

```
[ceph: root@clienta /]# ceph config get mon osd_pool_default_pg_num
250
[ceph: root@clienta /]# ceph config dump | grep osd_pool_default_pg_num
mon                                advanced osd_pool_default_pg_num
                                250
```

2. Create a CRUSH rule called onhdd to target HDD-based OSDs for replicated pools.

- 2.1. Create a new rule called onhdd to target HDD-based OSDs for replicated pools.

```
[ceph: root@clienta /]# ceph osd crush rule create-replicated onhdd default \
host hdd
```

- 2.2. Verify that the new rule exists.

```
[ceph: root@clienta /]# ceph osd crush rule ls
replicated_rule
onhdd
```

3. Create a replicated pool called rbd1 that uses the onhdd CRUSH map rule. Set the application type to rbd and the number of replicas for the objects in this pool to five.

- 3.1. Create a new replicated pool called rbd1 that uses the onhdd CRUSH map rule.

```
[ceph: root@clienta /]# ceph osd pool create rbd1 onhdd
pool 'rbd1' created
```

- 3.2. Set rbd as the application type for the pool.

```
[ceph: root@clienta /]# ceph osd pool application enable rbd1 rbd
enabled application 'rbd' on pool 'rbd1'
```

- 3.3. Increase the number of replicas for the pool to five and verify the new value.

```
[ceph: root@clienta /]# ceph osd pool set rbd1 size 5
set pool 6 size to 5
[ceph: root@clienta /]# ceph osd pool ls detail
...output omitted...
pool 6 'rbd1' replicated size 5 min_size 3 crush_rule 1 object_hash rjenkins
pg_num 250 pgp_num 250 autoscale_mode on last_change 235 flags hashpspool
stripe_width 0 application rbd
```

4. Create the following CRUSH hierarchy. Do not associate any OSD with this new tree.