotion, iSCSI, NFS, FCoE, Fault Tolerance, vSAN, host management and etc.

Virtual Machine Port Group for a Standard Switch

A port group handles the virtual machine traffic on standard switch.

Physical Network Adapter

A physical network adapter handles the network traffic to other hosts on the network.

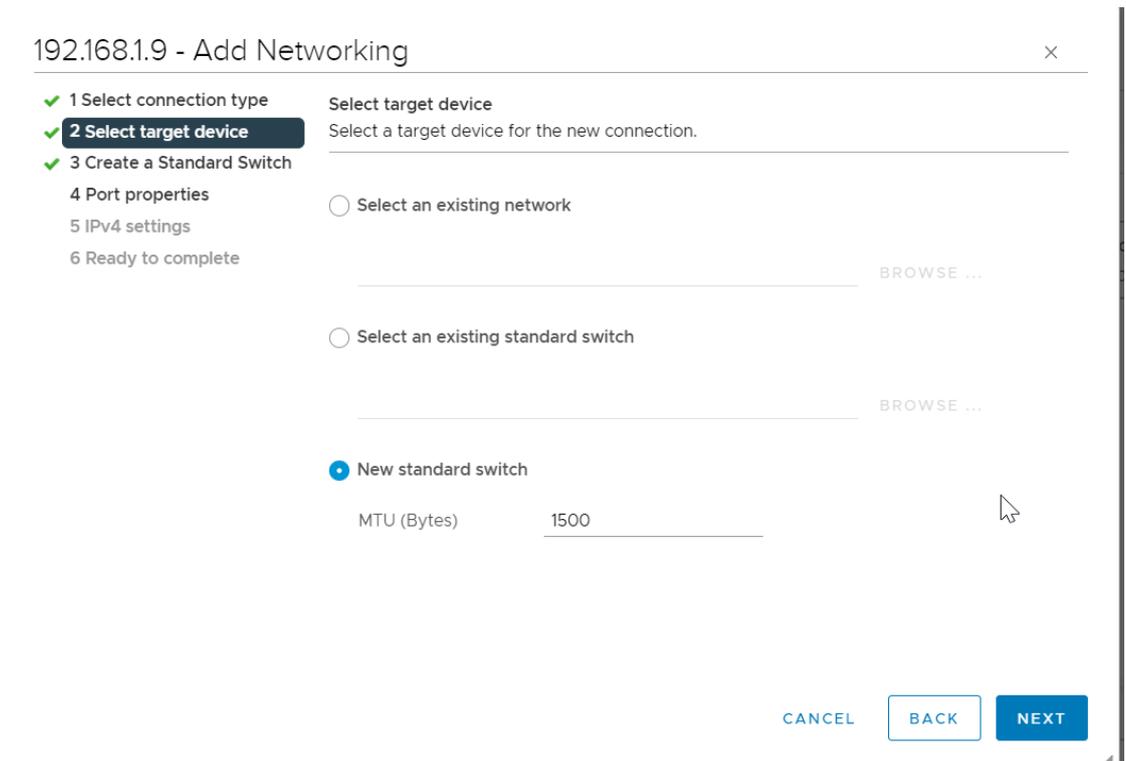


CANCEL

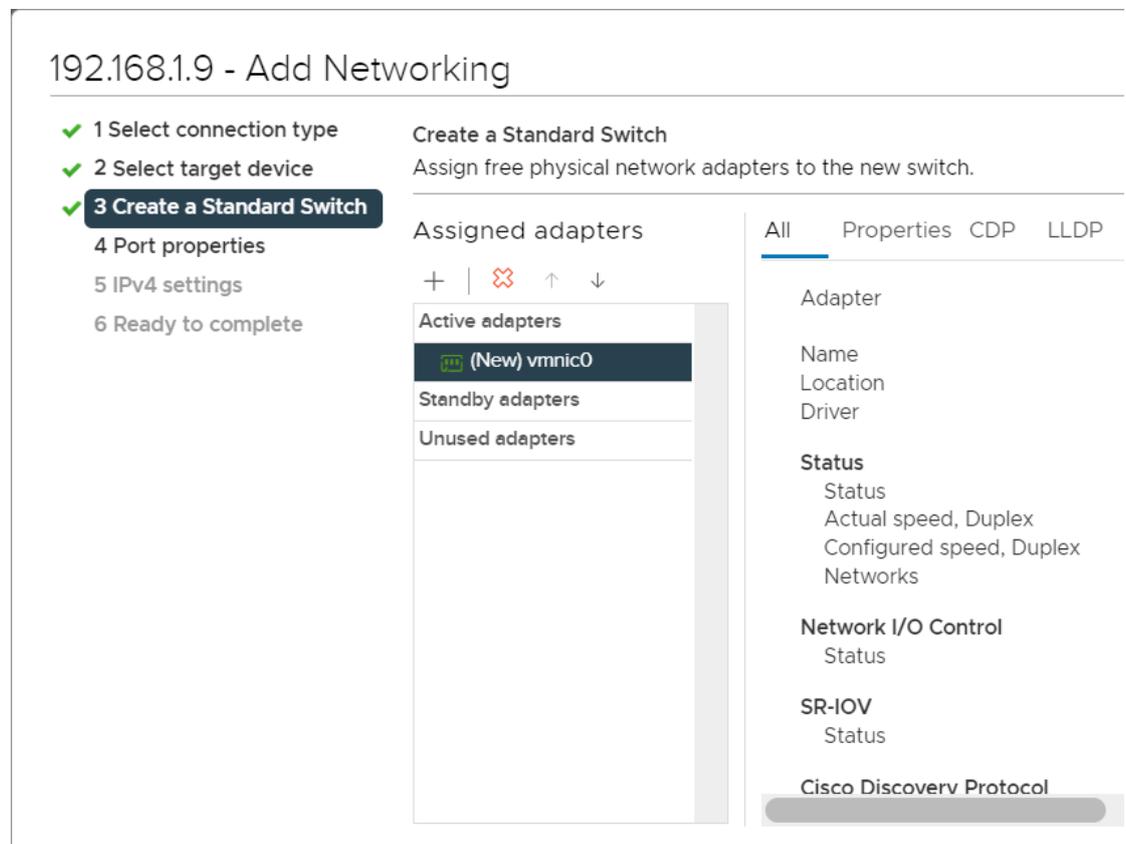
BACK

NEXT

根据现场网络环境，新建交换机



注意：MTU 如果要调整，需要适配交换机端口的设定。



192.168.1.9 - Add Networking

×

- ✓ 1 Select connection type
- ✓ 2 Select target device
- ✓ 3 Create a Standard Switch
- 4 Port properties**
- 5 IPv4 settings
- 6 Ready to complete

Port properties

Specify VMkernel port settings.

VMkernel port settings

Network label

VLAN ID

IP settings

MTU

TCP/IP stack

Available services

- Enabled services
- vMotion
 - Provisioning
 - Fault Tolerance logging
 - Management
 - vSphere Replication
 - vSphere Replication NFC
 - vSAN
 - vSphere Backup NFC

CANCEL

BACK

NEXT

192.168.1.9 - Add Networking

×

- ✓ 1 Select connection type
- ✓ 2 Select target device
- ✓ 3 Create a Standard Switch
- ✓ 4 Port properties
- 5 IPv4 settings**
- 6 Ready to complete

IPv4 settings

Specify VMkernel IPv4 settings.

