Backing Up and Restoring Etcd Cluster Data

Relevant Documentation

- Backing Up an etcd Cluster

Lesson Reference

Look up the value for the key `cluster.name` in the etcd cluster. The value should be `beebox`.

```
ETCDCTL_API=3 etcdctl get cluster.name \
  --endpoints=https://10.0.1.101:2379 \
  --cacert=/home/cloud_user/etcd-certs/etcd-ca.pem \
  --cert=/home/cloud_user/etcd-certs/etcd-server.crt \
  --key=/home/cloud_user/etcd-certs/etcd-server.key
```

Back up etcd using etcdctl and the provided etcd certificates.

```
ETCDCTL_API=3 etcdctl snapshot save /home/cloud_user/etcd_backup.db \
  --endpoints=https://10.0.1.101:2379 \
  --cacert=/home/cloud_user/etcd-certs/etcd-ca.pem \
  --cert=/home/cloud_user/etcd-certs/etcd-server.crt \
  --key=/home/cloud_user/etcd-certs/etcd-server.key
```

Reset etcd by removing all existing etcd data.

```
sudo systemctl stop etcd

sudo rm -rf /var/lib/etcd
```

Restore the etcd data from the backup. This command spins up a temporary etcd cluster, saving the data from the backup file to a new data directory (in the same location where the previous data directory was).

```
sudo ETCDCTL_API=3 etcdctl snapshot restore /home/cloud_user/etcd_backup.db \
  --initial-cluster etcd-restore=https://10.0.1.101:2380 \
  --initial-advertise-peer-urls https://10.0.1.101:2380 \
  --name etcd-restore \
  --data-dir /var/lib/etcd
```

Set ownership on the new data directory.

```
sudo chown -R etcd:etcd /var/lib/etcd
```

Start etcd.

```
sudo systemctl start etcd
```

Verify that the restored data is present by looking up the value for the key `cluster.name` again. The value should be `beebox`.

```
ETCDCTL_API=3 etcdctl get cluster.name \
  --endpoints=https://10.0.1.101:2379 \
  --cacert=/home/cloud_user/etcd-certs/etcd-ca.pem \
  --cert=/home/cloud_user/etcd-certs/etcd-server.crt \
  --key=/home/cloud_user/etcd-certs/etcd-server.key
```