

Exam Number/Code: 70-413

Exam Name: Designing and
Implementing a Server Infrastructure

Version: Demo

Topic 1, Contoso Ltd

Overview

Contoso, Ltd., is a healthcare company in Europe that has 2,000 users. The company is migrating to Windows Server 2012.

The company has two main offices and two branch offices. The main offices are located in Paris and Amsterdam. One of the branch offices is a sales office located in Berlin. The other branch office is a research office located in Brussels.

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

Current Environment

Active Directory

The network contains an Active Directory forest named contoso.com. An Active Directory site exists for each office.

The forest contains a child domain named research.contoso.com. The functional level of both the domains is Windows Server 2008.

In each site, there are two domain controllers for the contoso.com domain and two domain controllers for the research.contoso.com domain. The domain controllers run Windows Server 2008 R2.

All of the domain controllers are global catalog servers. The FSMO roles were not moved since the domains were deployed.

Network Infrastructure

All servers run Windows Server 2008 R2.

Each user has a laptop computer that runs Windows 7.

The company has 10 print servers. Each print server contains several shared printers.

The company has 10 file servers that have the following disk configurations:

A simple volume named C that is the System and Boot volume and is formatted NTFS

A mounted virtual hard disk (VHD) named DATA that is formatted NTFS
A simple volume named D that is formatted FAT32

A simple volume named E that is formatted NTFS

A Clustered Shared Volume (CSV)

The Paris office contains a server named PA1. The Amsterdam office contains a server named AM1. Both servers have the following server roles installed:

DNS Server

DHCP Server

Remote Access

The DNS servers are configured to use the DNS servers of the company's Internet Service Provider (ISP) as forwarders.

Users often work remotely. The users access the internal network by using an SSTP-based VPN connection.

Requirements

Planned Changes

The company plans to implement the following changes:

Create a child domain named sales.contoso.com. Only the domain controllers in sales.contoso.com will host a zone for the sales.contoso.com domain. The domain controllers in sales.contoso.com will run Windows Server 2012. The client computers in sales.contoso.com will use the sales.contoso.com domain controllers as their DNS servers.

Implement two servers in the Amsterdam office and two servers in the Paris office to replace PA1 and AM1. These new servers will run Windows Server 2012 and will not have shared storage.

Decommission the research.contoso.com domain. All of the users and the Group Policy objects (GPOs) in research.contoso.com will be migrated to contoso.com. Migrate the existing print queues to virtualized instances of Windows Server 2012. Migrate the file servers to new servers that run Windows Server 2012. Implement RADIUS authentication for VPN connections.

Deploy Windows Server 2012 to all new servers.

Technical Requirements

The company identifies following technical requirements:

All changes to Group Policies must be logged.

Network Access Protection (NAP) policies must be managed centrally. Core networking services in each office must be redundant if a server fails. The possibility of IP address conflicts during the DHCP migration must be minimized.

A central log of the IP address leases and the users associated to those leases must be created.

All of the client computers must be able to resolve internal names and internet names.

Administrators in the Paris office need to deploy a series of desktop restrictions to the entire company by using Group Policy.

The new sales.contoso.com domain will contain a web application that will access data from a Microsoft SQL Server located in the contoso.com domain. The web application must use integrated Windows authentication. Users' credentials must be passed from the web applications to the SQL Server.

QUESTION:1

- (Topic 1)

You implement and authorize the new DHCP servers. You import the server configurations and the scope configurations from PA1 and AM1.

You need to ensure that clients can obtain DHCP address assignments after you shut down PA1 and AM1. The solution must meet the technical requirements.

What should you do?

- A. Run the Get-DhcpServerv4Lease cmdlet and the Remove-DhcpServerv4Lease cmdlet. Run the Windows Server Migration Tools.
- B. Run the Get-DhcpServerv4Lease cmdlet and the Add-DhcpServerv4Lease cmdlet. Activate the scopes.
- C. Run the Get-DhcpServerv4FreeIPAddress cmdlet and the Invoke-DhcpServerv4FailoverReplication cmdlet. Run the Windows Server Migration Tools.
- D. Run the Get-DhcpServerv4FreeIPAddress cmdlet and the Invoke-DhcpServerv4FailoverReplication cmdlet. Activate the scopes.

Answer: B

QUESTION:2

- (Topic 1)

You need to recommend a management solution for the GPOs. The solution must meet the technical requirements. What should you include in the recommendation?

- A. Microsoft Baseline Security Analyzer (MBSA)
- B. Microsoft Desktop Optimization Pack (MDOP)
- C. Microsoft System Center 2012 Operations Manager
- D. Microsoft System Center 2012 Data Protection Manager (DPM)

Answer: B

Explanation:

Network Infrastructure	Planned Changes	Technical Requirements	All
<p>The company identifies following technical requirements:</p> <ul style="list-style-type: none"> • All changes to Group Policies must be logged. • Network Access Protection (NAP) policies must be managed centrally. • Core networking services in each office must be redundant if a server fails. • The possibility of IP address conflicts during the DHCP migration must be minimized. • A central log of the IP address leases and the users associated to those leases must be created. • All of the client computers must be able to resolve internal names and internet names. • Administrators in the Paris office need to deploy a series of desktop restrictions to the entire company by using Group Policy. • The new sales.contoso.com domain will contain a web application that will access data from a Microsoft SQL Server located in the contoso.com domain. The web application must use integrated Windows authentication. Users' credentials must be passed from the web applications to the SQL Server. 			

D:\Documents and Settings\useralbo\Desktop\1.jpg

Microsoft Desktop Optimization Pack

Windows Vista Enterprise helps global organizations and enterprises with complex IT infrastructures lower IT costs, reduce risk, and stay connected. The Microsoft Desktop Optimization Pack for Software Assurance further extends this value by reducing application deployment costs, enabling delivery of applications as services, and allowing for better management and control of enterprise desktop environments. Together these technologies deliver a highly cost-effective and flexible Windows desktop management solution.

What is the Microsoft Desktop Optimization Pack?

The Microsoft Desktop Optimization Pack (MDOP) for Software Assurance is an add-on subscription license available to Software Assurance customers. It uses innovative technologies to help reduce the total cost of ownership (TCO) of the Windows desktop by accelerating operating system and application management and enhancing IT responsiveness and end-user uptime. It will enable you to better control the desktop, accelerate and simplify desktop deployments and management, and create a dynamic infrastructure by turning software into centrally managed services. MDOP facilitates accelerated deployment and manageability of Windows through these innovative technologies-- available only to Windows Software Assurance customers.

<http://technet.microsoft.com/en-us/library/cc507880.aspx>

QUESTION:3

- (Topic 1)

You are planning the decommissioning of research.contoso.com.

You need to ensure that an administrator named Admin5 in the research department can manage the user accounts that are migrated to contoso.com. The solution must minimize the number of permissions assigned to Admin5.

What should you do before you migrate the user accounts?

- A. Run the New-Object cmdlet, and then run the Add-ADPrincipalGroupMembershipcmdlet.
- B. Create a new organizational unit (OU), and then add Admin5 to the Account Operators group.
- C. Create a new organizational unit (OU), and then run the Delegation of Control Wizard.
- D. Run the New-Object cmdlet, and then run the Add-ADCentralAccessPolicyMembercmdlet.

Answer: C

Explanation:

Contoso Ltd.,

Company Overview		Current Active Directory Environment	
Network Infrastructure	Planned Changes	Technical Requirements	All

The company plans to implement the following changes:

- Create a child domain named sales.contoso.com. Only the domain controllers in sales.contoso.com will host a zone for the sales.contoso.com domain. The domain controllers in sales.contoso.com will run Windows Server 2012. The client computers in sales.contoso.com will use the sales.contoso.com domain controllers as their DNS servers.
- Implement two servers in the Amsterdam office and two servers in the Paris office to replace PA1 and AM1. These new servers will run Windows Server 2012 and will not have shared storage.
- Decommission the research.contoso.com domain. All of the users and the Group Policy objects (GPOs) in research.contoso.com will be migrated to contoso.com.
- Migrate the existing print queues to virtualized instances of Windows Server 2012.
- Migrate the file servers to new servers that run Windows Server 2012.
- Implement RADIUS authentication for VPN connections.
- Deploy Windows Server 2012 to all new servers.

D:\Documents and Settings\useralbo\Desktop\1.jpg

<http://technet.microsoft.com/en-us/library/dd145344.aspx>

QUESTION:4

- (Topic 1)

You need to recommend changes to the DNS environment that support the implementation of the sales.contoso.com domain. The solution must ensure that the users in all of the

domains can resolve both Internet names and the names of the servers in all of the internal domains.

What should you recommend?

- A. On the DNS servers in contoso.com, configure a reverse lookup zone. On the DNS servers in sales.contoso.com, configure a conditional forwarder to contoso.com.
- B. On the DNS servers in contoso.com, add a conditional forwarder to the sales.contoso.com zone. On the DNS servers in sales.contoso.com, add a forwarder to the DNS servers of the company's ISP.
- C. On the DNS servers in contoso.com, create a zone delegation in the contoso.com zone. On the DNS servers in sales.contoso.com, add a forwarder to the contoso.com DNS servers.
- D. On the DNS servers in contoso.com, configure a conditional forwarder to sales.contoso.com. On the DNS servers in sales.contoso.com, configure a reverse zone.

Answer: C

Explanation:

Network Infrastructure	Planned Changes	Technical Requirements	All
------------------------	-----------------	------------------------	-----

The company plans to implement the following changes:

- Create a child domain named sales.contoso.com. Only the domain controllers in sales.contoso.com will host a zone for the sales.contoso.com domain. The domain controllers in sales.contoso.com will run Windows Server 2012. The client computers in sales.contoso.com will use the sales.contoso.com domain controllers as their DNS servers.
- Implement two servers in the Amsterdam office and two servers in the Paris office to replace PA1 and AM1. These new servers will run Windows Server 2012 and will not have shared storage.
- Decommission the research.contoso.com domain. All of the users and the Group Policy objects (GPOs) in research.contoso.com will be migrated to contoso.com.
- Migrate the existing print queues to virtualized instances of Windows Server 2012.
- Migrate the file servers to new servers that run Windows Server 2012.
- Implement RADIUS authentication for VPN connections.
- Deploy Windows Server 2012 to all new servers.

Company Overview	Current Active Directory Environment		
Network Infrastructure	Planned Changes	Technical Requirements	All

All servers run Windows Server 2008 R2.

Each user has a laptop computer that runs Windows 7. The company has 10 print servers. Each print server contains several shared printers. The company has 10 file servers that have the following disk configurations:

- A simple volume named C that is the System and Boot volume and is formatted NTFS
- A mounted virtual hard disk (VHD) named DATA that is formatted NTFS
- A simple volume named D that is formatted FAT32
- A simple volume named E that is formatted NTFS
- A Clustered Shared Volume (CSV)

The Paris office contains a server named PA1. The Amsterdam office contains a server named AM1. Both servers have the following server roles installed:

- DNS Server
- DHCP Server
- Remote Access

The DNS servers are configured to use the DNS servers of the company's Internet Service Provider (ISP) as forwarders.

Users often work remotely. The users access the internal network by using an SSTP-based VPN connection.

D:\Documents and Settings\useralbo\Desktop\1.jpg

QUESTION:5

- (Topic 1)

You are evaluating the implementation of data deduplication on the planned Windows Server 2012 file servers.

The planned servers will have the identical disk configurations as the current servers.

You need to identify which volumes can be enabled for data deduplication.

Which volumes should you identify? (Each correct answer presents part of the solution. Choose all that apply.)

- A. C
- B. D
- C. E
- D. The CSV
- E. DATA

Answer: C,E

Explanation:

Network Infrastructure	Planned Changes	Technical Requirements	All
<p>All servers run Windows Server 2008 R2.</p> <p>Each user has a laptop computer that runs Windows 7. The company has 10 print servers. Each print server contains several shared printers. The company has 10 file servers that have the following disk configurations:</p> <ul style="list-style-type: none">▪ A simple volume named C that is the System and Boot volume and is formatted NTFS▪ A mounted virtual hard disk (VHD) named DATA that is formatted NTFS▪ A simple volume named D that is formatted FAT32▪ <u>A simple volume named E that is formatted NTFS</u>▪ A Clustered Shared Volume (CSV) <p>The Paris office contains a server named PA1. The Amsterdam office contains a server named AML. Both servers have the following server roles installed:</p> <ul style="list-style-type: none">▪ DNS Server▪ DHCP Server▪ Remote Access <p>The DNS servers are configured to use the DNS servers of the company's Internet Service Provider (ISP) as forwarders.</p> <p>Users often work remotely. The users access the internal network by using an SSTP-based VPN connection.</p>			

D:\Documents and Settings\luseralbo\Desktop\1.jpg

It slices, it dices, and it cleans your floors!

Well, the Data Deduplication feature doesn't do everything in this version. It is only available in certain Windows Server 2012 editions and has some limitations.

Deduplication was built for

NTFS data volumes and it does not support boot or system drives and cannot be used with Cluster Shared Volumes (CSV). We don't support deduplicating live VMs or running SQL databases. See how to determine which volumes are candidates for deduplication on Technet.

<http://blogs.technet.com/b/filecab/archive/2012/05/21/introduction-to-data-deduplication-in-windows-server-2012.aspx>

http://blogs.technet.com/b/uspartner_ts2team/archive/2012/10/08/data-deduplication-in-windows-server-2012.aspx

QUESTION:6

- (Topic 1)

You are planning the implementation of two new servers that will be configured as RADIUS servers.

You need to recommend which configuration must be performed on the VPN servers. The solution must meet the technical requirements.

What should you do on each VPN server?

- A. Add a RADIUS client.
- B. Install the Health Registration Authority role service.
- C. Enable DirectAccess.
- D. Modify the authentication provider.

Answer: D

Explanation:

Network Infrastructure	Planned Changes	Technical Requirements	All
------------------------	-----------------	------------------------	-----

The company plans to implement the following changes:

- Create a child domain named sales.contoso.com. Only the domain controllers in sales.contoso.com will host a zone for the sales.contoso.com domain. The domain controllers in sales.contoso.com will run Windows Server 2012. The client computers in sales.contoso.com will use the sales.contoso.com domain controllers as their DNS servers.
- Implement two servers in the Amsterdam office and two servers in the Paris office to replace PA1 and AM1. These new servers will run Windows Server 2012 and will not have shared storage.
- Decommission the research.contoso.com domain. All of the users and the Group Policy objects (GPOs) in research.contoso.com will be migrated to contoso.com.
- Migrate the existing print queues to virtualized instances of Windows Server 2012.
- Migrate the file servers to new servers that run Windows Server 2012.
- Implement RADIUS authentication for VPN connections.
- Deploy Windows Server 2012 to all new servers.

Network Infrastructure	Planned Changes	Technical Requirements	All
------------------------	-----------------	------------------------	-----

The company identifies following technical requirements:

- All changes to Group Policies must be logged.
- Network Access Protection (NAP) policies must be managed centrally.
- Core networking services in each office must be redundant if a server fails.
- The possibility of IP address conflicts during the DHCP migration must be minimized.
- A central log of the IP address leases and the users associated to those leases must be created.
- All of the client computers must be able to resolve internal names and internet names.
- Administrators in the Paris office need to deploy a series of desktop restrictions to the entire company by using Group Policy.
- The new sales.contoso.com domain will contain a web application that will access data from a Microsoft SQL Server located in the contoso.com domain. The web application must use integrated Windows authentication. Users' credentials must be passed from the web applications to the SQL Server.

D:\Documents and Settings\useralbo\Desktop\1.jpg

QUESTION:7

- (Topic 1)

You need to recommend which changes must be implemented to the network before you can deploy the new web application.

What should you include in the recommendation?

- A. Change the forest functional level to Windows Server 2008 R2.
- B. Upgrade the DNS servers to Windows Server 2012.
- C. Change the functional level of both the domains to Windows Server 2008 R2.
- D. Upgrade the domain controllers to Windows Server 2012.

Answer: D

Explanation:

Contoso, Ltd., is a healthcare company in Europe that has 2,000 users. The company is migrating to Windows Server 2012.

The company has two main offices and two branch offices. The main offices are located in Paris and Amsterdam. One of the branch offices is a sales office located in Berlin. The other branch office is a research office located in Brussels. The offices connect to each other by using a WAN link.

The network contains an Active Directory forest named contoso.com. An Active Directory site exists for each office.

The forest contains a child domain named research.contoso.com. The functional level of both the domains is Windows Server 2008. In each site, there are two domain controllers for the contoso.com domain and two domain controllers for the research.contoso.com domain. The domain controllers run Windows Server 2008 R2.

All of the domain controllers are global catalog servers. The FSMO roles were not moved since the domains were deployed.

D:\Documents and Settings\useralbo\Desktop\1.jpg

QUESTION:8

- (Topic 1)

You need to recommend a fault-tolerant solution for the VPN. The solution must meet the technical requirements.

What should you include in the recommendation?

- A. Network adapter teaming
- B. Network Load Balancing (NLB)
- C. Failover Clustering
- D. DirectAccess

Answer: B

Explanation:

Contoso Ltd.					
Company Overview	Current Active Directory Environment	Network Infrastructure	Planned Changes	Technical Requirements	All
<p>The company identifies following technical requirements:</p> <ul style="list-style-type: none"> • All changes to Group Policies must be logged. • Network Access Protection (NAP) policies must be managed centrally. • Core networking services in each office must be redundant if a server fails. • The possibility of IP address conflicts during the DHCP migration must be minimized. • A central log of the IP address leases and the users associated to those leases must be created. • All of the client computers must be able to resolve internal names and internet names. • Administrators in the Paris office need to deploy a series of desktop restrictions to the entire company by using Group Policy. • The new sales.contoso.com domain will contain a web application that will access data from a Microsoft SQL Server located in the domain. The web application must use integrated Windows authentication. Users' credentials must be passed from the web application to the SQL Server. 					

D:\Documents and Settings\luseralbo\Desktop\1.jpg

<http://technet.microsoft.com/en-us/library/hh831698.aspx>

QUESTION:9

- (Topic 1)

You are planning the migration of research.contoso.com.

You need to identify which tools must be used to perform the migration.

Which tools should you identify?

- A. Active Directory Migration Tool version 3.2 (ADMT v3.2) and Group Policy Management Console (GPMC)
- B. Active Directory Federation Services (AD FS) and Microsoft Federation Gateway
- C. Active Directory Migration Tool version 3.2 (ADMT v3.2) and Active Directory Federation Services (AD FS)
- D. Active Directory Lightweight Directory Services (AD LDS) and Group Policy Management Console (GPMC)

Answer: A

Explanation:

Network Infrastructure	Planned Changes	Technical Requirements	All
<p>The company plans to implement the following changes:</p> <ul style="list-style-type: none"> • Create a child domain named sales.contoso.com. Only the domain controllers in sales.contoso.com will host a zone for the sales.contoso.com domain. The domain controllers in sales.contoso.com will run Windows Server 2012. The client computers in sales.contoso.com will use the sales.contoso.com domain controllers as their DNS servers. • Implement two servers in the Amsterdam office and two servers in the Paris office to replace PA1 and AM1. These new servers will run Windows Server 2012 and will not have shared storage. • Decommission the research.contoso.com domain. All of the users and the Group Policy objects (GPOs) in research.contoso.com will be migrated to contoso.com. • Migrate the existing print queues to virtualized instances of Windows Server 2012. • Migrate the file servers to new servers that run Windows Server 2012. • Implement RADIUS authentication for VPN connections. • Deploy Windows Server 2012 to all new servers. 			

D:\Documents and Settings\useralbo\Desktop\1.jpg

Company Overview	Current Active Directory Environment
<p>The network contains an Active Directory forest named contoso.com. An Active Directory site exists for each office.</p> <p>The forest contains a child domain named research.contoso.com. The functional level of both the domains is Windows Server 2008. In each site, there are two domain controllers for the contoso.com domain and two domain controllers for the research.contoso.com domain. The domain controllers run Windows Server 2008 R2.</p> <p>All of the domain controllers are global catalog servers. The FSMO roles were not moved since the domains were deployed.</p>	

D:\Documents and Settings\useralbo\Desktop\1.jpg

QUESTION:10

- (Topic 1)

You need to recommend a solution for DHCP logging. The solution must meet the technical requirement.

What should you include in the recommendation?

- A. Event subscriptions
- B. IP Address Management (IPAM)
- C. DHCP audit logging
- D. DHCP filtering

Answer: B