4/2/2021

Hands On Exercise

Chapter 7

Configuring Advanced Active Directory

(Part2)

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IT 416 - SPRING 2021 - OLD DOMINION UNIVERSITY

Table 7-1 Activity requirements

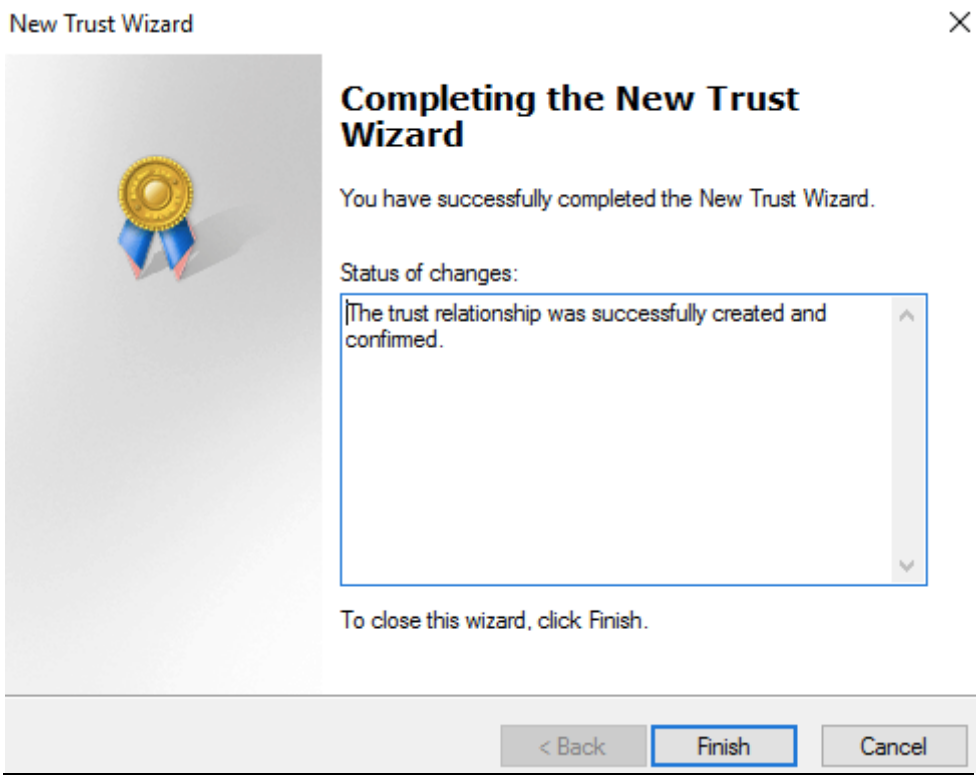
Activity	Requirements	Notes
Activity 7-1: Resetting Your Virtual Environment	ServerDC1, ServerSA1	
Activity 7-2: Installing a Subdomain	ServerDC1, ServerSA1	
Activity 7-3: Removing a Subdomain and Creating a New Tree	ServerDC1, ServerSA1	
Activity 7-4: Creating a New Forest	ServerDC1, ServerSA1	
Activity 7-5: Testing Cross-Forest Access Without a Trust	ServerDC1, ServerSA1	
Activity 7-6: Creating and Testing a Forest Trust	ServerDC1, ServerSA1	
Activity 7-7: Creating a Subnet and a Site	ServerDC1, ServerSA1	
Activity 7-8: Adding a DC to the MCSA2016 Domain	ServerDC1, ServerSA1	
Activity 7-9: Working with Connection Objects	ServerDC1, ServerSA1	
Activity 7-10: Creating a Site Link	ServerDC1, ServerSA1	
Activity 7-11: Managing Replication	ServerDC1, ServerSA1	

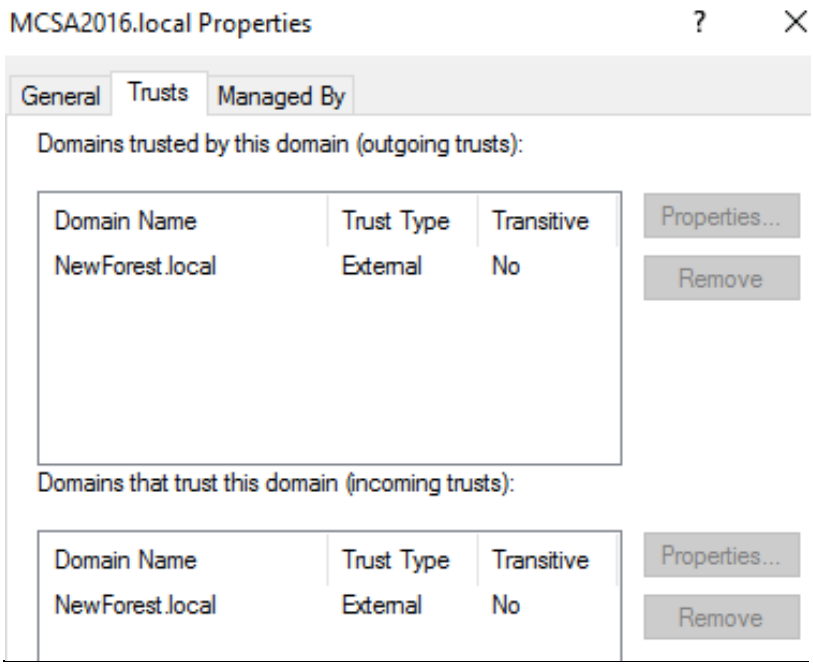
Activity 7-6: Creating and Testing a Forest Trust

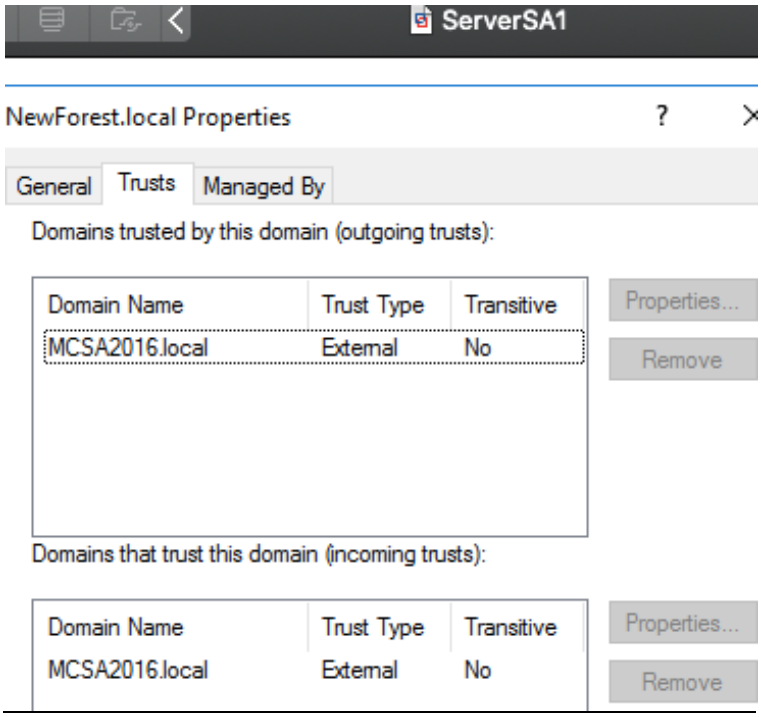
Time Required: 15 minutes
Objective: Create a forest trust.
Required Tools and Equipment: ServerDC1, ServerSA1
Description: In this activity, you create a forest trust between MCSA2016.local and NewForest.local. Then, you will test the trust by accessing resources in the NewForest.local domain from the MCSA2016.local domain, using credentials for the MCSA2016.local domain.

