

VMware Integrated OpenStack: Install, Configure, Manage

Course Overview

This five-day course provides you with the skills to build private cloud using VMware® Integrated OpenStack on VMware-proven SDDC. This course builds your VMware Integrated OpenStack installing, configuring, and managing skills through a combination of lecture and hands-on labs. You will learn how to offer IaaS and PaaS with advanced networking and security features to end users using VMware Integrated OpenStack.

Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Describe how VMware Integrated OpenStack fits into the VMware SDDC and its use cases
- List the deployment options and how to install VMware Integrated OpenStack
- Describe the architecture of VMware Integrated OpenStack and its components
- Configure tenancy and manage user authentication
- Integrate with VMware NSX® for vSphere® and VMware NSX-T™ networking platforms
- Deploy and manage virtual machine instances
- Manage containers using VMware Integrated OpenStack with Kubernetes
- Monitor VMware Integrated OpenStack with built-in tools and integrate with VMware vRealize® Operations™ and VMware vRealize® Log Insight™
- Design an auto-scale, multitier application using built-in automation tools
- List the commands, configuration files, log files, and database tables used by VMware Integrated OpenStack components

Target Audience

Cloud architects, systems engineers, data center administrators, and cloud administrators with experience in a service provider or managed services environment.

Prerequisites

This course requires the completion of the following course:

- [VMware vSphere: Install, Configure, Manage \[V6.7\]](#) or equivalent knowledge
- [VMware Integrated OpenStack Fundamentals](#)
- [VMware Network Virtualization Fundamentals](#)

Substantial knowledge of Linux administration and TCP/IP networking is helpful.

Course Delivery Options

- Classroom
- Live Online
- [On-Site](#)
- [On Demand](#)

Product Alignment

- VMware Integrated OpenStack 5.0

Course Modules

- 1 Course Introduction
 - Review course goals
 - Review course objectives
- 2 Introduction to VMware Integrated OpenStack
 - Describe what OpenStack is
 - Describe the services that make up OpenStack
 - Describe what VMware Integrated OpenStack is
 - Describe what NFV is and how VMware Integrated OpenStack fits in
 - Understand the licensing model of VMware Integrated OpenStack
 - Understand the features of VMware Integrated OpenStack
- 3 VMware Integrated OpenStack Deployment
 - Understand the roles of OpenStack Management Server and Ansible
 - List the deployment models
 - Prerequisites for installing VMware Integrated OpenStack
 - Perform a VMware Integrated OpenStack high-availability deployment
 - Patch and upgrade a VMware Integrated OpenStack environment
- 4 VMware Integrated OpenStack Architecture
 - List the VMs deployed after a VMware Integrated OpenStack high-availability installation
 - Understand the overall architecture of a VMware Integrated OpenStack high-availability setup
 - List the VMware Integrated OpenStack services running within each VM
 - Understand the role of each VMware Integrated OpenStack service
 - Understand SSL certificates in VMware Integrated OpenStack
- 5 Keystone Authentication
 - Understand Keystone use cases and services
 - List the features offered by Keystone
 - How to integrate Keystone with LDAP
 - Configuration files, log files, and database tables related to keystone
- 6 Glance Images
 - Understand Glance use cases and services
 - List the features offered by Glance
 - Create flavors and images
 - List the configuration files, log files, and database tables related to Glance
- 7 Networking with Neutron
 - Understand Neutron use cases and services
 - Integrate Neutron with VMware vSphere® Distributed Switch™
 - Integrate Neutron with NSX for vSphere
 - Integrate Neutron with NSX-T
 - List the configuration files, log files, and database tables related to Neutron
- 8 Managing Instances with Nova
 - Understand Nova use cases and services
 - Understand availability zones and host aggregates
 - Understand the concept of tenant VDCs
 - Deploy and manage instances using Nova
 - Resize an instance and view its console logs
 - Configuration and log files related to Nova services
- 9 Cinder Block Storage
 - Understand Cinder use cases and services
 - List the features of Cinder
 - Add a persistent volume to an instance
 - Snapshot and backup Cinder volume
 - List the configuration files, log files, and database tables related to Cinder
- 10 Monitoring with Ceilometer
 - List the Telemetry use cases and services
 - Enable Ceilometer in VMware Integrated OpenStack
 - Monitor instances using Ceilometer
 - Configuration and log files related to Ceilometer service
- 11 Automating with Heat
 - Define Heat use cases and services
 - Build a Heat orchestration template
 - Deploy resources using a Heat orchestration template
- 12 Kubernetes Integration
 - Introduction to Docker and Kubernetes
 - Deploy VMware Integrated OpenStack with Kubernetes
 - Manage containers using Kubernetes

13 Troubleshooting Concepts

- Common issues in VMware Integrated OpenStack
- Tools used to troubleshoot VMware Integrated OpenStack

14 Advanced Features

- LBaaS and its use cases
- FWaaS and its use cases
- DNSaaS and its use cases
- Auto-scaling using Heat
- Using hardware passthrough

Contact

If you have questions or need help registering for this course, click [here](#).



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com
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