

CN214 Mirantis Container Cloud (MCC) and Mirantis OpenStack (MOS) for Kubernetes

Download Whitepaper: Accelerate Your Modernization Efforts with a Cloud-Native Strategy
Get Your Free Copy Now

Course Number: CN214

Duration: 1.5 days

Overview

Course Description

In this rapid introduction to Mirantis Container Cloud, students will learn how to deploy Kubernetes clusters to in a virtual bare metal environment using MCC, as well as how to manage user permissions, Stacklight-based monitoring and logging tools, and third-party monitoring integrations. This course is designed to help your operators get up to speed quickly on the architecture and configuration best practices of Mirantis OpenStack for Kubernetes. We will focus on understanding the underlying Kubernetes elements that deploy OpenStack services on your infrastructure. We will also explore some of the tunable parameters to customize your OpenStack deployment, and demonstrate how these changes are deployed on a live environment. You will get hands-on experience performing a backup of the OpenStack database using tools built into MOS.

Who Can Benefit

This course is targeted at students with the following:

- **Motivations:** Deploy and configure the underlying Kubernetes Cluster for MOS, Operate a containerized OpenStack cloud.
- **Roles:** This course is intended for System Operators, Administrators, engineers who have the basic knowledge of Linux, virtualization and containerization technologies, Kubernetes API and CLI, Helm and Helm charts, Mirantis Kubernetes Engine, and OpenStack.

Prerequisites

- OS100 or similar experience with OpenStack Essentials
- CN100 Docker Containerization Essentials and CN120 Kubernetes Applications Essentials course and prerequisites therein, or equivalent experience
- Familiarity with the Bash shell: Filesystem navigation and manipulation, command line text editors like vim or nano, common tooling like curl, wget and ping
- Familiarity with YAML and JSON notation

Audience

Course Details

Mirantis Container Cloud Architecture

- Management, regional, managed and attached cluster usage and architecture
- Installation and setup of management and managed clusters

MCC User Management

- Using Keycloak to manage user permissions
- Integrating LDAP with MCC
- Managing permissions for multitenancy

Cluster Logging & Monitoring

- Stacklight configuration and cluster integration
- Using Prometheus and Grafana dashboards
- Customizing Stacklight configurations & third-party integrations
- Exploring logs with Kibana

Explain each component of the MOS infrastructure stack.

Use multiple methods to access openstack APIs running on MOS

Configure supported OpenStack parameters and update the OpenStack version on a live environment.

Run common OpenStack operations tasks (taking a backup of the Openstack database)