



PRO: Microsoft Lync Server 2010, Administrator

Version: 7.2



# **Topic 1, A.Datum Corporation**

# **Company Overview**

A. Datum Corporation is a market research company that has 6,000 employees.

#### **Physical Location**

The company has a main office and two branch offices. The main office is located in Seattle. The branch offices are located in Detroit and New York. The main office has 5,000 users. The Detroit office has 900 users. The New York office has 100 users.

Remote users frequently work from locations that only allow Internet access over ports 80 and 443. The remote users frequently work from client computers that are not joined to the domain.

# **Existing Environment**

Network Infrastructure

The network has the following servers:

- An enterprise certification authority (CA)
- A DHCP server has that the following DHCP options:
- 003 Router
- 006 DNS Servers
- 015 DNS Domain Name
- A Network Time Protocol (NTP) server that is configured to use the User Datagram Protocol (UDP)
- A server in the main office that runs Microsoft Office Communications Server 2007

The network has the following configurations:

- All client computers run Microsoft Office Communicator 2007.
- All Internet-accessible servers are located in a perimeter network.
- Microsoft Forefront Threat Management Gateway (TMG) is used to publish internal Web sites for customers.
- All servers that have Office Communications Server installed run Windows Server 2003 Service Pack 2 (SP2).

#### **Telephony Infrastructure**

Telephony Infrastructure

The telephony infrastructure is configured as shown in the exhibit.



# Requirements

#### **Business Goals**

A. Datum has the following business goals:

- Minimize software costs.
- Minimize hardware costs.
- Minimize the amount of administrative effort required to deploy new technology solutions.

## **Planned Changes**

A. Datum plans to migrate to Lync Server 2010 and implement the following changes:

- Enable Enterprise Voice for all internal users and remote users.
- In the main office, deploy devices that run Microsoft Lync 2010 Phone Edition.
- Enable IM, presence, and conferencing with a federated partner company named Contoso, Ltd.
- Create a Lync site for each office.
- Add the primary data center and the secondary data center to the Seattle Lync site.

#### **Technical Requirements**

A. Datum must meet the following technical requirements:

- The number of public IP addresses must be minimized.
- The main office must support 1,000 concurrent PSTN calls.
- Lync services must be available to remote users over TCP port 443.
- Remote users must be able to participate in conferences and make Enterprise Voice calls.

# **Telephony Requirements**

The telephony infrastructure must meet the requirements shown in the following table.

Role	Call type	Calling feature
Managers	<ul><li>Local</li><li>National</li><li>International</li></ul>	<ul> <li>Team call</li> <li>Delegation</li> <li>Call transfer</li> <li>Call forwarding</li> <li>Bandwidth policy override</li> </ul>
Employees	<ul><li>Local</li><li>National</li></ul>	<ul> <li>Team call</li> <li>Delegation</li> <li>Call transfer</li> <li>Call forwarding</li> <li>Bandwidth policy override</li> </ul>
Call Center Technicians	• Local	<ul> <li>Team call</li> <li>Delegation</li> <li>Call transfer</li> <li>Call forwarding</li> <li>Bandwidth policy override</li> </ul>

Each office will contain users who are assigned the Manager role and the Employees role.



# **Security Requirements**

A. Datum must meet the following security requirements:

- Federation must only be allowed with Contoso.
- Lync-related traffic must not be routed over VPN connections

# **Availability Requirements**

If a data center fails, all users in the main office must be able to perform the following tasks:

- Create a conference.
- Place calls to the PSTN.
- View the presence status of all users in the Seattle office.

If a WAN link fails, users in the Detroit office must be able to perform the following tasks:

- Create a conference.
- Place calls to the PSTN.
- View the presence status of all users in the Detroit office.

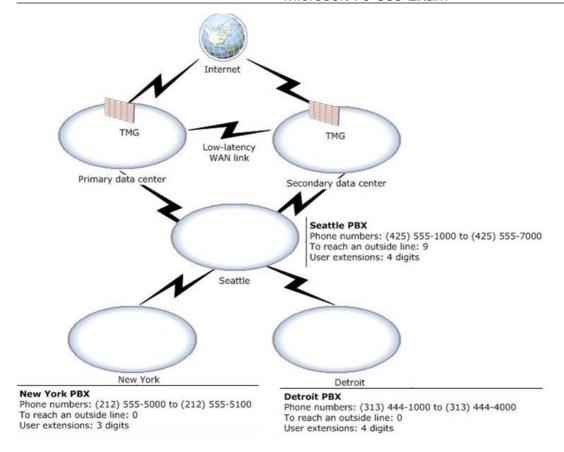
#### **Reference Data**

The typical bandwidth utilization for various codecs is listed in the following table.

