

Exam : NS0-185

Title : NetApp Storage Installation
Engineer, ONTAP
Professional Exam

Version : DEMO

1.After the installation of a new NetApp FAS system, you use the NetAppDocs tool for site design documentation.

In this scenario, in which three document formats would you create an inventory report? (Choose three.)

- A. .docx
- B. .html
- C. .pdf
- D. .ps
- E. .xlsx

Answer: A, C, E

Explanation:

Within the ONTAP SAN solution assessment domain, NetApp emphasizes the creation of accurate and reusable documentation immediately after system installation. One of the supported tools for this purpose is NetAppDocs, which is designed to collect system configuration data and generate standardized inventory and design documentation. According to NetApp Storage Installation concepts and objectives, inventory reports must be produced in formats that support both technical review and customer handoff, while remaining editable and auditable. NetAppDocs is explicitly described in NetApp documentation as supporting Microsoft Word, Microsoft Excel, and PDF outputs for inventory-style reports. These formats align with operational best practices defined in installation and assessment workflows. Word (.docx) files are used to present structured design narratives and annotated configuration details. Excel (.xlsx) files are used to present tabular inventory data such as controllers, disk shelves, ports, adapters, WWPNs, and LIF assignments, which are critical for SAN assessment and future expansion planning. PDF (.pdf) files are used as finalized, non-editable deliverables suitable for compliance records, customer signoff, and archival purposes.

Formats such as HTML and PostScript (.ps) are not identified in NetApp Storage Installation objectives as supported NetAppDocs inventory outputs. These formats do not align with NetApp's standardized documentation deliverables and are not referenced in official installation or assessment documentation. As a result, they are excluded.

From a SAN-focused assessment perspective, the ability to generate Word, Excel, and PDF reports ensures consistency across deployment teams, simplifies validation of ONTAP SAN configurations, and supports accurate lifecycle documentation. These formats are repeatedly reinforced in NetApp installation guidance as the approved and supported inventory report outputs.

Therefore, the correct answers are A (.docx), C (.pdf), and E (.xlsx), as they are the only formats verified and supported for NetAppDocs inventory reporting within NetApp Storage Installation concepts and domains provided by NetApp.

2.You installed a new 4-node AFF A400 ONTAP 9.8 cluster. The AFF A400 controller data ports were automatically discovered by automatic port placement.

In this scenario, which two ONTAP network settings were automatically configured? (Choose two.)

- A. routes
- B. IPspaces
- C. broadcast domains
- D. subnets

Answer: C, D

Explanation:

Within the ONTAP SAN implementation and configuration domain, automatic port placement is a key installation feature designed to simplify initial network setup during cluster deployment. In ONTAP 9.8, when controller data ports are discovered, ONTAP automatically analyzes physical port connectivity, speed, and role, and assigns those ports to appropriate broadcast domains and subnets. Broadcast domains define Layer 2 boundaries and group ports that share the same network reachability. During installation, ONTAP automatically creates and assigns broadcast domains based on detected network topology and intended port usage. This behavior is explicitly described in NetApp installation objectives as part of reducing manual network configuration during initial setup. Subnets are also automatically created and associated when automatic port placement is enabled. ONTAP uses subnets to manage pools of IP addresses for data LIF creation. By automatically configuring subnets, ONTAP enables rapid deployment of NAS and SAN data LIFs without requiring administrators to manually define IP address ranges during installation. By contrast, routes are not automatically configured by automatic port placement. Routes must be explicitly defined by the administrator to control Layer 3 traffic flow between networks. Similarly, IPspaces are logical network containers that must be deliberately designed and created based on multi-tenancy or isolation requirements. IPspaces are never automatically created by ONTAP during installation because they have architectural implications that require administrator intent. Therefore, the two ONTAP network settings that are automatically configured by automatic port placement are broadcast domains and subnets, making C and D the correct answers.

3. You were dispatched to install a cluster made up of FAS8060 and FAS8080 controllers. There are three FAS8060 controllers and three FAS8080 controllers.

Which solution would provide the largest possible cluster?

- A. a cluster made up of two nodes
- B. a cluster made up of four nodes
- C. a cluster made up of five nodes
- D. a cluster made up of six nodes

Answer: D

Explanation:

As part of the ONTAP SAN solution assessment domain, NetApp defines strict rules governing cluster composition and scalability. ONTAP clusters support a maximum of 24 nodes, and within that limit, clusters can include different controller models, provided they are supported by the same ONTAP release and meet hardware compatibility requirements.

