

### Exercise 1: Setup Hyper-V Manager

1. Start Hyper-V Manager
2. From "Actions" select „Virtual Switch Manager...“
3. Click on "New virtual network switch" and from right side select "External"
4. *Use wired connection if possible. Using Wi-Fi may lead to errors...*

#### *Create Virtual Switch*

5. Specify a name for the switch (For example: External ) and make sure that external network is selected under "Connection type"
6. Hit "OK" then in "Apply Networking Changes" window select "Yes"
7. When finished, right click on **INDV751K5-DC1** then select "Settings..."
8. Select Add Hardware from left side and "Network adapter" from right side
9. Click Add
10. New "Network Adapter" is automatically selected
11. From Virtual switch dropdown menu select "External" (or whatever name you have chosen) then click on "OK"

### Exercise 2: Setup network connections on INDV751K5-DC1

12. Start **INDV751K5-DC1** and **INDV751K5-CL1**
13. Login to INDV751K5-DC1 with "TEST\Administrator" account
14. After login completed, right click on network adapter from taskbar then select "Open Network and Sharing Center"
15. Select "Change adapter settings" from left side
16. In "Network connections" window right click on "Ethernet" and rename it to "Domain"
17. In "Network connections" window right click on "Ethernet 2" and rename it to "External"
18. Stay in the window and hit "Alt" key from keyboard and select "Advanced" then "Advanced settings..." from toolbar
19. Select "External" and move it down with the green arrow then "OK"

### Exercise 3: Add Routing role to INDV751K5-DC1

20. Open "Server Manager" and select "2 Add roles and features"
21. Click "Next" , select "Role-based or feature-based installation" and again "Next"
22. Make sure that "DC1.test.lab" is selected then "Next"
23. From "Roles" list check "Remote Access" role, then three times "Next"
24. From "Role services" list check "Routing"
25. In new window Click "Add Features", then three times "Next"
26. Click on "Install" and wait until installation completes (In meanwhile you can close the wizard, installation will continue in the background)
27. Close "Server Manager" and restart DC1

#### **Exercise 4: Setup NAT on INDV751K5-DC1**

28. After server is up again login with "TEST\Administrator"
29. In Server Manager select Tools -> "Routing and Remote Access"
30. In newly opened window right click on "DC1 (local)" and select "Configure and Enable Routing and Remote Access"
31. Click "Next", then select "Network address translation (NAT)" and "Next" again
32. Make sure that "Use this public interface to connect to the Internet" is checked and from "Network Interfaces:" External is selected
33. Click "Next" and on Summary page "Finish".
34. Wait until server finishes with configuration and starts corresponding services.

#### **Exercise 5: Setup and test routing using INDV751K5-CL1**

35. Switch to **INDV751K5-CL1** client and login with "TEST\Administrator"
36. After login completed, right click on network adapter from taskbar then select "Open Network and Sharing Center"
37. Select "Change adapter settings" from left side
38. Right click on "Ethernet" network adapter and open "Properties" of "Internet Protocol Version 4 (TCP/IPv4)"
39. To Default gateway specify "192.168.10.11" then click "OK" and "Close"
40. Sign out and Sign in back with "TEST\Daniel"
41. Start "Internet Explorer" and select "Use recommended security and compatibility settings" then "OK"
42. Wait until Bing page loads. ☺