

CV0-004 Dumps

CompTIA Cloud+

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NEW QUESTION 1

An on-premises data center is located in an earthquake-prone location. The workload consists of real-time, online transaction processing. Which of the following data protection strategies should be used to back up on-premises data to the cloud while also being cost effective?

- A. Remote replication for failover
- B. A copy that is RAID 1 protected on spinning drives in an on-premises private cloud
- C. A full backup to on-site tape libraries in a private cloud
- D. Air-gapped protection to provide cyber resiliency

Answer: A

Explanation:

Remote replication for failover is the data protection strategy that should be used to back up on-premises data to the cloud for an earthquake-prone location. It provides real-time or near-real-time copying of data to a remote location, which can be quickly activated in case the primary site fails. References: Disaster recovery strategies, including remote replication for failover, are part of the cloud-based data protection methods covered in the CompTIA Cloud+ certification.

NEW QUESTION 2

A cloud solutions architect needs to have consistency between production, staging, and development environments. Which of the following options will best achieve this goal?

- A. Using Terraform templates with environment variables
- B. Using Grafana in each environment
- C. Using the ELK stack in each environment
- D. Using Jenkins agents in different environments

Answer: A

Explanation:

Terraform templates with environment variables can ensure consistency across different environments such as production, staging, and development. Terraform allows for infrastructure as code, which can be used to define and maintain infrastructure with consistency. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

NEW QUESTION 3

Between 11:00 a.m. and 1:00 p.m. on workdays, users report that the sales database is either not accessible, sluggish, or difficult to connect to. A cloud administrator discovers that during the impacted time, all hypervisors are at capacity. However, when 70% of the users are using the same database, those issues are not reported. Which of the following is the most likely cause?

- A. Oversubscription
- B. Resource allocation
- C. Sizing issues
- D. Service quotas

Answer: A

Explanation:

The most likely cause of accessibility and performance issues during specific times is oversubscription. This happens when more users are trying to access the database than the hypervisors can handle, due to their resources being allocated to more virtual machines or processes than they can efficiently support. References: Resource management concepts such as avoiding oversubscription are covered under the Management and Technical Operations domain of the CompTIA Cloud+ exam objectives.

NEW QUESTION 4

A company requests that its cloud administrator provision virtual desktops for every user. Given the following information:

- One hundred users are at the company.
- A maximum of 30 users work at the same time.
- Users cannot be interrupted while working on the desktop. Which of the following strategies will reduce costs the most?

- A. Provisioning VMs of varying sizes to match user needs
- B. Configuring a group of VMs to share with multiple users
- C. Using VMs that have spot availability
- D. Setting up the VMs to turn off outside of business hours at night

Answer: D

Explanation:

Setting up the VMs to turn off outside of business hours at night will reduce costs the most, especially since a maximum of 30 users work at the same time and users cannot be interrupted while working. This approach ensures that resources are used only when necessary. References: Cost management and efficient resource utilization strategies like scheduling VMs to turn off during idle times are discussed within the financial management aspects of cloud services in the CompTIA Cloud+ exam objectives.

NEW QUESTION 5

Which of the following will best reduce the cost of running workloads while maintaining the same performance? (Select two).

- A. Instance size
- B. Tagging
- C. Reserved resources model
- D. Spot instance model
- E. Pay-as-you-go model

F. Dedicated host model

Answer: CD

Explanation:

The Reserved resources model offers cost savings for committed use over a long term, which can reduce costs while maintaining performance for predictable workloads. The Spot instance model allows users to take advantage of unused capacity at lower prices, offering significant cost savings, though with the possibility of instances being terminated when demand rises. Both models can be strategically used to optimize costs without compromising performance.

NEW QUESTION 6

A cloud engineer is troubleshooting an application that consumes multiple third-party REST APIs. The application is randomly experiencing high latency. Which of the following would best help determine the source of the latency?

- A. Configuring centralized logging to analyze HTTP requests
- B. Running a flow log on the network to analyze the packets
- C. Configuring an API gateway to track all incoming requests
- D. Enabling tracing to detect HTTP response times and codes

Answer: D

Explanation:

Enabling tracing in the application can help determine the source of high latency by providing detailed information on HTTP request and response times, as well as response codes. This can identify which API calls are experiencing delays and contribute to overall application latency, allowing for targeted troubleshooting and optimization.

NEW QUESTION 7

Which of the following strategies requires the development of new code before an application can be successfully migrated to a cloud provider?

- A. Refactor
- B. Re-architect
- C. Rehost
- D. Replatform

Answer: A

Explanation:

Refactoring requires the development of new code before an application can be successfully migrated to a cloud provider. It often involves restructuring and optimizing the existing code without changing its external behavior to fit into the new cloud environment. References: Application migration strategies and the requirements for each, like refactoring, are included in cloud migration best practices covered in CompTIA Cloud+.

NEW QUESTION 8

A cloud architect is preparing environments to develop a new application that will process sensitive data. The project team consists of one internal developer, two external consultants, and three testers. Which of the following is the most important security control for the cloud architect to consider implementing?

- A. Setting up private development, public development, and testing environments
- B. Segregating environments for internal and external teams
- C. Configuring DDoS protection to mitigate the risk of downtime
- D. Using IAM and ACL in order to bolster DLP

Answer: D

Explanation:

In a project handling sensitive data with a mix of internal and external team members, implementing Identity and Access Management (IAM) and Access Control Lists (ACL) is crucial for Data Loss Prevention (DLP). These controls ensure that only authorized individuals have access to specific resources, and actions are governed according to the principle of least privilege, minimizing the risk of data leakage or unauthorized access.

NEW QUESTION 9

A customer's facility is located in an area where natural disasters happen frequently. The customer requires the following:

- Data resiliency due to exposure to frequent natural disasters
- Data localization because of privacy regulations in the country
- High availability

Which of the following cloud resources should be provisioned to meet these requirements?

- A. Storage in a separate data center located in same region
- B. An on-premises private cloud carrying duplicate data
- C. Storage in an availability zone outside the region
- D. Storage in the same availability zone as the primary data

Answer: C

Explanation:

To meet the requirements of data resiliency, data localization, and high availability in a region prone to natural disasters, the customer should provision storage in an availability zone outside the region. This ensures that data is not affected by regional disasters and complies with data localization by remaining within the country's borders, while also providing high availability. References: Disaster recovery and high availability strategies, including the use of multiple availability zones, are discussed in the CompTIA Cloud+ certification material.

NEW QUESTION 10

An organization wants to ensure its data is protected in the event of a natural disaster. To support this effort, the company has rented a colocation space in another part of the country. Which of the following disaster recovery practices can be used to best protect the data?

- A. On-site
- B. Replication
- C. Retention
- D. Off-site

Answer: D

Explanation:

For an organization looking to protect its data in the event of a natural disaster, the best disaster recovery practice would be off-site replication. By renting a colocation space in another part of the country, the company can maintain copies of their data and critical systems in a geographically separate location, ensuring they are not affected by the same disaster. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Disaster Recovery

NEW QUESTION 10

A systems administrator needs to configure a script that will monitor whether an application is healthy and stop the VM if an unsuccessful code is returned. Which of the following scripts should the systems administrator use to achieve this goal?

- A.

```
RESPONSE_CODE }string APP_URLbool RESPONSE_CODEstring VMhealth checker (APP_URL, VM) {if [ http_probe (APP_URL) == 200] { echo RESPONSE_CODE }else{ stop (VM) echo
```
- B.

```
else{ echostring APP_URLfloat RESPONSE_CODE string VMhealth_checker (APP_URL, VM) {if [ http_probe (APP_URL) == 200] { stop (RESPONSE_CODE)echo VM } stop (VM)RESPONSE CODE }
```
- C.

```
else{ echostring APP_URLint RESPONSE_CODEstring VMhealth checker (APP_URL, VM) {if [ http_probe (APP_URL) == 200] { echo RESPONSE_CODE }stop (VM) RESPONSE_CODE }
```
- D.

```
else{ echostring APP_URLint RESPONSE_CODEstring VMhealth_checker (APP_URL, VM) { if [ http_probe (VM) == 200] { stop (VM)echo RESPONSE_CODE } RESPONSE CODE }
```

Answer: A

Explanation:

Script A is designed to monitor the health of an application by checking its response code. If the application returns a 200 (OK) status, it indicates that the application is healthy. Otherwise, the script will stop the VM to address the issue, which is a common approach to handle unhealthy application states in automated environments. This script effectively achieves the goal of monitoring application health and taking corrective action when an unsuccessful code is returned. References: CompTIA Cloud+ resources and general scripting practices for cloud environments

NEW QUESTION 11

Servers in the hot site are clustered with the main site.

- A. Network traffic is balanced between the main site and hot site servers.
- B. Offline server backups are replicated hourly from the main site.
- C. All servers are replicated from the main site in an online status.
- D. Which of the following best describes a characteristic of a hot site?

Answer: C

Explanation:

When servers in a hot site are clustered with the main site, it indicates that all servers are replicated from the main site in an online status. This means that the hot site maintains a live, real-time copy of data and applications, ensuring immediate availability in the event of a failure at the main site. Unlike options A and B, which describe load balancing and backup strategies respectively, clustering with a hot site as described in option C ensures that the hot site can take over with minimal downtime, maintaining business continuity.

References: CompTIA Cloud+ CV0-004 Study Guide and Official CompTIA Content

NEW QUESTION 16

A DevOps engineer is integrating multiple systems. Each system has its own API that exchanges data based on different application-level transactions. Which of the following delivery mechanisms would best support this integration?

- A. Enterprise service bus
- B. Socket
- C. RPC
- D. Queue

Answer: A

Explanation:

An Enterprise Service Bus (ESB) is designed to facilitate application integration by providing a centralized architecture for high-level, message-based, and event-driven communication between different systems. It is particularly well-suited for integrating multiple systems with their own APIs because it can handle various data formats and protocols, enabling different applications to communicate with each other seamlessly. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

NEW QUESTION 19

A systems administrator notices a surge of network traffic is coming from the monitoring server. The administrator discovers that large amounts of data are being downloaded to an external source. While investigating, the administrator reviews the following logs:

Protocol	Local address	Foreign address	State
TCP	10.181.12.5:20	172.17.250.12	ESTABLISHED
TCP	10.181.12.5:22	172.32.58.39	ESTABLISHED
TCP	10.181.12.5:443	172.30.252.204	ESTABLISHED
TCP	10.181.12.5:4443	10.11.15.82	ESTABLISHED
TCP	10.181.12.5:8048	172.24.255.192	TIME_WAIT

Which of the following ports has been compromised?

- A. Port 20
- B. Port 22
- C. Port 443
- D. Port 4443
- E. Port 8048

Answer: E

Explanation:

Based on the logs provided, the port that has been compromised is Port 8048. The state "TIME_WAIT" indicates that this port was recently used to establish a connection that has now ended. This could be indicative of the recent activity where large amounts of data were downloaded to an external source, suggesting a potential security breach. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 20

An DevOps engineer is receiving reports that users can no longer access the company's web application after hardening of a web server. The users are receiving the following error:

ERR_SSLJ/ERSION_OR_CIPHER_MISMATCH.

Which of the following actions should the engineer take to resolve the issue?

- A. Restart the web server.
- B. Configure TLS 1.2 or newer.
- C. Update the web server.
- D. Review logs on the WAF

Answer: B

Explanation:

To resolve the ERR_SSL_VERSION_OR_CIPHER_MISMATCH error after hardening a web server, the engineer should configure the server to use TLS 1.2 or newer. This error often occurs when the server or client supports an outdated version of SSL/TLS or incompatible cipher suites. Updating to a modern, secure version of TLS ensures compatibility and enhances security. References: The CompTIA Cloud+ certification includes governance, risk, compliance, and security for the cloud, emphasizing the importance of implementing up-to-date security protocols like TLS to protect data in transit and ensure secure communications in cloud environments.

