CompTIA

Exam Questions CV0-003

CompTIA Cloud+ Certification Exam

NEW QUESTION 1
- (Topic 1)
An organization is running a database application on a SATA disk, and a customer is experiencing slow performance most of the time.
Which of the following should be implemented to improve application performance?

A. Increase disk capacity
B. Increase the memory and network bandwidth
C. Upgrade the application
D. Upgrade the environment and use SSD drives

Answer: D

Explanation:
Upgrading the environment and using solid state drives (SSDs) can improve application performance for a database application that is running on a serial advanced technology attachment (SATA) disk and experiencing slow performance most of the time. Upgrading the environment can involve updating or replacing the hardware, software, or network components that support the application to enhance their functionality, capacity, or compatibility. Using SSDs can provide faster and more reliable data access and storage than SATA disks, as they use flash memory instead of spinning disks to store data. SSDs can also reduce latency, power consumption, and heat generation. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

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
- (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 4
- (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 5
- (Topic 1)

An administrator is performing an in-place upgrade on a quest 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 6
- (Topic 1)
An SQL injection vulnerability was reported on a web application, and the cloud platform
team needs to mitigate the vulnerability while it is corrected by the development team. Which of the following controls will BEST mitigate the risk of exploitation?

A. DLP
B. HIDS
C. NAC
D. WAF

Answer: D

Explanation:
A web application firewall (WAF) is a type of network security device or software that monitors and filters HTTP traffic between a web application and the Internet. A WAF can help mitigate the risk of exploitation of an SQL injection vulnerability reported on a web application while it is corrected by the development team, as it can detect and block any malicious requests or queries that attempt to inject SQL commands into the web application's database. A WAF can also help protect the web application from other common web-based attacks, such as cross-site scripting (XSS), remote file inclusion (RFI), or denial-of-service (DoS). References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

NEW QUESTION 7
- (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 8
- (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 9

- (Topic 1)
A systems administrator needs to convert ten physical servers to virtual.
Which of the following would be the MOST efficient conversion method for the administrator to use?

A. Rebuild the servers from scratch
B. Use the vendor's conversion tool
C. Clone the hard drive
D. Restore from backup

Answer: B

Explanation:
A vendor's conversion tool is a type of software or utility that automates and simplifies the process of converting physical servers to virtual machines by capturing the configuration and data of the physical servers and creating virtual disks and files for the virtual machines. Using the vendor's conversion tool can be the most efficient conversion method for a systems administrator to use to convert ten physical servers to virtual, as it can save time and effort by avoiding manual steps or errors involved in rebuilding, cloning, or restoring the physical servers to virtual machines. Using the vendor's conversion tool can also ensure compatibility and consistency, as it can match the hardware and software requirements and settings of the physical servers to the virtual machines.
References: CompTIA Cloud+ Certification Exam Objectives, page 10, section 1.5

NEW QUESTION 10
- (Topic 1)
A cloud administrator is switching hosting companies and using the same script that was previously used to deploy VMs in the new cloud. The script is returning errors that the command was not found.
Which of the following is the MOST likely cause of the script failure?

A. Account mismatches
B. IP address changes
C. API version incompatibility
D. Server name changes

Answer: C

Explanation:
An application programming interface (API) is a set of rules or protocols that defines how different systems or applications can communicate or interact with each other. An API version is a specific iteration or release of an API that may have different features or functionalities than previous or subsequent versions. API version incompatibility is the most likely cause of the script failure when switching hosting companies and using the same script that was previously used to deploy VMs in the new cloud, as it can result in errors or failures when trying to execute commands or functions that are not supported or recognized by the new cloud provider's API version. The issue can be resolved by updating or modifying the script to match the new cloud provider's API version.
References: CompTIA Cloud+ Certification Exam Objectives, page 13, section 2.5

NEW QUESTION 10
- (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 15
- (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 16
- (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 19
- (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://whatis.techtarget.com/definition/virtual-machine-escape

NEW QUESTION 20
- (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 24
- (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 27
- (Topic 1)

In an existing IaaS instance, it is required to deploy a single application that has different versions.
Which of the following should be recommended to meet this requirement?

A. Deploy using containers
B. Install a Type 2 hypervisor
C. Enable SR-IOV on the host
D. Create snapshots

Answer: A

Explanation:
Containers are a type of deployment technology that packages an application and its dependencies into a lightweight and portable unit that can run on any platform or environment. Containers can help deploy a single application that has different
versions in an existing IaaS instance, as they can isolate and run multiple versions of the same application without any conflicts or interference. Containers can also enable faster and easier deployment, scaling, and management of cloud-based applications. References: CompTIA Cloud+ Certification Exam Objectives, page 11, section 1.6

NEW QUESTION 30
- (Topic 1)
A cloud administrator is reviewing a new application implementation document. The administrator needs to make sure all the known bugs and fixes are applied, and unwanted
ports and services are disabled.
Which of the following techniques would BEST help the administrator assess these business requirements?

A. Performance testing
B. Usability testing
C. Vulnerability testing
D. Regression testing

Answer: D

Explanation:
Regression testing is a type of software testing that verifies that existing features or functionalities of a system or application are not affected by any changes or updates made to it. Regression testing can help assess whether all the known bugs and fixes are applied and unwanted ports and services are disabled when reviewing a new application implementation document for a cloud deployment, as it can detect any errors or defects that may have been introduced or re-introduced after applying patches, updates, or configurations to the application. References: CompTIA Cloud+ Certification Exam Objectives, page 19, section 4.1

NEW QUESTION 35
- (Topic 1)
A cloud administrator is building a new VM for a network security appliance. The security appliance installer says the CPU clock speed does not meet the requirements.
Which of the following will MOST likely solve the issue?

A. Move the VM to a host with a faster CPU
B. Add more vCPUs to the VM
C. Enable CPU masking on the VM
D. Enable hyperthreading on the virtual host

Answer: A

Explanation:
Moving the VM to a host with a faster CPU is the best way to solve the issue of the security appliance installer saying the CPU clock speed does not meet the requirements when building a new VM for a network security appliance. Moving the VM to a host with a faster CPU can ensure that the VM meets the minimum CPU clock speed requirement for the security appliance, as it can use the physical CPU resources of the host. Moving the VM to a host with a faster CPU can also improve the performance and reliability of the security appliance, as it can reduce latency, contention, and overhead.
References: CompTIA Cloud+ Certification Exam Objectives, page 11, section 1.6

NEW QUESTION 39
- (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 40

- (Topic 2)
A vendor is installing a new retail store management application for a customer. The application license ensures software costs are low when the application is not being used, but costs go up when use is higher.
Which of the following licensing models is MOST likely being used?

A. Socket-based
B. Core-based
C. Subscription
D. Volume-based

Answer: D

Explanation:
Volume-based licensing is a pricing model that charges the customers based on the amount of usage or consumption of a software product or service. The more the customers use the software, the higher the costs will be. This model is suitable for applications that have variable or seasonal demand patterns. Examples of volume-based licensing are AWS Lambda, Azure Functions, Google Cloud Run, etc.

NEW QUESTION 43
- (Topic 2)
A systems administrator is deploying a new cloud application and needs to provision cloud services with minimal effort. The administrator wants to reduce the tasks required for maintenance, such as OS patching, VM and volume provisioning, and autoscaling configurations. Which of the following would be the BEST option to deploy the new application?

A. A VM cluster
B. Containers
C. OS templates
D. Serverless

Answer: D

Explanation:
Serverless is what would be the best option to deploy a new cloud application and provision cloud services with minimal effort while reducing the tasks required for maintenance such as OS patching, VM and volume provisioning, and autoscaling configurations. Serverless is a cloud service model that provides customers with a platform to run applications or functions without having to manage or provision any underlying infrastructure or resources, such as servers, storage, network, OS, etc. Serverless can provide benefits such as:
? Minimal effort: Serverless can reduce the effort required to deploy a new cloud application and provision cloud services by automating and abstracting away all the infrastructure or resource management or provisioning tasks from customers, and allowing them to focus only on writing code or logic for their applications or functions.
? Reduced maintenance: Serverless can reduce the tasks required for maintenance by handling all the infrastructure or resource maintenance tasks for customers, such as OS patching, VM and volume provisioning, autoscaling configurations, etc., and ensuring that they are always up-to-date and optimized.

NEW QUESTION 45
- (Topic 2)
Which of the following should be considered for capacity planning?

A. Requirements, licensing, and trend analysis
B. Laws and regulations
C. Regions, clusters, and containers
D. Hypervisors and scalability

Answer: A

Explanation:
These are the factors that should be considered for capacity planning in a cloud environment. Capacity planning is a process of estimating and allocating the necessary resources and performance to meet the current and future demands of cloud applications or services. Capacity planning can help to optimize costs, efficiency, and reliability of cloud resources or services. The factors that should be considered for capacity planning are:
? Requirements: These are the specifications or expectations of the cloud applications or services, such as functionality, availability, scalability, security, etc. Requirements can help to determine the type, amount, and quality of resources or services needed to meet the objectives and goals of the cloud applications or services.
? Licensing: This is the agreement or contract that grants customers the right to use or access certain cloud resources or services for a specific period or fee. Licensing can affect the cost, availability, and compliance of cloud resources or services. Licensing can help to determine the budget, duration, and scope of using or accessing cloud resources or services.
? Trend analysis: This is the technique of analyzing historical and current data to identify patterns, changes, or fluctuations in demand or usage of cloud resources or services. Trend analysis can help to predict and anticipate future demand or usage of cloud resources or services, as well as identify any opportunities or challenges that may arise.

NEW QUESTION 46
- (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 48
- (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 50
- (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 54
- (Topic 2)
A database analyst reports it takes two hours to perform a scheduled job after onboarding 10,000 new users to the system. The analyst made no changes to the scheduled job before or after onboarding the users. The database is hosted in an IaaS instance on a cloud provider. Which of the following should the cloud administrator evaluate to troubleshoot the performance of the job?