- Obtain IPv4 settings automatically
- Use static IPv4 settings

IPv4 address

Subnet mask

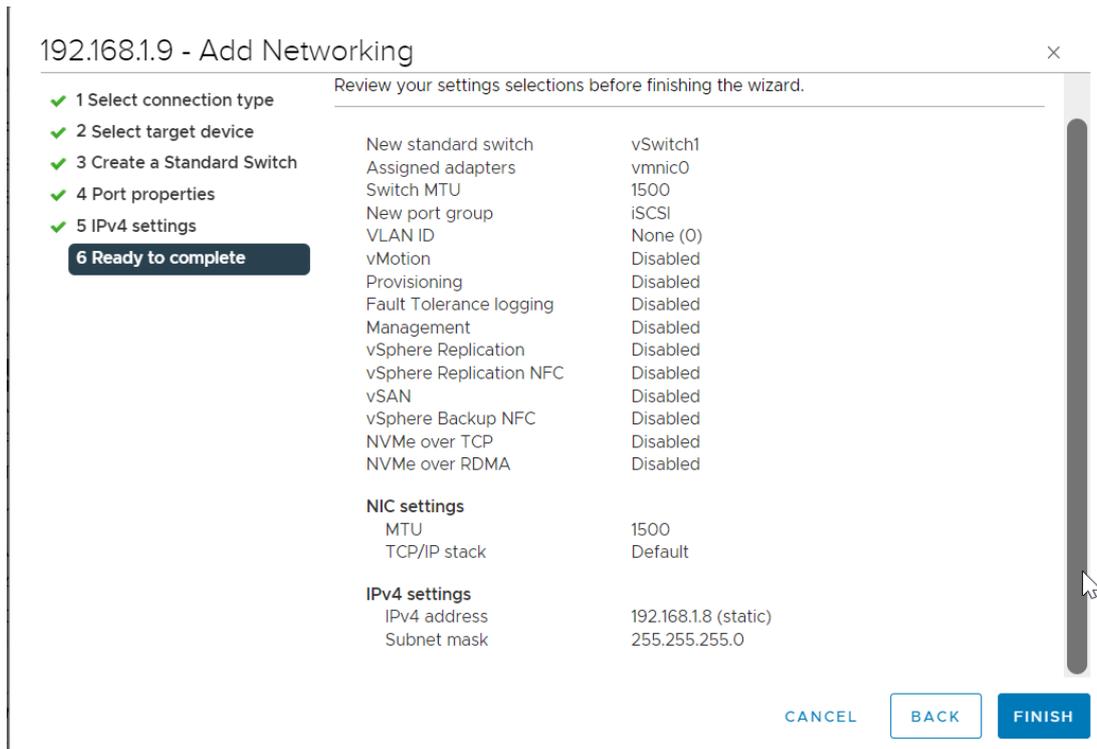
Default gateway Override default gateway for this adapter

DNS server addresses

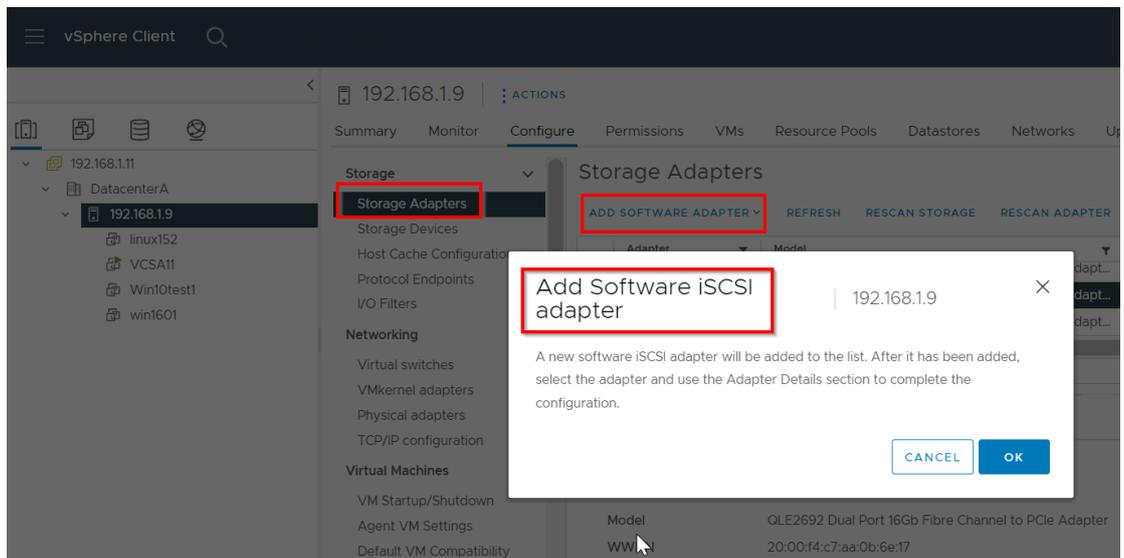
CANCEL

BACK

NEXT



六、新增和配置 Software iSCSI Adapter:



绑定之前创建的 Portgroup:

192.168.1.9 | ACTIONS

Summary Monitor **Configure** Permissions VMs Resource Pools Datastores Networks Updates

Storage

- Storage Adapters
- Storage Devices
- Host Cache Configuration
- Protocol Endpoints
- I/O Filters

Networking

- Virtual switches
- VMkernel adapters
- Physical adapters
- TCP/IP configuration

Virtual Machines

- VM Startup/Shutdown

Storage Adapters

ADD SOFTWARE ADAPTER ▾ REFRESH RESCAN STORAGE RESCAN ADAPTER REMOVE

Adapter	Model	Type	Status
vmhba66	iSCSI Software Adapter	iSCSI	Online
vmhba0	Louisburg SATA AHCI Controller	Block SCSI	Unknown

EXPORT ▾

Properties Devices Paths Dynamic Discovery Static Discovery **Network Port Binding**

ADD REMOVE VIEW DETAILS

Port Group	VMkernel Adapter	Port Group Policy	Path Status

Bind vmhba66 with VMkernel Adapter

Port Group	VMkernel Adapter	Physical Network Adapter
<input type="checkbox"/> Management Network (vSwitch0)	<input type="checkbox"/> vmk0	<input type="checkbox"/> vmnic2 (10 Gbit/s, Full)
<input checked="" type="checkbox"/> iSCSI (vSwitch1)	<input checked="" type="checkbox"/> vmk1	<input checked="" type="checkbox"/> vmnic0 (10 Gbit/s, Full)
<input type="checkbox"/> ..	<input type="checkbox"/> ..	<input type="checkbox"/> vmnic1
<input type="checkbox"/> ..	<input type="checkbox"/> ..	<input type="checkbox"/> vmnic3

添加存储端的 iSCSI 端口地址后，执行扫盘：

192.168.1.9 | ACTIONS

Summary Monitor **Configure** Permissions VMs Resource Pools Datastores Networks Updates

Storage

- Storage Adapters
- Storage Devices
- Host Cache Configuration
- Protocol Endpoints
- I/O Filters

Networking

- Virtual switches
- VMkernel adapters
- Physical adapters
- TCP/IP configuration

Virtual Machines

- VM Startup/Shutdown

Storage Adapters

⚠ Due to recent configuration changes, a rescan of "vmhba66" is recommended.

ADD SOFTWARE ADAPTER ▾ REFRESH RESCAN STORAGE RESCAN ADAPTER

Adapter	Model

EXPORT ▾

Properties Devices Paths **Dynamic Discovery** Static Discovery

ADD REMOVE AUTHENTICATION ADVANCED...

<input type="checkbox"/> iSCSI server

Add Send Target Server

vmhba66



iSCSI Server

Port

Inherit authentication settings from parent

CANCEL

OK

192.168.1.9 | ACTIONS

Summary Monitor **Configure** Permissions VMs Resource Pools Datastores Networks Updates

Storage > Storage Adapters

ADD SOFTWARE ADAPTER ▾ REFRESH RESCAN STORAGE **RESCAN ADAPTER** REMOVE

Adapter	Model	Type	Status	Identifie
vmhba66	iSCSI Software Adapter	iSCSI	Online	iscsi_vm
vmhba0	Lewisburg SATA AHCI Controller	Block SCSI	Unknown	--
vmhba1	Lewisburg SATA AHCI Controller	Block SCSI	Unknown	--

EXPORT ▾

Properties **Devices** Paths Dynamic Discovery Static Discovery Network Port Binding Advanced C

