

# Exam Questions CV0-004

CompTIA Cloud+

<https://www.2passeasy.com/dumps/CV0-004/>



**NEW QUESTION 1**

A newly configured VM fails to run application updates despite having internet access. The updates download automatically from a third-party network. Given the following output:

```
$dig +short apac.update-server.net
38.102.218.7
$dig +short na.update-server.net
request timeout
```

Which of the following troubleshooting steps would be best to take?

- A. Checking DNS configurations
- B. Reconfiguring routing protocols
- C. Testing the IP address configuration
- D. Running a trace to the router

**Answer:** A

**Explanation:**

The best troubleshooting step to take given the output is to check DNS configurations. The failure to resolve the "na.update-server.net" domain suggests a DNS resolution issue, which could be due to incorrect DNS settings, a failure in the DNS service, or an issue with the DNS server itself. References: Troubleshooting DNS issues is a crucial skill in cloud management, as DNS plays a fundamental role in network connectivity and access to resources. It is covered under Cloud Concepts in the CompTIA Cloud+ curriculum.

**NEW QUESTION 2**

The change control board received a request to approve a configuration change 10 deploy in the cloud production environment. Which of the following should have already been completed?

- A. Penetration test
- B. End-to-end security testing
- C. Cost benefit analysis
- D. User acceptance testing

**Answer:** D

**Explanation:**

Before a configuration change is deployed in the cloud production environment, it is crucial to conduct User Acceptance Testing (UAT). UAT involves testing the system by the end-users or clients to ensure it can handle required tasks in real-world scenarios, according to specifications. This testing is the final stage before the change is approved for production, ensuring that all functionalities meet user requirements and the system is ready for deployment. References: The CompTIA Cloud+ certification highlights the significance of various testing phases, including UAT, as part of the cloud deployment process to validate the system's readiness and functionality for end-users.

**NEW QUESTION 3**

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 4**

A systems administrator is configuring backups on a VM and needs the process to run as quickly as possible, reducing the bandwidth on the network during all times from Monday through Saturday. In the event of data corruption, the management team expects the mean time to recovery to be as low as possible. Which of the following backup methods can the administrator use to accomplish these goals?

- A. Incremental backup daily to the cloud
- B. Full backup on Sunday and incremental backups on all other days of the week
- C. Differential backup daily to the cloud

D. Incremental backups during off-hours on Monday, Wednesday, and Friday

**Answer:** B

**Explanation:**

To achieve a quick backup process and reduce bandwidth use, the administrator should perform a Full backup on Sunday and incremental backups on all other days of the week. This method ensures that only the changes made since the last full backup are copied, reducing the amount of data that needs to be transferred each time, and thus the time and bandwidth required. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

**NEW QUESTION 5**

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 6**

Which of the following requirements are core considerations when migrating a small business's on-premises applications to the cloud? (Select two).

- A. Availability
- B. Hybrid
- C. Testing
- D. Networking
- E. Compute
- F. Logs

**Answer:** AD

**Explanation:**

When migrating on-premises applications to the cloud for a small business, availability and networking are core considerations. Ensuring that applications are available and that the network is capable of handling the new cloud traffic are pivotal for a successful transition. References: The migration process and its core considerations, including availability and networking, are topics within the Business Principles of Cloud Environments in the CompTIA Cloud+ material.

**NEW QUESTION 7**

Which of the following is the most cost-effective and efficient strategy when migrating to the cloud?

- A. Retire
- B. Replatform
- C. Retain
- D. Refactor

**Answer:** A

**Explanation:**

The most cost-effective and efficient strategy when migrating to the cloud can often be to 'retire' or turn off legacy systems that are no longer useful or necessary. This avoids spending resources on migrating and maintaining systems that do not provide value in a cloud environment. References: Cloud migration strategies, including retiring outdated systems, are part of the decision-making process for cloud adoption in the CompTIA Cloud+ certification material.

**NEW QUESTION 8**

A company wants to implement a work environment that will have low operational overhead and highly accessible enterprise resource planning, email, and data resources. Which of the following cloud service models should the company implement?

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

**Answer:** D

**Explanation:**

A company that requires low operational overhead and highly accessible enterprise resources would benefit from implementing Software as a Service (SaaS). SaaS provides access to applications hosted in the cloud, eliminating the need for internal infrastructure or application development, which aligns with the requirement of having low operational overhead. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

**NEW QUESTION 9**

**SIMULATION**

A company has decided to scale its e-commerce application from its corporate datacenter to a commercial cloud provider to meet an anticipated increase in

demand during an upcoming holiday.

The majority of the application load takes place on the application server under normal conditions. For this reason, the company decides to deploy additional application servers into a commercial cloud provider using the on-premises orchestration engine that installs and configures common software and network configurations.

The remote computing environment is connected to the on-premises datacenter via a site-to-site IPsec tunnel. The external DNS provider has been configured to use weighted round-robin routing to load balance connections from the Internet.

During testing, the company discovers that only 20% of connections completed successfully.

**INSTRUCTIONS**

Review the network architecture and supporting documents and fulfill these requirements: Part 1:

- Analyze the configuration of the following components: DNS, Firewall 1, Firewall 2, Router 1, Router 2, VPN and Orchestrator Server.
- Identify the problematic device(s).

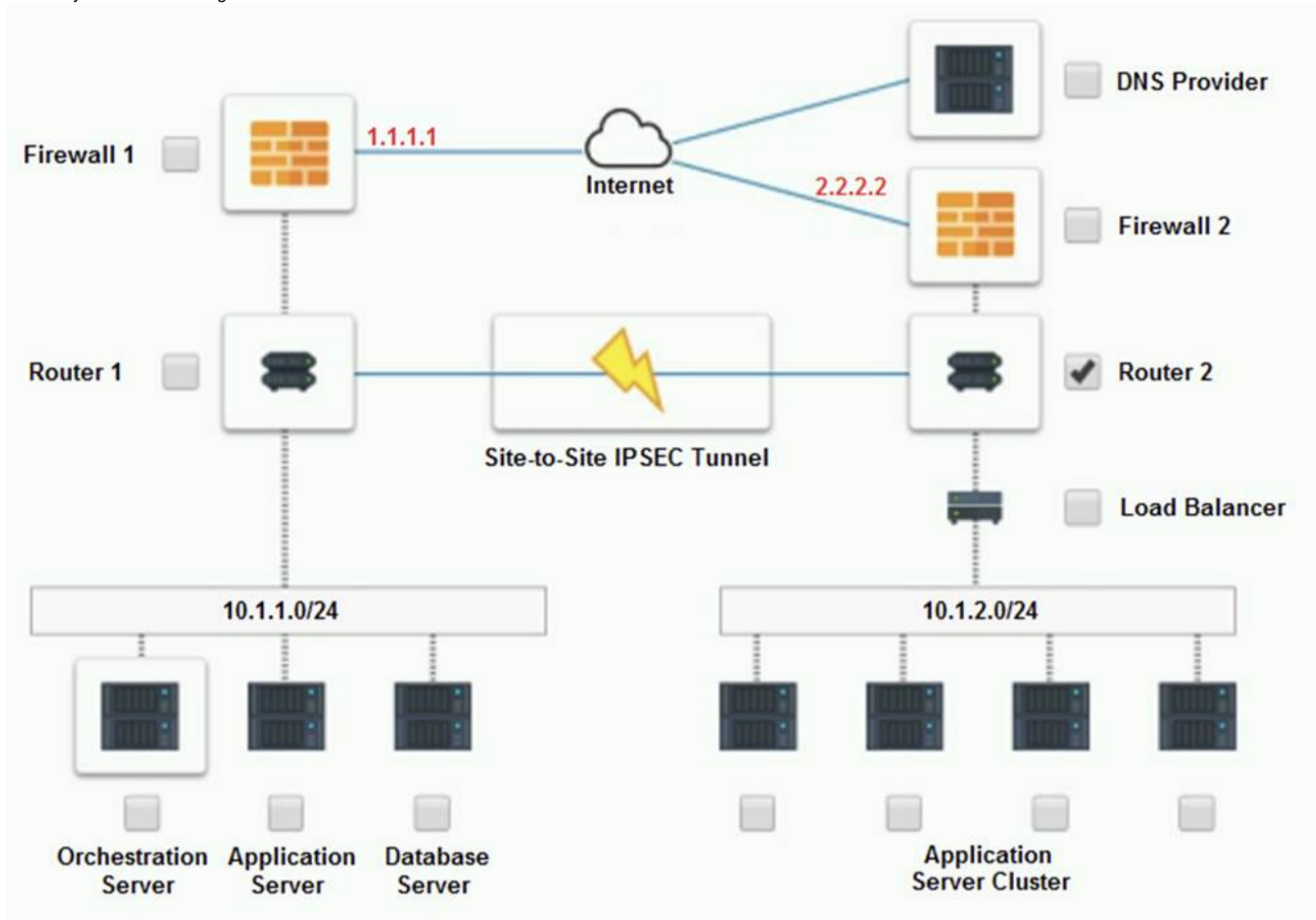
Part 2:

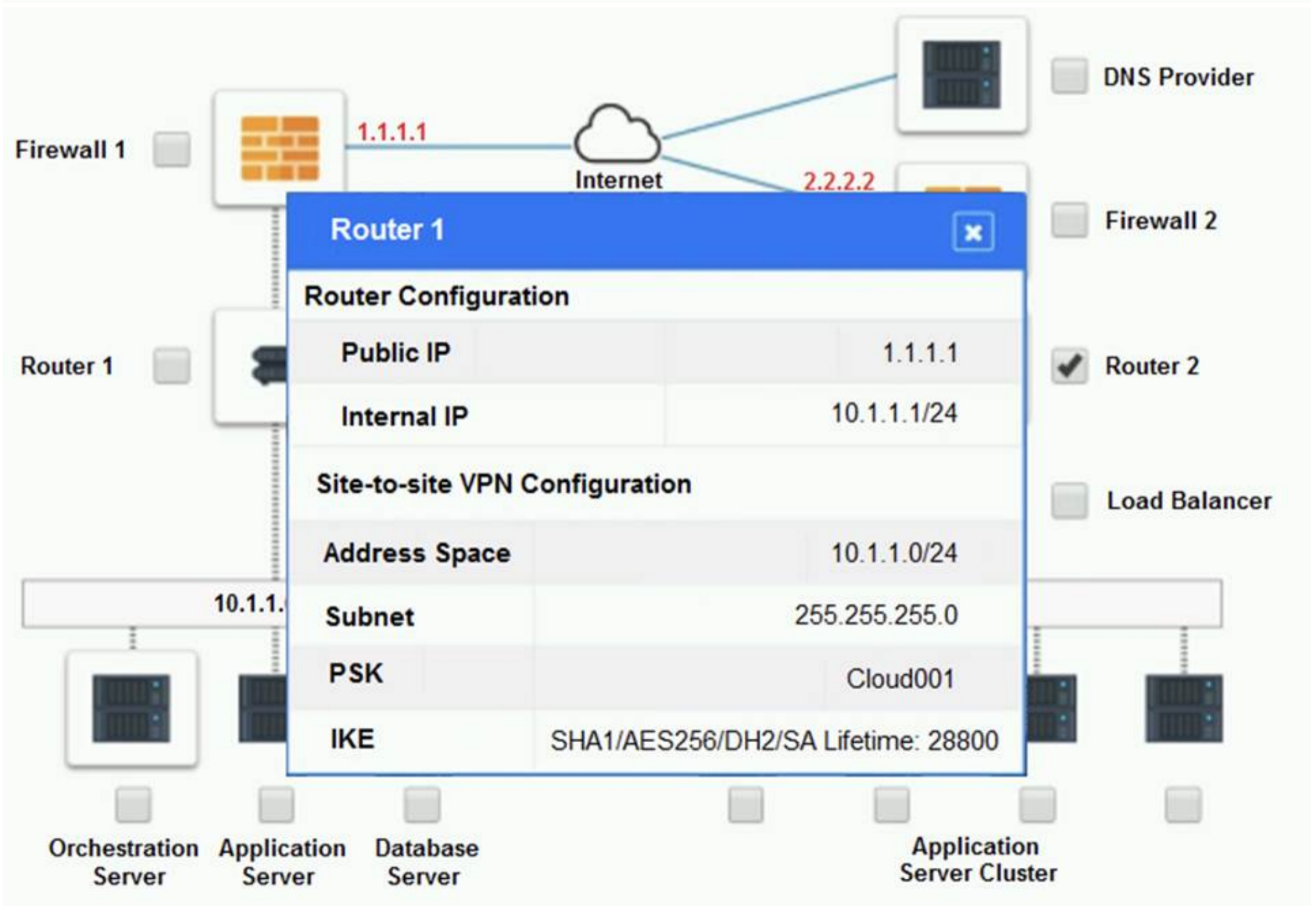
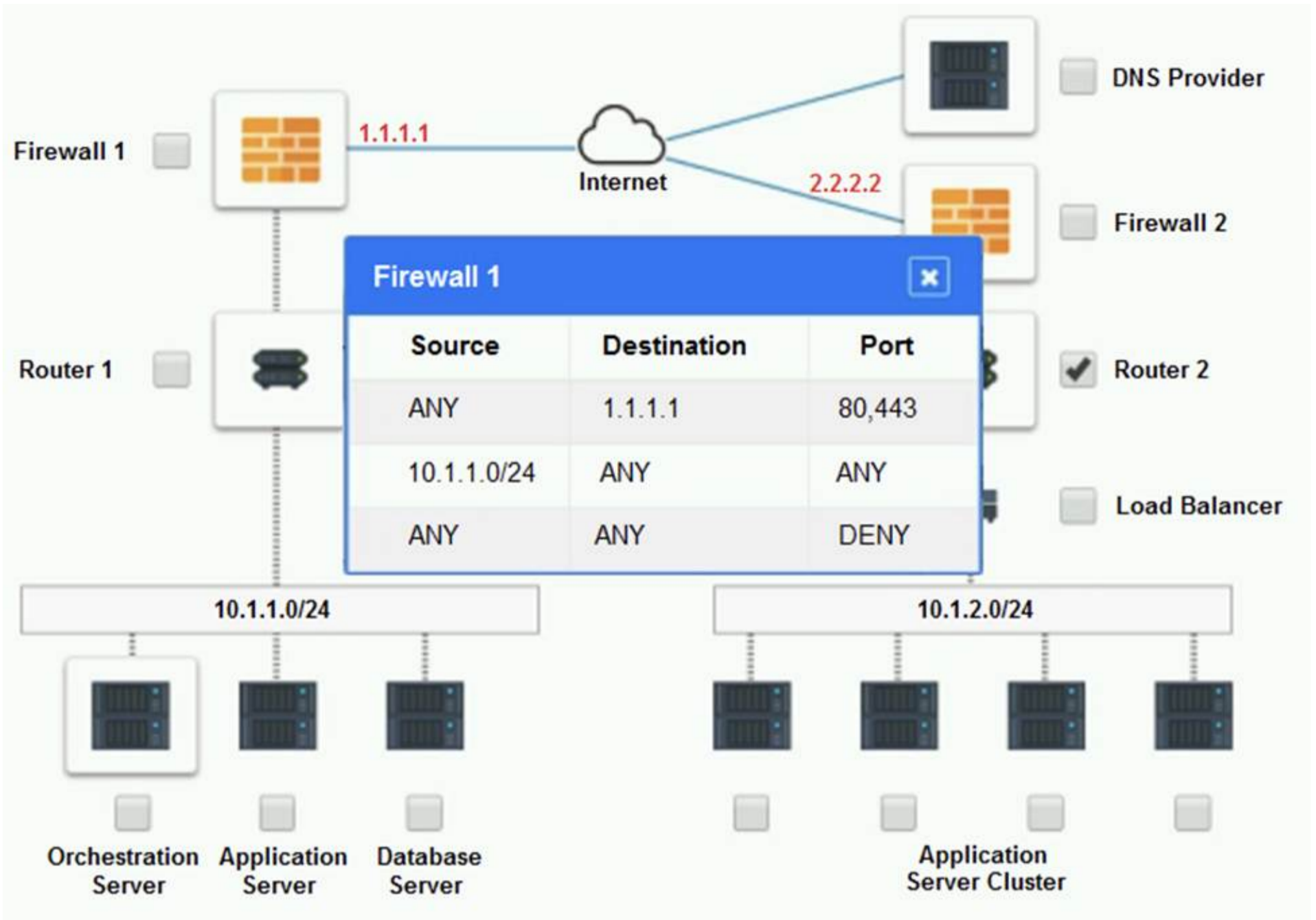
- Identify the correct options to provide adequate configuration for hybrid cloud architecture.

