Active Directory Deployment & IAM Implementation – Greenspring Solutions

This project is the deployment of a Windows Server Domain Controller (Active Directory) for a company called Greenspring Solutions**,** it includes domain setup, client configuration, OU design, group policies, and access control in an enterprise environment.

Company Structure

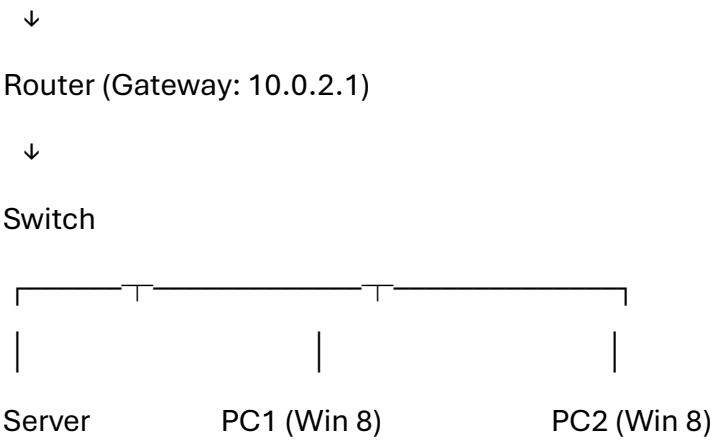
Greenspring Solutions is a small IT services firm with the following structure:

- 1 x Windows Server (AD Domain Controller)
- 1 x Windows 8 Client PC
- 1 x Windows 8 Client PC

Project Objectives

- Configure an AD Domain Controller on Windows Server
- Join client PCs to the domain
- Create Organizational Units (OUs)
- Implement basic Group Policies for access control
- Simulate a centralized IT environment

Network Design



| Device | IP Address | Role |

|---|---|---|

| Windows Server| 10.0.2.15 | AD Domain Controller (DC) |

| Windows 8 PC | DHCP | Client (CSU) |

| Windows XP PC | DHCP | IT Client |

Domain Configuration

Domain Name: greenspring.org
Server Name: Windowsserver2022
Static IP: 10.0.2.15
AD Roles Installed: AD DS, DNS (DHCP)

Organizational Units (OUs)

Created using **Active Directory Users and Computers**:
Greenspring.org

├— OU: IT Department

│ └— Users: Bidemi.IT

├— OU: CSU

│ └— Users: charles.CSU

Group Policy (GPO)

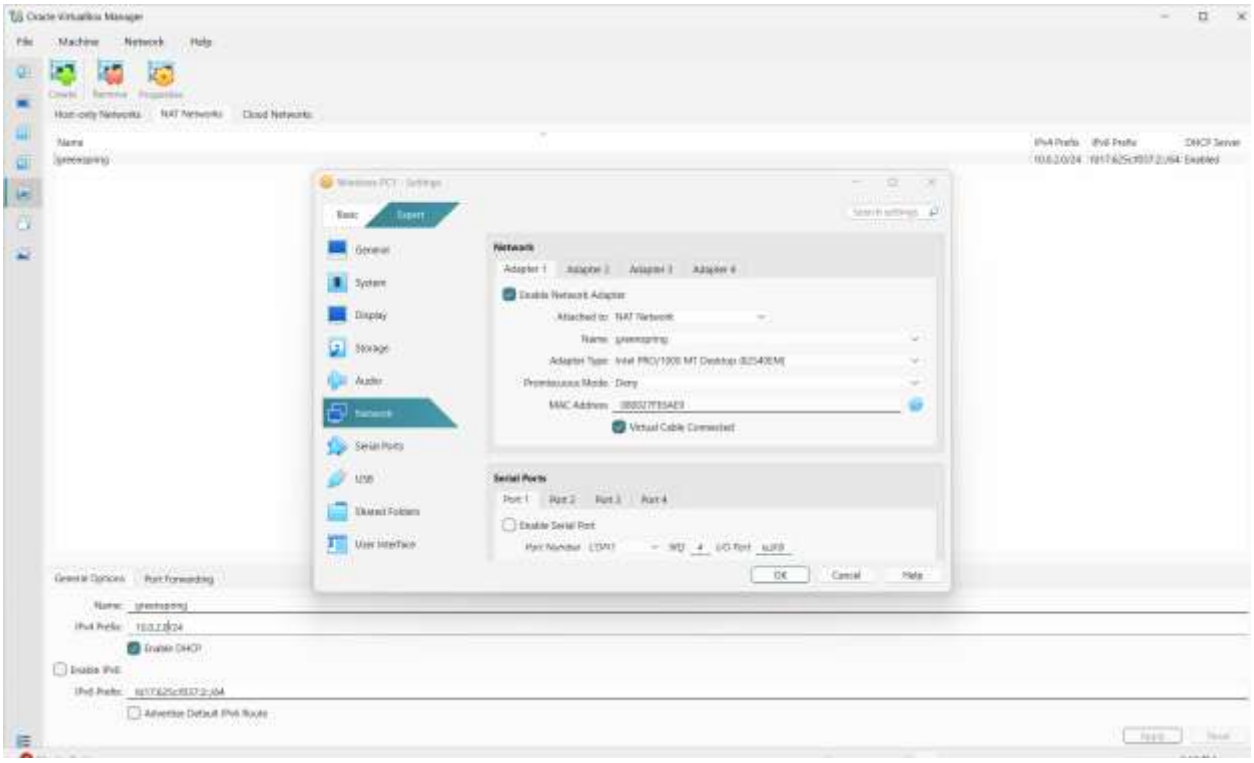
Created and linked using **Group Policy Management Console (gpmc.msc)**:

GPO Name: Disable Shutdown Ability
Linked to: OU: IT Department
Policy Configured
Computer Configuration > Administrative Templates > System > Disable Shutdown Ability
Set **"Disable Shutdown Ability: Disable"** to **"Enabled"**

Result: Shutdown Button not available on Desktop (start button) **IT OU**.

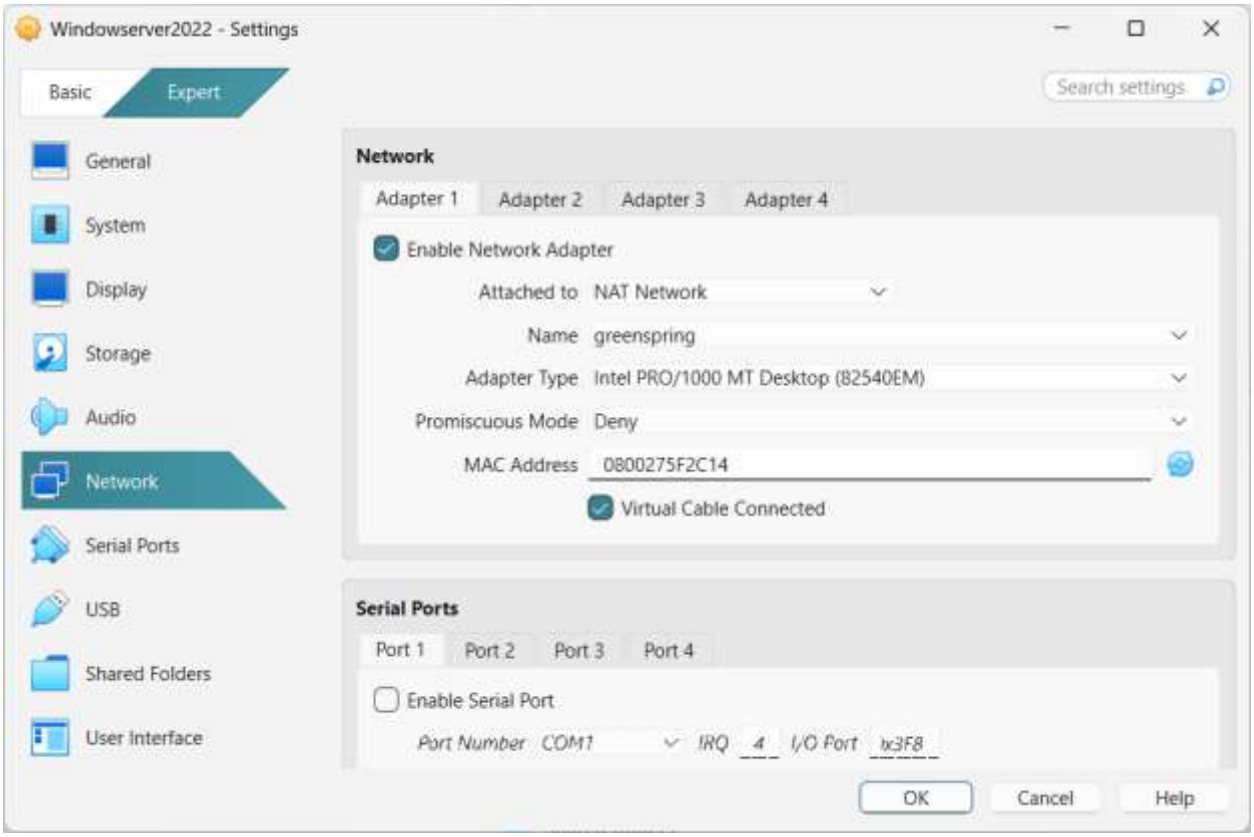
Screenshots

Virtual Box Network Configuration
File > Tools > Network > NAT Networks > input name & enable DHCP



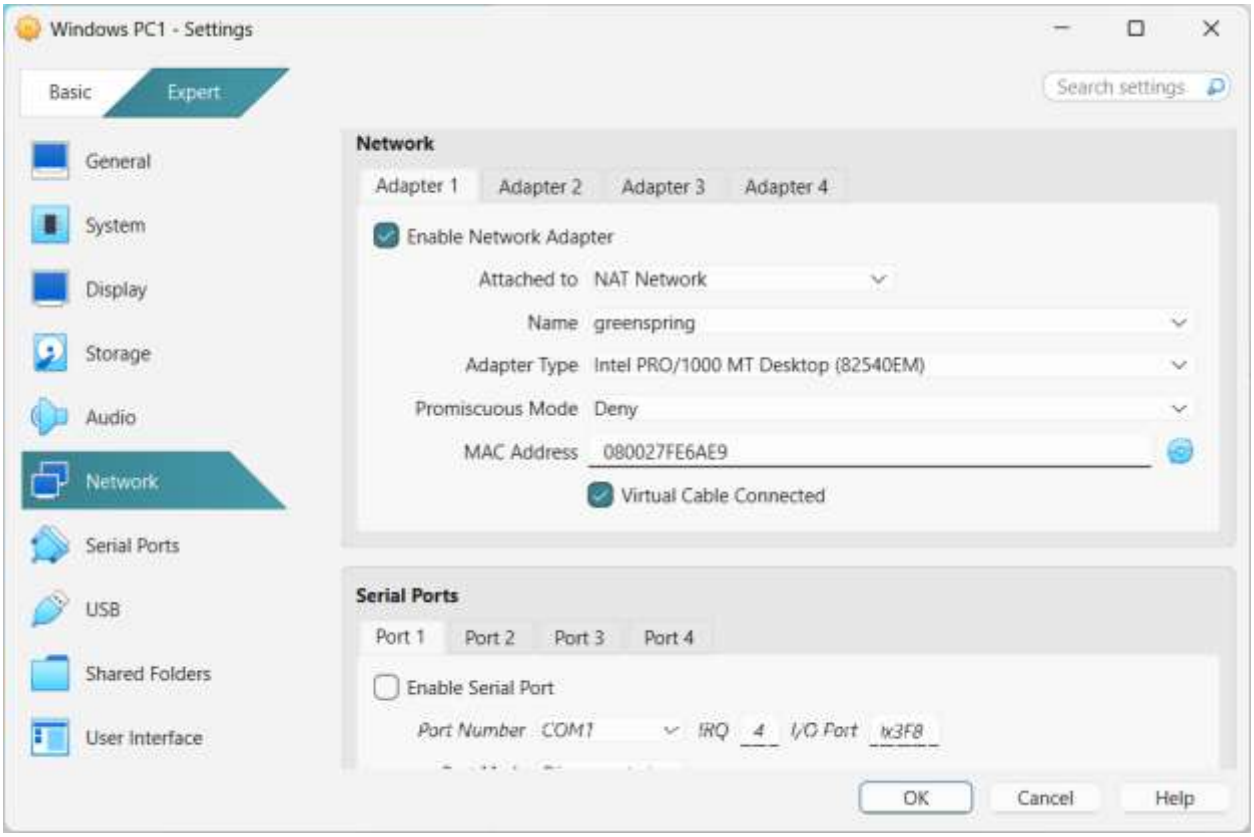
Windows Server 2022 Network Configuration

Settings > Network > Attached to (Nat Network) > Select okay



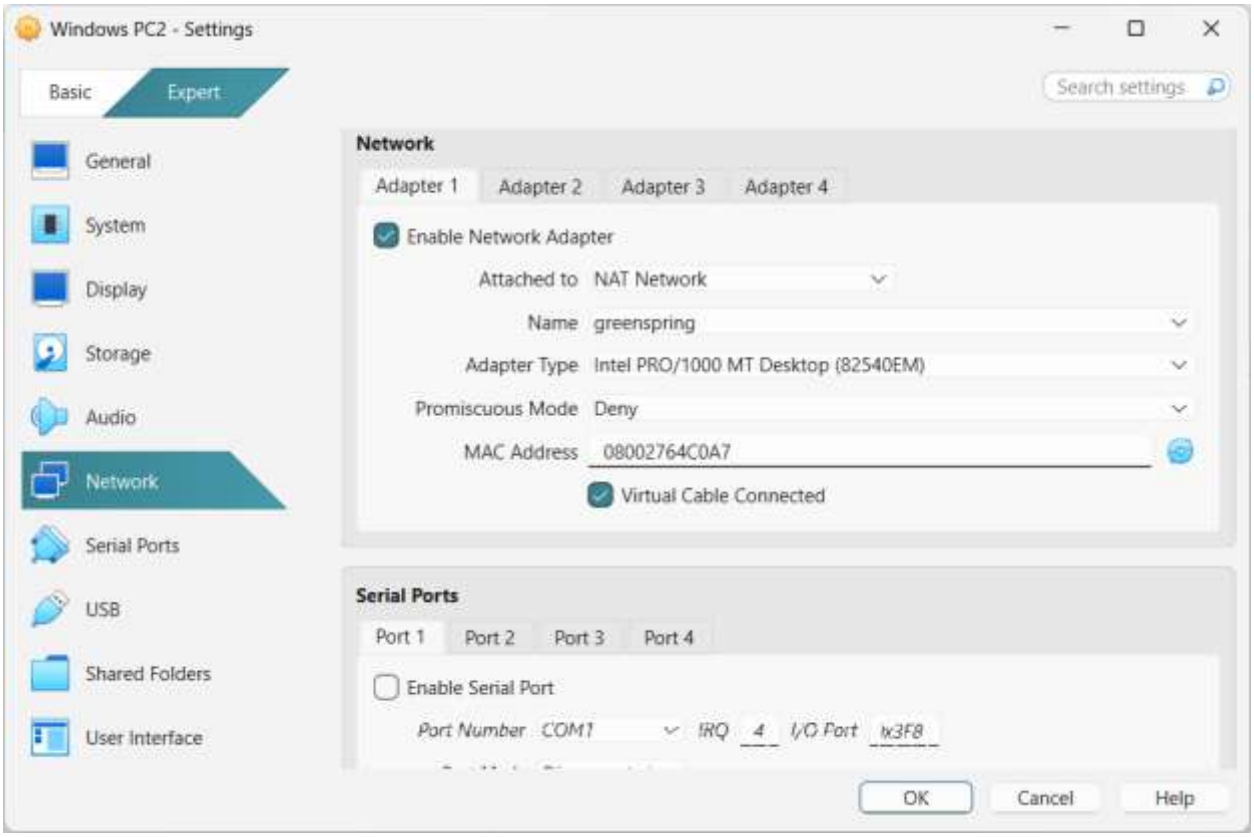
Window PC 1 Network Configuration

Settings > Network > Attached to (Nat Network) > Select okay



Window PC2 Network Configuration

