155 网络规划&&创建虚机

0x00 目的

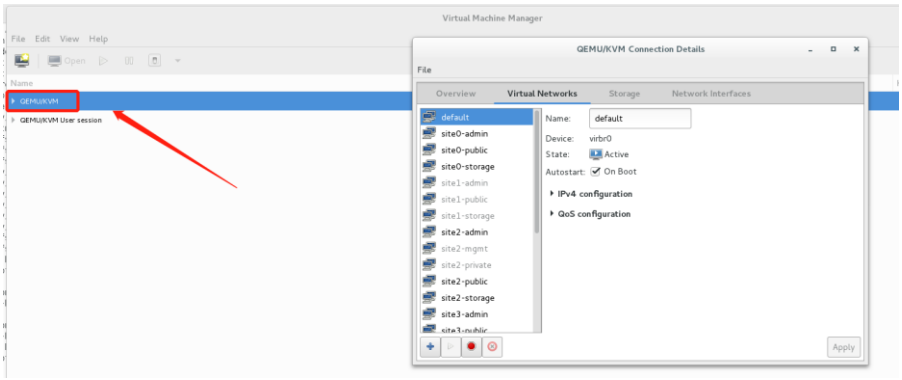
为了防止大家在 155 搭建 thinkcloud 产生 IP 冲突。

0x01 创建网络

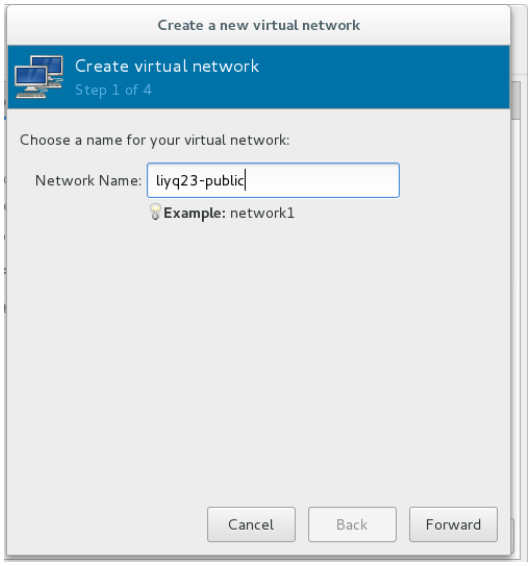
进入环境

```
[root@stackstation-1 ~]# virt-manager
```

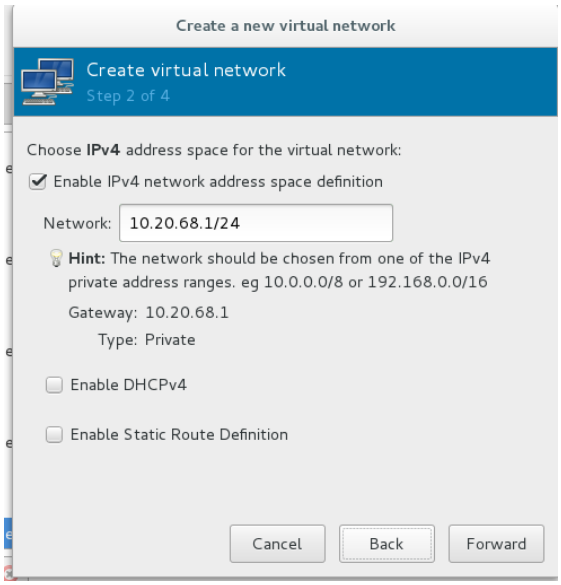
新建网络
双击 QEME/KVM，点击 Virtual Networks，如下图所示。



点击＋，进入如下所示

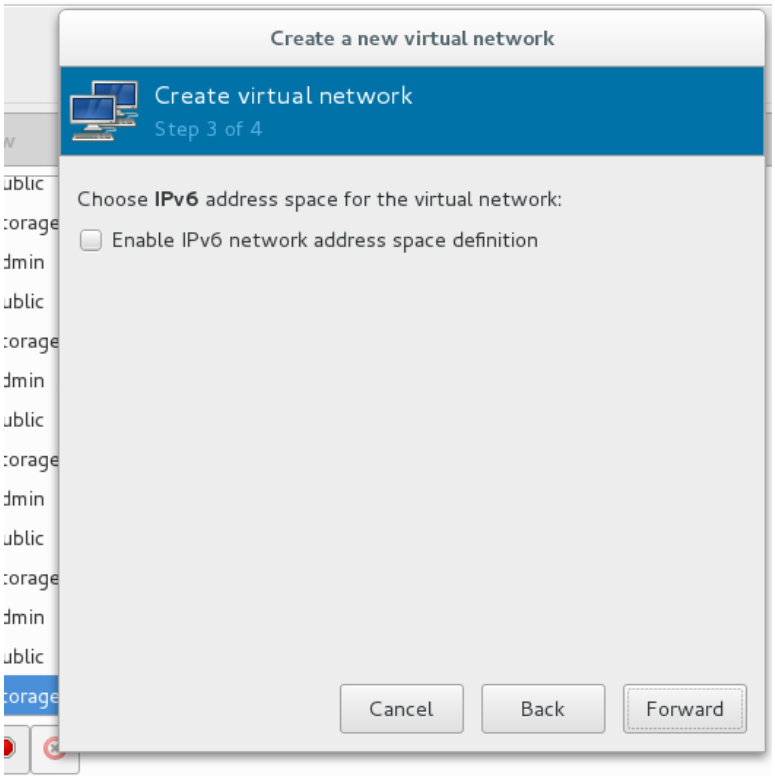


输入网络名称：itcode＋public/mgmt/storage/private/pxe

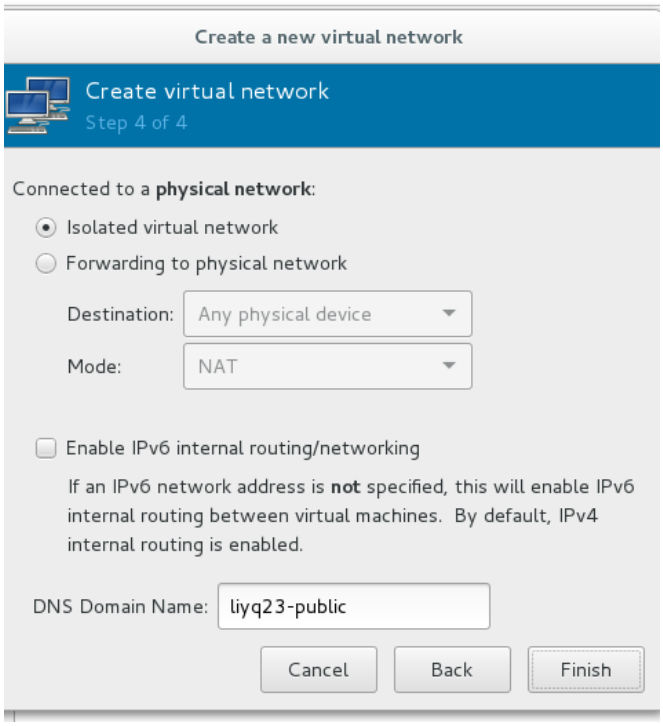


输入 CIDR 信息，请对照下表，输入 CIDR 信息，并且不要勾选 DHCPv4。

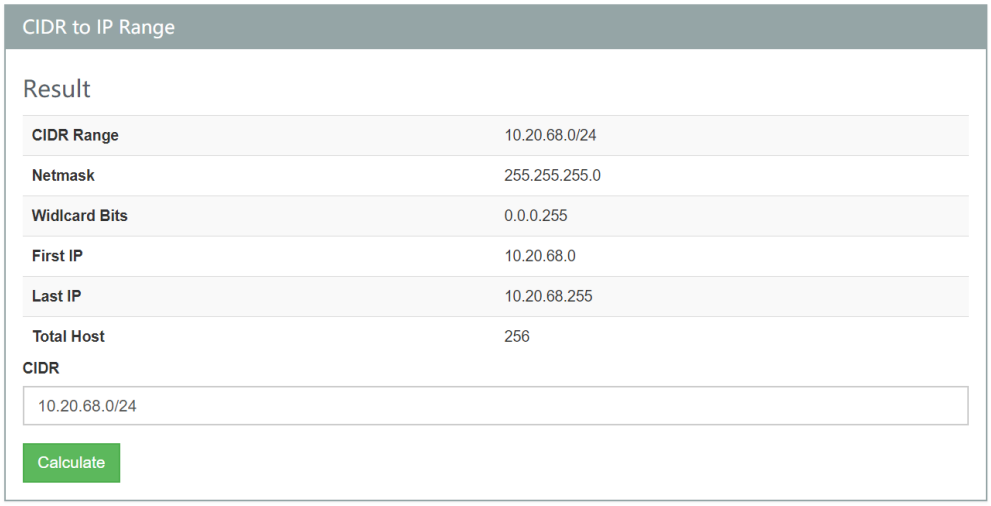
ITCode	public	private	storage	pxe	mgmt
liyq23	10.20.68.1/24	172.16.68.1/24	192.168.68.1/24	10.43.68.1/24	10.23.68.1/24
licl22	10.20.69.1/24	172.16.69.1/24	192.168.69.1/24	10.43.69.1/24	10.23.69.1/24
lith1	10.20.70.1/24	172.16.70.1/24	192.168.70.1/24	10.43.70.1/24	10.23.70.1/24
majw5	10.20.71.1/24	172.16.71.1/24	192.168.71.1/24	10.43.71.1/24	10.23.71.1/24
xiajj2	10.20.72.1/24	172.16.72.1/24	192.168.72.1/24	10.43.72.1/24	10.23.72.1/24
zhangjing57	10.20.73.1/24	172.16.73.1/24	192.168.73.1/24	10.43.73.1/24	10.23.73.1/24
zhuyn5	10.20.74.1/24	172.16.74.1/24	192.168.74.1/24	10.43.74.1/24	10.23.74.1/24