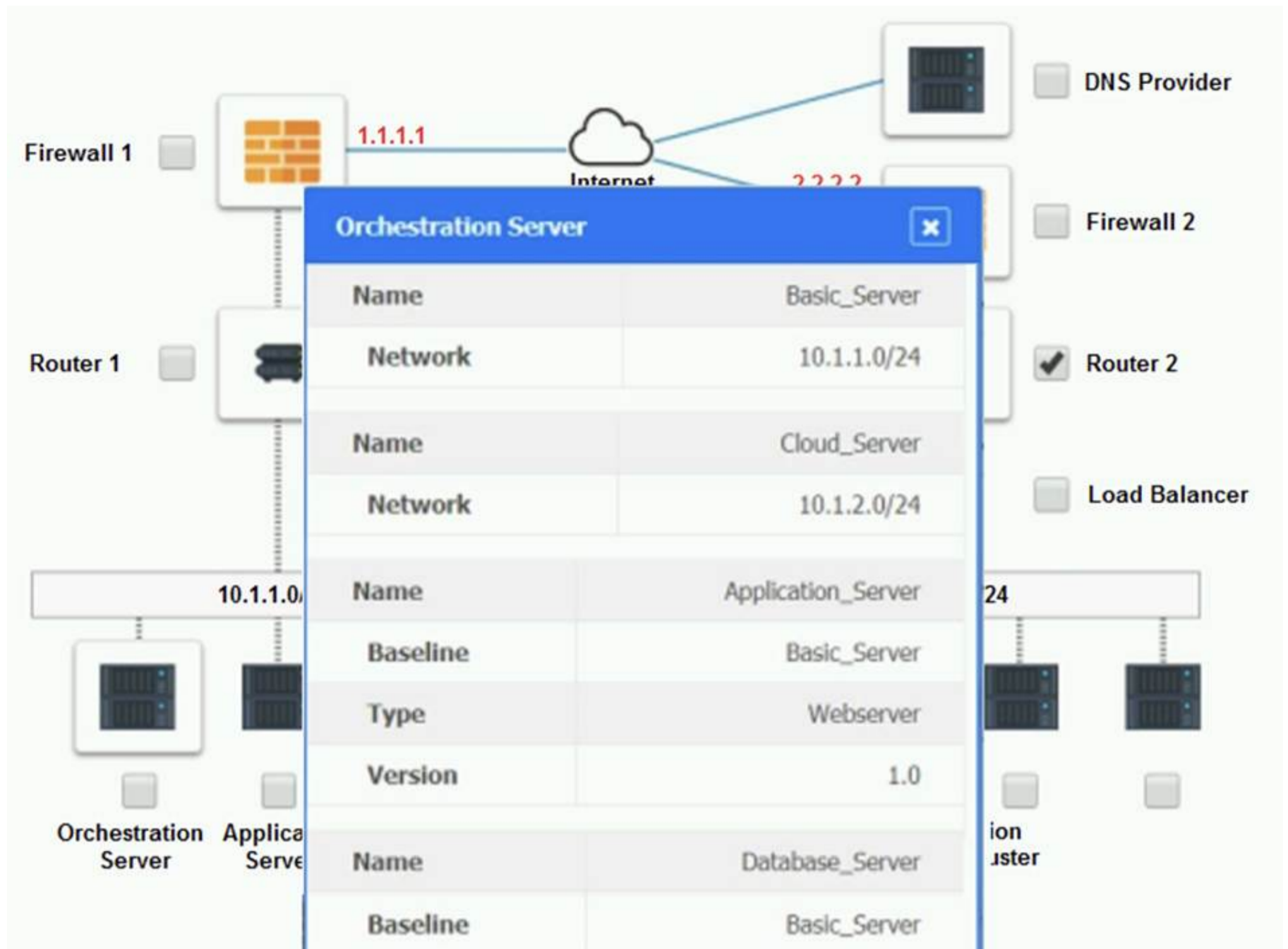
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.

Part 1:

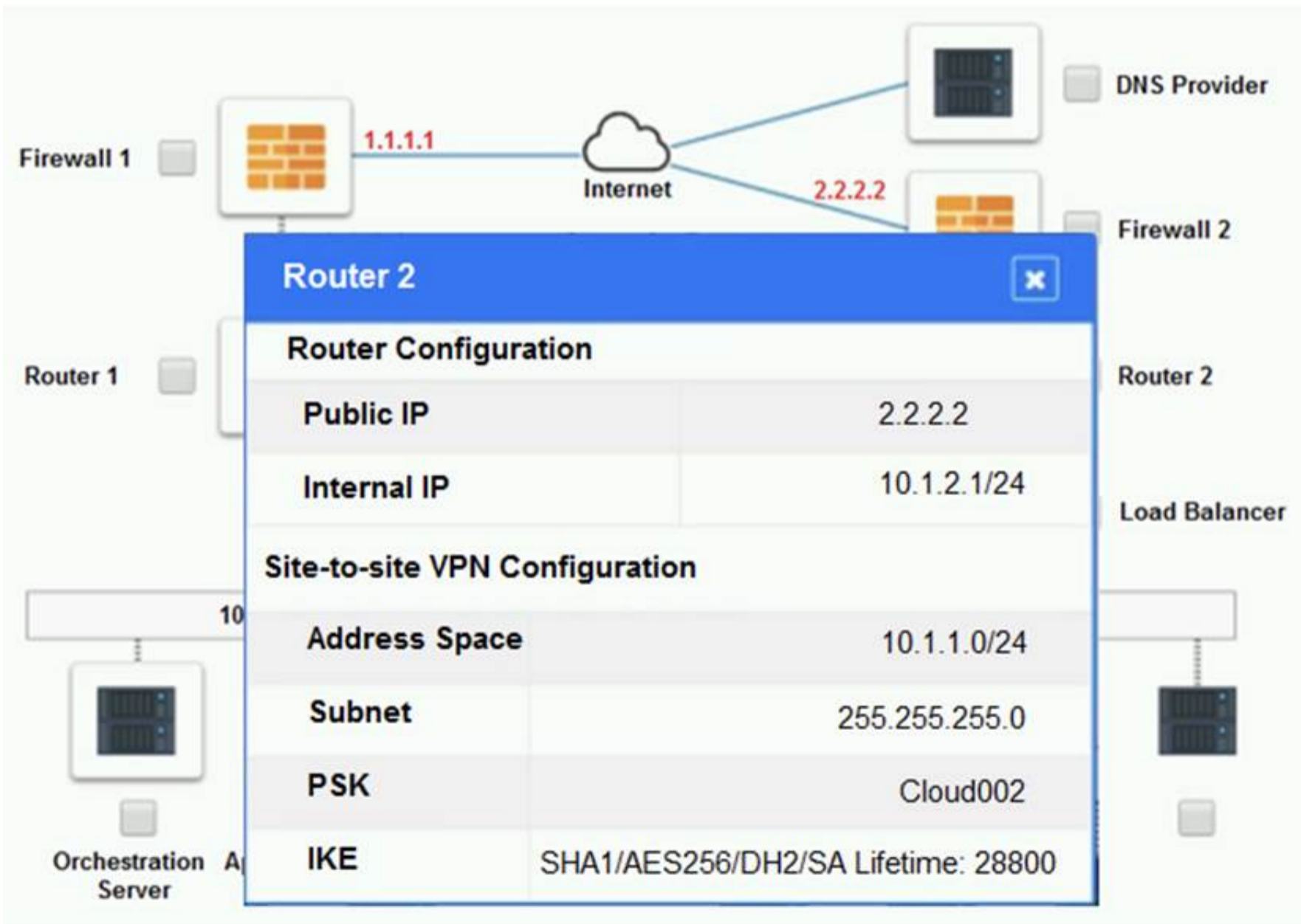
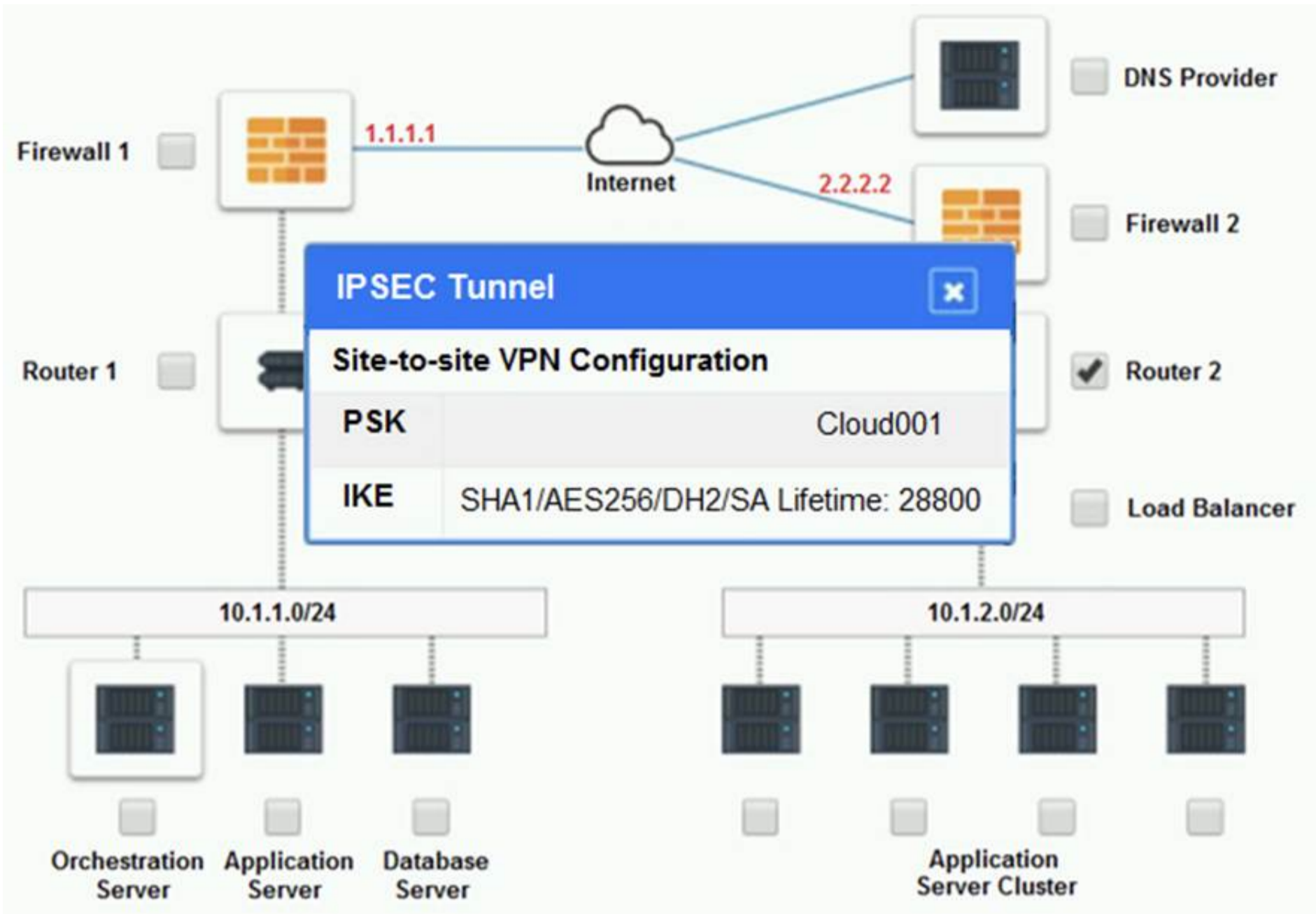
Cloud Hybrid Network Diagram

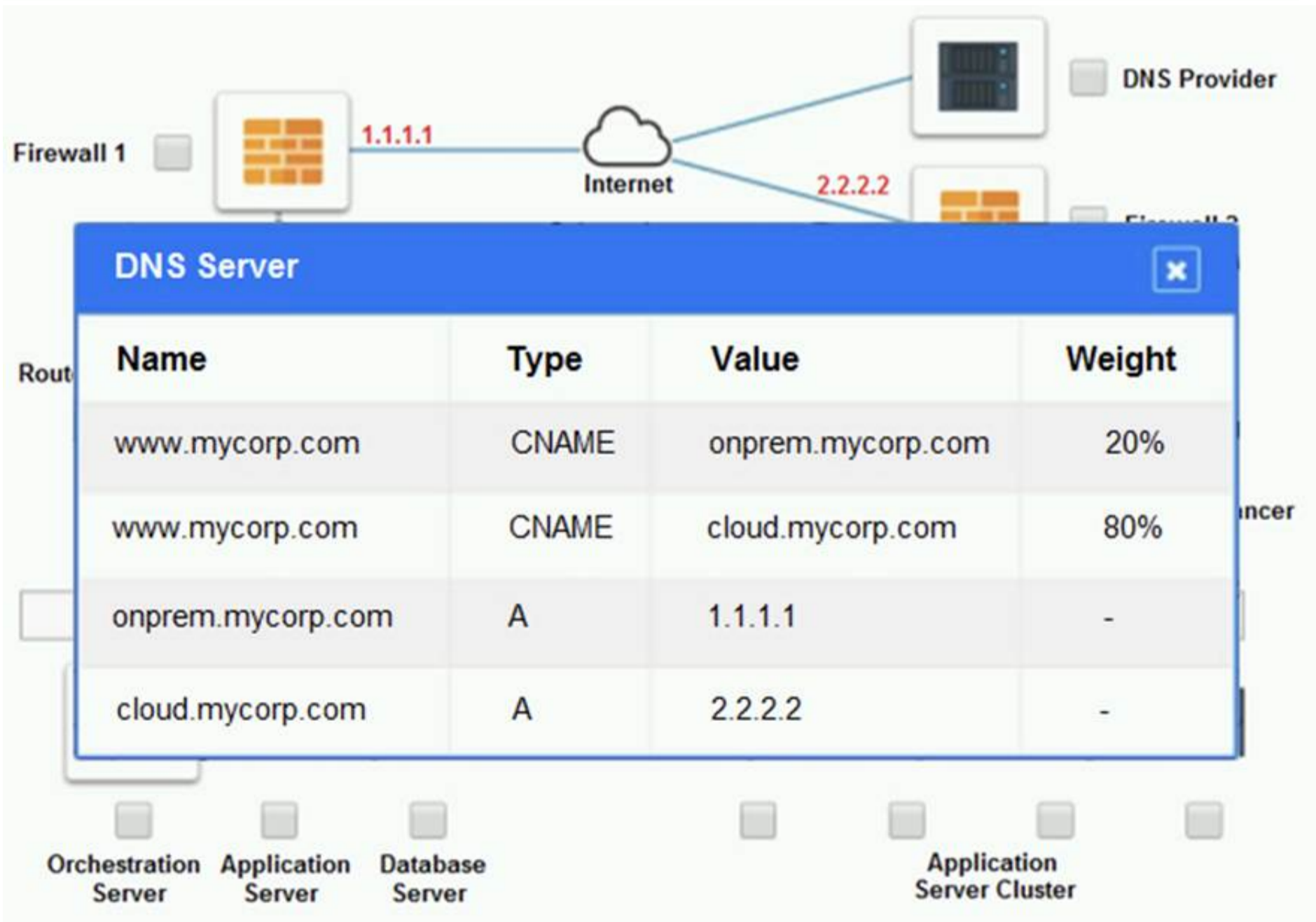
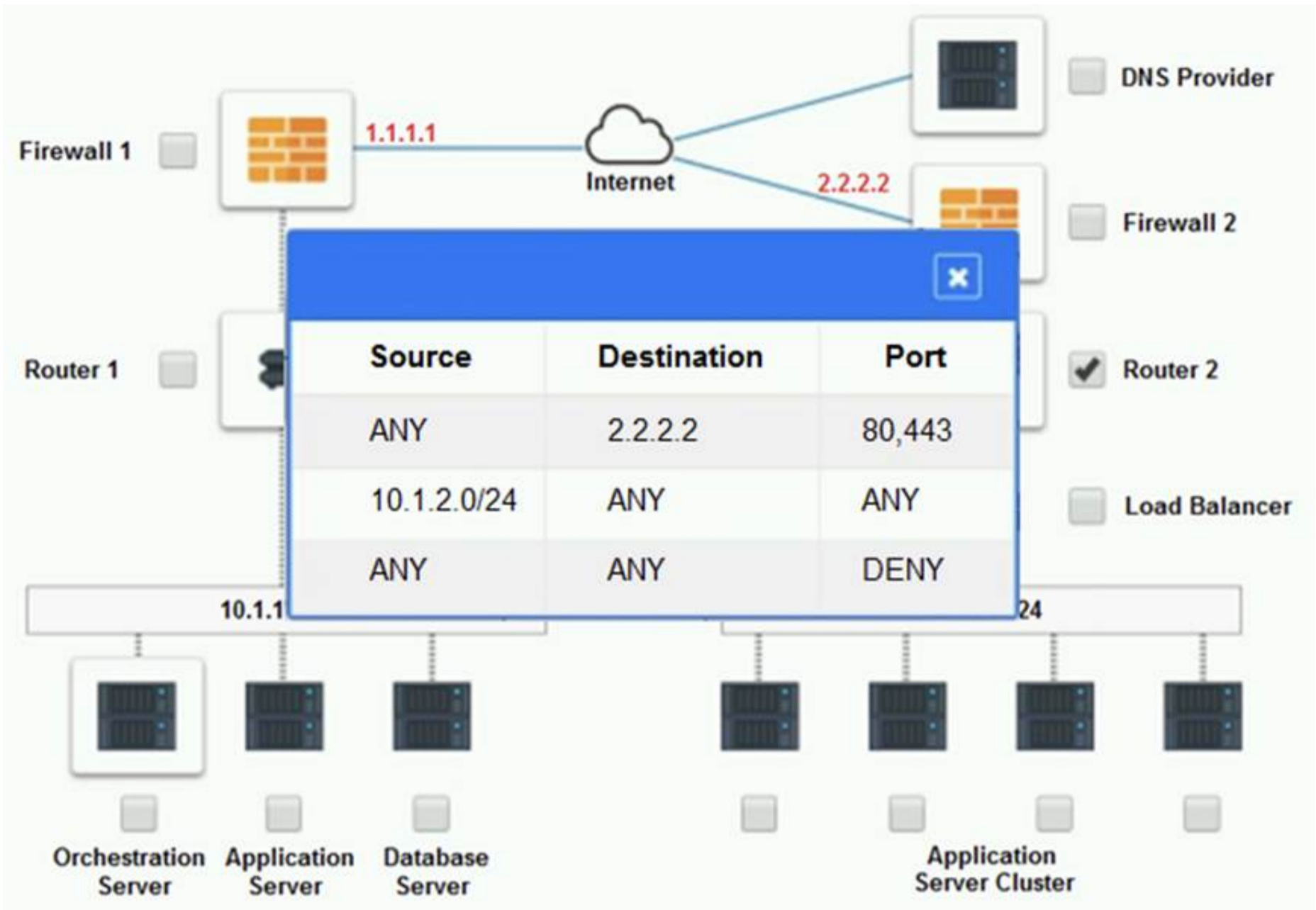






| Orchestration Server |                        |
|----------------------|------------------------|
| Name                 | Basic_Server           |
| Network              | 10.1.1.0/24            |
| Name                 | Cloud_Server           |
| Network              | 10.1.2.0/24            |
| Name                 | Application_Server     |
| Baseline             | Basic_Server           |
| Type                 | Webserver              |
| Version              | 1.0                    |
| Name                 | Database_Server        |
| Baseline             | Basic_Server           |
| Type                 | Database Server        |
| Version              | 1.0                    |
| Name                 | Corporate_Datacenter   |
| Baseline             | Application_Server     |
| Count                | 1                      |
| Name                 | Cloud_Service_Provider |
| Baseline             | Cloud_Server           |
| Count                | 4                      |





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

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

A. Mastered  
B. Not Mastered

**Answer:** A

**Explanation:**

Part 1: Router 2

The problematic device is Router 2, which has an incorrect configuration for the IPsec tunnel. The IPsec tunnel is a secure connection between the on-premises datacenter and the cloud provider, which allows the traffic to flow between the two networks. The IPsec tunnel requires both endpoints to have matching parameters, such as the IP addresses, the pre-shared key (PSK), the encryption and authentication algorithms, and the security associations (SAs).

According to the network diagram and the configuration files, Router 2 has a different PSK and a different address space than Router 1. Router 2 has a PSK of ??1234567890??, while Router 1 has a PSK of ??0987654321??. Router 2 has an address space of 10.0.0.0/8, while Router 1 has an address space of 192.168.0.0/16. These mismatches prevent the IPsec tunnel from establishing and encrypting the traffic between the two networks.

The other devices do not have any obvious errors in their configuration. The DNS provider has two CNAME records that point to the application servers in the cloud provider, with different weights to balance the load. The firewall rules allow the traffic from and to the application servers on port 80 and port 443, as well as the traffic from and to the VPN server on port 500 and port 4500. The orchestration server has a script that installs and configures the application servers in the cloud provider, using the DHCP server to assign IP addresses.

Part 2:

The correct options to provide adequate configuration for hybrid cloud architecture are:

? Update the PSK in Router 2.

? Change the address space on Router 2.

These options will fix the IPsec tunnel configuration and allow the traffic to flow between the on-premises datacenter and the cloud provider. The PSK should match the one on Router 1, which is ??0987654321??. The address space should also match the one on Router 1, which is 192.168.0.0/16.

\* B. Update the PSK (Pre-shared key in Router2)

\* E. Change the Address Space on Router2

**NEW QUESTION 10**

An administrator is creating a cron job that shuts down the virtual machines at night to save on costs. Which of the following is the best way to achieve this task?

A)

```
for X in list_vms() do
if [ describe_vm_status(X) == running ]
    shutdown_vm(X)
else
    echo "vm $X stopped"
done
```

B)

```
for X in list_vms() do
if [ describe_vm_status(X) > running]
shutdown_vm(X)
else
echo "vm $X stopped"
done
```

C)

```
for X in list_vms() do
if [ describe_vm_status(X) == running]
shutdown_vm(X)
else
echo "vm $X stopped"
done
```

D)

```
for X in list_vms() do
if [ describe_vm_status(X) != running]
shutdown_vm(X)
else
echo "vm $X is stopped"
done
```

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

**Answer:** C**Explanation:**

Option C is the correct script for shutting down virtual machines that are currently running. It iterates through a list of VMs, checks if the status of each VM is 'running', and if so, proceeds to shut down the VM. The script then prints a message stating that the VM has been stopped. This approach ensures that only VMs that are actively running are targeted for shutdown, optimizing resource utilization and cost savings.

**NEW QUESTION 10**

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 15**

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 16**

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 21**

Which of the following is the best type of database for storing different types of unstructured data that may change frequently?

- A. Vector
- B. Relational
- C. Non-relational
- D. Graph

**Answer:** C

**Explanation:**

Non-relational (NoSQL) databases are best for storing different types of unstructured data that may change frequently. They are designed to handle a wide variety of data types and are not constrained by the fixed schema of relational databases, making them more flexible and scalable for unstructured data. References: The distinction between relational and non-relational databases and their use cases is part of the foundational knowledge for cloud databases discussed in the CompTIA Cloud+ certification.

**NEW QUESTION 24**

A high-usage cloud resource needs to be monitored in real time on specific events to guarantee its availability. Which of the following actions should be used to meet this requirement?

- A. Configure a ping command to identify when the cloud instance is out of service.
- B. Create a dashboard with visualizations to filter the status of critical activities.
- C. Collect all the daily activity from the cloud instance and create a dump file for analysis.
- D. Schedule an hourly scan of the network to check for the availability of the resource.

**Answer:** B

**Explanation:**

To guarantee real-time monitoring of a high-usage cloud resource, creating a dashboard with visualizations to filter the status of critical activities is effective. This allows for a quick visual assessment of the system's health and performance, enabling immediate action if specific events indicate potential issues with availability. References: Real-time monitoring and the use of dashboards for tracking critical cloud resources are part of the cloud management best practices covered under the CompTIA Cloud+ objectives.

**NEW QUESTION 27**

A cloud consultant needs to modernize a legacy application that can no longer address user demand and is expensive to maintain. Which of the following is the best migration strategy?

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

**Answer:** C

**Explanation:**

Refactoring is the process of restructuring existing computer code without changing its external behavior. In cloud computing, it often means modifying the application to better leverage cloud-native features and services. This can address user demand and reduce maintenance costs by making the application more scalable, resilient, and manageable. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

**NEW QUESTION 28**

A company has one cloud-based web server that is prone to downtime during maintenance. Which of the following should the cloud engineer add to ensure high availability?

- A. A redundant web server behind a load balancer
- B. A backup cloud web server
- C. A secondary network link to the web server
- D. An autoscaling feature on the web server

**Answer:** A

**Explanation:**

Adding a redundant web server behind a load balancer is the solution that will ensure high availability. If one server goes down for maintenance, the other can take over, ensuring that the web service remains available without interruption. References: High availability concepts, including the use of load balancers and redundant servers, are part of cloud infrastructure design as per CompTIA Cloud+.

**NEW QUESTION 29**

A cloud engineer is exploring options to reduce the management overhead of the servers and network. Which of the following cloud service models should the engineer implement?

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

**Answer:** C

**Explanation:**

Platform as a Service (PaaS) provides a platform allowing customers to develop, run, and manage applications without the complexity of building and maintaining the infrastructure typically associated with developing and launching an app. Adopting PaaS can significantly reduce the management overhead of servers and networks. References: CompTIA Cloud Essentials+ Certification Study Guide (Exam CLO-002) by Scott Wilson.

**NEW QUESTION 31**

**SIMULATION**

You are a cloud engineer working for a cloud service provider that is responsible for an IaaS offering.

Your customer, who creates VMs and manages virtual storage, has noticed I/O bandwidth issues and low IOPS (under 9000).

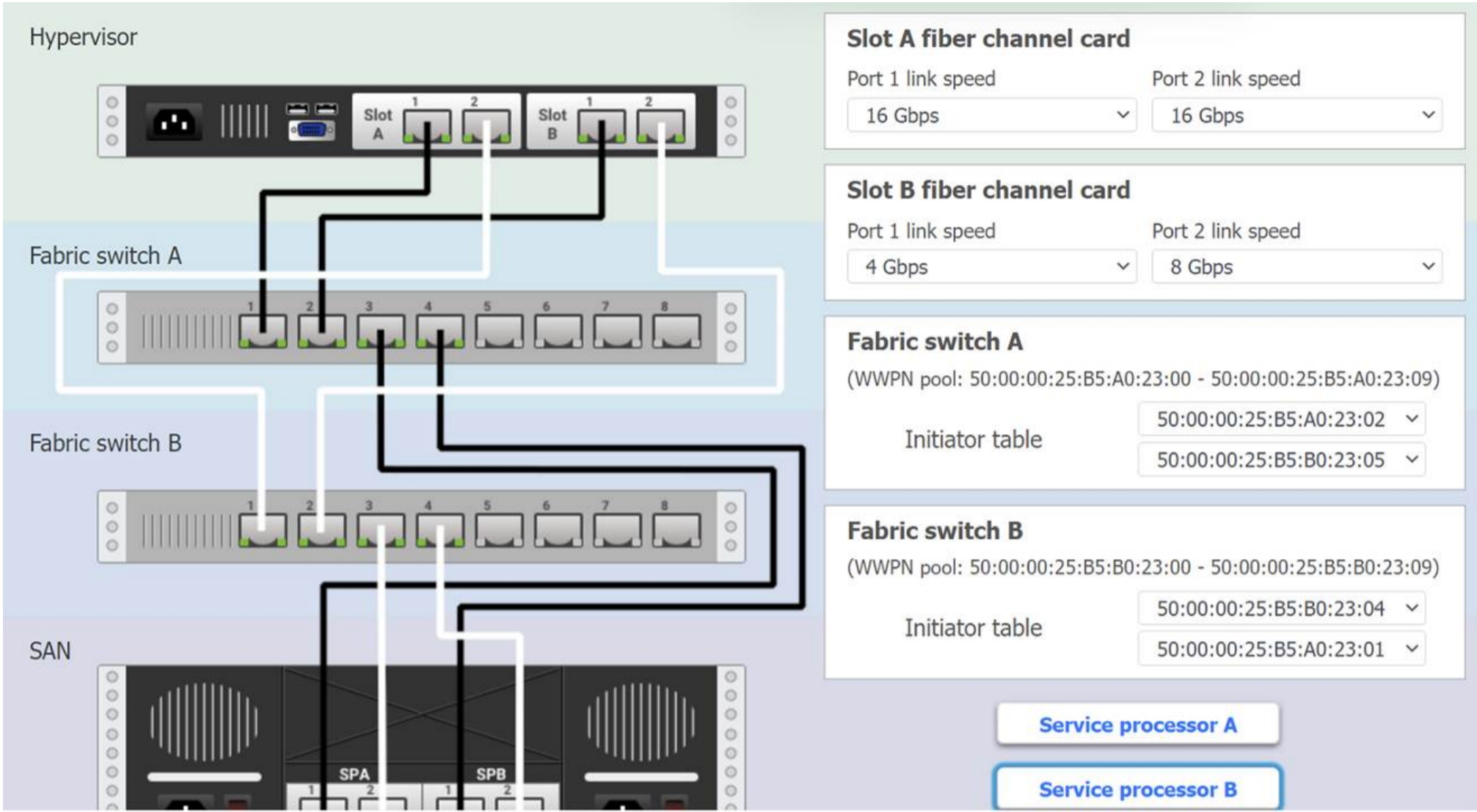
Your manager wants you to verify the proper storage configuration as dictated by your service level agreement (SLA).

The SLA specifies:

- . Each SFP on the hypervisor host must be set to the maximum link speed allowed by the SAN array. . All SAN array disk groups must be configured in a RAID 5.
- . The SAN array must be fully configured for redundant fabric paths. . IOPS should not fall below 14000

**INSTRUCTIONS**

Click on each service processor to review the displayed information. Then click on the drop-down menus to change the settings of each device as necessary to conform to the SLA requirements.



**Hypervisor**

Slot A fiber channel card

Slot B fiber channel card

Fabric switch A

Fabric switch B

SAN

SPA

SPB

| Slot A fiber channel card |                   |
|---------------------------|-------------------|
| Port 1 link speed         | Port 2 link speed |
| 16 Gbps                   | 16 Gbps           |
| 8 Gbps                    | 8 Gbps            |
| 16 Gbps                   | 16 Gbps           |
| 4 Gbps                    | 4 Gbps            |

| Slot B fiber channel card |                   |
|---------------------------|-------------------|
| Port 1 link speed         | Port 2 link speed |
| 16 Gbps                   | 16 Gbps           |
| 8 Gbps                    | 8 Gbps            |
| 16 Gbps                   | 16 Gbps           |
| 4 Gbps                    | 4 Gbps            |

| Fabric switch A  |   |
|--|---|
| (WWPN pool: 50:00:00:25:B5:A0:23:00 - 50:00:00:25:B5:A0:23:09) |   |
| Initiator table  |   |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:B0:23:05  | ▼ |
| 50:00:00:25:B5:D0:23:07  | ▼ |
| 50:00:00:25:B5:B0:23:04  | ▼ |
| 50:00:00:25:B5:A0:23:01  | ▼ |
| 50:00:00:25:B5:D0:23:06  | ▼ |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:B0:23:05  | ▼ |
| 50:00:00:25:B5:D0:23:07  | ▼ |
| 50:00:00:25:B5:B0:23:04  | ▼ |
| 50:00:00:25:B5:A0:23:01  | ▼ |
| 50:00:00:25:B5:D0:23:06  | ▼ |

| Fabric switch B  |   |
|--|---|
| (WWPN pool: 50:00:00:25:B5:B0:23:00 - 50:00:00:25:B5:B0:23:09) |   |
| Initiator table  |   |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:B0:23:05  | ▼ |
| 50:00:00:25:B5:D0:23:07  | ▼ |
| 50:00:00:25:B5:B0:23:04  | ▼ |
| 50:00:00:25:B5:A0:23:01  | ▼ |
| 50:00:00:25:B5:D0:23:06  | ▼ |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:A0:23:02  | ▼ |
| 50:00:00:25:B5:B0:23:05  | ▼ |
| 50:00:00:25:B5:D0:23:07  | ▼ |
| 50:00:00:25:B5:B0:23:04  | ▼ |
| 50:00:00:25:B5:A0:23:01  | ▼ |
| 50:00:00:25:B5:D0:23:06  | ▼ |

Service processor A

Service processor B

**Service processor A details** ✕

"no initiators currently logged in"

|                             |        |
|-----------------------------|--------|
| <b>SP-A module 0 Port 0</b> | 8 Gbps |
| <b>SP-A module 0 Port 1</b> | 8 Gbps |

|                    |   |
|--------------------|---|
| <b>Disk groups</b> | 1 |
| <b>RAID level</b>  | 5 |

**Service processor B details** ✕

"50:00:00:25:B5:A0:23:02 - logged in"

"50:00:00:25:B5:B0:23:04 - logged in"

|                             |        |
|-----------------------------|--------|
| <b>SP-B module 0 Port 0</b> | 8 Gbps |
| <b>SP-B module 0 Port 1</b> | 8 Gbps |

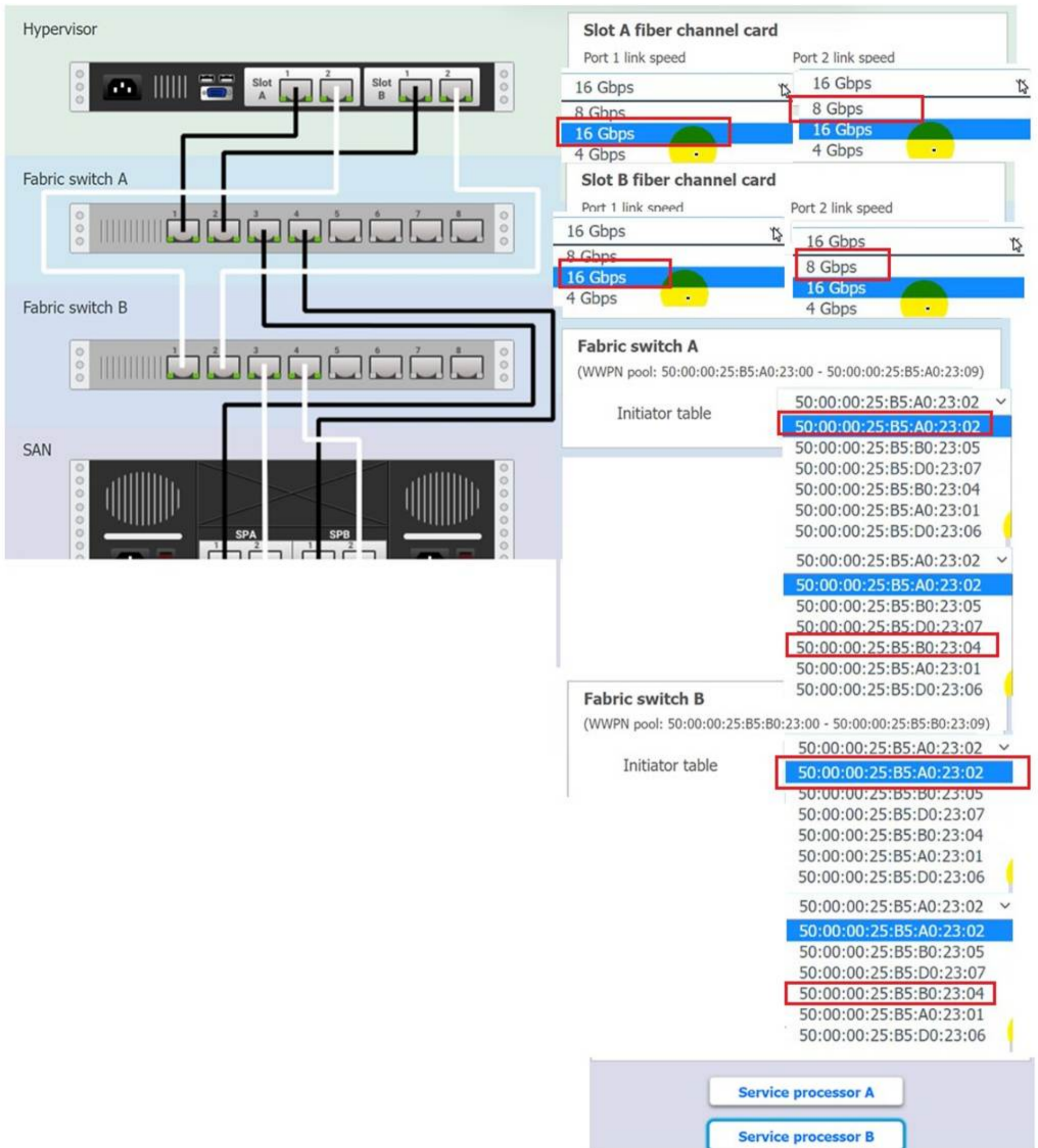
|                    |   |
|--------------------|---|
| <b>Disk groups</b> | 1 |
| <b>RAID level</b>  | 5 |

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Based on the SLA requirements and the information provided in the diagram: For the Hypervisor:  
 Slot A fiber channel card:  
 ? Port 1 link speed should be set to 16 Gbps since it's connected to Fabric switch A which supports 16 Gbps.  
 ? Port 2 link speed should be set to 8 Gbps because it's connected to Fabric switch B which supports up to 8 Gbps.  
 Slot B fiber channel card:  
 ? Port 1 link speed should be set to 16 Gbps since it's connected to Fabric switch A which supports 16 Gbps.  
 ? Port 2 link speed should be set to 8 Gbps because it's connected to Fabric switch B which supports up to 8 Gbps.



**NEW QUESTION 36**

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 41

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 a 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 42

Which of the following types of storage provides the greatest performance advantage for a traditional relational database?

- A. File
- B. Object
- C. Block
- D. Ephemeral

**Answer:** C

#### Explanation:

Block storage provides the greatest performance advantage for traditional relational databases due to its high performance and low-latency characteristics. Block storage allows databases to rapidly manage data in fixed-sized blocks, which is ideal for databases that require frequent read/write operations. References: Understanding different storage types and their use cases, including block storage for databases, is part of the cloud computing knowledge base covered in CompTIA Cloud+.

#### NEW QUESTION 43

Following a ransomware attack, the legal department at a company instructs the IT administrator to store the data from the affected virtual machines for a minimum of one year. Which of the following is this an example of?

- A. Recoverability
- B. Retention
- C. Encryption
- D. Integrity

**Answer:** B

#### Explanation:

The instruction by the legal department to store data from the affected virtual machines for a minimum of one year is an example of data Retention. Retention policies are often driven by regulatory compliance requirements and dictate how long certain types of data must be kept before they can be securely disposed of. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

#### NEW QUESTION 47

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 50

A user's assigned cloud credentials are locked, and the user is unable to access the project's application. The cloud administrator reviews the logs and notices several attempts to log in with the user's account were made to a different application after working hours. Which of the following is the best approach for the administrator to troubleshoot this issue?

