
➤ **Vendor: Network Appliance**

➤ **Exam Code: NS0-404**

➤ **Exam Name: Hybrid Cloud - Implementation Engineer Exam**

➤ **New Updated Questions from [Braindump2go](#) (Updated in [May/2025](#))**

[Visit Braindump2go and Download NS0-404 Exam Dumps](#)

1.You configured your NetApp Cloud Volumes ONTAP instance to protect your data against ransomware. A previously unknown ransomware file extension infects your data.

In this scenario, which two NetApp technologies will provide a writable volume of the dataset before the ransomware attack? (Choose two.)

- A. FPolicy
- B. SnapRestore
- C. FlexCache
- D. FlexClone

Answer: BC

2.You are asked to help a customer architect a private cloud solution using a tightly integrated converged infrastructure that can be managed by the vendor. You decide to present FlexPod Managed Private Cloud as a solution.

In this scenario, what are three results of this solution? (Choose three.)

- A. the ability to present storage using FC, iSCSI, or NFS
- B. allows for a variety of server vendors
- C. only available with software-defined storage
- D. validated designs that are available for a variety of applications
- E. the ability to provide rapid redeployment of resources using software-defined service profiles

Answer: ADE

3.You need to deploy BlueXP Observability collectors into a large environment and require multiple data collectors.

Which of the following must be used to deploy multiple collectors?

- A. VMware clone feature
- B. ONTAP FlexCache Technology
- C. ONTAP FlexClone Technology
- D. BlueXP clone feature

Answer: D

4.You are asked to provision storage for a development team to make use of NetApp Trident in their Kubernetes environment. You want to ensure that Trident will not be able to exhaust the storage system resources.

In this scenario, which two actions would you take to satisfy the requirements? (Choose two.)

- A. Limit the maximum volume count.
- B. Limit the available data LIFs.
- C. Use a shared SVM.

D. Limit the maximum volume size.

Answer: AD

5. A customer has deployed a NetApp HCI environment and has configured SnapMirror replication relationships to Cloud Volumes ONTAP in AWS. After migrating Cloud Manager from on-premises to AWS, the customer can no longer create new replication relationships between existing environments. The Cloud Manager can access the Cloud Volumes ONTAP working environment and the current

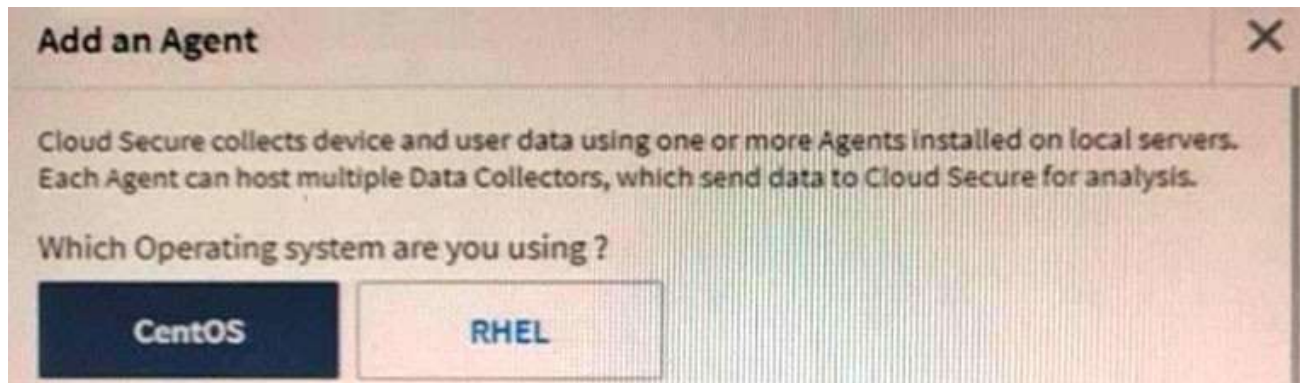
SnapMirror relationships continue to make successful transfers of data.

In this scenario, where would you locate the source of the problem?

- A. The routing table for the subnet where Cloud Volumes ONTAP resides.
- B. The EC2 type of the Cloud Manager EC2 instance.
- C. The Security Group for the Cloud Volumes ONTAP EC2 instance.
- D. The IAM role for Cloud Manager EC2 instance.

Answer: C

6.As shown in the exhibit, you are installing NetApp Cloud Secure agents.



In this scenario, which component must be deployed for Cloud Secure to report findings?

