

```
[ceph: root@node /]# ceph osd pool create pool-name pg-num pgp-num \
erasure erasure-code-profile crush-rule-name
```

Where:

- **pool-name** is the name of the new pool.
- **pg-num** is the total number of placement groups (PGs) for this pool.
- **pgp-num** is the effective number of placement groups for this pool. Normally, this should be equal to the total number of placement groups.
- **erasure** specifies that this is an erasure coded pool.
- **erasure-code-profile** is the name of the profile to use. You can create new profiles with the `ceph osd erasure-code-profile set` command. A profile defines the **k** and **m** values and the erasure code plug-in to use. By default, Ceph uses the `default` profile.
- **crush-rule-name** is the name of the CRUSH rule set to use for this pool. If not set, Ceph uses the one defined in the erasure code profile.

You can configure placement group autoscaling on a pool. Autoscaling allows the cluster to calculate the number of placement groups and to choose appropriate **pg_num** values automatically. Autoscaling is enabled by default in Red Hat Ceph Storage 5.

Every pool in the cluster has a **pg_autoscale_mode** option with a value of **on**, **off**, or **warn**.

- **on**: Enables automated adjustments of the PG count for the pool.
- **off**: Disables PG autoscaling for the pool.
- **warn**: Raises a health alert and changes the cluster health status to **HEALTH_WARN** when the PG count needs adjustment.

This example enables the **pg_autoscaler** module on the Ceph MGR nodes and sets the autoscaling mode to **on** for a pool:

```
[ceph: root@node /]# ceph mgr module enable pg_autoscaler
module 'pg_autoscaler' is already enabled (always-on)
[ceph: root@node /]# ceph osd pool set pool-name pg_autoscale_mode on
set pool 7 pg_autoscale_mode to on
```

Erasure coded pools cannot use the *Object Map* feature. An object map is an index of objects that tracks where the blocks of an **rbd** object are allocated. Having an object map for a pool improves the performance of **resize**, **export**, **flatten**, and other operations.

Erasure Code Profiles

An erasure code profile configures the number of data chunks and coding chunks that your erasure-coded pool uses to store objects, and which erasure coding plug-in and algorithm to use.

Create profiles to define different sets of erasure coding parameters. Ceph automatically creates the **default** profile during installation. This profile is configured to divide objects into two data chunks and one coding chunk.

Use the following command to create a new profile.

```
[ceph: root@node /]# ceph osd erasure-code-profile set profile-name arguments
```