这一步可选可不选，点击 forward



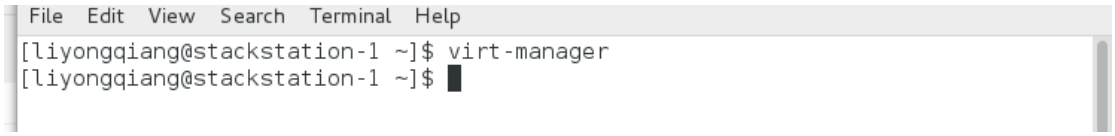
点击 finish，至此网络创建成功，下面是有关 CIDR 的含义解释。



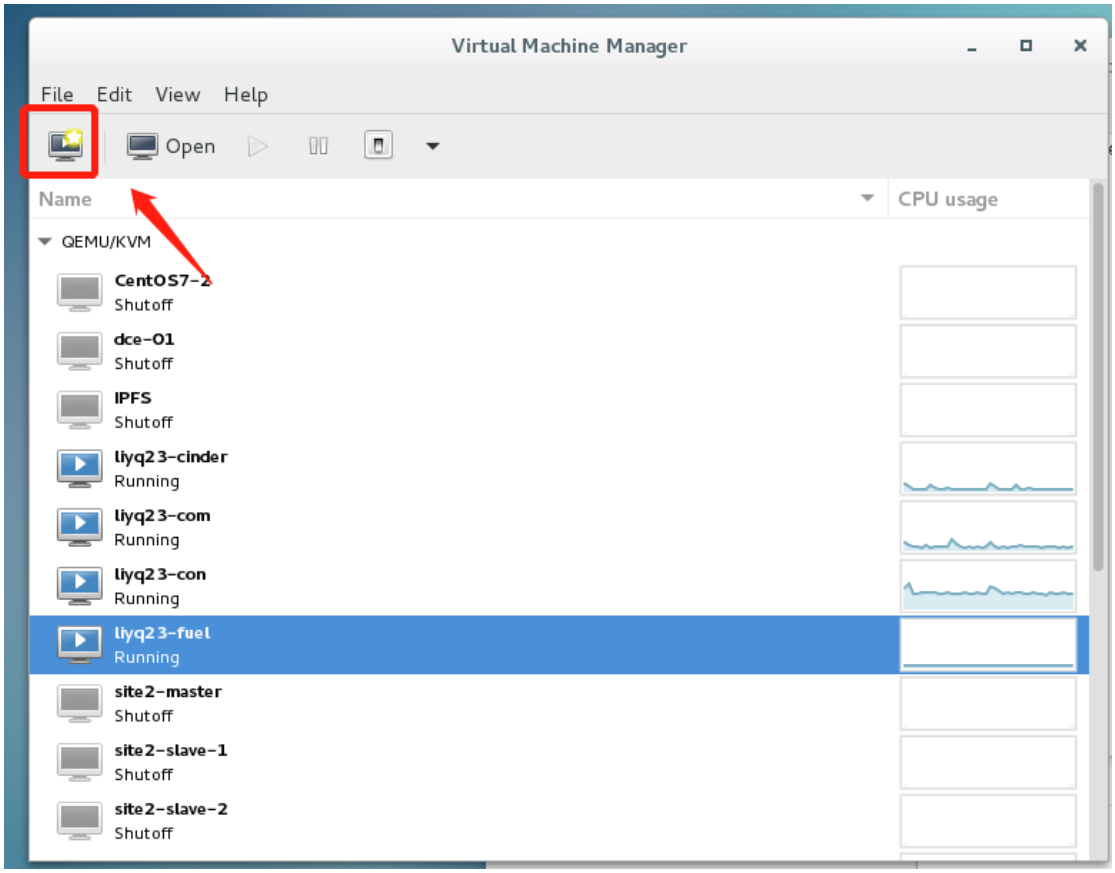
Over

0x02 创建 fuel-master

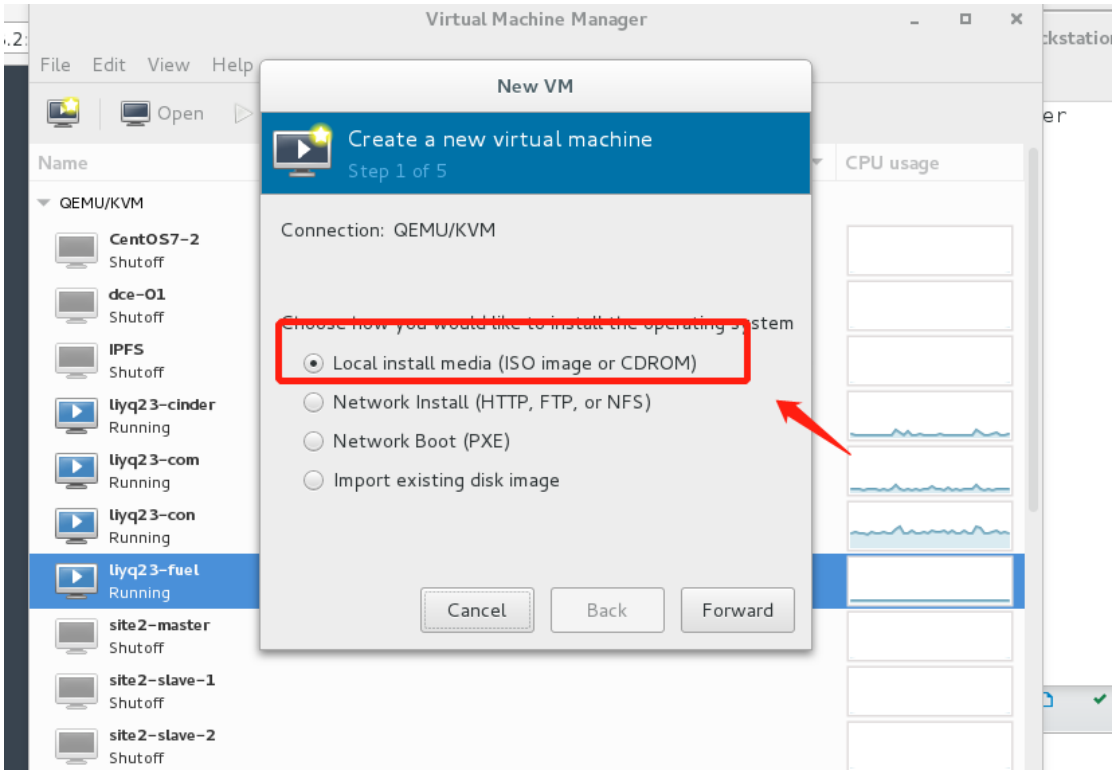
新建部署节点
命令行输入 virt-manager

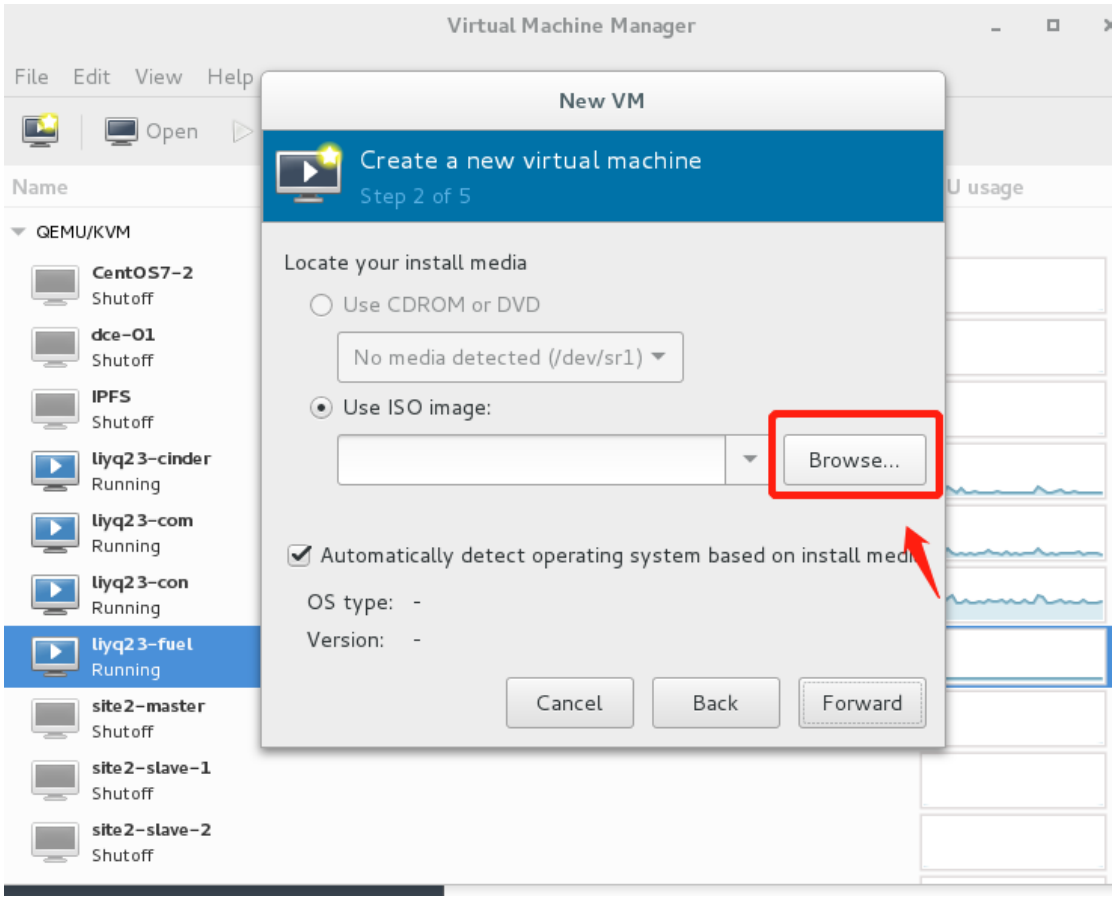


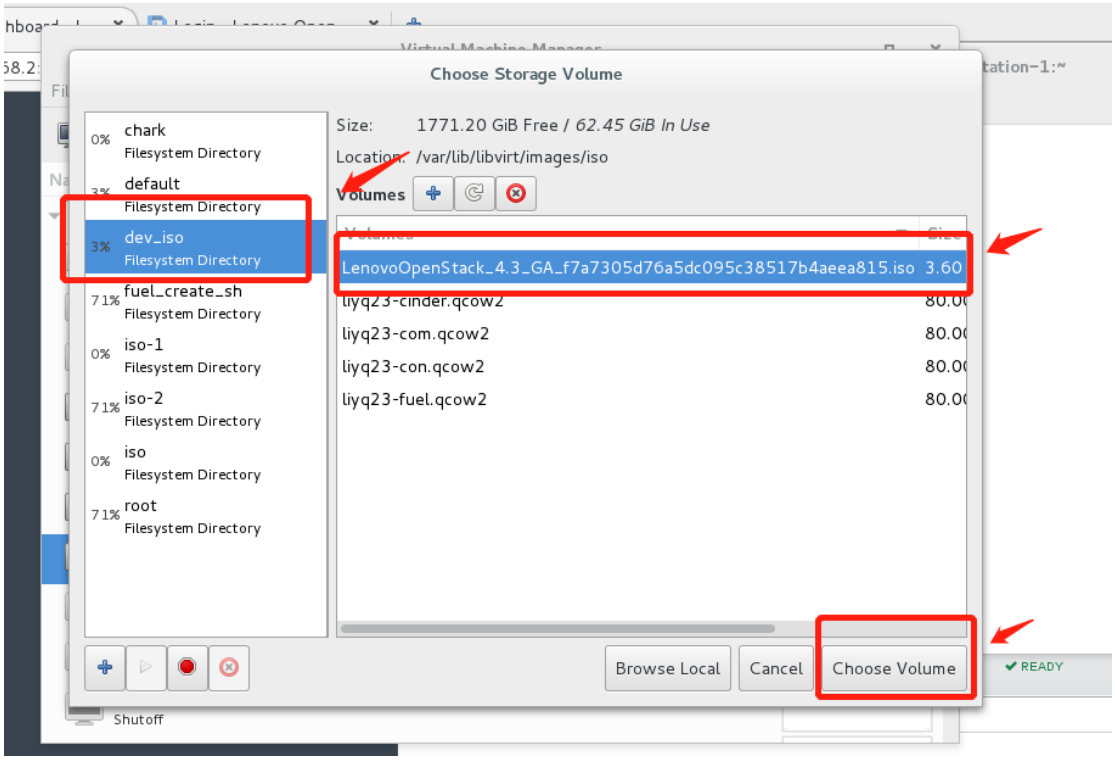
点击创建

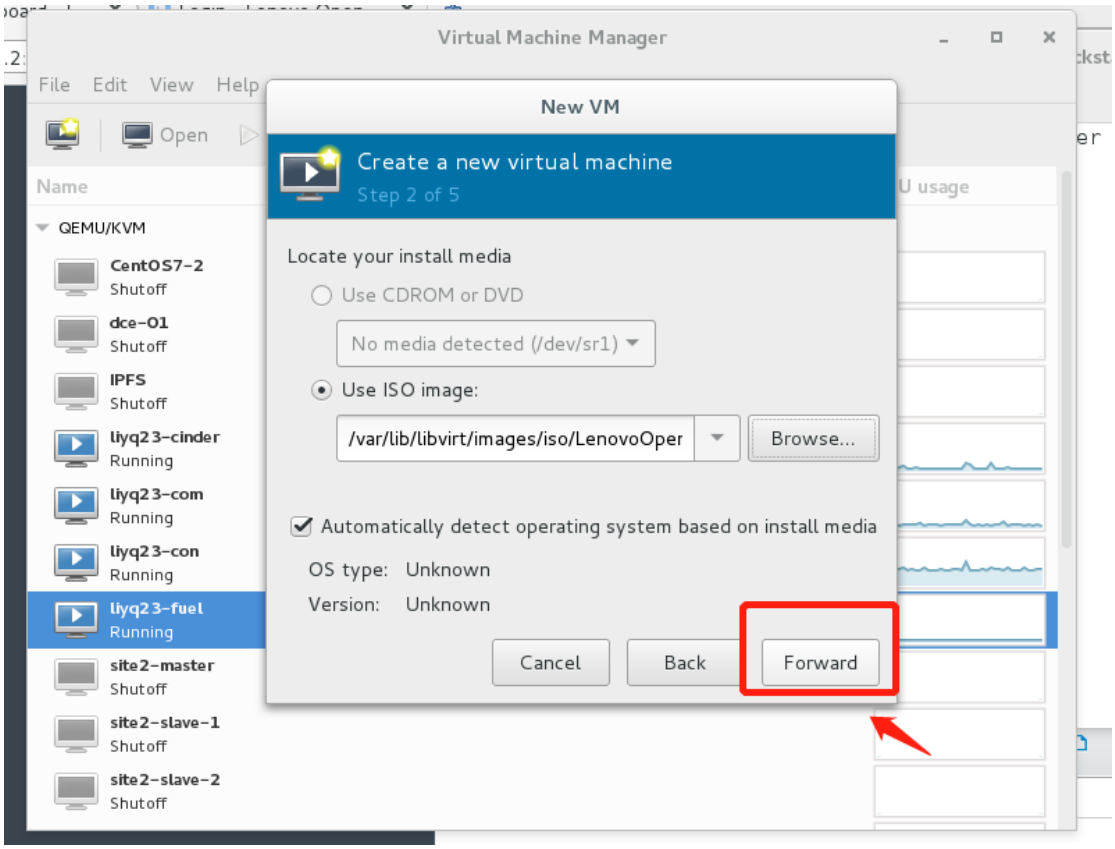

Virtual Machine Manager
File Edit View Help
Open
Name
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff

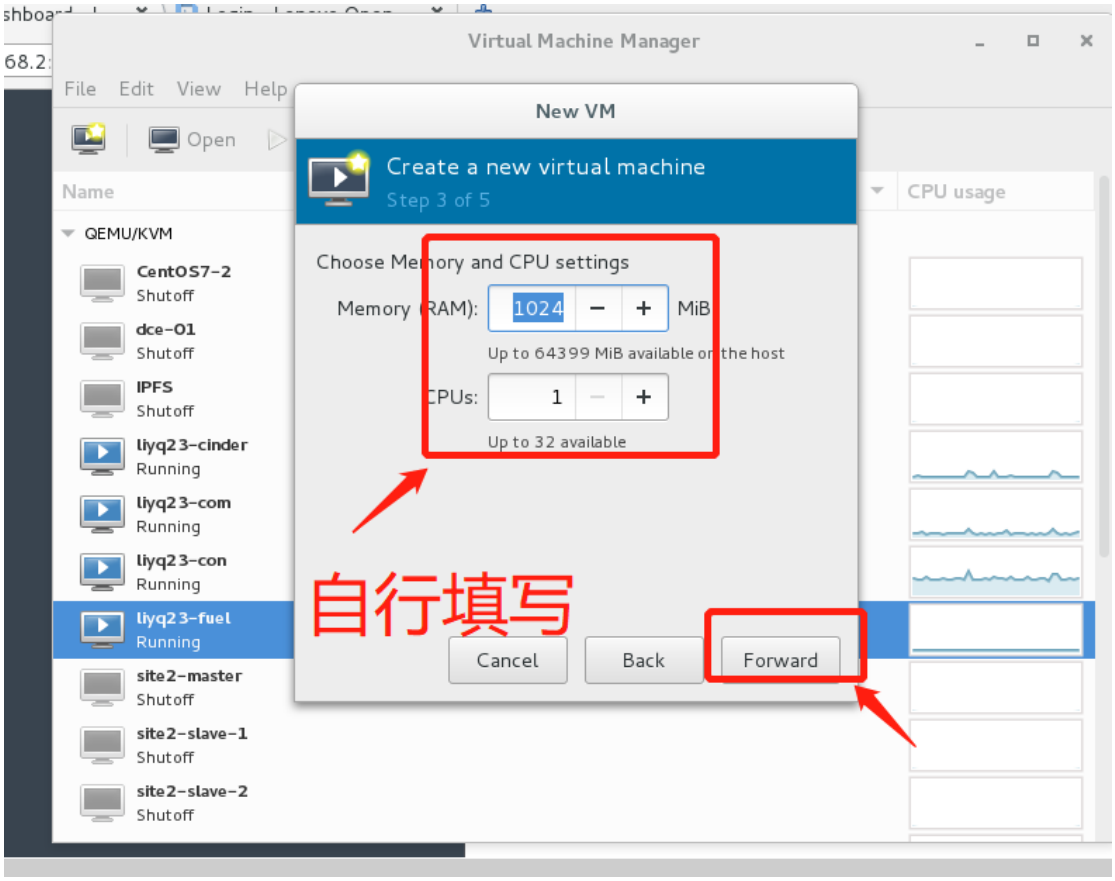
选择 iso 位置

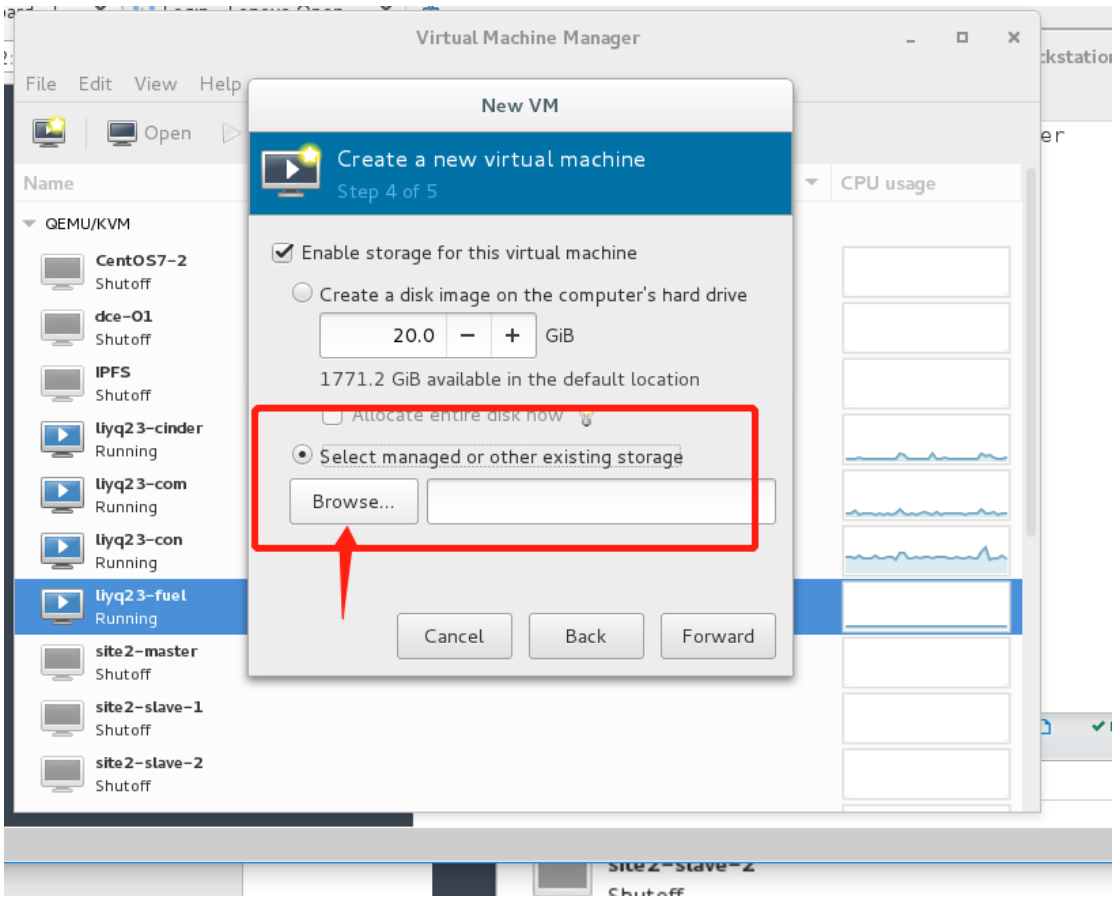

Virtual Machine Manager
File Edit View Help
Open
Name