NEW QUESTION 25

A company runs a discussion forum that caters to global users. The company's monitoring system reports that the home page suddenly is seeing elevated response times, even though internal monitoring has reported no issues or changes. Which of the following is the most likely cause of this issue?

- A. Cryptojacking
- B. Human error
- C. DDoS
- D. Phishing

Answer: C

Explanation:

Elevated response times without reported issues or changes internally could indicate a Distributed Denial of Service (DDoS) attack, where multiple systems flood the bandwidth or resources of a targeted system, usually one or more web servers. References: CompTIA Security+ Guide to Network Security Fundamentals by Mark Ciampa.

NEW QUESTION 27

Which of the following would allow a cloud engineer to flatten a deeply nested JSON log to improve readability for analysts?

- A. Grafana
- B. Kibana
- C. Elasticsearch
- D. Logstash

Answer: D

Explanation:

Logstash can be used to flatten a deeply nested JSON log, which would improve readability for analysts. Logstash is a data processing pipeline that ingests data from various sources, transforms it, and then sends it to a "stash" like Elasticsearch. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Data Management

NEW QUESTION 32

A cloud engineer has provisioned a VM for a high-frequency trading application. After the VM is put into production, users report high latency in trades. The engineer checks the last six hours of VM metrics and sees the following:

- CPU utilization is between 30% to 60%.
- NetworkIn is between 50Kbps and 70Kbps.
- NetworkOut is between 3.000Kpbs and 5.000Kbps.
- DiskReadOps is at 30.
- DiskWriteOps is at 70
- Memory utilization is between 50% and 70%.

Which of the following steps should the engineer take next to solve the latency issue?

- A. Move to a network-optimized instance type as the network throughput is not enough.
- B. Modify the disk IOPS to a higher value as the disk IO is being bottlenecked at 100 IOPS.
- C. Increase the memory of the instance as the high-frequency trading application requires more RAM.
- D. Increase the instance size to allocate more vCPUs as the CPU utilization is very high.

Answer: A

Explanation:

Since the NetworkOut is significantly higher than NetworkIn and considering the nature of a high-frequency trading application, the issue most likely lies with network throughput. Moving to a network-optimized instance type would provide higher network bandwidth, which can reduce latency in trades. References: This solution is derived from the Management and Technical Operations domain of the CompTIA Cloud+ objectives, focusing on performance optimization for cloud services.

NEW QUESTION 35

An IT manager is migrating the production environment to the cloud but needs to keep control of the operating systems, patches, and settings of all resources. Which of the following deployment models will best meet the requirements?

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

Answer: C

Explanation:

Infrastructure as a Service (IaaS) is the deployment model that will best meet the requirements of retaining control over the operating systems, patches, and settings of all resources. IaaS provides the cloud infrastructure but leaves the management of the operating system and applications to the user. References: The cloud service models and the level of control they offer are fundamental topics in the CompTIA Cloud+ certification material.

NEW QUESTION 37

A company is developing a new web application that requires a relational database management system with minimal operational overhead. Which of the following should the company choose?

- A. A database installed on a virtual machine
- B. A managed SQL database on the cloud
- C. A database migration service
- D. A hybrid database setup

Answer: B

Explanation:

For a new web application that requires a relational database management system with minimal operational overhead, the company should choose a managed SQL database on the cloud. Managed databases provide automated backups, patching, and other management tasks, reducing the administrative burden. References: The use of managed services, like managed databases, to minimize operational overhead is a strategic decision in cloud computing covered in CompTIA Cloud+.

NEW QUESTION 42

A software engineer at a cybersecurity company wants to access the cloud environment. Per company policy, the cloud environment should not be directly accessible via the internet. Which of the following options best describes how the software engineer can access the cloud resources?

- A. SSH
- B. Bastion host
- C. Token-based access
- D. Web portal

Answer: B

Explanation:

A bastion host is the best option described for accessing cloud resources without direct internet access. It acts as a secure gateway to access internal networks from external sources and is often used in conjunction with other security measures such as SSH for secure connections. References: The use of bastion hosts as a secure access point to cloud resources is a security best practice covered in the CompTIA Cloud+ certification's domain on cloud security.

NEW QUESTION 44

A company has decided to adopt a microservices architecture for its applications that are deployed to the cloud. Which of the following is a major advantage of this type of architecture?

- A. Increased security
- B. Simplified communication
- C. Reduced server cost
- D. Rapid feature deployment

Answer: D

Explanation:

A major advantage of adopting a microservices architecture is rapid feature deployment. Microservices allow for independent development, deployment, and scaling of individual service components, enabling teams to bring new features to market more quickly and efficiently compared to monolithic architectures. References: The CompTIA Cloud+ certification covers cloud design aspects, including architectural models like microservices, emphasizing their role in facilitating agile development practices and rapid feature release cycles in cloud environments.

NEW QUESTION 49

Which of the following cloud deployment strategies is best for an organization that wants to run open-source workloads with other organizations that are sharing the cost?

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

Answer: A

Explanation:

A community cloud deployment strategy is best for an organization that wants to run open-source workloads with other organizations while sharing the cost. Community clouds are collaborative efforts where infrastructure is shared between several organizations with common concerns, which could be regulatory, security, or compliance- related. References: The concept of community clouds is discussed in the domain of Cloud Concepts within the CompTIA Cloud+ exam objectives.

NEW QUESTION 52

Which of the following is the most cost-effective way to store data that is infrequently accessed?

- A. Cold site
- B. Hot site
- C. Off-site
- D. Warm site

Answer: C

Explanation:

The most cost-effective way to store data that is infrequently accessed is typically an off-site storage service, often referred to as cold or archival storage. This type of storage is designed for data that is rarely accessed, providing lower storage costs. References: Data storage solutions and their cost implications, including off-site (cold or archival) storage for infrequently accessed data, are part of the cloud storage options discussed in CompTIA Cloud+.

NEW QUESTION 56

An e-commerce store is preparing for an annual holiday sale. Previously, this sale has increased the number of transactions between two and ten times the normal level of transactions. A cloud administrator wants to implement a process to scale the web server seamlessly. The goal is to automate changes only when necessary and with minimal cost.

Which of the following scaling approaches should the administrator use?

- A. Scale horizontally with additional web servers to provide redundancy.
- B. Allow the load to trigger adjustments to the resources.
- C. When traffic increases, adjust the resources using the cloud portal.
- D. Schedule the environment to scale resources before the sale begins.

Answer: B

Explanation:

To seamlessly scale the web server for an e-commerce store during an annual sale, it's best to allow the load to trigger adjustments to the resources. This approach uses autoscaling to automatically adjust the number of active servers based on the current load, ensuring an automated change that is cost-effective. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Scalability

NEW QUESTION 60

Which of the following migration types is best to use when migrating a highly available application, which is normally hosted on a local VM cluster, for usage with an external user population?

- A. Cloud to on-premises
- B. Cloud to cloud
- C. On-premises to cloud
- D. On-premises to on-premises

Answer: C

Explanation:

When migrating a highly available application normally hosted on a local VM cluster for usage with an external user population, the best migration type would be on- premises to cloud. This allows the application to leverage the cloud's scalability and reach, providing better access to the external users. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Migration

NEW QUESTION 64

An organization is hosting a seminar with eight individuals who need to connect to their own dedicated VM. The technician used the following VM configurations:

IP address: DHCP NIC: 1Gbps

Network: 10.1.10.0/29

Several users are unable to access their VMs. Which of the following best describes the reason?

- A. Not enough addresses are available.
- B. The routes are misconfigured.
- C. Too much traffic is on the network.
- D. DHCP is not working correctly on the VM.

Answer: A

Explanation:

The network is configured with a subnet of /29, which provides only 6 usable IP addresses after accounting for the network and broadcast addresses. With eight individuals needing to connect to their own dedicated VMs, there are not enough IP addresses available to assign to each VM, leading to several users being unable to access their VMs. This issue is not related to misconfigured routes, network traffic, or DHCP functionality, but rather the limited number of IP addresses available in the given subnet.

NEW QUESTION 66

A company wants to optimize cloud resources and lower the overhead caused by managing multiple operating systems. Which of the following compute resources would be best to help to achieve this goal?

- A. VM
- B. Containers
- C. Remote desktops
- D. Bare-metal servers

Answer: B

Explanation:

Containers are the best compute resources to optimize cloud resources and lower the overhead caused by managing multiple operating systems. Containers encapsulate applications and their dependencies into a single executable package, running on a shared OS kernel, which reduces the need for separate operating systems for each application and simplifies resource management. References: CompTIA Cloud+ materials discuss management and technical operations in cloud environments, including the use of containers to improve resource utilization and operational efficiency by minimizing the overhead associated with traditional VMs.

NEW QUESTION 70

A company that has several branches worldwide needs to facilitate full access to a specific cloud resource to a branch in Spain. Other branches will have only read access. Which of the following is the best way to grant access to the branch in Spain?

- A. Set up MFA for the users working at the branch.
- B. Create a network security group with required permissions for users in Spain.
- C. Apply a rule on the WAF to allow only users in Spain access to the resource.
- D. Implement an IPS/IDS to detect unauthorized users.

Answer: B

Explanation:

The best way to grant full access to a specific cloud resource to a branch in Spain, while other branches have only read access, is to create a network security group with the required permissions. This group can be configured to allow full access to users within the branch's IP range while restricting others to read-only access. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Security Configuration

NEW QUESTION 72

A cloud developer needs to update a REST API endpoint to resolve a defect. When too many users attempt to call the API simultaneously, the following message is displayed:

Error: Request Timeout - Please Try Again Later

Which of the following concepts should the developer consider to resolve this error?

- A. Server patch
- B. TLS encryption
- C. Rate limiting
- D. Permission issues

Answer: C

Explanation:

To resolve the issue of a REST API endpoint timing out when too many users attempt to call the API simultaneously, the developer should consider implementing rate limiting. Rate limiting controls the number of requests a user can submit in a given amount of time, preventing overuse of the API resources and ensuring availability for all users. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Service Maintenance and Management

NEW QUESTION 75

A cloud engineer wants to implement a disaster recovery strategy that:

- . Is cost-effective.
- . Reduces the amount of data loss in case of a disaster.
- . Enables recovery with the least amount of downtime.

Which of the following disaster recovery strategies best describes what the cloud engineer wants to achieve?

- A. Cold site
- B. Off site
- C. Warm site
- D. Hot site

Answer: D

Explanation:

A hot site is a disaster recovery strategy that is cost-effective, minimizes data loss, and allows for the fastest recovery time in case of a disaster. It is an exact replica of the original site of the organization, with full computer systems as well as near-complete backups of user data. Hot sites are operational 24/7 and can take over functionality from the primary site immediately or with minimal delay. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Disaster Recovery

NEW QUESTION 76

A company wants to use a solution that will allow for quick recovery from ransomware attacks, as well as intentional and unintentional attacks on data integrity and availability. Which of the following should the company implement that will minimize administrative overhead?

- A. Object versioning
- B. Data replication
- C. Off-site backups
- D. Volume snapshots

Answer: D

Explanation:

Implementing volume snapshots is an effective solution for quick recovery from ransomware attacks and protecting data integrity and availability. Snapshots capture the state of a storage volume at a point in time and can be used to restore data quickly with minimal administrative overhead. References: Data protection strategies like volume snapshots are discussed under cloud data management and protection in the CompTIA Cloud+ objectives.

