▶ Guided Exercise

Expanding Red Hat Ceph Storage Cluster Capacity

In this exercise, you will expand the cluster by adding new OSDs to each of the nodes in the cluster, and by adding an OSD node to the Ceph cluster.

Outcomes
You should be able to expand your cluster by adding new OSDs.

Before You Begin
Start this exercise only after having successfully completed the previous *Guided Exercise: Deploying Red Hat Ceph Storage*:

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

```
[student@workstation ~]$ lab start deploy-expand
```

This command confirms that the Ceph cluster is reachable and provides an example service specification file.

Instructions

In this exercise, expand the amount of storage in your Ceph storage cluster.

▶ **1.** List the inventory of storage devices on the cluster hosts.

    1.1. Log in to `serverc` as the `admin` user and use `sudo` to run the `cephadm` shell.

```
[student@workstation ~]$ ssh admin@clienta
[admin@clienta ~]# sudo cephadm shell
[ceph: root@clienta /]#
```

    1.2. Display the storage device inventory on the Ceph cluster.

```
[ceph: root@clienta /]# ceph orch device ls
Hostname                  Path     Type  Serial              Size    Health
  Ident  Fault  Available
clienta.lab.example.com  /dev/vdb  hdd   f97f3019-2827-4b84-8  10.7G  Unknown  N/A
   N/A    Yes
clienta.lab.example.com  /dev/vdc  hdd   fdaeb489-de2c-4165-9  10.7G  Unknown  N/A
   N/A    Yes
clienta.lab.example.com  /dev/vdd  hdd   0159ff1a-d45a-4ada-9  10.7G  Unknown  N/A
   N/A    Yes
clienta.lab.example.com  /dev/vde  hdd   69f43b17-9af3-45f1-b  10.7G  Unknown  N/A
   N/A    Yes
```