

CompTIA

Exam Questions CV0-003

CompTIA Cloud+ Certification Exam



NEW QUESTION 1

- (Topic 1)

An organization has two businesses that are developing different software products. They are using a single cloud provider with multiple IaaS instances. The organization identifies that the tracking of costs for each business are inaccurate.

Which of the following is the BEST method for resolving this issue?

- A. Perform segregation of the VLAN and capture egress and ingress values of each network interface
- B. Tag each server with a dedicated cost and sum them based on the businesses
- C. Split the total monthly invoice equally between the businesses
- D. Create a dedicated subscription for the businesses to manage the costs

Answer: B

Explanation:

Tagging each server with a dedicated cost and summing them based on the businesses is the best method for resolving the issue of inaccurate cost tracking for different businesses that use multiple IaaS instances within a single cloud provider. Tagging can help identify and organize the servers based on various criteria, such as name, purpose, owner, or cost center. Tagging can also enable granular and accurate billing and reporting based on the tags. Summing the costs based on the businesses can help allocate and distribute the costs correctly and fairly among the different businesses. References: CompTIA Cloud+ Certification Exam Objectives, page 13, section 2.5

NEW QUESTION 2

- (Topic 1)

Which of the following cloud deployment models allows a company to have full control over its IT infrastructure?

- A. Private
- B. Cloud within a cloud
- C. Hybrid
- D. Public

Answer: A

Explanation:

A private cloud is a type of cloud deployment model that provides cloud services exclusively to a single organization or tenant. A private cloud allows a company to have full control over its IT infrastructure, as it can customize, configure, manage, and secure its own cloud environment according to its specific needs and preferences. A private cloud can also offer higher performance, reliability, and privacy than other cloud deployment models, as it does not share resources or data with other customers.

References: CompTIA Cloud+ Certification Exam Objectives, page 8, section 1.2 Reference: <https://www.sciencedirect.com/topics/computer-science/private-cloud>

NEW QUESTION 3

SIMULATION - (Topic 1)

The QA team is testing a newly implemented clinical trial management (CTM) SaaS application that uses a business intelligence application for reporting. The UAT users were instructed to use HTTP and HTTPS.

Refer to the application dataflow:

- 1A – The end user accesses the application through a web browser to enter and view clinical data.
- 2A – The CTM application server reads/writes data to/from the database server.
- 1B – The end user accesses the application through a web browser to run reports on clinical data.
- 2B – The CTM application server makes a SOAP call on a non-privileged port to the BI application server.
- 3B – The BI application server gets the data from the database server and presents it to the CTM application server.

When UAT users try to access the application using <https://ctm.app.com> or <http://ctm.app.com>, they get a message stating: "Browser cannot display the webpage." The QA team has raised a ticket to troubleshoot the issue.

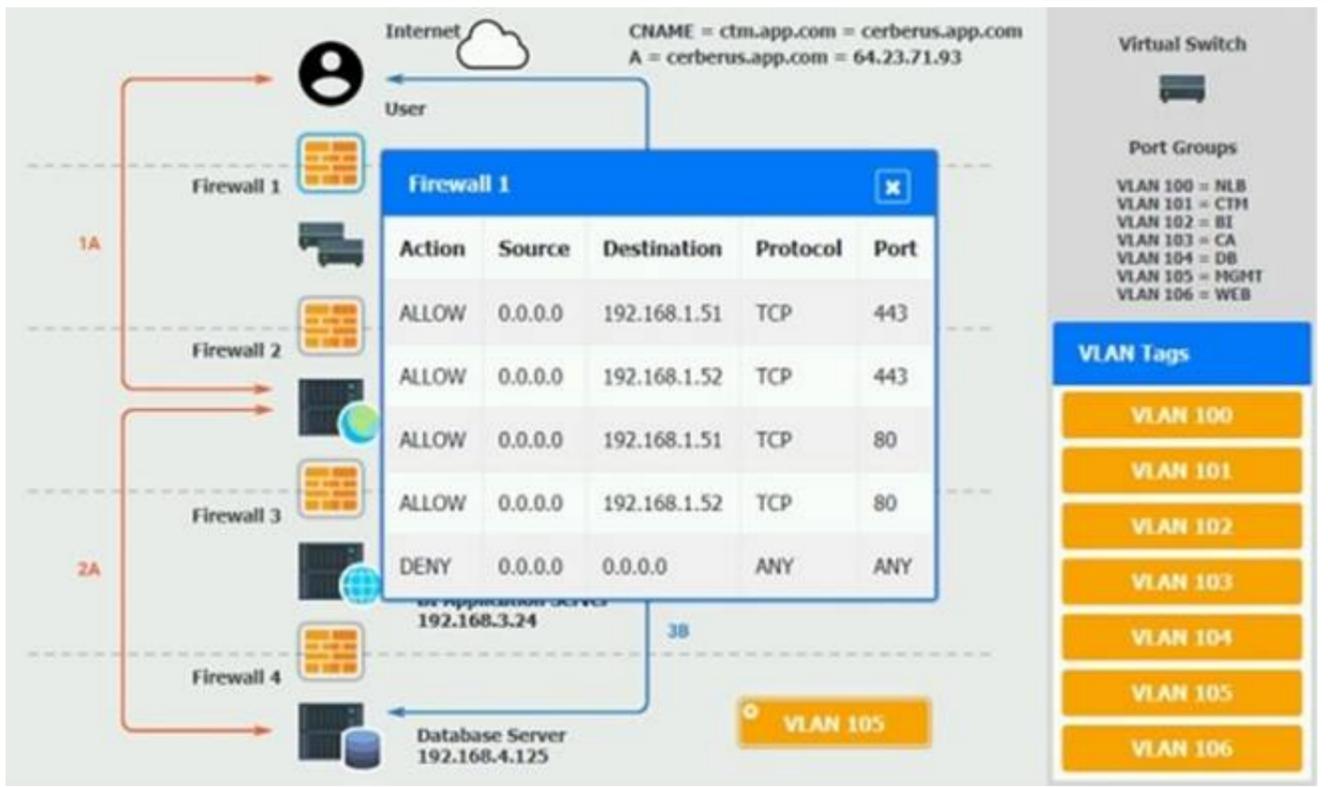
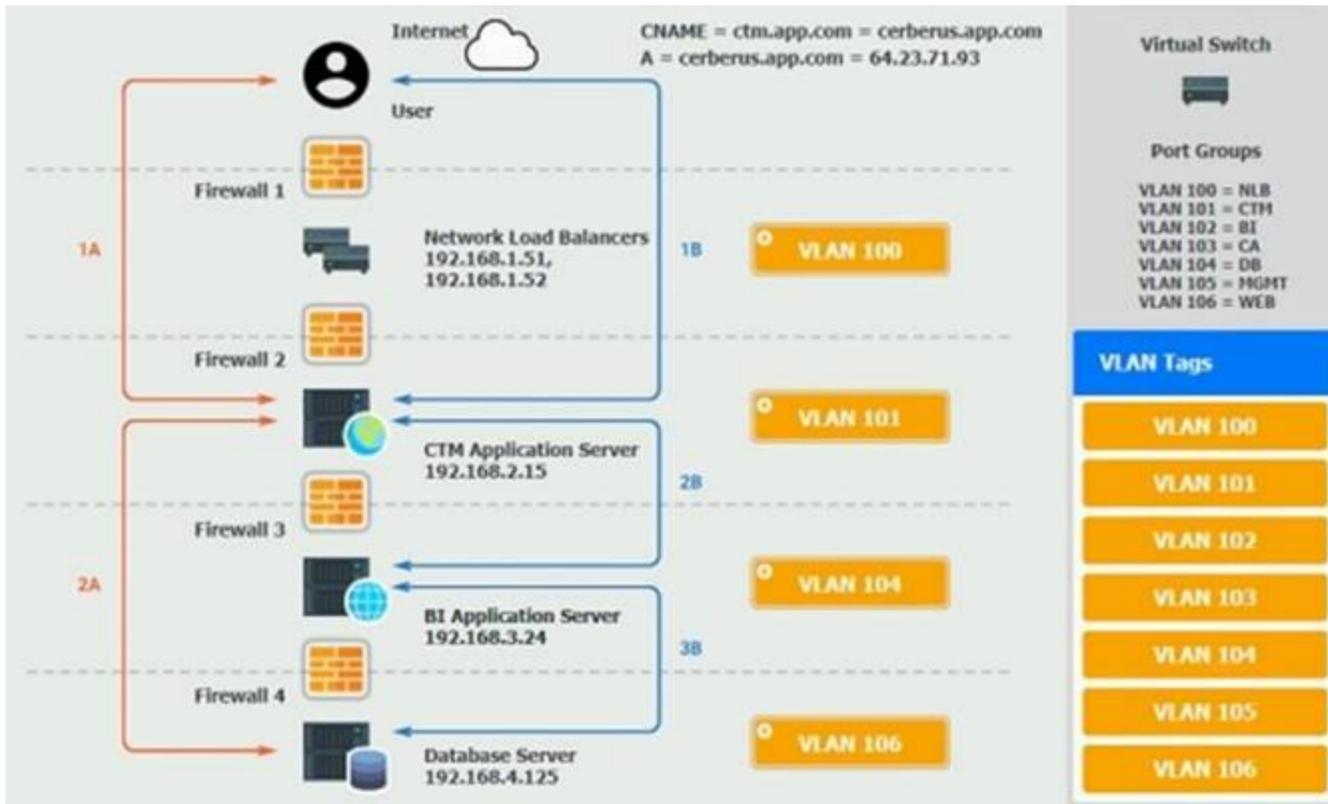
INSTRUCTIONS

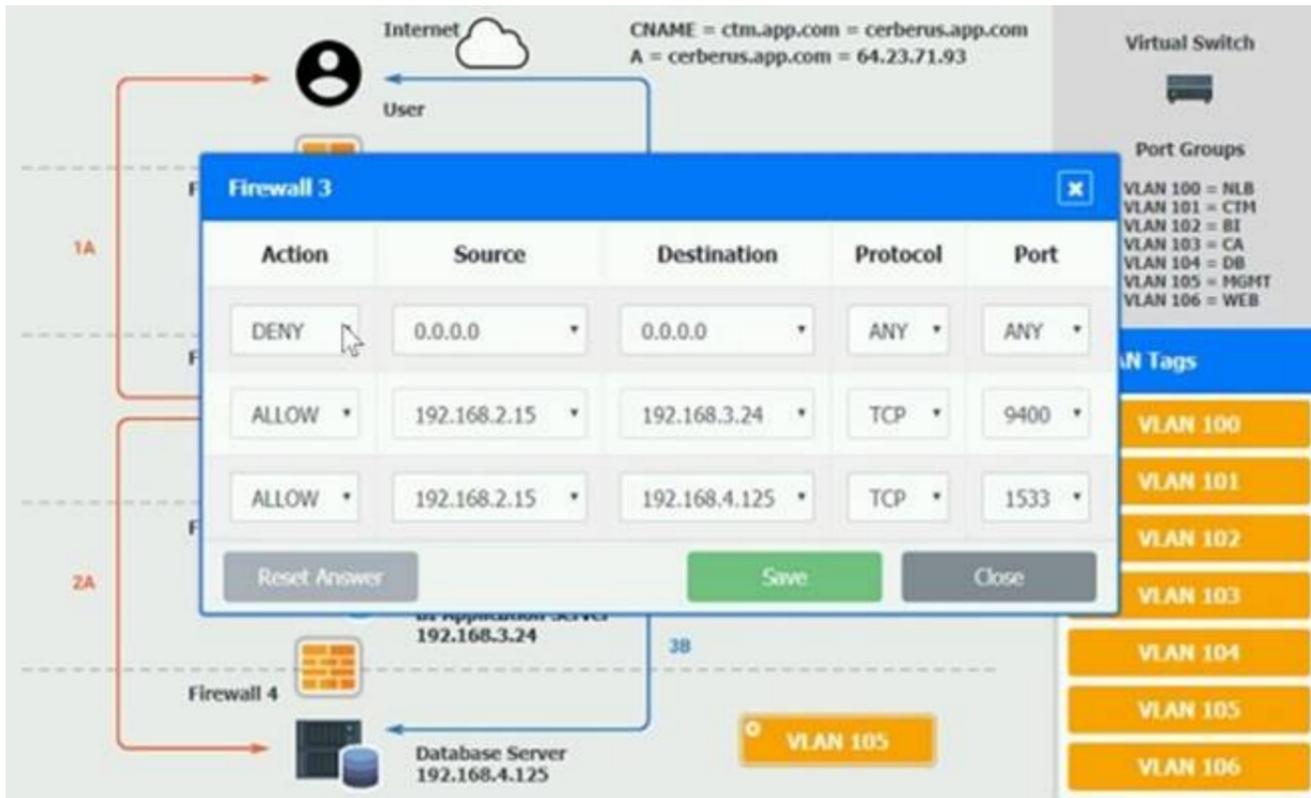
You are a cloud engineer who is tasked with reviewing the firewall rules as well as virtual network settings.

You should ensure the firewall rules are allowing only the traffic based on the dataflow. You have already verified the external DNS resolution and NAT are working.