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff
New VM
Create a new virtual machine
Step 1 of 5
Connection: QEMU/KVM
Local install media (ISO image or CDROM)
Network Install (HTTP, FTP, or NFS)
Network Boot (PXE)
Import existing disk image
Cancel
Back
Forward

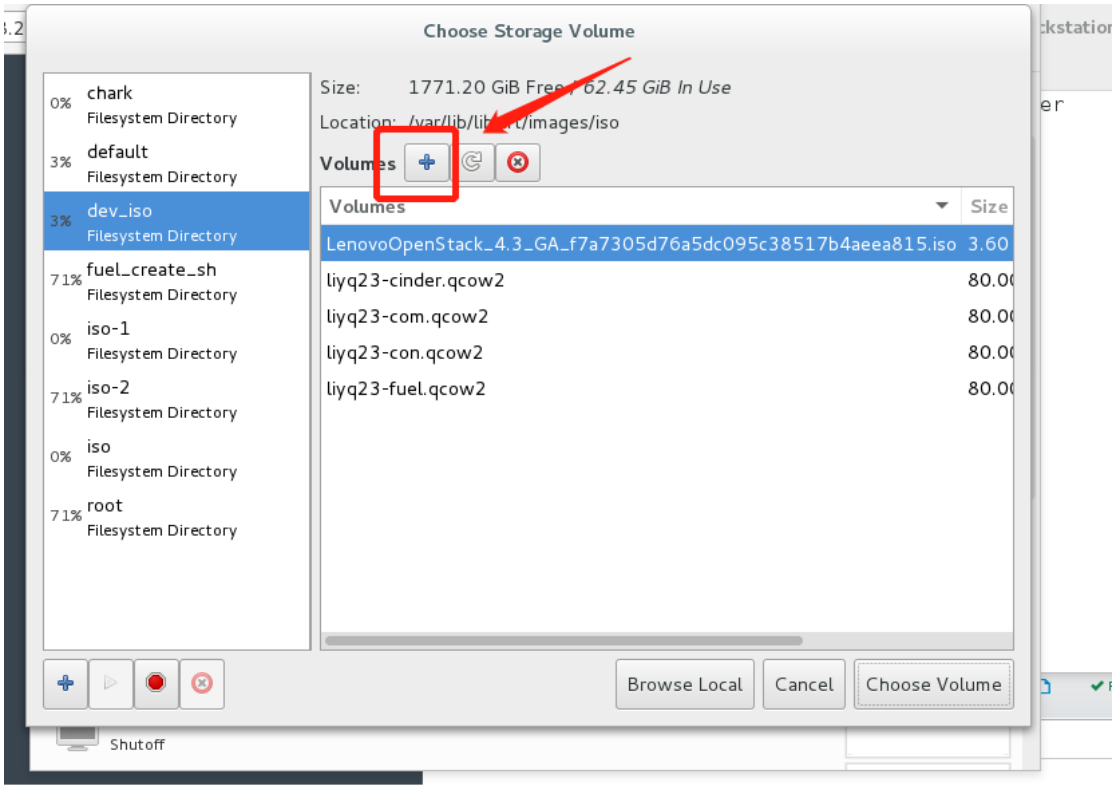

Virtual Machine Manager
File Edit View Help
Open
Name
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff
New VM
Create a new virtual machine
Step 2 of 5
Locate your install media
Use CDROM or DVD
No media detected (/dev/sr1)
Use ISO image:
Browse...
Automatically detect operating system based on install medi
OS type: -
Version: -
Cancel
Back
Forward

