NS0-181

NetApp Certified Storage Installation Engineer, ONTAP

Exam A

QUESTION 1
A customer wants to reduce the disk allocation requirement for the root aggregate and increase usable storage by partitioning the disks into one large part and one small part. The small part is used for the root aggregate and the large part for the data aggregates.

A. ONTAP
B. storage virtual machine
C. Advanced Drive Partitioning
D. RAID

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Reference: https://community.netapp.com/t5/Data-ONTAP-Discussions/Feature-in-Netapp/td-p/142416

QUESTION 2
Starting with ONTAP 9.1, what is the maximum number of HA pairs that are supported when using a SAN cluster?

https://www.vceplus.com/

A. 4
B. 2
C. 6
D. 8

Correct Answer: A

Section: (none)
Explanation

Explanation/Reference:

QUESTION 3
You are adding two new nodes into an existing switchless 2-node cluster.

Which two statements are true in this scenario? (Choose two.)

A. You first need to install the cluster interconnect switches to the existing cluster.
B. You must make sure that the existing nodes are healthy and that all cluster links are up.
C. The existing cluster must use clustered Data ONTAP 8.1 or later software.
D. You need to schedule downtime to add these two nodes.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:
Explanation:

▪ If you are adding nodes to a multiple-node cluster, more than half of the existing nodes in the cluster must be healthy (indicated by cluster show).
▪ If you are adding nodes to a two-node switchless cluster, you must have installed and configured the cluster management and interconnect switches before adding additional nodes.

Reference: https://docs.netapp.com/ontap-9/index.jsp?topic=%2Fcom.netapp.doc.dot-cm-sag%2FGUID-B13FF812-785E-4E62-9914-30E7A8F51A4C.html

QUESTION 4
You install a new 2-node FAS8200 switchless cluster. You want to reach all necessary management LIFs and SPs for this cluster.

How many management IP addresses do you need in this scenario?

A. 4
B. 5
C. 2
D. 1

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:

QUESTION 5
Click the Exhibit button.

fc09n02 (AFF-A700)

System Storage Configuration

Name	Disk Count	Notes	Details
5b | 5c | 7c| 7d	12	Stack Same Card	Modules of the stack are connected to the same PCI Card.
5a | 5d | 7a | 7b	12	Stack Same Card	Modules of the stack are connected to the same PCI Card.

Node Rule Failures and Warnings

Controller Name	Rule/Check	Description	Severity	Details
fc09n02	Shelf Path Checks	Checking the pathing configuration of the shelves	Low Impact ▽	Modules of the stack "5b|5c|7c|7d" are connected to the same PCI card.
fc09n02	Shelf Path Checks	Checking the pathing configuration of the shelves	Low Impact ▽	Modules of the stack "5a|5d|7a|7b" are connected to the same PCI card.

After running Config Advisor 5.0 on a newly deployed ONTAP system, you are reviewing the output with the customer, and you find the warnings shown in the exhibit.

Which action should you perform before you leave the customer site?

A. Explain to the customer that the warnings are not relevant because of the quad-path HA cabling.
B. Remove all of the SAS cables from behind the controllers and replace them with FC cables.
C. Explain to the customer that Config Advisor does not support the AFF A700 and FAS900 systems.
D. Review the Hardware Universe Web site for calling guidance.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
Config Advisor reports that you have a single point of failure on a stack of shelves. After investigation, you have assigned the following ports to each stack:

stack 1 – ports 0a and 0b
stack 2 –ports 3a and 4b
stack 3 – ports 4a and 3b

In this scenario, which two changes would you make to the cabling to solve the problem? (Choose two.)

A. Cable stack 3 to ports 4a and 0b.
B. Cable stack 2 to ports 4a and 4b.
C. Cable stack 1 to ports 0a and 3b.
D. Cable stack 3 to ports 3a and 3b.

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 7
Without adding new cluster interconnect switches, you want to nondisruptively upgrade from FAS2554 controllers to FAS8200 controllers on an existing 2-node switchless cluster running ONTAP 9.1 software.

Which statement is correct in this scenario?

A. Relocate the aggregates to one FAS2554 node, takeover, replace the node in takeover state with a FAS8200 node, reassign the disks, giveback, and repeat for the second node.
B. Connect the FAS8200 to the FAS2554 with interconnect cables, join the existing cluster, relocate the aggregates from the FAS2554 to the FAS8200, and decommission the FAS2554.
C. Set up the FAS8200 as a new cluster, move the SVMs from the FAS2554 to the FAS8200 using SVM move, and decommission the FAS2554.
D. You cannot perform this task nondisruptively.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 8
A customer has an ONTAP 9.1 8-node FAS8080 EX cluster. The cluster uses CN1610 cluster interconnect switches. The current workload runs NAS protocols. A business unit wants to add an additional workload that requires expanding the cluster by six AFF A300 nodes and use SAN protocols.

