

```
[ceph: root@clienta /]# ceph osd crush add-bucket rack3 rack
added bucket rack3 type rack to crush map
[ceph: root@clienta /]# ceph osd crush add-bucket hoste host
added bucket hoste type host to crush map
```

3.2. Use the `ceph osd crush move` command to build the hierarchy.

```
[ceph: root@clienta /]# ceph osd crush move rack1 root=default-cl260
moved item id -14 name 'rack1' to location {root=default-cl260} in crush map
[ceph: root@clienta /]# ceph osd crush move hostc rack=rack1
moved item id -15 name 'hostc' to location {rack=rack1} in crush map
[ceph: root@clienta /]# ceph osd crush move rack2 root=default-cl260
moved item id -16 name 'rack2' to location {root=default-cl260} in crush map
[ceph: root@clienta /]# ceph osd crush move hostd rack=rack2
moved item id -17 name 'hostd' to location {rack=rack2} in crush map
[ceph: root@clienta /]# ceph osd crush move rack3 root=default-cl260
moved item id -18 name 'rack3' to location {root=default-cl260} in crush map
[ceph: root@clienta /]# ceph osd crush move hoste rack=rack3
moved item id -19 name 'hoste' to location {rack=rack3} in crush map
```

3.3. Display the CRUSH map tree to verify the new hierarchy.

```
[ceph: root@clienta /]# ceph osd crush tree
ID CLASS WEIGHT      TYPE NAME
ID  CLASS  WEIGHT    TYPE NAME
-13          0      root default-cl260
-14          0        rack rack1
-15          0          host hostc
-16          0        rack rack2
-17          0          host hostd
-18          0        rack rack3
-19          0          host hoste
-1          0.08817    root default
-3          0.02939    host serverc
 0      hdd  0.00980      osd.0
 2      hdd  0.00980      osd.2
 1      ssd  0.00980      osd.1
-5          0.02939    host serverd
 3      hdd  0.00980      osd.3
 7      hdd  0.00980      osd.7
 5      ssd  0.00980      osd.5
-7          0.02939    host servere
 4      hdd  0.00980      osd.4
 8      hdd  0.00980      osd.8
 6      ssd  0.00980      osd.6
```

3.4. Place the OSDs as leaves in the new tree.