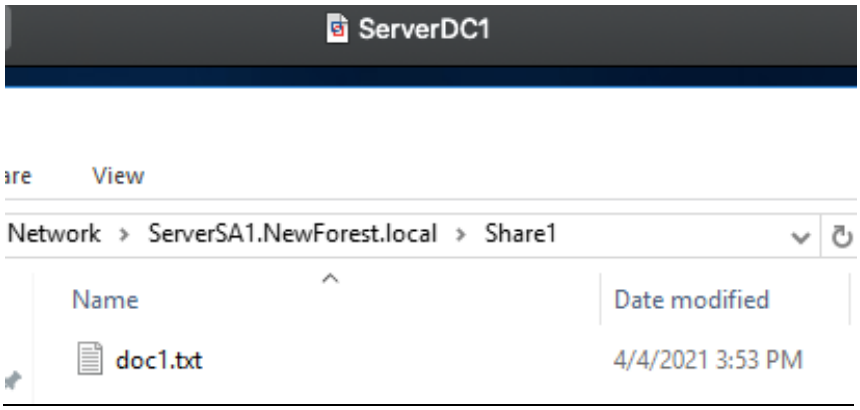
1. Sign in to ServerDC1 as **Administrator**, and from Server Manager, open Active Directory Domains and Trusts.
2. Right-click **MCSA2016.local** and click **Properties**.
3. Click the **Trusts** tab and click the **New Trust** button to start the New Trust Wizard. Click **Next** in the wizard's welcome window.
4. Type **NewForest.local** in the Name text box, and then click **Next**.
5. In the Trust Type window, click the **Forest trust** option button. (*Note:* You can create an external trust in this window, but an external trust creates a trust only between two domains whereas all domains in the forest are included in a forest trust.) Click **Next**.
6. In the Direction of Trust window, verify that the default **Two-way** option is selected, and then click **Next**.
7. In the Sides of Trust window, click **Both this domain and the specified domain**. If you're creating only one side of the trust, you're asked to enter a trust password, which must be used to create the second side of the trust. Click **Next**.
8. You need to specify credentials for the NewForest.local domain to create the other side of the trust. Type **Administrator** in the User name text box and **Password01** in the Password text box, and then click **Next**.
9. In the Outgoing Trust Authentication Level—Local Forest window, verify that **Forest-wide authentication** is selected for the authentication level, and then click **Next**.

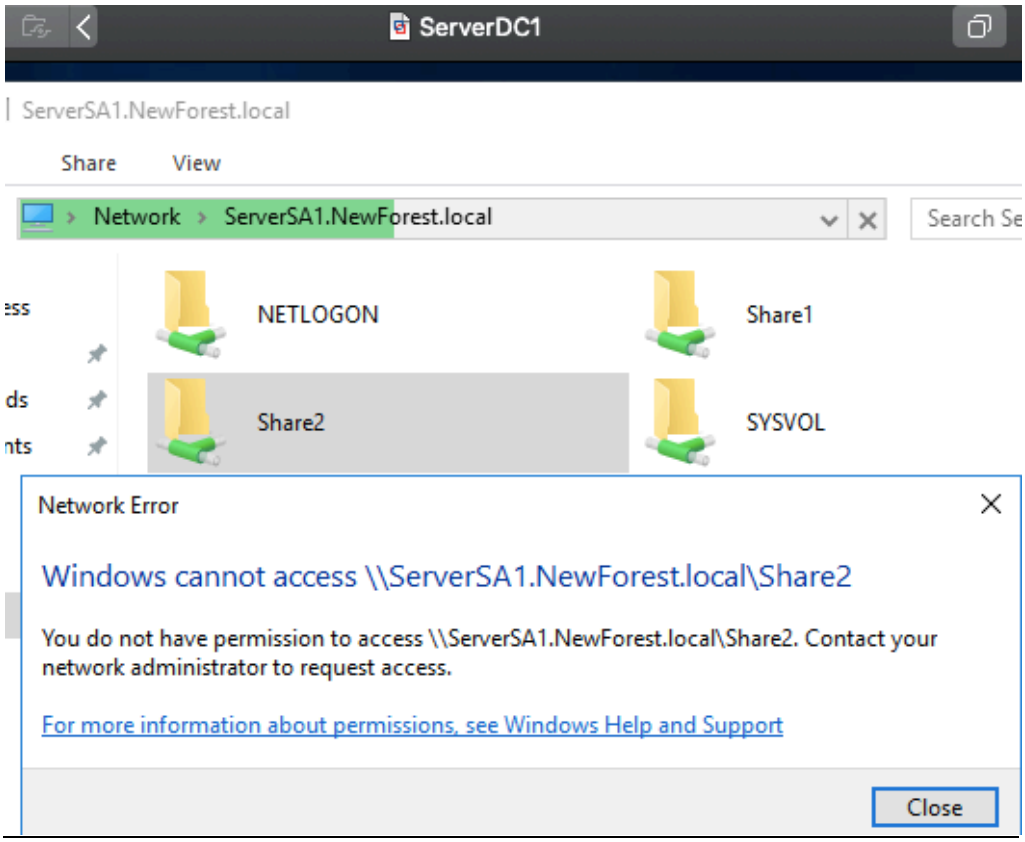
10. In the Outgoing Trust Authentication Level—Specified Forest window, verify that **Forest-wide authentication** is selected, and then click **Next**.
11. Review your settings in the Trust Selections Complete window, and then click **Next**.
12. In the Trust Creation Complete window, the status of the trust creation and a summary of your choices are displayed. Click **Next**.
13. In the Confirm Outgoing Trust window, click **Yes, confirm the outgoing trust**, and then click **Next**.
14. In the Confirm Incoming Trust window, click **Yes, confirm the incoming trust**, and then click **Next**.
15. Click **Finish**. The Trusts tab should list NewForest.local in both the outgoing trusts and incoming trusts lists. Click **OK**, and close Active Directory Domains and Trusts.
16. Sign in to ServerSA1 as **Administrator**, and open Active Directory Domains and Trusts. Verify that the trust relationship with MCSA2016.local was created successfully, and then close Active Directory Domains and Trusts.
17. Now, you will set up a share on ServerSA1 and access that share from ServerDC1 to test the trust. On ServerSA1, open File Explorer. On the root of the C drive, create a folder named **Share1**. Right-click the **Share1** folder, click **Share with**, and click **Specific people**. Add **Everyone** with **Read/Write** permission. Click **Share**, and then click **Done**.
18. Repeat the previous step, this time creating a share named **Share2** and leaving the default sharing permissions as they are. (Don't add the Everyone group to the list of users who can access the share.) Close File Explorer.
19. On ServerDC1, right-click **Start**, click **Run**, type **\\ServerSA1.NewForest.local** in the Open text box, and press **Enter**. A File Explorer window opens and lists all shares on ServerSA1.
20. Double-click the **Share1** share to open it. Notice that you weren't prompted for credentials because a trust exists between the two forests. Create a text file named **doc1.txt** to show that you can write files to the share across the forest. Share1 has Read/Write permission assigned to the Everyone group, which includes authenticated users from other forests.
21. In File Explorer, click the **back arrow** to see the list of shared folders on ServerSA1. Double-click **Share2**. You see a "Windows cannot access" message. You can't access this share because you weren't given permission to do so. Click **Close**. Close File Explorer.
22. Stay signed in to both servers and continue to the next activity.


New Trust Wizard
Completing the New Trust Wizard
You have successfully completed the New Trust Wizard.
Status of changes:
The trust relationship was successfully created and confirmed.
To close this wizard, click Finish.
< Back
Finish
Cancel


MCSA2016.local Properties
General
Trusts
Managed By
Domains trusted by this domain (outgoing trusts):
Domain Name
Trust Type
Transitive
NewForest.local
External
No
Properties...
Remove
Domains that trust this domain (incoming trusts):
Domain Name
Trust Type
Transitive
NewForest.local
External
No
Properties...
Remove


ServerSA1
NewForest.local Properties
General
Trusts
Managed By
Domains trusted by this domain (outgoing trusts):
Domain Name
Trust Type
Transitive
MCSA2016.local
External
No
Properties...
Remove
Domains that trust this domain (incoming trusts):
Domain Name
Trust Type
Transitive
MCSA2016.local
External
No
Properties...
Remove


ServerDC1
View
Network
ServerSA1.NewForest.local
Share1
Name
Date modified
doc1.txt
4/4/2021 3:53 PM

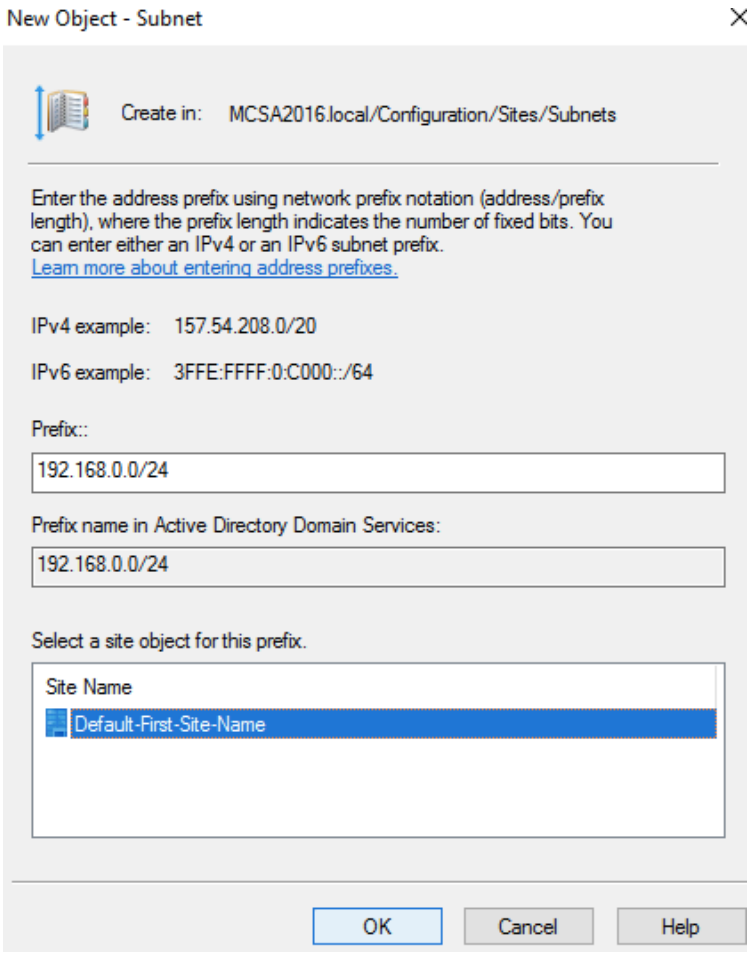


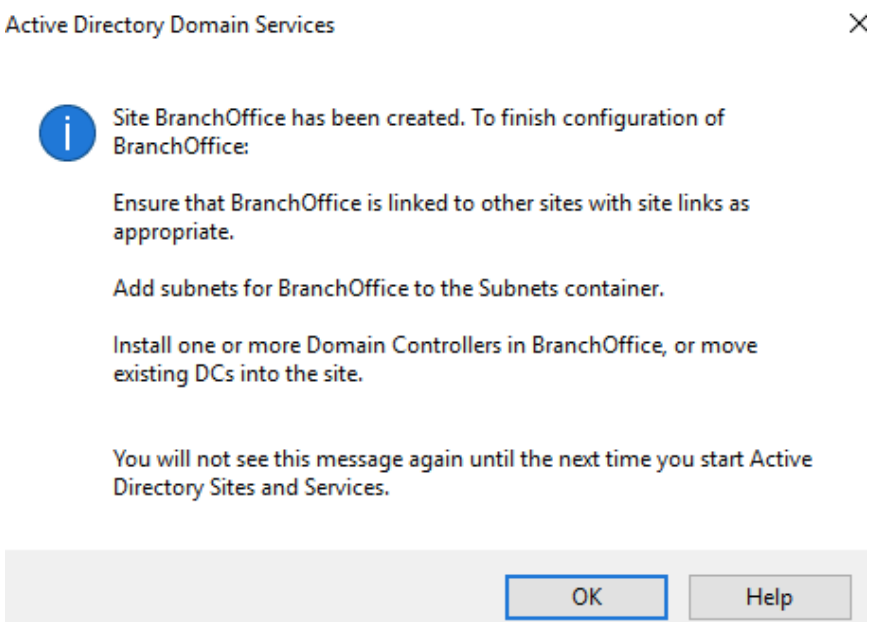
Activity 7-7: Creating a Subnet and a Site

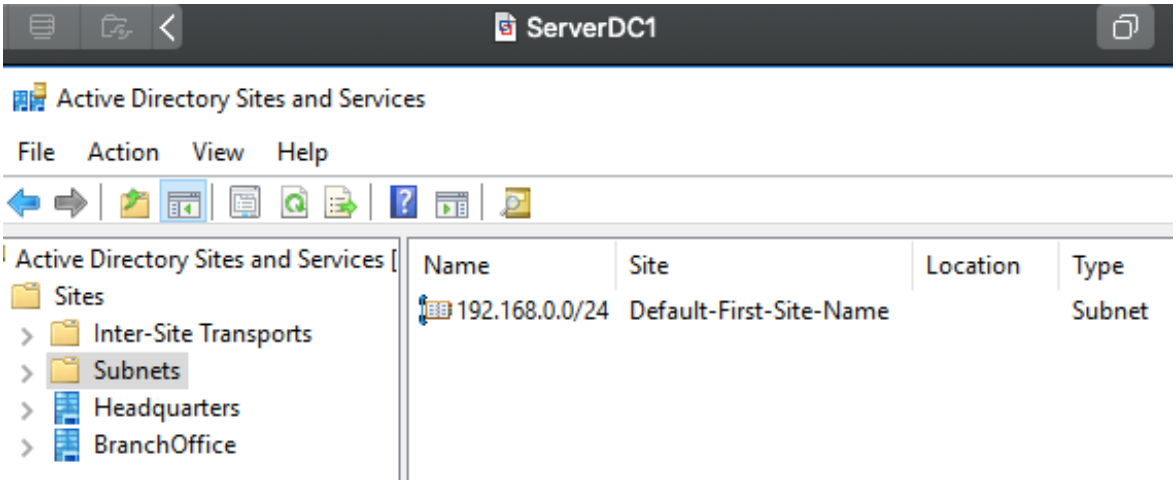
Time Required: 10 minutes
Objective: Create a new subnet and site.
Required Tools and Equipment: ServerDC1, ServerSA1
Description: In this activity, you create a new subnet and site.