Verify and appropriately configure the VLAN assignments and ACLs. Drag and drop the appropriate VLANs to each tier from the VLAN Tags table. Click on each Firewall to change ACLs as needed.

If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.





- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

On firewall 3, change the DENY 0.0.0.0 entry to rule 3 not rule 1.

NEW QUESTION 4

- (Topic 1)

Which of the following strategies will mitigate the risk of a zero-day vulnerability MOST efficiently?

- A. Using only open-source technologies
- B. Keeping all resources up to date
- C. Creating a standby environment with a different cloud provider
- D. Having a detailed incident response plan

Answer: D

Explanation:

An incident response plan is a document or procedure that defines the roles, responsibilities, and actions to be taken in the event of a security incident or breach. Having a detailed incident response plan can help mitigate the risk of a zero-day vulnerability most efficiently, as it can provide a clear and consistent framework for identifying, containing, analyzing, and resolving any potential threats or exploits related to the unknown or unpatched vulnerability. Having a detailed incident response plan can also help minimize the impact and damage of a security incident or breach, as it can enable timely and effective recovery and restoration processes. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 5

- (Topic 1)

A systems administrator disabled TLS 1.0 and 1.1, as well as RC4, 3DES, and AES-128 ciphers for TLS 1.2, on a web server. A client now reports being unable to

access the web server, but the administrator verifies that the server is online, the web service is running, and other users can reach the server as well. Which of the following should the administrator recommend the user do FIRST?

- A. Disable antivirus/anti-malware software
- B. Turn off the software firewall
- C. Establish a VPN tunnel between the computer and the web server
- D. Update the web browser to the latest version

Answer: D

Explanation:

Updating the web browser to the latest version is the first action that the user should do when experiencing a connection timeout error after the administrator configured a redirect from HTTP to HTTPS on the web server. Updating the web browser can ensure that it supports the latest security protocols and standards, such as TLS 1.2 or 1.3, which are required for HTTPS connections. If the web browser is outdated or incompatible with the security protocols or standards used by the web server, it may fail to establish a secure connection and result in a connection timeout error. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 6

- (Topic 1)

A DevOps administrator is automating an existing software development workflow. The administrator wants to ensure that prior to any new code going into production, tests confirm the new code does not negatively impact existing automation activities.

Which of the following testing techniques would be BEST to use?

- A. Usability testing
- B. Regression testing
- C. Vulnerability testing
- D. Penetration testing

Answer: B

Explanation:

Regression testing is a type of testing that ensures that new code or changes to existing code do not break or degrade the functionality of the software. Regression testing is often used in software development workflows to verify that new features or bug fixes do not introduce new errors or affect the performance of the software. Regression testing can help prevent negative impacts on existing automation activities by checking that the new code is compatible with the existing code and does not cause any unexpected failures or errors. References: CompTIA Cloud+ Certification Exam Objectives, page 19, section 4.1
Reference: <https://www.softwaretestinghelp.com/regression-testing-tools-and-methods/>

NEW QUESTION 7

- (Topic 1)

An administrator is performing an in-place upgrade on a guest VM operating system.

Which of the following can be performed as a quick method to roll back to an earlier state, if necessary?

- A. A configuration file backup
- B. A full backup of the database
- C. A differential backup
- D. A VM-level snapshot

Answer: D

Explanation:

A VM-level snapshot is a point-in-time copy of the state and data of a virtual machine (VM). A VM-level snapshot can be used as a quick method to roll back to an earlier state, if necessary, as it can restore the VM to the exact condition it was in when the snapshot was taken. A VM-level snapshot can be useful for performing an in-place upgrade on a guest VM operating system, as it can allow the administrator to revert to the previous operating system version in case of any issues or errors. References: CompTIA Cloud+ Certification Exam Objectives, page 10, section 1.5
Reference: <https://cloud.google.com/compute/docs/tutorials/performing-in-place-upgrade-windows-server>

NEW QUESTION 8

- (Topic 1)

A SAN that holds VM files is running out of storage space.

Which of the following will BEST increase the amount of effective storage on the SAN?

- A. Enable encryption
- B. Increase IOPS
- C. Convert the SAN from RAID 50 to RAID 60
- D. Configure deduplication

Answer: D

Explanation:

Deduplication is a type of data compression technique that eliminates redundant or duplicate data blocks or segments in a storage system or device. Configuring deduplication can help increase the amount of effective storage on a SAN that holds VM files and is running out of storage space, as it can reduce the storage space consumption and increase the storage space utilization by storing only unique data blocks or segments. Configuring deduplication can also improve performance and efficiency, as it can speed up data transfer and backup processes and save network bandwidth and power consumption. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

NEW QUESTION 9

- (Topic 1)

The security team for a large corporation is investigating a data breach. The team members are all trying to do the same tasks but are interfering with each other's

work. Which of the following did the team MOST likely forget to implement?

- A. Incident type categories
- B. A calling tree
- C. Change management
- D. Roles and responsibilities

Answer: D

Explanation:

Roles and responsibilities are definitions or descriptions of what each team member or stakeholder is expected to do or perform in a project or process. Roles and responsibilities can help clarify the scope, authority, and accountability of each team member or stakeholder and avoid any confusion or duplication of work. The security team most likely forgot to implement roles and responsibilities when investigating a data breach, as they are all trying to do the same tasks but are interfering with each other's work. Implementing roles and responsibilities can help improve efficiency and effectiveness, as it can ensure that each team member or stakeholder knows what tasks they need to do and how they need to coordinate with others. References: CompTIA Cloud+ Certification Exam Objectives, page 13, section 2.5

NEW QUESTION 10

- (Topic 1)

An organization has the following requirements that need to be met when implementing cloud services:

- ? SSO to cloud infrastructure
- ? On-premises directory service
- ? RBAC for IT staff

Which of the following cloud models would meet these requirements?

- A. Public
- B. Community
- C. Hybrid
- D. Multitenant

Answer: C

Explanation:

A hybrid cloud is a type of cloud deployment model that combines two or more different types of clouds, such as public, private, or community clouds, into a single integrated environment. A hybrid cloud can meet the requirements for implementing cloud services with SSO to cloud infrastructure, on-premises directory service, and RBAC for IT staff, as it can provide flexibility, scalability, and security for cloud-based and on-premises resources. A hybrid cloud can also enable seamless and secure access to cloud infrastructure using SSO with directory service federation, as well as granular and consistent control over IT staff permissions using RBAC across different cloud environments. References: CompTIA Cloud+ Certification Exam Objectives, page 8, section 1.2

NEW QUESTION 10

- (Topic 1)

A systems administrator needs to configure an email client to ensure data integrity of the email messages.

Which of the following provides the BEST mechanism to achieve this goal?

- A. Cyclic redundancy check
- B. SHA-1 hashes
- C. SHA-256 hashes
- D. Digital signature

Answer: D

Explanation:

A digital signature is a type of cryptographic technique that verifies the authenticity, integrity, and non-repudiation of an electronic message or document. A digital signature can help configure an email client to ensure data integrity of the email messages, as it can prove that the email message has not been altered or tampered with during transmission by using a mathematical algorithm to generate a unique code (signature) based on the content and identity of the sender. A digital signature can also help prevent spoofing, phishing, or impersonation attacks, as it can confirm that the email message originates from a legitimate source. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7
Reference: <https://www.fsl.cs.sunysb.edu/docs/integrity-storage05/integrity.html>

NEW QUESTION 12

- (Topic 1)

An organization is hosting a DNS domain with private and public IP ranges. Which of the following should be implemented to achieve ease of management?

- A. Network peering
- B. A CDN solution
- C. A SDN solution
- D. An IPAM solution

Answer: D

Explanation:

An IP address management (IPAM) solution is a type of tool or system that automates and standardizes the allocation, tracking, and management of IP addresses in an IP network. An IPAM solution can help achieve ease of management for hosting a DNS domain with private and public IP ranges, as it can simplify and centralize the process of assigning and updating IP addresses for different DNS records or zones without manual intervention or errors. An IPAM solution can also help optimize DNS performance and security, as it can monitor and report any issues or conflicts related to IP addresses or DNS records. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8
Reference: <https://www.infoblox.com/glossary/ipam-ip-address-management/>

NEW QUESTION 15

- (Topic 1)

A company has decided to get multiple compliance and security certifications for its public cloud environment. However, the company has few staff members to handle the extra workload, and it has limited knowledge of the current infrastructure.

Which of the following will help the company meet the compliance requirements as quickly as possible?

- A. DLP
- B. CASB
- C. FIM
- D. NAC

Answer: B

Explanation:

A cloud access security broker (CASB) is a type of security solution that acts as a gateway between cloud service users and cloud service providers. A CASB can help a company get multiple compliance and security certifications for its public cloud environment, as it can provide visibility, control, and protection for cloud data and applications. A CASB can also help the company handle the extra workload and overcome the limited knowledge of the current infrastructure, as it can automate and simplify the enforcement of security policies and compliance requirements across multiple cloud services. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 19

- (Topic 1)

A company wants to implement business continuity, and the cloud solution architect needs to design the correct solution.

Which of the following will provide the data to measure business continuity? (Choose two.)

- A. A service-level agreement
- B. Automation scripts
- C. Playbooks
- D. A network diagram
- E. A backup and restore
- F. A recovery time objective

Answer: AF

Explanation:

A service-level agreement (SLA) is a contract or document that defines the level of service and performance expected from a service provider or vendor. A recovery time objective (RTO) is a metric that specifies the maximum acceptable time for restoring a system or service after a disruption or outage. Both SLA and RTO can provide the data to measure business continuity, as they can indicate the availability, reliability, and recoverability of a system or service in case of a failure or disaster. SLA and RTO can also help evaluate the effectiveness and efficiency of the business continuity plan and solution. References: CompTIA Cloud+ Certification Exam Objectives, page 20, section 4.2

NEW QUESTION 20

- (Topic 1)

A cloud administrator has built a new private cloud environment and needs to monitor all computer, storage, and network components of the environment.

Which of the following protocols would be MOST useful for this task?

- A. SMTP
- B. SCP
- C. SNMP
- D. SFTP

Answer: C

Explanation:

Simple Network Management Protocol (SNMP) is a protocol that enables monitoring and managing network devices and components in an IP network. SNMP can help monitor all computer, storage, and network components of a private cloud environment, as it can collect and report information about their status, performance, configuration, and events. SNMP can also help troubleshoot and optimize the private cloud environment, as it can detect and alert any issues or anomalies related to the network devices and components. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 23

- (Topic 1)

A systems administrator is configuring RAID for a new server. This server will host files for users and replicate to an identical server. While redundancy is necessary, the most important need is to maximize storage.

Which of the following RAID types should the administrator choose?

- A. 5
- B. 6
- C. 10
- D. 50

Answer: C

Explanation:

RAID 50 is a type of RAID level that combines RAID 5 and RAID 0 to create a nested RAID configuration. RAID 50 consists of two or more RAID 5 arrays that are striped together using RAID 0. RAID 50 can provide redundancy, fault tolerance, and high performance for large data sets. RAID 50 can also maximize storage, as it has a higher usable capacity than other RAID levels with similar features, such as RAID 6 or RAID 10. The administrator should choose RAID 50 to configure a new server that will host files for users and replicate to an identical server, as it can meet the needs of redundancy and storage maximization. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

NEW QUESTION 28

- (Topic 1)

A company wants to check its infrastructure and application for security issues regularly. Which of the following should the company implement?

- A. Performance testing
- B. Penetration testing
- C. Vulnerability testing
- D. Regression testing

Answer: C

Explanation:

Vulnerability testing is a type of testing that identifies and evaluates the weaknesses or flaws in a system or application that could be exploited by attackers. Vulnerability testing can help check the infrastructure and application for security issues regularly, as it can reveal the potential risks and exposures that may compromise the confidentiality, integrity, or availability of the system or application. Vulnerability testing can also help remediate or mitigate the vulnerabilities by providing recommendations or solutions to fix or reduce them. References: CompTIA Cloud+ Certification Exam Objectives, page 19, section 4.1
Reference: <https://pure.security/services/technical-assurance/external-penetration-testing/>

NEW QUESTION 30

- (Topic 1)

A cloud administrator recently deployed an update to the network drivers of several servers. Following the update, one of the servers no longer responds to remote login requests. The cloud administrator investigates the issue and gathers the following information:

- ? The cloud management console shows the VM is running and the CPU and memory utilization is at or near 0%.
- ? The cloud management console does not show an IP address for that server.
- ? A DNS lookup shows the hostname resolves to an IP address.
- ? The server is a member of the same security group as the others.
- ? The cloud administrator is able to log in remotely to the other servers without issue.

Which of the following is the MOST likely cause of the server being unavailable?

- A. The network driver updates did not apply successfully, and the interface is in a down state.
- B. The ACL policy for the server was updated as part of the server reboot, preventing login access.
- C. The server was assigned a new IP address, and DNS entry for the server name was not updated.
- D. The update caused an increase in the output to the logs, and the server is too busy to respond.

Answer: A

NEW QUESTION 35

- (Topic 1)

A systems administrator is creating a playbook to run tasks against a server on a set schedule.