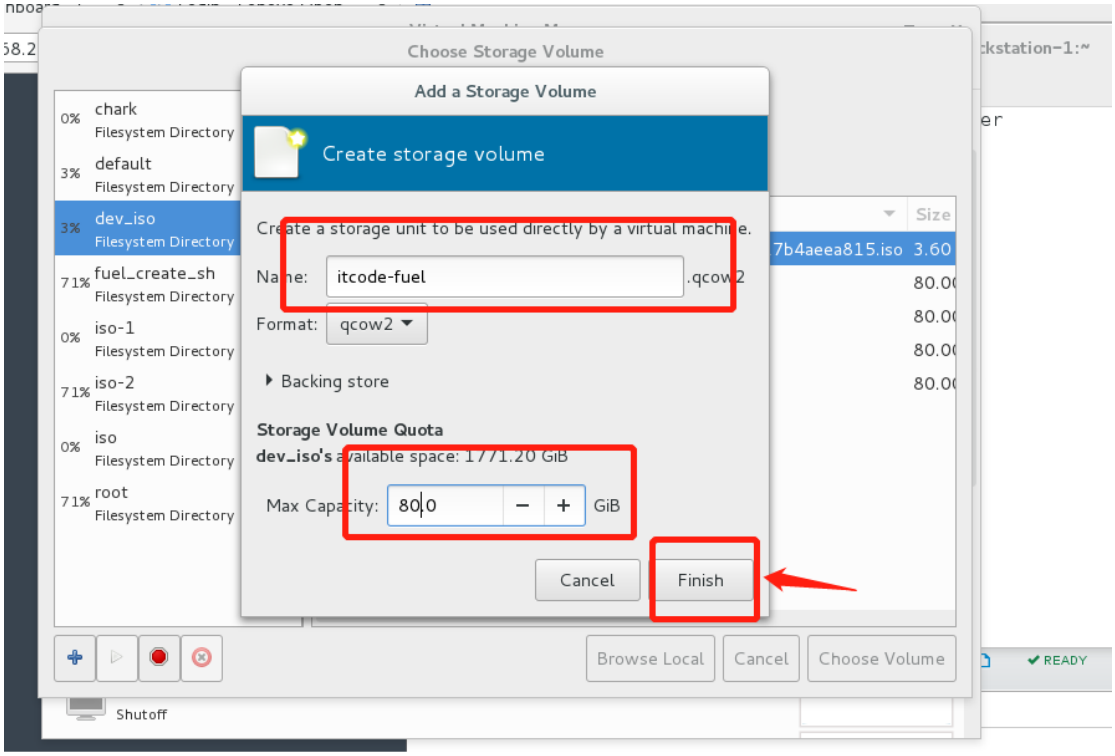

Choose Storage Volume
chark
Filesystem Directory
default
Filesystem Directory
dev_iso
Filesystem Directory
fuel_create_sh
Filesystem Directory
iso-1
Filesystem Directory
iso-2
Filesystem Directory
iso
Filesystem Directory
root
Filesystem Directory
Size: 1771.20 GiB Free / 62.45 GiB In Use
Location: /var/lib/libvirt/images/iso
Volumes
LenovoOpenStack_4.3_GA_f7a7305d76a5dc095c38517b4aeea815.iso 3.60
liyq23-cinder.qcow2
liyq23-com.qcow2
liyq23-con.qcow2
liyq23-fuel.qcow2
Browse Local
Cancel
Choose Volume
READY
Shutoff

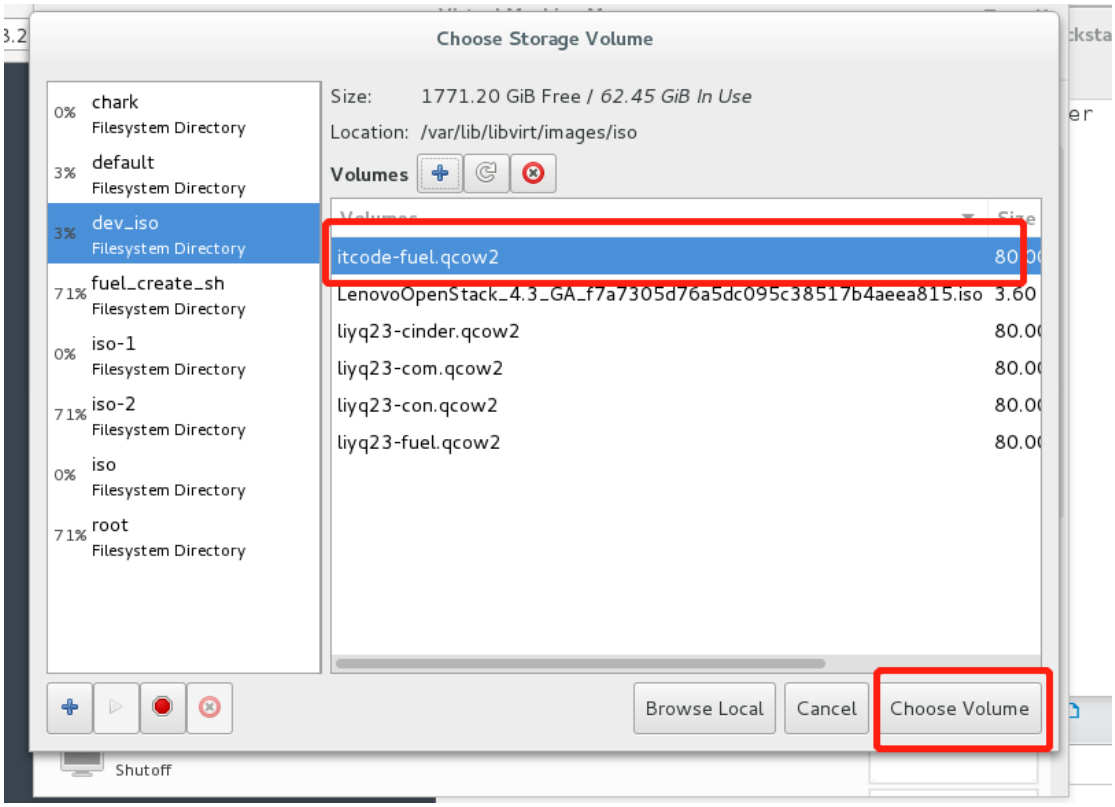

Virtual Machine Manager
File Edit View Help
Open
Name
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff
New VM
Create a new virtual machine
Step 2 of 5
Locate your install media
Use CDROM or DVD
No media detected (/dev/sr1)
Use ISO image:
/var/lib/libvirt/images/iso/LenovoOper
Browse...
Automatically detect operating system based on install media
OS type: Unknown
Version: Unknown
Cancel
Back
Forward

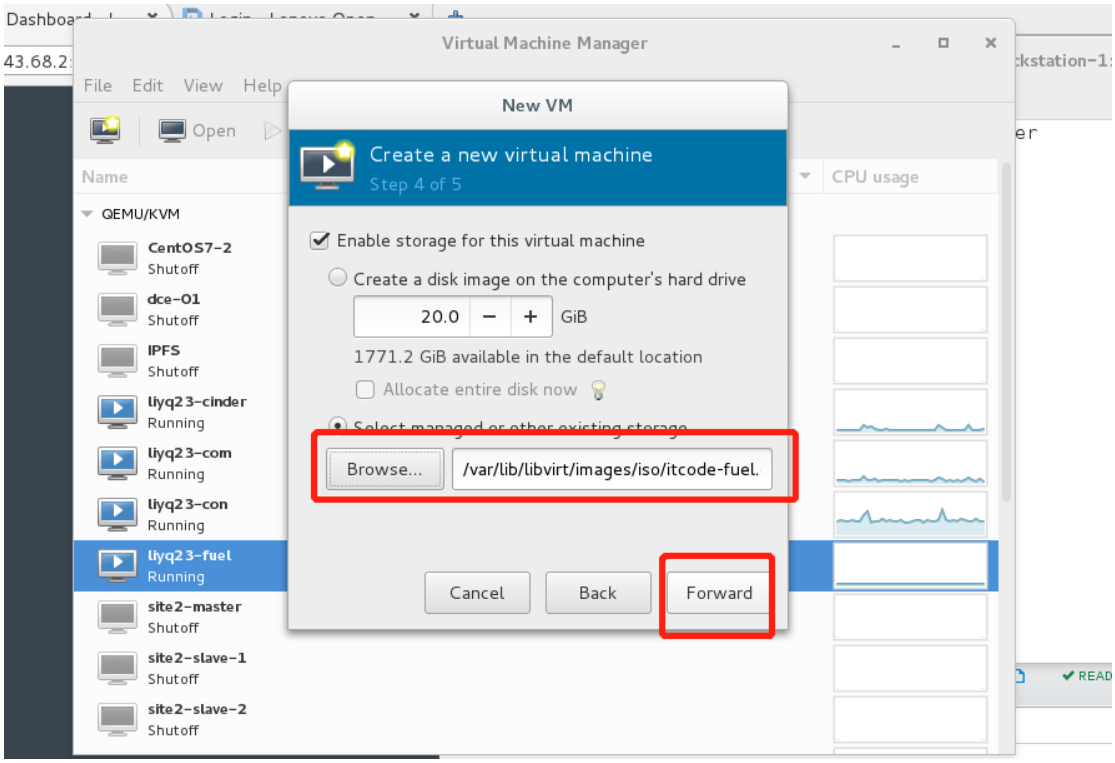

Virtual Machine Manager
File Edit View Help
Open
Name
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff
New VM
Create a new virtual machine
Step 3 of 5
Choose Memory and CPU settings
Memory (RAM): 1024 MiB
Up to 64399 MiB available on the host
CPUs: 1
Up to 32 available
自行填写
Cancel
Back
Forward

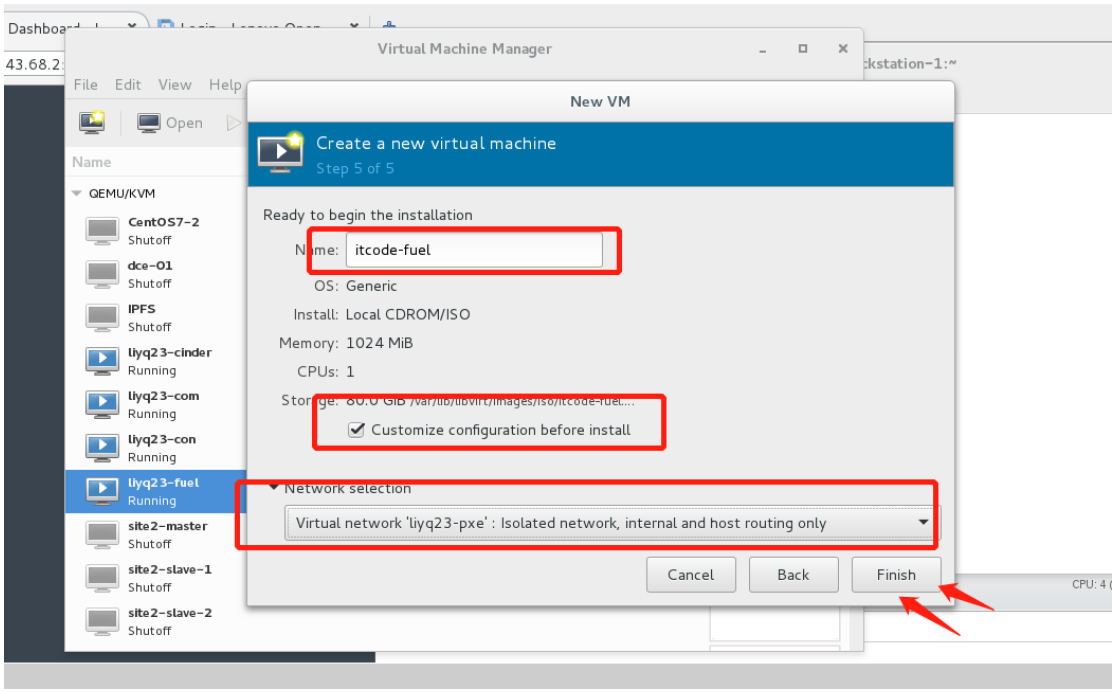

Virtual Machine Manager
File Edit View Help
Open
New VM
Create a new virtual machine
Step 4 of 5
Enable storage for this virtual machine
Create a disk image on the computer's hard drive
20.0
GiB
1771.2 GiB available in the default location
Allocate entire disk now
Select managed or other existing storage
Browse...
Cancel
Back
Forward
Name
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff

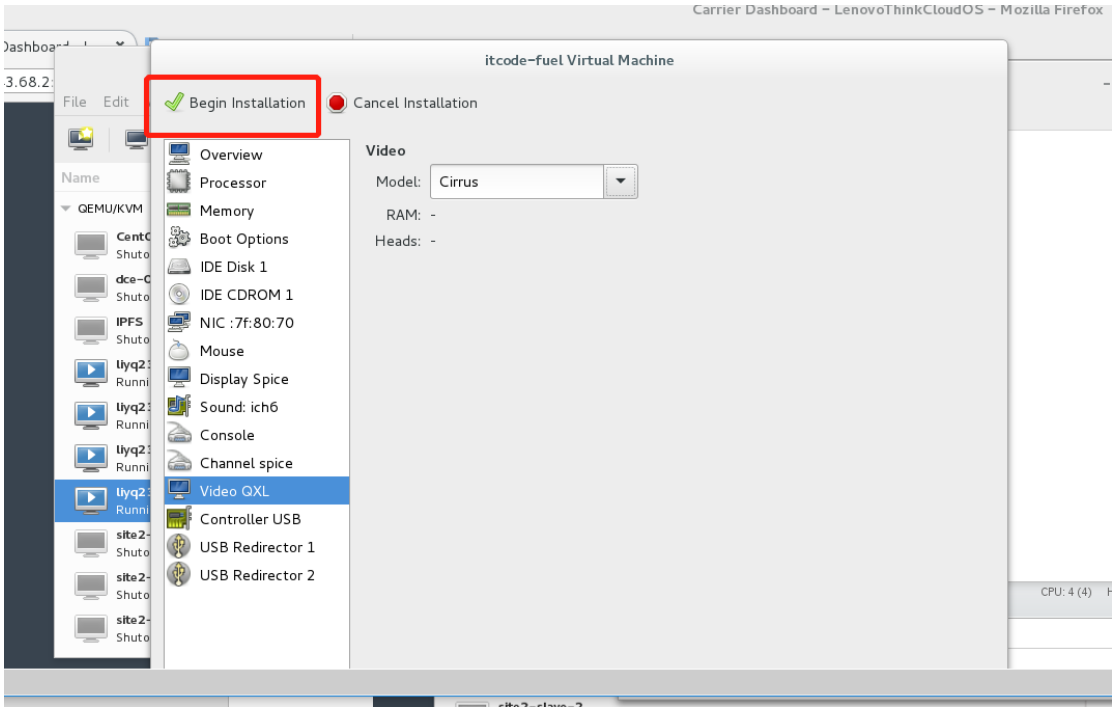

Choose Storage Volume
0% chark
Filesystem Directory
3% default
Filesystem Directory
3% dev_iso
Filesystem Directory
71% fuel_create_sh
Filesystem Directory
0% iso-1
Filesystem Directory
71% iso-2
Filesystem Directory
0% iso
Filesystem Directory
71% root
Filesystem Directory
Size: 1771.20 GiB Free / 62.45 GiB In Use
Location: /var/lib/libvirt/images/iso
Volumes
Volumes
Size
LenovoOpenStack_4.3_GA_f7a7305d76a5dc095c38517b4aeea815.iso 3.60
liyq23-cinder.qcow2
liyq23-com.qcow2
liyq23-con.qcow2
liyq23-fuel.qcow2
Browse Local
Cancel
Choose Volume
Shutoff


Choose Storage Volume
Add a Storage Volume
Create storage volume
Create a storage unit to be used directly by a virtual machine.
Name: itcode-fuel .qcow2
Format: qcow2
Backing store
Storage Volume Quota
dev_iso's available space: 1771.20 GiB
Max Capacity: 80.0 GiB
Cancel
Finish
0% chark Filesystem Directory
3% default Filesystem Directory
3% dev_iso Filesystem Directory
71% fuel_create_sh Filesystem Directory
0% iso-1 Filesystem Directory
71% iso-2 Filesystem Directory
0% iso Filesystem Directory
71% root Filesystem Directory
Size
7b4aeea815.iso 3.60
Browse Local
Cancel
Choose Volume
Shutoff
READY

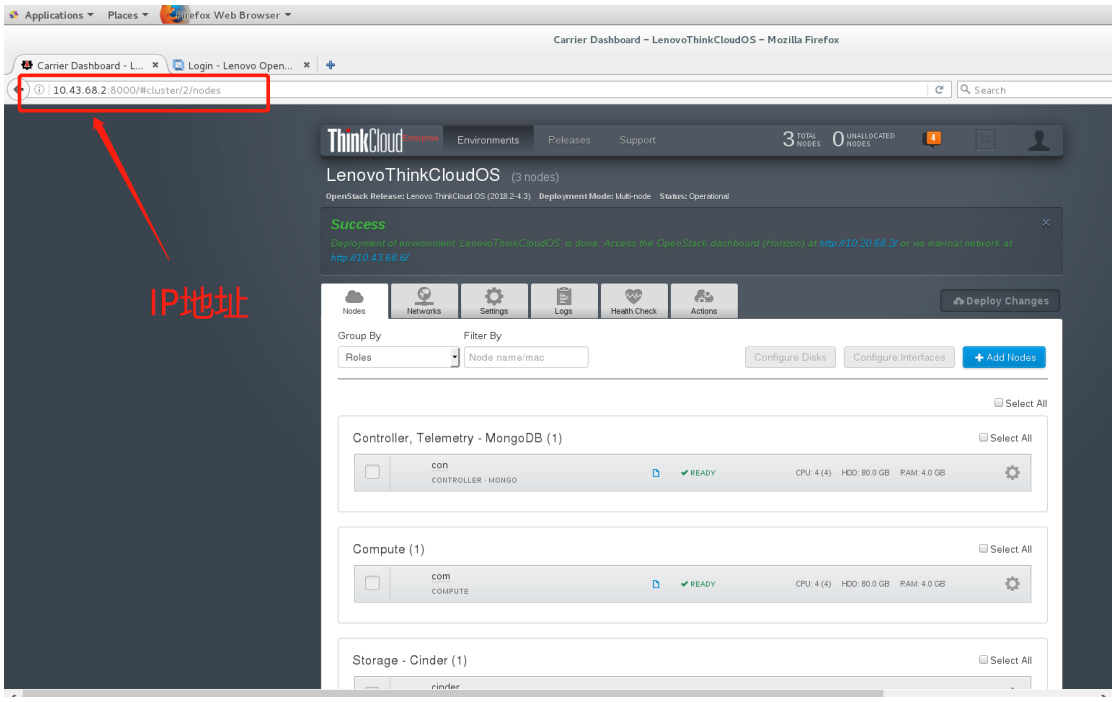

Choose Storage Volume
0% chark Filesystem Directory
3% default Filesystem Directory
3% dev_iso Filesystem Directory
71% fuel_create_sh Filesystem Directory
0% iso-1 Filesystem Directory
71% iso-2 Filesystem Directory
0% iso Filesystem Directory
71% root Filesystem Directory
Size: 1771.20 GiB Free / 62.45 GiB In Use
Location: /var/lib/libvirt/images/iso
Volumes
itcode-fuel.qcow2
LenovoOpenStack_4.3_GA_f7a7305d76a5dc095c38517b4aeea815.iso 3.60
liyq23-cinder.qcow2
liyq23-com.qcow2
liyq23-con.qcow2
liyq23-fuel.qcow2
Browse Local
Cancel
Choose Volume
Shutoff


Virtual Machine Manager
File Edit View Help
Open
New VM
Create a new virtual machine
Step 4 of 5
Enable storage for this virtual machine
Create a disk image on the computer's hard drive
20.0
GiB
1771.2 GiB available in the default location
Allocate entire disk now
Browse...
/var/lib/libvirt/images/iso/itcode-fuel.
Cancel
Back
Forward
Name
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff


Virtual Machine Manager
File Edit View Help
Open
New VM
Create a new virtual machine
Step 5 of 5
Ready to begin the installation
Name: itcode-fuel
OS: Generic
Install: Local CDROM/ISO
Memory: 1024 MiB
CPUs: 1
Customize configuration before install
Network selection
Virtual network 'liyq23-pxe' : Isolated network, internal and host routing only
Cancel
Back
Finish
Name
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff

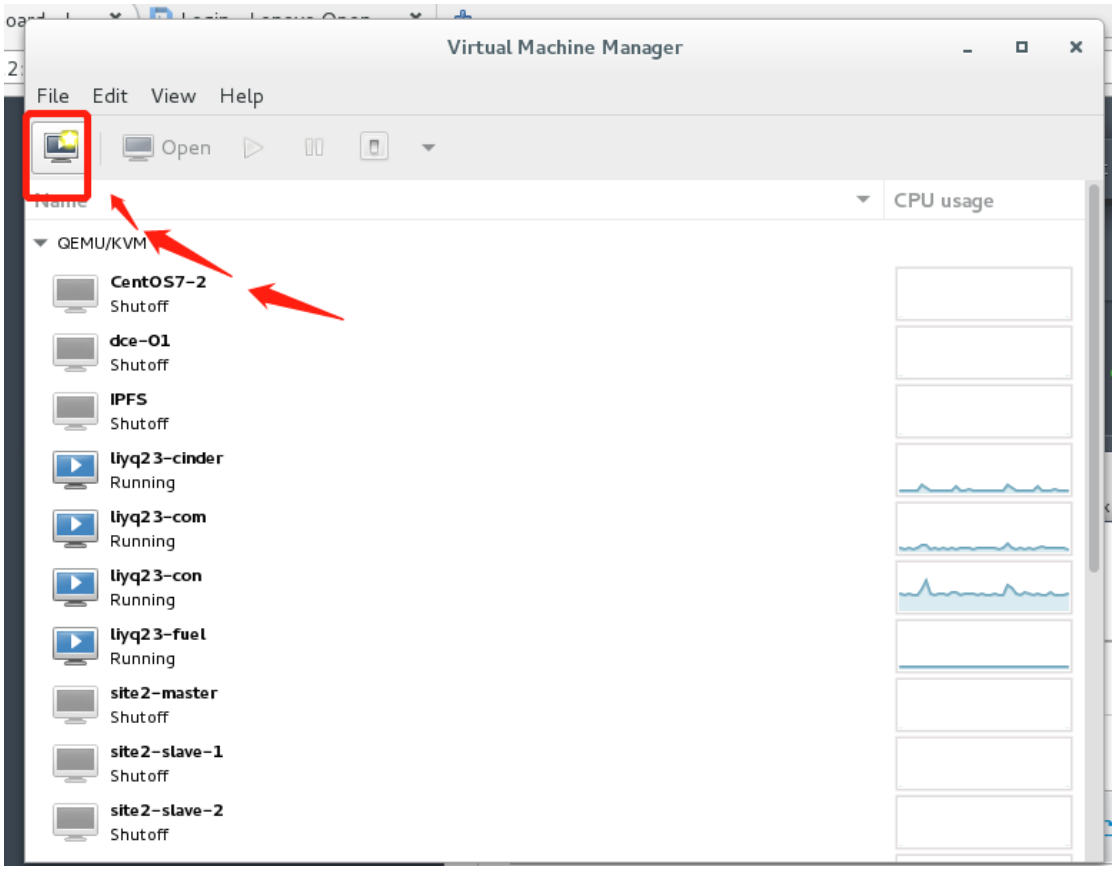


至此虚拟机已经创建，在启动 iso，需要更改 IP 信息，例如我的将自己的 fuel-master 的 IP 设置为 10.43.68.2，安装成功后在浏览器访问如下图所示。

