Version: 7.0

Case Study: 1
Contoso Ltd Case A
Overview
General Overview
Contoso, Ltd. is an electronics parts company located in North American. The company has 4,400 employees.

Contoso recently bought a company named Litware, Inc. Litware has an office in New York.

Litware has a Lync Server 2010 infrastructure and has Microsoft Lync 2010 clients deployed to all of its client computers.

Physical Locations
Contoso has a main office and a satellite office. The main office is located in Toronto. The satellite office is located in Boston. The Toronto office has 4,200 users. The Boston office has 200 users.

All offices connect to each other by using a WAN link.

Only the Toronto office connects directly to the Internet.

Existing Environment
Active Directory Environment
Contoso has an Active Directory forest named contoso.com. The forest contains a single domain. All domain controllers run Windows Server 2008 R2.

Lync Server Environment
Contoso has a Lync Server 2013 infrastructure and a Microsoft Exchange Server 2013 organization. The Lync Server 2013 infrastructure contains an Enterprise Edition Front End pool named Pool1.

The network contains five servers. The servers are configured as shown in the following table.

Server name	Role	Location
Lync1	Front End Server in Pool1	Toronto
Edge1	Edge Server	Toronto
Exchange1	Mailbox server Client Access server	Toronto
Server1	Member server	Toronto
SQL1	Back End Server	Toronto

The Lync Server infrastructure currently uses the names shown in the following table.

Name	Use
Pool1.contoso.com	Enterprise Edition Front End pool FQDN
Meet.contoso.com	Simple URL for meetings
Webext.contoso.com	External web services FQDN

All users can remotely access the Lync Server services from a client computer. The users cannot access the Lync Server services from a mobile device.

Some of the users have Lync 2010 installed. Most of the users run Lync 2013.

Problems Statements

Contoso identifies the following business issues:

- Users in the Boston office report that there are delays in the audio stream during conferences and that the audio frequently drops. Users in the other offices do not report this issue.
- Users cannot share Microsoft PowerPoint presentations during web conferences. Users can share other documents.
- All of the users in the Toronto office report that they receive the following error message from Lync 2013: "Lync can't connect to Exchange. You might experience Contact list issues".

Requirements

Planned Changes

Contoso plans to implement the following changes:

Implement the unified contact store.

- Deploy the Office Web Apps component.
- Add a second Front End Server named Lync2 in the Toronto office.
- Access Lync Server services by using mobile devices from the internal network and from the Internet.
- Implement direct federation with Litware and other business partners. All federated domains will have to be defined explicitly.

Administrative Requirements

A support technician named Techl must be able to perform all of the tasks currently performed by the members of the CSHelpDesk group. Additionally, Techl must also be able to edit conferencing policies.

Web Conferencing Requirements

Contoso identifies the following requirements for web conferencing:

- Users from Litware must be able to download the content of web conferences.
- Users must be able to share PowerPoint presentations during web conferences.
- Users from Litware must be able to record web conferences.

- A URL that points to a disclaimer must be provided.

Mobility Requirements

Contoso plans to provide all users the ability to connect by using mobile devices. When users connect from a mobile device, they must download their server settings automatically.

Question: 1

Which two tasks should be performed to meet the administrative requirements for Tech1? (Each correct answer presents part of the solution. Choose two.)

A. Modify the permissions of the RTCUniversalServerAdmins group.
B. Run the New-CsAdminRole cmdlet.
C. Run the Update-CsAdminRole cmdlet.
D. Create a new universal security group and add Tech1 to the group.
E. Create a new global security group and add Tech1 to the group.

Answer: B, D

Explanation:
"To create a new role, you must first create a universal security group in Active Directory Domain Services that shares a name with the role;"
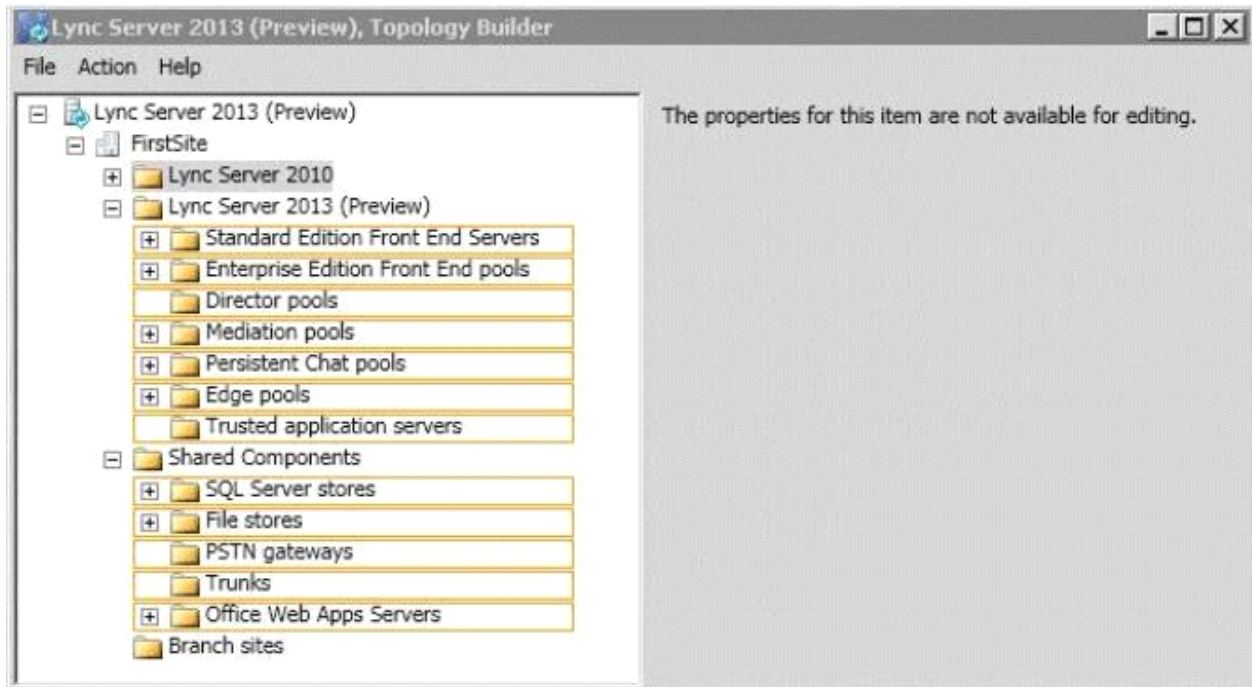http://technet.microsoft.com/en-us/library/gg398271.aspx
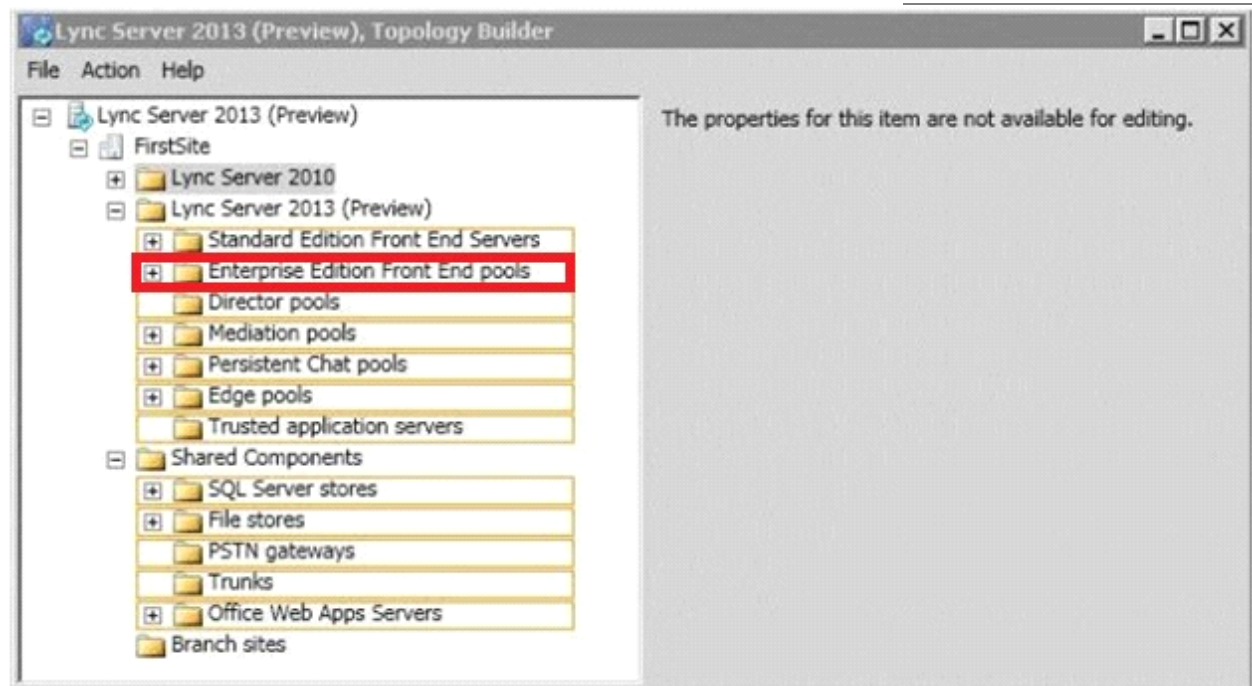
Question: 2

HOTSPOT
You need to modify the FQDN of the external web services.
From which node should you perform the modification?
To answer, select the appropriate node in the answer area.

Answer:

Explanation:
Configure Web Services
Log on to the computer where Topology Builder is installed as a member of the Domain Admins group and the RTCUniversalServerAdmins group.
Start Topology Builder: Click Start, click All Programs, click Microsoft Lync Server 2013, and then click Lync Server Topology Builder.
In Topology Builder, in the console tree under Standard Edition Front End Servers, Enterprise Edition Front End pools, and Directory pools, select the pool name. Right-click the name, click Edit Properties,

and then click Web Services.
Add or edit the External Web Services FQDN, and then click OK.

Question: 3

You are evaluating the implementation of a reverse proxy for Contoso.
You plan to create a certificate for the reverse proxy.
You need to identify which names must be included in the certificate.
Which three names should you identify? (Each correct answer presents part of the solution. Choose three.)

A. lyncdiscover.contoso.com
B. lyncdiscoverinternal.contoso.com
C. meet.contoso.com
D. pool1.contoso.com
E. edge.contoso.com
F. webext.contoso.com

Answer: A, C, F

Explanation:
http://technet.microsoft.com/en-us/library/jj205381.aspx
webext is the Subject Name and the Alternative Name with meet and lyncdiscover also listed as Alternative Names

Question: 4

You need to recommend a solution to resolve the audio issues for the users in the Boston office.
Which three possible recommendations should you include in the solution? (Each correct answer presents a complete solution. Choose three.)

A. user services
B. Quality of Service (QoS)
C. Call Admission Control (CAC)
D. a location policy
E. a conferencing policy

Answer: B, C, E

Question: 5

You are evaluating the implementation the second Front End Server. You need to recommend which common name must be used for the certificate that will be installed on Lync2.
Which name should you recommend using?

A. *.contoso.com
B. lync2.contoso.com

C. lyncdiscover.contoso.com
D. pool1.contoso.com

Answer: D

Explanation:
http://social.technet.microsoft.com/Forums/en-US/ocscertificates/thread/bc2b0383-17cd-4707-8c2f-19db8dd340f0/
The common name or SN of any Front End Server Certificate is the Pool Name.

Question: 6

HOTSPOT
You are planning the implementation of the unified contact store. You need to identify which clients can be used to read the contact list and which clients can be used to modify the contact lists.
Which clients should you identify?
To answer, select the correct actions for each client in the answer area.

Client	Read contact lists	Modify contact lists
Microsoft Outlook 2013	☐	☐
Outlook Web App	☐	☐
Lync 2010	☐	☐
Lync 2013	☐	☐

Answer:

Client	Read contact lists	Modify contact lists
Microsoft Outlook 2013	☑	☑
Outlook Web App	☑	☑
Lync 2010	☑	☐
Lync 2013	☑	☑

Explanation:
http://support.microsoft.com/kb/2757458/en-us?fr=1

"Lync Server Environment
Contoso has a Lync Server 2013 infrastructure and a Microsoft Exchange Server 2013 organization.
The Lync Server 2013 infrastructure contains an Enterprise Edition Front End pool named Pool1.
The network contains five servers. The servers are configured as shown in the following table."
TO EDIT THE CONTACT DATA IN THE UNIFIED CONTACTS STORE USE:
Microsoft Lync 2013,
Microsoft Outlook Web Access 2013
Microsoft Outlook 2013
http://support.microsoft.com/kb/2757458/en-us?fr=1

Question: 7

DRAG DROP
You are troubleshooting the issue reported by the Toronto users. You verify that the logging level of the centralized logging service is set to AlwaysOn.
You need to gather additional troubleshooting information immediately to resolve the issue.
Which five actions should you perform?
To answer, move the five appropriate actions from the list of actions to the answer area and arrange them in the correct order.

Actions	Answer Area
Sign in to Lync 2013 from a client computer in the Toronto office.	
Run the **clscontroller.exe -search** command.	
Run the **clscontroller.exe -start** command.	
Run the **clscontroller.exe –flush** command.	
Run the **clscontroller.exe -stop** command.	

Answer:

Box 1:

Run the **clscontroller.exe -start** command.

Box 2:

Sign in to Lync 2013 from a client computer in the Toronto office.

Box 3:

Run the **clscontroller.exe -stop** command.

Box 4:

Run the **clscontroller.exe –flush** command.

Box 5:

Run the **clscontroller.exe -search** command.

Explanation:
- Start
- Reproduce issue
- Stop
- Flush
- Search

http://masteringlync.com/2012/08/02/centralized-logging-in-lync-2013/

Question: 8

Contoso is evaluating the implementation of push notifications for mobile devices.
You need to identify which tasks must be performed to enable the push notifications.
Which three cmdlets should you identify? (Each correct answer presents part of the solution. Choose three.)

A. New-CsAllowedDomain
B. Set-CsPublicProvider
C. New-CsHostingProvider
D. Set-CsPushNotificationConfiguration
E. Enable-CsPublicProvider

Answer: A, C, D

Explanation:
http://technet.microsoft.com/en-us/library/hh690047.aspx
CONFIGURING FOR PUSH NOTIFICATIONS
LYNC SERVER 2013
Push notifications, in the form of badges, icons, or alerts, can be sent to a mobile device even when the mobile application is inactive. Push notifications notify a user of events such as a new or missed IM invitation and voice mail. The Lync Server 2013 Mobility Service sends the notifications to the cloud-based Lync Server Push Notification Service, which then sends the notifications to the Apple Push Notification Service (APNS) (for an Apple device running the Lync 2010 Mobile client) or the Microsoft Push Notification Service (MPNS) (for a Windows Phone device running the Lync 2010 Mobile or the Lync 2013 Mobile client).
Important:
If you use Windows Phone with Lync 2010 Mobile or Lync 2013 Mobile client, push notification is an important   consideration.
If you use Lync 2010 Mobile on Apple devices, push notification is an important consideration.
If you use Lync 2013 Mobile on Apple devices, you no longer need push notification.
Configure your topology to support push notifications by doing the following:
If your environment has a Lync Server 2010 or Lync Server 2013 Edge Server, you need to add a new hosting provider, Microsoft Lync Online, and then set up hosting provider federation between your organization and Lync Online.
If your environment has a Office Communications Server 2007 R2 Edge Server, you need to set up direct SIP federation with push.lync.com.
Note:
Push.lync.com is a Microsoft Office 365 domain for Push Notification Service.
To enable push notifications, you need to run the Set-CsPushNotificationConfiguration cmdlet. By default, push notifications are turned off.
Test the federation configuration and push notifications.
TO CONFIGURE FOR PUSH NOTIFICATIONS WITH LYNC SERVER 2013 OR LYNC SERVER 2010 EDGE SERVER
Log on to a computer where Lync Server Management Shell and Ocscore are installed as a member of the RtcUniversalServerAdmins group.
Start the Lync Server Management Shell: Click Start, click All Programs, click Microsoft Lync Server 2013,

and then click Lync Server Management Shell.

Add a Lync Server online hosting provider. At the command line, type:

New-CsHostingProvider -Identity <unique identifier for Lync Online hosting provider> -Enabled $True -ProxyFqdn <FQDN for the Access Server used by the hosting provider> -VerificationLevel UseSourceVerification

For example:

New-CsHostingProvider -Identity "LyncOnline" -Enabled $True -ProxyFqdn "sipfed.online.lync.com" -VerificationLevel UseSourceVerification

Note:

You cannot have more than one federation relationship with a single hosting provider. That is, if you have already set up a hosting provider that has a federation relationship with sipfed.online.lync.com, do not add another hosting provider for it, even if the identity of the hosting provider is something other than LyncOnline.

Set up hosting provider federation between your organization and the Push Notification Service at Lync Online. At the command line, type:

New-CsAllowedDomain -Identity "push.lync.com"

TO CONFIGURE FOR PUSH NOTIFICATIONS WITH OFFICE COMMUNICATIONS SERVER 2007 R2 EDGE SERVER

Log on to the Edge Server as a member of the RtcUniversalServerAdmins group.

Click Start, click All Programs, click Administrative Tools, and then click Computer Management.

In the console tree, expand Services and Applications, right-click Microsoft Office Communications Server 2007 R2, and then click Properties.

On the Allow tab, click Add.

In the Add Federated Partner dialog box, do the following:

In Federated partner domain name, type push.lync.com.

In Federated partner Access Edge Server, type sipfed.online.lync.com.

Click OK.

TO ENABLE PUSH NOTIFICATIONS

Log on to a computer where Lync Server Management Shell and Ocscore are installed as a member of the CsAdministrator role.

Start the Lync Server Management Shell: Click Start, click All Programs, click Microsoft Lync Server 2013, and then click Lync Server Management Shell.

Enable push notifications. At the command line, type:

Set-CsPushNotificationConfiguration -EnableApplePushNotificationService $True -EnableMicrosoftPushNotificationService $True

Enable federation. At the command line, type:

Set-CsAccessEdgeConfiguration -AllowFederatedUsers $True

TO TEST FEDERATION AND PUSH NOTIFICATIONS

Log on to a computer where Lync Server Management Shell and Ocscore are installed as a member of the CsAdministrator role.

Start the Lync Server Management Shell: Click Start, click All Programs, click Microsoft Lync Server 2013, and then click Lync Server Management Shell.

Test the federation configuration. At the command line, type:

Test-CsFederatedPartner -TargetFqdn <FQDN of Access Edge server used for federated SIP traffic> -Domain <FQDN of federated domain> -ProxyFqdn <FQDN of the Access Edge server used by the federated organization>

For example:

Test-CsFederatedPartner -TargetFqdn accessproxy.contoso.com -Domain push.lync.com -ProxyFqdn

sipfed.online.lync.com
Test push notifications. At the command line, type:
Test-CsMcxPushNotification -AccessEdgeFqdn <Access Edge service FQDN>
For example:
Test-CsMcxPushNotification -AccessEdgeFqdn accessproxy.contoso.com

Question: 9

You need to identify on which server you can install the Microsoft Office Web Apps server component.
Which server should you identify?

A. Lync1.contoso.com
B. Server1.contoso.com
C. Exchange1.contoso.com
D. SQL1.contoso.com

Answer: B

Explanation:
It is unclear what roles are on Server1, but you cannot collocate the web apps server on any server that
has been defined in the topology. I have illustrated below trying to add web apps server using the same
FQDN as my Standard Edition Pool.
Server1 appears to be the only the correct answer, because in the case study Server1 is a member server
with nothing installed on it.
Answer is Server1
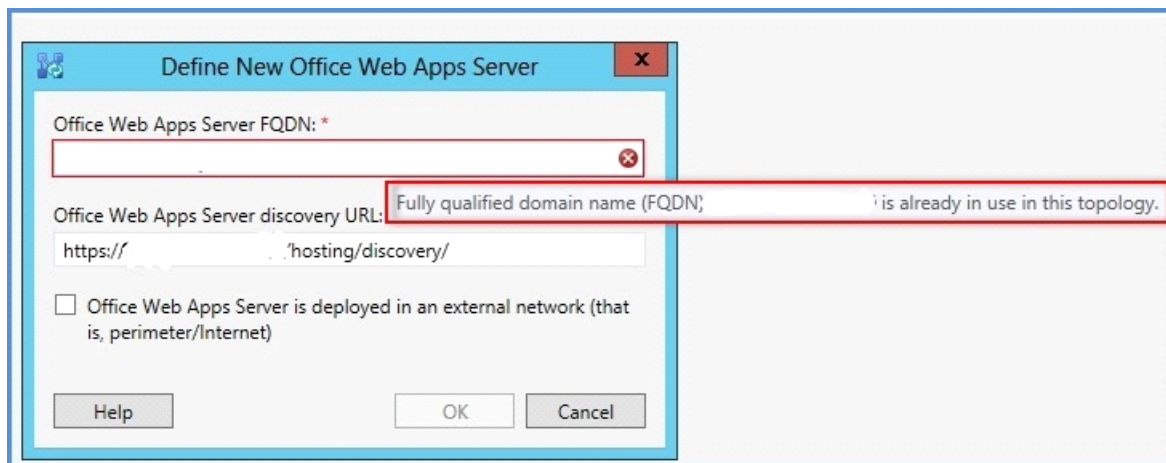
Question: 10

DRAG DROP
You need to identify which configurations must be used to meet the web conferencing requirements.
Which configuration should you identify for each requirement?
To answer, drag the appropriate configuration to the correct requirement in the answer area. Each
configuration may be used once, more than once, or not at all. Additionally, you may need to drag the
split bar between panes or scroll to view content.

Configurations	Answer Area	
A client policy	Users from Litware must be able to download the content of web conferences.	Configuration
A conferencing policy	Users must be able to share PowerPoint presentations during web conferences.	Configuration
A meeting configuration	Users from Litware must be able to record web conferences.	Configuration
	A URL that points to a disclaimer must be provided.	Configuration

Answer:

Box 1: A conferencing policy
Box 2: A conferencing policy
Box 3: A conferencing policy
Box 4: A meeting Configuration
Explanation:
"Users from Litware must be able to download the content of the Web Conference"
Download the content of web conferences:
Share PowerPoint presentations (Conferencing Policy) -
http://blogs.technet.com/b/csps/archive/2011/08/11/confpoliciesenabledatacollaboration.aspx
Record Web Conferences (Conferencing Policy) -
http://blogs.technet.com/b/csps/archive/2011/08/11/confpoliciesallowconferencerecording.aspx
URL Disclaimer (Meeting Configuration) - http://technet.microsoft.com/en-us/library/gg398638.aspx

Edit Conferencing Policy

💾 Commit   ✕ Cancel

Identity

Name:*

Global

Description

Description:

AllowAnonymousParticipantsInMeeting

Maximum meeting size:

200

MaxMeetingSize

☑ Allow users to invite anonymous users ❓

Recording:

None ▼

EnableRecording

EnableDialInConferencing

Audio/video:

Enable IP audio/video

* Combines AllowIPAudio and AllowIPVideo

AllowAnonymousUsersToDialOut

☑ Enable PSTN conference dial-in

☐ Allow anonymous users to dial out

Maximum video resolution allowed for conferencing:

MaxVideoConferenceResolution

640*480(VGA) ▼

EnableDataCollaboration

Data collaboration:

Enable data collaboration ▼

EnableFileTransfer

☑ Allow external users to download content

AllowExternalUsersToSaveContent

☑ Allow users to transfer files

EnableP2PFileTransfer

☑ Allow users to transfer files using peer-to-peer

☑ Enable the use of annotations

AllowAnnotations

☑ Allow users to schedule meetings with application sharing

AllowUsersToScheduleMeetinsWithAppSharing

Enable application and desktop sharing for users ▼

EnableAppDesktopSharing

☑ Allow users to take control

☐ Allow external users to control shared applications

AllowExternalUserControl

AllowParticipantControl