- A. connector from Cloud Manager
- B. data broker
- C. container in Astra
- D. acquisition unit from Cloud Insight

Answer: C

7.You are performing a default deployment using Kubernetes.

In this scenario, where is persistent data stored?

- A. on the worker node with the pod
- B. on the master node
- C. on a random worker node
- D. on every worker node

Answer: B

8.Which three volume workflows are supported by Trident for Kubernetes? (Choose three.)

- A. volume import
- B. volume replication
- C. LUN resize
- D. volume clone
- E. volume snapshots

Answer: BDE

9.Your customer is writing a curl command to test an API call to deploy Cloud Volumes ONTAP for AWS. They want to know what the content-Type parameter should be set to in the header of the HTTP

request.

In this scenario, what would you tell the customer?

- A. Set the parameter to text/plain.
- B. Set the parameter to application/json
- C. Set the parameter to application/xml
- D. Set the parameter to text/html.

Answer: C

10. Your customer wants a hierarchical view of their Kubernetes clusters, as well as the utilization of pod and namespace objects running inside of the clusters.

In addition, they want to be notified when certain health or performance metrics are affecting the objects in the cluster, as well as their storage.

In this scenario, which product would satisfy the requirements?

- A. NetApp Cloud Insights
- B. NetApp Trident
- C. Spot Elastigroup by NetApp
- D. NetApp Cloud Manager

Answer: A

11. You must have a firewall adjusted to allow Ansible to work with ONTAP and Element software. In this scenario, which port must be allowed for both systems?

- A. Telnet(23)
- B. SSH(22)
- C. HTTPS(443)
- D. HTTP(80)

Answer: D

12. You want to add your NetApp StorageGRID embedded Prometheus instance as a data source to Grafana.

What must be done to accomplish this task?

- A. Unblock port 9090 on the StorageGRID primary admin node.
- B. Deploy a gateway node in StorageGRID.
- C. Reboot the StorageGRID primary admin
- D. Create a dashboard for StorageGRID in Grafana.

Answer: C

13. Click the Exhibit button.

```

cli1::> vservers object-store-server show -vservers S3
Vserver: S3
    Object Store Server Name: s3.corp.local
    Administrative State: up
    HTTP Enabled: false
    Listener Port For HTTP: 80
    HTTPS Enabled: true
    Secure Listener Port For HTTPS: 443
    Certificate for HTTPS Connections: s3.corp.local
    Default UNIX User: pcuser
    Default Windows User: -
    Comment:

1 entry was displayed.

```

```

cli1::> vservers object-store-server bucket show
Vserver      Bucket      Type      Volume      Size      Encryption Role      NAS Path
-----
S3           mybucket    s3        fg_oss_1686555332 300GB     true                 standalone -

```

```

cli1::> vservers object-store-server user show
Vserver      User      ID      Access Key
-----
S3           s3user    1       S8W8G1083JOKFM0TM0DL
1 entry was displayed.

```

```

cli1::> vservers object-store-server bucket policy show -bucket mybucket
Vserver      Bucket      Index Effect Action      Principal      Resource
-----
S3           mybucket    1 allow PutObject, GetObject, ListBucket, DeleteObject    s3user        mybucket, mybucket/*

```

You are setting up ONTAP S3 as object store for an application.

You have configured a user, but when trying to access the S3 bucket you get the following error in the EMS log:

```

s3.bucket.invalid.accessKey: S3 PUT operation failed while accessing
bucket "mybucket" on S3 server s3.corp.local because access key
"s3user" is invalid.

```

- A. The wrong S3 user name was specified in the application
- B. The application tries to connect using unencrypted HTTP
- C. HTTPS is not enabled on the bucket
- D. The user has not been allowed access to the bucket

Answer: A

14. Your organization is adopting DevOps principles to deliver innovation rapidly.

Which three methods support this approach? (Choose three.)

- A. Automate processes as much as possible.
- B. Plan to reduce the blast radius of failures.
- C. Implement version control for code changes.
- D. Implement daily stand-up meetings for all team members.
- E. Allow more people within the organization to approve changes.

Answer: ABE




15. You are creating an Ansible playbook for use against an ONTAP cluster that is using HTTPS with the auto-generated certificates.

In this scenario, which two elements must be in every task? (Choose two.)

- A. self_signed: true
- B. validate_certs: false
- C. https: true
- D. security: https

Answer: BC

16. You have an on-premises AFF A320 cluster that will use SnapMirror to replicate all data to the cloud instance shown in the exhibit.