NEW QUESTION 80

A cloud engineer is provisioning a new application that requires access to the organization's public cloud resources. Which of the following is the best way for the cloud engineer to authenticate the application?

- A. Access key
- B. API
- C. MFA token
- D. Username and Password

Answer: A

Explanation:

The best way to authenticate an application requiring access to an organization's public cloud resources is through the use of an access key. Access keys provide a secure means of authentication for applications and services without the need for interactive login credentials. This method is particularly useful for automated processes or applications that need to interact with cloud services programmatically, ensuring secure and efficient access control. References: CompTIA Cloud+ content emphasizes the importance of secure authentication mechanisms, such as access keys, in managing and securing access to cloud resources, aligning with best practices for cloud security and application deployment.

NEW QUESTION 82

A network administrator is budding a site-to-site VPN tunnel from the company's headquarters office to the company's public cloud development network. The network administrator confirms the following:

The VPN tunnel is established on the headquarter office firewall.

While inside the office, developers report that they cannot connect to the development network resources.

While outside the office on a client VPN, developers report that they can connect to the development network resources.

The office and the client VPN have different IP subnet ranges.

The firewall flow logs show VPN traffic is reaching the development network from the office. Which of the following is the next step the next network administrator should take to troubleshoot the VPN tunnel?

- A. Review the development network routing table.
- B. Change the ciphers on the site-to-site VPN.
- C. Restart the site-to-site VPN tunnel.
- D. Check the ACLS on the development workloads

Answer: A

Explanation:

The next step in troubleshooting the VPN tunnel issue is to review the development network routing table. This action will help determine if the routing configurations are correctly directing traffic from the headquarters office through the VPN tunnel to the development network resources. Proper routing ensures that data packets find their way to the correct destination within the cloud environment, which is critical for establishing successful communication between different network segments. References: CompTIA Cloud+ materials stress the importance of networking fundamentals in cloud environments, including VPN configurations and routing, to ensure secure and efficient connectivity between on-premises infrastructure and cloud resources.

NEW QUESTION 84

A company's engineering department is conducting a month-long test on the scalability of an in-house-developed software that requires a cluster of 100 or more servers. Which of the following models is the best to use?

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

Answer: D

Explanation:

For testing the scalability of an in-house-developed software that requires a cluster of 100 or more servers, Infrastructure as a Service (IaaS) is the best model. IaaS provides the necessary computer resources and allows the engineering department to configure the environment as needed for their specific test without the constraints that might be present in PaaS or SaaS offerings. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Service Models

NEW QUESTION 85

Which of the following do developers use to keep track of changes made during software development projects?

- A. Code drifting
- B. Code control
- C. Code testing
- D. Code versioning

Answer: D

Explanation:

Developers use code versioning to keep track of changes made during software development projects. It is a system that records changes to a file or set of files over time so that specific versions can be recalled later. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Software Development in Cloud Environments

NEW QUESTION 87

A company just learned that the data in its object storage was accessed by an unauthorized party. Which of the following should the company have done to make the data unusable?

- A. The company should have switched from object storage to file storage.
- B. The company should have hashed the data.
- C. The company should have changed the file access permissions.
- D. The company should have encrypted the data at rest.

Answer: D

Explanation:

Encrypting the data at rest is a crucial security measure to make the data unusable to unauthorized parties. If the object storage data was accessed by an unauthorized party, having the data encrypted would ensure that the data remains confidential and inaccessible without the proper encryption keys, thus mitigating the impact of the breach.

References: CompTIA Cloud+ resources and data security practices

NEW QUESTION 91

Which of the following is a customer be responsible for in a provider-managed database service? (Select two).

- A. Operating system patches
- B. Table-level permissions
- C. Minor database engine updates
- D. Cluster configuration
- E. Row-level encryption
- F. Availability of hardware for scaling

Answer: BE

Explanation:

In a provider-managed database service, the cloud provider typically manages the infrastructure, operating system, and database engine updates. However, the customer is responsible for the data and its security within the database, which includes setting table-level permissions and row-level encryption to ensure that data access and security is managed appropriately. References: CompTIA Cloud+ Guide to Cloud Computing (ISBN: 978-1-64274-282-2)

NEW QUESTION 92

A list of CVEs was identified on a web server. The systems administrator decides to close the ports and disable weak TLS ciphers. Which of the following describes this vulnerability management stage?

- A. Scanning
- B. Identification
- C. Assessment
- D. Remediation

Answer: D

Explanation:

Closing the ports and disabling weak TLS ciphers as a response to a list of identified CVEs (Common Vulnerabilities and Exposures) describes the vulnerability management stage of 'remediation'. This stage involves taking actions to resolve vulnerabilities and mitigate potential risks. References: Vulnerability management stages, including remediation efforts, are a key aspect of the security measures discussed in CompTIA Cloud+.

NEW QUESTION 93

Which of the following best describes a system that keeps all different versions of a software separate from each other while giving access to all of the versions?

- A. Code documentation
- B. Code control
- C. Code repository
- D. Code versioning

Answer: D

Explanation:

A system that keeps all different versions of software separate from each other while providing access to all of the versions is best described by Code versioning. Code versioning systems, such as Git, allow developers to keep track of changes, revert to previous states, and manage multiple versions of codebases. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 94

A CI/CD pipeline is used to deploy VMs to an IaaS environment. Which of the following can be used to harden the operating system once the VM is running?

- A. Docker
- B. Kubernetes
- C. Git
- D. Ansible

Answer: D

Explanation:

Ansible can be used to harden the operating system once the VM is running. It is an automation tool that can configure systems, deploy software, and orchestrate more advanced IT tasks such as continuous deployments or zero downtime rolling updates. References: Ansible and other configuration management tools are part of the cloud management strategies discussed in the CompTIA Cloud+ certification material.

NEW QUESTION 95

A cloud engineer is extending on-premises services to a public cloud. The following design requirements must be considered in the overall solution:

" The ability to remotely connect systems from both environments

- No IP address conflicts or overlap
- Cost-effectiveness

Which of the following cloud network concepts best meets these requirements?

- A. Dedicated connection
- B. VPN
- C. VLAN
- D. ACL

Answer: B

Explanation:

A Virtual Private Network (VPN) is the most cost-effective solution for extending on-premises services to a public cloud while ensuring secure remote connectivity. VPNs can be configured to avoid IP address conflicts and overlap by using IP address translation and tunneling techniques, making them suitable for connecting disparate environments without significant changes to the existing network infrastructure.

NEW QUESTION 96

A company operates a website that allows customers to upload, share, and retain full ownership of their photographs. Which of the following could affect image ownership as the website usage expands globally?

- A. Sovereignty
- B. Data classification
- C. Litigation holds
- D. Retention

Answer: A

Explanation:

Data sovereignty refers to the legal implications of storing data in a country, subject to that country's laws. As the website's usage expands globally, data sovereignty becomes a critical concern because laws governing data ownership, privacy, and rights can vary significantly from one jurisdiction to another, potentially affecting the users' ownership rights over their photographs.

NEW QUESTION 101**SIMULATION**

A company hosts various containerized applications for business uses. A client reports that one of its routine business applications fails to load the web-based login prompt hosted in the company cloud.



INSTRUCTIONS
Click on each device and resource. Review the configurations, logs, and characteristics of each node in the architecture to diagnose the issue. Then, make the necessary changes to the WAF configuration to remediate the issue.


Web app 1

Web app 1				
SVC_Host	SVC_Name	SVC IP	SVC_Port	
webapp1	FIN	10.22.10.11	443	

Web app 2

Web app 2				
SVC_Host	SVC_Name	SVC IP	SVC_Port	
webapp2	VIDEO	10.22.10.21	443	


Web app 3

Web app 3				
SVC_Host	SVC_Name	SVC IP	SVC_Port	
webapp3	API	10.22.10.31	443	

Web app 4

Web app 4				
SVC_Host	SVC_Name	SVC IP	SVC_Port	
webapp4	CHAT	10.22.10.41	443	

Client app

Client app		
Client laptop	App config	
https_enabled	true	
cert_status	valid	
start	login	

Client app

Client laptop

App config

Host

client142

IP

192.168.10.142

WAF

Edit config

WAF logs

Rule ID	Description	Service	Action	Availability zone
1001	Brute-force attempt	<input type="text" value="^https://webapp[.]comptia[.]org/\$"/>	Block	A
1002	Botnet	<input type="text" value="^https://webapp[.]comptia[.]org/\$"/>	Block	A
1003	API web server	<input type="text" value="^https://webapp3[.]comptia[.]org/([0-9A-Za-z][0-9A-Za-z_?]*/*)*\$"/>	Allow	B
1004	Chat web traffic	<input type="text" value="^https://webapp4[.]comptia[.]org/chat/request[.]php\$"/>	Allow	B
1005	Finance application 1	<input type="text" value="^https://webapp1[.]comptia[.]org/([0-9A-Za-z][0-9A-Za-z_?]*/*)*\$"/>	Allow	B
1006	Finance application 2	<input type="text" value="^https://webapp1[.]comptia[.]org/login[.]html\$"/>	Block	A
1007	Video application	<input type="text" value="^https://webapp2[.]comptia[.]org/video/stream\$"/>	Allow	A

WAF

Edit config

WAF logs

...

Dec 12 21:50:45 10.1.105.1 CEF:0|Sec|Gateway|1.0|WAF|WAF_INSPECT|5|src=192.168.11.129 spt=39110 method=POST request="PASS991!!" msg=Unauthorized content. cn1=2002 cn2=104 cs1= cs2= cs3= cs4=ALERT cs5=2020 act=blocked

Dec 12 22:20:17 10.1.105.1 CEF:0|Sec|Gateway|1.0|WAF|WAF_STARTURL|6|src=192.168.10.142 spt=48909 method=GET request=https://webapp1.comptia.org/FIN/login.html msg=Start URL Check Failed. cn1=1005 cn2=248 cs1= cs2= cs3= cs4=ALERT cs5=2020 act=blocked

Dec 12 22:23:20 10.1.105.1 CEF:0|Sec|Gateway|1.0|WAF|WAF_STARTURL|1|src=192.168.11.129 spt=38995 method=GET request=https://webapp2.comptia.org/VIDEO/stream msg=Start URL Check Passed. cn1=1007 cn2=106 cs1= cs2= cs3= cs4=INFO cs5=2020 act=allow

Dec 12 22:23:20 10.1.105.1 CEF:0|Sec|Gateway|1.0|WAF|WAF_STARTURL|1|src=192.168.10.142 spt=49015 method=GET request=https://webapp4.comptia.org/CHAT/request.php msg=Start URL Check Passed. cn1=1004 cn2=332 cs1= cs2= cs3= cs4=INFO cs5=2020 act=allow

Dec 12 22:25:01 10.1.105.1 CEF:0|Sec|Gateway|1.0|WAF|WAF_URIINSPECT|2|src=192.168.10.142 spt=49117 method=GET request=https://webapp3.comptia.org/api?reqStatus=1 msg=Log sensitive request. cn1=1003 cn2=432 cs1= cs2= cs3= cs4=INFO cs5=2020 act=allow

...

Reset to Default

Save

Close

A. Mastered
B. Not Mastered

Answer: A

Explanation:

The issue is with Web app 1 (Finance application).

From the WAF logs, we can see that requests to <https://webapp1.comptia.org/FIN/login.html> are being blocked (Rule ID 1006). The rule is configured to block access to the finance application's login page. This corresponds to the reported issue of the web-based login prompt not loading.

