



OS50: OpenStack Fundamentals

A one-day introduction to the fundamentals of OpenStack

This OpenStack primer is a high level version of our top selling OpenStack Bootcamp I (OS100) course, with a focus on developing business perspectives and understanding the basics of OpenStack. This course is intended for OpenStack end-users such as project managers, business developers, and sales engineers who require cloud platform operational skills and a high level understanding of cloud computing, using OpenStack. The course is broken up into two sections: lectures and labs.

The **lectures** provide students with the basics of cloud computing, OpenStack business values, an introduction to OpenStack and the OpenStack Foundation, and the OpenStack Ecosystem.

The **labs** provide students with hands-on experience using the Dashboard UI (Horizon) to provision your own cloud resources like virtual machines, virtual networks, and block storage. Students will also gain experience managing their own application image repository.

Course Duration

- 1 Day

Prerequisites

- None

Lab Requirements

- Laptop with Web Browser

Target Audience

- Project Managers
- Pre-Sales / Sales Engineers
- Development Managers
- Business Stakeholders

Objectives

By the end of this course, students will be able to describe compelling enterprise use cases of OpenStack with a high level understanding of OpenStack components and how they interrelate. Furthermore, students will gain knowledge of operating an OpenStack cluster as an end-user which equates to valuable hands-on experience for business developers and sales engineers to seamlessly transition from pre-sales to successfully closing deals.

Outline

- Course Introduction
- Cloud fundamentals
- OpenStack business values
- OpenStack operations through the dashboard UI

Course Syllabus

Module 1

Introduction to OpenStack

Theory

- What is Cloud?
- OpenStack business value
- What is OpenStack?
- Introducing the OpenStack projects
- OpenStack deployment considerations

Workshops

- Understanding the classroom environment
- Exploring the Dashboard UI (Horizon)

Module 2

OpenStack Architecture -
VM Request Process Flow

Theory

- Identity service (Keystone)
- Compute service (Nova)
- Image service (Glance)
- Network service (Neutron)
- Block Storage/Volume service (Cinder)

Workshops

- Create, manage, and access Virtual Machines
- Create and manage images
- Create and manage volumes
- Create and manage projects and users