Both FAS8060 and FAS8080 controllers are supported within ONTAP clusters and can coexist in a single cluster configuration. NetApp installation documentation explicitly allows mixed-controller clusters as long as the controllers are compatible and running the same ONTAP version.

In this scenario, there are six total controllers available: three FAS8060 and three FAS8080. Since ONTAP supports heterogeneous clusters and there is no architectural limitation preventing all six controllers from participating, the largest possible cluster is achieved by including all six nodes. Smaller cluster sizes—two, four, or five nodes—are technically valid but do not meet the requirement of providing the largest possible cluster. The assessment objective focuses on maximizing usable resources while staying within supported configuration guidelines. Additionally, ONTAP automatically manages performance balancing and high availability across mixed-controller clusters. Each node pair forms an HA pair, and ONTAP ensures consistent data access across the entire cluster fabric.

Therefore, the correct answer is D, a cluster made up of six nodes.

4. After moving a new AFF A400 cluster into production, the administrator notices error events in ONTAP System Manager regarding SAS HA issues.

In this scenario, which NetApp tool would have identified these errors after the installation process?

- A. Cloud Manager
- B. ONTAP System Manager
- C. Active IQ Config Advisor
- D. Active IQ Unified Manager

Answer: C

Explanation:

Within the ONTAP SAN implementation testing and troubleshooting domain, NetApp places strong emphasis on post-installation validation tools. One of the primary tools used immediately after installation is Active IQ Config Advisor.

Active IQ Config Advisor is designed specifically to validate hardware configuration, cabling, HA connectivity, and SAS topology. During post-installation checks, Config Advisor scans the system for configuration errors, miswired cables, unsupported connections, and SAS HA path issues. These checks are a mandatory part of NetApp installation best practices.

SAS HA issues, such as incorrect shelf cabling, missing redundant paths, or improper HA connections, are precisely the types of errors Config Advisor is designed to detect. It performs rule-based validation against NetApp-supported configurations and flags deviations before they result in operational problems. By contrast, ONTAP System Manager displays events and alerts after the system is already operational, but it is not a post-installation validation tool. Cloud Manager is used for cloud-based storage management and is not applicable to on-premises AFF hardware validation. Active IQ Unified Manager focuses on long-term monitoring, performance analytics, and capacity planning rather than installation-time hardware verification.

Because the errors were related to SAS HA issues that could have been detected immediately after installation, the correct tool is Active IQ Config Advisor.

Therefore, the correct answer is C.

5. You are attempting to add a new ONTAP 9.7 node to your ONTAP 9.8 NetApp cluster.

After attempting to add the node, the operation fails as shown in the exhibit.

```
ns0184-98::> cluster add-node-status
```

Node Name	Cluster IP	Status	Error Reason
ns0184-98-01	169.254.111.185	success	
ns0184-98-02	169.254.124.154	success	
ns0184-97	168.254.242.195	failure	Failed to start cluster join on node: 169.254.242.195: Cluster join operation cannot be performed at this time: Cannot join node to the cluster because this is a mixed-version cluster. All nodes in the cluster should be running the same software version before a node is added. To attempt the join anyway, use the "-allow-mixed-version-join" parameter. Resolve the issue, then try the command again.

3 entries were displayed.

What are two nondisruptive ways to add the new node to your ONTAP cluster? (Choose two.)

- A. Revert the cluster from ONTAP 9.8 to ONTAP 9.7.
- B. Re-initialize all the nodes in the ONTAP cluster with ONTAP 9.7.
- C. Upgrade the new node from ONTAP 9.7 to ONTAP 9.8.
- D. Add the node using the -allow-mixed-version-join parameter.

Answer: C, D

Explanation:

ONTAP clusters require that all nodes run the same ONTAP version before a node can join the cluster under normal conditions. The exhibit clearly indicates that the join operation failed because the cluster is running ONTAP 9.8 while the new node is running ONTAP 9.7, resulting in a mixed-version cluster restriction.

One nondisruptive solution is to upgrade the new node to ONTAP 9.8 before attempting to join it to the cluster. This approach aligns the software version of the new node with the existing cluster and fully complies with NetApp-supported installation procedures. It does not impact cluster availability and is the preferred long-term solution.

The second nondisruptive option is to use the -allow-mixed-version-join parameter. ONTAP explicitly allows this method to temporarily permit a mixed-version cluster for the purpose of expansion or upgrade workflows. This option is designed for controlled scenarios and allows the node to join without disrupting existing cluster operations. However, the mixed-version state is intended to be temporary and must be resolved by upgrading the remaining nodes.

Reverting the cluster or reinitializing all nodes would be disruptive and violate nondisruptive installation principles.

Therefore, the correct answers are C and D.