To remediate the issue, the WAF configuration for Rule ID 1006 should be changed from "Block" to "Allow". This will enable the web-based login prompt to load for the client. Additionally, the client app configuration indicates that the client laptop (IP 192.168.10.142) is trying to access the service, and the WAF logs show that requests from this IP are being blocked due to the current rule set. Changing the action for Rule ID 1006 will also ensure that legitimate attempts to access the login page from this IP are not blocked.

Steps for remediation:

? Go to the WAF configuration.

? Find Rule ID 1006 for the Finance application 1.

? Change the action from "Block" to "Allow".

? Save the changes.

References:

? Web application firewall (WAF) configurations typically include rules that define which traffic should be allowed or blocked. Blocking legitimate traffic to login pages can prevent users from accessing the application, which seems to be the case here.

? Client application configurations and WAF logs provide valuable insights into the source of the traffic and the rules that are affecting it. It's important to ensure that the rules align with the intended access policies for the application.

NEW QUESTION 104

A customer relationship management application, which is hosted in a public cloud IaaS network, is vulnerable to a remote command execution vulnerability.

Which of the following is the best solution for the security engineer to implement to prevent the application from being exploited by basic attacks?

- A. IPS
- B. ACL
- C. DLP
- D. WAF

Answer: D

Explanation:

A Web Application Firewall (WAF) is the best solution to implement for a public cloud IaaS hosted customer relationship management application vulnerable to remote command execution attacks. WAFs are designed to monitor, filter, and block malicious HTTP/S traffic to and from a web application to protect against various application layer attacks, including remote command execution. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Security in the Cloud

NEW QUESTION 109

Department supervisors have requested a report that will help them understand the utilization of cloud resources, make decisions about budgeting for the following year, and reduce costs. Which of the following are the most important requisite steps to create the report? (Select two).

- A. Set the desired retention of resource logs.
- B. Configure application tracing.
- C. Integrate email alerts with ticketing software.
- D. Enable resource tagging.
- E. Configure the collection of performance/utilization logs.
- F. Configure metric threshold alerts.

Answer: DE

Explanation:

To create a report that helps understand the utilization of cloud resources, make budget decisions, and reduce costs, the most important steps are to enable resource tagging and configure the collection of performance/utilization logs. Resource tagging helps in categorizing and tracking costs by associating tags with resources, while performance/utilization logs are essential for analyzing resource usage over time. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Management

NEW QUESTION 111

An administrator needs to adhere to the following requirements when moving a customer's data to the cloud:

- The new service must be geographically dispersed.
- The customer should have local access to data
- Legacy applications should be accessible.

Which of the following cloud deployment models is most suitable?

- A. On-premises
- B. Private
- C. Hybrid
- D. Public

Answer: C

Explanation:

A hybrid cloud deployment model is most suitable given the requirements. This model combines on-premises infrastructure (or private cloud) with public cloud services, providing geographic dispersion while allowing local access to data. It also facilitates the use of legacy applications that might not be well-suited for a full public cloud environment. References: The hybrid model is a fundamental concept within the CompTIA Cloud+ curriculum, under the section of Cloud Concepts, that explains deployment models.

NEW QUESTION 116

An administrator needs to provide a backup solution for a cloud infrastructure that enables the resources to run from another data center in case of an outage.

Connectivity to the backup data center is via a third-party, untrusted network. Which of the following is the most important feature required for this solution?

- A. Deduplication
- B. Replication
- C. Compression
- D. Encryption
- E. Labeling

Answer: D

Explanation:

When backing up data that will traverse a third-party, untrusted network, encryption is the most important feature to ensure the confidentiality and integrity of the data. Encryption will protect the data from potential interception or tampering during transit to the backup data center. References: CompTIA Cloud+ Guide to Cloud Computing (ISBN: 978-1-64274-282-2)

NEW QUESTION 117

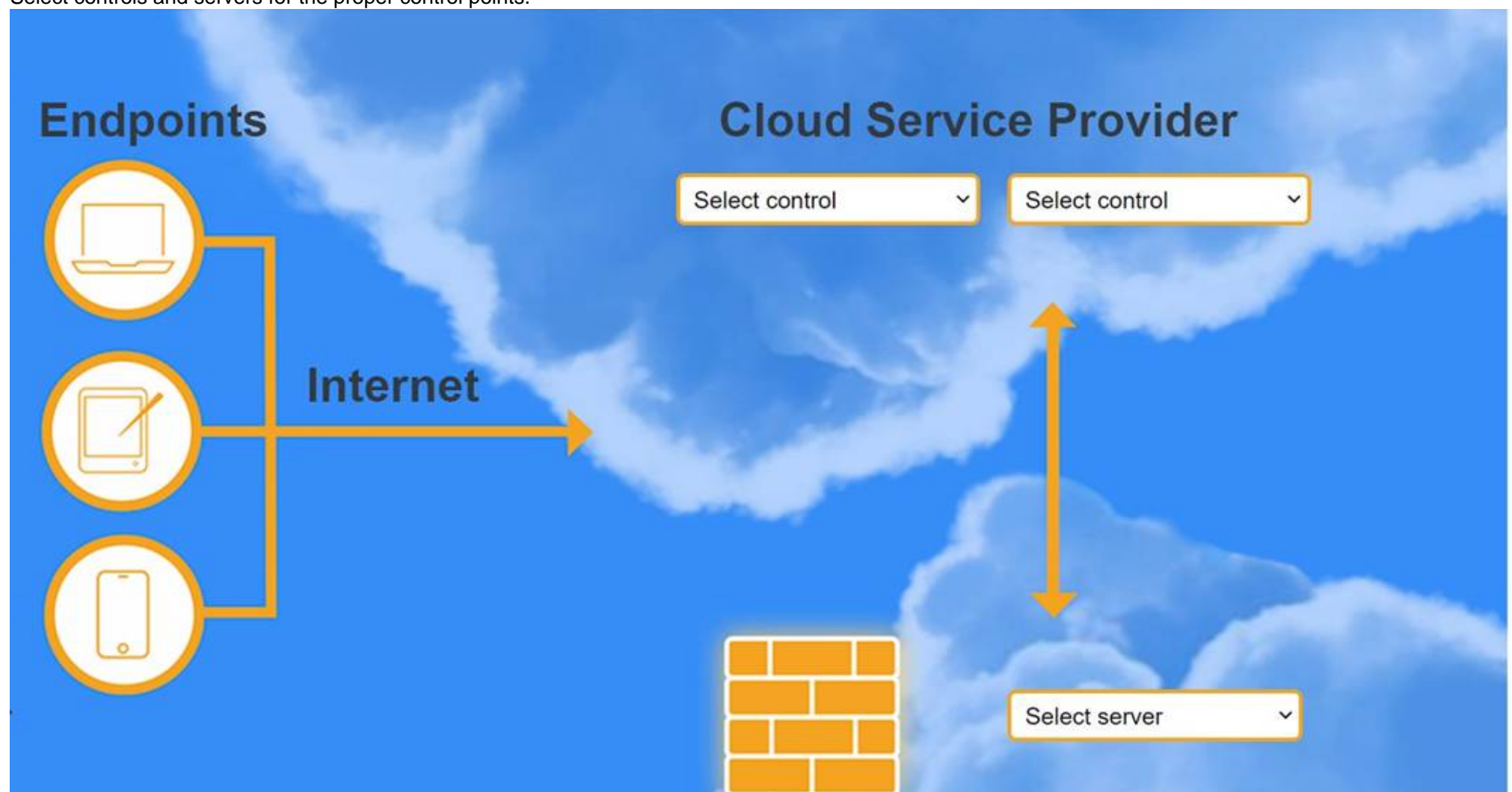
HOTSPOT

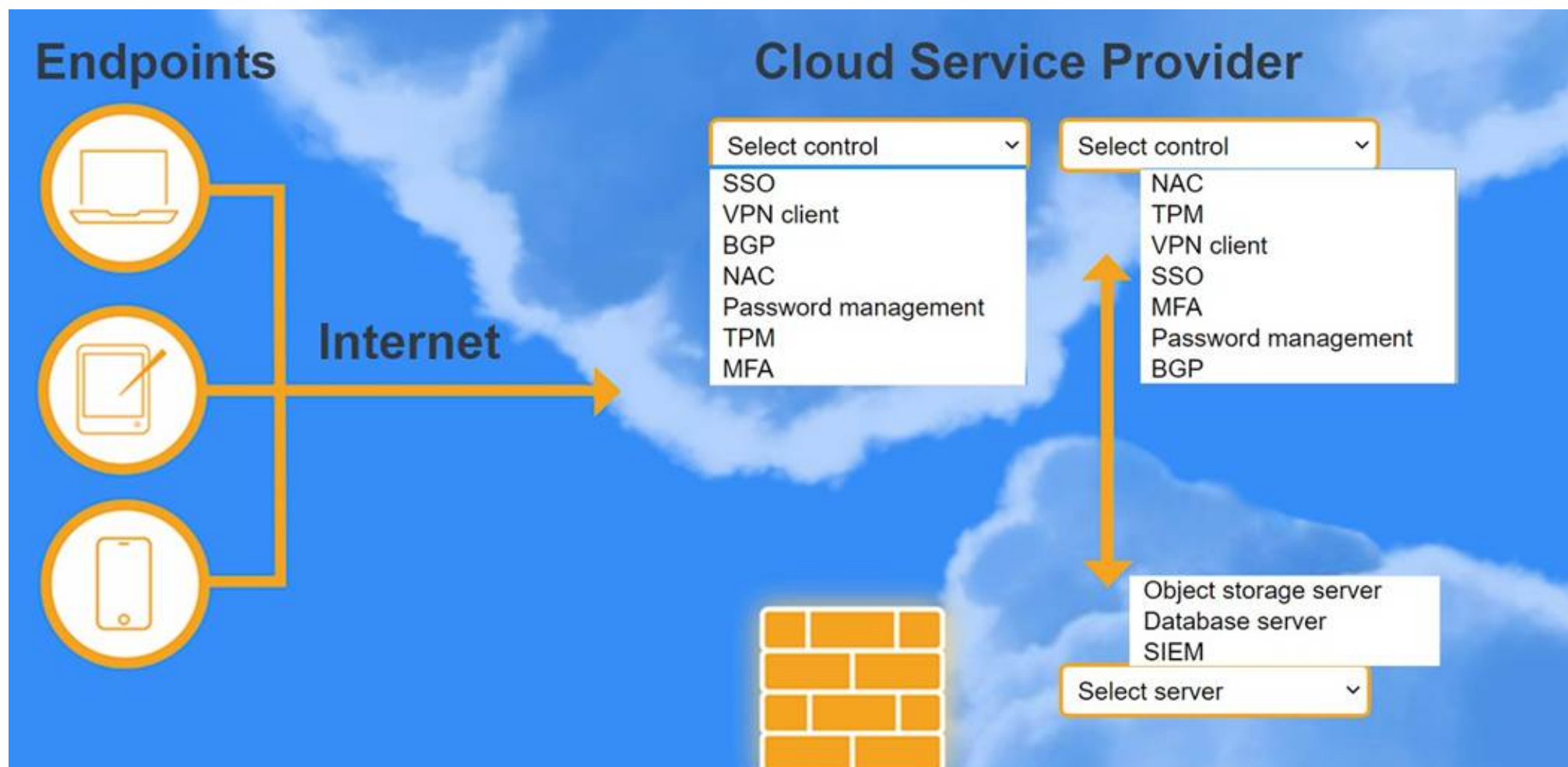
A highly regulated business is required to work remotely, and the risk tolerance is very low. You are tasked with providing an identity solution to the company cloud that includes the following:

- ? secure connectivity that minimizes user login
- ? tracks user activity and monitors for anomalous activity
- ? requires secondary authentication

INSTRUCTIONS

Select controls and servers for the proper control points.

