

[Lab report](#): 04/22/2025 10:19

CompTIA Network+ N10-008

Internet Protocol Addressing Solutions

Start:

04/22/2025 10:19

Finish:

04/22/2025 10:36

Elapsed (min):

17.0

Auth code:

JVP9GE

Status:

Submitted

User Details

Email:

enter your email address

Username:

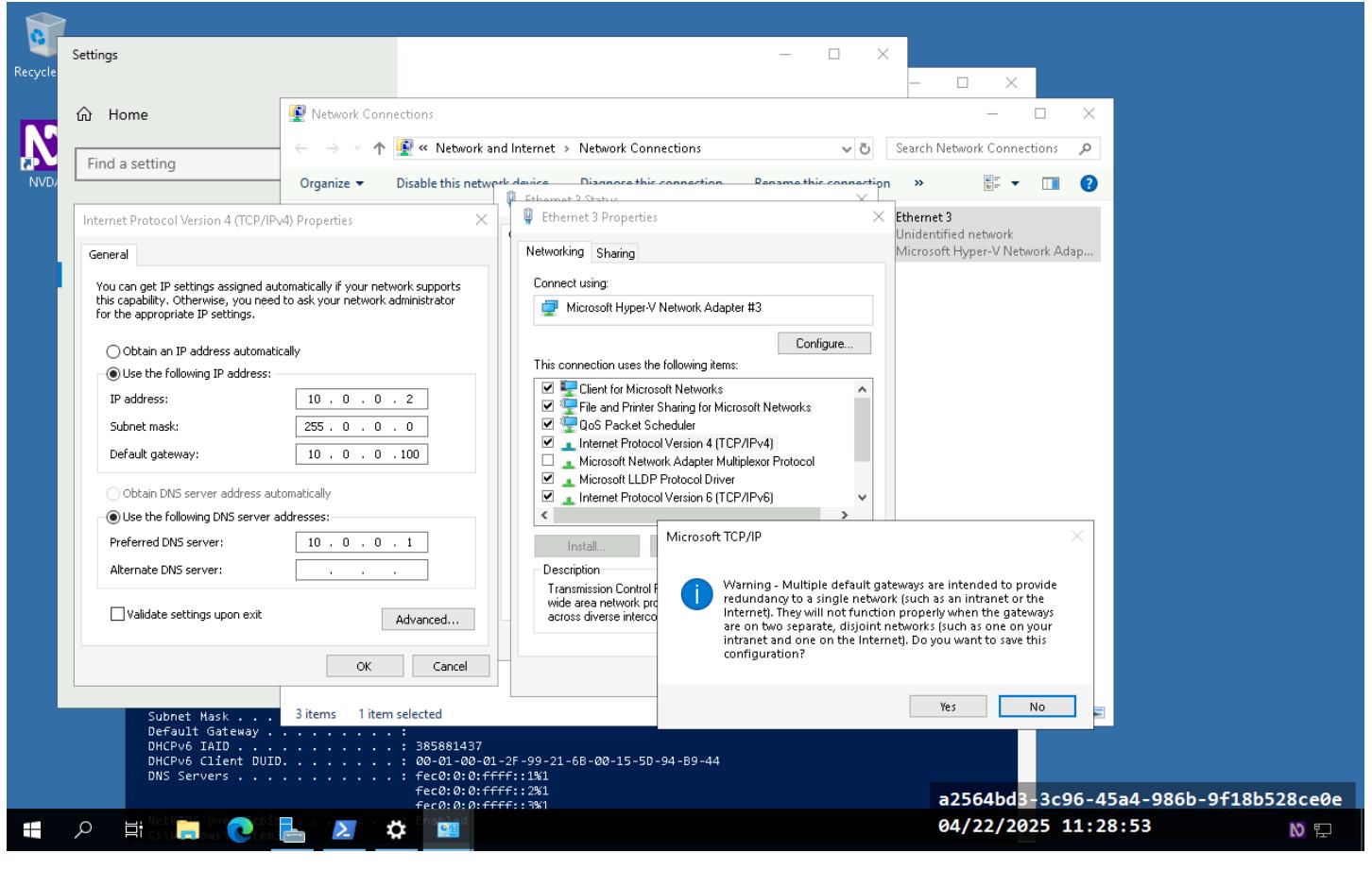
a2564bd3-3c96-45a4-986b-9f18b528ce0e

1. Screenshot

Actioned

Item completed: **04/22/2025 10:28**

Value: **0**



2. Screenshot

Actioned

Item completed: **04/22/2025 10:34**

Value: **0**

The screenshot shows a Windows PowerShell window titled "Select Administrator: Windows PowerShell". The command `ping ::1` was run, resulting in four replies from the loopback interface. Then, the command `ipconfig /all` was run, displaying detailed network configuration for two adapters: "Ethernet adapter Ethernet" and "Ethernet adapter Ethernet 2". Both adapters are Microsoft Hyper-V Network Adapters with physical addresses starting with 00-15-5D-94-B9. Adapter 1 has an IPv4 address of 192.168.0.2 (Preferred), subnet mask 255.255.255.0, and a default gateway of 192.168.0.250. Adapter 2 has an IPv4 address of 169.254.76.51 (Preferred), subnet mask 255.255.0.0, and a default gateway of 127.0.0.1. The PowerShell window is running as Administrator, and the session ID is a2564bd3-3c96-45a4-986b-9f18b528ce0e. The system date and time are 04/22/2025 11:34:36.

```
PS C:\Users\Administrator> ping ::1

Pinging ::1 with 32 bytes of data:
Reply from ::1: time<1ms
Reply from ::1: time<1ms
Reply from ::1: time<1ms
Reply from ::1: time<1ms

Ping statistics for ::1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PS C:\Users\Administrator> ipconfig /all

Windows IP Configuration

Host Name . . . . . : PLABDC01
Primary Dns Suffix . . . . . : PRACTICELABS.COM
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : PRACTICELABS.COM

Ethernet adapter Ethernet:

    Connection-specific DNS Suffix . :
    Description . . . . . : Microsoft Hyper-V Network Adapter
    Physical Address. . . . . : 00-15-5D-94-B9-41
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . . : Yes
    IPv4 Address. . . . . : 192.168.0.2(PREFERRED)
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.250
    DNS Servers . . . . . : 127.0.0.1
    NetBIOS over Tcpip. . . . . : Enabled

Ethernet adapter Ethernet 2:

    Connection-specific DNS Suffix . :
    Description . . . . . : Microsoft Hyper-V Network Adapter #2
    Physical Address. . . . . : 00-15-5D-94-B9-40
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . . : Yes
    Autoconfiguration IPv4 Address. . . . . : 169.254.76.51(PREFERRED)
    Subnet Mask . . . . . : 255.255.0.0
    Default Gateway . . . . . :
    DNS Servers . . . . . : 127.0.0.1
    NetBIOS over Tcpip. . . . . : Enabled

PS C:\Users\Administrator>
```

3. Screenshot

Actioned

Item completed: **04/22/2025 10:35**

Value: **0**

IPv4 Subnet Cheat Sheet

	Binary Notation	Subnet Mask	Number of Addresses	
4	Class C 11111111.11111111.11111111.11111111	255.255.255.255	1	IP Address Ranges
5	11111111.11111111.11111111.11111110	255.255.255.254	2	Class A
6	11111111.11111111.11111111.11111100	255.255.255.252	4	Class B
7	11111111.11111111.11111111.11111000	255.255.255.248	8	Class C
8	11111111.11111111.11111111.11110000	255.255.255.240	16	Class D
9	11111111.11111111.11111111.11100000	255.255.255.224	32	Class E
10	11111111.11111111.11111111.11000000	255.255.255.192	64	
11	11111111.11111111.11111111.10000000	255.255.255.128	128	Private IP Address Range
12	11111111.11111111.11111111.00000000	255.255.255.0	256	Class A
13	11111111.11111111.11111110.00000000	255.255.254.0	512	Class B
14	11111111.11111111.11111100.00000000	255.255.252.0	1,024	Class C
15	11111111.11111111.11111000.00000000	255.255.248.0	2,048	APIPA
16	11111111.11111111.11110000.00000000	255.255.240.0	4,096	localhost
17	11111111.11111111.11100000.00000000	255.255.224.0	8,192	
18	11111111.11111111.11000000.00000000	255.255.192.0	16,384	
19	11111111.11111111.10000000.00000000	255.255.128.0	32,768	
20	11111111.11111111.00000000.00000000	255.255.0.0	65,536	

4. Question

Actioned

Item completed: **04/22/2025 10:35**

Value: **1**

Answer: **192.168.0.10**

 **PASS**

5. Question

Actioned

Item completed: **04/22/2025 10:35**

Value: **1**

Answer: **255.0.0.0**

 **PASS**

6. Question

Actioned

Item completed: **04/22/2025 10:35**

Value: **1**

Answer: **255.255.255.240**

 **PASS**

7. Question

Actioned

Item completed: **04/22/2025 10:36**

Value: **1**

Answer: **127.0.0.1**

 **PASS**

8. Question

Actioned

Item completed: **04/22/2025 10:36**

Value: **1**

Answer: **Sends network communication to a specific set of hosts**

 **PASS**

Score : 5 out of 5 (100%)

