Ubuntu OpenStack
Fundamentals Training

Learn from the best, how to use the best!

You've made the decision to use the most powerful open cloud platform, and now you need to learn how to make the most of it. The Ubuntu OpenStack Fundamentals Training programme is an intensive 3-day hands-on course that will give you the best introduction to setting up and running Ubuntu OpenStack clouds.

The 3-day training course will cover everything you need to know about Ubuntu Server in the cloud and will focus on building an Openstack environment using Ubuntu OpenStack and our best in industry cloud tools:

- MAAS for bare-metal provisioning
- Juju for fast and easy deployment of OpenStack and cloud services, and
- Landscape for systems management and monitoring

Starting with a single standard installation of Ubuntu 14.04 LTS Server, your instructor will lead you through the process of creating a complete cloud infrastructure with Ubuntu AutoPilot and deploying machine instances within it. You will go through a complete OpenStack installation and configuration, and also learn how to use Ubuntu cloud tools to deploy workloads quickly and efficiently.

All sessions are a combination of theory and lab work.

Schedule:

Day 1 - 3: Lecture/demos/exercise

Level required:

Experienced Linux and Cloud Professionals

Install and Configure an Ubuntu OpenStack Cloud

Section 1:
Introduction to an Ubuntu OpenStack Cloud

Objective 1: Understand OpenStack

Objective 2: Understand Ubuntu's Approach to OpenStack

Section 2:
Install and Configure MAAS

Objective 1: Understand MAAS Features and Functionality

Objective 2: Understand MAAS Configuration Commands

Objective 3: Install a MAAS Server

Objective 4: Configure a MAAS Cluster

Objective 5: Commission Machines with MAAS

Objective 6: Work with Tags

Section 3:
Install and Configure Juju

Objective 1: Understand Juju Features and Functionality

Objective 2: Understand Charms

Objective 3: Understand Juju Configuration Commands

Objective 4: Install and Configure Juju

Objective 5: Deploy and Configure Services with Juju

Objective 6: Understand Juju Service Deployment Troubleshooting

Section 4:
Configure an OpenStack Cloud

Objective 1: Understand OpenStack

Objective 2: Understand OpenStack Deployment Architecture

Objective 3: Understand OpenStack Deployment Sizes

Objective 4: Understand General OpenStack Configuration Commands

Objective 5: Configure the Global OpenStack Environment

Install and Configure
an Ubuntu OpenStack Cloud

Section 5:
Deploy and OpenStack Cloud with Juju
and MAAS

Objective 1: Understand OpenStack
Deployment with Juju

Objective 2: Understand Relationships
Between Cloud Services

Objective 3: Prepare OpenStack for Use

Section 6:
Work with Software-Defined Networks

Objective 1: Understand OpenStack
Networking

Objective 2: Understand Neutron
Configuration Commands

Section 7:
Work with Cloud Images

Objective 1: Understand Glance Features
and Functionality

Objective 2: Understand Glance
Configuration Commands

Section 8:
Configure an OpenStack Project

Objective 1: Understand OpenStack
Tenants/Projects

Objective 2: Understand Keystone
Configuration Commands

Objective 3: Understand Key Pairs, Security
Groups and Quotas

Objective 4: Understand Tenant/Project
Networking

Section 9:
Work with Cloud Workload Instances

Objective 1: Understand Nova Features and
Functionality

Objective 2: Understand Nova
Configuration Commands

Install and Configure an Ubuntu OpenStack Cloud

Section 10:
Work with OpenStack Storage

Objective 1: Understand OpenStack Storage

Objective 2: Understand Cinder Features and Functionality

Objective 3: Understand Cinder Configuration Commands

Objective 4: Understand Swift Features and Functionality

Objective 5: Understand Swift Configuration Commands

Objective 6: Understand Ceph Features and Functionality

Section 11:
Introduction to Landscape and Ubuntu Autopilot

Objective 1: Understand the Canonical Distribution of Ubuntu OpenStack

Objective 2: Understand Landscape Features and Functionality

Objective 3: Deploy an OpenStack Cloud Using AutoPilot

Section 12:
Configure Juju to Manage a Tenant in an OpenStack Cloud

Objective 1: Configure Juju to Work with OpenStack