Exam : **642-425**

Title **:** **IP Telephony Troubleshooting**

Ver **:** **10.08.07**

QUESTION 1:

AN outsourcing IT firm has come in to review operations for all SQL server machines in an organization. They request, and are allowed to change all usernames and passwords for security purposes. After they leave, replication fails.
What is the most likely problem?

A. CCMAcct username mismatch
B. CCMSvc password mismatch
C. SQLSvc password mismatch
D. SQLRpl username mismatch

Answer: C

Explanation: The SQLSvc account is the core account used for server-to-server interaction within a Cisco CallManager system. This account must be the same on every machine in the cluster for database replication to work properly. If the SQLsvc password has been changed on the publisher from the installed default, replication of the publisher database will fail when a new subscriber is added.If replication has failed, change the new subscriber's SQLsvc service password to match the SQLsvc password on the publisher, and replication should succeed.

QUESTION 2:

Which CTI device allows queuing of calls to an unlimited depth?

A. hunt group
B. route point
C. peer
D. port

Answer: B

QUESTION 3:

You have recently installed a new Catalyst 3524-PWR switch in an IDF to increase the number of IP phones for a department. The IP phone for an office receives power but cannot communicate with the CallManager. The department uses VLAN 16 for data and VLAN 160 for voice. From the given show running-configuration command there are multiple problems. How can the communication problem with the CallManager be resolved?
Dept16SW2#show running.-configuration
!
!
output omitted

!
interface FastEthernet 0/6
switchport trunk encapsulation dot1q
switchport trunk native vlan 16
switchport mode trunk
switchport voice vlan 169
spanning-tree uplinkfast
switchport priority extend none
!
end

A. Change the voice VLAN to 160.
B. Change the switchport trunk encapsulation type to ISL.
C. Configure the port as an uplink to another switch configured for uplinkfast.
D. Change the incorrect switchport priority extend none command to switchport priority extend trust to extend the trust boundary to the IP phone.

Answer: A

QUESTION 4:

You have a centralized IP Telephony system with branch offices in eight major cities. The manager of your company help desk recently published local access numbers for external customers to reduce the cost associated with your company's toll-free 800 service. When customers call the new local numbers they hear a reorder tone instead of your centralized IP-IVR.
What is the best solution to this issue?

A. Deploy transcoders at the central location.
B. Deploy transcoders at each remote location.
C. Modify Region configuration to allow G.711 across the WAN.
D. Deploy IP-IVRs to each remote location.

Answer: A

QUESTION 5:

The operation of an existing network is severely degraded,
Assign the appropriate severity level as defined by the TAC Case Severity Definition.

A. S2 upgraded to S1
B. S4 upgraded to S1
C. S1 downgraded to S2
D. S3 downgraded to S4
E. S3 upgraded to S2

Answer: E
Cisco IP Solution Center Documentation Guide, 3.2
TAC Case Priority Definitions
To ensure that all cases are reported in a standard format, Cisco has established case
priority definitions.
Priority 1 (P1)-Your network is "down" or there is a critical impact to your business
operations. You and Cisco will commit all necessary resources around the clock to
resolve the situation.
Priority 2 (P2)-Operation of an existing network is severely degraded, or significant
aspects of your business operation are negatively affected by inadequate performance of
Cisco products. You and Cisco will commit full-time resources during normal business
hours to resolve the situation.
Priority 3 (P3)-Operational performance of your network is impaired, but most business
operations remain functional. You and Cisco will commit resources during normal
business hours to restore service to satisfactory levels.
Priority 4 (P4)-You require information or assistance
http://www.cisco.com/en/US/partner/products/sw/netmgtsw/ps4748/products_documentation_roadmap09186a0
0

QUESTION 6:

DRAG DROP
Drag the Cisco recommended troubleshooting model step to its appropriate
location.

Gather all relevant facts.
Define the problem clearly and understandably.
Create an action plan
Observe the reults or the Implemented action.
Consider the likely possibilities.
Implement the action plan.
If unsuccessful, undo changes, try another action plan.
If the problem stops, document the solution.

Step 1
Step 2
Step 3
Step 4
Step 5
Step 6
Step 7
Step 8

Answer:

Define the problem clearly and understandably.
Gather all relevant facts.
Consider the likely possibilities
Create an action plan
Implement the action plan.
Observe the results of the implemented action.
If unsuccessful, undo changes, try another action plan.
If the problem stops, document the solution.

QUESTION 7:

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. An analog 2-wire to 4-wire hybrid operating below a 600 ohm impedance.
B. Analog leakage between analog Tx and Rx paths.
C. Sufficient delay in echo return for echo to be perceived as annoying.
D. Sufficient echo amplitude to be perceived as annoying.
E. Sufficient power from the talker's side to cause listener echo.

Answer: B, C, D
Troubleshooting Echo Problems between IP Phones and IOS Gateways
Document ID: 19640
Echo is perceived as annoying when all of the following conditions are true:
* Signal leakage between analog Tx and Rx paths
* Sufficient delay in echo return
* Sufficient echo amplitude
http://www.cisco.com/en/US/partner/tech/ck652/ck698/technologies_tech_note_09186a0080149a1f.shtml

QUESTION 8:

The outbound access code from the CallManager is not being stripped. The
following configurations are set:
Route Pattern / Hunt Pilot Configuration
Discard Digits = PreDot
Route / Hunt List Detail
Discard Digits to NoDigits
What is the most likely solution?

A. Set Called Party Transformations under Route / Hunt List Detail to PreDot.
B. Set Calling Party Transformations under Route / Hunt List Detail to <NONE>.
C. Set Called Party Transformations under Route Pattern to NoDigits Change.
D. Set Calling Party Transformation under Route Pattern to <NONE>.

Answer: A

QUESTION 9:
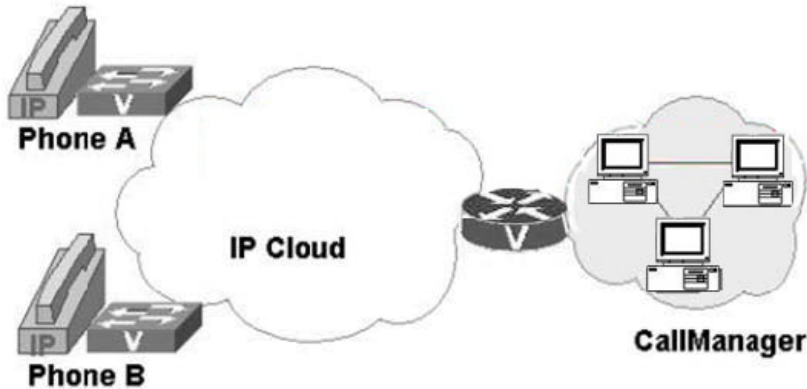
IP Phone A can make calls to some but not all phones. Phone A cannot call Phone B.
The following is the extended ping output from the router interface on the
CallManager subnet to the Phone B subnet.
ping 172.16.1.45
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.16.1.45, timeout is 2 seconds:.!.!
Success rate is 40 percent (2/5)
What does this output indicate?

A. CallManager has a good IP path to Phone B.
B. The IP path from CallManager to Phone B has a 20% packet loss problem.
C. The IP phone is turned off, but the switch port it connects to is accessible via IP.
D. Multiple equal cost paths exist from CallManager to Phone B, and one is currently
unusable.

Answer: D
From the PING result , we could deduce that there are multiple paths to phone B and one
of them are not down. This is also the reason why Phone A can't ring phone B.
If the PING result is 100%, then the answer is A.

QUESTION 10:

What task should be completed before enabling CCM trace files in a CallManager
cluster?

A. Configure NTP on all CallManagers.
B. Configure XML Formatted Output for Trace Analysis.
C. Install the Trace Collection Tool Plugin.
D. Configure a share drive on the publisher to store the trace files.

Answer: A

QUESTION 11:

You have received a trouble ticket for a recently installed MGCP gateway. It
appears that under testing the gateway, it is not switching to the secondary call

agent when the primary call agent is unreachable. Use the following configuration output to resolve the problem:
!
mgcp
mgcp call-agent 10.1.44.4 2427 service-type mgcp version 1.0
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
!
ccm-manager mgcp
ccm-manager config server 10.1.44.7
ccm-manager config
!
What command needs to be added to this configuration to allow the MGCP gateway to use a different call agent if the primary fails?

A. ccm-manager fallback-mgcp
B. ccm-manager switchback
C. ccm-manager switchover-to-backup
D. ccm-manager redundant-host

Answer: D
ccm-manager redundant-host
To configure the IP address or the Domain Name System (DNS) name of one or two backup CiscoCallManager servers, use the ccm-manager redundant-host command in global configuration mode. To disable the use of backup Cisco CallManager servers as call agents, use the no form of this command.
ccm-manager redundant-host {ip-address | dns-name} [ip-address | dns-name]
no ccm-manager redundant-host {ip-address | dns-name} [ip-address | dns-name]
Syntax Description

ip-address	IP address of the backup CiscoCallManager server.
dns-name	DNS name of the backup CiscoCallManager server.

Defaults
If you do not configure a backup CiscoCallManager, the redundancy is disabled.
Command Modes
Global configuration
Command History

Release	**Modification**

12.1(3)T	This command was introduced with CiscoCallManager Version3.0 and the CiscoVoiceGateway200 (VG200).
12.2(2)XA	The command was implemented on Cisco2600 series and Cisco3600 series. The _DNS-name argument was added.
12.2(4)T	The command was integrated into Cisco IOS Release 12.2(4)T.
12.2(2)XN	Support for enhanced MGCP voice gateway interoperability was added to Cisco CallManager Version3.1 for the Cisco2600 series, 3600 series, and the CiscoVG200.
12.2(11)T	This command was integrated into the Cisco IOS Release 12.2(11)T and Cisco CallManager Version 3.2 and implemented on the Cisco IAD2420 series routers.

Usage Guidelines

You can configure one or two backup CiscoCallManager servers. The list of IP addresses or DNS names is an ordered and prioritized list. The CiscoCallManager server that was defined with the mgcp call-agent command has the highest priority (that is, it is the primary CiscoCallManager server). The gateway selects a CiscoCallManager server on the basis of the order of its appearance in this list.

Examples

In the following example, the IP address of the backup CiscoCallManager is 10.0.0.50:
ccm-manager redundant-host 10.0.0.50
http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/122newft/122tcr/122tvr/vrg_c2.htm#wp10957

QUESTION 12:

Following is a partial configuration of an access layer switch:
mls qos map cos-dscp 0 8 12 16 28 32 40 46
mls qos
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
switchport trunk encapsulation dot1q
switchport mode trunk
no ip address
wrr-queue cos-map 1 6 7
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 20
no ip address
mls qos trust device cisco-phone
mls qos trust cos
wrr-queue cos-map 1 6 7
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
wrr-queue cos-map
Use the wrr-queue cos-map global configuration command to assign class of service (CoS) values to the
CoS priority queues. Use the no form of this command to return to the default settings.
wrr-queue cos-map quid cos1...cosn
no wrr-queue cos-map [queue-id [cos1 ... cosn]]
Command Modes Global configuration
Usage Guidelines CoS assigned at the ingress port is used to select a CoS priority at the egress port.
Examples This example shows how to map CoS values 0, 1, and 2 to CoS priority queue 1, value 3 to CoS priority
queue 2, values 4 and 5 to CoS priority 3, and values 6 and 7 to CoS priority queue 4:
Switch(config)# wrr-queue cos-map 1 0 1 2
Switch(config)# wrr-queue cos-map 2 3
Switch(config)# wrr-queue cos-map 3 4 5
Switch(config)# wrr-queue cos-map 4 6 7
This example shows how to map CoS values 0, 1, 2, and 3 to CoS priority queue 2:
Switch(config)# wrr-queue cos-map 2 0 1 2 3
quid The queue id of the CoS priority queue. The range is 1 to 4 where 1 is the lowest CoS priority queue.
cos1...cosn The CoS values that are mapped to the queue id.
CoS Value CoS Priority Queues
0, 1 1

2, 3 2
4, 5 3
6, 7 4
Release Modification
12.0(5.2)WC(1) This command was introduced.
12.1(12c)EA1 CoS values were added to the no form of this command.
http://www.cisco.com/application/pdf/en/us/guest/products/ps628/c2001/ccmigration_09186a00804760c6.pdf

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QUESTION 13:

You recently added a Cisco Unity voice mail server to your Cisco CallManager IP
telephony solution. Your users are receiving voice mails, but the MWI light does not
go off after they have listened to all of their new voice mail messages.
What must be verified and possibly modified to resolve this issue?

A. Use the Port Usage tool to verify 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 "off directory number" has been configured on both the Cisco
Unity server and the Cisco CallManager cluster.
If it has not been configured, configure it on both the Cisco Unity server and Cisco
CallManager cluster.
C. Verify the number of ports licensed for the Cisco Unity server as 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 the configured ports are incorrect on the CallManager cluster, change the values on the
cluster to be correct.

Answer: B
Cisco Unity Troubleshooting Guide, Release 3.1(3)
Message Waiting Indicators
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/prod_troubleshooting_guide_chapter09186a
0

QUESTION 14:

A new Cisco Unity voice mail system is being tested. The calls are being forwarded
to voice mail from the Automated Attendant console, but the callers are receiving
the wrong greeting.
What could be the problem?

A. The call routing rules are not working properly.
B. The mailbox under test is full.
C. The Unity ports for sending and receiving voice mails are not configured properly.
D. The Microsoft Exchange server has rejected the call due to a corrupted database.

Answer: A
Note: Uncertainty
There a quite a few references to A being true too, so hard to tell what Cisco actually
believes the answer for the test is....

QUESTION 15:

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

A. Acoustic feedback from speaker phones.
B. Impedance mismatch at the 2-wire to 4-wire hybrid.
C. Misconfigured tail circuits.
D. Signal reflection.
E. IP phone software loads.

Answer: A, B
There are two type of echo, electrical echo (including impedance mismatch) and
acoustical echo (including acoustical coupling from the handset.
Troubleshooting Echo Problems between IP Phones and IOS Gateways
Document ID: 19640
Introduction
This document describes how to troubleshoot and eliminate echo where possible in IP Telephony networks with Cisco
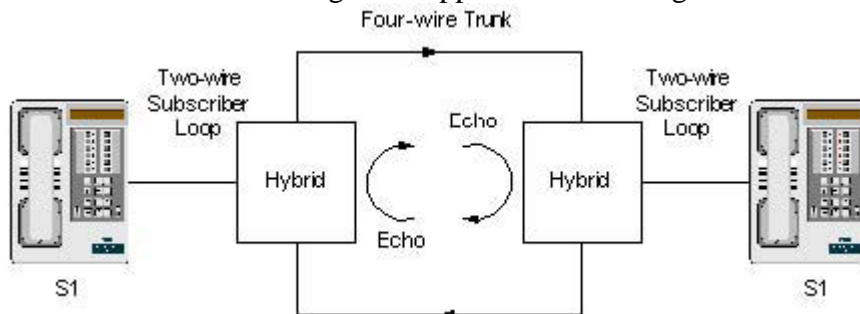IOS(r) gateways.
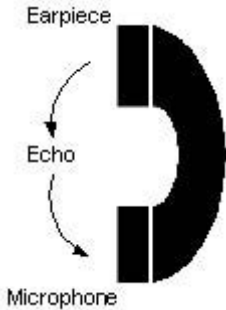There are two sources of echo:
* Hybrid echo
* Acoustic echo
Hybrid echo is caused by an impedance mismatch in the hybrid circuit, such as a two-wire to four-wire
interface. This
mismatch causes the Tx signal to appear on the Rx signal.

Acoustic echo is caused by poor acoustic isolation between the earpiece and the microphone in handsets and
hands-free devices.

Earpiece
Echo
Microphone

http://www.cisco.com/en/US/partner/tech/ck652/ck698/technologies_tech_note_09186a0080149a1f.shtml
Not D: Signal reflection is a consequence of impedance mismatch.

QUESTION 16:

Which unity troubleshooting tool would be used to diagnose problems with skinny and MWI?

A. trace tool
B. configuration tool
C. diagnostic tool
D. maestro tool

Answer: C
Cisco Unity Troubleshooting Guide (With Lotus Domino), Release 4.0(1)
CiscoUnity Diagnostic Tool
The CiscoUnity Diagnostic Tool allows creating and viewing of diagnostic log files to troubleshoot problems. It replaces the diagnostic log functionality in Maestro Tools, and allows the system administrator or TAC staff to selectively run diagnostic traces at two levels:
1. Macro Traces-These are collections of component traces that help diagnose problems such as message waiting indicator and system problems.
2. Micro Traces-These are the component traces. Each component has up to 32 trace levels that can be individually selected.
The CiscoUnity Diagnostic Tool also allows the system administrator or TAC staff to perform the following tasks:
1. Create new log files on demand. This makes troubleshooting problems easier. When a problem can be reproduced reliably, the system administrator can close all existing log files and create new log files prior to reproducing the problem. This eliminates many unnecessary and unrelated items from the logs.
2. Configure log settings. The system administrator can adjust the maximum disk space allowed for all diagnostic log files. (The default setting is 400 MB.) The Logging Properties screen also allows the system administrator to disable all diagnostic output by clearing the Diagnostic Output check box.
3. Gather standard logs. This option provides the ability to quickly gather all or selected Microsoft Windows and CiscoUnity logs.
4. Disable all traces. This is a quick way to return diagnostic logs to their default settings after troubleshooting efforts are complete.

5. View the Event log. The Event log files for either the local computer or another computer can be viewed and exported.

6. Change the display language for Windows Event log messages that are generated by Cisco Unity. This is a temporary change and is only in effect while the Cisco Unity Diagnostic Tool is running.

QUESTION 17:

Following a partial configuration of an access layer switch:
mls qos map cos-dscp 0 8 12 16 28 32 40 46
mls qos
!
Voice bearer traffic will be set to which per hop behavior?

A. ef
B. cs4
C. af32
D. af12
E. be

Answer: B
mls qos map
To define the multilayer switching (MLS) class of service (CoS)-to-differentiated services code point (DSCP) map or DSCP-to-CoS map, use the
mls qos map command in global configuration mode. To return to the default map, use the no form of this command.
mls qos map {cos-dscp dscp1...dscp8 | dscp-cos dscp-list to cos}
no mls qos map {cos-dscp | dscp-cos}
Syntax Description

cos-dscp dscp1...dscp8	Defines the CoS-to-DSCP map. For dscp1...dscp8, enter eight DSCP values that correspond to CoS values 0 to 7. Separate consecutive DSCP values from each other with a space. The supported DSCP values are 0, 8, 10, 16, 18, 24, 26, 32, 34, 40, 46, 48, and 56.
dscp-cos dscp-list to cos	Defines the DSCP-to-CoS map. For dscp-list, enter up to 13 DSCP values separated by spaces. Then enter the to keyword. The supported DSCP values are 0, 8, 10, 16, 18, 24, 26, 32, 34, 40, 46, 48, and 56. For cos, enter the CoS value to which the DSCP value or values correspond. The CoS range is 0 to 7.

Defaults
Table 1 shows the default CoS-to-DSCP map.

Table1 Default CoS-to-DSCP Map							
CoS Value	0	1	2	3	4	5	6	7
DSCP Value	0	8	16	26	32	46	48	56

Table 2 shows the default DSCP-to-CoS map.

Table2 Default DSCP-to-CoS Map							
DSCP Values	0	8, 10	16, 18	24, 26	32, 34	40, 46	48	56
CoS Value	0	1	2	3	4	5	6	7

http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cr/hlsw_r/lan_a1h.htm#wp1111205

QUESTION 18:

You have recently installed IP Phones on a centralized model. At a remote branch using a H.323 gateway, users are complaining they cannot call some internal numbers. After dialing the last digit, they get a reorder tone.
What is the most likely cause?

A. Partition/CSS configuration issue
B. Gateway dial-peer configuration issue
C. Codec mismatch
D. Call Admission Control

Answer: D
In centralized processing environment, the locations feature in Cisco CallManager lets you specify the maximum amount of audio bandwidth (for audio calls) that is available for calls to and from each location.
This limits the number of active calls and limits oversubscription of the bandwidth on the IP WAN links. If any additional calls try to exceed the bandwidth limit, the system rejects them, the calling party receives reorder tone, and a text message displays on the phone.

QUESTION 19:

The default configuration of dial peer 0 will fail to set which three of the following?
(Choose three)

A. DID
B. Toolkit Command Language (TCL) applications
C. Non-default voice-network capabilities: dtmf-relay, vad, and other commands

D. ANI with answer address
E. DNIS with incoming called number

Answer: A, B, C

Explanation:
If no incoming dial-peer is matched by the router or gateway, the inbound call leg is automatically routed to a default dial peer (POTS or Voice-Network). This default dial peer is referred to as dial-peer 0. Dial-peer 0 has a default configuration that cannot be changed. The default dial-peer 0 fails to negotiate non-default capabilities, services, and applications such as: (a) Non-default Voice-Network capabilities: dtmf-relay, no vad, so forth, and so on. (b) Direct Inward Dial (DID) (c) TCL Applications

QUESTION 20:

An 802.1Q trunk is configured with mismatched native VLANs.
What is the most likely symptom?

A. Communication over the link occurs in one direction only.
B. Spanning Tree Protocol is disabled for all VLANs in the trunk.
C. The switch port is shut down and displays a port status of errDisable.
D. Layer 2 CoS markings are not mapping correctly to layer 3 QoS markings.

Answer: D
As 802.1Q header(which contains CoS marking information) is not added when the data is sent on the Native VLAN , the mismatch in native VLAN configuration in both end of trunk cause the loss of CoS information when packets leaving trunk.
Not C: Mismatched native VLAN in 802.1q trunk configuration is not the cause of switch port errDisable.

QUESTION 21:
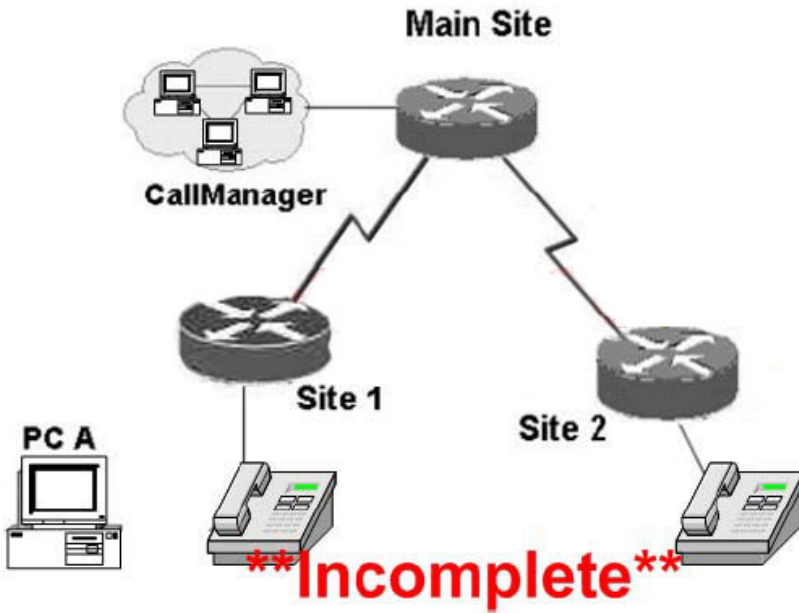
permit tcp any any eq 2000
permit icmp any any echo-reply
!
ip route 0.0.0.0 0.0.0.0 192.168.12.1
Pinging Phone B from PC A yields the following:
ping 172.16.6.4
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.16.6.4, timeout is 2
seconds:
.....
Success rate is 0 percent (0/5)
What is a likely cause of the problem?

A. There is no IP route to Phone B.
B. There is no IP route to the CallManager.
C. Access list 101 will not permit PC A to ping Phone B.
D. Access list 101 will not permit the IP phones to communicate with each other.

Answer: D

QUESTION 22:

Which two operations does this RTM screen display show? (Choose two)

A. A phone registering.
B. A call in process.
C. A phone removed from the network.
D. A call disconnecting.

Answer: A, C

QUESTION 23:

The Event Viewer Application Log on the Cisco CallManager subscriber initially showed device SEP000F223984410 unregistered with a Reason Code of 9. It is now registered back to the Cisco CallManager subscriber.
What was the possible cause?

A. The IP Phone lost its keepalive after 90 seconds.
B. The Catalyst switch reset.
C. The device name was unknown.
D. The Cisco CallManager initiated a reset.

Answer: D
The following event logs relate specifically to Cisco CallManager.

* Error Message: %CCMCALLMANAGER-CALLMANAGER-3-CallManagerFailure:
Indicates some failure within the Cisco CallManager system.
Explanation - This alarm indicates that some failure occurred in the Cisco CallManager system. Look at the Reason
Code of the error message for more information.
Recommended Action - Monitor for other alarms and restart the Cisco CallManager service, if necessary.
This table displays the Enum definitions and reason codes.

Value	Definition
1	Unknown
2	HeartBeatStopped
3	RouterThreadDied
4	TimerThreadDied
5	CriticalThreadDied
6	DeviceMgrInitFailed
7	DigitAnalysisInitFailed
8	CallControlInitFailed
9	LinkMgrInitFailed
10	DBMgrInitFailed
11	MsgTranslatorInitFailed
12	SuppServiceInitFailed

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/products_tech_note09186a0080111ac2.shtml
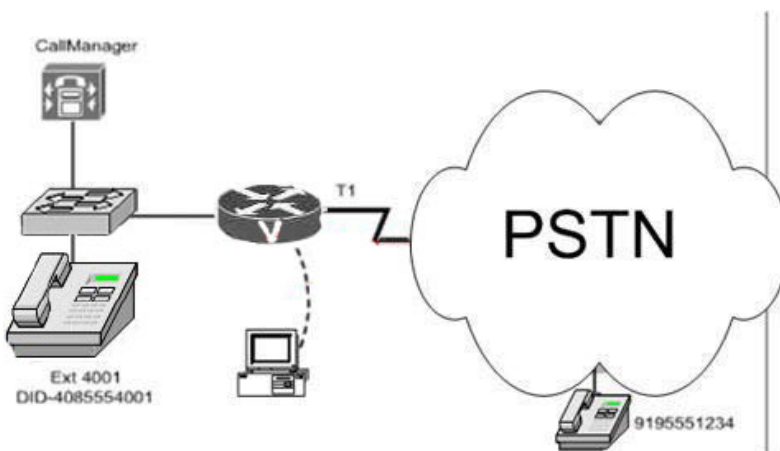

QUESTION 24:
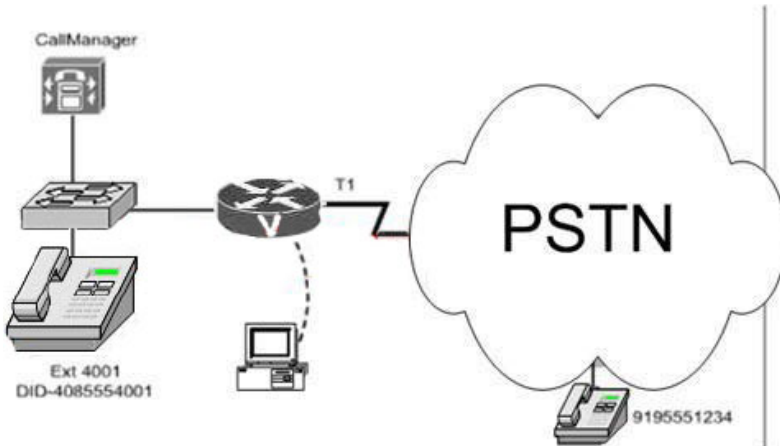
A Cisco CallManager installation is unable to connect to the PSTN. Calls cannot be placed or received on the T1 circuit. You have verified that the Cisco CallManager is correctly configured. Determine that root causes of the problem by using appropriate debug and show commands.
Which of the following will correct the issue with outbound calls from IP Phone 4001 to 9195551234?

A. Change the destination-pattern for dial-peer 1 to 91[2-9]..[2-9]......
B. Add prefix 1 to dial-peer 1 configuration to send the expected digits o the PSTN.
C. Add the commands direct-inward-dial to dial-peer 1.
D. Configure clocking on controller T1 2/0 to connect physical layer issue.
E. Change the destination-pattern for dial-peer 5 to 14085554...

Answer: A

QUESTION 25:

A Cisco CallManager installation is unable to connect to the PSTN. Calls cannot be placed or received on the T1 circuit. You have verified that the Cisco CallManager is correctly configured. Determine that root causes of the problem by using

appropriate debug and show commands.
Calls from PSTN (9195551234) to IP Phone (14085554001) get dial-tone after
entering the digits instead of ringing phone 4001.
Which of the following will correct this issue?

A. Change the destination-pattern for dial-peer 5 to 14085554...
B. Add the command translate-outgoing called 1 under dial-peer 5.
C. Add the command direct-inward-dial to dial-peer 1.
D. Configure clocking on controller T1 2/0 to correct physical layer issue.
E. Change the destination-pattern for dial-peer 1 to 91[2-9]..[2-9]......

Answer: C

QUESTION 26:

Refer to the exhibit. Directory Number 1001 reports they cannot use conferencing.
They are set to use hardware conferencing.
Which factor is most likely the issue?

A. The Directory Number needs to belong to a Media Resource Group List other than
<None>.
B. The Cisco IP phone needs to belong to a Media Resource Group List other than
<None>
C. The Media Resource Group List needs to be assigned to the Partition as the Directory
Number.
D. The Media Resource Group List must be assigned a Media Resource Group.

Answer: B
Media Resource Group and Media Resource Group List Configuration Checklist
The table provides a checklist to configure media resource groups and media resource
group lists.
Media Resource Group/Media Resource Group List Configuration Checklist

Configuration Steps		Procedures and Related Topics
Step 1	Create a media resource group.	Media Resource Group Configuration, *Cisco CallManager Administration Guide*
Step 2	Assign device to the media resource group. (Order has no significance.)	Media Resource Group Configuration, *Cisco CallManager Administration Guide*
Step 3	Create a media resource group list. (Order has significance.)	Media Resource Group List Configuration, *Cisco CallManager Administration Guide*
Step 4	Assign a media resource group to a media resource group list.	Media Resource Group List Configuration, *Cisco CallManager Administration Guide*
Step 5	Assign a media resource group list to a device or device pool.	Device Defaults Configuration, *Cisco CallManager Administration Guide* Device Pool Configuration, *Cisco CallManager Administration Guide*

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/products_administration_guide_chapter09186
a

QUESTION 27:

On a Cisco CallManager Subscriber, a red X appears in the Jobs folder next to a
replication job name.
Which tool will Cisco TAC use to restore proper replication?

A. DBRepair
B. DBSync
C. DBHelper
D. DBPublish

Answer: C

Search Result	
Solution #	K21227410
Title	Cisco CallManager database replication errors and other database corruptions identified by CallManager upgrade assistant utility database replication validation before an upgrade to CallManager version 3.3
Core Issue	Several issues that generally center on database replication can be uncovered after running the Cisco CallManager upgrade assistant utility prior to a CallManager 3.3(3) upgrade. For example, the upgrade assistant may report that there was a database replication problem between the Publisher and Subscriber in a Cisco CallManager 3.3(2) Service Pack B environment with a `Cisco CallManager Database Replication Status: Validation failed.` error message. The Dbhelper utility can be used to overcome some of these corruptions. Specifically, it is a wrapper of the ActiveX Data Object (ADO) database class that can be used with stored procedures and Structured Query Language (SQL) statements. It is useful when there are problems with replication, subscription or other types of database corruptions.
Resolution	To use Dbhelper, perform these steps: 1. Install the Dbhelper utility in the C:\program files\cisco\bin directory and run it from there. For information on how to obtain DBLHelper, refer to Reestablish the Relationship Between Publisher and Subscriber Using DBLHelper. 2. Select **Republish**. The Dbhelper tool attempts to fix the database corruptions. Dbhelper can also look into name resolution problems and report if there are issues with the name resolution scheme on a network. If the stored routines do not work, and a more hands-on approach to establishing subscriptions is needed, refer to these documents: • Reestablishing a Broken Cisco CallManager Cluster SQL Subscription with CallManager 3.0, 3.1 and 3.2 • Reestablishing a Broken CallManager Cluster SQL Subscription with Cisco CallManager 3.3
Problem Type	Ask a how to ... question, Call control software (CallManager, CallManager Express, ICS7750, SRST, SS7 call agents)
Call Control	CallManager
CallManager Features	Database
How to ...	How to ... CallManager database
Failure Type	Incorrect information: Wrong, mismatched, unsynchronized version, message, time, statistics, results, database, language, text, etc., Corruption
CallManager Errors	Cisco CallManager Database Replication
CallManager Versions	CallManager 3.3, CallManager 3.0, CallManager 3.2, CallManager 3.1
CallManager Database	Database replication
Voice Applications	CallManager upgrade assistant utility
CallManager Upgrade Assistant Utility Components	Database replication validation
Direct URL	http://www.ciscotacccc.com/voice/showcase?case=K21227410

QUESTION 28:

Following is a partial configuration of an access layer switch:
mls qos map cos-dscp 0 8 12 16 28 32 40 46
mls qos
!
Voice bearer traffic will be set to which dscp value?

A. 46
B. 32
C. 28
D. 12

E. 0

Answer: B

Explanation: As the CoS value for voice bearer traffice is 5 , this correspond to the 6th
value (that is 32) in the configuration.
Note: CoS is a 3 bit information in Layer 2 header for customizing network traffic.

QUESTION 29:

What happens if CDP is not enabled on a switch port where 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 cannot include the voice VLAN in the uplink trunk.
E. The switch will put the port into the errDisable state until CDP is enabled.

Answer: B

Explanation:
After IP Phone receives power from switch(capable of providing inline power) and
boots up, the switch sends a CDP packet to the IP phone which contains voice VLAN
information. Next, the IP phone broadcasts a request to a DHCP server. The DHCP
server responds to the IP phone with a minimum information of an IP address, a subnet
mask, and the IP address of Cisco TFTP server.

QUESTION 30:

Your customer has implemented an MCU to allow conferencing between VT
Advantage users. The MCU 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 partition/CSS configuration is preventing video setup.
B. The MRGL configuration is selecting incorrect conference resource.
C. The region configuration is selecting incorrect codec.
D. The location configuration is preventing video setup.

Answer: D
Video Codec conversion is not required. The most probable cause is the answer D :
Location configuration is preventing video setup If video bandwidth is set to none on
location ... We get this result.

QUESTION 31:

How does the IP helper-address command assist in an IP phone with its
configuration?

A. Required because each VLAB is a separate broadcast domain.
B. Modifies the directed broadcast sent out by the IP phone to assist in locating the DNS
server.
C. Assist the DHCP server in locating the subnet the IP phone resides in.
D. Modifies the IP phone DHCP broadcast to a unicast so the request can be routed to
other subnets.

Answer: D

QUESTION 32:

A Cisco CallManager installation has just switched to Active Directory. One of the
CTI services no longer functions.
What is the most likely problem?

A. The CTI server is not authenticating on the PDC.
B. The CTI service user is not valid in Active Directory.
C. The CTI service is not recognized as an Active Directory service.
D. The CTI server is not running Active Directory.

Answer: B

QUESTION 33:

A gateway attempts to match the following inbound dial peers:
The called number (DNIS) with the incoming called number.
The calling number (ANI) with answer address.
The calling number (ANI) with destination address.
The configured dial peer port to the voice port.
If none of these dial peers can be matched, which dial peer is selected?

A. The first dial peer configured.
B. The dial peer with the longest match.
C. The default dial peer.
D. The incoming called-number portion of the dial peer.

Answer: C
Inbound Dial Peers Matching Process
When the Cisco IOS router or gateway receives a call set-up request, a dial-peer match is made for the incoming
call in
order to facilitate routing the call to different session applications. This is not a digit-by-digit match, rather the

full
digit string received in the set-up request is used to match against configured dial peers.
The router or gateway matches the information elements in the set-up message with the dial peer attributes to select an
inbound dial peer. The router or gateway matches these items in this order:
1. Called number (DNIS) with incoming called-number
First, the router or gateway attempts to match the called number of the call set-up request with the configured incoming
called-number of each dial-peer. Since call setups always include DNIS information, it is recommended to use the
incoming called-number command for inbound dial peer matching. This attribute has matching priority over
answer-address and destination-pattern.
2. Calling Number (ANI) with answer-address
If no match is found in step 1, the router or gateway attempts to match the calling number of the call set-up request
with the answer-address of each dial-peers. This attribute may be useful in situations where you want to match calls
based on the calling number (originating).
3. Calling Number (ANI) with destination-pattern
If no match is found in step 2, the router or gateway attempts to match the calling number of the call set-up request to
the destination-pattern of each dial-peer. For more information about this, refer to the first bullet in the Dial Peer
Additional Information section of this document.
4. Voice-port (associated with the incoming call set-up request) with configured dial peer port (applicable for inbound
POTS call legs)
If no match is found in the step 3, the router or gateway attempts to match the configured dial-peer port to the
voice-port associated with the incoming call. If multiple dial-peers have the same port configured, the dial-peer first
added in the configuration is matched.
5. If no match is found in the first four steps, then default dial peer 0 (pid:0) is used.
http://www.cisco.com/en/US/partner/tech/ck652/ck90/technologies_tech_note09186a008010fed1.shtml

QUESTION 34:

Cisco CallManager 4.0 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. system parameters
B. media resource group
C. locations
D. CallManager group

E. CallManager CTI traces

Answer: B

QUESTION 35:
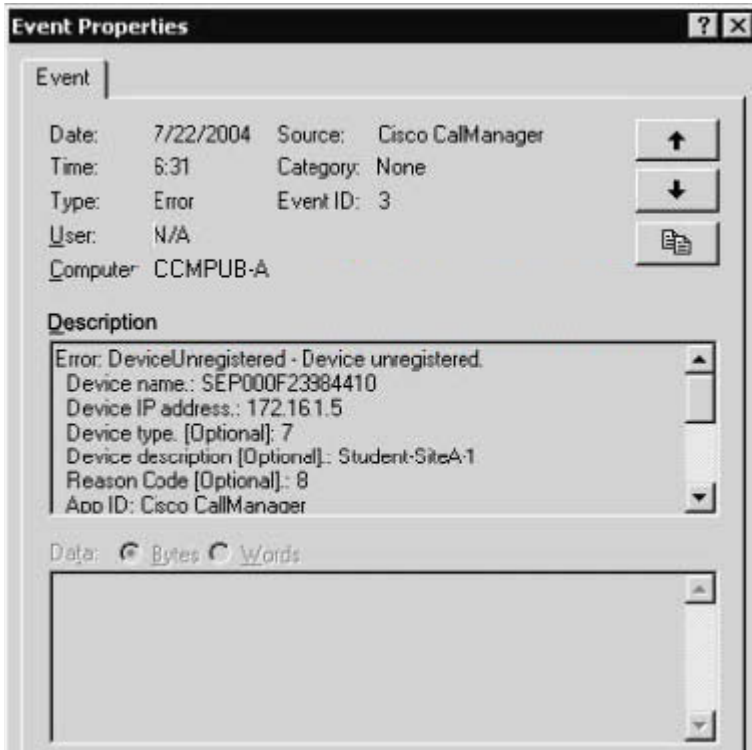
A phone has stopped working. Given the Event Viewer output shown, what is the most likely cause?

A. The switch has improperly extended the trust boundary.
B. The phone went off-hook.
C. The phone does not have the proper DN.
D. The switch port to the phone was shutdown.

Answer: D

QUESTION 36:

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

A. LLQ
B. CAC
C. priority queuing
D. classification

E. LFI

Answer: B

QUESTION 37:

You have received a trouble ticket that says users are experiencing echo when going out the H.323 gateway. You have tested the gateway and have modified the configuration so that the ERL level is no 4 dB. You also increased the echo-cancel converage value to 32 ms.
How will this impact voice quality after this change?

A. The increase in echo-cancel coverage will have no effect on voice quality.
B. This will lead to the end of sentences being chopped by the echo canceller.
C. This will lead to consonants being chopped by the echo canceller.
D. This change will take the echo canceller 2-3 seconds longer to coverage at the beginning of the call.

Answer: D
echo-cancel coverage
To adjust the size of the echo canceller (EC) and to select the extended EC when the Cisco default EC is present, use the echo-cancel coverage command in voice-port configuration mode. To reset this command to the default value (64ms), use the no form of this command.
echo-cancel coverage {8 | 16 | 24 | 32 | 48 | 64}
no echo-cancel coverage
Syntax Description

8	Specifies an EC size of 8 milliseconds.
16	Specifies an EC size of 16 milliseconds.
24	Specifies an EC size of 24 milliseconds.
32	Specifies an EC size of 32 milliseconds.
48	Specifies an EC size of 48 milliseconds.
64	Specifies an EC size of 64 milliseconds. This is the default.

Defaults
64 milliseconds
Command Modes
Voice-port configuration
Command History

| Release	Modification
11.3(1)T	This command was introduced on the Cisco 3600 series.
11.3(1)MA	This command was implemented on the Cisco MC3810.
12.0(5)XK	The command was modified to add the 8-millisecond option.
12.0(5)XE	The command was implemented on the Cisco 7200 series.
12.1(1)T	This command was integrated into Cisco IOS Release 12.1(1)T.
12.2(13)T	This command was modified to provide a new set of size options when the extended EC is configured. This command is supported on all T1 Digital Signal Processor (DSP) platforms.

Usage Guidelines
Use the echo-cancel coverage command to adjust the coverage size of the EC. This command enables cancellation of voice that is sent out the interface and received on the same interface within the configured amount of time. If the local loop (the distance from the interface to the connected equipment that is producing the echo) is greater than this amount of time, the configured value of this command should be increased.
If you configure a greater value for this command, the EC takes longer to converge. In this case, you might hear a slight echo when the connection is initially set up. If the configured value for this command is too short, you might hear some echo for the duration of the call because the EC is not canceling the longer delay echoes.
There is no echo or echo cancellation on the network side (for example, the non-POTS side) of the connection.
http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/122newft/122tcr/122tvr/vrg_e1.htm#wp99829

QUESTION 38:
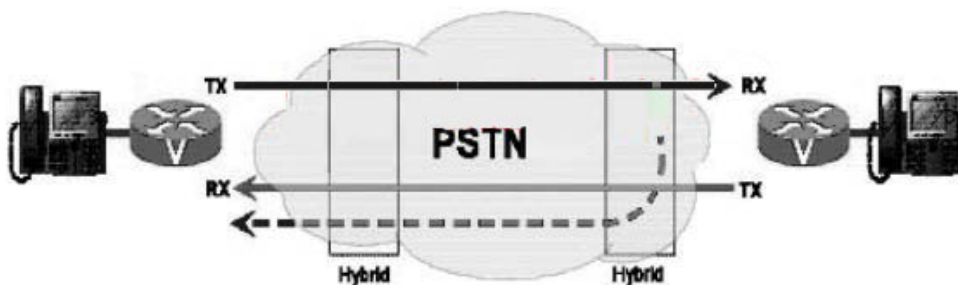
Which type of echo is presented in the network drawing shown?

A. listener echo
B. NPL echo
C. talker echo
D. dial tail circuit echo

Answer: C

Talker Echo

Symptom-Talker echo is the signal which leaks in the far-end hybrid and returns to the sender (talker). The talker hears an echo of his own voice.

QUESTION 39:

Your MGCP Gateway is experiencing call setup problems on your PRI to the PSTN.
TAC has asked you to send traces to determine the root cause.
Which two trace file settings should be configured? (Choose two)

A. Set Debug Trace Level to Detailed.
B. Select Enable XML Formatted Output for Trace Analysis.
C. Select Enable H245 Message Trace.
D. Select Enable ISDN Translation Trace.

Answer: A, D

QUESTION 40:

A company has migrated to a Cisco CallManager IP telephony system and now is 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. During testing the users are unable to leave voice mail messages on the new Unity system. It appears that the ports hang when users try to send voice mails.
How would you determine the cause of the problem? (Choose two)

A. Verify that the Cisco CallManager has been configured with the correct number of voice mail ports; the number of voice mail ports must match the Cisco Unity configuration.
B. Verify in the Cisco CallManager that the hunt group is hunting to Cisco Unity ports that can accept calls.
C. Verify the Cisco CallManager has been configured with the correct MWI ports; the number of MWI ports must match the Cisco Unity configuration.
D. Verify the call transfer call handlers are configured correctly.
E. Verify there are no TSP warning in the Event Viewer.

Answer: A, B
CiscoUnity Is Not Answering Some Internal or External Calls
Possible causes are:
Hunt Groups Are Programmed Incorrectly
Do the appropriate procedure for your integration type when the lines connected to CiscoUnity are organized in one or more hunt groups, and the phone system is programmed to forward calls when ports are busy.
To confirm hunt group programming at the port level (Cisco CallManager integration only)
Step 1
In Cisco CallManager Administration, click Service > Service Parameters.

Step 2
On the Service Parameters Configuration page, click the server that Cisco CallManager is installed on.
Step 3
In the Configured Services list, click Cisco CallManager.
Step 4
In the Configured Service Parameters list, click ForwardMaximumHopCount.
Step 5
Confirm that ForwardMaximumHopCount is set to a value of twice the number of CallManager ports connected to CiscoUnity. For example, on a 48 port system, the ForwardMaximumHopCount should be set to 96.
Step 6
Confirm that the voice messaging ports are set to forward on both Busy and Ring-No-Answer.
Step 7
Put the first voice messaging port into a Busy state.
Step 8
Set up two test phones. For more information, see the "Setting Up For a Diagnostic Test (Cisco CallManager Integration Only)" section on page1-1.
Step 9
Access an external line from Phone 2, and call Phone 1. The first available port should take the call.
Step 10
Put the next port into a Busy state, Disable the port you just tested via the CiscoUnity Administrator, and then repeat Step 9.
Step 11
Repeat until all the ports have been tested in a Busy state. When all voice messaging ports are disabled, and the last port is busy, CallManager should do whatever you programmed it to do when all lines are busy, such as forward the call to the attendant number. If not, change the CallManager programming and repeat the test.
Incorrect Number of System Key Ports
When the system key is programmed for fewer voice ports than are installed in the CiscoUnity server, CiscoUnity does not answer calls on the extra ports. (For example, if the voice cards in the CiscoUnity server have 48 ports but the system key is programmed for 24 ports, CiscoUnity will answer calls on only the first 24 ports.)
To verify the number of ports
Step 1
In the CiscoUnity Administrator, click System > Licensing > Licensed Features.
Step 2
Confirm that the Voice Ports value matches the number of ports on the voice cards.
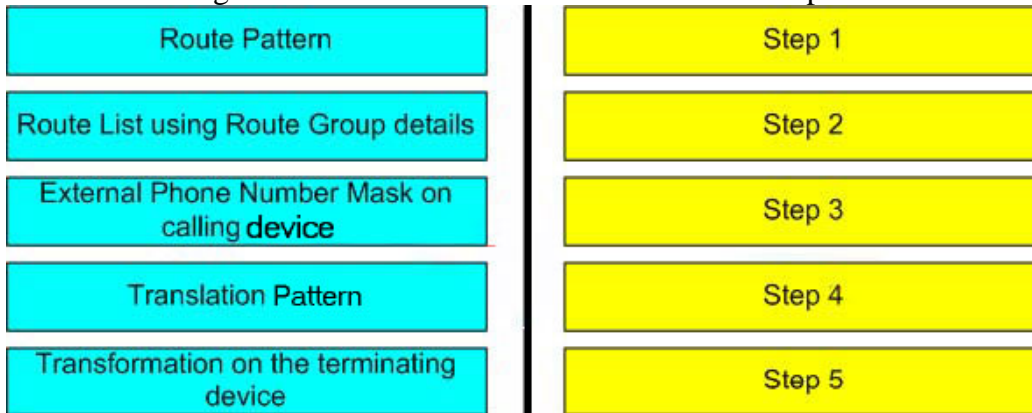If the values match, continue with the following "Calls Are Sent to the Wrong CiscoUnity Ports" section. If the value is smaller than the number of ports on voice cards in the CiscoUnity server, contact your sales representative.
http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_troubleshooting_guide_chapter09186a00801d6 a

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QUESTION 41:

DRAG DROP

Put the following transformation rules in the correct order of operation.

Route Pattern		Step 1
Route List using Route Group details		Step 2
External Phone Number Mask on calling **device**		Step 3
Translation Pattern		Step 4
Transformation on the terminating device		Step 5

Answer:

External Phone Number Mask on calling device
Translation Pattern
Route Pattern
Route List using Route Group details
Transformation on the terminating device
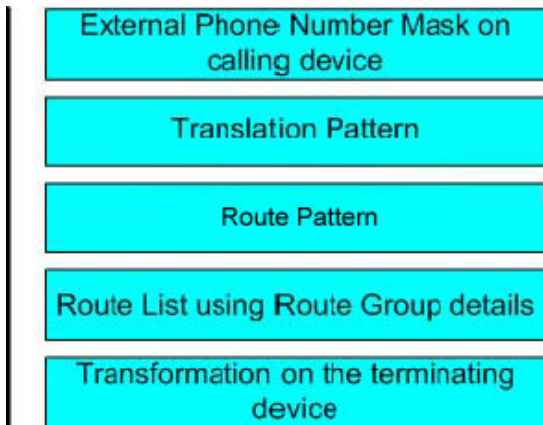
QUESTION 42:

Dept16SW4£show running-configuration
snip
!
interface FastEthernet 0/1
port group 1
!
interface FastEthernet 0/2
port group 2
!
interface FastEthernet 0/3
switchport trunk encapsulation dot1q
switchport trunk native vlan 16
switchport mode trunk
switchport voice vlan 160
spanning-tree portfast
switchport priority extend trust
!

end
Dept16SW4#vlan database
Dept16SW4(vlan)# show
VLAN ISL Id: 1
Name: default
Media Type: Ethernet
VLAN 802.10 Id: 100016
State: Operational
MTU: 1500
You have installed a new Catalyst 3524-PWR to support a small group of IP
telephony users in Department 16. When the IP phones are tested they receive
power, but do not communicate with the CallManager. The above show interface
FastEthernet 0/3 and show VLAN database.
What is the problem?

A. The VLAN and trunk statements are missing from FastEthernet ports 0/1 and 0/2.
B. VLAN 160 needs to be entered unto the VLAN database.
C. Fast EtherChannel is supported on only the last four ports in a Catalyst 3524-PWR.
D. VLAN 16 is an 80.1q trunk and not an ISL trunk.

Answer: B

QUESTION 43:

Which tool lists the following options in a query:
All Patterns
Unassigned DN
Call Park
Conference
Directory Number
Translation Pattern
Call Pickup Group
Route Pattern
Message Waiting
Voice Mail
Attendant Console

A. SQL Enterprise Manager > CCM 03xx > Device Pool > Return All Rows
B. Route Plan > Route Plan Report
C. Digit Number Analyzer
D. Route Plan > External Route Plan Wizard

Answer: B

QUESTION 44:

You are troubleshooting an issue where 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 to the gateway.
What is the next valid step in troubleshooting this issue?

A. Look in the SDL trace file to see if there is a signal to another CallManager node with the same tcp-handle.
B. Look in the SDL trace file to see if there is a signal to another CallManager node with the same time-stamp.
C. Look in the IP Voice Media Streaming App trace file to see if an MTP was invoked.
D. Look in the MGCP trace file to determine which MGCP gateway the call was sent to.

Answer: B

QUESTION 45:

Your company has recently installed Cisco Unity to be the voice mail platform for your Cisco CallManager IP telephony system. You have received complaints from the users that the red message waiting indicator (MWI) light does not come on when there are new voice mail messages in the voice mailboxes.
What must be verified and possibly modified to resolve this issue? (Choose two)

A. Use the Port Usage tool to verify 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 CallManager cluster dial plan.
If they are not, change the directory numbers in the CallManager cluster so they are unique and configure the Cisco Unity server so they match the new directory numbers.
C. Verify that the same directory numbers are being used fir MWI on/off in both the Cisco CallManager cluster and Cisco Unity server.
If they are different, change the Cisco Unity server to match the Cisco CallManager cluster.
D. Verify the number of ports licensed for the Cisco Unity server is equal to the number of configured ports.
If the number of configured ports is greater than the license number, reduce the number of configured ports to be no greater than the license number.
E. Verify that the calls are being sent to the correct ports on the Cisco Unity server.
If they are incorrect on the Cisco CallManager cluster, change the values on the cluster to be correct.

Answer: B, C

QUESTION 46:

Which three questions should be asked of end-users in the Gathering Facts phase?

(Choose three)

A. How often does the problem occur.
B. What is the problem?
C. When did the problem occur?
D. Did you make any changes just before the problem occurred?

Answer: A, C, D
"What is the problem?" would go into the "Define the problem" phase.
Step1
When analyzing a problem, draft a clear problem statement. Define the problem in terms of a set of symptoms and the potential causes behind those symptoms.
For example, the symptom might be that the EQPT FAIL alarm has become active. Possible causes might be physical problems, a bad interface card, or the failure of some supporting entity (for example, layer 1 framing).
FigureGeneral Problem-Solving Model
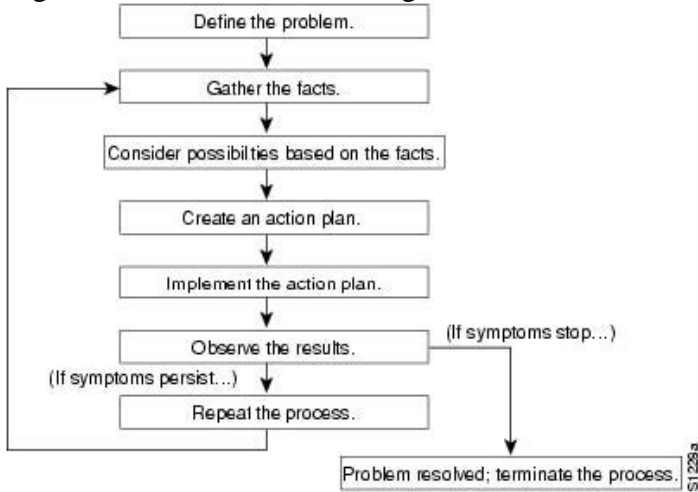
Step2
Gather the facts you need to help isolate the symptoms and their possible causes.
Ask questions of affected users, network administrators, managers, and other key people. Collect information from sources such as network management systems, protocol analyzer traces, output from router diagnostic commands, or software release notes.
Step3
Consider possible causes based on the facts you have gathered. You can also use these facts to eliminate potential causes from your list.
For example, depending on the data, you might be able to eliminate hardware as a cause, allowing you to focus on software. At every opportunity, try to narrow the number of potential causes so that you can create an efficient plan of action.
Step4
Create an action plan based on the remaining potential causes. Begin with the most likely cause, and devise a plan in which only one variable at a time is manipulated.
This approach allows you to reproduce the solution to a specific problem. If you alter more than one variable simultaneously, identifying the change that eliminated the symptom becomes more difficult.

Step5

Perform each step of the action plan carefully, and test to see if the symptom disappears.

Step6

Whenever you change a variable, gather the results. You should use the same method of gathering facts that you used in Step2.

Analyze the results to determine if the problem has been resolved. If it has, then the process is complete.

Step7

If the problem has not been resolved, you must create an action plan based on the next most likely problem in your list. Return to Step2 and continue the process until the problem is solved.

Before trying out a new cure, make sure to undo any "fixes" you made in implementing your previous action plan. Remember that you want to change only one variable at a time.

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps1913/products_maintenance_guide_chapter09186a0

QUESTION 47:

When dialing 1136, which of the following patterns will be selected?

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

Answer: A

All the options are potential match. The Cisco CallManager will apply closest match rule to select the best match. The best match is the route pattern in matching table that has the fewest number of route patterns.

1[14]XX matches 200 digit strings;
1[1-4]XX matches 400 digit strings;
11XX! matches infinite digit strings;
1[^2-8]XX matches 300 digit strings.

As such 1[14]XX will be selected.

QUESTION 48:

Which CTI device allows only a single media stream at a time?

A. hunt group
B. route point
C. peer port
D. Port

Answer: D

QUESTION 49:

You have received a trouble ticket that an executive cannot retrieve his account information from his bank. When the call is answered, the executive is prompted to enter his account code. The bank does not seem to recognize the DTMF tones and disconnects the call.
What is a possible solution to this problem?

A. Configure progressind setup enable 3 under the gateway VoIP dial-peer.
B. Configure progressind alert enable 8 under the gateway POTS dial-peer.
C. Configure voice rtp send-rvc in the gateway.
D. Set CallManager Service Parameter ToSendH225UserInfoMsg to True.

Answer: C

Explanation: A Cisco IP phone (CallManager scenario) or POTS phone (VoIP Toll-bypass scenario) call leaves through a Cisco IOS gateway, where the called number is usually an Interactive Voice Response (IVR) system that sends back an ISDN progress message, but does not connect until some account information is entered. By default, the audio path is cut-through in the backward direction (toward the IP Phone or originating gateway), but not in the forward direction, until the terminating gateway receives a connect message. Therefore, there is no voice path to transmit DTMF tones or speech towards the terminating switch. Resolution :Configure the Cisco IOS global configuration command voice rtp send-recv will establish (cut-through) the audio path in both directions prior to receiving an ISDN connect message from the PSTN.

QUESTION 50:
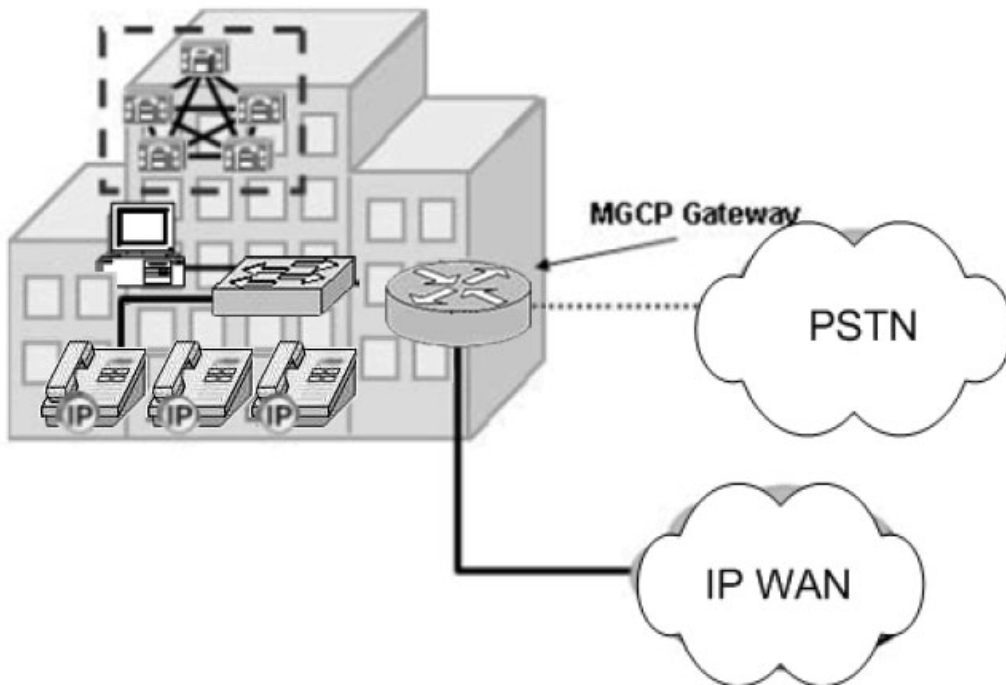
Use the diagram to assist in answering this questioins.

You have received a trouble ticket for a recently installed MGCP gateway. In testing it appears that the CallManager cluster cannot communicate with the gateway. The gateway address is 10.1.44.12/24 and the CallManager that is going to control the gateway has an address of 10.1.44.4/24. Use the following configuration snip to resolve the problem.
!
mgcp
mgcp call-agent 10.1.44.4 2427 service-type mgcp version 1.0
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthroughvoice mode cisco
mgcp sdp simple mgcp package-capability rtp-package
mgcp package-capability sst-package no mgcp timer receive-rtcp
no mgcp explicit hookstate
!
ccm-manager config server 10.1.44.7
ccm-manager config
!
mgcp sdp simple mgcp package-capability rtp-package
mgcp package-capability sst-package no mgcp timer receive-rtcp
no mgcp explicit hookstate
!
ccm-manager config server 10.1.55.7
ccm-manager config
!
What command is missing from the configuration that will allow the CallManager to control this gateway?

A. ccm-manager mgcp
B. mgcp bund control source-interface FastEthernet 0/0
C. ccm-manager redundant-host
D. ccm-manager fallback-mgcp
E. ccm-manager switchback

Answer: A
ccm-manager mgcp
To enable the gateway to communicate with the CiscoCallManager through the Media Gateway Control Protocol (MGCP) and to supply redundant control agent services, use the ccm-manager mgcp command in global configuration mode. To disable communication with the Cisco CallManager and redundant control agent services, use the no form of this command.
ccm-manager mgcp
no ccm-manager mgcp
Syntax Description
This command has no arguments or keywords.
Defaults
Cisco CallManager does not communicate with the gateway through MGCP

Command Modes
Global configuration
Command History

Release	Modification
12.1(3)T	This command was introduced with Cisco CallManager Version 3.0 and the Cisco VG200.
12.2(2)XA	The command was implemented on Cisco 2600 series and Cisco 3600 series.
12.2(2)XN	Support for enhanced MGCP voice gateway interoperability was added to Cisco CallManager Version 3.1 for the Cisco 2600 series, 3600 series, and Cisco VG200.
12.2(4)T	The command was integrated into Cisco IOS Release 12.2(4)T.
12.2(11)T	This command was integrated into the Cisco IOS Release 12.2(11)T and Cisco CallManager Version 3.2 and was implemented on the Cisco IAD2420 series routers.
12.2(11)YU	This command was implemented on the Cisco 1760 gateway.

Usage Guidelines
This command enables the gateway to communicate with Cisco CallManager through
MGCP. This command also enables control agent redundancy when a backup
CiscoCallManager server is available.

QUESTION 51:

Phone users are complaining of delayed dial tones.
What tool may be used to exhibit resource utilization on the Cisco CallManager
server?

A. Performance Monitor
B. Event Viewer
C. Log Viewer
D. Real-Time Monitor

Answer: A

QUESTION 52:

Refer to the exhibit. You have installed a PRI circuit to an H.323 gateway running 12.3(T) Cisco IOS software. The output shown is a result of which two factors? (Choose two)

A. layer-2 ISDN activity
B. layer-3 ISDN activity
C. the command debug isdn h323
D. the command debug isdn q921
E. the command debug isdn pri

Answer: A, D

QUESTION 53:

Referring to the exhibit, which phone rings when Bob dials 1000?

A. Phone A
B. Phone B
C. Phone C
D. Phone D

Answer: D
Cisco CallManager has applied the translation pattern rule to the number dialed(1000) into new number and
discard digit(pre-dot) and make Bob calls phone D.
Note: The called party information & Discard digit information are missing in the exhibit.

QUESTION 54:

On a Cisco CallManager implementation, calls may be established, but

supplementary services are not available.
What is the most likely problem?

A. One E1 port on the WS-X6608-E1 card provides 24 calls, resources may be
exhausted.
B. MTP software supports 16 calls, resources may be exhausted.
C. MTP software supports 26 calls, resources may be exhausted.
D. An MTP termination point is required but not present.

Answer: D

Explanation: A Media Termination Point(MTP) is a software device that provides
supplementary services for calls that are routed through an H.323 version 1(H.323v1)
gateway. These supplementary services include Call Hold,Call Transfer,Call Park,and
conferencing. They are not available when a call is routed to an H323.v1 endpoint. Cisco
CallManager uses an H.323 mechanism(ECS-Empty Capability Set) to support
hold,transfer,and other supplementary features. As H.323v1 endpoints do not support
ECSs,so they require an MTP to provide supplementary services.

QUESTION 55:

Cisco CallManager 4.0 Administration - Route Patterns/Hunt Pilot Configuration - Microsoft Internet Explorer

File   Edit   View   Favorites   Tools   Help

Back   •   •   ⊗ ⊡ ⌂   ⊗Search   ⊡Favorites   ⊗Media   ⊗   ⊡• ⊕

Address http://192.168.1.100/CCMAdmin/routepatternconfig.asp?pkid=(4FC07D0E-D2F0-4AE3-B3EB-CEBFA18KEDF4)   Go   Links

Pattern Definition

Route Pattern/Hunt Pilot*	9 @
Partition	< None >
Description	
Numbering Plan	North American Numbering Plan
Route Filter	< None >
MLPP Precedence	Default
Gateway or Route/Hunt List*	RL_Site1 (Edit)
Route Option	⦿ Route this pattern
	○ Block this pattern — Not Selected —

☑ Provide Outside Dial Tone   ☐ Allow Overlap Sending   ☐ Urgent Priority

Calling Party Transformations

☐ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation	Default
Calling Name Presentation	Default

Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

Called Party Transformations

Discard Digits	PreDot

Done   Internet

Refer to the exhibit. Your users cannot complete calls to the PSTN. After working with the Telco, you have determined that you are not stripping the access-code before setting up the call with the Telco.
What is a possible cause of this issue?

A. A dial-peer is modifying the called number.
B. The route list configuration is over-riding route pattern configuration.
C. A translation pattern is modifying the called number.
D. The external phone number mask is incorrect.

Answer: B

QUESTION 56:

Exhibit:

CCMIStationInit: 000000006 OffHook.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP0
CCMIStationD: 000000006 StationOutputDisplayText don't need to send, because mIsALegacyDevice =
0|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMI<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><MN::Directory Number><MV::2002><DKV::SKP000750834769>
CCMICTI: RoutePatternToCtlGlobalCallID::findValue(): RP=2002:Phones, bRc=0, T=, #entries=0|<CLID::StandAloneCluster><NID::10.1.1
CCMICTI: RoutePatternToCtlCallOrigin::findValue()   : RP=2002:Phones, bRc=0, T=, #entries=0|<CLID::StandAloneCluster><NID::10.1.1
CCMIStationD: 000000006 SetRinger ringMode=I(RingOff).|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192
CCMIStationD: 000000006 SetLamp stimulus=9(Line) stimulusInstance=1
lampMode=2(LampOn).|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMIStationD: 000000006 CallState callState=1 lineInstance=I
callReference=16777221|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMIStationD: 000000006 DisplayPromptStatus timeOutValue=0 promptStatus='? ' content='Enter Number' lineInstance=1 callRefere
ver=0x80000004.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMIStationD: 000000006 SelectSoftKeys instance=I reference=16777221 softKeySetIndex=4 validKeyMask=-
1.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,><DKV::SKP000750834769>
CCMIStationD: 000000006 ActivateCallPlane lineInstance=1.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::
CCMIInsert an entry into CiCcp table, now this table has 3
entries|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMIInsert an entry into CiCcp table, now this table has 4
entries|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMIDigit analysis: match(fqcn="2002", cn="2002",
dd="")|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMIDigit analysis: potentialMatches=PotentialMatchesExist|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::19
CCMIStationD: 000000006 StartTone tone=33(InsideDialTone),
direction=0.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.157><IP::192.168.101.52><DKV::SKP000750834769>
CCMICMProcMon - ------Entered Router Verification|<CLID::StandAloneCluster><NID::10.1.1.100>
CCMICMProcMon - ----Exited Router Verification|<CLID::StandAloneCluster><NID::10.1.1.100>
CCMICMProcMon - ------Entered Router Verification|<CLID::StandAloneCluster><NID::10.1.1.100>
CCMICMProcMon - ----Exited Router Verification|<CLID::StandAloneCluster><NID::10.1.1.100>
CCMIStationInit: 000000006 KeypadButton kpButton=2.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.158><IP::192.168.1
CCMIStationD: 000000006 StopTone.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.158><IP::192.168.101.52><DKV::SKP
CCMIStationD: 000000006 SelectSoftKeys instance=1 reference=16777221 softSetSoftKeys validKeyMask=-
1.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.158><IP::192.168.101.52><DKV::SKP000750834769>
CCMIDigit analysis: match(fqcn="2002", cn="2002", pss="Local",
dd="2")|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.158><IP::192.168.101.52><DKV::SKP000750834769>
CCMIDigit analysis: potentialMatches=PotentialMatchesExist|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.158><IP::19
CCMIStationInit: 000000006 KeypadButton kpButton=0.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.159><IP::192.168.1
CCMIDigit analysis: match(fqcn="2002", cn="2002", pss="Local",
dd="20")|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.159><IP::192.168.101.52><DKV::SKP000750834769>
CCMIDigit analysis: potentialMatches=PotentialMatchesExist|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.159><IP::19
CCMIStationInit: 000000006 KeypadButton kpButton=0.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.160><IP::192.168.1
CCMIDigit analysis: match(fqcn="2002", cn="2002", pss="Local",
dd="200")|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.160><IP::192.168.101.52><DKV::SKP000750834769>
CCMIDigit analysis: potentialMatches=PotentialMatchesExist|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.160><IP::19
CCMIStationInit: 000000006 KeypadButton kpButton=3.|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.161><IP::192.168.1
CCMIDigit analysis: match(fqcn="2002", cn="2002", pss="Local",
dd="2003")|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.161><IP::192.168.101.52><DKV::SKP000750834769>
CCMIDigit analysis: potentialMatches=NoPotentialMatchesExist|<CLID::StandAloneCluster><NID::10.1.1.100><CT::1,100,90,1.161><IP::

You have received a trouble ticket from an employee. The employee is reporting that he can call his manager but his manager cannot call him. The employee is calling from extension 2003 at site 2. His manager is at extension 2002 in site 1. You have verified that both DNs are in the Phones partition. What is the cause of the issue?

A. The manager's CSS does not include Phones partition.
B. The location configuration is resulting in insufficient bandwidth for this call.
C. The manager's CSS does not include Employee partition.
D. The region configuration is resulting in codec negotiation issue.

Answer: C

QUESTION 57:

Which two tasks must be performed to restore the Cisco Unity server data if it is corrupted or lost? (Choose two.)

A. Verify Microsoft IIS permissions.
B. Create a new batch file to replace components in the Registry.
C. Verify that no errors in other Cisco Unity processes.
D. Reload the Cisco Unity server application on a new server prior to restoring data files.
E. Start Dr. Watson manually to resolve issues in Microsoft message exchange server.

Answer: A,B

QUESTION 58:

You are a network engineer at Certkiller . Certkiller has a CallManager environment.
In this environment, what does a media stream between devices use as its transport
protocol?

A. SDL
B. RTP
C. SCCP
D. OSPF
E. MGCP

Answer: B
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, pages 56, 57

QUESTION 59:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee
wants to know what the recommended maximum number of CDR records in ART
is. What would your reply be?

A. 1.5Million
B. 2 Million
C. 5 Million
D. 10 Million
E. 25 Million

Answer: B
Release Notes for Administrative Reporting Tool for Release 1.1(1)
System Requirements
The following specifications apply to ART:
ART Release 1.1(1) is compatible with CiscoCallManager Release 3.1(1).
Make sure ART is installed on the CiscoCallManager with the primary publisher database.
The ART application uses approximately 42 MB of disk space for the executable and the online documentation.
ART is designed to work for an enterprise with a maximum of two million CDRs and a maximum of two
million
records in the ART database. If the size of the CDR database exceeds the limits, the performance of ART is
adversely
impacted.
The peak size of the ART database contains 1.5 GB.
The ART application requires no maintenance other than possible upgrades when CiscoCallManager is
upgraded.
System administrators, managers, and users have access to ART. The system administrators can also access

ART
directly from the server machine.
The system administrators, managers, or users can access ART by typing the URL as: "<server
name>/art/Logon.jsp"
where server name is the name/ipaddress of the server where ART is installed. The system administrators can
also
access ART directly from the Server machine
The client machines can be running Microsoft Windows OS.
The database is Structured Query Language (SQL) server, Version 7.0.
ART uses StyleReport Pro for report generation and displays reports in PDF form using Adobe Acrobat Reader.
The DialPlan for ART can be customized.

QUESTION 60:

You are a network engineer at Certkiller . You are trying to isolate a problem using
CMRs. Which of the following spreadsheet function would be most helpful in this
task?

A. sort
B. edit
C. insert
D. format
E. calculate

Answer: A

QUESTION 61:

In a Cisco Unity system, which troubleshooting tools can be used? (Select all that
apply.)

A. AA
B. SA
C. Maestro
D. Event Viewer
E. Status Monitor

Answer: C, D, E

automated attendant	A call handler that is used in place of a human operator to answer and direct calls by playing greetings and responding to touchtones.
Status Monitor	A Web-based application on the Cisco Unity server that contains pages providing information about system status, ports, and disk drives; also used to start and to shut down Cisco Unity.

On many web pages "SA" stands for Unity System Admin, an example of this can be
found at:

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/products_tech_note09186a00801a74d8.shtml

Introduction

This document describes a problem that may occur when you try to add a new user through the Cisco Unity System

Admin (SA), and outlines solutions to the problem.

A. Several web pages refer to having used Maestro Tools with Unity in the past, but

that functionality has been replaced in the Diagnostic Tool. An example of this is

found at:

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/prod_release_note09186a00800d759f.htm

B. Obtaining TSP TracesCiscoUnity versions 3.1(1) and later use the CiscoUnity Diagnostic Tool, rather than Maestro Tools, to obtain TSP traces.

Several web pages refer to using event viewer for troubleshooting purposes with Unity.

An example of this is found at:

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/prod_troubleshooting_guide_chapter09186a0

Event Log Traces

The Event log is used by Windows applications to report errors and warnings. The Miu

reports serious failures to the Event log, for example, "Component Miu: thread <XXX>

had a failure on port <YYY> in AvWav."

To Obtain an Event Log Trace

Step1

On the Windows Start menu, click Programs> Administrative Tools> Event Viewer.

Reference:

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/products_administration_guide_chapter09186

QUESTION 62:

You are a network engineer at Certkiller . The Finance Manager reports that

long-distance charges have increased dramatically in the past month while total

calls have NOT increased.

What is a likely cause of this increase?

A. Calls are routing to the PSTN instead of the WAN link.

B. Local calls are being sent over long distance by the route plan.

C. Off-net calls are being routed first to another cluster, causing higher costs.

D. Telephones at the local site are using the long distance lines for local calls.

E. Telephones at the remote site are using the long distance lines for local calls.

Answer: A

QUESTION 63:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee

wants to know how CallManager knows that a user has finished dialing a number.

What would your reply be?

A. It waits for the dialer to match a pattern or a route.
B. It waits for the inter-digit timeout and then begins call processing.
C. The IP phone sends an "end of string" to the CallManager indicating dialing is complete.
D. The IP phone counts the number of digits dialed then begins call processing when a specified number of digits has been met.

Answer: B

QUESTION 64:

DRAG DROP
The Graceful and Immediate switchover algorithms determine when a telephony device will failover.
Place a "G" for Graceful switchover algorithm and an "I" for Immediate switchover algorithm next to the appropriate algorithm property.

Place here	Registration occurs with any available CCM node after all active streaming sessions end.
Place here	Switches over to an available CCM node and communicates the status of preserved connections to this new CCM mode.
Place here	Is supported by Cisco phones.
Place here	Is supported by media resource devices.
Place here	Is supported by gateways.

Labels to me moved

G

I

Answer:

G	Registration occurs with any available CCM node after all active streaming sessions end.
I	Switches over to an available CCM node and communicates the status of preserved connections to this new CCM mode.
G	Is supported by Cisco phones
I	Is supported by media resource devices.
I	Is supported by gateways.

Labels to me moved

G

I

QUESTION 65:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee

wants to know what the most widely available 911 PBX PSTN interface is. What would your reply be?

A. CLID with ESN and ALI.
B. POTS with ESN and ALI.
C. CLID with CAM conversion.
D. A gateway used for handling call setup and call clearing.
E. A gateway to handle the media-negotiations of the RTP streams between station devices.

Answer: B
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/products_implementation_design_guide_chapter

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QUESTION 66:

With regard to the H.323 protocol, what is used to establish media capabilities?

A. H.225
B. H.245
C. H.261
D. G.263
E. G.711
F. G.723
G. G.726

Answer: B

Explanation: H.225 is used for signaling establishment, signaling setup, call proceeding ,call alerting and call release between H.323 endpoints(devices) whereas H.245 is used for exchanging media capabilities.

QUESTION 67:

DRAG DROP
Place an "M" next to Multiple site deployment issues and an "I" next to Individual Campus deployment issues.

Place here	Users are concentrated within a single building.
Place here	Users may share the same gateway association for 911 calls.
Place here	Each site may be a unique entity that you must configure separately for processing 911 calls.
Place here	Configuring is usually straightforward
Place here	It shares the challenge of correctly associating telephones with gateways.
Place here	LEC POTS lines may be the only type of interfacing required to satisfy 911 call requirements.

Labels to me moved

M

I

Answer:

I	Users are concentrated within a single building.
I	Users may share the same gateway association for 911 calls.
M	Each site may be a unique entity that you must configure separately for processing 911 calls.
I	Configuring is usually straightforward
M	It shares the challenge of correctly associating telephones with gateways.
I	LEC POTS lines may be the only type of interfacing required to satisfy 911 call requirements.

Labels to me moved

M

I

QUESTION 68:

Certkiller 's long distance access code is 95922. Certkiller has a branch office in
Seattle that has the number 959-20xx.
How can the Certkiller branch office avoid the Cisco CallManager (CCM) second dial
tone from playing too early?

A. Enter 95920xx in the dial plan.
B. Enter 95920xxxxxxxxx in the dial plan.
C. Enter 95922xxxxxxxxx in the dial plan.
D. Uncheck "Provide Outside Dial Tone" for the pattern 9592.
E. Check the "Provide Outside Dial Tone" for the pattern 95922.

Answer: D

Call Classification	Call Classification indicates whether the call that is routed through this route pattern is considered either off (OffNet) or on (OnNet) the local network. The default value specifies OffNet. When adding a route pattern, if you uncheck the Provide Outside Dial Tone check box, you set Call Classification as OnNet.
Provide Outside Dial Tone	Check this check box to provide outside dial tone. To route the call in the network, leave the check box unchecked.

Static ANI (Line Connection)

Static ANI provides a line (rather than a trunk) connection to the PSTN, and the ANI of the line is associated with all 911 calls made on that line, regardless to the CPN of the calling phone. A plain old telephone service (POTS) line is used for this purpose.

POTS lines are one of the simplest and most widely supported PSTN interfaces. A POTS line usually comes fully configured to accept 911 calls. In addition, the existing E911 infrastructure supports 911 calls from POTS lines very well.

The POTS approach has the following attributes:

The operational costs associated with a POTS line are low.

The POTS line can even serve as a backup line in case of power failure.

The POTS line number can be used as the callback number entered into the ALI database.

POTS lines represent the lowest cost 911 support for locations where user density does not justify local PRI or CAMA access into the PSTN.

POTS lines are ubiquitous in PSTN installations.

All outgoing 911 calls through this type of interface are treated the same by the E911 network, and the tools that enable CiscoCallManager to control the ANI presented to the E911 network (such as calling party transformation masks) are irrelevant because the ANI can be only the POTS line's number.

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/products_administration_guide_chapter09186a

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QUESTION 69:

You are troubleshooting an IP telephony issue. You want to digits to be displayed as they are collected. Which of the following commands should you use?

A. debug vtsp dsp
B. debug vtsp error
C. debug vtsp session
D. show dialplan digit
E. show dialplan number

Answer: A
debug vtsp dsp
Use the debug vtsp dsp EXEC command to show messages from the digital signal processor (DSP) on the V.Fast Class (VFC) modem to the router. Use the no form of this command to disable debugging output.
[no] debug vtsp dsp
Usage Guidelines

The debug vtsp dsp command shows messages from the DSP on the VFC to the router; this command is useful if you suspect that the VFC is not functional. It is a simple way to check if the VFC is responding to off-hook indications.

Sample Display

The following output shows the collection of DTMF digits from the DSP:

router# debug vtsp dsp*Nov 30 00:44:34.491: vtspprocessdspmessage:
MSGTXDTMFDIGIT: digit=3*Nov 30 00:44:36.267: vtspprocessdspmessage:
MSGTXDTMFDIGIT: digit=1*Nov 30 00:44:36.571: vtspprocessdspmessage:
MSGTXDTMFDIGIT: digit=0*Nov 30 00:44:36.711: vtspprocessdspmessage:
MSGTXDTMFDIGIT: digit=0*Nov 30 00:44:37.147: vtspprocessdspmessage:
MSGTXDTMFDIGIT: digit=2

http://www.cisco.com/en/US/partner/products/hw/routers/ps221/products_configuration_guide_chapter09

QUESTION 70:

You are a network engineer at Certkiller . Certkiller is using non-DID numbers in Cisco CallManager (CCM). Which method can Certkiller implement to provide E911 calling line identification that is sometimes legally required?

A. Use a third-party calling line identification (CLID)-ANI translator box.
B. Rely on the listed directory number of the trunk connected to the PSTN.
C. Mask all outgoing numbers to match a DID phone kept just for that purpose.
D. Route 911 calls through special gateways with known E.164 numbers on the PSTN trunk.

Answer: A

Explanation. You can also use a third party calling line identification-automatic number identification (CLID-ANI) translator box. This may be required in some states. Page 4-46 CIPT troubleshooting.

QUESTION 71:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know what a trunk port configured for auxiliary VLAN capability does. What would your reply be?

A. It tags all packets using the 802.1Q protocol.
B. It supports the native VLAN as well as multiple auxiliary VLANs.
C. It has the appearance of a trunk port supporting only two VLANs.
D. It does not participate in the spanning-tree process for the auxiliary VLAN.

Answer: C

QUESTION 72:

What information is used to link a Call Detail Record (CDR) with its corresponding Call

Management Record (CMR)?

A. The ID of IP phone.
B. The ID of the gateway.
C. The ID of CallManager server.
D. The number of packets sent in call.
E. The directory number of the source.

Answer: A, C, E

QUESTION 73:

You are a network engineer at Certkiller . You want to export only one Call Detail Record
(CDR) table at a time. In what format should the file be?

A. raw file
B. text file
C. csv file
D. tab file
E. spreadsheet

Answer: C

QUESTION 74:

You are a network engineer at Certkiller . You identify a toll fraud caller. You want
to look at the call detail data.
Where would you find the call detail data?

A. In the CallManager Call Detail Record (CDR) table
B. In the Subscriber CallManager Call Detail Record (CDR) table
C. In the Publisher CallManager application Call Detail Record (CDR) log
D. In the Subscriber CallManager application Call Detail Record (CDR) log

Answer: A

QUESTION 75:

You are a network engineer at Certkiller . Certkiller has a Frame Relay circuit. At
the one end of the Certkiller Frame Relay circuit is the CallManager (CCM) server.
All of the phones connected to a router at the other end of the circuit can register
calls but cannot connect calls.
What is the probable cause of this problem?

A. The Frame Relay interface is not set to full duplex.
B. The router is not passing packets toward the CCM server.

C. An ACL is blocking either voice IP port or protocol access.
D. The subnet mask on the router located on the CCM side is incorrect.
E. The subnet mask on the router located on the remote side is incorrect.

Answer: C

QUESTION 76:

On the Certkiller IP Telephony system, all the necessary digits on an incoming call
are contained in the setup message. The voice gateway does not perform subsequent
digital collection and does not use digit-by-digit matching.
With regard to this system, which of the following statements is true?

A. The call is DID.
B. The call is non-DID.
C. The call is not properly formed.
D. There is not enough information to determine if the call is DID.
E. None of the above.

Answer: A

Explanation:
On DID calls (also referred to as one-stage dialing), the setup message contains all the
digits necessary to route the call and the router/gateway should not do subsequent digit
collection. When the router/gateway searches for an outbound dial-peer, it uses the entire
incoming dial string. This matching is by default variable-length. It is not done
digit-by-digit because by DID definition, all digits have been received.
Source: http://www.cisco.com/warp/public/788/voip/in_dial_peer_match.html#topic8

QUESTION 77:

You are a network engineer at Certkiller . The current running-config on the
Certkiller Router is as follows:
interface Serial0/0
ip address 216.128.148.124 255.255.254.0
ip nat outside
!
interface FastEthernet0/0
ip address 172.16.0.1 255.255.0.0
ip nat inside
full-duplex
!
ip nat pool NATPOOL 216.128.148.135 216.128.148.135
215.58.148.195 prefix-length 23
!
ip nat inside source list NATINSIDE pool NATPOOL

!
An IP phone on the LAN connected to FE0/0 has an address 172.16.1.5. The NAT translated address is 216.58.148.171. You are at an office on the WAN side of the Router. You want to check connectivity to the IP phone.
What ping command should you issue?

A. ping 172.16.1.5
B. ping 216.128.148.171
C. ping 216.128.148.134
D. None of the above.

Answer: D

Explanation:
The IP phone cannot be reached using ping.
An IP phone can be pinged when using Static NAT translation and no access-list or firewall is preventing this communication. However, a dynamically translated IP address such as is shown in this exhibit would only be "pingable" within the time frame between a call disconnect and the NAT translation timeout (a matter of seconds). Therefore, pinging would not be a useful test method for reachability since it would be severely limited by these constraints.

QUESTION 78:

Exhibit:

```
dial-peer voice 101 voip
   destination-pattern 1111
   session target ipv4:10.1.1.101
   preference 0
   dtmf-relay h245-alphanumeric
ip route 0.0.0.0 0.0.0.0 FastEthernet 0/0
!
mgcp
mgcp call-agent 172.20.71.30
mgcp dtmf-relay codec all mode out-of-band
mgcp sdp simple
!
ccm-manager switchback immediate
ccm-manager redundant-host 172.20.71.26 172.20.71.47
ccm-manager mgcp
!
voice-port 1/1/1
!
dial-peer voice 4 pots
 application MGCPAPP
 port 1/1/1
```

With regard to the above exhibit, for which gateways is DTMF relay configured? (Select all that apply.)

A. Catalyst 6000 FXS
B. Catalyst 6000 T1/PRI
C. Cisco IOS software-based
D. Non-Cisco IOS software-based

Answer: C

Explanation : The catalyst 6000 T1 and FXS gateways enable DTMF relay by default and do not need additional configuration to enable this feature.
Page 10-26 CIPT troubleshooting.
http://www.cisco.com/en/US/products/hw/switches/ps708/prod_module_installation_guide09186a00801787ab.h

---

QUESTION 79:

You are a network engineer at Certkiller . You want to perform backup recovery on a Cisco Unity Server. Which two settings do you need to verify on the IIS server's virtual web directory? (Choose all that apply.)

A. The default web site is configured as an application.
B. Directory browsing is enabled in the Virtual Directory tab.
C. Anonymous Access is unchecked in the Directory Security tab.
D. Script Only permissions are selected under the execute permissions section.
E. Read and Execute permissions are selected under the execute permissions section.

Answer: C, D

Explanation: The Cisco unity sever cannot be accessed from internet explorer.
Verify internet information server permissions.
Under execute permissions, Click Script only.
Under Anonymous Access and Authentication control click edit. Confirm that the Anonymous Access box is unchecked.
Page 10-40 CIPT troubleshooting.

QUESTION 80:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know what will happen when a serious problem occurs that Cisco Unity does not handle. What would your reply be?

A. Windows 2000 starts the Dr. Watson program.
B. Cisco Unity notifies the IIS service, which begins to record all SNMP traps.
C. The Windows 2000 Event Viewer becomes your primary source of information.
D. The IIS service stops, which means that the only way to proceed is to restore your most recent backup.

Answer: A

QUESTION 81:

In which of the following formats can the Cisco CallManager (CCM) trace file be

generated? (Choose all that apply.)

A. .csv
B. .doc
C. .htm
D. .rtf
E. .txt
F. .xml

Answer: E, F

QUESTION 82:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee
wants to know what Cisco Unity uses as a database caching mechanism. What
would your reply be?

A. Exchange 5.5
B. Windows 2000
C. Exchange 2000
D. SQL Server 2000

Answer: D

QUESTION 83:

You are a network engineer at Certkiller . A Certkiller subscriber complains that they
hear a recorder tone when answering a call from Cisco Unity.
What is the probable cause of this problem?

A. The third parameter on the ring notification page is set to wait.
B. The wait-to-ring parameter on the message notification page is less than three.
C. On the message notification page, the rings-to-wait parameter is set to less than three.
D. The wait-to-ring parameter is incorrectly set to less than tree on the subscriber
notification page.

Answer: C

Explanation:
NOT D - no subscriber notification page in unity.
NOT A - no ring notification page in unity.
NOT B - no wait-to-ring parameter
Subscriber Hears a Reorder Tone When Answering a Call from Cisco Unity
A possible cause for this problem is that the Rings to Wait For settings are incorrect.
Cisco Unity requires a minimum setting of three rings to wait to properly transfer a call
or to make a message notification call. If the number of rings to wait is set to less than

three, a subscriber may hear the reorder tone instead of the Cisco Unity conversation.

To Correct the Rings to Wait For Settings

Step1

In the CiscoUnity Administrator, go to the Subscribers> Subscribers> Message Notification page for the subscriber.

Step2

In the Notification Options section for each device used, set the Wait For How Many Rings Before Hanging Up field to three or more rings.

Step3

Go to the Subscribers> Subscriber Template> Message Notification page.

Step4

In the Notification Options section for each device used, confirm that the Wait For How Many Rings Before Hanging Up field is set to three or more rings, thus ensuring that future subscriber accounts get the correct default value.

If the default setting in the subscriber template is incorrect, you will need to change the value in all subscriber accounts that are based on that template.

Step5

Go to the Call Management> Call Handlers> Call Transfer page.

Step6

View the Standard, Alternate, and Closed rules. In the Transfer Type section, if Supervise Transfer is selected for any of the rules, confirm that the Rings To Wait For field is set to three or more rings.

If Rings To Wait For is set correctly, and the subscriber still hears a reorder tone when answering a call from CiscoUnity, contact CiscoTAC.

QUESTION 84:

You are a network engineer at Certkiller . You want to open a case on your Cisco Unity Server. Which report must you provide to the Cisco Technical Assistance Center (TAC)?

A. Port Usage
B. System Configuration
C. Unresolved References
D. Subscriber Configuration
E. Administrative Access Activity

Answer: B

Reporting Problems to CiscoTAC

When you report a problem to the Cisco Technical Assistance Center (TAC), you will be asked to provide information about your system and about the problem. This section provides procedures for gathering the system information and problem descriptions that may be requested.

System Information

Have the following system information ready when you call. Some of this information can be obtained by using the Gather Unity System Info utility, available in Tools Depot.

CiscoUnity version currently in use. See one of the following: the "To Determine the CiscoUnity Version in Use by Using the CiscoUnity Administrator" procedure, or the

"To Determine the CiscoUnity Version in Use by Using the AvCsMgr.exe File"
procedure.
CiscoUnity-CM TSP version currently in use. See the "To Determine the CiscoUnity-CM
TSP Version in Use by Using the Avskinny.tsp File" procedure.
Note
In versions earlier than 3.1(1), the CiscoUnity-CM TSP was known as the AV-Cisco
TSP.
RealSpeak TTS version currently in use. See the "To Determine the RealSpeak ENU
Language Engine in Use" procedure.
Build number(s) of any software releases or upgrades installed.
Number, type, and speed of processors.
Memory and pagefile size.
Hard disk size and free space available.
Number and type of voice ports installed.
Phone system integration, including the manufacturer, model, and version (if applicable).
Name of the CiscoUnity switch.ini file currently in use. See the "To Determine the Name
of the Switch.ini File in Use" procedure.
Other telephony software or hardware installed, such as fax or UniModem.
Microsoft Windows 2000 service packs installed.
Exchange service packs installed.
Number of subscribers in the CiscoUnity database.
Number of subscribers in the Exchange database.
Size of the Exchange database file.
Approximate normal CiscoUnity server CPU utilization. (For example, does the
Windows task manager often show 100 percent CPU utilization, or is it usually less than
80 percent?)
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/prod_trouble_shooting_guide_chapter09186
a0

QUESTION 85:

What is the maximum number of private lists per subscriber that Cisco Utility supports?

A. 5
B. 10
C. 20
D. 25
E. 50

Answer: C

Explanation: Private lists can also be set for the subscriber in the Cisco unity
administrator. Each subscriber account comes with 20 private lists.
Page 10-16 CIPT

QUESTION 86:

You are troubleshooting a Cisco Unity system. You want to view all logs generated by the Unity system. In which event log would you look?

A. Unity
B. Events
C. System
D. Security
E. Application

Answer: E

Explanation: A report can be generated for all application events on the Cisco unity server or for the events that apply only to Cisco unity. Cisco unity writes events only to the Windows application log. Page 10-32 CIPT

QUESTION 87:

You make configuration changes to the registry on a Cisco Unity system. When will these changes be applied to the system?

A. Immediately.
B. Once you reboot the system.
C. Once you reload the registry.
D. Once you refresh the registry.
E. Once you press the Apply button.

Answer: A

QUESTION 88:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know what type of replication the SQL publisher's database uses. What would your reply be?

A. Two-way
B. Push/Pull
C. Full duplex
D. Asymmetrical
E. Uni-directional

Answer: D

QUESTION 89:

What is the maximum end-to-end delay allowed for voice traffic?

A. 100 ms
B. 200 ms
C. 250 ms
D. 300 ms
E. 400 ms

Answer: D
As ITU-T G.114 recommendation specifies 150 ms as maximum one-way end-to-end for
highest voice quality to be maintained, therefore end-to-end delay is 150ms x 2 = 300ms.

QUESTION 90:

Which of the following accounts supports the Cisco Call Detail Record (CDR) insert
service, the Cisco Tomcat service, and the CR Analysis and Reporting tool?

A. CCMCDR
B. CCMService
C. CCMCDRInsert
D. CCMServiceRD
E. CCMServiceDR

Answer: A
33. Correct, the explanation is found at:
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/products_administration_guide_chapter09186
a
CCMCDR Account
The CCMCDR account supports the Cisco CDR Insert service, the Cisco Tomcat service,
and the CDR Analysis and Reporting (CAR) tool.
CautionCisco requires that the same password exist on every server in the cluster.
CCMEML Account
The CCMEML account supports the CiscoCallManager Extension Mobility Logout
service.
CautionCisco requires that the same password exist on every server in the cluster.
CCMService Account
The CCMService account supports the Cisco Extended Functions service and the Cisco
RIS Data Collector service.
CautionCisco requires that the same password exist on every server in the cluster.
CCMServiceRW Account
The CCMServiceRW account supports the CiscoCallManager and CiscoCTIManager
services.
CautionCisco requires that the same password exist on every server in the cluster.
CCMUser
Use the CCMUser account for anonymous access to the CiscoCallManager web site.
When you are accessing the CiscoCallManager web pages, this account gives you access

without logging into NT.

CautionCisco requires that the same password exist on every server in the cluster.

SQLSvc Account

The SQLSvc account functions as the core account that is used for server-to-server interaction within a CiscoCallManager system. This account supports the Cisco Database Layer Monitor service and must be the same on every machine in the cluster for database replication to work properly.

CautionCisco requires that the same password exist on every server in the cluster.

SQL Server Administration (sa) Account

This account serves as the default SQL Server administration account. You only use the sa password during installation and migration. Most of the system does not use this account.

CautionCisco requires that the same password exist on every server in the cluster.

QUESTION 91:

What must the Calling Party Number must be when a phone is calling 911?

A. Encrypted
B. E.164 compliant
C. At least 4 digits long
D. Exactly 10 digits long
E. Not more than 7 digits long

Answer: B

QUESTION 92:

You are a network engineer at Certkiller . You notice that the fans on the Certkiller Cisco ICS 7750 runs fast for approximately 10 seconds when you power up the Cisco ICS 7750 and when a code upgrade completes.
What is the cause of this?

A. The fan tray is improperly seated.
B. There is no problem. This is normal operation.
C. A shorted voltage filter on the power supply causes a voltage surge.
D. There are version conflicts between the SAP card and the fan assembly unit control software.

Answer: B

Explanation:
http://www.cisco.com/en/US/products/hw/voiceapp/ps967/products_administration_guide_chapter09186a00800

QUESTION 93:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants
to know what information is contained in the Cisco CallManager (CCM) Component
Versions page. What would your reply be?

A. The CCM software versions that are running on the server.
B. The operating system version that is running on the server.
C. Hardware version information for the media convergence server.
D. The component version number of all currently connected RTP streams.

Answer: A

QUESTION 94:

You want to create Metalink ODBC agreements for the DC Directory. On the command
line of CallManager (C:\dcdsrvr\bin), which command should you use?

A. avvid_cfg
B. avvid_imp
C. avvid_inf
D. avvid_scfg
E. avvid_restore

Answer: A

Explanation: AVVID_CFG - is invoked by setup on primary server, initializes
and configures DC Directory, Configures Metalink ODCB import Agreements,
Page 5-27 CIPT

QUESTION 95:

You are a network engineer at Certkiller . You want to view information about
specific gateways (such as registrations or re-registrations) to pinpoint a particular
problem. Where will you find this information?

A. Gateway Event log
B. Windows 2000 Event Viewer
C. Cisco CallManager Event Viewer
D. Cisco CallManager Registration log

Answer: B
Microsoft Event Viewer
Microsoft Event Viewer tool can help you identify problems at the system level, such as
events regarding a specific gateway.
Access Event Viewer by choosing
Start > Programs > AdministrationTools > Event Viewer.
The Event Viewer displays the following types of logs:

Application log-Contains events logged by applications or programs, such as
CiscoCallManager.
System log-Reports events logged by Windows 2000 system components, such as the
failure of a component.
Security log-Holds information records regarding security events. CiscoCallManager
does not report events in this log.
The Event Viewer displays the following event types:
Error-Indicates a problem, such as the loss of data or functionality.
Warning-Indicates a potential problem, such as when a service is stopped or started. This
event type does not necessarily signal an error.
Information-Indicates the availability of system information, such as host names or the
version of the currently used database.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_troubleshooting_guide_chapter09186a0
0

QUESTION 96:

You want to replace a system switch processor (SSP) card for the Cisco ICS 7750. In
which must you place SSP card?

A. Slot 1
B. Slot 3
C. Slot 4
D. Slot 5
E. Slot 7

Answer: E
Explanation Replacing the SSP Card
Step 1 Put on an ESD-preventive wrist strap, and attach it to an unpainted chassis
surface.
Step 2 Align the SSP card with the upper and lower card guides in slot 7 of the chassis,
and make sure that the ejection levers are in the open position (pointing outward).
http://www.cisco.com/en/US/products/hw/voiceapp/ps967/prod_maintenance_guide09186a0080087163.html#7
7

QUESTION 97:

In the
show db tables command, which switch instructs command to
return the configuration database?

A. db
B. dbcfg
C. config
D. configdb
E. db tables

Answer: A

QUESTION 98:

You are a network Administrator at Certkiller . You use SQL Server Enterprise
Manager to expand the folders to the database level.
Which folder indicates that your server is a publisher?

A. The Publisher folder.
B. The Databases folder.
C. The Publications folder.
D. The Management folder.
E. The Replication Master folder.

Answer: C

QUESTION 99:

You are a network Administrator at Certkiller . You view a system error message on
a log server outside of the Cisco ICS system manager.
Which Cisco severity code indicates the severity of "emergency: system unusable"?

A. 0
B. 1
C. 4
D. 7
E. 9

Answer: A

QUESTION 100:

You want to use the Admin Serviceability Tool (AST) to monitor device status,
system performance, and device discovery? Which two protocols does the AST use
to perform this function? (Choose all that apply.)

A. CDP
B. UDP
C. RTP
D. TCP
E. HTTP

Answer: D, E

Explanation: The AST uses the HTTP and TCP protocols to monitor device status,

system performance, and device discovery. It also connects directly to devices using HTTP for troubleshooting system problems. page 5-35 CIPT

QUESTION 101:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know what capabilities network monitoring tools provide. What will your reply be? (Choose all that apply.)

A. Traffic counts by station.
B. Percent broadcast traffic
C. Protocol distribution by the Layer 2 protocol.
D. Protocol distribution by the Layer 3 protocol.

Answer: A, B, D
Reference: Page 6-6 CIPT

QUESTION 102:

You are a network engineer at Certkiller . The company suffers a power outage. You want to provide emergency contact service until the power is returned.
What is a standard method of providing emergency contact service during power outages?

A. Power provisioned from an alternate grid.
B. Cellular phones available in emergency closets.
C. Power provisioned from a backup power generator.
D. A general alarm bell connected directly to emergency service provides.
E. Standard handsets on LEC loop-start lines scattered throughout the facility.

Answer: E

QUESTION 103:

You are a network engineer at Certkiller . You are installing an SPE card installed in a Cisco ISC 7750. Your newly appointed Certkiller trainee wants to know which of the following host names he can use on the SPE card. What will your reply be? (Choose all that apply.)

A. CertK 01
B. CertK :01
C. CertK -01
D. CertK 01
E. CertK (01)

Answer: A, C

Explanation: Host names should be no more than 15 characters long.
Host names should contain only the numbers 0 through 9, the letters A through Z, the
letters a through z, and hyphens (-). Using other characters might prevent other users
from finding your device on the network
http://www.cisco.com/en/US/products/hw/voiceapp/ps967/products_installation_and_configuration_guide_chap
ter

QUESTION 104:

You are a network administrator at Certkiller . You want to perform a standard
SQL query. What utility can you use to perform this query?

A. Cisco SQL Query Analyzer
B. Cisco SQL Runtime Analyzer
C. Microsoft SQL Query Analyzer
D. Microsoft SQL Runtime Analyzer
E. CallManager SQL Query Analyzer

Answer: C

QUESTION 105:

You are an assistant technician at Certkiller . You are troubleshooting an network
problem. You want to make a clear problem statement.
What must you define?

A. The network topology.
B. A set of causes and their associated effects.
C. A set of symptoms and their associated causes.
D. How it relates to past known and definitively resolved network issued.
E. The comparison of your baseline network to your testing environment.

Answer: C

Explanation: A systematic approach to troubleshooting consists of a sequence of steps.
To make a clear problem statement, define the problem in terms of a set of symptoms and
associated causes. Page 2-7 CIPT.

QUESTION 106:

What should you do when implementing an action plan? (Choose all that apply.)

A. Do not remove access lists so as to maintain security.
B. Make sure you notify all users of the impact of the changes.
C. Make sure that the changes you make do not make the problem worse.

D. Maintain backup configurations of the most important routers and switches in your network.

Answer: A, C, D

Explanation: When developing and executing the action plan be specific.
Make sure changes do not make the problem worse, if so reverse the changes.
Limit the impact of the changes you make from other users. Minimize the extent or duration of potential security lapses. Page 2-20 CIPT

QUESTION 107:

You are an assistant technician at Certkiller . You are troubleshooting a network problem. You want to isolate the problem. What would be an important step in accomplishing this goal?

A. Listening carefully to expert Cisco TAC support.
B. Brainstorming with colleagues while considering the gathered facts.
C. Eliminating facts that are not supported when brainstorming with experts.
D. Carefully considering the facts you have gathered from listening to expert Cisco TAC support.

Answer: C

QUESTION 108:

You want to perform some IP telephony troubleshooting. Which of the following steps is part of the IPTT model action plan recommended by Cisco for troubleshooting IP telephony?

A. Split troubleshooting possibilities into logical domains.
B. The first step is to consider the least likely possibilities and eliminate them.
C. Collaborate with other TAC centers that may have a greater concentration of voice expertise.
D. Break the problem into small steps and assign each one to small steps and assign each one to a separate expert so you can maximize the use of your existing knowledge base.

Answer: A

Explanation: Use the partitioning effect. Split the troubleshooting possibilities into logical domains that are isolated from each other.
Page 2-18 CIPT

QUESTION 109:

With regard to IP telephony network infrastructures, which two of the following

statements are true? (Choose all that apply.)

A. It supports the existing data network.
B. It replaced obsolete data network benefits.
C. It supports the new data features and traffic patterns.
D. The infrastructure can be a common source of troubleshooting.
E. The existing data network carries less risk and also less reward.

Answer: A, C

QUESTION 110:

Troubleshooting IP telephony networks is more than just understanding Legacy
networking equipment and new voice functional equipment.
What other factor must you also understand?

A. Customer service issues such as QoS.
B. IT management issues such as unreliable service.
C. The progression and history of why VoIP technology is being adopted.
D. Customer service issues such as determining agent workspace satisfaction.

Answer: A

QUESTION 111:

You are a network Administrator at Certkiller . You want to gather information
about IP telephony-related problems. Which two tools can you use? (Choose all that
apply.)

A. CTI Server Performance Monitor
B. Unity Server Performance Monitor
C. Router show and debugcommands
D. CatOS switch show and debug commands
E. Voice Gateway or Gatekeeper bandwidth monitor

Answer: C, D

QUESTION 112:

With regard to Cisco CallManager (CCM), which of the following statements is
true?

A. CCM is relatively easy to configure.
B. CCM provides the same functionality as Legacy ACD systems.
C. CCM is the first place to look when troubleshooting VoIP issues.
D. CCM keeps most of the common voice troubleshooting issues from being attributed to

a configuration problem.

Answer: C
Not D: You could very easily have common voice problems from a misconfigured
CallManager. ex. invalid css and partition setup.

QUESTION 113:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee
wants to know what Q.931 provides. What will your reply be?

A. It provides connection control for gateway connections.
B. It provides connection flow control for ISDN connections.
C. It provides connection flow control for gateway connections.
D. It provides connection control and flow control for ISDN connections.
E. It provides connection control and flow control for H.323 connections.

Answer: B

Explanation:
NOT D,E - both say 'flow control'
NOT A,C - q.931 deals specifically with ISDN, not gateways in general.
Q.931 is ISDN's connection control protocol, roughly comparable to TCP in the Internet
protocol stack. Q.931 doesn't provide flow control or perform retransmission.
source: http://www.freesoft.org/CIE/Topics/126.htm

QUESTION 114:

Which of the following troubleshooting issues is related to Cisco Unity?

A. Automatic call transfers
B. Voice response verification
C. Advanced customization issues
D. Voicemail agent response levels

Answer: C

QUESTION 115:

You are a network engineer at Certkiller . Certkiller has a Frame Relay circuit that is
clocked at 65 Kbps. You want to ensure voice quality?
What is the largest fragment size that you can use?

A. 32k
B. 56k
C. 64k

D. 128k
E. 256k

Answer: D
This one is really tricky. According to the above table, the largest fragment size for 10ms serialization delay is 80 bytes, but if you were to extend that to the maximum allowed 20 ms serialization delay then the largest fragment size would be 160 bytes. However, we have to pick the "best" answer out of the available choices - so 128 is the "best" answer.
Fragmentation (FRF.12)
Turn on fragmentation for low speed links (less than 768 kbps). Set the fragment size so that voice packets are not fragmented and do not experience a serialization delay greater than 20 ms. Set the fragmentation size based on the lowest port speed between the routers. For example, if there is a hub and spoke Frame Relay topology where the hub has a T1 speed and the remote routers have 64 K port speeds, the fragmentation size needs to be set for the 64 K speed on both routers. Any other PVCs that share the same physical interface need to configure the fragmentation to the size used by the voice PVC. Use this chart to determine the fragmentation size values.

Lowest Link Speed in Path	Recommended Fragmentation Size (for 10 ms Serialization)
56 Kbps	70 bytes
64 Kbps	80 bytes
128 Kbps	160 bytes
256 Kbps	320 bytes
512 Kbps	640 bytes
768 Kbps	1000 bytes
1536 Kbps	1600 bytes

http://www.cisco.com/en/US/partner/tech/ck652/ck698/technologies_configuration_example09186a0080094af9.s

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QUESTION 116:

DRAG DROP
In troubleshooting situations where too many calls are causing voice quality issues,
three categories of Call Admission Control (CAC) tools are available.
Match the tools with their descriptions.

Category	Descriptions	
Place here	Gauges the state of the network to determine whether to allow a new call	Local
Place here	Monitors the use of certain resources and calculates a value that drives the CAC decision.	Resource-based
Place here	Router bases the CAC decision on nodal information, such as the state of the outgoing WAN link or the number of available outgoing trunks	Measurement-based

Answer:

Category	Descriptions
Measurement-based	Gauges the state of the network to determine whether to allow a new call
Resource-based	Monitors the use of certain resources and calculates a value that drives the CAC decision.
Local	Router bases the CAC decision on nodal information, such as the state of the outgoing WAN link or the number of available outgoing trunks

Explanation:
Categories of CAC MechanismsThe remainder of this document discusses ten different CAC mechanisms available in current versions of Cisco IOS software. They are grouped into the following three categories:
1. Local CAC Mechanisms-Local CAC mechanisms function on the outgoing gateway. The CAC decision is based on nodal information such as the state of the outgoing LAN or WAN link. If the local packet network link is down, there is no point in executing complex decision logic based on the state of the rest of the network, because that network is unreachable. Local mechanisms include configuration items to disallow more than a fixed number of calls. For example, if the network designer already knows that no more than five calls can fit across the outgoing WAN link because of bandwidth limitations, then it seems logical that it should be possible to configure the local node to allow no more than five calls.
2. Measurement Based CAC Mechanisms-Measurement-based CAC techniques look ahead into the packet network to gauge the state of the network in order to determine whether to allow a new call. Gauging the state of the network implies sending probes to the destination IP address (usually the terminating gateway or terminating gatekeeper) that will return to the outgoing gateway with some measured information on the conditions the probe found while traversing the network to the destination. Typically, loss and delay characteristics are the interesting information elements for voice.
3. Resource-Based CAC Mechanisms-There are two types of resource-based mechanisms: those that calculate resources needed and/or available, and those reserving resources for the call. Resources of interest include link bandwidth, DSPs and DS0 time slots on the connecting TDM trunks, CPU power, and memory. Several of these resources could be constrained at any one or more of the nodes the call will traverse to its destination.

QUESTION 117:

With regard to Layer 2 VoIP bottlenecks, which of the following statements is true?

A. Buffers are the issue within the enterprise campus.
B. Bandwidth is the issue within the enterprise campus.
C. Buffers fill slowly so they can be relied upon to smooth router traffic.
D. More Gigabit Ethernet feeding Ethernet connections corrects oversubscription problems.
E. QoS is not an enterprise issue because data traffic is bursty and withstands buffer overflow.

Answer: A

QUESTION 118:

DRAG DROP
Match the routing command with the tool that enables it to give Layer 3 troubleshooting information.

Tool	Routing Command		
Place here	show interfaces		WRED
Place here	show class-map		LLQ
Place here	show queuing		MLP
Place here	show policy-map		FRF.12
Place here	show interfaces random-detect		
Place here	show frame-relay fragment		

Answer:

Tool	Routing Command
MLP	show interfaces
LLQ	show class-map
WRED	show queuing
LLQ	show policy-map
WRED	show interfaces random-detect
FRF.12	show frame-relay fragment

WRED
LLQ
MLP
FRF.12

QUESTION 119:

Which of the following data characteristics classify traffic? (Choose all that apply)

A. DLIC address
B. MAC addresses
C. Layer 7 application
D. Range of port numbers
E. Layer 1 Class of Service (CoS)
F. Layer 2 Class of Service (CoS)

Answer: B, C, D, F

QUESTION 120:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee
wants to know what the disadvantages of queuing are. What will your reply be?

A. It increased jitter
B. It increased latency
C. It increased packet loss
D. It increased complexity of the router configuration

Answer: D
Note: Possibly B.

QUESTION 121:

DRAG DROP
There are three major impacts on voice quality: packet loss, jitter, and latency.
Place a "P" in the box next to the problems caused by packet loss.

Place a "J" in the box next to issues effecting jitter.
Place and "L" next to latency concerns.

Place here	Traffic classification statements in queuing could be the cause
Place here	You use an extended ping operation to check for this problem
Place here	Low latency queuing (LLQ) can stop the congestion that causes this
Place here	If the delay is constant but too long, there may be either a Frame Relay issue or a suboptimal routing issue
Place here	It can be caused by a router with a buffer problem.
Place here	Cyclic Redundancy Check (CRC) errors on the receiving interface
Place here	Benchmarking the network and then periodically monitoring the response time can reduce the potential for this condition
Place here	Routing tables may allow voice packets to use alternating paths

Labels to be moved

P

J

L

Answer:

J	Traffic classification statements in queuing could be the cause
P	You use an extended ping operation to check for this problem
J	Low latency queuing (LLQ) can stop the congestion that causes this
L	If the delay is constant but too long, there may be either a Frame Relay issue or a suboptimal routing issue
P	It can be caused by a router with a buffer problem.
P	Cyclic Redundancy Check (CRC) errors on the receiving interface
L	Benchmarking the network and then periodically monitoring the response time can reduce the potential for this condition
J	Routing tables may allow voice packets to use alternating paths

Labels to be moved

P

J

L

QUESTION 122:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee
wants to know what jitter is. What will your reply be?

A. It is the variability in the interpacket arrival time.
B. It is the variable delay caused by the use of the wrong codec.
C. It is the variability in the playout of signal at the receiving end.
D. It is the variable delay caused by the serialization of the bits on the interface.

Answer: A

QUESTION 123:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know what the default value of Bc on a Cisco router is. What will your reply be?

A. 1/16 of CIR
B. 1/12 of CIR
C. 1/10 of CIR
D. 1/8 of CIR
E. 1/3 of CIR

Answer: D

QUESTION 124:

DRAG DROP
Match each command with its function.

Place here	Creates a connection that terminates in an endpoint inside the gateway	RQNT
Place here	Changes the parameters associated with a previously established connection	NTFY
Place here	Requests that a gateway applies a specific signal to and endpoint (such as dial tone)	CRCX
Place here	Deletes an existing connection	MDCX
Place here	Audits the status of any connection associated with it	DLCX
Place here	Notifies CCM that the service status has changed for the gateway	AUEP
Place here	Notifies CCM when requested events occur	AUCX
Place here	Audits the status of an associated endpoint	RSIP

Answer:

CRCX	Creates a connection that terminates in an endpoint inside the gateway
MDCX	Changes the parameters associated with a previously established connection
RSIP	Requests that a gateway applies a specific signal to and endpoint (such
DLCX	Deletes an existing connection
AUCX	Audits the status of any connection associated with it
RQNT	Notifies CCM that the service status has changed for the gateway
NTFY	Notifies CCM when requested events occur
AUEP	Audits the status of an associated endpoint

QUESTION 125:

DRAG DROP
Match the priority levels to their descriptions.

Priority Levels

Place here	Your production network is down, with the potential of causing critical impact to business operations if service is not restored quickly. You are willing to commit resources around the clock to resolve the situation.	P4
Place here	Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.	P3
Place here	You need information concerning Cisco product capabilities, installation advice, or basic product configuration data.	P2
Place here	Your production network is severely degraded and affects significant aspects of your business operations. You are willing to commit full-time resources during business hours to resolve the situation.	P1

Answer:

P1	Your production network is down, with the potential of causing critical impact to business operations if service is not restored quickly. You are willing to commit resources around the clock to resolve the situation.
P3	Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
P4	You need information concerning Cisco product capabilities, installation advice, or basic product configuration data.
P2	Your production network is severely degraded and affects significant aspects of your business operations. You are willing to commit full-time resources during business hours to resolve the situation.

QUESTION 126:

DRAG DROP
Place the steps to escalate telephone service provider-related problems in the correct order.

1	Place step one here	You provide service representative all necessary information, including exact description of the problem and contact
2	Place step two here	If you are not satisfied with the service or turnaround time, you may want to escalate the call to a supervisor.
3	Place step three here	After the problem is resolved, you have the service representative leave the ticket open until you can verify the problem has been
4	Place step four here	You test all equipment (CSU/DSU), WAN interface card [WICS], router, etc.) thoroughly to rule out problems with the network
5	Place step five here	You collect all the necessary information (i.e., circuit ID, contact telephone numbers) before calling the telephone service provider.
6	Place step six here	You document the problem, including the resolution.

Answer:

1	You test all equipment (CSU/DSU), WAN interface card [WICS], router, etc.) thoroughly to rule out problems with the network
2	You collect all the necessary information (i.e., circuit ID, contact telephone numbers) before calling the telephone service operatior
3	You provide service representative all necessary information, including exact description of the problem and contact
4	If you are not satisfied with the service or turnaround time, you may want to escalate the call to a supervisor.
5	After the problem is resolved, you have the service representative leave the ticket open until you can verify the problem has been
6	You document the problem, including the resolution.

QUESTION 127:

You want to report an issue to a telephone service provider.
What are the three most important principles to remember when doing this?
(Choose all that apply.)

A. You should sufficiently test the problem.
B. You should call the main repair number for business.
C. You make sure you have your Cisco Service Contract Number available when you call.
D. You make sure they know you are a Cisco partner, reseller, or channel representative.
E. Your service provider may not be bale to troubleshoot your issue without documentation.
F. You should be aware that your service ticket is not the only ticket that the service center is working.

Answer: A, E, F

QUESTION 128:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know why documentation is necessary. What will your reply be? (Choose all that apply.)

A. Documentation can be used to assign responsibility for issues.
B. Documentation is necessary to assign liability for issues if needed.
C. If the problem returns, then the fix that was used may not have been the actual fix.
D. Documentation can be used to assign responsibility and liability for issues if needed.
E. If the problem occurs in a different part of the network, the documentation can be used to repair the problem quickly.
F. Another underlying problem might pop up and documentation allows you to start where the previous troubleshooting ended.

Answer: C, E, F

QUESTION 129:

DRAG DROP
The Bug Navigator shows the status on bugs you are investigating. A few of those status names are listed in the table.
Match the status with its description.

Status	Description	
Place here	Problem described in bug report is fixed in all release versions targeted to be fixed and all changes have been successfully.	Closed
Place here	Bug report is valid, but a conscious decision has been made not to fix it all or in all releases.	Held
Place here	The evaluating or test engineer cannot reproduce the problem	Information required
Place here	The assigned engineer is actively working on the bug report	Junked
Place here	Awaiting additional easily retrieved information needed to determine the cause of the problem.	Open
Place here	Development-engineering work is pending information from an outside source to verify the fix.	Resolved
Place here	Bug report is discarded because it does not describe a problem that requires changes to hardware, software, or documentation.	Irrepreducible

Answer:

Status	Description
Resolved	Problem described in bug report is fixed in all release versions targeted to be fixed and all changes have been successfully.
Closed	Bug report is valid, but a conscious decision has been made not to fix it all or in all releases.
Irrepreducible	The evaluating or test engineer cannot reproduce the problem.
Open	The assigned engineer is actively working on the bug report.
Information required	Awaiting additional easily retrieved information needed to determine the cause of the problem.
Held	Development-engineering work is pending information from an outside source to verify the fix.
Junked	Bug report is discarded because it does not describe a problem that requires changes to hardware, software, or documentation.

QUESTION 130:

You are troubleshooting IP telephony problems. You want to escalate the problems.
Which two of the following methods are NOT recommended? (Choose all that
apply.)

A. You assign a priority of P3 to the problem to get the information you need for a Cisco
product in a more timely manner.
B. You need information concerning Cisco product capabilities, installation advice, or
basic product configuration data.
You assign P4.
C. You assign P3 if your network performance is degraded.
Network functionality is noticeably impaired, but most business operations continue.
D. Your production network is severely degraded and affects insignificant aspects of
your business operations.
You are not willing to commit full-time resources during business hours to resolve the
situation.
You assign P2.
E. Your production network is down, with the potential of causing critical impact to
business operations if service is not restored quickly.
You are willing to commit substantial resources around the clock to resolve the situation.
You assign P1.

Answer: A, D
TAC Case Priority Definitions
To ensure that all cases are reported in a standard format, Cisco has established case
priority definitions.
Priority 1 (P1)-Your network is "down" or there is a critical impact to your business
operations. You and Cisco will commit all necessary resources around the clock to
resolve the situation.

Priority 2 (P2)-Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Priority 3 (P3)-Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Priority 4 (P4)-You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.
http://www.cisco.com/en/US/partner/products/sw/netmgtsw/ps4748/products_documentation_roadmap09186a0
0

QUESTION 131:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know when it would be appropriate to open a case via telephone?

A. When a P1 or P2 situation occurs.
B. When a P3 or P4 situation occurs.
C. As soon as you see any degradation in your network.
D. When the problem happens for the second time and the first case has not been resolved yet.
E. When a P3 or P4 situation occurs and you are closer to a telephone then your Internet-ready desktop.

Answer: A
TAC Case Priority Definitions
To ensure that all cases are reported in a standard format, Cisco has established case priority definitions.
Priority 1 (P1)-Your network is "down" or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.
Priority 2 (P2)-Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.
Priority 3 (P3)-Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.
Priority 4 (P4)-You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.
http://www.cisco.com/en/US/partner/products/sw/netmgtsw/ps4748/products_documentation_roadmap09186a0
0

QUESTION 132:

Which of the following are allowed to access the Cisco Technical Assistance Center (TAC) home page? (Choose all that apply)

A. Cisco resellers.
B. Cisco employees.
C. Any Cisco customer.
D. Customers who are registered with Cisco.com and hold a valid Cisco Service Agreement.
E. Partners who are registered with Cisco.com and hold a valid Cisco Partner Service Agreement.

Answer: A, D, E

QUESTION 133:

DRAG DROP
May valuable, time-saving tools are available in the Tools and Utilities module.
Match the tool to its task.

Tool	Task		
Place here	Identifies, evaluates, categories, and tracks defects that have real or potential impact to network operations or planning.		Voice Codec Bandwidth Calculator
Place here	Simulates the steps in TAC engineer takes to diagnose problems and provides a technical solution or recommendation.		Compatibility Advisor, Catalyst 5000 and 6000
Place here	Determines the compatibility between specific product numbers and software releases.		Hardware/Software Compatibility Matric
Place here	Identifies valid hardware configurations for Catalyst operating system (OS) for the Supervisor Engine software		Software Bug Toolkit
Place here	Determines the amount of bandwidth needed for different numbers of calls using various codecs.		Troubleshooting Assistant

Answer:

Tool	Task
Software Bug Toolkit	Identifies, evaluates, categories, and tracks defects that have real or potential impact to network operations or planning.
Troubleshooting Assistant	Simulates the steps in TAC engineer takes to diagnose problems and provides a technical solution or recommendation.
Hardware/Software Compatibility Matric	Determines the compatibility between specific product numbers and software releases.
Compatibility Advisor, Catalyst 5000 and 6000	Identifies valid hardware configurations for Catalyst operating system (OS) for the Supervisor Engine software.
Voice Codec Bandwidth Calculator	Determines the amount of bandwidth needed for different numbers of calls using various codecs.

QUESTION 134:

You are a network engineer at Certkiller . Your newly appointed Certkiller trainee wants to know how Cisco CallManager (CCM) performs digit analysis. What will your reply be?

A. It searches all route lists in the route group and chooses the best possible match.
B. It searches the route lists in the route group and selects the first possible match.
C. It searches all partitions in the Calling Search Space and chooses the best possible match.
D. It searches the partitions in the Calling Search Space and chooses the first possible match.

Answer: A

QUESTION 135:

You are a network engineer at Certkiller . Certkiller 's main supplier is a long-distance phone call away. Certkiller users complain that sometimes when they dial the supplier's number they reach a local number.
What is the most likely cause of this problem?

A. PSTN trunk saturation
B. Overlapping dial plans
C. Incorrectly defined gateway
D. Overlapping gateway access lists
E. Incorrectly defined Calling Search Spaces

Answer: B

QUESTION 136:

As a VoIP network troubleshooter, what are two reasons it is important to be able
to troubleshoot all current network issues? (Choose two)

A. Timeless is very important when adding VoIP networking equipment.
B. The voice network relies completely on the existing network foundation.
C. Voice functionality depends primarily on maintaining your existing routers and
switches.
D. The voice network does not rely on the existing network but you need to be able to
perform VoIP upgrades.
E. Because increases bandwidth exists, timeliness is not important but convergance is
what allows you to be able to take advantage of the new bandwidth.

Answer: A, B

QUESTION 137:

Which protocol does Cisco CallManager (CCM) use to establish calls between
station devices?

A. SDL
B. RTP
C. SCCP
D. MGCP
E. H.450

Answer: C
Skinny Overview
Skinny enables voice communication between two Skinny clients through the use of a
CM. Typically, the CM provides service to the Skinny clients on TCP Port 2000.
Initially, a Skinny client connects to the CM by establishing a TCP connection; the client
will also establish a TCP connection with a secondary CM, if available. After the TCP
connection is established, the client will register with the primary CM, which will be
used as the controlling CM until it reboots or there is a keepalive failure. Thus, the
Skinny TCP connection between the client and the CM exists forever and is used to
establish calls coming to or from the client. If a TCP connection failure is detected, the
secondary CM is used. All data channels established with the previous CM remain active
and will be closed after the end parties hang up the call.
http://www.cisco.com/en/US/partner/products/ps6350/products_configuration_guide_chapter09186a0080455cb
2

QUESTION 138:

You are adding a new subscriber to the database, but replication to the publisher is

failing.
What can you do to restore replication?

A. Change the sa password on the subscriber to match the publisher.
B. Change the SQLSvc password on the subscriber to match the publisher.
C. Change the CCMService account password on the subscriber to match the publisher.
D. Change the Administrator account password on the subscriber to match the publisher.

Answer: B

Explanation :
The SQLSvc account is the core account used for server-to-server interaction within a
Cisco CallManager system. This account must be the same on every machine in the
cluster for database replication to work properly. If the SQLsvc password has been
changed on the publisher from the installed default, replication of the publisher database
will fail when a new subscriber is added.If replication has failed, change the new
subscriber's SQLsvc service password to match the SQLsvc password on the publisher,
and replication should succeed.

QUESTION 139:

Which statement is true about opening a P1 or P2 case via telephone?

A. Technical Assistance Center (TAC) engineers handle the problems directly.
B. You must make sure that you use the special priority card number whenever you call.
C. Technical Assistance Center (TAC) engineers are available to customers and partners.
D. If your service contract has lapsed, you can open a P2 case via telephone and then
renew your contract.

Answer: A

QUESTION 140:

The Cisco CallManager includes the Trace utility.
Which three features does the Trace utility provide? (Choose three)

A. digit analysis
B. detail of call processing
C. in-depth troubleshooting
D. flow chart of the entire dial plan
E. listing of improperly routes calls

Answer: A, B, C

QUESTION 141:

Which debug vpm command shows on/off hook states?

A. debug vpm spi
B. debug vpm dsp
C. debug vpm status
D. debug vpm signal

Answer: D
debug vpm signal
Use the debug vpm signal EXEC command to collect debug information only for
signaling events. Use the no form of this command to disable debugging output.
[no] debug vpm signal
Usage Guidelines
The debug vpm signal EXEC command collects debug information only for signaling
events. This command can also be useful in resolving problems with signaling to a PBX.
Sample Display
The following output shows that a ring is detected and that the router waits for the
ringing to stop before accepting the call:
router# debug vpm signalssmprocessevent: [1/0, 0.2, 15]
fxols_onhook_ringingssm_process_event: [1/0, 0.7, 19]
fxols_ringing_notssm_process_event: [1/0, 0.3, 6]ssmprocessevent: [1/0, 0.3, 19]
fxolso_ffhook_clearThe following output shows that the call is connected:
ssm_process_event: [1/0, 0.3, 4] fxols_offhook_procssm_process_event: [1/0, 0.3, 8]
fxols_proc_voice_ssm_process_event: [1/0, 0.3, 5] fxols_offhook_connectThe following
output confirms a disconnect from the switch and release with higher layer code:
ssm_process_event: [1/0, 0.4, 27] fxols_offhook_discssm_process_event: [1/0, 0.4, 33]
fxols_disc_confirmssm_process_event: [1/0, 0.4, 3] fxols_offhook_release
http://www.cisco.com/en/US/partner/products/hw/routers/ps221/products_configuration_guide_chapter09186a0
08007c9c0.html#xtocid7

QUESTION 142:

Why is it important to understand how Cisco CallManager (CCM) and Cisco Unity
relate to each other?

A. Cisco Unity integrated lightly with CCM.
B. Problems always result from a configuration error between the two devices.
C. Cisco Unity configuration and communication with CCM is critical to CCM
functionality.
D. Communication between CCM and Cisco Unity is the primary source of your IP
telephony communication troubleshooting issues.

Answer:

QUESTION 143:

When can you change the computer name of an SPE card, installed in a Cisco ICS
7750, that is running Cisco ICS System Manager?

A. Before installing SQL
B. Before installing CallManager
C. Before installing new applications
D. Before you install any application

Answer: D

QUESTION 144:

Q . 931 is the connection control protocol used for ISDN connections.
It is roughly comparable to _____.

A. FTP in the Application layer.
B. TCP in the Internet protocol stack.
C. UDP in the Transport layer of the OSI model.
D. ISDN, the international telecommunications standard for
providing a digital service.

Answer: B

QUESTION 145:

Which tool would you use to run Skinny and TSP traces on a Cisco Unity Server?

A. stsptrace.exe
B. skinnytrace.exe
C. AV-CiscoTSP.exe
D. Maestro Tools.exe

Answer: D
Although the TSP trace functionality of Maestro Tools has been replaced with Cisco Unity Diagnostic tool, it is
the
best of the possible answers.
Obtaining TSP Traces
CiscoUnity versions 3.1(1) and later use the CiscoUnity Diagnostic Tool, rather than Maestro Tools, to obtain
TSP
traces.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/prod_release_note09186a00800d759f.html
Setting Skinny Traces using DBMON or TSPMON
To learn how to set Skinny traces using DBMON or TSPMON, review the information below.
Note:For some Cisco Unity versions, the Technical Support engineer might provide you
with a special application called dbmon.exe or tspmon.exe. Each utility captures trace
outputs. TSPMON also writes the diagnostics to the current command window, which is

helpful for real-time troubleshooting. TSPMON can also be enabled through Windows
Terminal Services; DBMON cannot.
Using DBMON
DBMON must be run from a command prompt on the server console. Copy the application to your system and-just
before you reproduce the problem-issue this command:
dbmon.exe > dbmon.txtThis routes all tracing output from the application to a file in the same directory
as dbmon.exe. After the problem has been reproduced, press Ctrl + C to stop the application. Send the
dbmon.txt file to your Technical Support engineer.
Using TSPMON
TSPMON must be run from a command prompt on the server console. If the TSP is version 3.0(3) or 3.0(4), set
HKLM\Software\Active Voice\AvSkinny\LogMgr Enabled = 0 in the registry and restart Cisco Unity before
you use TSPMON. Copy the application to your system and-just before you reproduce the problem-issue this
command:
tspmonThis routes all tracing output from the application to a file called tspmon.log in the same directory as
tspmon.exe. After the problem has been reproduced, press X to stop the application. Do not use Ctrl + C, or you
lose the last few lines of diagnostics. Send the tspmon.log file to your Technical Support engineer.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/products_tech_note09186a0080094c53.shtm
l#setskinny

QUESTION 146:

What is part of a successful implementation of an IPTT troubleshooting action
plan?

A. Fully backing up the IP telephone firmware.
B. Limiting the impact of the changes on other users.
C. Your ability to demonstrate your expertise in solving current issues.
D. Making sure that you have notified Cisco TAC so they can help with the problem if
needed.

Answer: B

QUESTION 147:

What is an advantage of Low Latency Queuing (LLQ) over IP Real Time Transport
Protocol (RTP) Priority Queuing?

A. LLQ ensures that excess bandwidth is assigned to the priority traffic.
B. LLQ provides the ability to prioritize the call setup as well as the UDP/RTO flows.
C. LLQ ensures that voice flows (i.e., UDP/RTP) have priority over all other UDP and
TCP flows.
D. LLQ uses map-class commands, which provide more configuration flexibility than the
IP RTP Priority configuration.

Answer: C

QUESTION 148:

Which condition prevents details from appearing on the Cisco CallManager (CCM) Component Versions page?

A. The connection between the CCM and the SQL Server 2000 fails.
B. The CCM administrator has turned Component Tracking off on the server.
C. The current administrator has insufficient SQL SA permissions to view information.
D. The hardware versions of the queried server are different than the local console's hardware version.

Answer: B

QUESTION 149:

Which gateway interface presents 911 services with a different calling party number for each call?

A. PRI
B. FXS
C. E&M
D. POTS

Answer: D

QUESTION 150:

Devices provide three disconnect supervision mechanisms for any media connections preserved during system failure.
What are the three mechanisms? (Choose three)

A. timed
B. switchover algorithm
C. end-user timed release
D. graceful switch over algorithm
E. Media Streaming Failure (MSF)

Answer: A, C, E

QUESTION 151:

Some Cisco Catalyst switches can make forwarding and dropping decisions.
Which two statements are true? (Choose two)

A. Layer 2 switches do not make forwarding or dropping decisions.

This is a Layer 3 function.
B. These decisions are based on marking approaches, such as CoS, DSCP, or IP precedence.
C. Trying to configure a switch port to drop or forward a packet is considered "untrusted" and is not supported by Cisco.
D. You can configure Ethernet ports with trust states that determine which markings the switch uses to make forwarding and dropping decisions.

Answer: B, D

QUESTION 152:

Where will Cisco CallManager (CCM) typically record events in the Event Viewer?

A. System log
B. Security log
C. Application log
D. CallManager log

Answer: C

QUESTION 153:

What command returns a Windows diagnostic report from the command line?

A. show diag
B. show windiag -v
C. show dbtables Win
D. show windiagnostics
E. show win

Answer: E
Command Line Tools
Command Line Tools prove useful in troubleshooting. The following list gives the available command line tools:
show-Displays the CiscoCallManager database content, the .ini config file, memory statistics, and Windows diagnostic information and runs from a DOS shell or from a Telnet session into the CiscoCallManager.
nslookup hostname-Checks for a host-name-to-IP-address resolution.
netstat - a | more-Checks for socket listens on the correct port number.
ping hostname-Checks that the machine can be reached via an IP.
net start-Checks to see whether services are running.
Show Command
Use the Show command line tool to display the contents of the system memory statistics and the Windows diagnostic information. You can run the show command from a DOS shell or from a Telnet session if Telnet server software is enabled. You can display the

output data on the console or save it as a text file.

The following syntax applies for the show command:

show [-f <filename>] [-c <column width>] [-w <console width>] [-v] [command]

Use the following parameters with the show command:

show ?-Show help message

show db-Show configuration database

show db tables-Show database table names

show db t <tablename>-Show content of the database table

show win-Report Windows diagnostics

Refer to the CiscoCallManager Serviceability Administration Guide for more information on the show command.

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_troubleshooting_guide_chapter09186a0 08011b368.html#wp1037465

QUESTION 154:

Which statement is true about Calling Search Spaces?

A. They are ordered lists of route groups.
B. They are assigned to devices, phones, and gateways.
C. They are assigned to directory numbers and route patterns.
D. They pass emergency locations when 911 is called when searching for the caller's dialled number.

Answer: B

Understanding Partitions and Calling Search Spaces

A partition comprises a logical grouping of directory numbers (DNs) and route patterns with similar reachability characteristics. Devices typically placed in partitions include DNs and route patterns. These are entities associated with DNs that users dial. For simplicity, partition names usually reflect their characteristics, such as "NYLongDistancePT," "NY911PT," and so on. When a DN or route pattern is placed into a certain partition, this creates a rule that specifies what devices can call that device or route list.

A calling search space comprises an ordered list of partitions that users can look at before being allowed to place a call. Calling search spaces determine which partitions calling devices, including IP phones, soft phones, and gateways, can search when attempting to complete a call.

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/products_administration_guide_chapter09186 a00800c2ef1.html#10870

QUESTION 155:

What is the first thing you should do when you encounter any Cisco-related problem?

A. Open a case with a Technical Assistance Center (TAC) engineer.

B. Call and have your Account Manager escalate the problem at P1.
C. Open a case with Technical Assistance Center (TAC) via the TAC website or email.
D. Try to resolve a problem using the tools and resources that are available on the Cisco
Technical Assistance Center (TAC) website.

Answer: D

QUESTION 156:

Which utility allows you to change the default Unity Call Handlers?

A. Syscheck.exe
B. Dohproptest.exe
C. AvRulerEditor.exe
D. Unity SA>Call Handlers

Answer: D

QUESTION 157:

When a networking problem is finally resolved, steps should be taken to document
the problem and its resolution.
What should the documentation include?

A. cause, effects, and fix for the problem only
B. symptoms, cause, and fix for the problem only
C. cause, symptoms, corrective steps, and fix for the problem only
D. cause, symptoms, corrective steps, effect, and fix for the problem

Answer: D

QUESTION 158:

What is the outcome of dialling 92552121 with the following route patterns in the
dial plan: 9.[2-9]XXXXXX or 9.XXX[2-9]XXXXXXX?

A. The caller heard the re-order tone.
B. The call routes immediately to pattern #1.
C. The call routes immediately to pattern #2.
D. The call waits for the inter-digit timeout and routes to pattern #1.
E. The call waits for the inter-digit timeout and routes to pattern #2.

Answer: D

QUESTION 159:

How does a Call Management Record (CMR) differ from a Call Detail Record (CDR)?

A. CMRs are rollups of CDRs.
B. CMRs track call quality data while CDRs track usage data.
C. CMRs track calls per cluster while CDRs track calls per server.
D. CMRs are recorded only when a call is transferred, while CDRs are recorded on every call.

Answer: B

QUESTION 160:

Which three statements are true? (Choose three)

A. Applying a combination of Call Admission Control (CAC) tools throughout the network is not recommended.
B. If the terminating POTS side is most susceptible to oversubscription, you could use GateKeeper Resource availability indicator.
C. Max Connections or GK Zone Bandwidth tools do not allow you to limit traffic within a site but do allow you to limit the traffic between sites.
D. If it is important to keep the originating PBX from attempting to place a call onto the network when the network is incapable of completing the call, you should consider the busyout Call Admission Control (CAC) features.

Answer: B, C, D

QUESTION 161:

You see the following system error message:
%SPE-Fan 3 failure-FMM-0-411000
Which element represents the Cisco subfacility?

A. SPE
B. FMM
C. FAN 3
D. 411000

Answer: B

QUESTION 162:

The CEO of Certkiller .com complains that calls from his 7960 phone have very poor voice quality.
Where is the first place to gather troubleshooting data?

A. The I button on the CEO's 7960 phone.
B. The running-config on the connected gateway.
C. The CDR tables on the publisher CallManager server.
D. The Call Management Record (CMR) tables on the registered CallManager server.

Answer: A

QUESTION 163:

During a call, which tool shows the gateway being used for that call?

A. SQL query
B. Event Viewer
C. Show ip route
D. Performance Minitor

Answer: B

QUESTION 164:

E911 deployments in IP telephony environments require that phones be correctly associated with what?

A. gateways
B. gatekeepers
C. Central Offices (COs)
D. File CallManager servers

Answer: A

QUESTION 165:

The output of a network monitoring tool indicates that the average traffic
bandwidth utilization is 50% and peak utilization is 85%
When can VoIP applications be added to this network?

A. There is insufficient information to answer this question.
B. They can be added now because this utilization meets the required capacity.
C. They can be added when redesigning the network drops the peak utilization below
85%.
D. They can be added when redesigning the network drops the average utilization below
45%.

Answer: D

QUESTION 166:

When are configuration changes to the registry applied to the Cisco Unity system?

A. After it is configured.
B. After reload of all registry.
C. After reboot of all the system
D. After the Apply button is pushed

Answer: A

QUESTION 167:

What command can you use to check the fans for proper operation in a Cisco ICS 7750?

A. show fan
B. check fan
C. get fan-speed
D. show fan-speed

Answer: C
Checking Fan Speed and Operation
The SAP on the CiscoICS7750 monitors the operational status of each component in the system.
Working with the Fault Management Module (FMM) and ICS System Manager, the SAP can remotely alert you of environmental, functional, or operational problems detected within the system. Access is available through the console port on the front of the card.
One element of the CiscoICS7750 that can affect performance is the speed of its fans. The fans run at different speeds, depending on the system's operation:
1. At power up, the fans should run at high speed (high noise level) for up to 10seconds. After that time, they should go into normal operation mode.
2. At normal operation, the fans should be spinning at a low speed (low noise level).
3. During a software upgrade, the fans should run quietly.
4. Following a software upgrade, the fans should run as they do during the power-up process, spinning fast for about 10 seconds and then slowing down to normal operation.
Follow these steps to check the fans for proper operation:
Step 1 On a PC, open a HyperTerminal session with the SAP card.
Step 2 At the prompt, enter enable mode by typing slpenablepassword, followed by the password for the card.
Step 3 Enter the following command:
get fan-speed :<fan#>
where fan# is the number of the fan that you wish to check.
The following is an example of output that shows fans running at normal operation:
AlarmCard>get fan-speed :1
INF FAN-SPEED : 1, 2250

AlarmCard>get fan-speed :2
INF FAN-SPEED : 2, 2250
AlarmCard>get fan-speed :3
INF FAN-SPEED : 3, 2250
AlarmCard>get fan-speed :4
INF FAN-SPEED : 4, 2280

QUESTION 168:

What is the first thing you should do to contact the service provider?

A. Call the number listed in your telephone book for business repair.
B. Call the customer service department and begin the escalation process.
C. Call your own service provider account manager to ask the best way to proceed.
D. Call Cisco Technical Assistance Center (TAC) and have them connect you with the correct service provider.

Answer: B

QUESTION 169:

What increases the probability that E911 services remain up at a remote site?

A. A UPS
B. More gatekeepers
C. Alternate route lists
D. Additional WAN lines

Answer: D

QUESTION 170:

A Cisco Unity subscriber calling in to check voicemail complains of being transferred to the opening greeting instead of the subscriber sign-in.
What is a possible cause of this problem?

A. call routing
B. call handlers
C. class of service
D. subscriber settings

Answer: B

QUESTION 171:

Which statement is true about the use of tools?

A. The choice of an internal tool versus an external tool should be based on the individual's experience.
B. The choice of an internal tool versus and external tool should be based on the symptoms of the problem.
C. Generally, external tools are better for identifying the source of IP telephony-related problems than internal tools.
D. Generally, internal tools are better for identifying the source of IP telephony-related problems than external tools.

Answer: B

QUESTION 172:

Which command initialized and configures the DC Directory and DC Directory replication agreements on the secondary server?

A. ccm_scfg<publisher server name> <subscriber server name>
B. avvid_scfg<publisher server name> <subscriber server name>
C. ccm_cfg <publisher server name> <Cisco CallManager DB name>
D. avvid_cfg <publisher server name> <Cisco CallManager DB name>

Answer: D

QUESTION 173:

What undesirable voice characteristic is typically caused by compression, decompression, packet loss, and echo cancellation?

A. jitter
B. noise
C. latency
D. serialization

Answer: C

QUESTION 174:

What has the greatest negative effect on Cisco Unity performance?

A. order of call routing rules
B. type of calls being routed
C. order of call routing tables
D. number of call routing rules

Answer: A

QUESTION 175:

You are assigned a trouble ticket. It states that a customer cannot call from Phone A
to Phone B, but Phone B can call to Phone A.
What is the most likely cause?

A. Phone B is the Null partition.
B. Phone A is the Null Calling Search Space.
C. Phone A's partition is not in Phone B's Calling Search Space.
D. Phone B's partition is not in Phone A's Calling Search Space.

Answer: D

QUESTION 176:

DRAG DROP
The bandwidth available to router son the WAN boundary may be insufficient to
transport packets in a timely fashion. Match the problems to their causes.

Cause	Problem	
Delay	The causes of delay introduce jitter.	Place here
Variable Delay	Packets temporarily remain in queue while the router sends other packets.	Place here
Buffer Overflow	Insufficient bandwidth exists for a router to send traffic out on the wire and discards ***MISSING***	Place here

Answer:

Cause	Problem	
	The causes of delay introduce jitter.	Variable Delay
	Packets temporarily remain in queue while the router sends other packets.	Delay
	Insufficient bandwidth exists for a router to send traffic out on the wire and discards ***MISSING***	Buffer Overflow

QUESTION 177:

Which statement about the Cisco Technical Assistance Center (TAC) Software Ceneter is true?

A. To access the Software Center, click Software Center on the Cisco home page.
B. The Software Ceneter is a gateway to all of the newest training devices that Cisco provides.
C. You can search, access, and download software and firmware upgrades from the Software Center.
D. The Software Center contains links to other software-related online auto configuration utilities such as the CCM Auto Config (CAC) and VoIP Solution Search (VoSS).

Answer: C

QUESTION 178:

Within the H.323 protocol, what is used for call alerting and connect messages?

A. H.225
B. H.245
C. H.261
D. G.263
E. G.711
F. G.723
G. G.726

Answer: A

Explanation: H.225 is used for signaling establishment, signaling setup, call proceeding

,call alerting and call release between H.323 endpoints(devices) whereas H.245 is used for exchanging media capabilities.

QUESTION 179:

What is the best method to handle calling line identification to E911 when using DID numbers in Cisco CallManager (CCM)?

A. Deploy a CLID-ANI conversion box.
B. Rely on the listed directory number of the outgoing trunk.
C. Use transformation masks to change the extension to full E.164 number.
D. Route through a particular gateway with a known PSTN connection and number.

Answer: A

QUESTION 180:

What is the default location used to store system reports generated with the Cisco Unity System Administration tool on a Cisco Unity Server?

A. C:\Cisco Unity\Reports
B. C:\CommServer\Reports
C. C:\winnt\system32\Reports
D. C:\Program Files\Cisco Unity\Reports

Answer: B

QUESTION 181:

You use the Windows 2000 Event Viewer to generate a report for application events that apply only to Cisco Unity.
What can you use as a filter to ensure that you receive only Unity events?

A. _MC
B. _Unity
C. _VVID
D. _ctivevoice

Answer: A
Event Notification Utility
The Event Notification utility sends e-mail, voice mail, or both to subscribers or public distribution lists in response to an error condition or potential problem on the CiscoUnity server. The utility monitors the Windows application log and sends notification when a specified event occurs, such as "Disk almost full." In addition, the utility can also automatically restart the CiscoUnity server when a specified event occurs.
The Event Notification utility has several default event notifications predefined, though

some event notifications, such as those which require the CiscoUnity server to automatically restart, are disabled. The notification settings for the default event notifications specify that an e-mail is sent to the System Event Messages distribution list. Because the Example Administrator is the only member of this distribution list by default, assign the appropriate subscriber(s) or public distribution list to the list to ensure that someone receives event notifications.

You can disable or enable existing event notifications, as well as modify the event which is monitored, how you are notified when the event occurs, and who receives notification. You can also add new event notifications. There are two types of event notifications that you can create:

Table: Event Notifications Types

Type	Action
NT Event Log	The utility notifies you when an application event that you specify occurs.
Reboot CiscoUnity	The utility notifies you and automatically restarts CiscoUnity when an application event that you specify occurs.

Note that CiscoUnity writes events only to the Windows application log; it does not write events to the system or security logs. To generate an Event Log report for all application events on the CiscoUnity server, or for the events that apply only to CiscoUnity, see the "Event Log Report" section. You can also view application events by using the Windows Event Viewer (from the Start menu, click Programs > Administrative Tools > Event Viewer). You can identify the CiscoUnity events in either the Event Log report or the Event Viewer as those events that end in "MC" (for example, "AvLogMgrSvrMC"). For more information on Windows events, refer to the Windows Event Viewer online Help.

QUESTION 182:

What affects latency?

A. enablement of VAD
B. serialization of the bits
C. inbound interface queuing
D. error-handling characteristics of the media

Answer: B

QUESTION 183:

Which priority level indicates that if you do not get help right away you are in a very serious trouble?

A. P1
B. P3
C. P4
D. Both P1 and P4 because a case must progress through each step of the escalation process in order to get to the highest level.

Answer: A

QUESTION 184:

DRAG DROP
When escalating a Cisco-related problem, the following steps are recommended.
Place the steps in the correct order.

Steps	Steps in order
Use the appropriate telephone number to contact a TAC engeiner handling **MISSING**	Place 1st step here
Research the problem using the resources available on the Cisco **MISSING**	Place 2nd step here
Document the problem, as well as the resolution.	Place 3rd step here
Use the Bug Navigator tool in the Software Bug toolkit	Place 4th step here
Use the Case Open tool available on the Cisco TAC home page if the problem is a P3 or P4 level	Place 5tht step here

Answer:

Steps

Steps in order

Steps in order
Research the problem using the resources available on the Cisco **MISSING***
Use the Bug Navigator tool in the Software Bug toolkit
Use the Case Open tool available on the Cisco TAC home page if the Problem is a P3 or P4 level
Use the appropriate telephone number to contact a TAC engeiner handling **MISSING**
Document the problem, as well as the resolution

QUESTION 185:

What must be placed in each remote office in a Centralized Call Processing environment?

A. PBXs
B. Gateways
C. File servers
D. Only one CallManager

Answer: B

QUESTION 186:

What is the default login and password when first logging into the ART tool?

A. Avvid, Avvid
B. Cisco, Cisco
C. Cisco, Avvid
D. Admin, Admin
E. Admin, Password

Answer: D
Resetting the Username and Password to the Default
In the event that you do not have access to the Global Directory in Cisco CallManager to
change the password, an alternative method to get into CAR is to reset the login

password to the default. The default is username=admin, password=admin. Once reset, you can log into CAR and assign administrator privileges for CAR to any user.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/products_tech_note09186a00801115eb.shtml
#

QUESTION 187:

Exhibit:
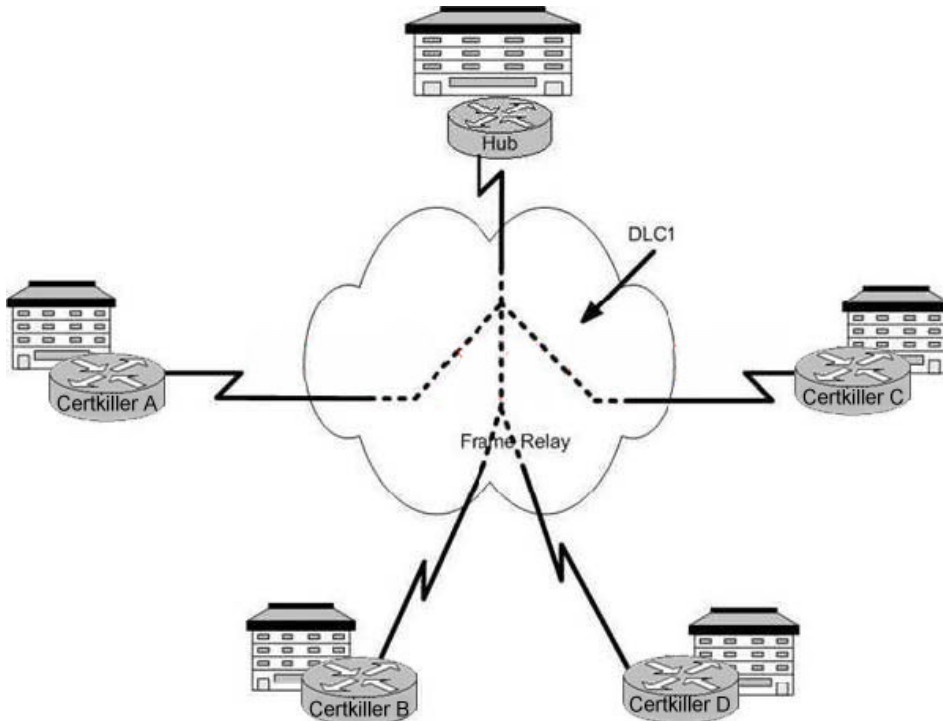
What, if anything, is wrong with the configuration shown in the exhibit?

A. Nothing is wrong. It is correct as shown.
B. Frame Relay traffic shaping should not be used in this configuration.
C. Frame Relay adaptive traffic shaping should be enabled in map-class FRG22.
D. Priority Queuing must be enabled on the serial interface if voice traffic is to be prioritized.

Answer: B

QUESTION 188:

You use the SQL Enterprise Manager to expand the folders to the database level.
What identifies your server as a publisher?

A. Roles
B. Tables
C. Stored Procedures
D. Replication Monitor

Answer: D

QUESTION 189:

When does a Cisco router set the discard eligible (DE) bit?

A. When transmission exceeds CIR.
B. When the interface is oversubscribed.
C. If retransmission exceeds 20% of CIR.
D. If Frame Relay network experiences congestion.

Answer: A

QUESTION 190:

DRAG DROP
Match each E911 services acronym to its definition or function.

	Definition or Function	Acronym
CAMA	A database at the LEC that looks up an address as soon as a call is made	Place here
CAS	Emergency service number	Place here
ALI	A trunk all used by all 911 networks in either analog or digital form	Place here
ESN	Digital signing over a T1	Place here

Answer:

Definition or Function	Acronym
A database at the LEC that looks up an address as soon as a call is made	ALI
Emergency service number	ESN
A trunk all used by all 911 networks in either analog or digital form	CAMA
Digital signing over a T1	CAS

QUESTION 191:

When you use the CLI on Cisco CallManager (CCM), what is it possible to display?

A. RTP packets
B. The active phone calls
C. Intercluster communication
D. The configured route pattern

Answer: A

QUESTION 192:

The Bug Navigator allows you to search for known bugs based on which two parameters? (Choose two)

A. feature set
B. product name
C. operating system
D. bug pervasiveness
E. enhancement bugs

Answer: A, B

QUESTION 193:

Which two statements are true about fragmentation and compression? (Choose two)

A. Voice packets are typically larger than data packets and need to be limited to 128 bytes.
B. Cisco recommends that you not perform fragmentation on link speeds greater than 768 kbps.
C. Compression is important because a voice packet header may be twice the size of the payload.
D. To improve QoS it is extremely important that you keep the serialization delay for any packet in the range of 10 ms to 20 ms.
E. The key to effective compression is to compress larger packets while letting the smaller packets pass through without compression.

Answer: B, C

QUESTION 194:

In certain situations, DTMP digits are not recognized when processed through VoIP dial-peer gateways.
To avoid this problem, what should you do?

A. Configure certain gateways to enable DTMF relay.
B. Use in-band signalling between PBX systems and Cisco Unity.
C. Use Cisco IOS software-based gateways that use H.245 out-of-band signalling.
D. Multiplex voice traffic with control codes to instruct Cisco Unity how to direct a particular call.

Answer: A

QUESTION 195:

A running-config shows the following:
access-list 101 permit tcp any any eq 23
access-list 101 permit tcp any any eq 2000
access-list 101 permit tcp any any eq 1720
Which communication is blocked?

A. telnet
B. voice packets
C. H.245 call setup
D. Skinny Client Control Protocol (SCCP)

Answer: B

QUESTION 196:

How do changes replicate between publisher and subscriber servers?

A. bi-directionally
B. multiple-master
C. incremental processes
D. transactional processes

Answer: D

QUESTION 197:

Where should you change the IP address of an ASI card installed in a Cisco ICS 7750?

A. ISCConfig utility
B. WINIPCFG utility
C. IPCONFIG command line utility
D. Windows 2000 network properties

Answer: A

QUESTION 198:

Why is troubleshooting voice networks complex?

A. New technology and equipment are required to allow VoIP to occur on an existing network infrastructure.
B. The older technology is more difficult to understand because education is becoming less available.
C. It takes a great deal of education to have a thorough understanding of existing and upgraded systems and equipment.
D. Some downtime can be tolerated because if the increase in network efficiency, but anything over 7.5& is unacceptable.

Answer: D

QUESTION 199:

You receive a startup message saying that "At least one service or driver failed during startup"
What should you check?

A. Call Viewer
B. Event Viewer
C. Status Monitor
D. Cisco Unity SA

Answer: B

QUESTION 200:

When using Call Detail Record (CDR) to troubleshot the IP telephony network,
what must you be bale to do to use these tools effectively?

A. Determine what a successful call looks like in the CDR.
B. Understand CDR and Call Management Record (CMR) information interacts.
C. Understand how CDR information relates to the partitions and Calling Search Spaces
in the CallManager.
D. Understand when to use the CDR information and when to use the Call Management
Record (CMR) information for troubleshooting.

Answer: B

QUESTION 201:

Where are Call Detail Record (CDR) and Call Management Record (CMR) data
initially recorded?

A. Database of the publisher CallManager server.
B. Database of the registered CallManager server.
C. Application log of the publisher CallManager server.
D. Application log of the registered CallManager server.

Answer: A

QUESTION 202:

Which two statements about TAC website are true? (Select two.)

A. The Location is http://www.cisco.com/tac
B. The contact TAC module includes all of the information you must have to open or
manage a TAC case.

Answer: A, B

QUESTION 203:

Which two are commands primitives of MGCP? (Select two.)

A. NTFY
B. AUEP

Answer: A, B

QUESTION 204:

Which three switch configuration parameters have an effect on ip phone operation?
(Select three.)

A. portfast
B. Portspeed
C. Jitter buffer size

Answers: A, B, C

QUESTION 205:

In Cisco Unity, a set of instructions that specify what to do when a call reaches a certain
point is called call a handler.

A. True
B. False

Answer: A

QUESTION 206:

Which of the following client operating systems are supported by the Administrative
Reporting Tool?

A. Windows 98
B. Windows 2000
C. Unix
D. MAC OS 10.2

Answer: A, B, C

QUESTION 207:

The ART tool is capable of looking for information from one week prior to its
installation.

A. False
B. True

Answer: A
Error MessageThat e-mail cannot be played at this time.

ExplanationAll of the licensed Text to Speech resources are in use.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/prod_troubleshooting_guide_chapter09186a0

QUESTION 208:

Which of the following fields can be found in a CMR?

A. dateTimeConnect
B. directoryNum
C. deviceName
D. dateTimeStamp
E. callIdentifier

Answer: B, C, D, E

QUESTION 209:

In Cisco Unity, a set of instructions that specify what to do when a call reaches a certain
point is called a(n):

A. Routing Agent
B. Instruction Agent
C. Processing Agent
D. Call Handler

Answer: D

QUESTION 210:

The 1 byte QoS classification field in the IP packet header is referred to as:

A. ToS
B. 802.1d
C. ISL
D. CoS

Answer: A

QUESTION 211:

A user is checking messages and receives an error " That e-mail cannot be played at this
time ". What should you check?

A. Class of service
B. Hard Drive has crashed

C. Licensing
D. Voice ports

Answer: C

QUESTION 212:

Which of the following web browsers are not supported by the Administrative Reporting
Tool?

A. Opera 2.5
B. Internet Explorer 5.0
C. Netscape 4.5
D. Mosaic 6.1

Answer: A, D

QUESTION 213:

Cisco CallManager uses which protocol for inter-cluster communications?

A. SMDI
B. SCCP
C. MGCP
D. H.323 v2

Answer: D

QUESTION 214:

Which of the following is not used to rate Quality of Service in the ART tool?

A. MTU
B. Jitter
C. Latency
D. Lost packets

Answer: A

QUESTION 215:

The Cisco CallManager Trace Gathering Tool can be run within the Unity System
Administrator.

A. True
B. False

Answer: B
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_technical_reference09186a00800d6a61.
h

QUESTION 216:

What standard signaling protocol is used within H.323 for call signaling and call
setup?

A. RTP
B. Q.Sig
C. H.225
D. H.245

Answer: C
H.225 Call Control (Setup) Signaling
H.225 call control signaling is used to setup connections between H.323 endpoints. The
ITU H.225 recommendation specifies the use and support of Q.931 signaling messages.
A reliable (TCP) call control channel is created across an IP network on TCP port 1720.
This port initiates the Q.931 call control messages for the purpose of connecting,
maintaining, and disconnecting calls.
When a gatekeeper is present in the network zone, H.225 call setup messages are
exchanged either via Direct Call Signaling or GKRCS. See the Gatekeeper-Routed Call
Signaling vs Direct Endpoint Signaling section of this document for more information.
The method chosen is decided by the gatekeeper during the RAS admission message
exchange.
If no gatekeeper is present, H.225 messages are exchanged directly between the
endpoints.
http://www.cisco.com/en/US/partner/tech/ck652/ck01/technologies_technote09186a00800c5e0d.shtml#h225ca

QUESTION 217:

In CallManager route plan, route patterns can be manipulated in which entities?

A. Route lists
B. Route groups
C. Route patterns
D. Gateways

Answer: A, D

QUESTION 218:

Which of the following gateways does not support SRST?

A. Cisco 7200
B. Cisco 2620
C. Cisco 3640
D. WS-X6608-T1

Answer: D
Platform Details-IP Phone Density and System Requirements

Platform	Cisco SRST 2.0 Phones/DN	Cisco SRST 2.1 Phones/DN	Cisco SRST 3.0 Phones/DN	Cisco SRST 3.1 Phones/DN	Cisco SRST 3.2 and 3.2.1 Phones/DN	Recommended Memory (Flash/DRAM)
Cisco 1751	24/96	24/120	-	-	-	16/96
Cisco 1751-V	24/96	24/120	24/120	24/120	24/120	32/128
Cisco 1760 and Cisco 1760-V	24/96	24/120	24/120	24/120	24/120	32/128
Cisco 2610	24/96	-	-	-	-	16/64
Cisco 2620	24/120	24/120	-	-	-	16/96
Cisco 2650, Cisco 2610 and Cisco 2620	24/96 24/96	24/96	24/96	-	-	32/96 16/64
Cisco 2610XM and Cisco 2620XM Cisco 2650	24/96 24/96	24/120 24/96	24/120 24/96	36/144 -	36/144 -	48/128 32/96
Cisco 2610XM and Cisco 2620XM	24/96	24/120	24/120	36/144	36/144	48/128
Cisco 2650XM	48/192	48/192	48/192	48/192	43/192	48/128
Cisco 2801	-	-	-	-	24/120	64/128
Cisco 2811	-	-	-	-	36/144	64/256
Cisco 2821	-	-	-	-	43/192	64/256
Cisco 2851	-	-	-	-	96/255	64/256
Cisco 2650XM	48/192	48/192	48/192	48/192	43/192	48/128
Cisco 2691	72/216	72/288	72/288	72/288	72/288	64/256
Cisco 3725	144/576	144/576	144/576	144/576	144/576	32/128
Cisco 3745	240/720	240/960	240/960	240/960	430/960	32/128
Cisco 3825	-	-	-	-	336/960	64/256
Cisco 3845	-	-	-	-	720/960	64/256
Cisco Catalyst 6500 CMM	-	-	-	480/960	430/960	32/256
Cisco 7200 NPE 225	200/800	200/800	Not Supported	Not Supported	Not Supported	16/256
7200 NPE 300	240/960	240/960	Not Supported	Not Supported	Not Supported	16/256
7200 NPE 400	480/960	480/960	Not Supported	Not Supported	Not Supported	16/512
7200 NPE G1	480/960	480/960	Not Supported	Not Supported	Not Supported	64/512

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2169/products_datasheet09186a00800888ac.html

QUESTION 219:

Which of the following patterns are valid for E-911 dialing?

A. 9.11
B. 911
C. 9.@ where (SERVICE == 911)
D. 9.911

Answer: B, C, D

QUESTION 220:

Which of the following call handlers are installed by default in Cisco Unity?

A. Welcome greeting
B. Attendant
C. Operator
D. Goodbye
E. Opening greeting

Answer: C, D, E
Predefined Call Handlers
CiscoUnity comes with the following predefined call handlers, which you can modify but
not delete. Note that you will at least want to modify the greetings for these call handlers.

Opening Greeting	Acts as an automated attendant, playing the greeting that callers first hear when they call your organization, and performing the actions you specify. The Default Call Handler Call Routing rule transfers all incoming calls to the Opening Greeting call handler. By default, the Opening Greeting call handler allows callers to dial the applicable extension to reach the Sign-in conversation, or the Operator call handler. Messages left in the Opening Greeting call handler are sent to the Example Administrator. See the Call Management > Call Handlers > Opening Greeting pages for details on additional settings.
Operator	Calls are routed to this call handler when callers press "0" or do not press any key, (the default setting) as stated in the Cisco Unity conversation. You can set up the Operator call handler so that callers can leave a message or be transferred to a live operator. By default, the Operator call handler allows callers to press * to reach the Sign-in conversation, or press # to reach the Opening Greeting call handler. Messages left in the Operator call handler are sent to the Unaddressed Messages distribution list. See the Call Management > Call Handlers > Operator pages for details on additional settings.
Goodbye	Plays a brief goodbye message and then hangs up if there is no caller input. By default, the Goodbye call handler allows callers to dial the applicable extension to reach the Sign-in conversation, or the Operator call handler. If you change the After Greeting action from Hang Up to Take Message, then messages left in the Goodbye call handler are sent to the Example Administrator. See the Call Management > Call Handlers > Good-bye pages for details on additional settings.

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/products_administration_guide_chapter0918
6

QUESTION 221:

Which of the following are valid route pattern wild cards?

A. &
B. @
C. +
D. X
E. !

Answer: B, C, D, E

Explanation:

Route Pattern: Commonly Used Wildcards

Wildcard	Description
x	Single digit (0-9, *, #)
@	North American Numbering Plan
!	One or more digits (0-9)
[x-y]	Generic range notation
[^x-y]	Exclusion range notation
.	Terminates access code
#	Terminates interdigit timeout

QUESTION 222:

ART must be installed on the server running the Publisher database for Cisco CallManager:

A. False
B. True

Answer: B

QUESTION 223:

The Administrative Reporting Tool can be loaded on which server operating systems?

A. Unix
B. Windows 2000
C. Windows NT 4.0
D. MAC OS 10

Answer: A, B, C

QUESTION 224:

Which of the following are true regarding a trunk configured for voice VLAN?

A. Can only carry voice traffic
B. Supports the native VLAN as well as the voice VLAN configured
C. Must tag all packets using the ISL protocol
D. The Port Fast feature is automatically enabled when voice VLAN is configured

Answer: B, D

QUESTION 225:

How many CDR records can the ART tool handle?

A. 1 million
B. 1.5 million
C. 2 million
D. 3 million

Answer: C
Release Notes for Administrative Reporting Tool for Release 1.1(1)
System Requirements
The following specifications apply to ART:
ART Release 1.1(1) is compatible with CiscoCallManager Release 3.1(1).
Make sure ART is installed on the CiscoCallManager with the primary publisher database.
The ART application uses approximately 42 MB of disk space for the executable and the online documentation.
ART is designed to work for an enterprise with a maximum of two million CDRs and a maximum of two million
records in the ART database. If the size of the CDR database exceeds the limits, the performance of ART is adversely
impacted.
The peak size of the ART database contains 1.5 GB.
The ART application requires no maintenance other than possible upgrades when CiscoCallManager is upgraded.
System administrators, managers, and users have access to ART. The system administrators can also access ART
directly from the server machine.
The system administrators, managers, or users can access ART by typing the URL as: "<server name>/art/Logon.jsp"
where server name is the name/ipaddress of the server where ART is installed. The system administrators can also
access ART directly from the Server machine

The client machines can be running Microsoft Windows OS.
The database is Structured Query Language (SQL) server, Version 7.0.
ART uses StyleReport Pro for report generation and displays reports in PDF form using Adobe Acrobat Reader.
The DialPlan for ART can be customized.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_release_note09186a00800b7578.html

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QUESTION 226:

Which of the following is true regarding the Administrative Reporting Tool (ART)?

A. ART must be installed on the server running the Publisher database for Cisco
CallManager
B. ART can be installed on either the Publisher or Subscriber
C. ART can be installed on any server running Cisco CallManager
D. ART can be
installed on any server running Windows 2000

Answer: A

QUESTION 227:

A user is checking their messages and they receive an error "All Ports Busy notification".
What should you check?

A. Licensing
B. Voice ports
C. Class of service
D. Hard Drive has crashed

Answer: B

QUESTION 228:

Which of the following CDR/CMR table contains information about the voice quality of
calls?

A. CMRVersion
B. CallDetailRecord
C. CallDetailRecordDiagnostics
D. CDRVersion

Answer: C

QUESTION 229:

Low latency queuing (LLQ) is also known as:

A. PQ/WFQ
B. CQ and CBWFQ
C. PQ/CBWFQ
D. CBWFQ

Answer: C

QUESTION 230:

What are the values of the default User ID and password when logging in to ART version
1.1(1) for the first time?

A. avvid, avvid
B. administator, administator
C. Cisco, Avvid
D. Cisco, Cisco
E. admin, admin

Answer: E

QUESTION 231:

What protocols does the Admin Serviceability Tool (AST) utilize to monitor
devices?

A. XML
B. TCP
C. FTPD. HTTP
E. RTP

Answer: B, D

QUESTION 232:

By default, status monitor can be found in which of the following directory?

A. C:\CommServer\documentation.doc
B. C:\UnityAdministration\StatusMonitor.exe
C. C:\Unity\Reports\StatusMonitor.exe
D. C :\Commserver\TechTools\StatusMonitor.exe

Answer: D
Workaround
Reset the port from the Cisco Unity Status Monitor. Status Monitor is located in the
C:\Commserver\TechTools directory.

1. Access Status Monitor.
2. Locate the port that is locked and click Reset Port.
Note:If more than one port is locked, stop and restart the Unity services.
3. Disable AGC on the Cisco Unity System from the registry. Locate the AGCUseCompression key under the following directory and set it to 0:
\\HKLM\Software\ActiveVoice\MIU\1.0\Initialization
4. The system must be restarted for this to take effect. This will disable AGC for both G.711 and G.729 messages.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/products_technote09186a0080094b7d.shtml

QUESTION 233:

Which of the following tools is used to observe serial or DTMF integration?

A. Edit Switch utility
B. Integration Monitor
C. SysCheck
D. Call Viewer utility

Answer: B
Integration Monitor
The Integration Monitor shows the information being sent between the phone system and CiscoUnity. Each packet of data contains information on one call that the phone system forwards to CiscoUnity. In some cases, seeing this data can help you diagnose integration problems.
With a serial integration, you can view the packets of data that are sent over the serial link. The Integration Monitor also displays the packets that CiscoUnity sends to the phone system, each of which contains one MWI on or off code.
With an analog integration, you can view the packets sent over the phone lines that connect the phone system and CiscoUnity.
When troubleshooting the Cisco CallManager integration, use the Call Viewer. The CiscoUnity Integration Monitor is not compatible with the Cisco CallManager integration.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/prod_troubleshooting_guidechapter09186a0

QUESTION 234:

What types of intra-cluster communications take place in Cisco CallManager architecture?

A. Run-Time Data
B. Subscription Data
C. SQL
D. Exchange

Answer: A, C

QUESTION 235:

Exhibit: *** MISSING***
Refer to the switch configuration in the exhibit. Which VLAN carries voice traffic?

A. VLAN 155
B. VLAN 100
C. VLAN 10
D. VLAN 0

Answer: A

QUESTION 236:

When documenting a problem, Cisco recommends the following be included:

A. How many people solved the problem
B. Tools used to gather facts
C. Date and time of the problem
D. Location of problem

Answer: B, C, D

QUESTION 237:

What is the maximum number of CDR records that can be stored?

A. 5,000,000
B. 20,000,000
C. 1,000,000
D. 10,000,000

Answer: D

QUESTION 238:

Which of the following capabilities do monitor tools provide?

A. Protocol distribution by Layer 3 protocol
B. Percent broadcast trafficC. Detailed packet level tracing
D. Protocol distribution by Layer 7 protocol
E. Traffic counts by station

Answer: A, B, C, E

QUESTION 239:

If some users are complaining that there is a delay in their MWI coming on, what could be the cause?

A. Not enough ports are set for MWIs
B. Ports are too busy to turn MWIs On and Off promptly
C. Calls are sent to Cisco Unity ports that set for MWIs but not set to Answer Calls
D. Too many ports are set for MWIs

Answer: A, B, C

QUESTION 240:

The G.729 compression specification defines_____ codec rate.

A. 8 kbps
B. 5.3 kbps
C. 64 kbps
D. 6.3 kbps

Answer: A

QUESTION 241:

Which of the following options are available from the Cisco Unity Port Usage report page?

A. Percent Utilization
B. Number of Calls
C. Frequency of Subscriber access
D. Length of Calls

Answer: A, B, D
Port Usage Report
You can use the Port Usage report to determine if the voice messaging system is running close to capacity, and indicate a specific port or ports to include in the report. Enter port numbers or ranges of numbers separated by commas (for example, 1,2,4-8) in the Ports to Show field. Note that this report fails if the specific port numbers or ranges that are entered are not valid (for example, do not enter a port range of 10-50 if there are only 48 ports on the system.)
As an alternative to the Port Usage report, we recommend using the Port Usage Analyzer, available in Tools Depot. For more information, refer to the Port Usage Analyzer Help.

The Port Usage report includes the following information:

Port Number	The Cisco Unity port number.
Unit of Time	The unit of time by which data is broken down for the time period that you specified in the Date Range. Depending on the length of the time period, data is broken down into hours, days, and weeks.
Date Range	The range of dates for which data is included.
Time	The specific hour or date(s) by which data is broken down for the time period that you specified in the Date Range.
Ports	The ports included in the report.
Number of Calls	The number of calls processed by the port per hour, day, or week for the time period specified.
Length of Calls	The total length, in milliseconds, of all calls on the port per hour, day, or week for the time period specified.
Average Length of Calls	The average length, in seconds, of all calls on the port per hour, day, or week for the time period specified.
Percent Utilization	The percentage of available time that a port was in use per hour, day, or week. Note that we recommend that the value of Percent Utilization not exceed 80 percent of the ports used for incoming calls during peak usage.
Average Calls Per Hour	The average number of calls per hour for each port.
Average Calls Per Day	The average number of calls per day for each port. This information is provided only on the row that contains the summary for the week.

QUESTION 242:

If a particular subnet appears in a routing table, all IP traffic can reach that subnet regardless of access-lists.

A. Yes
B. No

Answer: B
References: ICND, Access-lists

QUESTION 243:

Which of the following web browsers does the Administrative Reporting Tool (ART) support?

A. Mosaic 6.1
B. Opera 2.5

C. Netscape 4.5
D. Internet Explorer 5.0

Answer: C, D

QUESTION 244:

Which of the following call handlers are not installed by default in Cisco Unity?

A. Opening greeting
B. Welcome greeting
C. Goodbye
D. OperatorE. Closing greeting

Answer: B, E

QUESTION 245:

Admin Serviceability Tool (AST) utilizes TCP and HTTP to monitor devices.

A. True
B. False

Answer: A

QUESTION 246:

What is the peak size of the ART database?

A. 2.0GB
B. 1.5GB
C. 1.0GB
D. 150MB

Answer: B
Release Notes for Administrative Reporting Tool for Release 1.1(1)
System Requirements
The following specifications apply to ART:
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The ART application uses approximately 42 MB of disk space for the executable and the online documentation.
ART is designed to work for an enterprise with a maximum of two million CDRs and a maximum of two million
records in the ART database. If the size of the CDR database exceeds the limits, the performance of ART is adversely
impacted.

The peak size of the ART database contains 1.5 GB.
The ART application requires no maintenance other than possible upgrades when CiscoCallManager is
upgraded.
System administrators, managers, and users have access to ART. The system administrators can also access
ART
directly from the server machine.
The system administrators, managers, or users can access ART by typing the URL as: "<server
name>/art/Logon.jsp"
where server name is the name/ipaddress of the server where ART is installed. The system administrators can
also
access ART directly from the Server machine
The client machines can be running Microsoft Windows OS.
The database is Structured Query Language (SQL) server, Version 7.0.
ART uses StyleReport Pro for report generation and displays reports in PDF form using Adobe Acrobat Reader.
The DialPlan for ART can be customized.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_release_note09186a00800b7578.html

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QUESTION 247:

When ART is installed, how far into the past is it capable of looking for
information?

A. I year
B. 1 month
C. 1 day
D. 1 week

Answer: C

QUESTION 248:

What will happen if CDR records accumulate to a configured maximum?

A. The oldest CDR records will be removed along with related CMR records once a
week
B. The oldest CDR records will be removed once a day, but the related CMR records will
not be removed
C. The oldest CDR records will be removed along with related CMR records once a day
D. The newest CDR records will be removed along with related CMR records once a day

Answer: C
Removing Records
Because CiscoCallManager relies on third-party applications to post-process the CDR
data, you should remove the CDR data when all applications are through with the data.
If CDR records accumulate to a configured maximum (10,000,000 CDR records), then
the oldest CDR records will be removed along with related CMR records once a day.

When removing CDR data after analysis, be sure to remove all related CMR records also.
http://www.cisco.com/univercd/cc/td/doc/product/voice/ccallmg/31/trouble/trbld.htm

___

QUESTION 249:

What standard signaling protocol is used within H.323 for control signaling?

A. Q.Sig
B. H.245
C. H.225
D. RTP

Answer: C

Explanation: H.225 is used for signaling establishment, signaling setup, call proceeding
,call alerting and call release between H.323 endpoints(devices) whereas H.245 is used
for exchanging media capabilities.

___

QUESTION 250:

CDR record creation is enabled by default when the system is installed.

A. True
B. False

Answer: B
Call Detail Records and Call Management Records
Call Detail Records (CDR) is a reporting option that logs every call made (or attempted)
from any CiscoIPPhone. There are two kinds of CDRs:
basic CDRs
Diagnostic CDRs, also known as CMRs
Once enabled, you can open CDRs or CMRs in the SQL Server Enterprise Manager.
CDR files are saved in a SQL database that can be exported to nearly any application,
including Microsoft Access or Excel.
Enabling or Disabling CDRs
CDR record creation is disabled by default when the system is installed. If you wish to
have CDR data, you must enable CDRs in the
Service > Service Parameters area of CiscoCallManager Administration. CDR processing
can be enabled and disabled at any time while the system is in operation. You do not
need to restart CiscoCallManager for the enabling or disabling of CDRs to take effect.
The system will respond to all changes within a few seconds.
http://www.cisco.com/en/US/partner/products/sw/voicesw/ps556/prod_troubleshooting_guide_chapter09186a0
0

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QUESTION 251:

Which statement about CDRs is true relative to E-911 services?

A. Callmanager can be configured to specifically record E911 calls
B. E911 calls could be located in CDR records by exporting the records and parsing them.
C. E-911 call can be located through the use of the CMR extension of the CDRs.
D. Callmanager CDRs for E-911 calls can be located by searching on the "emergency services" marking bit in the record.

Answer: C

QUESTION 252:

What standard signaling protocol is used within H.323 for sequencing audio and video packets?

A. MGCP
B. RTP
C. Q.Sig
D. G.711

Answer: B

QUESTION 253:

Which of the following are true regarding Enhanced 911?

A. It is same as basic 911 service
B. It is designed to eliminate the requirement for the caller to provide location information
C. The caller's phone number is used to find the address of the telephone from which call is being made
D. The Automatic Number Identification or ANI is not passed to the PSAP

Answer: B, C

QUESTION 254:

The utility used to view licensed features on a Unity system is called:

A. ConfigLic utility
B. Key dump utility
C. Upgrade License utility
D. LearnTones utility

Answer: B

Q. How can I verify which features I have on my system?

A. For Cisco Unity 4.x systems, the License Info Viewer is used to view licensed features. Follow this procedure to

access License Info Viewer:

1. On the Cisco Unity server, log on to Windows via the Cisco Unity installation account.
2. Double-click the Cisco Unity Tools Depot icon on the desktop.
3. Under Administration Tools, double-click License Info Viewer.
4. Verify that the licensing features are correct.

A. For Cisco Unity 2.4/3.x systems, the Key Dump utility is used to view licensed features. Select Start > Programs >

Unity > Key Dump, to access Key Dump. Once you access Key Dump, you will see a summary of your currently

licensed features.

http://www.cisco.com/en/US/partner/products/sw/voicesw/ps2237/products_qanda_item09186a0080094ce5.sht
m

QUESTION 255:

Which ART Report can be used to give a quick overview of the health of a system?

A. QoS summary
B. Gateway summary
C. Department bill
D. Traffic summary
E. Gateway summary
F. System Overview Report

Answer: F

Reference:
http://www.cisco.com/univercd/cc/td/doc/product/voice/sw_ap_to/admin/admin_rp/1_0_1/guide/artch5.htm#xto
c

QUESTION 256:

The Administrative Reporting Tool can be loaded on the following server operating
systems, except:

A. Unix
B. Windows NT 4.0
C. MAC OS 10
D. Windows 2000

Answer: C

QUESTION 257:

Which of the following fields are not available in a CMR?

A. directoryNum
B. dateTimeConnect
C. callIdentifier
D. dateTimeStamp
E. deviceName

Answer: B

QUESTION 258:

The H.323 standard includes which of the following components?

A. Gateways
B. Processor
C. Gatekeepers
D. Terminals
E. Multipoint Control Units (MCUs)

Answer: A, C, D, E

QUESTION 259:

After adding the G.729a recording and storage codec in Cisco Unity, what do you have to do?

A. Re-install Unity
B. Nothing
C. Restart CallManager
D. Restart Unity

Answer: D

QUESTION 260:

Which of the following patterns would NOT be used for E-911 dialing?

A. 911
B. 9.11
C. 9.@ where (SERVICE == 911)
D. 9.911

Answer: B

QUESTION 261:

What does RSVP stand for in IP Telephony?

A. Resource Reservation Protocol
B. Reliable Reservation Protocol
C. Resource Routing Protocol
D. Realtime Reservation Protocol

Answer: A

QUESTION 262:

What does LFI stand for?

A. Link Forecast and Interleaving
B. Link Fragmentation and Interconnect
C. Link Fragmentation and Interleaving
D. Link Fragmentation Interconnect

Answer: C

QUESTION 263:

Which of the following client operating systems is not supported by the Administrative
Reporting Tool?

A. MAC OS 10.2
B. Windows 2000
C. Windows NT 4.0
D. Windows 98

Answer: A

QUESTION 264:

Which of the following are false regarding the Administrative Reporting Tool
(ART)?

A. ART can be installed on any server running Windows 2000
B. ART must be installed on the server running the Publisher database for Cisco
CallManager
C. ART can be installed on any server running Cisco CallManager
D. ART can be installed on either the Publisher or Subscriber

Answer: A, C, D

QUESTION 265:

The CallDetailRecord table contains information about the voice quality of calls in CDR/CMR.

A. False
B. True

Answer: A

QUESTION 266:

Which of the following gateways support Media Gateway Control Protocol (MGCP)?

A. Cisco 1751 Router
B. Cisco 2621 Router
C. VG248
D. VG200

Answer: B, D

QUESTION 267:

Exhibit: *** MISSING ***
Refer to the router configuration in the exhibit. Which VLAN carries data traffic?

A. VLAN 155
B. VLAN 100
C. VLAN 10
D. VLAN 0

Answer: B

QUESTION 268:

If some users are complaining that there is a delay in their MWI coming on, which of the following could not be the cause?

A. Too many ports are set for MWIs
B. Ports are too busy to turn MWIs On and Off promptly
C. Calls are sent to Cisco Unity ports that set for MWIs but not set to Answer Calls
D. Not enough ports are set for MWIs

Answer: A

QUESTION 269:

When Cisco Unity_____ , three tones play and a check mark appears in the Cisco
Unity icon in the status area of the taskbar.

A. reloads
B. receives a voice message
C. starts successfully
D. fails to start

Answer: C

QUESTION 270:

The default directory for unity installation is:

A. C:\Unity
B. C:\ProgramFiles\Unity
C. C:\CommServer
D. C:\Winnt\CommServer

Answer: C

QUESTION 271:

Which of the following capabilities do monitor tools NOT provide?

A. Detailed packet level tracing
B. Percent broadcast traffic
C. Protocol distribution by Layer 7 protocol
D. Traffic count by station
E. Protocol distribution by Layer 3 protocol

Answer: C

QUESTION 272:

A Port Usage report will tell you how many times a subscriber used a certain port to
login to Unity.

A. False
B. True

Answer: A

QUESTION 273:

By default, voice packets (RTP stream) sent by Cisco IP Phones are marked at CoS/ToS value of:

A. 5
B. 3
C. 1
D. 7

Answer: A

QUESTION 274:

Which of the following is not a valid route pattern wild card?

A. +
B. @
C. X
D. &
E. !

Answer: D

Explanation:

Route Pattern: Commonly Used Wildcards

Wildcard	Description
x	Single digit (0-9, *, #)
@	North American Numbering Plan
!	One or more digits (0-9)
[x-y]	Generic range notation
[^x-y]	Exclusion range notation
.	Terminates access code
#	Terminates interdigit timeout

QUESTION 275:

Which menu option within the Admin Serviceability Tool (AST) allows you to add, edit, and delete Alert Notify settings?

A. Monitor

B. Preferences
C. Options
D. Tools

Answer: B

QUESTION 276:

Which three acronyms are associated with E-911 services? (choose three)

A. ALI
B. ESN
C. PSAP
D. COPS
E. CAMA

Answer: A, C, E
Reference:
http://www.cisco.com/en/US/products/sw/iosswrel/ps1839/products_feature_guide09186a00800b5d63.html#wp

QUESTION 277:

Which statement is true about incoming patterns in a distributed call processing environment?

A. They must include the prefix8
B. They must not include the prefix9
C. They must match a template that exist in the local
D. They must match a template that exist in the remote

Answer: D

QUESTION 278:

What are possible causes call is not inter-cluster call? (Select all that apply.)

A. user error
B. faulty gateway
C. Telco
D. Improper CM config

Answer: B, C, D

QUESTION 279:

In order to accommodate small packet voice traffic in a low-speed FrameRelay

network. what is 128byte packet an access rate of 64kbps?

A. 8ms
B. 16ms
C. 24ms
D. 32ms

Answer: B
128 x 8 = 1024/64= 16 ms
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, page 388, Table 7-2

QUESTION 280:

Which of the switch configurations have an effect on IP Phone operation? (Select all that apply.)

A. portfast
B. portspeed
C. auxiliary VLAN
D. SCOIP address

Answer: A, B, C

QUESTION 281:

Which statements is true about removing a gateway's access list?

A. You should never remove it
B. You should delete it before removing it
C. You should rename it before removing it
D. You should make it is not removed for too long of it

Answer: D

QUESTION 282:

Q931 provides connect control and flow control for ISDN connections.

A. true
B. false

Answer: B

QUESTION 283:

What is a command of MGCP? (Select all that apply)

A. RSIP
B. AUEP
C. MDCX
D. NTFY
E. RQCX

Answer: A, B, C, D
Reference:
http://www.cisco.com/en/US/products/hw/gatecont/ps514/products_administration_guide_chapter0918

QUESTION 284:

If an MGCP gateway supports disconnect supervision. A start media streaming Fail
use signal is sent to the _____

A. device for the preserved call
B. Callmanager for the preserved call
C. device for each preserved call
D. Callmanager for each preserved call

Answer: C

QUESTION 285:

What is used for identifying frames coding resource problem?

A. Buffset
B. Breakout Box
C. Network Monitor
D. Protocol Analyzer

Answer: D

QUESTION 286:

Which two commands are internal tools that should be used during the F..Gagteway
Stage? (Select two.)

A. set
B. show
C. copy
D. debug
E. config

Answer: B, D

QUESTION 287:

What is your next step if you remove an acess-list but the problem is not solved?

A. create a new action plan
B. remove next in dB
C. create a access list
D. undo the access list ...

Answer: D

QUESTION 288:

When a phone is calling 911, the CPN must be _____

A. encrypted
B. E.164 compliant
C. At least 4digit long
D. No more than 7 digits long

Answer: B
PRI
This type of interface usually connects a telephony system to a PSTN Class 5 switch. The calling party number (CPN) is used at call setup time to identify the E.164 number of the calling party.
Most LECs treat the CPN differently when a call is made to 911. Depending upon the functionality available in the Class 5 switch and/or upon LEC or government policy, the CPN may not be used as the ANI for 911 call routing. Instead, the network may be programmed to use the listed directory number (LDN) or the bill-to number (BTN) for ANI purposes.
If the CPN is not used for ANI, then 911 calls coming from a PRI interface all look the same to the 911 network because they all have the same ANI, and they are all routed to the same destination (which might not be the appropriate one).
Some LECs offer a feature to provide CPN transparency through a PRI interface for 911 calls. With this feature, the CPN presented to the Class 5 switch at call setup is used as ANI to route the call. The feature name for this functionality varies, depending on the LEC. (For example, SBC calls it Inform 911 in California.)
Note
The CPN must be a routable E.164 number, which means that the CPN must be entered in the routing database of the associated E911 selective router.

QUESTION 289:

If a preferred E911 gateway is not available the most effective solution is to re-route the call the regular PSTN gateway.

A. true
B. false

Answer: A

QUESTION 290:

E911 deployments in IP telephony environment require that phones be correctly associated with _____

A. gateways
B. gatekeepers
C. file server
D. central office

Answer: A

QUESTION 291:

How can the CDR/CMR tools be viewed to look for the violate

A. Use SQL view mode
B. Use Windows 2000 performance
C. Use event viewer
D. Export to a third-party spreadsheet

Answer: A, D

QUESTION 292:

Which three capabilities do not work monitoring tool provide? (choose three)

A. traffic counts by stat..
B. percent broadcast traffic
C. percent broadcast traffic
D. protocol distributed by L1 protocol
E. protocol distributed by L3 protocol

Answer: A, B, D

QUESTION 293:

When are trace capture filers helpful?

A. when a WAN circuit is suspected
B. when identifying groups of IP address
C. when large amounts of traffic need to be captured
D. when all device on a single lan exhibit the same problem

Answer: C

QUESTION 294:

Which command used CLI of most appropriate resource for the use associated l....
of a device registered in Callmanager?

A. SQL query
B. Event viewer
C. Network Management Tool
D. AST

Answer: A
References:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_tech_note09186a00800e1529.shtml

QUESTION 295:

When you use the CLI on Callmanager. It is possible to

A. display the active phone calls
B. display the configured remote patterns
C. repair directory services for the pages
D. display the TCP/IP properties of the call.

Answer: C

QUESTION 296:

Which three ART reports are scheduled, by default to run automatically once per
month?

A. QoS summary
B. Traffic
C. Gateway
D. Call Report
E. Department bill
F. System Overview

Answer: A, C, F

References:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_user_guide_chapter09186a00800c26df.html
#
Under Automatic Report Generation/Alert

QUESTION 297:

For what are call management records used?

A. to track roll fraud
B. trace phone call originator
C. calculate the cost of the usage
D. main voice .....

Answer: D
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, pages 89-90
CMRs contain data such as packets sent and received, packets lost, and jitter for the
duration ofa call.

QUESTION 298:

Which are used to monitor QoS in the ART tools? (Select all that apply.)

A. MTV
B. Jitter
C. Latency
D. Lost packets

Answer: B,C,D
Reference:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_release_note09186a00800b7578.html

QUESTION 299:

What is the most appropriate resource tool to use when determining the associated
parameters of a device registered in Callmanager?

A. SQL query
B. Event viewer
C. Network Monitoring Tool
D. AST

Answer: A
References:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_tech_note09186a00800e1529.shtml

QUESTION 300:

In which file format can Callmanager trace files be produced? (Select all that apply.)

A. .txt
B. .csv
C. .doc
D. .htm
E. .xml

Answer: A, E
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, page 47

QUESTION 301:

Which three are true statements about Calling Search Space?

A. Calling Search Space are ordered lists of partitions
B. Calling Search Space are assigned to devices, phones, and gateways
C. Calling Search Space are assigned to directory numbers and route patterns
D. Callmanager looks through the caller's Calling Search Space when searching for the caller's detailed number.

Answer: A,B,D
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, pages 469-473

QUESTION 302:

With Callmanager V3.1 what is the maximum number of CDR records that can be stored?

A. 1000000
B. 1500000
C. 2000000
D. 10000000

Answer: D
Reference:
http://www.cisco.com/univercd/cc/td/doc/product/voice/ccallmg/31/trouble/trbld.htm

QUESTION 303:

If no transcoding resources exist you should configure your entire network for G.711?

A. Yes
B. No

Answer: A

Explanation: Transcoding is only required between different codecs. Many Features
and devices only support G.711.
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, pages 855, 944,
570-590.

QUESTION 304:

Which three affect latency? (Choose three.)

A. enablement of VAD
B. serialization of the hits
C. outbound interface queuing
D. propagation characteristics of the media

Answer: B,C,D
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, Chapter 7,
pages 385, 390, 402

QUESTION 305:

Which Callmanager CLI commands are used to make metalink agreement of DC
directory?

A. avvid-cfg
B. avvid-imp
C. avvid-scfg
D. avvid-restore

Answer: A
Reference: Cisco Course Curriculum - Cisco IP Telephony, Volume 2, page 6-43

QUESTION 306:

In a centralized configuration. Callmanager is configured to send 911 calls out the
central gateway for 911 calls from the central site. This is a FXO port into a 2600
router at the remote site for 911 calls, when the callers dial 911 at the remote site,
they are routing out the central site's gateway.
Which of the following statements applies to this scenario?

A. FXO ports are not supported in 2600 routers running H.323
B. This configuration is not possible with current callmanager software

C. The customer has not added additional Media Resource Groups for the remote site
D. The customer need to add partitions and Calling Search Space to make this work

Answer: D

QUESTION 307:

What does AST utilize to monitor device? (Select all that apply.)

A. GSF
B. RTP
C. TCP
D. XML
E. HTTP

Answer: C,E
Reference:
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_administration_guide_chapter09186a00800c
Under "Overview" Section

QUESTION 308:

Which statement is true?

A. The bandwidth parameter on a cisco router are influence routing as well as queuing
B. Digitized voice without VAD is an example of a network application with no queuing
requirements
C. The bandwidth parameter on a cisco router is derived directly from the clocking speed
of the interface
D. Interactive applications typically require large amounts of bandwidth in order to
maintain good response times

Answer: A
References:
http://www.cisco.com/en/US/tech/ CK5 43/ CK7 57/technologies_tech_note09186a0080103eae.shtml
http://www.cisco.com/en/US/products/sw/iosswrel/ps1828/products_configuration_guide_chapter09186a00800
c

QUESTION 309:

A Unity subscriber complains that the system does not notify him via his pager
when he has an urgent voice mail. What are three possible causes for this problem?

A. AV-Cisco TSP
B. Class of Service
C. Restriction Table

D. Calling Search Space

Answer: A, C, D
References:
http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_administration_guide_chapter09186a0080
0
http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_administration_guide_chapter09186a00800c
http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_trouble_shooting_guide_chapter09186a008009
8b

QUESTION 310:

A caller calls a subscriber and is transferred to the greeting for the subscriber. The
caller begins to learn a message, but gets cut off within 5 seconds. How might you
the correct the problem?

A. use AV cisco TSP
B. use WaveDBvolume
C. use WaveDBGainPlayback
D. increase the silence record timeout

Answer: D
References:
http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_administration_guide_chapter09186a0080
1

QUESTION 311:

You want to bypass creating a batchfile and run Regsvr32.exe. From where do you
run this command?

A. C:\Commserver
B. C:\winnt\system
C. C:\winnt\system32
D. C:\Commserver\components

Answer: C
Reference: Troubleshooting Cisco IP Telephony, ISBN: 1-58705-075-7, page 840
Reference2: Windows 2000Explorer - C:\winnt\system32\

QUESTION 312:

You receive the following IIS error message on Unity
"Your class of service prohibits you from accessing the
system Administration Web Pages."
What could be the explanation for this?

A. IIS service stopped
B. Unity is not running
C. World Wide Publishing service stopped
D. Class of service for the logon account was changed

Answer: D
Reference:
http://www.cisco.com/univercd/cc/td/doc/product/voice/cunity/tsg/tsg402/dom/tsg0700.htm

QUESTION 313:

An administrator creates a Call Handler that transfer to a certain phone number.
When used, it transfers to the greeting of the handler instead of the phone number.
What should you check to solve this problem? (Choose three.)

A. restriction tables
B. Calling Search Space
C. Transfer rule applied to
D. Transfer incoming calls

Answer: A, C, D
References:
http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_administration_guide_chapter09186a0080
0
http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_administration_guide_chapter09186a0080
0

QUESTION 314:

What is one of the causes for a single unity subscriber not getting MWI when a
message is left?

A. The Unity Message store is down
B. Callmanager has no MessageWaitingOnDN
C. The AVciscoTSP has no MessageWaitingOnDN
D. The Messages setting for the subscriber has not been set for MWI

Answer: D

QUESTION 315:

Which three statements are true about displaying detailed records from a network
monitoring? (Choose three).

A. A detailed description of the IP header is always an option

B. A detailed description of VOIP protocol is a always an option
C. A detailed description of the TCP or UDP fields are always an option
D. A detailed description of either the Ethernet II or 802.3 protocol

Answer: A, C, D

QUESTION 316:

What should be measured when using a network monitoring tool to benchmark a network prior to implementing VOIP? (Select all that apply.)

A. summary tracing
B. percent broadcast traffic
C. average bandwidth utilization
D. protocol distribution by application

Answer: A, B, C

QUESTION 317:

A user reports being cut off after leaving a message for five seconds which three questions provide useful information about the nature of the problem? (Choose three.)

A. How often does this happen?
B. What time of the day does this happen?
C. What happens if the call is made from the PSTN
D. Does it happen when you are trying to leave a message with other subscribers

Answer: A, C, D

QUESTION 318:

Which three tools can be useful in gathering information about IP Telephony related problem? (Choose three)

A. Unity Server Performance monitor
B. Router show and debug commands
C. Switch show and debug commands
D. Callmanager Server Performance Monitor

Answer: B, C, D

QUESTION 319:

A Trunk port configured for auxiliary VLAN capability _____

A. must tag all packets using the 802.1Q protocol
B. supports the native VLAN as well as multiple auxiliary VLANs
C. has the appearnce of a trunk port supporting only two VLANs
D. does not participate in the process for the auxiliary VLAN

Answer: A

QUESTION 320:

Which command shows all call routing options for the router's perspective if 2013 is
dialed from a FXS attached phone?

A. show voice call 2013
B. show call active voice
C. show dialplan number 2013
D. show dialplan incall 1/0/0 num 2013

Answer: C
Reference:
http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/122cgcr/fvvfaxr/vrfr.htm#1024198