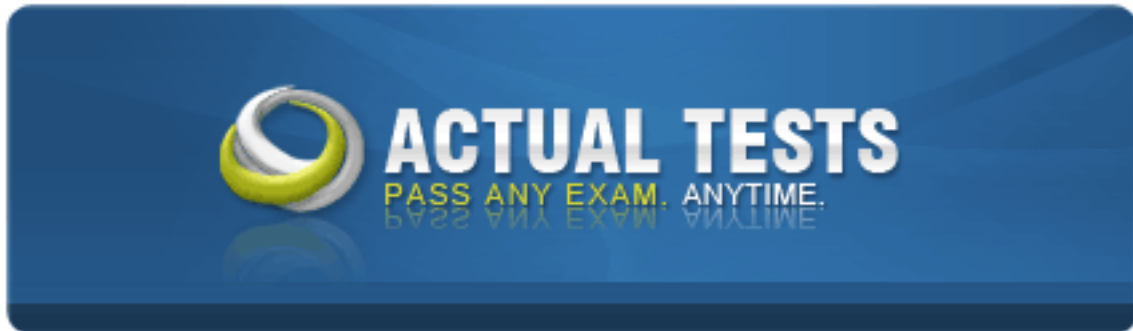# VMware 1V0-601

VMware Certified Associate 6 – Data Center Virtualization Fundamentals Exam

Version: 6.0

QUESTION NO: 1

What are two features of vSphere 6.x that help address the availability challenges that organizations face? (Choose two.)

A. Deploying from Templates
B. Host Profiles
C. High Availability
D. Fault Tolerance

Answer: C,D

Explanation:

VMware vSphere 6 will provide customers with a highly available, resilient, on-demand cloud infrastructure to run, protect and manage any application

VMware vSphere 6 appealing due to the new availability and fault tolerance capabilities for protecting applications on-premises.

Reference:http://www.vmware.com/company/news/releases/vmw-newsfeed/Introducing-VMware-vSphere-6---The-Foundation-for-Hybrid-Cloud/1920294

QUESTION NO: 2

Which two issues do organizations hope to solve with Data Center Virtualization? (Choose two.)

A. High inefficiency of the Data Center
B. High operating expenses
C. Low bandwidth utilization
D. Increased CPU utilization

Answer: A,B

Explanation:

QUESTION NO: 3

Which storage feature allows common management across storage tiers and dynamic storage classes in the Software-Defined Data Center?

A. VMware Certificate Authority
B. NFS
C. Platform Services Controller

D. Storage Policy-Based Management

Answer: D
Explanation: Storage-Policy Based Management
Allows common management across storage tiers and dynamic storage class of service automation via a policy-driven control plane.

Reference:http://www.vmware.com/products/vsphere/features

QUESTION NO: 4

Which vSphere 6.x feature enables you to mitigate the effects of storage latency during peak load periods in a virtualized data center?

A. NFS
B. iSCSI
C. Storage I/O Control
D. Virtual SAN

Answer: D
Explanation:

QUESTION NO: 5

What is the minimum number of virtual NICs that you can configure for a virtual machine?

A. Four
B. One
C. Zero
D. Two

Answer: C
Explanation:

QUESTION NO: 6

Why does iSCSI use hardware and software initiators?

A. To initiate connectivity to hardware and software components
B. To enable storage of data.
C. To obtain native support within ESXi.
D. To establish network connectivity.

Answer: C
Explanation:

QUESTION NO: 7

An administrator is working in a bank that has a highly regulated, secure environment. The bank faces an increasing number of clients, and the administrator is finding II monitor the environment and report any changes.

Which VMware product can help provide a solution?

A. vSphere Hypervisor
B. vRealize Operations Manager
C. Air Watch
D. Virtual SAN

Answer: B
Explanation:

QUESTION NO: 8

Which vSphere 6.x feature allocates available resources among the virtual machines based on pre-defined rules?

A. Storage vMotion
B. Dynamic Resource Scheduler
C. Distributed Power Management
D. vMotion

Answer: B
Explanation: VMware DRS continuously monitors utilization across the resource pools and intelligently allocates available resources among virtual machines based on resource allocation rules that reflect business needs and priorities.
Reference:https://www.vmware.com/pdf/vmware_drs_wp.pdf

QUESTION NO: 9

A network administrator wants reduce the network clutter in his infrastructure and decides to use virtual switches. How can virtual switches help reduce network clutter?

A. By troubleshooting and resolving all the network issues.
B. By reducing the number of physical machines.
C. By reducing the number of physical network cables plugged into hosts.
D. By reducing the virtual network traffic.