Settings > Network > Attached to (Nat Network) > Select Okay

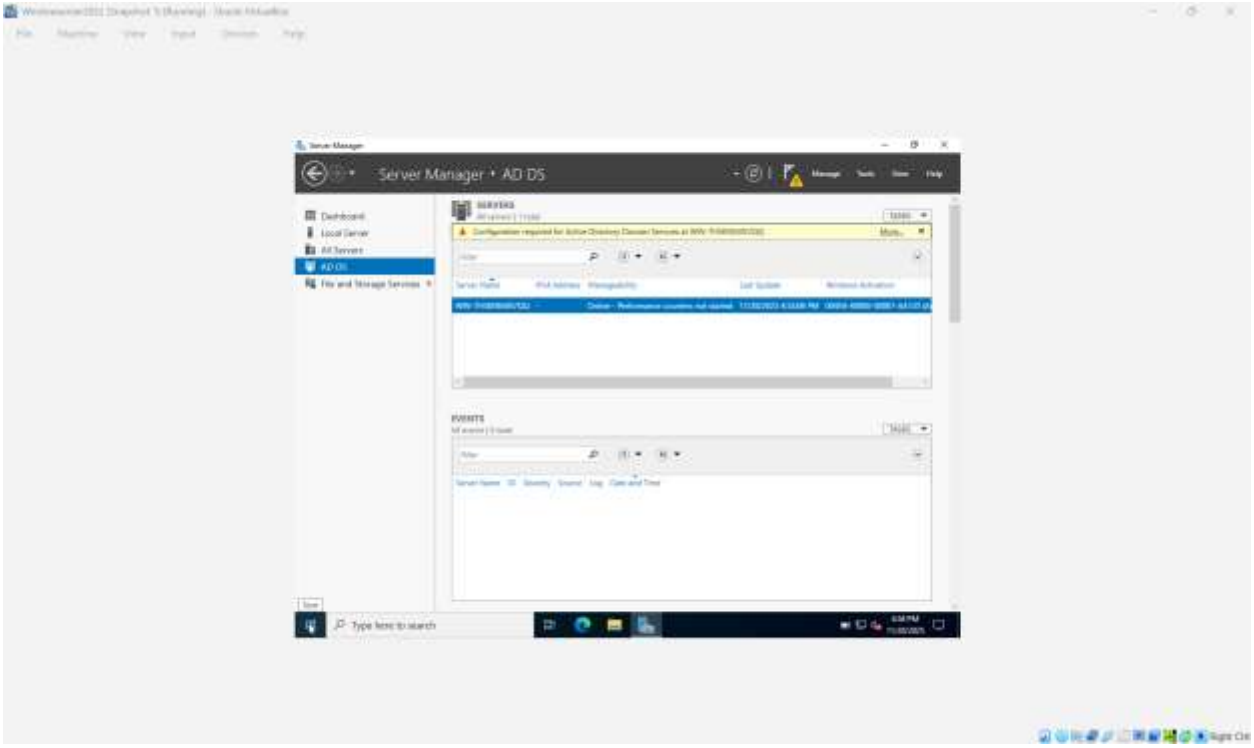


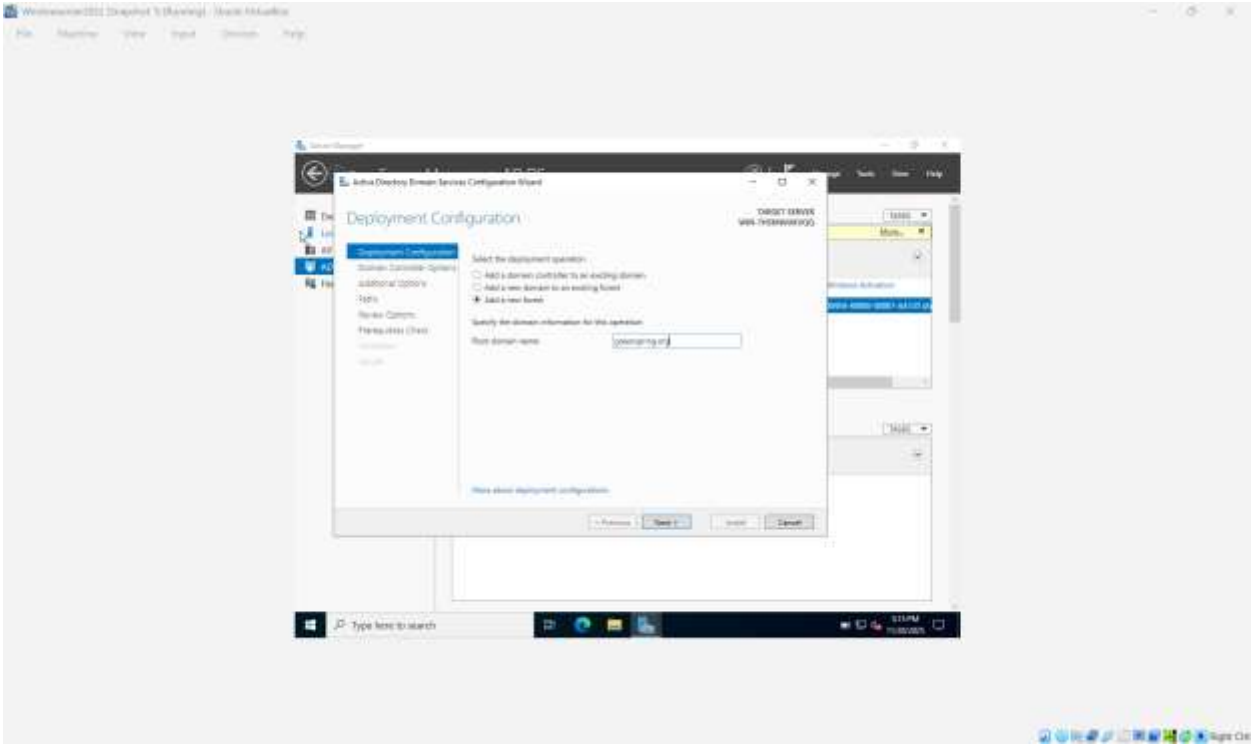
Deployment of Active Directory

Server Manager > Manage > Add Roles & Features > Follow Prompts > Select Active Directory Domain