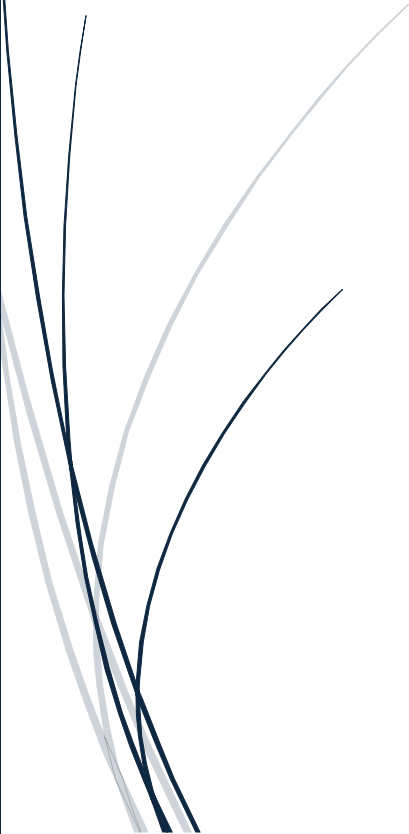




4/29/2025

Lab 1

Preparing the course environment
(verifications only)



Mohammed, Laetitia, 0931512
NETWORK INSTALLATION AND ADMINISTRATION II

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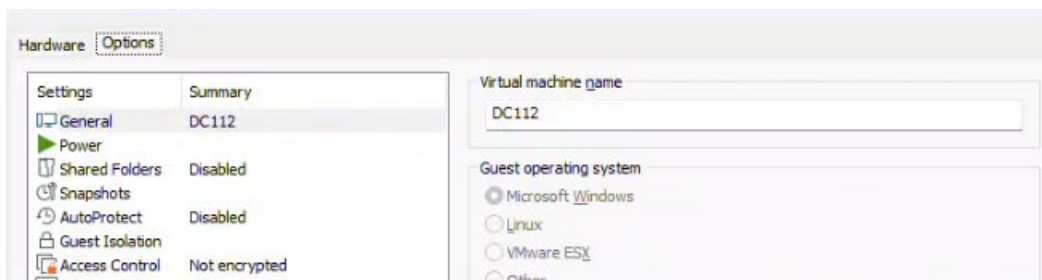
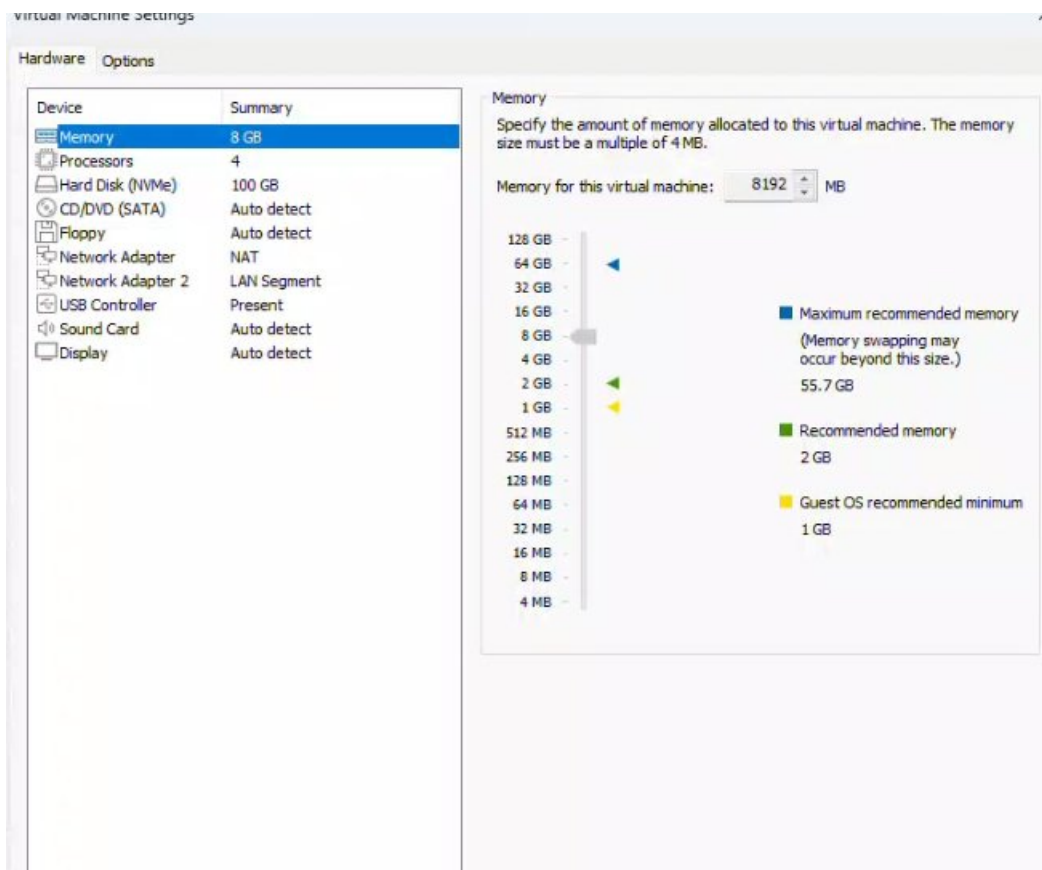
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DC112

VM Settings

```
PS C:\Users\Administrator>
PS C:\Users\Administrator> Get-ComputerInfo | Select-Object windowseditionid, windowsproductname, csnetworkadapters, csnumberoflogicalprocessors, csnumberofprocessors, cstotalphysicalmemory, csname

WindowsEditionId      : ServerDatacenter
WindowsProductName     : Windows Server 2022 Datacenter
CsNetworkAdapters     : {Ethernet0, Ethernet1}
CsNumberOfLogicalProcessors : 4
CsNumberOfProcessors   : 2
CsTotalPhysicalMemory  : 8588926976
CsName                 : DC112
```



IP configurations

```
PS C:\Users\Administrator> ipconfig

Windows IP Configuration

Ethernet adapter Ethernet0:

    Connection-specific DNS Suffix  . : localdomain
    Link-local IPv6 Address . . . . . : fe80::214e:f850:9abd:f3c5%11
    IPv4 Address. . . . . : 192.168.56.133
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.56.2

Ethernet adapter Ethernet1:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::84d8:2dc4:46ec:b172%10
    IPv4 Address. . . . . : 192.168.12.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :
PS C:\Users\Administrator>
```

Pings

To DC212

```
PS C:\Users\Administrator> ping 192.168.12.2

Pinging 192.168.12.2 with 32 bytes of data:
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.2:
    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>
```

To DC312

```
PS C:\Users\Administrator> ping 192.168.12.3

Pinging 192.168.12.3 with 32 bytes of data:
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.3:
    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> _
```

To Client12

```
PS C:\Users\Administrator> ping 192.168.12.100

Pinging 192.168.12.100 with 32 bytes of data:
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time=15ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 15ms, Average = 3ms
PS C:\Users\Administrator>
```

DC212

VM Settings

```
Host Name: DC212
OS Name: Microsoft Windows Server 2025 Standard
OS Version: 10.0.26100 N/A Build 26100
OS Manufacturer: Microsoft Corporation
OS Configuration: Standalone Server
OS Build Type: Multiprocessor Free
Registered Owner: N/A
Registered Organization: N/A
Product ID: 00492-80050-03017-AA414
Original Install Date: 4/29/2025, 2:26:09 PM
System Boot Time: 4/30/2025, 12:19:24 PM
System Manufacturer: VMware, Inc.
System Model: VMware20,1
System Type: x64-based PC
Processor(s): 1 Processor(s) Installed.
[01]: Intel64 Family 6 Model 151 Stepping 2 GenuineIntel ~2112 Mhz
BIOS Version: VMware, Inc. VMW201.00V.24006586.B64.2406042154, 6/4/2024
Windows Directory: C:\WINDOWS
System Directory: C:\WINDOWS\system32
Boot Device: \Device\HarddiskVolume2
System Locale: en-us;English (United States)
Input Locale: en-us;English (United States)
Time Zone: (UTC-05:00) Eastern Time (US & Canada)
```

```
Total Physical Memory: 4,095 MB
Available Physical Memory: 2,909 MB
Virtual Memory: Max Size: 5,503 MB
Virtual Memory: Available: 4,478 MB
Virtual Memory: In Use: 1,025 MB
Page File Location(s): C:\pagefile.sys
Domain: WORKGROUP
Logon Server: \\DC212
Hotfix(s): 3 Hotfix(s) Installed.
[01]: KB5042098
[02]: KB5043080
[03]: KB5043113
Network Card(s): 1 NIC(s) Installed.
[01]: Intel(R) 82574L Gigabit Network Connection
Connection Name: Ethernet0
DHCP Enabled: No
IP address(es)
[01]: 192.168.12.2
[02]: fe80::3ad:3702:8a9:3717
Virtualization-based security: Status: Not enabled
App Control for Business policy: Enforced
App Control for Business user mode policy: Off
Security Features Enabled:
Hyper-V Requirements: A hypervisor has been detected. Features required for Hyper-V will not be displayed.
PS C:\Users\Administrator>
```


IP configurations

```
PS C:\Users\Administrator> ipconfig /all

Windows IP Configuration

    Host Name . . . . . : DC212
    Primary Dns Suffix . . . . . :
    Node Type . . . . . : Hybrid
    IP Routing Enabled. . . . . : No
    WINS Proxy Enabled. . . . . : No

Ethernet adapter Ethernet0:

    Connection-specific DNS Suffix . :
    Description . . . . . : Intel(R) 82574L Gigabit Network Connection
    Physical Address. . . . . : 00-0C-29-63-DE-31
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . : Yes
    Link-local IPv6 Address . . . . . : fe80::3ad:3702:8a9:3717%4(Preferred)
    IPv4 Address. . . . . : 192.168.12.2(Preferred)
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.12.1
    DHCPv6 IAID . . . . . : 100666409
    DHCPv6 Client DUID. . . . . : 00-01-00-01-2F-A2-FC-27-00-0C-29-63-DE-31
    DNS Servers . . . . . : 192.168.12.1
    NetBIOS over Tcpip. . . . . : Enabled

PS C:\Users\Administrator>
```

Pings

To DC112

```
PS C:\Users\Administrator> ping 192.168.12.1

Pinging 192.168.12.1 with 32 bytes of data:
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.1:
    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>
```

To DC312

```
PS C:\Users\Administrator> ping 192.168.12.3

Pinging 192.168.12.3 with 32 bytes of data:
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time=3ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 0ms
PS C:\Users\Administrator> █
```

To Client12

```
PS C:\Users\Administrator> ping 192.168.12.100

Pinging 192.168.12.100 with 32 bytes of data:
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.100:
    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>
```

DC312

VM settings

```
Host Name: DC312
OS Name: Microsoft Windows Server 2022 Datacenter
OS Version: 10.0.20348 N/A Build 20348
OS Manufacturer: Microsoft Corporation
OS Configuration: Standalone Server
OS Build Type: Multiprocessor Free
Registered Owner: Windows User
Registered Organization:
Product ID: 00456-50925-69428-AA608
Original Install Date: 4/29/2025, 4:03:04 PM
System Boot Time: 4/30/2025, 10:50:09 AM
System Manufacturer: VMware, Inc.
System Model: VMware20,1
System Type: x64-based PC
Processor(s): 2 Processor(s) Installed.
               [01]: Intel64 Family 6 Model 151 Stepping 2 GenuineIntel ~2112 Mhz
               [02]: Intel64 Family 6 Model 151 Stepping 2 GenuineIntel ~2112 Mhz
BIOS Version: VMware, Inc. VMW201.00V.24006586.B64.2406042154, 6/4/2024
Windows Directory: C:\Windows
System Directory: C:\Windows\system32
Boot Device: \Device\HarddiskVolume1
System Locale: en-us;English (United States)
Input Locale: en-us;English (United States)
```

```
Total Physical Memory: 6,207 MB
Available Physical Memory: 4,702 MB
Virtual Memory: Max Size: 7,935 MB
Virtual Memory: Available: 6,616 MB
Virtual Memory: In Use: 1,319 MB
Page File Location(s): C:\pagefile.sys
Domain: WORKGROUP
Logon Server: \\DC312
Hotfix(s): 3 Hotfix(s) Installed.
            [01]: KB5028858
            [02]: KB5028171
            [03]: KB5028317
Network Card(s): 1 NIC(s) Installed.
                  [01]: Intel(R) 82574L Gigabit Network Connection
                        Connection Name: Ethernet0
                        DHCP Enabled: No
                        IP address(es)
                        [01]: 192.168.12.3
                        [02]: fe80::a12f:20d4:ac0f:738d
Hyper-V Requirements: A hypervisor has been detected. Features required for Hyper-V will not be displayed.
```

IP Settings

```

Windows IP Configuration

Host Name . . . . . : DC312
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

Ethernet adapter Ethernet0:

Connection-specific DNS Suffix . :
Description . . . . . : Intel(R) 82574L Gigabit Network Connection
Physical Address. . . . . : 00-0C-29-E5-9C-27
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::a12f:20d4:ac0f:738d%14(Preferred)
IPv4 Address. . . . . : 192.168.12.3(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . :
DHCPv6 IAID . . . . . : 100666409
DHCPv6 Client DUID. . . . . : 00-01-00-01-2F-A3-12-E4-00-0C-29-E5-9C-27
DNS Servers . . . . . : 192.168.12.1
NetBIOS over Tcpip. . . . . : Enabled
PS C:\Users\Administrator>

```

Pings

To DC112

```

PS C:\Users\Administrator> ping 192.168.12.1

Pinging 192.168.12.1 with 32 bytes of data:
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.1:
    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>

```

To DC212


```
PS C:\Users\Administrator> ping 192.168.12.2

Pinging 192.168.12.2 with 32 bytes of data:
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.2:
    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>
```

To Client12

```
PS C:\Users\Administrator> ping 192.168.12.100

Pinging 192.168.12.100 with 32 bytes of data:
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.100:
    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>
```

Client12

VM Settings

```
Host Name: CLIENT12
OS Name: Microsoft Windows 11 Education
OS Version: 10.0.26100 N/A Build 26100
OS Manufacturer: Microsoft Corporation
OS Configuration: Standalone Workstation
OS Build Type: Multiprocessor Free
Registered Owner: 1mohammed
Registered Organization: N/A
Product ID: 00328-00107-28663-AA759
Original Install Date: 4/30/2025, 7:37:34 AM
System Boot Time: 4/30/2025, 9:42:58 AM
System Manufacturer: VMware, Inc.
System Model: VMware20,1
System Type: x64-based PC
Processor(s): 2 Processor(s) Installed.
               [01]: Intel64 Family 6 Model 151 Stepping 2 GenuineIntel ~2112 Mhz
               [02]: Intel64 Family 6 Model 151 Stepping 2 GenuineIntel ~2112 Mhz
BIOS Version: VMware, Inc. VMW201.00V.24006586.B64.2406042154, 6/4/2024
Windows Directory: C:\WINDOWS
System Directory: C:\WINDOWS\system32
Boot Device: \Device\HarddiskVolume1
System Locale: en-us;English (United States)
Input Locale: en-us;English (United States)
```

```
Total Physical Memory: 5,999 MB
Available Physical Memory: 3,530 MB
Virtual Memory: Max Size: 7,663 MB
Virtual Memory: Available: 5,393 MB
Virtual Memory: In Use: 2,270 MB
Page File Location(s): C:\pagefile.sys
Domain: WORKGROUP
Logon Server: \\CLIENT12
Hotfix(s): 6 Hotfix(s) Installed.
            [01]: KB5042098
            [02]: KB5050575
            [03]: KB5054273
            [04]: KB5059093
            [05]: KB5043080
            [06]: KB5043113
```

IP configurations


```
Host Name . . . . . : Client12
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : localdomain
```

Ethernet adapter Ethernet1:

```
Connection-specific DNS Suffix . :
Description . . . . . : Intel(R) 82574L Gigabit Network Connection
Physical Address. . . . . : 00-0C-29-76-B4-30
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::5e2:6a94:5a73:4f07%7(Preferred)
IPv4 Address. . . . . : 192.168.12.100(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . :
DHCPv6 IAID . . . . . : 100666409
DHCPv6 Client DUID. . . . . : 00-01-00-01-2F-A4-17-DD-00-0C-29-76-B4-30
DNS Servers . . . . . : 192.168.12.1
NetBIOS over Tcpip. . . . . : Enabled
```

Ethernet adapter Ethernet0:

```
Connection-specific DNS Suffix . : localdomain
Description . . . . . : Intel(R) 82574L Gigabit Network Connection #2
Physical Address. . . . . : 00-0C-29-76-B4-26
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::a74b:194:c6f:112f%5(Preferred)
IPv4 Address. . . . . : 192.168.56.136(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : Wednesday, April 30, 2025 9:43:06 AM
Lease Expires . . . . . : Wednesday, April 30, 2025 10:13:05 AM
Default Gateway . . . . . : 192.168.56.2
DHCP Server . . . . . : 192.168.56.254
DHCPv6 IAID . . . . . : 167775273
DHCPv6 Client DUID. . . . . : 00-01-00-01-2F-A4-17-DD-00-0C-29-76-B4-30
DNS Servers . . . . . : 192.168.56.2
Primary WINS Server . . . . . : 192.168.56.2
NetBIOS over Tcpip. . . . . : Enabled
```

PS C:\WINDOWS\system32>

Pings

DC112

```
PS C:\WINDOWS\system32> ping 192.168.12.1

Pinging 192.168.12.1 with 32 bytes of data:
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time<1ms TTL=128
Reply from 192.168.12.1: bytes=32 time=1ms TTL=128
Reply from 192.168.12.1: bytes=32 time=2ms TTL=128

Ping statistics for 192.168.12.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms
```

DC212

```
PS C:\WINDOWS\system32> ping 192.168.12.2

Pinging 192.168.12.2 with 32 bytes of data:
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time=1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128
Reply from 192.168.12.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

DC312

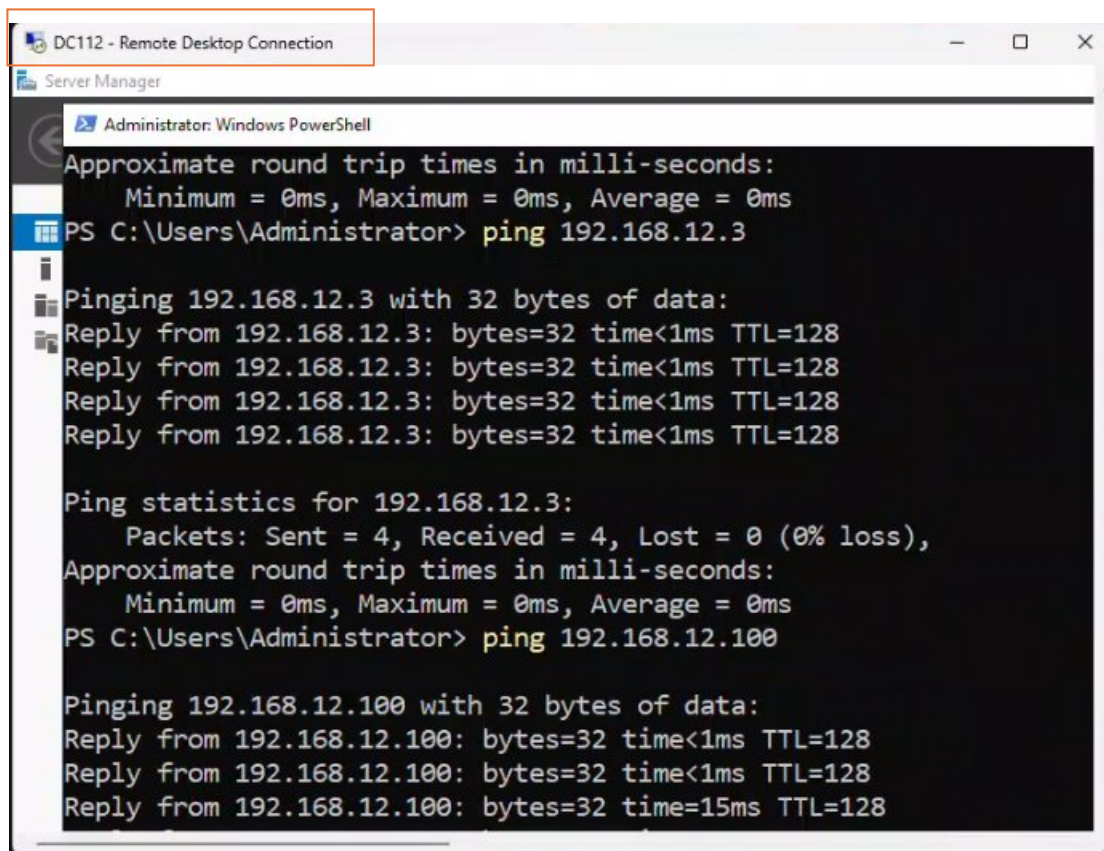
```
PS C:\WINDOWS\system32> ping 192.168.12.3

Pinging 192.168.12.3 with 32 bytes of data:
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Remote Desktop connectivity

DC112



```
DC112 - Remote Desktop Connection
Server Manager
Administrator: Windows PowerShell

Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
PS C:\Users\Administrator> ping 192.168.12.3

Pinging 192.168.12.3 with 32 bytes of data:
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128
Reply from 192.168.12.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.3:
    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> ping 192.168.12.100

Pinging 192.168.12.100 with 32 bytes of data:
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time=15ms TTL=128
```

DC212 - Remote Desktop Connection

```
Administrator: C:\WINDOWS\system32\cmd.exe

App Control for Business poli
App Control for Business user
Security Features Enabled:
Hyper-V Requirements:      A hypervisor has been detecte
PS C:\Users\Administrator> systeminfo

Host Name:                  DC212
OS Name:                    Microsoft Windows Server 2025
OS Version:                 10.0.26100 N/A Build 26100
OS Manufacturer:           Microsoft Corporation
OS Configuration:          Standalone Server
OS Build Type:               Multiprocessor Free
Registered Owner:           N/A
Registered Organization:    N/A
Product ID:                  00492-80050-03017-AA414
Original Install Date:       4/29/2025, 2:26:09 PM
System Boot Time:            4/30/2025, 12:19:24 PM
```

DC312

DC312 - Remote Desktop Connection

Server Manager

Administrator: Windows PowerShell

```
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128
Reply from 192.168.12.100: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.12.100:
    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>
PS C:\Users\Administrator>
PS C:\Users\Administrator> systeminfo

Host Name:                DC312
OS Name:                  Microsoft Windows Server 2022 Datacenter
OS Version:               10.0.20348 N/A Build 20348
OS Manufacturer:         Microsoft Corporation
OS Configuration:        Standalone Server
OS Build Type:             Multiprocessor Free
Registered Owner:         Windows User
Registered Organization:
```