

How to work with virt-install and virsh

Table of Contents

Most common used commands.....	1
Start VM.....	1
Reboot VM.....	1
Shutdown VM.....	1
List all VM's.....	1
List VM information.....	1
List all OS.....	2
List networks interfaces?.....	2
Create new VM.....	2
Create disk .qcow2.....	2
Create disk .iso.....	2
Edit configuration file.....	3
Display VM CPU and Memory Usage.....	3

Most common used commands

Start VM

`sudo virsh start server01`

Reboot VM

`sudo virsh reboot server01`

Shutdown VM

`sudo virsh shutdown server01`

List all VM's

`virsh list --all`

List VM information

`virsh dominfo DOCKER-01`

List all OS

osinfo-query os

List networks interfaces?

virsh net-list --all

Create new VM

sudo virt-install -n DOCKER-01

--description "Test VM for docker" \

--os-type=Linux \

--os-variant=debian10 \

--ram=2048 \

--vcpus=2 \

--disk path=/mnt/6ccc7df8-33f3-4bd4-b233-56ecfb26bde1/Virtual\ machines/images/DOCKER-01.img,bus=virtio,size=20 \

--graphics vnc \

--cdrom=/home/mechkarov/Downloads/debian-10.9.0-amd64-netinst.iso

Create disk .qcow2

Implementation

qemu-img create -f qcow2 /var/lib/libvirt/images/sample1.qcow2 5G

For Cluster size image of 2M

qemu-img create -f qcow2 -o cluster_size=2M /var/lib/libvirt/images/sample1.qcow2 5G

For Preallocated size

qemu-img create -f qcow2 -o preallocation=full /var/lib/libvirt/images/sample1.qcow2 5G

Lastly, to verify

qemu-img info /var/lib/libvirt/images/sample1.qcow2

Create disk .iso

Implementation

```
qemu-img create -f raw /var/lib/libvirt/images/sample1.img 5G
```

For Preallocating size

```
qemu-img create -f raw -o preallocation=full /var/lib/libvirt/images/sample1.img 5G
```

Lastly, to verify

```
qemu-img info /var/lib/libvirt/images/sample1.img
```

Edit configuration file

- **List all configuration files (default location)**

```
ls -l /etc/libvirt/qemu/
```

- **Edit the file with virsh**

```
virsh edit configurationfile.xml
```

Display VM CPU and Memory Usage

```
virt-top
```