

- Exam : 642-426
- Title : Troubleshooting Unified Communications (TUC)
- Ver : 11.12.07



QUESTION 1

Your Cisco Unified CallManager 5.0 cluster is using your corporate Windows 2003 Active Directory for user information. Over the weekend you updated the Windows 2003 Active Directory Server and added a small group of new users. Cisco Unified CallManager is configured to synchronize with the Active Directory server every 8 hours and it has been 32 hours since the last successful synchronization. The configuration on Cisco Unified CallManager did not change during the Active Directory server upgrade and the remainder of the Windows network is functioning properly.

What are two possible causes of this synchronization issue? (Choose two.)

A. The synchronization on the AD server was set to manual.

B. The domain controllers are down.

C. There is a username and or password mismatch between the Cisco Unified CallManager cluster and the Windows AD server.

D. Authorization has not been configured for a third party LDAP service.

E. The LMHOSTS file has been corrupted.

Answer: B, C

QUESTION 2

Refer to the exhibit.

```
1
mgcp
mgcp call-agent 10.1.44.4 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voice mode cisco
mgcp sdp simple mgcp package-capability rtp-package
mgcp package-capability sst-packateno mgcp timer receive-rtcp
no mgcp explicit hookstate
1
ccm-manager mgcp
1
```

You have received a trouble ticket stating that users cannot place calls to the PSTN. During testing you discover the gateway is not switching to the secondary call agent when the primary call agent is unreachable.

What needs to be done to allow the MGCP gateway to use a different call agent if the primary fails?

A. The ccm-manager fallback-mgcp command needs to be added to the gateway.

B. The ccm-manager redundant-host command needs to be added to the gateway.

C. A Cisco Unified CallManager group that includes the secondary call agent needs to be assigned to the gateway.

D. The gateway needs to be defined as a non-gatekeeper-controlled intercluster trunk with the secondary Cisco Unified CallManager defined.



Answer: B

QUESTION 3

You have received a trouble ticket stating that when callers dial the internal Help Desk queue at extension 2300, they hear a message that their calls cannot be completed as dialed. Which two issues could cause this problem? (Choose two.)

A. There are no agents logged in to the Help Desk queue.

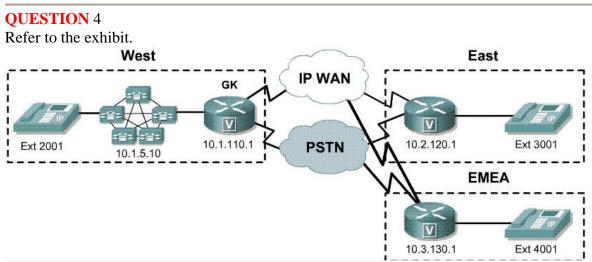
B. The script associated with the Help Desk queue is corrupt.

C. There is a connectivity issue between Cisco Unified CallManager and the Cisco Unified Contact Center Express server.

D. The route point for 2300 has been modified or deleted in Cisco Unified CallManager, resulting in a synchronization issue.

E. The CSS of the route point for 2300 is incorrect.

Answer: C, D



A gatekeeper has been configured on the 10.1.110.1 router to support three local zones, West, East and EMEA. When you do a show gatekeeper endpoints command the West zone device is missing. What needs to be done to the configuration in the CallManager for it to register with the gatekeeper in zone West?

A. Restart the CallManager so it can register with the gatekeeper

B. Change the Device Name to be the IP address of the gatekeeper in the CallManager Trunk Configuration page

C. Set the Terminal Type to terminal in the Gatekeeper Information field of the Trunk Configuration

D. Configure a zone name on the CallManager trunk

Answer: D

QUESTION 5

When using trace output to troubleshoot a Cisco Unified CallManager 5.0 problem, how can you collect and view the trace files?

A. Download the RTMT plug-in from the Cisco Unified CallManager Serviceability page to view the preconfigured trace files.

B. Configure the proper trace settings on the Cisco Unified CallManager Serviceability page and then use the embedded RTMT tool to view the trace files.

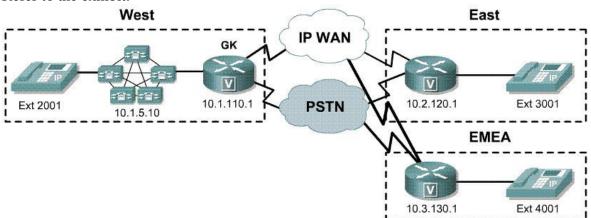
C. Configure the proper alarms and traces on the Cisco Unified CallManager Administration page and view the output with the RTMT plug-in.

D. Configure the proper trace settings on the Cisco Unified CallManager Serviceability page and download the RTMT plug-in from the CallManager Administration page to view the trace output.

Answer: D

QUESTION 6

Refer to the exhibit.



You have configured a gatekeeper with three local zones named East, West and EMEA. CallManager and the gateways in the East and EMEA zones are all registered in the West zone but they should each be registered in their own zone. What needs to be done to resolve this issue?

A. The gatekeeper needs to be stopped and restarted for the changes to take effect

B. The IP address in the gateway command h323-gateway voip ID needs to be changed to that of the individual gateways in both gateways

C. The zone name in the gateway command h323-gateway voip ID needs to be changed to the correct zone in both gateways

D. The gatekeeper can only support one zone and all registering endpoints are being placed correctly in the first configured zone

Answer: C

QUESTION 7

Which type of echo is found mostly on tail circuits and is due to reflection that causes the Tx

signal to appear on the Rx signal?

A. Hybrid echo

- B. Talker echo
- C. Listener echo
- D. Tail-end echo

Answer: B

QUESTION 8

Your Cisco Unified CallManager 5.0 cluster has just started to use a third-party LDAP service. Users complain that they are unable to make changes to their passwords in their Cisco Unified CallManager user web pages. How should you resolve this problem?

A. Restart the phones that are having problems to reinitialize the LDAP database.

- B. Have the users make changes to their passwords in the LDAP database.
- C. Configure automatic synchronization of the LDAP database.
- D. Change the passwords on the IP phone screen using the TUI.

Answer: B

QUESTION 9

You have received a trouble ticket stating that an IP phone is not working. When asked, the user informs you the phone is displaying the message "Registration rejected." Which two issues are possible causes of this problem? (Choose two.)

A. The IP phone is not getting an IP address.

B. The IP phone's primary Cisco Unified CallManager has a database replication issue.

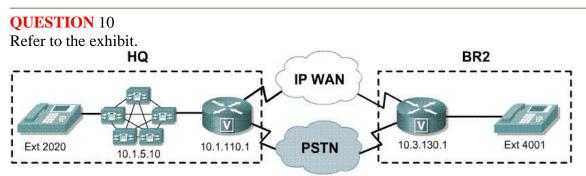
C. The primary Cisco Unified CallManager is unavailable and the CallManager group assigned to

the IP phone does not include a secondary CallManager.

D. The IP phone has not been defined in Cisco Unified CallManager.

E. The IP phone is not associated with a valid user profile.

Answer: B, D



A trunk has been configured between the Cisco Unified CallManager cluster at 10.1.5.10 and a CME at 10.3.130.1. During testing you find that calls are completed when dialing from ext. 2020 to ext. 4001, but calls from ext. 4001 to ext. 2020 receive a fast busy. What is the issue that is

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preventing calls from ext. 4001 to ext. 2020 from being completed?

A. The h323-gateway voip bind srcaddr 10.3.130.1 command has been omitted from the BR2 configuration

B. A translation rule has been applied that is keeping the call from being completed

- C. A CSS has been omitted from the trunk configured to BR2
- D. An incorrect CSS has been applied to the gateway at HQ

E. The trunk IP address in the Cisco Unified CallManager Information is field is incorrect

Answer: C

OUESTION 11

Refer to the exhibit.

a Call Viewer le ⊻jew									
Call #	Time	Origin	Reason	Trunk ID	Port ID	Dialed Number	Calling Number	Forwarding Station	
	13:32:44 13:32:34	Duration = 10 sec Internal	Fwd(Ring no answer)	0	1	8000	8000	8000	
								Close	

A site is using four-digit extensions for internal calling. The voice-mail pilot number is 8000. Calls to extension 2001 hear the Cisco Unity opening greeting instead of the subscriber's greeting when forwarded to Cisco Unity.

What is the probable cause?

- A. The mailbox is configured with the E.164 number instead of the extension.
- B. A call routing rule has been added that is preempting the Attempt Forward rule.
- C. Extension 2001 has not been defined in Cisco Unity.
- D. A greeting has not been recorded for mailbox 2001.
- E. The Voice Mail Box Mask setting in Cisco Unified CallManager is set to 8000 instead of XXXX

Answer: E

QUESTION 12

What happens it CDP is not enabled on a switch port to which an IP phone is connected?

- A. The phone is unable to acquire an IP address.
- B. The phone cannot get its VLAN ID assignments.
- C. The phone cannot learn the address of the TFTP server.
- D. The switch will put the port into the errDisable state until CDP is enabled.

Answer: B

```
OUESTION 13
Refer to the exhibit.
1
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server 10.1.5.2
ccm-manager config
1
mqcp
mgcp call-agent 10.1.5.2 2427 service-type mgcp version 0.1
mqcp dtmf-relay voip codec all mode out-of-band
mqcp rtp unreachable timeout 1000 action notify
mqcp modem passthrough voip mode nse
mqcp package-capability rtp-package
mqcp package-capability sst-package
no mqcp package-capability fxr-package
mqcp package-capability pre-package
no mgcp timer receive-rtcp
mqcp sdp simple
mgcp rtp payload-type g726r16 static
1
mgcp profile default
1
```

You have received a trouble ticket that users cannot place calls to the PSTN. During testing you discover the gateway is not switching to the secondary call agent when the primary call agent is unreachable.

What needs to be done to allow the MGCP gateway to use a different call agent it the primary fails?

A. The ccm-manager fallback-mgcp command needs to be added to the gateway.

B. The ccm-manager redundant-host command needs to be added to the gateway.

C. A Cisco Unified CallManager group that includes the secondary call agent needs to be assigned to the gateway.

D. The gateway needs to be defined as a non-gatekeeper-controlled intercluster trunk with the secondary Cisco Unified CallManager defined.

Answer: C

QUESTION 14

LSC validation is failing on a new SCCP IP phone you have just added to the Cisco Unified CallManager 5.0 cluster. No other IP phones are experiencing any problems with LSC validation. What can you do to help pinpoint the problem?

A. View the SDI trace output.

- B. Check for security alarms.
- C. Use the security configuration menu on the IP phone to verify that an LSC has been

downloaded to the IP phone. D. Verify that the authentication string is correct in the Cisco Unified CallManager device configuration screen.

Answer: C

OUESTION 15 Refer to the exhibit. mls qos map cos-dscp 0 8 12 16 28 32 40 46 mis gos spanning-tree mode pyst spanning-tree extend system-id interface FastEthernet0/1 switchport trunk encapsulation dot1q switchport mode trunk no ip address wrr-queue cos-map 167 wrr-queue cos-map 2 5 wrr-queue cos-map 3 2 3 4 wrr-queue cos-map 4 0 1 spanning-tree portfast interface FastEthernet0/2 switchport access vlan 20 switchport trunk encapsulation dot1q switchport mode dynamic desirable switchport voice vlan 120 no ip address mls gos trust device cisco-phone mls gos trust cos wrr-queue cos-map 167 wrr-queue cos-map 2 5 wrr-queue cos-map 3 2 3 4 wrr-queue cos-map 4 0 1 spanning-tree portfast Voice bearer traffic is mapped to which queue in FastEthernet0/2?

A. Queue 1 B. Queue 2 C. Queue 3 D. Queue 4

Answer: B

QUESTION 16

Which log file contains call-processing information from services such as Cisco Unified CallManager and Cisco Unified CallManager CTI Manager?



A. CTI traceB. SDI traceC. CDROnDemandD. SDL trace

Answer: B

QUESTION 17

You have received a trouble ticket from a user who could not leave a message for John Doe at extension 2001. The user stated that when the call was forwarded to voice-mail, the Cisco Unity opening greeting was played instead of John Doe's greeting. Which three issues could cause this problem? (Choose three.)

A. The exchange server was down and Cisco Unity was operating in UMP mode.

B. A Cisco Unity call routing rule was added that prevented the Attempt Forward rule from being applied to the call.

C. The voice-mail port used was configured only for Message Notification and MWI Outdial.

D. Extension 2001 was not configured with the correct voice-mail profile.

E. John Doe's mailbox does not have the correct extension configured in Cisco Unity.

F. A translation pattern modified the redirecting number.

Answer: B, D, E

QUESTION 18

Partition A contains four route patterns. The calling search space assigned to Device B contains only Partition A. When Device B dials 1136, which of the route patterns will be selected?

A. 1[14]XX B. 11X! C. 1[^2-8]XX D. 1[1-4]XX

Answer: B

QUESTION 19

Which two methods can be used to correct database replication issues in a cluster running Cisco Unified CallManager 4.1? (Choose two.)

A. Enter the utils dbreplication repair command at the command-line prompt.

- B. Execute the dblhelper utility on the publisher.
- C. Use the SQL Server Enterprise Manager application to recreate the database subscription.
- D. Run the Cisco Unified CallManager BARS utility to restore the database to the subscriber.
- E. Use the Informix database utility to recreate the database subscription.

Answer: B, C

QUESTION 20

Your customer has implemented a multipoint control unit to allow conferencing between existing Cisco Unified Video Advantage users. The multipoint control unit appears to be properly configured, but users are complaining that when they conference they get audio but no video. What is the most likely cause?

- A. The region configuration is selecting an incorrect codec.
- B. The partition or CSS configuration configuration is preventing video setup.
- C. The QoS policy is placing video packets in the default queue.
- D. The MRGL configuration is selecting the incorrect conference resource.

Answer: D

QUESTION 21

You are troubleshooting why a user cannot make calls to the PSTN. You are reviewing trace files and you have found where the user's IP phone initiates the call but you never see the call go out the gateway. What is the next step in troubleshooting this issue?

A. Look in the SDL trace file to see it there is a signal to another Cisco Unified CallManager node with the same time-stamp.

B. Look in the SDL trace file to see it there is a signal to another Cisco Unified CallManager node with the same TCP handle.

C. Look in the IP Voice Media Streaming App trace file to see it an MTP was invoked.

D. Look in the MGCP trace file to determine which MGCP gateway the call was sent to.

Answer: A

QUESTION 22

You have two Cisco Unified CallManager clusters each using endpoint authentication. You have moved a small group of users from Cluster 1 to Cluster 2 and now their phones are failing to register with Cluster 2. Each phone displays the error message "failure to authenticate on the CTL file".

Which step should be taken to resolve this issue?

A. Restart the Cisco CTL Provider and the Cisco Certificate Authority Proxy Function.

- B. Reset each IP phone so the correct CTL file can be downloaded.
- C. Perform a factory reset on each IP phone so the correct CTL file can be downloaded.

D. Press the Settings button on each IP phone, select the Security Configuration menu, and reset the trust list.

Answer: C

QUESTION 23

Your company has recently installed a Cisco Unified CallManager cluster and a Cisco Unity voice mail platform. You have received complaints from users that the red MWI light never comes on,

even when there are new voice-mail messages in the voice mailboxes. Which two steps must be taken to resolve this issue? (Choose two.)

A. Verify, using the Port Usage tool, that the ports dedicated to MWI on/off are not over-utilized. Add another dedicated port if the current port is over-utilized.

B. Verify that the MWI on/off numbers are unique within the Cisco Unified CallManager cluster dial plan. If they are not, change the MWI on/off numbers in the Cisco Unified CallManager cluster so they are unique and configure the Cisco Unity server so they match.

C. Ensure that the number of ports licensed for the Cisco Unity server is greater than or equal to the number of configured ports.

D. Verify that the calls are being sent to the correct ports on the Cisco Unity server. If they are being sent to the incorrect ones by the Cisco Unified CallManager cluster, correct the values in the cluster.

E. Verify that the same numbers are being used for MWI on/off in both the Cisco Unified CallManager cluster and Cisco Unity server. If they are different, change the Cisco Unity server to match the Cisco Unified CallManager cluster.

Answer: B, E

QUESTION 24

You have developed a dial plan for a Cisco United CallManager 5.0 solution. All the route patterns, partitions, calling search spaces, and translation rules have been configured. Before starting up the system you wish to test the dial plan for errors. Which Cisco United CallManager tool will simplify this testing?

- A. Dial Plan Installer
- B. RTMT Traces and Alarms
- C. Route Plan Report
- D. Dialed Number Analyzer

Answer: D

QUESTION 25

In order for a third-party SIP phone to register with a Cisco Unified CallManager cluster, which three configuration parameters must match between the phone and the cluster? (Choose three.)

- A. device pool B. DN
- C. username
- D. password
- E. MAC address
- F. SIP profile

Answer: B, C, E

QUESTION 26

You have configured an ISR at a branch office to register as an Enhanced IOS media resource providing transcoding services. The transcoder has not been placed into a media resource group. Which statement best describes which devices will be able to utilize this transcoder?

A. No devices will be able to utilize the transcoder until it is placed in a media resource group.

- B. Only devices at the branch office will be able to utilize the transcoder.
- C. Only devices configured to use G.729 will be able to utilize the transcoder.
- D. Only devices that have not been assigned an MRGL will be able to utilize the transcoder.

E. All devices will be able to utilize the transcoder.

Answer: E

QUESTION 27

You have configured the Enable Keep Alive check box under Trace Filter Settings. How does this change the trace output?

A. It adds TCP socket numbers between the endpoint and Cisco Unified CallManager for the session.

B. It maps the unique TCP handle for the endpoint to the MAC address of the endpoint in the trace output.

C. It adds the IP address of the endpoint in hex.

D. It adds the SCCP messages and all fields sent as part of that message.

Answer: B

QUESTION 28

You have just obtained a list of the following options: All Patterns Unassigned DN Call Park Conference Directory Number Translation Pattern Call Pickup Group Route Pattern Message Waiting Voice Mail Attendant Console What have you selected in order to produce this list?

- A. Control Center > Feature Services
- B. Dialed Number Analyzer
- C. Route Plan > Route Plan Report
- D. Route Plan > External Route Plan Wizard



Answer: C

QUESTI Refer to tl – Status –	ON 29 he exhibit.		
(i) Statu	s: Ready		
	esource Group Sta source Group: New	itus	
– Media R	esource Group Inf	ormation	
Name*	BRANCH		
Descriptio	in		
Available	for this Group Media Resources**		
1.		**	
Selected Media Resources*		CFB_2 CFB0012005FEEF1 MOH_2 ANN_2	×
Use M	ulticast for MOH Au	u dio (If at least one multicast MOH resource is ava	ailable)

You have received a trouble ticket that two engineers at the HQ site tried to conference at a user

location at the Branch site and the ad-hoc conference failed.

Further investigation reveals that the remote user can occasionally be conferenced in. Phones are configured to use G.711 for intra-site calls and G.729 for inter-site calls. All phones at the remote site are configured to use MRGL_Branch, which contains only the media resource group named BRANCH.

What should be done to correct this issue?

A. The software conference bridge CFB_2 should be removed from the Branch media resource group.

B. The hardware conference bridge CFB0012005FEEF1 should be listed first in the Branch media resource group so it is utilized if it is available.

C. Additional hardware conference resources should be added.

D. The number of sessions allowed per conference should be increased.

Answer: A

QUESTION 30

You have added a subscriber server to your Cisco Unified CallManager 5.0 cluster. The server is functioning properly, but regular updates from the publisher are failing. All other publishersubscriber communications are working properly in the cluster.

What is the problem?

A. the service isn't included in the current CTL client

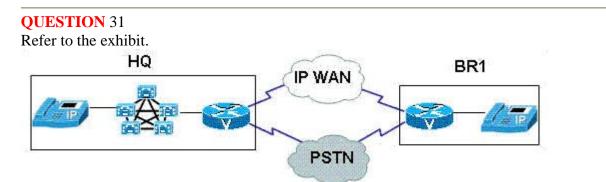
B. the correct username and password are not being applied in the subscriber

C. the Cisco Unified CallManager Administrator username and password have been changed in the publisher

D. the CTL client wasn't signed with the security token when the service was included in it

E. the MIC for the service needs to be included in the CTL client

Answer: B



A user at BR1 is on a call to the PSTN through the PRI interface on the local H.323 gateway. The IP WAN has just failed and the call has been dropped. What is causing the call to be dropped?

A. The H.323 gateway has lost the D channel on the PRI.

- B. SRST hasn't been configured on the BR1 gateway.
- C. The no h225 timeout keepalive command has not been configured on the gateway.
- D. The IP phone hasn't registered with SRST.

Answer: C

QUESTION 32

You have received a trouble ticket stating that an executive with an account at a bank cannot retrieve account information by phone. When the executive calls the bank, the call is answered and the executive is prompted to enter the account code. However, the bank does not seem to recognize the DTMF tones and disconnects the call.

What is a possible solution to this problem?

A. Configure the voice rip send-recv command in the gateway.

- B. Set the Cisco Unified CallManager service parameter ToSendH225UserInfoMsg to True.
- C. Configure the progress_ind setup enable 3 command under the gateway VoIP dial peer.
- D. Configure the progress_ind alert enable 8 command under the gateway POTS dial peer.

Answer: A

QUESTION 33

The following is a partial configuration of an access layer switch: mls qos map cos-dscp 0 8 12 16 28 32 40 48 mls qos !

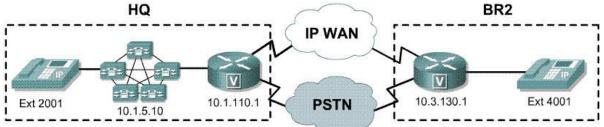
Voice bearer traffic will be set to use which per-hop behavior?

A. EF B. CS4 C. AF32 D. AF12 E. BE

Answer: B

QUESTION 34

Refer to the exhibit.



A trunk has been configured between the Cisco Unified CallManager cluster 10.1.5.10 and a CME at 10.3.130.1. During testing you find that calls cannot be completed when dialing from ext. 2001 to ext. 4001 or from ext. 4001 to ext. 2001. What is the issue that is preventing calls from being completed in either direction?

A. The h323-gateway voip bind srcaddr 10.3.130.1 command has been omitted from the BR2 configuration

B. A translation rule has been applied that is keeping the call from being completed

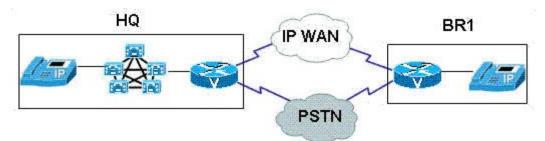
C. The CSS has been omitted from the trunk configured to BR2

D. An incorrect CSS has been applied to the gateway at HQ

E. The trunk IP address in the Cisco Unified CallManager Information field is incorrect

Answer: E

QUESTION 35 Refer to the exhibit.



A user is on a call to the PSTN through the MGCP gateway at BR1. The gateway and the IP phone lose the connection to the Cisco Unified CallManager cluster at HQ and the call is dropped. What is causing the call to be dropped?

A. The CallManager cluster has lost control of the D channel on the PRI gateway at BR1.

- B. SRST has not been configured on the BR1 gateway.
- C. The IP phone has not registered with SRST.
- D. The no h225 timeout keepalive command has not been configured on the gateway.

Answer: A

QUESTION 36

Which method can be used to correct database replication issues in a cluster running Cisco Unified CallManager 5.0?

- A. Enter the utils dbreplication repair command at the command-line prompt.
- B. Execute the dblhelper utility on the publisher.
- C. Use the SQL Server Enterprise Manager application to recreate the database subscription.
- D. Run the Cisco Unified CallManager BARS utility to restore the database to the subscriber.
- E. Use the Informix database utility to recreate the database subscription.

Answer: A

QUESTION 37

You have received a trouble ticket stating that users in accounting are not able to use the CFwdAll softkey to forward their calls to voice mail. Their phones continue to ring when they receive inbound calls, even after they have pressed the CFwdAll softkey and the Messages button. What is a possible cause of this issue?

- A. The users have not been enabled to use CTI.
- B. The users have not been associated with their phones.
- C. The voice-mail ports are not registered.
- D. There is a database replication issue with the subscriber the phones are registered to.
- E. The phones are not configured to use the standard phone template.

Answer: D

QUESTION 38

You have placed all DNs in the Phones partition. During testing you discover that you cannot

place calls between IP phones, but you can place calls to the PSTN and voice mail. What is one possible cause of this issue?

A. A database replication issue is preventing calls between phones.

- B. An access list is blocking RTP streams in your voice VLAN.
- C. An access list is blocking SCCP packets in your voice VLAN.

D. The IP phones have not been assigned a CSS.

Answer: D

QUESTION 39

You have received a trouble ticket stating that the MWI light is not coming on for a group of users. Further investigation reveals that the affected users are connected to the same subscriber in the cluster. Users that are connected to other subscribers in the same cluster are not experiencing this issue.

What is causing this problem?

A. The MWI numbers for this subscriber have been changed.

B. The Cisco Unity voice-mail services need to be restarted for the subscriber so all the users

will receive proper MWI message indication.

C. Database replication has an error or has failed.

D. The voice-mail ports assigned to the subscriber are down.

Answer: C

QUESTION 40

How does the echo canceller interpret a signal when the ERL value is too low?

A. The echo canceller treats the signal as echo and applies the configured values.

B. The echo canceller considers the signal returning to the gateway as comfort noise generated during periods of silence and does not act on it.

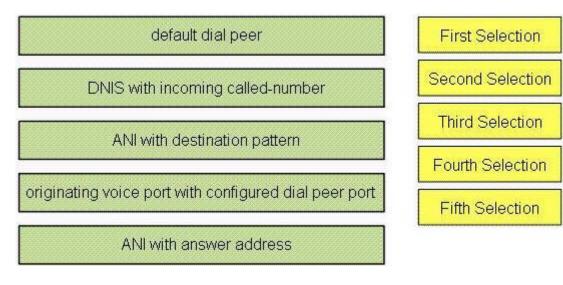
C. The echo canceller will apply the maximum echo-cancel coverage time to the signal to determine if this is echo or voice.

D. The echo signal retuning to the gateway is too loud and the echo canceller interprets it as normal voice instead of echo.

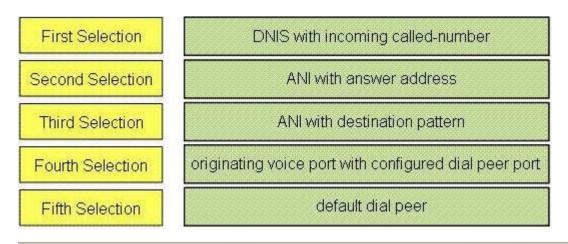
Answer: D

QUESTION 41

Click the matching criteria for inbound POTS calls on the left and drag them to the order of selection on the right.



Answer:



QUESTION 42

Three calls can successfully be made across a WAN link. When a fourth call is made, the quality of all four calls degrades. Which QoS mechanism can help avoid this problem?

A. CAC B. FRF.12 C. LFI D. LLQ E. priority queuing

Answer: A

QUESTION 43

Cisco CallManager 5.0 has just been deployed in two locations across a wide-area link. A distributed model with an intercluster trunk has been used. When you call an IP phone at the remote site the phone rings, but as soon as the other person picks up the phone, the call is dropped.

Where should you look to diagnose the problem?

A. locations

- B. system parameters
- C. media resource group
- D. Cisco Unified CallManager group
- E. Cisco Unified CallManager CTI traces

Answer: C

QUESTION 44

What are the two most common causes of echo? (Choose two.)

A. impedance mismatch at the two-wire to four-wire hybrid

- B. misconfigured tail circuits
- C. excessive packet loss
- D. signal reflection
- E. incorrect IP phone software loads

Answer: A, D

QUESTION 45

Echo is always present to some extent in all voice networks. For echo to be a problem, which three conditions must exist? (Choose three.)

A. analog leakage between analog Tx and Rx paths

- B. sufficient echo amplitude to be perceived as annoying
- C. sufficient power from the talker's side to cause listener echo
- D. sufficient delay in echo return for echo to be perceived as annoying
- E. an analog two-wire to four-wire hybrid operating below 600 ohm impedance

Answer: A, B, D

QUESTION 46

Refer to the exhibit.

```
BR1#deb isdn q931
  debug isdn q931 is
                                   ON.
  BR1#
 *Apr 23 05:08:36.464: ISDN se1/0:23 Q931: TX -> SETUP pd = 8 callref = 0x0002
          Bearer Capability i = 0x8090A2
                  Standard = CCITT
                  Transfer Capability = Speech
                  Transfer Mode = Circuit
                  Transfer Rate = 64 kbit/s
          Channel ID i = 0 \times A98397
                  Exclusive, Channel 23
          Calling Party Number i = 0x0181, '3002'
                  Plan: ISDN, Type: Unknown
          Called Party Number i = 0x80, '01133205551234'
                  Plan: Unknown, Type: Unknown
  *Apr 23 05:08:36.484: ISDN se1/0:23 Q931: RX <- RELEASE COMP pd = 8 callref = 0
  x8002
          Cause i = 0x82AC18 - Requested circuit/channel not available
```

BR1#

You have received a trouble ticket stating that calls to international numbers are failing. To place an international call, users dial the access code "9," followed by "011," the country code, and the destination number. After entering the debug isdn q931 command on the MGCP gateway, you have the user attempt the call again.

Based on the debug output, what is the most likely cause of this problem?

A. Cisco Unified CallManager is not stripping the access code before sending the call to the gateway.

B. The gateway dial peer needs to prefix "011 "to the called number so the PSTN knows this is an international call.

C. The user's CSS does not permit international calls.

D. The TON is incorrect.

E. The circuit is not configured correctly or has a physical layer issue.

Answer: E

QUESTION 47

You have received a trouble ticket from John Doe at extension 2001, which states that he cannot call a new employee who has been assigned extension 2005. When John Doe attempts to call 2005 he hears a message that his call cannot be completed as dialed. What is one possible cause of this issue?

A. The new employee's phone is not registered with Cisco Unified CallManager due to a physical cable or IP connectivity issue.

B. John Doe's CSS does not contain the partition assigned to extension 2005.

C. Extension 2005 was not assigned a partition.

D. A Cisco Unity voice-mail box has not yet been created for the new employee.

Answer: B

QUESTION 48

A company has migrated to a Cisco Unified CallManager IP Telephony system and is now replacing the existing voice-mail system with a Cisco Unity voice-mail system. A small group of users has been established to test the new voice mail system. The users were able to initialize their mailboxes and record greetings; however, during testing the callers were sometimes unable to leave voice-mail messages for Cisco Unity users.

Which two issues could cause this problem? (Choose two.)

A. There is a mismatch in the number of ports configured in Cisco Unified CallManager and Cisco Unity.

B. There is a mismatch in the MWI on/off numbers configured in Cisco Unified CallManager and Cisco Unity.

C. The call transfer call handlers are not configured correctly.

D. Cisco Unity is in a G.729 region and has not been configured to support G.729.

E. The hunt group is hunting to Cisco Unity ports that have been dedicated for message notification.

Answer: A, E

QUESTION 49

Which Cisco Unity troubleshooting tool would be used to diagnose problems with skinny and MWI messages?

A. Cisco Unity Performance Information and Diagnostics

B. Unity Diagnostic Tool

C. Integration Monitor

D. SysCheck

Answer: B

QUESTION 50

Your company has a centralized IP Telephony system and branch offices in eight major cities. The manager of your company help desk recently published local access numbers for external customers to reduce the costs associated with your company's toll-free 800 service. However, when customers call the new local numbers they hear a reorder tone instead of your centralized IVR.

What is the best solution to this issue?

- A. Deploy transcoders at each remote location.
- B. Deploy transcoders at the central location.
- C. Deploy Cisco Unified IP IVRs at each remote location.

D. Increase the number of ports in the centralized IVR.

Answer: B



QUESTION 51

```
Refer to the exhibit.
BR2#sh run | begin dial-peer
dial-peer voice 9 pots
  destination-pattern 9T
  port 1/0:1
BR2#
BR2#debug voice dialpeer
voip dialpeer default debugging is on
BR2#
 *Jul 20 03:42:06.478: //-1/802B59BE0500/DPM/dpAssociateIncomingPeerCore:
   Calling Number=3002, Called Number=9625432, Voice-Interface=0x0,
    Timeout=TRUE, Peer Encap Type=ENCAP VOIP, Peer Search Type=PEER TYPE VOICE,
   Peer Info Type=DIALPEER INFO SPEECH
 *Jul 20 03:42:06.482: //-1/802B59BE0500/DPM/dpAssociateIncomingPeerCore:
   Result=NO MATCH(-1) After All Match Rules Attempt
 *Jul 20 03:42:06.482: //-1/802B59BE0500/DPM/dpAssociateIncomingPeerCore:
   Calling Number=3002, Called Number=9625432, Voice-Interface=0x0,
    Timeout=TRUE, Peer Encap Type=ENCAP VOIP, Peer Search Type=PEER TYPE VOICE,
   Peer Info Type=DIALPEER INFO SPEECH
 *Jul 20 03:42:06.482: //-1/802B59BE0500/DPM/dpAssociateIncomingPeerCore:
   Result=NO MATCH(-1) After All Match Rules Attempt
 *Jul 20 03:42:06.486: //-1/802B59BE0500/DPM/dpMatchPeersCore:
   Calling Number=, Called Number=9625432, Peer Info Type=DIALPEER INFO SPEECH
 *Jul 20 03:42:06.486: //-1/802B59BE0500/DPM/dpMatchPeersCore:
   Match Rule=DP MATCH DEST; Called Number=9625432
 *Jul 20 03:42:06.486: //-1/802B59BE0500/DPM/dpMatchPeersCore:
   Result=Success(0) after DP MATCH DEST
 *Jul 20 03:42:06.486: //-1/802B59BE0500/DPM/dpMatchPeersMoreArg:
   Result=SUCCESS(0)
   List of Matched Outgoing Dial-peer(s):
      1: Dial-peer Tag=9
```

You have received a trouble ticket stating that calls to local PSTN numbers are failing. To place a call, Cisco Unified CallManager users dial the access code "9," followed by seven digits. After entering the debug voice dialpeer command on the H.323 gateway, you have the user attempt the call again.

Based on the debug output, what is the most likely cause of this problem?

A. The call is not matching an inbound dial peer resulting in a codec mismatch.

B. Cisco Unified CallManager is stripping the access code, resulting in only seven digits being sent to the gateway.

C. There is a physical layer issue with the circuit.

D. The gateway dial peer needs to prefix the access code to the called number.

Answer: B

QUESTION 52

You have received a trouble ticket stating that users are no longer hearing a second dial tone after pressing 9 to initiate an external call. The trouble ticket states that the second dial tone is played only after several additional digits are dialed. What is the mostly likely cause of this problem?

A. The Cisco Unified CallManager server is experiencing CPU spikes, causing a delay in playing

the second dial tone.

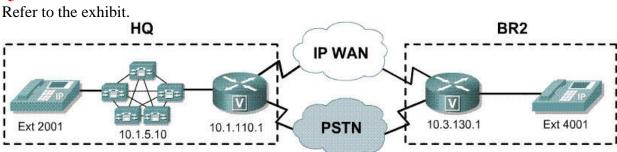
B. A route pattern beginning with the digit "9" has been added to the route plan without the Provide Outside Dial Tone check box selected.

C. A route pattern beginning with the digit "9" has been added to the route plan with the Call Classification parameter set to OnNet.

D. The first gateway in the route group is not available, causing a delay in playing the second dial tone while Cisco Unified CallManager queries the second gateway.

Answer: B

QUESTION 53



A trunk has been configured between the Cisco Unified CallManager cluster at 10.1.5.10 and a CME at 10.3.130.1. During testing you find that calls are completed when dialing from ext. 2001 to ext. 4001, but calls from ext. 4001 to ext. 2001 receive a fast busy. What is the issue that is preventing calls from ext. 4001 to ext. 2001 from being completed?

A. The h323-gateway voip bind srcaddr 10.3.130.1 command needs to be added to BR2

- B. A translation rule has been applied that is keeping the call from being completed
- C. The CSS has been omitted from the trunk configured to BR2
- D. An incorrect CSS has been applied to the gateway at HQ

E. The trunk IP address in the Cisco Unified CallManager Information field is incorrect

Answer: A

QUESTION 54

Which three capabilities cannot be configured if the default dial peer is matched? (Choose three.)

A. disable DID B. invoke a Tcl application C. enable dtmf-relay D. disable VAD

E. set codec to G.711 F. set preference to 1

r. set preference to

Answer: B, C, D

QUESTION 55 Refer to the exhibit.

```
BR1#deb isdn q931
debug isdn q931 is
                                ON.
BR1#
*Apr 23 05:41:07.828: ISDN se1/0:23 Q931: TX -> RELEASE pd = 8 callref = 0x0003
*Apr 23 05:41:07.840: ISDN se1/0:23 Q931: RX <- RELEASE COMP pd = 8 callref = 0
x8003[OK]
*Apr 23 05:41:16.368: ISDN se1/0:23 Q931: TX -> SETUP pd = 8 callref = 0x0004
        Bearer Capability i = 0x8090A2
                Standard = CCITT
                Transfer Capability = Speech
                Transfer Mode = Circuit
                Transfer Rate = 64 kbit/s
        Channel ID i = 0xA98381
                Exclusive, Channel 1
        Calling Party Number i = 0x0181, '3002'
                Plan: ISDN, Type: Unknown
        Called Party Number i = 0x80, '01133205551234'
                Plan: Unknown, Type: Unknown
*Apr 23 05:41:16.416: ISDN se1/0:23 Q931: RX <- CALL PROC pd = 8 callref = 0x80
04
        Channel ID i = 0xA98381
                Exclusive, Channel 1
*Apr 23 05:41:16.428: ISDN se1/0:23 Q931: RX <- DISCONNECT pd = 8 callref = 0x8
004
        Cause i = 0x82BE - Service not allowed
*Apr 23 05:41:16.468: ISDN se1/0:23 Q931: TX -> RELEASE pd = 8 callref = 0x0004
*Apr 23 05:41:16.484: ISDN se1/0:23 Q931: RX <- RELEASE COMP pd = 8 callref = 0
x8004
BR1#
```

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B. The gateway dial peer needs to prefix "011" to the called number so the PSTN knows this is an international call.

C. The user's CSS does not permit international calls.

D. The TON is incorrect.

E. The circuit is not configured correctly or has a physical layer issue.

Answer: D