

Implementing VMware vSphere on ONTAP

Course Code: IMPVMWAR

Duration: 2 days

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

In this 2 day, instructor led course, you learn how to implement NetApp's Virtual Storage Console by deploying, managing, and protecting a VMware virtual infrastructure in both SAN and NAS environments using ONTAP.

It also covers the implementation details for both traditional datastores and Virtual Volumes using Storage Policy Based Management. Monitoring of both traditional and VVOL performance characteristics are covered in lecture and hands on labs. Updated to align with ONTAP v9.4.

SKILLS COVERED

- Describe the components of NetApp storage and how they integrate into a vSphere environment
- Identify the types of datastores created by the Virtual Storage Console (VSC)
- Explain how VSC provides an automated datastore provisioning capability
- Describe the VVol datastore management process
- Create VVol datastores and VVols
- Identify performance characteristics of VVols using VSC
- Monitor virtual machines with VSC performance dashboard
- List the customer implementations for backup, restore and cloning capability when integrating vSphere with NetApp

WHO SHOULD ATTEND?

NetApp, Cisco or NetApp partner professional services

PRE-REQUISITES

The following training classes or equivalent knowledge are recommended:

- ONTAP Cluster Administration (ONTAP 9.5) (ONTAP9ADM) and ONTAP Data Protection Administration (ONTAP 9.5) (DATAPROT9) OR
- ONTAP Cluster Administration and Data Protection Bundle (ONTAP 9.5) (CDOTDP9)
- VM-VICM

MODULES

Module 1: Overview of ONTAP for vSphere

- NetApp storage in a virtualized environment
- NetApp Unified virtual appliance
- Datastore types that VSC creates

Module 2: Introduction to Virtual Storage Console (VSC)

- Unified virtual appliance (UVA) installation
- UVA key features
- NetApp VSC integration with vCenter
- ONTAP configuration for VSC operation

Module 3: Provisioning Traditional Datastores by Using VSC

- Basic IP networking and datastore considerations
- Creating NFS datastores by using VSC and System Manager
- Using the NFS datastore wizard
- VMFS datastores
- iSCSI VMFS datastores

- FC VMFS datastores

Module 4: Provisioning VVols Datastores by Using VSC

- VVols concepts
- NetApp VASA provider
- Storage policies and profiles
- Managing VVols
- On-Demand moving, copying and restoring of virtual disks

Module 5: Monitoring Performance and Quality of Service (QoS)

- VSC performance dashboards
- NetApp QoS features
- NetApp and VMware QoS use cases

Module 6: Data Protection

- SnapCenter plug-in for VMware vSphere
- Veeam and Commvault backup solutions

Labs:

- Configuring clusters, vCenter and the VSC management interface
- Configuring virtual storage console
- Using VSC to Provision traditional SAN and NAS datastores
- Creating and managing VVols
- Monitoring the performance of datastores and VMs
- Implementing configuration scenarios