Introduction to SUSE Virtualization (Harvester)

Course eHRV101v1.2

This course offers a comprehensive introduction to the SUSE Virtualization hyperconverged (HCI) infrastructure platform. SUSE Virtualization was formerly called Harvester and is referred to as Harvester throughout the course. Beginning with the fundamental concepts of HCI, you will then learn to deploy and configure Harvester clusters. The course covers the most essential aspects of the product, including network and storage configuration, as well as the creation and management of virtual machines within the Harvester environment. Finally, you will learn how to integrate Harvester with Rancher.

Course Information

Delivery Method: eLearning

Course Duration: Approximately 8 hours video content

Course Level: Beginner

Key Objectives

Attendees will be taught the following concepts and skills:

- Deployment of Harvester Clusters
- Configuration of Harvester Clusters
- Configuration of Networking and Storage in Harvester Clusters
- Creation and Management of VMs on Harvester Clusters
- Integration of Harvester Clusters with Rancher

Audience Summary

This course is designed for system administrators and others who are interested in how to deploy and user Harvester.

Course Prerequisites

Attendees should have experience with Linux administration. Experience with virtualization, particularly KVM+Libvirt, is beneficial. Experience with Kubernetes administration is also beneficial.

Course Outline

Section 1: Course Introduction

Section 2: Introduction to Harvester

- Hyperconverged Infrastructure Concepts
- Harvester Features and Functionality

Section 3: Harvester Cluster Deployment

- The Harvester Installation Process
- Harvester Cluster Deployment Preparation
- Harvester Cluster Manual Deployment
- Harvester Cluster Automated Deployment

Section 4: General Harvester Configuration

- Harvester Cluster Node Configuration
- Harvester Addons
- Cluster Monitoring and Metrics
- VM Backup Target Configuration

Section 5: Networking in Harvester

- Overview of Networking in a Harvester Cluster
- Cluster Network Definitions
- Network Configs
- VM Networks

Section 6: Storage in Harvester

- Longhorn Basics
- Dedicated Storage Network
- Storage Volumes
- Storage Expansion
- Storage Classes

Section 7: Virtualization Management with Harvester

- Virtual Machine Management Concepts in Harvester
- Virtual Machine Images
- SSH Keys
- Virtual Machine Creation
- Virtual Machine Cloning
- Cloud Config Templates
- VM Templates
- Hot-plug Volumes
- Live Migration
- Virtual Machine Snapshots
- Virtual Machine Backups

Section 8: Harvester Maintenance, Troubleshooting Tools and Cluster Upgrade

- Harvester Host Management
- Additional Troubleshooting Tools in Harvester
- Support Bundles in Harvester
- Harvester Cluster Upgrade

Section 9: Integrate Harvester with Rancher

- Harvester and Rancher Integration
- Rancher and Harvester Users
- Cloud Credentials
- Cluster Deployment with Rancher onto Harvester
- Application Deployment with Rancher onto Clusters Running on Harvester