## Working with the Swift Object Store



Andrew Mallett
LINUX AUTHOR AND TRAINER

@theurbanpenguin www.theurbanpenguin.com



## Objectives



**Identify Swift Services** 

**Swift Hierarchy** 

**Using Swift** 

**Expiring Objects** 



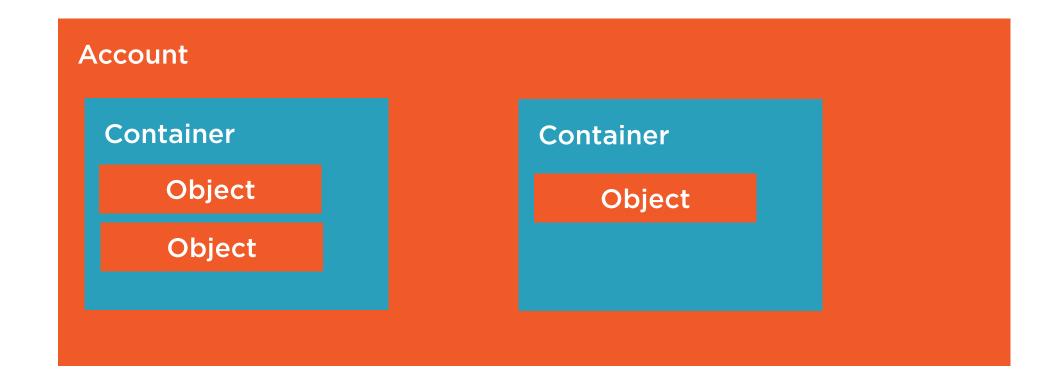
# systemctl | grep swift

#### Swift Services

Swift is the OpenStack object store. This can be used to store Cinder backups or simply files to be distributed to Virtual Machine Instances.



# Swift Hierarchy





# swift stat

## Listing Swift Objects

Using the swift stat command, the containers and objects for the current account will be listed



## Investigate Swift Services and Objects



## Swift

Swift can act as a configuration store. We may need a shared configuration file to be stored in Swift and downloaded to instances as required.



```
# swift stat

# swift upload hosts /etc/hosts

# swift stat

# swift list hosts

# swift stat hosts etc/hosts
```

## Uploading Content

We can upload to an existing container or create a new container. The leading / is removed from the path as files are uploaded to containers.



## **Upload Swift Content**



## Swift Client

If you want to download content to a Virtual Machine Instance then the swift client will be required: python-swiftclient



# swift download hosts

#### Download Content

Will download content to the PackStack host. The container contents will download to the current working directory.



```
# swift post hosts -r "demo:demo"
# swift post hosts -w "demo:demo"
# swift stat hosts
```

#### Manage ACLs

Swift post can be used to set the Access Control List to a container. The option -r is the read ACL -w is the write ACL.



## Manage ACL and Downlaods



# Expire Objects

Objects can be automatically deleted at a specific date and time or after a specified number of seconds



```
# date
# date +%s
# date --date '30 days'
# date --date '30 days' +%s
# swift post hosts etc/hosts -H "X-Delete-At:1495466045"
```

#### Unix Time

To delete at a specific data and time we use the Unix Time Epoch



# swift post hosts etc/hosts -H "X-Delete-After:86400"

#### Delete After Seconds

We can also delete after a given number of seconds.



# swift delete hosts

Delete Container



## Expire and Delete



## Summary



**Swift Services** 

Hierarchy: Accounts, Containers, Objects

**Upload Content** 

**Access Control Lists** 

**Expiring Content** 



# Next up: OpenStack: Nova and Neutron

