Installing the Glance Image Service

Andrew Mallett
LINUX AUTHOR AND TRAINER

@theurbanpenguin www.theurbanpenguin.com

Objectives

- Create Client Authentication Scripts
- Glance Image Service
- Create Glance Database
- Create Glance Identities
- Install and Configure Glance
- Populate Glance Database
- Create Image

Client Authentication Script: Admin

```
export OS_PROJECT_DOMAIN_ID=default
export OS_USER_DOMAIN_ID=default
export OS_PROJECT_NAME=admin
export OS_TENANT_NAME=admin
export OS_USERNAME=admin
export OS_PASSWORD=Password1
export OS_AUTH_URL=http://controller:35357/v3
export OS_IDENTITY_API_VERSION=3
export OS_IMAGE_API_VERSION=2
```

Client Authentication Script: Demo

```
export OS_PROJECT_DOMAIN_ID=default
export OS_USER_DOMAIN_ID=default
export OS_PROJECT_NAME=demo
export OS_TENANT_NAME=demo
export OS_USERNAME=demo
export OS_PASSWORD=Password1
export OS_AUTH_URL=http://controller:5000/v3
export OS_IDENTITY_API_VERSION=3
export OS_IMAGE_API_VERSION=2
```

```
# source adminrc.sh
# openstack service list
```

Using Scripts

Creating and Using Authentication Scripts

OpenStack Operating System

Glance

Image Service

The Glance Image Service is central to IaaS, Infrastructure as a Service.

The Service acts as an API to accept requests to locate Master Images that are used to deploy Virtual Machines.

Create the Database

```
MYSQL_ROOT_PW=Password1

cat > create-glancedb.sql << END
CREATE DATABASE glance;
GRANT ALL PRIVILEGES ON glance.* TO ‘glance'@'localhost' IDENTIFIED BY
'Password1';
GRANT ALL PRIVILEGES ON glance.* TO ‘glance'@'%' IDENTIFIED BY
'Password1';
SHOW GRANTS FOR ‘glance'@'%‘
END

mysql -u root -p$MYSQL_ROOT_PW < create-glancedb.sql
```

Create Database for Glance

Create Identities for Glance

source /root/adminrc.sh

openstack user create --domain default --password-prompt glance

openstack role add --project service --user glance admin

openstack service create --name glance --description "OpenStack Image service" image

openstack endpoint create --region RegionOne image public http://controller:9292

openstack endpoint create --region RegionOne image internal http://controller:9292

openstack endpoint create --region RegionOne image admin http://controller:9292

Create Identities for Glance

```
# apt-get install -y glance python-glanceclient
```

Install Glance

/etc/glance/glance-api.conf

/etc/glance/glance-registry.conf

Configuration Files

We need to edit two configuration files. The details are in the script.

```
# su -s /bin/sh -c "glance-manage db_sync" glance
```

Populate the Database

```
# service glance-registry restart
# service glance-api restart
```

Restart the Services

```
# rm -f /var/lib/glance/glance.sqlite
```

Delete the SQLlite DB

Configure Glance

```
# wget http://download.cirros-cloud.net/0.3.4/cirros-0.3.4-x86_64-disk.img
```

Download a Test Image

Cirros is a lightweight Linux OS designed for testing in a cloud environment. This was the same image that was in the PackStack install.

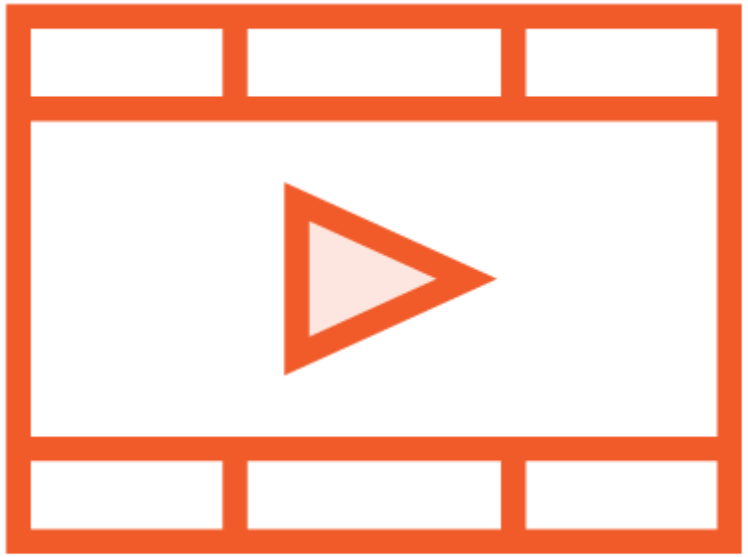
```
# source adminrc.sh

# openstack  image create  \
  --file cirros-0.3.4-x86_64-disk.img \
  --public  --disk-format qcow2 \
  --container-format bare \
  cirros

# openstack image list
```

Add the Image into Glance

Create Glance Images



Created Glance Database

Created Glance Identity in Service Project

Install Glance and edited glance-api.conf and glance-registry.conf

Populated Database and restarted services

Port 9292

Downloaded Cirros Image and added it to glance

Next up: Installing Nova Compute Service