

# compress qcow2 images

## Prepare VM disk before snapshot and compress

### disk

```
# 70GB disk space zeroed by
dd if=/dev/zero of=/zerofile bs=1M count=70k
rm /zerofile
```

### swap

```
# zero to 1GB swapfile (or partition)
swopoff -a
dd if=/dev/zero of=/swapfile1 bs=1M count=1k
mkswap /swapfile1
swapon -a
```

## Compress qcow2 image

```
qemu-img convert -O qcow2 -c /opt/stack/data/glance/images/8be7ab01-5140-4d51-bf5d-b0bcb65e8d61 /storage
/openstack/jira-2017-10-08-zip.qcow
```

### Compress results

```
-rw-r----- 1 1024 users 7.5G Oct 8 13:23 db-2017-10-08.qcow
-rw-r--r-- 1 1024 users 1.9G Oct 8 13:45 db-2017-10-08-zip.qcow
-rw-r----- 1 1024 users 6.4G Oct 8 13:26 home-2017-10-08.qcow
-rw-r--r-- 1 1024 users 2.9G Oct 8 14:05 home-2017-10-08-zip.qcow
-rw-r----- 1 1024 users 5.3G Oct 8 13:56 jira-2017-10-08.qcow
-rw-r--r-- 1 1024 users 3.6G Oct 8 14:00 jira-2017-10-08-zip.qcow
-rw-r----- 1 1024 users 3.8G Oct 8 13:24 noc-2017-10-08.qcow
-rw-r--r-- 1 1024 users 1.4G Oct 8 13:40 noc-2017-10-08-zip.qcow
-rw-r----- 1 1024 users 8.0G Oct 8 13:22 wiki-2017-10-08.qcow
-rw-r--r-- 1 1024 users 5.5G Oct 8 13:36 wiki-2017-10-08-zip.qcow
```

### Compress ratio for different images

Image	Disk	Size1	Size2	%	description
db	20G	7.5G	1.9G	25%	postgresql
wiki	80G	8.0G	5.5G	68%	atlassian confluence
jira	80G	5.3G	3.6G	67%	Atlassian jira
home	20G	6.4G	2.9G	45%	nginx
noc	20G	3.8G	1.4G	36%	zabbix

size1 - size after disk export from open stack

size2 - size after disk compress by qemu-img