CREATE A CLUSTER

The first step in using Ceph with `ceph-deploy` is to create a new Ceph cluster. A new Ceph cluster has:

- A Ceph configuration file, and
- A monitor keyring.

The Ceph configuration file consists of at least:

- Its own filesystem ID (`fsid`)
- The initial monitor(s) hostname(s), and
- The initial monitor(s) and IP address(es).

For additional details, see the Monitor Configuration Reference.

The ceph-deploy tool also creates a monitor keyring and populates it with a `[mon.]` key. For additional details, see the Cephx Guide.

USAGE

To create a cluster with `ceph-deploy`, use the new command and specify the host(s) that will be initial members of the monitor quorum.

```
ceph-deploy new {host [host], ...}
```

For example:

```
ceph-deploy new mon1.foo.com
ceph-deploy new mon{1,2,3}
```

The `ceph-deploy` utility will use DNS to resolve hostnames to IP addresses. The monitors will be named using the first component of the name (e.g., mon1 above). It will add the specified host names to the Ceph configuration file. For additional details, execute:

```
ceph-deploy new -h
```

NAMING A CLUSTER

By default, Ceph clusters have a cluster name of ceph. You can specify a cluster name if you want to run multiple clusters on the same hardware. For example, if you want to optimize a cluster for use with block devices, and another for use with the gateway, you can run two different clusters on the same hardware if they have a different `fsid` and cluster name.

```
ceph-deploy --cluster {cluster-name} new {host [host], ...}
```

For example:

```
ceph-deploy --cluster rbdcluster new ceph-mon1
ceph-deploy --cluster rbdcluster new ceph-mon{1,2,3}
```

Note: If you run multiple clusters, ensure you adjust the default port settings and open ports for your additional cluster(s) so that the networks of the two different clusters don't conflict with each other.