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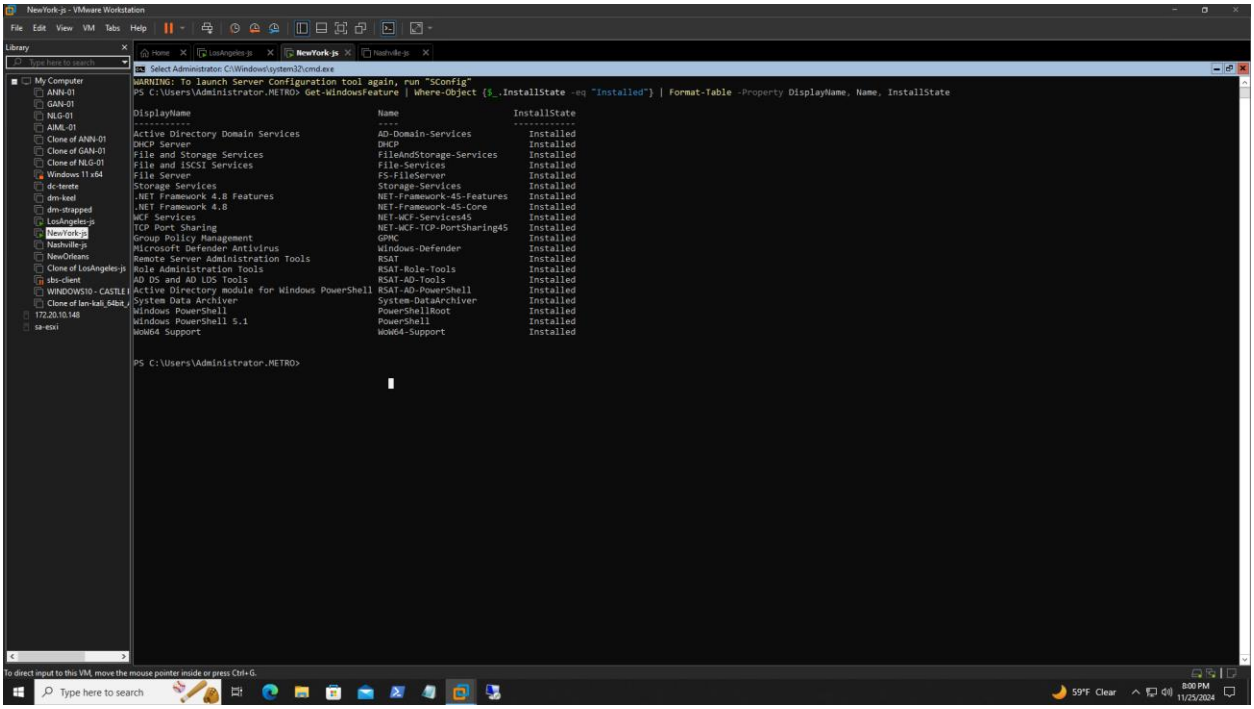
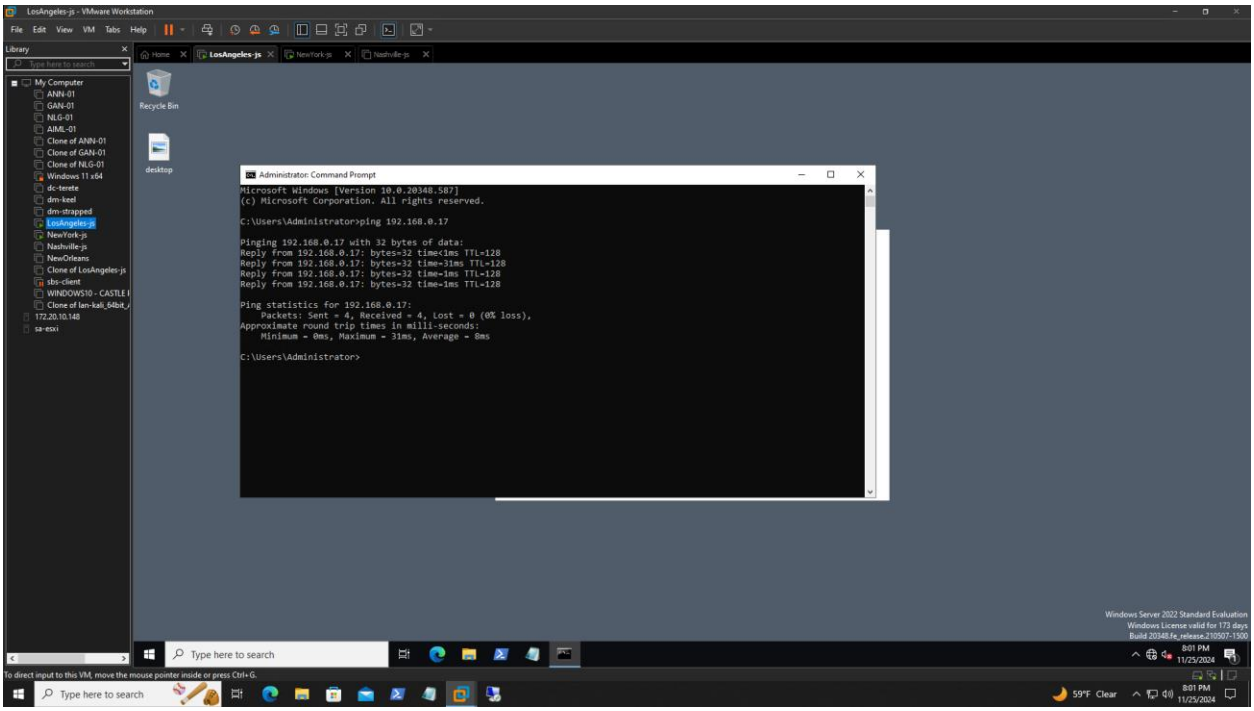
CET-2793C
Dr. Roberts
November 25, 2024
Final Hands-On Project: Add a Second Server to the Domain Build

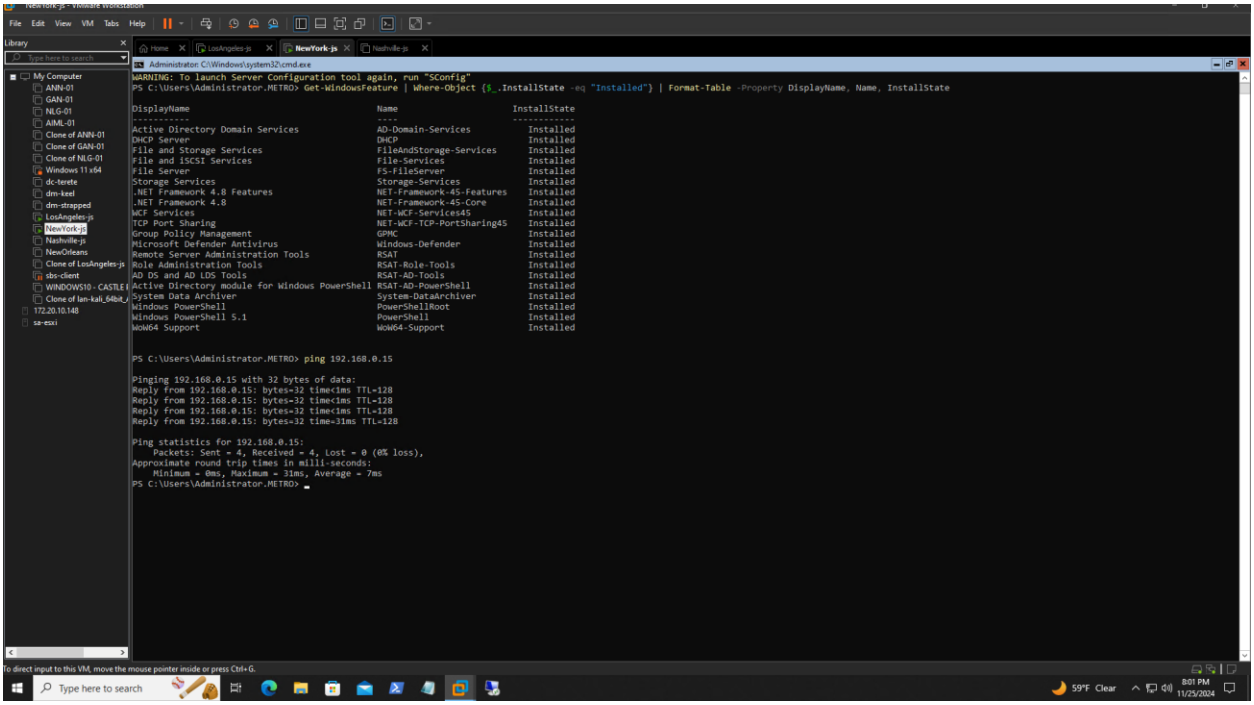
Screenshots

- Local Server screen showing the roles on the left-hand side

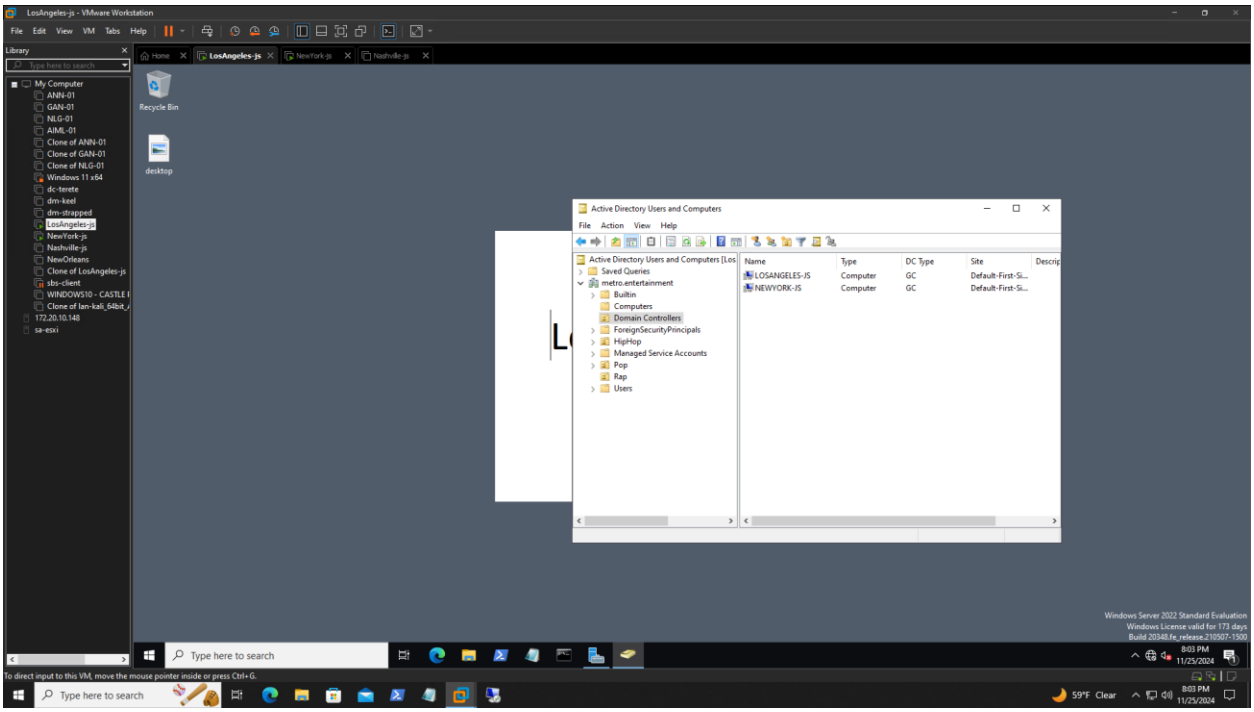


- Command prompt showing that the servers can ping each other (from either server)

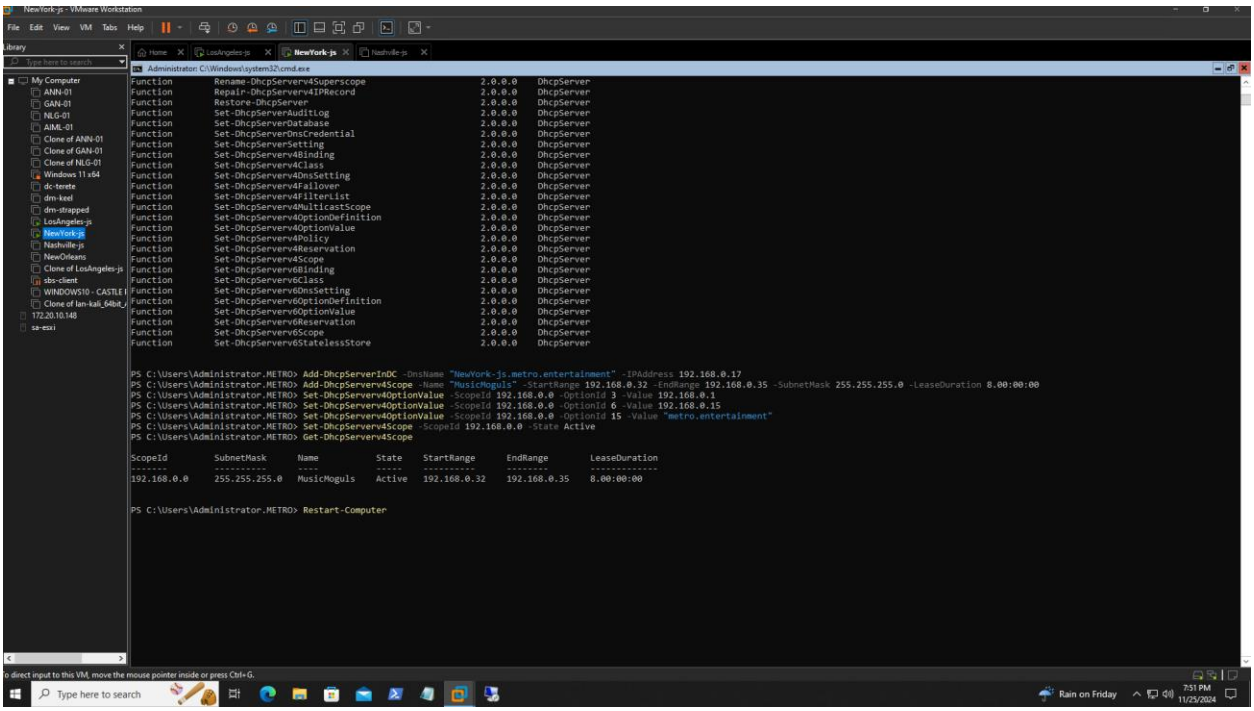

LosAngeles-js - VMware Workstation
Administrator: Command Prompt
Microsoft Windows [Version 10.0.20348.587]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Administrator>ping 192.168.0.17
Pinging 192.168.0.17 with 32 bytes of data:
Reply from 192.168.0.17: bytes=32 time<1ms TTL=128
Reply from 192.168.0.17: bytes=32 time=31ms TTL=128
Reply from 192.168.0.17: bytes=32 time=1ms TTL=128
Reply from 192.168.0.17: bytes=32 time=1ms TTL=128
Ping statistics for 192.168.0.17:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 31ms, Average = 8ms
C:\Users\Administrator>
Windows Server 2022 Standard Evaluation
Windows License valid for 173 days
Build 20348.fe_release.210507-1500
8:01 PM
11/25/2024
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.
59°F Clear


NewYork-js - VMware Workstation
Administrator: C:\Windows\system32\cmd.exe
WARNING: To launch Server Configuration tool again, run "SConfig"
PS C:\Users\Administrator.METRO> Get-WindowsFeature | Where-Object {$_.InstallState -eq "Installed"} | Format-Table -Property DisplayName, Name, InstallState
DisplayName Name InstallState
Active Directory Domain Services AD-Domain-Services Installed
DHCP Server DHCP Installed
File and Storage Services FileAndStorage-Services Installed
File and iSCSI Services File-Services Installed
File Server FS-FileServer Installed
Storage Services Storage-Services Installed
.NET Framework 4.8 Features NET-Framework-45-Features Installed
.NET Framework 4.8 NET-Framework-45-Core Installed
WCF Services NET-WCF-Services45 Installed
TCP Port Sharing NET-WCF-TCP-PortSharing45 Installed
Group Policy Management GPMC Installed
Microsoft Defender Antivirus Windows-Defender Installed
Remote Server Administration Tools RSAT Installed
Role Administration Tools RSAT-Role-Tools Installed
AD DS and AD LDS Tools RSAT-AD-Tools Installed
Active Directory module for Windows PowerShell RSAT-AD-PowerShell Installed
System Data Archiver System-DataArchiver Installed
Windows PowerShell PowerShellRoot Installed
Windows PowerShell 5.1 PowerShell Installed
WoW64 Support WoW64-Support Installed
PS C:\Users\Administrator.METRO> ping 192.168.0.15
Pinging 192.168.0.15 with 32 bytes of data:
Reply from 192.168.0.15: bytes=32 time<1ms TTL=128
Reply from 192.168.0.15: bytes=32 time<1ms TTL=128
Reply from 192.168.0.15: bytes=32 time<1ms TTL=128
Reply from 192.168.0.15: bytes=32 time=31ms TTL=128
Ping statistics for 192.168.0.15:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 31ms, Average = 7ms
PS C:\Users\Administrator.METRO>
8:01 PM
11/25/2024
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.
59°F Clear

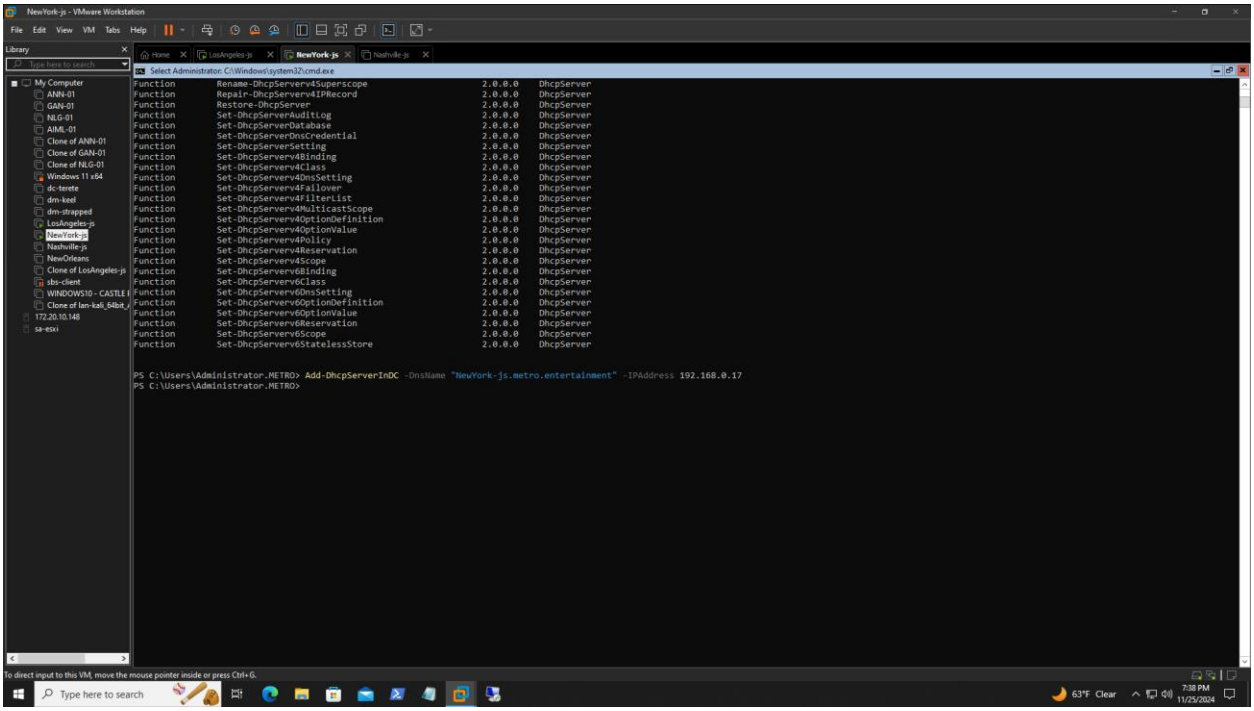
- Screenshot showing the second server as a DC in the Active Directory Computers and Users (ADUC) screen on the primary DC

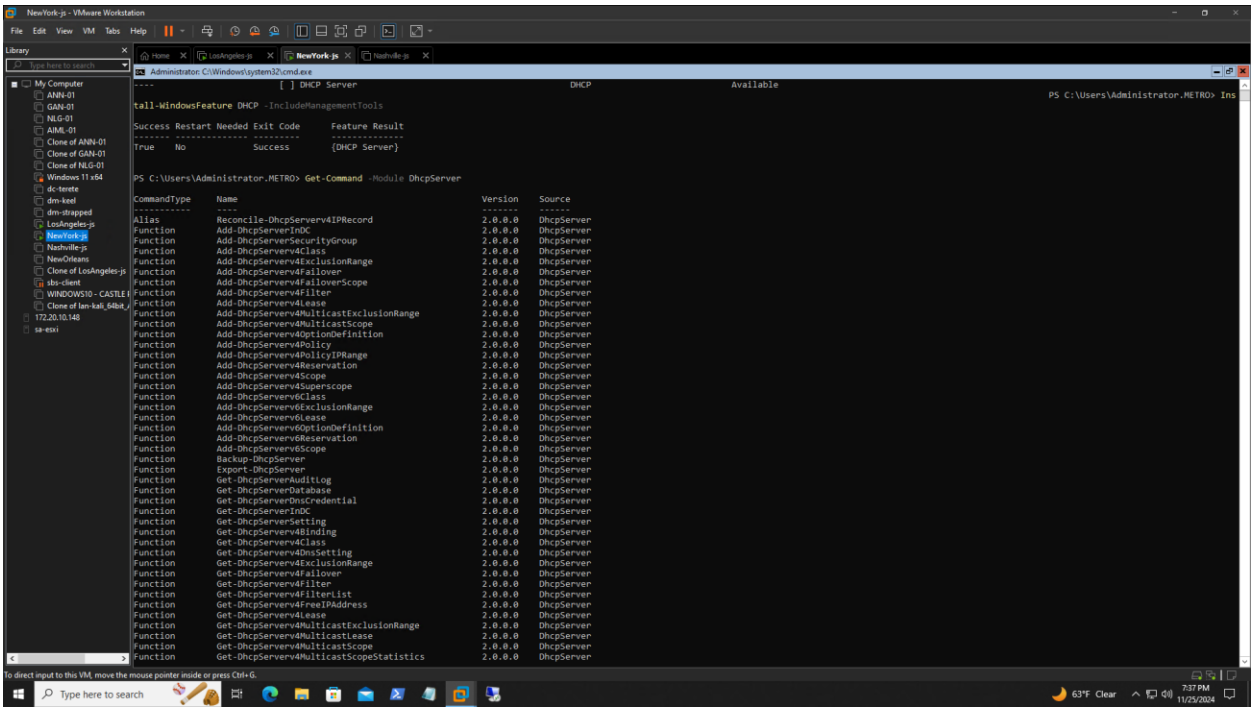


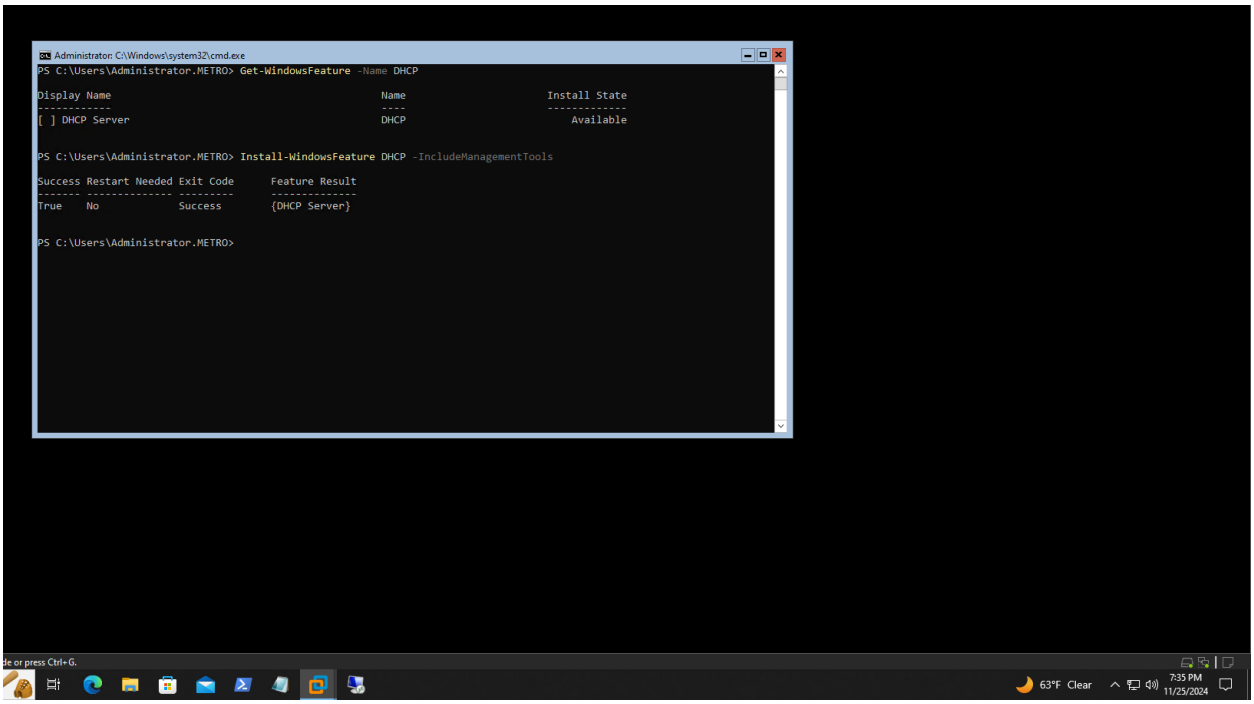
- Screenshot of the DHCP console showing the scope range (range should be active)

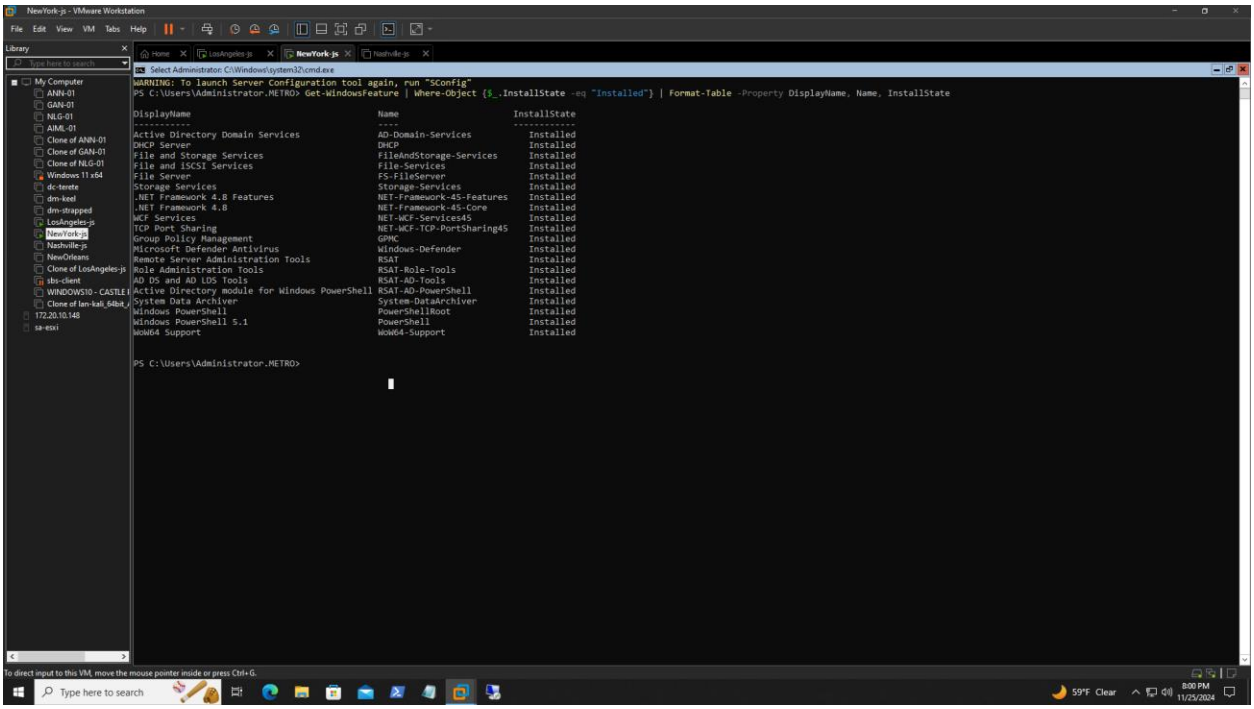


- Bonus: screenshot of each command




NewYork-js - VMware Workstation
Administrator: C:\Windows\system32\cmd.exe
[ ] DHCP Server DHCP Available
tall-WindowsFeature DHCP -IncludeManagementTools
Success Restart Needed Exit Code Feature Result
True No Success {DHCP Server}
PS C:\Users\Administrator.METRO> Get-Command -Module DhcpServer
CommandType Name Version Source
Alias Reconcile-DhcpServerv4IPRecord 2.0.0.0 DhcpServer
Function Add-DhcpServerInDC 2.0.0.0 DhcpServer
Function Add-DhcpServerSecurityGroup 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Class 2.0.0.0 DhcpServer
Function Add-DhcpServerv4ExclusionRange 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Failover 2.0.0.0 DhcpServer
Function Add-DhcpServerv4FailoverScope 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Filter 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Lease 2.0.0.0 DhcpServer
Function Add-DhcpServerv4MulticastExclusionRange 2.0.0.0 DhcpServer
Function Add-DhcpServerv4MulticastScope 2.0.0.0 DhcpServer
Function Add-DhcpServerv4OptionDefinition 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Policy 2.0.0.0 DhcpServer
Function Add-DhcpServerv4PolicyIPRange 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Reservation 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Scope 2.0.0.0 DhcpServer
Function Add-DhcpServerv4Superscope 2.0.0.0 DhcpServer
Function Add-DhcpServerv6Class 2.0.0.0 DhcpServer
Function Add-DhcpServerv6ExclusionRange 2.0.0.0 DhcpServer
Function Add-DhcpServerv6Lease 2.0.0.0 DhcpServer
Function Add-DhcpServerv6OptionDefinition 2.0.0.0 DhcpServer
Function Add-DhcpServerv6Reservation 2.0.0.0 DhcpServer
Function Add-DhcpServerv6Scope 2.0.0.0 DhcpServer
Function Backup-DhcpServer 2.0.0.0 DhcpServer
Function Export-DhcpServer 2.0.0.0 DhcpServer
Function Get-DhcpServerAuditLog 2.0.0.0 DhcpServer
Function Get-DhcpServerDatabase 2.0.0.0 DhcpServer
Function Get-DhcpServerDnsCredential 2.0.0.0 DhcpServer
Function Get-DhcpServerInDC 2.0.0.0 DhcpServer
Function Get-DhcpServerSetting 2.0.0.0 DhcpServer
Function Get-DhcpServerv4Binding 2.0.0.0 DhcpServer
Function Get-DhcpServerv4Class 2.0.0.0 DhcpServer
Function Get-DhcpServerv4DnsSetting 2.0.0.0 DhcpServer
Function Get-DhcpServerv4ExclusionRange 2.0.0.0 DhcpServer
Function Get-DhcpServerv4Failover 2.0.0.0 DhcpServer
Function Get-DhcpServerv4Filter 2.0.0.0 DhcpServer
Function Get-DhcpServerv4FilterList 2.0.0.0 DhcpServer
Function Get-DhcpServerv4FreeIPAddress 2.0.0.0 DhcpServer
Function Get-DhcpServerv4Lease 2.0.0.0 DhcpServer
Function Get-DhcpServerv4MulticastExclusionRange 2.0.0.0 DhcpServer
Function Get-DhcpServerv4MulticastLease 2.0.0.0 DhcpServer
Function Get-DhcpServerv4MulticastScope 2.0.0.0 DhcpServer
Function Get-DhcpServerv4MulticastScopeStatistics 2.0.0.0 DhcpServer
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.
63°F Clear
7:37 PM
11/25/2024


Administrator: C:\Windows\system32\cmd.exe
PS C:\Users\Administrator.METRO> Get-WindowsFeature -Name DHCP
Display Name Name Install State
[ ] DHCP Server DHCP Available
PS C:\Users\Administrator.METRO> Install-WindowsFeature DHCP -IncludeManagementTools
Success Restart Needed Exit Code Feature Result
True No Success {DHCP Server}
PS C:\Users\Administrator.METRO>
63°F Clear
7:35 PM
11/25/2024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Select Administrator: C:\Windows\system32\cmd.exe
WARNING: To launch Server Configuration tool again, run "SConfig"
PS C:\Users\Administrator.METRO> Get-WindowsFeature | Where-Object {$_.InstallState -eq "Installed"} | Format-Table -Property DisplayName, Name, InstallState
DisplayName Name InstallState
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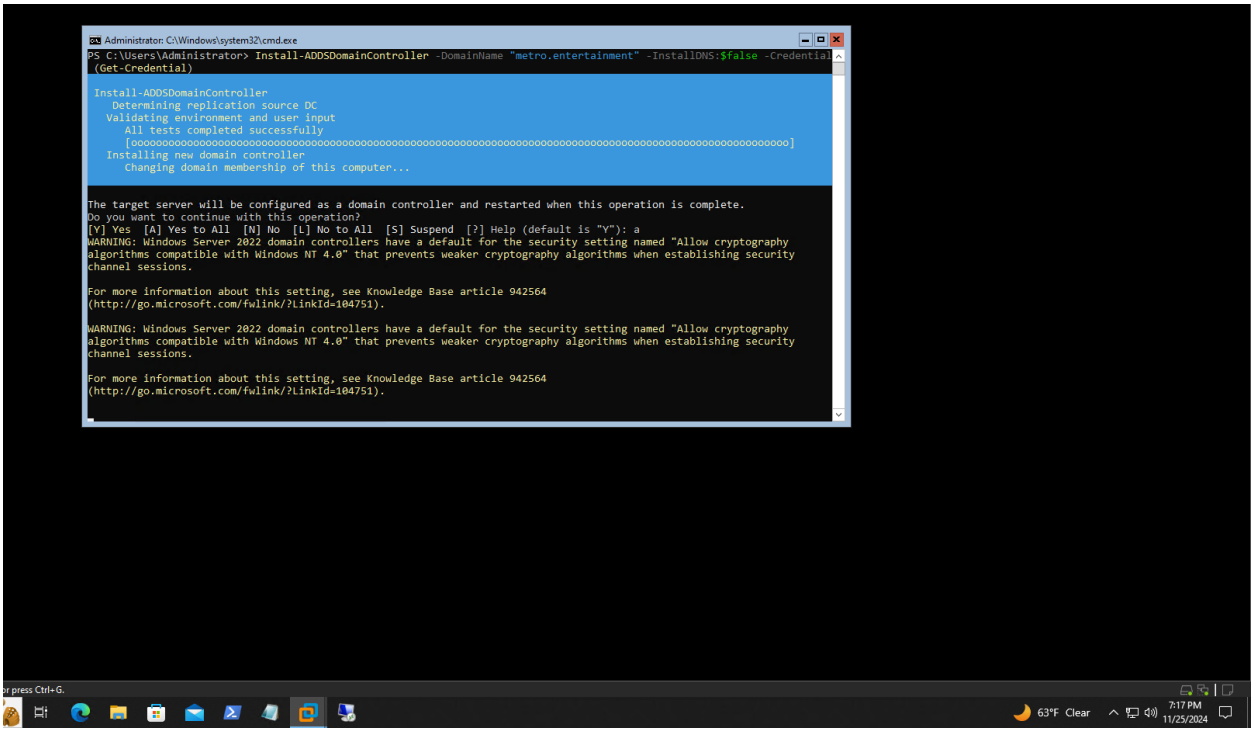
Windows PowerShell PowerShellRoot Installed
Windows PowerShell 5.1 PowerShell Installed
WoW64 Support WoW64-Support Installed
PS C:\Users\Administrator.METRO>
59°F Clear
8:00 PM
11/25/2024


Administrator: C:\Windows\system32\cmd.exe
PS C:\Users\Administrator> Install-ADDSDomainController -DomainName "metro.entertainment" -InstallDNS:$false -Credential (Get-Credential)
Install-ADDSDomainController
Determining replication source DC
Validating environment and user input
All tests completed successfully
Installing new domain controller
Changing domain membership of this computer...
The target server will be configured as a domain controller and restarted when this operation is complete.
Do you want to continue with this operation?
[Y] Yes [A] Yes to All [N] No [L] No to All [S] Suspend [?] Help (default is "Y"): a
WARNING: Windows Server 2022 domain controllers have a default for the security setting named "Allow cryptography algorithms compatible with Windows NT 4.0" that prevents weaker cryptography algorithms when establishing security channel sessions.
For more information about this setting, see Knowledge Base article 942564 (http://go.microsoft.com/fwlink/?LinkId=104751).
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63°F Clear
7:17 PM
11/25/2024