Money Back Guarantee

Vendor:HP

Exam Code: HPE6-A84

Exam Name:Aruba Certified Network Security Expert Written

Version:Demo

QUESTION 1

Refer to the scenario.

Introduction to the customer

You are helping a company add Aruba ClearPass to their network, which uses Aruba network infrastructure devices.

The company currently has a Windows domain and Windows CA. The Window CA issues certificates to domain computers, domain users, and servers such as domain controllers. An example of a certificate issued by the Windows CA is

shown here.

Certificate Information			
Windows of this certifi	ioes not hav cate.	e enough information	to verify
Issue	d to: employ	ee1	
Issue	d by: intca.	acnsxtest.com	
Valid	from 8/12/2	022 to 8/12/2023	

A Certificate

General Details Certification Path Show: <All> 4 Field Value SMIME Capabilities [1]SMIME Capability: Object I... Subject Key Identifier 066631b63703b5f0ce8ceed28... Authority Key Identifier KeyID=c39da74dbe13586c8d... CRL Distribution Points [1]CRL Distribution Point: Distr... Authority Information Access [1] Authority Info Access: Acc... Subject Alternative Name Other Name:Principal Name=e... 1.3.6.1.4.1.311.25.2 30 40 a0 3e 06 0a 2b 06 01 04... Kevlisane **Dinital Signature** Key Enginher Other Name: Principal Name=employee1@acnsxtest.com RFC822 Name = employee 1@acnsxtest.com Edit Properties... Copy to File OK

×

The company is in the process of adding Microsoft Endpoint Manager (Intune) to manage its mobile clients. The customer is maintaining the on-prem AD for now and uses Azure AD Connect to sync with Azure AD.

Requirements for issuing certificates to mobile clients

The company wants to use ClearPass Onboard to deploy certificates automatically to mobile clients enrolled in Intune. During this process, Onboard should communicate with Azure AD to validate the clients. High availability should also be

provided for this scenario; in other words, clients should be able to get certificates from Subscriber 2 if Subscriber 1 is down.

The Intune admins intend to create certificate profiles that include a UPN SAN with the UPN of the user who enrolled the device.

Requirements for authenticating clients

The customer requires all types of clients to connect and authenticate on the same corporate SSID.

The company wants CPPM to use these authentication methods:

1.

EAP-TLS to authenticate users on mobile clients registered in Intune

2.

TEAR, with EAP-TLS as the inner method to authenticate Windows domain computers and the users on them To succeed, EAP-TLS (standalone or as a TEAP method) clients must meet these requirements:

1.

Their certificate is valid and is not revoked, as validated by OCSP

2.

The client\\'s username matches an account in AD # Requirements for assigning clients to roles After authentication, the customer wants the CPPM to assign clients to ClearPass roles based on the following rules:

1.

Clients with certificates issued by Onboard are assigned the "mobile-onboarded" role

2.

Clients that have passed TEAP Method 1 are assigned the "domain-computer" role

3.

Clients in the AD group "Medical" are assigned the "medical-staff" role

4.

Clients in the AD group "Reception" are assigned to the "reception-staff" role The customer requires CPPM to assign authenticated clients to AOS firewall roles as follows:

1.

Assign medical staff on mobile-onboarded clients to the "medical-mobile" firewall role

2.

Assign other mobile-onboarded clients to the "mobile-other" firewall role

3.

Assign medical staff on domain computers to the "medical-domain" firewall role

4.

All reception staff on domain computers to the "reception-domain" firewall role

5.

All domain computers with no valid user logged in to the "computer-only" firewall role

6.

Deny other clients access # Other requirements Communications between ClearPass servers and on-prem AD domain controllers must be encrypted. # Network topology For the network infrastructure, this customer has Aruba APs and Aruba gateways, which are managed by Central. APs use tunneled WLANs, which tunnel traffic to the gateway cluster. The customer also has AOS-CX switches that are not

managed by Central at this point.



ClearPass cluster IP addressing and hostnames

A customer\\'s ClearPass cluster has these IP addresses:

1.

Publisher = 10.47.47.5

```
2.
```

Subscriber 1 = 10.47.47.6

```
3.
```

Subscriber 2 = 10.47.47.7

4.

Virtual IP with Subscriber 1 and Subscriber 2 = 10.47.47.8

The customer\\'s DNS server has these entries

1.

cp.acnsxtest.com = 10.47.47.5

2.

cps1.acnsxtest.com = 10.47.47.6

3.

cps2.acnsxtest.com = 10.47.47.7

4.

radius.acnsxtest.com = 10.47.47.8

5.

onboard.acnsxtest.com = 10.47.47.8

The customer needs a secure way for users to enroll their new wireless clients in Intune. You are recommending a new WLAN that will provide the users with limited access for the enrollment.

You have set up captive portal for clients on this WLAN to a web page with instructions for enrolling devices. You will need to add several hostnames to the captive portal allowlist manually.

What is one of those hostnames?

A. The hostname used by ClearPass Policy ManaGer\\'s RADIUS services

B. The ClearPass Onboard hostname referenced in an Onboard provisioninG profile

C. The ClearPass Onboard hostname referenced in Intune SCEP profiles

D. The hostname used by the on-prem domain controllers

Correct Answer: B

QUESTION 2

Refer to the exhibit.

400	y a display filter <cb< th=""><th>1-/></th><th></th><th></th><th>Depress</th><th>ion </th></cb<>	1-/>			Depress	ion
	Time	Source	Destination	Protocol	Length Info	
7	124 1745.313106	10.1.7.100	10.1.26.151	TLSv1.2	1389 Application Data, Application Data	
7	125 1745.313138	10.1.26.151	10.1.7.100	TCP	54 21379 → 443 [ACK] Seq=59293 Ack=555740 Win=2102272 Len=0	
7	126 1745.335486	10.1.26.151	10.1.7.100	TCP	54 21411 → 443 [ACK] Seq=22221 Ack=47130 Win=2101248 Len=0	
7	127 1752.091170	94:60:d5:bf:36:40	Broadcast	ARP	60 Gratuitous ARP for 10.1.26.1 (Request)	
7	128 1753.261660	10.1.26.151	10.254.1.21	DNS	84 Standard guery 0x0001 PTR 21.1.254.10.in-addr.arpa	
7	129 1753.262268	10.254.1.21	10.1.26.151	DNS	126 Standard query response 0x0001 PTR 21.1.254.10.in-addr.arpa PTR TrainingLab-AD.acnsxtest.com	
7	130 1753.263452	10.1.26.151	10.254.1.21	DNS	98 Standard guery 0x0002 A QW55IG9yZGVycz8.djdkduep62kz4nzx.onion	
7	131 1754.747844	10.1.26.150	224.0.0.251	MDNS	83 Standard query 0x0000 PTR _anywhereusbtcp.local, "QM" question	
7	132 1755.275570	10.1.26.151	10.254.1.21	DNS	98 Standard query 0x0003 AAAA QW55IG9yZGVycz8.djdkduep62kz4nzx.onion	
7	133 1755.303070	10.1.26.151	10.1.7.100	TLSv1.2	920 Application Data	
7	134 1755.303255	10.1.7.100	10.1.26.151	TCP	60 443 + 21379 [ACK] Seq=555740 Ack=60159 Win=63360 Len=0	
7	135 1755.318864	10.1.26.151	10.1.7.100	TLSv1.2	882 Application Data	
7	136 1755.323597	10.1.7.100	10.1.26.151	TLSv1.2	604 Application Data	
7	137 1755.343521	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Seq=555740 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
7	138 1755.343521	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Seq=557200 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
7	139 1755.343573	10.1.26.151	10.1.7.100	TCP	54 21379 → 443 [ACK] Seq=60159 Ack=558660 Win=2102272 Len=0	
7	140 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 → 21379 [ACK] Seq=558660 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
7	141 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Seg=560120 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
,	142 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 → 21379 [PSH, ACK] Seq=561580 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
	143 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Seq=563040 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
,	144 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 → 21379 [ACK] Sec=564500 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
,	145 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Sec=565960 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
,	146 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Seg-567420 Ack-60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
7	147 1755.343650	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [PSH, ACK] Seq=568880 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
,	148 1755.343704	10.1.26.151	10.1.7.100	TCP	54 21379 → 443 [ACK] Seg=60159 Ack=570340 Win=2102272 Len=0	
7	149 1755.343749	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Seg=570340 Ack=60159 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
7	150 1755, 343784	10.1.7.100	10.1.26.151	TLSv1.2	1389 Application Data, Application Data	
7	151 1755.343797	10.1.26.151	10.1.7.100	TCP	54 21379 → 443 [ACK] Seg=60159 Ack=573135 Win=2102272 Len=0	
,	152 1755, 368972	10.1.26.151	10.1.7.100	TCP	54 21411 + 443 [GK] Sen=33649 Ack=47680 Min=2102272 [en=0	
,	153 1755, 763334	10.1.26.150	224.0.0.251	MONS	83 Standard over 0x0000 PTR anywhereuch, tro.local, "OM" overtion	
7	154 1760, 159146	10.1.26.151	10.1.7.100	TLSv1.2	858 Application Data	
,	155 1760, 159402	10.1.7.100	10.1.26.151	TCP	60 443 + 21379 [ACK] Seg=573135 Ack=60973 Win=63360 Len=0	
,	156 1768, 162772	10.1.7.100	10.1.26.151	TLSv1.2	599 Application Data	
,	157 1768 165496	10.1.26.151	10.1.7.100	TI Sv1.2	888 Application Data	
7	158 1760, 165720	10.1.7.100	10.1.26.151	TCP	60 443 + 21379 [ACK] Seg=573680 Ack=61807 Win=63360 Len=0	
7	159 1768 171166	10.1.7.100	10.1.26.151	TI 5v1.2	S2 Anglication Data	
7	160 1760.212643	10.1.26.151	10.1.7.100	TCP	54 21379 + 443 [ACK] Seg=61887 Ack=574478 Win=2100992 Len=0	
7	161 1761.449829	10.254.1.21	10.1.26.151	DNS	146 Standard query resonse 8x8082 A ONSSIG9YZGVycz8.didkdueo62kz4nzx.onion CNAME_cnVuIGEgc2NhbiBhdCAxMC4xLiAuMC8xNg	
7	162 1761,449879	10.1.26.151	10.254.1.21	ICMP	174 Destination unreachable (Port unreachable)	
7	163 1765, 337103	10.1.26.151	10.1.7.100	TLSv1.2	920 Application Data	
7	164 1765, 349819	10.1.26.151	10.1.7.100	TLSv1.2	882 Application Data	
7	165 1765.355148	10.1.7.100	10.1.26.151	TLSv1.2	604 Application Data	
7	166 1765.379168	10.1.7.100	10.1.26.151	TCP	1514 443 → 21379 [ACK] Seg=574478 Ack=62673 Win=64128 Len=1460 [TCP segment of a reassembled PDU]	
,	167 1765. 379168	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [PSH, ACK] Seas575938 Ack=62673 Wine64128 Lens1469 [TCP segment of a reassembled PDU]	
,	168 1765. 379168	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Sec. 577398 Ack=52673 Win=54128 Lens1460 [TCP secret of a reassembled PDI]	
,	169 1765.379168	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [PSH, ACK] Sea=578858 Ack=62673 Win=64128 Len=1469 [TCP sement of a reassembled POul	
,	170 1765, 379168	10.1.7.100	10.1.26.151	TCP	1514 443 + 21379 [ACK] Sep-580318 Ack=62673 Win=64128 Len=1660 [TCP segment of a reassembled PDU]	
1					the set of a	

54 21379 + 443 [ACK] Seq=62673 Ack=583238 Win=2102272 Len=0 1514 443 + 21379 [ACK] Seq=583238 Ack=62673 Win=64128 Len=1460 [TCP segment of a reassembled PDU] D X

Which security issue is possibly indicated by this traffic capture?

10.1.7.100

10.1.26.151

A. An attempt at a DoS attack by a device acting as an unauthorized DNS server

TCP

TCP

- B. A port scan being run on the 10.1.7.0/24 subnet
- C. A command and control channel established with DNS tunneling

D. An ARP poisoning or man-in-the-middle attempt by the device at 94:60:d5:bf:36:40

Correct Answer: C

7172 1765.379235 10.1.26.151

7173 1765.379296 10.1.7.100

4 *Lab NIC

Refer to the scenario.

