



- Expert Verified, Online, **Free**.

A network engineer is preparing for an office site survey with a height of 2.5 meters. Which three components are recommended to complete the survey? (Choose three.)

- A. Use a battery pack to power APs.
- B. Use a drawing of the office space to draw AP and client placements.
- C. Use DoS attack on APs while measuring the throughput.
- D. Use APs with directional antennas.
- E. Use APs with external antennas.
- F. Use APs with built-in antennas.

Suggested Answer: ABF

Community vote distribution

ABF (69%)

ABE (31%)

  **EGD** Highly Voted 2 years, 12 months ago

Selected Answer: ABF



Seems straightforward . . .

upvoted 5 times

  **amjr2352s** Most Recent 1 year ago

Correct ABF



upvoted 2 times

  **ougy** 1 year, 8 months ago

Selected Answer: ABF

Correct

upvoted 3 times

  **rrahim** 2 years, 8 months ago

Selected Answer: ABF

correct

upvoted 3 times

  **kthekillerc** 2 years, 10 months ago

Provided answer is correct

upvoted 2 times

An engineer is designing a wireless network that will support many different types of wireless clients. When conducting the survey, which client must be used to ensure a consistent experience for all of the wireless clients?

- A. the client that has the highest RF properties
- B. the client that is used most by the company
- C. the client that is used least by the company
- D. the client with the worst RF characteristics

Suggested Answer: D

Community vote distribution

D (71%)

B (29%)

MrCisco **Highly Voted** 3 years, 8 months ago

Correct answer should be D
upvoted 14 times

Kneth13 **Most Recent** 2 months ago

Selected Answer: D

"When designing a Wi-Fi environment and choosing locations for APs or antennas, it is necessary to know the needs of the application and to design for the worst performing clients"

- 6.6 Describing and Implementing the Wireless Design Process

upvoted 1 times

ShamsDimashki 4 months, 1 week ago

D is the correct answer
upvoted 2 times

JBERTHIER 8 months ago

Selected Answer: D

Answer should be D because you need to design for the worst case.

Better clients will have a better coverage if the worst have since the design

upvoted 1 times

RITIBA 1 year, 3 months ago

Selected Answer: D

With the proliferation of clients with varying wireless capabilities, it is important to survey for the 'worst' clients in order to ensure a consistent experience across all your clients once your wireless network is in production.

upvoted 1 times

CCNA_beast_69 1 year, 10 months ago

Selected Answer: D

It's D

"The lower data rates in 11a can be disabled, the 24 Mbps data rate can be set to "required", and the rates of 36 to 54 can be left enabled. "

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>

upvoted 1 times

FabriG 1 year, 10 months ago

Selected Answer: D

According to Cisco ENWLSD Course, it is D.

upvoted 1 times

wili0001 2 years, 2 months ago

You can identify the least capable of the supported devices, which will define some minimum design requirements. C.1 p.44 answer D

upvoted 1 times

🗨️ **Thomas66** 2 years, 5 months ago

Selected Answer: D

Correct answer should be D

upvoted 1 times

🗨️ **Rastacuache** 2 years, 5 months ago

according to the official course (6.6 Describing and Implementing the Wireless Design Process) - "When designing a Wi-Fi environment and choosing locations for APs or antennas, it is necessary to know the needs of the application and to design for the worst performing clients"

upvoted 3 times

🗨️ **ulfjvw** 2 years, 6 months ago

Selected Answer: D

least capable

upvoted 2 times

🗨️ **RSC357** 2 years, 7 months ago

I think I take that back. Worst client is best practice. Thanks Meraki for the information.

upvoted 1 times

🗨️ **RSC357** 2 years, 7 months ago

Think of this: I'm not going to design a WiFi network for a few guy's that can't afford to upgrade their phones. There are 500 devices and 10 are old junk. What would you do? Answer = "B"

upvoted 1 times

🗨️ **jordib4** 2 years, 7 months ago

Selected Answer: D

Correct answer should be D

upvoted 1 times

🗨️ **Eyserith** 2 years, 7 months ago

Selected Answer: D

D is correct

upvoted 1 times

🗨️ **kthekillerc** 2 years, 10 months ago

The Provided answer is correct as the question is asking which client to use in the designing of the network, you are going to choose the one that is most used to ensure the majority. The most poorly or worst answer D is a referenced by Roger the preferred client to use in a Post Site Survey as stated in the Referenced Cisco Guide supplied by Roger.

upvoted 3 times

🗨️ **Liselot** 2 years, 10 months ago

The question is: " When conducting the survey..."

But even in the design you have to identify all possible clients. This will serve a twofold purpose:

- You can verify that your design support each device type
- You can identify the least capable of the supported devices, which will define some minimum design requirements

upvoted 2 times

🗨️ **EGD** 2 years, 12 months ago

I vote D too

upvoted 1 times

An engineer has performed a predictive site survey for high-speed data and voice in an indoor office. What is the recommended data rate with 67 dBm signal level for optimal VoWLAN design?

- A. 6 Mbps on 802.11 bgn
- B. 24 Mbps on 802.11 bgn
- C. 12 Mbps on 802.11 an
- D. 24 Mbps on 802.11 an

Suggested Answer: C

Community vote distribution

C (60%)

D (40%)

Babustest Highly Voted 11 months ago

Selected Answer: C

Answer is C.

- CCNP official guide, Chapter 5, Section Designing a Wireless Network for Voice and Video: A better approach is to limit transmissions to use higher data rates so that stations transmit a frame and get off the air sooner, allowing other stations an opportunity to use the channel. That ultimately affects latency and jitter—parameters that are critical for acceptable voice and video performance. You should configure 12Mbps as the lowest and only mandatory data rate, while disabling all rates below that. All data rates greater than 12Mbps should be configured as supported so that they can be used by any device and application as RF conditions permit.

- 802.11b supports max 11 Mbps.

upvoted 6 times

RogerTheLodger Highly Voted 3 years, 2 months ago

C - 'For voice or real-time application support, 12Mbps is common, and 24Mbps is expected if real-time video applications (for example, video conferencing) are your target. Here again, as most cells carry both data and voice, designing around 12Mbps minimum has become common even for data-only support, in anticipation of occasional voice activity.' Official Cert Guide, Ch.3. p.60. para.3.'As you plan the band and channel assignment for each AP, try to leverage the 5GHz band as much as possible.' Official Cert Guide, Ch.5. p.106. para.4.'You should configure 12Mbps as the lowest and only mandatory data rate, while disabling all rates below that.' Official Cert Guide, Ch.5. p.107. para.2.

upvoted 5 times

Farhad123 Most Recent 2 months, 3 weeks ago

C is correct .

upvoted 1 times

JBERTHIER 8 months ago

Selected Answer: C

I would sayt "it depends" of the number of simultaneous call to place

upvoted 2 times

learningccnp 1 year, 2 months ago

answer is A, please check the data rate. We traditionally use 2.4ghz to do the predicative, and 802.11b only have11 mbps, therefore, A is answer.

upvoted 1 times

ContactScott 1 year, 6 months ago

Selected Answer: D

Source - <https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>

"For a high density deployment or a deployment

where a large number of calls are required in a small floor space, 11a is recommended because of the number of channels and the 54 Mbps data rate. The lower data rates in 11a can be disabled, the 24 Mbps data rate can be set to "required", and the rates of 36 to 54 can be left enabled. "

upvoted 4 times

Faridtnx 1 year, 6 months ago

Selected Answer: C

For basic data

coverage, 6Mbps is common. For voice or real-time application support, 12Mbps is common, and 24Mbps is expected if real-time video applications (for example, video conferencing) are your target. Here again, as most cells carry both data and voice, designing around 12Mbps minimum has become common even for data-only support, in anticipation of occasional voice activity.

So the answer is C

upvoted 5 times

MoD82 1 year, 7 months ago

Selected Answer: C

VoWLAN. min -67dbm and 12 Mbps

upvoted 1 times

Thomas66 1 year, 11 months ago

I think the answer is D. I found this in the VoWLAN Design recommendations:

Coverage cells can be created for specific data rates. For a high density deployment or a deployment where a large number of calls are required within a small floor space, 802.11a is recommended because of the number of channels and the 54 Mbps data rate. The lower data rates in 802.11a can be disabled, the 24 Mbps data rate can be set to required, while the 36 to 54 Mbps data rates can be left enabled.

upvoted 3 times

Willys 2 years, 2 months ago

If it weren't for the question throwing "high-speed" and "optimal" in there, I would say 12Mbps, which is definitely the minimum specification. However, I believe they are looking for 24Mbps.

upvoted 3 times

ulfjvw 2 years, 6 months ago

when designing for voice, you have to think about RTP streams.

from cisco study guide: (an now you can choose C or D)

" voice calls use bidirectional RTP streams to transport audio.

Each call uses two separate streams, but they cannot be transmitted simultaneously because of channel contention. At a 24Mbps data rate, up to 27 simultaneous bidirectional RTP streams can exist, or up to 13 calls."

upvoted 2 times

Liselot 2 years, 10 months ago

It's definitely answer C

In voice and video design you should configure 12 Mbps as the lowest and only mandatory data rate.

upvoted 2 times

kthekillerc 2 years, 10 months ago

Provided answer is correct, the question involves a predictive site survey requirements, there are current and legacy VoWLAN environments that can utilize b with the overlapping channels for voice, however not recommended, but is important for predictive survey purposes. Here is the Cisco white page link ref. chapter 11-12.

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>

upvoted 1 times

notzigzag 3 years, 1 month ago

the right answer is c because at 24mbs 802.11b cannot scale and your advised to stick to the 5ghz band which gives us 12mbs for voice and 24mbs for video

upvoted 1 times

martas 3 years, 1 month ago



i will go for C - because there are asking - What is the recommended data rate with -67dBm signal level for optimal VoWLAN design? - -67dBm should be edge so there should be the lowest enabled data rate 12Mbps

upvoted 2 times

RhJ72 3 years, 3 months ago

"The lower data rates in 11a can be disabled, the 24 Mbps data rate can be set to "required", and the rates of 36 to 54 can be left enabled. "

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>
upvoted 1 times

  **tonydiamond** 3 years, 4 months ago

found this on Cisco's VoWLAN guide...I think the answer should be D

"Because the 2.4 GHz band is so crowded, and coupled with constraints on its channel allocation, Cisco recommends using the 5 GHz Wi-Fi band for new VoWLAN deployments"

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/Enterprise-Mobility-8-5-Design-Guide/Enterprise_Mobility_8-5_Deployment_Guide/Chapter-9.html
upvoted 4 times

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

Suggested Answer: B

Community vote distribution

B (100%)

- 🗨️ 👤 **RogerTheLodger** Highly Voted 3 years, 2 months ago
B - 'This traffic is always AES encrypted when it crosses a wireless mesh link such as a wireless backhaul'
https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-8/b_mesh_88/b_mesh_88_chapter_010.html
upvoted 5 times
- 🗨️ 👤 **Farhad123** Most Recent 2 months, 1 week ago
B is the correct one, in this case AES is used
upvoted 1 times
- 🗨️ 👤 **kthekillerc** 2 years, 10 months ago
Provided answer is correct
upvoted 3 times
- 🗨️ 👤 **saxophoneman_27** 2 years, 11 months ago
that's correct
upvoted 2 times
- 🗨️ 👤 **ROCKKKK** 3 years ago
@ RogerTheLodger
Hi Roger, this dump is valid to crack 300-425, please.
upvoted 1 times
- 🗨️ 👤 **skh** 3 years, 6 months ago
https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-8/b_mesh_88/b_mesh_88_chapter_010.html
correct
upvoted 3 times

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

- A. magnetic resonance imaging
- B. kitchen
- C. Gamma Knife radiation treatment
- D. X-ray radiography
- E. patient room

Suggested Answer: BE

Community vote distribution

BE (100%)

  **antmich** Highly Voted 3 years, 8 months ago



This answer is right, even though I wasn't sure at first. MRI scans emit at a frequency of 1MHz-300MHz, which is below the frequency of Wi-Fi (2.4GHz and 5GHz). Gamma rays (Exahertz) and X-rays (Petahertz) are happening at frequencies much higher than RF as well. Kitchens can be source of 2.4GHz interference with microwave ovens. I have no clue what can cause RF noise in patient rooms, but by elimination, it works.

upvoted 8 times

  **Farhad123** Most Recent 2 months, 1 week ago

BE are the right choices



upvoted 1 times

  **Lakshan_97** 5 months, 3 weeks ago

Selected Answer: BE

Answer BE. non of them are working in 2.4 or 5 GHz



upvoted 1 times

  **maagiful** 1 year, 4 months ago

Selected Answer: BE

the question asks for "potential Layer 1 interferers". patients can have bluetooth devices such as headphones or just mobile phones, tablets, laptops with bluetooth switched on. :)

upvoted 1 times

  **LSLS55** 1 year, 8 months ago

I'd say you also probably have fluorescent lights in the patients room and kitchen too.

upvoted 1 times

  **Liselot** 2 years, 10 months ago

Correct, kitchen contains microwave ovens

upvoted 1 times

  **tonydiamond** 3 years, 4 months ago

Correct

People have mobile devices in patient rooms such as tablets and cellphones which adds to the rf noise on 2.4Ghz and 5Ghz.

upvoted 4 times

Which three pieces of equipment are needed to conduct a fully measured wireless survey? (Choose three.)

- A. PoE battery
- B. spirit level
- C. access point
- D. tall tripod
- E. goggles
- F. ladder

Suggested Answer: *ACD*

🗨️ 👤 **Farhad123** 2 months, 1 week ago

A C and D are correct

upvoted 1 times

🗨️ 👤 **rsbot69420** 4 months ago

asdasd

upvoted 1 times

When conducting a site survey for real-time traffic over wireless, which two design capabilities of smartphones and tablets must be considered? (Choose two.)

- A. no support for 802.11ac
- B. higher data rates than laptops
- C. fewer antennas than laptops
- D. no support for 802.11r
- E. lower data rates than laptops

Suggested Answer: CE

Community vote distribution

CE (100%)

 **ASV2020** Highly Voted 3 years, 1 month ago

Answer: C y E

upvoted 11 times

 **RhJ72** Highly Voted 3 years, 3 months ago

"Most smartphones and tablets support 802.11. However, generally, the smartphones and tablets have fewer antennas and lower data rates than laptops"

https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/RToWLAN/CCVP_BK_R7805F20_00_rtowlan-srnd/CCVP_BK_R7805F20_00_rtowlan-srnd_chapter_01.html

upvoted 8 times

 **JBERTHIER** Most Recent 8 months ago

I would say C and E

upvoted 1 times

 **Babustest** 11 months ago

Selected Answer: CE

Smartphones and tablets typically have fewer antennas and lower data rates compared to laptops.


upvoted 1 times

 **NoWiresIncluded** 1 year, 5 months ago

Selected Answer: CE

Smart phones have fewer antennas and lower data rates than laptops


upvoted 2 times

 **MoD82** 1 year, 7 months ago

Selected Answer: CE

lower data rates and smaller antennas

upvoted 2 times

 **FabriG** 1 year, 10 months ago

Selected Answer: CE


C and E

upvoted 2 times

 **wili0001** 2 years, 1 month ago

Answer: A y D

upvoted 1 times

 **RSC357** 2 years, 8 months ago

Is Wi-Fi faster on phone or laptop?

The reason why Wi-Fi is faster on a smartphone than on that computer is obvious. It's clearly not equipped with the hardware to be able to

connect at this speed. The item that does not allow us to do this is a Wi-Fi network adapter for your desktop or laptop computer.



upvoted 1 times

  **Goatgirl20** 3 years, 4 months ago

the smartphones and tablets have fewer antennas and lower data rates than laptops. In addition, most are not purpose-built for the enterprise WLAN market. Almost all smartphones and tablets support enterprise security policies

C&E



upvoted 3 times

  **Hamoze** 3 years, 6 months ago

I think the correct answer is A&D

https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/RToWLAN/CCVP_BK_R7805F20_00_rtowlan-srnd/CCVP_BK_R7805F20_00_rtowlan-srnd_chapter_01.html

upvoted 2 times

  **MrCisco** 3 years, 8 months ago

B & E are correct

upvoted 2 times

Which two criteria must be considered when conducting an outdoor bridge site survey? (Choose two.)

- A. near-far effect
- B. weather
- C. traffic lights
- D. power lines
- E. Fresnel zone


Suggested Answer: BE

Community vote distribution

BE (100%)

 **antmich**  3 years, 8 months ago

Cisco, in their official documentation, talk about weather and fresnel zone. Power lines do not affect line of sight and wireless signals and the Near-far problem has no connexion to wireless bridges. Source : https://www.cisco.com/c/en/us/td/docs/wireless/technology/mesh/8-0/design/guide/mesh80/m_site-preparation-and-planning.html#ID3455
upvoted 19 times


 **Farhad123**  2 months, 1 week ago

Weather and Fresnel zone are important for outdoor radio survey
upvoted 1 times


 **Lakshan_97** 5 months, 3 weeks ago

Selected Answer: BE

https://www.cisco.com/c/en/us/td/docs/wireless/technology/mesh/7-3/design/guide/Mesh/Mesh_chapter_0100.html#ID3731
upvoted 1 times

 **8eb9ad6** 9 months, 2 weeks ago

The official cert guide CCNP Enterprise wireless design and implementation makes no mention of this subject.
upvoted 1 times

 **Bandito** 9 months, 4 weeks ago

Selected Answer: BE

the answer is BE
upvoted 1 times

 **FabriG** 1 year, 10 months ago

Selected Answer: BE

According to Cisco ENWLSD Course, it is B and E.
upvoted 1 times


 **ulfjvw** 2 years, 6 months ago

Selected Answer: BE

weather and fresnel zone
upvoted 1 times

 **samchaks** 2 years, 7 months ago

B and E are correct
upvoted 1 times

 **Eyserith** 2 years, 7 months ago

Selected Answer: BE

B and E are correct
upvoted 1 times

 **NoobMonkey** 2 years, 9 months ago

Selected Answer: BE

Weather can degrade a mesh link. A Fresnel zone is an imaginary ellipse around the visual line of sight between the transmitter and receiver. It could encounter an obstruction in the Fresnel area which degrading the signal.

upvoted 2 times

🗨️ 👤 **RSC357** 2 years, 9 months ago

Selected Answer: BE

I agree with antmich

upvoted 1 times

🗨️ 👤 **EGD** 2 years, 12 months ago

Answer: B e E

upvoted 2 times

🗨️ 👤 **ASV2020** 3 years, 1 month ago

Answer: B y E

upvoted 2 times

🗨️ 👤 **shahed4062** 3 years, 2 months ago

what is the correct answer then??

upvoted 1 times

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

Suggested Answer: D

Community vote distribution

D (67%)

B (33%)

RhJ72 Highly Voted 3 years, 3 months ago

Correct Answer D - -67dbm with 20% cell overlap is required
upvoted 10 times

Liselot 2 years, 10 months ago

There will be a big area without overlap in the (center of the) cells. At those spots there is only one AP > -67 dBm needed.
Answer B is correct in my opinion.
upvoted 4 times

fhrat21 Highly Voted 3 years, 1 month ago

Correct Answer B - there is nothing about redundancy in the question - so one access point is minimum
upvoted 5 times

Farhad123 Most Recent 2 months, 3 weeks ago

D:Overlap

Check the site survey to determine whether the channel overlap is adequate for devices to roam to the next AP before the signal is lost from the previous AP.

For example, based on the RF guidelines specified in the Cisco 7925G Wireless IP Phone Deployment Guide, you must use non-overlapping channels and allow at least 20 percent overlap with adjacent channels when phones are deployed in the 802.11b/g environment.

For voice deployments, it is recommended that the cell edge be at -67 dBm with 20 percent overlap.

upvoted 1 times

ShamsDimashki 4 months ago

Selected Answer: B

they mentioned the minimum requirement
B is the correct answer
upvoted 1 times

Babustest 11 months ago

Selected Answer: D

A designer is expected to know that emergency services including medical treatment facility requires HA.
upvoted 3 times

vangio 1 year, 3 months ago

Correct D
upvoted 1 times

Mimimimimi 1 year, 6 months ago

Answer is D:

"Remember, for voice services, the goal is to have at least two (2) APs heard at -67 dBm or greater at all times."



<https://www.cisco.com/c/en/us/support/docs/wireless/5500-series-wireless-controllers/116057-site-survey-guidelines-wlan-00.html>

upvoted 5 times

MoD82 1 year, 6 months ago


Selected Answer: B

no info for multi cell, so -67dbm and one AP
upvoted 2 times

  **kevinsa** 1 year, 6 months ago

Selected Answer: D

Medical needs HA , so overlap is important
upvoted 3 times

  **kthekillerc** 2 years, 10 months ago

Provided answer is correct, as it is asking for predictive site survey purposes so it requires a 67 dmb continuous setting.
upvoted 4 times

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

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

Suggested Answer: B

Community vote distribution

B (100%)

🗨️ **HealthyGeneral** 2 years, 7 months ago

Selected Answer: B

B. Jammers are the only non-Wi-Fi answer.
upvoted 3 times

🗨️ **skh** 3 years, 6 months ago

correct

Jammers: Although they should not be expected in normal networks, jammers are cheap devices and easily bought online. Their characteristic is a continuous signal with a high duty cycle across the entire affected band. They may operate in 2.4GHz or 5GHz. The presence of a jammer signal is reflective of an attack against your network. Many jammers operate in the 2.4GHz band because this band is categorized as Industrial, Scientific, and Medical (ISM) and can be used by any transmitter (under some relaxed regulatory conditions). Most of the 5GHz band is not ISM, which makes it less susceptible to interferences from non-802.11 devices. However, different countries have different rules, and you may see in non-ISM 5GHz channels devices that were designed for a country where such operation is allowed.
upvoted 3 times


A wireless engineer is utilizing the voice readiness tool in Cisco Prime for a customer that wants to deploy Cisco IP phones. Which dBm range is the network inspected against?

- A. 78 dBm to 65 dBm
- B. 72 dBm to 67 dBm
- C. 85 dBm to 65 dBm
- D. 85 dBm to 67 dBm

Suggested Answer: B

Community vote distribution

B (100%)

 **HealthyGeneral** Highly Voted 2 years, 7 months ago

I'm logged into Prime 3.8 now, I selected one of our buildings, then a floor, then clicked "Inspect Voice Readiness" from the tools menu. With "Cisco Phon as client, the range is *not* editable, and it's -75dBm to -67dBm. So there is something wrong with this question and its answers. No answer is right, and I document search to try shed light on the correct answer and found nothing. Think very carefully about how you answer this!


upvoted 7 times

 **HealthyGeneral** 2 years, 7 months ago

https://www.cisco.com/c/dam/en/us/td/docs/wireless/technology/vowlan/troubleshooting/7_VoWLAN_WCS_TSG.fm/_jcr_content/renditions/7_VoWLAN_01.jpg

Further confirmation that no answer is correct, check cisco's own screengrab of the the Voice Readiness tool.

upvoted 3 times

 **Farhad123** Most Recent 2 months, 1 week ago

there is something wrong with this question, by the way the right answer should be B

upvoted 1 times

 **ShamsDimashki** 4 months, 1 week ago

Always -67 is preferred


upvoted 1 times

 **CyborgXCZ** 1 year, 9 months ago

Selected Answer: B

Can confirm that Cisco Prime 3.10 has static value -75 to -67 so -72 could be consider as preferred value.

upvoted 4 times

 **wili0001** 2 years, 2 months ago

You will see different values for this signal level. Some references will refer to -75 dBm, and they mean the minimum signal (signal should be at least at -75 dBm). Others will mention -72 dBm as the "preferred" minimum, meaning that -75 dBm is acceptable, but -72 dBm will provide a better location estimation.

upvoted 1 times

 **Liselot** 2 years, 10 months ago



-85 to -67 dBm (I guess the minus signs have forgotten in the answers)

upvoted 1 times

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

Suggested Answer: *B*

  **skh** 3 years, 6 months ago

Study guide

Table 2-2 Common Obstacles and Their Estimated Attenuation Values

Object in Signal Path Signal Attenuation Through the Object

Plasterboard wall 3 dB

Glass wall with metal frame 6 dB

Cinderblock wall 4 dB

Office window 1–3 dB

Metal door 6 dB

Brick wall 8 dB

Concrete wall 12 dB

Phone and body position 3–6 dB

Phone near field absorption Up to 15 dB

upvoted 4 times

A wireless engineer is performing a post verification of a wireless network. Which two metrics does the engineer verify to ensure that the wireless network can support voice services? (Choose two.)

- A. The coverage area must have a noise floor that does not exceed -87 dBm.
- B. The client device must have at least an -67 dBm RSSI.
- C. The rate of retransmitted packets must be 15 percent or below.
- D. The rate of retransmitted packets must be 20 percent or below.
- E. The client device must have at least an -65 dBm RSSI.

Suggested Answer: BD

Community vote distribution

BD (100%)

 **skh** Highly Voted 3 years, 6 months ago

B&D should

https://www.cisco.com/c/en/us/td/docs/wireless/technology/vowlan/troubleshooting/vowlan_troubleshoot/8_Site_Survey_RF_Design_Valid.html

RF Design Validation

1. The optimal VoWLAN Cell Edge recommendation is -67 dBm.
2. An optimal VoWLAN deployment will require at least a 20 percent cell overlap for 2.4 GHz and 15-20 percent for 5 GHz for access points that reside on different channels.
3. Over all Channel Utilization should be less than 50 percent.
4. The Noise floor should not exceed -92 dBm, which facilitates a Signal to Noise Ratio of 25 dB.
5. Retransmissions should be kept under 20 percent.
6. Packet Loss should remain under 1 percent and jitter should be kept to less than 100 ms.

upvoted 14 times

 **ASV2020** Highly Voted 3 years, 1 month ago

Answer: B y D

upvoted 7 times

 **Farhad123** Most Recent 2 months, 3 weeks ago

B and D

upvoted 1 times

 **ShamsDimashki** 4 months, 1 week ago

Selected Answer: BD

B & D are the correct answers

upvoted 1 times

 **JBERTHIER** 8 months ago

I disagree

Answer should A and B

A voice design does not accept retransmission

upvoted 1 times

 **JBERTHIER** 8 months ago

Sorry my reply is wrong

Answer B & D

upvoted 1 times


☒  **ContactScott** 1 year, 6 months ago

Selected Answer: BD

RF Design Validation


https://www.cisco.com/c/en/us/td/docs/wireless/technology/vowlan/troubleshooting/vowlan_troubleshoot/8_Site_Survey_RF_Design_Valid.html

upvoted 1 times

☒  **brrrrrd** 1 year, 10 months ago

You should measure using 5 ghz because if that works then 2.4 will for sure work. It could be either or, there isnt enough info here. If the answer says 15% i could see that. I could also see 20% it depends.

upvoted 1 times

☒  **FabriG** 1 year, 10 months ago

Selected Answer: BD

According to Cisco ENWLSD Course, it is B and D.

upvoted 1 times

☒  **migu0692** 2 years, 2 months ago

Selected Answer: BD

B AND D

upvoted 3 times

☒  **kthekillerc** 2 years, 10 months ago

https://www.cisco.com/c/en/us/td/docs/wireless/technology/vowlan/troubleshooting/vowlan_troubleshoot/8_Site_Survey_RF_Design_Valid.html

Correct its B and D

upvoted 4 times

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.

Suggested Answer: A

Community vote distribution

A (100%)

 **Farhad123** 2 months, 1 week ago

A is correct one
upvoted 1 times

 **Cleytonsc** 1 year, 4 months ago


Selected Answer: A

Guidelines for deploying 802.11b VoWLAN handsets have recommended a design with a minimum power of -67 dBm on the cell boundary
upvoted 4 times

 **ContactScott** 1 year, 6 months ago

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>

Guidelines for deploying 802.11b VoWLAN handsets have recommended a design with a minimum power of -67 dBm on the cell boundary
upvoted 2 times

 **skh** 3 years, 6 months ago

The optimal VoWLAN network requires overlaps of 20 percent (2.4 GHz), and approximately 15 to 20 percent (5 GHz), where a WLAN Data design may use an AP cell overlap of 5 to 10 percent.

•The optimal VoWLAN cell boundary recommendation is -67 dBm

https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/vowlan/41dg/vowlan41dg-book/vowlan_ch3.html

upvoted 4 times

A wireless engineer is using Ekahau Site Survey to validate that an existing wireless network is operating as expected. Which type of survey should be used to identify the end-to-end network performance?

- A. GPS assisted
- B. spectrum analysis
- C. passive
- D. active ping

Suggested Answer: D

Community vote distribution

D (80%)

C (20%)

🗳️ 👤 **monkeyccie** Highly Voted 👍 2 years, 10 months ago

D is the correct one.

<https://support.ekahau.com/hc/en-us/articles/115004974107-Configuring-Active-Surveys>

upvoted 11 times

🗳️ 👤 **Johnconnor2021** Highly Voted 👍 3 years ago

Answer D - "When you perform an ACTIVE site survey to validate the network's performance, packet loss or the packet error rate (PER) should be no greater than about 1 percent." Cisco Press Book ENWLS - Ch5 Applying Wireless Design Requirements - You don't get performance results with a Passive Site Survey, it helps you to discover what its in the wireless network but not the performance of it.

upvoted 8 times

🗳️ 👤 **ShamsDimashki** Most Recent 🕒 4 months ago

Selected Answer: C

The question said "Type of Survey" and "Passive" is the only type survey available between the answers

upvoted 1 times

🗳️ 👤 **TroyD** 1 year, 3 months ago

D is correct

upvoted 1 times

🗳️ 👤 **ContactScott** 1 year, 6 months ago

Selected Answer: D

Source: <https://support.ekahau.com/hc/en-us/articles/115004974107-Configuring-Active-Surveys>

The end-to-end network performance testing (Ping) is always made with the wireless network adapter that is currently associated with the network.

upvoted 3 times

🗳️ 👤 **FabriG** 1 year, 10 months ago

Selected Answer: D

Clearly D.

upvoted 1 times

🗳️ 👤 **bctrailrider8** 2 years, 2 months ago

D has to be correct, ping is the only way to test end to end. Spectrum will only indicate issues on the RF portion of the link.

upvoted 3 times

🗳️ 👤 **wirelessvibes** 2 years, 5 months ago

Active Ping Surveys

The end-to-end network performance testing (Ping) is always made with the wireless network adapter that is currently associated with the network. Typically it is the laptop's integrated Wi-Fi network adapter, but you may also use external adapter such as an 802.11ac adapter. Before you start the survey, make sure wireless network adapter is connected to the Wi-Fi network to be able to measure the network performance.

So D.

upvoted 3 times

🗨️ 👤 **santoshkotla** 2 years, 6 months ago

"To collect active survey data, you must have an external network adapter collecting passive survey data in addition to the internal NIC for active survey data. For example, Ekahau Sidekick or SA-1 adapter in passive mode in addition to the internal NIC in throughput mode."

Active ping is not used by the engineer but done by the Wireless network adapter. An external analyzer, like SA, should be in Passive Mode for this to happen. Tricky question but the given answer is correct.

upvoted 1 times

🗨️ 👤 **samchaks** 2 years, 7 months ago

Correct answer is D

upvoted 1 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

Spectrum Analysis and Passive Surveys are typically pre-installation surveys (or troubleshooting)

Active ping is a way of active survey. Active survey is a post-installation survey.

In my opinion the answer must be D

upvoted 2 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

Ekahau utilizes spectrum analyzer to perform end-to end wireless and non wireless issues affecting the network. Provided answer is correct.

upvoted 1 times

🗨️ 👤 **ASV2020** 3 years, 1 month ago

Answer: C

upvoted 2 times

🗨️ 👤 **zzz_riv** 3 years, 1 month ago

I think it must be D

upvoted 3 times

A medium-sized hospitality company with 50 hotels needs to upgrade the existing WLAN in each hotel to 802.11n. During the site surveys for each hotel, what needs to be taken into consideration when determining the locations for each AP?

- A. Selecting APs that can be hidden in ceiling panels to provide a secure and clean aesthetic look.
- B. Selecting locations that make visual assessment of the AP operation easy.
- C. Selecting locations that are easily accessed so maintenance and upgrades can be performed quickly.
- D. Selecting AP locations where power is already available.

Suggested Answer: D

Community vote distribution

A (100%)

🗨️ **RogerTheLodger** Highly Voted 3 years, 2 months ago

A - 'Also, these are usually public places and thus susceptible to theft and vandalism. A common requirement is to properly secure APs to ceilings or walls or to hide them above the ceiling.' 'Hotels also have many of the same concerns as hospitals regarding aesthetics. APs may need to be hidden in the walls or ceiling, where possible, or behind elements of the furniture.' Official Cert Guide, Ch.2. P.30. para.7. & P.31. para.2.
upvoted 13 times

🗨️ **ASV2020** Highly Voted 3 years, 1 month ago

Answer: A
upvoted 6 times

🗨️ **Normanby** Most Recent 2 weeks, 3 days ago

Selected Answer: A
'A' is the least wrong !
'B' and 'C' have the same vibe, so can't be both.
'D' is just nonsense - Hello PoE !
upvoted 1 times

🗨️ **AlmightKas** 1 month, 2 weeks ago

I would say A. While D seems to be the chosen answer by the website, most modern-day switches have PoE so power shouldn't be a huge concern with an AP. We also don't want the AP out in plane site for security reasons.
upvoted 1 times

🗨️ **Farhad123** 2 months, 1 week ago

Right Answer is D, where AP installed we need access to Power
upvoted 1 times

🗨️ **scottj** 5 months, 3 weeks ago

C is the correct answer
upvoted 1 times

🗨️ **gargionifabio** 1 year, 5 months ago

Answer A, Official Cert Guide, Ch.2. P.30
upvoted 1 times

🗨️ **NoWiresIncluded** 1 year, 5 months ago

It is not A, please, please, please, you should never hide an AP in a ceiling unless you are using external antenna with it. There are lockable enclosures that can ensure security. In-ceiling mountings create horrible RF characteristics (nearsite reflections off of ductwork, pipes, etc) and can be a nightmare to find during an upgrade or troubleshooting, also many times the mounting might have "overlooked", I have seen APs thrown on top of ceiling tiles just waiting to drop on someone or crammed next in the electrical wires.
This question is pretty poorly worded though, choice D is also false as most APs should be accommodated by POE, so a power supply should not be a factor. So is it B or C? Probably should be both.
upvoted 2 times

🗨️ **FabriG** 1 year, 10 months ago

Selected Answer: A
Clearly A.

upvoted 2 times

🗨️ 👤 **Alonzo_Harris** 1 year, 11 months ago

The answer is "A". Looking in the Cisco 300-425 book says in Chapter 5 that's is a common requirement because of theft and vandalism.

upvoted 2 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

Definitely answer A

upvoted 4 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

Answer is incorrect, it should be A

upvoted 3 times

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. wireless intrusion prevention
- B. Cisco Spectrum Expert
- C. Wireshark
- D. network analysis module

Suggested Answer: B

Community vote distribution

B (100%)

🗨️ 👤 **Farhad123** 2 months, 1 week ago

B is correct
upvoted 1 times

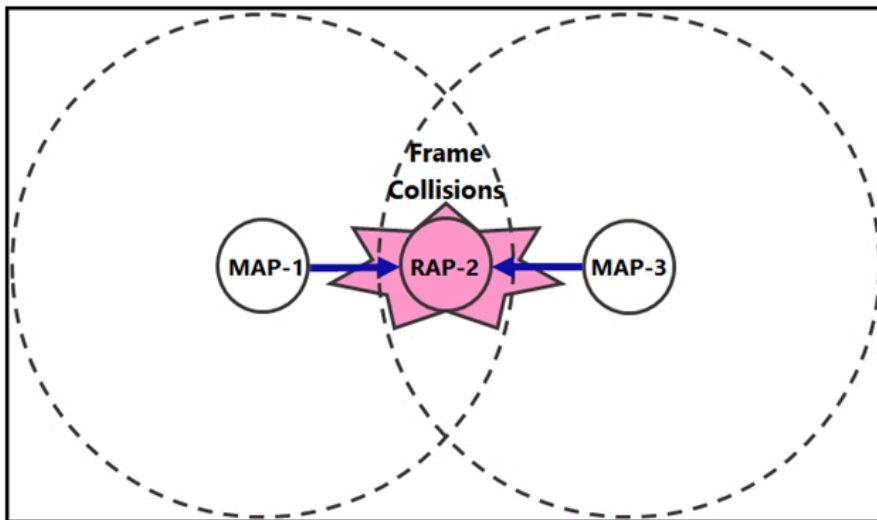
🗨️ 👤 **Ram0n_Aya1a** 2 years, 5 months ago

B is correct.
https://www.cisco.com/c/en/us/products/collateral/wireless/spectrum-expert/product_data_sheet0900aecd807033c3.html
upvoted 2 times

🗨️ 👤 **HealthyGeneral** 2 years, 7 months ago

Selected Answer: B

B. Download Cisco Spectrum Expert, deploy a spare AP where you want to see the the live RF spectrum and put the AP into SE-Connect mode in Prime & let it reboot. Putty to controller, and do 'show ap config <ap-name>', take note of the RF Key string (note: this string appears to change on every reboot!), Run the Spectrum Expert client software and connect to the AP's IP Address using the current RF key. Marvel at being able to see microwave ovens wreck your 2.4GHz in real time then get kudos from your boss that you're doing Layer 1 survey without spending money on pricey airmagnet/ekahau equipment.
upvoted 3 times



Refer to the exhibit. During a post Mesh deployment survey, an engineer notices that frame collisions occur when MAP-1 and MAP-3 talk to RAP-2. Which type of issue does the engineer need to address in the design?

- A. co-channel interference
- B. hidden node
- C. backhaul latency
- D. exposed node

Suggested Answer: B

Community vote distribution

B (100%)

Farhad123 2 months, 1 week ago

B is the correct one

upvoted 1 times

Lakshan_97 5 months, 3 weeks ago

Selected Answer: B

you will see here hidden node as expected in the question

https://www.cisco.com/c/en/us/td/docs/wireless/technology/mesh/7-3/design/guide/Mesh/Mesh_chapter_0100.html#ID3731

upvoted 2 times

www 2 years, 1 month ago

Hidden Node is the right answer

<https://inet.omnetpp.org/docs/showcases/wireless/hiddennode/doc/index.html>

upvoted 4 times

kthekillerc 2 years, 10 months ago

Provided answer is correct. Please if you don't know the answer do not comment as it continues to muddy the waters for everyone else. "Don't Speculate only Validate Please"

upvoted 4 times

EGD 2 years, 12 months ago

Hidden Node - MAP-1 and MAP-3 can not "see" each other to do the Collision Avoidance of 802.11.

upvoted 4 times

rrahim 2 years, 12 months ago



https://en.wikipedia.org/wiki/Hidden_node_problem

upvoted 4 times

ASV2020 3 years, 1 month ago

Answer: B

upvoted 3 times

  **d3d4r** 3 years, 3 months ago

it should be D as 1 is exposed and seen by 2

upvoted 1 times

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

Suggested Answer: *D*

🗨️ 👤 **Farhad123** 2 months, 1 week ago

D is the correct answer, in this case we should do the survey again
upvoted 1 times

🗨️ 👤 **1984wolf** 1 year, 7 months ago

but it can be time-consuming and expensive. A resurvey and redesign will require additional resources, and the customer may not be willing to incur additional costs. It is also important to note that the customer has already specified the AP and antenna combinations for the design, so a redesign may not be necessary if the correct APs are deployed in the correct areas.

In conclusion, the most appropriate strategy for reducing the negative impact of the design is to deploy the specified access points per area type. This will ensure that the correct APs are deployed in the right locations, resulting in optimal network performance.

C

What you guys think
upvoted 2 times

🗨️ 👤 **wifi_russ** 10 months ago

That not the customer's problem. If the mistake come from the auditor, the survey must be re-done accordingly with the right AP for each deployment scenario.
upvoted 2 times

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

- A. monitor
- B. local
- C. sniffer
- D. SE-connect

Suggested Answer: B

Community vote distribution

B (100%)

🗳️ 👤 **Farhad123** 2 months, 1 week ago

B is the correct answer, for current operating channel we should put AP in local mode and then connect to CleanAir
upvoted 1 times

🗳️ 👤 **Bandito** 9 months, 4 weeks ago

Selected Answer: B

Answer is B: Local Mode
upvoted 2 times

🗳️ 👤 **Mimimimi** 1 year, 6 months ago

Answer is B:

"In Local Mode, each Cisco CleanAir-enabled access point radio provides air quality and interference detection reports for the current operating channel only."

"In Monitor Mode, the access point provides air quality and interference detection reports for all monitored channels."

"SE-Connect Mode enables a user to connect Chanalyzer directly to a Cisco CleanAir access point when the access point is not connected to a controller. The access point provides air quality and interference detection reports for all monitored channels."

<https://support.metageek.com/hc/en-us/articles/200591105-Connecting-Chanalyzer-to-a-Cisco-CleanAir-Access-Point>

upvoted 3 times

🗳️ 👤 **Alonzo_Harris** 1 year, 11 months ago

The answer is definitely Local Mode

In Local Mode, each Cisco CleanAir-enabled access point radio provides air quality and interference detection reports for the current operating channel only. Local mode does not disrupt client connections. When a hybrid-REAP access point is connected to the controller, its Cisco CleanAir functionality is identical to local mode.

upvoted 2 times

🗳️ 👤 **JONATHGA** 2 years, 5 months ago

Chanalyzer has the advantage of being able to capture from a specialized USB card but can also connect to a Cisco AP running CleanAir and capture raw data detected by the AP Spectrum Analysis Engine (SAGe). To enable such a mode, you can keep your AP in a normal (Local) mode, but you will then only be able to see that AP channel. If you want the AP to sweep the entire band, you need to set your AP to SE-Connect

https://ebookreading.net/view/book/EB9780136600992_19.html

upvoted 2 times

🗳️ 👤 **Ram0n_Aya1a** 2 years, 5 months ago

Local Mode.

"To enable such a mode, you can keep your AP in a normal (Local) mode, but you will then only be able to see that AP channel. If you want the AP to sweep the entire band, you need to set your AP to SE-Connect" Chapter 3 page 49-50

upvoted 1 times

🗳️ 👤 **Liselot** 2 years, 10 months ago

Local Mode

Each Cisco CleanAir-enabled access point radio provides air quality and interference detection reports for the current operating channel only. Local mode does not disrupt client connections.

--> Answer B

upvoted 3 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

Provided answer is correct.

<https://www.metageek.com/training/lessons/chanalyzer-clean-air.html>

"only on the current operating channel is local mode. Please don't argue answers unless you know. Validate not guess please.

upvoted 1 times

🗨️ 👤 **zyzyx123** 2 years, 11 months ago

"only on the current operating channel", so that would be B, SE-Connect is for a full scan on a non-wlc connected AP. So its not D

upvoted 3 times

🗨️ 👤 **EGD** 2 years, 12 months ago

D - <https://www.metageek.com/training/lessons/chanalyzer-clean-air.html>

"SE-Connect Mode

SE-Connect Mode enables a user to connect Chanalyzer directly to a Cisco CleanAir access point when the access point is not connected to a controller. The access point provides air quality and interference detection reports for all monitored channels."

upvoted 2 times

🗨️ 👤 **wifinut** 2 years, 12 months ago

Should be D

upvoted 1 times

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. Sniffer
- B. Monitor
- C. FlexConnect
- D. SE-Connect

Suggested Answer: D

  **Liselot** Highly Voted 2 years, 10 months ago

SE-Connect Mode


SE-Connect Mode enables a user to connect Chanalyzer directly to a Cisco CleanAir access point when the access point is not connected to a controller. The access point provides air quality and interference detection reports for all monitored channels.

upvoted 6 times

  **Farhad123** Most Recent 2 months, 1 week ago

D is correct one, when you want to do Layer 1 survey and monitor Non wifi channels then we should put AP in SE-Connect mode and connect that to ChannelAnalyzer

upvoted 1 times

  **kthekillerc** 2 years, 10 months ago

Provided answer is correct

upvoted 2 times

An engineer changed the TPC Power Threshold for a wireless deployment from the default value to -65 dBm. The engineer conducts a new post deployment survey to validate the results. What is the expected outcome?

- A. decreased channel overlap
- B. increased cell size
- C. increased received sensitivity
- D. decreased client signal strength

Suggested Answer: B

Community vote distribution

B (69%)

A (31%)

🗨️ **Lakshan_97** 5 months, 3 weeks ago

Selected Answer: B

B is correct, default is -70dBm and now -65dBm which is increased that will definitely increase the cell size as well since there is nothing mentioned about data rates limitations

upvoted 1 times

🗨️ **crabb63** 10 months, 2 weeks ago

Selected Answer: B

<https://community.cisco.com/t5/wireless/radio-transmit-power-control-tpc-settings-power-threshold/td-p/977028>

upvoted 1 times

🗨️ **wili0001** 2 years, 2 months ago

Selected Answer: A

I think is A chapter 6 pag.122. Figure 6-11

upvoted 2 times

🗨️ **RSC357** 2 years, 3 months ago

Default threshold is -70dBm. Range is from -50 to -80. Increase this value (ie between -70 -50) causes the AP to operate at higher transmit power rates. Decreasing the value has opposite effect

B is correct

upvoted 1 times

🗨️ **Ram0n_Aya1a** 2 years, 5 months ago

-70 dBm is less power than -65 dBm.

Engineer is increasing the power therefore Cell size is increased

B is correct

upvoted 4 times

🗨️ **ulfjvw** 2 years, 6 months ago

Selected Answer: B

2nd neighbor should be 70, you configure 65. the cell will increase

upvoted 3 times

🗨️ **NoobMonkey** 2 years, 9 months ago

Selected Answer: B

More on cell size instead of channel overlapping

upvoted 2 times

🗨️ **Liselot** 2 years, 10 months ago

Selected Answer: B

The transmit power was tuned based on the 3rd AP 'hearing' the NDP advertisements at -70 dBm. When this threshold is changed to -65 dBm, the AP needs to increase the transmit power and that increases the cell size. It will also increase channel overlap not decrease.

upvoted 4 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

The transmit power was tuned based on the 3rd AP ' hearing' the NDP advertisements at -70 dBm. When this threshold is changed to -65 dBm, the AP needs to increase the transmit power and that increases the cell size. It will also increase channel overlap not decrease.

--> Answer B is correct

upvoted 2 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

Provided answer is correct. By reducing the power threshold from the default 70 to 65 it is forcing the controller to ramp up the power levels to meet this requirement. When you increase the power levels you increase the cell size. Which in affect will do the opposite of your suggested answer and increase channel overlapping rather than decrease it. Please don't guesstimate but rather Validate.

upvoted 4 times

🗨️ 👤 **monkeyccie** 2 years, 12 months ago

I do think it is A as well

upvoted 2 times

🗨️ 👤 **EGD** 2 years, 12 months ago

Selected Answer: A

I think it is A - because the default is -70, so -65 would decrease the Cell size and reduce overlap

upvoted 3 times

An engineer is conducting a Layer 2 site survey. Which type of client must the engineer match to the survey?

- A. best client available
- B. phone client
- C. normal client
- D. worst client available

Suggested Answer: D

Community vote distribution

D (100%)

  **ulfjvw** Highly Voted 2 years, 6 months ago

Selected Answer: D

always least capable
upvoted 9 times

  **Coffee313** Highly Voted 3 years, 3 months ago

It is a best practice to rely on the weakest device, so D is correct
upvoted 8 times



  **FabriG** Most Recent 1 year, 10 months ago

Selected Answer: D

According to Cisco ENWLSD Course, it is D.
upvoted 5 times

  **NoSpamming** 2 years, 2 months ago

Layer 2 is data. Normal client is fine. Least would be for RSSI and such with Layer 1.
upvoted 2 times

  **Bapu20** 2 years, 4 months ago

D should be answer here
upvoted 3 times

  **monkeyccie** 2 years, 12 months ago

D is the correct one
upvoted 3 times

  **ASV2020** 3 years, 1 month ago

Answer: D
upvoted 3 times

An engineer must perform a pre deployment site survey for a new building in a high-security area. The design must provide a primary signal RSSI of -65 dBm for the clients. Which two requirements complete this design? (Choose two.)

- A. HVAC access
- B. WLC model
- C. site access
- D. number of clients
- E. AP model

Suggested Answer: CE

Community vote distribution



ulfjw Highly Voted 2 years, 6 months ago

pre-deployment. there are two types of pre-deployment surveys: walkthrough and predictive. It seems they want to confuse us with "highly secure shit".

I would say this is design, or predictive survey, and to complete it, you have to know antenna pattern or AP type and number of clients in certain areas.

upvote if agree. txn

upvoted 10 times

Normanby Most Recent 2 weeks, 3 days ago

Selected Answer: DE

All the other 'cram websites' say Clients and AP model

upvoted 1 times

Bugmenot240411 4 months ago

"Which two requirements complete this design?" the requirements are related to design.

I would require a Site Access in the design of an high-secured area, and of course AP model. CE for me.

upvoted 1 times

Bembs 4 months, 2 weeks ago

Selected Answer: DE

You don't need access to the site to perform pre-deployment survey. Moreover, highly secured simply means restricted access, so strike that off.

upvoted 3 times

scottj 5 months, 3 weeks ago

C, E are the answers

upvoted 1 times

Bandito 9 months, 4 weeks ago

Selected Answer: CD

CD is my answer

upvoted 2 times

Mimimimi 1 year, 6 months ago

High-security means that it might not be accessible for an engineer.

Pre-deployment could consist of predictive or on-prem site survey.

It is save to assume that on-prem is what we need to do. In which we do not require site access.

We do require knowledge on AP Model.

We also need to know the client count because we want to deliver a good survey. And not taking client counts into consideration could negatively impact the deployment.

upvoted 4 times

FabriG 1 year, 10 months ago

Selected Answer: DE

D and E

upvoted 4 times

🗨️ 👤 **NoSpamming** 2 years, 2 months ago

Always need to know AP model and client count (capacity) for any new design.

upvoted 4 times

🗨️ 👤 **rrahim** 2 years, 8 months ago

Selected Answer: CE

"new building in a high-security area" - if you don't have site access - you cannot do site survey.

upvoted 3 times

🗨️ 👤 **RSC357** 2 years, 9 months ago

Selected Answer: CE

Required to do a new survey? Site access and AP models. Number of clients will affect internet speed. Well, human bodies contain water that will absorb RF. Typical tricky Cisco question.

upvoted 3 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

Provided answer is correct. obviously the Ap model determines this as well as the number of clients directly effects the signal strength. Please if you clearly don't the question or material don't muddy the waters. HVAC Access, Site Access, and or WLC model??? By process of elimination this should have been more than obvious from the beginning. Validate the answers not guestimate.

upvoted 4 times

🗨️ 👤 **santoshkotla** 2 years, 6 months ago

Hi there. Number of clients should affect the speed but not the signal strength. It's a pre-deployment in a new building which will also require the drawing and visual analysis of the place for which an access will be required. So I'm more inclined to C,E but please correct me if I'm wrong. I didn't find any text book reference that says clients affect the RSSI value.

upvoted 2 times

🗨️ 👤 **EGD** 2 years, 11 months ago

C & E?

The number of clients has no affect on the signal strength. I think maybe Site Access because it is often mentioned that it can be difficult to gain access to secure areas for the survey. And the AP for model/antenna choice for the high signal desired. I don't think that the WLC matters

But I am not sure. . . .

upvoted 4 times

A wireless engineer is getting ready to perform a predictive site survey. The new network needs to support data and voice over wireless. Which two Cisco recommendations should be considered for the design? (Choose two.)

- A. Set -19 dBm of separation between APs on the same channel.
- B. Use the 5 GHz radio band due to 40 MHz bandwidth capability.
- C. Use the 5 GHz radio band due to the 24 non-overlapping channels.
- D. Set the cell boundary to -67 dBm.
- E. Set the cell overlap to 15%

Suggested Answer: CD

Community vote distribution



dordonezmx Highly Voted 6 months ago

I think C & D is correct, 15 % is for High density deployment. Chapter 5 "Applying Wireless Design Requirements" page 355 in CCNP Enterprise Wireless Design ENWLS D 300-425 and Implementation ENWLS I 300-430 Official Cert Guide 2nd Edition
upvoted 6 times

Jonycici Most Recent 4 weeks, 1 day ago

Selected Answer: DE

DE is correct
upvoted 1 times

Farhad123 2 months, 3 weeks ago

The best-practice guidelines for designing any AP cell recommend setting the cell boundary at -67 dBm,
upvoted 1 times

ShamsDimashki 4 months ago

Selected Answer: DE

the available 24 channels make this answer invalid, because of the DFS requirements
While 15% of overlap is a recommendation from Cisco
No recommendation for 40 MHz
Correct answer D + E
upvoted 2 times

luch 4 months, 1 week ago

Selected Answer: CD

Chapter 5 "Applying Wireless Design Requirements"
Designing a Wireless Network for Voice and Video
"As you plan the band and channel assignment for each AP, try to leverage the 5GHz band as much as possible. There are more non-overlapping channels there and much less chance of interference from non-Wi-Fi devices than in 2.4GHz. A common practice is to use the U-NII-1 and U-NII-3 channels, while avoiding U-NII-2 and U-NII-2 Extended channels because of DFS requirements."
upvoted 4 times

n3sh 5 months, 3 weeks ago

Selected Answer: CD

I agree it's C and D
upvoted 4 times

JBERTHIER 8 months ago

Is is D and E
40Mhz is useless for voice and it is limiting the number of channels available.
There is 25 channels available in 5Ghz but UNII-2 is under DFS regulation so unusable for voice deployment.
upvoted 1 times

🗨️ 👤 **Babustest** 11 months ago

Selected Answer: CE

To reduce channel utilization in the 2.4 GHz band, Cisco recommends moving clients to 5 GHz.

https://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

upvoted 1 times

🗨️ 👤 **Babustest** 11 months ago

Please ignore. It's C and D

upvoted 3 times

🗨️ 👤 **SakoTRG** 1 year ago

Def D&E<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>

upvoted 2 times

🗨️ 👤 **Mimimimimi** 1 year, 4 months ago

Selected Answer: BD

-67 dBm cell boundary is a requirement for Voice.

Channel-bonding is a site-dependent capability and should at least be considered.

- 19 dBm is incorrect. dBm is a compared value. As it is the separation between 2 AP's, it should have been stated as 19 dBm. And in most deployments this is not achievable.

The number of non-overlapping channels is regulatory domain dependent.

The cell overlap should be 20% instead of 15%

upvoted 2 times

🗨️ 👤 **JBERTHIER** 8 months ago

Good point for noticing the incorrect usage of dBm to express a difference between two cells !

upvoted 2 times

🗨️ 👤 **angelclaw** 1 year, 6 months ago

Selected Answer: DE

Both D and E are explain here : <https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>

upvoted 2 times

🗨️ 👤 **angelclaw** 1 year, 6 months ago

Cisco will not provide answers that involve regulatory domain, so it is not option C.

B is not an option because using 20MHz is enough for any voice deployment.

Option D and E are correct because both are specified in the Cisco PDF here:

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.pdf>

upvoted 2 times

🗨️ 👤 **FabriG** 1 year, 10 months ago

Selected Answer: BD

According to Cisco ENWLSO Course, it is B and D.

20 MHz BW recommended for only voice use cases (24/25 channels)

upvoted 2 times

🗨️ 👤 **AnnieBell2** 1 year, 11 months ago

Selected Answer: BD

Arent there 25 channels in 5Ghz?

upvoted 1 times

🗨️ 👤 **Donald_Trump** 1 year, 11 months ago

I think B&D should be correct

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/Enterprise-Mobility-8-5-Design-Guide/Enterprise_Mobility_8-5_Deployment_Guide/Chapter-9.html#36873

"It is not likely that this 19 dBm of separation can be achieved in most deployments. The most important RF design criteria are the -67 dBm cell radius and the 20 percent recommended overlap between cells. Designing to these constraints optimizes channel separation."

"The data rate is 150 Mbps for an 802.11n client on the 5 GHz band with a 40 MHz wide channel and with a one spatial stream client. A laptop running a softphone application such as Jabber can support three spatial streams and have a data rate to 450 Mbps on a 5 GHz, 40 MHz wide

channel. Both an 802.11ac client and an 802.11n client that is only 20 MHz wide and supporting one spatial stream can share Wi-Fi channel access on a 40 MHz wide channel with an 802.11ac three spatial stream client on a 80 MHz wide channel."

upvoted 3 times

An engineer is designing a wireless network to support Cisco Hyperlocation. The customer indicated some locations that require high density. How is the design adjusted?

- A. Add additional APs to all the comers of the site.
- B. Add more APs than indicated from the site survey spread across all areas.
- C. Add an additional AP in the middle of the dense area.
- D. Run the site survey using -57dBm as a threshold.

Suggested Answer: C

Community vote distribution

C (83%)

Other

🗨️ 👤 **Thomas66** Highly Voted 👍 1 year, 10 months ago

Correct Answer is C:

Some basic guidelines for site surveys and deployments for Cisco Hyperlocation:

- Perform a survey, or try to maintain consistent -65 dBm RSSI for data, voice, video, and location.
- Use a 10 to 20 percent cell overlap for optimized roaming and location calculations.
- A good general principle is one AP per 2500 square feet (232.26 square meters; best performance).
- For high-density applications, perhaps add an extra AP in the middle.

upvoted 7 times

🗨️ 👤 **Lakshan_97** Most Recent 🕒 5 months, 3 weeks ago

Selected Answer: C

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-1/Halo-DG/b_hyperlocation-deployment-guide.html

upvoted 2 times

🗨️ 👤 **JBERTHIER** 8 months ago

Selected Answer: A

Sorry but I would add APs to corners in order to always have at least one AP in each quadrant from the client

Like this picture : [https://www.cisco.com/c/dam/en/us/td/i/400001-500000/410001-420000/410001-](https://www.cisco.com/c/dam/en/us/td/i/400001-500000/410001-420000/410001-411000/410014.tif/_jcr_content/renditions/410014.jpg)

[411000/410014.tif/_jcr_content/renditions/410014.jpg](https://www.cisco.com/c/dam/en/us/td/i/400001-500000/410001-420000/410001-411000/410014.tif/_jcr_content/renditions/410014.jpg)

upvoted 1 times

🗨️ 👤 **vangio** 1 year, 3 months ago

Correct C

upvoted 1 times

🗨️ 👤 **FabriG** 1 year, 10 months ago

Selected Answer: C

Answer C.

upvoted 2 times

🗨️ 👤 **Alonzo_Harris** 1 year, 11 months ago

Correct answer is C

Best Practices for high dense areas says the following:

For high density applications, it is recommended to add an additional AP in the middle of dense areas

upvoted 2 times

🗨️ 👤 **ALEX_CC** 1 year, 12 months ago

Selected Answer: C

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-2/b_hyperLocation_best_practices_and_troubleshooting_guide.html

upvoted 4 times

☒  **Cayenne** 2 years ago

Selected Answer: C

" it is recommended to add an additional AP in the middle of dense areas "

upvoted 3 times

☒  **NoSpamming** 2 years, 2 months ago

"For high density applications, it is recommended to add an additional AP in the middle of dense areas"

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-2/b_hyperLocation_best_practices_and_troubleshooting_guide.html

Clearly C

upvoted 4 times

☒  **migu0692** 2 years, 2 months ago

Selected Answer: D

<https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8->

[7/b_wireless_high_client_density_design_guide.html#concept_D5D592FC38C24B9291AFF5A391B0E4ED](https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-7/b_wireless_high_client_density_design_guide.html#concept_D5D592FC38C24B9291AFF5A391B0E4ED)

upvoted 2 times

☒  **bctrailrider8** 2 years, 2 months ago

Selected Answer: C

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-2/b_hyperLocation_best_practices_and_troubleshooting_guide.html

upvoted 4 times

An engineer is designing a new wireless network. The network needs to fulfill the following requirements:

- ⇒ support multimedia applications
- ⇒ support a high concentration of wireless clients
- ⇒ support data over wireless
- ⇒ support roaming

Which approach should be used?

- A. use of micro cells with reduced power levels
- B. use of macro cells with reduced power levels
- C. coverage for cells at maximum power levels
- D. use of macro cells with maximum power levels

Suggested Answer: A

Community vote distribution

A (100%)

🗨️ 👤 **Farhad123** 2 months, 1 week ago

Best solution to support high concentration clients is to use Micro cell to reduce interference. to reach that one option is to reduce the power . more opt explained here : https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-3/b_cisco_ironet_series_2800_3800_access_point_deployment_guide/b_cisco_ironet_series_2800_3800_access_point_deployment_guide_chapter_01001
upvoted 1 times

🗨️ 👤 **ShamsDimashki** 4 months ago

Selected Answer: A

High density area
upvoted 2 times

An engineer is designing a high-density WLAN for a 10,000-seat auditorium. The solution must take advantage of human attenuation, as well as the aesthetics of the room. Where must the APs be placed?

- A. on the walls
- B. under the seats
- C. on the ceiling
- D. above the seating areas

Suggested Answer: B

Community vote distribution

B (100%)

  **Cayenne** Highly Voted 2 years ago

Selected Answer: B

Under Seat Mounting. This provides two advantages. First, the users themselves attenuate the signals. Second, this can generally provide a great way to hide APs.



upvoted 5 times

  **ougy** Most Recent 1 year, 6 months ago

Selected Answer: B

Under Seat Mounting. Like we do in Stade de France

upvoted 3 times

  **FabriG** 1 year, 10 months ago

Selected Answer: B

According to Cisco ENWLSD Course, it is B.

upvoted 3 times

  **walacky** 2 years, 1 month ago

https://www.cisco.com/c/dam/en_us/solutions/industries/docs/education/cisco_wlan_design_guide.pdf

"Under Seat Mounting" section says that correct answer is B

upvoted 4 times

  **NoSpamming** 2 years, 2 months ago

"take advantage of human attenuation"

Only Under the Seats takes "advantage of human attenuation".

upvoted 3 times

A network administrator of a global organization is collapsing all controllers to a single cluster located in central Europe. Which concern must be addressed?

- A. Some channels may not be available consistently across the organization.
- B. Different RF policies per office are not available in this configuration.
- C. Syslog must be configured to the time-zone of the NMS platform.
- D. Centralized controllers cannot uniformly authenticate global users.

Suggested Answer: A

Community vote distribution

A (80%)

C (20%)

JBERTHIER Highly Voted 8 months ago

Selected Answer: A

Even if C could be right I think the critical concern would be to deal with different RF settings par region centralised on this controller in Europe
upvoted 5 times

FabriG Highly Voted 1 year, 10 months ago

Selected Answer: A

Answer A
upvoted 5 times

Farhad123 Most Recent 2 months, 1 week ago

A is correct since each country might have its regulation . C is not an answer, Syslog uses UTC by default but there is no need to do timing for NMS
upvoted 2 times

Notinmybrain 1 year, 9 months ago

so it says address the concern which A is a concern that needs to be taken into account, syslog is not restricted but if there is a channelling issue that's something to be concerned about
upvoted 4 times

Thomas66 1 year, 10 months ago

Selected Answer: A

Available Channels differ from region to region. It's A
upvoted 3 times

AnnieBell2 1 year, 11 months ago

Selected Answer: A

The question is "Which concern must be addressed", therefore the correct answer will be A.

Configuring country codes seems to address that concern: https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/country_codes.html
upvoted 3 times

migu0692 2 years, 2 months ago

Selected Answer: C

Answer is correct
upvoted 3 times

kthekillerc 2 years, 10 months ago

Provided answer is correct. Please Validate not Guess, it makes it harder for everyone else to practice this.
upvoted 4 times

antmich 3 years, 8 months ago

I believe it is A., since available channels differ from region to region.
upvoted 3 times

🗨️ 👤 **antmich** 3 years, 8 months ago

I just looked it up, but you can actually change the channels allowed on a per RF Profile basis, which would allow restriction of channels in the needed regions. The original answer is legit.

upvoted 6 times

🗨️ 👤 **Jonycici** 4 weeks ago

But when you configure the WLC you set the country code. It impacts the overall channel availability.

upvoted 1 times

🗨️ 👤 **Faridtnx** 1 year, 6 months ago

Answer A says "available CONSISTENTLY". So the it's not that channels can't be used at all, but rather, it has to be customized through RF Profile per each AP group.

Correct answer would be A

upvoted 2 times

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

Suggested Answer: C

🗨️ 👤 **Farhad123** 2 months, 1 week ago

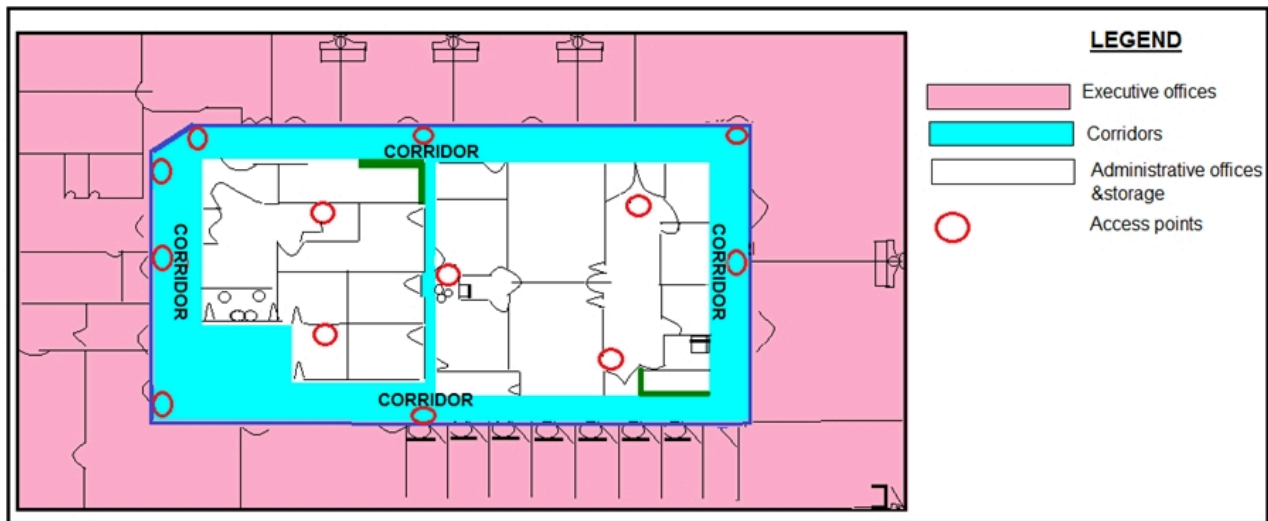
C is correct

upvoted 1 times

🗨️ 👤 **Bapu20** 2 years, 4 months ago

CORRECT

upvoted 3 times



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

Suggested Answer: A

Community vote distribution

A (100%)

Cyrillka Highly Voted 3 years, 6 months ago

Right answer is A.

<https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/WiFiLBS-DG/wifich5.html>

Figure 5-6

For aesthetic reasons, facilities management has decided that access points will not be placed within any of the executive offices or conference rooms located between the hallway corridors and the physical perimeter. Because of these restrictions, our convex hull now lies at the outside edge of the corridor (indicated by the blue rectangle) and not at the true physical perimeter of the floor.

upvoted 11 times

Liselot Highly Voted 2 years, 10 months ago

Answer A

Cyrillka's link is not working anymore. Here is a new one:

[https://community.cisco.com/kxiwq67737/attachments/kxiwq67737/6015-discussions-wireless/10130/1/Cisco%20Connected%20Mobile%20Experiences%20\(CMX\)%20CVD.pdf](https://community.cisco.com/kxiwq67737/attachments/kxiwq67737/6015-discussions-wireless/10130/1/Cisco%20Connected%20Mobile%20Experiences%20(CMX)%20CVD.pdf)

upvoted 6 times

Farhad123 Most Recent 2 months, 1 week ago

A is correct one

upvoted 1 times

Farhad123 2 months, 3 weeks ago

A is correct

upvoted 1 times

Cleytonsc 1 year, 4 months ago

Selected Answer: A

Answer A

upvoted 2 times

🗨️ 👤 **FabriG** 1 year, 10 months ago

Selected Answer: A

Answer A.

upvoted 2 times

🗨️ 👤 **Impeg** 2 years, 5 months ago

I think the answer is correct. The difference between the document "everyone" refers to and the question is the person from which the solution comes:

"facilities management has decided" and "Wi-Fi design engineer"

upvoted 2 times

🗨️ 👤 **rrahim** 2 years, 8 months ago

Selected Answer: A

"even though that installation provides better coverage"

upvoted 3 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

Provided answer is correct

upvoted 1 times

🗨️ 👤 **rrahim** 2 years, 8 months ago

Please Validate not Guess, it makes it harder for everyone else to practice this. Correct answer is A. Read the manual

<https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/WiFiLBS-DG/wifich5.html>

upvoted 6 times

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

Suggested Answer: B

Community vote distribution

B (100%)

🗃️ 👤 **Peter_Perez** Highly Voted 3 years, 6 months ago

https://www.cisco.com/c/dam/en_us/solutions/industries/docs/education/cisco_wlan_design_guide.pdf
upvoted 7 times

🗃️ 👤 **Farhad123** Most Recent 2 months, 1 week ago

B is correct
upvoted 1 times

🗃️ 👤 **vangio** 1 year, 3 months ago

Correct B
upvoted 2 times

🗃️ 👤 **ContactScott** 1 year, 6 months ago

Selected Answer: B

Source:

https://www.cisco.com/c/dam/en_us/solutions/industries/docs/education/cisco_wlan_design_guide.pdf
Under seat or under desk mounting can provide from 6 dB to 20 dB of attenuation to the cell, depending on the openness of the mounting options.
upvoted 2 times

🗃️ 👤 **EGD** 2 years, 12 months ago

B - "Under seat or under desk mounting can provide from 6 dB to 20 dB of attenuation to the cell, depending on the openness of the mounting options."
upvoted 3 times

A company wants to replace its existing PBX system with a new VoIP System that will include wireless IP phones. The CIO has concerns about whether the company's existing wireless network can support the new system. Which tool in Cisco Prime can help ensure that the current network will support the new phone system?

- A. Location Readiness
- B. Site Calibration
- C. Map Editor
- D. Voice Readiness

Suggested Answer: D

 **EGD** Highly Voted 2 years, 12 months ago

D -

https://www.cisco.com/c/en/us/td/docs/net_mgmt/prime/infrastructure/3-4/user/guide/bk_CiscoPrimeInfrastructure_3_4_0_UserGuide/bk_CiscoPrimeInfrastructure_3_4_0_UserGuide_chapter_01010.html

"The voice readiness tool allows you to check the RF coverage to determine if it is sufficient for your voice needs. This tool verifies RSSI levels after access points have been installed."

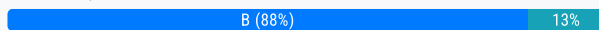
upvoted 7 times

A rapidly expanding company has tasked their network engineer with wirelessly connecting a new cubicle area with Cisco workgroup bridges until the wired network is complete. Each of 42 new users has a computer and VoIP phone. How many APs for workgroup bridging must be ordered to keep cost at a minimum while connecting all devices?

- A. 4
- B. 5
- C. 6
- D. 7

Suggested Answer: B

Community vote distribution



🗳️ **skh** Highly Voted 3 years, 6 months ago

looking at the "42" number, but indeed since it mentions computer + VoIP =84

It's 5. Workgroup bridges support 20 cliens maximum.

upvoted 14 times

🗳️ **RogerTheLodger** 3 years, 2 months ago

That's what I thought. The question doesn't specify the type of VoIP phone, so you shouldn't assume you can connect the PC to it, and even if you could you'd only need 3 WGBs for 42.

upvoted 2 times

🗳️ **rrahim** 2 years, 9 months ago

The question says:

wirelessly connecting a new cubicle area with Cisco workgroup bridges until the wired network is complete. Each of 42 new users has _a_ computer and VoIP phone_

upvoted 2 times

🗳️ **rrahim** 2 years, 8 months ago

Also the question is "How many APs for workgroup bridging" not how many WGBs. So WGBs will be connected to APs wirelessly and then phones and computers will be connected to WGBs. Some of those computers can be connected to APs wirelessly too.

upvoted 1 times

🗳️ **wirelessvibes** 2 years, 7 months ago

Hi, the WGB AP is basically an antenna and an ethernet port. So this would connect upstream to the AP. But in this case they ask for how many APs for workgroup bridging. If max 20 clients per wgb then 5 WGB APs should be correct.

upvoted 3 times

🗳️ **ShamsDimashki** Most Recent 4 months ago

VoIP & Computer together need only 1 port

upvoted 1 times

🗳️ **Valeronitro** 1 year, 3 months ago

Selected Answer: A

Minimum is the key to this answer

upvoted 1 times

🗳️ **CyborgXCZ** 1 year, 9 months ago

Selected Answer: B

The answer should be B.

This is from the deployment guide..

A Cisco WGB provides information about its wired clients via Internet Access Point Protocol (IAPP) messaging. This enables the wireless

infrastructure to know the MAC addresses of the WGB's wired clients. Up to 20 wired clients are supported behind a Cisco WGB.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-1/configuration-guide/b_cg81/workgroup_bridges.pdf

Since each user will consume 2 clients (PC/IP Phone) and we have 48 Users we will need minimum of 5x AP's to support 84 Clients
upvoted 3 times

🗉 👤 **FabriG** 1 year, 10 months ago

Selected Answer: B

According to Cisco ENWLSO Course, it is B.

WGBs support up to 20 clients.

upvoted 2 times

🗉 👤 **JONATHGA** 2 years, 5 months ago

Selected Answer: B

a WGB is used to provide access to the network through wireless to a device that doesn't have wireless capability, so if they want to use APs on WGB mode, we could assume that the laptops and VoIP phones are not wifi capable, so they will use the ethernet port of the AP to connect to the network. An AP on WGB mode can support up to 20 wired clients, so if there are 42 clients with two devices each, the total amount of devices to be connected to the WGBs will be 84 and we need at least 5 APs on WGB mode to support all those clients:

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/workgroup_bridges.html#wgb

upvoted 2 times

🗉 👤 **Ram0n_Aya1a** 2 years, 5 months ago

Tricky Question.

A general rule-of-thumb is ~20-30 users per AP.

<https://community.cisco.com/t5/wireless/how-to-limit-maximum-wireless-client-count-per-ap/td-p/2419273>

Also look at the book, Chapter 5 page 101

"This time if the room is full of people, each AP might carry around 25 associated clients"

The question says "must be ordered to keep cost at minimum while connecting all devices"

I will go with answer A

upvoted 2 times

🗉 👤 **rrahim** 2 years, 9 months ago

<https://community.cisco.com/t5/wireless-mobility-documents/how-many-clients-can-be-connected-to-an-access-point/ta-p/3115019>

Number of 802.11b devices per AP: Cisco recommends that you have no more than 15 to 25.

$4 \times 25 = 100$

$42 \times 2 = 84$

Answer A

upvoted 3 times

🗉 👤 **fhrt21** 3 years ago

Answer B - 5 WGBs

$42 \times 2 = 84$ Clients

upvoted 2 times

🗉 👤 **ASV2020** 3 years, 1 month ago

Answer: A

upvoted 1 times

A high-density wireless network is designed. Which Cisco WLC configuration setting must be incorporated in the design to encourage clients to use the 5 GHz spectrum?

- A. Band Select
- B. RRM
- C. Cisco Centralized Key Management
- D. load balancing

Suggested Answer: A

  **skh** Highly Voted 3 years, 6 months ago

Band Select or Band Direction

The 2.4-GHz band is often congested. Clients on this band typically experience interference from Bluetooth devices, microwave ovens, and cordless phones as well as co-channel interference from other access points because of the 802.11b/g limit of three non-overlapping channels. You can use this feature to combat these sources of interference and improve overall network performance. Band direction enables client radios that are capable of dual-band (2.4- and 5-GHz) operation to move to a less congested 5-GHz access point.

<https://community.cisco.com/t5/wireless-mobility-documents/load-balancing-and-band-select-on-the-cisco-wireless-lan/ta-p/3128513>
upvoted 6 times

  **Farhad123** Most Recent 2 months, 1 week ago

A is correct

upvoted 1 times

  **Ram0n_Aya1a** 2 years, 5 months ago

A is Correct.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/9800/16-12/config-guide/b_wl_16_12_cg/802-11-parameters-and-band-selection.html
upvoted 4 times

A wireless network consultant must assess an existing wireless LAN controller. Which section must the consultant check before replacing the old APs with APs that are IEEE 802.11ac-capable?

- A. number of AP licenses
- B. controller PSU
- C. throughput capacity
- D. software version

Suggested Answer: D

Community vote distribution

D (75%) C (25%)

antmich Highly Voted 3 years, 8 months ago

I think it is D, since newer APs might not be compatible with older WLC software. Also, if you replace each old AP by a new one, the licenses should remain the same

upvoted 21 times

Farhad123 Most Recent 2 months, 1 week ago

D is correct answer , as this is replacing we dont have issue with licencing but the WLC software should be compatible with AP

upvoted 2 times

dordonezmx 5 months, 3 weeks ago

Selected Answer: C

The answer is C, question only says AC standard AP, if you check the first AP with AC capabilities would be 3600, then if you check the wireless compatibility matrix, version 7.2.103 supports 1040, 1140 and 3600 model. Lastly, 3600 datasheet talk alot of VHT.

upvoted 2 times

Mimimimi 1 year, 6 months ago

Answer is D.

802.11ac was released in 2014.

December 2013 , Cisco had released a new software code to support the 3700's. This software contained a lot of (unresolved) bugs.

WLC's running an older software verison (pre-7.5 or 7.6 would not support 802.11ac, right?

<https://mrnciew.com/2014/01/10/802-11ac-with-cisco-3700-ap/>

<https://www.cisco.com/c/en/us/td/docs/wireless/controller/release/notes/crn76mr01.html>

upvoted 1 times

FabriG 1 year, 10 months ago

Selected Answer: D

Answer D

upvoted 3 times

Alonzo_Harris 1 year, 11 months ago

D is the answer just from experience working at healthcare facility

upvoted 1 times

Macintosh_and_Merida 1 year, 11 months ago

Selected Answer: D

As it's 'replacing' then the licenses should not be a problem. However, firmware compatibility may be an issue - worth checking on

<https://www.cisco.com/c/en/us/td/docs/wireless/compatibility/matrix/compatibility-matrix.html>

upvoted 3 times

ALEX_CC 1 year, 12 months ago

Selected Answer: D



D is corrent, since one AP consumes one Licens, the typ of AP does not matter

upvoted 3 times

ASV2020 3 years, 1 month ago

Answer: D

upvoted 2 times

  **tonydiamond** 3 years, 4 months ago


answer is D. why would you check ap licenses for replacing existing aps? we are in the process now of replacing old aps with newer models. we have to upgrade the WLC with a newer software version to make it compatible with the newer models.

upvoted 4 times


Clustering Cisco WLCs into a single RF group enables the RRM algorithms to scale beyond the capabilities of a single Cisco WLC. How many WLCs 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

Suggested Answer: D


 **skh** Highly Voted 3 years, 6 months ago
book study guide


NOTE A single RF group can contain up to 20 WLCs. Depending on the WLC platform, a single RF group can contain up to 6,000 APs.
upvoted 10 times


 **Ram0n_Aya1a** Highly Voted 2 years, 5 months ago
D is Correect

"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
upvoted 5 times

 **Farhad123** Most Recent 2 months, 1 week ago
D is correct 20WLC and 6000APs this is the reference: https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/m_configuring_rf_groups.html
upvoted 1 times

 **Liselot** 2 years, 10 months ago
Strange that all the answers include 20 WLCs. Then that part should not have been asked...
upvoted 2 times

 **zyzyx123** 2 years, 11 months ago
A 8540 has a build in 6000 AP license from start, so how can it be anything lower than that. 6000 must be the answer.
upvoted 2 times

An engineer must speed up the reauthentication delays that are being experienced on the wireless infrastructure by deploying a key-caching mechanism. Which mechanism must be configured?