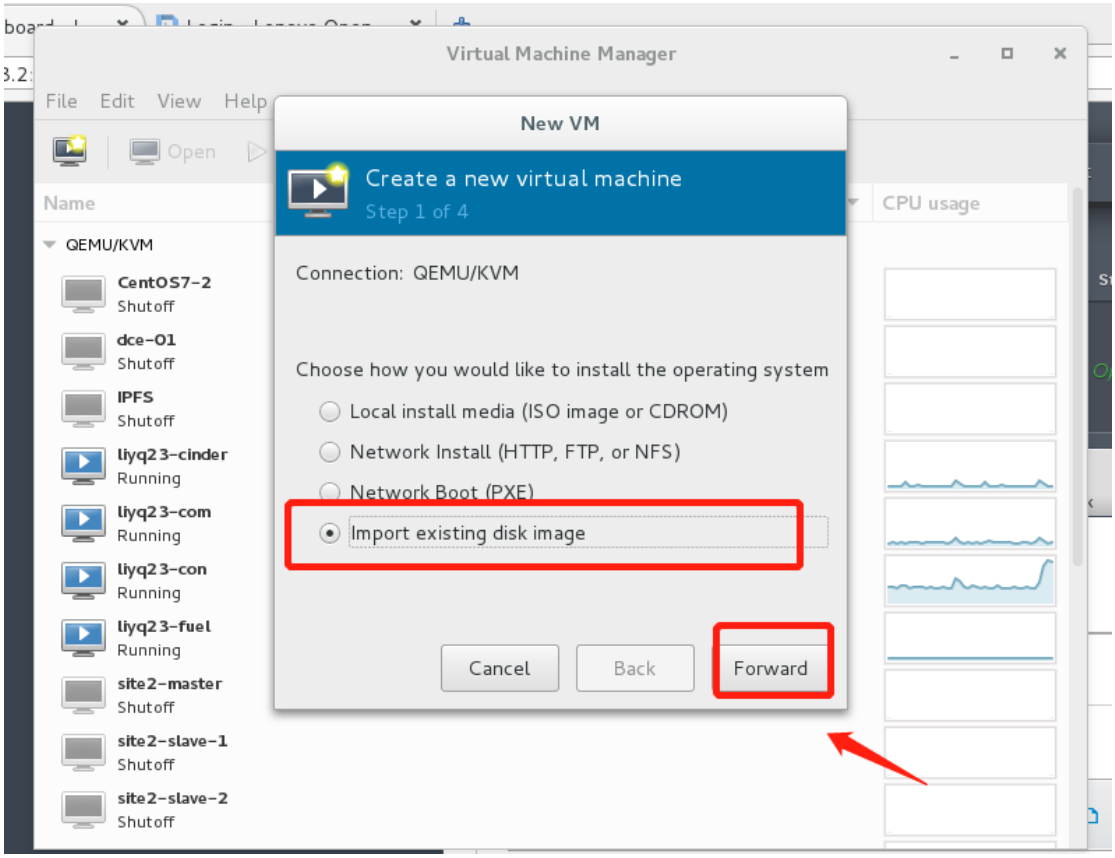


0x03 创建节点

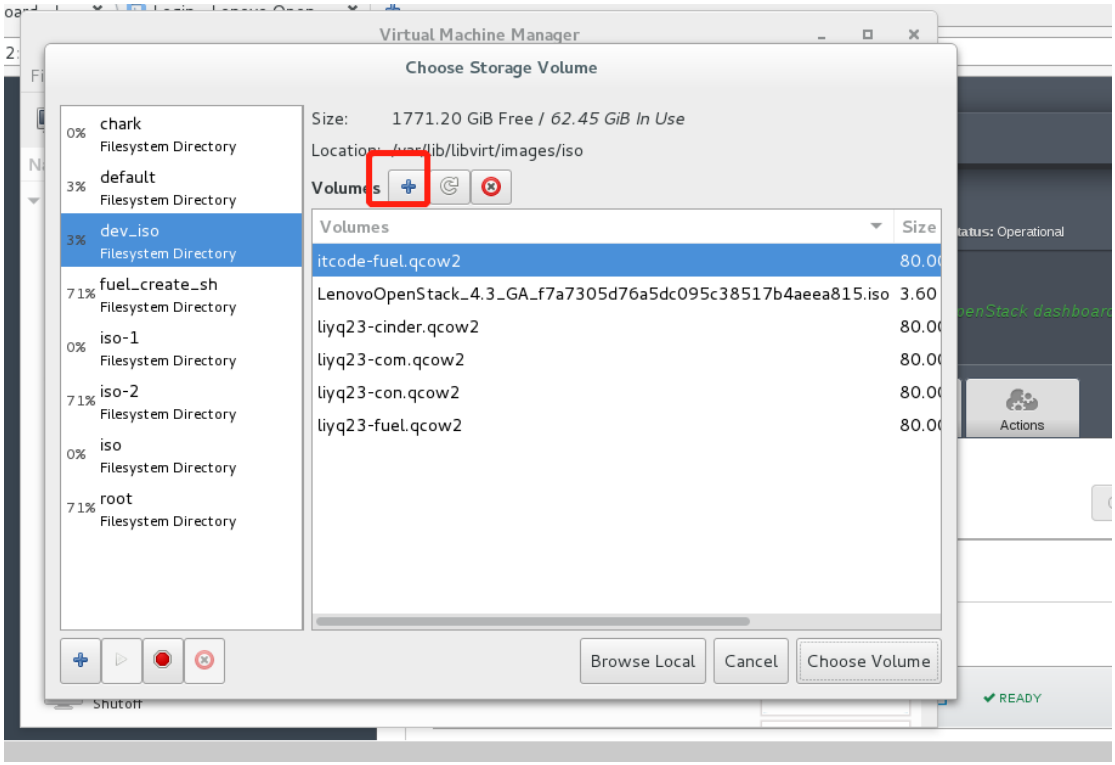
点击创建


Virtual Machine Manager
File Edit View Help
Open
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff

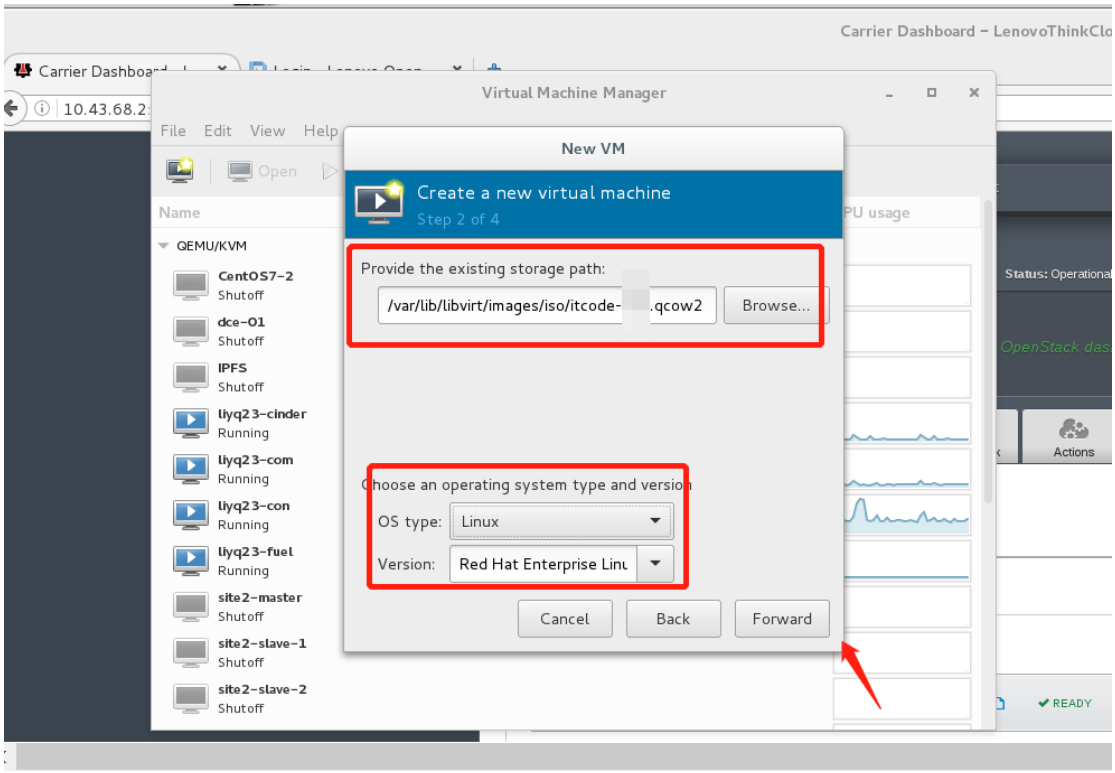
选择 import


Virtual Machine Manager
File Edit View Help
Open
Name
CPU usage
QEMU/KVM
CentOS7-2
Shutoff
dce-01
Shutoff
IPFS
Shutoff
liyq23-cinder
Running
liyq23-com
Running
liyq23-con
Running
liyq23-fuel
Running
site2-master
Shutoff
site2-slave-1
Shutoff
site2-slave-2
Shutoff
New VM
Create a new virtual machine
Step 1 of 4
Connection: QEMU/KVM
Choose how you would like to install the operating system
Local install media (ISO image or CDROM)
Network Install (HTTP, FTP, or NFS)
Network Boot (PXE)
Import existing disk image
Cancel
Back
Forward

