

► Guided Exercise

Troubleshooting Clusters and Clients

In this exercise, you will configure tuning parameters and diagnose common problems for various Red Hat Ceph Storage services.

Outcomes

You should be able to identify the error code for each Ceph component and resolve the issues.

Before You Begin

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

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

Instructions

1. Log in to `clienta` as the `admin` user and use `sudo` to run the `cephadm` shell. Verify the health of the Ceph storage cluster.

Two separate issues need troubleshooting. The first issue is a clock skew error, and the second issue is a down OSD which is degrading the PGs.

```
[student@workstation ~]$ ssh admin@clienta
[admin@clienta ~]$ sudo cephadm shell
[ceph: root@clienta /]# ceph health detail
HEALTH_WARN clock skew detected on mon.serverd; 1 osds down; Degraded data
redundancy: 63/567 objects degraded (11.111%), 14 pgs degraded, 10 pgs
undersized; 278 slow ops, oldest one blocked for 170 sec, mon.serverd has slow
ops
[WRN] MON_CLOCK_SKEW: clock skew detected on mon.serverd
      mon.serverd clock skew 299.103s > max 0.05s (latency 0.0204872s)
[WRN] OSD_DOWN: 1 osds down
      osd.0 (root=default,host=serverc) is down
[WRN] PG_DEGRADED: Degraded data redundancy: 63/567 objects degraded (11.111%), 14
pgs degraded, 10 pgs undersized
      pg 2.5 is stuck undersized for 2m, current state active+undersized, last
acting [8,7]
      pg 2.c is stuck undersized for 2m, current state active+undersized, last
acting [6,5]
...output omitted...
```



Note

The lab uses `chronyd` for time synchronization with the `classroom` server.