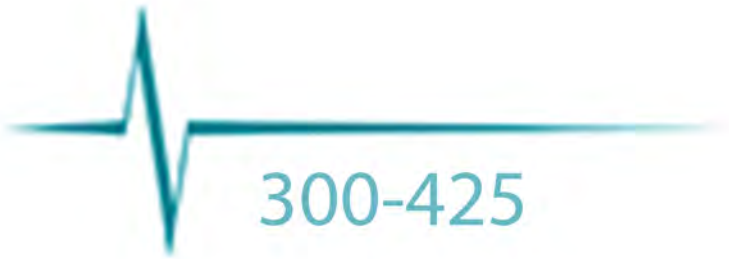
Practice Exam Questions



Designing Cisco Enterprise Wireless Networks (ENWLSD)

EXAMKILLER

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Cisco

Exam 300-425

Designing Cisco Enterprise Wireless Networks (ENWLSD)

Version: 8.0

[Total Questions: 114]

Question No : 1

During a client roaming event, which device is responsible for communicating the new Layer 2 EID mapping of a wireless supplicant to the fabric domain?

A. WLC
B. BN
C. CP2
D. CP1

Answer: A

Explanation: https://www.cisco.com/c/dam/en/us/td/docs/cloud-systems-management/network-automation-and-management/dna-center/deploy-guide/cisco-dna-center-sd-access-wl-dg.pdf

Question No : 2

A wireless engineer is hired to design a network for a technology company. The company campus has four buildings and a warehouse with access points that provide full wireless coverage as well as a pair of WLCs located in the core of the network. Which type of wireless architecture is being used?

A. unified deployment
B. autonomous deployment
C. centralized deployment
D. distributed deployment

Answer: C

Question No : 3

A technician connects a Cisco Aironet 3700 Series access point to a switch and realizes that the AP is coming up with 3x3 MIMO. Which reason explains this behavior?

A. A redundant power supply is unavailable on the switch.
B. The switch is 802.3af capable.
C. The AP is getting power from a power injector.
D. The switch is PoE+ capable.

Answer: D

Question No : 4

A wireless engineer must optimize RF performance for multiple buildings with multiple types of construction and user density. Which two actions must be taken? (Choose two.)

A. Configure Flexconnect groups for each building.
B. Configure WMM profiles for each building.
C. Configure AP groups for each area type.
D. Configure RF profiles for each area type.
E. Enable DTPC on the network.

Answer: C,D

Explanation: https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-10/config-guide/b_cg810/configuring_ap_groups.html

Question No : 5

An engineer has designed an anchor redundancy for guest clients connecting to SSID with auto-anchor configured. After adding a second Anchor WLC under the SSID mobility anchor list, clients are load-balanced between existing and new anchors instead of having one anchor as active and the other one as standby. Which feature should be included in the design that will be configured on the WLC running

8.1 or above to ensure anchor redundancy?

A. Auto-Anchor Foreign Mapping
B. AP groups
C. Guest Anchor Priority
D. 802.11r

Answer: C

Question No : 6

A wireless engineer is designing a wireless network to support real-time applications over wireless. Which IEEE protocol must the engineer enables on the WLC so that the number of packets that are exchanged between an access point and client are reduced and fast roaming occurs?

A. 802.11w
B. 802.11r
C. 802.11i
D. 802.11k

Answer: D

Question No : 7

An engineer must create data link redundancy for the company's Cisco Wireless LAN controller. The engineer has decided to configure LAG-based redundancy instead of port-based redundancy. Which three features of LAG-based redundancy influenced this decision? (Choose three.)

A. Packets are always sent out on the same port they are received on.
B. All interface traffic passes as long as one port is up.
C. The same port has multiple untagged dynamic interfaces.
D. Interface connection to two separate nonstacked switches is available.
E. Full bandwidth of all links is available.
F. Ports are grouped into multiple LAGs.