Introduction to the customer

You are helping a company add Aruba ClearPass to their network, which uses Aruba network infrastructure devices.

The company currently has a Windows domain and Windows CA. The Window CA issues certificates to domain computers, domain users, and servers such as domain controllers. An example of a certificate issued by the Windows CA is shown here.

Window this cert	Vindows does not have enough information to verify this certificate.				
Iss	ued to:	employe	ee1		
Iss	ued by:	intca.	acnsxte	st.com	
Val	id from	8/12/20	22 to 8/	12/2023	

	Details C	ertification Path	1	
ow:	<all></all>		Ŷ	
Field			Value	
E SN E SU AL	IIME Capabil bject Key Id ithority Key I	ities entifier Identifier	[1]SMIME Capab 066631b63703b KeyID=c39da74	lity: Object I 5f0ce8ceed28 dbe13586c8d
AL	L Distributio thority Infor	n Points mation Access	[1]CRL Distribution [1]Authority Info	Access: Acc
Subject Alternative Name		Other Name:Prin	cipal Name=e	
1.3.6.1.4.1.311.25.2		30 40 a0 3e 06 0a 2b 06 01 04		
Ke	v I kane		Dinital Signature	Kev Enrinher
-	and and the same of the	employee1@acr	nsxtest.com	
Prin FC82	2 Name = em	ployee1@acnsx	test.com	

The company is in the process of adding Microsoft Endpoint Manager (Intune) to manage its mobile clients. The customer is maintaining the on-prem AD for now and uses Azure AD Connect to sync with Azure AD.

Requirements for issuing certificates to mobile clients

The company wants to use ClearPass Onboard to deploy certificates automatically to mobile clients enrolled in Intune. During this process, Onboard should communicate with Azure AD to validate the clients. High availability should also be

provided for this scenario; in other words, clients should be able to get certificates from Subscriber 2 if Subscriber 1 is

down.

The Intune admins intend to create certificate profiles that include a UPN SAN with the UPN of the user who enrolled the device.

Requirements for authenticating clients

The customer requires all types of clients to connect and authenticate on the same corporate SSID.

The company wants CPPM to use these authentication methods:

1.

EAP-TLS to authenticate users on mobile clients registered in Intune

2.

TEAR, with EAP-TLS as the inner method to authenticate Windows domain computers and the users on them To succeed, EAP-TLS (standalone or as a TEAP method) clients must meet these requirements:

1.

Their certificate is valid and is not revoked, as validated by OCSP

2.

The client\\'s username matches an account in AD # Requirements for assigning clients to roles After authentication, the customer wants the CPPM to assign clients to ClearPass roles based on the following rules:

1.

Clients with certificates issued by Onboard are assigned the "mobile-onboarded" role

2.

Clients that have passed TEAP Method 1 are assigned the "domain-computer" role

3.

Clients in the AD group "Medical" are assigned the "medical-staff" role

4.

Clients in the AD group "Reception" are assigned to the "reception-staff" role The customer requires CPPM to assign authenticated clients to AOS firewall roles as follows:

1.

Assign medical staff on mobile-onboarded clients to the "medical-mobile" firewall role

2.

Assign other mobile-onboarded clients to the "mobile-other" firewall role

3.

Assign medical staff on domain computers to the "medical-domain" firewall role

4.

All reception staff on domain computers to the "reception-domain" firewall role

5.

All domain computers with no valid user logged in to the "computer-only" firewall role

6.

Deny other clients\\' access # Other requirements Communications between ClearPass servers and on-prem AD domain controllers must be encrypted. # Network topology For the network infrastructure, this customer has Aruba APs and Aruba gateways, which are managed by Central. APs use tunneled WLANs, which tunnel traffic to the gateway cluster. The customer also has AOS-CX switches that are not

managed by Central at this point.



ClearPass cluster IP addressing and hostnames A customer\\'s ClearPass cluster has these IP addresses:

1.

Publisher = 10.47.47.5

```
Subscriber 1 = 10.47.47.6

3.

Subscriber 2 = 10.47.47.7

4.

Virtual IP with Subscriber 1 and Subscriber 2 = 10.47.47.8

The customer\\'s DNS server has these entries

1.

cp.acnsxtest.com = 10.47.47.5

2.

cps1.acnsxtest.com = 10.47.47.6

3.

cps2.acnsxtest.com = 10.47.47.7

4.

radius.acnsxtest.com = 10.47.47.8

5.
```

onboard.acnsxtest.com = 10.47.47.8

You have created a role mapping policy as shown in the exhibits below.

Policy Mapping	Rules Summary	
Policy:		
Policy Name:	written-exam	
Description:		
Default Role:	[Other]	
Mapping Rules:		
Rules Evaluation Alg	orithm: Evaluate all	
Conditions	the second s	Role Name
1. (Certificate:Subj	ect-CN EQUALS ClearPass Intune Certificate Authority (Signing))	mobile-onboarded
2. (Authorization:U	IniversityAD:Groups EQUALS_IGNORE_CASE Medical)	medical-staff
3. (Authorization:U	IniversityAD:Groups EQUALS_IGNORE_CASE Reception)	reception-staff
4. (Authentication:	TEAP-Method-1-Status EQUALS Success)	domain-computer

What is one change that you need to make to this policy?

- A. In rule 1 change Subject-CN to Issuer-CN.
- B. Move rules 2 and 3 to the top of the list.

C. Change the rules evaluation mechanism to first applicable.

D. Change the default role to \\'mobile-onboarded*

Correct Answer: A

QUESTION 4

Refer to the scenario.

A customer requires these rights for clients in the "medical-mobile" AOS firewall role on Aruba Mobility Controllers (MCs):

1.

Permitted to receive IP addresses with DHCP

2.

Permitted access to DNS services from 10.8.9.7 and no other server

3.

Permitted access to all subnets in the 10.1.0.0/16 range except denied access to 10.1.12.0/22

4.

Denied access to other 10.0.0.0/8 subnets

5.

Permitted access to the Internet

6.

Denied access to the WLAN for a period of time if they send any SSH traffic

7.

Denied access to the WLAN for a period of time if they send any Telnet traffic

8.

Denied access to all high-risk websites

External devices should not be permitted to initiate sessions with "medical-mobile" clients, only send return traffic.

The exhibits below show the configuration for the role.

nedical-mobile	Policies	Bandwidth Ca	aptive Portal	More			Show Basic View
AME	RULES C	OUNT TYP	E	POLICY USAGE	DESCRIPT	TION	
lobal-saci	0	ses	sion	logon, guest, ap-ro	ie. stat –		
pprf-medical-mobile	Hs 1	ses	sion	medical-mobile	-		Ø 🖻
nedical-mobile	8	ses	sion	medical-mobile	-		
+							
nedical-mobile > P	Policy > apprf	-medical-mobile-sac	Rules			0	Drag rows to re-order
VERSION	SOURCE	DESTINATIO	N SERVI	CE/APPLICATION	ACTION	DESCRIPTION	
pv4	user	any	web-c	c-reputation high-risk	deny_opt	-	
medical-mobile	Policies	Bandwidth (Captive Portal	More			Show Basic View
NAME	RULES	COUNT TY	PE	POLICY USAGE	DESCRI	PTION	E
giobal-saci	0	se	ssion	logon, guest, ap-r	ole, stat		
apprf-medical-mobile	e-saci 1	se	ssion	medical-mobile	-		
medical-mobile	8	se	ssion	medical-mobile	-		Ø 🗇
+ medical-mobile >	Policy > med	ical-mobile Rules				Ū	Drag rows to re-order
IP VERSION	SOURCE	DESTINATION	SERVICE/APPI	LICATION ACTION	DES	CRIPTION	E
lpv4	any	any	svc-dhcp	permit	-		
lpv4	user	10.8.9.7	svc-dns	permit			
lpv4	user	10.1.12.0 255.255.252	.0 any	deny_opt	-		
lpv4	user	10.1.0.0 255.255.0.0	any	permit	-		
lpv4	user	10.0.0.0 255.0.0.0	any	deny_opt	-		
lpv4	user	any	svc-teinet	deny_opt	-		
lpv4	user	any	svc-ssh	deny_opt	-		

There are multiple issues with the configuration.

any

any

What is one of the changes that you must make to the policies to meet the scenario requirements? (In the options, rules in a policy are referenced from top to bottom. For example, "medical-mobile" rule 1 is "ipv4 any any svc-dhcp permit," and rule 8 is "ipv4 any any permit\\'.)

permit

A. In the "medical-mobile" policy, change the source in rule 1 to "user."

B. In the "medical-mobile" policy, change the subnet mask in rule 3 to 255.255.248.0.

any

C. In the "medical-mobile" policy, move rules 6 and 7 to the top of the list.

D. Move the rule in the "apprf-medical-mobile-sacl" policy between rules 7 and 8 in the "medical-mobile" policy.

Correct Answer: C

Ipv4

+

Rules 6 and 7 in the "medical-mobile" policy are used to deny access to the WLAN for a period of time if the clients send any SSH or Telnet traffic, as required by the scenario. However, these rules are currently placed below rule 5, which permits access to the Internet for any traffic. This means that rule 5 will override rules 6 and 7, and the clients will not be denied access to the WLAN even if they send SSH or Telnet traffic. To fix this issue, rules 6 and 7 should be moved to the top of the list, before rule 5. This way, rules 6 and 7 will take precedence over rule 5, and the clients will be denied access to the WLAN if they send SSH or Telnet traffic, as expected.

QUESTION 5

Refer to the scenario.

This customer is enforcing 802.1X on AOS-CX switches to Aruba ClearPass Policy Manager (CPPM). The customer wants switches to download role settings from CPPM. The "reception-domain" role must have these settings:

- -- Assigns clients to VLAN 14 on switch 1, VLAN 24 on switch 2, and so on.
- -- Filters client traffic as follows:
- -- Clients are permitted full access to 10.1.5.0/24 and the Internet
- -- Clients are denied access to 10.1.0.0/16 The switch topology is shown here:



How should you configure the VLAN setting for the reception role?

A. Assign a consistent name to VLAN 14, 24, or 34 on each access layer switch and reference that name in the enforcement profile VLAN settings.

B. Configure the enforcement profile as a downloadable role, but specify only the role name and leave the VLAN undefined. Then define a \\'reception\\' role with the correct VLAN setting on each individual access layer switch.

C. Assign a number-based ID to the access layer switches. Then use this variable in the enforcement profile VLAN settings: %(NAS-ID]4.

D. Create a separate enforcement profile with a different VLAN ID for each switch. Add all profiles to the profile list in the appropriate enforcement policy rule.

Correct Answer: A

According to the AOS-CX User Guide, one way to configure the VLAN setting for the reception role is to assign a consistent name to VLAN 14, 24, or 34 on each access layer switch and reference that name in the enforcement profile VLAN settings. This way, the switches can download the role settings from CPPM and apply the correct VLAN based on the name, rather than the ID. For example, the enforcement profile VLAN settings could be:

vlan-name reception-vlan

And the VLAN configuration on each switch could be:

vlan 14
name reception-vlan
exit

vlan 24
name reception-vlan
exit

vlan 34
name reception-vlan
exit

QUESTION 6

Refer to the scenario.

Introduction to the customer

You are helping a company add Aruba ClearPass to their network, which uses Aruba network infrastructure devices.

The company currently has a Windows domain and Windows CA. The Window CA issues certificates to domain computers, domain users, and servers such as domain controllers. An example of a certificate issued by the Windows CA is shown here.

Certificate Information		
Windows does not have enough information to verify this certificate.		
	aleune I	
Issued to: emp	poyee1	
Issued to: em	ca.acnsxtest.com	
Issued to: em Issued by: int Valid from 8/1	2/2022 to 8/12/2023	
Issued to: em Issued by: int Valid from 8/1	2/2022 to 8/12/2023	

	Details C	ertification Path	1	
ow:	<all></all>		Ŷ	
Field			Value	
E SN E SU AL	IIME Capabil bject Key Id ithority Key I	ities entifier Identifier	[1]SMIME Capab 066631b63703b KeyID=c39da74	lity: Object I 5f0ce8ceed28 dbe13586c8d
AL	L Distributio thority Infor	n Points mation Access	[1]CRL Distribution [1]Authority Info	Access: Acc
Subject Alternative Name		Other Name:Prin	cipal Name=e	
1.3.6.1.4.1.311.25.2		30 40 a0 3e 06 0a 2b 06 01 04		
Ke	v I kane		Dinital Signature	Kev Enrinher
-	and and the same of the	employee1@acr	nsxtest.com	
Prin FC82	2 Name = em	ployee1@acnsx	test.com	

The company is in the process of adding Microsoft Endpoint Manager (Intune) to manage its mobile clients. The customer is maintaining the on-prem AD for now and uses Azure AD Connect to sync with Azure AD.

Requirements for issuing certificates to mobile clients

The company wants to use ClearPass Onboard to deploy certificates automatically to mobile clients enrolled in Intune. During this process, Onboard should communicate with Azure AD to validate the clients. High availability should also be

provided for this scenario; in other words, clients should be able to get certificates from Subscriber 2 if Subscriber 1 is

down.

The Intune admins intend to create certificate profiles that include a UPN SAN with the UPN of the user who enrolled the device.

Requirements for authenticating clients

The customer requires all types of clients to connect and authenticate on the same corporate SSID.

The company wants CPPM to use these authentication methods:

1.

EAP-TLS to authenticate users on mobile clients registered in Intune

2.

TEAR, with EAP-TLS as the inner method to authenticate Windows domain computers and the users on them To succeed, EAP-TLS (standalone or as a TEAP method) clients must meet these requirements:

1.

Their certificate is valid and is not revoked, as validated by OCSP

2.

The client\\'s username matches an account in AD # Requirements for assigning clients to roles After authentication, the customer wants the CPPM to assign clients to ClearPass roles based on the following rules:

1.

Clients with certificates issued by Onboard are assigned the "mobile-onboarded" role

2.

Clients that have passed TEAP Method 1 are assigned the "domain-computer" role

3.

Clients in the AD group "Medical" are assigned the "medical-staff" role

4.

Clients in the AD group "Reception" are assigned to the "reception-staff" role The customer requires CPPM to assign authenticated clients to AOS firewall roles as follows:

1.

Assign medical staff on mobile-onboarded clients to the "medical-mobile" firewall role

2.

Assign other mobile-onboarded clients to the "mobile-other" firewall role

3.

Assign medical staff on domain computers to the "medical-domain" firewall role

4.

All reception staff on domain computers to the "reception-domain" firewall role

5.

All domain computers with no valid user logged in to the "computer-only" firewall role

6.

Deny other clients access # Other requirements Communications between ClearPass servers and on-prem AD domain controllers must be encrypted. # Network topology For the network infrastructure, this customer has Aruba APs and Aruba gateways, which are managed by Central. APs use tunneled WLANs, which tunnel traffic to the gateway cluster. The customer also has AOS-CX switches that are not

managed by Central at this point.



ClearPass cluster IP addressing and hostnames A customer\\'s ClearPass cluster has these IP addresses:

1.

Publisher = 10.47.47.5

```
Subscriber 1 = 10.47.47.6
3.
Subscriber 2 = 10.47.47.7
4.
Virtual IP with Subscriber 1 and Subscriber 2 = 10.47.47.8
The customer\\'s DNS server has these entries
1.
cp.acnsxtest.com = 10.47.47.5
2.
cps1.acnsxtest.com = 10.47.47.6
3.
cps2.acnsxtest.com = 10.47.47.7
4.
radius.acnsxtest.com = 10.47.47.8
5.
onboard.acnsxtest.com = 10.47.47.8
You have imported the root certificate for the Windows CA to the ClearPass CA Trust list.
Which usages should you add to it based on the scenario requirements?
A. EAP and AD/LDAP Server
B. LDAP and Aruba infrastructure
C. Radsec and Aruba infrastructure
D. EAP and Radsec
```

Correct Answer: A

QUESTION 7

Refer to the scenario.

A customer is migrating from on-prem AD to Azure AD as its sole domain solution. The customer also manages both wired and wireless devices with Microsoft Endpoint Manager (Intune).

The customer wants to improve security for the network edge. You are helping the customer design a ClearPass deployment for this purpose. Aruba network devices will authenticate wireless and wired clients to an Aruba ClearPass Policy Manager (CPPM) cluster (which uses version 6.10).

The customer has several requirements for authentication. The clients should only pass EAP-TLS authentication if a query to Azure AD shows that they have accounts in Azure AD. To further refine the clients\\' privileges, ClearPass also should use information collected by Intune to make access control decisions.

Assume that the Azure AD deployment has the proper prerequisites established.

You are planning the CPPM authentication source that you will reference as the authentication source in 802.1X services.

How should you set up this authentication source?

A. As Kerberos type

B. As Active Directory type

C. As HTTP type, referencing the Intune extension

D. AS HTTP type, referencing Azure AD\\'s FODN

Correct Answer: D

An authentication source is a configuration element in CPPM that defines how to connect to an external identity provider and retrieve user or device information . CPPM supports various types of authentication sources, such as Active

Directory, LDAP, SQL, Kerberos, and HTTP .

To authenticate wireless and wired clients to Azure AD, you need to set up an authentication source as HTTP type, referencing Azure AD\\'s FQDN. This type of authentication source allows CPPM to use REST API calls to communicate with

Azure AD and validate the user or device credentials . You also need to configure the OAuth 2.0 settings for the authentication source, such as the client ID, client secret, token URL, and resource URL .

To use information collected by Intune to make access control decisions, you need to set up another authentication source as HTTP type, referencing the Intune extension . This type of authentication source allows CPPM to use REST API

calls to communicate with Intune and retrieve the device compliance status . You also need to configure the OAuth 2.0 settings for the authentication source, such as the client ID, client secret, token URL, and resource URL .

QUESTION 8

Refer to the scenario.

Introduction to the customer

You are helping a company add Aruba ClearPass to their network, which uses Aruba network infrastructure devices.

The company currently has a Windows domain and Windows CA. The Window CA issues certificates to domain computers, domain users, and servers such as domain controllers. An example of a certificate issued by the Windows CA is shown here.

Certificate Information			
Windows of this certifi	ioes not hav cate.	e enough information	to verify
Issue	d to: employ	ee1	
Issue	d by: intca.	acnsxtest.com	
Valid	from 8/12/2	022 to 8/12/2023	

A Certificate

General Details Certification Path Show: <All> 4 Field Value SMIME Capabilities [1]SMIME Capability: Object I... Subject Key Identifier 066631b63703b5f0ce8ceed28... Authority Key Identifier KeyID=c39da74dbe13586c8d... CRL Distribution Points [1]CRL Distribution Point: Distr... Authority Information Access [1] Authority Info Access: Acc... Subject Alternative Name Other Name:Principal Name=e... 1.3.6.1.4.1.311.25.2 30 40 a0 3e 06 0a 2b 06 01 04... Kevlisane **Dinital Signature** Key Enginher Other Name: Principal Name=employee1@acnsxtest.com RFC822 Name = employee 1@acnsxtest.com Edit Properties... Copy to File OK

×

The company is in the process of adding Microsoft Endpoint Manager (Intune) to manage its mobile clients. The customer is maintaining the on-prem AD for now and uses Azure AD Connect to sync with Azure AD.

Requirements for issuing certificates to mobile clients

The company wants to use ClearPass Onboard to deploy certificates automatically to mobile clients enrolled in Intune. During this process, Onboard should communicate with Azure AD to validate the clients. High availability should also be

provided for this scenario; in other words, clients should be able to get certificates from Subscriber 2 if Subscriber 1 is down.

The Intune admins intend to create certificate profiles that include a UPN SAN with the UPN of the user who enrolled the device.

Requirements for authenticating clients

The customer requires all types of clients to connect and authenticate on the same corporate SSID.

The company wants CPPM to use these authentication methods:

1.

EAP-TLS to authenticate users on mobile clients registered in Intune

2.

TEAR, with EAP-TLS as the inner method to authenticate Windows domain computers and the users on them To succeed, EAP-TLS (standalone or as a TEAP method) clients must meet these requirements:

1.

Their certificate is valid and is not revoked, as validated by OCSP

2.

The client\\'s username matches an account in AD # Requirements for assigning clients to roles After authentication, the customer wants the CPPM to assign clients to ClearPass roles based on the following rules:

1.

Clients with certificates issued by Onboard are assigned the "mobile-onboarded" role

2.

Clients that have passed TEAP Method 1 are assigned the "domain-computer" role

3.

Clients in the AD group "Medical" are assigned the "medical-staff" role

4.

Clients in the AD group "Reception" are assigned to the "reception-staff" role The customer requires CPPM to assign authenticated clients to AOS firewall roles as follows:

1.

Assign medical staff on mobile-onboarded clients to the "medical-mobile" firewall role

2.

Assign other mobile-onboarded clients to the "mobile-other" firewall role

3.

Assign medical staff on domain computers to the "medical-domain" firewall role

4.

All reception staff on domain computers to the "reception-domain" firewall role

5.

All domain computers with no valid user logged in to the "computer-only" firewall role

6.

Deny other clients access # Other requirements Communications between ClearPass servers and on-prem AD domain controllers must be encrypted. # Network topology For the network infrastructure, this customer has Aruba APs and Aruba gateways, which are managed by Central. APs use tunneled WLANs, which tunnel traffic to the gateway cluster. The customer also has AOS-CX switches that are not

managed by Central at this point.



ClearPass cluster IP addressing and hostnames A customer\\'s ClearPass cluster has these IP addresses:

1.

```
Publisher = 10.47.47.5
```

2.

```
Subscriber 1 = 10.47.47.6
```

3.

```
Subscriber 2 = 10.47.47.7
```

4.

Virtual IP with Subscriber 1 and Subscriber 2 = 10.47.47.8 The customer\\'s DNS server has these entries

1.

cp.acnsxtest.com = 10.47.47.5

2.

cps1.acnsxtest.com = 10.47.47.6

3.

```
cps2.acnsxtest.com = 10.47.47.7
```

4.

```
radius.acnsxtest.com = 10.47.47.8
```

5.

onboard.acnsxtest.com = 10.47.47.8 You cannot see flow attributes for wireless clients. What should you check?

A. Deep packet inspection is enabled on the role to which the Aruba APs assign the wireless clients.

B. Firewall application visibility is enabled on the Aruba gateways, and the gateways have been rebooted.

C. Gateway IDS/IPS is enabled on the Aruba gateways, and the gateways have been rebooted.

D. Deep packet inspection is enabled on the Aruba Aps, and the APs have been rebooted.

Correct Answer: A

QUESTION 9

Refer to the scenario.

A customer has asked you to review their AOS-CX switches for potential vulnerabilities. The configuration for these switches is shown below:

hostname Access-Switch-\$\$ ntp authentication-key 1 sha1 ciphertext AQBapYn45h7mDzxcLhAYWBH6biegegFASS1kvTQPPgICEfaLCAAAAMIb48QNRhSg ntp trusted-key 1 ntp server pool.ntp.org minpoll 4 maxpoll 4 iburst key-id 1 ntp enable ntp authentication radius-server host rad.example.com tis tacacs-server host rad.example.com aaa authentication login ssh group tacacs local aaa authentication login telnet group tacacs local aaa accounting port-access start-stop interim group radius radius dyn-authorization enable radius dyn-authorization client rad.example.com tls ssh server vrf default ssh server vrf mgmt teinet server vrf default teinet server vrf mgmt crypto pki application radsec-client certificate device-identity crypto pki ta-profile privateca ta-certificate -BEGIN CERTIFICATE MIIGAZCCA+ugAwIBAgIUEVfsxopuixT20HZDJ/UYAAbYsdowDOYJKoZIhvcNAOEL BQAwgYgxCzAJBgNVBAYTALVTMRMwEQYDVQQIDApDYWxpZm9ybmlhMRIwEAYDVQQH DAlTdW5ueX2hbGUxHDAaBgNVBAcME0FydWJhIFRyYWluaW5nIExhYnMxEzARBgNV BASMCKFDT1NYIFR1c3QxHTAbBgNVBAMMFHJvb3RjYS5hY25zeHR1c3QuY29tMB4X DTIYMTEYMjIwNTQxOFoXDTMYMTEXOTIwNTQxOFowgYgxCzAJBgNVBAYTA1VTMRMw EQYDVQQIDApDYWxpZm9ybmlhMRIwEAYDVQQHDAlTdW5ueXZhbGUxHDAaBgNVBAoM E0FydWJh1FRy1WluaW5n1Exh1nMxEzARBgNVBAsMCkFDTlNY1FRlc30xHTAbBgNV BAMMFHJvb3RjYS5hY25zeHRlc3QuY29tMIICIjANBgkqhkiG9w0BAQEFAAOCAg8A MIICCgKCAgEAsiUzsBkJcUgcdsbRyoLd0ZNqpcXfphk2VsSzZngP1LCu3lea3OHU V9GchhJXOQaI3HDUTcLp4b5If63z4nKzA36T6tyWXOe0PSgUjy+61XXNA9Rp5DKc CyoY9F8spVJiEo2n2hqL4m/DLFY1hxo522UKav/08DMfzD/yVUzGNiQKDP/L7ivk CWF+15WIGSTH101/rgIM/+W20n58aDx5f1AwaH9bYdRTwFMuklUXQ/f8+7+9F3ju B95Mt4b77RaWWj6CkW9k8WhmyjE7MMPSHtuJ4t3evh7jd/lTkm52Og/V8kvNTtW5 fif71kWLevmlLlvcxYnj+S3CWhAFdaR7S33a6xwdZxCDOLfPB6L1oOnKe0VM4mO2 l0ZtJNPFueBt16BRolR+IMANQkj3B21B0whSLHF6JmLr0L6y/edV8khIUhMxofIp JKeSw38TDm3t1k98PBCOaLj5s4tYJRxcZLDnrg7Oz1e37sxENYoBtgRp77cdfePr cP/sp8U66gti2F0ijkU6k37moL3sMs2uHgC0YWpfRyFI09BWCRbxmy81UePiS1sW 0go0aPDr35W/0443I/z6A+q/ciwVrALS+zEfHbMDFxo4VMygJttaiW205GAQQSHj redcmcEcPMwkgbzaELtAgYOWGkB56T/XifRLVxneYU8woAEZwmscI3kCAwEAAANj MgEwHqYDVR0oBBYEFGXCH/z475pdNkIHhjDxFCfjz8khMB8GA1UdIwqYMBaAFGXC H/z475pdNKIHhjDxFCfjz8khMA8GA1UdeweB/wQFMAMBAf8wDgYDVR0FAQH/BAQD AgGGMA0GCSqGSIb3DQEBcwUAA4ICAQB5TGIspaamHQXtsnWgmux6PANdEdPZ0Ele wDnpUxkVbeSPr9wl8luRJMptR025rwVwEtrM8t5JD4jAK+d0usr4TDKwWqPPqFi0 F5svFK9aEJ59ceD+eDWl4LAJJi3zjb92BuBa3LkaP7kyTlsnI0+opN+vdV43LNXh T23xEmLC90Uolq3bb8zpkWXieeFwSo2BafFMscPdf75DVY+x+QolSgpjbWBAS80B jRdZHrKmsqcrIG+37bixqaFj9nMzWpX0n2HfKCVcl6uk2pDNbiYVbU3k9b/ZWQmW DRYkAuR8dFBN31KDyQo86T/chT/DY77FoStfg0gDZEj3EqaM76rf8S2z1GCsrfkp Crp5oKF6jiOCi2EcidkZSsmbzAHWKXNaF7vWRj00ivpdEFRkIVu/kce902KaxNYd sIK1Nh7qG4pcQqhFfDddFD9vXvjOwKnXKkKppUpN6w+Quc+jhqFpF8GVF0y7ayZo z5cz5yEaVXtbfXRhVSg9oooq7xImBT14SK1pyrHsj8sD67Og3zgnNot/v8fHh13O zUtBe4UPGWfraO4gkHH3mbb1qYeJnxKpMz56A0APBkKV9icYOuTQOsHk6bA91G+Q sjqyWwKApf7RB41HjF+7FfMU6UJnZBm75zQ89CPAPCoVeJ6fNNr/aO+3VrNz4j91 Nr63M6xe END CERTIFICATE-END_OF_CERTIFICATE vsf member 1 type jl666a dhcpv4-snooping vlan 1 vlan 2 vlan 4 dhcpv4-snooping spanning-tree Interface mgmt no shutdown aaa authentication port-access dot1x authenticator enable interface lag 1 no shutdown no routing vian trunk native 1 vlan trunk allowed 2.4 dhcpv4-snooping trust Interface 1/1/1-1/1/24 no shutdown no routing vlan access 4 aaa authentication port-access dot1x authenticator enable interface vlan 1 interface vlan 2 ip address 10.1.2.1/24 ip route 0.0.0.0/0 10.1.2.254 ip dns domain-name example.com ip dns server-address 10.1.1.9 https-server vrf default https-server vrf mgmt

What is one recommendation to make?

A. Let the RADIUS server configure VLANs on LAG 1 dynamically.

B. Use MDS instead of SHA1 for the NTP authentication key.

C. Encrypt the certificate in the TA-profile.

D. Create a control plane ACL to limit the sources that can access the switch with SSH.

Correct Answer: D

According to the AOS-CX Switches Multiple Vulnerabilities1, one of the vulnerabilities (CVE-2021-41000) affects the SSH service on AOS-CX switches. This vulnerability allows an unauthenticated remote attacker to cause a denial-of-service condition on the switch by sending specially crafted SSH packets. The impact of this vulnerability is high, as it could result in a loss of management access and network disruption. Therefore, one recommendation to make is to create a control plane ACL to limit the sources that can access the switch with SSH. This way, the switch can filter out unwanted or malicious SSH traffic and reduce the risk of exploitation.

QUESTION 10

A customer requires a secure solution for connecting remote users to the corporate main site. You are designing a clientto-site virtual private network (VPN) based on Aruba VIA and Aruba Mobility Controllers acting as VPN Concentrators (VPNCs). Remote users will first use the VIA client to contact the VPNCs and obtain connection settings.

The users should only be allowed to receive the settings if they are the customer\\'s "RemoteEmployees" AD group. After receiving the settings, the VIA clients will automatically establish VPN connections, authenticating to CPPM with certificates.

What should you do to help ensure that only authorized users obtain VIA connection settings?

A. Set up the VPNCs\\' VIA web authentication profile to use CPPM as the authentication server; set up a service on CPPM that uses AD as the authentication source.

B. Set up the VPNCs\\' VIA web authentication profile to use an AD domain controller as the LDAP server.

C. Set up the VPNCs\\' VIA connection profile to use two authentication profiles, one RADIUS profile to CPPM and one LDAP profile to AD.

D. Set up the VPNCs\\' VIA connection profile to use one authentication profile, which is set to the AD domain controller\\'s hostname.

Correct Answer: A

The VIA web authentication profile is used to authenticate the users who want to download the VIA connection settings from the VPNCs. The VPNCs can use either an internal database or an external server (such as RADIUS or LDAP) as the authentication source for this profile. To ensure that only authorized users obtain VIA connection settings, you should use CPPM as the external server and configure a service on CPPM that uses AD as the authentication source. This way, you can leverage the role mapping and enforcement features of CPPM to check if the users belong to the "RemoteEmployees" AD group and grant or deny them access accordingly The other options are not correct because they do not allow you to verify the users\\' AD group membership before providing them with VIA connection settings. Option B would only check the users\\' credentials against AD, but not their group membership. Option C would only apply to the VPN connection phase, not the VIA connection settings phase. Option D would not work because the VPNCs do not support LDAP as an authentication source for VIA connection profiles

Reference:

1: Configuring the VIA Controller - Aruba, section "Configuring VIA Web Authentication Profile"

2: Configuring VIA Connection Profile - Aruba, section "Configuring Authentication Profile"

QUESTION 11

The customer needs a way for users to enroll new wired clients in Intune. The clients should have limited access that only lets them enroll and receive certificates. You plan to set up these rights in an AOS-CX role named "provision."

The customer\\'s security team dictates that you must limit these clients\\' Internet access to only the necessary sites. Your switch software supports IPv4 and IPv6 addresses for the rules applied in the "provision" role.

What should you recommend?

A. Configuring the rules for the "provision" role with IPv6 addresses, which tend to be more stable

B. Enabling tunneling to the MCs on the "provision" role and then setting up the privileges on the MCs

C. Configuring the "provision" role as a downloadable user role (DUR) in CPPM

D. Assigning the "provision" role to a VLAN and then setting up the rules within a Layer 2 access control list (ACL)

Correct Answer: C

This is because a downloadable user role (DUR) is a feature that allows the switch to use a central ClearPass server to download user-roles to the switch for authenticated users12 A DUR can contain various attributes and rules that define the access level and privileges of the user, such as VLAN, ACL, PoE, reauthentication period, etc3 A DUR can also be customized and updated on the ClearPass server without requiring any changes on the switch1 A DUR can be used to create a "provision" role that allows users to enroll new wired clients in Intune. The "provision" role can have limited access that only lets them enroll and receive certificates from the Intune service. The "provision" role can also have rules that restrict the Internet access of the users to only the necessary sites, such as the Intune portal and the certificate authority. The rules can be based on IPv4 or IPv6 addresses, depending on the network configuration and preference2 A. Configuring the rules for the "provision" role with IPv6 addresses, which tend to be more stable. This is not a valid recommendation because it does not address how to create and apply the "provision" role on the switch. Moreover, IPv6 addresses do not necessarily tend to be more stable than IPv4 addresses, as both protocols have their own advantages and disadvantages4

B. Enabling tunneling to the MCs on the "provision" role and then setting up the privileges on the MCs. This is not a valid recommendation because it does not explain how to enable tunneling or what MCs are. Moreover, tunneling is a technique that encapsulates one network protocol within another, which adds complexity and overhead to the network communication5

D. Assigning the "provision" role to a VLAN and then setting up the rules within a Layer 2 access control list (ACL). This is not a valid recommendation because it does not explain how to assign a role to a VLAN or how to create a Layer 2 ACL on the switch. Moreover, a Layer 2 ACL is limited in its filtering capabilities, as it can only match on MAC addresses or Ethernet types, which might not be sufficient for restricting Internet access to specific sites

QUESTION 12

Refer to the scenario.

A customer is using an AOS 10 architecture with Aruba APs and Aruba gateways (two per site). Admins have implemented auto-site clustering for gateways with the default gateway mode disabled. WLANs use tunneled mode to the

gateways.

The WLAN security is WPA3-Enterprise with authentication to an Aruba ClearPass Policy Manager (CPPM) cluster VIP. RADIUS communications use RADIUS, not RadSec.

For which devices does CPPM require network device entries?

- A. Forgateways\\' actual IP addresses and dynamic authorization VRRP addresses
- B. For gateways\\' actual IP addresses and AP clusters\\' virtual IP addresses for dynamic authorization
- C. For APs\\' actual IP addresses
- D. ForAP clusters\\'virtual IP addresses

Correct Answer: A

ClearPass Policy Manager (CPPM) requires network device entries for the devices that communicate with it using RADIUS or TACACS+ protocols. In this scenario, the gateways are the devices that act as RADIUS clients and send authentication requests to CPPM for the WLAN users. Therefore, CPPM needs to have network device entries for the gateways\\' actual IP addresses and the shared secrets that match the ones configured on the gateways.

Additionally, CPPM also requires network device entries for the gateways\\' dynamic authorization VRRP addresses, which are used for sending CoA messages to the gateways. CoA messages are used to change the attributes or status of a user session on the gateways without requiring re-authentication. For example, CPPM can use CoA to apply policies, roles, or bandwidth limits based on various conditions. To enable VRRP IP addresses for dynamic authorization, you need to set up gateway clusters manually and assign a VRRP VLAN and a VRRP IP address to each cluster. This way, CPPM can use the VRRP IP address as the NAS IP address for RADIUS communications and CoA messages. The VRRP IP address will remain the same even if the active gateway in the cluster changes due to a failover event, ensuring seamless operations.