

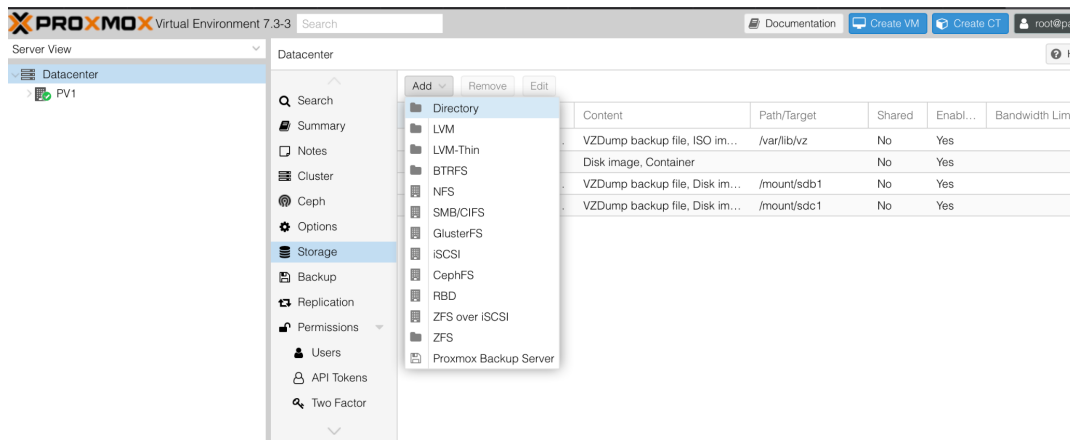
# INSTALLATION OF ZONE CONTROLLERS AND MMRS IN PROXMOX VIRTUALIZATION ENVIRONMENT

## Steps

- 1.Install the Proxmox server on a Virtual box
  - 2.Partition the storage
  - 2.Make the partition as directory storage
- Move the files from the host pc to your Proxmox server
- Change the file format from vmdk to raw
- 3.Create 2 Virtual machines one for MMR and another for ZCs
  - 4.set up the storage
  - 5.Start the VM and Console
  - 6.Setup the network

## Make the partition as directory storage

- 1.Datacenter >>Storage>>Add>>Directory



- 2.Create a new directory storage

Add: Directory
✕

General

Backup Retention

ID:

Nodes:

Directory:

Enable:

Content:

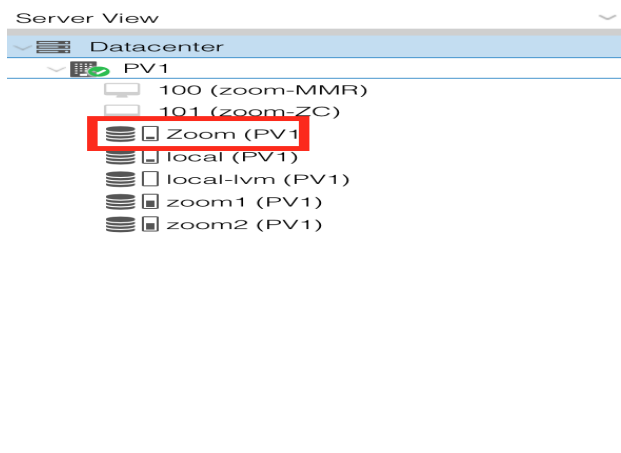
Shared:

? Help

Advanced

Add

You can see the new directory storage like this



3. Move the files from host PC to Proxmox nodes

Use SCP or WinSCP/Filezilla to upload the MMR and ZC vmdk files to proxmox nodes

```
SCP: scp /Users/mercy/Downloads/ZC.vmdk root@192.248.4.96:/mount/sdb1
      scp /Users/mercy/Downloads/MMR.vmdk root@192.248.4.96:/mount/sdb1
```

4. Proxmox doesn't support OVF or VMDK format

- Convert into .raw or .qcow2 format
- **Cd /mount/sdb1** where the vmdk files are stored

- `qemu-img convert -f vmdk mmr.vmdk -O raw MMR.raw`
- Or
- `qemu-img convert -f vmdk mmr.vmdk -O qcow2 MMR.qcow2`

## 5. Create MMR and ZC virtual machines

The screenshot shows the 'Create: Virtual Machine' dialog box with the 'General' tab selected. The fields are as follows:

- Node: PV1
- VM ID: 100
- Name: Zoom-MMR
- Resource Pool: (empty)

At the bottom, there is a 'Help' button, an 'Advanced' checkbox (unchecked), and 'Back' and 'Next' buttons.