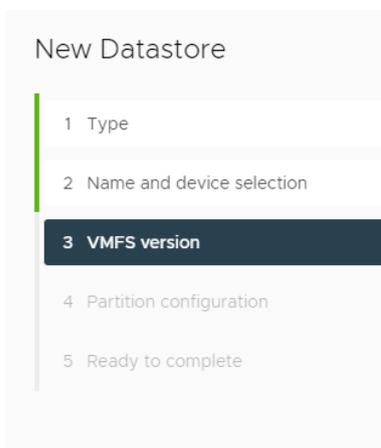
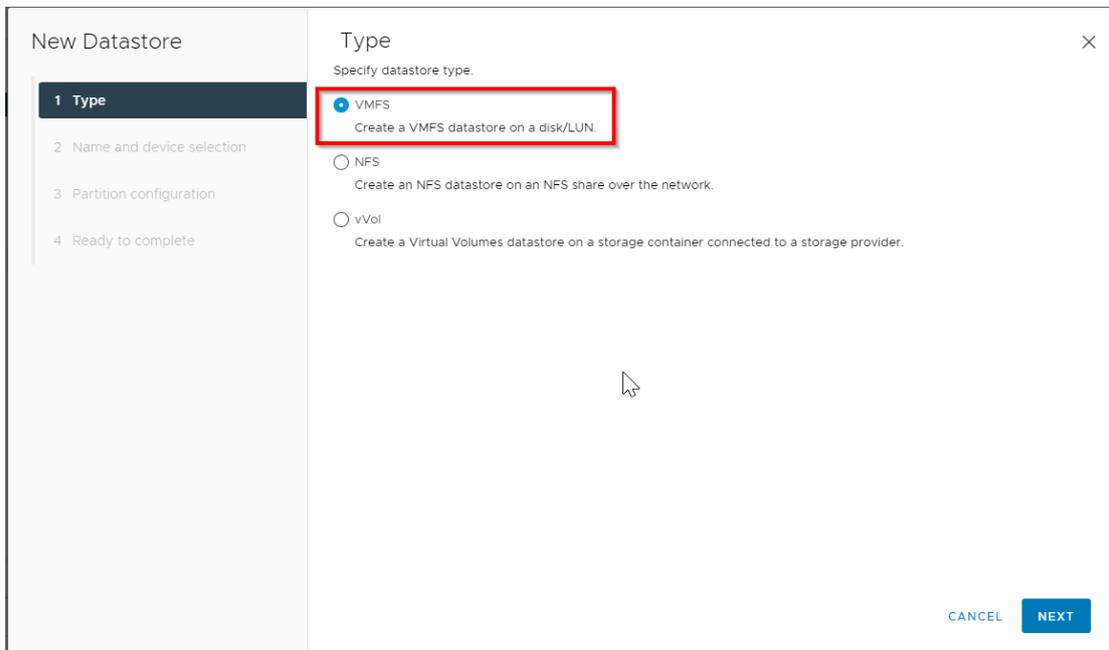
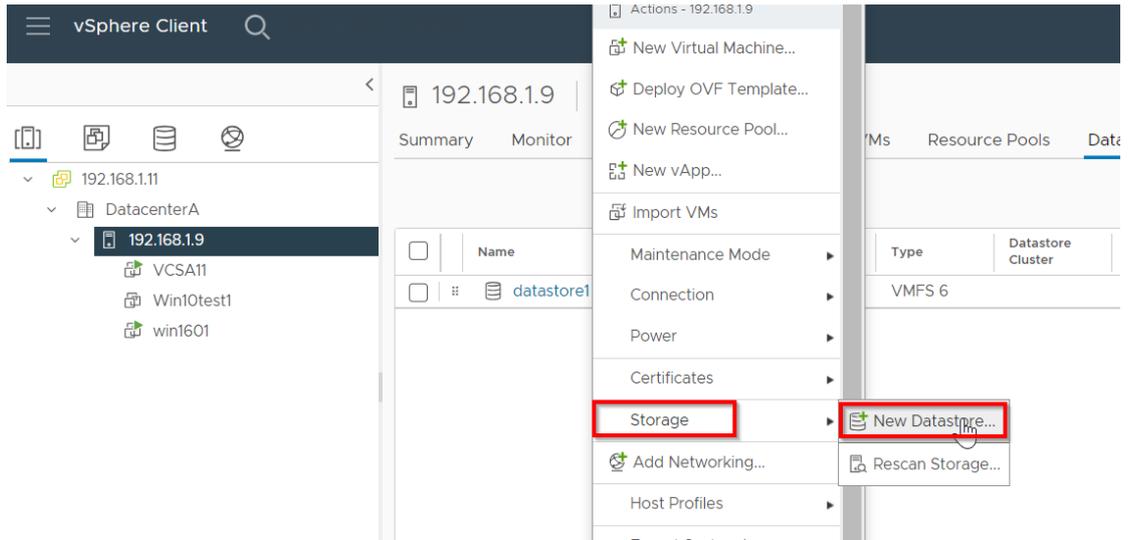
REFRESH ATTACH DETACH RENAME