- A. PEAP
- B. FT
- C. PMF
- D. GTK-randomization

Suggested Answer: *B*

🗨️ 👤 **Farhad123** 2 months, 1 week ago

B is correct

upvoted 1 times

🗨️ 👤 **skh** 3 years, 6 months ago

802.11r An amendment to the 802.11 standard that defines a method of fast BSS transition

(FT). Clients capable of FT associate normally and then can reassociate very quickly by using a special FT 4-way handshake during the authentication and reassociation exchanges with subsequent APs.

upvoted 4 times

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

Suggested Answer: BE

Community vote distribution


BE (100%)

  **kthekillerc** Highly Voted 2 years, 10 months ago

Provided answer is correct
upvoted 9 times

  **Farhad123** Most Recent 2 months, 1 week ago

BE is the right choice
upvoted 1 times

  **Lakshan_97** 5 months, 3 weeks ago

Selected Answer: BE

Given answeres are accepted
upvoted 2 times

A technician connects a Cisco Aironet 3700 Series AP to a switch and realizes that the AP is coming up with 3x3 MIMO. What 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.

Suggested Answer: B

Community vote distribution

B (92%)

8%

🗨️ **Farhad123** 2 months, 1 week ago

802.3af = PoE (15.4 watts)

802.3at = PoE+ (25.5 watts)

upvoted 1 times

🗨️ **ShamsDimashki** 3 months, 3 weeks ago

Selected Answer: D

The power required for this release is: 19.6 (meaning it's POE+)

upvoted 1 times

🗨️ **FabriG** 1 year, 10 months ago

Selected Answer: B

According to Cisco ENWLSO Course, it is B.

upvoted 4 times

🗨️ **Macintosh_and_Merida** 1 year, 11 months ago

Selected Answer: B

802.3af is PoE, not PoE+, which provides 15.4W and reduces AP capabilities. Answer B is correct.

upvoted 4 times

🗨️ **DB1991** 2 years ago

The access point is downgraded to 3x3 when it is connected to a 15.4W supply

802.3af - IEEE 802.3af-2003 PoE standard provides up to 15.4 W of DC power

upvoted 3 times

🗨️ **Antasik** 2 years, 1 month ago

Selected Answer: B

From Datasheet: PoE 802.3af - 3700 - No external module installed - 3x3:3 on 2.4/5 GHz

upvoted 3 times

🗨️ **wili0001** 2 years, 1 month ago

answer b

upvoted 2 times

🗨️ **kaimi** 2 years, 2 months ago

802.3af delivers 15.4W which downgrades the AP to 3x3. If it was a POE+ switch then you would get 30W of power and the AP would be able to use it's full features but the question is only asking about 3x3 MIMO.

https://www.cisco.com/c/en/us/td/docs/wireless/access_point/3700/quick/guide/ap3700getstart.html

upvoted 4 times

A network engineer is working on a design for a wireless network that must support data, voice, and location services. To support these services, which access point placement must the engineer use?

- A. corner only
- B. perimeter and corner
- C. perimeter only
- D. indoor and outdoor

Suggested Answer: B

Community vote distribution

B (100%)

🗳️ 👤 **Hatestar** Highly Voted 👍 3 years, 7 months ago

B is correct, the following is found in the location-based services design guide:

In order to assure proper convex hull establishment around the set of location data points possessing high potential for good accuracy, access points should be placed in each corner of the floor, as well as along the floor perimeter between corners

upvoted 16 times

🗳️ 👤 **ASV2020** Highly Voted 👍 3 years, 1 month ago

Answer: B

upvoted 5 times

🗳️ 👤 **Farhad123** Most Recent 🕒 2 months, 1 week ago

B is the correct one

upvoted 1 times

🗳️ 👤 **FabriG** 1 year, 10 months ago

Selected Answer: B

According to Cisco ENWLSD Course, it is B.

upvoted 3 times

🗳️ 👤 **DB1991** 2 years ago

Selected Answer: B

<https://www.cisco.com/c/en/us/support/docs/wireless/mobility-services-engine/107571-mse-cams-guide.html>

In a location-ready design, it is important to ensure that access points are not solely clustered in the interior and toward the center of floors.

Rather, perimeter access points complement access points located within floor interior areas. In addition, access points must be placed in each of the four corners of the floor, and at any other corners that are encountered along the floor perimeter. These perimeter access points play a vital role to ensure good location fidelity within the areas they encircle, and, in some cases, can provide general voice or data coverage, as well.

upvoted 3 times

🗳️ 👤 **santoshkotla** 2 years, 6 months ago

Selected Answer: B

In order to assure proper convex hull establishment around the set of location data points possessing high potential for good accuracy, access points should be placed in each corner of the floor, as well as along the floor perimeter between corners

upvoted 3 times

A customer has noticed that Client Band Select is enabled and no clients are utilizing the 5 GHz band. Which three parameters must be met to ensure that wireless clients use the 5 GHz band? (Choose three.)

- A. Ensure that channel bonding is enabled on the WLAN.
- B. Ensure that the co-channel interference has not exceeded 85 dBm.
- C. Ensure that the UNII-2 extended channels are enabled on the 802.11a radios.
- D. Ensure that the client is receiving RSSI above the minimum band select RSSI threshold.
- E. Ensure that the client is dual-band capable.
- F. Ensure that the WLAN has 802.11a enabled.

Suggested Answer: DEF

Community vote distribution

DEF (100%)


 **Coffee313** Highly Voted 3 years, 3 months ago

I thing DEF is correct. UNII-2 Extended channels are additional but if 'a' is disabled, the 5GHz radios won't work at all.
upvoted 12 times

 **Liselot** Highly Voted 2 years, 10 months ago

DEF

The Acceptable Client RSSI is feature that determines how well a 2.4 GHz client needs to be heard before trying to push them to the 5 GHz band
upvoted 5 times

 **Liselot** 2 years, 10 months ago

The client obviously need both radios

If the WLAN has switched off the A radio, it can never connect to 5GHz

upvoted 2 times

 **Farhad123** Most Recent 2 months, 1 week ago

DEF are the right choices, UNII-2 Extended is not the right choice
upvoted 1 times

 **Notinmybrain** 1 year, 9 months ago

Ensure that the UNII-2 extended channels are enabled on the 802.11a radios.

i thought the radios need to be active for this to be put in place? and if so F is already in the mix with C so CDE should still stand? or if it a case of you enable the channels but not necessarily enable the radio.


thanks in advance

upvoted 1 times

 **NoWiresIncluded** 1 year, 5 months ago

Many clients do not support the UNII-2 Extended channels due to the DFS requirements, and thus the client manufacturer not wanting to spend the money to match the requirements of operating in that space, so it is definitely not one of the answers, in fact if you were having clients not joining the 5.0GHz with Band-Select enabled you would want to ensure UNII-2 channels are disabled.

upvoted 1 times

 **FabriG** 1 year, 10 months ago

Selected Answer: DEF

Answers D, E and F.

upvoted 3 times

 **AnnieBell2** 1 year, 11 months ago

Selected Answer: DEF

If 5Ghz band is disabled, clients wont be able to connect to it.

upvoted 1 times

  **ASV2020** 3 years, 1 month ago

Answer: CEF

upvoted 1 times

An engineer is reducing the subnet size of the corporate WLAN by segmenting the VLAN into smaller subnets. Clients will be assigned a subnet by location.

Which type of groups should the engineer use to map the smaller subnets to the corporate WLAN?

- A. WLC port groups
- B. RF groups
- C. AP groups
- D. interface groups

Suggested Answer: C

Community vote distribution

C (100%)

EGD **Highly Voted** 2 years, 12 months ago

C - "AP groups define the WLAN and VLAN mapping with RF profiles"
upvoted 11 times

ASV2020 **Highly Voted** 3 years, 1 month ago

Answer:C
upvoted 11 times

Farhad123 **Most Recent** 2 months, 1 week ago

I think D is correct since by having interface group you can have segmented subnet/VLAN and with AP group you can have segmented WLAN, this is my understanding but maybe I am wrong.
upvoted 1 times

scottj 5 months, 3 weeks ago

I think D

Based on the original question about how to map smaller subnets in a corporate WLAN where clients are assigned subnets according to their location, what's being sought is an efficient way to manage the distribution and assignment of these subnets within the network. This management must allow subnets to be assigned consistently with the physical location of users within the organization.

The correct choice, D. Interface groups, directly focuses on the administration of subnets and their logical assignment within a larger network, which is the primary goal in this scenario. Interface groups allow for the grouping of multiple network interfaces on the controller, where each group can be associated with a different subnet. This makes it much easier to assign specific subnets to users in different locations, ensuring that the network structure is organized and that access and security policies are appropriately applied based on where the user is connecting.
upvoted 1 times

JBERTHIER 8 months ago

Selected Answer: C

tricky question !

You may solve the case with an AP group or with an interface group

It depends if an anchor / foreign situation is involved :

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-2/config-guide/b_cg82/b_cg82_chapter_010101110.html

In most cases, a mapping WLAN<->interface in each AP group per location is the solution. So I would say answer C

upvoted 1 times

FabriG 1 year, 10 months ago

Selected Answer: C

Answer C.

upvoted 2 times


rrahim 2 years, 8 months ago

Selected Answer: C

c

In typical deployment scenarios, each WLAN is mapped to a single dynamic interface per WLC, but consider a deployment scenario where there is a 4404-100 WLC that supports the maximum number of APs (100). Now consider a scenario where 25 users are associated to each AP. That would result in 2500 users who share a single VLAN. Some customer designs can require substantially smaller subnet sizes. One way to deal with this is to break up the WLAN into multiple segments. The AP grouping feature of the WLC allows a single WLAN to be supported across multiple dynamic interfaces (VLANs) on the controller. This is done when a group of APs is mapped to a specific dynamic interface. APs can be grouped logically by employee workgroup or physically by location. <https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-vlan/71477-ap-group-vlans-wlc.html>

upvoted 5 times

  **kthekillerc** 2 years, 10 months ago

Provided answer is correct

upvoted 3 times

A customer has determined that aesthetics is a primary concern for their upcoming guest deployment. Which design consideration can be leveraged to address this concern?

- A. Paint the access point to cover the LED from being noticeable.
- B. Use enclosures to hide the wireless infrastructure in the surrounding environment.
- C. Use AIR-AP-BRACKET-1 to allow for greater mounting locations
- D. Deploy environmentally friendly cabling components to blend into the environment.

Suggested Answer: B

Community vote distribution

B (100%)

  **skh** Highly Voted 3 years, 6 months ago

I Should B

upvoted 13 times

  **FabriG** Most Recent 1 year, 10 months ago

Selected Answer: B

Answer B.


upvoted 3 times

  **NoobMonkey** 2 years, 9 months ago

Selected Answer: B

use enclosure for aesthetic look

upvoted 4 times

  **kthekillerc** 2 years, 10 months ago



Provided answer is correct

upvoted 2 times

  **ASV2020** 3 years, 1 month ago

Answer: B

upvoted 4 times

  **tonydiamond** 3 years, 4 months ago

B!!! we use enclosures all the time. its definetly b. it looks way better than mounted on the tile.

upvoted 4 times

An engineer has deployed a group of APs in an auditorium and notices that the APs are showing high co-channel interference. Which profile is used to adjust the parameters for these high-density APs?

- A. QoS profile
- B. AVC profile
- C. RF profile
- D. ISE profile

Suggested Answer: C

Community vote distribution

C (100%)

ASV2020 **Highly Voted** 3 years, 1 month ago

Answer: C

upvoted 11 times

hypergammaspacemonkey **Highly Voted** 3 years, 3 months ago

Should be C.

upvoted 7 times

Farhad123 **Most Recent** 2 months, 1 week ago

C is the correct answer

upvoted 1 times

FabriG 1 year, 10 months ago

Selected Answer: C

Clearly C.

upvoted 3 times

ulfjvw 2 years, 6 months ago

Selected Answer: C

RF profile

upvoted 2 times

alvaro_rutes 2 years, 9 months ago

C is correct

upvoted 3 times

NoobMonkey 2 years, 9 months ago

Selected Answer: C

RF profile setting for co-interference troubleshooting

upvoted 2 times

kthekillerc 2 years, 10 months ago

Correct answer is C

upvoted 3 times

Liselot 2 years, 10 months ago

Definitely answer C

upvoted 4 times

A wireless deployment in a high-density environment is being used by vendors to process credit card payment transactions via handheld mobile scanners. The scanners are having problems roaming between access points in the environment. Which feature on the wireless controller should have been incorporated in the design?

- A. RX-SOP
- B. 802.11w
- C. AP Heartbeat Timeout
- D. Application Visibility Control

Suggested Answer: A

EGD Highly Voted 2 years, 12 months ago

A - seems the best answer. "The intended use-case for RX-SOP is for high density deployments such as stadiums, large auditoriums, and other scenarios where many client devices are connected per AP. Additionally, this tool should only be used for fine-tuning after other Wi-Fi best practices have been followed.

Finally, RX-SOP should only be used to tune out neighboring or adjacent cells of coverage. Never use RX-SOP in an attempt to tune out distant client devices, as this is not the intended use case for the feature and it can cause unintended connectivity problems."

upvoted 8 times

Farhad123 Most Recent 2 months, 1 week ago

A is correct and I think 802.11w is not correct and that might be a good choice when you want more safety and security for payment system, here in this https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/5700/software/release/ios_xe_33/11rkw_DeploymentGuide/b_802point11rkw_dep

upvoted 1 times

kthekillerc 2 years, 10 months ago

Provided answer is correct

upvoted 3 times

skh 3 years, 6 months ago

[https://documentation.meraki.com/MR/Radio_Settings/Receive_Start_of_Packet_\(RX-SOP\)](https://documentation.meraki.com/MR/Radio_Settings/Receive_Start_of_Packet_(RX-SOP))

upvoted 3 times

A university is in the process of designing a wireless network in an auditorium that seats 500 students and supports student laptops. Which design methodology should the university implement in the auditorium?

- A. roaming design model
- B. voice design model
- C. location design model
- D. high-density design model

Suggested Answer: D

Community vote distribution

D (100%)

- 🗨️ **brutes** Highly Voted 3 years, 8 months ago
D is correct smaller cell's more AP for a better client utilization
upvoted 11 times
- 🗨️ **Farhad123** Most Recent 2 months, 1 week ago
D is the correct one
upvoted 1 times
- 🗨️ **FabriG** 1 year, 10 months ago
Selected Answer: D
Clearly D.
upvoted 3 times
- 🗨️ **Macintosh_and_Merida** 1 year, 11 months ago
Selected Answer: D
Definitely D, 'high density'.
upvoted 2 times
- 🗨️ **ulfjvw** 2 years, 6 months ago
Selected Answer: D
who selects "correct" answers on this site????
upvoted 4 times
- 🗨️ **NoobMonkey** 2 years, 9 months ago
Selected Answer: D
auditorium with 500 users scenario is considered high-density environment
upvoted 3 times
- 🗨️ **kthekillerc** 2 years, 10 months ago
D is the correct answer
upvoted 3 times
- 🗨️ **notzigzag** 3 years, 1 month ago
HIHG DENSITY DESIGN MODEL
upvoted 4 times
- 🗨️ **ASV2020** 3 years, 1 month ago
Answer: D
upvoted 4 times
- 🗨️ **tonydiamond** 3 years, 4 months ago
D is the correct answer.
upvoted 4 times

An engineer is designing an outdoor mesh network to cover several sports fields. The core of the network is located in a building at the entrance of a sports complex. Which type of antenna should be used with the RAP for backhaul connectivity?

- A. 5 GHz, 8-dBi omnidirectional antenna
- B. 2.4 GHz, 8-dBi patch antenna
- C. 5 GHz, 14-dBi patch antenna
- D. 2.4 GHz, 14-dBi omnidirectional antenna

Suggested Answer: C

Community vote distribution

C (100%)

EGD **Highly Voted** 2 years, 12 months ago

A- The RAP has to "cover several sports fields" . . .containing MAPs . . .
upvoted 9 times

Lakshan_97 5 months, 3 weeks ago

but clearly mentioned RAP will be placed at the entrance. using a omni is useless because half will be covered and another hald will be wasted.
upvoted 2 times

wili0001 **Highly Voted** 2 years, 1 month ago

Chapter 7 pag.147
ount the RAP such that it has a good view of the area to be covered, using directional antennas if possible. Answer : C
upvoted 8 times

Jonycici **Most Recent** 3 weeks, 4 days ago

Selected Answer: C

C is correct. Check the radiation pattern of a patch 14dbi

<https://www.cisco.com/c/en/us/td/docs/wireless/antenna/installation/guide/ant5114P.pdf>

upvoted 1 times

Babustest 11 months ago

Selected Answer: C

C. 5 GHz, 14-dBi patch antenna

Here's the rationale for this choice:

5 GHz Frequency Band: The 5 GHz band is generally preferred for backhaul connectivity in a mesh network due to its larger bandwidth capacity and reduced interference compared to the 2.4 GHz band. This is particularly important in an outdoor setting like a sports complex, where there might be other sources of interference.

14-dBi Patch Antenna: A patch antenna with a high gain (14 dBi) is directional and focuses the signal in a specific direction, which is ideal for backhaul links where the signal needs to travel a longer distance from the RAP to other access points in the network. The directional nature of the patch antenna helps in maintaining a strong and focused signal, increasing the link's reliability and performance.

upvoted 2 times

gargionifabio 1 year, 4 months ago

omnidirectional antennas is used to cliente conectivity (2.4Ghz), to backhaul we use directional antennas with good gain and ins 5Ghz. So C is correct.

Cisco Cert Guide Chap7 pag. 146, 147.

upvoted 1 times

jorgemejiae 1 year, 5 months ago

A) it is correct

high-gain antenna configuration is recommended only for connecting a RAP to the MAP. To optimize mesh behavior, omnidirectional antennas are

used because mesh links are limited to one mile (1.6 km). The curvature of the earth does not impact line-of-sight calculations because the curvature of the earth changes every six miles (9.6 km).

https://www.cisco.com/c/en/us/td/docs/wireless/technology/mesh/8-0/design/guide/mesh80/m_site-preparation-and-planning.html

upvoted 2 times

🗨️ 👤 **NoWiresIncluded** 1 year, 5 months ago

This question should have a diagram/map showing location data as to where this entrance is located with regard to the fields, as such we cannot answer the question accurately beyond the fact that it should be 5.0GHz.

upvoted 1 times

🗨️ 👤 **anagy11** 1 year, 8 months ago

As it's about a sports complex, I assume that distances are long between APs and that APs are deployed in a serial manner, one after another, with the RAP being the first AP in the line near the entrance.

In order to cover long distances, you need a directional antenna with appropriate gain value, so I vote for C.

I don't think that an omnidirectional antenna in the RAP with a lower gain could provide sufficient RSSI for MAPs to be able cover the distance of the whole complex.

Of course, a walkthrough survey would help in the final decision.

upvoted 1 times

🗨️ 👤 **FabriG** 1 year, 10 months ago

Selected Answer: C

Clearly C.

upvoted 2 times

🗨️ 👤 **Eyserith** 2 years, 7 months ago

Selected Answer: C

For backhaul to the core you'd want a directional antenna pointed at the entrance of the Sports complex.

upvoted 2 times

🗨️ 👤 **Gab99** 1 year, 9 months ago

This is not what the question asked. The question is what the RAP should be using. And as RAP has to cover multiple directions you need omni. So A

upvoted 4 times

🗨️ 👤 **Lakshan_97** 5 months, 3 weeks ago

its not mandatory that app MAP should connect to the RAP. so that several sport field will be in directional way for distributed places , even its distributed MAP can be connected to another MAP too then it will reach to the RAP

upvoted 1 times

🗨️ 👤 **fhrat21** 3 years ago

Anyone who can explain why A and not C ?

upvoted 1 times

🗨️ 👤 **Johnconnor2021** 3 years ago

it doesnt say how the sports complex are distributed so normally they are spread over a core building, as it suggest the question. Hence, you should think in an omnidirectional. Besides, it does not say how far are the sports fields, so its understandable that are not quite far from the core building either. Therefore 8 dBi should be enough. I would go for A.

upvoted 4 times

A network engineer needs to create a wireless design to bridge wired IP surveillance cameras in the parking lot through a mesh AP. To which operate mode of the AP should the cameras connect?

- A. RAP
- B. MAP
- C. FlexConnect
- D. local

Suggested Answer: B

Community vote distribution

B (100%)

SKDA Highly Voted 3 years ago

B is correct.

<https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-mesh/110996-vid-over-mesh-00.html>

upvoted 7 times

Farhad123 Most Recent 2 months, 1 week ago

MAP is the right choice , B

upvoted 1 times

Cleytonsc 1 year, 4 months ago

Selected Answer: B

answer: MAP

upvoted 2 times

anagy11 1 year, 8 months ago

MAPs can also connect wired clients just like WGBs.

Question is about connecting wired cameras through a MAP.

It's B.

WGB would also be another option for wired-over-wireless connection.

upvoted 3 times

learningccnp 1 year, 8 months ago

Selected Answer: B

MAP is correct.

upvoted 2 times

RSC357 1 year, 10 months ago

The cameras are wired. I would think they would connect to a WGB but that's not an option.

upvoted 1 times

Ram0n_Aya1a 2 years, 5 months ago

B is correct.

Chapter 7 , page 151, figure 7-9

upvoted 3 times

kthekillerc 2 years, 10 months ago

Provided answer is correct

upvoted 3 times

A network engineer is designing a new wireless network. The network needs to have these characteristics:

- ⇒ support high client concentration
- ⇒ optimize client performance
- ⇒ avoid interference

Which approach should be taken?

- A. Deploy APs near each other for 2.4 GHz coverage, and disable the 5 GHz radios for all APs.
- B. Deploy APs near each other for 5 GHz coverage, and disable the 2.4 GHz radios for some APs.
- C. Deploy APs near each other for 2.4 GHz coverage, and disable the 5 GHz radios for some APs.
- D. Deploy APs near each other for 5 GHz coverage, and enable the 2.4 GHz radios for all APs.

Suggested Answer: B

Community vote distribution

B (100%)

🗳️ **hypergammaspacemonkey** Highly Voted 3 years, 3 months ago

Should be B.

upvoted 13 times

🗳️ **Farhad123** Most Recent 2 months, 1 week ago

B is the correct one

upvoted 1 times

🗳️ **Arian5431** 2 months, 3 weeks ago

Selected Answer: B

Who has chozen for C????

upvoted 2 times

🗳️ **Thor1992** 1 year, 6 months ago

Selected Answer: B

should be B

upvoted 1 times

🗳️ **MoD82** 1 year, 7 months ago

Selected Answer: B

should be B

upvoted 1 times

🗳️ **FabriG** 1 year, 10 months ago

Selected Answer: B

Clearly B.

upvoted 2 times

🗳️ **ulfjvw** 2 years, 6 months ago

Selected Answer: B

disable 66% of 2.4 radios

upvoted 1 times

🗳️ **Liselot** 2 years, 10 months ago

Answer B.

The disabled 2.4 GHz radios are also known as " redundant AP Radios"

upvoted 3 times

🗳️ **ASV2020** 3 years, 1 month ago

Answer: B

upvoted 4 times

Why is 802.11a connectivity reduced in an X-ray room?

- A. X-rays create significant non-Wi-Fi interference on the 802.11a band.
- B. X-rays impact the 802.11a UNII-2 channels that cause access points to dynamically change channels.
- C. X-rays within these rooms cause multipath issues.
- D. X-ray rooms exhibit increased signal attenuation.

Suggested Answer: D

Community vote distribution

D (100%)

 **Johnconnor2021** Highly Voted 3 years ago

D its correct. According the book (...) d X-ray areas, where the walls might be lead-lined and completely stop RF signals.(...) Its not A because says:(...) These devices may also use the same spectrum as Wi-Fi but with other protocols and, therefore, become sources of interference for your system(...) It does not mention non-Wifi interference, it says the same Wifi spectrum.

upvoted 9 times

 **Farhad123** Most Recent 2 months, 1 week ago

D is the correct choice


upvoted 1 times

 **Cleytonsc** 1 year, 4 months ago

Selected Answer: D

Answer: D

upvoted 1 times

 **RSC357** 2 years, 3 months ago

The question does say "rooms" not machines. D it is.

upvoted 1 times

 **Ram0n_Aya1a** 2 years, 5 months ago

D is Correct.

X-ray does not interfere with 5 GHz.

The wall of the X-ray does.

upvoted 2 times

 **kthekillerc** 2 years, 10 months ago

Provided answer is correct

upvoted 1 times

 **zyxzyx123** 2 years, 11 months ago

It's because inside those rooms you're standing basically in a microwave own, which again has the potential to cause cancer, so the room must contain radio waves which means attenuation.

Just picture putting your level 1 scanner inside a microwave own and consider what signal you get in there. Hopefully none if its not defect otherwise one should replace it.

upvoted 1 times

 **Liselot** 2 years, 10 months ago


X-Ray operates in the range of 30 petahertz to 30 exahertz (30×10¹⁵ Hz to 30×10¹⁸ Hz) and does not interfere with 5.0 GHz

upvoted 3 times

 **NoWiresIncluded** 1 year, 5 months ago

It is the shielding used in those rooms to stop X-rays that also blocks the RF signal

upvoted 1 times

 **EGD** 2 years, 12 months ago

D - Why is 802.11a connectivity "reduced" in an X-ray room? - I'm going with "reduced" == "attenuation".

upvoted 3 times

🗨️ 👤 **mafiaz** 3 years, 1 month ago

A

From the Book - portable X-ray machines, sending high-resolution images, sometimes in real time, echography machines, and electrocardiography [ECG] machines). These devices may also use the same spectrum as Wi-Fi but with other protocols and, therefore, become sources of interference for your system.

upvoted 1 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

I have read this as well, but answer A states: " X-rays create significant non-Wi-Fi interference on the 802.11a band."

The X-Rays it selves are not in the 5 GHz spectrum.

upvoted 3 times

🗨️ 👤 **HealthyGeneral** 2 years, 7 months ago

22 years in IT in a hospital here, portable x-ray machines aren't used in 'x-ray rooms'. They're taken to the patient because for one reason or another, the patient can't come to the lead lined room mentioned in the question. So portable X-ray machines is a moot point. The answer is D, and it's why we have wifi points inside our x-ray rooms.

upvoted 1 times


What is the attenuation value of a human body on a wireless signal?