点击＋，创建一块新的硬盘

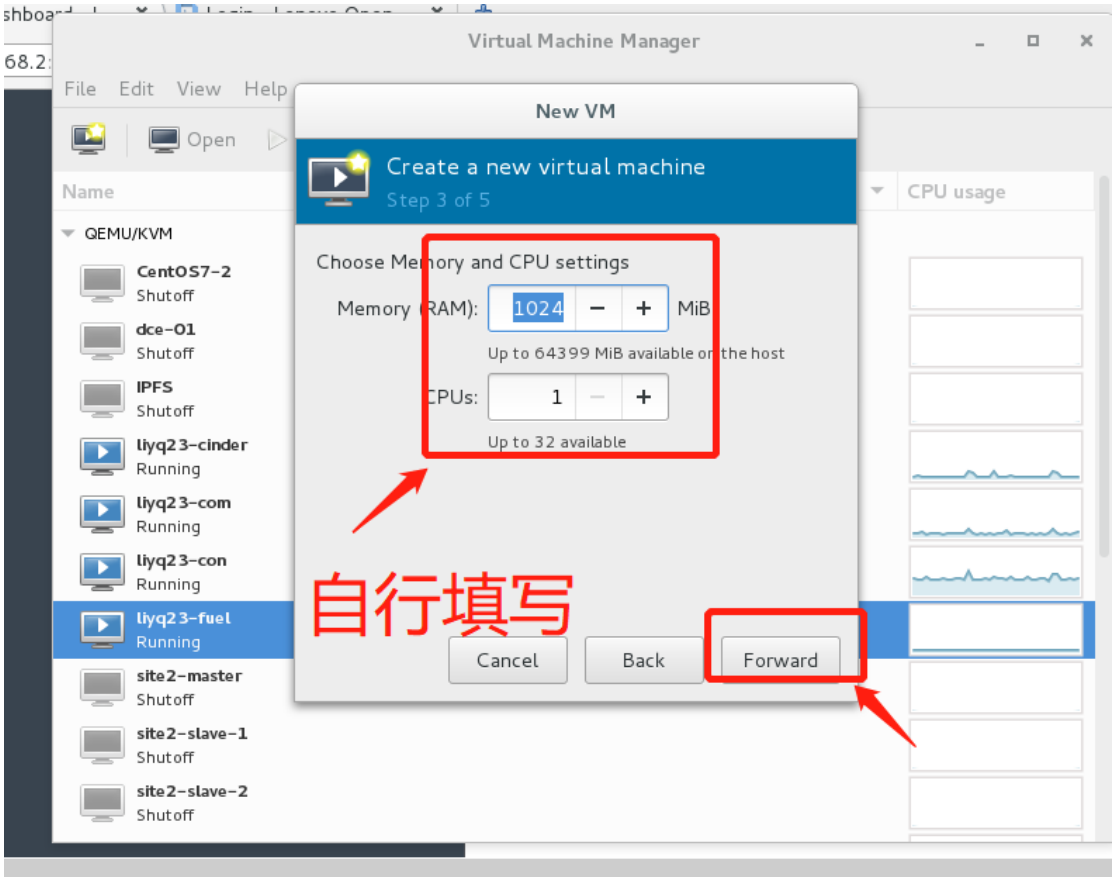


选中这块刚刚创建的硬盘，点击 choose volume

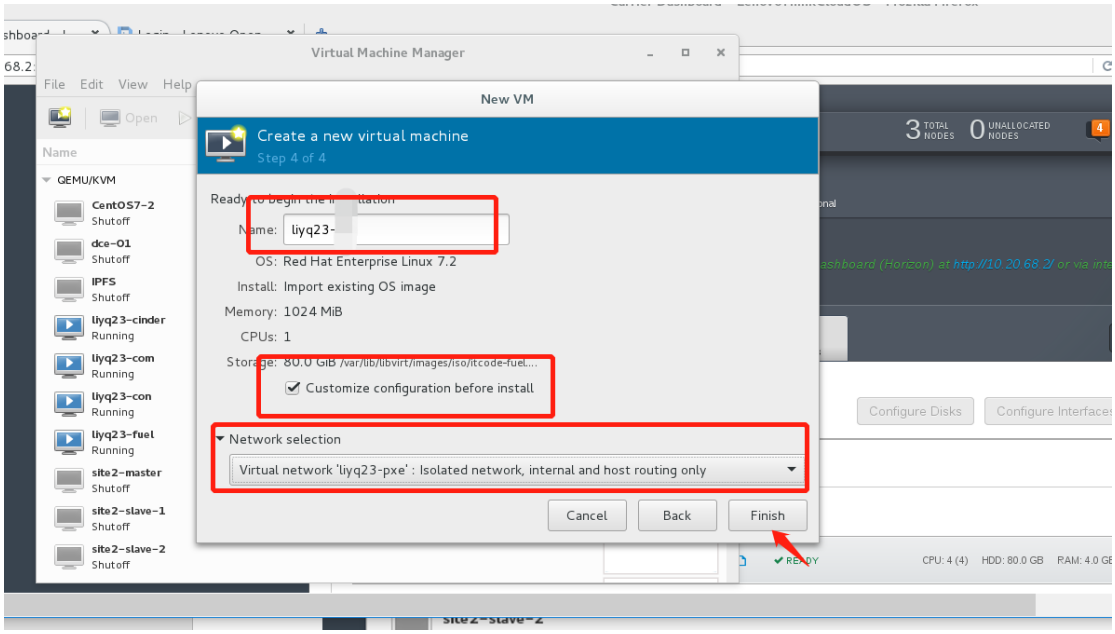


点击 forward

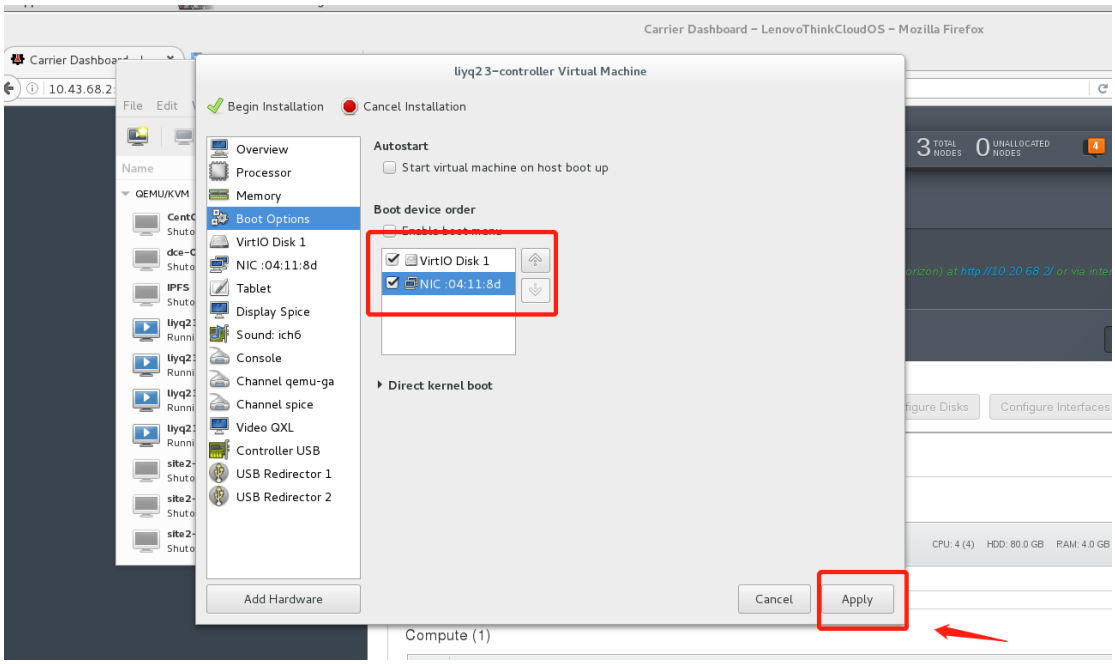
此处信息，自行填写 cpu 和 ram 信息。

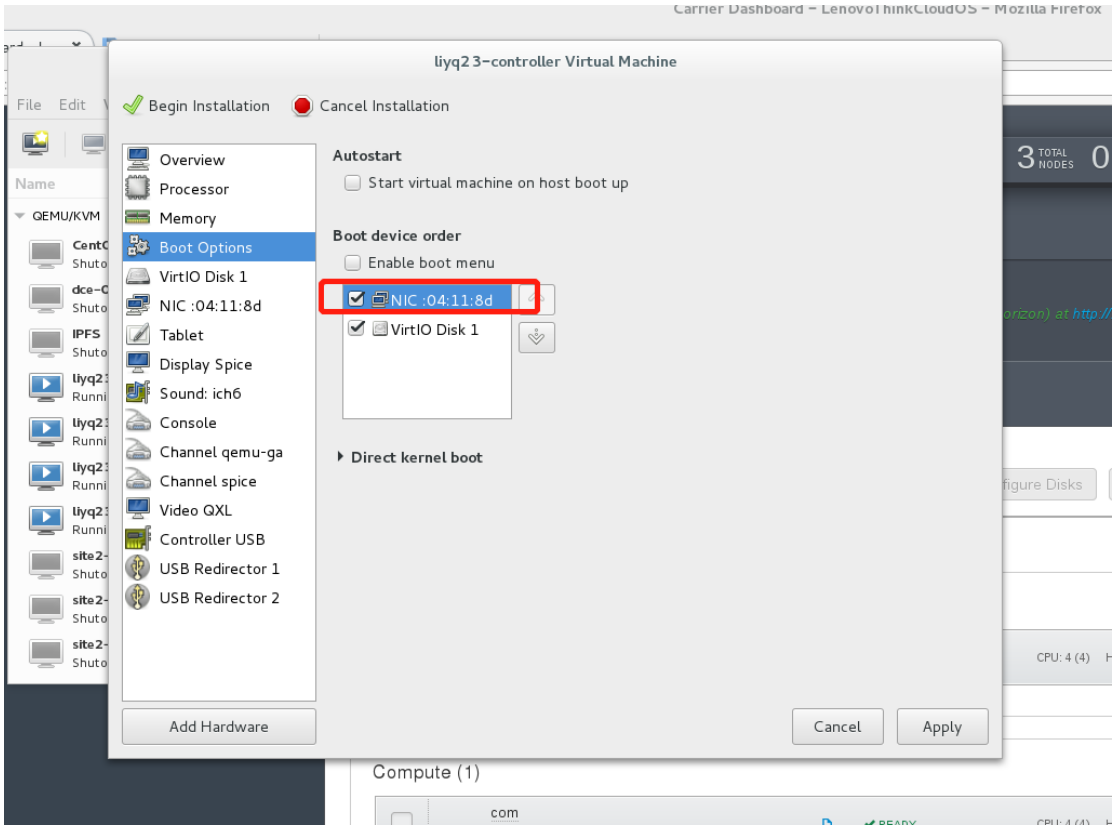


输入虚拟主机名，勾选 customize，选择网卡的网络为 pxe 网络

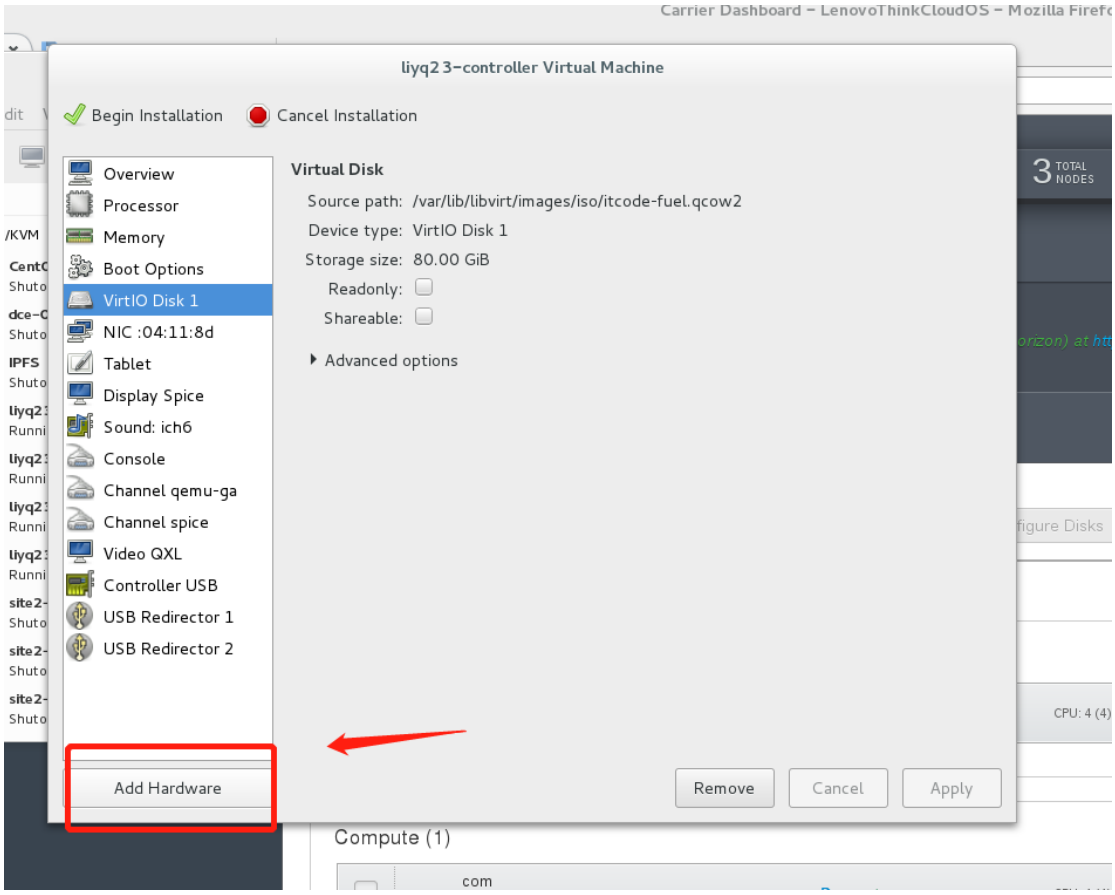