Answer: C

Explanation: vSphere supports two main categories of virtual switches. It supports the standard switch and the distributed switch. Both switches help you reduce network clutter by reducing the number of physical network cables plugged into your ESXi hosts.
Reference:http://webpages.uncc.edu/~smcleo12/teaching_portfolio_sterling_mcleod.pdf

QUESTION NO: 10

A consultant is meeting the COO of a new client to help the company consider implementing data center virtualization. The COO asks the consultant to explain the benefits of virtualization.

Which are three benefits of data center virtualization with vSphere 6.x? (Choose three.)

A. It supports automatic software integration.
B. It provides unlimited storage.
C. It delivers high application availability.
D. It helps reduce capital and operating expenditures.
E. It increases IT productivity.

Answer: C,D,E
Explanation:

QUESTION NO: 11

Under what two conditions does Distributed Power Management bring powered-off hosts back online? (Choose two.)

A. When power consumption increase.
B. At the pre-defined time.
C. M When an administrator adds another host to vCenter Server
D. When virtual machine requirements increase.

Answer: B,D

Explanation: bring powered off hosts online once again to meet virtual machine requirements either at a pre-defined time or when it senses virtual machine requirements increasing.

Reference:http://www.vmware.com/files/pdf/VMware-Distributed-Resource-Scheduler-DRS-DS-EN.pdf

QUESTION NO: 12

A company has recently incurred financial loss, due to a crashed server that resulted in the loss of critical data.

Which two vSphere 6.x features should this company implement to protect against losing critical data due to physical server failure? (Choose two.)

A. Virtual Volumes
B. Enhanced vMotion Capability
C. High Availability
D. Fault Tolerance

Answer: C,D

Explanation: VMware HA. The solution in this paper extends the high availability offered by VMware HA by using a feature called VMware Fault Tolerance, which protects mission-critical virtual machines (VMs) from downtime and data loss.

Reference:http://h20195.www2.hp.com/v2/getpdf.aspx/4aa0-4385enw.pdf

QUESTION NO: 13

In what two situations would an administrator use Storage vMotion? (Choose two.)

A. To create new virtual machines in the host.
B. To bring powered-down hosts back online.

C. To select separate locations for the virtual machine disk files.
D. To migrate virtual machines from one datastore to another.

Answer: C,D

Explanation: You can use vMotion to migrate virtual machines to a different host and datastore simultaneously. In addition, unlike Storage vMotion, which requires a single host to have access to both the source and destination datastore, you can migrate virtual machines across storage accessibility boundaries.

Reference:http://pubs.vmware.com/vsphere-
51/index.jsp?topic=%2Fcom.vmware.vsphere.vcenterhost.doc%2FGUID-561681D9-6511-44DF-
B169-F20E6CA94944.html

QUESTION NO: 14

How does fault tolerance provide continuous availability?

A. By providing the availability required by most applications running in virtual machines, independent of the operating system and application running in it.
B. By using a feature called Changed Block Tracking (CBT), which backs up content.
C. By creating and maintaining a secondary virtual machine that is identical to primary machine.
D. By using the host as the medium to provide asynchronous replication of datastores.

Answer: C

Explanation: VMware Fault Tolerance provides continuous availability for virtual machines by creating and maintaining a Secondary VM that is identical to, and continuously available to replace, the Primary VM in the event of a failover situation.

Reference:http://pubs.vmware.com/vsphere-4-esx-
vcenter/index.jsp?topic=/com.vmware.vsphere.availability.doc_41/c_plan_understand_ft.html

QUESTION NO: 15

A network administrator notices that a few virtual machines run slowly every morning. To troubleshoot the issue the administrator needs to analyze the total traffic sent I virtual machines.

Which feature would the administrator use for troubleshooting?

A. Virtual LANs
B. Traffic Shaping
C. NetFlow
D. Port Mirroring

Answer: D

Explanation: This feature is similar to the port mirroring capability available on the physical switches. Network administrators can use this feature to troubleshoot any network related issues in the virtual infrastructure and monitor virtual_machine-to-virtual_machine traffic that is flowing on the same ESXi host. Network administrators use network analyzer tool, which captures traffic, along with the port mirror feature to perform monitoring and troubleshooting activities. In the physical network, depending on where the analyzer or debug tool is placed in the network, network administrators choose different port mirroring options. The following are some of the standard port mirroring options available on physical switches
Reference:http://blogs.vmware.com/vsphere/2012/06/how-to-use-port-mirroring-feature-of-vds-for-monitoring-virtual-machine-traffic.html

QUESTION NO: 16

What does Storage DRS do to determine if a particular disk device is overburdened?