- A. 3 dB
- B. 4 dB
- C. 6 dB
- D. 12 dB

Suggested Answer: A


Community vote distribution


A (100%)


 **Gray99** Highly Voted 3 years, 1 month ago
(a) 3 dB

<https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/71642-vocera-deploy-guide.html>


Plasterboard wall 3 dB
Glass wall with metal frame 6 dB
Cinder block wall 4 dB
Office window 3 dB
Metal door 6 dB
Metal door in brick wall 12 dB
Human body 3 dB
upvoted 14 times

 **FabriG** Highly Voted 1 year, 10 months ago
Answer A.
According to Cisco ENWLSD Course, human head between 3 to 6 dB.
upvoted 6 times

 **RITIBA** Most Recent 1 year, 3 months ago
Higher gain antennas can also reduce the number of calls on a WiFi channel because of the increased coverage area. The Cisco AP1130 Series provides the same type of antenna design concept. For voice, a ceiling-mounted antenna is preferred over a wall-mounted patch because the human head and body attenuate 5 dB of the signal (see Figure 11-1). Most floors attenuate 7 dB of the signal.
For phones that have the antenna inside the body of the phone, the way the phone is held in the human hand can influence signal attenuation by 4 dB. In some cases, a phone held against the head with the hand covering the antenna can result in a signal drop of 9 dB. The general rule for indoor deployments is that every 9 dB of signal loss reduces the coverage area in half. Figure 11-1 shows an example of the difference in radiating power from a handset when held to the head.
<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.html>
upvoted 1 times

 **Cleytonsc** 1 year, 4 months ago
Selected Answer: A
Cisco ENWLSD Book. List:

Plasterboard wall 3 dB
Glass wall with metal frame 6 dB
Cinder block wall 4 dB
Office window 3 dB
Metal door 6 dB
Metal door in brick
upvoted 1 times

 **google_np** 1 year, 10 months ago

Signal Attenuation

Signal attenuation or signal loss occurs even as the signal passes through air. The loss of signal strength is more pronounced as the signal passes through different objects. A transmit power of 20 mW is equivalent to 13 dBm. Therefore, if the transmitted power at the entry point of a plasterboard wall is at 13 dBm, the signal strength is reduced to 10 dBm when exiting that wall. This table shows the likely loss in signal strength caused by various types of objects.

Signal Attenuation Caused By Various Types of Objects

Object in Signal Path Signal Attenuation through Object

Plasterboard wall 3 dB

Glass wall with metal frame 6 dB

Cinder block wall 4 dB

Office window 3 dB

Metal door 6 dB

Metal door in brick wall 12 dB

Human body 3 dB

upvoted 1 times

  **google_np** 1 year, 10 months ago

"A" is the correct answer

upvoted 1 times



  **santoshkotla** 2 years, 6 months ago

Selected Answer: A

Refer Table:

<https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/71642-vocera-deploy-guide.html>


upvoted 2 times

  **santoshkotla** 2 years, 6 months ago

Correction: Given answer is correct.

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/Voice.html>

upvoted 2 times

  **kthekillerc** 2 years, 10 months ago

Provided answer is correct [https://www.mdpi.com/1424-](https://www.mdpi.com/1424-8220/20/18/5121/htm#:~:text=The%20signal%20attenuation%20by%20the,9%20dBm%3B%20see%20Table%203.)

[8220/20/18/5121/htm#:~:text=The%20signal%20attenuation%20by%20the,9%20dBm%3B%20see%20Table%203.](https://www.mdpi.com/1424-8220/20/18/5121/htm#:~:text=The%20signal%20attenuation%20by%20the,9%20dBm%3B%20see%20Table%203.)

correct.

upvoted 1 times

During a wireless network design, a customer requires wireless coverage on the perimeter of a building but also wants to minimize signal leakage from the wireless network. Which antenna should be used to accomplish this design?

- A. omnidirectional
- B. patch
- C. monopole
- D. dipole

Suggested Answer: B

Community vote distribution

B (100%)

ASV2020 Highly Voted 3 years, 1 month ago

Answer: B

upvoted 9 times

d3d4r Highly Voted 3 years, 3 months ago

i would say B and install it on the perimeter walls

upvoted 6 times

TonyVi Most Recent 6 months, 1 week ago

It's Patch antenna. look at the signal patern in the link below

<https://www.cisco.com/c/en/us/td/docs/routers/connectedgrid/antennas/installing-combined/b-cisco-industrial-routers-and-industrial-wireless-access-points-antenna-guide/m-air-ant2566p4w-r.html>

upvoted 2 times

FabriG 1 year, 10 months ago

Selected Answer: B

Answer B.

upvoted 3 times

Wifi_freak 2 years, 5 months ago

Selected Answer: B

B. Patch. A monopole is for industrial installations.

<https://www.cisco.com/c/en/us/td/docs/routers/connectedgrid/antennas/installing-combined/b-cisco-industrial-routers-and-industrial-wireless-access-points-antenna-guide/m-ant-mp-int-out-m.html>

upvoted 3 times

kthekillerc 2 years, 10 months ago

provide <https://www.mwrf.com/technologies/passive-components/article/21844577/cshaped-slot-servesuwb-antenna>

d answer is correct

upvoted 2 times

ulfjvw 2 years, 6 months ago

that's not cisco...

The answer is B. you can install patch faced down from the ceiling or against walls.

upvoted 1 times

An engineer at a global enterprise organization must ensure that a mesh deployment has the highest number of channels available to the backhaul, regardless of region deployed. Which design meets this requirement?

- A. redundant controllers in the least restrictive regulatory domain
- B. redundant controllers in the most restrictive regulatory domain
- C. one controller per continent
- D. one controller per country code

Suggested Answer: D

Community vote distribution

D (100%)

🗨️ **RogerTheLodger** Highly Voted 3 years, 2 months ago

D - AP regulatory domain is set when shipped, this can't be changed. Country codes are changed manually on the WLC, not the regulatory domain. The country set must be in the regulatory domain of any associated APs. There is no setting for continent.
upvoted 9 times

🗨️ **Farhad123** Most Recent 2 months ago

C is correct. There is an exception for MESH APs where you have to configure single country code on WLC for them to register.
<https://mrnciew.com/2013/04/07/configuring-country-codes-on-wlc/>
upvoted 1 times

🗨️ **FabriG** 1 year, 10 months ago

Selected Answer: D

Answer D.
upvoted 4 times

🗨️ **RSC357** 1 year, 10 months ago

D - Will guarantee each location will have access to all the channels allowed for that location.
upvoted 1 times

🗨️ **JoeTh** 1 year, 10 months ago

Selected Answer: D

Tricky question from Cisco. One can configure multiple country codes on a WLC, however that is not possible for mesh APs: " There is an exception for MESH APs where you have to configure single country code on WLC for them to register."
(<https://mrnciew.com/2013/04/07/configuring-country-codes-on-wlc/>)

Since the question is asking about a mesh deployment, the correct answer is D.
upvoted 4 times

🗨️ **JCastroG** 2 years, 6 months ago

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/country_codes.html

I think A could be the answer.

From Release 8.2 onwards, you can configure up to 110 country codes per controller. This multiple-country support enables you to manage access points in various countries from a single controller.

So I have not problem to manage many APs in different countries.
upvoted 1 times

🗨️ **Ram0n_Aya1a** 2 years, 5 months ago

Sure you can do it.
But they askng for highest number of channels available to the backhaul.
I think D is correct.
upvoted 1 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

I am afraid that I don't understand the question.

@RogerTheLodger:

You can select multiple countries at the controller.

The APs (which regulatory domain indeed can't be changed) can be bound to a compatible country in the WLC. So in one WLC you can support APs from multiple countries (with their different regulatory domains)

upvoted 1 times

🗨️ 👤 **ASV2020** 3 years, 1 month ago

Answer: A

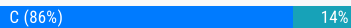
upvoted 2 times

A customer is looking for a network design with Cisco Hyperlocation using AP4800 for location tracking via a custom mobile app. Issues appeared in the past with refresh rates for location updates. What needs to be implemented to meet these requirements?

- A. Cisco CMX SDK in the location app
- B. device Bluetooth via the app
- C. Cisco FastLocate technology
- D. redundant CMX and fetch location in round-robin fashion

Suggested Answer: C

Community vote distribution



santoshkotla Highly Voted 2 years, 6 months ago

Selected Answer: C

Implementing CMX SDK on the mobile app is not a part of the network design. Faster refresh from mobile devices result in drain of battery. Cisco Fastlocate needs to be enabled so that the location packets are read from the data packets and this is deployed on the Network. So Given answer is correct
upvoted 6 times

santoshkotla 2 years, 6 months ago

https://www.cisco.com/c/en/us/td/docs/wireless/controller/9800/17-2/config-guide/b_wl_17_2_cg/fastlocate_for_cisco_catalyst_series_access_points.pdf

upvoted 1 times

Farhad123 Most Recent 2 months ago

Using CMX SDK is a option for hyperlocation but here in this question it seems they already have used that or something same, and the issue is refresh rate , to solve refresh rate the solution is FastLocate , then C is the correct one
upvoted 1 times

TonyVi 6 months, 1 week ago

Cisco CMX SDK in the location app (Option A) is useful for integrating location services into the mobile app, but it alone does not address the issue of refresh rates for location updates.

Cisco FastLocate technology (Option C) is specifically designed to enhance location accuracy and reduce the latency of location updates by leveraging advanced algorithms and features of the Cisco AP4800. FastLocate provides more frequent and accurate location updates, addressing the primary issue of refresh rates. (C is correct)

upvoted 3 times

Bandito 9 months, 3 weeks ago

Selected Answer: A

Vote for a, seems more logical to me.
upvoted 1 times

Rastacuache 2 years, 4 months ago

According to the official guide

"The Cisco Hyperlocation solution substantially increases the location accuracy of Cisco CMX. The FastLocate technology boosts the refresh rate, so Cisco CMX captures more location data points, and the AoA capabilities increase location accuracy to as close as 1 meter. The improved accuracy provides more granular analytics data and more relevant push content to the customer".

So in my oponion the provided answer is correct

upvoted 4 times

ASV2020 3 years, 1 month ago

Answer: A

upvoted 2 times

RogerTheLodger 3 years, 2 months ago

Answer is A - The problem listed refers to refresh rates.

'Near real-time refresh

Delivers extremely fast refresh rate when the Cisco CMX SDK is embedded in your mobile application.'

<https://www.cisco.com/c/en/us/solutions/enterprise-networks/hyperlocation-solution/index.html>

upvoted 3 times

 **RogerTheLodger** 3 years, 2 months ago

SDK stands for software development kit or devkit for short. It's a set of software tools and programs used by developers to create applications for specific platforms.

upvoted 1 times

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

Suggested Answer: AD

Community vote distribution

AD (64%)

AC (36%)

RogerTheLodger Highly Voted 3 years, 2 months ago

AD - mGIG switches recommended for 802.11AC wave 2 AP deployment Cisco 802.11ac Wave 2 Access Points - Cisco
CAT 6A cable can support mGIG links when they do not exceed 100m Cisco Aironet Series 2800/3800 Access Point Deployment Guide
upvoted 20 times

Coffee313 Highly Voted 3 years, 3 months ago

AD is correct
upvoted 8 times

Rododendron2 Most Recent 2 weeks, 1 day ago

if the question would state to provide eg maximum performance , not to provide maximum support , perhaps it would make sense to me...
upvoted 1 times

Jonycici 3 weeks, 4 days ago

Selected Answer: AD

AD. Pay attention to the words.
C is saying "Replace the existing switches with gigabit switches" - THAT's WRONG, we should use MGIG switches.
upvoted 1 times

Farhad123 2 months ago

I Think A and D are correct, since you select mGig switch then you dont need C , and even you have existing infra but you always need to make sure about distance to keep them under 100m
upvoted 1 times

Lakshan_97 5 months, 3 weeks ago

Selected Answer: AC

A and C , A is correct for mGig since the scenario has fast ethernet ,
C is correct because to get the maximum support from 3900 series at least ports should be 1G port and uplinks should be 10G to have a better oversubscribe ratio.
D is not an answer or this question. because CAT 6 and CAT 6A support 5 Gbps till 100 meters since the 3800 series supports maximum 5Gbps, no need to worry 10Gbps for AP.
upvoted 1 times

gopolo 9 months, 3 weeks ago

Selected Answer: AC

AC is right answer

Get up-to-date <https://www.pinterest.com/pin/937522847419120025>

upvoted 2 times

CyborgXCZ 1 year, 9 months ago

Selected Answer: AC



A - For sure

C - As some one already mentioned what is the point to use mGig if rest is FE capable only

D - Not D based on keyword in the question " existing infra....based on the CAT6A standard"

CAT6A Standard = Supports up to 100m in other words the Infra is built up to the code.

upvoted 2 times

  **ciscotur01** 9 months, 3 weeks ago


I'm going to say it like this, I don't know of a single switch manufacturer whether it is cisco or 3rd party that would create a switch with mGig Access ports and make their uplinks with less bandwidth than their access ports. generally if you have a 2.5 gig port, the uplinks are atleast 10gig. So that argument is invalid. Answer is A&D

upvoted 5 times

  **TonyVi** 4 months ago



what if someone is using one of the mGig ports as an uplink? That's why I believe option C is still valid, but it's just tricky.. honestly I don't appreciate these kind of questions

upvoted 1 times

  **yaramhu** 1 year, 9 months ago


CD, C3800 does not have mGig port

upvoted 1 times

  **Gab99** 1 year, 9 months ago

they do, check your facts



upvoted 2 times

  **FabriG** 1 year, 10 months ago

Selected Answer: AD

According to Cisco ENWLSD Course, it is A and D.

upvoted 7 times

  **Matha83** 1 year, 11 months ago

I'll go with A and C

A - Yes you need Mgig switches

C- What is the point of doing Mgig with APs if the uplinks are limited to 100 or a gi

D- since its an existing site that means APs are already working and distances between APs and SWs are less than 100M.

upvoted 3 times

  **JCastroG** 2 years, 6 months ago



Selected Answer: AD

A&D

Cat 6A support 10Gbps with mgig switches up to 100 mts

Cat 6 support 10Gbps only up to 55 mts.

upvoted 4 times

  **Lakshan_97** 5 months, 3 weeks ago

why do we need 10G for UTP even 3800 Series mGig supports up to 5 Gbps which works with CAT6 and CAT 6A for 100 meters . your point is correct CAT6A is the one for 10G for 100 meters and CAT 6 for 55 m only but here the 10G for AP is not an answer even the AP doesnt support 10G uplink.

upvoted 1 times

  **Bembs** 5 months, 1 week ago

I believe Uplink in this context means switch trunk (uplink) port, not AP to switch connection.

upvoted 1 times

  **ASV2020** 3 years, 1 month ago

Answer: A & D

upvoted 7 times

A network engineer is working on a predictive WLAN design. The new wireless network must support access to Internet, email, voice, and the inventory database.

To successfully support these services, which configuration must the engineer use for the signal strength levels and SNR on the planning tool?

- A. signal strength of -67 dBm, 20-dB SNR, and maximum 5 percent packet loss
- B. signal strength of -70 dBm, 30-dB SNR, and maximum 10 percent packet loss
- C. signal strength of 67 dBm, 20-dB SNR, and maximum 1 percent packet loss
- D. signal strength of -67 dBm, 25-dB SNR, and maximum 1 percent packet loss

Suggested Answer: D

Community vote distribution

D (100%)

🗳️ **RogerTheLodger** Highly Voted 3 years, 2 months ago

Answer cannot be C, as the signal strength has a positive value. Answer is D as shown in official cert guide, page 106. 'When you need an AP deployment that supports voice and video, your goal should be to design for wireless coverage and call capacity. AP cells should be overlapped by about 20 percent to streamline client roaming and handoff from one AP to another. Any delay or interruption will be very noticeable to users on an active call, so devices should be able to find candidate APs well ahead of time as the users move around. As the previous sections recommended, the RSSI of each AP should be -67 dBm or higher at the boundary of its cell, and the SNR should be 25 dB or greater. When you perform an active site survey to validate the network's performance, packet loss or the packet error rate (PER) should be no greater than about 1 percent.'

upvoted 8 times

🗳️ **HealthyGeneral** Highly Voted 2 years, 7 months ago

Selected Answer: D

"To ensure acceptable voice quality, the device should always have a signal of -67 dBm or higher when using 5GHz or 2.4GHz, while the device meets the access point's receiver sensitivity required signal level for the transmitted data rate. A minimum SNR of 25 dB (-92 dBm noise level with -67 dBm signal level) should be maintained." ...taken from chapter 5 of official cert guide.

upvoted 7 times

🗳️ **Farhad123** Most Recent 2 months ago

D is the correct answer, since we should meet Voice design. then we need 20% cell overlap and 25db SNR and minimum -67dbm signal and 1% packet loss. if the case data-only design we can have 10% packet loss.

upvoted 1 times

🗳️ **Cleytonsc** 1 year, 4 months ago

Selected Answer: D

Answer: D

upvoted 2 times

🗳️ **FabriG** 1 year, 10 months ago

Selected Answer: D

According to Cisco ENWLSD Course, it is D.

upvoted 2 times

🗳️ **RSC357** 2 years, 7 months ago

Selected Answer: D

Answer cannot be C, as the signal strength has a positive value.

upvoted 2 times

🗳️ **ASV2020** 3 years, 1 month ago

Answer: D

upvoted 4 times

🗳️ **Coffee313** 3 years, 3 months ago

D is correct

upvoted 3 times

An engineer is designing a new wireless network. The network needs to meet these requirements:

- ⇒ support a high wireless client concentration
- ⇒ support data over wireless
- ⇒ support voice over wireless
- ⇒ avoid interference

Which design approach should be taken?

- A. 5 GHz frequency band with channel bonding, to support 40 MHz channels
- B. 5 GHz frequency band without channel bonding, to support 20 MHz channels
- C. 2.4 GHz frequency band without channel bonding, to support 20 MHz channels
- D. 5 GHz frequency band with channel bonding, to support 80 MHz channels

Suggested Answer: B

Community vote distribution

B (100%)

🗨️ **Johnconnor2021** Highly Voted 3 years ago

B - to avoid interference you have to have a higher SNR as possible. While doing Channel bonding you add noise. Besides, high wireless clients concentration demand needs to have a high SNR and to avoid Co-Channel interference. I quote: "One of the hallmarks of a high-performing WLAN is channel reuse. This is the practice of deploying channels in such a manner that they limit the amount of CCI introduced into the environment. The best way to achieve this is by having as many channels to deploy as possible. While a 20MHz channel will not achieve the higher data rates that are advertised with 80MHz, clients can still reach acceptable speeds, allowing you to optimally use each bit of available airtime."

<https://www.ekahau.com/blog/channel-planning-best-practices-for-better-wi-fi/>

upvoted 7 times

🗨️ **mafiaz** Highly Voted 3 years, 1 month ago

has to be B

upvoted 7 times

🗨️ **Farhad123** Most Recent 2 months ago

B is the correct answer

upvoted 1 times

🗨️ **Bandito** 9 months, 3 weeks ago

Selected Answer: B

B, obviously

upvoted 2 times

🗨️ **RSC357** 2 years, 3 months ago

Selected Answer: B

Agreed with all other comments

upvoted 2 times

🗨️ **atryo** 2 years, 5 months ago

Selected Answer: B

Agreed with all other comments, definitely B.

upvoted 2 times

🗨️ **Ram0n_Aya1a** 2 years, 5 months ago

For high wireless client concentration is not good idea to have channel bonding

B is correct

upvoted 1 times

An enterprise is using the wireless network as the main network connection for corporate users and guests. To ensure wireless network availability, two standalone controllers are installed in the head office. APs are connected to the controllers using a round-robin approach to load balance the traffic. After a power cut, the wireless clients disconnect while roaming. An engineer tried eping from the controller but fails. Which protocol needs to be allowed between the networks that the controllers are installed?

- A. IP Protocol 67
- B. IP Protocol 77
- C. IP Protocol 87
- D. IP Protocol 97

Suggested Answer: D

Community vote distribution

D (100%)

 **Liselot** Highly Voted 2 years, 10 months ago

D is correct

Ethernet over IP (EoIP) tunnels are using IP Protocol 97

upvoted 6 times

 **NoWiresIncluded** Most Recent 1 year, 5 months ago

Selected Answer: D

• "If you have a firewall b/w your mobility group members, open UDP port 16666 and IP protocol 97. If you are using encrypted mobility, open UDP port 5246 and 5247"

[https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-](https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/m_configuring_mobility_groups.pdf)

[4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/m_configuring_mobility_groups.pdf](https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/m_configuring_mobility_groups.pdf)

upvoted 3 times

A customer called with a requirement that internal clients must be on different subnets depending on the building they are in. All APs 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 FlexConnect groups, place the access points in, and set the correct VLAN to SSID mapping based on location.
- B. 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.
- C. Create AP groups for each desired location, map the correct VLANs to the internal SSID, and add the APs for that location.
- D. 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.

Suggested Answer: C

Community vote distribution

C (100%)

🗨️ 👤 **Farhad123** 2 months ago

Also read this for more clarification regarding AP group:

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/TechArch.html>

upvoted 1 times

🗨️ 👤 **Alonzo_Harris** 1 year, 11 months ago

Selected Answer: C

The answer is definitely C. I have done this many times throughout the hospital.

upvoted 4 times

🗨️ 👤 **HealthyGeneral** 2 years, 7 months ago

Answer is A.

From https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-7/config-guide/b_cg87/flexconnect_groups.html

"All of the FlexConnect APs in a group can share the same backup RADIUS server, fast secure roaming, local authentication configuration, and WLAN-VLAN mapping information."

So flex connect groups are set up for each building, aps within that building are put into the corresponding group, the flex connect group has VLAN settings specific for that building.

upvoted 1 times

🗨️ 👤 **HealthyGeneral** 2 years, 7 months ago

I'm 3 hours from the exam. I now believe my comment above is incorrect. (I'm only human! :)

The question clearly says, the APs won't be changed from Local Mode, so they can't participate in FlexConnect Groups as that requires a mode change from Local on the APS. I'm still not sure about the answer, but mobility anchors need more than one controller, and who knows if this customer has ISE? So I think the displayed answer is correct, C.

upvoted 9 times

An engineer is designing a network deployment for a college with six buildings. Each building must have a WLC located in the IDF to support the APs. The wireless clients should be able to roam between the APs and the controllers. Which type of wireless architecture should be used?

- A. cloud
- B. autonomous
- C. centralized
- D. distributed

Suggested Answer: D

Community vote distribution

D (100%)

🗨️ 👤 **Liselot** Highly Voted 2 years, 10 months ago

Answer D

Each building has its own WLC

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-1/Enterprise-Mobility-8-1-Design-Guide/Enterprise_Mobility_8-1_Deployment_Guide/cuwn.html

upvoted 12 times

🗨️ 👤 **mae2k** 2 years, 9 months ago

yes, Should be D, as Cisco says: distributed WLC deployment. In this model the WLCs are located throughout the campus network, typically on a per building basis

upvoted 1 times

🗨️ 👤 **Farhad123** Most Recent 1 month, 3 weeks ago

D,it is easy , question brings the answer with itself, when the requirement is Each building must have its own controller then we should use Distributed solution

upvoted 1 times

🗨️ 👤 **jjcbb** 1 year, 6 months ago

Selected Answer: D

D

<https://www.cisco.com/en/US/docs/solutions/Enterprise/Mobility/emob30dg/TechArch.html>

upvoted 2 times

🗨️ 👤 **leo_591** 2 years, 10 months ago

If we follow the official guide of the old 2016 ccna it would be "c" centralized because as distributed @RogerTheLodger says it is synonymous with autonomous. If we follow the @Liselot reference it is "d" distributed, although in its reference it indicates implementation mode and not architecture. I choose the answer "c".

upvoted 1 times

🗨️ 👤 **RogerTheLodger** 3 years, 2 months ago

Answer is C - Cloud-based architecture has controllers in the cloud, not on premises. Autonomous architecture means each AP is autonomous and is not managed by a WLC, distributed architecture is another term for autonomous architecture, so the same applies. Centralized architecture, a.k.a. split-MAC architecture is when all APs are managed centrally by WLCs, they do not need to be co-located.

Understanding Cisco Wireless Architectures - CCNA Wireless 200-355 Official Cert Guide (2016) (apprize.best)

upvoted 2 times

🗨️ 👤 **martas** 3 years, 1 month ago

shouldn't be distributed rather than cloud according to this? https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-1/Enterprise-Mobility-8-1-Design-Guide/Enterprise_Mobility_8-1_Deployment_Guide/cuwn.html#32233

upvoted 3 times

🗨️ 👤 **Johnconnor2021** 3 years ago

yes its distributed, because the WLC are local in each place. Cloud is normally referred to devices that are not in the same area or region or belong to a ISP or SP. D is correct

upvoted 3 times

A wireless engineer is designing a wireless network to support real time applications over wireless. Which IEEE protocol must the engineer enable on the WLC so that neighbor list radio management packets are sent to the wireless devices?

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

Suggested Answer: D

Community vote distribution

D (100%)

EGD **Highly Voted** 2 years, 12 months ago

D - The 802.11k standard helps devices search quickly for nearby APs that are available as roaming targets by creating an optimized list of channels. When the signal strength of the current AP weakens, your device will scan for target APs from this list
upvoted 9 times

Alonzo_Harris **Most Recent** 1 year, 11 months ago

Selected Answer: D

The answer is D

The 802.11k standard allows clients to request neighbor reports containing information about known neighbor access points that are candidates for a service set transition.

upvoted 4 times

notzigzag 3 years, 1 month ago

d is the right answer

upvoted 4 times

An AP is receiving 802.11 packets on its 802.11a radio with an RSSI value of -77 dBm. The current AP is part of an AP group that has been assigned an RF profile with RX-SOP set to Medium for 802.11a. Which action does the AP take with the packets?

- A. All frames are classified as non-Wi-Fi frames and are not decoded by the 5 GHz radio.
- B. Frames are decoded by the 2.4 GHz radio.
- C. All frames are classified as non-Wi-Fi frames and are not decoded by the 2.4 GHz radio.
- D. Frames are decoded by the 5 GHz radio.

Suggested Answer: D

Community vote distribution

D (83%)

Other

 **walacky** Highly Voted 2 years, 1 month ago

My opinion is D:

.11a radio means we are at 5Ghz.

RxSOP Medium setting means signal lower than -78dBm is ignored. So -77dBm is normally decoded by 5G radio

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-1/configuration-guide/b_cg81/b_cg81_chapter_010001111.pdf

upvoted 11 times

 **FabriG** Highly Voted 1 year, 10 months ago

Selected Answer: D

According to Cisco, it is D.

upvoted 5 times

 **NHN88** Most Recent 1 year, 10 months ago

Selected Answer: D

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-0/hdx_final/b_hdx_dg_final/high_density_experience_features_added_in_release_8_0.html

upvoted 1 times

 **Alonzo_Harris** 1 year, 11 months ago

Selected Answer: D

The answer is D

Medium Threshold Rx-SOP: 2.4Ghz is -82dBm and 5Ghz is -78dBm

All frames received with weaker RSSI than configured RS-SOP will be classified as non-WiFi frames and will not get decoded by the radio, only packets with acceptable RSSI values are decoded. Packets that are not decoded are treated as non-WiFi interference and detected at the AP as noise. So since -77dBm is not at the threshold of -78dBm the RSSI of -77dBm will be decoded by 802.11a (5Ghz)

upvoted 2 times

 **learningccnp** 1 year, 11 months ago

Selected Answer: D

because 802.11a signal is 5Ghz , and whatever RxSOP, it only decode the 5Ghz signal, and not 2.4Ghz.

upvoted 1 times

 **Antasik** 2 years, 1 month ago

Selected Answer: D

As walacky wrote D

upvoted 1 times

 **wili0001** 2 years, 1 month ago

Selected Answer: A

RxSOP is enable so there is a threshold where AP ignores the packet. I think the answer is A.

Chapter 6. pag.133

upvoted 1 times

🗨️ 👤 **wili0001** 2 years, 1 month ago

RxSOP is enable so there is a threshold where AP ignores the packet. I think the answer is A.

Chapter 6. pag.133

upvoted 1 times

🗨️ 👤 **Bapu20** 2 years, 1 month ago

Selected Answer: B

I honestly believe that the 2.4GHz will decode this because the High threshold for 2.4GHz is -79 dBm so -77 is better ,why would it drop a better packet received at a better threshold?

upvoted 1 times

🗨️ 👤 **Bapu20** 2 years, 1 month ago

Afterthought:The threshold for middle is -82DBm rather!typo!!

upvoted 1 times

🗨️ 👤 **madhir** 2 years, 1 month ago

They are asking about the 802.11a (5Ghz radio) not the 2.4...

As per walacky's comment above, -78dBm or lower is ignored so the answer in this case is D.

upvoted 2 times

What is the recommended cell overlap when designing a wireless network for Cisco Hyperlocation?

- A. 20%
- B. 30%
- C. 40%
- D. 50%

Suggested Answer: A

Community vote distribution

A (100%)

 **EGD** Highly Voted 2 years, 12 months ago

Selected Answer: A

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-2/b_hyperLocation_best_practices_and_troubleshooting_guide.html

....."20% cell overlap for optimized roaming and location calculations"

upvoted 8 times

 **kthekillerc** Highly Voted 2 years, 10 months ago

Provided answer is correct

upvoted 5 times

 **skh** Most Recent 3 years, 6 months ago

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-2/b_hyperLocation_best_practices_and_troubleshooting_guide.html

Some basic guidelines on Site Surveys or deployments are:

Try to maintain consistent -65 dBm RSSI for data, voice, video, location

In order to achieve the best accuracy results, A site survey is recommended for best accuracy results

20% cell overlap for optimized roaming and location calculations

A good rule of thumb is 1 Access Point per 2,500 square feet (best performance) or more, but AP density should be determined through a Site Survey.

For high density applications, it is recommended to add an additional AP in the middle of dense areas

upvoted 4 times

Add APs

Name Prefix

Add APs

AP Type

Enable 11n Support

802.11a/n/ac Antenna

802.11b/g/n Antenna

Protocol

Optimize for High Throughput

Throughput (MB/s)
802.11a/n/ac

802.11b/g/n

Services: Advanced Options

Data/Coverage
Safety Margin

Voice
Safety Margin

Location
 Location with Monitor Mode APs
 Demand
 Override Coverage Per AP
Per AP Area (sq feet)

Total Coverage Area 179312 (sq feet)

Recommended AP Count **74**
Data/Coverage **48**
Voice **48**
Location **59**
Location with Monitor Mode APs
Demand

Floor Type: Cubes And Walled Offices

Add APs Automatically:
Resize and move the rectangle using the mouse over the desired coverage area, then specify placement criteria. Click "Calculate" to determine the number of APs recommended by NCS. If you are satisfied with the result, press "Apply". APs will be created and automatically positioned on the map.

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.

Suggested Answer: AE

Community vote distribution

AE (100%)

rrahim **Highly Voted** 2 years, 8 months ago

Selected Answer: AE

A and E

RTFM

Use Planning Mode to Calculate Access Point Coverage Requirements

Prime Infrastructure planning mode lets you calculate the number of access points (APs) required to cover an area by placing fictitious APs on a map and viewing the coverage area. Based on the throughput specified for each protocol (802.11a/n or 802.11b/g/n), planning mode calculates the total number of APs required to provide optimum coverage in your network.

https://www.cisco.com/c/en/us/td/docs/net_mgmt/prime/infrastructure/3-2/user/guide/bk_CiscoPrimeInfrastructure_3_2_0_UserGuide/bk_CiscoPrimeInfrastructure_3_2_0_UserGuide_chapter_0111.html

upvoted 5 times

ShamsDimashki **Most Recent** 3 months, 4 weeks ago

Selected Answer: AE

The figure mentioned that we can get the expected APs in a specific area, meaning answer A is correct

Answer is A & E

upvoted 1 times

🗨️ 👤 **FabriG** 1 year, 10 months ago

Selected Answer: AE

A and E

upvoted 3 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

of course you can remove the wlc and aps, thats precisely the reason why a couldn't be the right answer, if you do that then your planning will be completely inaccurate without the controller and data provided by the aps. Prime only produces a collective display of data produced by other polling devices aka synchronized devices reporting. Everybody knows not to use Prime as an accurate source for site surveys or accurate heatmaps, especially if your not using the data collected from a controller or ap. That would be the equivalent of handwriting a design plan on a blank piece of paper. Not advised.

upvoted 1 times

🗨️ 👤 **HealthyGeneral** 2 years, 7 months ago

You're in planning mode, the APs are fictitious. What are you ranting about? The fact you're the person telling everyone to validate not speculate is hilarious. Please take this guys posts with a grain of salt. Answer is A & E.

upvoted 3 times

🗨️ 👤 **kthekillerc** 2 years, 10 months ago

Please do not speculate but validate. This question is so straight forward. In order to utilize the Prime Planning mode you absolutely must synchronize the controllers as there are no other depositories for Prime to gather AP information. The provided answers are correct and should have been obvious to a wireless engineer familiar with working with Prime.

upvoted 2 times

🗨️ 👤 **zyzzyx123** 2 years, 10 months ago

With all do respect (especially considering that you're telling everybody else to validate before they reply). You can go straight into CPI and delete your WLC and all AP's and still see "planning mode" function just fine, you just can't sync obviously. You can make a map, make dimensions, walls etc. and tell it to calculate just fine.

You should try it out.

upvoted 4 times

🗨️ 👤 **ASV2020** 3 years, 1 month ago

Answer: A & E

upvoted 4 times

🗨️ 👤 **Coffee313** 3 years, 3 months ago

AE is correct

upvoted 4 times

An engineer is designing a wireless deployment for a university auditorium. Which two features can be used to help deal with the issues introduced by high AP count? (Choose two.)

- A. TSPEC
- B. RXSOP
- C. TPC
- D. LSS
- E. DFS

Suggested Answer: BC

Community vote distribution

BC (67%)

CE (33%)

 **skh** Highly Voted 3 years, 6 months ago

should be (RXSOP) and (TPC) as per definitions:

TPC – Transmit Power Control, sets to power to determine the cells boundary

RXSOP – The higher the RX-SOP level, the less sensitive the radio is and the smaller the receiver cell size will be


As for the other options:

TSPEC – Traffic Specification, this is a QoS feature to prioritise traffic

LSS – Location Specific Service, has to do with mDNS and Bonjour

DFS – Dynamic Frequency Selection, is used to back off of radar bands in case radar signals are detected

upvoted 20 times

 **Hamoze** 3 years, 6 months ago

i think the same answred should be B & C

upvoted 6 times

 **kthekillerc** Highly Voted 2 years, 10 months ago

Provided answer is correct. AGAIN please read the questions, per your own provided info and the question stating "it is a high AP Count atmosphere, This is precisely what DFS is designed for. The correct answers were provided. Don't speculate but validate!

upvoted 6 times

 **santoshkotla** 2 years, 6 months ago

Given Answer is correct:

<https://www.cisco.com/c/en/us/support/docs/wireless-mobility/80211/200069-Overview-on-802-11h-Transmit-Power-Cont.html>

(Check Section : TPC vs DTPC vs World mode)

TPC vs DTPC vs World mode

upvoted 1 times

 **Liselot** 2 years, 10 months ago

This is a discussion forum. Everybody is free to join the discussion, even if they are not 100% sure of the answer. Discussions contribute to learning and understanding. I would not discourage this to anyone.

RxSOP reduces the cell sizes and in this scenario I would definitely implement it

TPC manages the cell sizes; I would configure it

DFS offers more channels, thus more available frequencies, which is an advantage in this scenario.

Three features to consider. Let's discuss

upvoted 4 times

 **Liselot** 2 years, 10 months ago

While thinking more and more about this:

DFS itself is not a feature that you helps dealing with this scenario. DFS dynamically selects other channels when radar is detected.

Although it's wise to include DFS channels to minimize co-channel interference, we can't change or configure DFS itself.



upvoted 5 times

  **MoD82** Most Recent 1 year, 7 months ago

Selected Answer: CE

Without DFS you would lost all U-NII-2C-channels. It is mandatory. In HDX-enviroments each channel counts...



upvoted 2 times

  **MoD82** 1 year, 7 months ago

my fault, all U-NII-2.

<https://d2cpnw0u24fjm4.cloudfront.net/wp-content/uploads/Wi-Fi-Channel-Allocations-5GHz-and-2.4GHz-WLAN-Pros.pdf>

upvoted 1 times

  **FabriG** 1 year, 10 months ago

Selected Answer: BC

Clearly B and C

upvoted 4 times

  **Donald_Trump** 1 year, 11 months ago

i agree BC

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-0/hdx_final/b_hdx_dg_final/high_density_experience_features_added_in_release_8_0.html

"Receiver Start of Packet Detection Threshold (RX-SOP) determines the Wi-Fi signal level in dBm at which an AP radio will demodulate and decode a packet. The higher the RX-SOP level, the less sensitive the radio is and the smaller the receiver cell size will be. By reducing the cell size, we ensure that the clients are connected to the nearest access point using the highest possible data rates. This is ideal for high density environments such as stadiums and large auditoriums where there are a large number of client devices connected per AP. In a high density environment, the smaller the cell size, the better. "

upvoted 1 times

  **Donald_Trump** 1 year, 11 months ago



Selected Answer: BC

i agree BC

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-0/hdx_final/b_hdx_dg_final/high_density_experience_features_added_in_release_8_0.html

"Receiver Start of Packet Detection Threshold (RX-SOP) determines the Wi-Fi signal level in dBm at which an AP radio will demodulate and decode a packet. The higher the RX-SOP level, the less sensitive the radio is and the smaller the receiver cell size will be. By reducing the cell size, we ensure that the clients are connected to the nearest access point using the highest possible data rates. This is ideal for high density environments such as stadiums and large auditoriums where there are a large number of client devices connected per AP. In a high density environment, the smaller the cell size, the better. "

upvoted 1 times

  **ALEX_CC** 1 year, 11 months ago

Selected Answer: BC

DFS has nothing to do with the channels, it only clears channels if radar is detected.

--> B & C in my opinion

upvoted 1 times

  **santoshkotla** 2 years, 6 months ago

Selected Answer: CE

<https://www.cisco.com/c/en/us/support/docs/wireless-mobility/80211/200069-Overview-on-802-11h-Transmit-Power-Cont.html>

upvoted 1 times

  **skh** 3 years, 6 months ago

CCA/RX-SOP

CCA (clear channel assessment) and RX-SOP (receive start of packet) are extraordinarily complementary to RRM for appropriately sizing WLAN cells in a high-density environment. It is best to think of CCA, TPC (transmit power control), and RX-SOP as working in tandem for determining optimal cell size.

DFS

The ability to use spectrum requiring radar detection is fully supported in HDX. Support for DFS (dynamic frequency selection) permits many more channels to be used, which is essential for environments with many access points and/or many WLANs.

Reference : [https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-](https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-0/hdx_final/b_hdx_dg_final/high_density_experience_features_added_in_release_8_0.html)

0/hdx_final/b_hdx_dg_final/high_density_experience_features_added_in_release_8_0.html

<https://community.cisco.com/t5/wireless-mobility-documents/cisco-high-density-experience-hdx-enhanced-whitepaper/ta-p/3616207?attachment-id=132610>

upvoted 1 times

A wireless engineer is designing a wireless network to support real time applications over wireless. Which IEEE protocol must the engineer enable 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

Suggested Answer: B

Community vote distribution

B (100%)

🗨️ **FabriG** 1 year, 10 months ago

Selected Answer: B

According to Cisco ENWLSD course, it is B.
upvoted 3 times

🗨️ **learningccnp** 1 year, 11 months ago

Selected Answer: B

it explained the reason below.
https://documentation.meraki.com/MR/Wi-Fi_Basics_and_Best_Practices/802.11k_and_802.11r_Overview
upvoted 2 times

🗨️ **RSC357** 2 years, 9 months ago

Selected Answer: B

I read, googled and asked a Cisco expert, they all say 802.11R. This is important : "Reduces the number of packets that are exchanged between the client and an AP"
upvoted 4 times

🗨️ **Liselot** 2 years, 10 months ago

Selected Answer: B

802.11r skips the EAPoL packages.
802.11k is an ammendment that the AP helps the client choosing a new AP to roam to, but the roaming procedure itself won't change.
upvoted 3 times

🗨️ **kthekillerc** 2 years, 10 months ago

Provided answer is correct, K setting allows for the removal of real time re-authentication between access points.
upvoted 1 times

🗨️ **Liselot** 2 years, 10 months ago

802.11k is an ammendment that the AP helps the client choosing a new AP to roam to (it provides a list), but the roaming procedure itself won't change.
upvoted 1 times

🗨️ **Gab99** 1 year, 9 months ago

I think you should validate and not speculate. Its clearly B 802.11r
upvoted 2 times

🗨️ **monkeyccie** 2 years, 12 months ago

B is the correct answer
upvoted 3 times

🗨️ **skh** 3 years, 6 months ago

802.11r reduces the number of packets that are exchanged between the client and an AP. This means the roam itself occurs faster because the AP already has the client authentication credentials cached, resulting in fewer packets required between the client and the AP.

https://www.cisco.com/c/en/us/td/docs/solutions/Enterprise/Mobility/RTtoWLAN/CCVP_BK_R7805F20_00_rtowlan-srnd/CCVP_BK_R7805F20_00_rtowlan-srnd_chapter_0101.html

upvoted 4 times

How are mobility groups created, excluding mobility anchors?

- A. Each WLC must use the same mobility domain name and be defined as a peer in each other's static mobility members list.
- B. If WLCs with HA SSO are deployed, each WLC in the WLC HA pair is considered separately as a mobility peer.
- C. The WLCs do not have to be of the same model or type to be a member of a mobility group; however, each member should be running different software versions.
- D. A mobility group does not require all WLCs in the group to use the same virtual IP address.

Suggested Answer: A

Community vote distribution

A (100%)


 **Liselot** Highly Voted 2 years, 10 months ago

Answer A is correct

To create a Mobility Group, you just add WLCs to the Mobility Group Member list (of each WLC). WLCs with the same Group Name will end up in the same Mobility Group.


If you add WLCs with a different Group Name to the list, they will form a different Mobility Group, but end up in the same Mobility Domain. The Mobility Domain can contain up to 3 Mobility Groups.

upvoted 7 times

 **Liselot** 2 years, 10 months ago

The Group Name is inherited from the Default Mobility Domain Name

upvoted 1 times

 **Farhad123** Most Recent 1 month, 2 weeks ago

A is correct , as B. is wrong , each WLC in WLC HA pair cannot be considered separately as a mobility peer, physically they are 2 WLCs, but from function point of view, in Mobility group you should consider them as one.

C. is wrong, the WLCs do not have to be of the same model or type to be member of mobility group.but to be functional the should run same software version.

D. is wrong as all WLCs in mobility group should use same virtual IP address.

upvoted 1 times

 **Cleytonsc** 1 year, 4 months ago

Selected Answer: A

Answer: A

upvoted 2 times

 **FabriG** 1 year, 10 months ago

Selected Answer: A

Answer A with the correction commented by others.

upvoted 4 times

 **Coffee313** 3 years, 3 months ago

None of the answers a true but it seems like there is a mistake in the A answer. If you replace "domain" with "group" - that would be true.

upvoted 4 times

 **Johnconnor2021** 3 years ago

Think A is correct but its not precise. According to Cisco book: mobility domain - A logical grouping of all mobility groups within an enterprise.

So in theory the WLC can be on different mobility groups BUT on the same mobility domain. Hence, A is correct, however is not precise because to being called peers they should be on the same mobility group. Its the best answer of this 4 imo.

upvoted 2 times

 **maksim_churyukin** 2 years, 11 months ago

"Each WLC must use the same Mobility Domain name and be defined as a peer in each other's Static Mobility Members list. The exception to this rule are when guest anchors are deployed where Cisco recommends deploying a separate Mobility Group for the guest anchors".

Enterprise Mobility 8.5 Design Guide, Ch2, p2-57

If you go to WLC GUI and click the Controller tab you will see the Default Mobility Domain Name field. I think it's what is meant.

If you check further this guide on the p 10-20 you will see the phrase

"The "Group Name" in Figure 10-13 above is the name configured under the foreign WLC's 'Default Mobility Domain Name'".

They mixed up 2 concepts in that guide and in the Official Cert Guide and they didn't write in the Official Cert Guide that to assign a WLC to mobility group you need to fill the Default Mobility Domain Name field.

upvoted 1 times

  **maksim_churyukin** 2 years, 11 months ago

So A is correct for sure

upvoted 1 times

Which two considerations must a network engineer have when planning for voice over wireless roaming? (Choose two.)

- A. Full reauthentication introduces gaps in a voice conversation.
- B. Roaming time increases when using 802.1x + Cisco Centralized Key Management.
- C. Roaming occurs when the phone has seen at least four APs.
- D. Roaming occurs when the phone has reached 80 dBm or below.
- E. Roaming with only 802.1x authentication requires full reauthentication.

Suggested Answer: *AE*

 **Farhad123** 1 month, 2 weeks ago

when we use 802.11 with CCKM or Fast secure roaming , then the time of roaming is shorter compare to 802.11 only
upvoted 1 times

 **Farhad123** 1 month, 2 weeks ago

A and E are correct choice , since the rest choice are incorrect.
upvoted 2 times

What is the 9800 Series Wireless Controller mobility tunnel on a Cisco Catalyst 9800 controller?

- 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.

Suggested Answer: C

Community vote distribution

C (100%)

🗨️ 👤 **Impeg** Highly Voted 2 years, 5 months ago
Correct answer is C

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

"The Cisco Catalyst 9800 Series Wireless Controller mobility tunnel is a CAPWAP tunnel with control path (UDP 16666) and data path (UDP 16667). The control path is DTLS encrypted by default. Data path DTLS can be enabled when you add the mobility peer."
upvoted 8 times

🗨️ 👤 **learningccnp** Most Recent 1 year, 8 months ago
Selected Answer: C
correct answer is C
upvoted 2 times

🗨️ 👤 **FabriG** 1 year, 10 months ago
Selected Answer: C
Answer C.
upvoted 4 times

🗨️ 👤 **Wifi_freak** 2 years, 5 months ago
Selected Answer: C
C. is correct.
upvoted 3 times

🗨️ 👤 **santoshkotla** 2 years, 6 months ago
Given Answer is correct!

<https://www.cisco.com/c/en/us/support/docs/wireless/catalyst-9800-series-wireless-controllers/213913-building-mobility-tunnels-on-catalyst-98.html>

"On the 9800 WLC, control plane encryption is always enabled, which means that you need to have secure mobility enabled on the AireOS side. However, data link encryption is optional. If you enable it on the 9800 side, enable it on AireOS with: config mobility group member data-dtls enable"
upvoted 1 times

🗨️ 👤 **ASV2020** 3 years, 1 month ago
Answer: C
upvoted 3 times

🗨️ 👤 **rufusruru** 3 years, 2 months ago
The Cisco Catalyst 9800 Series Wireless Controller mobility tunnel is a CAPWAP tunnel with control path (UDP 16666) and data path (UDP 16667). The control path is DTLS encrypted by default. Data path DTLS can be enabled when you add the mobility peer.
upvoted 3 times

🗨️ 👤 **d3d4r** 3 years, 3 months ago

it should be C

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

upvoted 2 times

An engineer must configure the virtual IP address on multiple controllers in a mobility group. Which rule must the engineer follow 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.

Suggested Answer: D

Community vote distribution


D (100%)

 **Cyrilka** Highly Voted 3 years, 6 months ago

D is correct.


Virtual IP should not be routable.

upvoted 9 times

 **d3d4r** 3 years, 3 months ago

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/mobility_groups.html

upvoted 2 times

 **Alonzo_Harris** Highly Voted 1 year, 11 months ago

Selected Answer: D

The answer is D

Cisco documentation states the following:

All controllers within a mobility group must be configured with the same virtual interface IP address. Otherwise, inter-controller roaming may appear to work, but the handoff does not complete, and the client loses connectivity for a period of time.

upvoted 5 times

 **Farhad123** Most Recent 1 month, 2 weeks ago

D is correct

upvoted 1 times

 **ShamsDimashki** 3 months, 4 weeks ago

I think it's D

As per Cisco book "Be aware that a controller name is not the same as its DNS entry; rather, it is the name string configured on the individual controller." meaning we can configure the WLC with IP only

upvoted 2 times

 **Antasik** 2 years, 1 month ago

Selected Answer: D


https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/mobility_groups.html

Prerequisites for Configuring Mobility Groups

...

All controllers must be configured with the same virtual interface IP address.

upvoted 1 times

 **Impeg** 2 years, 5 months ago

I think the given answer is correct.

Answer D says IP address, not virtual IP address

"To ensure connectivity and web authentication, the DNS server should always point to the virtual interface. If a DNS hostname is configured for the virtual interface, then the same DNS host name must be configured on the DNS server(s) used by the client."

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/b_cg74_CONSOLIDATED_chapter_010011101.html

upvoted 2 times

🗨️ 👤 **ASV2020** 3 years, 1 month ago

Answer: D

upvoted 3 times

🗨️ 👤 **Goatgirl20** 3 years, 4 months ago

All controllers must be configured with the same virtual interface IP address.

upvoted 2 times

🗨️ 👤 **Araghas** 1 year, 8 months ago

Answer is IP ADDRESS not VIRTUAL IP ADDRESS.

Tricky question but I would go towards A :

"To ensure connectivity and web authentication, the DNS server should always point to the virtual interface. If a DNS hostname is configured for the virtual interface, then the same DNS host name must be configured on the DNS server(s) used by the client."

upvoted 1 times

🗨️ 👤 **Mimimimimi** 1 year, 7 months ago

@Araghas:

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-2/config-guide/b_cg82/b_cg82_chapter_010.html

Scroll to step 32:

"In the IP Address field, enter the IP address of the controller's virtual interface. You should enter a fictitious, unassigned IP address."

"To ensure connectivity and web authentication, the DNS server should always point to the virtual interface. If a DNS hostname is configured for the virtual interface, then the same DNS host name must be configured on the DNS server(s) used by the client."

-> The "if" statement tells is that the DNS host entry is optional.

upvoted 1 times

Guest anchoring is configured for a newly created SSID for a company. It has been noticed that the mobility tunnels are not up and that MPING fails from your foreign WLC to the anchor WLC. What is the reason that it is failing?

- A. A rule is needed at the firewall to allow UDP port 16666 for communication to work.
- B. A rule is needed at the firewall to allow UDP port 97 for communication to work.
- C. A rule is needed at the firewall to allow TCP port 97 for communication to work.
- D. A rule is needed at the firewall to allow TCP port 16666 for communication to work.

Suggested Answer: A

Community vote distribution

A (100%)

🗨️ 👤 **Farhad123** 1 month, 2 weeks ago

A is correct since it is asking about Mping
upvoted 1 times

🗨️ 👤 **Cleytonsc** 1 year, 4 months ago

Selected Answer: A

look in:

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-5/configuration-guide/b_cg75/b_cg75_chapter_010010001.pdf

upvoted 2 times

🗨️ 👤 **HealthyGeneral** 2 years, 7 months ago

Selected Answer: A

A. Because question specifies mping., not eping.

upvoted 2 times

🗨️ 👤 **Goatgirl20** 3 years, 4 months ago

- You can test the mobility communication environment by performing mobility ping tests. These tests may be used to validate connectivity between members of a mobility group (including guest controllers). Two ping tests are available:
- Mobility ping over UDP—This test runs over mobility UDP port 16666. It tests whether the mobility control packet can be reached over the management interface.
- Mobility ping over EoIP—This test runs over EoIP. It tests the mobility data traffic over the management interface.
- Only one mobility ping test per controller can be run at a given time.

upvoted 3 times

🗨️ 👤 **Goatgirl20** 3 years, 4 months ago

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-5/configuration-guide/b_cg75/b_cg75_chapter_010010001.pdf

upvoted 2 times

Multiple WLCs are implemented in a high-availability configuration in a mobility group. APs are deployed with only a primary controller assigned. By default, which mobility group member controller do the orphaned APs join in the event of a failed controller?

- A. controller with the most available AP free license capacity
- B. controller with the lowest percent of associated APs per license capacity
- C. controller with the least CPU utilization over the last reporting period
- D. controller with the least number of associated APs

Suggested Answer: A

Community vote distribution

A (88%)

13%

🗨️ 👤 **Ram0n_Aya1a** Highly Voted 2 years, 5 months ago

Selected Answer: A

A is correct.

its between A and B, but A is better answer

upvoted 5 times

🗨️ 👤 **Farhad123** Most Recent 1 month, 2 weeks ago

Option A is correct, and note that option D is incorrect and misleading. This is because merely being associated with the minimum number of access points is not a suitable reason to consider a controller as the least loaded WLC. If a controller has a small number of joined access points, it might be due to the limited license capacity of that controller.

upvoted 2 times

🗨️ 👤 **ContactScott** 1 year, 6 months ago

Selected Answer: A

<https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-mobile/71963-apload-apfall-uw.html>

"The AP then attempts to join the least loaded WLC, which is the WLC with the greatest available AP capacity."

upvoted 4 times

🗨️ 👤 **Alonzo_Harris** 1 year, 11 months ago

Selected Answer: D

The answer is D

When an AP is fully joined to a controller, the AP learns of all the controllers configured in that mobility group. Should the controllers that an AP is currently registered with go down, the AP will send discoveries to any and all controllers in the mobility group. Assuming one of the controller has the capacity to accept the AP, the AP should join the least loaded controller it can find.

upvoted 1 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

Answer C

Cisco APs can discover multiple controllers.

If the joined controller becomes unavailable, the AP can simply select the next least-loaded controller and request to join it.

upvoted 2 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

Sorry, Answer A

Least loaded = greatest available AP capacity

upvoted 4 times

🗨️ 👤 **EGD** 2 years, 11 months ago

A? . . . it wouldn't want to pick a small WLC with low license count just because it only has a few associated, but with only a few left in the license. . . shouldn't "greatest available AP capacity" take license availability into consideration?

"The AP then attempts to join the least loaded WLC, which is the WLC with the greatest available AP capacity. After an AP joins a WLC, the AP learns the IP addresses of the other WLCs in the mobility group from its joined WLC."

upvoted 4 times

🗨️ 👤 **RhJ72** 3 years, 3 months ago

You can perform AP load balancing on two (or more) WLCs if you configure mobility groups properly. The LWAPP allows for dynamic redundancy and load balancing. For example, if you specify more than one IP address for option 43, an AP sends LWAPP discovery requests to each of the IP addresses that the AP receives. In the WLC LWAPP discovery response, the WLC embeds this information:

Information on the current AP load, which is defined as the number of APs that are joined to the WLC at the time

The AP capacity

The number of wireless clients that are connected to the WLC

The AP then attempts to join the least loaded WLC, which is the WLC with the greatest available AP capacity

<https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-mobile/71963-apload-apfall-uwn.html>

upvoted 2 times

🗨️ 👤 **Goatgirl20** 3 years, 4 months ago

If you have a firewall b/w your mobility group members, open UDP port 16666 and IP protocol 97. If you are using encrypted mobility, open UDP port 5246 and 5247.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/mobility_groups.html

upvoted 1 times

An engineer must ensure that the wireless network accomplishes fast, secure roaming by way of caching keys on the APs. Which key caching mechanism is enabled by default on a Cisco AireOS WLC?

- A. SKC
- B. OKC
- C. 802.11r
- D. CCKM

Suggested Answer: B

Community vote distribution

B (100%)

🗨️ **FabriG** Highly Voted 1 year, 10 months ago

Selected Answer: B

By default, SKC is disabled and opportunistic key caching (OKC) is enabled.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/b_cg74_CONSOLIDATED_chapter_01010010.html
upvoted 6 times

🗨️ **Farhad123** Most Recent 1 month, 2 weeks ago

While 802.11r and CCKM are both key components of fast roaming solutions, the question specifically focuses on caching mechanisms. In this case, only SKC (Sticky Key Caching) and OKC (Opportunistic Key Caching) are relevant. It's important to note that SKC is optional, not widely supported, and does not function across inter-controller roams, which limits its effectiveness. Given these limitations, OKC is the correct choice for fast roaming in most environments.
upvoted 1 times

🗨️ **Farhad123** 1 month, 2 weeks ago

Right choice is OKC, read this link for more details : <https://www.cisco.com/c/en/us/support/docs/wireless-mobility/wireless-lan-wlan/116493-technote-technology-00.html>
upvoted 1 times

🗨️ **Thomas66** 1 year, 10 months ago

Answer is B

OKC is a fast roaming technique supported by Microsoft and some Android clients. Another fast roaming method is the use of 802.11r, which is supported by Apple and few Android clients. OKC is enabled by default on a WLAN. This configuration enables the control of OKC on a WLAN. Disabling OKC on a WLAN disables the OKC even for the OKC-supported clients.

A new configuration is introduced for each WLAN in the controller in Cisco IOS XE Amsterdam 17.2.1, to disable or enable fast and secure roaming with OKC at the corresponding AP.
upvoted 2 times

🗨️ **Antasik** 2 years, 1 month ago

Selected Answer: B

https://www.cisco.com/c/en/us/td/docs/wireless/controller/9800/17-2/config-guide/b_wl_17_2_cg/_opportunistic_key_caching.pdf

Page 1 / Step 3

upvoted 2 times

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

Suggested Answer: A

 **Goatgirl20** Highly Voted 3 years, 4 months ago

I think A is correct

<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>

upvoted 6 times


 **Farhad123** Most Recent 1 month, 2 weeks ago

A is correct : In a Cisco SD-Access network, during a client roaming event, the device responsible for communicating the new Layer 2 EID (Endpoint Identifier) mapping of a wireless supplicant to the fabric domain is the WLC (Wireless LAN Controller).

The WLC is responsible for updating the Host Tracking database with the new roaming client information. When a wireless client moves between Access Points, the WLC updates the client's MAC address (used as the EID) and informs the Control Plane (CP) to ensure that the fabric devices (Layer 2 and Layer 3) apply this change.

Therefore, the correct answer is A: WLC, as the WLC handles the EID updates and manages the roaming process.

upvoted 1 times

 **Bandito** 9 months, 3 weeks ago

Client Roaming Flow in this document:

<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>

Since Layer 2 EID in terms of LISP is a MAC address, the WLC is responsible for updating the control plane (fabric domain)

upvoted 1 times

Campus users report a poor wireless experience. An engineer investigating the issue notices that in high-density areas, the wireless clients fail to switch the AP to which are automatically connected. This sticky client behavior is causing roaming issues. Which feature must the engineer configure?

- A. optimized roaming
- B. load balancing and band select
- C. Layer 3 roaming
- D. Layer 2 roaming

Suggested Answer: A

Community vote distribution

A (100%)

EGD **Highly Voted** 2 years, 12 months ago

A - "Optimized roaming resolves the problem of sticky clients that remain associated to access points that are far away"

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-1/configuration-guide/b_cg81/b_cg81_chapter_010001110.pdf

upvoted 8 times

Farhad123 **Most Recent** 1 month, 2 weeks ago

A is correct

upvoted 1 times

Cleytonsc 1 year, 4 months ago

Selected Answer: A

Answer is A.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-1/configuration-guide/b_cg81/b_cg81_chapter_010001110.pdf

upvoted 1 times

An enterprise has moved most services to the cloud, including email applications and real-time communication. Which feature must be enabled on the wireless network to improve the user experience?

- A. radio management
- B. fast secure roaming
- C. QoS
- D. interference mitigation

Suggested Answer: C

Community vote distribution

C (67%)

B (33%)

 **ulfjvw** Highly Voted 2 years, 6 months ago

Selected Answer: C

qos c.

upvoted 7 times

 **Antasik** Highly Voted 2 years, 1 month ago

Selected Answer: B

Most services are in the cloud. This may be important information, users and services are separated by WAN (no QOS, best effort only) so enabling QOS only on WiFi part of data path may not improve user experience as fast roaming does. Vote B

upvoted 6 times

 **Rododendron2** Most Recent 2 weeks ago

Selected Answer: B


Really bad question. Depends where is the Internet breakout. Internet = no QOS, useless to set that if direct access to internet on LAN. If not - traffic over wan - might then help

upvoted 1 times

 **Ntwrk_Nnja_85** 11 months, 2 weeks ago

Stuck between B and C here, but I'm going with B ultimately because I think the key here is "moved most services to the cloud"...meaning out on the Internet. QoS markings cannot be honored out on the Internet, as MoD82 alluded to, so the markings get dropped once the packets leave your private WAN. Alternatively, a fast roaming handoff will improve the wireless experience. A tricky one from Cisco, but I think the best choice here is B.


upvoted 2 times

 **MoD82** 1 year, 7 months ago

Selected Answer: B

could only be B, QoS ends at WAN

upvoted 2 times

 **FabriG** 1 year, 10 months ago

Selected Answer: C

Clearly C.

upvoted 3 times


 **Alonzo_Harris** 1 year, 11 months ago

Selected Answer: C

The answer is C

Once the phrase "Real Time Communications" was mention which encompasses Voice & Video. QoS is required.

upvoted 1 times

 **PixelRunner** 2 years, 3 months ago

Selected Answer: C

QOS (c)

upvoted 3 times

🗨️ 👤 **Liselot** 2 years, 10 months ago

QoS is configured at the WLAN (SSID).

Of course it helps when you have a WLAN for voice QoS and a separate VLAN for data (best effort), but QoS is not something that you 'enable' at the wireless network.

Roaming can be tricky for real-time communication when no fast secure roaming amendments have been configured.

For that reason I opt for answer B

upvoted 4 times

🗨️ 👤 **Johnconnor2021** 3 years ago

yeah I think is QoS, you can fast roaming but if your applications like video/audio its giving delays or interruptions even if you are not roaming, then means the AV traffic is being combined with normal traffic. QoS is for me.

upvoted 2 times

🗨️ 👤 **fhrat21** 3 years ago

I think it is QoS

upvoted 1 times

🗨️ 👤 **d3d4r** 3 years, 3 months ago

it could be correct if we consider ISE being moved to the cloud

upvoted 1 times

🗨️ 👤 **hypergammaspacemonkey** 3 years, 3 months ago

Shouldn't the answer be QoS?

upvoted 1 times

An enterprise is using two wireless controllers to support the wireless network. The data center is located in the head office. Each controller has a corporate WLAN configured with the name Copr-NET392267230WLC-1 and Corp-NET68371638WLC-2. The APs are installed using a round-robin approach to load balance the traffic. What should be changed on the configuration to optimize roaming?

- A. Use the same WLAN name for the corporate network on both controllers.
- B. Move all access points to one controller and use the other as N+1 HA.
- C. Move the controllers to an external data center with higher internet speeds.
- D. Place the access points per floor on the same controller.

Suggested Answer: A

Community vote distribution

A (100%)

 **maksim_churyukin** Highly Voted 2 years, 11 months ago

"For a wireless client to seamlessly roam between mobility group members (WLCs), a given WLAN SSID and security configuration must be consistent across all WLCs comprising the mobility group"

Enterprise Mobility 8.5 Design Guide, Ch2, p2-57

So the WLANs' names should be the same, the answer is A

upvoted 13 times

 **Liselot** 2 years, 10 months ago

I agree.

They are talking about WLAN Names (SSIDs) here.

Not the Mobility Group Name

upvoted 4 times

 **ulfjvw** Highly Voted 2 years, 6 months ago

Selected Answer: A

roaming requires same SSID

upvoted 5 times

 **ASV2020** Most Recent 3 years, 1 month ago

Answer: B

upvoted 1 times

 **hypergammaspacemonkey** 3 years, 3 months ago


I'd suggest A because of inter-floor roaming and bleed-through.

upvoted 2 times

 **Coffee313** 3 years, 3 months ago

Seems like the WLCs are not in the same mobility domain so if the WLANs will have the same names - roaming will be slow. I think the best option is to configure HA SSO, so my answer is B.

upvoted 2 times

 **ulfjvw** 2 years, 6 months ago

n+1 is not SSO...

upvoted 1 times

The wireless team must configure a new voice SSID for optimized roaming across multiple WLCs with Cisco 8821 phones. Which two WLC settings accomplish this goal? (Choose two.)

- A. Configure AVC profiles on the SSID.
- B. Configure mobility groups between WLCs.
- C. Use AVC to tag traffic voice traffic as best effort.
- D. Configure AP groups between WLCs.
- E. Use Cisco Centralized Key Management for authentication.

Suggested Answer: BE

Community vote distribution

BE (100%)

 **Liselot** Highly Voted 2 years, 10 months ago

Answer: BE

Cisco 8821 phones are clients that support CCKM.


CCKM caches clients' PMK for 1 hour (good for voice calls) and works inter-controller, but this requires that the WLCs know each other: Mobility Group

upvoted 11 times

 **fhtrat21** Highly Voted 3 years, 1 month ago

B & E i think

upvoted 6 times

 **Cleytonsc** Most Recent 1 year, 4 months ago

Selected Answer: BE

like another comment

upvoted 2 times

 **ASV2020** 3 years, 1 month ago


Answer: C & E

upvoted 1 times

 **Johnconnor2021** 3 years ago

best effort is the QoS default setting, you should not combine sensible traffic like video and audio with the normal traffic. C is not an answer for me. Answer B and E for me. correct

upvoted 3 times

 **ft75** 3 years ago

I don't think tagging voice traffic as best-effort is a valid choice, so for me C is not correct.

upvoted 1 times

 **Cleytonsc** 1 year, 4 months ago

C is incorrect ...

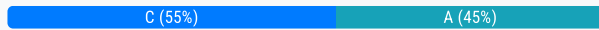
upvoted 1 times

An engineer must repurpose a lab WLC appliance for use in the production environment of the enterprise. After the new WLC is configured with the information of the other WLC, the mobility tunnels are still not coming up. What is the reason?

- A. A firewall is blocking UDP port 16667 between the WLCs.
- B. The WLC management interfaces are in the same VLAN.
- C. The hardware platform is incompatible.
- D. The mobility groups are different.

Suggested Answer: C

Community vote distribution



🗨️ **patiks** 3 weeks, 2 days ago

Selected Answer: A

A is correct. Hardware Platform can be corrected by the right software - IRCM.
upvoted 1 times

🗨️ **Farhad123** 1 month, 2 weeks ago

A is the right one, and D is not correct, while having different mobility group names would prevent seamless roaming, it would not necessarily prevent the mobility tunnel itself from forming. The tunnels could still be established, but roaming wouldn't work properly.
upvoted 2 times

🗨️ **Lakshan_97** 5 months, 3 weeks ago

Selected Answer: C

If a network consists of a mix of controller platforms, you should validate that mobility messaging actually works between them. Mobility messages cannot be exchanged at all between Catalyst 9800 and AireOS platforms unless the AireOS controllers are running release 8.8.111 or later, which introduced the Inter-Release Controller Mobility (IRCM) feature. Henry, Jerome. CCNP Enterprise Wireless Design ENWLSD 300-425 and Implementation ENWLSI 300-430 Official Cert Guide: Designing & Implementing Cisco Enterprise Wireless Networks (Certification Guide)
upvoted 3 times

🗨️ **Bandito** 9 months, 3 weeks ago

I'd say the question doesn't provide enough information.

The reasons for the mobility tunnel issue might be because the port is blocked, as well as the EoIP-only compatible WLC tries to establish tunnel with Secure Mobility only compatible WLC.

upvoted 1 times

🗨️ **gargionifabio** 1 year, 4 months ago

Selected Answer: A

Enable these UDP ports for Mobility traffic:

16666 - Secured Mode

16667 - Unsecured Mode

<https://community.cisco.com/t5/wireless/question-about-udp-16667/td-p/1399015>

upvoted 2 times

🗨️ **Zhiko** 1 year, 5 months ago

The correct answer is D / the question says "information of the other WLC" but don't specify which, A is not possible because 16667 is just for secure tunnels

upvoted 1 times

🗨️ **Jonycici** 4 weeks ago

different mobility group name will not prevent tunnel to come up

upvoted 1 times

peer1024 1 year, 9 months ago

Selected Answer: C

Explanation:

The Cisco 5508 and 8510 Wireless Controllers do not support tunnel encryption protocols. They support IRCM with unencrypted mobility tunnels only.

Reference:

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

upvoted 1 times

wifishark 1 year, 10 months ago

Selected Answer: A

A is correct, firewall is blocking

upvoted 4 times

Alonzo_Harris 1 year, 11 months ago

Selected Answer: C

Looks like the answer is C

The controllers have the same config so the only thing that can prevent the mobility tunnel from happening from the info we are given is that the hardware is not compatible to do tunneling. Mobility tunneling is not supported on all Cisco WLC models.

upvoted 2 times

pipe84 2 years, 1 month ago

Correct answer is A

The question is regarding the status of the mobility TUNNELS are still not coming up due to firewall is blocking UDP port 16667 between the WLCs.

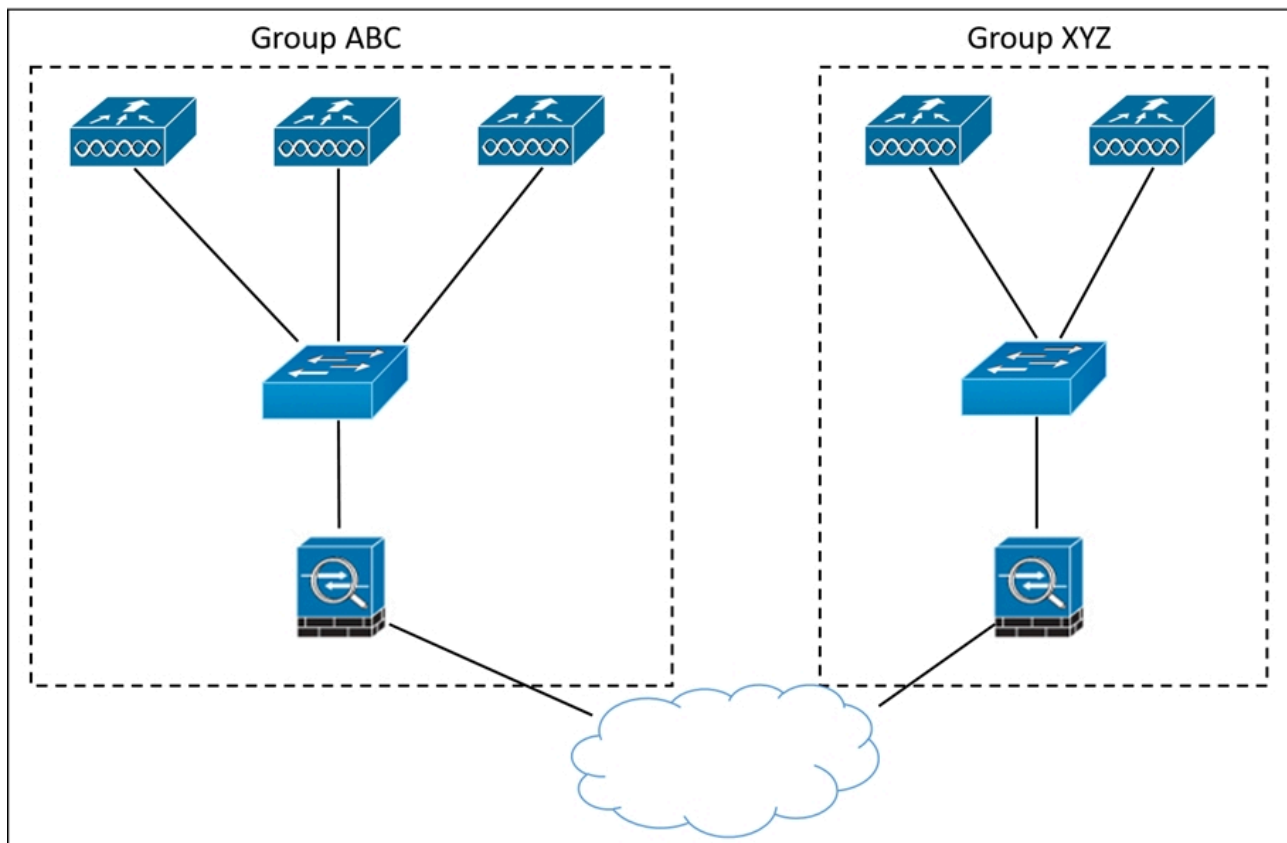
upvoted 3 times

Bapu20 2 years, 1 month ago

Selected Answer: C

D cannot be right because the question says "Configured the same as the other WLC",that means EVERYTHING is the same config-wise so that answer cannot be valid.My guess is different hardware types!

upvoted 3 times



Refer to the exhibit. An enterprise has offices spread around the globe. The APs are connected to different controllers installed in separate datacenters. The IT team wants to allow clients to roam from controllers in group ABC to controllers in group XYZ. Which feature must be incorporated in the design to accomplish this task?

- A. switch peer group
- B. workgroup bridge
- C. mDNS gateway
- D. mobility lists

Suggested Answer: D

Community vote distribution

D (100%)

Farhad123 1 month, 2 weeks ago

D is correct
upvoted 1 times

Farhad123 1 month, 2 weeks ago

D is correct
upvoted 1 times

Gab99 1 year, 9 months ago

Selected Answer: D

D

<https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/107188-mobility-groups-faq.html#anc3>

A mobility list is a group of controllers configured on a single controller that specifies members in different mobility groups. Controllers can communicate across mobility groups and clients can roam between access points in different mobility groups if the controllers are included in each other's mobility lists.

upvoted 4 times

Alonzo_Harris 1 year, 11 months ago

Selected Answer: D

Each controller must have a complete list of itself and every other controller in the mobility domain.

upvoted 3 times

General	Credentials	Interfaces	High availability	Inventory	Advanced
		Name		Management IP Address(Ipv4/Ipv6)	
Primary Controller		<input type="text" value="WLC-PRIMARY"/>		<input type="text" value="192.168.1.11"/>	
Secondary Controller		<input type="text" value="WLC-SECONDARY"/>		<input type="text" value="10.42.98.11"/>	
Tertiary Controller		<input type="text"/>		<input type="text"/>	
AP Failover Priority		<input type="text" value="Low"/>			

Refer to the exhibit. An engineer determined that during a recent controller failure, some APs did not failover to their secondary controller based on the network design, which has sufficient licenses for all APs. The controllers are not in a mobility group but have A records for their hostnames in DNS. Which setting needs to be addressed?

- A. The controllers must be in the same mobility group.
- B. The secondary controller IP address is incorrect.
- C. DNS hostnames are required to be FQDN.
- D. The AP failover priority was not set high enough.

Suggested Answer: D

Community vote distribution

D (67%)

B (33%)

🗨️ **Farhad123** 1 month, 2 weeks ago

Be careful this question is about AP failover and priority, so we don't need to have controller in same subnet. In the context of HA (High Availability) and SSO yes we should have controllers Management IP in same subnet.
upvoted 1 times

🗨️ **Farhad123** 1 month, 2 weeks ago

D is the correct answer, IP is correct here. Read more detail here: <https://mrnciew.com/2013/04/07/ap-failover/>
upvoted 1 times

🗨️ **zyzyx123** 2 months, 1 week ago

A is false as CAPWAP establishment has nothing to do with mobility
B is possible a correct answer as this is a per AP setting which could mean the AP's IP were configured incorrectly on some AP's giving the result of some working while others don't.
C is false as the high availability setting uses IP for function and one can set the names to whatever one wishes without loss of function
D is absolutely the correct answer as failover priority is used when there are too many AP's and some should have priority over others. And there is no reason to mention "sufficient licenses" unless it's to indicate to many AP's.
upvoted 1 times

🗨️ **ShamsDimashki** 3 months, 4 weeks ago

Selected Answer: D

provided answer is correct
AP failover priority not configured properly for some APs
upvoted 4 times

🗨️ **Bandito** 9 months, 3 weeks ago

Selected Answer: B



The controllers do not have to be in the same mobility group. Priority is not the issue here either. In the guides, you will not find any references about DNS in the HA configuration. I would suggest answer B in this case.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-4/configuration/guides/consolidated/b_cg74_CONSOLIDATED/m_configuring_backup_controllers.pdf
upvoted 1 times

🗨️ **2d93f33** 5 months, 2 weeks ago

If the secondary WLC IP is wrong, why should only "some" APs not failover? If the secondary IP is wrong, the failover shouldnt work for all APs .. or am i misunderstanding something here?

upvoted 5 times

  **vangio** 1 year, 3 months ago

Correct A

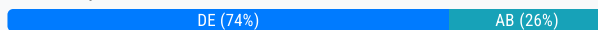
upvoted 3 times

A wireless engineer must design mobility between two buildings at a campus site. The engineer has one controller at each site. The engineer is investigating inter-controller CAPWAP data and control traffic. Which two ports must be open? (Choose two.)

- A. 5246
- B. 5247
- C. 8443
- D. 16666
- E. 16667

Suggested Answer: DE

Community vote distribution



Faridtnx Highly Voted 1 year, 6 months ago

Selected Answer: DE

A/B are capwap ports for AP-WLC connection. The question is asking for WLC-WLC
D and E is correct
upvoted 8 times

NetworkJoe Highly Voted 12 months ago

Selected Answer: DE

inter-controller roaming is using UDP/16666 and UDP/16667 CAPWAP tunnels.
upvoted 7 times

Farhad123 Most Recent 1 month, 2 weeks ago

D and E are correct
upvoted 2 times

4cde783 2 months, 2 weeks ago

Selected Answer: DE

The Cisco Catalyst 9800 Series Wireless Controller mobility tunnel is a CAPWAP tunnel with control path (UDP 16666) and data path (UDP 16667). The control path is DTLS encrypted by default. Data path DTLS can be enabled when you add the mobility peer.

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

upvoted 1 times

ShamsDimashki 3 months, 4 weeks ago

Selected Answer: AB

16666 and 16667 used for legacy platforms using EoIP
upvoted 1 times

All_ultrex 4 months, 3 weeks ago

Selected Answer: AB

A&B, just googled the answer, CAPWAP talks on these two ports for data and control
upvoted 1 times

All_ultrex 3 months, 3 weeks ago

Changing my answer to DE, CyborgXCZ has a great answer below. This is a mobility tunnel, there for it uses UDP 16666 and UDP 16667
upvoted 2 times

Bandito 9 months, 3 weeks ago

Selected Answer: DE

The only intercontroller CAPWAP ports are 16666 and 16667

<https://www.cisco.com/c/en/us/support/docs/wireless/5500-series-wireless-controllers/113344-cuwn-ppm.html>

upvoted 3 times

🗨️ 👤 **SakoTRG** 1 year ago

a+b is correct

CAPWAP uses 5246 + 5247 for both APs + WLC

16666 is used with EoIP Legacy

upvoted 3 times

🗨️ 👤 **Arghas** 1 year, 8 months ago

Update to below:

<https://community.cisco.com/t5/wireless/question-about-udp-16667/td-p/1399015>

upvoted 1 times

🗨️ 👤 **Arghas** 1 year, 8 months ago

"Ensure that the CAPWAP UDP ports 5246 and 5247 (similar to the LWAPP UDP ports 12222 and 12223) are enabled and are not blocked by an intermediate device that could prevent an access point from joining the controller."

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-6/config-guide/b_cg86/ap_connectivity_to_cisco_wlc.html#capwap

upvoted 1 times

🗨️ 👤 **CyborgXCZ** 1 year, 9 months ago

Selected Answer: DE

Matrix Page

<https://www.cisco.com/c/en/us/support/docs/wireless/5500-series-wireless-controllers/113344-cwnn-ppm.html>

Source----Dest.----Protocol----Dest. Port----Src. Port----Description

WLC-----WLC-----UDP-----16666-----16666-----Mobility - non-secured

WLC-----WLC-----UDP-----16666-----Mobility - secured - removed in 5.2

WLC -----AP-----UDP-----5246-5247-----CAPWAP Ctl/Data

upvoted 4 times

🗨️ 👤 **CyborgXCZ** 1 year, 9 months ago

D & E

As per this official Cisco Document

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-5/config-guide/b_cg85/mobility_groups.html

If you have a firewall b/w your mobility group members, open UDP port 16666 and IP protocol 97. If you are using encrypted mobility, open UDP port 5246 and 5247.

If you are using New Mobility, UDP port 16666, 16667, and 16668 are used.

For information about protocols and port numbers that must be used for management and operational purposes, see the Matrix Site

Further more looking at the Matrix Page

<https://www.cisco.com/c/en/us/support/docs/wireless/5500-series-wireless-controllers/113344-cwnn-ppm.html>

Source Dest. Protocol Dest. Port Src. Port Description

WLC WLC UDP 16666 16666 Mobility - non-secured

WLC WLC UDP 16667 n/a Mobility - secured - removed in 5.2

WLC AP UDP 5246-5247 n/a CAPWAP Ctl/Data

Since the question is related to controllers between each site (WLC < --- > WLC) then D & E is the most logical answer here.

upvoted 3 times

🗨️ 👤 **Gab99** 1 year, 9 months ago

its not really clear

https://www.cisco.com/c/en/us/td/docs/wireless/controller/9800/17-2/config-guide/b_wl_17_2_cg/mobility.html says:

"The Cisco Catalyst 9800 Series Wireless Controller mobility tunnel is a CAPWAP tunnel with control path (UDP 16666) and data path (UDP 16667)"

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-8/config-guide/b_cg88/mobility_groups.html says:

"If you have a firewall b/w your mobility group members, open UDP port 16666 and IP protocol 97. If you are using encrypted mobility, open UDP port 5246 and 5247."

upvoted 1 times

🗨️ **vigyory** 1 year, 10 months ago

I think D&E.

Based on Cisco ENWLS D book

- UDP/5246-47 is used for CAPWAP traffic between AP and WLC (5246 for Control, and 5247 for Data traffic)

- this book says: Test mobility control messaging over UDP port 16666 mping <ip-address>

So, I think the right answers are D&E

upvoted 1 times

🗨️ **peer1024** 1 year, 10 months ago

Selected Answer: DE

Explanation:

Two different building on a campus --> to different IP address ranges --> WLC1 and WLC2 ARE NOT in the same IP address range

It will be a Layer 3 inter controller roam with anchor and foreign controller.

The most recent platforms, such as the Catalyst 9800, transport mobility control messages over encrypted CAPWAP tunnels. Client data traffic is also transported over CAPWAP tunnels, but encryption is optional. Legacy controller platforms that are based on AireOS software prior to release 8.5 transport mobility messages over Ethernet-over-IP (EoIP) tunnels (IP protocol 97) and UDP port 16666.

AireOS platforms running release 8.5 or later support encrypted CAPWAP. (16667)

Reference:

Cert. guide "CCNP Enterprise ENWLS D 300-425 ENWLS I 300-430 Official Cert Guide", page 169f and page 175

upvoted 3 times

🗨️ **Alonzo_Harris** 1 year, 11 months ago

Selected Answer: AB

The answer is A & B

CAPWAP Control Channel: Uses UDP port 5246

CAPWAP Data Channel: Uses port 5247 and encapsulates (tunnels) the client's 802.11 frames

upvoted 3 times

🗨️ **RSC357** 1 year, 11 months ago

A + B - The Official Cisco Cert Guide does not contain the word 16667 or 8443. It does say AirOS, but this question does not.

"AireOS software prior to release 8.5 transport mobility messages over Ethernet-over-IP (EoIP) tunnels (IP protocol 97) and UDP port 16666"

upvoted 1 times

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

Suggested Answer: C

Community vote distribution

C (100%)

🗨️ 👤 **Farhad123** 1 month, 2 weeks ago

C is correct , read more here : https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-10/config-guide/b_cg810/configuring_auto_anchor_mobility.html

upvoted 1 times

🗨️ 👤 **Farhad123** 1 month, 2 weeks ago

Choice A is wrong read more here , Auto-Anchor Foreign Mapping feature uses for mapping guest users to specific subnet.

<https://mrnciew.com/2013/03/24/auto-anchor-foreign-mapping/>

upvoted 1 times

🗨️ 👤 **NoWiresIncluded** 1 year, 5 months ago

Selected Answer: C

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-3/config-guide/b_cg83/b_cg83_chapter_010010.html

upvoted 2 times

🗨️ 👤 **Alonzo_Harris** 1 year, 11 months ago

Selected Answer: C

The answer is C

The guest anchor priority feature provides a mechanism that gives "active/standby" load distribution amongst the anchor WLCs.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/8-3/config-guide/b_cg83/b_cg83_chapter_010010.html

upvoted 4 times

An enterprise network administrator is asked to set up an experimental WLAN for a collaboration project with a local service provider. The WLAN must be anchored to a WLC in the service provider data center using legacy mobility mode. After the configurations are completed on the WLCs and the firewalls in the path, the data path mobility tunnel is failing to come up. What should be performed by the administrator to debug the issue?

- A. Establish a Telnet connection from a local PC to the firewall on port 97.
- B. Use the eping command on the WLC.
- C. Establish a Telnet connection from a local PC to the firewall on port 16666.
- D. Use the mping command on the WLC.

Suggested Answer: B

Community vote distribution

B (100%)

🗨️ **FabriG** Highly Voted 1 year, 10 months ago

Selected Answer: B

Answer B

upvoted 5 times

🗨️ **CyborgXCZ** Most Recent 1 year, 9 months ago

Selected Answer: B

I think it's B and again tricky question.

First lets look at the matrix

<https://www.cisco.com/c/en/us/support/docs/wireless/5500-series-wireless-controllers/113344-cuwn-ppm.html>

Mobility data traffic is carried via Ethernet over IP (EoIP) which is IP protocol 97 hence firewall rules should allow IP protocol 97 traffic between your WLCs.

Now since you cannot telnet just to a port alone with out a valid IP address A: is not correct which leave us with eping which used for testing the data-connection. Yes it's simple but more correct than A:

upvoted 4 times

🗨️ **Alonzo_Harris** 1 year, 11 months ago

Selected Answer: B

Im thinking B

eping is used to test the mobility EoIP data packet communication between two controllers

upvoted 4 times

🗨️ **AustinP** 1 year, 12 months ago

Selected Answer: B

A can't be right. Legacy Mobility uses ethernet over IP, which is IP protocol 97. You can't use telnet to connect to that, telnet only does TCP (IP protocol 6).

C can't be right. When mobility uses port 16666 it is UDP (ip protocol 17). Telnet only does TCP.

Leaves us with B and D.

eping is used for testing the data-connection.

mping is used for testing the control-connection.

The question is about the data-path, so my guess would be that B is correct.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-5/configuration-guide/b_cg75/b_cg75_chapter_010010001.pdf

upvoted 3 times

🗨️ **wili0001** 2 years, 1 month ago

"the data path mobility tunnel is failing to come up" I think the answer is B.

Chapter 8 Pag. 175 table 8-2

upvoted 4 times

An engineer is configuring a centralized set of controllers for separate facilities. Which two Cisco wireless architectures must be used to ensure flexible sizing of WLAN to VLAN mappings? (Choose two.)

- A. interface group
- B. mobility group
- C. AP group
- D. controller group
- E. RF group

Suggested Answer: AC

Community vote distribution

AC (100%)

🗨️ 👤 **NoWiresIncluded** 1 year, 5 months ago

Selected Answer: AC

Interface group for sizing the subnets and ap-group for assigning them
upvoted 3 times

🗨️ 👤 **wifishark** 1 year, 10 months ago

Selected Answer: AC

AC is correct
upvoted 1 times

🗨️ 👤 **Gab99** 1 year, 9 months ago

agree

<https://community.cisco.com/t5/wireless/wlc-what-is-the-purpose-of-the-interface-interface-group-field/td-p/4032294> says:

"Interface groups are used for a number of reasons. The most common is that there are a lot of users on one WLAN and the network admin didn't want to create a broadcast domain large enough to facilitate all the clients. To help with this problem you can create a group of interfaces(VLANs) and spread the client load out across all of them."

upvoted 1 times

AireOS 5520:

```
config mobility group domain CCNP
config mobility group member add 00:1e:14:08:fb:ff 10.0.109.4 CCNP encrypt
enable
config mobility group member hash 10.0.109.4
dc0582ed7748ecfdb543cedd82caafa34b705a39
config mobility group member data-dtls 00:1e:14:08:fb:ff enable
```

IOS-XE 9800-CL

```
wireless mobility group name CCNP
wireless mobility mac-address 001E.E63D.CDFF
wireless mobility group member mac-address a493.4cb1.15e0 ip 10.0.100.2 public-
ip 10.0.100.2 group CCNP
```


Refer to the exhibit. An engineer is about to establish a mobility peer connection between a Cisco Catalyst 9800-CL version 16.10.1e and Cisco AireOS 5520 version 8.8.120.0. The data path between the 9800-CL and AireOS 5520 is down, but its control path is up. Based on the configuration, what is the cause of the issue?

- A. The certificate hash key is incorrect leading to data path down.
- B. The data-link-encryption configuration is missing from the 9800-CL configuration.
- C. Encrypted mobility is being used in the 5520 configuration leading to data path down.
- D. CAPS is used to key in MAC address in the IOS_XE configuration leading to data path down.

Suggested Answer: B

Community vote distribution

B (100%)

 **Gab99** 1 year, 9 months ago

Selected Answer: B

Answer is correct.


A is not correct, if the hash key would be wrong, control path wouldnt come up in the first place.

C is not correct. Secure Mobility is enabled by default on 9800 and therefore needs to be enabled on aireos. keyword is 'encrypt enable' on 2nd Line of AireOS konfig.

D is not correct. case-sensitive doesnt matter.

So B is the answer.

Though on 9800 config there is an error: wireless mobility mac-address is with wrong mac. Should be 9800 own mac-address configured.
upvoted 4 times

 **Gab99** 1 year, 9 months ago

Also see:

https://content.cisco.com/chapter.sjs?uri=/searchable/chapter/content/dam/en/us/td/docs/wireless/controller/technotes/8-8/b_c9800_wireless_controller-aires_ircm_dg.html.xml

https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/8-8/b_c9800_wireless_controller-aires_ircm_dg.html

upvoted 3 times

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.

Suggested Answer: C

Community vote distribution

C (100%)

🗨️ **Gab99** 1 year, 9 months ago

Selected Answer: C

C is right

In a FlexConnect Deployment scenario, 802.11r BSS FT roaming is supported between APs within the same FlexConnect group.

A would be applicable if it was local authentication aswell. but there is no mention of it.

upvoted 2 times

🗨️ **wifishark** 1 year, 10 months ago

Selected Answer: C

They must in a FlexConnect Group to support 802.11r above 8.2

<https://www.cisco.com/c/en/us/td/docs/wireless/controller/technotes/80211r-ft/b-80211r-dg.html>

upvoted 3 times

🗨️ **RSC357** 1 year, 10 months ago

"802.11r Fast Transition is not working as expected, like on local mode AP" So it was working before the change to FC, then put the AP in a FC group.

upvoted 1 times

🗨️ **Bapu20** 2 years, 1 month ago

Selected Answer: C

In 8.1 and earlier releases, this feature is not supported on access points in FlexConnect mode. In Release 8.2, this restriction is removed.802.11r fast rc only if the APs are in the same FlexConnect group.

[https://content.cisco.com/chapter.sjs?uri=/searchable/chapter/content/dam/en/us/td/docs/wireless/controller/technotes/80211r-ft/b-80211r-dg.html.xml#:~:text=802.11r%20fast%20roaming%20works%20only%20if%20the%20APs,standalone%20mode.%20EAP%20LEAP%20method%20is%20not%](https://content.cisco.com/chapter.sjs?uri=/searchable/chapter/content/dam/en/us/td/docs/wireless/controller/technotes/80211r-ft/b-80211r-dg.html.xml#:~:text=802.11r%20fast%20roaming%20works%20only%20if%20the%20APs,standalone%20mode.%20EAP%20LEAP%20method%20is%20not%20)

upvoted 4 times

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

Suggested Answer: B

Community vote distribution

B (100%)

🗨️ 👤 **Farhad123** 1 month, 2 weeks ago

Fast SSID change ,
upvoted 1 times

🗨️ 👤 **peer1024** 1 year, 9 months ago

Selected Answer: B

This is an "onboarding problem" with two (2) SSIDs

Explanation:

When fast SSID changing is enabled, the controller allows clients to move between SSIDs.

When the client sends a new association for a different SSID, the client entry in the controller connection table is cleared before the client is added to the new SSID.

When fast SSID changing is disabled, the controller enforces a delay before clients are allowed to move to a new SSID.

Reference: <https://rsciew.wordpress.com/2014/06/07/fast-ssid-change/>

upvoted 2 times

🗨️ 👤 **jaimeamazonspam** 1 year, 9 months ago

Selected Answer: B

B is correct, see:

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-6/configuration-guide/b_cg76/b_cg76_chapter_01001.pdf

upvoted 1 times

🗨️ 👤 **wifishark** 1 year, 10 months ago

Selected Answer: B

B is correct, all other have no direct action to apple devices. it goes about the ARP/Cache overwrite by changing SSID or roaming process

upvoted 1 times

Which UDP port numbers are used for exchange mobility packets in an AireOS wireless deployment?

- A. UDP 16666 for control plane, EoIP (IP protocol 97) for data plane
- B. UDP 16668 for control plane, UDP 16667 for data plane
- C. UDP 16667 for control plane, UDP 16666 for data plane
- D. UDP 16666 for control plane, UDP 16667 for data plane

Suggested Answer: D


Community vote distribution

D (60%)

A (40%)

 **samchaks** Highly Voted 2 years, 6 months ago

The key is UDP ports. IP protocol 97 is not UDP.
upvoted 15 times

 **JONATHGA** Highly Voted 2 years, 5 months ago

The question is asking for the UDP ports, that would remove the IP protocol 97 from the options.

"If encrypted mobility tunnel is in enabled state, the data traffic is encrypted and the controller uses UDP port 16667, instead of EoIP, to send the data traffic."

<https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/107188-mobility-groups-faq.html#anc13>

upvoted 9 times

 **Farhad123** Most Recent 1 month, 2 weeks ago

D is correct
upvoted 1 times

 **NightmareCreature** 4 months, 2 weeks ago

UDP 16666 = data plane
UDP 16667 = control plane
upvoted 2 times

 **NightmareCreature** 3 months, 3 weeks ago

Sorry,
meant the opposite ;)
upvoted 1 times

 **learningccnp** 10 months, 3 weeks ago

Selected Answer: A
16667 for controlling, not for data.
upvoted 1 times

 **ShamsDimashki** 3 months, 4 weeks ago

16667 for Data not controlling
upvoted 1 times

 **Mimimimimi** 1 year, 7 months ago

Selected Answer: D
Legacy details: Control plane was UDP16666 and data plane was IP97

The question is asking for UDP ports. This eliminates answer A because 97 is IP and not UDP.

Correct answer is D.
upvoted 2 times

 **Araghas** 1 year, 8 months ago

Selected Answer: D
16666 and 16667 and 97 are required for mobility (16666, 16667 are ports, EoIP is PROTOCOL 97)

upvoted 3 times

🗨️ **FabriG** 1 year, 10 months ago

Selected Answer: A

From Cisco ENWLSD course, it is A.

upvoted 4 times

🗨️ **RSC357** 1 year, 10 months ago

Because the questions asks for UDP, we should pick the wrong answer? 16667 is never mentioned in the Official Cisco Cert Guide. This is why the exam is so hard. Pure trickery on Cisco's end! I'll stick with "A".

upvoted 1 times

🗨️ **RSC357** 1 year, 11 months ago

A is correct. 16667 is never mentioned in the entire book!

AireOS software prior to release 8.5 transport mobility messages over Ethernet-over-IP (EoIP) tunnels (IP protocol 97) and UDP port 16666

upvoted 1 times

🗨️ **bctrailrider8** 2 years, 2 months ago

Selected Answer: D

D is correct, as stated below EoIP is not UDP and the question specifically ask for UDP.

upvoted 4 times

🗨️ **ulfjvw** 2 years, 6 months ago

Selected Answer: A

from study guide: Legacy

controller platforms that are based on AireOS software prior to release 8.5 transport mobility messages over Ethernet-over-IP (EoIP) tunnels (IP protocol 97) and UDP port 16666. AireOS platforms running release 8.5 or later support encrypted CAPWAP.

AND

<https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/107188-mobility-groups-faq.html>

upvoted 1 times

🗨️ **pitostocas** 3 years, 4 months ago

If encrypted mobility tunnel is in enabled state, the data traffic is encrypted and the controller uses UDP port 16667, instead of EoIP, to send the data traffic.

<https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/107188-mobility-groups-faq.html>

upvoted 1 times

🗨️ **RogerTheLodger** 3 years, 2 months ago

The question doesn't mention encryption., and without it, in a purely AireOS wireless environment, A is correct.

upvoted 2 times

🗨️ **Cyrillka** 3 years, 6 months ago

Seems A is correct

<https://www.cisco.com/c/en/us/support/docs/wireless/4400-series-wireless-lan-controllers/107188-mobility-groups-faq.html>

UDP 16666 for tunnel control traffic

IP protocol 97 for user data traffic

upvoted 7 times

🗨️ **skh** 3 years, 6 months ago

Cisco WLCs exchange mobility traffic with each other using various tunneling methods, depending on the controller platform. The most recent platforms, such as the Catalyst 9800, transport mobility control messages over encrypted CAPWAP tunnels. Client data traffic is also transported over CAPWAP tunnels, but encryption is optional. Legacy controller platforms that are based on AireOS software prior to release 8.5 transport mobility messages

over Ethernet-over-IP (EoIP) tunnels (IP protocol 97) and UDP port 16666. AireOS platforms running release 8.5 or later support encrypted CAPWAP.

upvoted 4 times

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

- A. 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 WLC is in the same mobility domain.
- B. If WLCs are in the same mobility domain, they communicate with each other but, if an anchor WLC is present, it must be in the same mobility domain for communication to be possible.
- C. If WLCs are in the 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. 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.

Suggested Answer: C

Community vote distribution

C (100%)

🗉 👤 **Ram0n_Aya1a** Highly Voted 👍 2 years, 5 months ago

C is the better answer.

MD: WLC in the same domain, can communiacte

MG: WLC in the same group, constrains distribution of client security context.

upvoted 8 times

🗉 👤 **Farhad123** Most Recent 🕒 1 month, 1 week ago

C is correct

upvoted 1 times

🗉 👤 **raresalexa_22** 3 months, 1 week ago

Selected Answer: C

Mobility has two categories, Mobility Domains & Mobility Groups. If WLCs are in same mobility domain they communicate with each other. Mobility Group constraint the distribution of security context of a client. It also constrain AP fail-over between controllers.

A WLC support 3 mobility groups with up to 24 controllers in a single group for a total of 72 controllers in the mobility domain (or list). WLC 5.1 or later allows seamless roaming across multiple mobility groups in the mobility list of the controller.

<https://mrnciew.com/2013/03/16/wireless-mobility-basics/>

upvoted 1 times

🗉 👤 **Gab99** 1 year, 9 months ago

C

<https://mrnciew.com/2013/03/16/wireless-mobility-basics/>

upvoted 1 times

🗉 👤 **ulfjvw** 2 years, 6 months ago

shouldn't this be A?

upvoted 2 times

🗉 👤 **EGD** 2 years, 12 months ago

A mobility domain is a cluster of APs forming a continuous radio frequency space, where the Pairwise Master Key (PMK) can be synchronized, and fast roaming can be enabled for 802.11r

A Mobility Group is a group of Wireless LAN Controllers (WLCs) in a network with the same Mobility Group name.

upvoted 3 times

An engineer must ensure that the new wireless LAN deployment can support seamless roaming between access points using a standard based on an amendment to the 802.11 protocol. Which protocol must the engineer select?


- A. 802.11i
- B. 802.11ac
- C. 802.11r
- D. 802.11e

Suggested Answer: C

Community vote distribution

C (100%)

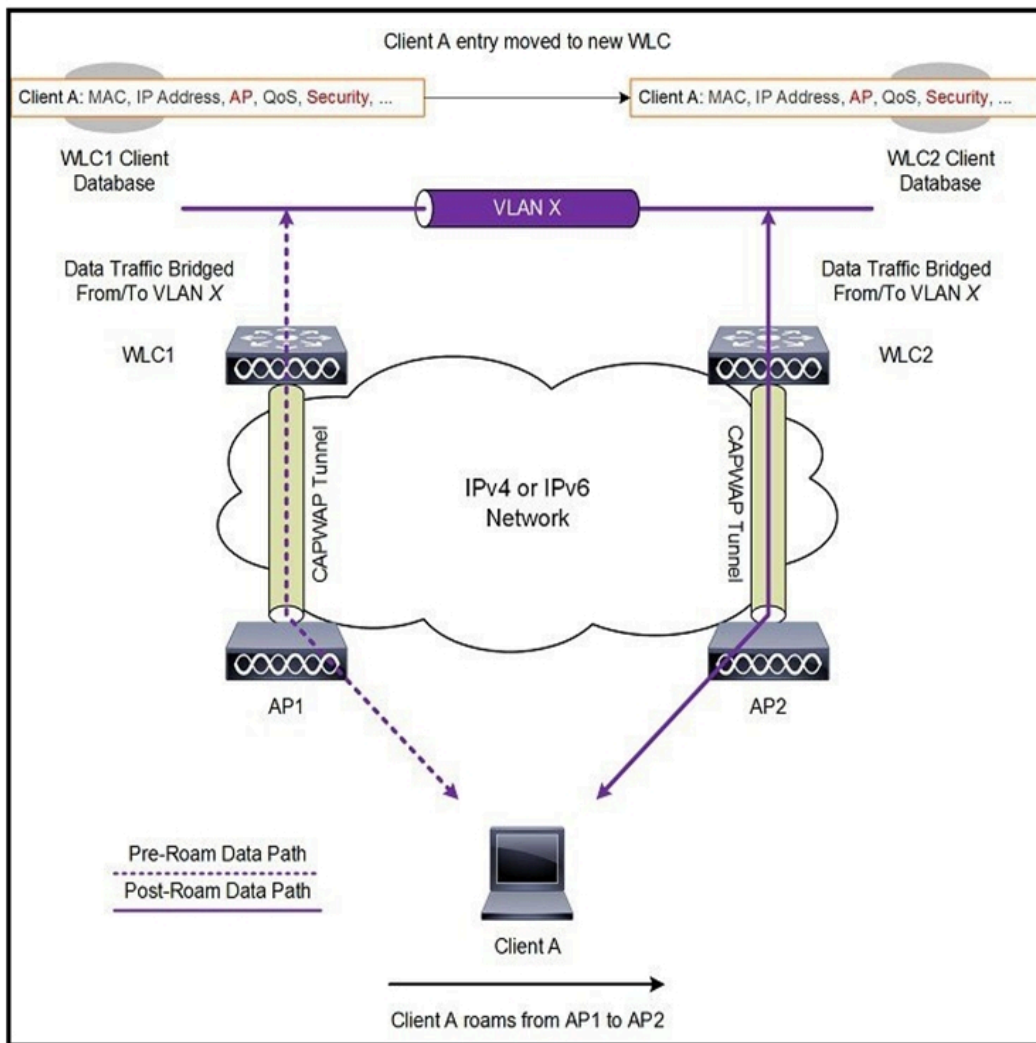


 **PixelRunner** Highly Voted 2 years, 3 months ago

Selected Answer: C

802.11r = fast roaming

upvoted 8 times



Refer to the exhibit. A client roams between two APs that are registered to two different controllers, where each controller has an interface in the client subnet.

Both controllers are running AireOS. Which scenario explains the client roaming behavior?

- A. Controllers exchange mobility control messages (over UDP port 16666), and the client database entry is moved from the original controller to the new controller.
- B. Controllers do not exchange mobility control messages (over UDP port 16666), and the client database entry is not moved from the original controller to the new controller.
- C. Controllers exchange mobility control messages (over UDP port 16666), and a new client session is started with the new controller.
- D. Controllers exchange mobility control messages (over UDP port 16666), and the client database entry is tunneled from the original controller to the new controller.

Suggested Answer: A

Liselot Highly Voted 2 years, 10 months ago

It's a layer 2 (same subnet) inter-controller roam.

The client database entry is moved to the new controller.

--> Answer A is correct

upvoted 10 times

Cyrilka Highly Voted 3 years, 6 months ago

A is correct

<https://mrnciew.com/2013/03/16/wireless-mobility-basics/>

upvoted 6 times

🗨️ 👤 **Farhad123** Most Recent 1 month, 1 week ago

A is correct

upvoted 1 times

🗨️ 👤 **Goatgirl20** 3 years, 4 months ago

Answer should be D

When the client associates to an access point joined to a new controller, the new controller exchanges mobility messages with the original controller, and the client database entry is moved to the new controller. New security context and associations are established if necessary, and the client database entry is updated for the new access point. This process remains transparent to the user.

https://www.cisco.com/c/en/us/td/docs/wireless/controller/7-3/configuration/guide/b_cg73/b_wlc-cg_chapter_01111.html

upvoted 1 times

🗨️ 👤 **edgardm0426** 7 months ago

This is wrong

upvoted 1 times

🗨️ 👤 **Hamoze** 3 years, 3 months ago

I think you mean A , client database is entry is moved to the new controller

upvoted 6 times

🗨️ 👤 **Johnconnor2021** 3 years ago

No, D is correct, look carefully: there is a CAPWAP involved. According to the Cisco Press book there is a Inter-controller Layer 3 Roam. So when there is a IC L3 involved a CAPWAP tunneled is formed in order to exchange the user information from one WLC to other WLC, hence D is correct.

upvoted 1 times

🗨️ 👤 **Johnconnor2021** 3 years ago

I quote from Chapter 8. of the ENWLSO book: (...) "Layer 3 roams require a further step, where anchor and foreign controllers must form a relationship and the extra CAPWAP TUNNEL REQUIRED TO TRANSPORT the client's traffic between them.(...)"

upvoted 1 times

🗨️ 👤 **Johnconnor2021** 3 years ago

I read again and my bad: A is the correct answer, both WLC are in the SAME subnet, hence no tunnel is added at least the WLC are in different subnets. A is correct. Sorry for the confusion

upvoted 10 times