Codec	Typical bandwidth	
G.711	59.8 Kbps	
G.722	42.8 Kbps	
RTAudio (8 kHz)	25.9 Kbps	
RTAudio (16 kHz)	34.8 Kbps	

A T1 interface supports 23 concurrent calls





#### **QUESTION NO: 1**

You are evaluating the use of standard gateway devices that support eight T1 interfaces each. The gateways do not support media bypass.

You need to recommend a solution to support PSTN calls from the main office. The solution must meet the company's technical requirements. What should you include in the recommendation?

- **A.** Deploy four gateways and a single Mediation pool that contains two servers.
- **B.** Deploy six gateways and a single Mediation pool that contains six servers.
- **C.** Deploy four gateways and two Mediation pools that each contains a single server.
- **D.** Deploy six gateways and a single Mediation pool that contains two servers.

Answer: D Explanation:

## **QUESTION NO: 2**

You need to recommend a certificate for the external interface of the Edge pool. Which certificate should you recommend?



- A. a certificate that contains one FQDN from the internal CA
- B. a certificate that contains a wildcard from the internal CA
- C. a certificate that contains multiple FQDNs from a trusted third-party CA
- D. a certificate that contains a wildcard from a trusted third-party CA

Answer: C Explanation:

#### **QUESTION NO: 3**

You need to recommend an Enterprise Voice solution that meets the company's telephony requirements. What should you include in the recommendation?

A. Create three User Voice Policies.

In the User Voice Policies, configure the calling features and the call types.

B. Create three Site Voice Policies.

In the Site Voice Policies, configure the calling features and the call types.

**C.** Create three User Voice Policies and one Site Voice Policy.

In the User Voice Policies, configure the calling features.

In the Site Voice Policy, configure the call types.

D. Create three User Voice Policies and one Site VoicePolicy.

In the User Voice Policies, configure the call types.

In the Site Voice Policy, configure the calling features.

Answer: D

**Explanation:** Site voice policy applies to an entire site, except for any users, groups, or contact objects that are assigned a user voice policy. http://technet.microsoft.com/en-us/library/gg412891.aspx

#### **QUESTION NO: 4**

You need to recommend a backup solution for the configuration store of the Lync Server 2010 deployment. Which database should you include in the recommendation?

A. RTCLocal\rtc

B. RTCLocal\rtcdyn

C. RTC\xds

D. RTC\rtc

Answer: C



**Explanation:** http://blog.insidelync.com/2011/04/the-lync-server-databases/

The repository is implemented as an SQL database (xds). It is recommended to install CMS on an Enterprise Edition (EE) pool so that it benefits from the high availability built into the Enterprise Edition. In such a configuration the master xds database is located in the same SQL Server instance as the backend databases, typically RTC. If CMS is installed on a Standard Edition (SE) pool the master xds database will be located in the normal SQL Express instance called RTC. (http://blogs.technet.com/b/jenstr/archive/2010/10/13/what-is-central-management-store-cms.aspx, http://lyncinsider.com/conferencing/backup-and-restore-lync-server-20-tasks-every-lync-administrator-must-know/)

#### **QUESTION NO: 5**

You need to recommend changes to the existing environment to support the planned Lync 2010 Phone Edition devices. What should you include in the recommendation?

- **A.** Modifications to the DHCP options
- **B.** Modifications to the NTP server configuration
- **C.** Windows Server Update Services (WSUS)
- **D.** Kerberos authentication on the Front End Servers

Answer: A

**Explanation:** http://technet.microsoft.com/ru-ru/library/gg412881%28v=ocs.14%29.aspx

#### **QUESTION NO: 6**

You need to recommend a Lync Server 2010 deployment solution that meets the company's availability requirements for the Detroit office. What should you recommend?

**A.** Deploy a Standard Edition server and a PSTN gateway in the Detroit office.

Deploy an Enterprise Edition server and a PSTN gateway in the Seattle data center.

Assign the Standard Edition server as the primary registrar.

Assign the Enterprise Edition server as the backup registrar.

**B.** Deploy a Standard Edition server and a PSTN gateway in the Seattle data centers.

Deploy a Survivable Branch Server in the Detroit office.

Assign the Survivable Branch Server as the primary registrar.

Assign the Standard Edition server as the backup registrar.



C. Deploy an Enterprise Edition server and a PSTN gateway in the Seattle data centers.

Deploy a Standard Edition server in the Detroit office.

Assign the Standard Edition server as the primary registrar.

Assign the Enterprise Edition server as the backup registrar.

**D.** Deploy a Standard Edition server and a PSTN gateway in the Seattle data centers.

Deploy a Survivable Branch Appliance (SBA) in the Detroit office.

Assign the SBA as the primary registrar.

Assign the Standard Edition server as the backup registrar.

Answer: A

**Explanation:** 

#### **QUESTION NO: 7**

You need to recommend an Enterprise Voice solution for the New York office. What should you include in the recommendation?

A. a Response Group

B. the Attendant Console

C. a dial plan

D. an IP-PBX gateway

Answer: C

**Explanation:** 

#### **QUESTION NO: 8**

You are evaluating the implementation of a SIP trunk in the main office to support the planned Lync Server 2010 deployment. You need to calculate the minimum amount of bandwidth required for PSTN calls. How much bandwidth is required on the network connection to the SIP trunk?

**A.** 33.98 Mbps

**B.** 58.40 Mbps

**C.** 41.80 Mbps

**D.** 25.29 Mbps

**Answer: B** 

**Explanation:** http://technet.microsoft.com/en-us/library/ee323608(v=office.13).aspx http://technet.microsoft.com/en-us/library/gg425743.aspx



In this articles, we can see the formula Microsoft uses:

SIP Trunk Peak Bandwidth = Max Simultaneous Calls x 80kbps

so, if we convert the bandwidth from mbps to kbps

33.98 Mbps = 33980 Kbps / 80 Kbps = 424.75 Simultaneous calls, WRONG

58.40 Mbps = 58400 Kbps / 80 Kbps = 730 Simultaneous calls, OK

41.80 Mbps = 41800 Kbps / 80 Kbps = 522.5 Simultaneous calls, WRONG

25.29 Mbps = 25290 Kbps / 80 Kbps = 316.125 Simultaneous calls, WRONG

Calculation for G7.11 (used by SIP-trunks):

(1000\*59,8Kbps)/1024=58,3984375Mbps -> rounded to 58,40Mbps

## **Topic 2, Mixed Questions**

## **QUESTION NO: 9**

Your network has Microsoft Office Communications Server 2007 R2 installed. You migrate the Office Communications Server 2007 R2 infrastructure to Lync Server 2010. The network contains 2,000 users who use Microsoft Lync 2010 and 100 users who use Microsoft Office Communicator 2007 R2.

The corporate security policy states that when users sign in, they must restrict their presence information so that it is visible to only their contacts.

You need to recommend changes to the Lync Server 2010 infrastructure to meet the corporate security policy requirements.

What should you include in the recommendation?

- A. a Monitoring Server and a Client Version Policy
- **B.** Privacy Mode and a Client Version Policy
- C. a Monitoring Server and a Client Version Configuration
- **D.** Privacy Mode and a Response Group

# Answer: B

#### **Explanation:**

With enhanced presence privacy mode, users can restrict their presence information so that it is



visible only to the contacts listed in their Microsoft Lync 2010 Contacts list. Lync 2010 privacy settings are not honored by previous versions (Microsoft Office Communicator 2007 R2 or Microsoft Office Communicator 2007).

For these reasons, in a migration scenario, before you enable Lync 2010 enhanced presence privacy mode:

- \* Ensure that every user has Lync 2010 installed.
- \* Define a client version policy rule to prevent previous versions of Communicator from signing in. (http://technet.microsoft.com/en-us/library/gg399028.aspx)

#### **QUESTION NO: 10**

Your network contains an Active Directory forest. The functional level of both the domain and the forest is Windows Server 2003. The forest contains the following servers:

A server that runs Microsoft Live Communications Server 2005 Service Pack 1 (SP1)

A Front End Server that runs Microsoft Office Communications Server 2007 R2

An Edge Server that runs Office Communications Server 2007 R2

A Mediation Server that runs Office Communications Server 2007 R2

An Office Communications Server 2007 Communicator Web Access (CWA) server

You plan to migrate all users to Lync Server 2010. You need to recommend changes to the network to ensure that you can deploy Lync Server 2010 to the Active Directory forest.

What should you recommend?

- **A.** Raise the functional level of the domain to Windows Server 2008.
- **B.** Remove the Live Communications Server 2005 server and the CWA server.
- **C.** Remove the CWA server and the Edge Server.
- **D.** Raise the functional level of the forest to Windows Server 2008.

# Answer: B

#### **Explanation:**

http://www.microsoft.com/en-us/download/details.aspx?id=27432

http://technet.microsoft.com/en-us/library/gg412955%28v=ocs.14%29.aspx