High availability architecture
Learn from the best

Now that you’re up and running with OpenStack, it is time to take it to the next level. High Availability (HA) is crucial to making the most of your cloud.

The High Availability with OpenStack Clouds course is a one day overview of the basics of High Availability including:

• The benefits of HA
• Using Juju to add HA to your models and deployments
• HA strategies for both Stateless and Stateful applications
• Extending the benefits of HA to your network tenants

Through examples and practice activities you’ll learn to spot and eliminate single points of failure in your cloud and build a working knowledge that will allow you to implement HA architecture throughout your OpenStack clouds.

Schedule:
One half day of lecture

Level required:
Experienced Linux and cloud professionals
Section 1: Introduction

- Define high availability
- Discuss the benefits of high availability
- Define single points of failure (SPOF)

Section 2: Juju modeling

- Explain Juju Charms
- Discuss how HA Charms can be added to a Juju model
- Show how the Juju tool works with the OpenStack cloud

Section 3: HA configuration with stateless vs. stateful services

- Discuss whether a service is stateless or stateful based on the type of service named
- Identify potential HA solutions based on whether a service is stateless or stateful, given the type of the service
- Review system messages generated through the command line status checks of properly configured HA services
- Demonstrate failures of both stateless and stateful services

Section 4: Extending HA to network tenants

- Discuss HA alternatives for a stateless service, given the service type
- Describe an HA alternative for a stateful service, given the service type
- Review the system status messages for stateful and stateless services

Students should complete the course with a comprehension of the following lessons: