

# 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:

<b>Exam ID</b>	HPE6-A46
<b>Exam type</b>	Proctored
<b>Exam duration</b>	1 hour
<b>Exam length</b>	32 questions
<b>Passing score</b>	66%
<b>Delivery languages</b>	Japanese, English
<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"> <li>Given a scenario with an architect's design and/or customer requirements, identify gaps between the design and customer requirements.</li> <li>Given a scenario with an architect's design and/or customer requirements, determine an appropriate implementation, monitoring, and management plan.</li> </ul>
38%	Install and configure the wired network solution. <ul style="list-style-type: none"> <li>Given an implementation plan, configure backplane stacking and VSF.</li> <li>Given an implementation plan, explain how to configure Layer 2 technologies.</li> <li>Explain ArubaOS-Switch security features and configuration concepts.</li> <li>Explain mobility integration features and configuration concepts.</li> </ul>
22%	Troubleshoot the wired network solution. <ul style="list-style-type: none"> <li>Given a scenario, identify a failure such as an IP mismatch, VLAN mismatch, hardware failure, or configuration error.</li> <li>Given an action plan to remediate an issue, determine the implications to the network state.</li> <li>Given a scenario, determine the cause of the performance problem such as QoS issue, configuration issue with hardware and software, and end node.</li> <li>Given a scenario, predict the outcome based on the changes to the security configuration.</li> <li>Given a scenario with an identified security issue, determine the remediation actions.</li> </ul>
12%	Manage, maintain, optimize, and monitor the wired network solution. <ul style="list-style-type: none"> <li>Given a scenario, determine a strategy to implement configuration management (maintenance, auditing, backup, archiving) and to monitor the network.</li> <li>Analyze data that represents the operational state of a network and determine the appropriate action.</li> </ul>

## 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

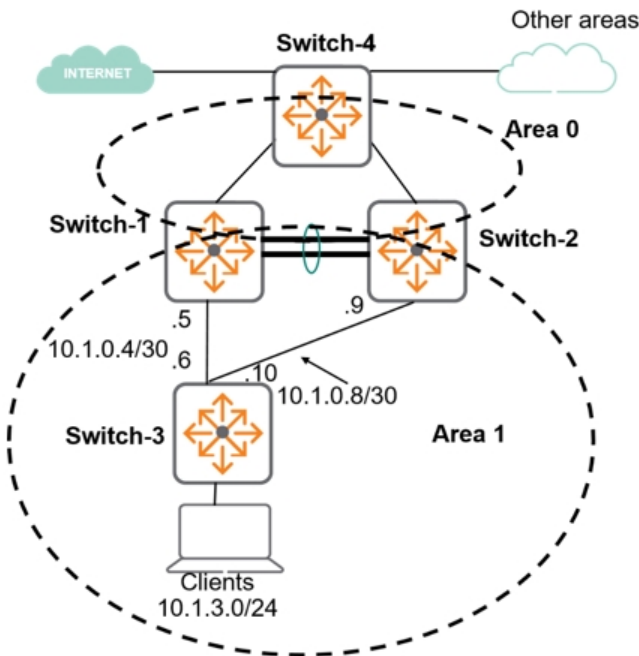


Exhibit 2

```
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:

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- 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
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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

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  mode role-based
  exit
aaa authorization user-role name "tunneledUser"
  vlan-id 30
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aaa port-access authenticator active
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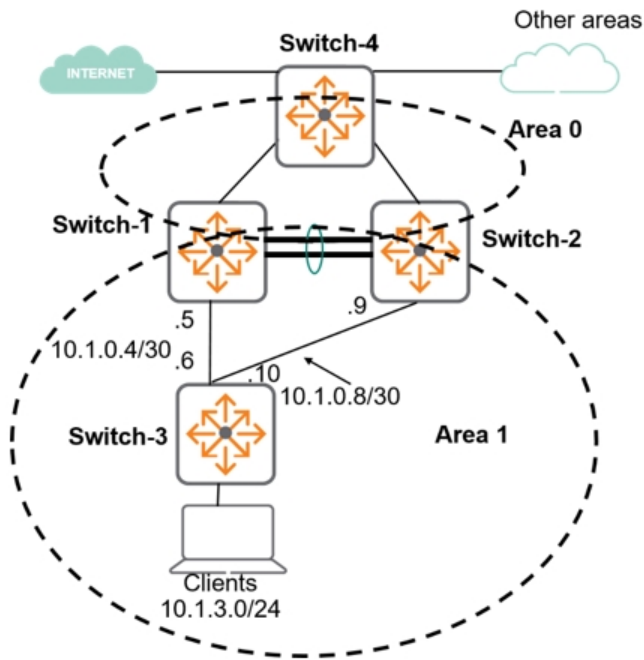


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```

```
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
```

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- It drops this traffic.

## **For more information**

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