

**STUDENT ACTIVITY 1.4-1.5: UNDERSTAND MOBILITY, REMOTE MANAGEMENT, AND ASSISTANCE**

MTA Course: 10753 Windows Operating System Fundamentals

Topic: Understand mobility, remote management, and assistance

File name: 10753\_WindowsOS\_SA\_1.4-1.5

**Lesson Objectives**

**1.4:** Understand mobility. *This objective may include but is not limited to:* understanding Sync Center, Windows® Mobility Center, and Remote Desktop

**1.5** Understand remote management and assistance. *This objective may include but is not limited to:* understanding MMC and Windows PowerShell™

**Resources, software, and additional files needed for this lesson:**

- Workstation with Windows 7 Professional or Enterprise edition
- Alternative option:
  - A virtual machine with Windows 7 Professional or Enterprise edition
- Students should have their computer name and IP address available.

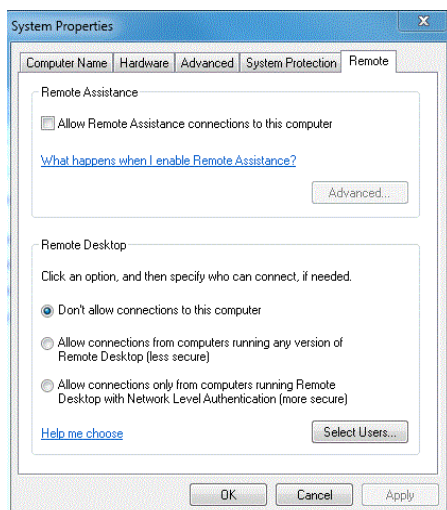
**Directions to the student:**

1. Complete the following hands-on activities. You will need a partner for the first activity. Please note that the screenshots in the activity may look different from your system.
2. Answer the questions throughout the activities. Ask the instructor to verify your answers or results where applicable.

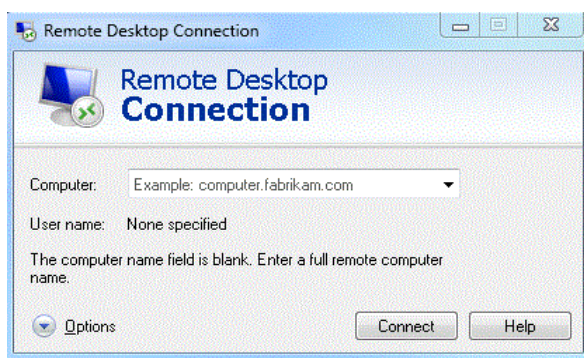
**Configuring Remote Desktop Connection**

1. Authenticate into your system using the credentials provided by your instructor.
2. Click the Start Button, Control Panel, System and Security, System, and click Remote Settings in the left panel.

3. The remote settings screen should appear as follows.



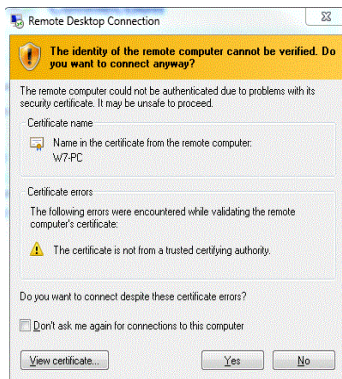
4. Select the option Allow Connections Only From Computers Running Remote Desktop With Network Level Authentication (more secure) and click OK.
  - a. Note: If you wanted non-administrative users to have Remote Desktop access, you would have to **Select Users** from your Local Users And Groups. Users who are a member of the Administrators group have access by default.
5. Exchange the computer name or IP address and authentication information with your partner.
6. Open Remote Desktop Connection by clicking Start and Type Remote Desktop Connection in the Search Programs And Files box and press ENTER. The Remote Desktop Connection should appear as shown here.



7. Type in your partner's computer name or IP address and click Connect.
 

Note: only one person can connect at a time. Once the connection is established, the other user will be logged out and will have to wait until the user completes the task.
8. The user name should be in the following format:
  - a. Computername\username
    - i. i.e.: windows7-PC\Sanjay.Patel

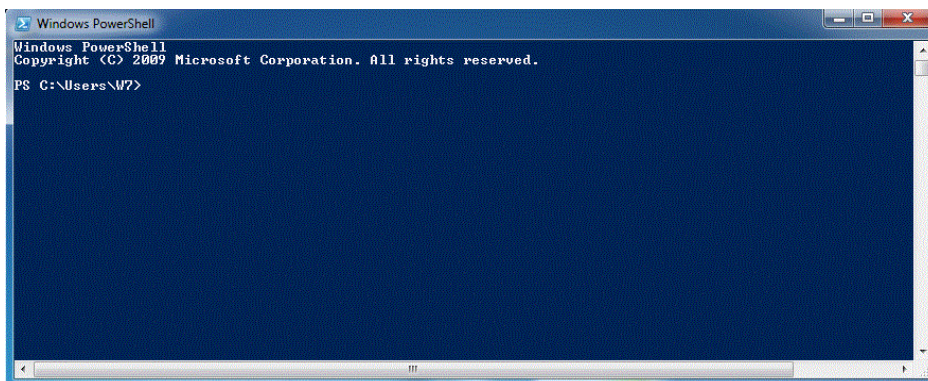
9. You may receive a warning stating the identity of the remote computer cannot be verified, as shown here. This is acceptable. Click Yes.



10. You should now see the desktop of your partner's computer. Your partner will be logged off during this session because both users cannot be logged in simultaneously.
11. Right-click the desktop, select New...Text Document, and provide your name for the file.
12. Click Start and select Log Off.
13. Your partner should now attempt a Remote Desktop Connection.
14. Once complete, have your instructor verify that the text documents were created successfully on each desktop.

## Using Windows PowerShell

1. Authenticate into your system using the credentials provided by your instructor.
2. Click Start, All Programs, Accessories, Windows PowerShell, and select Windows PowerShell.
3. You should see a window similar to the following:



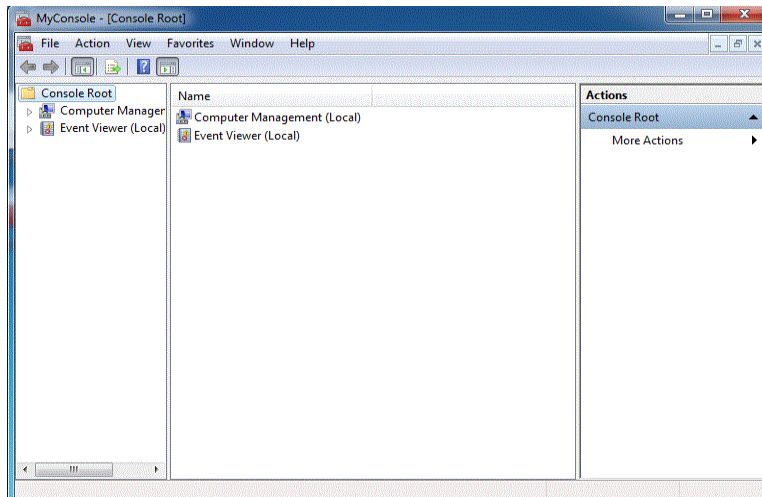
4. To create a Hypertext Markup Language (HTML) file of all services on the local computer, type  
**Get-Service | ConvertTo-HTML | Out-File Services.html** and press ENTER.  
Note: we didn't specify a location for the output file, so the file will be saved in your current working directory. This information will be important later.
5. You will not see a confirmation on your screen. If you have incorrectly typed the command, you will see the related error that will explain what was incorrectly typed. If you continue to receive an error, have your instructor review your syntax.
6. Using Windows Explorer, browse to the path displayed in your Windows PowerShell window.
7. Find the file called Services.html. Double-click the Services.html file to open it. You should see a great deal of information. We will modify our command to have a more readable output.
8. Return to your Windows PowerShell window.
9. Type:  
**Get-Service | Select DisplayName, Status, ConvertTo-HTML | Out-File Services-Name.html** and press ENTER.
10. Find the file called Services-Name.html. Double-click the Services-Name.html file to open it. The output should display only the Display Name and Status of the service.
11. Return to your Windows PowerShell window.
12. Type **Get-help** and press ENTER. Review the help information provided.
13. Type **Get-help Get-Service** and press ENTER.
14. What is the **SYNOPSIS** of the Get-Service cmdlet?  

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15. Review the **SYNTAX** portion of this help file. What could we add to our Select statement to view the Dependent Services as well? Change your command to include the Dependent Services and have your instructor verify.

### Creating a Custom Microsoft Management Console (MMC)

1. Authenticate into your system using the credentials provided by your instructor.
2. Click Start, type **MMC** in the Search Programs And Files box, and press ENTER.
  - a. Note: If you are not a member of the Administrators group, you will be prompted by User Account Control for the credentials of a user with those rights.
3. An empty MMC should be displayed. Click File and select Add/Remove Snap-in.

4. Select Computer Management and click Add to add it to the Selected snap-ins panel. It will ask you if you wish to manage the local computer or another computer. Click Finish to accept Local computer.
5. Repeat the last step and choose Event Viewer and click OK to accept the choices for the Add/Remove Snap-ins screen.
6. You should now have Computer Management and Event Viewer in your console as shown here.



7. Click File, select Save As, select Desktop, and enter **MyConsole** for the file name.
8. Close your console, and you should see an icon on your desktop called MyConsole.
9. You can modify this console to include any tools that you feel are important. You can create other consoles as well, based on task or functions.