AWS Region	VPC	Security group
US West Oregon ▼	vpc-3a01e05f 172.31.0.0/16 ▼	Use a generated security group ▼
 Node 1: Availability Zone us-west-2a ▼ Subnet 172.31.16.0/20 ▼	 Node 2: Availability Zone us-west-2b ▼ Subnet 172.31.32.0/20 ▼	 Mediator: Availability Zone us-west-2c ▼ Subnet 172.31.0.0/20 ▼ Key Pair newKey ▼

Which action will enable end-to-end connectivity for SnapMirror?

- A. Set up a FabricPool connection between the AFF A320 network and the AWS VPC.
- B. Set up an outbound connection from the HA mediator instance to the AWS EC2 service.
- C. Create a VPC Endpoint from the HA mediator to the AWS S3 service.
- D. Set up a VPN connection between the AFF A320 network and the AWS VPC.

Answer: C

17. Click the Exhibit button.

```
terraform {
  required_providers {
    netapp-cloudmanager = {
      source = "NetApp/netapp-cloudmanager"
      version = "21.6.0"
    }
  }
}
```

Referring to the exhibit, what would happen if there is a newer version of netapp-cloudmanager available when you install the provider with the terraform init command?

- A. The newer version will be downloaded.
- B. The newer version will be downloaded only when it is a patch release.
- C. Only the exact version 21.6.0 is downloaded.
- D. Any version below version 21.6.0 is installed.

Answer: D

18. A customer has implemented a NetApp-based hybrid cloud solution using AFF A700 on-premises and Cloud Volumes ONTAP for AWS. When attempting to cut over workloads from on-premises to AWS, a final SnapMirror update fails.

In this scenario, what are two validation points to ensure cutover success? (Choose two.)

- A. network connectivity between the sites
- B. bandwidth on the source volumes
- C. capacity on the destination volumes
- D. OnCommand Cloud Manager installed

Answer: BC

19. You are asked to design a Trident solution on NetApp ONTAP for a highly scaled Kubernetes environment that contains thousands of stateful microservice applications.

Which ONTAP Trident driver should be used in such a highly scaled environment?

- A. ontap-nas-flexgroup
- B. ontap-nas
- C. ontap-nas-economy
- D. ontap-san

Answer: C

20. Which process refers to the automated release of new applications into production?

- A. continuous integration
- B. continuous feedback
- C. continuous improvement
- D. continuous deployment

Answer: D

21. You are working with your development team to automate the deployment of Cloud Volumes ONTAP instances across various hyperscalers. The developers are asking you for specific RESTful API calls and other details to facilitate the automation.

In this scenario, which two links would you provide to them? (Choose two.)

- A. the link to the API documentation on cloud.netapp.com
- B. the link to the Swagger interface found on the connector instance
- C. the link to the Swagger interface found on cloud.netapp.com
- D. the link to the API documentation on readthedocs.io

Answer: BC

22. You are using NetApp Cloud Sync to replicate NFS to S3 as shown in the exhibit.

Schedule [ON] | No Tags

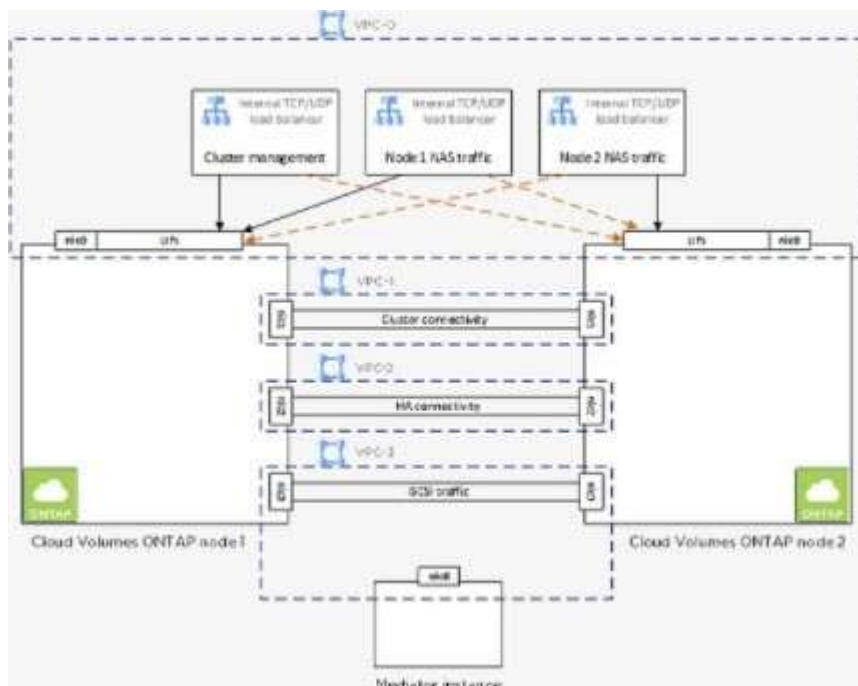
	Source nfs://217.70.21.18	✓ Sync Completed
	Target s3://medium	Initial Copy A few seconds ago Duration: < 1 min
	On-Prem Data Bro... on-prem1	
		Copied 692 Files 5.08 TB
		Deleted 0 Files
		Failed 4 Files 241.28 MB