Services > Click Add Features > Select Prompts > Install

Promote AD to Domain Controller

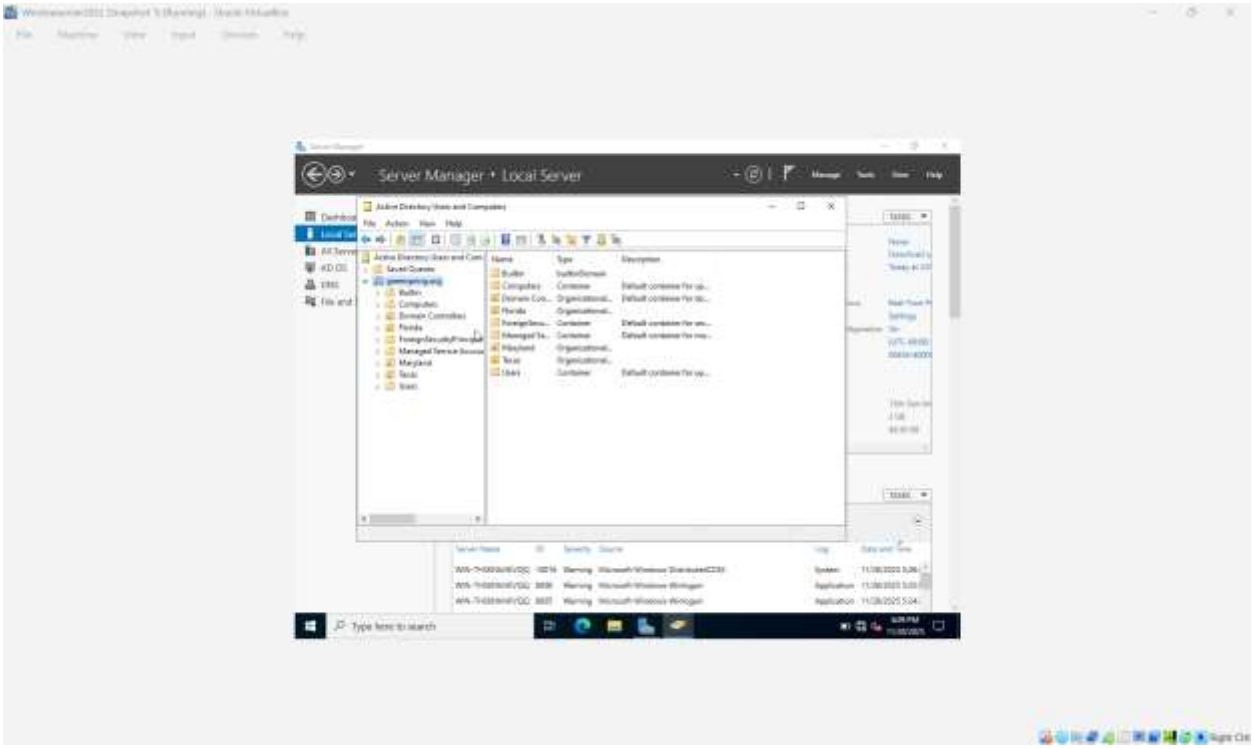
Click on the 'yellow caution symbol' > click on 'Promote this server to DC' > Add a New Forest > Follow prompts > Install


