

400-051

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Cisco 400-051 Questions & Answers

CCIE Collaboration

Version: 11.0
Cisco 400-051 Exam

Topic 1, Cisco Collaboration Infrastructure

Exam A

QUESTION 1

Company ABC is planning to migrate from MCS-hosted Cisco Unified Communications Manager applications to Cisco UC on UCS B-Series servers. Which statement about installation media support is true for this migration?

- A. The install log can be written to a USB flash drive that is attached to the UCS server.
- B. The answer file that is generated by the Answer File Generator (platformConfig.xml) can be read from a USB flash drive to perform an unattended installation on the UCS server.
- C. The Cisco Music on Hold USB audio sound card can be mapped to a virtual USB port on a VMware virtual machine on the UCS server.
- D. The answer file that is generated by the Answer File Generator (platformConfig.xml) can be read from an FLP image that is mounted in a virtual floppy drive.
- E. The Cisco Music on Hold USB audio sound card can be mapped to a virtual serial port on a VMware virtual machine on the UCS server.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Using the AFG will allow you to get this license mac before even touching the server. It is provided after filling in the main form of the AFG but it can also be found by looking at the last few lines of your platformconfig.xml file.

Once you have the xml files, you will need to map those to the floppy drive of the VM (no usb support on the VM OVA). There are many ways to do this. I simply use a freeware virtual floppy app that I drop the platformconfig.xml file on and then copy the *.flp image out to the datastore. I'll end up with a directory on my datastore called AFG that has the host named *.flp images that I will use during install. It also serves as archival of these files in the event the server needs to be re- imaged. This is important because the license mac will change if every parameter is not entered exactly as it was prior. If the license mac changes, you will have to go through the process of requesting new license files to be generated.

Reference:<http://angryciscoguy.com/jello/cisco-answer-file-generator-to-the-rescue/>

QUESTION 2

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.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

VMware vCenter is

Reference:http://docwiki.cisco.com/wiki/Unified_Communications_VMware_Requirements

QUESTION 3

Which definition is included in a Cisco UC on UCS TRC?

- A. storage arrays such as those from EMC or NetApp, if applicable
- B. configuration of virtual-to-physical network interface mapping
- C. step-by-step procedures for hardware BIOS, firmware, drivers, and RAID setup
- D. server model and local components (CPU, RAM, adapters, local storage) at the part number level
- E. configuration settings and patch recommendations for VMware software

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

What does a TRC definition include?

Reference:http://docwiki.cisco.com/wiki/UC_Virtualization_Supported_Hardware#UC_on_UCS_The_Standard_Reference_Configurations

QUESTION 4

Which capability is supported by Cisco Discovery Protocol but not by LLDP-MED?

- A. LAN speed and duplex discovery
- B. Network policy discovery
- C. Location identification discovery
- D. Power discovery
- E. Trust extension

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Discovery Protocol provides an additional capability not found in LLDP-MED that allows the switch to extend trust to the phone. In this case, the phone is now trusted to mark the packets received on the PC port accordingly. This feature can be used to off-load the switch because now it does not need to police the information being received from the phone.

QUESTION 5

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

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

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:

- Cisco EnergyWise UDP broadcast packet
- Cisco EnergyWise CDP packets

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 6

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Prime LMS 4.1 uses TCP port 43440.

QUESTION 7

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.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

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/eng_ish/admin/guide/6921trb.html#wp1031181

QUESTION 8

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.
- D. The load server will not function if its IP address is not in the same subnet as the IP phones.
- E. This option is only available for newer IP phone models.
- F. This option does not accommodate falling back to Cisco TFTP on error.

Correct Answer: CF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Choosing the Right Distribution Method

Which of the three different image-distribution methods discussed so far is the best for a customer deployment? Each method has advantages and disadvantages, and they are summarized in Table 1.

Table 1. Summary of Distribution Models

Peer Firmware Sharing

Load Server

Traditional TFTP

Advantages

- Hierarchy is automatic
- One download per phone model on a subnet
- Uses TCP
- Fails back to TFTP
- Speeds up LAN upgrades
- Reduces TFTP CPU load during upgrade
- Has same download time as LAN image distribution
- Distributes TFTP load over multiple TFTP servers
- Proven distribution
- Default behavior

Disadvantages

- Must be enabled on each phone
- Hierarchy is formed for each phone model
- Hierarchy is limited to subnet
- IP must be set on each phone
- Administrator must manually file copy to load server - No failback to TFTP on error
- More prone to user error
- High-bandwidth requirements
- Multiple requests for same file
- High CPU usage on TFTP server

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

QUESTION 9

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.

Correct Answer: CF

Section: (none)

Explanation

Explanation/Reference:

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
- Speeds up LAN upgrades
- Reduces TFTP CPU load during upgrade

QUESTION 10

Which two statements about the Cisco UC on UCS specs-based virtualization support model are true? (Choose two.)

- A. It has a configuration-based approach.
- B. It has a rule-based approach.
- C. It has less hardware flexibility compared to the third-party server specs-based support model.
- D. It has less hardware flexibility compared to the UC on UCS TRC support model.
- E. VMware vCenter is optional with this support model.

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Reference:http://docwiki.cisco.com/wiki/UC_Virtualization_Supported_Hardware#UC_on_UCS_Standard_Reference_Configurations

QUESTION 11

Which definition is included in a Cisco UC on UCS TRC?

- A. required RAID configuration, when the TRC uses direct-attached storage
- B. configuration of virtual-to-physical network interface mapping
- C. step-by-step procedures for hardware BIOS, firmware, drivers, and RAID setup

- D. configuration settings and patch recommendations for VMware software
- E. server model and local components (CPU, RAM, adapters, local storage) by name only; part numbers are not included because they change over time

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Definition of server model and local components (CPU, RAM, adapters, local storage) at the orderable part number level.

QUESTION 12

Which capability is supported by LLDP-MED but not by Cisco Discovery Protocol?

- A. LAN speed discovery
- B. network policy discovery
- C. location identification discovery
- D. power discovery
- E. trust extension

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

LLDP-MED supports both LAN speed and duplex discovery. Cisco Discovery Protocol supports duplex discovery only, but this limited support is not seen as a problem because if there is a speed mismatch, LLDP-MED and Cisco Discovery Protocol cannot be exchanged and thus cannot be used to detect the mismatch.

QUESTION 13

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

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

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

QUESTION 14

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.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference:http://www.cisco.com/en/US/docs/solutions/Enterprise/Borderless_Networks/Energy_Management/energywisedge.html?referring_site=smartnavRD#wp554384

QUESTION 15

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

Correct Answer: ADEF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

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

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

QUESTION 16

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

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

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.

Topic 2, Telephony Standards and Protocols

QUESTION 17

Which two SCCP call signaling messages are initiated by Cisco Unified Communications Manager to an IP phone? (Choose two.)

- A. SoftKeyEvent
- B. CloseReceiveChannelAck
- C. CallState
- D. KeypadButton
- E. OpenReceiveChannel
- F. Offhook

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Upon receiving anOpenReceiveChannelmessage, the IP phone selects the UDP port number it wants to use to receive RTP packets and reports this information to call manager. With the SCCP protocol architecture, the majority of the H.323 processing power resides in an H.323 proxy -- the Cisco CallManager. The end stations (IP phones) run the Skinny client, which consumes less processing overhead. The client communicates with CallManager using connection-oriented (TCP/IP-based) communication to establish a call with another H.323- compliant end station. Once Cisco CallManager has established the call, the two H.323 end stations use connectionless (UDP/IP-based) communication for audio transmissions.

QUESTION 18

Which two SCCP call signaling messages are sent by an IP phone to Cisco Unified Communications Manager? (Choose two.)

- A. SoftKeyEvent
- B. OpenReceiveChannelAck
- C. StartMediaTransmission
- D. SelectSoftKeys
- E. CloseReceiveChannel
- F. StopTone

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

This message indicates which soft key was pressed. Upon receipt of this message, CallManager invokes the action associated with the pressed soft key. For example, ifHoldwas the pressed soft key, CallManager places the active call on user hold. In some trace files you might see a soft key number without the corresponding description. The following list defines each soft key number.

QUESTION 19

Which device is the initiator of a StationInit message in a Cisco Unified Communications Manager SDI trace?

- A. Cisco Unified Communications Manager
- B. MGCP gateway
- C. Cisco Music on Hold server
- D. SCCP IP phone
- E. SIP Proxy Server

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Station Init means that an inbound Transmission Control Protocol (TCP) message from a Skinny station reached CallManager. A Skinny station is any endpoint that uses the Skinny protocol to communicate with CallManager.

QUESTION 20

To which SIP response class do the SIP response codes 300 to 399 belong?

- A. Provisional
- B. Client Failure
- C. Server Failure
- D. Successful
- E. Redirection

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Redirection -- further action needs to be taken in order to complete the request. That is what this class implies.

QUESTION 21

Which SIP request method enables reliability of SIP 1xx response types?

- A. ACK
- B. PRACK
- C. OPTIONS
- D. CANCEL
- E. REGISTER

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

In order to achieve reliability for provisional responses, we do nearly the same thing. Reliable provisional responses are retransmitted by the TU with an exponential backoff. Those retransmissions cease when a PRACK message is received. The PRACK request plays the same role as ACK, but for

provisional responses. There is an important difference, however. PRACK is a normal SIP message, like BYE. As such, its own

QUESTION 22

Which SIP response is considered a final response?

- A. 183 Session in Progress
- B. 199 Early Dialog Terminated
- C. 200 OK
- D. 180 Ringing
- E. 100 Trying

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

200 OK Indicates the request was successful. Whether other options state the request is still in progress or request is initiated.

QUESTION 23

Which two SDP content headers can be found in a SIP INVITE message? (Choose two.)

- A. Expires
- B. Contact
- C. Connection Info
- D. Media Attributes
- E. Allow
- F. CSeq

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Connection info is optional field in SDP whether Media attributes decide the codec and media type for that call.

QUESTION 24

Which two responses are examples of client error responses in SIP protocol? (Choose two.)

- A. 302 Moved Temporarily
- B. 404 Not Found
- C. 503 Service Unavailable
- D. 502 Bad Gateway
- E. 604 Does Not Exist Anywhere
- F. 408 Request Timeout

Correct Answer: BF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Client Error (400 to 499)--Request contains bad syntax or cannot be fulfilled at this server. This class of 400 to 499 contains only error messages.

QUESTION 25

Which H.245 information is exchanged within H.225 messages in H.323 Fast Connect?

- A. Terminal Capability Set
- B. Open Logical Channel
- C. Master-Slave Determination
- D. Call Setup
- E. Call Progress

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

With the standard H.245 negotiation, the two endpoints need three round-trips before they agree on the parameters of the audio/video channels (1. master/slave voting, 2. terminal capability set exchange, and finally, 3. opening the logical channels). In certain situations and especially with high-latency network links, this can last too long and users will notice the delay.

QUESTION 26

Which two compression formats for high-definition video have technical content that is identical to

- A. 264? (Choose two.)
- B. MPEG-4 Part 10
- C. MPEG-4 Part 14

- D. MPEG-2 Part 7
- E. AVC
- F. VC3
- G. VP8

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

MPEG-4 Part 10, also known as MPEG-4 AVC (Advanced Video Coding), is actually defined in an identical pair of standards maintained by different organizations, together known as the Joint Video Team (JVT). While MPEG-4 Part 10 is a ISO/IEC standard, it was developed in cooperation with the ITU, an organization heavily involved in broadcast television standards. Since the ITU designation for the standard is H.264, you may see MPEG-4 Part 10 video referred to as either AVC or H.264. Both are valid, and refer to the same standard.

QUESTION 27

How are DTMF digits transported in RFC 2833?

- A. In the RTP stream with the named telephone events payload format.
- B. In the RTP stream with the regular audio payload format.
- C. In SIP NOTIFY messages.
- D. In SIP INFO messages.
- E. In SIP SUBSCRIBE messages.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

DTMF digits and named telephone events are carried as part of the audio stream, and MUST use the same sequence number and time-stamp base as the regular audio channel to simplify the generation of audio waveforms at a gateway. The default clock frequency is 8,000 Hz, but the clock frequency can be redefined when assigning the dynamic payload type.

QUESTION 28

To which SIP response category does 301 Moved Permanently belong?

- A. Provisional
- B. Successful

- C. Redirection
- D. Client Failure
- E. Server Failure

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The 301 response from the Web server should always include an alternative URL to which redirection should occur. If it does, a Web browser will immediately retry the alternative URL. So you never actually see a 301 error in a Web browser, unless perhaps you have a corrupt redirection chain e.g. URL A redirects to URL B which in turn redirects back to URL A. If your client is not a Web browser, it should behave in the same way as a Web browser i.e. immediately retry the alternative URL.

QUESTION 29

Which two statements describe characteristics of Binary Floor Control Protocol? (Choose two.)

- A. Its binary encoding is designed to work in high-bandwidth environments.
- B. It is designed for audio or video conference sessions of three or more participants.
- C. It enables management of shared content resources independent of video streams.
- D. It supports TLS-based authentication.
- E. It supports SIP as well as H.323.

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

BFCP is a deliverable developed as part of the Internet Engineering Task Force (IETF) XCON Centralized Conferencing working group. The IETF XCON working group was formed to focus on delivering a standards-based approach to managing IP conferencing while promoting broad interoperability between software and equipment vendors.

QUESTION 30

What is the minimum number of TCP sessions needed to complete a H.323 call between two

- A. 323 gateways using slow start?
- B. 0
- C. 1

- D. 2
- E. 3
- F. 4

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

H.323 has two modes of operation: slow start and fast start. The initiation of a call may proceed in a slow start or fast start in H.323. In a slow start, H.323 signaling consists of Setup, Call Proceeding, Alerting, and Connect steps. After these steps, the H.245 media negotiation is performed. When a call is initiated in H.323 fast start, the H.245 media negotiation is performed within the initial Setup message. With slow start, multiple TCP connections are needed for an H.323 call, such as one H.225 signaling channel and one H.245 signaling channel if required (minimum of these two).

QUESTION 31

Which element was added to H.225 messages to enable Fast Connect in H.323 version 2?

- A. fastStart
- B. fastConnect
- C. H.245 PDU
- D. User-User Information
- E. Connection Information

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Fast start allows for H323 media connections to be started at the beginning of a call. This is helpful for ringback scenarios, and also reduces the amount of time calls take to establish media. H245 is still negotiated later, but the actual media can be done earlier through H225 messages.

QUESTION 32

What is the name of the logical channel proposal that is transmitted from the called entity to the calling entity in H.323 Fast Connect?

- A. Forward Logical Channel
- B. Backward Logical Channel
- C. Reverse Logical Channel
- D. Originator Logical Channel

E. Destination Logical Channel

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation: Unlike the OpenLogicalChannel request used by H.323 for video uni-directional logical channels, the request used by H.324 for opening video bi-directional logical channels specifies the temporalSpatialTradeOff Capability in both the forward and reverse directions--in the forwardLogicalChannelParameters.dataTypeandreverseLogicalChannelParameters.dataType components, respectively. The semantics of temporalSpatialTradeOffCapability used in forward LogicalChannelParameters.dataType is described in the previous section. The semantics for its presence in the reverse direction is described in this section.

QUESTION 33

Which procedure uses H.225 messages to exchange H.245 Master-Slave Determination information?

- A. H.323 Fast Connect
- B. H.245 tunneling
- C. H.225 tunneling
- D. H.323 early media
- E. H.245 terminal capability set

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The H.245 protocol is a media control protocol that is a part of H.323 protocol suite. The H.245 protocol is used primarily to negotiate master-slave relationship between communicating endpoints. These endpoints exchange terminal capabilities and logical channel manipulations (open, close, modify).The H.245 messages can be encapsulated and carried between H.225 controlled endpoints within H.225 messages. This way of "piggy-backing" an H.245 message to H.225 message is referred to as H245 Tunneling. The H.245 Tunneling method is optional and negotiable between communicating H.323 endpoints. If both endpoints support this option, usually the H.245 Media Controlled messages are exchanged via the Tunneling method.

QUESTION 34

Which two VoIP protocols use SDP to describe streaming media sessions? (Choose two.)

- A. SCCP
- B. H.323
- C. SIP

- D. MGCP
- E. RAS
- F. cRTP

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Session Description Protocol (SDP), defined in RFC 2327, describes the content of sessions, including telephony, Internet radio, and multimedia applications. SDP includes information about [8]:

- Media streams: A session can include multiple streams of differing content. SDP currently defines audio, video, data, control, and application as stream types, similar to the MIME types used for Internet mail.
- Addresses: SDP indicates the destination addresses, which may be a multicast address, for a media stream.
- Ports: For each stream, the UDP port numbers for sending and receiving are specified.
- Payload types: For each media stream type in use (for example, telephony), the payload type indicates the media formats that can be used during the session.
- Start and stop times: These apply to broadcast sessions, for example, a television or radio program. The start, stop, and repeat times of the session are indicated.
- Originator: For broadcast sessions, the originator is specified, with contact information. This may be useful if a receiver encounters technical difficulties.

QUESTION 35

Which RAS message is used between two gatekeepers to resolve an alias address?