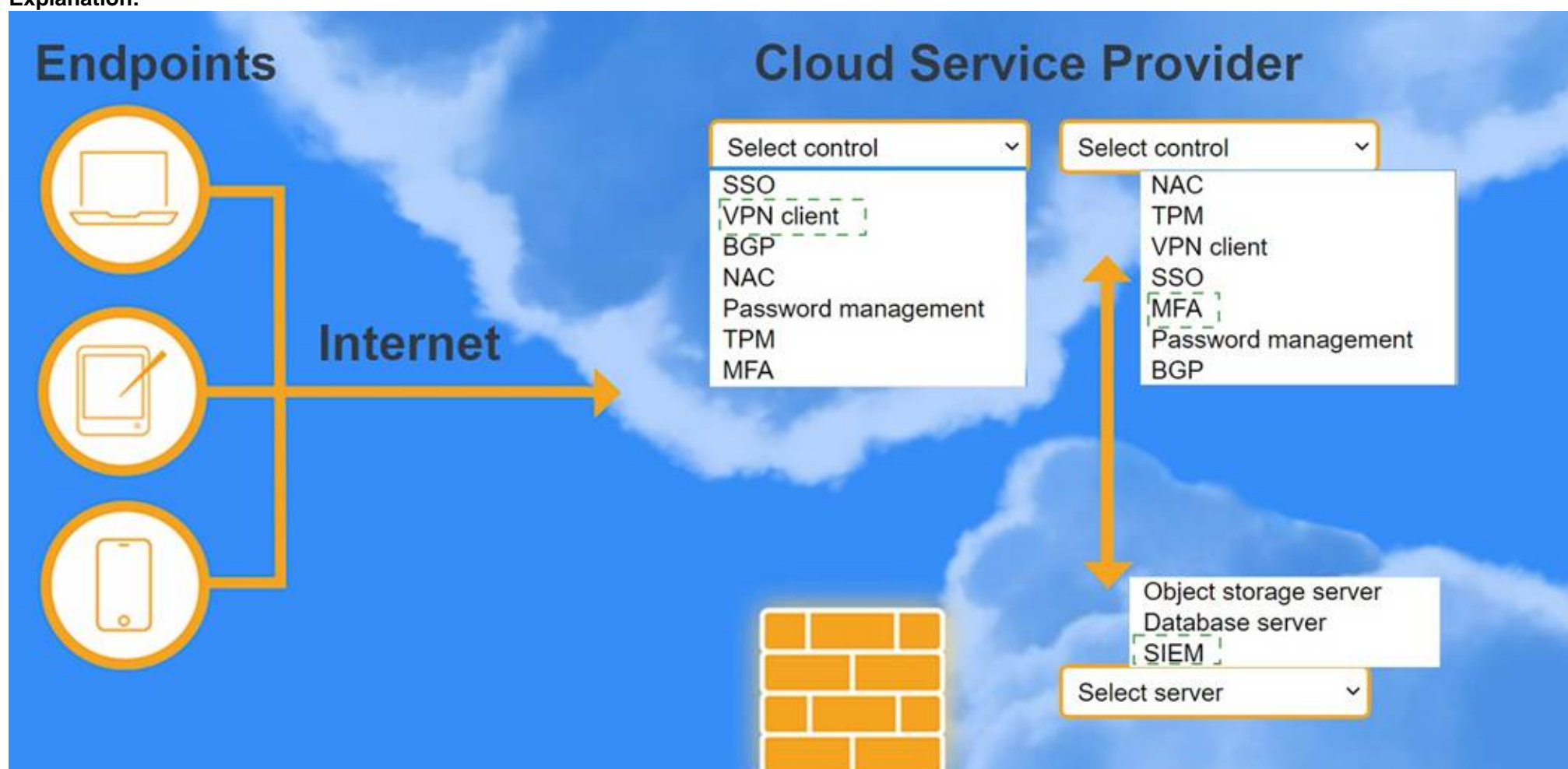




- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 121

A software engineer is integrating an application to the cloud that is web socket based. Which of the following applications is the engineer most likely deploying?

- A. Image-sharing
- B. Data visualization
- C. Chat
- D. File transfer

Answer: C

Explanation:

A chat application is most likely to be deployed when integrating a web socket-based application to the cloud. Web sockets provide full-duplex communication channels over a single, long-lived connection, which is ideal for real-time applications like chat services that require persistent connections between the client and server for instant data exchange. References: CompTIA Cloud+ materials cover cloud networking concepts, emphasizing the importance of choosing the right technologies, like web sockets, for specific application requirements to ensure efficient and responsive cloud-based services.

NEW QUESTION 124

An administrator received a report that company data has been compromised. The compromise occurred on a holiday, and no one in the organization was working. While reviewing the logs from the holiday, the administrator noted the following details:

Account	Access	Details
Cloud administrator	Granted	Log-in granted
Software developer	Granted	Log-in granted
Software developer	Denied	Denied access to human resources folder
Security engineer	Granted	Log-in granted
Security engineer	Denied	Denied access to personnel files
Human resources manager	Granted	Log-in granted
Human resources manager	Granted	Access granted to human resources folder

The most appropriate action for the cloud security analyst to recommend is using CIS- hardened images. These images are pre-configured by the Center for Internet Security to provide security benchmark standards that help in mitigating vulnerabilities in publicly available container images. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security Posture

Which of the following accounts should the administrator disable to prevent a further breach?

- A. Cloud administrator
- B. Human resources manager
- C. Security engineer
- D. Software developer

Answer: D

Explanation:

Based on the provided log details, the account of the Software Developer was used to gain unauthorized access. This account should be disabled to prevent further breaches, especially considering no one from the organization was working during the holiday, suggesting a compromised account. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security

NEW QUESTION 128

A cloud engineer was deploying the company's payment processing application, but it failed with the following error log:

ERFOR:root: Transaction failed http 429 response, please try again Which of the following are the most likely causes for this error? (Select two).

- A. API throttling
- B. API gateway outage
- C. Web server outage
- D. Oversubscription
- E. Unauthorized access
- F. Insufficient quota

Answer: AF

Explanation:

The error "http 429 response, please try again" typically indicates API throttling, where the number of requests exceeds the rate limit set by the API provider, and insufficient quota, where the allowed number of API calls within a given timeframe has been exceeded. References: API throttling and quota management are key concepts in the management of cloud resources, as highlighted in the CompTIA Cloud+ curriculum.

NEW QUESTION 133

A developer is building an application that has multiple microservices that need to communicate with each other. The developer currently manually updates the IP address of each service. Which of the following best resolves the communication issue and automates the process?

- A. Service discovery
- B. Fan-out
- C. Managed container services
- D. DNS

Answer: A

Explanation:

Service discovery is a key component in microservices architectures, allowing services to dynamically discover and communicate with each other. By

implementing service discovery, the developer can automate the process of updating service addresses, resolving the communication issue without manual updates to IP addresses, thus ensuring seamless interaction between the microservices. References: CompTIA Cloud+ resources and microservices architecture principles

NEW QUESTION 136

An organization's security policy states that software applications should not exchange sensitive data in cleartext. The security analyst is concerned about a software application that uses Base64 to encode credit card data. Which of the following would be the best algorithm to replace Base64?

- A. 3DES
- B. AES
- C. RC4
- D. SHA-3

Answer: B

Explanation:

AES (Advanced Encryption Standard) is the best algorithm to replace Base64 for secure data exchange. Base64 is an encoding method that is not secure by itself, as it's easily reversible. AES, on the other hand, is a widely used encryption standard that ensures data is protected and is not readable without the correct encryption key. References: Encryption standards and practices, including the use of AES for securing data, are essential knowledge in cloud security covered in CompTIA Cloud+.

NEW QUESTION 137

A systems engineer is migrating a batch of 25 VMs from an on-premises compute cluster to a public cloud using the public cloud's migration agent. The migration job shows data copies at a rate of 250Mbps. After five servers migrate, the data copies at a rate of 25Mbps. Which of the following should the engineer review first to troubleshoot?

- A. The on-premises VM host hardware utilization
- B. The on-premises ISP throttling rate
- C. The IOPS on the SAN backing the on-premises cluster
- D. The compute utilization of the VMs being migrated

Answer: A

Explanation:

The engineer should review the on-premises VM host hardware utilization first. A decrease in transfer rate after a batch of migrations could suggest that the host hardware resources (like CPU, RAM, or network bandwidth) are becoming saturated, which would slow down additional migrations. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

NEW QUESTION 138

Which of the following storage resources provides higher availability and speed for currently used files?

- A. Warm/HDD
- B. Cold/SSD
- C. Hot/SSD
- D. Archive/HDD

Answer: C

Explanation:

Hot storage using Solid State Drives (SSD) is designed for data that needs to be accessed frequently and quickly. SSDs provide faster access times compared to HDDs, making them suitable for high-availability and speed-critical files, such as those currently in use or requiring rapid access. References: CompTIA Cloud+ resources and storage tiering concepts

NEW QUESTION 139**HOTSPOT**


An e-commerce company is migrating from an on-premises private cloud environment to a public cloud IaaS environment. You are tasked with right-sizing the environment to

save costs after the migration. The company's requirements are to provide a 20% overhead above the average resource consumption, rounded up.

INSTRUCTIONS

Review the specifications and graphs showing resource usage for the web and database servers. Determine the average resource usage and select the correct specifications from the available drop-down options.





Web Server

Current Specifications

CPU: 4vCPU
RAM: 16GB
Disk Speed: 20MB/s


Target Specifications

CPU: Select
2 vCPUs
6 vCPUs
4 vCPUs
8 vCPUs
1 vCPU


RAM: Select
32GB
16GB
128GB
1GB
8GB
4GB
64GB
2GB

Disk Speed: Select
120MBps
70MBps
110MBps
5MBps
80MBps
100MBps
90MBps
30MBps
10MBps
15MBps
25MBps

Processor Usage (%)



RAM Usage (%)



Disk Throughput (MBps)





Database Server

Current Specifications

CPU: 4vCPU
RAM: 16GB
Disk Speed: 20MB/s

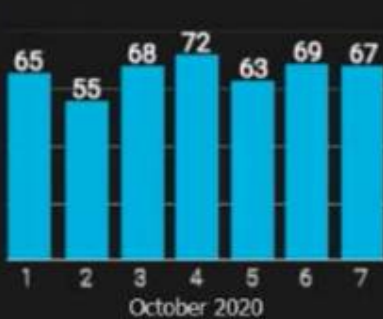
Target Specifications

CPU: Select
2 vCPUs
6 vCPUs
4 vCPUs
8 vCPUs
1 vCPU

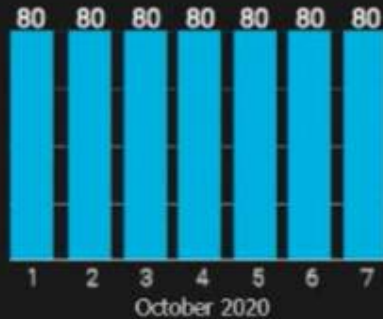
RAM: Select
32GB
16GB
128GB
1GB
8GB
4GB
64GB
2GB

Disk Speed: Select
120MBps
70MBps
110MBps
5MBps
80MBps
100MBps
90MBps
30MBps
10MBps
15MBps
25MBps

Processor Usage (%)



RAM Usage (%)



Disk Throughput (MBps)



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

For the Web Server:

? CPU: 2 vCPUs

? RAM: 2GB

? Disk Speed: 10MBps

For the Database Server:

? CPU: 6 vCPUs

? RAM: 128GB

? Disk Speed: 110MBps

These selections are based on maintaining a 20% overhead above the average resource consumption and rounding up to the next available option in the dropdowns provided.