Which network connection is required for the replication service?

- A. The data broker needs an inbound Internet connection.
- B. The NFS server needs a VPN connection to the S3 endpoint.
- C. The NFS server must be on the same subnet as the S3 endpoint.
- D. The data broker needs an outbound Internet connection.

Answer: D

23.Exhibit:



You deployed a Cloud Volumes ONTAP HA pair, and NetApp Cloud Manager automatically provisioned load balancers as shown in the exhibit. You are troubleshooting cross-region traffic and are asked to open a support ticket to enable global access on the load balancers.

In this scenario, which public cloud provider would you call to open the ticket?

- A. Azure
- B. AWS

- C. Google Cloud
- D. IBM

Answer: C

24. You are deploying a containerized application to track user data. However, every time the container is re-created, user data is lost.

What do you need to save this data?

- A. Configuration Management
- B. Persistent Storage
- C. Dynamic Proxy
- D. Elastic Compute

Answer: B

25. You are developing an Ansible playbook to create a volume within a NetApp ONTAP cluster.

In this scenario, which Ansible module would be used to collect a list of existing aggregates?

- A. na_ontap_cluster
- B. netapp_e_facts
- C. na_ontap_gather_facts
- D. na_elementsw_cluster_config

Answer: C

26. Your company uses all four of NetApp's storage offerings: ONTAP, StorageGRID, Element, and E-Series. You are asked to provide persistent storage to the OpenShift group by using NFS.

In this scenario, which of the available storage deployments would provide access?

- A. StorageGRID
- B. ONTAP Select
- C. E-Series
- D. Element

Answer: C

27. You want to increase the storage performance of a Kubernetes application running in Azure Kubernetes Service (AKS). You are using Astra Control Service to backup the applications.

What two steps would you take to complete this task? (Choose two)

- A. Restore using a different storage class
- B. Restore application to the original namespace
- C. Restore application to a new namespace
- D. Restore using the original storage class

Answer: AC

28. A customer wants their main data set to be stored in their primary location while providing a writable, persistent cache in another location closer to the consumer.

Which two solutions will satisfy the customer's requirements? (Choose two.)

- A. Deploy Cloud Volumes ONTAP in their primary location and Cloud Volumes ONTAP with FlexCache on a public cloud region nearest to the consumer.

- B. Deploy Cloud Volumes ONTAP with FlexCache in their primary location and ONTAP Select at the consumer site.
- C. Deploy an FAS8300 with FlashCache in their primary location and export the share to the VPN IPspace.
- D. Deploy Cloud Volumes ONTAP in their primary location and ONTAP Select with FlexCache at the consumer site.

Answer: BD

29. Your company asks you to deploy a new version control management system.

In this scenario, which two tools would accomplish this task? (Choose two.)

- A. Confluence
- B. GitHub
- C. ALM
- D. SourceForge

Answer: AB

30. Your customer is running their Kafka and Spark applications inside a Kubernetes cluster. They want to create a single backup policy within Astra to automate the backup of both applications and all their related Kubernetes objects at the same time.

Which method in Kubernetes should be used to accomplish this task?

- A. Create a Helm chart that deploys Kafka and Spark and their related objects to multiple namespaces.
- B. Put the applications and their objects in a single namespace, or label all the objects with a single label that Astra can recognize.
- C. Create a Kubernetes custom resource definition that includes all of the objects that Astra needs to treat as a single entity.
- D. Use a single Trident-based StorageClass to provision all storage for Kafka and Spark.

Answer: C

31. Your customer is using Astra Control Service to back up applications. They require a consistent copy of the data that also captures data in flight.

