# OpenStack: Managing Identities and Objects

#### IDENTITY AND OBJECT MANAGEMENT IN OPENSTACK



Andrew Mallett
LINUX AUTHOR AND TRAINER

@theurbanpenguin www.theurbanpenguin.com



### Objectives



**Introduce Course Contents** 

**Keystone - Identity Service** 

**Cinder - Volume Service** 

**Glance - Image Service** 

**Swift - Object Storage** 



# From the Exam Requirements





#### Identity Management - Keystone (12%)

Manage keystone catalog services and endpoints

Manage/Create domains, groups, projects, users and roles

Manage the Identity service

Verify the Identity Service





#### **Block Storage - Cinder (10%)**

Manage volumes

Create volume groups for storage

Create volume and mount to instance

Manage quotas

Manage backups

Manage snapshots

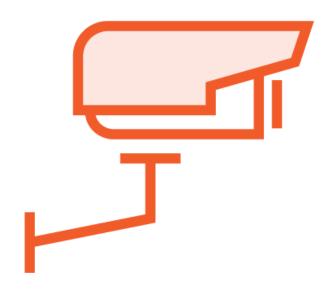
Manage encryption

Setup storage pools

Monitor capacity

Analyze volume size reports





#### Image Management - Glance (10%)

Deploy a new image to instance

Manage image types and back-ends

Manage images

Verify image service





#### Object Storage - Swift (10%)

Manage access to object store

Manage expiring objects

Manage policies

Monitor space

Verify object store

Manage permissions on containers





OpenStack: Installing the Lab Environment

OpenStack: Getting to Know OpenStack

and the COA



## Lab Environment (Single Node)



**Virtual Machine** 



Virtualization Host CentOS 7.2 KVM 192.168.56.1 Centos 7 192.168.56.5



## Highlights



Convert CLI and Horizon to use Keystone V3 API

Create your own images

**Snapshot volumes** 

Use Swift to store central configuration files



# Next up: Using Identity Management with Keystone

