



Arrow ECS Finland Oy - Education Services

TRAINING OFFERING

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CODE:	LENGTH:	PRICE:
VMW_NFVVCD97	40 Hours (5 days)	€3,850.00

Description

This five-day, hands-on training course discusses Network Functions Virtualization (NFV), a network architecture concept that specifies how virtualization technologies can be used to virtualize network service functions. This course also covers interfacing VMware vCloud Director® with other systems using various APIs and the integration and use of VMware vCloud® Availability for vCloud Director®. You will also understand how to manage multisite, cross-VDC (Virtual Data Center) networking for vCloud Director and how to configure Central Point of Management (CPOM) to define a software-defined datacenter (SDDC) for tenant and provider users of vCloud Director. This course also discusses how to monitor various vCloud Director objects using VMware vRealize® Operations™, Tenant vApp, and VMware vRealize® Log Insight™

Objectives

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

- Describe the VMware vCloud® NFV™ architecture
- Describe the vCloud Director architecture as Virtualized Infrastructure Manager (VIM)
- Secure the deployment of multivendor virtual network functions (VNFs) on the vCloud NFV platform
- Manage vCloud Director to support NFV workloads in a secure, multitenant environment
- Configure VMware vSAN™ to enable multiple tiers in provider virtual data centers
- Create and manage vCloud Director organizations and vApps to satisfy business needs
- Create and manage vCloud Director catalogs
- Use advanced services to manage VMware NSX® from vCloud Director

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 [V6.x] or equivalent knowledge

Completion of the following eLearning courses is recommended:

- VMware vCloud Director: Fundamentals [V8.x]
- VMware vSAN and HCI Fundamentals
- VMware Network Virtualization Fundamentals

Substantial knowledge of TCP/IP networking is helpful.

Programme

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|--|---|
| 1 Course Introduction | 2 vCloud NFV Overview |
| • Introductions and course logistics | • Define the benefits of vCloud NFV |
| • Course objectives | • Describe a sample vCloud NFV solution |
| • Describe the vCloud NFV architecture | |
| 3 NFV Infrastructure | |
| • Compare physical and virtual infrastructures | |
| • Describe the advantages and components of the NFV infrastructure (NFVI) | |
| • Explain the role of network virtualization in the NFVI | |
| • Compare physical and virtual infrastructures | |
| • Describe the vSAN architecture and the differences between the vSAN hybrid and all-flash architectures | |
| • Explain the purpose of virtual machine storage policies | |
| • Describe network virtualization with NSX | |

- 4 Virtualized Infrastructure Manager (VIM)
 - Describe the VMware products for the VIM layer
 - Explain basic concepts related to vCloud Director
 - Describe the relationship between provider VDCs (Virtual Data Centers) and organization VDCs
 - Describe how vSAN integrates with vCloud Director
 - Create vSAN storage policies
 - Describe the components and basic configuration of the vCloud Director architecture
 - Create resource pools
- 5 vCloud Providers
 - Describe how compute and storage resources are provided to vCloud Director
 - Describe provider VDC requirements and best practices
 - Create provider VDCs
 - Describe the VNF on-boarding process
- 6 vCloud Director Organizations
 - Describe and create vCloud Director organizations
 - Discuss vCloud Director HTML5 UI
 - Discuss HTML5-based provider portal
 - Discuss tenant portal
 - Discuss the use cases of a vCloud Director organization VDC
 - Discuss organization VDC allocation models
 - Recognize resource allocations for an organization
 - Examine the function and requirements of network pools.
 - Describe the network types available in vCloud Director (external, organization, and vApp)
 - Discuss the organization network types
 - Create and manage organization VDC networks
 - Add a catalog to an organization
 - Populate, share, and publish catalogs
 - Manage access to vApps and catalogs
 - Modify the configuration of vApps and their virtual machines (VMs)
 - Manage organization VDC networking
 - Create affinity and anti-affinity rules
- 7 vCloud Director Security
 - Describe role-based access
 - Create custom security roles
 - Integrate Directory Service with vCloud Director
 - Integrate LDAP, SAML, SSL, Kerberos, and OAuth2 with vCloud Director
 - Configure SSO
- 8 vCloud Director Networking
 - Describe the use and placement of NSX® EdgeTM services gateways in relation to vCloud Director
 - Review routing with the distributed logical router and Edge services gateways in combination with vCloud Director
 - Firewall management in vCloud Director with Edge services gateways and the distributed firewall
 - Architecture of VMware NSX-T™ (Basic)
 - vCloud Director supported features of NSX-T
 - Discuss multisite
 - Configure Cross VDC networking
- 9 Resource Management and Monitoring
 - Manage provider and organization VDCs
 - Manage VMware vCenter Server® instances and VMware ESXi™ hosts
 - Manage vSphere datastores
 - Manage resource pools at the vSphere level
 - Monitor usage information at provider and organization VDCs
 - Use the cell management tool
 - Manage provider VDC and Org-VDC
 - Monitor vCloud Director environments with VMware vRealize® Operations Manager™
 - Monitor vCloud Director environments with vRealize Log Insight
 - Describe the components for NVFI operations management
 - Use VMware vRealize® Business™ for cost management
 - Review historical virtual machine metrics in vCloud Director
 - View vCloud Director logs
- 10 vCloud Extensibility
 - Introduce container service extension
 - Explore vCloud Director CLI
 - Use Python SDK for vApp deployment
 - Discuss Terraform vCloud Director capabilities
 - Use VMware vRealize® Orchestrator™ Plug-in for vCloud Director
- 11 Day 2 Operations
 - Identify log locations for vCloud Director
 - Navigate through vCloud Director logs

Session Dates

Aikataulutamme kiinnostuksen mukaan. [Ota yhteyttä](#)

Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)