

Cloud Init setup guide

Create disk

```
qm create 5000 --memory 8096 --core 8 --name ubuntu-cloud --net0 virtio,bridge=vbr0
```

cd into directory below

```
cd /var/lib/vz/template/iso/
```

import disk using previously downloaded cloud image

```
qm importdisk 5000 "insert name of cloud image here" (example)lunar-server-cloudimg-amd64-disk-kvm.img Ceph-Fast
```

create disk settings from imported vm below

```
qm set 5000 --scsihw virtio-scsi-pci --scsi0 <Ceph-Fast>:5000/vm-5000-disk-0.raw
```

setup cloud init drive

```
qm set 5000 --scsi <Ceph-Fast>:cloudinit
```

make disk bootable

```
qm set 5000 --boot c --bootdisk scsi0
```

NOTE run this command to make vm bootable by proxmox console

```
qm set 5000 --serial0 socket --vga serial0
```

Once the above steps have been completed do the following

NOTE

DO NOT START VM once it is created

Right click on the vm id 5000 you have created and hit convert to template

Cloud init settings for each vm

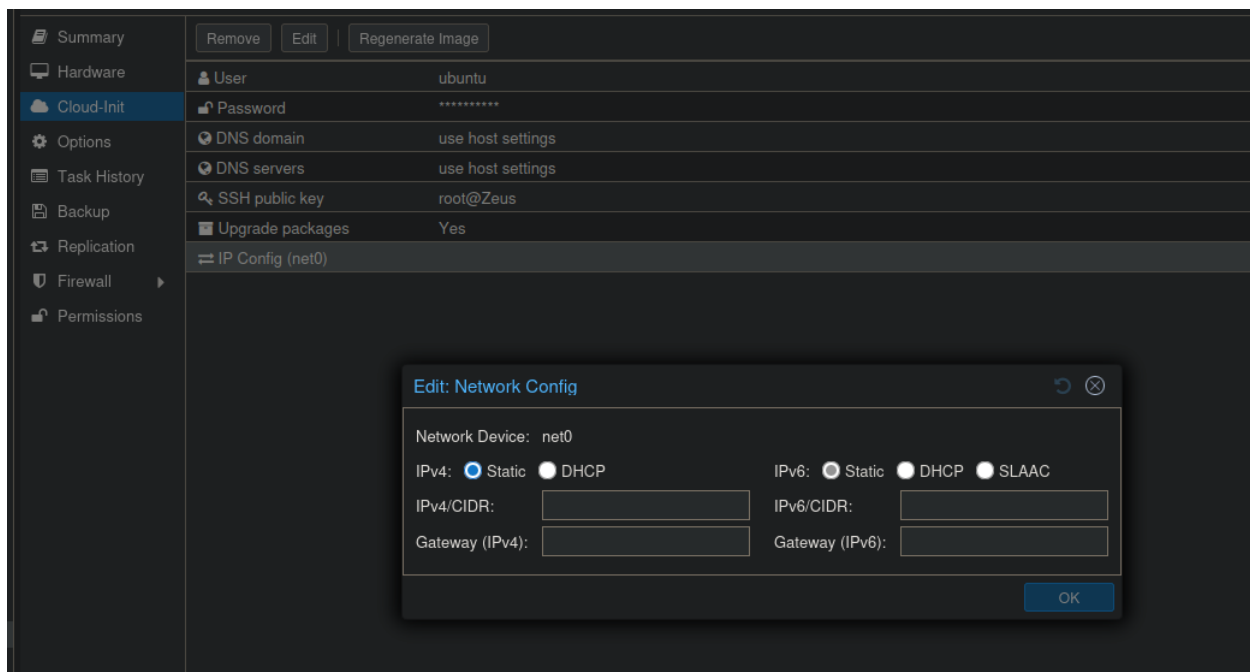
username: use ubuntu/root ONLY

Password: enter pw here

Network settings make sure each vm has a static ip address assignment

Ssh key : enter key from proxmox host

Summary	Remove	Edit	Regenerate Image
Hardware	User	ubuntu	
Cloud-Init	Password	*****	
Options	DNS domain	use host settings	
Task History	DNS servers	use host settings	
Backup	SSH public key	root@Zeus	
Replication	Upgrade packages	Yes	
Firewall	IP Config (net0)		
Permissions			



