

# IT2654 System Administration and Security

## Practical 7 – Windows Firewall

### Practice 1

#### Objectives:

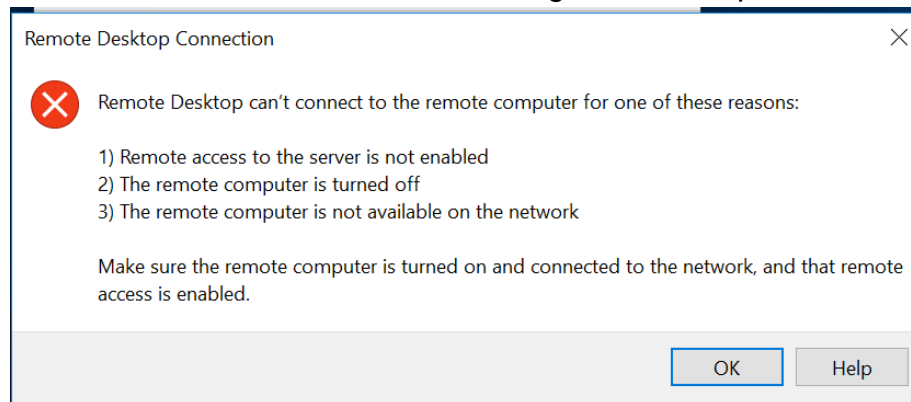
Use the firewall to block a Windows feature – Remote Connection

#### Steps:

1. Login to **NYP-DC1** (Windows server) as **Administrator**.
2. Ensure that Remote Connection to the server is enabled (*Control Panel → System → Remote settings*).
3. Login to **NYP-CL1** (Windows 10 client) as **user1-IT** and run the Remote Desktop Connection. Try to remote login to NYP-DC1 as user1-IT or Administrator. The remote login should work.
4. We shall now disable the remote login at the server thru the firewall.
5. Login to **NYP-DC1** (Windows Server) as **Administrator**.
6. Open the Firewall (*Control Panel → Windows Firewall*).
7. Click on **Allow an app or feature through Windows Firewall**.
8. Scroll down to find the **Remote Desktop settings**.

|  |                                     |                                     |                                     |  |
|--|-------------------------------------|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> Performance Logs and Alerts | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |  |
| <input checked="" type="checkbox"/> Remote Desktop   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |  |
| <input type="checkbox"/> Remote Event Log Management | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |  |

9. Disable the Remote Desktop (uncheck all the ticks for Remote Desktop). Click **OK**.
10. Now go to **NYP-CL1** (Windows 10 client) and try to remote into the server again. You should not be able to and should get below response:



The remote connection failed because we blocked it at the Server's firewall.

11. Return to step 8 and add enable back the Remote Desktop settings in the firewall.

## Practice 2

### Objectives:

#### Configuring Inbound Filtering

In this exercise, we shall block the ping request into the Windows server NYP-DC1.

#### Steps:

1. Log in to **NYP-DC1** (Windows server) as Administrator and turn on the firewall (for all profiles).
2. Login to **NYP-CL1** as **user1-IT** and turn on the firewall (for all profiles).
3. In **NYP-CL1**, ping the server. (does it work?) (open a cmd console and run the ping command: ping 10.0.0.2)
4. Go to the server **NYP-DC1** and open the **Inbound Rules** of the **Windows Firewall with Advanced Security**.
5. Find the rule "**File and Printer Sharing (Echo Request – ICMPv4-In)**" and double click it. It should be configure as "**Allow the connection**".
6. Click the "**Block the connection**" and click **OK**.
7. Go to **NYP-CL1** and try to ping the server again. The ping should fail.
8. Go to **NYP-DC1** (server) and repeat step 5 and Allow the connection back.
9. Try the ping in the **NYP-CL1** (Client). Does it work?

## Practice 3

### Objectives:

Configuring Outbound Filtering

### Steps:

1. Make sure the server (NYP-DC1) can ping the client (NYP-CL1).
2. Find the **Outbound Rule “File and Printer Sharing (Echo Request – ICMPv4-In)”** in the server’s firewall and set to **“Block the connection”**.
3. Try to ping the client from the server. Does it work?
4. Configure the Outbound Rule in step 2 back to **“Allow the connection”** and try to ping the client from the server again.

[The End]