Guided Exercise

Optimizing Red Hat Ceph Storage Performance

In this exercise, you will run performance analysis tools and configure the Red Hat Ceph Storage cluster using the results.

Outcomes

You should be able to run performance analysis tools and configure the Red Hat Ceph Storage cluster using the results.

Before You Begin

Important

Do you need to reset your environment before performing this exercise?

If you performed the practice exercises in the *Managing a Red Hat Ceph Storage Cluster* chapter, but have not reset your environment to the default classroom cluster since that chapter, then you must reset your environment before executing the `lab start` command. All remaining chapters use the default Ceph cluster provided in the initial classroom environment.

As the `student` user on the `workstation` machine, use the `lab` command to prepare your system for this exercise.

This command ensures that the lab environment is available for the exercise.

```
[student@workstation ~]$ lab start tuning-optimize
```


Instructions

- Create a new pool called `testpool` and change the PG autoscale mode to `off`. Reduce the number of PGs, and then check the recommended number of PGs. Change the PG autoscale mode to `warn` and check the health warning message.
- Modify the primary affinity settings on an OSD so it is more likely to be set as primary for placement groups.
- Using the Ceph built in benchmarking tool known as the `rados bench`, measure the performance of a Ceph cluster at a pool level.
- The `clienta` node is set up as your admin node server.
- The `admin` user has SSH key-based access from the `clienta` node to the `admin` account on all cluster nodes, and has passwordless `sudo` access to the `root` and `ceph` accounts on all cluster nodes.