Which of the following authentication techniques should the systems administrator use within the playbook?

- A. Use the server's root credentials
- B. Hard-code the password within the playbook
- C. Create a service account on the server
- D. Use the administrator's SSO credentials

Answer: C

Explanation:

A service account is a type of user account that is created for a specific service or application to run on a server or system. Creating a service account on the server is the best authentication technique to use within the playbook to run tasks against the server on a set schedule, as it can provide secure and consistent access to the server without exposing or hard-coding any sensitive credentials within the playbook. Creating a service account can also help manage and monitor the tasks and activities performed by the service or application on the server. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 37

- (Topic 1)

A systems administrator is troubleshooting performance issues with a Windows VDI environment. Users have reported that VDI performance has been slow since the images were upgraded from Windows 7 to Windows 10.

This VDI environment is used to run simple tasks, such as Microsoft Office. The administrator investigates the virtual machines and finds the following settings:

- ? 4 vCPU
- ? 16GB RAM
- ? 10Gb networking
- ? 256MB frame buffer

Which of the following MOST likely needs to be upgraded?

- A. vRAM
- B. vCPU
- C. vGPU
- D. vNIC

Answer: C

Explanation:

A virtual graphics processing unit (vGPU) is a type of hardware or software that enables a VM to use the physical GPU resources of the host or server for graphics-intensive tasks. Upgrading the vGPU is most likely to solve the issue of VDI performance being slow since the images were upgraded from Windows 7 to Windows 10, as it can provide more graphics processing power and memory for the VMs. Upgrading the vGPU can also improve the user experience and productivity, as it can enhance the display quality and responsiveness of the VDI environment. References: CompTIA Cloud+ Certification Exam Objectives, page 11, section 1.6

NEW QUESTION 39

- (Topic 1)

A global web-hosting company is concerned about the availability of its platform during an upcoming event. Web traffic is forecasted to increase substantially during the next week. The site contains mainly static content.

Which of the following solutions will assist with the increased workload?

- A. DoH
- B. WAF
- C. IPS
- D. CDN

Answer: D

Explanation:

A content delivery network (CDN) is a distributed network of servers that delivers web content to users based on their geographic location, origin server, and content delivery server. A CDN can assist with the increased workload caused by sudden continuous bursts of traffic, as it can reduce the load on the origin server by caching and serving static content from edge servers closer to the users. A CDN can also improve the performance and availability of web content delivery, as it can reduce latency, bandwidth consumption, and network congestion. References: CompTIA Cloud+ Certification Exam Objectives, page 12, section 2.2
Reference: <https://www.globaldots.com/content-delivery-network-explained>

NEW QUESTION 42

- (Topic 1)

An organization will be deploying a web application in a public cloud with two web servers, two database servers, and a load balancer that is accessible over a single public IP.

Taking into account the gateway for this subnet and the potential to add two more web servers, which of the following will meet the minimum IP requirement?

- A. 192.168.1.0/26
- B. 192.168.1.0/27
- C. 192.168.1.0/28
- D. 192.168.1.0/29

Answer: C

Explanation:

A /28 subnet is a subnet that has a network prefix of 28 bits and a host prefix of 4 bits. A /28 subnet can support up to 16 hosts (14 usable hosts) and has a subnet mask of 255.255.255.240. Using a /28 subnet can meet the minimum IP requirement for deploying a web application in a public cloud with two web servers, two database servers, and a load balancer that is accessible over a single public IP, taking into account the gateway for this subnet and the potential to add two more web servers. Using a /28 subnet can provide enough host addresses for the current and future web servers, database servers, load balancer, and gateway, as well as allow for some growth or redundancy.

References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 45

- (Topic 1)

A cloud administrator is designing a multiregion network within an IaaS provider. The business requirements for configuring the network are as follows:

? Use private networking in and between the multisites for data replication.

? Use low latency to avoid performance issues.

Which of the following solutions should the network administrator use within the IaaS provider to connect multiregions?

- A. Peering
- B. Gateways
- C. VPN
- D. Hub and spoke

Answer: A

Explanation:

Peering is a type of network connection that allows two or more networks to exchange traffic directly without using an intermediary or a third-party service. Peering can help connect multiregions within an IaaS provider, as it can enable private networking in and between the multisites for data replication. Peering can also provide low latency, as it can reduce the number of hops and distance between the networks. Peering is the best solution for designing a multiregion network within an IaaS provider to support business requirements. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 48

- (Topic 1)

A company that utilizes an IaaS service provider has contracted with a vendor to perform a penetration test on its environment. The vendor is able to exploit the virtualization layer and obtain access to other instances within the cloud provider's environment that do not belong to the company.

Which of the following BEST describes this attack?

- A. VM escape
- B. Directory traversal
- C. Buffer overflow
- D. Heap spraying

Answer: A

Explanation:

VM escape is a type of attack that allows an attacker to break out of a virtual machine (VM) and access the host system or other VMs within the same cloud provider's environment. VM escape can exploit the vulnerabilities in the virtualization layer or hypervisor that separates and isolates the VMs from each other and from the host system. VM escape can result in serious consequences, such as compromising the security and privacy of other customers' data or resources, gaining unauthorized access to the cloud provider's infrastructure or services, or launching further attacks on other systems or networks. VM escape best describes the attack that was performed by a vendor who was able to exploit the virtualization layer and obtain access to other instances within the cloud provider's environment that do not belong to the company. References: CompTIA Cloud+ Certification Exam Objectives, page 19, section 4.1
Reference: <https://whatistechtarget.com/definition/virtual-machine-escape>

NEW QUESTION 53

- (Topic 1)

A systems administrator needs to configure a set of policies to protect the data to comply with mandatory regulations.

Which of the following should the administrator implement to ensure DLP efficiently prevents the exposure of sensitive data in a cloud environment?

- A. Integrity
- B. Versioning
- C. Classification
- D. Segmentation

Answer: C

Explanation:

Classification is a process of assigning labels or categories to data based on its sensitivity, value, or risk level. Classification can help implement data loss prevention (DLP) policies by identifying which data needs to be protected and how to protect it according to its classification level. Classification can also help comply with mandatory regulations by ensuring that data is handled and stored appropriately based on its legal or contractual requirements. Classification is essential for DLP to efficiently prevent the exposure of sensitive data in a cloud environment. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 54

- (Topic 1)

An organization requires the following to be achieved between the finance and marketing departments:

? Allow HTTPS/HTTP.

? Disable FTP and SMB traffic.

Which of the following is the MOST suitable method to meet the requirements?

- A. Implement an ADC solution to load balance the VLAN traffic
- B. Configure an ACL between the VLANs
- C. Implement 802.1X in these VLANs
- D. Configure on-demand routing between the VLANs

Answer: B

Explanation:

An access control list (ACL) is a set of rules that defines which traffic is allowed or denied between different network segments or devices. An ACL can be used to filter traffic based on various criteria, such as source and destination addresses, ports, protocols, and applications. Configuring an ACL between the VLANs of the finance and marketing departments is the most suitable method to meet the requirements of allowing HTTPS/HTTP and disabling FTP and SMB traffic. An ACL can specify which ports and protocols are permitted or blocked between the VLANs, such as allowing port 80 (HTTP) and port 443 (HTTPS), and denying port 21 (FTP) and port 445 (SMB). References: [CompTIA Cloud+ Certification Exam Objectives], page 15, section 2.8

NEW QUESTION 56

- (Topic 1)

A systems administrator is troubleshooting performance issues with a Windows VDI environment. Users have reported that VDI performance is very slow at the start of the workday, but the performance is fine during the rest of the day. Which of the following is the MOST likely cause of the issue? (Choose two.)

- A. Disk I/O limits
- B. Affinity rule
- C. CPU oversubscription
- D. RAM usage
- E. Insufficient GPU resources
- F. License issues

Answer: AC

Explanation:

Disk I/O limits are restrictions or controls that limit the amount of disk input/output operations per second (IOPS) that a VM can perform on a storage device or system. CPU oversubscription is a situation where more CPU resources are allocated to VMs than are physically available on the host or server. Disk I/O limits and CPU oversubscription are most likely to cause VDI performance being very slow at the start of the workday, but fine during the rest of the day, as they can create bottlenecks or contention for disk and CPU resources when multiple users log in or launch their VDI sessions at the same time, resulting in increased latency or reduced throughput for VDI operations. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

NEW QUESTION 58

- (Topic 1)

A company needs to rehost its ERP system to complete a datacenter migration to the public cloud. The company has already migrated other systems and configured VPN connections.

Which of the following MOST likely needs to be analyzed before rehosting the ERP?

- A. Software
- B. Licensing
- C. Right-sizing
- D. The network

Answer: D

Explanation:

The network is the set of devices, connections, protocols, and configurations that enable communication and data transfer between different systems and applications. The network can affect the rehosting of an ERP system to complete a datacenter migration to the public cloud, as it can influence factors such as bandwidth, latency, availability, security, and compatibility. The network needs to be analyzed before rehosting the ERP system to ensure that the network requirements and specifications are met, the network performance and reliability are maintained or improved, and the network security and integrity are preserved

or enhanced. References: CompTIA Cloud+ Certification Exam Objectives, page 18, section 3.5

NEW QUESTION 59

- (Topic 1)

Which of the following is relevant to capacity planning in a SaaS environment?

- A. Licensing
- B. A hypervisor
- C. Clustering
- D. Scalability

Answer: D

Explanation:

Scalability is the ability of a system or service to handle increased workload or demand by adding or removing resources or capacity as needed. Scalability is relevant to capacity planning in a SaaS environment, as it can affect the performance, availability, and cost of the SaaS service. Scalability can help optimize the capacity planning process by ensuring that the SaaS service has enough resources or capacity to meet the current and future needs of the customers without wasting or underutilizing resources or capacity. References: CompTIA Cloud+ Certification Exam Objectives, page 12, section 2.2

NEW QUESTION 64

- (Topic 1)

A cloud administrator is setting up a DR site on a different zone of the same CSP. The application servers are replicated using the VM replication, and the database replication is set up using log shipping. Upon testing the DR site, the application servers are unable to access the database servers. The administrator has verified the systems are running and are accessible from the CSP portal.

Which of the following should the administrator do to fix this issue?

- A. Change the database application IP
- B. Create a database cluster between the primary site and the DR site
- C. Update the connection string
- D. Edit the DNS record at the DR site for the application servers

Answer: C

Explanation:

A connection string is a parameter that specifies how to connect to a database server or instance. A connection string typically includes information such as the server name, database name, user name, password, and other options. Updating the connection string is the best way to fix the issue of application servers being unable to access the database servers after setting up a DR site on a different zone of the same CSP and replicating the application and database servers using VM replication and log shipping. Updating the connection string can ensure that the application servers can connect to the correct database server or instance in the DR site, as the server name or IP address may have changed after the replication. References: CompTIA Cloud+ Certification Exam Objectives, page 10, section 1.5

NEW QUESTION 65

- (Topic 1)

A media company has made the decision to migrate a physical, internal file server to the cloud and use a web-based interface to access and manage the files. The users must be able to use their current corporate logins.

Which of the following is the MOST efficient way to achieve this goal?

- A. Deploy a VM in a cloud, attach storage, and copy the files across
- B. Use a SaaS service with a directory service federation
- C. Deploy a fileshare in a public cloud and copy the files across
- D. Copy the files to the object storage location in a public cloud

Answer: B

Explanation:

Software as a service (SaaS) is a type of cloud service model that provides software applications over the Internet that are hosted and managed by a cloud service provider. Directory service federation is a type of authentication mechanism that allows users to access multiple systems or applications across different domains or organizations with a single login credential. Using a SaaS service with a directory service federation can help migrate an internal file server to the cloud and use a web-based interface to access and manage the files, as it can eliminate the need for maintaining an on-premises file server and enable seamless and secure access to cloud-based files using the same corporate logins. References: CompTIA Cloud+ Certification Exam Objectives, page 8, section 1.2

NEW QUESTION 69

- (Topic 1)

An IaaS provider has numerous devices and services that are commissioned and decommissioned automatically on an ongoing basis. The cloud administrator needs to implement a solution that will help reduce administrative overhead.

Which of the following will accomplish this task?

- A. IPAM
- B. NAC
- C. NTP
- D. DNS

Answer: A

Explanation:

IP address management (IPAM) is a type of tool or system that automates and standardizes the allocation, tracking, and management of IP addresses in an IP network. IPAM can help reduce administrative overhead for an IaaS provider that has numerous devices and services that are commissioned and decommissioned automatically on an ongoing basis, as it can simplify and centralize the process of assigning and reclaiming IP addresses for different devices and services without manual intervention or errors. IPAM can also help optimize network performance and security, as it can monitor and report any issues or conflicts related to IP

addresses. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8
Reference: <https://www.infoblox.com/glossary/ipam-ip-address-management/>

NEW QUESTION 72

- (Topic 1)

A company recently subscribed to a SaaS collaboration service for its business users. The company also has an on-premises collaboration solution and would like users to have a seamless experience regardless of the collaboration solution being used.

Which of the following should the administrator implement?