- A. Create new credentials for the user and restrict access to the authorized application.
- B. Track the source of the log-in attempts and block the IP address of the source in the WAR
- C. Reset the user's account and implement a stronger lock-out policy.
- D. Install an IDS on the network to monitor suspicious activity

**Answer:**

B

**Explanation:**

The administrator should track the source of the log-in attempts and block the IP address in the Web Application Firewall (WAF). This will prevent further unauthorized attempts from that source. It is also advisable to reset the user's account credentials as a precautionary measure. References: Incident response and addressing unauthorized access attempts, including tracking and blocking IP addresses, are security measures addressed in the CompTIA Cloud+ material.

**NEW QUESTION 55**

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 56**

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 57**

A video surveillance system records road incidents and stores the videos locally before uploading them to the cloud and deleting them from local storage. Which of the following best describes the nature of the local storage?

- A. Persistent
- B. Ephemeral
- C. Differential
- D. Incremental

**Answer: B**

**Explanation:**

The nature of the local storage in a video surveillance system that records road incidents and stores the videos locally before uploading them to the cloud and deleting them from local storage is ephemeral. Ephemeral storage is temporary and is designed to provide short-term storage for information that changes frequently or is not meant to be persistent. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Storage Options

**NEW QUESTION 59**

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 64**

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 66**

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 68**

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 71**

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 75**

A log-parsing application requires significant processing power to ingest the logs streaming from web servers. The engineering team presents the cloud architect with four proposals using the same underlying hardware. Which of the following should the cloud architect select in order to minimize the impact of an instance failure while keeping the cost as low as possible?

- A. Four instances of 4vCPU, 8GB RAM, 80GB SSD
- B. Four instances of 4vCPU, 8GB RAM, 80GB HDD
- C. Two instances of 8vCPU, 16GB RAM, 80GB SSD
- D. Two instances of 8vCPU, 16GB RAM, 80GB HDD

**Answer:** A

**Explanation:**

Choosing four instances with the given specifications would distribute the load and reduce the impact of any single instance failure. Using SSDs over HDDs would provide faster data processing capabilities which is crucial for a log-parsing application. This setup also retains cost efficiency by not over-provisioning resources. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

**NEW QUESTION 78**

Which of the following container storage types loses data after a restart?

- A. Object

- B. Persistent volume
- C. Ephemeral
- D. Block

**Answer:** C

**Explanation:**

In the context of container storage, ephemeral storage types are designed to be temporary, losing their data when the container is restarted or deleted. This is in contrast to persistent volumes, which retain data across container restarts and lifecycle, and object and block storage, which are used for specific types of data storage but not inherently temporary. Ephemeral storage is often used for temporary computation data, caching, or any data that doesn't need to persist beyond the lifecycle of the container instance.

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

**NEW QUESTION 82**

Which of the following compute resources is the most optimal for running a single scripted task on a schedule?

- A. Bare-metal server
- B. Managed container
- C. Virtual machine
- D. Serverless function

**Answer:** D

**Explanation:**

Serverless functions are ideal for running scripted tasks on a schedule because they can be triggered by events, run the task, and then shut down, incurring costs only for the actual compute time used. This eliminates the need for a continuously running server and is optimal for sporadic or scheduled tasks. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

**NEW QUESTION 86**

A cloud engineer is designing a high-performance computing cluster for proprietary software. The software requires low network latency and high throughput between cluster nodes.

Which of the following would have the greatest impact on latency and throughput when designing the HPC infrastructure?

- A. Node placement
- B. Node size
- C. Node NIC
- D. Node OS

**Answer:** A

**Explanation:**

Node placement is critical in high-performance computing (HPC) clusters where low network latency and high throughput are required. Proper placement of nodes within the network infrastructure, including proximity to each other and to key network components, can significantly reduce latency and increase throughput. Ensuring that nodes are physically close and well-connected can facilitate faster data transfer rates between them. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

**NEW QUESTION 91**

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 93**

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 95**

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 97**

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 98**

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 100**

A security team recently hired multiple interns who all need the same level of access. Which of the following controls should the security team implement to provide access to the cloud environment with the least amount of overhead?

- A. MFA
- B. Discretionary access
- C. Local user access

D. Group-based access control

**Answer:** D

**Explanation:**

Implementing group-based access control is the most efficient way to provide access to multiple interns who require the same level of access. This method allows the security team to assign permissions to a group rather than to individual user accounts, thereby reducing the administrative overhead involved in managing access rights for each intern individually. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

**NEW QUESTION 104**

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 105**

An engineer made a change to an application and needs to select a deployment strategy that meets the following requirements:

- Is simple and fast
- Can be performed on two identical platforms

Which of the following strategies should the engineer use?

- A. Blue-green
- B. Canary
- C. Rolling
- D. in-place

**Answer:** A

**Explanation:**

The blue-green deployment strategy is ideal for scenarios where simplicity and speed are crucial. It involves two identical production environments: one (blue) hosts the current application version, while the other (green) is used to deploy the new version. Once testing is completed on the green environment and it's ready to go live, traffic is switched from blue to green, ensuring a quick and efficient rollout with minimal downtime. This method allows for immediate rollback if issues arise, by simply redirecting the traffic back to the blue environment. References: CompTIA Cloud+ material emphasizes the importance of understanding various cloud deployment strategies, including blue-green, and their application in real-world scenarios to ensure efficient and reliable software deployment in cloud environments.

**NEW QUESTION 110**

A cloud administrator needs to distribute workloads across remote data centers for redundancy reasons. Which of the following deployment strategies would eliminate downtime, accelerate deployment, and remain cost efficient?

- A. In-place
- B. Rolling
- C. Blue-green
- D. Canary

**Answer:** C

**Explanation:**

Blue-green deployment is the strategy that can eliminate downtime, accelerate deployment, and remain cost-efficient. It involves running two identical production environments, only one of which is live at any given time (blue or green). When it's time to deploy, the new version is released to the inactive environment (green), which is then thoroughly tested. Once ready, the traffic is switched over, making the green environment live. References: Deployment strategies and their impact on operations are a significant topic within the CompTIA Cloud+ examination objectives.

**NEW QUESTION 113**

Which of the following technologies should be used by a person who is visually impaired to access data from the cloud?

- A. Object character recognition
- B. Text-to-voice
- C. Sentiment analysis
- D. Visual recognition

**Answer:** B

**Explanation:**

Text-to-voice (or text-to-speech) technology should be used by a person who is visually impaired to access data from the cloud. It converts text data into audible speech, allowing visually impaired individuals to receive the information audibly. References: CompTIA Accessibility in IT Study Guide.

**NEW QUESTION 115**

A cloud engineer is reviewing the following Dockerfile to deploy a Python web application:

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

Which of the following changes should the engineer make to the file to improve container security?

- A. Add the instruction "USER nonroot.
- B. Change the version from latest to 3.11.
- C. Remove the ENTRYPOINT instruction.
- D. Ensure myapp/main.py is owned by root.

**Answer:** A

**Explanation:**

To improve container security, the engineer should add the instruction "USER nonroot" to the Dockerfile. This change ensures that the container does not run as the root user, which reduces the risk of privilege escalation attacks. Running containers as a non-root user is a best practice for enhancing security in containerized environments. References: CompTIA Cloud+ content includes security concerns, measures, and concepts for cloud operations, highlighting container security best practices such as running containers with least privilege to mitigate security risks.

**NEW QUESTION 119**

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 123**

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 124**

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 125**

.....

## THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual CV0-004 Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the CV0-004 Product From:

<https://www.2passeasy.com/dumps/CV0-004/>

### Money Back Guarantee

#### **CV0-004 Practice Exam Features:**

- \* CV0-004 Questions and Answers Updated Frequently
- \* CV0-004 Practice Questions Verified by Expert Senior Certified Staff
- \* CV0-004 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- \* CV0-004 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year