

# Configuring Cluster Networking

## Objectives

After completing this section, you should be able to describe the purpose for each of the cluster networks, and view and modify the network configuration.

## Configuring the Public and Cluster Networks

The `public` network is the default network for all Ceph cluster communication. The `cephadm` tool assumes that the network of the first MON daemon IP address is the `public` network. New MON daemons are deployed in the `public` network unless you explicitly define a different network.

Ceph clients make requests directly to OSDs over the cluster's `public` network. OSD replication and recovery traffic uses the `public` network unless you configure a separate `cluster` network for this purpose.

Configuring a separate `cluster` network might improve cluster performance by decreasing the `public` network traffic load and separating client traffic from back-end OSD operations traffic.

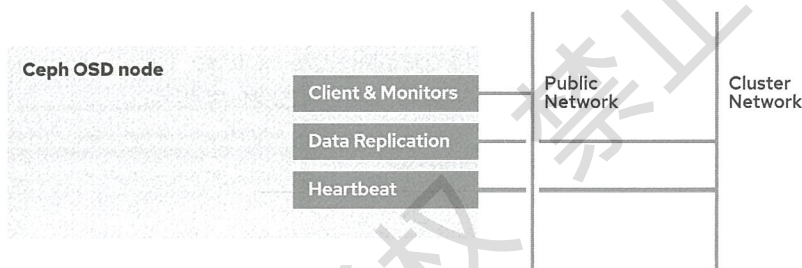


Figure 3.6: OSD network communication

Configure the nodes for a separate `cluster` network by performing the following steps.

- Configure an additional network interface on each cluster node.
- Configure the appropriate `cluster` network IP addresses on the new network interface on each node.
- Use the `--cluster-network` option of the `cephadm bootstrap` command to create the `cluster` network at the cluster bootstrap.

You can use a cluster configuration file to set `public` and `cluster` networks. You can configure more than one subnet for each network, separated by commas. Use CIDR notation for the subnets (for example, `172.25.250.0/24`).

```
[global]
public_network = 172.25.250.0/24,172.25.251.0/24
cluster_network = 172.25.249.0/24
```