A. Powers down the storage device.
B. Monitors disk I/O latency on the shared storage devices.
C. Takes a count of virtual machines on the storage device.
D. Reads the data on the storage devices.

Answer: B
Reference:http://www.vmware.com/files/pdf/techpaper/vsphere-storage-drs-interoperability.pdf

QUESTION NO: 17

Which feature of vSphere networking restricts the inbound and outbound network bandwidth of a group of virtual machines?

A. Differentiated Services Code Point
B. NetFlow
C. Traffic Shaping
D. Port Mirroring

Answer: C

Explanation: Traffic Shaping

Allows you to restrict the inbound and outbound network bandwidth of a group of virtual machines.

Reference:https://quizlet.com/35738634/vmware-data-center-virtualization-vca-dcv-flash-cards/

QUESTION NO: 18

Which two features would an administrator use to1 migrate virtual machines across a WAN to another site? (Choose two.)

A. Storage vMotion
B. Long Distance vMotion
C. High Availability
D. Cross vSwitchvMotion

Answer: A,B
Reference:https://f5.com/resources/white-papers/enabling-long-distance-live-migration-with-f5-and-vmware-vmotion

QUESTION NO: 19

What is the name of the logical volume that vSphere 6.x uses to store virtual machines files?

A. Virtual Volume
B. Datastore
C. Logical Unit Number (LUN)
D. Raw Device Mapping (RDM)

Answer: B
Explanation:

QUESTION NO: 20

Which two statements are true about local storage? (Choose two.)

A. It requires a compatible Host Bus Adapter in the host.
B. It requires a storage network to communicate with the host.
C. It is a virtual storage.
D. It is a direct-attached storage.

Answer: A,D
Explanation:

QUESTION NO: 21

Which three statements are true regarding VMware NSX? (Choose three.)

A. Requires dedicated network devices.
B. Can handle data across virtual switches.
C. Can handle data across physical switches.
D. Is independent of the underlying network hardware.
E. Has the ability to be deployed on any IP network.

Answer: B,D,E
Reference:https://www.vmware.com/files/pdf/products/nsx/VMware-NSX-Network-Virtualization-Platform-WP.pdf

QUESTION NO: 22

What can an administrator do if they does not want Storage DRS to perform all storage balancing functions?

A. Use automatic mode in Storage DRS
B. Use manual mode in Storage DRS
C. Use Storage vMotion
D. Disable Storage DRS

Answer: B
Reference: http://www.vmware.com/products/vsphere/features/storage-drs.html

QUESTION NO: 23

A company has recently reported a financial loss and has identified that a major part of their expenses is the maintaining and managing of their virtualized network in the data center.

The company needs a solution that would help cut down on their operating expenditures.

What should the company do to solve this issue?

A. Virtualize the physical servers.
B. Implement a management platform for IT services on vSphere and other hypervisors.
C. Remove all physical servers which are not in use.
D. Increase the number of physical servers.

Answer: B
Explanation:

QUESTION NO: 24

After configuring Fault Tolerance for critical servers, an administrate notices that protected virtual machines run slower than usual. What is the reason for performance reduction of these virtual machines?

A. Hosts have lower bandwidth for Fault Tolerance logging.
B. Virtual machines are usually slow after Fault Tolerance logging.
C. The storage space on the host is low.
D. Virtual machines are running memory intensive applications.

Answer: A
Explanation:

QUESTION NO: 25

What are two advantages of Network I/O Control? (Choose two.)

A. Monitors the virtual machine storage.
B. Performs load-based teaming.
C. Enforces network bandwidth limit on the virtual distributed switch.
D. Enforces traffic isolation.

Answer: C,D

Explanation:

QUESTION NO: 26

Which three vSphere 6.x features require a shared storage infrastructure to work properly? (Choose three.)

A. Storage Policy Based Management
B. vSphere Distributed Switch
C. Fault Tolerance
D. Distributed Power Management
E. Dynamic Resource Scheduler

Answer: C,D,E
Explanation:

QUESTION NO: 27

An administrator has finished configuring vSphere HA in their IT environment. Which component does the administrator remove from the infrastructure to save cost?

A. Storage clusters
B. Network stack
C. Dedicated standby hardware
D. Standard switches

Answer: C
Reference:http://www.vmware.com/files/pdf/VMwareHA_twp.pdf

QUESTION NO: 28

Which statement about standard switches is true?

A. Performs Port Mirroring simultaneously for virtual machines in all port groups
B. Performs Port Mirroring for virtual machines in the same port group.
C. Bridges traffic between virtual machines in other port groups.
D. Bridges traffic internally between virtual machines in the same port group.

