Lab Answer Key: Module 2: Introduction to Active Directory Domain Services

Lab: Installing Domain Controllers

Exercise 1: Installing a Domain Controller

Task 1: Add an Active Directory Domain Services (AD DS) role to a member server

1. On LON-DC1, in Server Manager, in the left column, click All Servers.
2. Right-click All Servers, and then click Add Servers.
3. In the Add Servers dialog box, in the Name (CN) box, type LON-SVR1, and then click Find Now.
4. Under Name, click LON-SVR1, and then click the arrow to add the server to the Selected column.
5. Click OK to close the Add Servers dialog box.
6. In Server Manager, in the Servers pane, right-click LON-SVR1, and then select Add Roles and Features.
7. In the Add Roles and Features Wizard, click Next.
8. On the Select installation type page, ensure that Role-based or feature-based installation is selected, and then click Next.
9. On the Select destination server page, ensure that Select a server from the server pool is selected.
10. Under Server Pool, verify that LON-SVR1.Adatum.com is highlighted, and then click Next.
11. On the Select server roles page, select the Active Directory Domain Services role.
check box, click **Add Features**, and then click **Next**.

12. On the **Select features** page, click **Next**.

13. On the **Active Directory Domain Services** page, click **Next**.

14. On the **Confirm installation selections** page, select the **Restart the destination server automatically if required** check box, and then click **Install**.

   Installation will take several minutes.

15. When the installation completes, click **Close** to close the Add Roles and Features Wizard.

**Task 2: Configure a server as a domain controller**

1. On LON-DC1, in Server Manager, on the command bar, click the **Notifications** icon—it looks like a flag.

2. Under Post-deployment Configuration, click **Promote this server to a domain controller**.

   The Active Directory Domain Services Configuration Wizard will open.

3. In the Active Directory Domain Services Configuration Wizard, on the **Deployment Configuration** page, ensure that **Add a domain controller to an existing domain** is selected, and then, beside the Domain line, click **Select**.

4. In the **Windows Security** dialog box, in the **Username** box type **Administrator**, in the **Password** box type **Pa$$w0rd** and then click **OK**.

5. In the **Select a domain from the forest** dialog box, click **adatum.com**, and then click **OK**.

6. Beside the **Supply the credentials to perform this operation** line, click **Change**.

7. In the **Windows Security** dialog box, in the **Username** box, type **Adatum\Administrator**, in the **Password** box, type **Pa$$w0rd**, and then click
8. On the **Deployment Configuration** page, click **Next**.

9. On the **Domain Controller Options** page, ensure that **Domain Name System (DNS) server** is selected, and then deselect **Global Catalog (GC)**.

   ![Note: You would usually also want to enable the global catalog, but for the purpose of this lab, this is done in the next lab task.]

10. In the **Type the Directory Services Restore Mode (DSRM) password** section, type **Pa$$w0rd** in both text boxes, and then click **Next**.

11. On the **DNS Options** page, click **Next**.

12. On the **Additional Options** page, Click **Next**.

13. On the **Paths** page, accept the default folders, and then click **Next**.


15. Close the Notepad window.

16. On the **Review Options** page, click **Next**.

17. On the **Prerequisites Check** page, read any warning messages, and then click **Install**.

18. When the task completes successfully, click **Close**.

19. Wait for LON-SVR1 to restart.

**Task 3: Configure a server as a global catalog server**

1. Sign in to LON-SVR1 as **Adatum\Administrator** with the password **Pa$$w0rd**.

2. In Server Manager, click **Tools**, and then click **Active Directory Sites and**
Services.

3. When Active Directory Sites and Services opens, expand **Sites**, expand **Default-First-Site-Name**, expand **Servers**, and then expand **LON-SVR1**.

4. In the left column, right-click **NTDS Settings**, and then click **Properties**.

5. In the **NTDS Settings Properties** dialog box, select **Global Catalog (GC)**, and then click **OK**.


**Results:** After completing this exercise, you will have explored Server Manager and promoted a member server to be a domain controller.

**Exercise 2: Installing a Domain Controller by Using IFM**

**Task 1: Use the Ntdsutil tool to generate IFM**

1. On LON-DC1, in the lower-left corner of the screen, click the **Start** button.

2. On the Start screen, type **CMD**, right click **Command Prompt** and then click **Run as administrator**.

3. At a command prompt, type the following, pressing Enter after each line:
   ```
   Ntdsutil
   Activate instance ntds
   Ifm
   Create sysvol full c:\ifm
   ```

4. Wait for the IFM command to complete and then close the command prompt.
Task 2: Add the AD DS role to the member server

1. Switch to LON-SVR2, and, if required, sign in as Adatum\Administrator with the password Pa$$w0rd.

2. In the lower-left corner of the screen, click the Start button.

3. On the Start screen, type CMD, and then press Enter.

4. Type the following command, and then press Enter:

   ```
   Net use k: \LON-DC1\c$\IFM
   ```

5. Switch to Server Manager.

6. From the list on the left, click Local Server.

7. In the toolbar, click Manage, and then click Add Roles and Features.

8. On the Before you begin page, click Next.

9. On the Select installation type page, ensure that Role-based or feature-based installation is selected, and then click Next.

10. On the Select destination server page, verify that LON-SVR2.Adatum.com is highlighted, and then click Next.


12. In the Add Roles and Features Wizard, click Add Features, and then click Next.

13. On the Select Features page, click Next.


15. On the Confirm installation selections page, click Restart the destination server automatically if required. Click Yes at the message box.

16. Click Install.

17. After the installation completes, click Close.
Task 3: Use IFM to configure a member server as a new domain controller

1. On LON-SVR2, At the command prompt, type the following command, and then press Enter:

   ```
   Robocopy k: c:\ifm /copyall /s
   ```

2. Close the Command Prompt window.

3. In Server Manager, on the command bar, click the **Notifications** icon.

4. Under Post-deployment Configuration, click **Promote this server to a domain controller**.
   
The Active Directory Domain Services Configuration Wizard will open.

5. On the **Deployment Configuration** page, ensure that **Add a domain controller to an existing domain** is selected, and confirm that **adatum.com** is the target domain. Click **Next**.

6. On the **Domain Controller Options** page, ensure that both **Domain Name System (DNS) server** and **Global Catalog (GC)** are selected. For the DSRM password, type **Pa$$w0rd** in both boxes, and then click **Next**.

7. On the **DNS Options** page, click **Next**.

8. On the **Additional Options** page, select **Install from media**, in the **Install from media path** box, type **C:\ifm**, and then click **verify**.

9. When the path has been verified, click **Next**.

**Note:** If you see a message stating that a delegation for the DNS server cannot be created, click **OK**.
10. On the **Paths** page, click **Next**.

11. On the **Review Options** page, click **Next**, and then observe the Active Directory Domain Services Configuration Wizard as it performs a check for prerequisites.

12. Click **Install**, and wait while AD DS is configured.

   While this task is running, read the information messages that display on the screen.

13. Wait for the server to restart.

**Results:** After completing this exercise, you will have installed an additional domain controller for the branch office by using IFM.

**Prepare for the next module**

When you have completed the lab, revert the virtual machines back to their initial state.

To do this, complete the following steps:

1. On the host computer, start Hyper-V® Manager.

2. In the **Virtual Machines** list, right-click **20410C-LON-DC1**, and then click **Revert**.

3. In the **Revert Virtual Machine** dialog box, click **Revert**.

4. Repeat steps 2 and 3 for **20410C-LON-SVR1**, **20410C-LON-RTR**, and **20410C-LON-SVR2**.