Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

Arrow ECS, Nidderdale House, Beckwith Knowle, Harrogate, HG3 1SA

Email: educationteam.ecs.uk@arrow.com
Phone: 0870 251 1000

VMware Cloud Director: Install, Configure, Manage [V10.1]

CODE:	LENGTH:	PRICE:
VMW_VCDICM101	40 Hours (5 days)	£3,230.00

Description

In this five-day course, you focus on installing, configuring, and managing VMware Cloud Director™ 10.x. You learn about workload provisioning, the creation of organizations, virtual data centers (VDCs), catalog services that include predefined virtual machines, and on-demand VMware NSX® networks.
This course also covers interfacing VMware Cloud Director with other systems and the integration and use of VMware Cloud Director Availability™. You also learn how to manage multisite, cross-VDC networking, and configuring Central Point of Management (CPOM) to define a Software-defined Data Center (SDDC) for a tenant and provider users of VMware Cloud Director. This course also discusses how to monitor various VMware Cloud Director objects using VMware vRealize® Operations™ and discusses administering tenant facing applications using vRealize® Operations Tenant App™.

Objectives

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

- • Deploy VMware Cloud Director
- • Manage VMware Cloud Director to meet the service provider needs
- • Create and manage VMware Cloud Director organizations and vApps to fulfill business needs
- • Create and manage VMware Cloud Director catalogs
- • Transfer virtual machine workloads from VMware vSphere® into and out of VMware Cloud Director
- • Configure networking for organizations and vApps with the help of VMware NSX-T™ Data Center and VMware NSX® Data Center for vSphere™
- • Discuss customer onboarding scenario using VMware Cloud Availability for on premises-to-cloud workload migration
- • Enable a layer 2 stretched network that spans across multiple VMware Cloud Director sites and organization VDCs within the same site
- • Manage resources from the VMWare Cloud Director console and use VMware vRealize® Operations Manager™
- • Manage a dedicated VMware vCenter Server® and publish proxies to the tenant
- • Onboard developer applications to the tenant using VMware Cloud Director® App Launchpad™
- • Enable VM and Named Disk Encryption
- • Create VM sizing and placement policies

Audience

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

Prerequisites

Completion of the following course is required:

- • VMware vSphere: Install, Configure, Manage or equivalent knowledge

Substantial knowledge of TCP/IP networking is helpful.

Programme

1 Course Introduction

- • Introductions and course logistics
- • Course objectives

2 Software-Defined Data Center and VMware Validated Design

- • Define Software-Defined Data Center
- • Discuss VMware offerings for Cloud-Based Services
- • Understand the main components of the Software- Defined Data Center
- • Discuss the deployment options for vCloud Director

- • Discuss VMware Validated Design™
- • Recognize the design considerations when creating a cloud environment on the SDDC

3 Deploying and Configuring VMware Cloud Director

- • Discuss the deployment options for VMware Cloud Director
- • Explain different deployment options of VMware Cloud Director.
- • Define automatic failover, switchover, and fencing in the VMware Cloud Director appliance
- • Describe the API-only supported features of the VMware Cloud Director appliance
- • Familiarize with the multiple API endpoints of the VMware Cloud Director appliance

4 VMware Cloud Director Provider and Tenant

- • Describe how the compute resources are provided to VMware Cloud Director
- • Describe how storage is provided to VMware Cloud Director
- • Configure and manage storage for Virtual Datacenters (VDCs)
- • Discuss the use of External Networks
- • Describe VMware Cloud Director organizations
- • Describe the purpose of VMware Cloud Director organizations
- • Configure organizations
- • Enumerate organization policies
- • Allocate resources to an organization
- • Discuss Cloud Director organizations
- • Create Cloud Director organizations
- • Understand organization policies
- • How to access an organization using various portals
- • Understand organization VDC
- • Discuss what is linked clone and fast provisioning
- • Explore cross datastore provisioning