A. The laaS compute configurations, the capacity trend analysis reports, and the storage IOPS
B. The hypervisor logs, the memory utilization of the hypervisor host, and the network throughput of the hypervisor
C. The scheduled job logs for successes and failures, the time taken to execute the job, and the job schedule
D. Migrating from laaS to on premises, the network traffic between on-premises users and the laaS instance, and the CPU utilization of the hypervisor host

Answer: A

Explanation:
To troubleshoot the performance of a scheduled job that takes two hours to run after onboarding 10,000 new users to a cloud-based system, the administrator should evaluate the IaaS compute configurations, the capacity trend analysis reports, and the storage IOPS. These factors can affect the performance of a database job in an IaaS instance on a cloud provider. The IaaS compute configurations include the CPU, memory, and network resources assigned to the instance. The capacity trend analysis reports show the historical and projected usage and demand of the resources. The storage IOPS (Input/Output Operations Per Second) measure the speed and performance of the disk storage. The administrator should check if these factors are sufficient, optimal, or need to be adjusted to improve the performance of the job.

NEW QUESTION 57
- (Topic 2)
A cloud administrator has been using a custom VM deployment script. After three months of use, the script no longer joins the LDAP domain. The cloud administrator verifies the account has the correct permissions. Which of the following is the MOST likely cause of the failure?

A. Incorrect encryption ciphers
B. Broken trust relationship
C. Invalid certificates
D. Expired password

Answer: D

Explanation:
An expired password is the most likely cause of the failure of a custom VM deployment script that no longer joins the LDAP domain. LDAP (Lightweight Directory Access Protocol) is a protocol that allows access and management of directory services, such as user accounts, groups, permissions, etc., over a network. LDAP can be used to authenticate and authorize users or devices to access network resources or systems. An expired password is a password that has reached its validity period and needs to be changed or renewed. An expired password can prevent users or devices from joining or accessing an LDAP domain, as it may indicate that the account is inactive, compromised, or outdated.

NEW QUESTION 59
- (Topic 2)
A systems administrator has been asked to restore a VM from backup without changing the current VM's operating state. Which of the following restoration methods would BEST fit this scenario?

A. Alternate location
B. Rolling
C. Storage live migration
D. In-place

Answer: C

Explanation:
Storage live migration is the best restoration method to restore a VM from backup without changing the current VM’s operating state. Storage live migration is a process of moving or transferring storage resources or data from one location to another without affecting or interrupting the operation or performance of the VMs that use them. Storage live migration can help to restore a VM from backup by copying the backup data to a new storage location and switching the VM’s storage configuration to point to the new location, without requiring any downtime or reboot.

NEW QUESTION 63
- (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 65
- (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 70
- (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 72
- (Topic 2)
A company is planning to migrate applications to a public cloud, and the Chief Information Officer (CIO) would like to know the cost per business unit for the applications in the cloud. Before the migration, which of the following should the administrator implement FIRST to assist with reporting the cost for each business unit?

A. An SLA report
B. Tagging
C. Quotas
D. Showback

Answer: B

Explanation:
Tagging is what the administrator should implement first to assist with reporting the cost for each business unit for applications in a public cloud environment. Tagging is a technique that allows customers to assign metadata or labels to their cloud resources, such as applications, instances, volumes, etc., based on their attributes or criteria. Tagging can help customers to organize, manage, monitor, and report their cloud resources and costs by business unit, project, owner, environment, etc.

NEW QUESTION 74
- (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 79
- (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 83
- (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 84
- (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 85
- (Topic 2)
A systems administrator is configuring network management but is concerned about confidentiality. Which of the following should the administrator configure to address this concern?

A. SNMPv3
B. Community strings
C. IPSec tunnels
D. ACLs

Answer: A

Explanation:
SNMPv3 is the protocol that the administrator should configure to address the concern about confidentiality for network management. SNMP (Simple Network Management Protocol) is a standard protocol that allows network devices and systems to exchange information and perform management tasks. SNMPv3 is the latest version of SNMP that provides security enhancements, such as authentication, encryption, and access control, to protect the confidentiality, integrity, and availability of network data.

NEW QUESTION 88
- (Topic 2)
A cloud administrator needs to reduce the cost of cloud services by using the company's off-peak period. Which of the following would be the BEST way to achieve this with minimal effort?

A. Create a separate subscription.
B. Create tags.
C. Create an auto-shutdown group.
D. Create an auto-scaling group.

Answer: C

Explanation:
Creating an auto-shutdown group is the best way to reduce the cost of cloud services by using the company's off-peak period with minimal effort. An auto-shutdown group is a feature that allows customers to automatically turn off or shut down certain cloud resources or services during a specified time period or schedule. An auto-shutdown group can help to reduce the cost of cloud services by minimizing the consumption of resources or services during off-peak periods,

when they are not needed or used. An auto-shutdown group can also help to reduce the effort of managing cloud resources or services by automating the shutdown process, without requiring any manual intervention or configuration.

NEW QUESTION 89
- (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 92
- (Topic 2)
After a few new web servers were deployed, the storage team began receiving incidents in their queue about the web servers. The storage administrator wants to verify the incident tickets that should have gone to the web server team. Which of the following is the MOST likely cause of the issue?

A. Incorrect assignment group in service management
B. Incorrect IP address configuration
C. Incorrect syslog configuration on the web servers
D. Incorrect SNMP settings

Answer: C

Explanation:
Incorrect syslog configuration on the web servers is the most likely cause of the issue of storage team receiving incidents in their queue about web servers after new web servers were deployed in a cloud environment. 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. Incorrect syslog configuration on the web servers can cause them to send log messages to the wrong destination or queue, such as the storage team's queue, rather than the web server team's queue.

NEW QUESTION 93
- (Topic 2)
A systems administrator is performing upgrades to all the hypervisors in the environment. Which of the following components of the hypervisors should be upgraded? (Choose two.)

A. The fabric interconnects
B. The virtual appliances
C. The firmware
D. The virtual machines
E. The baselines
F. The operating system

Answer: CF

Explanation:
These are the components of the hypervisors that should be upgraded by the administrator who is performing upgrades to all the hypervisors in the environment. A hypervisor is a software or hardware that allows multiple VMs (Virtual Machines) to run on a single physical host or server. A hypervisor consists of various components, such as:
? The firmware: This is the software that controls the basic functions and operations of the hardware or device. The firmware can affect the performance, compatibility, and security of the hypervisor and the VMs. The firmware should be upgraded to ensure that it supports the latest features and functions of the hardware or device, as well as fix any bugs or vulnerabilities.
? The operating system: This is the software that manages the resources and activities of the hypervisor and the VMs. The operating system can affect the functionality, reliability, and efficiency of the hypervisor and the VMs. The operating system should be upgraded to ensure that it supports the latest applications and services of the hypervisor and the VMs, as well as improve stability and performance.

NEW QUESTION 98
- (Topic 2)
A technician is trying to delete six decommissioned VMs. Four VMs were deleted without issue. However, two of the VMs cannot be deleted due to an error. Which of the following would MOST likely enable the technician to delete the VMs?

A. Remove the snapshots
B. Remove the VMs' IP addresses
C. Remove the VMs from the resource group
D. Remove the lock from the two VMs

Answer: D

Explanation:

Removing the lock from the two VMs is what would most likely enable the technician to delete the VMs that cannot be deleted due to an error. A lock is a feature that prevents certain actions or operations from being performed on a resource or service, such as deleting, modifying, moving, etc. A lock can help to protect a resource or service from accidental or unwanted changes or removals. Removing the lock from the two VMs can enable the technician to delete them by allowing the delete action or operation to be performed on them.

NEW QUESTION 100
- (Topic 2)
A systems administrator is working in a globally distributed cloud environment. After a file server VM was moved to another region, all users began reporting slowness when saving files. Which of the following is the FIRST thing the administrator should check while troubleshooting?

A. Network latency
B. Network connectivity
C. Network switch
D. Network peering

Answer: A

Explanation:
Network latency is the first thing that the administrator should check while troubleshooting slowness when saving files after a file server VM was moved to another region in a globally distributed cloud environment. Network latency is a measure of how long it takes for data to travel from one point to another over a network or connection. Network latency can affect performance and user experience of cloud applications or services by determining how fast data can be transferred or processed between clients and servers or vice versa. Network latency can vary depending on various factors, such as distance, bandwidth, congestion, interference, etc. Network latency can increase when a file server VM is moved to another region in a globally distributed cloud environment, as it may increase the distance and decrease the bandwidth between clients and servers, which may result in delays or errors in data transfer or processing.

NEW QUESTION 104
- (Topic 2)
A systems administrator is troubleshooting performance issues with a VDI environment. The administrator determines the issue is GPU related and then increases the frame buffer on the virtual machines. Testing confirms the issue is solved, and everything is now working correctly. Which of the following should the administrator do NEXT?

A. Consult corporate policies to ensure the fix is allowed
B. Conduct internal and external research based on the symptoms
C. Document the solution and place it in a shared knowledge base
D. Establish a plan of action to resolve the issue

Answer: C

Explanation:
Documenting the solution and placing it in a shared knowledge base is what the administrator should do next after troubleshooting performance issues with a VDI (Virtual Desktop Infrastructure) environment, determining that the issue is GPU (Graphics Processing Unit) related, increasing the frame buffer on the virtual machines, and testing that confirms that the issue is solved and everything is now working correctly. Documenting the solution is a process of recording and describing what was done to fix or resolve an issue, such as actions, steps, methods, etc., as well as why and how it worked. Placing it in a shared knowledge base is a process of storing and organizing documented solutions in a central location or repository that can be accessed and used by others. Documenting the solution and placing it in a shared knowledge base can provide benefits such as:
? Learning: Documenting the solution and placing it in a shared knowledge base can help to learn from past experiences and improve skills and knowledge.
? Sharing: Documenting the solution and placing it in a shared knowledge base can help to share information and insights with others who may face similar issues or situations.
? Reusing: Documenting the solution and placing it in a shared knowledge base can help to reuse existing solutions for future issues or situations.

NEW QUESTION 106
- (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 110
- (Topic 2)
A cloud administrator is upgrading a cloud environment and needs to update the automation script to use a new feature from the cloud provider. After executing the script, the deployment fails. Which of the following is the MOST likely cause?

A. API incompatibility
B. Location changes
C. Account permissions
D. Network failure

Answer: A

Explanation:
API incompatibility is the most likely cause of the failure of an automation script to use a new feature from the cloud provider. 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 incompatibility is a situation where an API does not work or function properly with another software component or system due to differences or changes in versions, formats, parameters, etc. API incompatibility can cause errors or issues when using an automation script to deploy or configure cloud resources or services, especially if the script is not updated or modified according to the new API specifications.

NEW QUESTION 111
- (Topic 2)
Which of the following service models would be used for a database in the cloud?

A. PaaS
B. laaS
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 112
- (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 115
- (Topic 2)
A disaster situation has occurred, and the entire team needs to be informed about the situation. Which of the following documents will help the administrator find the details of the relevant team members for escalation?

A. Chain of custody
B. Root cause analysis
C. Playbook
D. Call tree

Answer: D

Explanation:
A call tree is what will help the administrator find the details of the relevant team members for escalation after a disaster situation has occurred and the entire team needs to be informed about the situation. A call tree is a document or diagram that shows the hierarchy or sequence of communication or notification among team members in case of an emergency or incident, such as a disaster situation. A call tree can help to find the details of the relevant team members for escalation by providing information such as:
? Name: This indicates who is involved in the communication or notification process, such as team members, managers, stakeholders, etc.
? Role: This indicates what is their function or responsibility in the communication or notification process, such as initiator, receiver, sender, etc.
? Contact: This indicates how they can be reached or contacted in the communication or notification process, such as phone number, email address, etc.

NEW QUESTION 118
- (Topic 2)
A systems administrator wants to ensure two VMs remain together on the same host. Which of the following must be set up to enable this functionality?

A. Affinity
B. Zones
C. Regions
D. A cluster

Answer: A

Explanation:
Affinity is what must be set up to ensure two VMs remain together on the same host. Affinity is a feature that allows customers to specify preferences or requirements for placing VMs on certain hosts or clusters within a cloud environment. Affinity can help to improve performance, availability, compatibility, or security of VMs by ensuring they are located on optimal hosts or clusters. Affinity can also help to keep two VMs together on the same host by creating an affinity rule that binds them together.

NEW QUESTION 122
- (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 126
- (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 128
- (Topic 2)
A cloud provider wants to make sure consumers are utilizing its IaaS platform but prevent them from installing a hypervisor on the server. Which of the following will help the cloud provider secure the environment and limit consumers' activity?

A. Patch management
B. Hardening
C. Scaling
D. Log and event monitoring

Answer: B

Explanation:
Hardening is the best option to help the cloud provider secure the environment and limit consumers' activity on its IaaS platform. Hardening is a process of reducing the attack surface and vulnerabilities of a system or device by applying security configurations, patches, updates, policies, rules, etc. Hardening can prevent consumers from installing unauthorized or unsupported software on their cloud servers, such as hypervisors.

NEW QUESTION 130
- (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 135
- (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 136
- (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 141
- (Topic 2)
An administrator is securing a private cloud environment and wants to ensure only approved systems can connect to switches. Which of the following would be MOST useful to accomplish this task?

A. VLAN
B. NIPS
C. WAF
D. NAC

Answer: D

Explanation:

Reference: https://www.cisco.com/c/en/us/products/security/what-is-network-access- control-nac.html
NAC (Network Access Control) is what the administrator should implement to ensure only approved systems can connect to switches in a private cloud environment. NAC is a security technique that controls and restricts access to network resources based on predefined policies or rules. NAC can verify and authenticate users or devices before granting them access to switches or other network devices. NAC can also enforce compliance and security standards on users or devices before allowing them to connect to switches.

NEW QUESTION 146
- (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 147
- (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 149
- (Topic 2)
Which of the following actions should a systems administrator perform during the containment phase of a security incident in the cloud?

A. Deploy a new instance using a known-good base image.
B. Configure a firewall rule to block the traffic on the affected instance.
C. Perform a forensic analysis of the affected instance.
D. Conduct a tabletop exercise involving developers and systems administrators.

Answer: B

Explanation:
Configuring a firewall rule to block the traffic on the affected instance is what the administrator should perform during the containment phase of a security incident in the cloud. A security incident is an event or situation that affects or may affect the confidentiality, integrity, or availability of cloud resources or data. A security incident response is a process of managing and resolving a security incident using various phases, such as identification, containment, eradication, recovery, etc. The containment phase is where the administrator tries to isolate and prevent the spread or escalation of the security
incident. Configuring a firewall rule to block the traffic on the affected instance can help to contain a security incident by cutting off any communication or interaction between the instance and other systems or networks, which may stop any malicious or unauthorized activity or access.

NEW QUESTION 151
- (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 156
SIMULATION - (Topic 1)
A company has decided to scale its e-commerce application from its corporate datacenter to a commercial cloud provider to meet an anticipated increase in demand during an upcoming holiday.
The majority of the application load takes place on the application server under normal conditions. For this reason, the company decides to deploy additional application servers into a commercial cloud provider using the on-premises orchestration engine that installs and configures common software and network configurations.
The remote computing environment is connected to the on-premises datacenter via a site- to-site IPSec tunnel. The external DNS provider has been configured to use weighted round-robin routing to load balance connections from the Internet.
During testing, the company discovers that only 20% of connections completed successfully.
INSTRUCTIONS
Review the network architecture and supporting documents and fulfill these requirements: Part 1:
- Analyze the configuration of the following components: DNS, Firewall 1, Firewall 2, Router 1, Router 2, VPN and Orchestrator Server.

- Identify the problematic device(s).

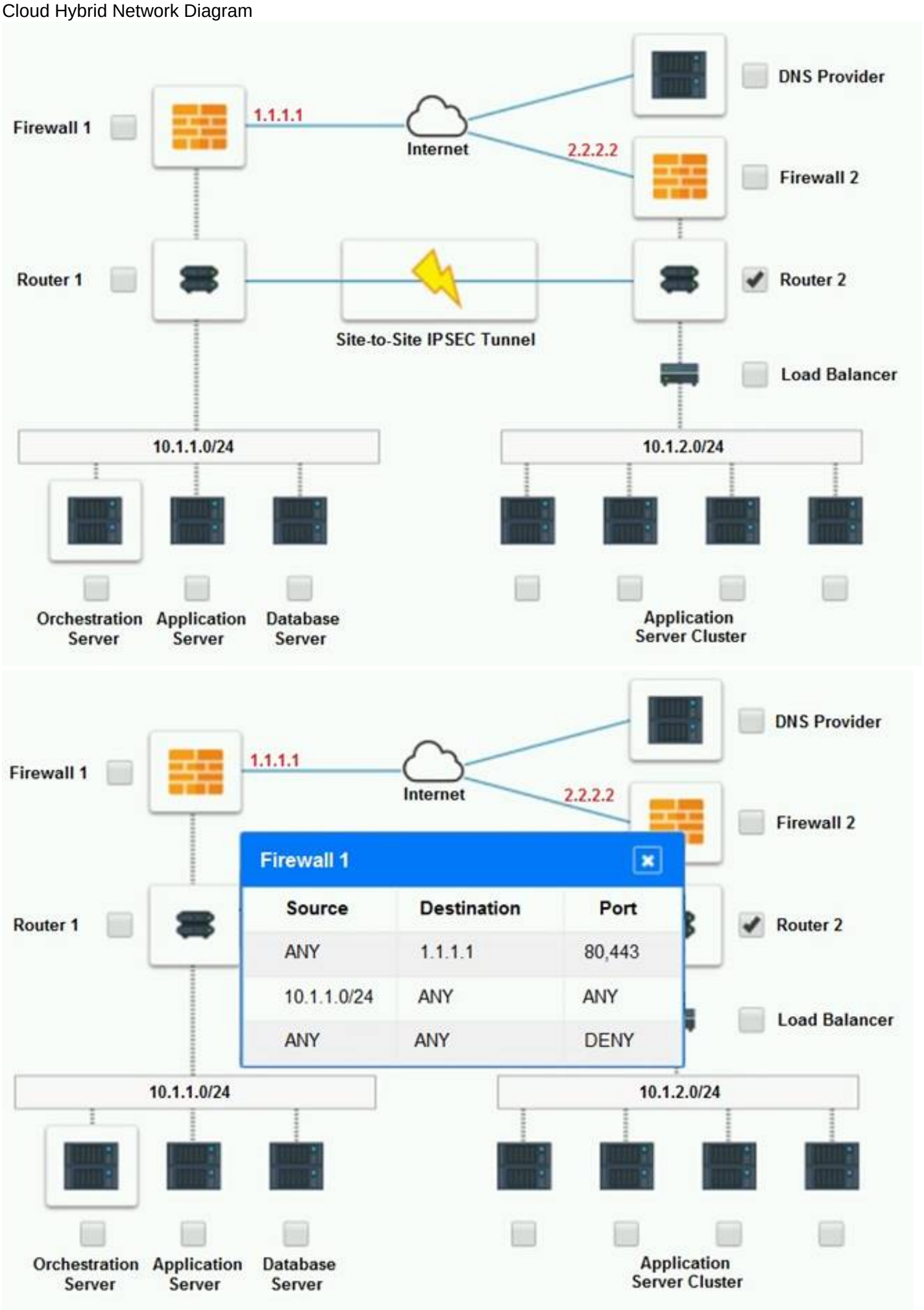
Part 2:

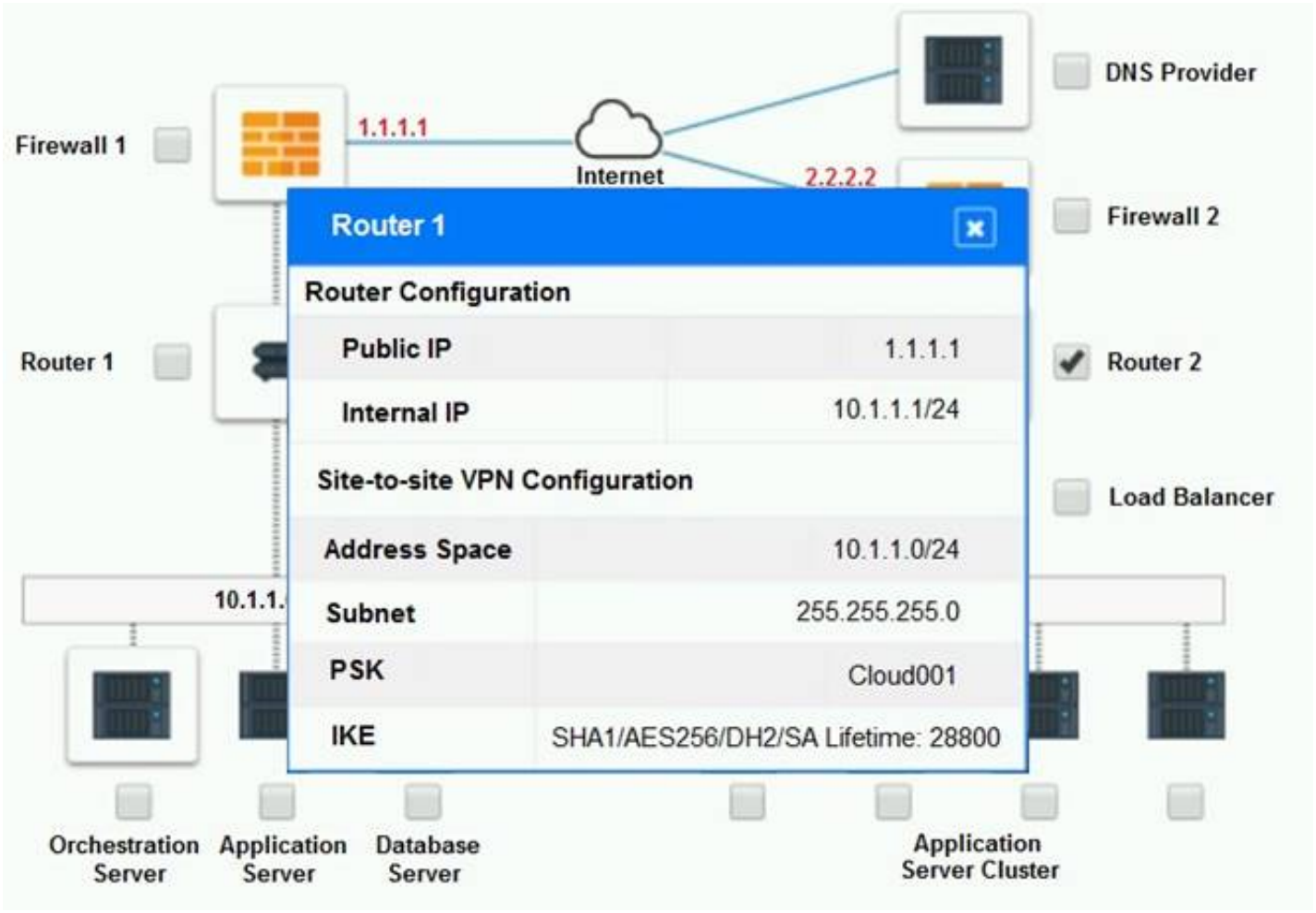
- Identify the correct options to provide adequate configuration for hybrid cloud architecture.

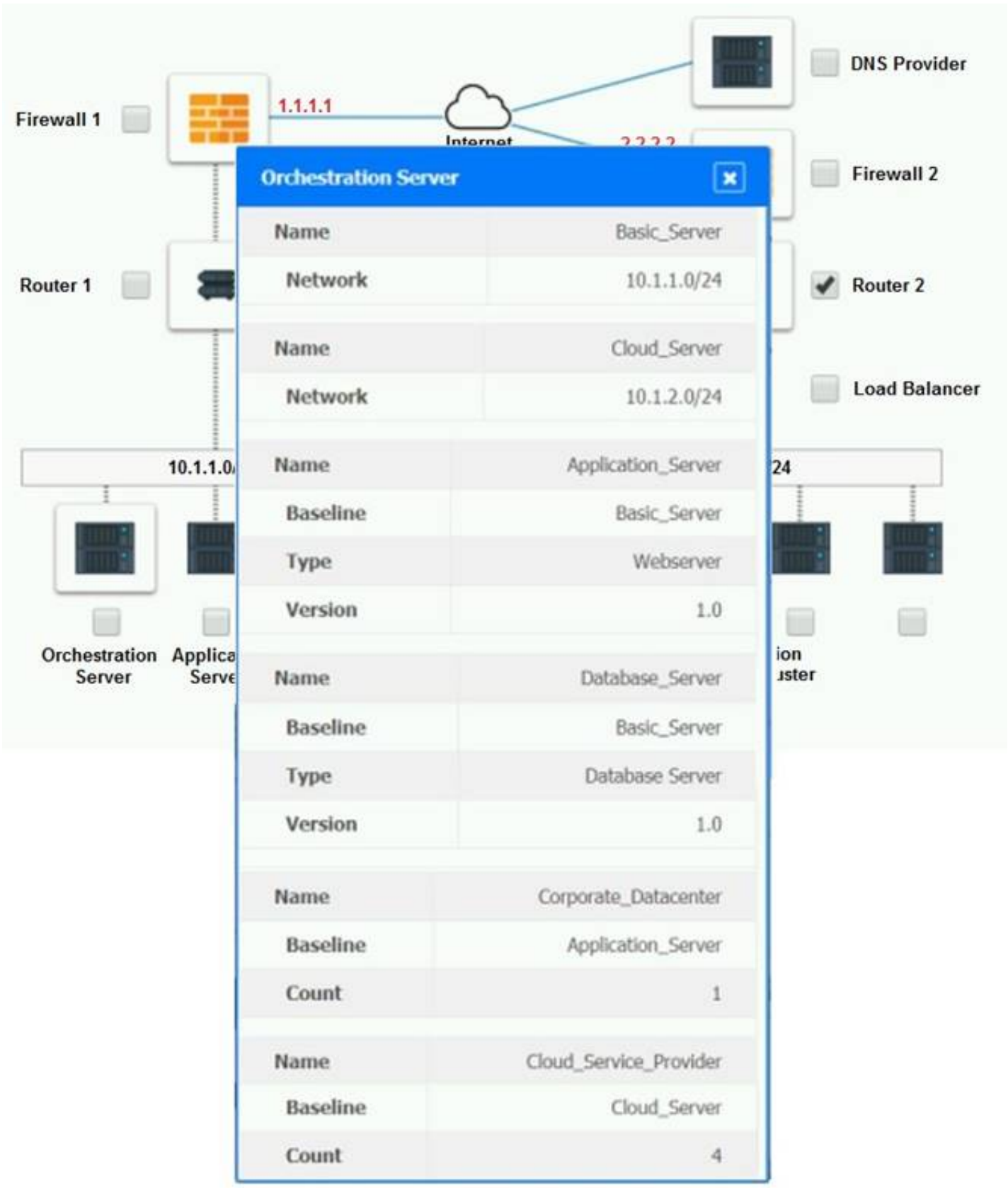
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

Part 1:

Cloud Hybrid Network Diagram




Firewall 1
1.1.1.1
Internet
2.2.2.2
DNS Provider
Firewall 2
Router 1
Router 2
Load Balancer
Router 1
Router Configuration
Public IP
1.1.1.1
Internal IP
10.1.1.1/24
Site-to-site VPN Configuration
Address Space
10.1.1.0/24
Subnet
255.255.255.0
PSK
Cloud001
IKE
SHA1/AES256/DH2/SA Lifetime: 28800
Orchestration Server
Application Server
Database Server
Application Server Cluster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DNS Provider
Firewall 2
Router 1
Router 2
Load Balancer
Orchestration Server
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Network
10.1.1.0/24
Name
Cloud_Server
Network
10.1.2.0/24
Name
Application_Server
Baseline
Basic_Server
Type
Webserver
Version
1.0
Name
Database_Server
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Basic_Server
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Application_Server
Count
1
Name
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Baseline
Cloud_Server
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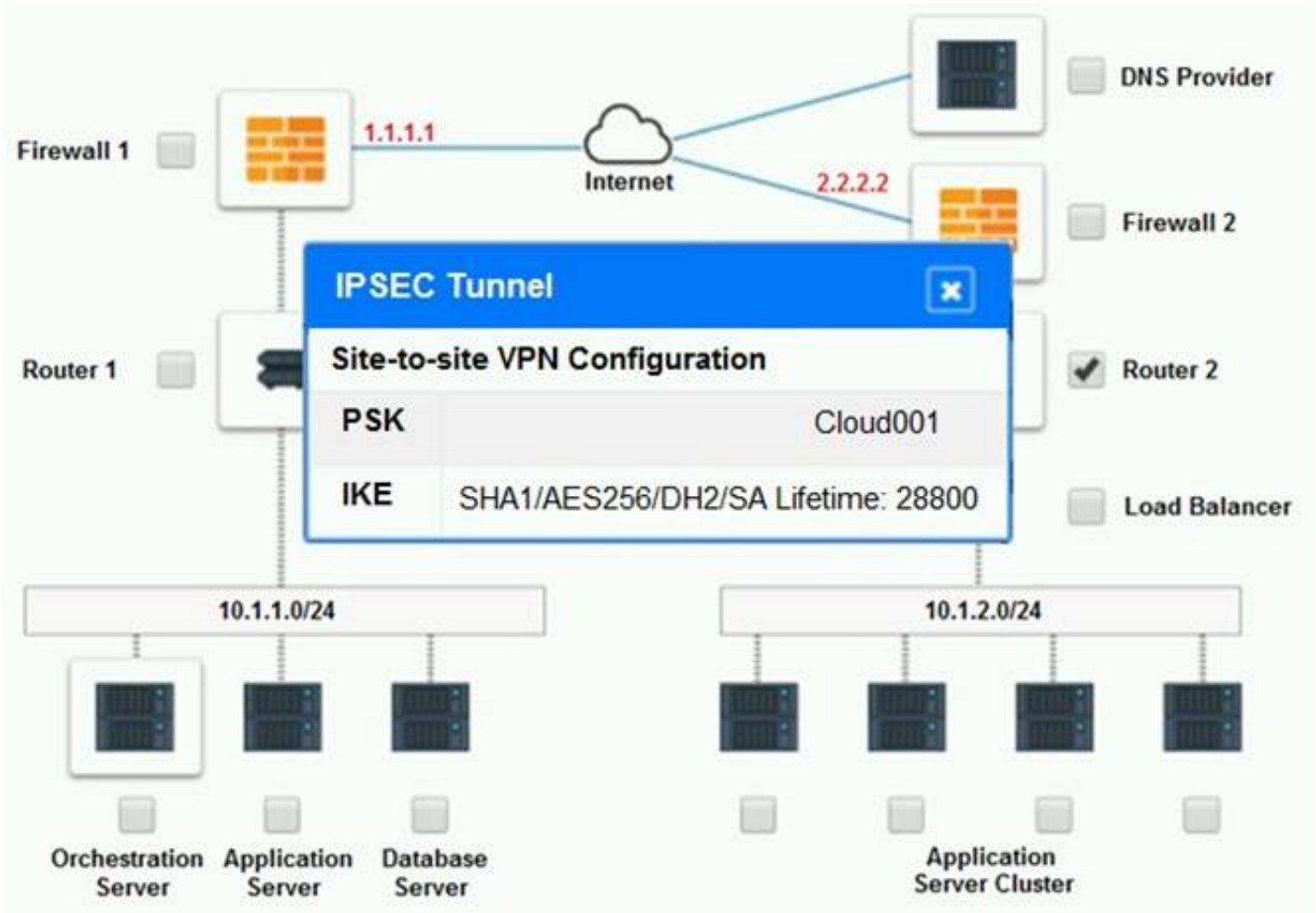
DNS Provider
Firewall 1
1.1.1.1
Internet
2.2.2.2
Firewall 2
IPSEC Tunnel
Site-to-site VPN Configuration
PSK
Cloud001
Router 1
IKE
SHA1/AES256/DH2/SA Lifetime: 28800
Router 2
Load Balancer
10.1.1.0/24
10.1.2.0/24
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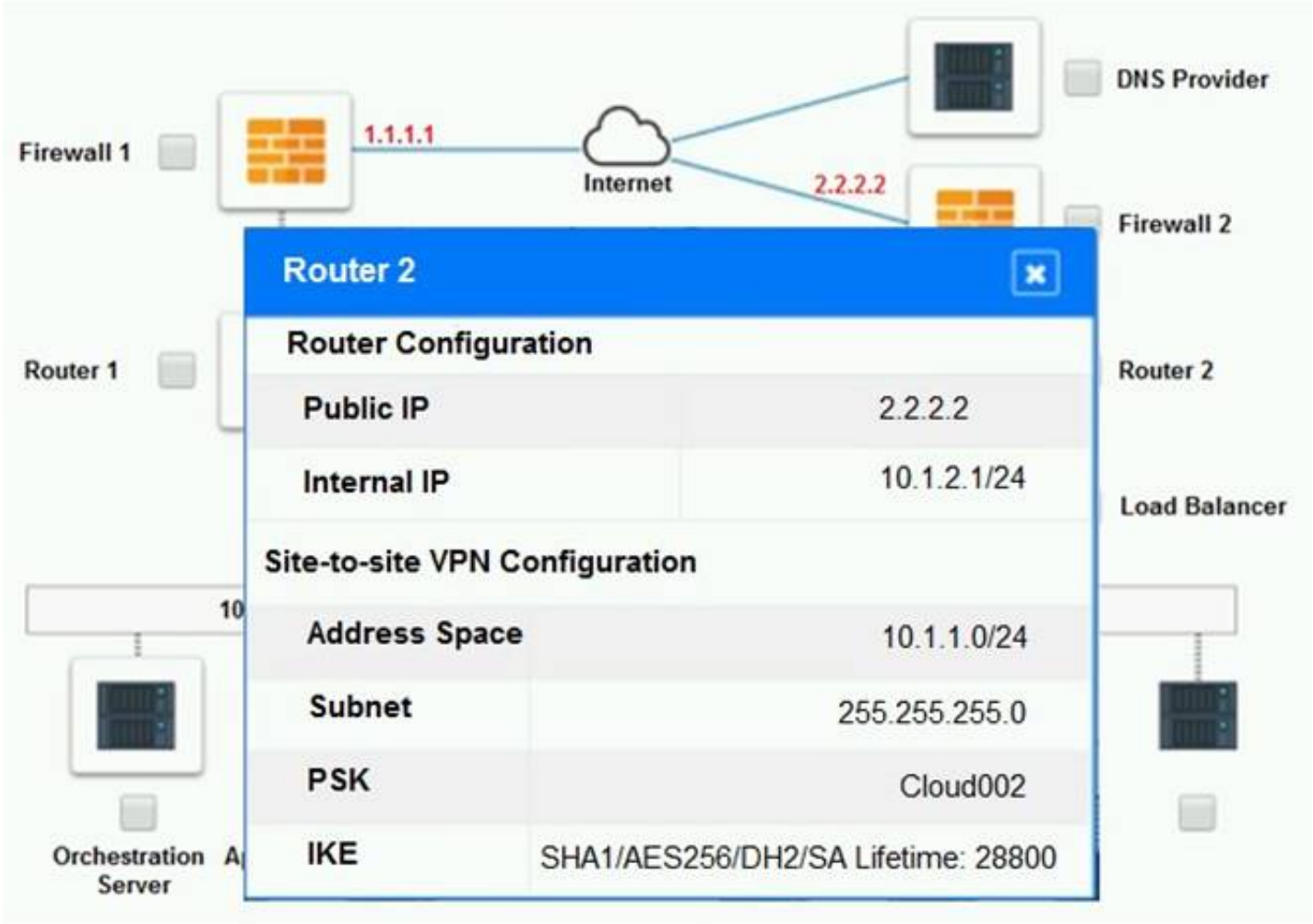
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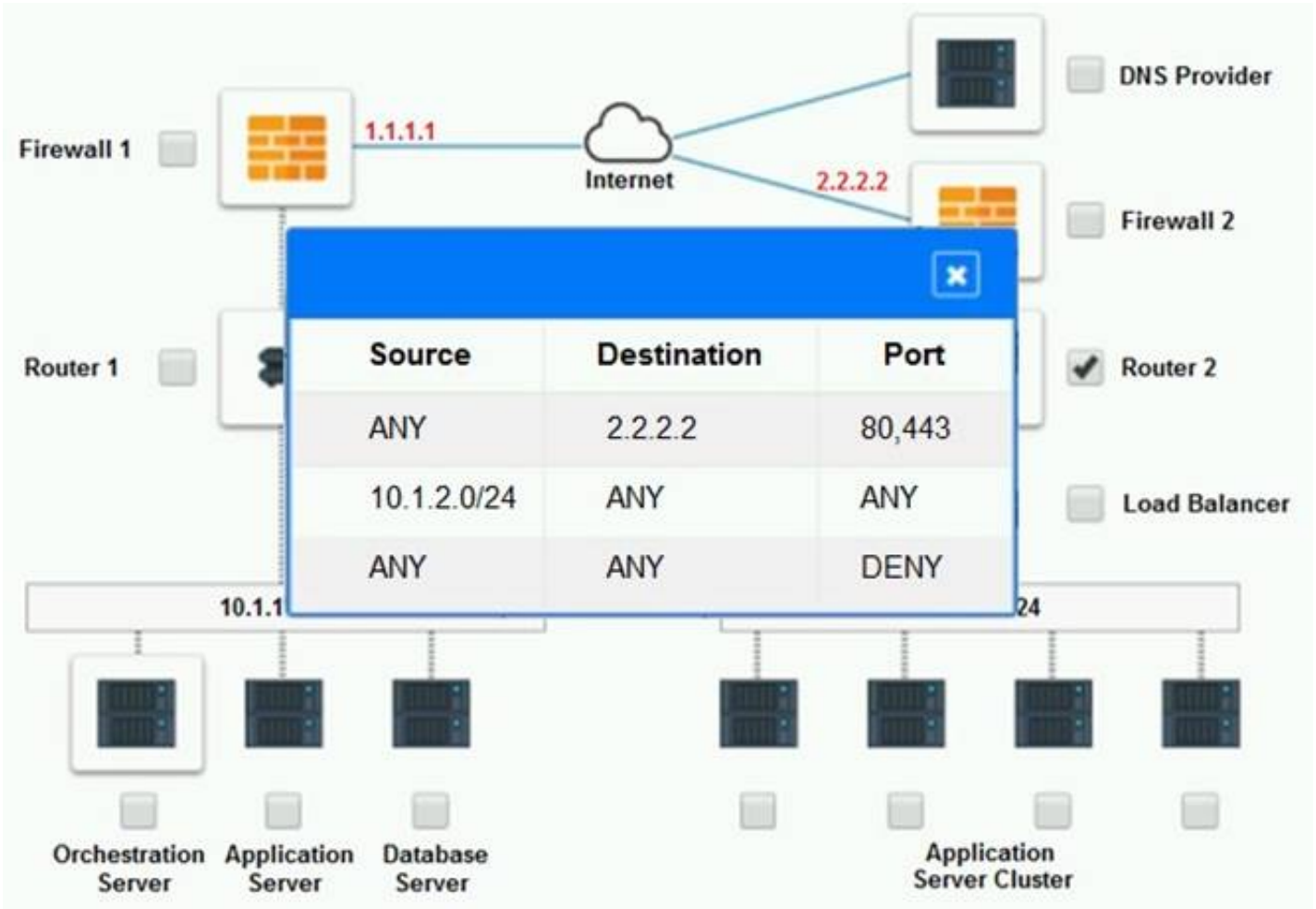

