

```
[root@clienta ~]# mkfs.xfs /dev/rbd0
...output omitted...
```

2.3. Confirm that the `/dev/rbd0` device is writable.

```
[root@clienta ~]# blockdev --getro /dev/rbd0
0
```

- ▶ 3. Create an initial snapshot called `firstsnap`. Calculate the provisioned and actual disk usage of the `rbd/image1` image and its associated snapshots by using the `rbd disk-usage` command.

3.1. Run the `cephadm` shell. Create an initial snapshot called `firstsnap`.

```
[root@clienta ~]# cephadm shell
...output omitted...
[ceph: root@clienta /]# rbd snap create rbd/image1@firstsnap
Creating snap: 100% complete...done.
```

3.2. Calculate the provisioned and used size of the `rbd/image1` image and its associated snapshots.

```
[ceph: root@clienta /]# rbd disk-usage --pool rbd image1
```

NAME	PROVISIONED	USED
image1@firstsnap	128 MiB	36 MiB
image1	128 MiB	36 MiB
<TOTAL>	128 MiB	72 MiB

- ▶ 4. Open another terminal window. Log in to `clientb` as the `admin` user and switch to the `root` user. Set the `CEPH_ARGS` variable to the `'--id=rbd.clientb'` value.

```
[student@workstation ~]$ ssh admin@clientb
...output omitted...
[admin@clientb ~]$ sudo -i
[root@clientb ~]# export CEPH_ARGS='--id=rbd.clientb'
```

- ▶ 5. On the `clientb` node, map the `image1@firstsnap` snapshot and verify that the device is writable.

5.1. Map the `rbd/image1` image as a block device.

```
[root@clientb ~]# rbd map --pool rbd image1@firstsnap
/dev/rbd0
[root@clientb ~]# rbd showmapped
```

id	pool	namespace	image	snap	device
0	rbd		image1	firstsnap	/dev/rbd0

5.2. Confirm that `/dev/rbd0` is a read-only block device.