

# VMWARE VSPHERE: OPTIMIZE AND SCALE [V7]





**Professional** 

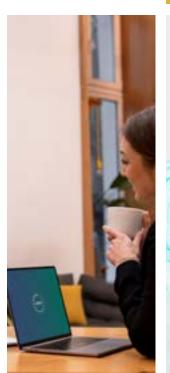
#### Course Duration:

5 Days

#### Course Overview:

This five-day VMware vSphere: Optimize and Scale [V7] training course from CloudThat teaches candidates how to configure and maintain a highly scalable virtual infrastructure. Taking this course helps candidates learn how to configure and optimize the VMware vSphere 7 features.

Candidates attending this VMware certification training course gain in-depth knowledge of vSphere to unleash the benefits of its advanced features and controls for an organization. By enrolling in our VMware vSphere: Optimize and Scale [V7] training program, learners will acquire the necessary skills and knowledge to pass the final exam successfully. Candidates attending our training get access to the authored curriculum and can learn through engaging and interactive sessions delivered by VMware certified in-house trainers.







#### **Product Alignment**

- VMware ESXi 7.0
- VMware vCenter Server 7.0

# Prerequisites

You must complete one of the following prerequisites:

- Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage [V7] course
- Equivalent knowledge and administration experience with ESXi and vCenter Server

Experience with working at the command line is highly recommended

## **Objectives**

Configure and manage vSphere networking and storage for a large and sophisticated enterprise

Use VMware vSphere Client to manage certificates

Use Identity Federation to configure VMware vCenter Server to use external identity sources

Use VMware vSphere Trust Authority to secure the infrastructure for encrypted VMs

Use host profiles to manage VMware ESXi host compliance

Create and manage a content library for deploying virtual machines

Manage VM resource usage with resource pools

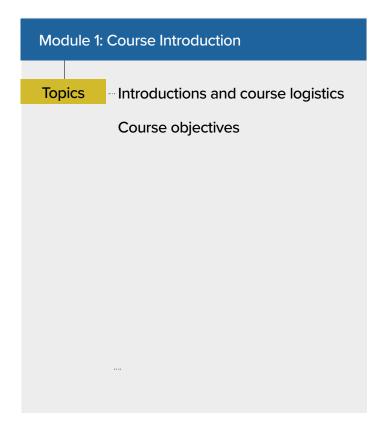
Monitor and analyze key performance indicators for compute, storage, and networking resources for ESXi hosts

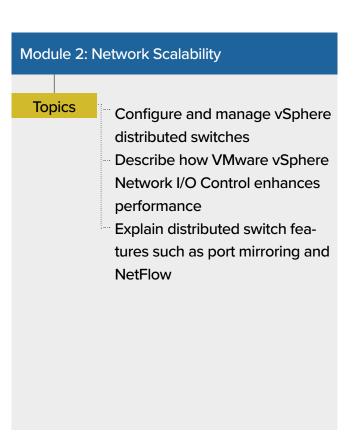
Optimize the performance in the vSphere environment, including vCenter Server

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### **Course Outline**





### **Course Outline**

#### Module 3: Storage Scalability

#### **Topics**

Explain why VMware vSphere VMFS is a high-performance, scalable file system Explain VMware vSphere Storage APIs - Array Integration, VMware vSphere API for Storage Awareness, and vSphere APIs for I/O filtering Configure and assign virtual machine storage policies

Create VMware vSAN storage policies

Recognize components of the VMware vSphere Virtual Volumes architecture

Configure VMware vSphere Storage DRS and VMware vSphere Storage I/O Control

#### Module 5: CPU Optimization

#### **Topics**

- Explain the CPU scheduler operation and other features that affect CPU performance
- Explain NUMA and vNUMA support Use esxtop to monitor key CPU performance metrics

#### Module 4: Host and Management Scalability

#### **Topics**

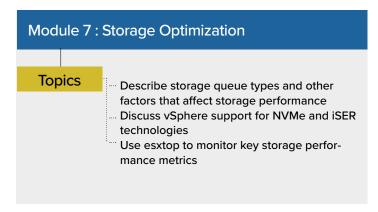
- Use the vSphere Client to manage vSphere certificates
- Describe identity federation and recognize its use cases
- Configure identity federation to allow
- vCenter Server to use external identity provider
- Describe the benefits and use cases of vSphere Trust Authority
- Configure vSphere Trust Authority
- Use host profiles to manage ESXi configuration compliance
- Create a local content library and subscribe to a published content library
- Deploy VMs from a content library
  Create and manage resource pools in a
  cluster
  - Describe how scalable shares work

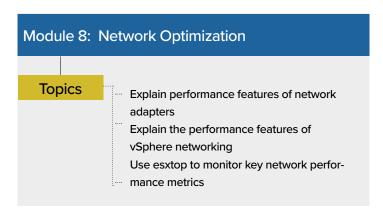
#### Module 6: Memory Optimization

#### **Topics**

- Explain ballooning, memory compression, transparent page sharing, and host-swapping techniques for memory reclamation when memory is overcommitted
- Use esxtop to monitor key memory performance metrics

### **Course Outline**







#### Appendix A: vSphere Auto Deploy

Explain the purpose of VMware vSphere ESXi Image Builder CLI Explain the purpose of VMware vSphere Auto Deploy Describe how an autodeployed ESXi host boots Configure a vSphere Auto Deploy environment

#### Appendix B: vSphere Security

Configure ESXi Host Access and Authentication

Recognize strategies for securing vSphere components, such as vCenter Server, ESXi hosts, and virtual machines

Describe vSphere support for security standards and protocols

Describe virtual machine security features

Describe the components of a VM encryption architecture

Create, manage, and migrate encrypted VMs

**Encrypt core dumps** 

List VM encryption events and alarms

### Who Should Enroll for this Course?

vRealize Operations Cloud customers including experienced system administrators, system integrators, and consultants responsible for designing, implementing, and customizing vRealize Operations.

### About CloudThat

CloudThat is the first company in India to offer Cloud Training & Consulting services for mid-market & enterprise clients from across the globe. Since our inception in 2012, we have trained over 500K+ IT professionals from fortune 500 companies on technologies such cloud, Artificial Intelligence, Machine Learning, IoT, OpenStack, OpenShift, DevOps, MongoDB, Big Data and more.

Through sheer dedication and excellence in the field of cloud training, CloudThat has recently being recognized as **VMware Authorized Training Reseller**. In addition, CloudThat is a proud Microsoft Gold Partner, AWS Advanced Consulting Partner, Google Cloud Platform Partner, and Databricks Partner. Recently, we have won the Microsoft Asia Superstar Campaign for India-2021 for being a global leader in providing cloud training and consultancy services with exemplary track record.

### Our Success Track-

10+ Years of Experience

500K+
Professionals trained

100+

Corporates served

200+

Projects delivered

28+

countries catered

350+

Cloud certifications

To know more about our VMware certification training, email at sales@cloudthat.com or call us at +918880002200.