

2V0-621D

VMware Certified Professional 6 - Data Center Virtualization Delta



Exam Summary – Syllabus –Questions



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Introduction to 2V0-621D Exam on VMware Certified Professional 6 - Data Center Virtualization Delta

The VMware 2V0-621D exam preparation guide is designed to provide candidates with necessary information about the VCP6-DCV exam. It includes exam summary, sample questions, practice test, objectives and ways to interpret the exam objectives to enable candidates to assess the types of questions-answers that may be asked during the VMware Certified Professional 6 - Data Center Virtualization (VCP6-DCV) exam.

It is recommended for all the candidates to refer the 2V0-621D objectives and sample questions provided in this preparation guide. The VMware VCP6-DCV certification is mainly targeted to the candidates who want to build their career in Data Center Virtualization domain and demonstrate their expertise. We suggest you to use practice exam listed in this cert guide to get used to with exam environment and identify the knowledge areas where you need more work prior to taking the actual VMware Certified Professional 6 - Data Center Virtualization Delta exam.

VMware 2V0-621D Certification Details:

Exam Name	VMware Certified Professional 6 - Data Center Virtualization Delta (VCP6-DCV)
Exam Code	2V0-621D
Exam Price	\$250 USD
Duration	105 minutes
Number of Questions	65
Passing Score	300 / 500
Recommended Training / Books	vSphere: Install, Configure, Manage [V6] vSphere: Optimize and Scale [V6] vSphere: Design & Deploy Fast Track [V6]
Schedule Exam	PEARSON VUE
Sample Questions	VMware 2V0-621D Sample Questions
Recommended Practice	VMware Certified Professional 6 - Data Center Virtualization (VCP6-DCV) Practice Test



VMware 2V0-621D Exam Syllabus:

Section	Objectives
Section 1: Configure and Adm	
Configure and Administer Role- based Access Control	Knowledge: - Compare and contrast propagated and explicit permission assignments - Add/Modify/Remove permissions for users and groups on vCenter Server inventory objects - Determine how permissions are applied and inherited in vCenter Server - Configure VMware Directory Service - Apply a role to a User/Group and to an object or group of objects - Determine the appropriate set of privileges for common tasks in vCenter Server - Compare and contrast default system/sample roles - Determine the correct permissions needed to integrate vCenter Server with other VMware products
	Tools: - vSphere Installation and Setup Guide - vSphere Security Guide - What's New in the VMware vSphere® 6.0 Platform - vSphere Administration with the vSphere Client Guide - vSphere Client / vSphere Web Client
	 Knowledge: Harden virtual machine access 1. Control VM data access 2. Configure virtual machine security policies Harden a virtual machine against Denial-of-Service
Secure ESXi, vCenter Server, and vSphere Virtual Machines	attacks 1. Control VM-VM communications 2. Control VM device connections 3. Configure network security policies - Harden ESXi Hosts 1. Enable/Configure/Disable services in the ESXi firewall 2. Change default account access 3. Add an ESXi Host to a directory service 4. Enable Lockdown Mode



Section	Objectives
	5. Control access to hosts (DCUI/Shell/SSH/MOB)
	- Harden vCenter Server
	 Create/Manage vCenter Server Security Certificates Change default account access Restrict administrative privileges
	Tools: - vSphere Installation and Setup Guide - vSphere Security Guide - What's New in the VMware vSphere® 6.0 Platform - Security of the VMware vSphere® Hypervisor - vSphere Administration with the vSphere Client Guide - VMware Hardened Virtual Appliance Operations Guide added to Tech Resource Directory - vSphere Client / vSphere Web Client
Enable SSO and Active Directory Integration	Knowledge: - Describe SSO architecture and components - Differentiate available authentication methods with VMware vCenter - Perform a multi-site SSO installation - Configure/Manage Active Directory Authentication - Configure/Manage Platform Services Controller (PSC) - Configure/Manage VMware Certificate Authority (VMCA) - Enable/Disable Single Sign-On (SSO) Users Tools: - vSphere Installation and Setup Guide - vSphere Security Guide - What's New in the VMware vSphere® 6.0 Platform - VMware vCenter Server™ 6.0 Deployment Guide - Direct Console User Interface (DCUI) - vSphere Client / vSphere Web Client
Section 2: Configure and Adm	inister Advanced vSphere Networking
Configure Advanced Policies/Features and Verify Network Virtualization	Knowledge: - Explain the behavior of a virtual Distributed Switch (vDS) Auto-Rollback - Determine and configure appropriate port group PVLAN settings for VMs given communication requirements



Section	Objectives
	 Determine physical network connectivity requirements between ESXi Hosts to support vDS deployments Configure LACP on vDS given design parameters Configure vDS across multiple vCenter Servers to support Long Distance vMotion
	Tools: - vSphere Installation and Setup Guide - vSphere Networking Guide - What's New in the VMware vSphere® 6.0 Platform - Leveraging NIC Technology to Improve Network Performance in VMware vSphere - VDS Network Health Check - vSphere Client / vSphere Web Client
Configure Network I/O Control (NIOC)	Knowledge: - Configure NIOC shares/limits based on VM requirements - Explain the behavior of a given NIOC setting - Determine Network I/O Control requirements - Differentiate Network I/O Control capabilities - Enable/Disable Network I/O Control Tools: - vSphere Installation and Setup Guide - vSphere Networking Guide - What's New in the VMware vSphere® 6.0 Platform - Performance Evaluation of Network I/O Control in VMware vSphere 6 - vSphere Client / vSphere Web Client
Section 3: Configure and Adm	ninister Advanced vSphere Storage
Manage vSphere Storage Virtualization	Knowledge: - Configure FC/iSCSI/FCoE LUNs as ESXi boot devices - Enable/Configure/Disable vCenter Server storage filters - Configure/Edit hardware/dependent hardware initiators - Enable/Disable software iSCSI initiator - Configure/Edit software iSCSI initiator settings - Configure iSCSI port binding - Enable/Configure/Disable iSCSI CHAP
	Tools: - vSphere Installation and Setup Guide - vSphere Storage Guide - Best Practices for Running VMware vSphere® on



Section	Objectives
	iSCSI - vSphere Client / vSphere Web Client
Configure Software-defined Storage	Knowledge: - Determine the role of storage providers in VSAN - Determine the role of storage providers in VVOLs - Explain VSAN failure domains functionality - Configure/Manage VMware Virtual SAN - Create/Modify VMware Virtual Volumes (VVOLs) - Enable/Disable Virtual SAN Fault Domains - Create Virtual Volumes given the workload and availability requirements - Create storage policies appropriate for given workloads and availability requirements
	Tools: - Administering VMware Virtual SAN - vSphere Storage Guide - What's New: VMware Virtual SAN 6.0 - What's New in the VMware vSphere® 6.0 Platform - Virtual SAN 6.0 Performance: Scalability and Best Practices - vSphere Client / vSphere Web Client
Configure vSphere Storage Multi-pathing and Failover	Knowledge: - Explain common multi-pathing components - Differentiate APD and PDL states - Understand the effects of a given claim rule on multipathing and failover - Change the Path Selection Policy using the UI - Determine required claim rule elements to change the default PSP - Determine the effect of changing PSP on Multipathing and failover - Determine the effects of changing SATP on relevant device behavior - Configure/Manage Storage Load Balancing - Differentiate available Storage Load Balancing options - Differentiate available Storage Multi-pathing Policies - Configure Storage Policies
	Tools: - vSphere Installation and Setup Guide - vSphere Storage Guide - Multipathing Configuration for Software iSCSI Using



Section	Objectives
	Port Binding - vSphere Client / vSphere Web Client
Perform Advanced VMFS and NFS Configurations and Upgrades	Knowledge: - Upgrade VMFS3 to VMFS5 - Compare functionality of newly created vs. upgraded VMFS5 datastores - Compare and contrast VMFS and NFS datastore properties - Extend/Expand VMFS datastores - Place a VMFS datastore in Maintenance Mode - Select the Preferred Path/Disable a Path to a VMFS datastore - Enable/Disable vStorage API for Array Integration (VAAI) - Given a scenario, determine a proper use case for multiple VMFS/NFS datastores
	Tools: - vSphere Installation and Setup Guide - vSphere Storage Guide - VMware vSphere® Storage APIs – Array Integration (VAAI) - vSphere Client / vSphere Web Client
	Knowledge: - Enable and configure SIOC - Configure/Manage SIOC - Monitor SIOC - Given a scenario, determine a proper use case for SIOC - Compare and contrast the effects of I/O contention in environments with and without SIOC Tools: - Administering VMware Virtual SAN - vSphere Storage Guide - vSphere Resource Management Guide - vSphere Client / vSphere Web Client
Section 4: Upgrade a vSphere	Deployment to 6.x
Perform ESXi Host and Virtual Machine Upgrades	Knowledge: - Configure download source(s) - Stage patches & Extensions - Remediate an object - Upgrade a vSphere Distributed Switch - Upgrade VMware Tools - Upgrade Virtual Machine hardware



Section	Objectives
-	 Stage multiple ESXi Host upgrades Align appropriate baselines with target inventory objects.
	Tools: - vSphere Upgrade Guide - vSphere Virtual Machine Administration Guide - vSphere Client / vSphere Web Client
Perform vCenter Server Upgrades	Knowledge: - Compare the methods of upgrading vCenter Server - Backup vCenter Server database, configuration and certificate datastore - Perform update as prescribed for Appliance or Installable - Upgrade vCenter Server Appliance (vCSA) - Given a scenario, determine the upgrade compatibility of an environment - Determine correct order of steps to upgrade a vSphere implementation
	Tools: - vSphere Installation and Setup Guide - vSphere Upgrade Guide - VMware vCenter Server™ 6.0 Deployment Guide - Command-Line Installation and Upgrade of VMware vCenter Server 6.0 for Windows - Command-Line Installation and Upgrade of VMware vCenter Server Appliance 6.0 - vSphere Client / vSphere Web Client
Section 5: Administer and Ma	nage vSphere 6.x Resources
Configure Advanced/Multilevel Resource Pools	Knowledge: - Determine the effect of the Expandable Reservation parameter on resource allocation - Create a resource pool hierarchical structure - Configure custom resource pool attributes - Determine how resource pools apply to vApps - Create/Remove a Resource Pool - Add/Remove virtual machines from a Resource Pool - Given a scenario, determine appropriate shares, reservations and limits for hierarchical Resource Pools
	Tools: - vSphere Resource Management - vSphere Virtual Machine Administration Guide - What's New in VMware vSphere® Flash Read



Section	Objectives
	Cache® - vSphere Client / vSphere Web Client
Section 6: Backup and Recove	r a vSphere Deployment
Configure and Administer a vSphere Backups/Restore/Replication Solution	Knowledge: - Compare and contrast vSphere Replication compression methods - Differentiate VMware Data Protection capabilities - Explain VMware Data Protection sizing guidelines - Install and Configure VMware Data Protection - Create a backup job with VMware Data Protection - Backup/Restore a virtual machine with VMware Data Protection - Install/Configure/Upgrade vSphere Replication - Configure vSphere Replication for Single/Multiple VMs - Recover a VM using vSphere Replication Tools: - VMware vSphere® Data Protection™ 6.0 - vSphere Data Protection Administration Guide - VMware vSphere® Data Protection™ Evaluation Guide - What's New in the VMware vSphere® 6.0 Platform - VMware vSphere Replication Administration - VDR Data Migration Tool - VDP Configure Utility - vSphere Client / vSphere Web Client
Section 7: Troubleshoot a vSp	here Deployment
Troubleshoot vCenter Server, ESXi Hosts, and Virtual Machines	 Knowledge: Monitor status of the vCenter Server service Perform basic maintenance of a vCenter Server database Monitor status of ESXi management agents Determine ESXi Host stability issues and gather diagnostics information Monitor ESXi system health Locate and analyze vCenter Server and ESXi logs Determine the appropriate Command Line Interface (CLI) command for a given troubleshooting task Troubleshoot common issues, including: 1. vCenter Server service 2. SSO 3. vCenter Server connectivity



Section	Objectives
	 4. Virtual machine resource contention, configuration and operation 5. Platform Services Controller (PSC) 6. Problems with installation 7. VMware Tools installation 8. Fault Tolerant network latency Tools: vSphere Installation and Setup Guide vSphere Troubleshooting Guide vSphere Virtual Machine Administration Guide vSphere Server and Host Management Guide vSphere Monitoring and Performance Guide
	vSphere Security GuidevSphere Client / vSphere Web Client
Troubleshoot vSphere Storage and Network Issues	Knowledge: - Identify and isolate network and storage resource contention and latency issues - Monitor networking and storage resources using vCOPs alerts and all badges - Verify network and storage configuration - Verify a given virtual machine is configured with the correct network resources - Monitor/Troubleshoot Storage Distributed Resource Scheduler (SDRS) issues - Recognize the impact of network and storage I/O control configurations - Recognize a connectivity issue caused by a VLAN/PVLAN - Troubleshoot common issues with: 1. Storage and network 2. Virtual switch and port group configuration 3. Physical network adapter configuration 4. VMFS metadata consistency Tools: - vSphere Networking Guide - vSphere Storage Guide - vSphere Storage Guide - vSphere Server and Host Management Guide - vSphere Client / vSphere Web Client
Troubleshoot vSphere Upgrades	Knowledge: - Collect upgrade diagnostic information - Recognize common upgrade issues with vCenter Server and vCenter Server Appliance



Section	Objectives
-	- Create/Locate/Analyze VMware log bundles - Determine alternative methods to upgrade ESXi Hosts in event of failure - Configure vCenter Server logging options
	Tools: - vSphere Upgrade Guide - vSphere Troubleshooting Guide - vSphere Update Manager Utility - vSphere Client / vSphere Web Client - Update Manager Web Client
Section 8: Deploy and Consoli	date vSphere Data Center
Deploy ESXi Hosts Using Autodeploy	Knowledge: - Utilize Auto Deploy Image Builder VMware PowerCLI scripts - Utilize Host Profile answer files during an Auto Deploy of an ESXi Host - Install and configure Auto Deploy - Explain PowerCLI cmdlets for Auto Deploy - Deploy/Manage multiple ESXi Hosts using Auto Deploy
	Tools: - vSphere Installation and Setup Guide - vSphere Client / vSphere Web Client - Direct Console User Interface (DCUI)
Customize Host Profile Settings	Knowledge: - Edit answer file to customize ESXi Host settings - Modify and apply a storage PSP to a device using host profiles - Modify and apply standard switch configuration across multiple hosts using host profiles - Create/Edit/Remove a Host Profile from an ESXi Host - Import/Export a Host Profile - Attach/Apply a Host Profile to an ESXi Host or cluster - Perform compliance scanning and remediation of an ESXi Hosts and clusters using Host Profiles Tools: - vSphere Installation and Setup Guide - vSphere Client / vSphere Web Client
Section 9: Configure and Adm	inister vSphere Availability Solutions



Section	Objectives	
Configure Advanced vSphere HA Features	Knowledge: - Modify vSphere HA advanced cluster settings - Configure a network for use with HA heartbeats - Apply an admission control policy for HA - Enable/disable advanced vSphere HA settings - Configure different heartbeat datastores for an HA cluster - Apply virtual machine monitoring for a cluster - Configure Virtual Machine Component Protection (VMCP) settings - Explain how vSphere HA communicates with Distributed Resource Scheduler and Distributed Power Management	
	Tools: - vSphere Installation and Setup Guide - vSphere Availability Guide - What's New in the VMware vSphere® 6.0 Platform - vSphere Administration with the vSphere Client Guide - vSphere Client / vSphere Web Client	
Configure Advanced vSphere DRS Features	Knowledge: - Configure VM-Host affinity/anti-affinity rules - Configure VM-VM affinity/anti-affinity rules - Enable/disable Distributed Resource Scheduler (DRS) affinity rules - Configure the proper Distributed Resource Scheduler (DRS) automation level based on a set of business requirements - Explain how DRS affinity rules effect virtual machine placement	
	Tools: - vSphere Installation and Setup Guide - vSphere Administration with the vSphere Client Guide - What's New in the VMware vSphere® 6.0 Platform - vSphere Resource Management Guide - vSphere Client / vSphere Web Client	
Section 10: Administer and Manage vSphere Virtual Machines		
Configure Advanced vSphere Virtual Machine Settings	Knowledge: - Configure virtual machines for vGPUs, DirectPath I/O and SR-IOV - Configure virtual machines for multicore vCPUs - Differentiate virtual machine configuration settings - Interpret virtual machine configuration files (.vmx)	



Section Objectives				
	settings - Enable/disable advanced virtual machine settings			
	Tools: - vSphere Installation and Setup Guide - vSphere Administration with the vSphere Client Guide - vSphere Virtual Machine Administration Guide - vSphere Client / vSphere Web Client			
Create and Manage a Multi-site Content Library	Knowledge: - Publish a content catalog - Subscribe to a published catalog - Determine which privileges are required to global manage a content catalog - Compare the functionality of Automatic sync and On-Demand sync - Configure Content Library to work across sites - Configure Content Library authentication - Set/configure Content Library roles - Add/remove Content Libraries Tools: - vSphere Installation and Setup Guide - vSphere Administration with the vSphere Client Guide - What's New in the VMware vSphere® 6.0 Platforr - vSphere Virtual Machine Administration Guide			

2V0-621D Sample Questions:

01. Which two statements are incorrect regarding vSphere 6.x certificates? (Choose two.)

- **a)** ESXi host upgrades do not preserve the SSL certificate and reissue one from the VMware Certificate Authority (VMCA).
- **b)** ESXi host upgrades preserve the existing SSL certificate
- **c)** ESXi hosts have assigned SSL certificates from the VMware Certificate Authority (VMCA) during install.
- **d)** ESXi hosts have self-signed SSL certificates by default.

02. After configuring Storage I/O controls and setting congestion thresholds, an administrator notices that Storage I/O is not functioning correctly. What could be the cause of this?

- a) VMDKs are larger than 2TB
- **b)** Storage I/O is not licensed
- c) Virtual machines are not enabled for Storage I/O
- d) Two different datastores share the same spindles



03. In vimtop, which key displays the top four physical CPUs?

- **a)** h
- **b)** c
- **c)** g
- **d)** d

04. Which two statements are incorrect regarding iSCSI adapters?

(Choose two.)

- a) Software iSCSI adapters require vmkernel networking.
- **b)** Independent Hardware iSCSI adapters offload processing from the ESXi host.
- c) Dependent Hardware iSCSI adapters do not require vmkernel networking.
- **d)** Independent Hardware iSCSI adapters require vmkernel networking.

05. An administrator attempts to enable jumbo frames on a virtual switch. What is the max MTU size (in bytes) that the administrator can set?

- **a)** 9500
- **b)** 9000
- **c)** 1500
- **d)** 3500

06. When attempting to migrate a virtual machine with a USB device attached the compatibility check fails with the error message:

"Currently connected device 'USB 1' uses backing 'path:1/7/1', which is not accessible". **Which two solutions will resolve the error?**

(Choose two.)

- a) Make sure that the devices are not in the process of transferring data
- **b)** Power down the virtual machine
- c) Re-add and enable vMotion for each affected USB device
- d) vMotion the virtual machine to another host

07. In a Fully Automated Distributed Resource Scheduler (DRS) cluster with vMotion enabled, virtual machines are never migrated. Which three scenarios can cause this situation?

(Choose three.)

- **a)** DRS is disabled on the virtual machine.
- **b)** Moving the virtual machine will violate an affinity rule.
- c) Virtual machine has a local device mounted.
- **d)** Virtual machine is configured with a thin-provisioned virtual disk.
- **e)** Virtual machine has a snapshot.

08. Which of the following steps would you take to support a virtual machine with extremely high network demand?

(Choose two.)

- a) Configure the sched.mem.maxmemctl parameter.
- **b)** Configure NPIV.
- c) Configure an ESXi Host network adapter for passthrough.
- d) Configure DirectPath I/O.



09. A network administrator wants to take advantage of vSphere Network I/O Control 3 (NIOC3). What version must the vSphere Distributed Switch be at to support NIOC3?

- **a)** 6.0
- **b)** 5.5
- **c)** 5.1
- **d)** 5.0

10. When attempting to place a datastore in Maintenance Mode, the task remains at 1%. What are two potential causes for this?

(Choose two.)

- a) Storage DRS is disabled on one or more virtual machine(s) disk(s).
- **b)** Storage DRS rules prevent migration recommendations for the disk.
- c) Storage DRS datastores have insufficient space to accommodate failover.
- **d)** Storage DRS provisioning network has been limited with I/O control policies.

Answers to 2V0-621D Exam Questions:

_	•	•	•	Question: 05 Answer: b
•	_	•		Question: 10 Answer: a, b

Note: If you find any typo or data entry error in these sample questions, we request you to update us by commenting on this page or write an email on feedback@vmexam.com