# Cisco

# 300-360 Exam

Cisco Designing Cisco Wireless Enterprise Networks Exam

# Questions & Answers Demo

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Question:	1
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Which two types of information must be included in the installation inventory portion of the post-installation report? (Choose two.)

- A. all AP, controller, and MSE administrator credentials
- B. the names, locations, IP addresses, MAC addresses, etc. for every AP, controller, and MSE in the WLAN
- C. a layout of the rack that the equipment is installed
- D. results of the coverage audit performed with the site survey mapping tool
- E. the number and type of all WLAN clients and tags

Answer: A, B

#### Question: 2

A customer wants to implement a wireless network in a historic location, but is concerned about the structural and aesthetic impact to the facility. Which benefit of using wireless mesh addresses these concerns?

- A. Power is required only at the installation location.
- B. The APs do not have LED lights.
- C. More wireless channels can be supported.
- D. APs do not need network connections.

Answer: D

### Question: 3

An engineer is preparing for an indoor wireless LAN survey and is provisioning a survey kit. Which three pieces of equipment should be included? (Choose three.)

- A. external connector access point
- B. integrated antenna access point
- C. coax low-loss cable
- D. battery operated power supply
- E. range finder
- F. Yagi antennas

Answer: B, D, E

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Which three options are benefits of U-APSD? (Choose three.)

- A. optimized power-save mode periods
- B. increased call capacity
- C. bandwidth reservation
- D. synchronization of the transmission and reception of voice frames
- E. efficient roaming
- F. priority bandwidth and polling

Answer: A, B, D

Unscheduled automatic power-save delivery (U-APSD) is a feature that has two key benefits: The primary benefit of U-APSD is that it allows the voice client to synchronize the transmission and reception of voice frames with the AP, thereby allowing the client to go into power-save mode between the transmission/reception of each voice frame tuple. The WLAN client frame transmission in the access

categories supporting U-APSD triggers the AP to send any data frames queued for that WLAN client in that AC. A U-APSD client remains listening to the AP until it receives a frame from the AP with an end-of-service period (EOSP) bit set. This tells the client that it can now go back into its power-save mode. This triggering mechanism is considered a more efficient use of client power than the regular listening for beacons method, at a period controlled by the delivery traffic indication map (DTIM) interval, because the latency and jitter requirements of voice are such that a WVoIP client would either not be in power-save mode during a call, resulting in reduced talk times, or would use a short DTIM interval, resulting in reduced standby times. The use of U-APSD allows the use of long DTIM intervals to maximize standby time without sacrificing call quality. The U-APSD feature can be applied individually across access categories, allowing U-APSD can be applied to the voice ACs in the AP, but the other ACs still use the standard power save feature.

The secondary benefit of this feature is increased call capacity. The coupling of transmission buffered data frames from the AP with the triggering data frame from the WLAN client allows the frames from the AP to be sent without the accompanying interframe spacing and random backoff, thereby reducing the contention experience by call.

#### Reference:

http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/vowlan/41dg/vowlan41dg-book/vowlan\_ch2.html#wp1045982

#### **Question: 5**

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 option is the best to reduce the negative impact of the design?

A. Deploy the specified access points per area type.

В.	Resurvey	/ and	adjust	the	design.
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- C. Increase the Tx power on incorrectly surveyed access points.
- D. Deploy unsurveyed access points to the design.

Answer: B

### Question: 6

An engineer is performing a predictive wireless design for a carpeted office space, which requires voice

capability and location services. Which two requirements are inputs to the design? (Choose two.)

- A. overlapping -67 dBm coverage from three access points
- B. overlapping -75 dBm coverage from three access points
- C. overlapping-72 dBm coverage from two access points
- D. continuous -67 dBm coverage from one access point
- E. continuous -72 dBm coverage from one access point

Answer: A, D

For a voice network the APs are grouped closer together and have more overlap than a data-only installation because voice clients need to roam to a better AP before dropping packets. Generally, you should create smaller cells than for data-only networks and ensure the overlapping cell edges are at or above -67 dBm.

Reference:

http://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/emob73dg/emob73/ch3\_WLAN.html#pgfld-1000250

#### Question: 7

The AP has been configured property for a VoWLAN survey The RF environment contains a noise of -87 to -90 dBm. What is the target value for the cell edge reading?

- A. -62 dBm
- B. -67 dBm
- C. -60 dBm
- D. -70 dBm

**Answer: B** 

Reference: http://www.cisco.com/c/en/us/td/docs/wireless/controller/8-1/Enterprise-Mobility-8-1-Design-Guide/Enterprise\_Mobility\_8-1\_Deployment\_Guide/Chapter-9.html

#### **Question: 8**

A customer has dual-band devices that they want to use 40 MHz channels. If the customer is using

Cisco 3600 Series access	points with a 5508	controller. Which se	tting assists with	this change?

- A. Enable band select globally.
- B. Enable aggressive load balancing.
- C. Disable lower data rates on 802 .11G GHz radios.
- D. Disable overlapping 802.11G channels.

Answer: A

# Question: 9

An engineer is tuning RRM parameters to improve client connectivity. Which channel band results in the best 802.11n client compatibility?

- A. UNII-2
- B. UNII-2e
- C. UNII-3
- D. UNII
- E. UNII-1

Answer: E

802.11n operates on the same channel as 802.11A. For better compatibility with 802.11n clients, it is recommended to stay on lower channels (UNII-1 band).

Reference: http://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lancontrollers/108184-config-802-11n-wlc.html

#### Question: 10

An engineer is assigned to assist a customer by estimating the number of access points needed to provide voice-grade wireless coverage in a carpeted office space. How many access points should be estimated to cover this space of roughly 38,000 square feet?

- A. 17
- B. 10
- C. 6
- D. 13

**Answer: D** 

The rule of thumb coverage plan is 1 AP per 5,000 square feet for data and 1 per 3,000 square feet for voice and location services.

Reference: http://www.cisco.com/c/en/us/td/docs/wireless/technology/apdeploy/8-0/Cisco\_Aironet\_3700AP.html

Question: 11

An engineer plugs in a Cisco Aironet 2700 Series Access Point and it is running in low power. Which three power requirements should be verified? (Choose three.)

- A. 802.3ac compliant
- B. 802.3at compliant
- C. AP requires 43 VDC to function in full power.
- D. AIR-PWRINJ3 power injector should be used.
- E. AP requires 57 VDC to function in full power.
- F. AIR-PWRINJ4 power injector should be used.

Answer: B, E, F

The access point should be powered by any 802.3at compliant device.

The recommended external power supply for the access point is the Cisco AIR-PWR-B power supply. The access point can also be powered by the following optional external power sources:

- Access point power injector (AIR-PWRINJ4)
- Any 802.3af compliant power injector is supported, but in this case the access point will dynamically shift from 3x4 to 3x3.

Reference:

http://www.cisco.com/c/en/us/td/docs/wireless/access\_point/2700/quick/guide/ap2700getstart.ht ml

## Question: 12

An 802.11n implementation is being discussed. Users are satisfied with the potential 300-450 Mbps throughput of new 802.11n APs. Which three bandwidth requirements are used to calculate per client bandwidth through an 802.11n AP network? (Choose three.)

- A. 450 Mbps throughput is the client max for 5-GHz radio.
- B. Channel bonding on 5 GHz is required for a client to have a 300 Mbps WiFi link.
- C. 300 Mbps throughput is the client max for 2.4-GHz radio.
- D. The remaining bandwidth is divided per device when more clients are connected to one AP.
- E. 100 Mbps Ethernet switch port is a potential bottleneck.
- F. CleanAir helps clear noise for 802.11n channel bonding to work.

Answer: A, C, E

#### Question: 13

As part of a wireless site survey in a hospital, an engineer needs to identify potential Layer 1 interferers. In which three areas is the engineer most likely expect to find sources of 2.4 GHz and 5 GHz RF noise? (Choose three.)

- A. emergency room
- B. magnetic resonance imaging
- C. laboratory

D. WLSE

**Answer: C** 

D. X-ray radiography E. Gamma Knife radiation treatment F. kitchen	
	Answer: A, C, F
Question: 14	
What is the recommended minimum speed at the edge of the c Cisco VoWLAN deployment?	ells in an 802.11g network for a good
A. 11 Mb/s	
B. 36 Mb/s	
C. 12 Mb/s	
D. 18 Mb/s	
	Answer: C
Question: 15	
An engineer is installing a wireless network in an industrial are significant amount of dust. Which enclosure should be used to p	
A. ACU	
B. ADU	
C. NEMA	

Sometimes access points (APs) are located in areas where they are subject to extreme moisture, temperatures, dust and particles. These APs might need to be mounted inside a sealed enclosure. The NEMA has a rating system for these enclosures, which are generally called NEMA enclosures. Reference: <a href="http://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/68666-wireless-sitesurvey-faq.html">http://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/68666-wireless-sitesurvey-faq.html</a>