Which two applications will Astra support in this scenario? (Choose two.)

- A. ksqldb
- B. Jenkins
- C. Argo CD
- D. PostgreSQL

Answer: AB

32. You are deploying StorageGRID software on-premises. You have a requirement to keep a second copy of specific production objects in Amazon Glacier.

In this scenario, which native NetApp technology provides this functionality for specific objects?

- A. Lambda
- B. CloudMirror
- C. FabricPool
- D. SnapMirror

Answer: B

33. Your company's infrastructure includes on-premises multivendor resources and public cloud Amazon Elastic Compute Cloud (Amazon EC2) instances on AWS.

Your company is also planning on expanding its public cloud infrastructure to Azure and Google Cloud. You need to implement a tool to monitor the performance issues and errors for your entire environment, using real-time service-level indicators.

In this scenario, which tool should you implement to achieve this goal?

- A. NetApp OnCommand Performance Manager
- B. Amazon Cloudwatch
- C. NetApp Cloud Insights
- D. NetApp Active IQ Unified Manager

Answer: C

34. You are responsible for setting up a process to handle version control for developers' source code. You need to decide which tools you will use.

In this scenario, which two tools would satisfy the requirement? (Choose two.)

- A. Docker Hub
- B. git
- C. Jfrog
- D. subversion

Answer: AD

35. You have an application that runs once per month to provide analytics and report generation. You are asked to use cloud compute resources to run this application. However, your existing environment consists of a single AFF A300 HA pair.

In this scenario, which two actions would satisfy the requirements? (Choose two.)

- A. Use the NetApp Cloud Backup Service.
- B. Configure FabricPool on existing aggregates by using Amazon Simple Storage Service (Amazon S3).
- C. Use the NetApp Cloud Sync service.
- D. Use the NetApp Cloud Volumes Service in AWS.

Answer: CD

36. You are developing microservices on a Kubernetes system. When developers push new code to a branch, you want to have your application deployed on Kubernetes using the CI/CD pipeline that automatically picks up new changes in the main branch.

In this scenario, what are three steps to accomplish this deployment workflow? (Choose three.)

- A. Issue a pull request.
- B. Reset the Git branches.
- C. Commit changes to a Git branch
- D. Configure Git hooks.
- E. Merge code changes to the main branch.

Answer: ACD

37. What are two DevOps-related technologies that are used to accelerate processes? (Choose two.)

- A. Robotic Process Automation (RPA)
- B. Continuous Integration/Continuous Deployment (CI/CD)
- C. Visual Basic for Applications (VBA)
- D. Business Process Modelling Ontology (BPMO)

Answer: AB

38. You deployed a NetApp HCI private cloud system using a six-cable configuration. You are asked to make changes to the network configuration post-deployment.

In this scenario, which configuration change is supported?

- A. Remove virtual interfaces.
- B. Change vSwitch names.
- C. Add virtual interfaces.
- D. Remove default port groups.

Answer: B

39. You have an on-premises AFF A400 system with SnapMirror replication to a Cloud Volumes ONTAP system. You have a corruption on a source volume and you want to make the destination volume in Cloud Volumes ONTAP writable.

In this scenario, which action would you perform on the replication relationship in Cloud Manager?

- A. break
- B. sync
- C. delete
- D. reverse resync

Answer: A

40. You have a hybrid storage environment with on-premises ONTAP 9.8 clusters and Cloud Volumes ONTAP for AWS 9.8 clusters. You require anomaly detection to automatically analyze data access patterns to identify risks from ransomware attacks.

In this scenario, which NetApp service satisfies this requirement?

- A. Cloud Sync
- B. Cloud Data Sense
- C. Cloud Volumes Service
- D. Cloud Secure

Answer: A

41. Your customer is moving a file analytics workload from on-premises to AWS. Their current environment is using Windows file servers in combination with an older version of their software, in AWS they are moving to a newer version which runs on Linux and requires the data to be available via the NFS protocol.

What is a good solution for the customer to migrate the data?

- A. Use BlueXP Copy and Sync to migrate the data from on-premises CIFS shares to AWS FSx for NetApp ONTAP
- B. Use FlexCache to cache the data from on-premises CIFS shares to AWS FSx for NetApp ONTAP

- C. Use XCP to migrate the data from on-premises CIFS shares to AWS FSx for NetApp ONTAP
- D. Use SnapMirror to migrate the data from on-premises to Cloud Volumes ONTAP

Answer: A

42. An IT administrator needs to query image metadata of an OpenStack server using the REST API. Which REST API method would accomplish this task?

