[ceph: root@node /]# ceph config get mon osd_pool_default_size

Change the size of a pool with the ceph osd pool set *pool-name* size *number-of-replicas* command. Alternatively, update the default setting of the osd_pool_default_size configuration setting.

The osd_pool_default_min_size parameter sets the number of copies of an object that must be available to accept I/O requests. The default value is 2.

Configuring Erasure Coded Pools

An erasure coded pool uses erasure coding instead of replication to protect object data.

Objects stored in an erasure coded pool are divided into a number of data chunks which are stored in separate OSDs. The number of coding chunks are calculated based on the data chunks and are stored in different OSDs. The coding chunks are used to reconstruct the object's data if an OSD fails. The primary OSD receives the write operation, then encodes the payload into K+M chunks and sends them to the secondary OSDs in erasure coded pools.

Erasure coded pools use this method to protect their objects and, unlike replicated pools, do not rely on storing multiple copies of each object.

To summarize how erasure coded pools work:

- Each object's data is divided into k data chunks.
- m coding chunks are calculated.
- · The coding chunk size is the same as the data chunk size.
- The object is stored on a total of k + m OSDs.