Answer: A,B,F

Explanation:

https://community.cisco.com/t5/wireless-mobility-documents/lag-link-aggregation/ta-p/3128669

Question No : 8

Clustering Cisco WLCs into a single RF group enables the RRM algorithms to scale beyond the capabilities of a single Cisco WLC. How many WLC and APs in an RF group can the controller software scale up to in WLC release 8.9 depending on the platform?

A. up to 20 WLCs and 1000 APs
B. up to 20 WLCs and 3000 APs
C. up to 20 WLCs and 4000 APs
D. up to 20 WLCs and 6000 APs

Answer: D

Explanation:

- Controller software supports up to 20 controllers and 6000 access points in an RF group.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-9/config-guide/b_cg89/radio_resource_management.html

Question No : 9

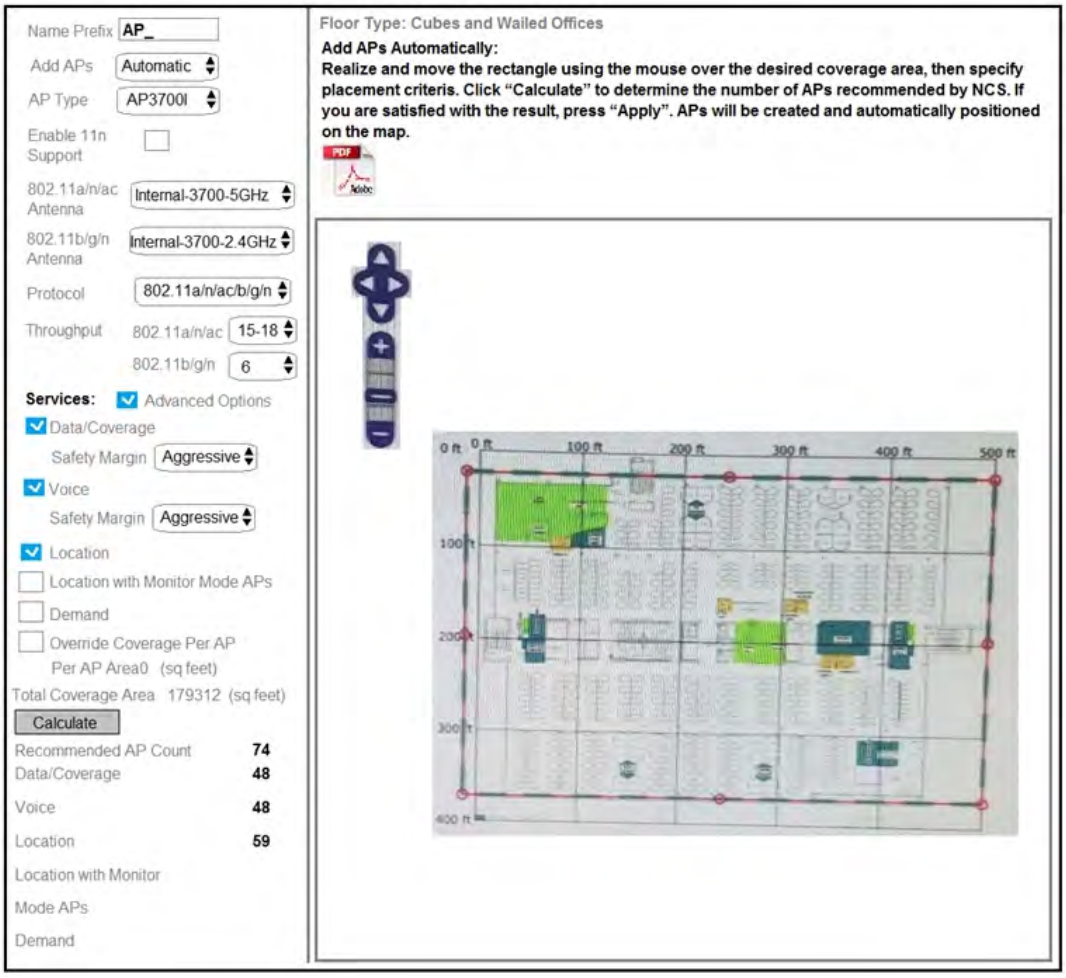
An enterprise is using a Cisco AireOS controller and Wi-Fi 6 APs. The controller is installed in the head office, and the employees primarily use Apple OS devices. The APs broadcast WLAN ENT-WLAN406558520-1 for the employees and a guest WLAN with similar naming. What needs to be enabled on the controller to optimize roaming?

A. Aggregated Probe Response Optimization
B. Fast SSID Changing
C. Load Balancing Window
D. Client Timers

Answer: B

Question No : 10

Refer to the exhibit.



Which two statements about Cisco Prime Infrastructure are true? (Choose two.)

A. It presents the recommended number of APs for the selected coverage area based on the selections made.
B. Planning mode requires a special license in Cisco Prime Infrastructure.
C. It shows the map editor feature in Cisco Prime Infrastructure.
D. Controllers must be synchronized with Cisco Prime Infrastructure for planning mode to work.
E. It shows the planning mode feature in Cisco Prime Infrastructure.

Answer: D,E

Question No : 11

A customer has restricted the AP and antenna combinations for a design to be limited to one model integrated antenna AP for carpeted spaces and one model external antenna AP with high gain antennas for industrial, maintenance, or storage areas. When moving between a carpeted area to an industrial area, the engineer forgets to change survey devices and surveys several APs. Which strategy will

reduce the negative impact of the design?

A. Resurvey and adjust the design.
B. Deploy unsurveyed access points to the design.
C. Deploy the specified access points per area type.
D. Increase the Tx power on incorrectly surveyed access points.

Answer: A

Question No : 12

An engineer must perform an assessment of a customer LAN for a future IEEE 802.11ac Wave 2 wireless deployment All access switches are Fast Ethernet-Capable only, and the wired infrastructure between existing APs and access switches is based on the CAT 6A standard. Which two actions provide maximum support of Cisco 3800 Series access points? (Choose two.)

A. Replace the existing switches with mGig switches.
B. Replace the existing switches with gigabit switches with 10G uplinks.
C. Ensure that cable distances between access switches and APs are not longer than 100 meters.
D. Replace the existing wiring infrastructure with the CAT-7E wiring standard,
E. Ensure that cable distances between access switches and APs are not longer than 55 meters.

Answer: A,C

Question No : 13

An engineer must decide the cell overlap for a wireless voice deployment. Which Cisco measurement recommendation should be considered?

A. The edge of the cell should be -67 dBm.
B. The edge of the cell should be below 35 RSSI.
C. The measurement should be done on the 2.4-GHz band.
D. One AP should be deployed per 3000 square feet.

Answer: A

Question No : 14

A customer called with a requirement that internal clients must be on different subnets depending on the building they are in. All access points are operating in local mode and will not be modified, and this is a single controller solution. Which design approach creates the desired result?

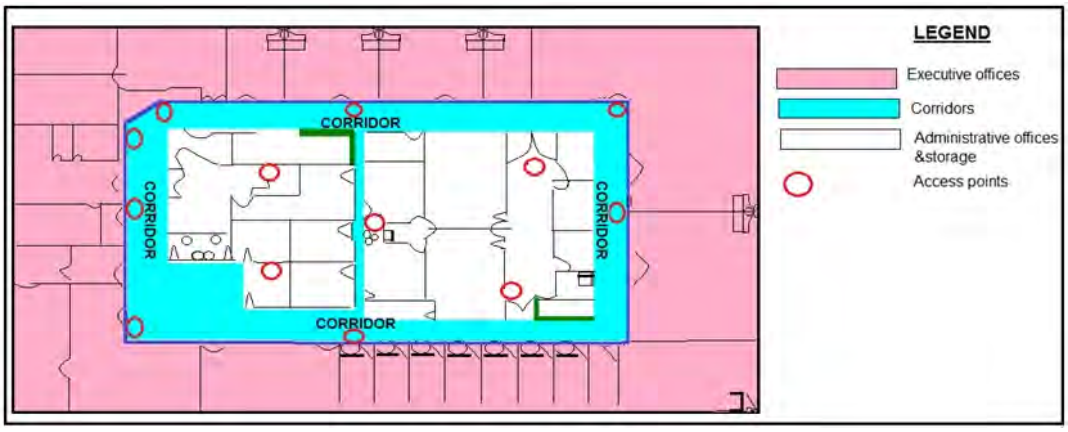
A. Create AP groups for each desired location, map the correct VLANs to the internal SSID, and add the access points for that location.
B. Create an SSID place it to the desired VLAN under WLANs and configure 802.1x in ISE to assign the correct VLAN based on the SSID from which the client is authenticating
C. Create FlexConnect groups, place the access points in, and set the correct VLAN to SSID mapping based on location.
D. Create mobility anchors for the SSID and on the controller under the internal SSID create a foreign map to the desired VLAN based on location.

Answer: A

Explanation: https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-vlan/71477-ap-group-vlans-wlc.html

Question No : 15

Refer to the exhibit.



What is the main reason why the Wi-Fi design engineer took a different approach than installing the APs in the offices, even though that installation provides better coverage?

A. aesthetics
B. transmit power considerations
C. antenna gain

D. power supply considerations

Answer: B

Explanation:

https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/RFDesign.html#wp1000551

Question No : 16

An engineer has configured guest anchoring for a newly created SSD however, the mobility tunnels are not up, and EPING is failing from the foreign WLC to the anchor WLC. Which traffic flow must be allowed at the firewall to enable the communication?

A. UDP port 16666
B. IP protocol 97
C. UDP port 97
D. TCP port 97

Answer: A

Question No : 17

During a post-deployment site Survey, issues are found with non wi-Fi interference. What should the engineer use to identify the source of the Interference?

A. Network analysis module
B. Wireless intrusion prevention
C. Wireshark
D. Cisco spectrum expert

Answer: D

Question No : 18

An engineer performs a Layer 1 survey by using Metegeek chanalyzer only on the current operating channel. Which operating mode is configured for a Cisco CleanAIR AP?

A. Local
B. Sniffer
C. Monitor
D. SE-connect

Answer: A

Question No : 19

A customer celled with a requirement that internal clients must be on different subnets depending on the building they are in, AH access points are operating in local mode and will not be modified, and this is a single controller solution. Which design approach creates the desired result?

A. Create an SSID, place it to the desired VLAN under WLANs, and configure 802 lx in ISE to assign the correct VLAN based on the SSID from which the client is authenticating.
B. Create FlexConnecI groups, place the access points in. and sat the correct VLAN to SSID mapping based on location.
C. Create AP groups for each desired location, map the correct VLANs to the internal SSID, and add the access points for that location.
D. Create mobility anchors for the SSID, and on the controller under the internal SSID. create a foreign map to the desired VLAN based on location.

Answer: C

Question No : 20

What causes the most signal attenuation, based on the wireless design tools?

A. cinder block wall
B. metal door
C. glass wall
D. office window

Answer: B

Question No : 21

APs in a remote office recently have been converted from local mode to FlexConnect to take advantage of the local switching. After the change, remote wireless users report voice quality issues and bad quality on wireless IP phones while roaming. A debug is performed, and it is noticed that the 802.11r Fast Transition is not working as expected, like on local mode AP, though the same WLAN configuration is in place. What is the cause of the issue regarding the FlexConnect APs?

A. They do not support 802.11r FT.
B. They must be added into AP groups along with a common RF profile.
C. They must be in a FlexConnect group to support 802.11r FT.
D. They must be added to AP groups to support fast roaming methods.

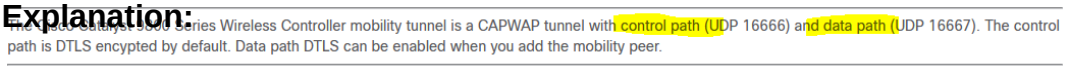
Answer: A
Reference:
https://www.cisco.com/c/dam/en/us/td/docs/wireless/controller/technotes/80211r-ft/b-80211r-dg.html

Question No : 22

Which statement about the 9800 Series Wireless Controller mobility tunnel on a Cisco Catalyst 9800 controller is true?

A. It is an IPsec tunnel with control path only.
B. It is a CAPWAP tunnel with data path only.
C. It is a CAPWAP tunnel with control path and data path.
D. It is an IPsec tunnel with control path and data path.

Answer: C
Explanation:



https://www.cisco.com/c/en/us/td/docs/wireless/controller/9800/config-guide/b_wl_16_10_cg/mobility.html

Question No : 23

An engineer must configure the virtual IP address on multiple controllers in a mobility group. Which rule must the engineer follows to ensure proper roaming?

A. Ensure that the DNS entry is tied to the virtual IP address of the WLC.

B. Use a unique IP address for each WLC.
C. Ensure that the DNS Host Name field is defined.
D. Use the same IP address for each WLC.

Answer: A

Question No : 24

An engineer is performing a predictive wireless design for a medical treatment environment, which requires data and voice services. What is the minimum requirement for the design?

A. overlapping -72 dBm coverage from two access points
B. continuous -67 dBm coverage from one access point
C. continuous -72 dBm coverage from one access point
D. overlapping -67 dBm coverage from two access points

Answer: B

Explanation:

dBi is 50mW. What you see on your laptop of a -20 dBm is a good signal. Cisco's recomendation for data is a max of -72 dBm and for voice it is -65dBm. You will notice this when you start walking away from your AP. So if you are planning on adding another ap, you would want your coverage to be bordering eithe -72 dBm or -65 dBm.

So -67dBm covers both Data & Voice with a single AP

Question No : 25

A wireless engineer is designing a wireless network for a warehouse using access points with internal antennas. Which two elements have a negative effect on the wireless users? (Choose two.)

A. wireless channels
B. access point height
C. client authentication
D. client authorization
E. absorption

Answer: B,E

Explanation: https://www.cisco.com/c/en/us/products/collateral/wireless/aironet-1250-series/design_guide_c07-693245.html#_Toc309331086

Question No : 26

An engineer is using a Cisco AIR-2702i AP to conduct a Layer 1 site Survey, which mode is selected for the AP to discover non-Wi-Fi interference with metageek chanalyzer?

A. FlexConnect
B. Sniffer
C. Monitor
D. SE-connect

Answer: D

Question No : 27

How should the concept of mobility domains and mobility groups be explained to a customer?

A. WLCs do not need to be in the same mobility domain to communicate with each other Mobility groups constrain the distribution of security context of a client and also constrain AP fail-over between controllers.
B. A mobility group does not constrain the distribution of security context of a client and also does not constrain AP fail-over between controllers when the WLCs are in the same mobility domain.
C. if WLCs are in same mobility domain, they communicate with each other. Mobility groups constrain the distribution of security context of a client and also constrain AP fail-over between controllers.
D. If WLCs are in the same mobility domain, they communicate with each other but. if an anchor WLC ® present, it must: be in the same mobility domain for communication to be possible.

Answer: C

Question No : 28

Which non-Wi-Fi interferer can be identified by Metageek Chanalyzer?

A. PDAs
B. jammers
C. smartphones
D. printers

Answer: B

Explanation: https://www.metageek.com/training/resources/wifi-and-non-wifi-interference

A jamming transmitter creates constant noise across each frequency. These are used in a denial-of-service attack, and will prevent other wireless technologies from fully operating.

Question No : 29

Where must the APs be mounted when used in a high-density wireless network to provide 6 dB to 20 dB of attenuation to a cell?

A. in the aisle
B. under the seat
C. above the stage
D. under the stage

Answer: B

Question No : 30

A customer is concerned about mesh backhaul link security. Which level of encryption does the backhaul link use?

A. hash
B. AES
C. WEP
D. 3DES

Answer: B

Question No : 31