Lab

Accessing Object Storage Using a REST API

In this lab, you will configure Ceph to provide object storage to clients, using both the Amazon S3 and OpenStack Swift APIs.

Outcomes

You should be able to:

- Create buckets and containers using the Amazon S3 and OpenStack Swift APIs.
- Upload and download objects using the Amazon S3 and OpenStack Swift APIs.

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 created and ready for the lab exercise.

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

This command confirms that the hosts required for this exercise are accessible and configures a multisite RADOS Gateway service.

Instructions

Important

This lab runs on a multisite RADOS Gateway deployment.

To ensure that metadata operations, such as user and bucket creation, occur on the master zone and are synced across the multisite service, perform all metadata operations on the `serverc` node. Other normal operations, such as uploading or downloading objects from the RADOS Gateway service, can be performed on any cluster node that has access to the service endpoint.

1. On the `serverc` node, create a user for the S3 API and a subuser for the Swift API. Create the S3 user with the name `S3 Operator`, UID `operator`, access key `12345`, and secret key `67890`. Grant full access to the `operator` user.

   Create the Swift subuser of the `operator` user with the name `operator:swift` and the secret `opswift. Grant full access to the subuser.

2. Configure the AWS CLI tool to use the `operator` user credentials. Create a bucket called `log-artifacts`. The RADOS Gateway service is running on the default port on the `serverc` node.

3. Create a container called `backup-artifacts`. The RADOS Gateway service is on the default port on the `serverc` node.