We do not need any media we will use the MMR and ZC and both support in linux

The screenshot shows the 'Create: Virtual Machine' dialog box with the 'OS' tab selected. The options are as follows:

- Use CD/DVD disc image file (iso)
  - Storage: local
  - ISO image: (empty)
- Use physical CD/DVD Drive
- Do not use any media
- Guest OS:
  - Type: Linux
  - Version: 5.x - 2.6 Kernel

At the bottom, there is an 'Advanced' checkbox (unchecked) and 'Back' and 'Next' buttons.

Create: Virtual Machine

General OS **System** Disks CPU Memory Network Confirm

Graphic card: Default SCSI Controller: VirtIO SCSI single

Machine: Default (i440fx) Qemu Agent:

Firmware

BIOS: Default (SeaBIOS) Add TPM:

Help Advanced  Back Next

This disk will not be used and removed later. the ZC.raw and MMR.raw disk will be used

Create: Virtual Machine

General OS System **Disks** CPU Memory Network Confirm

scsi0

Disk Bandwidth

Bus/Device: SCSI 0 Cache: Default (No cache)

SCSI Controller: VirtIO SCSI single Discard:

Storage: local-vm IO thread:

Disk size (GiB): 32

Format: Raw disk image (raw)

+ Add

Help Advanced  Back Next

Minimum number of CPU cores is 4

Create: Virtual Machine ✕

General OS System Disks **CPU** Memory Network Confirm

Sockets:  Type:

Cores:  Total cores: 4

? Help Advanced  Back Next

Minimum RAM size is 8GB

Create: Virtual Machine ✕

General OS System Disks CPU **Memory** Network Confirm

Memory (MiB):

? Help Advanced  Back Next

## Create: Virtual Machine



General OS System Disks CPU Memory **Network** Confirm

No network device

Bridge:

Model:

VLAN Tag:

MAC address:

Firewall:

Help

Advanced

Back

Next

Create: Virtual Machine ✕

General OS System Disks CPU Memory Network **Confirm**

Key ↑	Value
cores	4
ide2	none,media=cdrom
memory	8192
name	Zoom-MMR
net0	virtio,bridge=vibr0,firewall=1
nodename	PV1
numa	0
ostype	l26
scsi0	local-lvm:32,iothread=on
scsihw	virtio-scsi-single
sockets	1
vmid	100

Start after created

Advanced  **Back** **Finish**

### Remove the unused disk and CD/DVD

- Attaching MMR and ZC disks on MMR and ZC machines

Summary Console Hardware Cloud-Init Options Task History Monitor Backup Replication Snapshots

Add Remove Edit Resize disk Move disk Revert

Memory	8.00 GiB
Processors	4 (1 sockets, 4 cores)
BIOS	Default (SeaBIOS)
Display	Default
Machine	Default (i440fx)
SCSI Controller	VirtIO SCSI
CD/DVD Drive (ide2)	none,media=cdrom
Hard Disk (scsi0)	NL-UGC3PAR-1:vm-133-disk-0,size=32G
Network Device (net0)	virtio=B2:13:87:16:A7:81,bridge=vibr0,firewall=1

## 6) Obtain VMID

- And the storage that will be assigned on the machines
- **qm importdisk <vmid> ZC.raw <Directory storage>**
- **qm importdisk <vmid> MMR.raw <Directory storage>**

## 7) Select Bus/Device as IDE

### Add: Unused Disk

**Disk** | Bandwidth

Bus/Device:  0  Cache:

Disk image:  Discard:

IO thread:

Advanced

## 8) Rearrange the boot order

### Edit: Boot Order

#	Enabled	Device	Description
1	<input checked="" type="checkbox"/>	net0	virtio=36:38:70:2E:AE:A6,bridge=vmbr0,firewall=1
2	<input checked="" type="checkbox"/>	ide0	zoom2:101/vm-101-disk-0.raw,size=100G

Drag and drop to reorder



9) Start the VM and access the console

Once you logged in [change the password of the admin](#)

Network Configuration of MMR and ZC

**vi /etc/sysconf ig/network-scripts/<ifcfg-xx>**

```
TYPE=Ethernet
PROXY_METHOD=none
BROWSER_ONLY=no
BOOTPROTO=none
IPADDR=192.168.1.116
NETMASK=255.255.255.0
GATEWAY=192.168.1.1
DNS1=8.8.8.8
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=yes
IPV6_AUTOCONF=yes
IPV6_DEFROUTE=yes
IPV6_FAILURE_FATAL=no
IPV6_ADDR_GEN_MODE=stable-privacy
NAME=eth0
DEVICE=eth0
UUID=a562c685-46d9-4373-9223-79c30306e7ad
ONBOOT=yes
```

Add

the static ip address

Gateway

Netmask

10)Restart the network service

**service network restart**

11)Ping the ip to see if reachable

12)Open Browser

Browse to <https://<ip-address>:5480>