1. On ServerDC1, open Active Directory Sites and Services and click to expand the **Sites** folder, if necessary. You should see a Subnets folder, an Inter-Site Transports folder, and the Default-First-Site-Name site object.
2. Right-click **Subnets** and click **New Subnet**. In the Prefix text box, type **192.168.0.0/24** (assuming you're following the IP address scheme used in this book; otherwise, ask your instructor what to enter).
3. In the Select a site object for this prefix list box, click **Default-First-Site-Name**, and then click **OK**.

4. Right-click **Default-First-Site-Name** and click **Rename**. Type **Headquarters** and press **Enter**.
5. Right-click the **Sites** folder and click **New Site**. In the New Object - Site dialog box, type **BranchOffice** in the Name text box. Notice that you're prompted to select a site link object for the site. Click **DEFAULTIPSITELINK**, and then click **OK**.
6. You should see a message from Active Directory Domain Services stating that more steps are needed to finish configuring the site: making sure site links are suitable, adding subnets for the site in the Subnets folder, and adding a domain controller to the site. Click **OK**.
7. Close Active Directory Sites and Services, and continue to the next activity.







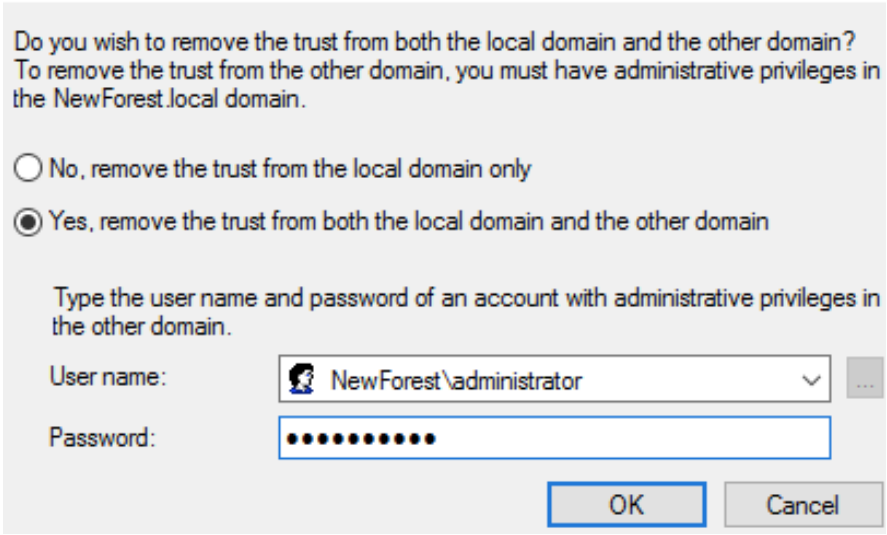
Activity 7-8: Adding a DC to the MCSA2016 Domain

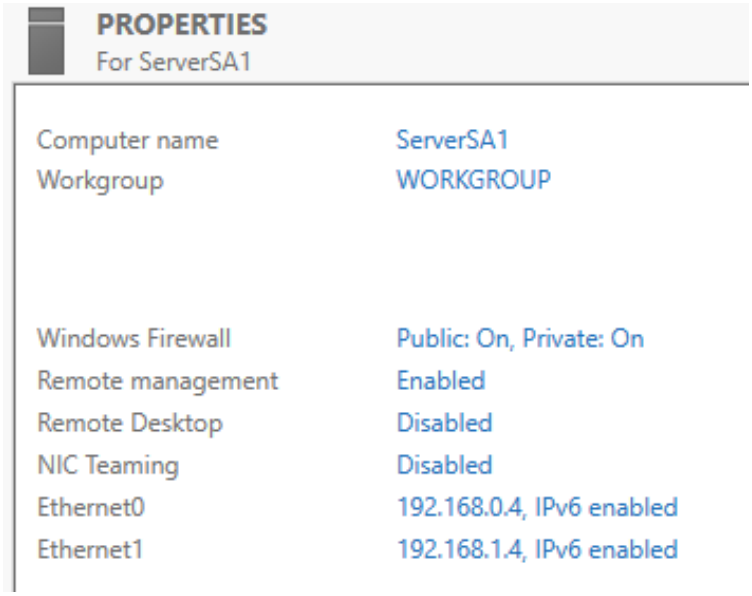
Time Required: 20 minutes
Objective: Add a DC to the MCSA2016 domain.
Required Tools and Equipment: ServerDC1, ServerSA1
Description: In this activity, first you delete the trust between MCSA2016.local and NewForest.local. Then, you demote ServerSA1 to have the NewForest.local forest removed. Finally, you promote ServerSA1 as an additional DC in the MCSA2016.local domain.

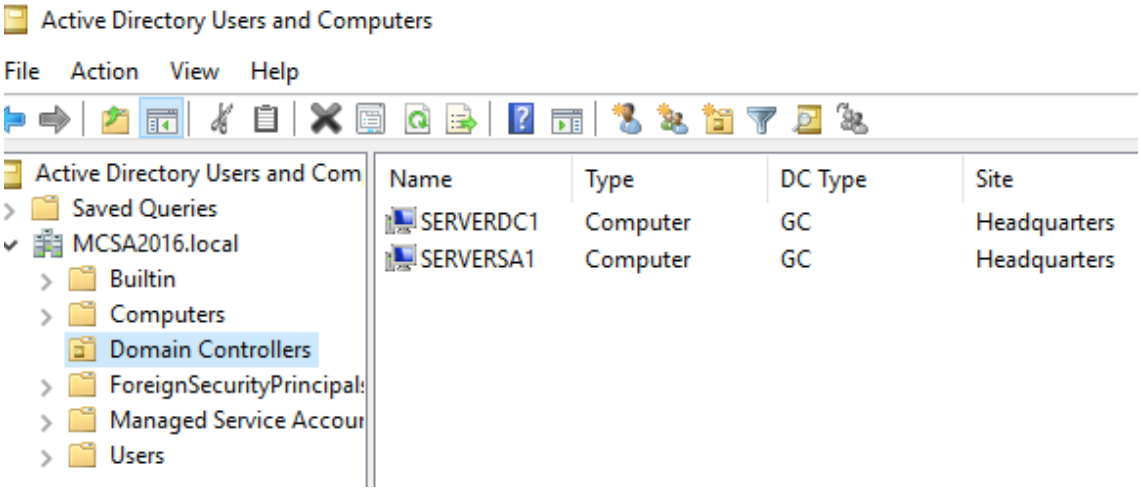
1. On ServerDC1, open Server Manager, if necessary, and click **Tools**, **Active Directory Domains and Trusts** from the menu. Right-click **MCSA2016.local** and click **Properties**. Click the **Trusts** tab.
2. Click **NewForest.local** in the Domains trusted by this domain list box, and click **Remove**. In the Active Directory Domain Services dialog box, click **Yes, remove the trust from both the local domain and other domain**. In the User name text box, type **NewForest\administrator**, and in the Password text box, type **Password01**. Click **OK**, and click **Yes** to confirm.
3. Repeat Step 2 for the incoming trust. You don't need to re-enter the credentials for NewForest. Click **OK**.
4. On ServerSA1, from Server Manager, click **Manage, Remove Roles and Features** to start the Remove Roles and Features Wizard.
5. In the Before You Begin window, click **Next**. In the Server Selection window, click **Next**.
6. In the Server Roles window, click to clear **Active Directory Domain Services**. Click **Remove Features**. The Validation Results message box states that you must demote the domain controller first. Click **Demote this domain controller**.
7. In the Credentials window, click the **Last domain controller in the domain** check box, and then click **Next**. In the Warnings window, click **Proceed with removal**, and then click **Next**.
8. In the Removal Options window, click **Remove this DNS zone** and **Remove application partitions**, and then click **Next**.
9. In the New Administrator Password window, type **Password01** in both the Password and Confirm password text boxes, and then click **Next**.
10. In the Review Options window, click **Demote**. After a while, the server restarts.
11. After ServerSA1 restarts, sign in as **Administrator** with the password **Password01**. Before you promote this server to a DC, change the Preferred DNS server address in the TCP/IPv4 Properties dialog box to **192.168.0.1** (the address of ServerDC1). Also, set the TCP/IPv6 DNS server to **Obtain DNS server address automatically**.
12. Open Server Manager, if necessary, and click the notifications flag. Next, click **Promote this server to a domain controller**. In the Deployment Configuration window, accept the default deployment operation, **Add a domain controller to an existing domain**, and type **MCSA2016.local** in the Domain text box.
13. Click the **Change** button, and type **MCSA2016\administrator** for the username and **Password01** for the password. Click **OK**, and then click **Next**.
14. In the Domain Controller Options window, accept the default settings for domain controller capabilities and site information, and type **Password01** in the Password and Confirm password text boxes for the DSRM password. Click **Next**.

15. In the DNS Options window, click **Next**. In the Additional Options window, click **Next**.
16. In the Paths window, accept the default settings, and then click **Next**.
17. In the Review Options window, click **Next**. In the Prerequisites Check window, click **Install**.
18. Active Directory is installed, and the server restarts. After the server restarts, sign in as **Administrator** with the password **Password01** (click Other user if the sign in defaults to NewForest\administrator). Note that you're now logging on to the MCSA2016.local domain.
19. Open Active Directory Users and Computers, and verify that ServerDC1 and ServerSA1 are in the Domain Controllers OU. Notice that the Site column shows that both servers are in HeadQuarters. Close Active Directory Users and Computers, and continue to the next activity.

Active Directory Domain Services







Activity 7-9: Working with Connection Objects

Time Required: 15 minutes
Objective: View and change properties of connection objects.
Required Tools and Equipment: ServerDC1, ServerSA1
Description: In this activity, you explore the properties of NTDS Site Settings, server NTDS Settings, and connection objects.

1. On ServerDC1, open **Active Directory Sites and Services**.
2. Click to expand **Sites**, and then click **Headquarters**. Two objects are displayed in the right pane: the Servers folder, which lists the DCs in the site, and NTDS Site Settings.
3. In the right pane, double-click to expand the **Servers** folder and then double-click **ServerDC1**. Right-click **NTDS Settings** and click **Properties** to open the dialog box shown in Figure 7-26. (Notice that NTDS Settings are associated with server objects and site objects.)
4. In the General tab, you can configure the server as a global catalog server. Click the **Connections** tab. You should see ServerSA1 in both the Replicate From and Replicate To text boxes. Click **Cancel**.

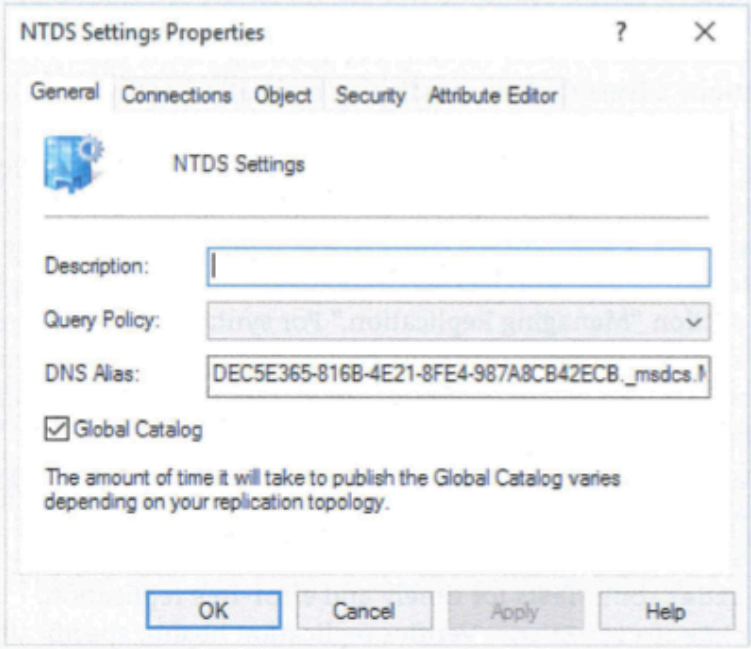
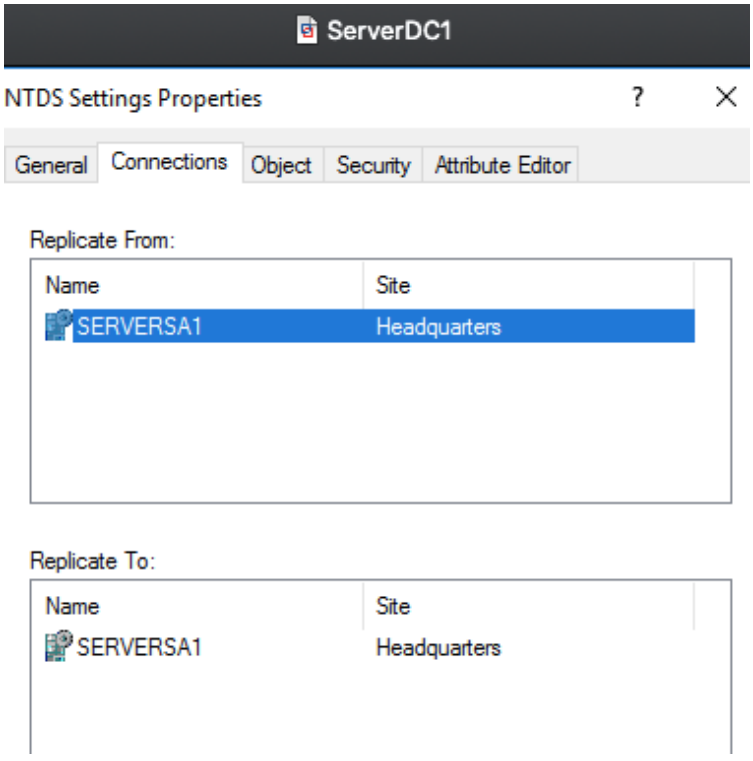
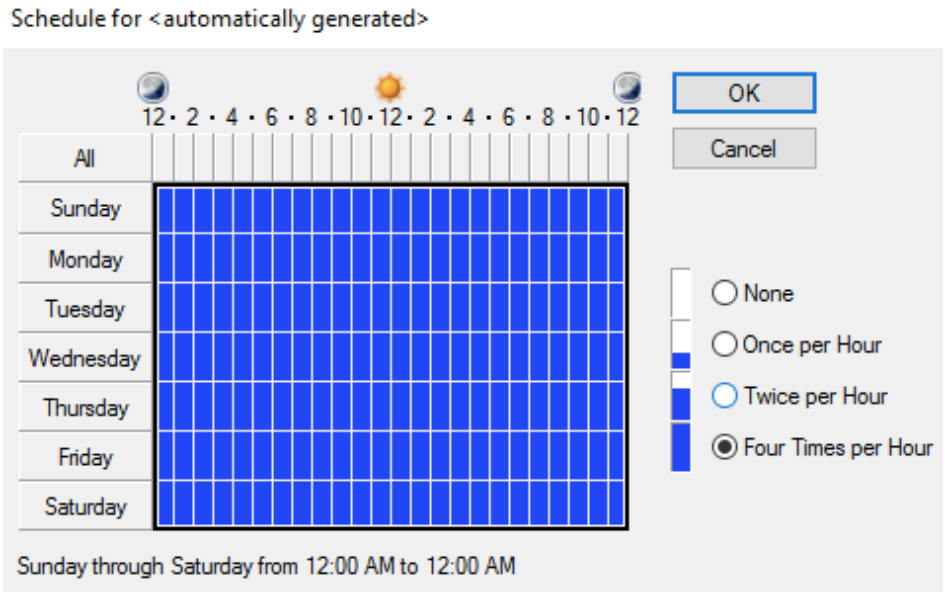
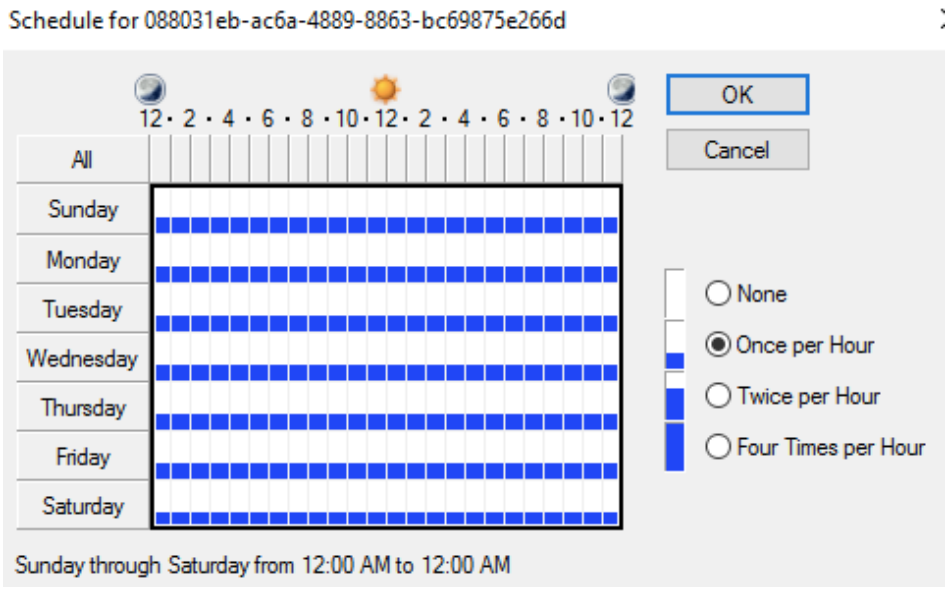


Figure 7-26 The NTDS Settings Properties dialog box

5. In the right pane, double-click to expand **NTDS Settings**. Right-click the connection object for ServerSA1. Notice that Replicate Now is an option, which you can use to force replication to occur immediately. Click **Properties**.
6. Click the **Change Schedule** button. The regular schedule for intrasite replication is once per hour. Click **Cancel**, and then click **Cancel** again.
7. In the left pane, click **Headquarters**. In the right pane, right-click **NTDS Site Settings** and click **Properties**.
8. In the Site Settings tab, click **Change Schedule**. In the Schedule for NTDS Site Settings dialog box, click **All**, and then click the **Four Times per Hour** option button. Changing the replication schedule here changes it for all automatically generated connections in the site. Click **OK** twice.
9. To verify that the schedule has changed, click **NTDS Settings** under ServerDC1 again. Double-click the connection object to open its Properties dialog box, and click the **Change Schedule** button. (The schedule change might take a while to occur under each server. Eventually, the change at the site level overwrites the server settings.) Click the **All** button at the upper left of the day/time table, click the **Once per Hour** option button, and then click **OK**.
10. Click **Apply**. You see a message indicating that changes to the connection will be overwritten because the connection object is generated automatically. When prompted to mark the connection as not automatically generated, click **Yes**, which changes the replication schedule for this connection only. Any other connections have their schedules set in NTDS Site Settings. Click **OK**. Notice that the connection object's name changes to a numeric GUID instead of "<automatically generated>."
11. Continue to the next activity.



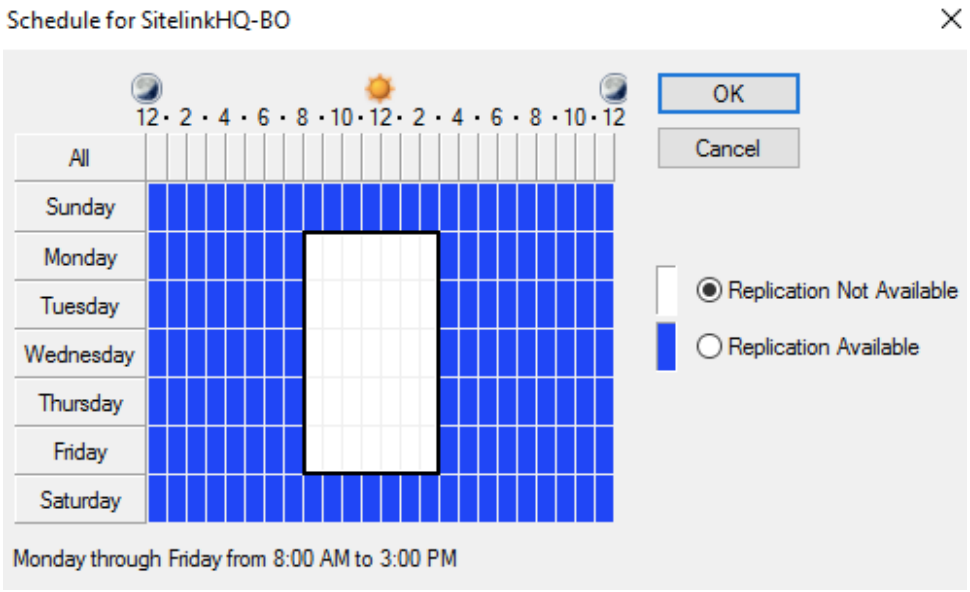


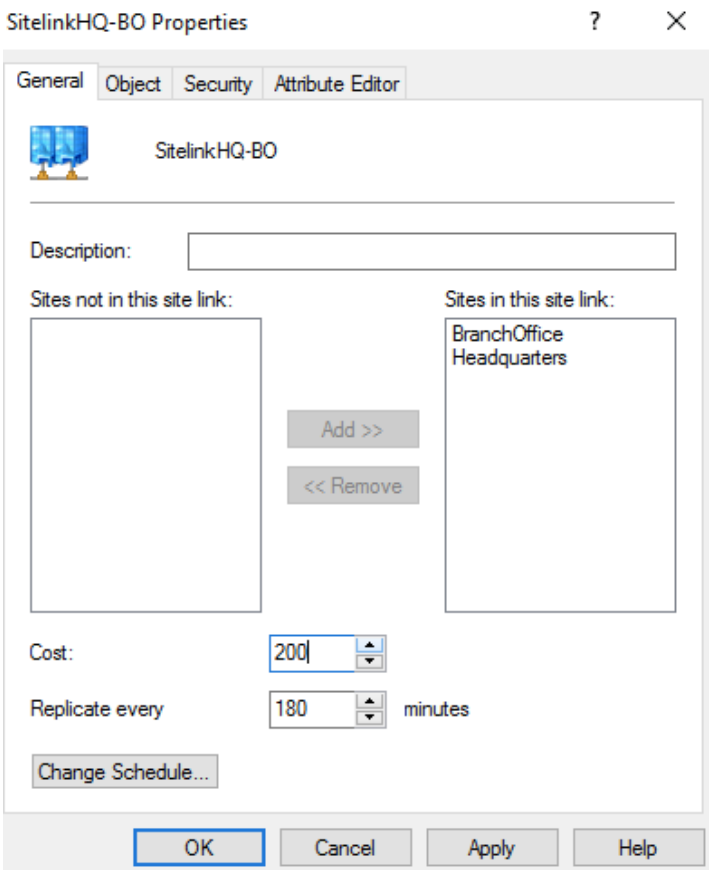


Activity 7-10: Creating a Site Link

Time Required: 10 minutes
Objective: Create a site link.
Required Tools and Equipment: ServerDC1, ServerSA1
Description: In this activity, you create a site link to configure replication between sites Headquarters and BranchOffice.

1. On ServerDC1, in Active Directory Sites and Services, click to expand **Sites** and **Inter-Site Transports**, if necessary. Click the **IP** folder.
2. Right-click the **IP** folder and click **New Site Link**. In the Properties dialog box, type **SiteLinkHQ-BO** in the Name text box.
3. Because only two sites are defined and a site link must contain at least two sites, both Site12 and Site20 are added to the Sites in this site link list box. If there were more than two sites, you would choose two or more sites to include in the site link. Click **OK**.
4. In the right pane of Active Directory Sites and Services, right-click **SiteLinkHQ-BO** and click **Properties**. Click the **Change Schedule** button. Notice that replication takes place all day every day, which is the default setting for site links.
5. Drag to form a box around Monday through Friday from 8 a.m. to 3 p.m., and then click **Replication Not Available**. Now Headquarters and BranchOffice won't attempt to replicate during these times. Click **OK**.
6. Click in the Cost text box and type **200**. Recall that the higher the cost of the link, the less attractive it is when the topology is generated. If there are multiple paths between destinations, the lower cost path is selected. In this case, DEFAULTIPSITELINK also contains Headquarters and BranchOffice and has a cost of 100, so it's the preferred site link. Click **OK**.
7. Continue to the next activity.





Activity 7-11: Managing Replications

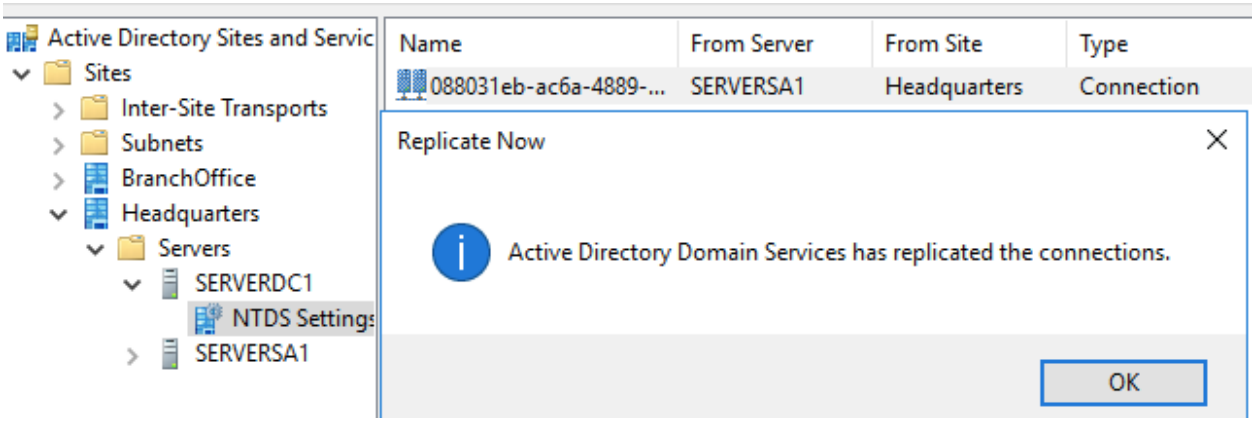
Time Required: 10 minutes
Objective: Manage replication with Active Directory Sites and Services and with the command line.
Required Tools and Equipment: ServerDC1, ServerSA1
Description: In this activity, you see how to force replication to occur and how to check the replication topology by using Active Directory Sites and Services and command-line tools.

1. On ServerDC1, in Active Directory Sites and Services, navigate to ServerDC1 under Headquarters. Click to expand **ServerDC1** and click **NTDS Settings** in the left pane.
2. In the right pane, right-click the connection object connecting ServerDC1 to ServerSA1 and click **Replicate Now**. Click **OK** in the message box.
3. Open a command prompt window, type **repadmin /showrepl**, and press **Enter**. You see detailed information about partitions that were replicated and the date and time of the last attempt and whether it was successful. You should see that the last attempt just occurred and was successful.
4. Type **repadmin /replsum** and press **Enter**. You see a less detailed summary of the most recent replication (see Figure 7-27). There are two parts to the display: Source DSA and Destination DSA. The Source DSA indicates the server from which data is being transferred, and the Destination DSA indicates the server to which data is being transferred. The "largest delta" column shows the last time replication occurred. Notice that for ServerSA1, under Source DSA, the time shows just a few seconds or minutes, and under Destination DSA, the times are reversed.

```
C:\Users\Administrator>repadmin /replsum
Replication Summary Start Time: 2017-06-21 18:19:52

Beginning data collection for replication summary, this may take awhile:
  .....


Source DSA          largest delta    fails/total %%   error
 SERVERDC1                  29m:24s    0 /   5    0
 SERVERSA1                     :34s    0 /   5    0


Destination DSA     largest delta    fails/total %%   error
 SERVERDC1                     :34s    0 /   5    0
 SERVERSA1                  29m:24s    0 /   5    0
```

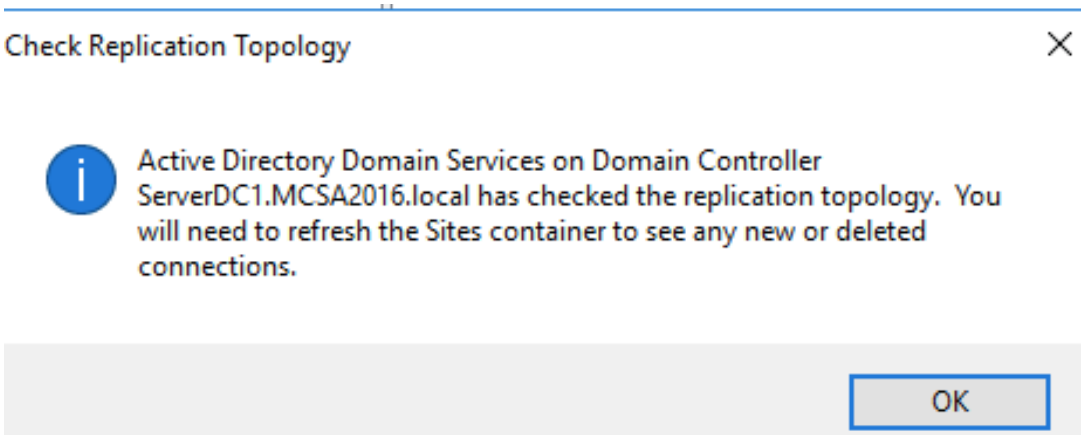
Figure 7-27 Output of `repadmin /replsum`

5. In Active Directory Sites and Services, right-click the **NTDS Settings** object under ServerDC1, point to **All Tasks**, and click **Check Replication Topology**. Read the message. Click **OK** in the message box. Because no changes have been made to the domain, the topology won't change.
6. On ServerDC1 at the command prompt, type **repadmin /replicate ServerDC1 ServerSA1 dc=MCSA2016,dc=local**, and press **Enter**. You see a message stating that the sync was completed successfully. In this command, the source DC is ServerSA1, and the destination DC is ServerDC1. Recall that this command replicates only the domain partition unless additional partitions are specified.
7. Type **repadmin /replsum** and press **Enter**. You'll probably see that the replication doesn't seem to have happened because the timers weren't reset. However, `repadmin /replicate` replicates only changes; if no changes occurred since the last replication, no replication takes place.
8. Type **repadmin /syncall** and press **Enter**. This command replicates all partitions as needed.
9. Type **repadmin /showrepl** and press **Enter**. The most likely partition to have changed that requires replication is the Configuration partition.
10. Type **dcdiag /test:replications** and press **Enter**. The output indicates whether a connection can be made and the results of tests run on each Active Directory partition. Any replication errors are shown in the output.
11. Shut down ServerSA1. After ServerSA1 is shut down, on ServerDC1, type **dcdiag /test:replications** and press **Enter**. Because ServerSA1 was shut down, the command takes a while to time out. The output indicates that replication failed.
12. Type **repadmin /replicate ServerDC1 ServerSA1 dc=MCSA2016,dc=local** and press **Enter**. Because ServerSA1 was shut down, the command takes a while to time out. After it does, type **repadmin /showrepl** and press **Enter**. You should see that there was an error replicating the domain partition because it's the partition you attempted to replicate.
13. Type **repadmin /replsum** and press **Enter**. The output indicates that errors occurred in replication. You see the message "The RPC server is unavailable."
14. Shut down ServerDC1.




```
C:\Users\Administrator>repadmin /showrepl

Repadmin: running command /showrepl against full DC localhost
Headquarters\SERVERDC1
DSA Options: IS_GC
Site Options: (none)
DSA object GUID: d2bdf41b-d2b0-4b5b-be35-260dfceaac4d
DSA invocationID: b2b223aa-7d47-4eaa-81fc-867c9e65818d

==== INBOUND NEIGHBORS ======================================

DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

CN=Schema,CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

DC=DomainDnsZones,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

DC=ForestDnsZones,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.
```

```
C:\Users\Administrator>repadmin /showrepl

Repadmin: running command /showrepl against full DC localhost
Headquarters\SERVERDC1
DSA Options: IS_GC
Site Options: (none)
DSA object GUID: d2bdf41b-d2b0-4b5b-be35-260dfceaac4d
DSA invocationID: b2b223aa-7d47-4eaa-81fc-867c9e65818d

==== INBOUND NEIGHBORS ======================================

DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

CN=Schema,CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

DC=DomainDnsZones,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

DC=ForestDnsZones,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.


C:\Users\Administrator>repadmin /replsum
Replication Summary Start Time: 2021-04-04 21:19:22

Beginning data collection for replication summary, this may take awhile:
  .....


Source DSA          largest delta    fails/total %%   error
 SERVERDC1                  23m:20s    0 /   5    0
 SERVERSA1                  01m:34s    0 /   5    0


Destination DSA     largest delta    fails/total %%   error
 SERVERDC1                  01m:34s    0 /   5    0
 SERVERSA1                  23m:20s    0 /   5    0
```




```
C:\Users\Administrator>repadmin /replicate ServerDC1 ServerSA1 dc=MCSA2016,dc=local
Sync from ServerSA1 to ServerDC1 completed successfully.
```

```
C:\Users\Administrator>repadmin /replsum
Replication Summary Start Time: 2021-04-04 21:19:22

Beginning data collection for replication summary, this may take awhile:
  .....


Source DSA          largest delta    fails/total %%   error
 SERVERDC1                  23m:20s    0 /   5    0
 SERVERSA1                  01m:34s    0 /   5    0


Destination DSA     largest delta    fails/total %%   error
 SERVERDC1                  01m:34s    0 /   5    0
 SERVERSA1                  23m:20s    0 /   5    0



C:\Users\Administrator>repadmin /replicate ServerDC1 ServerSA1 dc=MCSA2016,dc=local
Sync from ServerSA1 to ServerDC1 completed successfully.


C:\Users\Administrator>repadmin /replsum
Replication Summary Start Time: 2021-04-04 21:23:10

Beginning data collection for replication summary, this may take awhile:
  .....


Source DSA          largest delta    fails/total %%   error
 SERVERDC1                  27m:08s    0 /   5    0
 SERVERSA1                  05m:22s    0 /   5    0


Destination DSA     largest delta    fails/total %%   error
 SERVERDC1                  05m:22s    0 /   5    0
 SERVERSA1                  27m:08s    0 /   5    0
```

```
C:\Users\Administrator>repadmin /syncall
CALLBACK MESSAGE: The following replication is in progress:
    From: 0bf0c355-cbc0-4493-b30c-385409d8a0f8._msdcs.MCSA2016.local
    To  : d2bdf41b-d2b0-4b5b-be35-260dfceaac4d._msdcs.MCSA2016.local
CALLBACK MESSAGE: The following replication completed successfully:
    From: 0bf0c355-cbc0-4493-b30c-385409d8a0f8._msdcs.MCSA2016.local
    To  : d2bdf41b-d2b0-4b5b-be35-260dfceaac4d._msdcs.MCSA2016.local
CALLBACK MESSAGE: SyncAll Finished.
SyncAll terminated with no errors.
```

```
Repadmin: running command /showrepl against full DC localhost
Headquarters\SERVERDC1
DSA Options: IS_GC
Site Options: (none)
DSA object GUID: d2bdf41b-d2b0-4b5b-be35-260dfceaac4d
DSA invocationID: b2b223aa-7d47-4eaa-81fc-867c9e65818d

==== INBOUND NEIGHBORS ======================================

DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:22:21 was successful.

CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:24:01 was successful.

CN=Schema,CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

DC=DomainDnsZones,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

DC=ForestDnsZones,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.
```

```
C:\Users\Administrator>repadmin /showrepl

Repadmin: running command /showrepl against full DC localhost
Headquarters\SERVERDC1
DSA Options: IS_GC
Site Options: (none)
DSA object GUID: d2bdf41b-d2b0-4b5b-be35-260dfceaac4d
DSA invocationID: b2b223aa-7d47-4eaa-81fc-867c9e65818d

==== INBOUND NEIGHBORS ======================================

DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:28:18 failed, result 1722 (0x6ba):
            The RPC server is unavailable.
        1 consecutive failure(s).
        Last success @ 2021-04-04 21:22:21.

CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:24:01 was successful.

CN=Schema,CN=Configuration,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.

DC=DomainDnsZones,DC=MCSA2016,DC=local
    Headquarters\SERVERSA1 via RPC
        DSA object GUID: 0bf0c355-cbc0-4493-b30c-385409d8a0f8
        Last attempt @ 2021-04-04 21:17:48 was successful.
```

```
C:\Users\Administrator>repadmin /replsum
Replication Summary Start Time: 2021-04-04 21:29:38

Beginning data collection for replication summary, this may take awhile:
  .....


Source DSA          largest delta    fails/total %%   error
 SERVERSA1                  11m:50s    1 /   5   20  (1722) The RPC server is unavailable.


Destination DSA     largest delta    fails/total %%   error
 SERVERDC1                  11m:50s    1 /   5   20  (1722) The RPC server is unavailable.


Experienced the following operational errors trying to retrieve replication information:
          58 - ServerSA1.MCSA2016.local
```