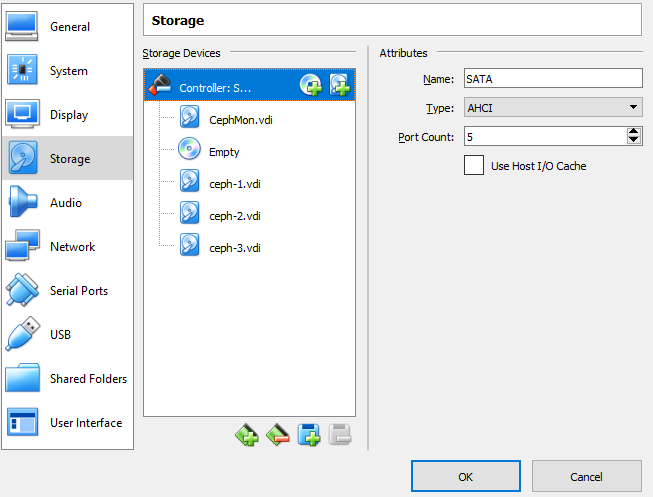
**Deploying Ceph cluster using ansible on VM(All in one) machine**

1. CentOS image
   1. Memory: 8GB
   2. HardDisk: 20Gb
   3. 3 virtual disk:
      1. Ceph-1: 8gb
      2. Ceph-2: 8gb
      3. Ceph-3: 8gb



1. Make a local user(Ex: poswal) and give sudo access.
2. Create a new id\_rsa key and copy to local host

ssh-keygen

ssh-copy-id poswal@localhost

1. Make this entry in /etc/ansible/hosts and verify:

[mons]

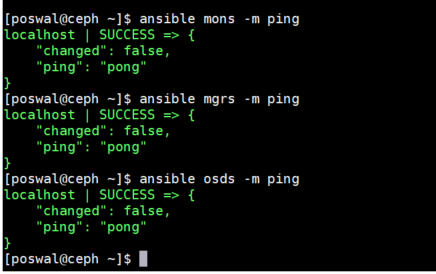
localhost

[mgrs]

localhost

[osds]

localhost



1. Create a local repo:

[poswal@Ceph yum.repos.d]$ cat myrepo.repo

[myrepo]

name=myrepo

baseurl=http://mirror.centos.org/centos/7/storage/x86\_64/ceph-luminous/

enabled=1

gpgcheck=0

1. Packages to be installed:

ansible-2.6.11-1.el7.ans.noarch.rpm

ceph-ansible-3.2.30.1-1.el7cp.noarch.rpm

ceph-common

ceph-mon

ceph-mgr

ceph-osd

1. Copy the template playbook located at

**/usr/share/ceph-ansible/site.yml.sample** to **/usr/share/ceph-ansible/site.yml**

1. Copy

**/usr/share/ceph-ansible/group\_vars/all.yml.sample to /usr/share/ceph-ansible/group\_vars/all.yml**

Edit the all.yml and edit these parameters:

ceph\_rhcs\_cdn\_install: True

fetch\_directory: ~/ceph-ansible-keys

ntp\_service\_enabled: false

ceph\_repository\_type: iso

ceph\_origin: repository

ceph\_repository: rhcs

ceph\_rhcs\_version: "3"

ceph\_rhcs\_iso\_path: "/var/tmp/rpm/CentOS-7-x86\_64-DVD-1908.iso"

rbd\_cache: "true"

rbd\_cache\_writethrough\_until\_flush: "false"

monitor\_interface: enp0s3

public\_network: 10.0.2.15/24

cluster\_network: "{{ public\_network }}"

common\_single\_host\_mode: true

ceph\_conf\_overrides:

global:

mon\_osd\_allow\_primary\_affinity: 1

mon\_clock\_drift\_allowed: 0.5

osd\_pool\_default\_size: 2

osd\_pool\_default\_min\_size: 1

mon\_pg\_warn\_min\_per\_osd: 0

mon\_pg\_warn\_max\_per\_osd: 0

mon\_pg\_warn\_max\_object\_skew: 0

client:

rbd\_default\_features: 1

ceph\_docker\_image: "rhceph/rhceph-3-rhel7"

ceph\_docker\_image\_tag: "latest"

ceph\_docker\_registry: "registry.access.redhat.com"

1. copy

/usr/share/ceph-ansible/group\_vars/osds.yml.sample

to

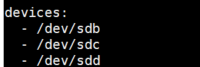
/usr/share/ceph-ansible/group\_vars/osds.yml

Edit osds.yml:

**devices:**

**- /dev/vdb**

osd\_scenario: **"collocated"**





1. Pre-requisite steps before execute ansible playbook:
   * 1. Copy “CentOS-” iso to /var/tmp/rmp/
     2. cd /var/tmp/rpm
     3. sudo mount -o loop ceph-3.3-rhel-7-x86\_64-debug.iso /mnt
     4. cd /mnt
     5. sudo cp RPM-GPG-KEY-CentOS-7 /tmp/rh-storage-repo/RPM-GPG-KEY-redhat-release
     6. yum install ceph-mon
     7. yum install ceph-mgr
     8. yum install ceph-osd
     9. sudo yum install python-pycurl
     10. sudo yum install epel-release
     11. sudo yum install python-setuptools
     12. sudo yum install libselinux-python
2. Go to /usr/share/ceph-ansible

**ansible-playbook site.yml**