- A. GRQ
- B. ARQ
- C. IRQ
- D. LRQ
- E. RRQ

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

LRQ--These messages are exchanged between gatekeepers and are used for inter-zone (remote zone) calls. For example, gatekeeper A receives an ARQ from a local zone gateway requesting call admission for a remote zone device. Gatekeeper A then sends an LRQ message to gatekeeper B. Gatekeeper B replies to the LRQ message with either a Location Confirm (LCF) or Location Reject (LRJ) message, which depends on whether it is configured to admit or reject the inter-zone call request and whether the requested resource is registered

QUESTION 36

When a Cisco IOS gatekeeper receives an ARQ from a registered endpoint, what is the first step it will take in an attempt to resolve the destination address?

- A. Check to see if the destination address is locally registered.
- B. Check to see if the destination address matches the technology prefix.
- C. Check to see if the destination address matches the local zone prefix.
- D. Check to see if the destination address matches the remote zone prefix.
- E. Check to see if the destination address matches the default technology prefix.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Admission Request (ARQ) and Location Request (LRQ) are the two H.225 Registration, Admission, Status (RAS) messages that trigger a gatekeeper to initiate the call routing decision process.

QUESTION 37

When a Cisco IOS gatekeeper receives an LRQ, what is the first step it will take in an attempt to resolve the destination address?

- A. Check to see if the LRQ reject-unknown-prefix flag is set.
- B. Check to see if the destination address matches the technology prefix.
- C. Check to see if the destination address matches the hop-off technology prefix.
- D. Check to see if the destination address matches the remote zone prefix.
- E. Check to see if the LRQ forward-queries flag is set.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

LRQ--These messages are exchanged between gatekeepers and are used for inter-zone (remote zone) calls. For example, gatekeeper A receives an ARQ from a local zone gateway requesting call admission for a remote zone device. Gatekeeper A then sends an LRQ message to gatekeeper B. Gatekeeper B replies to the LRQ message with either a Location Confirm (LCF) or Location Reject (LRJ) message, which depends on whether it is configured to admit or reject the inter-zone call request and whether the requested resource is registered.

QUESTION 38

Which ITU-T recommendation defines the procedures for using more than one video channel in

- A. 320-based systems?
- B. H.324
- C. H.230
- D. H.239
- E. H.264
- F. H.329

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

H.239 is the ITU standard for a second video channel; this is supported by all the major vendors, and is the only content channel standard supported by Cisco acquired Codian products or Cisco TelePresence Serial Gateway Series products on H.323 video calls. Cisco acquired Codian products need to be configured to enable H.239. Any H.323 endpoint that also supports the H.239 protocol can source this channel, as can a VNC connection, though some endpoints need to be configured to use H.239 instead of their proprietary solution.

QUESTION 39

Which statement about the iSAC on Cisco Unified Border Element is true?

- A. It is a narrow-band codec.
- B. It has a fixed frame of 30 milliseconds.
- C. It has an adaptive frame of up to 60 milliseconds.
- D. It is designed to deliver wideband sound quality in high-bit-rate applications only.
- E. It is not yet supported on the Cisco Unified Border Element (CUBE)
- F. It is not yet supported on Cisco Unified Border Element.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

iSAC-Internet Speech Audio Codec (iSAC) is an adaptive wideband audio codec, specially designed to deliver wideband sound quality with low delay in both low and medium-bit rate applications. Using an adaptive bit rate of between 10 and 32 kb/s, iSAC provides audio quality approaching that of G.722 while using less than half the bandwidth. In deployments with significant packet loss, delay, or jitter, such as over a WAN, iSAC audio quality is superior to that of G.722 due to its robustness. iSAC is supported for SIP and SCCP devices. The Cisco Unified Communications Manager IP Voice Media Streaming App (IPVMSApp), which includes Media Termination Point, Conference Bridge, Music on Hold Server, and Annunciator does not support iSAC. MGCP devices are not supported.

QUESTION 40

Which two data frame lengths are supported by iLBC? (Choose two.)

- A. 10 milliseconds
- B. 20 milliseconds
- C. 30 milliseconds
- D. 40 milliseconds
- E. 50 milliseconds
- F. 60 milliseconds

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

iLBC-Internet Low Bit Rate Codec (iLBC) provides audio quality between that of G.711 and G.729 at bit rates of 15.2 and 13.3 kb/s, while allowing for graceful speech quality degradation in a lossy network due to the speech frames being encoded independently. By comparison, G.729 does not handle packet loss, delay, and jitter well, due to the dependence between speech frames. iLBC is supported for SIP, SCCP, H323, and MGCP devices.

QUESTION 41

Which two types of devices on Cisco Unified Communications Manager support iSAC? (Choose two.)

- A. MGCP
- B. SIP
- C. SCCP
- D. Music on Hold server
- E. H.323

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

iSAC-Internet Speech Audio Codec (iSAC) is an adaptive wideband audio codec, specially designed to deliver wideband sound quality with low delay in both low and medium-bit rate applications. Using an adaptive bit rate of between 10 and 32 kb/s, iSAC provides audio quality approaching that of G.722 while using less than half the bandwidth. In deployments with significant packet loss, delay, or jitter, such as over a WAN, iSAC audio quality is superior to that of G.722 due to its robustness. iSAC is supported for SIP and SCCP devices. The Cisco Unified Communications Manager IP Voice Media Streaming App (IPVMSApp), which includes Media Termination Point, Conference Bridge, Music on Hold Server, and Annunciator does not support iSAC. MGCP devices are not supported.

QUESTION 42

Which statement about G.722.1 codec support on Cisco Unified Communications Manager is true?

- A. It is always preferred by Cisco Unified Communications Manager over G.711.
- B. It is a high-complexity wideband codec.
- C. It operates at bit rates of 15.2 and 13.3 kb/s.
- D. It is supported for SIP and SCCP devices.
- E. It is supported for SIP and H.323 devices.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

G.722.1 is a low-complexity wideband codec operating at 24 and 32 kb/s. The audio quality approaches that of G.722 while using at most half the bit rate. As it is optimized for both speech and music, G.722.1 has slightly lower speech quality than the speech-optimized iSAC codec. G.722.1 is supported for SIP and H.323 devices.

QUESTION 43

In Key Press Markup Language, which SIP request is used to deliver the actual DTMF digits?

- A. SUBSCRIBE
- B. INFO
- C. NOTIFY
- D. INVITE
- E. ACK

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

KPML procedures use a SIP SUBSCRIBE message to register for DTMF digits. The digits themselves are delivered in NOTIFY messages containing an XML encoded body.

QUESTION 44

Which SIP reason phrase maps to SIP response reason code 181?

- A. Ringing
- B. Call is Being Forwarded
- C. Session in Progress
- D. Unknown Number
- E. Call Does not Exist

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

1xx--Provisional Responses

100 Trying

Extended search being performed may take a significant time so a forking proxy must send a 100 Trying response.

180 Ringing

Destination user agent received INVITE, and is alerting user of call.

181 Call is Being Forwarded

Servers can optionally send this response to indicate a call is being forwarded.[1]:§21.1.3 182 Queued

Indicates that the destination was temporarily unavailable, so the server has queued the call until the destination is available. A server may send multiple 182 responses to update progress of the queue.

183 Session in Progress

This response may be used to send extra information for a call which is still being set up.

199 Early Dialog Terminated

Can be used by User Agent Server to indicate to upstream SIP entities (including the User Agent Client (UAC)) that an early dialog has been terminated. Reference: http://en.wikipedia.org/wiki/List_of_SIP_response_codes

QUESTION 45

In a SIP REFER-based call transfer, which SIP message is being used by the recipient to notify the originator that the final recipient was successfully contacted?

- A. 200 OK
- B. NOTIFY with a message body of 200 OK
- C. 202 Accepted
- D. 100 Trying
- E. 200 BYE

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Refer method always begins within the context of an existing call and starts with the originator . The originator sends a Refer request to the recipient (user agent receiving the Refer request) to initiate a triggered Invite request. The triggered Invite request uses the SIP URL contained in the Refer-To header as the destination of the Invite request. The recipient then contacts the resource in the Refer-To header (final-recipient), and returns a SIP 202 (Accepted) response to the originator. The recipient also must notify the originator of the outcome of the Refer transaction--whether the final-recipient was successfully or unsuccessfully contacted. The notification is accomplished using the Notify Method, SIP's event notification mechanism.A Notify message with a message body of SIP 200 OK indicates a successful transfer, while a body of SIP 503 Service Unavailable indicates an unsuccessful transfer.If the call was successful, a call between the recipient and the final-recipient results.

QUESTION 46

Which device is the initiator of a StationD message in a Cisco Unified Communications Manager SDI trace?

- A. SCCP IP phone
- B. SIP IP phone
- C. Cisco Unified Communications Manager
- D. MGCP analog gateway
- E. digital voice gateway

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

All messages to and from a skinny device are preceded by either the words StationD or StationInit. StationD messages are sent from call manager to IP phone.Skinny message transmission such as this between the IP phone and CallManger occurs for every action undertaken by the IP phone,includinginitialization,registration,on-hook,off-hook,dialing of the digits,key press on the phone,and so much more.

QUESTION 47

What is the maximum length of any numeric geographic area address in ITU recommendation

- A. 164?
- B. 15
- C. 18
- D. 21
- E. 22
- F. 25

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

E.164 defines a general format for international telephone numbers. Plan-conforming numbers are limited to a maximum of 15 digits. The presentation of numbers is usually prefixed with the character + (plus sign), indicating that the number includes the international country calling code(country code), and must typically be prefixed when dialing with the appropriate international call prefix, which is a trunk code to reach an international circuit from within the country of call origination.

QUESTION 48

According to ITU-T E.164 recommendations, which two fields in the National Significant Number code may be further subdivided? (Choose two.)

- A. Country Code
- B. National Destination Code
- C. Subscriber Number
- D. Regional Significant Number
- E. Local User Code
- F. National Numbering Plan

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A telephone number can have a maximum of 15 digits .The first part of the telephone number is the country code (one to three digits) .The second part is the national destination code (NDC). The last part is the subscriber number (SN). The NDC and SN together are collectively called the national (significant) number

QUESTION 49

What does a comma accomplish when it is used in a SIP Dial Rule pattern that is associated with a Cisco 9971 IP Phone that is registered to Cisco Unified Communications Manager?

- A. It inserts a 500-millisecond pause between digits.
- B. It causes the phone to generate a secondary dial tone.
- C. It is a delimiter and has no significant dialing impact.
- D. It indicates a timeout value of 5000 milliseconds.
- E. It is an obsolete parameter and will be ignored.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Comma is accepted in speed dial as delimiter and pause. -Comma used to delineate dial string, FAC, CMC, and post connect digits For post connect digits, commas insert a 2 second delay Commas may be duplicated to create longer delays

QUESTION 50

What does a period accomplish when it is used in a SIP Dial Rule pattern that is associated with a Cisco 9971 IP Phone that is registered to Cisco Unified Communications Manager?

- A. It matches any single digit from 0 to 9.
- B. It matches one or more digits from 0 to 9.
- C. It is a delimiter and has no significant dialing impact.
- D. It matches any single digit from 0 to 9, or the asterisk (*) or pound (#) symbols.
- E. It matches one or more digits from 0 to 9, or the asterisk (*) or pound (#) symbols.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Asterisk (*) matches one or more characters. The * gets processed as a wildcard character. You can override this by preceding the * with a backward slash (\) escape sequence, which results in the sequence *. The phone automatically strips the \, so it does not appear in the outgoing dial string. When * is received as a dial digit, it gets matched by the wildcard characters * and period (.).

QUESTION 51

What does a weight represent in the Enhanced Location Call Admission Control mechanism on Cisco Unified Communications Manager?

- A. It defines the bandwidth that is available between locations.
- B. It defines the bandwidth that is available on a link.
- C. It is the amount of bandwidth allocation for different types of traffic.
- D. It is used to provide the relative priority of a link between locations.
- E. It is used to provide the relative priority of a location.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A weight provides the relative priority of a link in forming the effective path between any pair of locations. The effective path is the path used by Unified CM for the bandwidth calculations, and it has the least cumulative weight of all possible paths. Weights are used on links to provide a "cost" for the "effective path" and are pertinent only when there is more than one path between any two locations.

QUESTION 52

Which statement about the effective path in the Enhanced Location Call Admission Control mechanism on Cisco Unified Communications Manager is true?

- A. It is a sequence of links and intermediate locations that connect a pair of locations.
- B. It is used to define the bandwidth that is available between locations.
- C. Only one effective path is used between two locations.
- D. There could be multiple effective paths between a pair of locations.
- E. It logically represents the WAN link.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The effective path is the path used by Unified CM for the bandwidth calculations, and it has the least cumulative weight of all possible paths. Weights are used on links to provide a "cost" for the "effective path" and are pertinent only when there is more than one path between any two locations.

QUESTION 53

Which configuration component in Cisco Unified Communications Manager Enhanced Location Call Admission Control is designated to participate directly in intercluster replication of location, links, and bandwidth allocation data?

- A. an active member of a Location Bandwidth Manager Group

- B. a member of a Location Bandwidth Manager Hub Group
- C. a standby member of a Location Bandwidth Manager Group
- D. all members of a Location Bandwidth Manager Group
- E. a shadow member of a Location Bandwidth Manager Hub Group

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A Location Bandwidth Manager (LBM) service that has been designated to participate directly in intercluster replication of fixed locations, links data, and dynamic bandwidth allocation data. LBMs assigned to an LBM hub group discover each other through their common connections and form a fully-meshed intercluster replication network. Other LBM services in a cluster with an LBM hub participate indirectly in intercluster replication through the LBM hubs in their cluster.

QUESTION 54

What is the amount of audio bandwidth, in kilobits per second, that is used in the Cisco Unified Communications Manager location bandwidth calculation for a G.728 call?

- A. 8
- B. 16
- C. 24
- D. 29
- E. 80

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

G.728--Low-bit-rate codec that video endpoints support.It supportkilobits per second

QUESTION 55

When neither the active or standby Location Bandwidth Manager in the configured LBM group is available, what will the Cisco CallManager service on a subscriber Cisco Unified Communications Manager server do to make location CAC decisions?

- A. It will attempt to communicate with the first configured member in the Location Bandwidth Manager hub group.
- B. It will use the Call Treatment When No LBM Available service parameter with the default action to allow calls.

- C. It will use the Call Treatment When No LBM Available service parameter with the default action to reject calls.
- D. It will attempt to communicate with the local LBM service for location CAC decisions.
- E. It will allow all calls until communication is reestablished with any configured servers in the LBM group.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

By default the Cisco CallManager service communicates with the local LBM service; however, LBM groups can be used to manage this communication. LBM groups provide an active and standby LBM in order to create redundancy for Unified CM call control.

QUESTION 56

Which system location is used for intercluster Enhanced Location CAC on Cisco Unified Communications Manager?

- A. Hub_None
- B. Default
- C. Intercluster
- D. Phantom
- E. Shadow

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The shadow location is used to enable a SIP trunk to pass Enhanced Location CAC information such as location name and Video-Traffic-Class (discussed below), among other things, required for Enhanced Location CAC to function between clusters. In order to pass this location information across clusters, the SIP intercluster trunk (ICT) must be assigned to the "shadow" location. The shadow location cannot have a link to other locations, and therefore no bandwidth can be reserved between the shadow location and other locations. Any device other than a SIP ICT that is assigned to the shadow location will be treated as if it was associated to Hub_None. That is important to know because if a device other than a SIP ICT ends up in the shadow location, bandwidth deductions will be made from that device as if it were in Hub_None, and that could have varying effects depending on the location and links configuration.

QUESTION 57

Router A and router B are Cisco IOS routers with hardware CFB resources that are registered to the same Cisco Unified Communications Manager server. Which Media Resource Group and Media Resource Group List configuration should be implemented if an administrator wants to make sure that all provisioned DSPs on router A are consumed before router B's DSP is used?

- A. Router A's CFB and router B's CFB should each be configured in its own MRG. Both MRGs should then be grouped into the same MRGL, but the MRG that contains router A's CFB should be listed in higher order than the MRG that contains router B's CFB. Finally, associate the MRGL to all conference resource consumers.
- B. Router A's CFB and router B's CFB should each be configured in its own MRG. Both MRGs should then be further separated into different MRGLs. Finally, associate the MRGL that contains router A's CFB in higher order than router B's CFB to all conference resource consumers.
- C. Router A's CFB and router B's CFB should both be configured in the same MRG with router A's CFB listed higher than that of router B. Then associate the MRG with an MRGL and apply it to all conference resource consumers.
- D. Router A's CFB and router B's CFB should both be configured in the same MRG. Make sure router A's CFB is listed in a higher alphabetical order than router B's CFB. Then associate the MRG with an MRGL and apply it to all conference resource consumers.
- E. Router A's CFB and router B's CFB should both be configured in the same MRG. Use Cisco Unified Communications Manager service parameters to assign a higher priority to router A's CFB. Then associate the MRG with an MRGL and apply it to all conference resource consumers.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 58

Which Device Pool configuration setting will override the device-level settings only when a device is roaming within a device mobility group?

- A. Region
- B. Location
- C. SRST Reference
- D. Calling Party Transformation CSS
- E. Media Resource Group List

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Device Mobility Related Settings:

The parameters under these settings will override the device-level settings only when the device is roaming within a Device Mobility Group. The parameters included in these settings are:

- Device Mobility Calling Search Space
- AAR Calling Search Space
- AAR Group

- Calling Party Transformation CSS
- Called Party Transformation CSS

The device mobility related settings affect the dial plan because the calling search space dictates the patterns that can be dialed or the devices that can be reached.

QUESTION 59

Which two Device Pool configuration settings will override the device-level settings when a device is roaming within or outside a device mobility group? (Choose two.)

- A. Adjunct CSS
- B. Device Mobility CSS
- C. Network Locale
- D. Called Party Transformation CSS
- E. AAR CSS
- F. Device Mobility Group

Correct Answer: CF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 60

Which Call Admission Control mechanism is supported for the Cisco Extension Mobility Cross Cluster solution?

- A. Location CAC
- B. RSVP CAC
- C. H.323 gatekeeper
- D. intercluster Enhanced Location CAC
- E. visiting cluster's LBM hub

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Configuring extension mobility cross cluster (EMCC) is nothing you should take lightly. EMCC requires a lot of configuration parameters including the exporting and importing of each neighbor cluster's X.509v3 digital certificates. EMCC is supported over SIP trunks only. Presence is another feature

that's only supported over SIP trunks. If you want to be able to perform scalable Call "Leading the way in IT Testing & Certification Tools" - www.testking.com 59 Admission Control (CAC) in a distributed multi-cluster call processing model, you will need to point an H.225 or Gatekeeper controlled trunk to an H.323 Gatekeeper for CAC... but if you want to support presence and EMCC between clusters and maintain CAC. Cisco 400-051 Exam

QUESTION 61

Which two Cisco Unified Communications Manager SIP profile configuration parameters for a SIP intercluster trunk are mandatory to enable end-to-end RSVP SIP Preconditions between clusters? (Choose two.)

- A. Set the RSVP over SIP parameter to Local RSVP.
- B. Set the RSVP over SIP parameter to E2E.
- C. Set the SIP Rel1XX Options parameter to Disabled.
- D. Set the SIP Rel1XX Options parameter to Send PRACK If 1xx Contains SDP.
- E. Set the SIP Rel1XX Options parameter to Send PRACK for All 1xx Messages.
- F. Check the Fall Back to Local RSVP check box.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Each Unified Communications Manager cluster and Unified CME should have the same configuration information. For example, Application ID should be the same on each Unified Communications Manager cluster and Unified CME. RSVP Service parameters should be the same on each Unified Communications Manager cluster.

QUESTION 62

What is the number of directory URIs with which a Cisco Unified Communications Manager directory number can be associated?

- A. 1
- B. up to 2
- C. up to 3
- D. up to 4
- E. up to 5

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified Communications Manager supports dialing using directory URIs for call addressing. Directory URIs look like email addresses and follow the username@host format where the host portion is an IPv4 address or a fully qualified domain name. A directory URI is a uniform resource identifier, a string of characters that can be used to identify a directory number. If that directory number is assigned to a phone, Cisco Unified Communications Manager can route calls to that phone using the directory URI. URI dialing is available for SIP and SCCP endpoints that support directory URIs.

QUESTION 63

Which Cisco Unified Communications Manager partition will be associated with a directory URI that is configured for an end user with a primary extension?

- A. null
- B. none
- C. directory URI
- D. default
- E. any partition that the Cisco Unified Communications Manager administrator desires

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified Communications Manager supports dialing using directory URIs for call addressing. Directory URIs look like email addresses and follow the username@host format where the host portion is an IPv4 address or a fully qualified domain name. A directory URI is a uniform resource identifier, a string of characters that can be used to identify a directory number. If that directory number is assigned to a phone, Cisco Unified Communications Manager can route calls to that phone using the directory URI. URI dialing is available for SIP and SCCP endpoints that support directory URIs.

QUESTION 64

Which Call Control Discovery function allows the local Cisco Unified Communications Manager to listen for advertisements from remote call-control entities that use the SAF network?

- A. CCD advertising service
- B. CCD requesting service
- C. SAF forwarder
- D. SAF enabled trunks
- E. CCD registration service

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

SAF and CCD will allow large distributed multi-cluster deployments to have the directory number (DN) ranges of each call routing element advertised dynamically over SAF. Cisco routers act as SAF Forwarders (SAFF), while the call routing elements (e.g. CUCM) act as clients that register with the routers to advertise their DN ranges and listen to the advertisements of other routers.

QUESTION 65

Which message is used by a Cisco Unified Communications Manager respond to periodic keepalives from a Cisco IOS MGCP gateway?

- A. AUPE
- B. RQNT
- C. NTFY
- D. 200
- E. AUCX

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

(2xx) Successful completion: The requested transaction was executed normally.

QUESTION 66

What is the maximum number of Cisco Unified Communications Manager subscriber pairs in a megacluster deployment?

- A. 4
- B. 8
- C. 12
- D. 16
- E. 32

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

There can be up to 8 pairs of subscribers, 16 subscribers total and must be in a 1:1 redundancy mode (8 active, 8 standby).

QUESTION 67

You have implemented 5-digit forced authorization codes to all international route patterns on Cisco Unified Communications Manager. Your users report that after entering the FAC codes, they must wait for more than 10 seconds before the call is routed.

Which procedure eliminates the wait time?

- A. Check and eliminate any existing route patterns that overlap with the international route pattern.
- B. Go to the Cisco Unified Communications Manager Service Parameters and reduce the T-304 number to 5000 milliseconds.
- C. Request your long distance telephone service provider to reduce the call setup time to 5 seconds.
- D. Configure a # (hash) sign to the end of the forced authorization codes to signal the end of dialing.
- E. Educate the users to press # (hash) after entering the forced authorization codes.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Because it immediately stops taking digits and route the digits to CUCM, otherwise the call occurs after the interdigit timer expire which is 15 seconds by default. Reference:<http://www.cisco.com/c/en/us/support/docs/voice-unified-communications/unified-communications-manager-callmanager/81541-fac-config-ex.html>

QUESTION 68

Which call processing feature overrides the Do Not Disturb settings on a Cisco IP phone?

- A. park reversion for remotely parked calls by a shared line
- B. hold reversion
- C. remotely placed pickup request by a shared line
- D. pickup notification
- E. terminating side of a call back

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Hold Reversion and Intercom

Hold reversion and intercom override DND (both options), and the call gets presented normally.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/7_1_2/ccmfeat/fsgd-712-cm/fsdnd.html#wp1072487

QUESTION 69

Which statement describes the Maximum Serving Count service parameter of the Cisco TFTP service on Cisco Unified Communications Manager?

- A. It specifies the maximum number of files in the TFTP server disk storage.
- B. It specifies the maximum number of TFTP client requests to accept and to serve files at a given time.
- C. It specifies the maximum file support by the Cisco TFTP service.
- D. It specifies the maximum file counts, in cache as well as in disk, that are supported by the Cisco TFTP service.
- E. It specifies the maximum number of TFTP client requests to accept and to serve files in a 120- minute window.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

This parameter specifies the maximum number of client requests to accept and to serve files at a time. Specify a low value if you are serving files over a low bandwidth connection. You can set it to a higher number if you are serving small files over a large bandwidth connection and when CPU resources are available, such as when no other services run on the TFTP server. Use the default value if the TFTP service is run along with other Cisco CallManager services on the same server. Use the following suggested values for a dedicated TFTP server: 1500 for a single-processor system and 3000 for a dual-processor system. If the dual-processor system is running Windows 2000 Advanced Server, the serving count can be up to 5000. This is a required field.

QUESTION 70

In a Cisco Unified Communications Manager design where +E.164 destinations are populated in directory entries, which call routing practice is critical to prevent unnecessary toll charges caused by internal calls routed through the PSTN?

- A. forced on-net routing
- B. automated alternate routing
- C. forced authorization codes
- D. client matter codes
- E. tail-end hop-off

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:**QUESTION 71**

Which option is a characteristic of the Enhanced Location Call Admission Control mechanism on Cisco Unified Communications Manager?

- A. It accounts for network protocol rerouting.
- B. It accounts for network downtime and failures.
- C. It supports dynamic bandwidth adjustments based on WAN topology changes.
- D. It supports asymmetric media flows such that different bit rates in each direction are deducted accordingly.
- E. Unidirectional media flows are deducted as if they were bidirectional.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Network Modeling with Locations, Links, and Weights

Enhanced Location CAC is a model-based static CAC mechanism. Enhanced Location CAC involves using the administration interface in Unified CM to configure Locations and Links to model the "Routed WAN Network" in an attempt to represent how the WAN network topology routes media between groups of endpoints for end-to-end audio, video, and immersive calls. Although Unified CM provides configuration and serviceability interfaces in order to model the network, it is still a "static" CAC mechanism that does not take into account network failures and network protocol rerouting. Therefore, the model needs to be updated when the WAN network topology changes. Enhanced Location CAC is also call oriented, and bandwidth deductions are per-call not per-stream, so asymmetric media flows where the bit-rate is higher in one direction than in the other will always deduct for the highest bit rate. In addition, unidirectional media flows will be deducted as if they were bidirectional media flows.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/srnd/collab10/collab10/cac.html

QUESTION 72

Which two host portion format conditions are true for directory URI on Cisco Unified Communications Manager? (Choose two.)

- A. It is case sensitive.
- B. It cannot start with a hyphen.
- C. It must have at least one character.
- D. It supports IPv4 or IPv6 addresses, or fully qualified domain names.
- E. It cannot end with a hyphen.
- F. It supports the & character.

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified Communications Manager supports the following formats in the host portion of a directory URI (the portion after the @ symbol):

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/bat/9_1_1/CUCM_BK_C271A69D_00_cucm-bulk-administration-guide-91/CUCM_BK_C271A69D_00_cucm-bulk-administration-guide-91_chapter_01001110.html

QUESTION 73

Which two user portion format conditions are true for directory URI on Cisco Unified Communications Manager 9.1 or later? (Choose two.)

- A. It supports the \$ character.
- B. It support space between characters.
- C. It has a maximum length of 50 characters.
- D. It has a maximum length of 254 characters.
- E. It is always case-sensitive.
- F. It cannot be a directory number.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified Communications Manager supports the following formats in the user portion of a directory URI (the portion before the @ symbol):

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/bat/9_1_1/CUCM_BK_C271A69D_00_cucm-bulk-administration-guide-91/CUCM_BK_C271A69D_00_cucm-bulk-administration-guide-91_chapter_01001110.html

QUESTION 74

Which configuration parameter defines whether or not the user portion of a directory URI is case sensitive on Cisco Unified Communications Manager 9.1 or later?

- A. URI Dialing Display Preference in Cisco CallManager Service Parameter
- B. URI Lookup Policy in Cisco CallManager Service Parameter
- C. URI Dialing Display Preference in Enterprise Parameters
- D. URI Lookup Policy in Enterprise Parameters
- E. The user portion of a directory URI is always case sensitive and cannot be changed.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation: Cisco Unified Communications Manager supports the following formats in the user portion of a directory URI (the portion before the @ symbol):

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/bat/9_1_1/CUCM_BK_C271A69D_00_cucm-bulk-administration-guide-91/CUCM_BK_C271A69D_00_cucm-bulk-administration-guide-91_chapter_01001110.html

QUESTION 75

The number of calls waiting in a Cisco Unified Communications Manager native call queue has reached its maximum limit.

Which statement about what happens to additional incoming calls is true?

- A. Calls are handled according to the Forward Hunt Busy settings on the Hunt Pilot configuration page.
- B. Calls are handled according to the Forward Hunt No Answer settings on the Hunt Pilot configuration page.
- C. Calls are handled according to the Forward Hunt Busy settings on the Line Group members.
- D. Calls are handled according to the Hunt Options settings on the Line Group Configuration page.
- E. Calls are handled according to the When Queue Is Full settings on the Hunt Pilot Configuration page.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

There are three main scenarios where alternate numbers are used:

When queue is full

Call Queuing allows up to 100 callers to be queued per hunt pilot (the maximum number of callers allowed in queue on a hunt pilot page). Once this limit for new callers has been reached on a particular hunt pilot, subsequent calls can be routed to an alternate number. This alternate number can be configured through the Hunt Pilot configuration page (through the "Destination When Queue is Full" settings).

When maximum wait time is met

Each caller can be queued for up to 3600 seconds per hunt pilot (the maximum wait time in queue). Once this limit is reached, that caller is routed to an alternate number. This alternate number can be configured through the Hunt Pilot configuration page (through the "Maximum wait time in queue" settings).

When no hunt members are logged in or registered

In a scenario where none of the members of the hunt pilot are available or registered at the time of the call, hunt pilot configuration provides an alternate number field (through the "When no hunt members are logged in or registered" settings) where calls can be routed. For Call Queuing, a hunt pilot member is considered available if that member has both deactivated do not disturb (DND) and logged into the hunt group. In all other cases, the line member is considered unavailable or logged off.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmfeat/CUCM_BK_CEF0C471_00_cucm-features-services-guide-90/CUCM_BK_CEF0C471_00_cucm-features-and-services-guide_chapter_0111.html

QUESTION 76

A queued call has reached the maximum wait time configured for a Cisco Unified Communications Manager native call queue.

Which statement about what happens to this queued call is true?

- A. Calls are handled according to the Forward Hunt No Answer settings on the Hunt Pilot configuration page.
- B. Calls are handled according to the When Maximum Wait Time Is Met settings on the Hunt Pilot Configuration page.
- C. Calls are handled according to the When Maximum Wait Time Is Met settings in Cisco Unified Communications Manager Service Parameters.
- D. Calls are handled according to the Not Available Hunt Option settings on the Line Group Configuration page.
- E. Calls are handled according to the When Queue Is Full settings on the Hunt Pilot Configuration page.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

There are three main scenarios where alternate numbers are used:

When queue is full

Call Queuing allows up to 100 callers to be queued per hunt pilot (the maximum number of callers allowed in queue on a hunt pilot page). Once this limit for new callers been reached on a particular hunt pilot, subsequent calls can be routed to an alternate number. This alternate number can be configured through the Hunt Pilot configuration page (through the "Destination When Queue is Full" settings).

When maximum wait time is met

Each caller can be queued for up to 3600 seconds per hunt pilot (the maximum wait time in queue). Once this limit is reached, that caller is routed to an alternate number. This alternate number can be configured through the Hunt Pilot configuration page (through the "Maximum wait time in queue" settings).

When no hunt members are logged in or registered

In a scenario where none of the members of the hunt pilot are available or registered at the time of the call, hunt pilot configuration provides an alternate number field (through the "When no hunt members are logged in or registered" settings) where calls can be routed. For Call Queuing, a hunt pilot member is considered available if that member has both deactivated do not disturb (DND) and logged into the hunt group. In all other cases, the line member is considered unavailable or logged off.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmfeat/CUCM_BK_CE

[F0C471_00_cucm-features-services-guide-90/CUCM_BK_CEF0C471_00_cucm-features-and-services-guide_chapter_0111.html](http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmfeat/CUCM_BK_CEF0C471_00_cucm-features-services-guide-90/CUCM_BK_CEF0C471_00_cucm-features-and-services-guide_chapter_0111.html)

QUESTION 77

Which statement about what happens to incoming calls to a Cisco Unified Communications Manager native call queue when no hunt members are logged in or registered is true?

- A. Calls are handled according to the Forward Hunt No Answer settings on the Hunt Pilot configuration page.
- B. Calls are handled according to the Not Available Hunt Option settings on the Line Group Configuration page.

- C. Calls are handled according to the Forward Hunt Busy settings on the Hunt Pilot configuration page.
- D. Calls are forward to the Forward Busy Calls To destination if configured; otherwise the calls are disconnected.
- E. Calls are handled according to the correspondent parameters under the Queuing section on the Hunt Pilot Configuration page.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

There are three main scenarios where alternate numbers are used:

When queue is full

Call Queuing allows up to 100 callers to be queued per hunt pilot (the maximum number of callers allowed in queue on a hunt pilot page). Once this limit for new callers been reached on a particular hunt pilot, subsequent calls can be routed to an alternate number. This alternate number can be configured through the Hunt Pilot configuration page (through the "Destination When Queue is Full" settings).

When maximum wait time is met

Each caller can be queued for up to 3600 seconds per hunt pilot (the maximum wait time in queue). Once this limit is reached, that caller is routed to an alternate number. This alternate number can be configured through the Hunt Pilot configuration page (through the "Maximum wait time in queue" settings).

When no hunt members are logged in or registered

In a scenario where none of the members of the hunt pilot are available or registered at the time of the call, hunt pilot configuration provides an alternate number field (through the "When no hunt members are logged in or registered" settings) where calls can be routed. For Call Queuing, a hunt pilot member is considered available if that member has both deactivated do not disturb (DND) and logged into the hunt group. In all other cases, the line member is considered unavailable or logged off.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmfeat/CUCM_BK_CE_F0C471_00_cucm-features-services-guide-90/CUCM_BK_CEF0C471_00_cucm-features-and-services-guide_chapter_0111.html

QUESTION 78

Which statement about what happens to a hunt member who does not answer queuing-enabled hunt-list call in Cisco Unified Communications Manager 9.1 is true?

- A. The hunt member is logged off automatically and must press HLOG to log back in.
- B. The hunt member remains logged in if Automatically Logout Hunt Member on No Answer is not selected in Cisco Unified Communications Manager Service Parameters.
- C. The hunt member is logged off automatically and must manually reset the phone to log back in.
- D. The hunt member is logged off if Automatically Logout Hunt Member on No Answer is selected on the Line Group configuration page.
- E. The hunt member remains logged in if Automatically Logout Hunt Member on No Answer is not selected in Hunt Pilot configuration page.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

If a line member does not answer a queue-enabled call, that line member is logged off the hunt group only if the setting "Automatically Logout Hunt Member on No Answer" is selected on the line group page.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_1_1/ccmcfg/CUCM_BK_A34970C5_00_admin-guide-91/CUCM_BK_A34970C5_00_admin-guide-91_chapter_0100011.html

QUESTION 79

Which SIP request is used by a Cisco 9971 IP Phone to signal DND status changes to Cisco Unified Communications Manager?

- A. REGISTER
- B. NOTIFY
- C. INFO
- D. PUBLISH
- E. UPDATE

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified Communications Manager supports Do Not Disturb that a SIP device initiates or that a Cisco Unified Communications Manager device initiates. A DND status change gets signaled from a SIP device to Cisco Unified Communications Manager by using the SIP PUBLISH method (RFC3909). A DND status change gets signaled from a Cisco Unified Communications Manager to a SIP device by using a dndupdate Remote-cc REFER request. Cisco Unified Communications Manager can also publish the Do Not Disturb status for a device, along with the busy and idle status for the device.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/6_1_1/ccmfeat/cmfs_gd611/fsdnd.html

QUESTION 80

Which SIP request is used by Cisco Unified Communications Manager to signal DND status changes to a Cisco 9971 IP Phone?

- A. OPTIONS
- B. NOTIFY
- C. INFO
- D. REFER
- E. UPDATE

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified Communications Manager supports Do Not Disturb that a SIP device initiates or that a Cisco Unified Communications Manager device initiates. A DND status change gets signaled from a SIP device to Cisco Unified Communications Manager by using the SIP PUBLISH method (RFC3909). A DND status change gets signaled from a Cisco Unified Communications Manager to a SIP device by using a dndupdate Remote-cc REFER request. Cisco Unified Communications Manager can also publish the Do Not Disturb status for a device, along with the busy and idle status for the device.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/6_1_1/ccmfeat/cmfs_gd611/fsdnd.html

QUESTION 81

You are assisting a customer to troubleshoot a SIP early-offer problem with a SIP service provider. You have enabled Cisco CallManager trace and set the debug trace level to Detailed for SIP Call Processing trace on their standalone Cisco Unified Communications Manager 9.1 system. Using the RTMT tool, your customer has remote browsed to the Cisco UCM and asked you which trace file to download.

What is the trace file name syntax in which detailed SIP messages are logged?

- A. SDL
- B. SDI
- C. CCM
- D. Call logs
- E. Traces

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

SDL files log SIP messages from CCM.

QUESTION 82

Which tag in the SIP header is used by Cisco Unified Communications Manager to deliver a blended identity of alpha URI and number?

- A. x-cisco-callinfo
- B. x-cisco-service-control
- C. x-cisco-serviceuri
- D. x-cisco-number
- E. x-cisco-uri

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified Communications Manager supports blended addressing of directory URIs and directory numbers. When blended addressing is enabled across the network, Cisco Unified Communications Manager inserts both the directory URI and the directory number of the sending party in outgoing SIP Invites, or responses to SIP Invites. The destination endpoint has the option of using either the directory URI or the directory number for its response--both will reach the same destination.

Cisco Unified Communications Manager uses the x-cisco-number tag in the SIP identity headers to communicate a blended address. When both a directory URI and directory number are available for the sending phone and blended addressing is enabled, Cisco Unified Communications Manager uses the directory URI in the From fields of the SIP message and adds the x-cisco- number tag with the accompanying directory number to the SIP identity headers. The x-cisco- number tag identifies the directory number that is associated with the directory URI.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/10_0_1/ccmfeat/CUCM_BK_F3AC1C0F_00_cucm-features-services-guide-100/CUCM_BK_F3AC1C0F_00_cucm-features-services-guide-100_chapter_0110011.html#CUCM_RF_D0008C2B_00

QUESTION 83

Which SIP header is used by Cisco Unified Communication Manager to support the Redirected Number ID Service?

- A. replaces
- B. RPID
- C. diversion
- D. join
- E. P-charging-vector

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

CUCM uses sip diversion header in INVITE message to carryout Redirected Number ID service.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmsys/CUCM_BK_CD2F83FA_00_cucm-system-guide-90/CUCM_BK_CD2F83FA_00_system-guide_chapter_0101000.html#CUCM_TP_R3F173A9_00

QUESTION 84

What is the maximum one-way delay, in milliseconds, between any two Cisco Unified Communications Manager servers in a non-Session Management Edition cluster over an IP WAN?

- A. 20
- B. 40
- C. 80
- D. 160
- E. 250

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The maximum one-way delay between any two Unified CM servers should not exceed 40 msec, or 80 msec round-trip time. Propagation delay between two sites introduces 6 microseconds per kilometer without any other network delays being considered. This equates to a theoretical maximum distance of approximately 3000 km for 20 ms delay or approximately 1860 miles. These distances are provided only as relative guidelines and in reality will be shorter due to other delay incurred within the network

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/srnd/7x/uc7_0/models.html

QUESTION 85

Which Cisco Unified Communications Manager deployment model for clustering over the IP WAN mandates a primary and a backup subscriber at the same site?

- A. multisite with centralized call processing
- B. multisite with distributed call processing
- C. local failover
- D. remote failover
- E. remote failover with Cisco Unified Communications Manager Express as SRST

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Clustering Over the IP WAN

You may deploy a single Unified CM cluster across multiple sites that are connected by an IP WAN with QoS features enabled. This section provides a brief overview of clustering over the WAN. For further information, refer to the chapter on Call Processing. Clustering over the WAN can support two types of deployments:

-Local Failover Deployment Model

Local failover requires that you place the Unified CM subscriber and backup servers at the same site, with no WAN between them. This type of

deployment is ideal for two to four sites with Unified CM.

·Remote Failover Deployment Model

Remote failover allows you to deploy primary and backup call processing servers split across the WAN. Using this type of deployment, you may have up to eight sites with Unified CM subscribers being backed up by Unified CM subscribers at another site.

Reference: http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/4x/42models.html

QUESTION 86

What is the maximum number of option 150 IP addresses that a Cisco IP SCCP phone will accept and use from a DHCP server?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Unified IP Phones use the option 150 value as the TFTP server IP address when Alternate TFTP option is set to No. You can assign only IP addresses as Option 150 values. A maximum of two IP addresses get used, and only the first two IP addresses that the DHCP server provides get accepted.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmsys/CUC_M_BK_CD2F83FA_00_cucm-system-guide-90/CUCM_BK_CD2F83FA_00_system-guide_chapter_01010.html

QUESTION 87

What is the maximum number of option 66 IP addresses that a Cisco IP SCCP phone will accept and use from a DHCP server?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://www.techtronicssolution.com/blog/?p=1201>

QUESTION 88

Which two statements about BFCP with Cisco Unified Communications Manager are true?
(Choose two.)

- A. BFCP is supported only on full SIP networks.
- B. Cisco Unified Communications Manager allows BFCP only over UDP.
- C. BFCP is not supported for third-party endpoints.
- D. BFCP is not supported through Cisco Unified Border Element.
- E. BFCP is supported between Cisco Unified Communications Manager and a TelePresence MCU.

Correct Answer: AB

Section: (none)

Explanation**Explanation/Reference:**

Explanation:

BFCP configuration tips

To enable BFCP in Cisco Unified Communications Manager, check the Allow Presentation Sharing using BFCP check box in the SIP Profile Configuration window. If the check box is unchecked, all BFCP offers will be rejected. By default, the check box is unchecked. BFCP is supported only on full SIP networks. For presentation sharing to work, BFCP must be enabled for all SIP endpoints as well as all SIP lines and SIP trunks between the endpoints. CUCM uses BFCP over user datagram protocol (UDP) in both secure and non-secure BFCP modes.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmsys/CUCM_BK_CD2F83FA_00_cucm-system-guide-90/CUCM_BK_CD2F83FA_00_system-guide_chapter_0101011.html

QUESTION 89

When the Cisco Unified Communications Manager service parameter "Auto Call Pickup Enabled" is selected, which two softkeys on an IP phone connect you to an incoming call? (Choose two.)

- A. Pickup
- B. Gpickup
- C. CallBack
- D. Select
- E. Join

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Pickup softkey is used to receive a call that is ringing in another phone within the same pickup group and Gpickupsoftkey is used to receive calls that are ringing but that phone is another pickup group.

QUESTION 90

On a Cisco Unified Communications Manager SIP trunk with a single remote device and OPTIONS ping feature enabled, which response from the SIP remote peer causes the trunk to be marked as "Out of Service"?

- A. 401 Unauthorized
- B. 505 Version Not Supported
- C. 406 Not Acceptable
- D. 408 Request Timeout
- E. 500 Server Internal Error

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

408 Request Timeout

Couldn't find the user in time. The server could not produce a response within a suitable amount of time, for example, if it could not determine the location of the user in time. The client MAY repeat the request without modifications at any later time

Reference:http://en.wikipedia.org/wiki/List_of_SIP_response_codes

QUESTION 91

How many music on hold servers are required in a trunk-only megacluster of Cisco Unified Communications Manager Session Management Edition?

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When considering a megacluster deployment, the primary areas impacting capacity are as follows:

- The megacluster may contain a total of 21 servers consisting of 16 subscribers, 2 TFTP servers, 2 music on hold (MoH) servers (0 required), and 1 publisher
- Server type must be either Cisco MCS 7845-I3/H3 class or Cisco Unified Computing System (UCS) C-Series or B-Series using the 10K Open Virtualization Archive (OVA) template.
- Redundancy model must be 1:1.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/8_5_1/ccmfeat/fsgd-851-cm/fsmoh.html#wp1027431

QUESTION 92

Which two applications can connect directly with a Cisco Unified Communications Manager Session Management Edition cluster? (Choose two.)

- A. Cisco Unity
- B. Cisco Unified Meeting Place Express
- C. Cisco Unified Contact Center Enterprise
- D. Cisco Unified Contact Center Express
- E. Cisco Unified Communications Manager Attendant Console
- F. Cisco Emergency Responder

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The deployment of a Unified CM Session Management Edition enables commonly used applications such as conferencing or videoconferencing to connect directly to the Session Management cluster, thus reducing the overhead of managing multiple trunks to leaf systems. Cisco Unity or other voicemail systems can be deployed at all sites and integrated into the Unified CM cluster.

QUESTION 93

Which two call processing features have a lower priority than the Do Not Disturb settings on a Cisco IP phone? (Choose two.)

- A. park reversion for a locally parked call
- B. hold reversion
- C. intercom
- D. pickup notification
- E. terminating side of a call back
- F. originating side of a call back

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

For the DND Ringer Off option, only visual notification gets presented to the device. For the DND Call Reject option, no notification gets presented to the device. For the terminating side of the call, Do Not Disturb overrides call back:

When the phone that terminates the call has DND Call Reject enabled but the phone becomes available (goes off hook and on hook), a new screen will be presented to the originating device as "<Extension> has become available but is on DND-R". Callback available notification will be sent only after the terminating side disables DND Call Reject.

QUESTION 94

How many destinations can be configured for a SIP trunk on a Cisco Unified Communications Manager 9.1 system when the destination address is an SRV?

- A. 1
- B. 2
- C. 3
- D. 8
- E. 16

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

SIP trunks can be configured with up to 16 destination IP addresses, 16 fully qualified domain names, or a single DNS SRV entry.

Reference: http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/srnd/8x/uc8x/trunks.html

QUESTION 95

Which design restriction applies to Cisco Unified Communications Manager Session Management Edition clustering over the WAN deployment with extended round-trip times in Cisco Unified CM 9.1 and later releases?

- A. SIP and H.323 intercluster trunks are supported.
- B. Only SIP trunk is supported.
- C. SIP trunks and H.323 gateways are supported.
- D. A minimum of 1.544 Mb/s bandwidth is required for all traffic between any two nodes in the cluster.
- E. Only RSVP agents can be configured and registered to the SME cluster as media resources.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Using only SIP trunks in the SME cluster allows you to deploy a "media transparent" cluster where media resources, when required, are inserted by the end or leaf Unified Communications system and never by SME. Using only SIP trunks also allows you to use extended round trip times (RTTs) between SME nodes when clustering over the WAN.

QUESTION 96

Which statement about using the Answer File Generator to load a Cisco Unified Communications virtual machine is true?

- A. You must copy the output text to a file named platformConfig.txt.
- B. Each host should be copied to its own configuration file.
- C. The answer file can be used only when performing the new identity process to load the Cisco Unified Communications virtual machines.
- D. The configuration file should be placed inside an ISO file and mounted on the virtual machine.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 97

Which method does a Cisco Unified 9971 phone use to send keep-alive messages to Cisco Unified Communications Manager?

- A. SIP NOTIFY with Event set to keep-alive
- B. SIP OPTIONS
- C. SIP REGISTER with Expires set to zero
- D. SCCP StationRegister
- E. SCCP StationServerReq

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Phone registers with primary and establishes keepalive connection with secondary. Expires = 0 keepalive mechanism allows Cisco SIP Phones to more

closely resemble the failover / fallback behavior of SCCP.

QUESTION 98

Which three requirements must be met to share Enhanced Location Based Call Admission Control bandwidth usage between clusters? (Choose three.)

- A. The Cisco Unified Communications Manager version must be 8.6 or higher.
- B. The location name must be the same on both clusters.
- C. SIP ICT must use the Shadow location.
- D. The Location Bandwidth Manager Service should be started on only two servers in each cluster.
- E. A Location Bandwidth Manager Hub Group must be created for each cluster.
- F. Links must be created to the Shadow location.

Correct Answer: BCE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 99

When IP phone A was provisioned in a Cisco Unified Communications Manager, 2001 was configured as the directory number for its first line. Also, bob@cisco.com was defined as the only directory URI on the Directory Number configuration page for this line. A few days later, an end user was created in the same Cisco Unified Communications Manager and was associated with the same phone with the primary extension set to 2001. Also, bobby@cisco.com was defined as a directory URI for that end user.

Which option about the primary directory URI for IP phone A is true?

- A. bob@cisco.com
- B. bobby@cisco.com
- C. It depends on which radio button was selected next to the Directory URI entries on the Directory Configuration page.
- D. Both are primary directory URIs in a manner like a shared line for DNs.
- E. Neither are primary directory URIs for IP phone A.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/9_0_1/ccmsys/CUCM_BK_CD_2F83FA_00_cucm-system-guide-90/

QUESTION 100

Which two statements about Cisco Unified Communications Manager mixed-mode clusters are true? (Choose two.)

- A. Cluster security mode configures the security capability for your standalone server or a cluster.
- B. The device security mode in the phone configuration file is set to nonsecure.
- C. The phone makes nonsecure connections with Cisco Unified Communications Manager even if the device security mode specifies authenticated or encrypted.
- D. Security-related settings other than device security mode, such as the SRST Allowed check box, get ignored.
- E. Auto-registration does not work when you configure mixed mode.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cluster security mode configures the security capability for a standalone server or a cluster.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/security/7_0_1/secugd/sec_701-cm/secuauth.html#wp1037433

Topic 4, Cisco IOS UC Applications and Features

QUESTION 101

Which codec complexity mode, when deployed on Cisco IOS routers with DSPs using the C5510 chipset, supports the most G.711 calls per DSP?

- A. Low
- B. Medium
- C. High
- D. Secure
- E. Flex

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The flex parameter allows the complexity to automatically adjust to either medium or high complexity depending on the needs of a call. For example, if a call uses the G.711 codec, the C5510 chipset automatically adjusts to the medium-complexity mode. However, if the call uses G.729, the C5510 chipset uses the high complexity mode

QUESTION 102

When DSP oversubscription occurs on a Cisco IOS router using DSP modules that are based on the C5510 chipset, what will happen when an analog phone connected to a FXS port goes off-hook?

- A. A fast busy tone will be played.
- B. A slow busy tone will be played.
- C. A network busy tone will be played.
- D. A dial tone will be played, but digits will not be processed.
- E. No tone will be played.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When DSP oversubscription occurs for both analog ports and digital ports, except PRI and BRI. FXO signaling and application controlled endpoints are not supported. This feature does not apply to insufficient DSP credits due to mid-call codec changes (while a call is already established).

QUESTION 103

Which statement describes the question mark wildcard character in a SIP trigger that is configured on Cisco Unity Express?

- A. It matches any single digit in the range 0 through 9.
- B. It matches one or more digits in the range 0 through 9.
- C. It matches zero or more occurrences of the preceding digit or wildcard value.
- D. It matches one or more occurrences of the preceding digit or wildcard value.
- E. It matches any single digit in the range 0 through 9, when used within square brackets.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Table 5-2 Trigger Pattern Wildcards and Special Characters Character

Description

Examples

Which type of mailbox on Cisco Unity Express can play a user greeting and disconnect the call, but cannot take or send messages?

- A. PIN-less mailbox
- B. announcement-only mailbox
- C. general delivery mailbox
- D. call-handling mailbox
- E. personal mailbox

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Announcement-only mailbox are set for those user who only want the caller to listen the announcement and leave his message according to the announcement.

QUESTION 106

When multiple greetings are enabled on Cisco Unity Express, which greeting will take the highest precedence?

- A. standard
- B. meeting
- C. busy
- D. closed
- E. internal

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Meeting greeting has highest priority because it is set by user when he don't want to take the call and notice the caller he is online.

QUESTION 107

Which two statements are requirements regarding hunt group options for B-ACD implementation on Cisco Unified Communications Manager Express routers? (Choose two.)

- A. The ephone hunt group is mandatory.
- B. Either the ephone hunt group or the voice hunt group is acceptable.

- C. Hunt group members must be SCCP IP phones.
- D. Hunt group members can include both SCCP or SIP IP phones.
- E. Hunt group members must be SIP IP phones.
- F. The member hunting mechanism must be set to sequential.

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The ephone hunt group is mandatory, and while ephone hunt groups only support Cisco Unified SCCP IP phones, a voice hunt group supports either a Cisco Unified SCCP IP phone or a Cisco Unified SIP IP phone

Reference:.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucme/command/reference/cme_v1ht.html

QUESTION 108

Which call hunt mechanism is only supported by the voice hunt group in a Cisco Unified Communications Manager Express router?

- A. sequential
- B. peer
- C. longest idle
- D. parallel
- E. overlay

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Parallel Hunt-Group, allows a user to dial a pilot number that rings 2-10 different extensions simultaneously. The first extension to answer gets connected to the caller while all other extensions will stop ringing. A timeout value can be set whereas if none of the extensions answer before the timer expires, all the extensions will stop ringing and one final destination number will ring indefinitely instead. The final number could be another voice hunt-group pilot number or mailbox

The following features are supported for Voice Hunt-Group:

QUESTION 109

Which Cisco Unified Communications Manager Express ephone button configuration separator enables overflow lines when the primary line for an overlay button is occupied by an active call?

- A. o
- B. c
- C. w
- D. x
- E. :

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

x expansion/overflow, define additional expansion lines that are used when the primary line for an overlay button is occupied by an active call.

QUESTION 110

Refer to the exhibit.

In an effort to troubleshoot a caller ID delivery problem, a customer emailed you the voice port configuration on a Cisco IOS router. Which type of voice port is it?

- A. FXS
- B. E&M
- C. BRI
- D. FXO
- E. DID

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

To configure caller-ID on FXS and FXO voice ports, use the following commands beginning in global configuration mode:

Command

Purpose

Step 1

Router(config)# caller-id enable

Enables caller ID. This command applies to FXS voice ports that send caller-ID information and to FXO ports that receive it. By default caller ID is disabled.

If the station-id or a caller-id alertingcommand is configured on the voice port, these automatically enable caller ID, and thecaller-id enable command is not necessary.

Step 2

```
Router(config-voiceport)#station-id namename
```

Configures the station name on FXS voice ports connected to user telephone sets. This sets the caller-ID information for on-net calls originated by the FXS port. You can also configure the station name on an FXO port of a router for which incoming Caller ID from the PSTN subscriber line is expected. In this case, if no caller-ID information is included on the incoming PSTN call, the call recipient receives the information configured on the FXO port instead. If the PSTN subscriber line does provide caller-ID information, this information is used and the configured station name is ignored.

The name argument is a character string of 1 to 15 characters identifying thestation.

Note

This command applies only to caller-ID calls, not Automatic Number Identification (ANI) calls. ANI supplies calling number identification only.

Step 3

```
Router(config-voiceport)#station-id numbernumber
```

Configure the station number on FXS voice ports connected to user telephone sets. This sets the caller-ID information for on-net calls originated by the FXS port.

You can also configure the station number on an FXO port of a router for which incoming caller ID from the PSTN subscriber line is expected. In this case, if no caller-ID information is included on the incoming PSTN call, the call recipient receives the information configured on the FXO port instead. If the PSTN subscriber line does provide caller-ID information, this information is used and the configured station name is ignored.

If the caller-ID station number is not provided by either the incoming PSTN caller ID or by the station number configuration, the calling number included with the on-net routed call is determined by Cisco IOS software by using a reverse dial-peer search. In this case, the number is obtained by searching for a POTS dial-peer that refers to the voice-port and the destination-pattern number from that dial-peer is used.

number is a string of 1 to 15 characters identifying the station telephone or extension number.

Reference:

http://www.cisco.com/c/en/us/td/docs/ios/12_2/voice/configuration/guide/fvvfax_c/vvfclid.html

QUESTION 111

Which message is used by a Cisco IOS MGCP gateway to send periodic keepalives to its call agent?

- A. CRCX
- B. AUCX
- C. NTFY
- D. RQNT
- E. 200 OK

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The gateway maintains this connection by sending empty MGCP Notify (NTFY) keepalive messages to Cisco CallManager at 15-second intervals. If the active Cisco CallManager fails to acknowledge receipt of the keepalive message within 30 seconds, the gateway attempts to switch over to the next highest order Cisco CallManager server that is available. If none of the Cisco CallManager servers respond, the gateway switches into fallback mode and reverts to its default H.323 session application for basic call control support of IP telephony activity in the network.

QUESTION 112

In Cisco IOS routers, which chipset is the PVDM-12 DSP hardware based on?

- A. C542
- B. C549
- C. C5510
Cisco 400-051 Exam
- D. C5421
- E. C5409

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

NM-HDV has five SIMM sockets (called Banks) that hold the PVDM-12 cards. Each PVDM-12 card contains three TI 549 DSPs

Reference: http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/srnd/7x/uc7_0/media.html

QUESTION 113

Which codec is supported on the Cisco PVDM2 DSP modules but not on the PVDM3 DSP modules?

- A. G.728
- B. G.729B
- C. G.729AB
- D. G.723
- E. G.726

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

All codecs that are supported on the PVDM2 are supported on the PVDM3, except that the PVDM3 does not support the G.723 (G.723.1 and G.723.1A) codecs. The PVDM2 can be used to provide G.723 codec support or the G.729 codec can be as an alternative on the PVDM3 Reference:http://www.cisco.com/c/en/us/td/docs/routers/access/1900/software/configuration/guide/Software_Configuration/pvdm3_config.html

QUESTION 114

In which call state does the Mobility soft key act as a toggle key to enable or disable Single Number Reach for Cisco Unified Communications Manager Express SCCP IP phones?

- A. idle
- B. seized
- C. alerting
- D. ringing
- E. connected

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Pressing the Mobility soft key during the idle call state enables the SNR feature. This key is a toggle; pressing it a second time disables SNR. Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucme/admin/configuration/guide/cmeadm/cmesnr.html

QUESTION 115

Which two Cisco Unified Communications Manager Express hunt group mechanisms keep track of the number of hops in call delivery decisions? (Choose two.)

- A. sequential
- B. peer
- C. longest idle
- D. parallel
- E. overlay
- F. linear

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Peer configures hunting in a circular manner among the hunt group member DNs and starts with the DN to the right of the last DN to ring.

Longest-idle specifies hunting on the DN which is idle for a longest period of time and the call will go to that DN of the hunt Group.

Reference:<http://ccievoice.ksiazek.be/?p=690>

QUESTION 116

Which method allows administrators to determine the best match impedance on analog voice ports in Cisco IOS router without having to shut and no shut the ports?

- A. THL tone sweep
- B. original tone sweep
- C. ECAN test
- D. inject-tone local sweep
- E. remote loop

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

THL tone sweep allows all available impedances for a single test call to a quiet termination point out to the PSTN. You do not need to manually disable ECAN on the voice port under test. The test feature switches impedances automatically for the tester. The test feature calculates the arithmetic mean ERL and reports the mean for each channel profile at each impedance setting. Then, at the end of the test, the feature specifies the best match impedance setting. This test requires minimal supervision.

Reference:<http://www.cisco.com/c/en/us/support/docs/voice/ip-telephony-voice-over-ip-voip/64282-impedance-choice.html>

QUESTION 117

Which two types of line codes are configurable for an E1 PRI controller on a Cisco IOS router? (Choose two.)

- A. CRC4
- B. AMI
- C. B8ZS
- D. HDB3
- E. ESF
- F. SF

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Perform this task to select and configure an NM-xCE1T1-PRI network module card as E1.

SUMMARY STEPS

1. enable
2. configure terminal
3. card type e1 slot
4. controller e1 slot / port
5. linecode {ami | hdb3}
6. framing {crc4 | no-crc4}

Reference:

<http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/interface/configuration/12-4/ir-12-4-book/ir-12- port-chann-nm.html>

QUESTION 118

In Channel Associated Signaling on a T1 circuit using Extended Super Frame, how many signaling bits does each T1 timeslot have?

- A. 1
- B. 2
- C. 4
- D. 12
- E. 24

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Each T1 channel carries a sequence of frames. These frames consist of 192 bits and an additional bit designated as the framing bit, for a total of 193 bits per frame. Super Frame (SF) groups twelve of these 193 bit frames together and designates the framing bits of the even numbered frames as signaling bits. CAS looks specifically at every sixth frame for the timeslot's or channel's associated signaling information. These bits are commonly referred to as A- and B-bits. Extended super frame (ESF), due to grouping the frames in sets of twenty-four, has four signaling bits per channel or timeslot. These occur in frames 6, 12, 18, and 24 and are called the A-, B-, C-, and D-bits respectively.

Reference: <http://www.cisco.com/c/en/us/support/docs/voice/digital-cas/22444-t1-cas-ios.html>

QUESTION 119

In Cisco IOS routers, which chipset is the PVDM2-32 DSP hardware based on?

- A. C5441
- B. C549
- C. C5510
- D. C5421
- E. Broadcom 1500

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Table 6-2 DSP Resources on Cisco IOS Hardware Platforms with C5510 Chipset Hardware Module or Chassis

DSP Configuration

Maximum Number of Voice Terminations (Calls) per DSP and per Module

Medium Complexity

(8 calls per DSP)

High Complexity

(6 calls per DSP)

Flex Mode1

(240 MIPS per DSP)

VG-224

Fixed at 4 DSPs

N/A

24 calls per platform

Supported codecs:

G.711 (a-law, mu-law)

.

G.729a

N/A

NM-HD-1V2

Fixed at 1 DSP

4 calls per NM

4 calls per NM

240 MIPS per NM

NM-HD-2V

Fixed at 1 DSP

8 calls per NM
6 calls per NM
240 MIPS per NM
NM-HD-2VE
Fixed at 3 DSPs
24 calls per NM
18 calls per NM
720 MIPS per NM
NM-HDV2
NM-HDV2-2T1/E1
NM-HDV2-1T1/E1
1 to 4 of:
PVDM2-83 (1 DSP)PVDM2-16 (1 DSP)PVDM2-32 (2 DSPs)PVDM2-48 (3 DSPs)PVDM2-64 (4 DSPs)
Calls per PVDM:
48162432
Calls per PVDM:
36121824
MIPS per PVDM:
120240480720960

Reference: http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/4x/42media.html

QUESTION 120

Which digital modulation method is used to transmit caller ID information on analog FXS ports on Cisco IOS routers?

- A. DTMF
- B. PSK
- C. FSK
- D. MF
- E. pulse dialing

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation: Link: <http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/vcr1/vcr1-cr-book/vcr- c4.html>

QUESTION 121

How many signaling bits are there in each T1 time slot using channel associated signaling with Super Frame?

- A. 1
- B. 2
- C. 4
- D. 8
- E. 12

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Each T1 CAS has 24 channels that can transmit 8 bits per channel each. This gives us a total of 192 bits. The T1 has one additional bit for framing, bringing the total to 193 bits. Two types of line coding can be used on a T1 CAS. The first type of line coding is called Super Frame (SF). This is an older and less - efficient type of framing. Super Frame bundles 12 of these 193 - bit frames together for transport. It then uses the even numbered frames as signaling bits. The T1 CAS signaling then looks at every sixth frame for signaling information. This comes out to be 2 bits that are referred to as the A and B bits, which reside in frames 6 and 12.

QUESTION 122

Which two statements about the restrictions for support of H.239 are true? (Choose two.)

- A. SIP to H323 video calls using H.239 are not supported.
- B. Redundancy for H.323 calls is not supported.
- C. H.239 calls are not supported over intercluster trunks with Cisco Unified Communications Manager.
- D. H.239 is not supported with third-party endpoints.
- E. Cisco Unified Communications Manager supports a maximum of three video channels when using H.239.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Restriction for Support for H.239

The Support for H.239 feature has the following restrictions:

Reference:http://www.cisco.com/c/en/us/td/docs/routers/asr1000/configuration/guide/sbcu/2_xe/sbcu_2_xe_book/sbc_h239.html

QUESTION 123

Which two responses from a SIP device, which is the only remote destination on a Cisco Unified Communications Manager SIP trunk with OPTIONS ping enabled, cause the trunk to be marked as "Out of Service"? (Choose two.)

- A. 503 Service Unavailable
- B. 408 Request Timeout
- C. 505 Version Not Supported
- D. 504 Server Timeout
- E. 484 Address Incomplete
- F. 404 Not Found

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The remote peer may be marked as Out of Service if it fails to respond to OPTIONS, if it sends 503 or 408 responses, or if the Transport Control Protocol (TCP) connection cannot be established. If at least one IP address is available, the trunk is In Service; if all IP addresses are unavailable, the trunk is Out of Service.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/admin/8_5_1/ccmcfg/bccm-851-cm/b06siprf.html

QUESTION 124

Which two analog telephony signaling methods are most vulnerable to glare conditions? (Choose two.)

- A. FXS Loop-start
- B. FXO Ground-start
- C. E&M Wink-start
- D. E&M Delay-dial
- E. E&M Immediate-start
- F. E&M Feature Group D

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The loop start signaling method is more common and is typically used by residential phone lines. When a voice port is configured with loop start signaling, the device (telephone) closes the circuit loop that signals the CO voice port to provide dial tone; an incoming call is signaled on the CO by supplying a predefined voltage on the line. The loop start signaling method has one main disadvantage in that it has no method of preventing both sides

of the connection from attempting to seize the line at the same time; this condition is referred to as glare. Because of this, loop start signaling is typically not used on high demand circuits.

With immediate-start, the calling side of the connection seizes the line by going off hook on the E- lead and address information is sent using dual-tone multifrequency (DTMF) digits. Immediate start signaling is vulnerable to glare just like loop-start signaling.

QUESTION 125

Which two Cisco IOS multipoint video conferencing profiles are supported on the Cisco Integrated Router Generation 2 with packet voice and video digital signal processor 3? (Choose two.)

- A. homogeneous
- B. rendezvous
- C. guaranteed-audio
- D. scheduled
- E. guaranteed-video
- F. ad-hoc

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Q. What video conferences are supported?

A. Three types of video profiles are supported: homogeneous conferences (video switching), heterogeneous conferences (video mixing), and guaranteed audio conferences (best-effort video). Reference:http://www.cisco.com/c/en/us/products/collateral/unified-communications/voice-video-conferencing-isr-routers/qa_c67-649850.html

QUESTION 126

Which Cisco IOS multipoint video conferencing profile is also known as best-effort video on the Cisco Integrated Router Generation 2 with packet voice and video digital signal processor 3?

- A. homogeneous
- B. guaranteed-audio
- C. rendezvous
- D. heterogeneous
- E. flex mode video

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation: Three types of video profiles are supported: homogeneous conferences (video switching), heterogeneous conferences (video mixing), and guaranteed audio conferences (best- effort video).

As the name suggests, when Guaranteed Audio Conferences is configured, the system attempts to display video for all participants; however, it does not guarantee that the video of all participants is displayed. For those participants whose video is not displayed, participants are downgraded to audio-only and the profile guarantees preservation of the audio portion of the call. This option gives you added flexibility because the DSPs are not all reserved when the profile is created; the system attempts to reserve them when this profile is activated with an actual conference. For example:

```
dspfarm profile 1 conference video guaranteed-audio
```

```
codec h264 vga
```

```
codec h264 4cif
```

Reference:

http://www.cisco.com/c/en/us/products/collateral/unified-communications/voice-video- conferencing-isr-routers/qa_c67-649850.html

QUESTION 127

Which Cisco packet voice and video digital signal processor 3 can be used for video mixing on a Cisco Integrated Router Generation 2?

- A. PVDM3-16
- B. PVDM3-32
- C. PVDM3-64
- D. PVDM3-128

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

All the PVDM3 types (that is, PVDM3-16, PVDM3-32, PVDM3-64, PVDM3-128, PVDM3-192, and PVDM3-256) support switched-only video conferences. Only PVDM3-128 and higher modules support video conferencing with video mixing, transcoding and transrating.

Reference:http://www.cisco.com/c/en/us/products/collateral/unified-communications/voice-video- conferencing-isr-routers/data_sheet_c78-649427.pdf

QUESTION 128

Which three options are valid per-session video conference participants supported on the Cisco Integrated Router Generation 2 with packet voice and video digital signal processor 3? (Choose three.)

- A. 3
- B. 4
- C. 6

- D. 8
- E. 9
- F. 12
- G. 16

Correct Answer: BDG

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The integrated video conferencing services use the same DSP resources on PVDM3s that are used for widely deployed ISR G2 voice capabilities. These modules, in conjunction with Cisco IOS Software, perform audio and video mixing, video transcoding for certain resolutions, and other functions for video endpoints. PVDM3 modules support flexible media resources and conference profile management to maximize capacity with predictable end-user experiences. Both homogenous and heterogenous video conferences are supported. A homogenous conference refers to one in which participants connect to the ISR G2 with devices that support the same video format attributes (for example, the same codec, resolution, frame rate, and bit rate). A heterogeneous conference refers to one in which participants can connect to a conference bridge with devices that support different video format attributes. Each conference allows 4-, 8-, or 16- party participants.

Reference: http://www.cisco.com/c/en/us/products/collateral/unified-communications/voice-video-conferencing-isr-routers/data_sheet_c78-649427.html

QUESTION 129

Which two are characteristics of jitter buffers? (Choose two.)

- A. Jitter buffers are used to change asynchronous packet arrivals into a synchronous stream by turning variable network delays into constant delays at the destination end systems.
- B. Jitter buffers are used to change asynchronous packet arrivals into a synchronous stream by turning variable network delays into constant delays at the sending systems.
- C. The role of the jitter buffer is to balance the delay and the probability of interrupted playout due to late packets.
- D. The role of the jitter buffer is to queue late packets and reorder out-of-order packets.
- E. Jitter buffers are used to change asynchronous packet arrivals into a synchronous stream by queuing packets into constant delays at the sending systems.

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Jitter buffers are used to remove the effects of jitter so that asynchronous packet arrivals are changed to a synchronous stream. The jitter buffer trades off between delay and the probability of interrupted playout because of late packets (discard).

Reference: <http://www.appneta.com/blog/jitter-voip/>

QUESTION 130

Which enrollment method does a Cisco IOS VPN router trustpoint use to install a Certificate Authority Proxy Function certificate for LSC validation of a Cisco IP phone client?

- A. HTTP proxy server
- B. certificate authority server URL
- C. terminal
- D. self signed
- E. registration authority

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Things to Note:

Reference: [http://www.cisco.com/c/en/us/support/docs/ios-nx-os-software/authentication- authorization-accounting-aaa/116313-configure-anyconnect-00.html](http://www.cisco.com/c/en/us/support/docs/ios-nx-os-software/authentication-authorization-accounting-aaa/116313-configure-anyconnect-00.html)

QUESTION 131

Which statement about a virtual SNR DN-configured Cisco Unified Communications Manager Express-enabled Cisco IOS router is true?

- A. Virtual SNR DN supports either SCCP or SIP IP phone DNs.
- B. A virtual SNR DN is a DN that is associated with multiple registered IP phones.
- C. Calls in progress can be pulled back from the phone that is associated with the virtual SNR DN.
- D. The SNR feature can only be invoked if the virtual SNR DN is associated with at least one registered IP phone.
- E. A call that arrived before a virtual SNR DN is associated with a registered phone, and still exists after association is made, but cannot be answered from the phone.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Mid-calls are either of the following:

Calls that arrive before the DN is associated with a registered phone and is still present after the DN is associated with the phone.

Calls that arrive for a registered DN that changes state from registered to virtual and back to registered.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucme/admin/configuration/guide/cm adm/c_mesnr.html

QUESTION 132

The iLBC codec operates at 38 bytes per sample per 20-millisecond interval. What is its codec bit rate in kilobits per second?

- A. 6.3
- B. 13.3
- C. 15.2
- D. 16
- E. 24

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation: Explanation;

The internet Low Bit Rate Codec (iLBC) is designed for narrow band speech and results in a payload bit rate of 13.33 kbits per second for 30-millisecond (ms) frames and 15.20 kbits per second for 20 ms frames. When the codec operates at block lengths of 20 ms, it produces 304 bits per block, which is packetized as defined in RFC 3952. Similarly, for block lengths of 30 ms it produces 400 bits per block, which is packetized as defined in RFC 3952. The iLBC has built-in error correction functionality to provide better performance in networks with higher packet loss

QUESTION 133

Assume 6 bytes for the Layer 2 header, 1 byte for the end-of-frame flag, and a 40-millisecond voice payload, how much bandwidth should be allocated to the strict priority queue for five VoIP calls that use a G.729 codec over a multilink PPP link?

- A. 87 kb/s
- B. 134 kb/s
- C. 102.6 kb/s
- D. 77.6 kb/s
- E. 71.3 kb/s

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Voice payloads are encapsulated by RTP, then by UDP, then by IP. A Layer 2 header of the correct format is applied; the type obviously depends on the

link technology in use by each router interface: A single voice call generates two one-way RTP/UDP/IP packet streams. UDP provides multiplexing and checksum capability; RTP provides payload identification, timestamps, and sequence numbering.

QUESTION 134

Assume 20 bytes of voice payload, 6 bytes for the Layer 2 header, 1 byte for the end-of-frame flag, and the IP, UDP, and RTP headers are compressed to 2 bytes, how much bandwidth should be allocated to the strict priority queue for six VoIP calls that use a G.729 codec over a multilink PPP link with cRTP enabled?

- A. 80.4 kb/s
- B. 91.2 kb/s
- C. 78.4 kb/s
- D. 69.6 kb/s
- E. 62.4 kb/s

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Voice payloads are encapsulated by RTP, then by UDP, then by IP. A Layer 2 header of the correct format is applied; the type obviously depends on the link technology in use by each router interface: A single voice call generates two one-way RTP/UDP/IP packet streams. UDP provides multiplexing and checksum capability; RTP provides payload identification, timestamps, and sequence numbering.

QUESTION 135

To which QoS tool category does compressed RTP belong?

- A. classification
- B. marking
- C. link efficiency
- D. queuing
- E. prioritization

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

LLQ is a feature that provides a strict PQ to CBWFQ. LLQ enables a single strict PQ within CBWFQ at the class level. With LLQ, delay-sensitive data (in the PQ) is dequeued and sent first. In a VoIP with LLQ implementation, voice traffic is placed in the strict PQ.

QUESTION 136

How are queues serviced in Cisco IOS routers with the CBWFQ algorithm?

- A. first-in, first-out
- B. weighted round robin based on assigned bandwidth
- C. strict priority based on assigned priority
- D. last-in, first-out
- E. weighted round robin based on assigned priority

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Class Based Weighted Fair queuing is an advanced form of WFQ that supports user defined traffic classes i.e. one can define traffic classes based on match criteria like protocols, access control lists (ACLs), and input interfaces. A flow satisfying the match criteria for a class contributes the traffic for that particular defined class. A queue is allocated for each class, and the traffic belonging to that class is directed to the queue for that class.

QUESTION 137

In Cisco IOS routers that use low latency queuing, which algorithm is used to presort traffic going into the default queue?

- A. first-in, first-out
- B. last-in, first-out
- C. weighted round robin
- D. fair queuing
- E. random processing

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

WFQ is a flow-based queuing algorithm used in Quality of Service (QoS) that does two things simultaneously: It schedules interactive traffic to the front of the queue to reduce response time, and it fairly shares the remaining bandwidth between high bandwidth flows. A stream of packets within a single session of a single application is known as flow or conversation. WFQ is a flow-based method that sends packets over the network and ensures packet transmission efficiency which is critical to the interactive traffic. This method automatically stabilizes network congestion between individual packet transmission flows.

QUESTION 138

Which statement describes the Cisco best practice recommendation about priority queue bandwidth allocation in relationship to the total link bandwidth when multiple strict priority LLQs are configured on the same router interface?

- A. Each LLQ should be limited to one-third of the link bandwidth capacity.
- B. The sum of all LLQs should be limited to two-thirds of the link bandwidth capacity.
- C. The sum of all LLQs should be limited to one-half of the link bandwidth capacity.
- D. The sum of all LLQs should be limited to one-third of the link bandwidth capacity.
- E. Cisco does not recommend more than one strict priority LLQ per interface.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Technical Marketing testing has shown a significant decrease in data application response times when Real-Time traffic exceeds one-third of a link's bandwidth capacity. Cisco IOS Software allows the abstraction (and, thus, configuration) of multiple LLQs. Extensive testing and production-network customer deployments have shown that limiting the sum of all LLQs to 33 percent is a conservative and safe design ratio for merging real-time applications with data applications.

QUESTION 139

To which Cisco enterprise medianet application class does Cisco TelePresence belong?

- A. VoIP Telephony
- B. Real-time Interactive
- C. Multimedia Conferencing
- D. Broadcast Video
- E. Low Latency Data

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Telepresence is used for video conferencing which can be done in Real-time so it is Real-time Interactive.

QUESTION 140

Which statement describes the key security service that is provided by the TLS Proxy function on a Cisco ASA appliance?

- A. It provides interworking to ensure that external IP phone traffic is encrypted, even if the rest of the system is unencrypted.
- B. It only applies to encrypted voice calls where both parties utilize encryption.
- C. It manipulates the call signaling to ensure that all media is routed via the adaptive security appliance.
- D. It enables internal phones to communicate with external phones without encryption.
- E. It protects Cisco Unified Communications Manager from rogue soft clients and attackers on the data VLAN.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

TLS Proxy is typically deployed in front of Cisco Unified Communications Manager and other unified communications application servers that utilize media encryption. TLS Proxy is not designed to provide remote-access encryption services for remote phones or client endpoints. Other solutions such as Cisco ASA Phone Proxy or IP Security/Secure Sockets Layer (IPsec/SSL) VPN services are more appropriate. TLS Proxy is not designed to provide a secure campus soft phone solution where the requirement is to provide secure data to phone VLAN traversal or for proxying connections to Cisco Unified Communications Manager.

QUESTION 141

Which two statements describe security services that are provided by the Phone Proxy function on a Cisco ASA appliance? (Choose two.)

- A. It is supported only on phones that use SCCP.
- B. It is supported on an adaptive security appliance that runs in transparent mode.
- C. It provides interworking to ensure that the external IP phone traffic is encrypted, as long as the Cisco Unified Communications Manager cluster runs in secure mode.
- D. It provides a proxy of phone signaling, with optional use of NAT, to hide the Cisco Unified Communications Manager IP address from the public Internet.
- E. It proxies phone media so that internal phones are not directly exposed to the Internet.
- F. It supports IP phones that send phone proxy traffic through a VPN tunnel.

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

TLS Proxy is typically deployed in front of Cisco Unified Communications Manager and other unified communications application servers that utilize media encryption. TLS Proxy is not designed to provide remote-access encryption services for remote phones or client endpoints. Other solutions such as Cisco ASA Phone Proxy or IP Security/Secure Sockets Layer (IPsec/SSL) VPN services are more appropriate. TLS Proxy is not designed to provide a secure campus soft phone solution where the requirement is to provide secure data to phone VLAN traversal or for proxying connections to Cisco Unified Communications Manager.

QUESTION 142

Which entity signs a Cisco IP phone LSC?

- A. Godaddy.com Enrollment Server
- B. Manufacturer Certificate Authority
- C. Registration Authority
- D. Certificate Authority Proxy Function
- E. Cisco Certificate Authority

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

By default, LSC certificates are not installed on Cisco IP phones. Cisco IP phones that are required to use LSC certificates must be provisioned to allow TLS transactions before deployment in the field. LSC certificates can be provisioned to the Cisco IP phones through the Certificate Authority Proxy Function (CAPF) process. This process is completed using TLS and USB tokens coupled with the CTL client. Moreover, the Cisco ASA Phone Proxy feature can serve LSC certificates to the Cisco IP phones. Cisco IP phones will only work with the Cisco ASA Phone Proxy and will not establish secure connectivity with the Cisco Unified Communications Manager.

QUESTION 143

Assume 18 bytes for the Layer 2 header and a 10-millisecond voice payload, how much bandwidth should be allocated to the strict priority queue for three VoIP calls that use a G.722 codec over an Ethernet network?

- A. 331.2 kb/s
- B. 347.8 kb/s
- C. 261.6 kb/s
- D. 274.7 kb/s
- E. 238.4 kb/s

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference:

http://www.cisco.com/en/US/tech/tk652/tk698/technologies_tech_note09186a0080094ae2.shtml

QUESTION 144

Assume a 30-millisecond voice payload, 6 bytes for the Layer 2 header, 1 byte for the end-of-frame flag, and the IP, UDP, and RTP headers are compressed to 2 bytes, how much bandwidth should be allocated to the strict priority queue for eight VoIP calls that use a G.729 codec over a multilink PPP link with cRTP enabled?

- A. 121.6 kb/s
- B. 92.8 kb/s
- C. 88.4 kb/s
- D. 83.2 kb/s
- E. 78.4 kb/s

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference:

http://www.cisco.com/en/US/tech/tk652/tk698/technologies_tech_note09186a0080094ae2.shtml

QUESTION 145

Which two security services are provided by the Phone Proxy function on a Cisco ASA appliance? (Choose two.)

- A. It provides interworking to ensure that external IP phone traffic is encrypted, as long as the Cisco Unified Communications Manager cluster runs in secure mode.
- B. It only applies to encrypted voice calls where both parties utilize encryption.
- C. It manipulates the call signaling to ensure that all media is routed via the adaptive security appliance.
- D. It supports encrypted TFTP operation of IP phone configuration files.
- E. It intercepts and authenticates soft clients before they reach Cisco Unified Communications Manager clusters.
- F. It requires a remote routing device with an IPsec VPN tunnel.

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When using TLS Proxy, the Cisco ASA appliance is inserted between the phones and Cisco Unified Communications Manager. The phones will now establish a TLS session with the ASA appliance. The appliance will, in turn, establish a proxy TLS connection with Cisco Unified Communications Manager on the phone's behalf. This function generates two TLS sessions.

QUESTION 146

Which statement about application inspection of SAF network services on an adaptive security appliance is true?

- A. The adaptive security appliance can inspect and learn the ephemeral port numbers that are used by H.225 and H.245 on SAF-enabled H.323 trunks.
- B. An explicit ACL must be configured on the adaptive security appliance for SAF-enabled SIP trunks.
- C. An explicit ACL must be configured on the adaptive security appliance for SAF-enabled H.323 trunks to account for ephemeral port numbers that are used by H.225 and H.245.
- D. The adaptive security appliance can inspect and learn the ephemeral port numbers that are used by H.225 on SAF-enabled H.323 trunks, but H.245 ports must be explicitly defined.
- E. The adaptive security appliance provides full application inspection for SAF network services.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Adaptive Security Appliances do not have application inspection for the SAF network service. When Unified CM uses a SAF-enabled H.323 trunk to place a call, the ASA cannot inspect the SAF packet to learn the ephemeral port number used in the H.225 signalling. Therefore, in scenarios where call traffic from SAF-enabled H.323 trunks traverses the ASAs, ACLs must be configured on the ASAs to allow this signaling traffic. The ACL configuration must account for all the ports used by the H.225 and H.245 signaling.

Reference: Cisco Collaboration 9.x Solution Reference Network Designs (SRND) page 4-34

QUESTION 147

Which option is the default Cisco Wireless Unified Communications endpoints marking for video media traffic or video RTP traffic?

- A. DSCP 8
- B. DSCP 24
- C. DSCP 34
- D. DSCP 46

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When configuring network-level quality of service (QoS), Cisco video endpoints (including Cisco Unified IP Phone 8900 and 9900 Series and Cisco TelePresence System EX Series devices) generally mark traffic at Layer 3 according to Cisco general QoS guidelines related to voice and video packet marking (video media as DSCP 34 or PHB AF41; call signaling as DSCP 24 or PHB CS3) and therefore these devices can be trusted.

Topic 6, Cisco Unity Connection

QUESTION 148

A Cisco Unity Connection administrator receives a name change request from a voice-mail user, whose Cisco Unity Connection user account was imported from Cisco Unified Communications Manager. What should the administrator do to execute this change?

- A. Change the user data in the Cisco Unity Connection administration page, then use the Synch User page in Cisco Unity Connection administration to push the change to Cisco Unified Communications Manager.
- B. Change the user data in the Cisco Unified Communications Manager administration page, then use the Synch User page in Cisco Unity Connection administration to pull the changes from Cisco Unified CM.
- C. Change the user data in the Cisco Unified Communications Manager administration page, then use the Synch User page in Cisco Unified CM administration to push the change to Cisco Unity Connection.
- D. Change the user profile from Imported to Local on Cisco Unity Connection Administration, then edit the data locally on Cisco Unity Connection.
- E. Change the user data in Cisco Unity Connection and Cisco Unified Communications Manager separately.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

As we can see user are getting synch from call manager so we first have to change the details of user on call manager so that user will synch the changes from call manager.

QUESTION 149

Which message-handling behavior describes how Cisco Unity Connection Single Inbox works for Outlook users who do not have ViewMail installed?

- A. Cisco Unity Connection voice messages are treated as emails without a WAV file attachment.
- B. Cisco Unity Connection voice messages are treated as voice messages.
- C. Cisco Unity Connection voice messages are treated as emails with a WAV file attachment.
- D. Cisco Unity Connection adds a Voice Outbox folder to the Outlook mailbox.
- E. Replies to Cisco Unity Connection voice messages are sent to Exchange as well as the Cisco Unity Connection mailbox for the recipient.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco unity here acts as an IMAP server for the outlook user who don't have view mail installed so user send their request as an IMAP client and unity will revert back with email and wav file attached to play.

QUESTION 150

When Single Inbox is configured, what will happen to an email message that was moved from any Outlook folder to the Voice Outbox folder?

- A. The email message will be delivered to Cisco Unity Connection.
- B. The email message will be kept in the Voice Outbox folder.
- C. The move will fail because the operation is not supported.
- D. The email message will be moved to the Deleted Items folder.
- E. The email message will be permanently deleted and will not be retrievable.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Voicemessages queue for delivery in theVoice Outbox folder that is why it shows inDeleted Items folder.

QUESTION 151

Which Cisco Unity Connection call handler greeting, when enabled, overrides all other greetings?

- A. holiday
- B. closed
- C. internal
- D. busy
- E. alternate

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

An Alternate greeting might be enabled to override the Standard Greeting during certain times, because it is a personal greeting used for specific purpose.

QUESTION 152

Which three Cisco Unity Connection call handler greetings can be overridden by the internal greeting? (Choose three.)

- A. holiday

- B. alternate
- C. error
- D. busy
- E. closed
- F. standard

Correct Answer: AEF

Section: (none)

Explanation

Explanation/Reference:

Explanation:

This greeting overrides the Standard, Closed, and Holiday greetings but only for internal callers or users defined in Cisco Unity Connection because the mentioned three greetings are defined for external users.

QUESTION 153

Which Cisco Unity Connection call handler message is played when a caller enters a string of digits that is not found in the search scope?

- A. error
- B. closed
- C. internal
- D. busy
- E. alternate

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

As soon as unity finds the unexpected behavior it prompts the error message to the user.

QUESTION 154

What is the default treatment of a message that is left in the opening greeting default call handler in Cisco Unity Connection?

- A. It will be sent to the mailbox for the Operator user.
- B. It will be sent to the Undeliverable Messages distribution list.
- C. It will be sent to the mailbox of the system administrator.
- D. It will be sent to the All Voicemail Users distribution list.

E. It will be sent to the General Delivery Mailbox.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Default call handler is selected when we don't assign any call handler to user and with this default call handler no specific user assigned so it don't go to any specific mail box and goes to It will be sent to the Undeliverable Messages distribution list

QUESTION 155

Which statement about system broadcast messages in Cisco Unity Connection is true?

- A. The user can skip a system broadcast message to listen to new messages first.
- B. The user can forward a system broadcast message only if it has been played in its entirety.
- C. System broadcast messages are synchronized between Cisco Unity Connection and Exchange when Single Inbox is configured.
- D. System broadcast messages do not trigger MWI.
- E. System broadcast messages are played immediately after users sign in and listen to message counts for new and saved messages.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation: Explanation;

System broadcast messages are played immediately after users log on to Cisco Unity Connection by phone even before they hear message counts for new and saved messages. After logging on, users hear how many system broadcast messages they have and Connection begins playing them.

QUESTION 156

Which statement describes the supported integration method when Cisco Unity Connection and Cisco Unified Communications Manager are installed on the same server as Cisco Unified Communications Manager Business Edition?

- A. Only SCCP integration is supported.
- B. Only SIP integration is supported.
- C. Both SCCP or SIP integration are supported, but you must choose one or the other.
- D. Q-Sig integration is supported through a voice-enabled Cisco ISR router.
- E. Circuit-switched integration is supported through PIMG.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When installed on the same server there is no way to create trunk that is why sccp is the only way Cisco Unity Connection and Cisco Unified Communications Manager are installed on the same server.

QUESTION 157

Which statement about accessing secure Cisco Unity Connection voice messages in an Exchange mailbox in a Single Inbox deployment is true?

- A. Users can listen to a secure voice message if they use the Outlook email client.
- B. Users can listen to a secure voice message if they use the Outlook email client with the ViewMail add-in.
- C. Users can listen to a secure voice message with email clients other than Outlook if they have installed the ViewMail add-in.
- D. Users cannot listen to a secure message in Exchange because it is not supported in Single Inbox.
- E. Secure voice messages are stored on the Cisco Unity Connection server and the Exchange server.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Users can listen to a secure voice message if they use the Outlook email client with the ViewMail add-in. Because in this integration outlook integrate with unity as secresmapclient .

QUESTION 158

When Cisco Unity Connection users attempt to connect using Web Inbox and receive a Site Is Unavailable error message, which service status should be verified?

- A. Tomcat
- B. Connection Exchange Notification Web Service
- C. Connection Voicemail Web Service
- D. Connection Administration
- E. Secured Web Server

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco Tomcat service, as the name suggests, is used by the Web Server of CUCM and helps display the administration, operating system, disaster recovery, and other GUI interfaces of CUCM. The service leverages a built-in CA for Tomcat in that it redirects the incoming HTTP requests to HTTPS using the default self-signed certificate.

QUESTION 159

Which statement describes how the digit zero is handled in the predefined restriction tables in Cisco Unity Connection?

- A. Zero is listed in the Default Out-Dial Restriction table.
- B. Zero is listed in the Default System Transfer Restriction table.
- C. Zero is listed in the Default Transfer Restriction table.
- D. Zero is listed in the User-Defined and Automatically Added Alternate Extensions Restriction table.
- E. Zero is not listed in any default restriction table configuration.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When user dials "0", by default Unity Connection treats it as an operator call and does not block "0" by any restriction table configuration. Only the operator can modify transfer extension associated with operator call.

QUESTION 160

Which two statements about virtual SNR in Cisco Unified Communications Manager Express are true? (Choose two.)

- A. The SNR DN must be configured as SCCP.
- B. Calls cannot be pulled back from the phone associated with the DN.
- C. Ephone hunt groups are supported.
- D. The virtual SNR DN must be assigned to an ephone.
- E. Music on hold is supported for trunk and line side calls.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Cisco 400-051 Exam

To configure a virtual SNR DN on Cisco Unified SCCP IP phones, perform the following steps:

Prerequisites

Cisco Unified CME 9.0 or a later version.

Restrictions

Mid-calls are either of the following:

Calls that arrive before the DN is associated with a registered phone and is still present after the

DN is associated with the phone.

Calls that arrive for a registered DN that changes state from registered to virtual and back to registered.

Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucme/admin/configuration/guide/cmeadm/cmesnr.html#pgfId-1012065

QUESTION 161

In Cisco Unity Connection, to which three configuration dialog boxes can a user assign a search space? (Choose three.)

- A. Routing Rule
- B. Call Handler
- C. Interview Handler
- D. Contacts
- E. Users
- F. Port
- G. Phone System

Correct Answer: ABE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

In unity connection, user can assign a search space in:

Users

Call Routing Rules

System Distribution Lists

System Call Handlers

Directory Handlers

Interview Handlers

Digital Networking

VPIM Locations

Administrator-Defined Contacts

QUESTION 162

Which two search scope options are removed from a directory handler when you check the "voice enabled" check box? (Choose two.)

- A. Class of Service
- B. System Distribution List
- C. Search Space
- D. Partition
- E. Phone System

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

You can configure the scope of a directory handler to define the objects that callers who reach the directory handler can find or hear. For phone directory handlers, you can set the scope to the entire server, to a particular class of service, to a system distribution list, or to a search space (either inherited from the call or specified for the directory handler). For voice-enabled directory handlers, you can set the scope to the entire server or to a search space (either inherited from the call or specified for the directory handler).

When callers search a directory handler for a particular name, if the scope of the directory handler is set to a search space, Cisco Unity Connection searches each partition in the search space and returns a list of all of the objects that match the name. Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/connection/8x/administration/guide/8xcucsagx/8xcucsag235.html#pgfid-1058609

QUESTION 163

Which Cisco Unified Contact Center Express data store contains user scripts, grammars, and documents?

- A. configuration data store
- B. repository data store
- C. agent data store
- D. historical data store
- E. script data store

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Unified CCX applications might use auxiliary files that interact with callers, such as scripts, pre-recorded prompts, grammars, and custom Java classes. Depending on each implementation, Unified CCX applications use some or all of the following file typesThe Unified CCX Server's local disk prompt, grammar, and document files are synchronized with the central repository during Unified CCX engine startup and during run-time when the Repository datastore is modified.

QUESTION 164

Which Cisco Unified Contact Center Express script media step can invoke a VXML application to retrieve and play prompts on-demand from an off-box location?

- A. Play Prompt step
- B. Voice Browser step
- C. Menu step
- D. Recording step
- E. Simple Recognition step

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

CRA Voice Browser is fully integrated with the CRA Engine. You can use scripts designed in the CRA Editor to extend VoiceXML applications by providing ICD (Integrated Contact Distribution) call control and resource management. For example, you can use VoiceXML to build a speech dialog as a front end to collect information from the caller. You can then pass this information to the CRA script, and when the agent receives the call, the information collected by VoiceXML will be available. You use the Voice Browser step in the Media palette of the CRA Editor to invoke a VoiceXML application. You can use the bundled voicebrowser.aef script as an example for creating scripts that invoke VoiceXML. (You can create custom scripts to execute other steps in addition to VoiceXML.)

QUESTION 165

A company that is using the Cisco Unified Contact Center Express Enhanced version requires that selected types of agent calls are automatically recorded. Which call recording operation can be used to satisfy this requirement?

- A. Instruct agents to use the Record button on Cisco IPPA to trigger recording.
- B. Instruct supervisors to use the Record button on Cisco Agent Desktop to trigger recording.
- C. Instruct supervisors to use the Record button on Cisco Supervisor Desktop to trigger recording.
- D. Configure the Cisco Agent Desktop workflow to trigger recording.
- E. Recording is not supported on the Cisco Unified CCX Enhanced version. It is supported only on the Premium version.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

On-demand recording of active agent calls, available in Enhanced and Premium versions, improves customer service and encourages appropriate and consistent agent behavior and it is a feature of Cisco Agent Desktop.

QUESTION 166

Which statement describes the call recording operation on Cisco Unified Contact Center Express call agents that use Cisco IPPA?

- A. Recording is facilitated via desktop monitoring on supported IP phones.
- B. Automatic recording is supported.
- C. Only G.711 codec is supported.
- D. Only SPAN port monitoring is supported.
- E. Call recording is not supported on Cisco Unified CCX call agents that use Cisco IPPA.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

There is no mechanism created as of now to record the call so we first span and record it from packet capture or from third party software.

QUESTION 167

Which Cisco Unified Contact Center Express data store contains CSQ information?

- A. configuration data store
- B. repository data store
- C. agent data store
- D. historical data store
- E. script data store

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Database component is required for any Unified CCX deployment and manages access to the database. The Unified CCX Database contains four data stores. They are as follows:

The configuration data store contains Unified CCX configuration information such as resources (agents), skills, resource groups, teams, and CSQ information. The repository data store contains user prompts, grammars, and documents. The agent data store contains agent logs, statistics, and pointers to the recording files. The historical data store contains Contact Call Detail Records (CCDRs).

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cust_contact/contact_center/crs/express_9_02/design/guide/UCCX_BK_C39FDB35_00_cisco-unified-contact-center-express/UCCX_BK_C39FDB35_00_cisco-unified-contact-center-express_chapter_010.html

QUESTION 168

Which Cisco Unified Contact Center Express core system software component communicates with Cisco Agent Desktop for agent state control and call control?

- A. Unified CCX Engine
- B. Database
- C. Monitoring
- D. Recording
- E. RmCm

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Unified CCX Engine enables you to run multiple applications to handle Unified CM Telephony calls or HTTP requests. The Unified CCX Engine uses the Unified CM Telephony subsystem to request and receive services from the Computer Telephony Interface (CTI) manager that controls Unified CM clusters. The Unified CCX Engine is implemented as a service that supports multiple applications. You can use a web browser to administer the Unified CCX Engine and your Unified CCX applications from any computer on the network. Unified CCX provides you the following two web interfaces:

QUESTION 169

How many RTP streams exist on the network when a Cisco Unified Contact Center Express agent is engaged in a call that is being silently monitored and recorded?

- A. 3
- B. 4
- C. 5
- D. 6
- E. 8

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

6 RTP streams exist when UCCE agent is engaged in a call when it is being silently monitored. Reference: http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/crs/expr_ess_9_0/design/UCCX_BK_UD5B347F_00_uccx-solution-reference-network-design_chapter_0110.html

QUESTION 170

Which mechanism enables the Cisco Unified CCX Cisco Agent Desktop application to obtain a copy of the RTP packet stream directly from a supported IP phone?

- A. SPAN port monitoring
- B. desktop monitoring
- C. remote SPAN monitoring
- D. reflector port monitoring
- E. ESPAN monitoring

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Desktop monitoring provides a mechanism for the CAD application to obtain a copy of the RTP packet streams directly from the phone and therefore removes the need for a Monitoring component connected to the SPAN port on the Catalyst switch. A Cisco phone supporting desktop monitoring is required and the agent workstation running CAD must be connected to the data port on the back of the agent phone. The Cisco IP Communicator also supports using desktop monitoring for silent monitoring and recording.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cust_contact/contact_center/crs/express_9_0/design/UCCX_BK_UD5B347F_00_uccx-solution-reference-network-design/UCCX_BK_UD5B347F_00_uccx-solution-reference-network-design_chapter_010.html

QUESTION 171

Which statement describes DTMF processing on Cisco Unified Contact Center Express with supported SIP-based agent IP phones that are registered to Cisco Unified Communications Manager?

- A. Cisco Unified CCX receives the DTMF digits via SIP NOTIFY messages.
- B. Cisco Unified CCX receives the DTMF digits in the RTP payload based on RFC 2833.
- C. Cisco Unified CCX receives the DTMF digits via JTAPI messages.
- D. Cisco Unified CCX receives the DTMF digits via SIP INFO messages.
- E. Cisco Unified CCX receives the DTMF digits as part of the audio encoding in the RTP stream.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Unified CCX CTI ports are notified of caller-entered digits (DTMF input) via JTAPI messages from Unified CM. Unified CCX does not support any mechanism to detect in-band DTMF digits where DTMF digits are sent with voice packets. In deployments with voice gateways or SIP phones that only support in-band DTMF or are configured to use in-band DTMF, an MTP resource must be invoked by Unified CM to convert the in-band DTMF signaling so that Unified CM can notify Unified CCX of the caller-entered digits. Be sure to enable out-of-band DTMF signaling when configuring voice gateways in order to avoid using the previous MTP resources. Reference:http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/crs/express_9_02/design/guide/UCCX_BK_C39FDB35_00_cisco-unified-contact-center-express_chapter_010.html

QUESTION 172

Which two statements describe the remote supervisory monitoring feature in Cisco Unified Contact Center Express? (Choose two.)

- A. It is supported on Cisco Unified CCX Enhanced and Premium editions.
- B. It does not require a Cisco Supervisor Desktop or any data network connectivity.
- C. Agents are aware that they are being silently monitored.
- D. Calls can be silently monitored from a PSTN phone.
- E. It supports G.711 and G.729 codecs.
- F. It works with SPAN port monitoring only.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Agents use the Cisco Agent Desktop (commonly referred to as CAD) to login to the Unified CCX server and control their ACD state, control incoming and outgoing calls, chat with supervisors and other agents on their team, view their own real-time statistics, and view their own recent call activity. Supervisors use the CSD to view real-time queue and agent statistics, view recent call activity for agents, change agent states, chat with agents, and send marquee messages to all agents on the selected team. With the Enhanced or Premium packages, the supervisor can also barge-in or intercept ACD calls, silently monitor agents, and record agent calls.

QUESTION 173

Which two guidelines are recommended when configuring agent phones for Cisco Unified CCX agents? (Choose two.)

- A. In the Multiple Call/Call Waiting Settings section, set the Maximum Number of Calls to 2.
- B. In the Multiple Call/Call Waiting Settings section, set the Busy Trigger value to 2.
- C. The Unified CCX extension for the agent must be listed within the top four extensions on the device profile.
- D. In the Multiple Call/Call Waiting Settings section, set the Maximum Number of Calls to at least 3.
- E. Always enable SRTP when configuring an agent phone.

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Follow these guidelines when configuring agent phones for Unified CCX agents:

Choose Device > Phone in Unified Communications Manager Administration. The Find and List Phones window is displayed.

Enter search criteria to locate a specific phone and click Find. A list of phones that match the search criteria is displayed. Click the device name of the phone to which you want to add a directory number. The Phone Configuration window is displayed. In the Unified Communications Manager Administration Phone Configuration web page, select the required Association Information (on the left) to get to the Directory Number Configuration web page. On this page, make the following changes:

- o In the Multiple Call/Call Waiting Settings section, set the Maximum Number of Calls to 2 (default is 4) for Cisco Unified IP Phones 7900 Series and 3 for Cisco Unified IP Phones 8961, 9951, and 9971.

- o In the Multiple Call/Call Waiting Settings section, set the Busy Trigger value to 1 (default is 2).
- o In the Call Forward and Call Pickup Settings section, verify that you do not forward any Unified Communications Manager device to the Unified CCX extension of an agent.
- o In the Call Forward and Call Pickup Settings section, verify that you do not configure the Unified CCX extension of an agent to forward to a Unified CCX route point. Always disable (turn off) Secure Real-Time Transport Protocol (SRTP) when configuring a Cisco Unified Communications product. You can disable SRTP for a specified device or for the entire Unified Communications Manager:

- o For a specified device--Choose Device > Phone. In the Find and List Phone page, select the required phone device. In the Phone Configuration page for the selected phone, scroll down to the Protocol Specific Information section. To turn off SRTP on the phone device, select any one of the Non Secure SCCP Profile auth by choices from the drop-down list in SCCP Phone Security Profile or SCCP Device Security Profile field.

- o For the entire Unified Communications Manager cluster--Choose System > Enterprise Parameters. In the Enterprise Parameters Configuration page, scroll down to the Securities Parameters section, to verify that the corresponding value for the Cluster Security Mode field is 0. This parameter indicates the security mode of the cluster. A value of 0 indicates that phones will register in nonsecure mode (no security).

The Unified CCX extension for the agent must be listed within the top 4 extensions on the device profile. Listing the extension from position 5 on will cause Unified CCX to fail to monitor the device, so the agent will not be able to log in.

Do not forward any Unified Communications Manager device to the Unified CCX extension of an agent.

Do not configure the Unified CCX extension of an agent to forward to a Unified CCX route point.

Do not use characters other than the numerals 0 to 9 in the Unified CCX extension of an agent.

Do not configure two lines on an agent phone with the same extension when both lines exist in different partitions.

Do not assign a Unified CCX extension to multiple devices. Do not configure the same Unified CCX extension in more than one device or device profile.

(Configuring a Unified CCX extension in one device or device profile is supported.) To use Cisco Unified IP Phones 9900 Series, 8900 Series, and 6900 Series as agent devices, the RmCm application user in Unified Communications Manager needs to have "Allow device with connected transfer/conference" option assigned to itself

QUESTION 174

Which protocol is used by presence-enabled users in Cisco IM and Presence to control phones that are registered to Cisco Unified Communications Manager?

- A. AXL/SOAP
- B. CTI/QBE
- C. SIP/SIMPLE
- D. LDAP
- E. XMPP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The CTI gateway provides desk phone control when users are configured for phone association mode. Proper installation calls upon information to specify CTI gateway server names, addresses, ports, and protocols on CUPS. Configured correctly, the CTI gateway enables users logging in to CUPC to reach the CTI gateway.

QUESTION 175

Which statement about high availability for XMPP federation in Cisco IM and Presence is true?

- A. A maximum of two Cisco IM and Presence nodes can be enabled for XMPP federation.
- B. Cisco IM and Presence load balances outbound requests across all nodes that are enabled for XMPP federation.
- C. Cisco IM and Presence load balances outbound requests across both nodes that are enabled for XMPP federation in a subcluster.
- D. The XMPP federation-enabled nodes should have different priorities and weights on the published DNS SRV for proper inbound request node selection.
- E. A single DNS SRV record that resolves to an XMPP federation-enabled node must be published on a public DNS server for inbound request routing.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

High availability for XMPP federation differs from the high availability model for other IM and Presence Service features because it is not tied to the two node sub-cluster model. To provide high availability for XMPP federation, you must enable two or more IM and Presence Service nodes in your cluster for XMPP federation; having multiple nodes enabled for XMPP federation not only adds scale but it also provides redundancy in the event that any node fails

QUESTION 176

Which protocol does the Cisco Jabber client use, in conjunction with Cisco IM and Presence, to deliver enterprise-class instant messaging services?

- A. SIP
- B. CTI/QBE
- C. XMPP
- D. IRC
- E. ICQ

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Many federated IM networks communicate using an open standard, such as Jabber, that leverages the Extensible Messaging and Presence Protocol (XMPP). Networks using XMPP provide open communications with other XMPP-based networks.

QUESTION 177

Which protocol that is used between Cisco IM and Presence and Cisco Unified Communications Manager is responsible for the exchange of phone state presence information?

- A. AXL/SOAP
- B. CTI/QBE
- C. SIP/SIMPLE
- D. LDAP
- E. XMPP

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

To provide interoperability between communications systems, SIP is the protocol leveraged. Enterprise Presence solutions need to provide for a uniform definition of the main communication services such as IM, voice, video, e-mail, web calendaring, and so on, while SIP delivers the necessary features.

QUESTION 178

Which two enterprise presence domains can federate with Cisco IM and Presence by using SIP? (Choose two.)

- A. AOL
- B. Microsoft OCS
- C. IBM Sametime
- D. Cisco WebEx Connect
- E. Google Talk
- F. Cisco Unified Presence 8.X Releases

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Microsoft Lync and OCS support presence services with sip as well as AOL so to sip is easy to troubleshoot and feasible for signaling that's why cisco federate these with sip.

QUESTION 179

Which statement describes the external database requirement for the Cisco IM and Presence permanent group chat feature?

- A. All nodes in a Cisco IM and Presence cluster can share a physical external database.
- B. All nodes in a Cisco IM and Presence cluster can share a logical external database.
- C. Each node in a Cisco IM and Presence cluster must have its own physical external database.
- D. Each node in a Cisco IM and Presence cluster must have its own logical external database.
- E. An external database is not mandatory.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

When you configure an external database entry on IM and Presence, you assign the external database to a node, or nodes, in your cluster as follows:

QUESTION 180

Which external database software is required for the Cisco IM and Presence compliance feature?

- A. MySQL
- B. EnterpriseDB
- C. MSSQL
- D. SQLite
- E. PostgreSQL

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 181

Which Cisco IM and Presence service is responsible for logging all IM traffic that passes through the IM and Presence server to an external database for IM compliance?

- A. Cisco Presence Engine
- B. Cisco Serviceability Reporter
- C. Cisco Sync Agent
- D. Cisco XCP Connection Manager
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- E. Cisco XCP Message Archiver

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Cisco Unified Presence XCP Message Archiver service supports the IM Compliance feature. The IM Compliance feature logs all messages sent to and from the Cisco Unified Presence server, including point-to-point messages, and messages from adhoc (temporary) and permanent chat rooms for the Chat feature. Messages are logged to an external Cisco-supported database.

QUESTION 182

Which two settings should be configured on the SIP Trunk Security Profile for the IM & Presence Service SIP Trunk? (Choose two.)

- A. Check to enable Accept Presence Subscription.
- B. Verify that the setting for Incoming Transport Type is TCP+UDP.
- C. Configure Device Security Mode to Encrypted.
- D. Check to enable Enable Application Level Authorization.
- E. Configure the Outgoing Transport Type to TLS.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Configure SIP Trunk Security Profile for IM and Presence Service Procedure

Step 1

Choose Cisco Unified CM Administration > System > Security > SIP Trunk Security Profile.

Step 2

Click Find.

Step 3

Click Non Secure SIP Trunk Profile.

Step 4

Click Copy and enter CUP Trunk in the Name field.

Step 5

Verify that the setting for Device Security Mode is Non Secure.

Step 6

Verify that the setting for Incoming Transport Type is TCP+UDP.

Step 7

Verify that the setting for Outgoing Transport Type is TCP.

Step 8

Check to enable these items:

Step 9

Click Save.

Reference:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/im_presence/configAdminGuide/9_0/CUP0_BK_CFF5B189_00_config-admin-guide-imp-90/CUP0_BK_CFF5B189_00_config-admin-guide-imp-90_chapter_0101.html

QUESTION 183

Which three services must be stopped to change the IM & Presence service default domain setting of DOMAIN.NOT.SET? (Choose three.)

- A. Cisco XCP Router
- B. Cisco Intercluster Sync Agent
- C. Cisco XCP Authentication Service
- D. Cisco SIP Proxy
- E. Cisco Presence Engine
- F. Cisco AXL Web service

Correct Answer: ADE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 184

Two Jabber clients are unable to pass instant messages between each other. What is the appropriate next step?

- A. Review XCP router logs.
- B. Open port 5060 on the firewalls between the PCs and the IM&P servers.

- C. Review SIP proxy logs.
- D. Review Help > Show Connection Status in each Jabber client, and pull logs as necessary.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The XCP Router is the core communication functionality on the Cisco Unified Presence server. It provides XMPP-based routing functionality on Cisco Unified Presence; it routes XMPP data to the other active XCP services on Cisco Unified Presence, and it accesses SDNS to allow the system to route XMPP data to Cisco Unified Presence users. The XCP router manages XMPP sessions for users, and routes XMPP messages to and from these sessions.

QUESTION 185

Which three issues prevent a customer from seeing the presence status of a new contact in their Jabber contact list? (Choose three.)

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- A. incoming calling search space on SIP trunk to IM&P
- B. IM&P incoming ACL blocking inbound status
- C. subscribe calling search space on SIP trunk to IM&P
- D. PC cannot resolve the FQDN of IM&P
- E. Owner user ID is not set on device.
- F. Primary DN is not set in end user configuration for that user.
- G. Subscriber calling search space is not defined on user's phone.

Correct Answer: BCD

Section: (none)

Explanation

Explanation/Reference:

Reference:<http://www.cisco.com/c/en/us/support/docs/voice-unified-communications/unified-presence/97443-cups-cupc-ts.html>

QUESTION 186

Which three statements about configuring partitioned intradomain federation to Lync are true? (Choose three.)

- A. Intradomain federation to Lync is only possible using SIP.
- B. IM&P and Lync should federate to any required remote domains.
- C. You must update the URIs of any users migrated from Lync to IM&P to match the Cisco Unified Presence Server SIP URI format.
- D. A static route must be added to point the local presence domain to the Lync server.

- E. Microsoft RCC must be enabled.
- F. The Enable use of Email Address when Federating option can be turned on if SIP URIs are different between IM&P and Lync.

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Please refer to the link for more

information:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cups/8_6/english/integration_not es/Federation/Intradomain_Federation/Partitioned_Intradomain_Federation/InterdomainFederation.html

QUESTION 187

Which option describes how you can show the same contacts in your Jabber for Windows on- premise client as you do on the corporate directory of your IP phone?

- A. Switch your Jabber client to use UDS instead of EDI.
- B. Switch your Jabber client to use EDI instead of UDS.
- C. Update your IM&P server to sync off of the same LDAP directory as your Cisco Unified Communications Manager.
- D. Add Jabber to your inbound/outbound firewall rules on your PC.
- E. Jabber can only pull directly from LDAP and cannot directly search the Cisco Unified Communications Manager user database.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

LDAP contact resolution --The client cannot use LDAP for contact resolution when outside of the corporate firewall. Instead, the client must use UDS for contact resolution. When users are inside the corporate firewall, the client can use either UDS or LDAP for contact resolution. If you deploy LDAP within the corporate firewall, Cisco recommends that you synchronize your LDAP directory server with Cisco Unified Communications Manager to allow the client to connect with UDS when users are outside the corporate firewall. Reference:http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/jabber/Windows/9_7/JABW_BK_C4C679C9_00_cisco-jabber-for-windows-97/JABW_BK_C4C679C9_00_cisco-jabber-for-windows-97_chapter_0111.html#CJAB_CN_C2733196_00

Topic 9, Mix Questions

QUESTION 188

Company ABC is planning to migrate from Cisco MCS-hosted Cisco Unified Communications Manager applications to Cisco UC on UCS B-Series servers. Which statement about external media supportability is true for this migration?

- A. The Cisco Music on Hold USB audio sound card on the MCS servers will continue to work on the USB ports on the UCS server.
- B. The Cisco Music on Hold USB audio sound card on the MCS servers will continue to work through the USB ports on the Cisco UCS server KVM dongle cable adaptor connected to the front of the UCS server.
- C. The Cisco Music on Hold USB audio sound card on the MCS servers will not work on the UCS server.
- D. The Cisco Music on Hold USB audio sound card can be mapped to a virtual USB port on a VMware virtual machine on the UCS server.
- E. The Cisco Music on Hold USB audio sound card can be mapped to a virtual serial port on a VMware virtual machine on the UCS server.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 189

Which codec complexity mode, when deployed on Cisco IOS routers with DSPs using the C5510 chipset, supports the most G.711 calls per DSP?

- A. Low
- B. Medium
- C. High
- D. Secure
- E. Flex

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 190

When DSP oversubscription occurs on a Cisco IOS router using DSP modules that are based on the C5510 chipset, what will happen when an analog phone connected to a FXS port goes off-hook?

- A. A fast busy tone will be played.
- B. A slow busy tone will be played.
- C. A network busy tone will be played.
- D. A dial tone will be played, but digits will not be processed.

E. No tone will be played.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 191

To which QoS tool category does compressed RTP belong?

- A. classification
- B. marking
- C. link efficiency
- D. queuing
- E. prioritization

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 192

In a Cisco Unified Communications Manager system, which three locations does the TFTP server search when a device requests a configuration file from a TFTP server? (Choose three.)

- A. internal caches
- B. local disk
- C. alternate file server
- D. NFS server
- E. FTP server
- F. load server

Correct Answer: ABC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 193

Which three message types for RTCP are valid? (Choose three.)

- A. sender report
- B. end of participation
- C. source description
- D. sender codec
- E. receiver packets
- F. average MOS

Correct Answer: ABC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 194

Which three components are required when configuring the Cisco Unified Communications Manager for time-of-day routing? (Choose three.)

- A. Partition
- B. Time Period
- C. Time Schedule
- D. Time Zone
- E. Date Time Group

Correct Answer: ABC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 195

Which two steps must be taken when configuring EMCC? (Choose two.)

- A. An SFTP server that all clusters share must be set up.

- B. Certificates from all remote clusters must be imported into each cluster.
- C. Cross-cluster Enhanced Location CAC must be configured.
- D. End users must be configured to only exist in their home cluster.
- E. A device pool for EMCC phones must be configured.
- F. Define MLPP domains.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 196

Which two settings must be the same between the backup source and restore target with DRS in Cisco Unified Communications Manager? (Choose two.)

- A. Server Hostname
- B. Server IP Address
- C. Cluster Security Password
- D. NTP Servers
- E. Domain Name
- F. Certificate Information

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 197

Which two rules apply to MMOH in SRST? (Choose two.)

- A. A maximum of three MOH groups are allowed.
- B. Cisco Unified SRST voice gateway allows you to associate phones with different MOH groups on the basis of their IP address to receive different MOH media streams.
- C. A maximum of five media streams are allowed.
- D. Cisco Unified SRST voice gateway allows you to associate phones with different MOH groups on the basis of their MAC address to receive different

MOH media streams.

- E. Cisco Unified SRST voice gateway allows you to associate phones with different MOH groups on the basis of their extension numbers to receive different MOH media streams.

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 198

Which two QoS guidelines are recommended for provisioning interactive video traffic? (Choose two.)

- A. Latency should be no more than 45 seconds.
- B. Overprovision interactive video queues by 20% to accommodate bursts.
- C. Loss should be no more than 5%.
- D. Interactive video should be marked to DSCP CS4.
- E. Jitter should be no more than 30 ms.

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 199

Which two clock rates does Performance Monitor use to calculate RTP jitter values? (Choose two.)

- A. PCMU (G.711 mu-law) , 8000 Hz
- B. PCMU (G.711 mu-law) , 32000 Hz
- C. PCMA (G.711 A-law) , 16000 Hz
- D. H.263 , 90,000 Hz
- E. H.263 , 64,000 Hz

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 200

Which TFTP server address selection option has the highest precedence on Cisco SCCP IP phones using firmware release 8.0(4) or later?

- A. a manually configured alternate TFTP option on the phone
- B. the first Option 150 IP address received from the DHCP server
- C. the first Option 66 dotted decimal IP address received from the DHCP server
- D. the first IPv6 TFTP Server address received from the DHCP server
- E. the value of next-server IP address in the boot-up process

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 201

Which Cisco IOS multipoint video conferencing profile attempts to reserve DSPs only when it is activated with an actual conference?

- A. homogeneous
- B. guaranteed-audio
- C. rendezvous
- D. heterogeneous
- E. flex mode video

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 202

Which Cisco IOS multipoint video conferencing profile reserves DSPs when it is created in the configuration?

- A. flex mode video
- B. guaranteed-audio

- C. rendezvous
- D. heterogeneous
- E. guaranteed-video

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 203

Which statement describes how much of the DSP resources are reserved for video conference when voice-service dsp-reservation 40 is configured on a Cisco Integrated Router Generation 2 with packet voice and video digital signal processor 3?

- A. 60% of the total available DSP resources
- B. 40% of the total available DSP resources
- C. 50% of the total available DSP resources
- D. Video conferencing resources are reserved dynamically by Cisco IOS and cannot be changed.
- E. This command is used for voice resource reservation only.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 204

Which statement describes a video conference viewing mode on a Cisco Integrated Router Generation 2 with packet voice and video digital signal processor 3 that is configured to work with Cisco Unified Communications Manager?

- A. Video of one participant is displayed to all other video capable participants in a round-robin manner.
- B. Video of the loudest speaker is displayed across all video capable participants.
- C. Video of one participant, except for those with mute enabled, is displayed to all other video capable participants in a round-robin manner.
- D. The dedicated conference lecturer can one participant at a time, while all others can only see the lecturer.
- E. Video of one participant is displayed to all other video capable participants in a random manner using an algorithm hard-coded in Cisco IOS.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:
Explanation: