LAB 6
CONFIGURING SERVERS FOR REMOTE MANAGEMENT

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This lab contains the following exercises and activities:

Exercise 6.1   Adding Servers to Server Manager

Exercise 6.2   Working with Remote Servers

Lab Challenge   Configuring Windows Firewall

Exercise 6.3   Using Remote Server Administration Tools

BEFORE YOU BEGIN

The lab environment consists of computers connected to a local area network, along with a server that functions as the domain controller for a domain called *adatum.com*. The computers required for this lab are listed in Table 6-1.

Table 6-1
Computers Required for Lab 6

Computer	Operating System	Computer Name
Domain controller	Windows Server 2016	SERVERA
Member server	Windows Server 2016	SERVERB
Member server	Windows Server 2016	SERVERC

In addition to the computers, you also require the software listed in Table 6-2 to complete Lab 6.

Table 6-2

Software Required for Lab 6

Software	Location
Lab 6 student worksheet	Lab06_worksheet.docx (provided by instructor)

Working with Lab Worksheets

Each lab in this manual requires that you answer questions, take screen shots, and perform other activities that you will document in a worksheet named for the lab, such as Lab06_worksheet.docx. It is recommended that you use a USB flash drive to store your worksheets, so you can submit them to your instructor for review. As you perform the exercises in each lab, open the appropriate worksheet file, fill in the required information, and save the file to your flash drive.

After completing this lab, you will be able to:

■ Configure Server Manager to administer multiple servers

■ Use the Remote Server Administration Tools to manage a domain controller

■ Install roles and features on a remote server

Estimated lab time: 75 minutes

Before doing this lab, you need to launch all three servers: SERVERA, SERVERB, and SERVERC.

Exercise 6.1	**Adding Servers to Server Manager**
Overview	In this exercise, you add servers to a member server's Server Manager interface, so you can install roles and features on any server, as well as perform other administration tasks.
Mindset	How do you use the Server Manager application on a single computer to manage multiple servers?
Completion time	10 minutes

In this lab, you need to start all three servers: SERVERA, SERVERB, and SERVERC.

1. On the SERVERC computer, log on using the domain **Administrator** account (adatum\administrator) with the password **Pa$$w0rd**.

2. In the left pane of the Server Manager, click All Servers. The All Servers home page appears, displaying only the local server.

3. Right-click the All Servers icon and, from the context menu, select **Add Servers**. The Add Servers dialog box appears.

4. With the **Active Directory** tab and the **adatum** domain selected, click **Find Now**. The three servers on the network appear (see Figure 6-1).
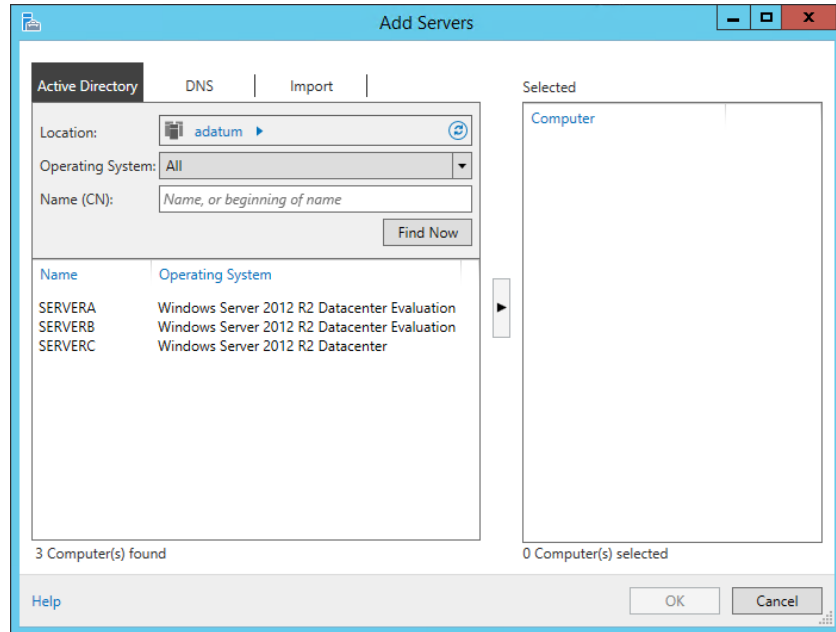

Figure 6-1
The Add Servers dialog box in Server Manager

In Fall 2019, a few students couldn't see the servers in adatum domain. We solved the problem by moving SERVERB out of the domain and rejoin. Go to Server Manager > Local Server > adatum.com, change to work group WORKGROUP. SERVERB will be restarted, then you can change back to adatum.com domain.

5. Select the **SERVERA** server and click the right arrow. The server appears in the Selected list.

6. Select the **SERVERB** server and click the right arrow. The server appears in the Selected list.

7. Click **OK**. The wizard closes and the two remote servers appear in the Servers tile.

8. **[SCREEN SHOT 1]** Press Alt+Prt Scr to take a screen shot of the Server Manager console showing the Servers tile with the servers you just added. Press Ctrl+V to paste the image on the page provided in the Lab 6 worksheet file.

End of exercise. You can leave the windows open for the next exercise.

3

Exercise 6.2	**Working with Remote Servers**
Overview	In this exercise, you use Server Manager to connect to another server on the network and try to access the Computer Management console.
Mindset	How do you use the Server Manager application on a single computer to manage multiple servers?
Completion time	20 minutes

1. On SERVERC, in Server Manager, click Manage > Add Roles and Features. The Add Roles and Features Wizard appears, displaying the *Before you begin* page.

2. Click Next. The *Select installation type* page appears.

3. Click Next. The *Select destination server* page appears (see Figure 6-2).
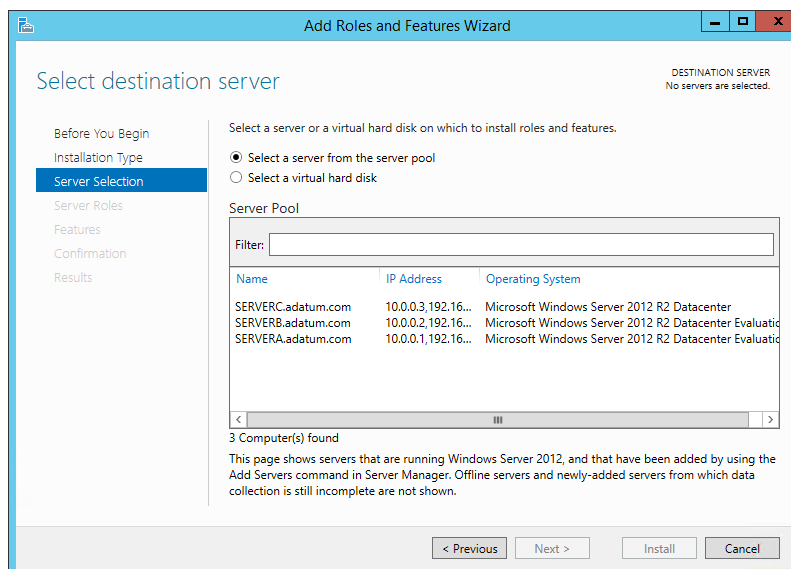

Figure 6-2
The *Select destination server* page in Server Manager

4. Select the **SERVERB.adatum.com** server in the Server Pool list and click Next. The *Select server roles* page appears.

If SERERB doesn't show up, make sure SERVERB has been started.

5. Select the **Web Server (IIS)** check box. The *Add features that are required for Web Server (IIS)* dialog box appears.

    If **Web Server (IIS)** has been installed, you can click cancel and ignore steps 5 – 11.

6. Click Add Features. Then click Next. The *Select features* page appears.

7. Click Next. The *Web Server Role (IIS)* page appears.

8. Click Next. The *Select role services* page appears.

9. Click Next to accept the default role services. The *Confirm installation selections* page appears.

10. Select the *Restart the destination server automatically if required* check box and click Install. The *Installation progress* page appears as the wizard installs the role on the remote system.

11. Click Close. The wizard closes (I usually wait until installation succeeds before closing the wizard).

12. In Server Manager, click the Tools menu.

Question 1	*Why does the Internet Information Services (IIS) Manager console not appear in the Tools menu if you have previously installed the Web Server (IIS) role?*

13. On **SERVERB**, log on using the domain **Administrator** account and the password **Pa$$w0rd**.

Question 2	*How can you tell that the Web Server (IIS) role has been successfully installed on the remote server?*

14. **[SCREEN SHOT 2]** Click the IIS node on Server Manager, then press Alt+Prt Scr to take a screen shot of the Server Manager console on SERVERB, showing the Web Server (IIS) role has been installed. Press Ctrl+V to paste the image on the page provided in the Lab 6 worksheet file.

15. On **SERVERC**, in Server Manager, click the All Servers icon. The All Servers home page appears.

16. In the Servers tile, right-click the **SERVERB** server and, from the context menu, select Restart Server. A message box appears, prompting you to confirm that you want to restart the server.

17. Click OK. Server SERVERB restarts.

18. In the Servers tile, right-click the SERVERB server and, from the context menu, select Computer Management. A Computer Management message box appears, informing you that the Computer Management console cannot connect to SERVERB. Click OK.

Question 3	*What must you do to enable the Computer Management console to connect to SERVERB?*

End of exercise. Close any open windows before you begin the next exercise.

Lab Challenge	Configuring Windows Firewall
Overview	Although Server Manager can install roles and perform certain management functions on remote servers, the default Windows Firewall settings prevent Microsoft Management Console (MMC) snap-ins from connecting to remote servers.
Completion time	15 minutes

Lab Challenge is optional.

To complete this lab, you must configure Windows Firewall on SERVERB so that the Computer Management console running on SERVERC can connect to SERVERB. Then, on SERVERC, press Alt+Prt Scr to take a screen shot of the Computer Management console on SERVERB, after selecting Event Viewer in the left pane, showing the connection to the remote server. Press Ctrl+V to paste the image on the page provided in the Lab 6 worksheet file.

End of exercise. Close any open windows before you begin the next exercise.

Exercise 6.3	**Using Remote Server Administration Tools**
Overview	In this exercise, you install the Remote Server Administration Tools feature and use it to manage the other servers on your network.
Mindset	Where are your domain controllers? According to Microsoft's recommendations, they should be under lock and key, and administrators should access them remotely.
Completion time	15 minutes

1. On the **SERVERC** computer, in Server Manager, click Tools. Observe that no Active Directory Domain Services administration tools are listed. The Tools menu appears (see Figure 6-3).
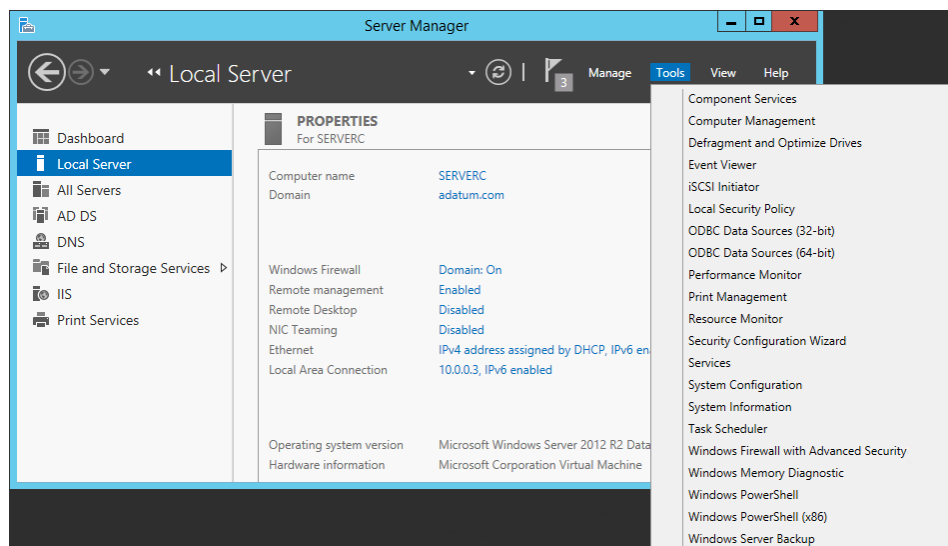

Figure 6-3
The Tools menu on a member server

Question 4	*Why do the standard Active Directory Domain Services administration tools not appear in the Tools menu?*

2. In Server Manager, click Manage > Add Roles and Features. The Add Roles and Features Wizard appears, displaying the *Before you begin* page.

3. Click Next. The *Select installation type* page appears.

4. Click Next. The *Select destination server* page appears.

5. Select **SERVERC**, and then click Next. The *Select server roles* page appears.

6. Click Next. The *Select features* page appears.

7. Scroll down and expand the **Remote Server Administration Tools** feature.

8. Expand the Role Administration Tools feature and select the **AD DS and AD LDS Tools** check box.

9. Click Next. The *Confirm installation selections* page appears.

10. Click Install. The *Installation progress* page appears as the wizard installs the selected features.

11. Click Close. The wizard closes.

12. Click Tools. The Tools menu appears, which now contains the Active Directory administration tools.

13. **[SCREEN SHOT 3]** Press Alt+Prt Scr to take a screen shot of the Tools menu. Press Ctrl+V to paste the image on the page provided in the Lab 6 worksheet file.

    The following is an example screen shot.
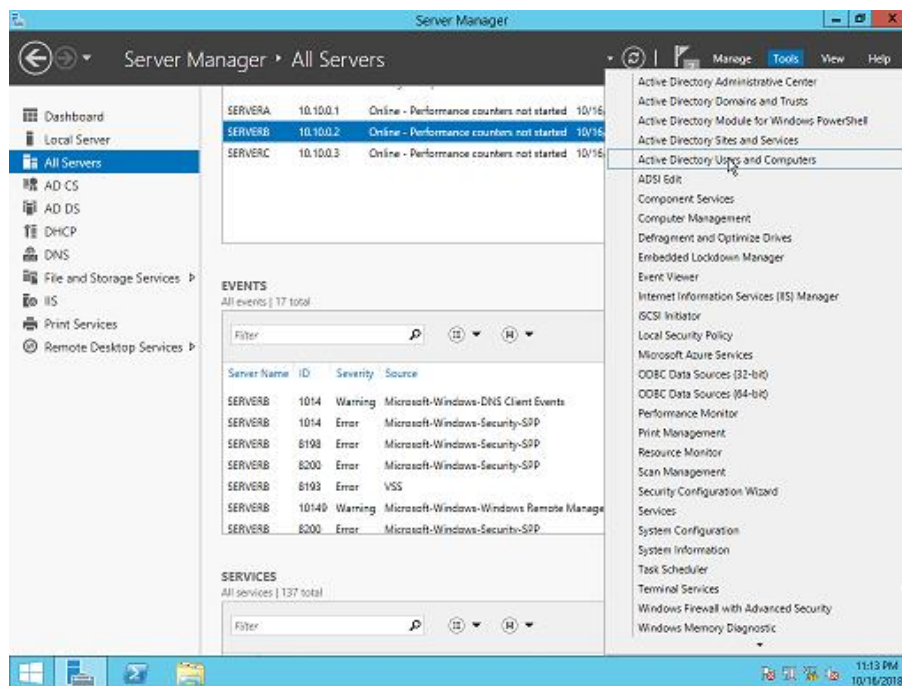
End of lab. You can log off or start a different lab. If you want to restart this lab, you'll need to click the End Lab button in order for the lab to be reset.