Name	LUN	Type	Capacity
LIO-ORG iSCSI Disk (naa.6001405ce29ef0e714d46ad98c5b943c)	0	disk	49.06 GB

EXPORT

可以看到，对应的 iSCSI 设备已经被发现。

七、 创建并挂载 iSCSI 存储：



VMFS version

Specify the VMFS version for the datastore.

- VMFS 6
VMFS 6 enables advanced format (512e) and automatic space reclamation support.
- VMFS 5
VMFS 5 enables 2+TB LUN support.

New Datastore

- Type
- Name and device selection**
- VMFS version
- Partition configuration
- Ready to complete

Name and device selection

Specify datastore name and a disk/LUN for provisioning the datastore.

Name

	Name	LUN	Capacity	Hardware Acceleration	Drive Type	Sector Format	Clustered VMDK Supported
<input type="radio"/>	Local ATA Disk (t10.ATA_...)	0	5.46 TB	Not suppo...	HDD	512e	No
<input checked="" type="radio"/>	LIO-ORG iSCSI Disk (naa.6...)	0	49.06 GB	Supported	HDD	512n	No

CANCEL BACK NEXT

New Datastore

- Type
- Name and device selection
- VMFS version**
- Partition configuration
- Ready to complete

VMFS version

Specify the VMFS version for the datastore.

VMFS 6
VMFS 6 enables advanced format (512e) and automatic space reclamation support.

VMFS 5
VMFS 5 enables 2+TB LUN support.

New Datastore

- Type
- Name and device selection
- VMFS version
- Partition configuration**
- Ready to complete

Partition configuration

Review the disk layout and specify partition configuration details.

⚠ This configuration will delete the current disk layout. All file systems and data will be permanently lost.

Partition Configuration Use all available partitions

Datastore Size 49.06 GB

Block size

Space Reclamation Granularity

Space Reclamation Priority

Legend:
■ Legacy MBR
■ Legacy MBR

CANCEL BACK NEXT

New Datastore

1 Type
2 Name and device selection
3 VMFS version
4 Partition configuration
5 Ready to complete

Ready to complete ×

Review your selections before finishing the wizard

- ✓ **Name and device selection**
 - Datastore name: Oss-store1
 - Disk/LUN: LIO-ORG iSCSI Disk (naa.6001405ce29ef0e714d46ad98c5b943c)
- ✓ **VMFS version**
 - Version: VMFS 6
- ✓ **Partition configuration**
 - Datastore size: 49.06 GB
 - Partition format: GPT
 - Block size: 1 MB
 - Space reclamation granularity: 1 MB
 - Space reclamation priority: Low: Deleted or unmapped blocks are reclaimed on the LUN at low priority

Summary Monitor Configure Permissions Hosts & Clusters VMs **Datstores** Networks

Datstores Datastore Clusters Datastore Folders

<input type="checkbox"/>	Name	↑	Status	Type	Datastore Cluster	Capacity
<input type="checkbox"/>	datastore1		✓ Normal	VMFS 6		825.75 GB
<input type="checkbox"/>	Oss-store1		✓ Normal	VMFS 6		49 GB

至此，对应的 OSS-STORE1 创建完成，可供虚拟化应用使用。