- A. DELETE
- B. POST
- C. GET
- D. PUT

Answer: C

43. You are deploying a new container application with persistent storage that is set up with StatefulSets storage. You are concerned about the number of persistent volumes during scale-up and scale-down activities.

In this scenario, which statement is correct?

- A. The number of persistent volumes will not increase and decrease automatically.
- B. The number of persistent volumes will increase and decrease automatically.
- C. The number of persistent volumes will increase and not decrease.
- D. The number of persistent volumes will increase and then will decrease automatically if the data is not used after a defined period of time.

Answer: B

44. You have a single node Cloud Volumes ONTAP (CVO) system in AWS.

In this scenario, which two activities will cause system downtime? (Choose two.)

- A. Apply a new Cloud Volumes ONTAP license.
- B. Change the Cloud Volumes ONTAP EC2 instance type.
- C. Upgrade the Cloud Volumes ONTAP system software.
- D. Change the disk type of a volume from HDD (st1) to SSD (gp2).

Answer: AC

45. A customer has implemented a NetApp-based hybrid cloud solution using NetApp Cloud Volumes ONTAP for AWS and NetApp Cloud Volumes ONTAP for Azure. Users are complaining about slow read and write speeds when they access data from Microsoft Azure while they are using compute resources in AWS.

Which three actions would solve the problem? (Choose three.)

- A. Move user compute resources to AWS from Azure.
- B. Monitor network connectivity between AWS and Azure.
- C. Transition volumes from Cloud Volumes ONTAP for Azure to Cloud Volumes ONTAP for AWS.
- D. Increase the instance size and type of Cloud Volumes ONTAP for AWS.
- E. Modify the underlying storage resources of Cloud Volumes ONTAP for Azure.

Answer: ABD

46. A software development team wants to adopt a new business process that allows a choice of coding

language and does not require capital expenditure.

In this scenario, which two cloud classifications would satisfy these conditions? (Choose two.)

- A. Platform as a Service (PaaS)
- B. Software as a Service (SaaS)
- C. Infrastructure as a Service (IaaS)
- D. Testing as a Service (TaaS)

Answer: AC

47. Using NetApp Astra Control, which three steps must be completed to protect your Kubernetes-based applications? (Choose three.)

- A. Set the snapshot retention.
- B. Set the snapshot schedule.
- C. Copy the protection.YAML file to the/etc/ directory.
- D. Choose the application to protect.
- E. Install the appropriate application agent

Answer: ABD

48. You are using Nvidia DeepOps to deploy Kubernetes clusters on top of NetApp ONTAP AI systems. In this scenario, which automation engine is required?

- A. Ansible
- B. Puppet
- C. Jenkins
- D. Terraform

Answer: A

49. You have the variable file shown in the exhibit.

```
# variable.yml
```

```
volume:
  - vol1
  - vol2
  - vol3
```

Which task would enable you to iterate over this group?

A)

```
- name: Volume create
  na_ontap_volume:
    state: present
    hostname: cluster1
    username: admin
    password: netapp123
    name: "{ item }"
    size: 10
    aggregate: aggr1
    vserver: vserver1
  with_items:
    "{ volume }"
```

B)

```
- name: Volume create
  na_ontap_volume:
    state: present
    hostname: cluster1
    username: admin
    password: netapp123
    name: "$item"
    size: 10
    aggregate: aggr1
    vserver: vserver1
  with_items:
    "{{ volume }}"
```

C)

```
- name: Volume create
  na_ontap_volume:
    state: present
    hostname: cluster1
    username: admin
    password: netapp123
    name: "{{ volume }}"
    size: 10
    aggregate_name: aggr1
    vservers: vservers
  with_items:
    "{{ volume }}"
```

D)

```
- name: Volume create
  na_ontap_volume:
    state: present
    hostname: cluster1
    username: admin
    password: netapp123
    name: "{{ item }}"
    size: 10
    aggregate_name: aggr1
    vservers: vservers
  with_items:
    "{{ volume }}"
```

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

Answer: B

50. You are using REST APIs to deploy and manage storage that is provided by NetApp Cloud Volumes ONTAP in Microsoft Azure. You are a federated user, and you want to communicate with an authenticated endpoint.

In this scenario, how should you acquire the JWT access token?

- A. Use the API key generator.
- B. Use a JWT access token generator.
- C. Use the refresh token generator.
- D. Use an e-mail address and password

Answer: A