Under vm options

Enable qemu-guest agent

Enable start at bootup

Virtual Machine 0000 (ubuntu-init) on node Zeus	
Summary	Edit Revert
Hardware	Name ubuntu-init
Cloud-Init	Start at boot Yes
Options	Start/Shutdown order order=any
Task History	OS Type Other
Backup	Boot Order scsi0
Replication	Use tablet for pointer Yes
Firewall	Hotplug Disk, Network, USB
Permissions	ACPI support Yes
	KVM hardware virtualization Yes
	Freeze CPU at startup No
	Use local time for RTC Default (Enabled for Windows)
	RTC start date now
	SMBIOS settings (type1) uuid=8427df2e-f9be-4505-9866-637f6f594899
	QEMU Guest Agent Enabled
	Protection Yes
	Spice Enhancements none
	VM State storage Automatic
	AMD SEV Default (Disabled)

NOTE if this is a worker node change following settings

ram settings from 8gigs to 128gigs

hdd from 80gigs to 200gigs

Master node vm hardware settings

Virtual Machine 129 (master2) on node Atlas No tags

Summary

> Console

Hardware

Cloud-Init

Options

Task History

Monitor

Backup

Replication

Snapshots

Firewall

Permissions

Add Remove Edit Disk Action Revert

Memory	15.63 GiB
Processors	8 (1 sockets, 8 cores) [x86-64-v2-AES]
BIOS	Default (SeaBIOS)
Display	Default
Machine	Default (i440fx)
SCSI Controller	VirtIO SCSI
Hard Disk (sata0)	Ceph-Fast:vm-129-disk-0,discard=on,size=80G,ssd=1
Network Device (net0)	virtio=BC:24:11:DF:AF:3C,bridge=vibr0,firewall=1

Worker node vm settings

Virtual Machine 131 (worker2) on node Atlas No tags

Summary

> Console

Hardware

Cloud-Init

Options

Task History

Monitor

Backup

Replication

Snapshots

Firewall

Permissions

Add Remove Edit Disk Action Revert

Memory	125.00 GiB
Processors	8 (1 sockets, 8 cores) [x86-64-v2-AES]
BIOS	Default (SeaBIOS)
Display	Default
Machine	Default (i440fx)
SCSI Controller	VirtIO SCSI
Hard Disk (sata0)	Ceph-Fast:vm-131-disk-0,discard=on,size=200G,ssd=1
Network Device (net0)	virtio=BC:24:11:B7:9D:CF,bridge=vibr0,firewall=1

VM Layout per Proxmox Node In Cluster

NOTE Beast node is not used (dell optiplex 7080 mini)

NODE 1 (Atlas)

4x 1tb osd array

Proxmox Storage Name Ceph-Fast

vms

Master 1 control plane 8 core /16gig ram/80gb hdd static ip (192.168.2.x)

Worker1 worker node 8 core 128gigs ram 200gb hdd static ip (192.168.2.x)

Node 2 (Goliath)

4x 1tb osd array

Proxmox Storage Name Ceph-Fast

vms

Master 2 control plane 8 core /16gig ram/80gb hdd static ip (192.168.2.x)

Worker2 worker node 8 core 128gigs ram 200gb hdd static ip (192.168.2.x)

Node 3 (Zeus)

4x 1tb osd array

Proxmox Storage Name Ceph-Fast

Vms

Master3 control plane 3 8 core /16gig ram/80gb hdd static ip (192.168.2.x)

Worker3 worker node 8 core 128gigs ram 200gb hdd static ip (192.168.2.x)

Node 4 (Titan)

4x 1tb osd array

Proxmox Storage Name Ceph-Fast

Vms

Master4 control plane4 8 core /16gig ram/80gb hdd static ip (192.168.2.x)

Worker4 worker node 8 core 128gigs ram 200gb hdd static ip (192.168.2.x)