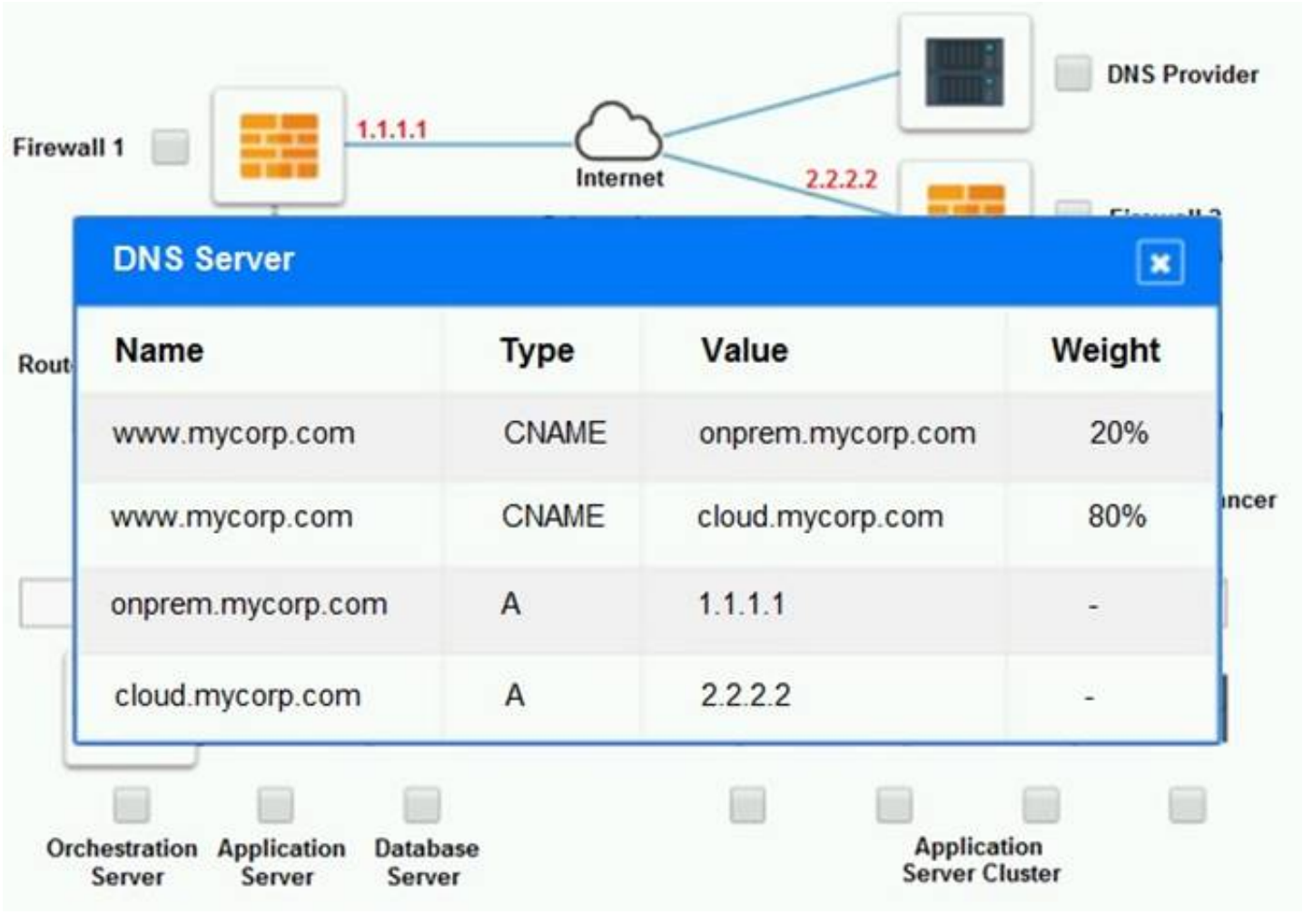

Part 2:
Only select a maximum of TWO options from the multiple choice question

- ☐ Deploy a Replica of the Database Server in the Cloud Provider.
- ☐ Update the PSK (Pre-shared key) in Router 2.
- ☐ Update the A record on the DNS from 2.2.2.2 to 1.1.1.1.
- ☐ Promote deny All to allow All in Firewall 1 and Firewall 2.
- ☐ Change the Address Space on Router 2.
- ☐ Change internal IP Address of Router 1.
- ☐ Reverse the Weight property in the two CNAME records on the DNS.
- ☐ Add the Application Server at on-premises to the Load Balancer.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Part 1: Router 2
The problematic device is Router 2, which has an incorrect configuration for the IPSec tunnel. The IPSec tunnel is a secure connection between the on-premises datacenter and the cloud provider, which allows the traffic to flow between the two networks. The IPSec tunnel requires both endpoints to have matching parameters, such as the IP addresses, the pre-shared key (PSK), the encryption and authentication algorithms, and the security associations (SAs) .
According to the network diagram and the configuration files, Router 2 has a different PSK and a different address space than Router 1. Router 2 has a PSK of "1234567890", while Router 1 has a PSK of "0987654321". Router 2 has an address space of 10.0.0.0/8, while Router 1 has an address space of 192.168.0.0/16. These mismatches prevent the IPSec tunnel from establishing and encrypting the traffic between the two networks.
The other devices do not have any obvious errors in their configuration. The DNS provider has two CNAME records that point to the application servers in the cloud provider, with different weights to balance the load. The firewall rules allow the traffic from and to the application servers on port 80 and port 443, as well as the traffic from and to the VPN server on port 500 and port 4500. The orchestration server has a script that installs and configures the application servers in the cloud provider, using the DHCP server to assign IP addresses.
Part 2:
The correct options to provide adequate configuration for hybrid cloud architecture are:
? Update the PSK in Router 2.
? Change the address space on Router 2.
These options will fix the IPSec tunnel configuration and allow the traffic to flow between the on-premises datacenter and the cloud provider. The PSK should match the one on Router 1, which is "0987654321". The address space should also match the one on Router 1, which is 192.168.0.0/16.
* B. Update the PSK (Pre-shared key in Router2)
* E. Change the Address Space on Router2

NEW QUESTION 158
- (Topic 1)
A cloud engineer is responsible for managing two cloud environments from different MSPs. The security department would like to inspect all traffic from the two cloud environments.
Which of the following network topology solutions should the cloud engineer implement to reduce long-term maintenance?

A. Chain
B. Star
C. Mesh
D. Hub and spoke

Answer: D

Explanation:
Hub and spoke is a type of network topology that consists of a central node or device (hub) that connects to multiple peripheral nodes or devices (spokes). Hub and spoke can help reduce long-term maintenance for managing two cloud environments from different MSPs, as it can simplify and centralize the network configuration and management by using the hub as a single point of contact and control for the spokes. Hub and spoke can also improve network performance and security, as it can reduce latency, bandwidth consumption, and network congestion by routing traffic through the hub. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 162
- (Topic 1)
A cloud architect is designing the VPCs for a new hybrid cloud deployment. The business requires the following:
? High availability
? Horizontal auto-scaling
? 60 nodes peak capacity per region
? Five reserved network IP addresses per subnet
? /24 range
Which of the following would BEST meet the above requirements?

A. Create two /25 subnets in different regions
B. Create three /25 subnets in different regions
C. Create two /26 subnets in different regions
D. Create three /26 subnets in different regions
E. Create two /27 subnets in different regions
F. Create three /27 subnets in different regions

Answer: C

Explanation:
A /26 subnet is a subnet that has a network prefix of 26 bits and a host prefix of 6 bits. A /26 subnet can support up to 64 hosts (62 usable hosts) and has a subnet mask of 255.255.255.192. Creating two /26 subnets in different regions can best meet the business requirements for deploying a high availability, horizontally auto-scaling solution that has a peak capacity of 60 nodes per region and five reserved network IP addresses per subnet. Creating two /26 subnets can provide enough host addresses for the peak capacity and the reserved addresses, as well as allow for some growth or redundancy. Creating the subnets in different regions can provide high availability and horizontal auto- scaling, as it can distribute the workload across multiple locations and scale out or in based on demand. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 167
- (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 172
- (Topic 1)
An IaaS application has a two-hour RTO and a four-hour RPO. The application takes one hour to back up its data or restore from a local backup file. A systems administrator is tasked with configuring the backup policy.
Which of the following should the administrator configure to achieve the application requirements with the LEAST cost?

A. Back up to long-term storage every night
B. Back up to object storage every three hours
C. Back up to long-term storage every four hours
D. Back up to object storage every hour

Answer: B

Explanation:
Object storage is a type of storage service that stores data as objects with unique identifiers and metadata in a flat namespace or structure. Backing up to object storage every three hours can help achieve the application requirements with the least cost for an IaaS application that has a two-hour RTO and a four-hour RPO, as it can provide scalable, durable, and cost-effective storage for backup data while meeting the recovery time and point objectives. Backing up to object storage every three hours can ensure that the backup data is no more than four hours old and can be restored within two hours in case of a disaster or failure. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

NEW QUESTION 176
- (Topic 1)
A systems administrator is deploying a solution that requires a virtual network in a private cloud environment. The solution design requires the virtual network to transport multiple payload types.
Which of the following network virtualization options would BEST satisfy the requirement?

A. VXLAN
B. STT
C. NVGRE
D. GENEVE

Answer: D

Explanation:
Generic Network Virtualization Encapsulation (GENEVE) is a type of network virtualization technology that creates logical networks or segments that span across multiple physical networks or locations. GENEVE can satisfy the requirement of transporting multiple payload types in a virtual network in a private cloud environment, as it can support various network protocols and services by using a flexible and extensible header format that can encapsulate different types of payloads within UDP packets. GENEVE can also provide interoperability and compatibility, as it can integrate with existing network virtualization technologies such as VXLAN, STT, or NVGRE. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 177
- (Topic 1)
A systems administrator wants to have near-real-time information on the volume of data being exchanged between an application server and its clients on the Internet.
Which of the following should the systems administrator implement to achieve this objective?

A. A stateful firewall
B. DLP
C. DNSSEC
D. Network flows

Answer: D

Explanation:
Network flows are records of network traffic that capture information such as source and destination IP addresses, ports, protocols, timestamps, and byte and packet counts. Network flows can provide near-real-time information on the volume of data being exchanged between a system and its clients on the Internet, as they can measure and monitor the amount and rate of network traffic for each connection or session. Network flows can also help analyze network performance, troubleshoot network issues, and detect network anomalies or security incidents. A systems administrator should implement network flows to achieve the objective of having near-real-time information on the volume
of data being exchanged between an application server and its clients on the Internet. References: CompTIA Cloud+ Certification Exam Objectives, page 16, section 3.2

NEW QUESTION 181
- (Topic 1)
A systems administrator is reviewing two CPU models for a cloud deployment. Both CPUs have the same number of cores/threads and run at the same clock

speed.
Which of the following will BEST identify the CPU with more computational power?