Answer: D

Explanation: A standard switch can bridge traffic internally between virtual machines in the same port group and link to external networks.

Reference:https://pubs.vmware.com/vsphere-51/index.jsp?topic=%2Fcom.vmware.vsphere.networking.doc%2FGUID-350344DE-483A-42ED-B0E2-C811EE927D59.html

QUESTION NO: 29

Which vSphere 6.x feature would you choose for offsite disaster recovery?

A. Distributed Power Management
B. vSphere HA
C. vSphere Data Protection
D. Dynamic Resource Scheduler

Answer: C
Explanation:

QUESTION NO: 30

An IT administrator working in a space agency has just in installed some applications that are critical for a satellite launch mission. The administrator wants the applications to work irrespective of any operating system failure.

Which vSphere 6.x feature should the administrator use?

A. vSphere HA
B. vSphere Fault Tolerance
C. vSphere Replication
D. vSphere Data Protection

Answer: B
Reference:https://www.vmware.com/files/pdf/vsphere/VMW-WP-vSPHR-Whats-New-6-0-PLTFRM.pdf

QUESTION NO: 31

Which vSphere 6.x storage service provides array-based operations at the virtual disk level?

A. Local storage
B. Virtual Volumes
C. Virtual SAN
D. Datastores

Answer: B

Explanation: vSphere Virtual Volumes simplifies the delivery of storage service levels to applications by providing administrators with finer control of storage resources and data services at the VM level that can be dynamically adjusted in real time.
Reference:http://blogs.vmware.com/storage/2015/02/02/vsphere-virtual-volumes/

QUESTION NO: 32

After creating virtual machine backups using vSphere Data Protection, you decide to perform a simple verification of those backups. Which feature will you use for this?

A. vSphere Replication
B. Changed Block Tracking
C. VMware Tools heartbeat
D. Verification scripts

Answer: C

Explanation: VMware Tools heartbeat, used for simple verification
Reference:http://blogs.vmware.com/vsphere/files/2013/12/ABV_technical_white_paper.pdf

QUESTION NO: 33

VMware vSphere 6.x empowers users with which two capabilities? (Choose two.)

A. Provide advanced availability protection.
B. Virtualize scale-up and scale-out applications.
C. Provide detailed compliance check.

D. Allow self-service file recovery.

Answer: A,B

Explanation: vSphere empowers users to virtualize scale-up and scale-out applications with confidence, redefines availability, and simplifies the virtual data center.
Reference:http://www.vmware.com/products/vsphere

QUESTION NO: 34

Which storage protocol allows administrators to reduce the total number of network ports used in the network environment?

A. Fibre Channel over Ethernet
B. Virtual SAN
C. Fibre Channel
D. Network File System

Answer: A
Explanation:
FCoE: The Fibre Channel traffic is encapsulated into Fibre Channel over Ethernet (FCoE) frames. These FCoE frames are converged with other types of traffic on the Ethernet network. By carrying both Ethernet and Fibre Channel traffic on the same Ethernet link, the utilization of the physical infrastructure has greatly increased. FCoE also reduces the total number of network ports and cabling.

QUESTION NO: 35

What are two features of a resource pool? (Choose two.)

A. Controls the aggregate CPU and memory resources of the DRS cluster.
B. Allocates available resources among the virtual machines.
C. Consolidates workloads to reduce the power consumed by the cluster.
D. Provides easy migration and monitoring.

Answer: A,B
Reference:http://www.vmware.com/files/pdf/drs_datasheet.pdf

QUESTION NO: 36

Which three vSphere 6.x features allow an administrator to perform effective resource management? (Choose three.)

A. DRS
B. vMotion
C. vRealize Operations
D. Storage I/O Control
E. NAS

Answer: A,B,D
Reference:https://www.vmware.com/files/pdf/vsphere/VMW-WP-vSPHR-Whats-New-6-0-PLTFRM.pdf

QUESTION NO: 37

Which two features of vSphere 6.x help address scalability challenges in a data center? (Choose two.)

A. Big Data Extensions
B. Content Library
C. Long Distance vMotion
D. Hot Add

Answer: A,C
Explanation:

QUESTION NO: 38

How does Storage Replication handle data replication without a dedicated link between various storage sites?

A. By using storage I/O control for replication of datastores.
B. By Using the host as a medium to provide asynchronous replication of datastores.
C. By using volume level mirroring.
D. By using storage vMotion.

