

Delta - Aruba Certified Switching Professional Exam

Exam Description

This exam tests your skills with wired configurations of Aruba Mobile First Solutions in complex two-tier and three-tier networks with redundancy. It tests your skills to build to a given implementation plan and deploy consistent wired access control technologies to mirror the wireless access control policies. It also tests your ability to configure specialized applications and security requirements for a LAN.

Ideal Candidate For This Exam

Typical candidates for this exam are networking IT professionals who have advanced-level implementation experience with ArubaOS wired switching solutions. This candidate has a minimum of 4 to 5 years of general networking experience and 2 years of experience focused on interpreting network architectures and customer requirements to install and configure Aruba solutions.

Exam Contents

This exam has 32 questions.

Advice To Help You Take This Exam

- Complete the training and review all course materials and documents before you take the exam.
- Exam items are based on expected knowledge acquired from job experience, an expected level of industry standard knowledge, or other prerequisites (events, supplemental materials, etc.).
- Successful completion of the course alone does not ensure you will pass the exam.
- Read this HPE Exam Preparation Guide and follow its recommendations.
- Visit HPE Press for additional reference materials, study guides, practice tests, and HPE books.

Supporting resources

These recommended resources help you prepare for the exam:

Resource Type	Resource ID	Resource Name
Course	01095999	Implementing Aruba Switching, Rev. 17.41

Objectives

This exam validates that you can:

Exam ID	HPE6-A46
Exam type	Proctored
Exam duration	1 hour
Exam length	32 questions
Passing score	66%
Delivery languages	English, Japanese
<p>Register for this Exam You need an HPE Learner ID and a Pearson VUE login and password.</p> <p>No reference material is allowed at the testing site. This exam may contain beta test items for experimental purposes.</p> <p>During the exam, you can make comments about the exam items. We welcome these comments as part of our continuous improvement process.</p>	

Percentage of Exam	Sections/Objectives
28%	Plan the wired network solution. <ul style="list-style-type: none"> Given a scenario with an architect's design and/or customer requirements, identify gaps between the design and customer requirements. Given a scenario with an architect's design and/or customer requirements, determine an appropriate implementation, monitoring, and management plan.
38%	Install and configure the wired network solution. <ul style="list-style-type: none"> Given an implementation plan, configure backplane stacking and VSF. Given an implementation plan, explain how to configure Layer 2 technologies. Explain ArubaOS-Switch security features and configuration concepts. Explain mobility integration features and configuration concepts.
22%	Troubleshoot the wired network solution. <ul style="list-style-type: none"> Given a scenario, identify a failure such as an IP mismatch, VLAN mismatch, hardware failure, or configuration error. Given an action plan to remediate an issue, determine the implications to the network state. Given a scenario, determine the cause of the performance problem such as QoS issue, configuration issue with hardware and software, and end node. Given a scenario, predict the outcome based on the changes to the security configuration. Given a scenario with an identified security issue, determine the remediation actions.
12%	Manage, maintain, optimize, and monitor the wired network solution. <ul style="list-style-type: none"> Given a scenario, determine a strategy to implement configuration management (maintenance, auditing, backup, archiving) and to monitor the network. Analyze data that represents the operational state of a network and determine the appropriate action.

Sample questions

Sample questions are provided only as examples of question style, format and complexity/difficulty. They do not represent all question types and do not reflect all topic areas. These sample questions do not represent a practice test.

- A company security policy requires managers to authenticate to a RADIUS server when they log in to an AOS-Switch CLI with SSH. In addition to the RADIUS server settings, each AOS-Switch is configured with these commands:

```
Switch(config)# aaa authentication ssh login radius
Switch(config)# aaa authentication ssh enable radius
Switch(config)# aaa authentication login privilege
Switch(config)# no telnet-server
```

A manager logs in with SSH. Which attribute must the RADIUS server send in the Access-Accept in order to for the user to receive manager level access?

- an HPE vendor specific attribute (VSA) named HPE-Command-Exception with value 0
 - an HPE vendor specific attribute (VSA) named HPE-Command-Exception with value 1
 - a standard RADIUS attribute named Service-Type with value 6
 - a standard RADIUS attribute named Service-Type with value 7
- A network administrator wants to prevent changes in the spanning tree topology if a rogue switch connects to interface 1 on an AOS-Switch. The interface should NOT shut down because it receives BPDUs, but it should shut down if it receives superior BPDUs. Which feature should the administrator configure on interface 1?
 - Loop guard
 - BPDU protection
 - BPDU filtering
 - Root guard
 - A network administrator wants to prioritize all traffic that arrives on VLAN 20 with a DSCP configured for that VLAN on the switch. The administrator does not want the incoming DSCP for any traffic to override the configured DSCP. Which settings meet these criteria?
 - Global type of service set to none; QoS trust for interfaces in VLAN 20 set to default
 - Global type of service set to none; QoS trust for interfaces in VLAN 20 set to dscp
 - Global type of service set to DiffServ; QoS trust for interfaces in VLAN 20 set to default

d. Global type of service set to DiffServ; QoS trust for interfaces in VLAN 20 set to dscp

4. Refer to the exhibit.

```
#Partial running configuration
radius-server host 10.1.1.5 key password
radius-server host 10.1.1.5 dyn-authorization
radius-server host 10.1.1.5 time-window 0
tunneled-node-server
  controller-ip 10.1.10.10
  mode role-based
  exit
aaa authorization user-role name "tunneledUser"
  vlan-id 30
  tunneled-node-server-redirect secondary-role "authenticated"
  exit
aaa authorization user-role enable
aaa port-access authenticator active
aaa port-access authenticator 1-20
```

An AOS-Switch has the settings shown in the exhibit. A user connects to interface 1 and authenticates, but cannot receive network access. The ClearPass server at 10.1.1.5 indicates that the user successfully authenticated and was assigned the *tunneledUser* role.

What might cause this issue?

- a. The AOS-Switch RADIUS key does not match the one on ClearPass.
- b. The AOS-Switch does not have a tunneled-node license activated on it.
- c. The Aruba controller does not have VLAN 30 configured on it.
- d. The Aruba controller does not have the tunneledUser role configured on it.

5. Refer to the exhibits.

Exhibit 1

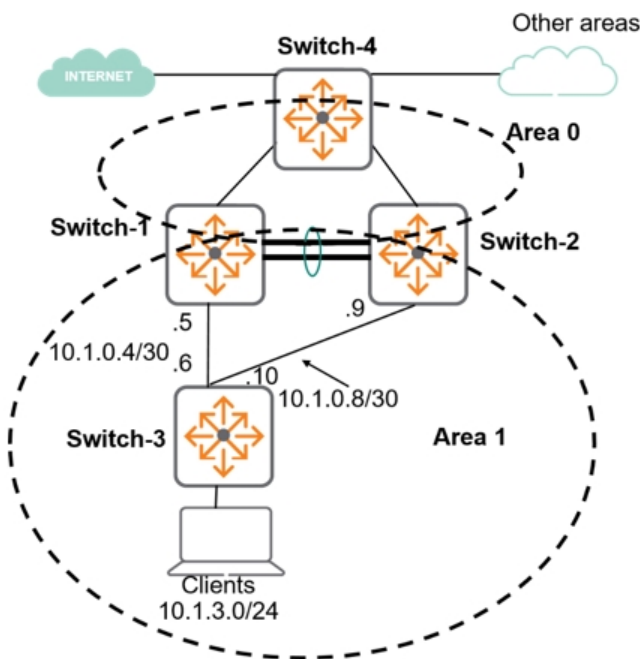


Exhibit 2

```
Switch-1 partial running-config
router ospf
 area backbone
 area 0.0.0.1 stub 100 no-summary
```

```
Switch-2 partial running-config
router ospf
 area backbone
 area 0.0.0.1 stub 10 no-summary
```

```
Switch-3 partial running-config
vlan 104
 ip address 10.1.0.6 255.255.255.252
 ip ospf area 0.0.0.1
 untagged a24
vlan 108
 ip address 10.1.0.10 255.255.255.252
 ip ospf area 0.0.0.1
 untagged a1
router ospf
 area 0.0.0.1 stub 1
```

Both Switch-1 and Switch-2 have an OSPF inter-area route to 10.2.0.0/16 in their IP routing table. The metric for this route is 10 on Switch-1 and 100 on Switch-2. Switch-3 has the default setting for ECMP.

Based on the exhibits, how does Switch-3 forward traffic to destinations in 10.2.0.0/16 if the network operates as normal?

- It sends all of this traffic to next hop 10.1.0.5.
- It sends all of this traffic to next hop 10.1.0.9.
- It load balances this traffic to next hop 10.1.0.5 and 10.1.0.9.
- It drops this traffic.

Answers

This section provides answers to and references for the sample questions.

- A company security policy requires managers to authenticate to a RADIUS server when they log in to an AOS-Switch CLI with SSH. In addition to the RADIUS server settings, each AOS-Switch is configured with these commands:

```
Switch(config)# aaa authentication ssh login radius
Switch(config)# aaa authentication ssh enable radius
Switch(config)# aaa authentication login privilege
Switch(config)# no telnet-server
```

A manager logs in with SSH. Which attribute must the RADIUS server send in the Access-Accept in order to for the user to receive manager level access?

- an HPE vendor specific attribute (VSA) named HPE-Command-Exception with value 0
 - an HPE vendor specific attribute (VSA) named HPE-Command-Exception with value 1
 - a standard RADIUS attribute named Service-Type with value 6
 - a standard RADIUS attribute named Service-Type with value 7
- A network administrator wants to prevent changes in the spanning tree topology if a rogue switch connects to interface 1 on an AOS-

Switch. The interface should NOT shut down because it receives BPDUs, but it should shut down if it receives superior BPDUs. Which feature should the administrator configure on interface 1?

- a. Loop guard
- b. BPDU protection
- c. BPDU filtering
- d. Root guard

3. A network administrator wants to prioritize all traffic that arrives on VLAN 20 with a DSCP configured for that VLAN on the switch. The administrator does not want the incoming DSCP for any traffic to override the configured DSCP. Which settings meet these criteria?

- a. Global type of service set to none; QoS trust for interfaces in VLAN 20 set to default
- b. Global type of service set to none; QoS trust for interfaces in VLAN 20 set to dscp
- c. Global type of service set to DiffServ; QoS trust for interfaces in VLAN 20 set to default
- d. Global type of service set to DiffServ; QoS trust for interfaces in VLAN 20 set to dscp

4. Refer to the exhibit.

```
#Partial running configuration
radius-server host 10.1.1.5 key password
radius-server host 10.1.1.5 dyn-authorization
radius-server host 10.1.1.5 time-window 0
tunneled-node-server
  controller-ip 10.1.10.10
  mode role-based
  exit
aaa authorization user-role name "tunneledUser"
  vlan-id 30
  tunneled-node-server-redirect secondary-role "authenticated"
  exit
aaa authorization user-role enable
aaa port-access authenticator active
aaa port-access authenticator 1-20
```

An AOS-Switch has the settings shown in the exhibit. A user connects to interface 1 and authenticates, but cannot receive network access. The ClearPass server at 10.1.1.5 indicates that the user successfully authenticated and was assigned the *tunneledUser* role.

What might cause this issue?

- a. The AOS-Switch RADIUS key does not match the one on ClearPass.
- b. The AOS-Switch does not have a tunneled-node license activated on it.
- c. The Aruba controller does not have VLAN 30 configured on it.
- d. The Aruba controller does not have the tunneledUser role configured on it.

5. Refer to the exhibits.

Exhibit 1

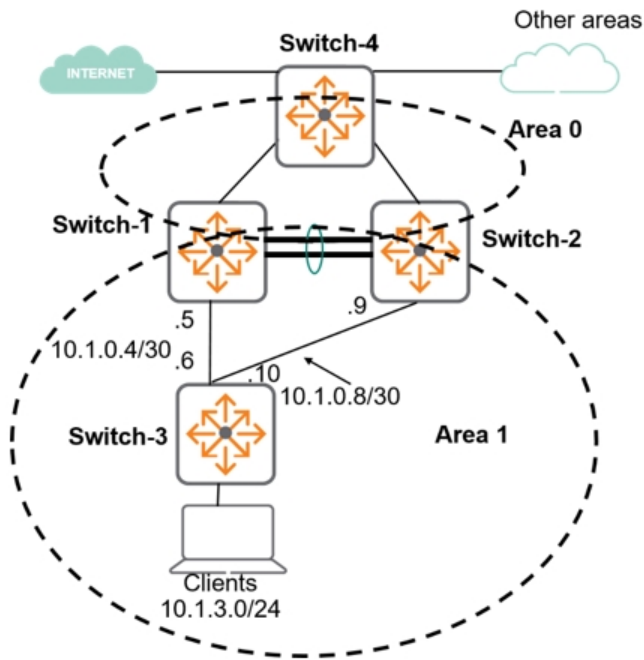


Exhibit 2

```
Switch-1 partial running-config
router ospf
 area backbone
 area 0.0.0.1 stub 100 no-summary
```

```
Switch-2 partial running-config
router ospf
 area backbone
 area 0.0.0.1 stub 10 no-summary
```

```
Switch-3 partial running-config
vlan 104
 ip address 10.1.0.6 255.255.255.252
 ip ospf area 0.0.0.1
 untagged a24
vlan 108
 ip address 10.1.0.10 255.255.255.252
 ip ospf area 0.0.0.1
 untagged a1
router ospf
 area 0.0.0.1 stub 1
```

Both Switch-1 and Switch-2 have an OSPF inter-area route to 10.2.0.0/16 in their IP routing table. The metric for this route is 10 on Switch-1 and 100 on Switch-2. Switch-3 has the default setting for ECMP.

Based on the exhibits, how does Switch-3 forward traffic to destinations in 10.2.0.0/16 if the network operates as normal?

- It sends all of this traffic to next hop 10.1.0.5.
- It sends all of this traffic to next hop 10.1.0.9.
- It load balances this traffic to next hop 10.1.0.5 and 10.1.0.9.
- It drops this traffic.

For more information

Contact our program

© Copyright 2020 Hewlett Packard Enterprise. The information contained herein is subject to change without notice. The only warranties for HPE products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HPE shall not be liable for technical or editorial errors or omissions contained herein.

Information is as of June 2020, Revision 4