

PREFLIGHT CHECKLIST

New in version 0.60.

Thank you for trying Ceph! Petabyte-scale data clusters are quite an undertaking. Before delving deeper into Ceph, we recommend setting up a two-node demo cluster to explore some of the functionality. This **Preflight Checklist** will help you prepare an admin host and a server host for use with ceph-deploy.



Before you can deploy Ceph using ceph-deploy, you need to ensure that you have a few things set up first on your admin host and on hosts running Ceph daemons.

INSTALL AN OPERATING SYSTEM

Install a recent release of Debian or Ubuntu (e.g., 12.04, 12.10) on your hosts. For additional details on operating systems or to use other operating systems other than Debian or Ubuntu, see [OS Recommendations](#).

INSTALL AN SSH SERVER

The ceph-deploy utility requires ssh, so your server host(s) require an SSH server.

```
sudo apt-get install openssh-server
```

CREATE A USER

Create a user on hosts running Ceph daemons.

Tip: We recommend a username that brute force attackers won't guess easily (e.g., something other than root, ceph, etc).

```
ssh user@ceph-server
sudo useradd -d /home/ceph -m ceph
sudo passwd ceph
```

ceph-deploy installs packages onto your hosts. This means that the user you create requires passwordless sudo privileges.

Note: We **DO NOT** recommend enabling the root password for security reasons.

To provide full privileges to the user, add the following to /etc/sudoers.d/ceph.

```
echo "ceph ALL = (root) NOPASSWD:ALL" | sudo tee /etc/sudoers.d/ceph
sudo chmod 0440 /etc/sudoers.d/ceph
```

CONFIGURE SSH

Configure your admin machine with password-less SSH access to each host running Ceph daemons (leave the passphrase empty).

```
ssh-keygen
Generating public/private key pair.
Enter file in which to save the key (/ceph-client/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
```

```
Enter same passphrase again:
Your identification has been saved in /ceph-client/.ssh/id_rsa.
Your public key has been saved in /ceph-client/.ssh/id_rsa.pub.
```

Copy the key to each host running Ceph daemons:

```
ssh-copy-id ceph@ceph-server
```

Modify your `~/.ssh/config` file of your admin host so that it defaults to logging in as the user you created when no username is specified.

```
Host ceph-server
    Hostname ceph-server.fqdn-or-ip-address.com
    User ceph
```

INSTALL GIT

To clone the ceph-deploy repository, you will need install git on your admin host.

```
sudo apt-get install git
```

CLONE CEPH-DEPLOY

To begin working with ceph-deploy, clone its repository.

```
git clone https://github.com/ceph/ceph-deploy.git ceph-deploy
```

INSTALL PYTHON-VIRTUALENV

To bootstrap ceph-deploy and run it, you must install the python-virtualenv package.

```
sudo apt-get install python-virtualenv
```

BOOTSTRAP CEPH-DEPLOY

After you clone the repository, bootstrap ceph-deploy.

```
cd ceph-deploy
./bootstrap
```

Add ceph-deploy to your path so that so that you can execute it without remaining in ceph-deploy directory (e.g., `/etc/environment`, `~/.pam_environment`). Once you have completed this pre-flight checklist, you are ready to begin using ceph-deploy.

SUMMARY

Once you have passwordless ssh connectivity, passwordless sudo, and a bootstrapped ceph-deploy, proceed to the [Object Store Quick Start](#).

Tip: The ceph-deploy utility can install Ceph packages on remote machines from the admin host!