How would you advise the customer in this situation?

A. The customer must upgrade the existing cluster interconnect switches, add the six new nodes, and execute the new SAN workload within a new SVM only.
B. The customer should create a new cluster with the new AFF A300 nodes for the SAN workload.
C. The customer must upgrade the existing cluster interconnect switches, add the six new nodes, and execute the new SAN workload within an existing SVM.
D. The customer can add the six new nodes to the existing cluster interconnect switches and execute the new SAN workload within an existing SVM.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 9
You just finished an AFF A300 installation with two DS224C disk shelves.

What are two ways to cable these disk shelves? (Choose two.)

A. Use alternative control path.

B. Use single-path HA.
C. Use quad-path HA.
D. Use multipath HA.

Correct Answer: AB
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10
After an installation, your customer asks you if you have a solution or a product that can easily list all the elements of a running ONTAP cluster, and highlight the changed and new objects including IP addresses, subnets, IPspaces, SVMs, volumes, and LUNs. For easy modification the output should be a document or a spreadsheet. Your customer does not have any PowerShell or scripting knowledge.

In this scenario, which Windows PowerShell-based NetApp tool would help to extract this information?

A. NetApp Management SDK
B. NetAppDocs
C. NetApp PowerShell Toolkit
D. NetApp Synergy

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 11
After completing an installation, the customer wants to know how they can manually open a new technical case with NetApp Global Support.

What are three ways to accomplish this task? (Choose three.)

A. Use the support site.
B. Use the NetApp Field Portal.
C. Use the mobile app.
D. Use a telephone.
E. Use AutoSupport.

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12
You finished an ONTAP 9.1 installation using the information provided by the customer, but the NFS exports and CIFS shares cannot be accessed using the newly created data LIFs.

In this situation, which action should you perform before you leave the customer's site?

A. Advise the customer to but Cisco switches because NetApp supports only Cisco switches for CIFS and NFS.
B. Review the ONTAP network configuration with the customer and make sure that it is correct.
C. Connect to the customer's switch infrastructure and reset the port configurations.
D. Advise the customer to solve the issue on their own, this is not part of a basic installation.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 13
You have created an aggregate with one RAID group on your ONTAP 9 cluster. Two disks have already failed and have not finished reconstructing.

What would protect you from a third disk failure while you are still reconstructing the two failed disks?

A. RAID-0
B. RAID-4

C. RAID-TEC
D. RAID-DP

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 14
You have just replaced a FAS controller with a new controller and installed the appropriate licenses for the new FAS controller.

What are two ways to remove unused licenses in this situation? (Choose two.)

A. Use OnCommand Unified Manager.
B. Use OnCommand System Manager.
C. Use the `cluster license clean-up -unused` command.
D. Use the `system license clean-up -unused` command.

Correct Answer: BD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 15
You are asked to install an AFF A700 with two DS224C shelves fully populated. When you arrive, the customer asks you to install an additional shelf.

Which shelf would you add to this cluster?

A. a DS224C shelf fully populated with SAS drives
B. a DS224C shelf fully populated with SATA drives
C. a DS2246 shelf fully populated with SSD drives
D. a DS4486 shelf fully populated with SATA drives

Correct Answer: C

Section: (none)
Explanation

Explanation/Reference:
QUESTION 16
What are two ways to obtain customer licenses for a new ONTAP system? (Choose two.)

A. Access the NetApp Support site.
B. Open a support ticket.
C. Access the Field Portal site.
D. Access NetApp Knowledge Base.

Correct Answer: AD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 17
You were dispatched to add a DS224C to an existing HA pair that has a stack of DS4243 shelves with 1 TB drives and a stack of DS4246 shelves with 1 TB drives. The customer wants to make sure that ACP is cabled for all shelves.

Which two considerations should you advise the customer in this situation? (Choose two.)

A. ACP communication uses SAS cables and does not require Ethernet cables for IOM12 and IOM6 modules.
B. ACP communication cannot be used for the DS224C and the DS4243 shelves at the same time.
C. Out-of-band ACP communication is use by default in ONTAP 9.0 and later software.
D. The ACP communication has been discontinued beginning with ONTAP 9.1, IOM6, and IOM12 modules.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 18

Your customer has a new FAS2650 HA cluster with ONTAP 9.1 installed. The cluster is connected to two CN1610 switches.

Which two statements describe this installation? (Choose two.)

A. This is a multiple-node installation.
B. This is a single-node installation.
C. The cluster interconnect is in a switched configuration.
D. The cluster interconnect is in a switchless configuration.

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 19
What is the minimum number of iSCSI LIFs per node in ONTAP 9.1?

A. 2
B. 3
C. 1
D. 4

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 20
You are setting up a new cluster. The customer notices that there are many management ports on the cluster. The customer wants to know the purpose of the cluster management LIF.

In this situation, what should you tell the customer?

A. The cluster management LIF provides a dedicated IP address for the entire cluster and can fail over to any port in the cluster that is available in the broadcast domain.
B. The cluster management LIF provides a dedicated IP address for managing a particular node in the cluster and is used for system maintenance.
C. The cluster management LIF is used to carry intracluster traffic between nodes in a cluster and must be created on a 10GbE network port.
D. The cluster management LIF provides multiple IP addresses for the entire cluster and can fail over to any cluster or intercluster ports.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 21
You have a 2-node switchless cluster in a remote location. Node1 has taken over node 2. You want to access node 2 to investigate the problem.

In this scenario, how would you contact node 2 from a remote location?

A. Use SSH to access the Service Processor on node 2.
B. Use telnet to access the Service Processor IP on node 2.
C. Use SSH to access the node management IP on node 1.
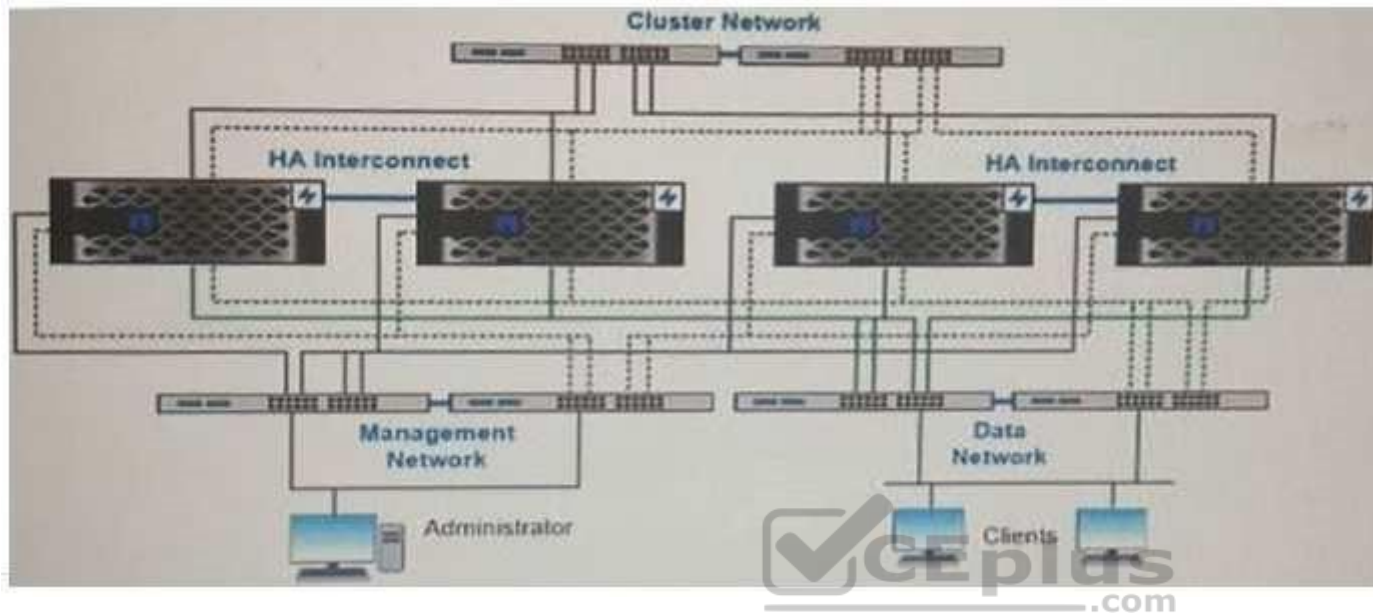D. Use SSH to access the node management IP on node 2.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 22
Select the Exhibit tab.

The exhibit illustrates the network cabling of a 4-node HA cluster that includes four separate networks.

Which two definitions are correct in this scenario? (Choose two.)

A. Each node must be connected to five distinct networks.
B. A cluster can be created without data network connections, but it must include a cluster interconnect connection.
C. Each node may be connected to the management and cluster networks only.
D. A cluster cannot be created without data network connections, but it must include a cluster interconnect connection.

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 23

Select the Exhibit tab.

```
cluster::> net int show -fields vserver, data-protocol, lif, role
       (network interface show)
vserver   life         role    data protocol
-------   ---------   -----   --------------
CIFS      cifs_lif1   data    cifs
Cluster   cluster1-01_clus1 cluster none
Cluster   cluster1-01_clus2 cluster none
Cluster   cluster1-02_clus1 cluster none
Cluster   cluster1-02_clus2 cluster none
cluster1  cluster1-01_mgmt1 node-mgmt none
cluster1  cluster1-02_mgmt1 node-mgmt none
cluster1  cluster_mgmt cluster-mgmt none
iSCSI     lif1_iscsi data iscsi
9 entries were displayed
```

Referring to the exhibit, a customer wants to migrate LIF `lif1_iscsi` to node `cluster1-02` port e0d, but they receive an error.

What is the cause of this error?

A. The LIF is not properly configured.
B. The designation port is not available.
C. This type of LIF cannot be migrated.
D. The LIF does not have a failover group.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 24
A customer ordered two new DS224C shelves. The customer wants you to add these shelves to an existing stack which consists of two DS2246 shelves.

Which statement is true in this scenario?

A. You need to order additional cables to expand the existing stack.
B. Mixing DS224C and DS2246 shelves in the same node are not supported.
C. You cannot mix DS224C and DS2246 shelves in the same stack.
D. DS224C shelves are supports with only new HBAs.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 25
A customer buys a new switchless ONTAP 9.1 FAS2650 cluster. You are asked to install the system at the customer's site.

Which three steps are needed to accomplish this task? (Choose three.)

A. Cable the ACP.
B. Cable the cluster-interconnect to the CN1610 switches.
C. Connect both power cords.
D. Install the system in the rack.
E. Cable the controller for switchless ONTAP software.

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 26
You are asked to install a new ONTAP cluster at a customer site.

In this scenario, which ONTAP versions would you normally install? (Choose two.)

A. the latest RC1 with the included patch level
B. the latest GA with the included patch level
C. the release specified by the customer

D. the latest D release listed for the controller type

Correct Answer: BC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 27
You are asked to install a 2-node FAS2554 cluster running ONTAP 9.1. The controller arrived with ONTAP 9.0 installed.

In this scenario, which two tools would be used to complete this upgrade for this installation? (Choose two.)

A. HTTP server
B. SMTP server
C. FTP server
D. SNMP server

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 28
You are preparing to install a new cluster at a customer site.

Which two concerns must you address with the customer in this scenario? (Choose two.)

A. Is there an uninterruptible power supply (UPS) system?
B. Is there enough rack space available?
C. Are the power requirements fulfilled?
D. Is there a fire extinguishing system?

Correct Answer: AD

QUESTION 29
Recently, your 2-node FAS8020 cluster was upgraded from ONTAP 8.3 to ONTAP 9.1. You have just added two FAS8060 nodes to the cluster. You have executed Config Advisor to verify your work. Config Advisor tells you that the cluster ports on the original two FAS8020 nodes have Flow Control set to FULL.

In this scenario, to what should the Flow Control setting on the FAS8020 ports be set?

A. Flow Control should be set to SEND.
B. Flow Control should be set to ALL.
C. Flow Control should be set to RECEIVE.
D. Flow Control should be set to NONE.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 30
You have a 4-node FAS8060 cluster. You are using the `vol move` command to relocate a volume from an aggregate on node 1 to an aggregate on node 4.

In this scenario, which network is used for the traffic being relocated?

A. the node management network
B. the HA interconnect
C. the intercluster networkD. the cluster interconnect

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
QUESTION 31
You want to grow your current ONTAP cluster. You have a Cisco Nexus 5596UP that is currently using all of its on-board ports.

Which statement is correct in this situation?

A. Contact NetApp Support to order new switches.
B. Add expansion modules to the Cisco switches.
C. Pull the redundant cables from each node to obtain more free ports on the switch.
D. Add new SFP modules to the empty on board ports on the Cisco switches.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 32
Upon finishing the installation of a new system for a customer, they request that you train them on how to administer the system.

In this scenario, which two responses are appropriate? (Choose two.)

A. Visit the NetApp MySupport Site and look for the Express Guides, they will guide you through the daily tasks and provide input and output examples.
B. If you have a specific issue, you can visit the Knowledge Base Web site (https://kb.netapp.com).
C. The answers to any of your questions can be found on the NetApp SmartSolve site (http://smartsolve.netapp.com).
D. You should open a case with NetApp Support for all future questions with low priority and include the keyword "Training" in the title.

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference: