

# Working with the Swift Object Store

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# 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

Account

Container

Object

Object

Container

Object



```
# 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

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# 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

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# 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 Downloads

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# 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

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# Summary



**Swift Services**

**Hierarchy: Accounts, Containers, Objects**

**Upload Content**

**Access Control Lists**

**Expiring Content**



Next up: OpenStack: Nova  
and Neutron