- A. LDAP
- B. WAF
- C. VDI
- D. SSO

Answer: D

Explanation:

Single sign-on (SSO) is a type of authentication mechanism that allows users to access multiple systems or applications with a single login credential. SSO can help users have a seamless experience regardless of the collaboration solution being used, as it can eliminate the need for multiple logins and passwords for different systems or applications. SSO can also improve user convenience, productivity, and security, as it can simplify the login process, reduce login errors, and enhance password management. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 73

- (Topic 1)

A systems administrator recently upgraded the processors in a web application host. Upon the next login, the administrator sees a new alert regarding the license being out of compliance.

Which of the following licensing models is the application MOST likely using?

- A. Per device
- B. Per user
- C. Core-based
- D. Volume-based

Answer: C

Explanation:

Core-based licensing is a type of licensing model that charges based on the number of processor cores in a system or server. Core-based licensing is often used by software vendors to align their pricing with the performance and capacity of modern hardware. Core-based licensing can also enable customers to optimize their licensing costs by choosing the appropriate hardware configuration for their needs. Upgrading the processors in a web application host can affect the core-based licensing of the application, as it may increase the number of cores that need to be licensed. This can result in an alert regarding the license being out of compliance if the license is not updated accordingly. References: CompTIA Cloud+ Certification Exam Objectives, page 20, section 4.2

Reference: https://download.microsoft.com/download/3/d/4/3d42bdc2-6725-4b29-b75a-a5b04179958b/percorelicensing_definitions_vlbrief.pdf

NEW QUESTION 78

- (Topic 1)

A VDI administrator has received reports of poor application performance. Which of the following should the administrator troubleshoot FIRST?

- A. The network environment
- B. Container resources
- C. Client devices
- D. Server resources

Answer: A

Explanation:

The network environment is the set of network devices, connections, protocols, and configurations that enable communication and data transfer between different systems and applications. The network environment can affect the performance of a virtual desktop infrastructure (VDI) by influencing factors such as bandwidth, latency, jitter, packet loss, and congestion. Poor network performance can result in slow or unreliable application delivery, degraded user experience, and reduced productivity.

Therefore, troubleshooting the network environment should be the first step for a VDI administrator who receives reports of poor application performance.

References: CompTIA Cloud+ Certification Exam Objectives, page 17, section 3.4

NEW QUESTION 80

- (Topic 2)

A systems administrator is troubleshooting a performance issue with a virtual database server. The administrator has identified the issue as being disk related and believes the cause is a lack of IOPS on the existing spinning disk storage. Which of the following should the administrator do NEXT to resolve this issue?

- A. Upgrade the virtual database server.
- B. Move the virtual machine to flash storage and test again.
- C. Check if other machines on the same storage are having issues.
- D. Document the findings and place them in a shared knowledge base.

Answer: B

Explanation:

Moving the virtual machine to flash storage and testing again is what the administrator should do next to resolve the issue of disk-related performance issue with a virtual database server that has been identified as being caused by a lack of IOPS on the existing spinning disk storage. IOPS (Input/Output Operations Per Second) is a measure of how fast a storage device can read and write data. IOPS can affect performance of a virtual database server by determining how quickly it can access and process data from storage. Spinning disk storage is a type of storage device that uses rotating magnetic disks to store data. Spinning disk storage

has lower IOPS than flash storage, which is a type of storage device that uses solid-state memory chips to store data. Flash storage has higher IOPS than spinning disk storage, which means that it can read and write data faster and more efficiently than spinning disk storage. Moving the virtual machine to flash storage and testing again can help to resolve the issue by increasing the IOPS and improving the performance of the virtual database server.

NEW QUESTION 81

- (Topic 2)

A systems administrator is using a configuration management tool to perform maintenance tasks in a system. The tool is leveraging the target system's API to perform these maintenance tasks. After a number of features and security updates are applied to the target system, the configuration management tool no longer works as expected. Which of the following is the MOST likely cause of the issue?

- A. The target system's API functionality has been deprecated
- B. The password for the service account has expired
- C. The IP addresses of the target system have changed
- D. The target system has failed after the updates

Answer: A

Explanation:

The target system's API (Application Programming Interface) functionality has been deprecated is what will most likely cause the issue of configuration management tool no longer working as expected after using it to perform maintenance tasks in a system using its API, and applying features and security updates to it. An API is a set of rules or specifications that defines how different software components or systems can communicate and interact with each other. An API functionality is a feature or function that an API provides or supports, such as methods, parameters, responses, etc. An API functionality can be deprecated when it is no longer maintained or supported by the API provider or developer, and is replaced or removed by a newer or better functionality. The target system's API functionality has been deprecated can cause the issue by making the configuration management tool unable to use or access the API functionality that it relies on to perform maintenance tasks in the system, which may result in errors or failures.

NEW QUESTION 86

- (Topic 2)

A cloud architect is reviewing four deployment options for a new application that will be hosted by a public cloud provider. The application must meet an SLA that allows for no more than five hours of downtime annually. The cloud architect is reviewing the SLAs for the services each option will use:

Option A		Option B	
VM servers	99.00%	Container hosting	99.90%
Attached block storage	99.99%	Shared network storage	99.90%
Total uptime	99.00%	Total uptime	99.90%
Option C		Option D	
Container deployment services	99.95%	Container application services	99.99%
Attached block storage	99.99%	Shared network storage	99.99%
Total uptime	99.95%	Total uptime	99.99%

Based on the information above, which of the following minimally complies with the SLA requirements?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

Explanation:

Option B is what minimally complies with the SLA (Service Level Agreement) requirements of allowing for no more than five hours of downtime annually for a new application that will be hosted by a public cloud provider. An SLA is a contract or agreement that defines the level of service or performance that a customer expects from a provider, such as availability, reliability, scalability, security, etc. An SLA can help to measure and monitor the quality and satisfaction of service or performance, as well as identify any penalties or rewards for meeting or failing to meet the SLA. Option B minimally complies with the SLA requirements by using services that have availability percentages that are equal to or higher than 99.95%, which translates to no more than five hours of downtime annually. Option B uses services such as:

? Compute: This is a service that provides computing resources such as servers, processors, memory, etc., to run applications or functions. Option B uses compute service with availability percentage of 99.95%, which means that it guarantees to be available for 99.95% of the time in a year, and allows for no more than five hours of downtime in a year.

? Storage: This is a service that provides storage resources such as disks, volumes, files, etc., to store data or information. Option B uses storage service with availability percentage of 99.99%, which means that it guarantees to be available for 99.99% of the time in a year, and allows for no more than one hour of downtime in a year.

? Database: This is a service that provides database resources such as tables, records, queries, etc., to store and retrieve data or information. Option B uses database service with availability percentage of 99.95%, which means that it guarantees to be available for 99.95% of the time in a year, and allows for no more than five hours of downtime in a year.

NEW QUESTION 90

- (Topic 2)

A cloud administrator wants to have a central repository for all the logs in the company's private cloud. Which of the following should be implemented to BEST meet this requirement?

- A. SNMP
- B. Log scrubbing
- C. CMDB
- D. A syslog server

Answer: D

Explanation:

Reference: <https://www.itpro.com/infrastructure/network-internet/355174/how-to-build-a-dedicated-syslog-server>

A syslog server is what the administrator should implement to have a central repository for all the logs in the company's private cloud. Syslog is a standard protocol that allows network devices and systems to send log messages to a centralized server or collector. Syslog can help to consolidate and manage logs from different sources in one place, which can facilitate monitoring, analysis, troubleshooting, auditing, etc.

NEW QUESTION 91

- (Topic 2)

A systems administrator adds servers to a round-robin, load-balanced pool, and then starts receiving reports of the website being intermittently unavailable. Which of the following is the MOST likely cause of the issue?

- A. The network is being saturated.
- B. The load balancer is being overwhelmed.
- C. New web nodes are not operational.
- D. The API version is incompatible.
- E. There are time synchronization issues.

Answer: C

Explanation:

New web nodes are not operational is the most likely cause of the issue of website being intermittently unavailable after adding servers to a round-robin, load-balanced pool. A round-robin, load-balanced pool is a method of distributing network traffic evenly and sequentially among multiple servers or nodes that provide the same service or function. A round-robin, load-balanced pool can help to improve performance, availability, and scalability of network applications or services by ensuring that no server or node is overloaded or underutilized. New web nodes are not operational if they are not configured properly or functioning correctly to provide web service or function. New web nodes are not operational can cause website being intermittently unavailable by disrupting the round-robin, load-balanced pool and creating inconsistency or unreliability in web service or function.

NEW QUESTION 92

- (Topic 2)

A system administrator has provisioned a new web server. Which of the following, in combination, form the best practice to secure the server's OS? (Choose three.)

- A. Install TLS certificates on the server.
- B. Forward port 80 traffic to port 443.
- C. Disable TLS 1.0/1.1 and SSL.
- D. Disable password authentication.
- E. Enable SSH key access only.
- F. Provision the server in a separate VPC.
- G. Disable the superuser/administrator account.
- H. Restrict access on port 22 to the IP address of the administrator's workstation.

Answer: ADE

Explanation:

These are the best practices to secure the OS of a new web server that has been provisioned in a cloud environment:

? Install TLS certificates on the server: TLS (Transport Layer Security) certificates are digital documents that contain information such as identity, public key, expiration date, etc., that can be used to prove one's identity and establish secure communication over a network. Installing TLS certificates on the web server can encrypt and secure web traffic between the server and the clients, as well as prevent spoofing or impersonation attacks.

? Disable password authentication: Password authentication is a method of verifying and authenticating users or devices based on passwords or other credentials. Password authentication can be insecure or vulnerable to attacks such as brute force, dictionary, phishing, etc., especially if passwords are weak, reused, or compromised. Disabling password authentication can enhance security by preventing unauthorized or malicious access to the web server using passwords.

? Enable SSH key access only: SSH key access is a method of verifying and authenticating users or devices based on digital keys issued by a trusted authority. SSH key access can provide more security and convenience than password authentication, as it does not require users or devices to remember or enter passwords every time they access the web server. Enabling SSH key access only can ensure that only authorized or trusted users or devices can access the web server using keys.

NEW QUESTION 96

- (Topic 2)

After announcing a big sales promotion, an e-commerce company starts to experience a slow response on its platform that is hosted in a public cloud. When checking the resources involved, the systems administrator sees the following consumption:

VM	Memory used	CPU used	Network used
webserver01	89%	98%	12%
appserver01	45%	43%	13%
appserver02	43%	44%	15%
database01	55%	50%	60%

Considering all VMs were built from the same templates, which of the following actions should the administrator perform FIRST to speed up the response of the e-commerce platform?

- A. Spin up a new web server
- B. Spin up a new application server
- C. Add more memory to the web server
- D. Spin up a new database server

Answer: D

Explanation:

Spinning up a new web server is what the administrator should perform first to speed up the response of the e-commerce platform that is hosted in a public cloud and starts to experience a slow response after announcing a big sales promotion. A web server is a system or service that hosts and delivers web content, such as web pages, images, videos, etc., to clients over a network or internet connection. A web server can affect the response of an e-commerce platform by determining how fast it can process and serve web requests or responses from clients. Spinning up a new web server can speed up the response of an e-commerce platform by providing benefits such as:

? Scalability: Spinning up a new web server can increase the scalability of the e-commerce platform by adding more capacity or resources to handle the increased demand or load caused by the sales promotion, without affecting the existing web servers.

? Performance: Spinning up a new web server can improve the performance of the e-commerce platform by reducing the latency or overhead of processing and serving web requests or responses from clients, which may cause delays or errors.

NEW QUESTION 100

- (Topic 2)

A cloud administrator is building a new VM for machine-learning training. The developer requesting the VM has stated that the machine will need a full GPU dedicated to it.

Which of the following configuration options would BEST meet this requirement?

- A. Virtual GPU
- B. External GPU
- C. Passthrough GPU
- D. Shared GPU

Answer: C

Explanation:

Reference: <https://blogs.vmware.com/apps/2018/09/using-gpus-with-virtual-machines-on-vsphere-part-2-vmdirectpath-i-o.html>

Passthrough GPU is a configuration option that allows a VM to access a physical GPU directly without any virtualization layer or sharing mechanism. This provides the VM with full and exclusive access to the GPU resources and performance. Passthrough GPU is suitable for applications that require intensive graphics processing or machine learning training.

NEW QUESTION 101

- (Topic 2)

Some VMs that are hosted on a dedicated host server have each been allocated with 32GB of memory. Some of VMs are not utilizing more than 30% of the allocation. Which of the following should be enabled to optimize the memory utilization?

- A. Auto-scaling of compute
- B. Oversubscription
- C. Dynamic memory allocations on guests
- D. Affinity rules in the hypervisor

Answer: C

Explanation:

Enabling dynamic memory allocations on guests is the best option to optimize memory utilization for VMs that have been allocated with 32GB of memory but are not utilizing more than 30% of it. Dynamic memory allocation is a feature that allows a VM to adjust its memory usage according to its workload and demand, without requiring a reboot or manual intervention. Dynamic memory allocation can help to improve memory utilization and efficiency by allocating more memory to VMs that need it and releasing memory from VMs that do not need it.