A. Simultaneous multithreading
B. Bus speed
C. L3 cache
D. Instructions per cycle

Answer: D

Explanation:
Instructions per cycle (IPC) is a metric that measures how many instructions a CPU can execute in one clock cycle. IPC can help identify the CPU with more computational power when comparing two CPU models that have the same number of cores/threads and run at the same clock speed, as it indicates the efficiency and performance of the CPU architecture and design. A higher IPC means that the CPU can process more instructions in less time, resulting in faster and better performance. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4
Reference: https://en.wikipedia.org/wiki/Central_processing_unit

NEW QUESTION 183
- (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 185
- (Topic 1)
A systems administrator would like to reduce the network delay between two servers.
Which of the following will reduce the network delay without taxing other system resources?

A. Decrease the MTU size on both servers
B. Adjust the CPU resources on both servers
C. Enable compression between the servers
D. Configure a VPN tunnel between the servers

Answer: A

Explanation:
The maximum transmission unit (MTU) is the largest size of a packet or frame that can be sent over a network. Decreasing the MTU size on both servers can reduce the network delay between them, as it can reduce the fragmentation and reassembly of packets, improve the transmission efficiency, and avoid packet loss or errors. Decreasing the MTU size can also avoid taxing other system resources, as it does not require additional CPU, memory, or disk resources. References: CompTIA Cloud+ Certification Exam Objectives, page 16, section 3.2
Reference: https://cseweb.ucsd.edu/~calder/papers/HPDC-01-DynComp.pdf

NEW QUESTION 190
- (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 191
- (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 193
- (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 194
- (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 199
- (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 202
- (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 207
- (Topic 1)
A marketing team is using a SaaS-based service to send emails to large groups of potential customers. The internally managed CRM system is configured to generate a list of target customers automatically on a weekly basis, and then use that list to send emails to each customer as part of a marketing campaign. Last week, the first email campaign sent emails successfully to 3,000 potential customers. This week, the email campaign attempted to send out 50,000 emails, but only 10,000 were sent.
Which of the following is the MOST likely reason for not sending all the emails?

A. API request limit
B. Incorrect billing account
C. Misconfigured auto-scaling
D. Bandwidth limitation

Answer: A

Explanation:
An API request limit is a restriction on the number of requests that can be made to a web service or application programming interface (API) within a certain time period. API request limits are often used by SaaS-based services to control the usage and traffic of their customers and prevent overloading or abuse of their resources. An API request limit can cause a failure to send all the emails if the marketing team exceeds the number of requests allowed by the SaaS-based service in a week. The service may reject or block any requests that go beyond the limit, resulting in fewer emails being sent than expected. References: CompTIA Cloud+ Certification Exam Objectives, page 13, section 2.5
Reference: https://developers.google.com/analytics/devguides/config/mgmt/v3/limits- quotas

NEW QUESTION 210
- (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 212
- (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 216
- (Topic 1)
A cloud administrator is planning to migrate a globally accessed application to the cloud.
Which of the following should the cloud administrator implement to BEST reduce latency for all users?

A. Regions
B. Auto-scaling
C. Clustering
D. Cloud bursting

Answer: A

Explanation:
Regions are geographical locations or areas where cloud service providers have data centers or facilities that host their cloud resources or services. Regions can help reduce latency for all users when deploying a globally accessed application to the cloud, as they can enable faster and closer access to the cloud resources or services based on the user's physical location. Regions can also improve performance and availability, as they can provide redundancy and load balancing by distributing the workload across multiple locations. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

NEW QUESTION 220
- (Topic 4)
A systems administrator is attempting to gather information about services and resource utilization on VMs in a cloud environment. Which of the following will best accomplish this objective?

A. Syslog
B. SNMP
C. CMDB
D. Service management
E. Performance monitoring

Answer: E

Explanation:
Performance monitoring is a technique that collects and analyzes data about the services and resource utilization on VMs in a cloud environment. Performance monitoring can help the systems administrator to gather information about the CPU, memory, disk, network, and application performance of the VMs, as well as identify any bottlenecks, errors, or anomalies that may affect the cloud service quality. Performance monitoring can be implemented using various tools or agents that can collect and report the performance metrics from the VMs to a centralized dashboard or console. Performance monitoring can also help the systems administrator to optimize, troubleshoot, and plan the cloud resources and services. References: CompTIA Cloud+ CV0-003 Certification Study Guide, Chapter 5, Objective 5.1: Given a scenario, monitor cloud resources and services.

NEW QUESTION 221
- (Topic 4)
Which of the following are advantages of a public cloud? (Select TWO).

A. Full control of hardware
B. Reduced monthly costs
C. Decreased network latency
D. Pay as you use
E. Availability of self-service
F. More secure data

Answer: BD

Explanation:
The correct answers are B and D.
* B. Reduced monthly costs: One of the main advantages of public cloud is that it lowers the costs of IT infrastructure and maintenance for the customers. They do not need to purchase, install, or manage any hardware or software, and they only pay for the resources they use. This can result in significant savings compared to owning and operating a private cloud or an on-premise data center1234
* D. Pay as you use: Another benefit of public cloud is that it offers a flexible and scalable pricing model based on the actual usage of the customers. They can adjust their resource consumption according to their changing needs and demands, and only pay for what they use. This eliminates the need for upfront capital investment or long-term contracts, and allows customers to optimize their spending and performance1234

NEW QUESTION 223
- (Topic 4)
A cloud engineer is deploying a server in a cloud platform. The engineer reviews a security scan report. Which of the following recommended services should be disabled? (Select two).

A. Telnet
B. FTP
C. Remote log-in
D. DNS
E. DHCP

F. LDAP

Answer: AB

Explanation:
Telnet and FTP are recommended services to be disabled when deploying a server in a cloud platform, as they are insecure protocols that transmit data in plain text and expose credentials and sensitive information to potential attackers12. Remote log-in, DNS, DHCP, and LDAP are not necessarily recommended to be disabled, as they may provide useful functionality for the server and the cloud environment. However, they should be configured properly and secured with encryption, authentication, and authorization mechanisms34.
References: CompTIA Cloud+ CV0-003 Exam Objectives, Objective 4.2: Given a scenario, apply security configurations and compliance controls ; CompTIA Quick Start Guide to Tackling Cloud Security Concerns3

NEW QUESTION 225
- (Topic 4)
As a result of an IT audit, a customer has decided to move some applications from an old legacy system to a private cloud. The current server location is remote with low bandwidth. Which of the following is the best migration strategy to use for this deployment?

A. P2V with physical data transport
B. P2P with remote data copy
C. V2V with physical data transport
D. V2P with physical data transport
E. V2P with remote data copy

Answer: A

Explanation:
P2V stands for physical to virtual, which is the process of converting a physical server into a virtual machine. This is a common migration strategy for moving legacy systems to the cloud, as it preserves the existing configuration and data of the server. Physical data transport means using a physical device, such as a hard disk drive or a USB flash drive, to transfer the data from the source location to the destination location. This method is suitable for remote locations with low bandwidth, as it avoids the network latency and congestion that may occur with remote data copy. P2P, V2V, and V2P are other types of migration strategies, but they are not applicable for this scenario. P2P stands for physical to physical, which is the process of moving a physical server to another physical server. V2V stands for virtual to virtual, which is the process of moving a virtual machine to another virtual machine. V2P stands for virtual to physical, which is the process of converting a virtual machine into a physical server. Remote data copy means using a network connection, such as FTP or SCP, to transfer the data from the source location to the destination location. This method is suitable for locations with high bandwidth and reliable network connectivity. References: CompTIA Cloud+ CV0-003 Certification Study Guide, Chapter 21, Cloud Migration, page 3371.

NEW QUESTION 226
- (Topic 4)
A systems administrator is deploying a new version of a website. The website is deployed in the cloud using a VM cluster. The administrator must then deploy the new version into one VM first. After a period of time, if there are no issues detected, a second VM will be updated. This process must continue until all the VMS are updated. Which of the following upgrade methods is being implemented?

A. Canary
B. Blue-green
C. Rolling
D. Staging

Answer: C

Explanation:
The upgrade method that is being implemented by the systems administrator is rolling. A rolling upgrade is a type of upgrade that applies the new version of a software or service to a subset of nodes or instances at a time, while the rest of the nodes or instances continue to run the old version. This way, the upgrade can be performed gradually and incrementally, without causing downtime or disruption to the entire system. A rolling upgrade can also help to monitor and test the new version for any issues or errors, and roll back to the old version if needed12.
A canary upgrade is a type of upgrade that applies the new version of a software or service to a small and selected group of users or customers, before rolling it out to the rest of the population. This way, the upgrade can be evaluated for its performance, functionality, and feedback, and any problems or bugs can be fixed before affecting the majority of users or customers34.
A blue-green upgrade is a type of upgrade that involves having two identical environments, one running the old version (blue) and one running the new version (green) of a software or service. The traffic is switched from the blue environment to the green environment once the new version is ready and tested. This way, the upgrade can be performed quickly and seamlessly, without any downtime or risk of failure. The blue environment can also serve as a backup in case of any issues with the green environment5 .
A staging upgrade is a type of upgrade that involves having a separate environment that mimics the production environment, where the new version of a software or service is deployed and tested before moving it to the production environment. This way, the upgrade can be verified and validated for its compatibility, security, and quality, and any defects or errors can be resolved before affecting the live system .

NEW QUESTION 228
- (Topic 4)
A cloud administrator created a developer desktop image and added it to the VDI farm in a private cloud environment. One of the developers opened a VDI session and noticed that compiling the code was taking up to one hour to complete. However, when the developer compiles the code on a local machine, the job completes in less than five minutes. Which of the following sizing techniques would be best to use to improve the performance of the compile job?

A. Add more servers to the VDI environment.
B. Increase the CPU and the memory on the VDI template.
C. Configure the VDI environment to increase sessions automatically.
D. Migrate code compile jobs to a public cloud provider.

