▶ Lab

Tuning and Troubleshooting Red Hat Ceph Storage

In this lab, you will tune and troubleshoot Red Hat Ceph Storage.

Outcomes

You should be able to:

- Troubleshoot Ceph clients and Ceph performance issues.
- Modify the logging options for Ceph clients.
- Tune the recovery and backfill processes to preserve cluster performance.

Before You Begin

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

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

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

Instructions

1. Log in to `clienta` as the `admin` user. Verify the health of the Ceph storage cluster. Hypothesize possible causes for the displayed issues.

2. First, troubleshoot the clock skew issue.

3. Troubleshoot the down OSD issue. Use diagnostic logging to find and correct a non-working configuration.

4. For the OSD 5 service, set the operations history size to track 40 completed operations and the operations history duration to 700 seconds.

5. For all OSDs, modify the current runtime value for the maximum concurrent backfills to 3 and for the maximum active recovery operations to 1.

6. Return to `workstation` as the `student` user.

Evaluation

Grade your work by running the `lab grade tuning-review` command from your `workstation` machine. Correct any reported failures and rerun the script until successful.

```
[student@workstation ~]$ lab grade tuning-review
```

Finish

On the `workstation` machine, use the `lab` command to complete this exercise. This is important to ensure that resources from previous exercises do not impact upcoming exercises.