NetApp
NS0-604 Exam

Hybrid Cloud - Architect Exam

Questions & Answers
Demo

Version: 4.0

Question: 1

A company has finished migrating all data to NetApp Cloud Volumes ONTAP. An application administrator needs to make sure that there are no interruptions in service for this new NFSv4 application.

Which feature must be registered on the Azure subscription to reduce unplanned failover times?

A. multipath HA

B. high availability

C. fault tolerance

D. redundancy

Answer: B

Explanation:

NetApp Cloud Volumes ONTAP provides a High Availability (HA) configuration, which is crucial for ensuring that services remain available even during unplanned outages. When using NetApp Cloud Volumes ONTAP in environments such as Azure, ensuring continuous availability, especially for NFSv4 workloads, is vital.

The "High Availability" (HA) feature creates a pair of ONTAP instances configured as an active-passive cluster. This setup reduces failover times by allowing one node to take over if the other fails, providing minimal service disruption. HA is designed to manage failovers automatically, which is essential for applications requiring constant availability, such as those using NFSv4. In Azure, enabling this feature via the appropriate subscription registration ensures that when an unexpected failure occurs, the system will automatically failover to the standby node, minimizing downtime and ensuring that the application continues to function smoothly without manual intervention.

In this case, "multipath HA," "fault tolerance," and "redundancy" are related concepts, but they don't directly address the specific need to register and enable the high-availability feature in Azure. Registering HA on the Azure subscription ensures that the Cloud Volumes ONTAP can perform its failover processes effectively, keeping the application running.

Question: 2

Which network construct is required to enable nondisruptive failover between nodes in a Multi-AZ NetApp Cloud Volumes ONTAP cluster in AWS?

A. floating IPs

B. security groups

C. elastic network interfaces

D. Intercluster UFs

Answer: A

Explanation:

In a Multi-AZ (Availability Zone) setup for NetApp Cloud Volumes ONTAP in AWS, ensuring nondisruptive failover between nodes is critical for high availability. "Floating IPs" are required for seamless failover between nodes in such a configuration.

Floating IPs allow the primary node to automatically transfer its IP address to the secondary node during a failover event, ensuring that clients can continue to access the service without needing to reconfigure anything. This mechanism enables clients to access the same IP regardless of which node in the cluster is actively serving requests, thus maintaining nondisruptive operations.

Elastic Network Interfaces (ENIs) facilitate networking in AWS but do not inherently handle IP floating between nodes for failover. Security groups and Intercluster UFs manage security and inter-node communication, respectively, but do not address the failover requirements. Floating IPs are explicitly designed to enable failover in high-availability cloud storage environments like NetApp Cloud Volumes ONTAP.

Thus, "floating IPs" are the required network construct that allows for nondisruptive failover

between nodes in a multi-AZ setup, ensuring continuous service availability even in the event of an outage in one availability zone.

Question: 3

What are two ways to optimize cloud data storage costs with NetApp Cloud Volumes ONTAP? (Choose two.)

A. aggregate deduplication

B. thin provisioning

C. TCO calculator

D. volume deduplication

Answer: B, D

Explanation:

NetApp Cloud Volumes ONTAP provides several storage efficiency features that help optimize cloud storage costs. Two of the key methods for reducing costs are:

Thin Provisioning: This feature allows users to allocate more storage capacity than is physically available. Instead of reserving full storage at the time of volume creation, space is only consumed as data is written. This reduces upfront costs and optimizes storage use by delaying actual storage allocation until necessary, making it cost-effective.

Volume Deduplication: Deduplication removes redundant copies of data within a volume, reducing the total storage footprint. By eliminating duplicate blocks of data, volume deduplication significantly cuts down on the amount of storage consumed, leading to lower storage costs in the cloud environment.

Other options like "aggregate deduplication" and the "TCO calculator" are not direct methods to optimize storage costs. Aggregate deduplication is not as granular as volume deduplication, and the TCO calculator is a tool for estimating total cost, not a method for optimization.

Question: 4

A customer has an on-premises NetApp ONTAP based system with data from several workloads. The customer wants to create a backup of their on-premises data to Microsoft Azure Blob storage.

Which two of the customer's on-premises data sources are supported with NetApp BlueXP backup and recovery? (Choose two.)

A. Microsoft SQL Server

B. NetApp ONTAP volume data

C. Microsoft Azure Stack

D. NetApp ONTAP S3 data

Answer: B, D

Explanation:

NetApp BlueXP (formerly Cloud Manager) provides a comprehensive backup and recovery solution that supports various data sources. For customers looking to back up their on-premises data to Microsoft Azure Blob storage, the following data sources are supported:

NetApp ONTAP Volume Data: BlueXP backup and recovery can efficiently back up volumes created on NetApp ONTAP systems. This is a primary use case, ensuring that on-premises ONTAP environments can be backed up securely to cloud storage like Azure Blob, which offers scalability and cost-efficiency.

NetApp ONTAP S3 Data: NetApp ONTAP supports object storage using the S3 protocol, and BlueXP can back up these S3 buckets to cloud storage as well. This allows for a seamless backup of object-based workloads from ONTAP systems to Azure Blob.

Microsoft SQL Server and Azure Stack are not directly supported by NetApp BlueXP backup and recovery, as it focuses specifically on ONTAP environments and data sources.

Question: 5

A customer wants to lower their TCO using a cloud solution to reduce their expenditure for on-premises third-party storage.

Which NetApp solution should the customer use?

A. BlueXP tiering

B. BlueXP backup and recovery

C. BlueXP copy and sync

D. BlueXP replication

Answer: A

Explanation:

NetApp BlueXP tiering is the ideal solution for reducing total cost of ownership (TCO) by leveraging cloud storage. It enables automatic tiering of infrequently accessed data (cold data) from expensive on-premises storage to lower-cost object storage in the cloud (such as Azure Blob, AWS S3, or Google Cloud Storage). This reduces the need for high-performance, high-cost local storage for data that isn't frequently accessed, effectively lowering the overall storage costs.

By migrating cold data to more economical cloud storage tiers, BlueXP tiering helps organizations optimize their storage spend, thus reducing TCO for their on-premises third-party storage infrastructure.

Other solutions like BlueXP backup and recovery, copy and sync, and replication provide different services (such as data protection, data migration, and disaster recovery) but are not focused on cost reduction through tiering, which specifically helps reduce TCO.