Answer: B

Explanation:
The most likely cause of the poor performance of the compile job is that the VDI template does not have enough CPU and memory resources to handle the task

efficiently. Compiling code is a CPU-intensive and memory-intensive process that requires sufficient computing power to run smoothly. By increasing the CPU and memory on the VDI template, the cloud administrator can improve the performance of the compile job and reduce the time it takes to complete. Adding more servers to the VDI environment or configuring the VDI environment to increase sessions automatically would not help, as they would only affect the scalability and availability of the VDI farm, not the performance of individual sessions. Migrating code compile jobs to a public cloud provider would incur additional costs and complexity, and may not be feasible or desirable for the organization. References: The Official CompTIA Cloud+ Self-Paced Study Guide (CV0-003) eBook, Chapter 3, Section 3.3, page 971

NEW QUESTION 230
- (Topic 4)
Which of the following enables CSPs to offer unlimited capacity to customers?

A. Adequate budget
B. Global data center distribution
C. Economies of scale
D. Agile project management

Answer: C

Explanation:
The correct answer is C. Economies of scale.
Economies of scale are the cost advantages that CSPs can achieve by increasing the size and scale of their operations. By spreading the fixed costs of infrastructure, software, and personnel over a larger customer base and data volume, CSPs can reduce the average cost per unit of service and offer unlimited capacity to customers at competitive prices1. Adequate budget is not a sufficient condition for offering unlimited capacity, as CSPs still need to optimize their resource utilization and efficiency to meet the growing demand for data storage and processing.
Global data center distribution is a strategy that CSPs use to improve their service availability, reliability, and performance by locating their servers closer to their customers and reducing network latency. However, this does not necessarily imply unlimited capacity, as CSPs still need to manage the trade-offs between data center size, cost, and power consumption.
Agile project management is a methodology that CSPs use to deliver their services faster, better, and cheaper by adopting iterative, incremental, and collaborative approaches. However, this does not directly affect their capacity, as CSPs still need to scale their infrastructure and software to handle the increasing data load.

NEW QUESTION 231
- (Topic 4)
An organization deployed an application using a cloud provider's internal managed certificates. Developers are unable to retrieve data when calling the API from any machine.
The following error message is in the log:
12-04-2023-10:05:25, SSL Negotiation Error 12-04-2023-10:05:28,Invalid Certificate
12-04-2023-10:05:29, TLS Handshake Failed 12-04-2023-10:05:30,Connection Closed
Which of the following is the most likely cause of the error?

A. TLS version
B. Insecure cipher
C. Self-signed certificate
D. Root trust

Answer: D

Explanation:
The error message indicates that the SSL/TLS handshake failed due to an invalid certificate. This means that the client machine does not trust the certificate authority (CA) that issued the certificate for the cloud provider’s API. A self-signed certificate or an insecure cipher would not cause this error, as they would be detected during the certificate validation process. The TLS version is not relevant, as the error occurs before the protocol negotiation. The most likely cause of the error is that the client machine does not have the root CA certificate installed in its trust store, or that the cloud provider’s certificate chain is incomplete or broken. To fix the error, the client machine needs to install the root CA certificate or the cloud provider needs to fix its certificate chain. References: The Official CompTIA Cloud+ Self-Paced Study Guide (CV0-003) eBook, Chapter 6, Section 6.2, page 2321

NEW QUESTION 232
- (Topic 4)
A cloud administrator must ensure all servers are in compliance with the company's security policy Which of the following should the administrator check FIRST?

A. The application version
B. The OS version
C. Hardened baselines
D. Password policies

Answer: C

Explanation:
Hardened baselines are a set of security best practices that reduce the vulnerability of a system to exploits by reducing its attack surface1. They are also known as security configurations or benchmarks, and they provide a standard level of system hardening for an organization23.
Checking the hardened baselines of the servers is the first step that a cloud administrator should take to ensure compliance with the company’s security policy. This is because hardened baselines can help to:
Identify and eliminate common vulnerabilities and exposures (CVEs) that attackers can exploit1.
Remove unnecessary or unused services, accounts, software, and ports that can increase the attack surface23.
Apply appropriate settings and controls for encryption, authentication, authorization, firewall, and logging23.
Streamline audits and testing by reducing complexity and providing a reliable benchmark23.

NEW QUESTION 235
- (Topic 4)
A cloud engineer is migrating a customer's web servers from a hypervisor platform to a CSP environment. The engineer needs to decouple the infrastructure and

components during the migration to reduce the single points of failure. Which of the following storage options should the cloud engineer migrate the content to in order to improve availability?

A. Block
B. File
C. Object
D. iSCSI
E. NFS

Answer: C

Explanation:
Object storage is a storage option that stores data as discrete units called objects, which are identified by a unique identifier and can have metadata attached to them. Object storage can help the cloud engineer migrate the content to improve availability by decoupling the data from the underlying infrastructure and components. Object storage can also provide high scalability, durability, and redundancy for the data, as well as support for multiple protocols and access methods. Object storage can be accessed through APIs, web interfaces, or gateways that can emulate file or block storage. Object storage is suitable for storing unstructured or static data, such as web content, images, videos, or documents. References: CompTIA Cloud+ CV0-003 Certification Study Guide, Chapter 4, Objective 4.1: Given a scenario, implement cloud storage solutions.

NEW QUESTION 239
- (Topic 4)
A systems administrator is attempting to gather information about services and resource utilization on VMS in a cloud environment. Which of the following will BEST accomplish this objective?

A. Syslog
B. SNMP
C. CMDB
D. Service management
E. Performance monitoring

Answer: E

Explanation:
Performance monitoring is the process of collecting and analyzing metrics related to the performance and availability of resources in a cloud environment1. Performance monitoring can help a systems administrator to gather information about services and resource utilization on VMs in a cloud environment by providing the following benefits2:
? Identify and troubleshoot performance issues and bottlenecks before they affect the end users or business operations.
? Optimize the resource allocation and configuration to meet the performance requirements and SLAs of the services.
? Plan for future capacity and scalability needs based on the historical trends and patterns of resource utilization.
? Compare the performance and costs of different cloud service providers, regions, and SKUs.
Some of the tools and services that can help with performance monitoring in a cloud environment are3:
? Azure Monitor: A comprehensive service that provides a unified view of the health,
performance, and availability of your Azure resources, applications, and services. Azure Monitor collects metrics, logs, and traces from various sources and provides analysis, visualization, alerting, and automation capabilities.
? Azure Advisor: A personalized service that provides recommendations to optimize your Azure resources for performance, security, cost, reliability, and operational excellence. Azure Advisor analyzes your resource configuration and usage data and suggests best practices to improve your cloud environment.
? Azure Application Insights: A service that monitors the performance and usage of your web applications and services. Application Insights collects telemetry data such as requests, dependencies, exceptions, page views, custom events, and metrics from your application code and provides powerful analytics, diagnostics, and alerting features.
? Azure Log Analytics: A service that collects and analyzes data from various sources such as Azure Monitor, Azure services, VMs, containers, applications, and other cloud or on-premises systems. Log Analytics enables you to query, visualize, and correlate log data using the Kusto Query Language (KQL) and create custom dashboards and reports.
Syslog is a standard protocol for sending log messages from network devices to a central server. Syslog can help with logging and auditing activities in a cloud environment, but it does not provide performance monitoring capabilities. Therefore, option A is incorrect. SNMP (Simple Network Management Protocol) is a protocol for collecting and organizing information about managed devices on a network. SNMP can help with network management and monitoring in a cloud environment, but it does not provide comprehensive performance monitoring for VMs and services. Therefore, option B is incorrect.
CMDB (Configuration Management Database) is a database that stores information about the configuration items (CIs) in an IT environment. CMDB can help with configuration management and change management in a cloud environment, but it does not provide performance monitoring capabilities. Therefore, option C is incorrect.
Service management is a set of processes and practices that aim to deliver value to customers by providing quality services that meet their needs and expectations. Service management can help with service design, delivery, support, and improvement in a cloud environment, but it does not provide performance monitoring capabilities. Therefore, option D is incorrect.

NEW QUESTION 242
- (Topic 4)
A cloud administrator needs to deploy a security virtual appliance in a private cloud environment, but this appliance will not be part of the standard catalog of items for other users to request. Which of the following is the BEST way to accomplish this task?

A. Create an empty V
B. import the hard disk of the virtual applianc
C. and configure the CPU and memory.
D. Acquire the build scripts from the vendor and recreate the appliance using the baseline templates
E. Import the virtual appliance into the environment and deploy it as a VM
F. Convert the virtual appliance to a template and deploy a new VM using the template.

Answer: C

Explanation:
The correct answer is C. Import the virtual appliance into the environment and deploy it as a VM.
A virtual appliance is a pre-packaged and pre-configured software solution that runs on a virtual machine (VM). A virtual appliance typically consists of an operating system, an application, and any required dependencies, and is designed to provide a specific function or service. A virtual appliance can be distributed

as a single file or a set of files that can be imported into a virtualization platform, such as VMware, Hyper-V, or KVM .
A cloud administrator can deploy a security virtual appliance in a private cloud environment by importing the virtual appliance into the environment and deploying it as a VM. This is the best way to accomplish this task because it preserves the original configuration and functionality of the virtual appliance, and does not require any additional installation or customization. The cloud administrator can also control the access and visibility of the virtual appliance, and prevent other users from requesting it from the standard catalog of items .
Creating an empty VM, importing the hard disk of the virtual appliance, and configuring the CPU and memory is not the best way to accomplish this task because it involves more steps and complexity than importing the virtual appliance as a whole. It also introduces the risk of losing or corrupting some data or settings during the import process, or misconfiguring the CPU and memory for the virtual appliance.
Acquiring the build scripts from the vendor and recreating the appliance using the baseline templates is not the best way to accomplish this task because it involves more time and effort than importing the virtual appliance directly. It also depends on whether the vendor provides the build scripts or not, and whether they are compatible with the baseline templates or not.
Converting the virtual appliance to a template and deploying a new VM using the template is not the best way to accomplish this task because it adds an unnecessary step of creating a template from the virtual appliance. It also does not prevent other users from accessing or requesting the template from the catalog of items.

NEW QUESTION 246
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