5 User Access Control

- • User bundle and role-based access control
- • Describe role-based access
- • Create custom security roles
- • Describe and configure LDAP integration with Active Directory
- • Describe single sign-on
- • Enable a SAML identity provider
- • Describe two-factor authentication
- • Discuss user-bundle and role-based access control

6 Working with Virtual Machines

- • Discuss the use of virtual machines
- • Create a standalone VM
- • Perform VM operations
- • Manage VM properties
- • Discuss the use of App Launchpad
- • Onboard applications using App Launchpad

7 Working with vApps

- • Create and manage vApps
- • Deploy a vApp using various methods
- • Build a vApp using best practices
- • Discuss the vApp lease policies
- • Discuss the implications of deleting a VM that has a named disk attached to it
- • Describe VM encryption
- • Discuss how VMware Cloud Director VMs and disks are encrypted
- • Demonstrate how to use VM sizing and placement policies

8 Managing Catalogs and Templates

- • Explain the purpose of catalogs and how to create a catalog organization.
- • Manage catalogs
- • Share catalogs

- • Discuss vApp templates
- • Describe the purpose and usage of Open Virtualization Format (OVF) and Custom vApp or VM Properties
- • Define Catalog management and sharing catalogs inside and between organizations

9 VMware Cloud Director Networking

- • Discuss Container Service Extension
- • Discuss organization VDC networks
- • List the types of organization VDC networks
- • Describe the edge gateway services
- • Explain NSX Datacenter for vSphere architecture
- • Discuss NSX-T Datacenter architecture
- • List the enhanced VMware NSX-T Data Center supported features of VMware Cloud Director
- • Explore the services offered by the edge services gateway
- • Recognize the sub-allocation IP pool and its use cases
- • Discuss DHCP, NAT, and high availability services on the edge services gateway
- • Recognize SNAT and DNAT use cases
- • Explain load balancing, routing, and distributed firewall services
- • Create and manage vApp networks
- • List the various types of vApp networks
- • Discuss vApp fencing
- • Discuss routed, isolated, and direct vApp networks

10 Advanced Networking

- • Describe the multisite feature in Cloud Director
- • Associate Cloud Director sites
- • Associate organizations
- • Access multiple sites from a single user interface
- • Configure cross-VDC networking and L2 stretched networks
- • Configure data center groups
- • Explain the main usage and purpose of the NSX Migration of Cloud Director tool
- • Explain the environmental prerequisites and how to prepare the edge cluster for bridging

11 Additional Features

- • Discuss multisite deployments
- • Configure cross VDC networking
- • Define SDDC
- • Familiarize with SDDC and SDDC proxy
- • Discuss enhanced CPOM through the tenant portal
- • Discuss architecture for vCloud Availability for vCloud Director
- • Discuss vCloud Availability for vCloud Director portal
- • Review fail-over Virtual Machine options
- • Discuss on premises-to-cloud migration
- • Discuss enhanced CPOM through the tenant portal
- • Integrate vRealize Orchestrator with Cloud Director.
- • Execute Cloud Director workflows using vRealize Orchestrator.
- • Integrate vCloud Availability with Cloud Director
- • Understand Container Service Extension

12 Resource Monitoring and Feature Preview

- • Identify log locations for vCloud Director
- • Manage vSphere resources from vCloud Director
- • Manage cloud resources from vCloud Director
- • Understand monitoring of objects from VMware Cloud Director HTML5 Portal
- • Briefly introduce vRealize Operations Manager
- • Integrate VMware Cloud Director with vRealize Operations Manager
- • Configure Cloud Director Management Pack
- • Understand dashboard, metrics, alerts, alert definition, and reports
- • Introduce VMware vRealize Operations Tenant App

- • Integrate VMware Cloud Director with Tenant App
- • Configure Tenant App with VMware Cloud Director
- • Monitoring and billing objects with Tenant App
- • List the upcoming features

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.