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 ID	HPE6-A45
Exam type	Proctored
Exam duration	1 hour 30 minutes
Exam length	60 questions
Passing score	67%
Delivery languages	English, Japanese

Register for this Exam
You need an HPE Learner ID and a Pearson VUE login and password.

No reference material is allowed at the testing site. This exam may contain beta test items for experimental purposes.

During the exam, you can make comments about the exam items. We welcome these comments as part of our continuous improvement process.

Exam Contents

This exam has 60 questions.

Advice To Help You Take This Exam

- Complete the training and review all course materials and documents before you take the exam.
- Use HPE Press study guides and additional reference materials; study guides, practice tests, and HPE books.
- 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 or study materials alone, does not ensure you will pass the exam.

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

Additional study materials

- Aruba Certified Switching Professional Study Guide

Objectives

This exam validates that you can:

Percentage of Exam	Sections/Objectives
14%	Plan the wired network solution. • 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.
46%	Install and configure the wired network solution. • Given an implementation plan, configure backplane stacking and VSF. • Given an implementation plan, explain how to configure Layer 2 technologies. • Given an implementation plan, explain how to configure and validate Layer 3 interfaces, services, routing protocols and overlays. • Explain multicast features and configuration concepts. • Explain ArubaOS-Switch security features and configuration concepts. • Explain QoS ArubaOS-Switch features and configuration concepts. • Explain mobility integration features and configuration concepts.
27%	Troubleshoot the wired network solution. • 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.
13%	Manage, maintain, optimize, and monitor the wired network solution. • 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.

1. 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?

   a. an HPE vendor specific attribute (VSA) named HPE-Command-Exception with value 0
   b. an HPE vendor specific attribute (VSA) named HPE-Command-Exception with value 1
   c. a standard RADIUS attribute named Service-Type with value 6
   d. a standard RADIUS attribute named Service-Type with value 7

2. A network administrator deploys a backplane stack with four members. The stack has formed with the default stacking settings. What should the administrator implement to prevent issues in case the stack splits into two equal fragments?

   a. an OOBM connection on each member
   b. LLDP Multi-Active Detection (MAD)
   c. a member ID of 1 on the commander
   d. a designated forwarder for each link aggregation

3. 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

4. Refer to the exhibit.

```
Switch-1# show ip route
                                IP Route Entries

  Destination        Gateway         VLAN  Type      Sub-Type   Metric     Dist.
  ------------------ --------------- ----  --------- ---------- ---------- -----
  10.0.0.2/32        10.0.2.2         2    ospf      IntraArea  2          110
  10.0.2.0/30        VLAN2            2    connected            1          0
  10.0.3.0/30        VLAN3            3    connected            1          0
  10.2.0.0/16        10.0.2.2         2    ospf      InterArea  6          110
  10.3.0.0/16        10.0.3.2         3    ospf      InterArea  6          110
  192.168.1.0/30     VLAN100          100  connected            1          0
  192.0.2.0/24       192.168.1.1      100  bgp        external  0          20
  198.51.100.0/25    10.0.2.2         2    ospf      IntraArea  6          110
  198.51.100.128/25  VLAN102          102  connected            1          0
  198.51.100.0/24    blackhole             static              1          1
  127.0.0.0/8        reject                static               0          0
  127.0.0.1/32       lo0                   connected            1          0

Switch-1# show running-config router bgp
Running configuration:
router bgp 46500
   enable
   network 198.51.100.0/24
   neighbor 192.168.1.1 remote-as 46501
   neighbor 10.255.0.2 remote-as 46500
   exit
```

How many routes in the 198.51.100.0/24 range does Switch-1 advertise to neighbor 192.168.1.1?

a. 0
b. 1
c. 2
d. 3

5. 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

6. 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.

7. Refer to the exhibits.
Exhibit 1

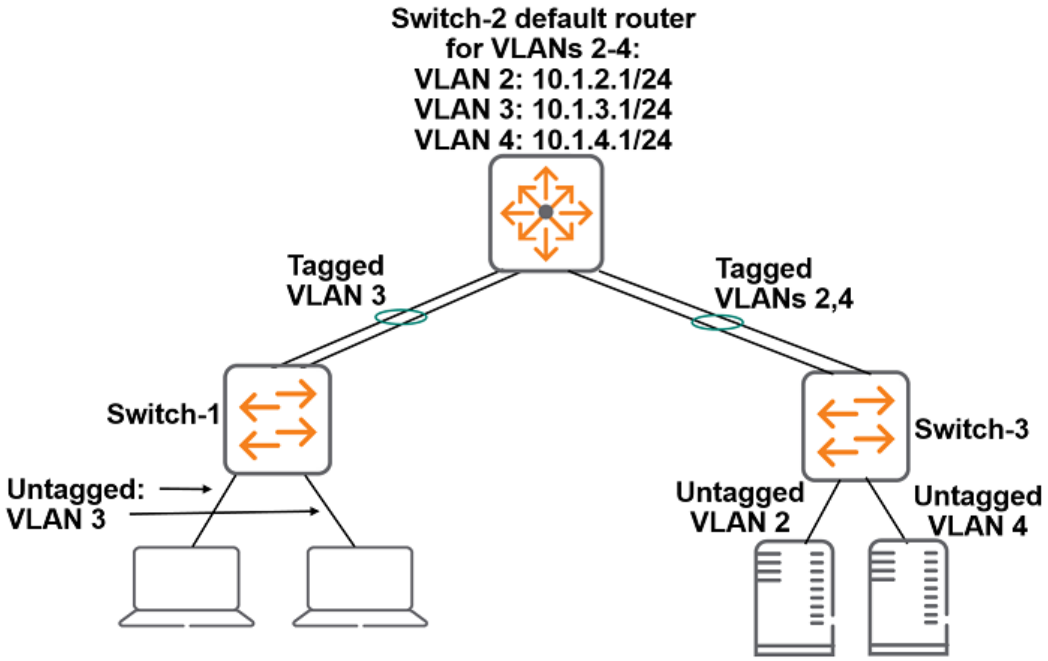

Exhibit 2

```
Switch-1# show running-config vlan 3
Running configuration:
vlan 3
  ip address 10.1.3.1 255.255.255.0
  ip access-group myACL vlan-in

Switch-1# show access-list myACL
Access Control Lists

  Name: myACL
  Type: Extended
  Applied: Yes

 SEQ  Entry
 ------------------------------------------------------------------------------
 10    Action: deny
       Src IP: 10.1.3.0          Mask: 0.0.0.255   Port(s):
       Dst IP: 10.1.2.0          Mask: 0.0.1.255   Port(s):
       Proto : IP
       TOS   : -                 Precedence: -

 10000 Action: permit
       Src IP: 0.0.0.0           Mask: 255.255.255.255   Port(s):
       Dst IP: 0.0.0.0           Mask: 255.255.255.255   Port(s):
       Proto : IP
       TOS   : -                 Precedence: -
```

The network administrator wants this behavior:

- All IP traffic from clients in 10.1.3.0/24 to servers in 10.1.2.0/24 is dropped.
- All IP traffic from clients in 10.1.3.0/24 to other clients in 10.1.3.0/24 dropped.
- All other traffic from clients in 10.1.2.0/24 is allowed.

The administrator applies the ACL as shown in Exhibit 2. The ACL does not currently control traffic as desired. How should the administrator apply the ACL instead?

a. as an inbound routed ACL (RACL) on VLAN 3 on Switch-1
b. as an inbound VLAN ACL (VACL) on VLAN 3 on Switch-1
c. as an outbound routed ACL (RACL) on VLAN 2 on Switch-2
d. as an outbound VLAN ACL (VACL) on VLAN 3 on Switch-2

8. Refer to the exibits.

   Exhibit 1

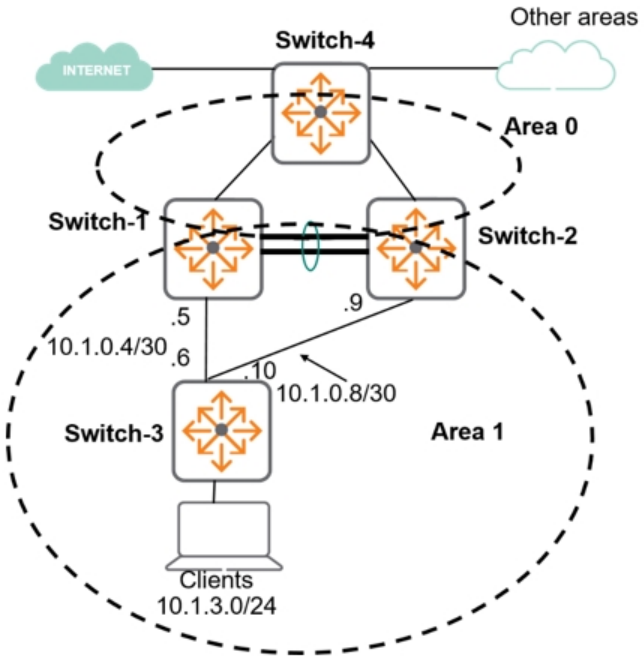

Exhibit 2

```
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?

a. It sends all of this traffic to next hop 10.1.0.5.
b. It sends all of this traffic to next hop 10.1.0.9.
c. It load balances this traffic to next hop 10.1.0.5 and 10.1.0.9.
d. It drops this traffic.

Answers

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

1. 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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   mode role-based
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aaa authorization user-role name "tunneledUser"
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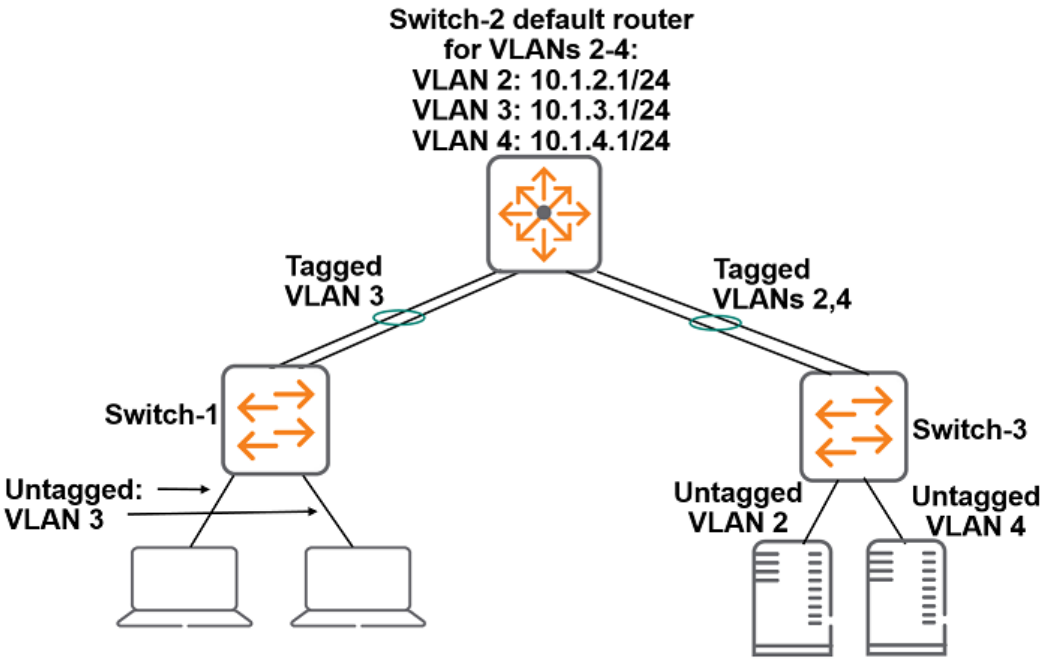

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 10000 Action: permit
       Src IP: 0.0.0.0           Mask: 255.255.255.255   Port(s):
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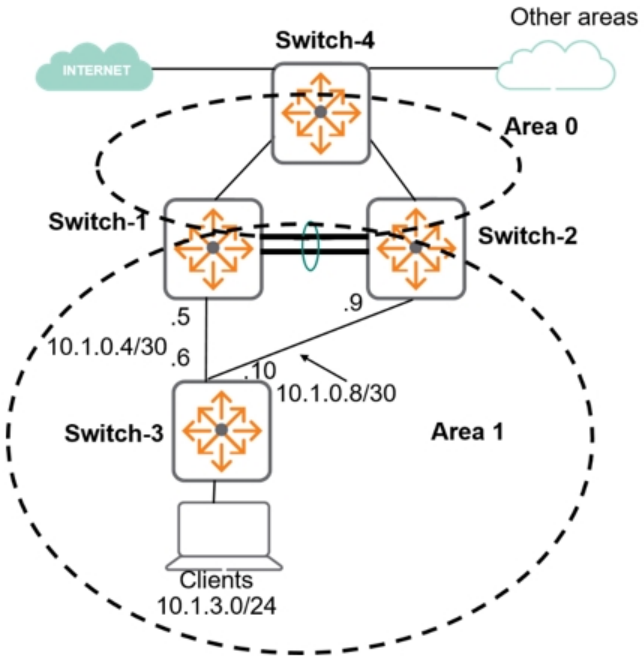

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 area 0.0.0.1 stub 100 no-summary

Switch-2 partial running-config
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 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
```

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For more information

Contact our program

Information is as of November 2019, Revision 3