NEW QUESTION 104

- (Topic 2)

Users of an enterprise application, which is configured to use SSO, are experiencing slow connection times. Which of the following should be done to troubleshoot the issue?

- A. Perform a memory dump of the O
- B. Analyze the memory dump. Upgrade the host CPU to a higher clock speed CPU.
- C. Perform a packet capture during authenticatio
- D. Validate the load-balancing configuration. Analyze the network throughput of the load balancer.
- E. Analyze the storage system IOP
- F. Increase the storage system capacit
- G. Replace the storage system disks to SS
- H. Evaluate the OS ACL
- I. Upgrade the router firmware. Increase the memory of the router.

Answer: B

Explanation:

These are the steps that should be done to troubleshoot the issue of slow connection times for users of an enterprise application that is configured to use SSO (Single Sign-On). SSO is a feature that allows users to access multiple applications or services with one login credential, without having to authenticate separately for each application or service. SSO can improve user experience and security, but it may also introduce performance issues if not configured properly. To troubleshoot the issue, the administrator should perform a packet capture during authentication to analyze the network traffic and identify any delays or errors in the SSO process. The administrator should also validate the load-balancing configuration to ensure that the SSO requests are distributed evenly and efficiently among the available servers or instances. The administrator should also analyze the network throughput of the load balancer to check if there is any congestion or bottleneck that may affect the SSO performance.

NEW QUESTION 108

- (Topic 2)

Users are experiencing slow response times from an intranet website that is hosted on a cloud platform. There is a site-to-site VPN connection to the cloud provider over a link of 100Mbps.

Which of the following solutions will resolve the issue the FASTEST?

- A. Change the connection to point-to-site VPN
- B. Order a direct link to the provider
- C. Enable quality of service
- D. Upgrade the link to 200Mbps

Answer: B

Explanation:

Ordering a direct link to the provider is the fastest solution to resolve the issue of slow response times from an intranet website that is hosted on a cloud platform. A direct link is a dedicated, high-bandwidth, low-latency connection between the customer's network and the cloud provider's network. It bypasses the public internet and provides better performance, security, and reliability. Examples of direct links are AWS Direct Connect, Azure ExpressRoute, Google Cloud Interconnect, etc.

NEW QUESTION 109

- (Topic 2)

A company has an in-house-developed application. The administrator wants to utilize cloud services for additional peak usage workloads. The application has a very unique stack of dependencies.

Which of the following cloud service subscription types would BEST meet these requirements?

- A. PaaS
- B. SaaS
- C. DBaaS
- D. IaaS

Answer: D

Explanation:

IaaS (Infrastructure as a Service) is a cloud service model that provides basic computing resources such as servers, storage, network, etc., to the customers. The customers have full control and flexibility over these resources and can install and configure any software they need on them. IaaS is suitable for applications that have a unique stack of dependencies that may not be supported by other cloud service models.

NEW QUESTION 110

- (Topic 2)

An update is being deployed to a web application, and a systems administrator notices the cloud SQL database has stopped running. The VM is responding to pings, and there were not any configuration changes scheduled for the VM. Which of the following should the administrator check NEXT?

- A. Logs on the VM
- B. Firewall on the VM
- C. Memory on the VM
- D. vGPU performance on the VM

Answer: A

Explanation:

Checking the logs on the VM is the next step that the administrator should take if the cloud SQL database has stopped running after an update deployment. Logs are records of events and activities that occur on a system or application. Logs can provide useful information for troubleshooting and identifying the root cause of an issue. The administrator should look for any errors, warnings, or messages that indicate what happened to the SQL database service and why it stopped running.

NEW QUESTION 111

- (Topic 2)

A private IaaS administrator is receiving reports that all newly provisioned Linux VMs are running an earlier version of the OS than they should be. The administrator reviews the automation scripts to troubleshoot the issue and determines the scripts ran successfully. Which of the following is the MOST likely cause of the issue?

- A. API version incompatibility
- B. Misconfigured script account
- C. Wrong template selection
- D. Incorrect provisioning script indentation

Answer: C

Explanation:

The wrong template selection is the most likely cause of the issue of newly provisioned Linux VMs running an earlier version of OS than they should be in a private IaaS environment. A template is a preconfigured image or blueprint of a VM that contains an OS, applications, settings, etc., that can be used to create new VMs quickly and consistently. A template may have different versions or updates depending on when it was created or modified. If a template is selected incorrectly or not updated properly, it may result in creating VMs with an older or different version of OS than expected.

NEW QUESTION 115

- (Topic 2)

Which of the following cloud services is fully managed?

- A. IaaS
- B. GPU in the cloud
- C. IoT
- D. Serverless compute
- E. SaaS

Answer: E

Explanation:

SaaS (Software as a Service) is a cloud service model that provides fully managed applications to the end users. The users do not have to worry about installing, updating, or maintaining the software, as the cloud provider handles all these tasks. Examples of SaaS are Gmail, Office 365, Salesforce, etc.

NEW QUESTION 116

- (Topic 2)

A technician just received the lessons learned from some recent data that was lost due to an on-premises file-server crash. The action point is to change the backup strategy to minimize manual intervention. Which of the following is the BEST approach for the technician to implement?

- A. Backup as a service
- B. RAID 1
- C. Long-term storage
- D. New backup devices

Answer: A

Explanation:

Backup as a service (BaaS) is the best approach for changing the backup strategy to minimize manual intervention after a data loss due to an on-premises file-server crash. BaaS is a cloud-based service that provides backup and recovery solutions for customers' data and systems. BaaS can automate and simplify backup processes by using cloud storage, encryption, deduplication, compression, scheduling, etc., without requiring customers to purchase or maintain backup hardware or software.

NEW QUESTION 119

- (Topic 2)

A system administrator is migrating a bare-metal server to the cloud. Which of the following types of migration should the systems administrator perform to accomplish this task?

- A. V2V
- B. V2P
- C. P2P
- D. P2V

Answer: D

Explanation:

P2V (Physical to Virtual) is a type of migration that converts a physical server into a virtual machine (VM). P2V migration can help to move a bare-metal server to the cloud by creating an image of its disk and configuration and uploading it to a cloud platform that supports VM creation from custom images.

NEW QUESTION 121

- (Topic 2)

A cloud administrator is setting up a new coworker for API access to a public cloud environment. The administrator creates a new user and gives the coworker access to a collection of automation scripts. When the coworker attempts to use a deployment script, a 403 error is returned. Which of the following is the MOST likely cause of the error?

- A. Connectivity to the public cloud is down.
- B. User permissions are not correct.
- C. The script has a configuration error.
- D. Oversubscription limits have been exceeded.

Answer: B

Explanation:

User permissions are not correct is the most likely cause of the error 403 (Forbidden) that is returned when a coworker attempts to use a deployment script after being set up for API access to a public cloud environment by an administrator. API (Application Programming Interface) is a set of rules or specifications that defines how different software components or systems can communicate and interact with each other. API access is the ability to use or access an API to perform certain actions or tasks on a software component or system. User permissions are the settings or policies that control and restrict what users can do or access on a software component or system. User permissions can affect API access by determining what actions or tasks users can perform using an API on a software component or system. User permissions are not correct if they do not match or align with the intended or expected actions or tasks that users want to perform using an API on a software component or system. User permissions are not correct can cause error 403 (Forbidden), which means that the user does not have the necessary permission or authorization to perform the requested action or task using an API on a software component or system.

NEW QUESTION 126

- (Topic 2)

A systems administrator swapped a failed hard drive on a server with a RAID 5 array. During the RAID resynchronization, a second hard drive failed. Which of the following actions will make the server fully operational?

- A. Restart the RAID resynchronization process
- B. Perform a P2V migration of the server
- C. Swap the failed hard drive with a fresh one
- D. Restore the server from backup

Answer: D

Explanation:

RAID 5 is a disk array configuration that uses parity to provide fault tolerance and data recovery. RAID 5 can tolerate the failure of one disk, but not two or more disks. If a second disk fails during the resynchronization process, the data on the RAID 5 array will be lost and unrecoverable. The only way to make the server fully operational is to restore the data from a backup source.

NEW QUESTION 129

- (Topic 2)

A technician needs to deploy two virtual machines in preparation for the configuration of a financial application next week. Which of the following cloud deployment models should the technician use?

- A. XaaS
- B. IaaS
- C. PaaS
- D. SaaS

Answer: B

Explanation:

IaaS (Infrastructure as a Service) is the cloud deployment model that the technician should use to deploy two virtual machines in preparation for the configuration of a financial application next week. IaaS is a cloud service model that provides basic computing resources such as servers, storage, network, etc., to the customers. The customers have full control and flexibility over these resources and can install and configure any software they need on them. IaaS is suitable for deploying virtual machines, as it allows the customers to choose their preferred OS, applications, settings, etc., and customize them according to their needs.

NEW QUESTION 130

- (Topic 2)

A cloud administrator is responsible for managing a cloud-based content management solution. According to the security policy, any data that is hosted in the cloud must be protected against data exfiltration. Which of the following solutions should the administrator implement?

- A. HIDS
- B. FIM
- C. DLP
- D. WAF

Answer: C

Explanation:

DLP (Data Loss Prevention) is what the administrator should implement to protect data against data exfiltration in a cloud-based content management solution. Data exfiltration is a process of transferring or stealing data from a system or network without authorization or permission. Data exfiltration can cause data breaches, leaks, or losses that may affect confidentiality, integrity, or availability of data. DLP is a tool or service that monitors and controls data movement and usage within a system or network. DLP can help to prevent data exfiltration by detecting and blocking any unauthorized or suspicious data transfers or activities, as well as enforcing policies and rules for data classification, encryption, access, etc.

NEW QUESTION 133

- (Topic 2)

A VDI administrator has received reports from the drafting department that rendering is slower than normal. Which of the following should the administrator check FIRST to optimize the performance of the VDI infrastructure?

- A. GPU
- B. CPU
- C. Storage
- D. Memory

Answer: A

Explanation:

Checking the GPU (Graphics Processing Unit) is the first thing that the VDI administrator should do to optimize the performance of the VDI infrastructure for rendering tasks. GPU is a specialized hardware device that accelerates graphics processing and rendering. GPU can improve the user experience and performance of VDI applications that require intensive graphics processing, such as drafting, gaming, video editing, etc.

NEW QUESTION 135

- (Topic 2)

A cloud administrator is assigned to establish a connection between the on-premises data center and the new CSP infrastructure. The connection between the two locations must be secure at all times and provide service for all users inside the organization. Low latency is also required to improve performance during data transfer operations. Which of the following would BEST meet these requirements?

- A. A VPC peering configuration
- B. An IPSec tunnel
- C. An MPLS connection
- D. A point-to-site VPN

Answer: B

Explanation:

An IPSec tunnel is what would best meet the requirements of establishing a connection between the on-premises data center and the new CSP infrastructure that is secure at all times and provides service for all users inside the organization with low latency. IPSec (Internet Protocol Security) is a protocol that encrypts and secures network traffic over IP networks. IPSec tunnel is a mode of IPSec that creates a virtual private network (VPN) tunnel between two endpoints, such as routers, firewalls, gateways, etc., and encrypts and secures all traffic that passes through it. An IPSec tunnel can meet the requirements by providing:

? Security: An IPSec tunnel can protect network traffic from interception, modification, spoofing, etc., by using encryption, authentication, integrity, etc., mechanisms.

? Service: An IPSec tunnel can provide service for all users inside the organization by allowing them to access and use network resources or services on both ends of the tunnel, regardless of their physical location.

? Low latency: An IPSec tunnel can provide low latency by reducing the number of hops or devices that network traffic has to pass through between the endpoints of the tunnel.

NEW QUESTION 137

- (Topic 2)

A systems administrator is trying to reduce storage consumption. Which of the following file types would benefit the MOST from compression?

- A. System files
- B. User backups
- C. Relational database
- D. Mail database

Answer: B

Explanation:

User backups are the file type that would benefit the most from compression to reduce storage consumption. Compression is a process of reducing the size of data by removing redundant or unnecessary information or using algorithms to encode data more efficiently. Compression can save storage space and bandwidth, but it may also affect the quality or performance of data depending on the compression method and ratio. User backups are typically large files that contain various types of data, such as documents, images, videos, etc., that can be compressed without significant loss of quality or functionality.

NEW QUESTION 140

- (Topic 2)

Which of the following service models would be used for a database in the cloud?

- A. PaaS
- B. IaaS
- C. CaaS
- D. SaaS

Answer: A

Explanation:

PaaS (Platform as a Service) is a cloud service model that provides a platform for developing, testing, deploying, and managing applications in the cloud. PaaS includes the underlying infrastructure (servers, storage, network, etc.) as well as the middleware, databases, tools, frameworks, and APIs that are required for application development and delivery. Examples of PaaS are AWS Elastic Beanstalk, Azure App Service, Google App Engine, etc.

NEW QUESTION 141

- (Topic 2)

A company needs a solution to find content in images. Which of the following technologies, when used in conjunction with cloud services, would facilitate the BEST solution?

- A. Internet of Things
- B. Digital transformation
- C. Artificial intelligence
- D. DNS over TLS

Answer: C

Explanation:

Artificial intelligence (AI) is the technology that, when used in conjunction with cloud services, would facilitate the best solution for finding content in images. AI is a branch of computer science that aims to create machines or systems that can perform tasks that normally require human intelligence, such as reasoning, learning, decision making, etc. AI can be used to analyze images and extract information such as objects, faces, text, emotions, etc., using techniques such as computer vision, machine learning, natural language processing, etc. AI can help to find content in images faster, more accurately, and more efficiently than manual methods.

NEW QUESTION 143

- (Topic 2)

A software development manager is looking for a solution that will allow a team of developers to work in isolated environments that can be spun up and torn down quickly.

Which of the following is the MOST appropriate solution?

- A. Containers
- B. File subscriptions
- C. Ballooning
- D. Software-defined storage

Answer: A

Explanation:

Containers are isolated environments that can run applications and their dependencies without interfering with other processes or systems. Containers are lightweight, portable, and scalable, which makes them ideal for development and testing purposes. Containers can be spun up and torn down quickly using tools such as Docker, Kubernetes, etc.

NEW QUESTION 146

- (Topic 2)

A systems administrator is examining a managed hosting agreement and wants to determine how much data would be lost if a server had to be restored from backups. To which of the following metrics should the administrator refer?

- A. RTO
- B. MTBF
- C. RPO
- D. MTTR

Answer: C

Explanation:

RPO (Recovery Point Objective) is the metric that the administrator should refer to determine how much data would be lost if a server had to be restored from backups. RPO is a metric that measures how much data can be lost or how far back in time a recovery point can be without causing significant impact or damage. RPO can help to determine how much data would be lost by comparing the time of the disruption or disaster with the time of the last backup or snapshot. RPO can also help to determine how frequently backups or snapshots should be performed to minimize data loss.

NEW QUESTION 147

- (Topic 2)

A Chief Information Security Officer (CISO) is evaluating the company's security management program. The CISO needs to locate all the assets with identified deviations and mitigation measures. Which of the following would help the CISO with these requirements?

- A. An SLA document
- B. ADR plan
- C. SOC procedures
- D. A risk register

Answer: D

Explanation:

A risk register is a document that records all the identified risks, their causes, impacts, probabilities, mitigation measures, and status for a project or an organization. A risk register helps to manage and monitor risks throughout their lifecycle and ensure they are addressed appropriately. A risk register would help the CISO to locate all the assets with identified deviations and mitigation measures.

NEW QUESTION 152

- (Topic 2)

An engineer is responsible for configuring a new firewall solution that will be deployed in a new public cloud environment. All traffic must pass through the firewall. The SLA for the firewall is 99.999%. Which of the following should be deployed?

- A. Two load balancers behind a single firewall
- B. Firewalls in a blue-green configuration
- C. Two firewalls in a HA configuration
- D. A web application firewall

Answer: C

Explanation:

Deploying two firewalls in a HA (High Availability) configuration is the best option to ensure all traffic passes through the firewall and meets the SLA (Service Level Agreement) of 99.999%. HA is a design principle that aims to minimize downtime and ensure continuous operation of a system or service. HA can be achieved by using redundancy, failover, load balancing, clustering, etc. Two firewalls in a HA configuration can provide redundancy and failover in case one firewall fails or becomes overloaded.

NEW QUESTION 153

- (Topic 2)

Which of the following would be the BEST option for discussion of what individuals should do in an incident response or disaster recovery scenario?

- A. A business continuity plan
- B. Incident response/disaster recovery documentation
- C. A tabletop exercise
- D. A root cause analysis

Answer: C

Explanation:

A tabletop exercise is the best option for discussion of what individuals should do in an incident response or disaster recovery scenario. A tabletop exercise is a simulated scenario that involves key stakeholders and decision-makers who review and discuss their roles and responsibilities in response to an emergency situation or event. A tabletop exercise can help to test and evaluate plans, procedures, policies, training, and communication.

NEW QUESTION 157

- (Topic 2)

A system administrator supports an application in the cloud, which includes a restful API that receives an encrypted message that is passed to a calculator system. The administrator needs to ensure the proper function of the API using a new automation tool. Which of the following techniques would be BEST for the administrator to use to accomplish this requirement?

- A. Functional testing
- B. Performance testing
- C. Integration testing
- D. Unit testing

Answer: C

Explanation:

Integration testing is the best technique to use to ensure the proper function of an API that receives an encrypted message that is passed to a calculator system. Integration testing is a type of testing that verifies and validates the functionality, performance, and reliability of different components or modules of a system or application when they are combined or integrated together. Integration testing can help to ensure the API can communicate and interact with the calculator system correctly and securely, as well as identify any errors or issues that may arise from the integration.

NEW QUESTION 162

- (Topic 2)

A systems administrator is analyzing a report of slow performance in a cloud application. This application is working behind a network load balancer with two VMs, and each VM has its own digital certificate configured. Currently, each VM is consuming 85% CPU on average. Due to cost restrictions, the administrator cannot scale vertically or horizontally in the environment. Which of the following actions should the administrator take to decrease the CPU utilization? (Choose two.)

- A. Configure the communication between the load balancer and the VMs to use a VPN.
- B. Move the digital certificate to the load balancer.
- C. Configure the communication between the load balancer and the VMs to use HTTP.
- D. Reissue digital certificates on the VMs.
- E. Configure the communication between the load balancer and the VMs to use HTTPS.
- F. Keep the digital certificates on the VMs.

Answer: BC

Explanation:

Moving the digital certificate to the load balancer and configuring the communication between the load balancer and the VMs to use HTTP are two actions that will decrease the CPU utilization of the VMs that are running behind a network load balancer with two VMs, each with its own digital certificate configured. Moving the digital certificate to the load balancer will offload the SSL/TLS encryption and decryption tasks from the VMs to the load balancer, which can reduce the CPU overhead and improve performance. Configuring the communication between the load balancer and the VMs to use HTTP will eliminate the need for encryption and decryption between them, which can also reduce CPU consumption. However, this may introduce security risks if sensitive data is transmitted over HTTP.

NEW QUESTION 166

- (Topic 2)

A systems administrator is deploying a VM and would like to minimize storage utilization by ensuring the VM uses only the storage if needs. Which of the following will BEST achieve this goal?

- A. Compression
- B. Deduplication
- C. RAID
- D. Thin provisioning

Answer: D

Explanation:

Reference: https://docs.vmware.com/en/VMware-vSphere/7.0/com.vmware.vsphere.vm_admin.doc/GUID-4C0F4D73-82F2-4B81-8AA7-1DD752A8A5AC.html
Thin provisioning is the technique that will minimize storage utilization by ensuring the VM uses only the storage it needs. Thin provisioning is a storage allocation method that assigns disk space to a VM on demand, rather than in advance. Thin provisioning can improve storage utilization and efficiency by avoiding overprovisioning and wasting disk space. Thin provisioning can also allow for more flexibility and scalability of storage resources.

NEW QUESTION 169

- (Topic 2)

A company is preparing a hypervisor environment to implement a database cluster. One of the requirements is to share the disks between the nodes of the cluster to access the same LUN. Which of the following protocols should the company use? (Choose two.)

- A. CIFS
- B. FTP
- C. iSCSI
- D. RAID 10
- E. NFS
- F. FC

Answer: CF

Explanation:

These are the protocols that should be used to share the disks between the nodes of a database cluster to access the same LUN (Logical Unit Number). A LUN is an identifier that represents a logical unit of storage, such as a disk, partition, volume, etc., that can be accessed by a host system or device. To share the disks between the nodes of a cluster, the following protocols can be used:

? iSCSI (Internet Small Computer System Interface): This is a protocol that allows SCSI commands to be sent over IP networks. iSCSI can enable block-level storage access over a network, which means that the host system or device can access the storage as if it were a local disk.

? FC (Fibre Channel): This is a protocol that provides high-speed and low-latency data transfer over optical fiber cables. FC can also enable block-level storage access over a network, which means that the host system or device can access the storage as if it were a local disk.

NEW QUESTION 170

- (Topic 2)

A development team recently completed testing changes to a company's web-based CMS in the sandbox environment. The cloud administrator deployed these CMS application changes to the staging environment as part of the next phase in the release life cycle. The deployment was successful, but after deploying the CMS application, the web page displays an error message stating the application is unavailable. After reviewing the application logs, the administrator sees an error message that the CMS is unable to connect to the database. Which of the following is the BEST action for the cloud administrator to perform to resolve the issue?

- A. Modify the deployment script to delete and recreate the database whenever the CMS application is deployed.
- B. Modify the ACL to allow the staging environment to access the database in the sandbox environment.
- C. Modify the CMS application deployment to use the previous version and redeploy the application.
- D. Modify the configuration settings of the CMS application to connect to the database in the current environment.

Answer: D

Explanation:

Modifying the configuration settings of the CMS (Content Management System) application to connect to the database in the current environment is what the

cloud administrator should do to resolve the issue of web page displaying an error message stating the application is unavailable after deploying CMS application changes to the staging environment. A CMS is a software or platform that allows users to create, manage, and publish web content. A CMS may use a database to store and retrieve web content and information. A staging environment is a testing or pre-production environment that simulates the production environment and allows users to verify and validate changes or updates before deploying them to production. Modifying the configuration settings of the CMS application can help to resolve the issue by ensuring that the CMS application can access and communicate with the database in the current environment, rather than using the previous or default settings that may point to a different or non-existent database.

NEW QUESTION 172

- (Topic 2)

A company had a system compromise, and the engineering team resolved the issue after 12 hours. Which of the following information will MOST likely be requested by the Chief Information Officer (CIO) to understand the issue and its resolution?

- A. A root cause analysis
- B. Application documentation
- C. Acquired evidence
- D. Application logs

Answer: A

Explanation:

A root cause analysis is what will most likely be requested by the Chief Information Officer (CIO) to understand the issue and its resolution after a system compromise that was resolved by the engineering team after 12 hours. A root cause analysis is a technique of investigating and identifying the underlying or fundamental cause or reason for an incident or issue that affects or may affect the normal operation or performance of a system or service. A root cause analysis can help to understand the issue and its resolution by providing information such as:

? What happened: This describes what occurred during the incident or issue, such as symptoms, effects, impacts, etc.

? Why it happened: This explains why the incident or issue occurred, such as triggers, factors, conditions, etc.

? How it was resolved: This details how the incident or issue was fixed or mitigated, such as actions, steps, methods, etc.

? How it can be prevented: This suggests how the incident or issue can be avoided or reduced in the future, such as recommendations, improvements, changes, etc.

NEW QUESTION 177

- (Topic 2)

A company needs to migrate the storage system and batch jobs from the local storage system to a public cloud provider. Which of the following accounts will MOST likely be created to run the batch processes?

- A. User
- B. LDAP
- C. Role-based
- D. Service

Answer: D

Explanation:

A service account is what will most likely be created to run the batch processes that migrate the storage system and batch jobs from the local storage system to a public cloud provider. A service account is a special type of account that is used to perform automated tasks or operations on a system or service, such as running scripts, applications, or processes. A service account can provide benefits such as:

? Security: A service account can have limited or specific permissions and roles that are required to perform the tasks or operations, which can prevent unauthorized or malicious access or actions.

? Efficiency: A service account can run the tasks or operations without any human intervention or interaction, which can save time and effort.

? Reliability: A service account can run the tasks or operations consistently and accurately, which can reduce errors or failures.

NEW QUESTION 179

- (Topic 2)

An administrator recently provisioned a file server in the cloud. Based on financial considerations, the administrator has a limited amount of disk space. Which of the following will help control the amount of space that is being used?

- A. Thick provisioning
- B. Software-defined storage
- C. User quotas
- D. Network file system

Answer: C

Explanation:

User quotas are what will help control the amount of space that is being used by a file server in the cloud that has a limited amount of disk space due to financial considerations. User quotas are the limits or restrictions that are imposed on the amount of space that each user can use or consume on a file server or storage device. User quotas can help to control the amount of space that is being used by:

? Preventing or reducing wastage or overuse of space by users who may store unnecessary or redundant files or data on the file server or storage device.

? Ensuring fair and equal distribution or allocation of space among users who may have different needs or demands for space on the file server or storage device.

? Monitoring and managing the usage or consumption of space by users who may need to be notified or alerted when they reach or exceed their quota on the file server or storage device.

NEW QUESTION 181

- (Topic 2)

A company needs to access the cloud administration console using its corporate identity. Which of the following actions would MOST likely meet the requirements?

- A. Implement SSH key-based authentication.
- B. Implement cloud authentication with local LDAP.

- C. Implement multifactor authentication.
- D. Implement client-based certificate authentication.

Answer: D

Explanation:

Implementing client-based certificate authentication is what the administrator should do to access the cloud administration console using corporate identity. Client-based certificate authentication is a method of verifying and authenticating users or devices based on digital certificates issued by a trusted authority. Digital certificates are electronic documents that contain information such as identity, public key, expiration date, etc., that can be used to prove one's identity and establish secure communication over a network. Client-based certificate authentication can allow users or devices to access cloud resources or services using their corporate identity without requiring passwords or other credentials.

NEW QUESTION 186

- (Topic 2)

A systems administrator is about to deploy a new VM to a cloud environment. Which of the following will the administrator MOST likely use to select an address for the VM?

- A. CDN
- B. DNS
- C. NTP
- D. IPAM

Answer: D

Explanation:

IPAM (IP Address Management) is what the administrator will most likely use to select an address for the new VM that is about to be deployed to a cloud environment. IPAM is a tool or service that allows customers to plan, track, and manage the IP addresses and DNS names of their cloud resources or systems. IPAM can help to select an address for the new VM by providing information such as available IP addresses, IP address ranges, subnets, domains, etc., as well as ensuring that the address is unique and valid.

NEW QUESTION 188

- (Topic 2)

A cloud security analyst needs to ensure the web servers in the public subnet allow only secure communications and must remediate any possible issue. The stateful configuration for the public web servers is as follows:

ID	Direction	Protocol	Port	Source	Action
1	inbound	TCP	80	any	allow
2	inbound	TCP	443	any	allow
3	inbound	TCP	3306	any	allow
4	inbound	TCP	3389	any	allow
5	outbound	UDP	53	any	allow
*	both	any	any	any	deny

Which of the following actions should the analyst take to accomplish the objective?

- A. Remove rules 1, 2, and 5.
- B. Remove rules 1, 3, and 4.
- C. Remove rules 2, 3, and 4.
- D. Remove rules 3, 4, and 5.

Answer: A

Explanation:

To ensure the web servers in the public subnet allow only secure communications and remediate any possible issue, the analyst should remove rules 1, 2, and 5 from the stateful configuration. These rules are allowing insecure or unnecessary traffic to or from the web servers, which may pose security risks or performance issues. The rules are:

? Rule 1: This rule allows inbound traffic on port 80 (HTTP) from any source to any destination. HTTP is an unencrypted and insecure protocol that can expose web traffic to interception, modification, or spoofing. The analyst should remove this rule and use HTTPS (port 443) instead, which encrypts and secures web traffic.

? Rule 2: This rule allows outbound traffic on port 25 (SMTP) from any source to any destination. SMTP is a protocol that is used to send email messages. The web servers in the public subnet do not need to send email messages, as this is not their function. The analyst should remove this rule and block outbound SMTP traffic, which may prevent spamming or phishing attacks from compromised web servers.

? Rule 5: This rule allows inbound traffic on port 22 (SSH) from any source to any destination. SSH is a protocol that allows remote access and management of systems or devices using a command-line interface. The web servers in the public subnet do not need to allow SSH access from any source, as this may expose them to unauthorized or malicious access. The analyst should remove this rule and restrict SSH access to specific sources, such as the administrator's workstation or a bastion host.

NEW QUESTION 192

- (Topic 2)

A cloud engineer is responsible for managing a public cloud environment. There is currently one virtual network that is used to host the servers in the cloud environment. The environment is rapidly growing, and the network does not have any more available IP addresses. Which of the following should the engineer do

to accommodate additional servers in this environment?

- A. Create a VPC and peer the networks.
- B. Implement dynamic routing.
- C. Enable DHCP on the networks.
- D. Obtain a new IPAM subscription.

Answer: A

Explanation:

Creating a VPC (Virtual Private Cloud) and peering the networks is the best option to accommodate additional servers in a public cloud environment that has run out of IP addresses. A VPC is a logically isolated section of a cloud provider's network that allows customers to launch and configure their own virtual network resources. Peering is a process of connecting two VPCs together so that they can communicate with each other as if they were in the same network.

NEW QUESTION 197

- (Topic 2)

A cloud administrator set up a link between the private and public cloud through a VPN tunnel. As part of the migration, a large set of files will be copied. Which of the following network ports are required from a security perspective?

- A. 22, 53, 445
- B. 22, 443, 445
- C. 25, 123, 443
- D. 137, 139, 445

Answer: B

Explanation:

These are the network ports that are required from a security perspective to copy a large set of files between the private and public cloud through a VPN tunnel. A VPN (Virtual Private Network) tunnel is a secure and encrypted connection that allows data to be transferred between two networks or locations over the public internet. To copy files between the private and public cloud, the following ports are needed:

? Port 22: This is the port used by SSH (Secure Shell) protocol, which is a method of remotely accessing and managing cloud resources or systems using a command-line interface. SSH can also be used to securely transfer files using SCP (Secure Copy Protocol) or SFTP (SSH File Transfer Protocol).

? Port 443: This is the port used by HTTPS (Hypertext Transfer Protocol Secure), which is a protocol that encrypts and secures web traffic. HTTPS can also be used to transfer files using web browsers or tools such as curl or wget.

? Port 445: This is the port used by SMB (Server Message Block) protocol, which is a protocol that allows file sharing and access over a network. SMB can also be used to transfer files using tools such as robocopy or rsync.

NEW QUESTION 198

- (Topic 2)

Which of the following will provide a systems administrator with the MOST information about potential attacks on a cloud IaaS instance?

- A. Network flows
- B. FIM
- C. Software firewall
- D. HIDS

Answer: D

Explanation:

HIDS (Host-based Intrusion Detection System) is the tool that will provide the administrator with the most information about potential attacks on a cloud IaaS instance. HIDS is a software or agent that monitors and analyzes the activities and events on a host system or device, such as a cloud instance. HIDS can detect and alert on any malicious or anomalous behavior, such as unauthorized access, malware infection, configuration changes, etc., that may indicate an attack or compromise.

NEW QUESTION 203

- (Topic 1)

A web server has been deployed in a public IaaS provider and has been assigned the public IP address of 72.135.10.100. Users are now reporting that when they browse to the website, they receive a message indicating the service is unavailable. The cloud administrator logs into the server, runs a netstat command, and notices the following relevant output:

```
TCP 17.3.130.3:0 72.135.10.100:5500 TIME_WAIT
TCP 17.3.130.3:0 72.135.10.100:5501 TIME_WAIT
TCP 17.3.130.3:0 72.135.10.100:5502 TIME_WAIT
TCP 17.3.130.3:0 72.135.10.100:5503 TIME_WAIT
TCP 17.3.130.3:0 72.135.10.100:5504 TIME_WAIT
```

Which of the following actions should the cloud administrator take to resolve the issue?

- A. Assign a new IP address of 192.168.100.10 to the web server
- B. Modify the firewall on 72.135.10.100 to allow only UDP
- C. Configure the WAF to filter requests from 17.3.130.3
- D. Update the gateway on the web server to use 72.135.10.1

Answer: D

Explanation:

Updating the gateway on the web server to use 72.135.10.1 is the best action to take to resolve the issue of the web server being unavailable after being deployed in a public IaaS provider and assigned the public IP address of 72.135.10.100. Updating the gateway can ensure that the web server can communicate with the

Internet and other networks by using the correct router or device that connects the web server's network to other networks. Updating the gateway can also improve performance and reliability, as it can avoid any routing errors or conflicts that may prevent the web server from responding to remote login requests. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 205

- (Topic 1)

Company A has acquired Company B and is in the process of integrating their cloud resources. Company B needs access to Company A's cloud resources while retaining its IAM solution.

Which of the following should be implemented?

- A. Multifactor authentication
- B. Single sign-on
- C. Identity federation
- D. Directory service

Answer: C

Explanation:

Identity federation is a type of authentication mechanism that allows users to access multiple systems or applications across different domains or organizations with a single login credential. Identity federation can help integrate the cloud resources of Company A and Company B after Company A has acquired Company B, as it can enable seamless and secure access to both companies' cloud resources using the same IAM solution. Identity federation can also improve user convenience, productivity, and security, as it can simplify the login process, reduce login errors, and enhance password management. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

Reference: <https://medium.com/@dinika.15/identity-federation-a-brief-introduction-f2f823f8795a>

NEW QUESTION 209

- (Topic 1)

A systems administrator needs to configure SSO authentication in a hybrid cloud environment.

Which of the following is the BEST technique to use?

- A. Access controls
- B. Federation
- C. Multifactor authentication
- D. Certificate authentication

Answer: B

Explanation:

Federation is a type of authentication mechanism that allows users to access multiple systems or applications across different domains or organizations with a single login credential. Federation can help configure SSO authentication in a hybrid cloud environment, as it can enable seamless and secure access to cloud-based and on-premises resources using the same identity provider and authentication method. Federation can also improve user convenience, productivity, and security, as it can simplify the login process, reduce login errors, and enhance password management.

References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 211

- (Topic 1)

A company is utilizing a private cloud solution that is hosted within its datacenter. The company wants to launch a new business application, which requires the resources below:

Maximum concurrent sessions	Number of nodes required	Required per-node vCPU	Required per-node RAM
1,000	2	4	32
5,000	4	6	64
10,000	6	8	64
25,000	8	8	128

The current private cloud has 30 vCPUs and 512GB RAM available. The company is looking for a quick solution to launch this application, with expected maximum sessions to be close to 24,000 at launch and an average of approximately 5,000 sessions.

Which of the following solutions would help the company accommodate the new workload in the SHORTEST amount of time and with the maximum financial benefits?

- A. Configure auto-scaling within the private cloud
- B. Set up cloud bursting for the additional resources
- C. Migrate all workloads to a public cloud provider
- D. Add more capacity to the private cloud

Answer: B

Explanation:

Cloud Bursting can be used for both compute and storage. This question is about compute capability. "Compute Bursting" unleashes the high-performance compute capabilities of the cloud for processing locally created datasets. (reference: <https://www.ctera.com/it-initiatives/cloud-bursting/>)

<https://azure.microsoft.com/en-us/overview/what-is-cloud-bursting/>

NEW QUESTION 215

- (Topic 1)

An organization purchased new servers with GPUs for render farms. The servers have limited CPU resources.

Which of the following GPU configurations will be the MOST optimal for virtualizing this environment?

- A. Dedicated

- B. Shared
- C. Passthrough
- D. vGPU

Answer: C

Explanation:

Passthrough is a type of GPU configuration that allows a VM to directly access a physical GPU on the host system without any virtualization layer or sharing mechanism. Passthrough can provide optimal performance and compatibility for GPU-intensive applications, such as rendering or gaming, as it eliminates any overhead or contention caused by virtualization or sharing. Passthrough is also suitable for servers with limited CPU resources, as it reduces the CPU load and offloads the graphics processing to the GPU. Passthrough is the most optimal GPU configuration for virtualizing a new server with GPUs for render farms. References: CompTIA Cloud+ Certification Exam Objectives, page 11, section 1.6

NEW QUESTION 217

- (Topic 1)

A storage array that is used exclusively for datastores is being decommissioned, and a new array has been installed. Now the private cloud administrator needs to migrate the data.

Which of the following migration methods would be the BEST to use?

- A. Conduct a V2V migration
- B. Perform a storage live migration
- C. Rsync the data between arrays
- D. Use a storage vendor migration appliance

Answer: B

Explanation:

A storage live migration is a process of moving or transferring data or files from one storage system or device to another without interrupting or affecting the availability or performance of the VMs or applications that use them. Performing a storage live migration can help migrate the data from a SAN that is being decommissioned to a new array, as it can ensure that there is no downtime or disruption for the VMs or applications that rely on the data or files stored on the SAN. Performing a storage live migration can also help maintain consistency and integrity, as it can synchronize and verify the data or files between the source and destination storage systems or devices.

References: CompTIA Cloud+ Certification Exam Objectives, page 10, section 1.5

NEW QUESTION 221

- (Topic 1)

A cloud administrator needs to implement a mechanism to monitor the expense of the company's cloud resources.

Which of the following is the BEST option to execute this task with minimal effort?

- A. Ask the cloud provider to send a daily expense report
- B. Set custom notifications for exceeding budget thresholds
- C. Use the API to collect expense information from cloud resources
- D. Implement a financial tool to monitor cloud resource expenses

Answer: B

Explanation:

Setting custom notifications for exceeding budget thresholds is the best option to execute the task of monitoring the expense of the company's cloud resources with minimal effort, as it can automate and simplify the process of tracking and alerting the cloud administrator about any overspending or wastage of cloud resources. Setting custom notifications can also help optimize the cost and performance of cloud resources, as it can enable timely and proactive actions to adjust or optimize the resource allocation or consumption based on the budget limits. References: CompTIA Cloud+ Certification Exam Objectives, page 13, section 2.5

NEW QUESTION 225

- (Topic 1)

A cloud administrator recently noticed that a number of files stored at a SaaS provider's file-sharing service were deleted. As part of the root cause analysis, the administrator noticed the parent folder permissions were modified last week. The administrator then used a test user account and determined the permissions on the files allowed everyone to have write access.

Which of the following is the best step for the administrator to take NEXT?

- A. Identify the changes to the file-sharing service and document
- B. Acquire a third-party DLP solution to implement and manage access
- C. Test the current access permissions to the file-sharing service
- D. Define and configure the proper permissions for the file-sharing service

Answer: D

Explanation:

Permissions are rules or settings that determine what actions users can perform on files or resources in a system or service. Permissions can help control and restrict access to files or resources based on various criteria, such as user identity, role, group, or ownership. Defining and configuring the proper permissions for the file-sharing service is the best step for the administrator to take next after discovering that sales group members can access the financial application due to being part of the finance group and having write access to all files in the file-sharing service. Defining and configuring the proper permissions can prevent unauthorized or accidental access or modification of files or resources by limiting or granting access based on specific criteria.

References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 229

- (Topic 1)

A cloud administrator has finished setting up an application that will use RDP to connect. During testing, users experience a connection timeout error.

Which of the following will MOST likely solve the issue?

- A. Checking user passwords
- B. Configuring QoS rules
- C. Enforcing TLS authentication
- D. Opening TCP port 3389

Answer: D

Explanation:

TCP port 3389 is the default port used by Remote Desktop Protocol (RDP) to connect to a remote system or application over a network. Opening TCP port 3389 on the firewall or network device will most likely solve the issue of users experiencing a connection timeout error when trying to use RDP to connect to an application, as it will allow RDP traffic to pass through. If TCP port 3389 is closed or blocked, RDP traffic will be denied or dropped, resulting in a connection timeout error. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

Reference: <https://docs.microsoft.com/en-us/windows-server/remote/remote-desktop-services/troubleshoot/rdp-error-general-troubleshooting>

NEW QUESTION 234

- (Topic 1)

A systems administrator in a large enterprise needs to alter the configuration of one of the finance department's database servers. Which of the following should the administrator perform FIRST?

- A. Capacity planning
- B. Change management
- C. Backups
- D. Patching

Answer: B

Explanation:

The SA would do the other three regardless of the need to alter configurations. In this situation, the SA would have to present the change to the CCB in order to do the alteration.

There is no clarification on whether the change management process has been gone through. Any changes, regardless of how small or big, must go through the change management process. This allows proposals to be heard by end-users, management, and possibly stockholders. From there, it will be reviewed and either approved or denied, with reasons specified. From there, the administrator(s) can do whatever processes are necessary.

Change management is a process or procedure that defines the steps, roles, and responsibilities for implementing, documenting, and communicating any changes or updates to a system or service. Change management can help ensure that any changes or updates are done in a controlled and consistent manner, minimizing any risks or impacts to the system or service. Performing change management is the first thing that a systems administrator should do before altering the configuration of one of the finance department's database servers, as it can ensure that the change request is approved, authorized, tested, and verified before applying it to the database server. References: CompTIA Cloud+ Certification Exam Objectives, page 13, section 2.5

NEW QUESTION 235

- (Topic 1)

Which of the following will mitigate the risk of users who have access to an instance modifying the system configurations?

- A. Implement whole-disk encryption
- B. Deploy the latest OS patches
- C. Deploy an anti-malware solution
- D. Implement mandatory access control

Answer: D

Explanation:

Mandatory access control (MAC) is a type of access control model that enforces strict security policies based on predefined rules and labels. MAC assigns security labels to subjects (users or processes) and objects (files or resources) and allows access only if the subject has the appropriate clearance and need-to-know for the object. MAC can mitigate the risk of users who have access to an instance modifying the system configurations, as it can prevent unauthorized or accidental changes to critical files or settings by restricting access based on predefined rules and labels. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 239

- (Topic 1)

A SaaS provider wants to maintain maximum availability for its service. Which of the following should be implemented to attain the maximum SLA?

- A. A hot site
- B. An active-active site
- C. A warm site
- D. A cold site

Answer: B

Explanation:

An active-active site is a type of disaster recovery (DR) site that runs simultaneously with the primary site and handles part of the normal workload or traffic. An active-active site can help maintain maximum availability for a SaaS service, as it can provide load balancing, redundancy, and failover capabilities for the SaaS service in case of an outage or disruption at the primary site. An active-active site can also improve performance and scalability, as it can distribute the workload or traffic across multiple sites and handle increased demand or peak periods. References: CompTIA Cloud+ Certification Exam Objectives, page 10, section 1.5

NEW QUESTION 240

- (Topic 1)

An organization's web server farm, which is hosted in the cloud with DNS load balancing, is experiencing a spike in network traffic. This has caused an outage of the organization's web server infrastructure.

Which of the following should be implemented to prevent this in the future as a mitigation method?

- A. Enable DLP
- B. Configure microsegmentation
- C. Enable DNSSEC
- D. Deploy a vADC appliance

Answer: D

Explanation:

A virtual application delivery controller (vADC) is a type of network device or software that provides load balancing, security, and optimization for web applications or services. Deploying a vADC appliance can help prevent an outage of the organization's web server infrastructure due to a spike in network traffic, as it can distribute the traffic across multiple web servers and improve the performance and availability of web applications or services. Deploying a vADC appliance can also provide mitigation methods such as DDoS protection, SSL offloading, and caching to enhance the security and efficiency of web traffic delivery. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 242

- (Topic 1)

An OS administrator is reporting slow storage throughput on a few VMs in a private IaaS cloud. Performance graphs on the host show no increase in CPU or memory. However, performance graphs on the storage show a decrease of throughput in both IOPS and MBps but not much increase in latency. There is no increase in workload, and latency is stable on the NFS storage arrays that are used by those VMs. Which of the following should be verified NEXT?

- A. Application
- B. SAN
- C. VM GPU settings
- D. Network

Answer: D

Explanation:

The network is the set of devices, connections, protocols, and configurations that enable communication and data transfer between different systems and applications. The network can affect the performance of storage throughput by influencing factors such as bandwidth, latency, jitter, packet loss, and congestion. Poor network performance can result in low storage throughput in both IOPS and MBps, as it can limit the amount and speed of data that can be sent or received by the storage devices. Verifying the network should be the next step for troubleshooting the issue of slow storage throughput on a few VMs in a private IaaS cloud, as it can help identify and resolve any network-related problems that may be causing the issue. References: CompTIA Cloud+ Certification Exam Objectives, page 17, section 3.4

NEW QUESTION 243

- (Topic 1)

A systems administrator is using VMs to deploy a new solution that contains a number of application VMs. Which of the following would provide high availability to the application environment in case of hypervisor failure?

- A. Anti-affinity rules
- B. Cold migration
- C. Live migration
- D. Affinity rules

Answer: A

Explanation:

Anti-affinity rules are rules or policies that prevent two or more VMs from running on the same host or cluster in a cloud environment. Anti-affinity rules can provide high availability to an application environment in case of hypervisor failure, as they can distribute or separate the application VMs across different hosts or clusters and avoid having a single point of failure. Anti-affinity rules can also improve performance and reliability, as they can reduce contention and load by balancing the resource utilization across multiple hosts or clusters. References: CompTIA Cloud+ Certification Exam Objectives, page 10, section 1.5
Reference: <https://www.vmware.com/products/vsphere/high-availability.html>

NEW QUESTION 247

- (Topic 1)

A systems administrator recently deployed a VDI solution in a cloud environment; however, users are now experiencing poor rendering performance when trying to display 3-D content on their virtual desktops, especially at peak times. Which of the following actions will MOST likely solve this issue?

- A. Update the guest graphics drivers from the official repository
- B. Add more vGPU licenses to the host
- C. Instruct users to access virtual workstations only on the VLAN
- D. Select vGPU profiles with higher video RAM

Answer: D

Explanation:

A vGPU profile is a configuration option that defines the amount of video RAM (vRAM) and other resources that are allocated to a virtual machine (VM) that uses a virtual graphics processing unit (vGPU). A vGPU profile can affect the rendering performance of a VM, as it determines how much graphics memory and processing power are available for displaying complex graphics content. Selecting vGPU profiles with higher video RAM can most likely solve the issue of poor rendering performance when trying to display 3-D content on virtual desktops, especially at peak times, as it can provide more graphics resources and improve the quality and speed of rendering. References: CompTIA Cloud+ Certification Exam Objectives, page 11, section 1.6

NEW QUESTION 252

- (Topic 1)

A systems administrator for an e-commerce company will be migrating the company's main website to a cloud provider. The principal requirement is that the website must be highly available.

Which of the following will BEST address this requirement?

- A. Vertical scaling
- B. A server cluster
- C. Redundant switches
- D. A next-generation firewall

Answer: B

Explanation:

A server cluster is a group of servers that work together to provide high availability, load balancing, and scalability for applications or services. A server cluster can help ensure the high availability requirement for migrating an e-commerce company's main website to a cloud provider, as it can prevent downtime or disruption in case of a server failure or outage by automatically switching the workload to another server in the cluster. A server cluster can also improve performance and reliability, as it can distribute the workload across multiple servers and handle increased traffic or demand. References: CompTIA Cloud+ Certification Exam Objectives, page 10, section 1.5

NEW QUESTION 255

- (Topic 1)

Lateral-moving malware has infected the server infrastructure.

Which of the following network changes would MOST effectively prevent lateral movement in the future?

- A. Implement DNSSEC in all DNS servers
- B. Segment the physical network using a VLAN
- C. Implement microsegmentation on the network
- D. Implement 802.1X in the network infrastructure

Answer: C

Explanation:

Microsegmentation is a type of network security technique that divides a network into smaller logical segments or zones based on workload or application characteristics and applies granular policies and rules to control and isolate traffic within each segment or zone. Implementing microsegmentation on the network can help prevent lateral movement in the future after lateral-moving malware has infected the server infrastructure, as it can limit the exposure and spread of malware by restricting access and communication between different segments or zones based on predefined criteria such as identity, role, or behavior. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 260

- (Topic 1)

A systems administrator is configuring a storage array.

Which of the following should the administrator configure to set up mirroring on this array?

- A. RAID 0
- B. RAID 1
- C. RAID 5
- D. RAID 6

Answer: B

Explanation:

RAID 1 is a type of RAID level that creates an exact copy or mirror of data on two or more disks. RAID 1 can provide redundancy and fault tolerance, as it can survive the failure of one disk without losing any data. RAID 1 can also improve read performance, as it can access data from multiple disks simultaneously. The administrator should configure RAID 1 to set up mirroring on a storage array. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

NEW QUESTION 261

- (Topic 1)

A company developed a product using a cloud provider's PaaS platform and many of the platform-based components within the application environment.

Which of the following would the company MOST likely be concerned about when utilizing a multicloud strategy or migrating to another cloud provider?

- A. Licensing
- B. Authentication providers
- C. Service-level agreement
- D. Vendor lock-in

Answer: D

Explanation:

Vendor lock-in is a situation where a customer becomes dependent on a specific vendor for products or services and faces high switching costs or barriers when trying to change vendors. Vendor lock-in is most likely to be a concern for a company that developed a product using a cloud provider's PaaS platform and many of the platform-based components within the application environment when utilizing a multicloud strategy or migrating to another cloud provider, as it can limit the flexibility, scalability, and portability of the product and increase the complexity, risk, and cost of moving or integrating with other cloud platforms or providers. References: CompTIA Cloud+ Certification Exam Objectives, page 8, section 1.2

NEW QUESTION 263

- (Topic 1)

An organization has multiple VLANs configured to segregate the network traffic. Following is the breakdown of the network segmentation:

- ? Production traffic (10.10.0.0/24)
- ? Network backup (10.20.0.0/25)
- ? Virtual IP network (10.20.0.128/25)

The following configuration exists on the server:

Server name	Interface	IP address	Gateway
COMPSRV01	Production	10.10.0.12/24	10.10.0.1
COMPSRV01	Network backup	10.20.0.12/25	10.10.0.1

The backup administrator observes that the weekly backup is failing for this server. Which of the following commands should the administrator run to identify the issue?

- A. ROUTE PRINT
- B. NETSTAT -A
- C. IPCONFIG /ALL
- D. NET SM

Answer: A

Explanation:

ROUTE PRINT is a command that displays the routing table of a system, which shows the destination network, the gateway, the interface, and the metric for each route. ROUTE PRINT can help identify the issue of the weekly backup failing for this server, as it can show if there is a valid route to the network backup segment (10.20.0.0/25) from the production traffic segment (10.10.0.0/24). If there is no route or an incorrect route, the backup will fail to reach the destination. The administrator can use ROUTE PRINT to verify and troubleshoot the routing configuration of the server. References: CompTIA Cloud+ Certification Exam Objectives, page 16, section 3.2

Reference: <https://www.toolbox.com/tech/operating-systems/blogs/using-the-route-print-command-in-windows-7-022310/>

NEW QUESTION 266

- (Topic 4)

A cloud administrator is evaluating a solution that will limit access to authorized individuals. The solution also needs to ensure the system that connects to the environment meets patching, antivirus, and configuration requirements. Which of the following technologies would BEST meet these requirements?

- A. NAC
- B. EDR
- C. IDS
- D. HIPS

Answer: A

Explanation:

NAC (Network Access Control) is a technology that will limit access to authorized individuals and ensure the system that connects to the environment meets patching, antivirus, and configuration requirements. NAC can enforce policies and rules that define who, what, when, where, and how a device or a user can access a network or a cloud environment. NAC can also inspect and evaluate the security posture and compliance status of a device or a user before granting or denying access. For example, NAC can check if the device has the latest patches, antivirus software, and configuration settings, and if not, it can quarantine, remediate, or reject the device. NAC can also monitor and audit the ongoing network activity and behavior of the devices and users, and take actions if any violations or anomalies are detected.

NEW QUESTION 267

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