Answer: D

Explanation: vSphere Storage vMotion Yes You can move the disk files of a replicated virtual machine on the source
Reference:http://pubs.vmware.com/vsphere-replication-
60/topic/com.vmware.ICbase/PDF/vsphere-replication-60-admin.pdf

QUESTION NO: 39

Which two statements about virtual switches in vSphere 6.x virtual networking are true? (Choose two)

A. Monitors metadata about communications that occur in a network.
B. Creates isolated networks for testing and development.
C. Attaches virtual machines to the physical network.
D. Performs load balancing.

Answer: B,C
Reference:https://www.virtualbox.org/manual/ch06.html

QUESTION NO: 40

Which feature helps in managing the power consumed by a cluster when virtual machine usage is low?

A. vMotion
B. Dynamic Resource Scheduler
C. Distributed Power Management
D. Storage vMotion

Answer: C
Reference:http://www.vmware.com/files/pdf/VMware-Distributed-Resource-Scheduler-DRS-DS-EN.pdf

QUESTION NO: 41

What is the network virtualization platform used by a vSphere 6.x Software-Defined Data Center?

A. SRM
B. vSphere Monitoring
C. VMFS
D. NSX

Answer: D

Explanation: VMware NSX is the network virtualization platform for the Software-Defined Data Center (SDDC).
Reference:http://www.vmware.com/products/nsx

QUESTION NO: 42

Which statement best defines the virtual machine hot-add feature?-

A. Administrators can transfer the virtual machines from one physical server to another while the virtual machine is running
B. Administrators can copy-and-paste virtual machines instead of creating them from scratch.
C. Administrators can add and install applications without restarting it.
D. Administrators can increase the capabilities of a virtual machine without powering it off.

Answer: D
Explanation:

QUESTION NO: 43

Where does Fault Tolerance store the primary and secondary virtual machine files?

A. Only local storage
B. Only shared storage
C. Both shared and local storage
D. SSD

Answer: C
Explanation:

QUESTION NO: 44

VMware vSphere 6.x provides which three capabilities? (Choose three.)

A. Data center extension
B. Manage virtual machines with simple and intuitive tools
C. Perform live workload migrations
D. Zero data center clown time
E. Predictive analytics

Answer: B,C,D
Explanation:

QUESTION NO: 45

Which feature of vSphere 6.x enables organizations to move virtual machines across data centers?

A. Long Distance vMotion
B. Content Library
C. Auto Deploy
D. Replication

Answer: A
Explanation: Sphere vMotion capabilities have been enhanced in this release, enabling users to perform live migration of virtual machines across virtual switches, vCenter Server systems, and long distances
Reference:http://www.vmware.com/files/pdf/vsphere/VMW-WP-vSPHR-Whats-New-6-0-PLTFRM.pdf

QUESTION NO: 46

What are two features of vSphere with Operations Management? (Choose two.)

A. Enables proactive identification of system issues through predictive analysis.
B. Allows reclaiming overprovisioned capacity to increase resource utilization.
C. Provides a secure portal for requesting new IT services.
D. Delivers real-time log management.

Answer: A,B

Explanation:

QUESTION NO: 47

Which datastore type can be extended to span several physical storage extents, including storage Area Network LUNs and local storage devices, in order to create a datastore that fits the needs of your virtual machines?

A. Virtual SAN
B. NFS
C. iSCSI
D. VMFS Datastores

Answer: D

Explanation:

QUESTION NO: 48

What are two advantages of using vSphere Data Protection In a data center? (Choose two.)

A. Creates new virtual machines.
B. Migrates virtual machines.
C. Ensures minimum impact on network bandwidth.
D. Provides increased backup data capacity.

Answer: C,D

Explanation:

QUESTION NO: 49

Which statement best defines virtualization?

A. The process of scaling applications and licenses to support multiple hosts
B. The process of moving virtual machines from one .place to another
C. The process of replicating virtual versions of physical components
D. The process of creating virtual versions of physical components

Answer: D

Explanation:

QUESTION NO: 50

Virtual Volumes virtualize-Storage Area Network and Network Attached Storage devices into logical pools of capacity.

What are these pools of capacity known as?

A. Virtual SAN Datastores
B. NFS
C. VMFS Datastores
D. iSCSI

Answer: A

Explanation:

Virtual Volumes virtualizes SAN and NAS devices by abstracting physical hardware resources into logical pools of capacity. These pools of capacity are known as Virtual Datastores. The Virtual Datastore defines capacity boundaries, access logic, and exposes a set of data services accessible to the virtual machines provisioned in the pool. Virtua l Datastores are purely logical constructs that can be configured on the fly, when needed, without disruption and don't require formatting with a fi le system