NEW QUESTION 143

A company has ten cloud engineers working on different manual following is the best method to address this issue?

- A. Deployment documentation
- B. Service logging
- C. Configuration as code
- D. Change ticketing

Answer: C

Explanation:

Configuration as code is the best method to address the issue of cloud engineers working on different manual configurations. This practice allows configurations to be scripted and automated, which reduces human error, enhances consistency, and makes the deployment process more efficient and reproducible. References: Configuration as code is part of cloud deployment best practices, ensuring standardized environments, which is a key topic within the CompTIA Cloud+ curriculum.

NEW QUESTION 148

A SaaS provider introduced new software functionality for customers as part of quarterly production enhancements. After an update is implemented, users cannot locate certain transactions from an inbound integration. During the investigation, the application owner finds the following error in the logs:

Error: REST API - Deprecated call is no longer supported in this release.

Which of the following is the best action for the application owner to take to resolve the issue?

- A. Update the custom integration to use a supported function.
- B. Include the custom integration in the quarterly testing scope.
- C. Ask the users to monitor the quarterly updates.
- D. Revert the application to the last stable quarterly release.

Answer: A

Explanation:

The error message indicates that the SaaS provider has deprecated a function that was previously called by the custom integration. The best action for the application owner to take is to update the custom integration to use a function that is supported in the current release. This is a direct solution to the problem and ensures the custom integration conforms to the updated SaaS provider's API. References: Based on the error message provided and standard practices for dealing with deprecated API calls in a SaaS environment.

NEW QUESTION 150

A cloud administrator needs to collect process-level, memory-usage tracking for the virtual machines that are part of an autoscaling group. Which of the following is the best way to accomplish the goal by using cloud-native monitoring services?

- A. Configuring page file/swap metrics
- B. Deploying the cloud-monitoring agent software
- C. Scheduling a script to collect the data
- D. Enabling memory monitoring in the VM configuration

Answer: B

Explanation:

To collect process-level, memory-usage tracking for virtual machines, deploying cloud- monitoring agent software is the best approach. The agent can gather detailed system metrics and send them to the cloud-native monitoring services for analysis and visualization. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Monitoring

NEW QUESTION 151

Which of the following network protocols is generally used in a NAS environment?

- A. BGP
- B. RDP
- C. TCP/IP
- D. iSCSI

Answer: C

Explanation:

The network protocol generally used in a NAS (Network Attached Storage) environment is TCP/IP (Transmission Control Protocol/Internet Protocol). NAS devices are accessed over a network rather than being directly connected to the computer, and they utilize the TCP/IP protocol to enable this network communication. References: Understanding of networking protocols, including TCP/IP in the context of NAS environments, is part of the foundational networking knowledge for cloud services in CompTIA Cloud+.

NEW QUESTION 154

A cloud administrator learns that a major version update. 4.6.0. is available for a business- critical application. The application is currently on version 4.5.2. with additional minor versions 3, 4, and 5 available. The administrator needs to perform the update while minimizing downtime. Which of the following should the administrator do first?

- A. Apply the minor updates and then restart the machine before applying the major update.
- B. During off hours, decommission the machine and create a new one directly on major update 4.6.0.
- C. Stop the service and apply the major updates directly.
- D. Create a test environment and apply the major update

Answer: D

Explanation:

The first step the administrator should take is to create a test environment and apply the major update there. This allows for testing the new version without impacting the production environment, thus minimizing downtime and the potential for unexpected issues. References: Creating test environments and conducting thorough testing before applying updates in production is a risk mitigation strategy covered under cloud deployment and operations in the CompTIA Cloud+ certification.

NEW QUESTION 156

A cloud deployment uses three different VPCs. The subnets on each VPC need to communicate with the others over private channels. Which of the following will achieve this objective?

- A. Deploying a load balancer to send traffic to the private IP addresses
- B. Creating peering connections between all VPCs
- C. Adding BGP routes using the VPCs' private IP addresses
- D. Establishing identical routing tables on all VPCs

Answer: B

Explanation:

To allow subnets on different VPCs to communicate with each other over private channels, the cloud engineer should create peering connections between all the VPCs. VPC Peering allows networks to connect and route traffic using private IP addresses without the need for gateways, VPN connections, or separate physical hardware. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 157

A cloud engineer hardened the WAF for a company that operates exclusively in North America. The engineer did not make changes to any ports, and all protected applications have continued to function as expected. Which of the following configuration changes did the engineer most likely apply?

- A. The engineer implemented MFA to access the WAF configurations.
- B. The engineer blocked all traffic originating outside the region.
- C. The engineer installed the latest security patches on the WAF.
- D. The engineer completed an upgrade from TLS version 1.1 to version 1.3.

Answer: B

Explanation:

Given that the WAF was hardened without changing any ports and all protected applications continued to function as expected, it is most likely that the engineer blocked all traffic originating outside of North America, which is the company's operating region. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security Best Practices

NEW QUESTION 158

A cloud developer is creating a static website that customers will be accessing globally. Which of the following services will help reduce latency?

- A. VPC
- B. Application load balancer
- C. CDN
- D. API gateway

Answer: C

Explanation:

A Content Delivery Network (CDN) is the service that will help reduce latency for a static website accessed globally. CDNs distribute content across multiple geographically dispersed servers, allowing users to connect to a server that is closer to them, thereby reducing the time it takes to load the website. References: The use of CDNs is a common practice to enhance global access and improve user experience, as covered under Cloud Concepts in the CompTIA Cloud+ certification.

NEW QUESTION 160

A software engineer needs to transfer data over the internet using programmatic access while also being able to query the data. Which of the following will best help the engineer to complete this task?

- A. SQL
- B. Web sockets

- C. RPC
- D. GraphQL

Answer: D

Explanation:

GraphQL is the best option for transferring data over the internet with programmatic access and querying capabilities. It is a query language for APIs and a runtime for executing those queries with existing data, providing a more efficient, powerful, and flexible alternative to the REST API. References: Data transfer and querying methods are part of the technical knowledge associated with cloud computing, as included in CompTIA Cloud+.

NEW QUESTION 161

Which of the following can reduce the risk of CI/CD pipelines leaking secrets?

- A. Protected Git branches
- B. Use of a VM instead of containers
- C. Private image repositories
- D. Canary tests

Answer: A

Explanation:

Protected Git branches help reduce the risk of CI/CD pipelines leaking secrets by imposing restrictions on who can commit to the branches, enforce status checks before merging, and prevent unauthorized access or changes to sensitive information, such as API keys, passwords, and secret tokens. This ensures that only approved changes can be made to the codebase, and sensitive information is safeguarded.

NEW QUESTION 166

Which of the following is used to detect signals and measure physical properties, such as the temperature of the human body?

- A. Beacon
- B. Transmission protocols
- C. Sensors
- D. Gateways

Answer: C

Explanation:

Sensors are used to detect signals and measure physical properties, such as temperature. They are devices that respond to a physical stimulus (like heat, light, sound, pressure, magnetism, or a particular motion) and transmit a resulting impulse for detection and measurement. References: The use of sensors in cloud environments, particularly in IoT (Internet of Things) applications, is included in the technical domains of the CompTIA Cloud+ material.

NEW QUESTION 167

A government agency in the public sector is considering a migration from on premises to the cloud. Which of the following are the most important considerations for this cloud migration? (Select two).

- A. Compliance
- B. IaaS v
- C. SaaS
- D. Firewall capabilities
- E. Regulatory
- F. Implementation timeline
- G. Service availability

Answer: AD

Explanation:

For a government agency considering cloud migration, compliance and regulatory considerations are of utmost importance. The agency must ensure that the migration aligns with legal requirements, industry standards, and government regulations specific to the public sector. References: Compliance and regulatory considerations are crucial factors in the cloud migration process for government entities, as emphasized in the CompTIA Cloud+ certification.

NEW QUESTION 169

The company's IDS has reported an anomaly. The cloud engineer remotely accesses the cloud instance, runs a command, and receives the following information:


```

UID    PID    PPID  CMD
0      987    1      sshd /usr/sbin/sshd -D [listener] 0 of 10-100
        startups
0      915    915    sshd: su seceng
0      45078 987     sshd: seceng [priv]
1000   45418 45078  sshd: seceng @pts/0
1000   45419 45418 -bash
1000   45440 45419 ps -elf
0      50596 1       /usr/sbin/apache2 -k start
65535 50597 50596  /usr/sbin/apache2 -k start
0      50612 50597  /var/www/command.py

```

Which of the following is the most likely root cause of this anomaly?

- A. Privilege escalation
- B. Leaked credentials
- C. Cryptojacking
- D. Defaced website

Answer: A

Explanation:

The output from the 'ps' command indicates there is a process running under the UID (User ID) of 0, which is the root user, and the command that was run is '/var/www/command.py'. Given that the normal Apache processes are running under their own UID (65535), this suggests that a command was executed with root privileges that typically should not have such high-level access. This is a strong indicator of privilege escalation, where an unauthorized user or process gains elevated access to resources that are normally protected from an application or user. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

NEW QUESTION 171

A company uses containers stored in Docker Hub to deploy workloads (or its IaaS infrastructure). The development team releases changes to the containers several times per hour. Which of the following should a cloud engineer do to prevent the proprietary code from being exposed to third parties?

- A. Use IaC to deploy the IaaS infrastructure.
- B. Convert the containers to VMs.
- C. Deploy the containers over SSH.
- D. Use private repositories for the containers.

Answer: D

Explanation:

To prevent proprietary code from being exposed to third parties, a cloud engineer should use private repositories for the containers. Private repositories ensure that access to container images is restricted and controlled, unlike public repositories where images are accessible to anyone. References: The concept of using private repositories for protecting proprietary code is part of cloud security best practices, which is covered under the Governance, Risk, Compliance, and Security domain of the CompTIA Cloud+ certification.

NEW QUESTION 175

A cloud engineer wants to implement a monitoring solution to detect cryptojacking and other cryptomining malware on cloud instances. Which of the following metrics would most likely be used to identify the activity?

- A. Disk I/O
- B. Network packets
- C. Average memory utilization
- D. Percent of CPU utilization

Answer: D

Explanation:

To detect cryptojacking and other cryptomining malware on cloud instances, monitoring the percent of CPU utilization is most effective. Cryptomining malware typically consumes a significant amount of CPU resources for mining operations, leading to unusually high CPU usage. Monitoring and analyzing CPU utilization metrics can help identify instances of cryptojacking by highlighting abnormal levels of resource consumption. References: Understanding management and technical operations in cloud environments, as outlined in the CompTIA Cloud+ objectives, includes the use of monitoring solutions to detect and respond to security threats like cryptomining malware, ensuring the integrity and performance of cloud resources.

NEW QUESTION 179

A cloud engineer wants containers to run the latest version of a container base image to reduce the number of vulnerabilities. The applications in use require Python 3.10 and are not compatible with any other version. The containers' images are created every time a new version is released from the source image. Given the container Dockerfile below:

```
FROM cgr.dev/chainguard/python:3.10
WORKDIR /myapp
COPY main.py ./
ENTRYPOINT ["python", "/myapp/main.py"]
```

Which of the following actions will achieve the objectives with the least effort?

- A. Perform docker pull before executing docker run.
- B. Execute docker update using a local cron to get the latest container version.
- C. Change the image to use python:latest on the image build process.
- D. Update the Dockerfile to pin the source image version.

Answer: A

Explanation:

Performing a "docker pull" before executing "docker run" ensures that the latest version of the container base image is used, aligning with the objective of reducing vulnerabilities. This command fetches the latest image version from the repository, ensuring that the container runs the most up-to-date and secure version of the base image. This approach is efficient and requires minimal effort, as it automates the process of maintaining the latest image versions for container deployments. References: Within the CompTIA Cloud+ examination scope, understanding management and technical operations in cloud environments, including container management and security, is critical. This includes best practices for maintaining up-to-date container images to minimize vulnerabilities.

NEW QUESTION 182

Which of the following is an auditing procedure that ensures service providers securely manage the data to protect the interests of the organization and the privacy of its clients?

- A. CIS
- B. ITIL
- C. SOC2
- D. ISO 27001

Answer: C

Explanation:

SOC2 (Service Organization Control 2) is an auditing procedure that ensures service providers securely manage data to protect the interests of an organization and the privacy of its clients. SOC2 is specifically designed for service providers storing customer data in the cloud, making it pertinent for data management and privacy. References: SOC2 and its role in auditing and ensuring secure data management by cloud service providers are part of the compliance standards and regulations included in the CompTIA Cloud+ certification material.

NEW QUESTION 186

A systems administrator is provisioning VMs according to the following requirements:

- A VM instance needs to be present in at least two data centers.
- During replication, the application hosted on the VM tolerates a maximum latency of one second.
- When a VM is unavailable, failover must be immediate.

Which of the following replication methods will best meet these requirements?

- A. Snapshot
- B. Transactional
- C. Live
- D. Point-in-time

Answer: C

Explanation:

Live replication is the process of continuously copying data in real-time to ensure that an exact copy is available in another location. Given the requirement for immediate failover and the presence of the VM instance in at least two data centers, live replication is the best method to meet the one-second maximum latency tolerance and ensure immediate availability in the event of a VM becoming unavailable. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Disaster Recovery and Replication Methods

NEW QUESTION 188

An organization needs to retain its data for compliance reasons but only when required. Which of the following would be the most cost-effective type of tiered storage?

- A. Warm
- B. Hot
- C. Archive
- D. Cold

Answer: C

Explanation:

Archive storage is the most cost-effective type of tiered storage for retaining data that is infrequently accessed and only when required for compliance reasons. It is designed for long-term storage and offers lower storage costs compared to hot, cold, or warm storage tiers. References: Understanding data storage and the various tiers, including archival storage, is part of cloud storage strategies covered in the CompTIA Cloud+ certification.

NEW QUESTION 193

Which of the following is a field of computer science that enables computers to identify and understand objects and people in images and videos?

- A. Image reconstruction
- B. Facial recognition
- C. Natural language processing
- D. Computer vision

Answer: D

Explanation:

Computer vision is a field of computer science that enables computers to identify and understand objects and people in images and videos. It involves the development of systems that can capture and interpret visual information from the world, similar to the way humans do. References: The application of computer vision and its role in cloud services, particularly in relation to AI and machine learning capabilities, is discussed in CompTIA Cloud+.

NEW QUESTION 198

Which of the following provides secure, private communication between cloud environments without provisioning additional hardware or appliances?

- A. VPN
- B. VPC peering
- C. BGP
- D. Transit gateway

Answer: B

Explanation:

VPC peering provides secure, private communication between cloud environments without the need for provisioning additional hardware or appliances. It allows direct network connectivity between two Virtual Private Clouds (VPCs), enabling resources in either VPC to communicate with each other using private IP addresses. References: Cloud networking options such as VPC peering and its benefits are included in the networking concepts of cloud environments in the CompTIA Cloud+ certification.

NEW QUESTION 202

A company's main web application is no longer accessible via the internet. The cloud administrator investigates and discovers the application is accessible locally and only via an IP address. Which of the following was misconfigured?

- A. IP
- B. DHCP
- C. NAT
- D. DNS

Answer: D

Explanation:

When a web application is accessible locally via an IP address but not via the internet, the issue likely lies with the Domain Name System (DNS). DNS is responsible for translating domain names into IP addresses. A misconfiguration in DNS records or failure in DNS resolution can prevent users from accessing the application through its domain name, even though the application itself is running and accessible via its direct IP address. References: In the CompTIA Cloud+ curriculum, understanding cloud concepts and networking fundamentals, including DNS, is crucial for troubleshooting and ensuring applications are accessible and perform optimally in cloud environments.

NEW QUESTION 203

A cloud engineer needs to determine a scaling approach for a payroll-processing solution that runs on a biweekly basis. Given the complexity of the process, the deployment to each new VM takes about 25 minutes to get ready. Which of the following would be the best strategy?

- A. Horizontal
- B. Scheduled
- C. Trending
- D. Event

Answer: B

Explanation:

For a biweekly payroll-processing solution that takes a significant amount of time to deploy to each new VM, the best scaling strategy is Scheduled scaling. This strategy involves preparing new instances in advance of when they are needed based on a known schedule, which in this case is the biweekly payroll process. By scheduling the scaling actions in advance, the cloud engineer ensures that the resources are ready when needed without incurring extra costs for running them all the time. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 207

An organization's web application experiences periodic bursts of traffic when a new video is launched. Users are reporting poor performance in the middle of the month. Which of the following scaling approaches should the organization use to scale based on forecasted traffic?

- A. Scheduled
- B. Manual
- C. Event
- D. Load

Answer: A

Explanation:

For periodic bursts of traffic that are predictable, such as when a new video is launched, a scheduled scaling approach is suitable. This strategy involves scaling resources based on forecasted or known traffic patterns, ensuring that the infrastructure can handle the load during expected peak times. References: The use of scheduled scaling to manage predictable traffic increases is discussed within the Management and Technical Operations section of the CompTIA Cloud+ exam objectives.

NEW QUESTION 211

Which of the following industry standards mentions that credit card data must not be exchanged or stored in cleartext?

- A. CSA
- B. GDPR
- C. SOC2
- D. PCI-DSS

Answer: D

Explanation:

The Payment Card Industry Data Security Standard (PCI-DSS) is the industry standard that mandates that credit card data must not be stored or transmitted in cleartext. It includes requirements for encryption, access control, and other security measures to protect cardholder data. References: Official PCI Security Standards Council Site.

NEW QUESTION 213

An IT manager needs to deploy a cloud solution that meets the following requirements:

- Users must use two authentication methods to access resources.
- Each user must have 10GB of storage space by default.

Which of the following combinations should the manager use to provision these requirements?

- A. OAuth 2.0 and ephemeral storage
- B. OIDC and persistent storage
- C. MFA and storage quotas
- D. SSO and external storage

Answer: C

Explanation:

The combination that should be used to provision the requirements of two authentication methods and 10GB of storage space by default for each user is Multi-Factor Authentication (MFA) and storage quotas. MFA provides an additional layer of security beyond just a username and password, and storage quotas can be used to allocate a specific amount of storage space for each user. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 215

A company recently set up a CDN for its photography and image-sharing website. Which of the following is the most likely reason for the company's action?

- A. To eliminate storage costs
- B. To improve site speed
- C. To enhance security of static assets
- D. To prevent unauthorized access

Answer: B

Explanation:

The most likely reason for setting up a Content Delivery Network (CDN) is to improve site speed, especially for a photography and image-sharing website. CDNs cache content at edge locations closer to end-users, significantly reducing load times for static assets like images and videos. This enhancement in speed can improve user experience and site performance. References: CompTIA Cloud+ resources and CDN functionality

NEW QUESTION 218

Which of the following best explains the concept of migrating from on premises to the cloud?

- A. The configuration of a dedicated pipeline to transfer content to a remote location
- B. The creation of virtual instances in an external provider to transfer operations of selected servers into a new
- C. remotely managed environment
- D. The physical transportation, installation, and configuration of company IT equipment in a cloud services provider's facility
- E. The extension of company IT infrastructure to a managed service provider

Answer: B

Explanation:

Migrating from on-premises to the cloud generally involves creating virtual instances in an external provider's environment and transferring the operations of selected servers to this new, remotely managed setup. This process allows organizations to leverage the cloud provider's resources and services. References: The migration process and strategies are topics included in the Business Principles of Cloud Environments within the CompTIA Cloud+ curriculum.

NEW QUESTION 222

A company's website suddenly crashed. A cloud engineer investigates the following logs:


```
webbapp_access.log

...
2023-04-03 16:45:00 GET /home?x=213
2023-04-03 16:45:01 GET /home?x=6544
2023-04-03 16:45:02 GET /home?x=52455
2023-04-03 16:45:03 GET /home?x=56
2023-04-03 16:45:04 GET /home?x=7895

...
2023-04-03 16:47:00 GET /home?x=3986 502
2023-04-03 16:47:01 GET /home?x=2461 502
```

Which of the following is the most likely cause of the issue?

- A. SQL injection
- B. Cross-site scripting
- C. Leaked credentials
- D. DDoS

Answer: D

Explanation:

The logs indicate a sudden surge in access requests to the website's homepage, followed by 502 errors, which are indicative of server overload or failure to handle incoming requests. This pattern is typical of a Distributed Denial of Service (DDoS) attack, where multiple compromised systems flood the target with traffic, exceeding its capacity to handle requests, leading to service disruption.

NEW QUESTION 226

A security analyst reviews the daily logs and notices the following suspicious activity:

Host	NA/US/John Smith
IP	10.150.71.151
Activity	A powershell process executed compressed, encoded command line content.

The analyst investigates the firewall logs and identifies the following:

Operating system	Kali Linux
CPU	x64
Filesystem	ext4
User	John Smith
Category	Compromised - Unauthorized Access
Domain	NA/US
IP	201.101.25.121 (External)
Port	4444
Connection type	Inbound Connection

Which of the following steps should the security analyst take next to resolve this issue? (Select two).

- A. Submit an IT support ticket and request Kali Linux be uninstalled from John Smith's computer
- B. Block all inbound connections on port 4444 and block the IP address 201.101.25.121.
- C. Contact John Smith and request the Ethernet cable attached to the desktop be unplugged
- D. Check the running processes to confirm if a backdoor connection has been established.
- E. Upgrade the Windows x64 operating system on John Smith's computer to the latest version.
- F. Block all outbound connections from the IP address 10.150.71.151.

Answer: BD

Explanation:

Given the suspicious activity and Kali Linux's association with penetration testing and hacking tools, the security analyst should block all inbound connections on port 4444, as it is commonly used for malicious purposes, and block the IP address that's potentially the source of the intrusion. Additionally, checking the running processes on John Smith's computer is crucial to determine if a backdoor or unauthorized connection has been established. References: Incident response and threat mitigation steps such as these are part of the security protocols discussed in the CompTIA Cloud+ certification.

NEW QUESTION 229

A company has developed an online trading platform. The engineering team selected event-based scaling for the platform's underlying resources. The platform resources scale up with every 2,000 subscribed users. The engineering team finds out that although compute utilization is low, scaling is still occurring. Which of the following statements best explains why this is the case?

- A. Event-based scaling does not scale down resources.
- B. Event-based scaling should not be triggered at the 2,000-user frequency.
- C. Event-based scaling should not track user subscriptions.
- D. Event-based scaling does not take resource load into account.

Answer: D

Explanation:

Event-based scaling triggers based on specific events, such as the number of user subscriptions in this case. It does not necessarily account for the actual load or utilization of compute resources. This is why the platform's resources continue to scale up even though compute utilization is low; the scaling decision is being made based on the number of subscribed users rather than the current resource usage. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

NEW QUESTION 231

Which of the following AI/ML technologies consumes text input to discern tone?

