

# CEPH DEPLOYMENT

The ceph-deploy tool is a way to deploy Ceph relying only upon SSH access to the servers, sudo, and some Python. It runs on your workstation, and does not require servers, databases, or anything any other tools. If you set up and tear down Ceph clusters a lot, and want minimal extra bureaucracy, ceph-deploy is an ideal tool. The ceph-deploy tool is not a generic deployment system. It was designed exclusively for Ceph users who want to get Ceph up and running quickly with sensible initial configuration settings without the overhead of installing Chef, Puppet or Juju. Users who want fine-control over security settings, partitions or directory locations should use a tool such as Juju, Puppet, [Chef](#) or Crowbar.

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With ceph-deploy, you can install Ceph packages on remote hosts, create a cluster, add monitors, gather (or forget) keys, add metadata servers and OSDs, configure admin hosts, and tear down the clusters. With a single tool, you can develop scripts to create, deploy and tear down clusters quickly and easily.

- **Transition from mkcephfs**
  - Monitor Keyring
  - Use Default Paths
- **Preflight Checklist**
  - Install an Operating System
  - Install an SSH Server
  - Create a User
  - Configure SSH
  - Install git
  - Clone ceph-deploy
  - Install python-virtualenv
  - Bootstrap ceph-deploy
- **Install Ceph**
  - Install
  - Uninstall
- **Create a Cluster**
  - Usage
  - Naming a Cluster
- **Add/Remove Monitor(s)**
  - Add a Monitor
  - Remove a Monitor
- **Key Management**
  - Gather Keys
  - Forget Keys
- **Add/Remove OSD(s)**
  - List Disks
  - Zap Disks
  - Prepare OSDs
  - Activate OSDs
  - Create OSDs
  - List OSDs
  - Destroy OSDs
- **Add/Remove MDS(s)**
  - Add a Metadata Server
  - Remove a Metadata Server
- **Purge Hosts**
  - Purge Data
  - Purge
- **Admin Tasks**
  - Create an Admin Host
  - Deploy Config File

## MKCEPHFS (DEPRECATED)

The mkcephfs utility generates an fsid and keys for your cluster, as defined by the Ceph configuration file. It does not create directories for you and relies on use of the root password. As of Ceph v0.60, it is deprecated in favor of ceph-deploy.

- **mkcephfs (deprecated)**
  - **Enable Login to Cluster Hosts as root**
  - **Copy Configuration File to All Hosts**
  - **Create the Default Directories**
  - **Mount Disks to the Data Directories**
  - **Run mkcephfs**