

Cisco

Exam 400-051

CCIE Collaboration

Version: 19.0

[Total Questions: 432]



Topic break down

Topic	No. of Questions
Topic 1: Cisco Collaboration Infrastructure	18
Topic 2: Telephony Standards and Protocols	47
Topic 3: Cisco Unified Communications Manager (CUCM)	67
Topic 4: Cisco IOS UC Applications and Features	64
Topic 5: Quality of Service and Security in Cisco Collaboration Solutions	19
Topic 6: Cisco Unity Connection	19
Topic 7: Cisco Unified Contact Center Express	12
Topic 8: Cisco Unified IM and Presence	16
Topic 9: Mix Questions	170



Topic 1, Cisco Collaboration Infrastructure

Question No : 1 - (Topic 1)

In a Cisco EnergyWise domain, which two terms describe a Cisco IP phone? (Choose two.)

- A. endpoint
- B. domain member
- C. child domain member
- D. EnergyWise agent
- E. Cisco power distribution unit

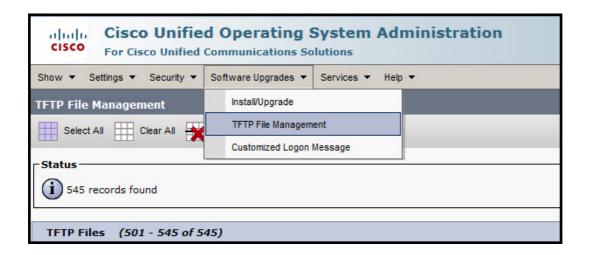
Answer: A,C

ference:

http://www.cisco.com/en/US/docs/switches/lan/energywise/phase2_5/ios/configuration/guide/one_ent.html

Question No : 2 - (Topic 1)

Refer to the exhibit.



Assuming that the administrator has never performed any manual custom uploads, which two file types can be found when you choose Software Upgrades, followed by TFTP File Management on the Cisco Unified Operating System Administration web page? (Choose two.)



- A. IP phone configuration files
- B. sample music-on-hold audio files
- C. Identity Trust List files
- D. IP phone license files
- E. Mobile Voice Access audio files
- F. softkey template files

Answer: C,E Explanation:

We get option for Identity Trust list Files and Mobile Voice Access audio files.

Question No: 3 - (Topic 1)

Which statement describes a disadvantage of using the Cisco TFTP service to serve IP phone load files?

- **A.** The Cisco TFTP services can run on only one Cisco Unified Communications Manager server in a cluster.
- **B.** Because TFTP operates on top of UDP, there is a high risk of corrupted load file delivery at the completion of the TFTP process due to undetected data loss in the network.
- **C.** If a response is not received in the timeout period, the TFTP server will not resend the data packet.
- **D.** Packet loss can significantly increase the TFTP session completion time.
- **E.** Because TFTP operates with an adaptive timeout period, the time to complete the file transfer is unpredictable.

Answer: D

Explanation:

Voice traffic cannot recapture lost packets. Rather than retransmitting a lost network connection, the phone resets and attempts to reconnect its network connection.

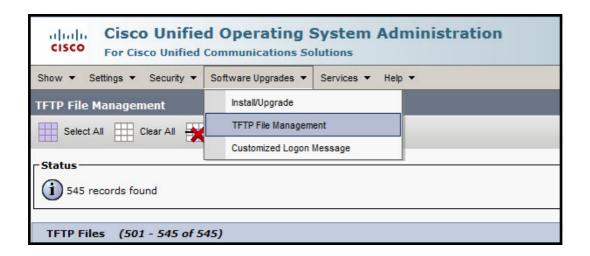
Reference:

http://www.cisco.com/en/US/docs/voice_ip_comm/cuipph/6921_6941_6961/7_1_2/english/admin/guide/6921trb.html#wp1031181



Question No : 4 - (Topic 1)

Refer to the exhibit.



Assuming that the administrator has never performed any manual custom uploads, which two file types can be found when you choose Software Upgrades, followed by TFTP File Management on the Cisco Unified Operating System Administration web page for Cisco Unified Communications Manager? (Choose two.)

- A. IP phone configuration files
- B. announcement audio files
- C. ringer files
- D. IP phone license files
- E. sample music-on-hold audio files
- **F.** softkey template files

Answer: B,C

Explanation:

The two file types that we get are Announcement Audio Files and Ringer Files.

Question No: 5 - (Topic 1)

Which statement about Cisco EnergyWise domain member neighbor formation is true?

A. Cisco EnergyWise supports static neighbors, but the neighbor relationship is only



possible if a noncontiguous domain member and a contiguous domain member have a static neighbor entry pointing to each other.

- **B.** Cisco EnergyWise static neighbors can be formed even if domain members are not physically contiguous.
- **C.** Static neighbors can be manually defined on Cisco EnergyWise domain members, but TCP protocols must be used.
- **D.** Static neighbors can be manually defined on Cisco EnergyWise domain members, but they have a lower priority compared to the autodiscovered members.
- **E.** Static neighbors can be manually defined on Cisco EnergyWise domain members and the TCP or UDP protocol can be used.

Answer: B

Reference:

http://www.cisco.com/en/US/docs/solutions/Enterprise/Borderless_Networks/Energy_Mana gement/energywisedg.html?referring_site=smartnavRD#wp554384

Question No : 6 - (Topic 1)

What is the maximum number of call-processing subscribers in a standard deployment of a Cisco Unified Communications Manager Session Management Edition cluster?

- **A.** 3
- **B.** 4
- **C.** 5
- **D.** 8
- **E.** 16

Answer: D

Explanation:

There is no deployment difference between CUCM & CUCM session management Edition cluster. The only difference is that CUCM SME is designed to support a large number of trunk to trunk connections. Thus, 8 subscribers.

Question No: 7 - (Topic 1)



Which statement about the Cisco UC on UCS TRC and the third-party server specs-based virtualization support model is true?

- **A.** Both the UC on UCS TRC and the third-party servers spec-based support models have rule-based approaches.
- **B.** The UC on UCS TRC support model has a rule-based approach and the third-party servers spec-based support model has a configuration-based approach.
- **C.** The UC on UCS TRC support model requires a high level of virtualization experience while the third-party server spec-based support model requires a low to medium level virtualization experience.
- **D.** VMware vCenter is mandatory for the UC on UCS TRC support model but it is optional for the third-party server spec-based support model.
- **E.** VMware vCenter is optional for the UC on UCS TRC support model but it is mandatory for the third-party server spec-based support model.

Answer: E

Explanation:

VMware vCenter is

- mandatory when deploying on UC on UCS Specs-based and Third-party Server Specs-based hardware.
- Click here for how to configure VMware vCenter to capture these logs. If not configured by default, Cisco TAC may request enabling these settings in order to provide effective support.
- Also note that enablement of specific VMware vSphere management features may require vCenter and/or a higher feature Edition of vSphere ESXi.
- ✓ Note that when VMware vCenter is not required and is not used, then VMware vSphere ESXi's default management interface is its free/included VMware vSphere Client (formerly branded VI Client).

Reference: http://docwiki.cisco.com/wiki/Unified Communications VMware Requirements

Question No:8 - (Topic 1)

Which two statements about the Peer Firmware Sharing option for IP phone firmware distribution are true? (Choose two.)



- **A.** This option uses a parent-child hierarchy in which a firmware image is downloaded by a parent phone to up to three directly associated child phones.
- **B.** This option must be enabled on Cisco Unified Communications Manager service parameters for Cisco TFTP.
- **C.** This option mandates that the parent phone and child phones be identical, selected phone models.
- **D.** This option allows firmware transfers between phones in different subnets, as long as the round-trip delay is less than 5 milliseconds.
- **E.** This option uses a parent-child hierarchy that must be manually defined by the Cisco Unified Communications Manager administrator.
- **F.** This option allows falling back to the TFTP server in the Cisco Unified Communications Manager cluster.

Answer: C,F

Explanation:

Peer Firmware Sharing works by setting up a parent-child hierarchy of the phones in which a firmware image is downloaded by the parent phone to a child phone. The advantage of using Peer Firmware Sharing is that instead of all phones individually retrieving a software image, they pass the image along from one phone to another phone on the same subnet.

Advantage of PFS:

- # Hierarchy is automatic
- One download per phone model on a subnet
- # Uses TCP
- # Fails back to TFTP
- Reduces TFTP CPU load during upgrade

Question No: 9 - (Topic 1)

Which two mechanisms does Cisco EnergyWise use for neighbor discovery? (Choose two.)

- A. multicast
- **B.** LLDP-MED
- C. UDP broadcast
- D. Cisco Discovery Protocol
- E. TCP



Answer: C,D

Explanation:

Cisco EnergyWise Neighbor Discovery Process

The Cisco EnergyWise neighbor discovery process is the mechanism by which domain members discover each other and populate their Cisco EnergyWise neighbor tables. Cisco EnergyWise queries can subsequently be distributed to all domain members using the neighbor relationships to monitor and control the power usage of devices within a domain. Cisco EnergyWise domain members automatically discover their neighbors through one of two mechanisms:

UDP broadcast packets are automatically sent out switch ports which support Cisco EnergyWise, regardless of whether the interfaces are configured with the no energywise interface-level command. CDP packets are sent when CDP is configured for the switch ports.

Reference:

http://www.cisco.com/en/US/docs/solutions/Enterprise/Borderless_Networks/Energy_Management/energywisedg.html?referring_site=smartnavRD#wp555927

Question No: 10 - (Topic 1)

Which four attributes are needed to determine the time to complete a TFTP file transfer process? (Choose four.)

- A. file size
- **B.** file type
- C. network interface type
- **D.** round-trip time
- E. packet loss percentage
- **F.** response timeout
- G. network throughput

Answer: A,D,E,F

Explanation:

Four attributes that are needed to determine the time to complete TFTP file transfer process is:



- # File Size
- Round-trip time
- Packet loss percentage
- Response timeout

Reference:

http://www.cisco.com/en/US/prod/collateral/voicesw/ps6882/ps6884/white_paper_c11-583891_ps10451_Products_White_Paper.html

Question No: 11 - (Topic 1)

Which protocol does the Cisco Prime LAN Management Solution application use to communicate with Cisco EnergyWise domain members?

- A. UDP broadcast
- B. Cisco Discovery Protocol
- C. UDP unicast
- D. TCP
- E. multicast

Answer: D

Explanation:

Cisco Prime LMS 4.1 uses TCP port 43440.

Question No : 12 - (Topic 1)

Which two statements about using the Load Server option for IP phone firmware distribution are true? (Choose two.)

- **A.** This option must be enabled on at least two servers in a Cisco Unified Communications Manager cluster.
- **B.** This option must be enabled on Cisco Unified Communications Manager service parameters for Cisco TFTP.
- C. Phone firmware must be manually copied to any applicable load servers.