- A. Text recognition
- B. Computer vision
- C. Visual recognition
- D. Sentiment analysis

Answer: D

Explanation:

Sentiment analysis is an AI/ML technology that processes text to determine the tone. It helps in understanding the sentiments behind the words by analyzing the text input, which can be positive, negative, or neutral. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Technologies and Applications

NEW QUESTION 235

A cloud administrator is building a company-standard VM image, which will be based on a public image. Which of the following should the administrator implement to secure the image?

- A. ACLs
- B. Least privilege
- C. Hardening
- D. Vulnerability scanning

Answer: C

Explanation:

Hardening a VM image involves implementing security measures to reduce vulnerabilities and protect against threats. This process includes removing unnecessary software, services, and permissions, ensuring that the remaining software is updated with the latest security patches, and configuring settings to enhance security. Starting with a public image, the administrator should apply hardening techniques to ensure the custom company-standard VM image is secure and resilient against attacks.

NEW QUESTION 236

Five thousand employees always access the company's public cloud-hosted web application on a daily basis during the same time frame. Some users have been reporting performance issues while attempting to connect to the web application. Which of the following is the best configuration approach to resolve this issue?

- A. Scale vertically based on a trend.
- B. Scale horizontally based on a schedule
- C. Scale vertically based on a load.
- D. Scale horizontally based on an event

Answer: B

Explanation:

For a web application accessed by a large number of employees daily during the same time frame, the best configuration approach to resolve performance issues is to scale horizontally based on a schedule. This means adding more server instances to handle the load during known peak times. References: Cloud resource scaling strategies, including scheduled horizontal scaling, are discussed in the CompTIA Cloud+ curriculum under cloud management and optimization.

NEW QUESTION 240

A cloud engineer is designing a cloud-native, three-tier application. The engineer must adhere to the following security best practices:

- Minimal services should run on all layers of the stack.
- The solution should be vendor agnostic.
- Virtualization could be used over physical hardware.

Which of the following concepts should the engineer use to design the system to best meet these requirements?

- A. Virtual machine
- B. Micro services
- C. Fan-out
- D. Cloud-provided managed services

Answer: B

Explanation:

Microservices architecture is the most suitable design principle that aligns with the security best practices mentioned. It involves developing a suite of small services, each running in its own process and communicating with lightweight mechanisms, often an HTTP resource API. This architecture minimizes the services running on each layer, allows for vendor-agnostic solutions, and is well-suited for virtualization over physical hardware. References: Microservices as an architectural approach is discussed in the context of cloud-native applications within the CompTIA Cloud+ material.

NEW QUESTION 243

Which of the following vulnerability management concepts is best defined as the process of discovering vulnerabilities?

- A. Scanning
- B. Assessment
- C. Remediation
- D. Identification

Answer: D

Explanation:

In vulnerability management, 'Identification' is the concept best defined as the process of discovering vulnerabilities. This step is crucial as it involves detecting vulnerabilities in systems, software, and networks, which is the first step in the vulnerability management process before moving on to assessment, remediation,

and reporting.

NEW QUESTION 247

Which of the following communication methods between on-premises and cloud environments would ensure minimal-to-low latency and overhead?

- A. Site-to-site VPN
- B. Peer-to-peer VPN
- C. Direct connection
- D. peering

Answer: C

Explanation:

A direct connection between on-premises and cloud environments involves a dedicated, private connection that does not traverse the public internet. This setup ensures minimal-to-low latency and overhead, providing more consistent network performance and reliability compared to other methods like VPNs or public internet connections, making it suitable for high-volume or latency-sensitive applications.

NEW QUESTION 251

A company migrated its CRM system to a SaaS solution. The security team is updating the RAG matrix for the newly migrated CRM. Given the following table:

	Data-center security	CRM software security	CRM server patching	CRM development life cycle
Customer	C,I	I	A, I	A,C,I
CSP	R,A	R,A,C	R,C	R

Which of the following responsibility assignments best aligns with the shared responsibility model for the new CRM?

- A. Data-center security
- B. CRM software security
- C. CRM server patching
- D. CRM development life cycle

Answer: A

Explanation:

For the newly migrated SaaS CRM, the responsibility assignment that best aligns with the shared responsibility model is data-center security. In a SaaS model, the cloud service provider (CSP) is responsible for the security of the infrastructure, including data centers, while the customer is typically responsible for the data and possibly the user access management. References: The shared responsibility model and its implications for different service models are foundational concepts included in the CompTIA Cloud+ certification, under the domain of Governance, Risk, Compliance, and Security.

NEW QUESTION 256

A cloud engineer is in charge of deploying a platform in an IaaS public cloud. The application tracks the state using session cookies, and there are no affinity restrictions.

Which of the following will help the engineer reduce monthly expenses and allow the application to provide the service?

- A. Resource metering
- B. Reserved resources
- C. Dedicated host
- D. Pay-as-you-go model

Answer: D

Explanation:

A pay-as-you-go model would be beneficial for the cloud engineer because it allows the application to be scaled based on demand, reducing monthly expenses since costs are only incurred for the resources actually used. Since there are no affinity restrictions and the application uses session cookies for state tracking, the pay-as-you-go model can handle fluctuating workloads without the need to pay for unused reserved resources or dedicated hosts. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Service Models

NEW QUESTION 259

A company serves customers globally from its website hosted in North America. A cloud engineer recently deployed new instances of the website in the Europe region. Which of the following is the most likely reason?

- A. To simplify workflow
- B. To enhance security
- C. To reduce latency
- D. To decrease cost

Answer: C

Explanation:

The most likely reason for deploying new instances of a website in the Europe region, in addition to the ones hosted in North America, is to reduce latency for users located in Europe. By having the website's resources closer to the end-users, the data has a shorter distance to travel, resulting in faster load times and better performance. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 263

A cloud engineer wants to run a script that increases the volume storage size if it is below 100GB. Which of the following should the engineer run?

- ☐ A.

```
if [ VOL = describe_volume_size(get_volume(VM)) < 100]
    resize_size(VOL)
else
    echo "$vol is already larger than 100GB"
```
- ☐ B.

```
if [ VOL = describe_volume_size(get_volume(VM)) + 100]
    resize_size(VOL)
else
    echo "$vol is already larger than 100GB"
```
- ☐ C.

```
if [ VOL = describe_volume_size(get_volume(VM)) != 100]
    resize_size(VOL)
else
    echo "$vol is already larger than 100GB"
```
- ☐ D.

```
if [ VOL = describe_volume_size(get_volume(VM)) == 100]
    resize_size(VOL)
else
    echo "$vol is already larger than 100GB"
```

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

Answer: A

Explanation:

The correct script is Option A, which uses a conditional test to check if the volume size is less than 100GB. If it is, then it performs a resize operation; otherwise, it outputs a message indicating the volume is already the desired size. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Automation

NEW QUESTION 265

A company wants to build its new platform using a public cloud. The workload requirements include the following:

- Implementation of custom CIS compliance
- Patch for vulnerabilities within 24 hours
- Warrant at least 1,800 IOPS per volume Which of the following meets the requirements?

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

Answer: B

Explanation:

Infrastructure as a Service (IaaS) provides the most flexibility among cloud service models, allowing for the implementation of custom security and compliance standards, such as CIS compliance. IaaS environments offer control over the infrastructure, enabling patch management within specific time frames. Additionally, IaaS providers typically offer configurable storage options, including the ability to specify IOPS (Input/Output Operations Per Second) per volume to meet performance requirements.

NEW QUESTION 269

A company's content management system (CMS) service runs on an IaaS cluster on a public cloud. The CMS service is frequently targeted by a malicious threat actor using DDoS.

Which of the following should a cloud engineer monitor to identify attacks?

- A. Network flow logs
B. Endpoint detection and response logs
C. Cloud provider event logs
D. Instance syslog

Answer: A

Explanation:

To identify DDoS attacks against a CMS service, a cloud engineer should monitor network flow logs. These logs provide data about the IP traffic going to and from network interfaces in a public cloud, which is essential for detecting the increased traffic volumes typically associated with DDoS attacks. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Security in the Cloud

NEW QUESTION 273

Which of the following application migration strategies will best suit a customer who wants to move a simple web application from an on-premises server to the cloud?

- A. Rehost
- B. Rearchitect
- C. Refactor
- D. Retain

Answer: A

Explanation:

Rehosting, often referred to as a "lift and shift" strategy, is the best suit for a customer who wants to move a simple web application from an on-premises server to the cloud. It involves moving the application to the cloud without making significant changes, which can be a quick and cost-effective migration approach for straightforward applications. References: The various cloud migration strategies, including rehosting, are part of the knowledge base for cloud migration in the CompTIA Cloud+ certification.

NEW QUESTION 275

A company implements a web farm with 100 servers behind an application load balancer. During scaling events, new web servers that are placed in service have not loaded all their modules, which causes some requests to the web farm to fail. Which of the following should the cloud engineer implement to address the scaling issue?

- A. Instance warm-up
- B. Scheduled scaling
- C. Event-based scaling
- D. Load balancer passthrough

Answer: A

Explanation:

Implementing an instance warm-up period can address the issue of new web servers not having all modules loaded during scaling events. This warm-up period allows new instances to fully initialize and start serving traffic only when they are ready, preventing failed requests. References: Scaling strategies and their operational impact, including the concept of instance warm-up, are covered under cloud infrastructure management in the CompTIA Cloud+ curriculum.

NEW QUESTION 278

A cloud administrator deploys new VMs in a cluster and discovers they are getting IP addresses in the range of 169.254.0.0/16. Which of the following is the most likely cause?

- A. The scope has been exhausted.
- B. The network is overlapping.
- C. The VLAN is missing.
- D. The NAT is Improperly configured.

Answer: A

Explanation:

IP addresses in the range of 169.254.0.0/16 are Automatic Private IP Addressing (APIPA) addresses, which devices assign themselves when they are configured to obtain an IP automatically but are unable to reach a DHCP server to get one. The most likely cause for VMs in a cluster to receive APIPA addresses is the exhaustion of the DHCP scope, meaning there are no more available IP addresses in the DHCP range to be assigned.

NEW QUESTION 281

Which of the following refers to the idea that data should stay within certain borders or territories?

- A. Data classification
- B. Data retention
- C. Data sovereignty
- D. Data ownership

Answer: C

Explanation:

Data sovereignty refers to the concept that data is subject to the laws and governance structures within the nation it is collected or stored. It implies that regardless of where a company's data is stored, the data must comply with the laws of the country where it is physically located. References: The principle of data sovereignty is a critical consideration in international cloud services and is included in the governance, risk, and compliance domain of CompTIA Cloud+.

NEW QUESTION 282

A company is required to save historical data for seven years. A cloud administrator implements a script that automatically deletes data older than seven years. Which of the following concepts best describes why the historical data is being deleted?

- A. End of life

- B. Data loss prevention
- C. Cost implications
- D. Tiered storage for archiving

Answer: A

Explanation:

Deleting historical data older than seven years as described is an example of data end of life (EOL) policies in action. These policies dictate when data is no longer needed or relevant and should be securely disposed of, often for compliance, legal, or cost- saving reasons.

References: CompTIA Cloud+ resources and data management strategies

NEW QUESTION 283

Once a change has been made to templates, which of the following commands should a cloud architect use next to deploy an IaaS platform?

- A. git pull
- B. git fetch
- C. git commit
- D. git push

Answer: D

Explanation:

After making changes to templates, a cloud architect should use the git push command to deploy an IaaS platform. This command is used to upload the local repository content to a remote repository, making the new or changed templates available for the next deployment. References: Version control practices and commands, such as using git for IaaS template management, are covered under the best practices for cloud deployments in the CompTIA Cloud+ certification.

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