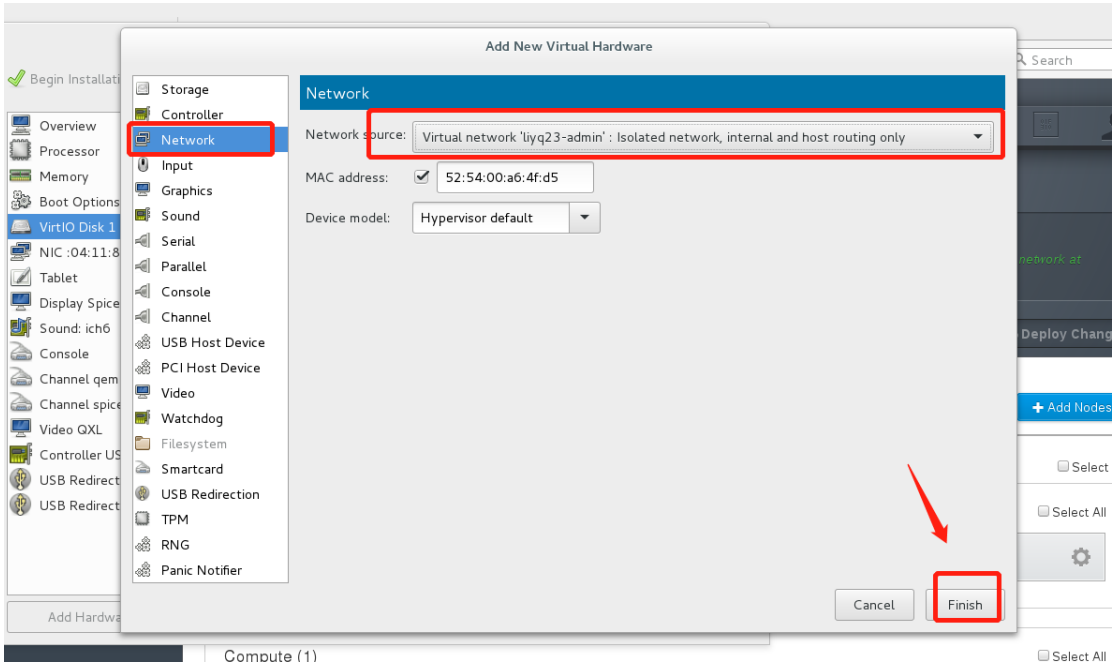
勾选 boot 启动顺序，并且将 pxe 网络启动放到第一顺位。

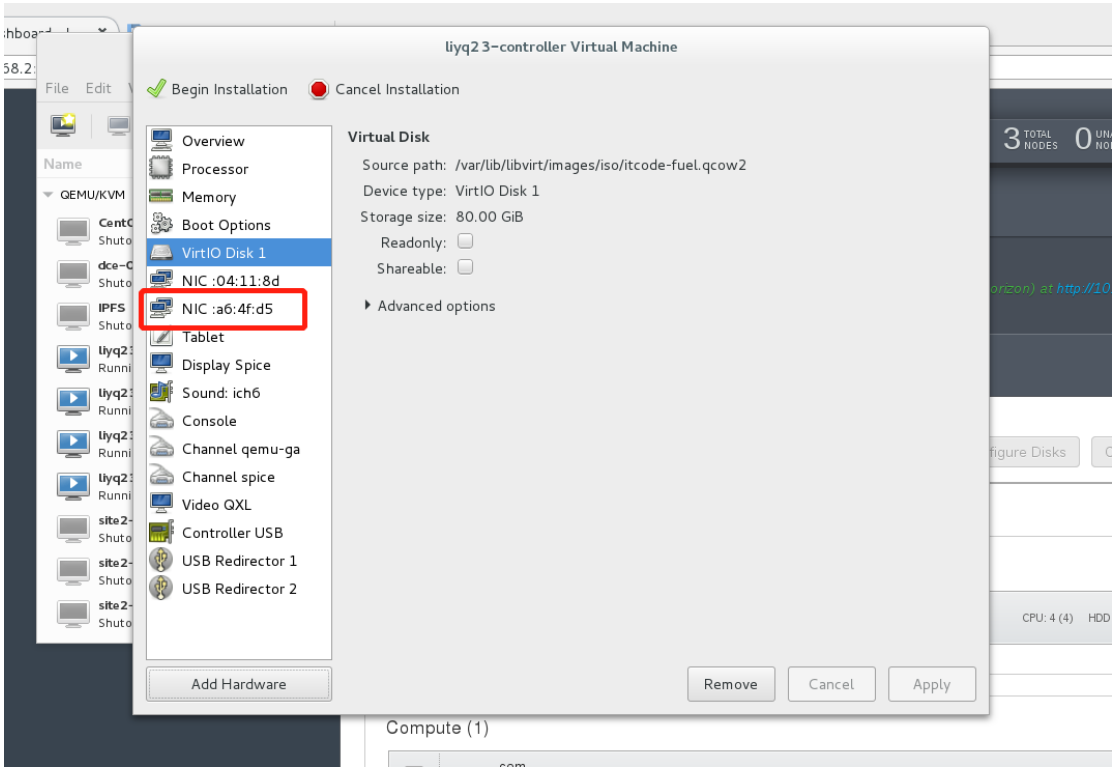




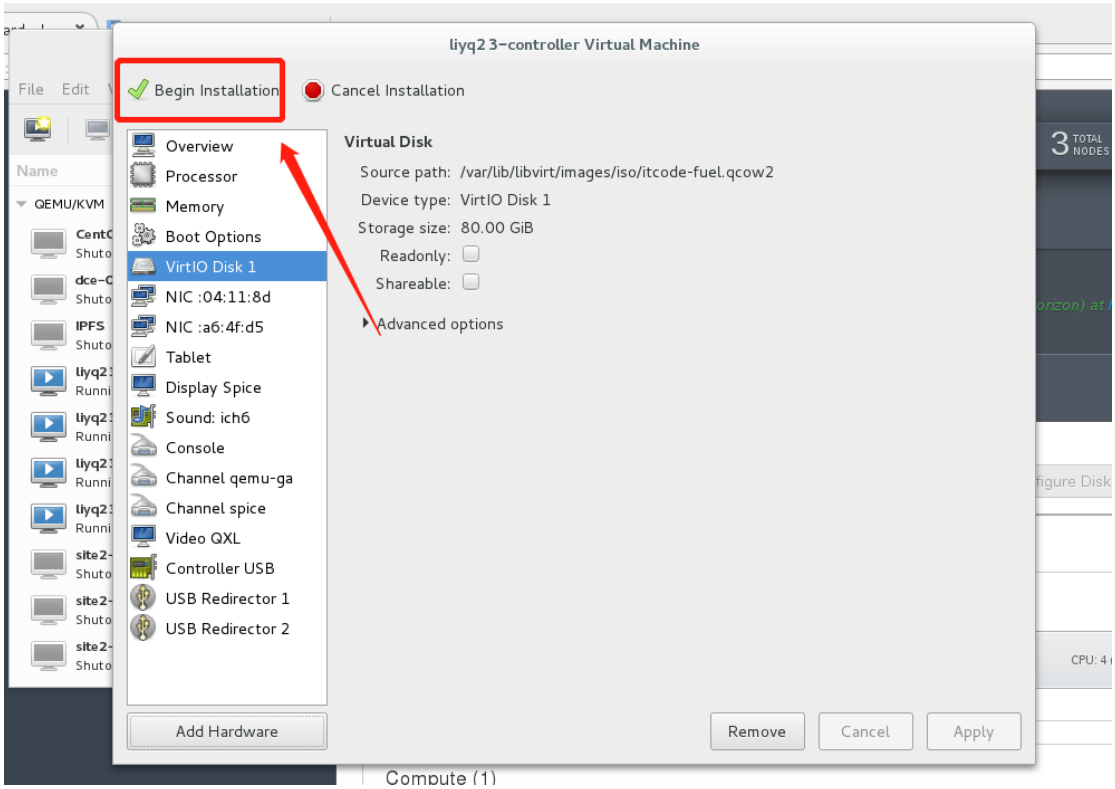
添加另外四块网卡，也就是 public、mgmt、private、storage 网络



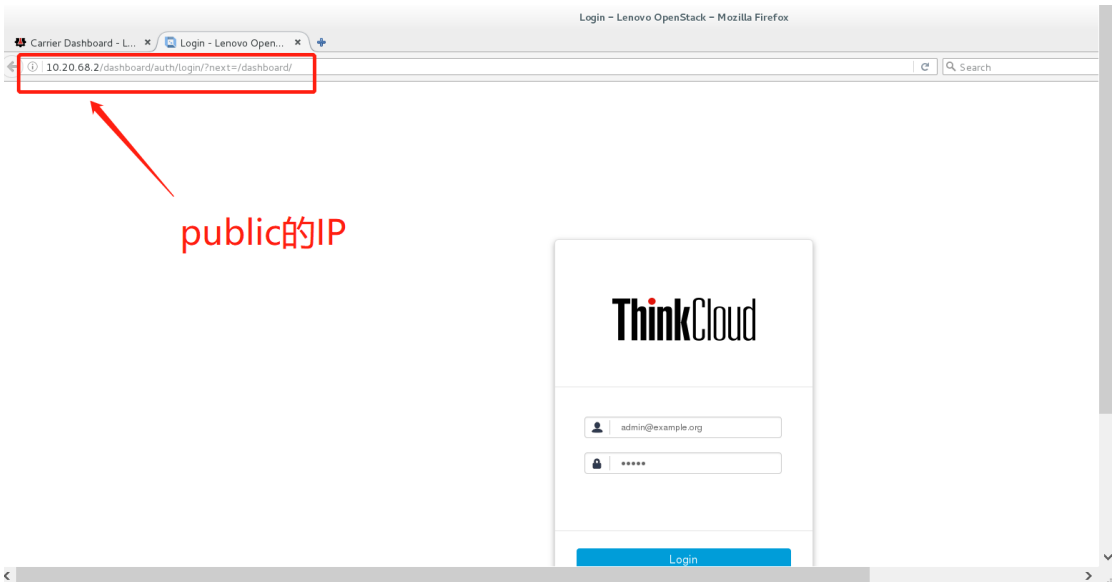




网卡添加成功后，点击 begin installation



在 fuel 当中添加节点，开始部署，部署成功后，会得到 dashboard 的访问地址如下图所示。



0x04

演示结束，感谢观看