Server Manager • AD DS
Dashboard
Local Server
All Servers
AD DS
File and Storage Services
Type here to search

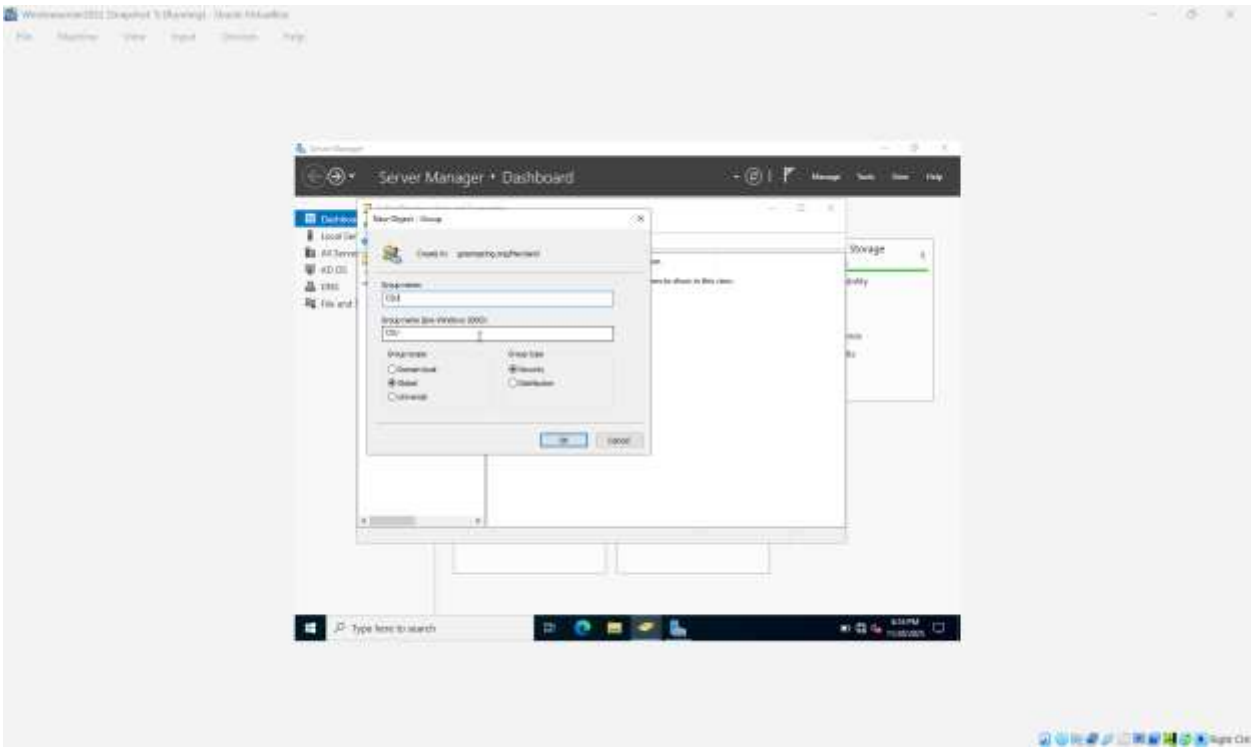

Deployment Configuration
Type here to search

AD Domain Structure

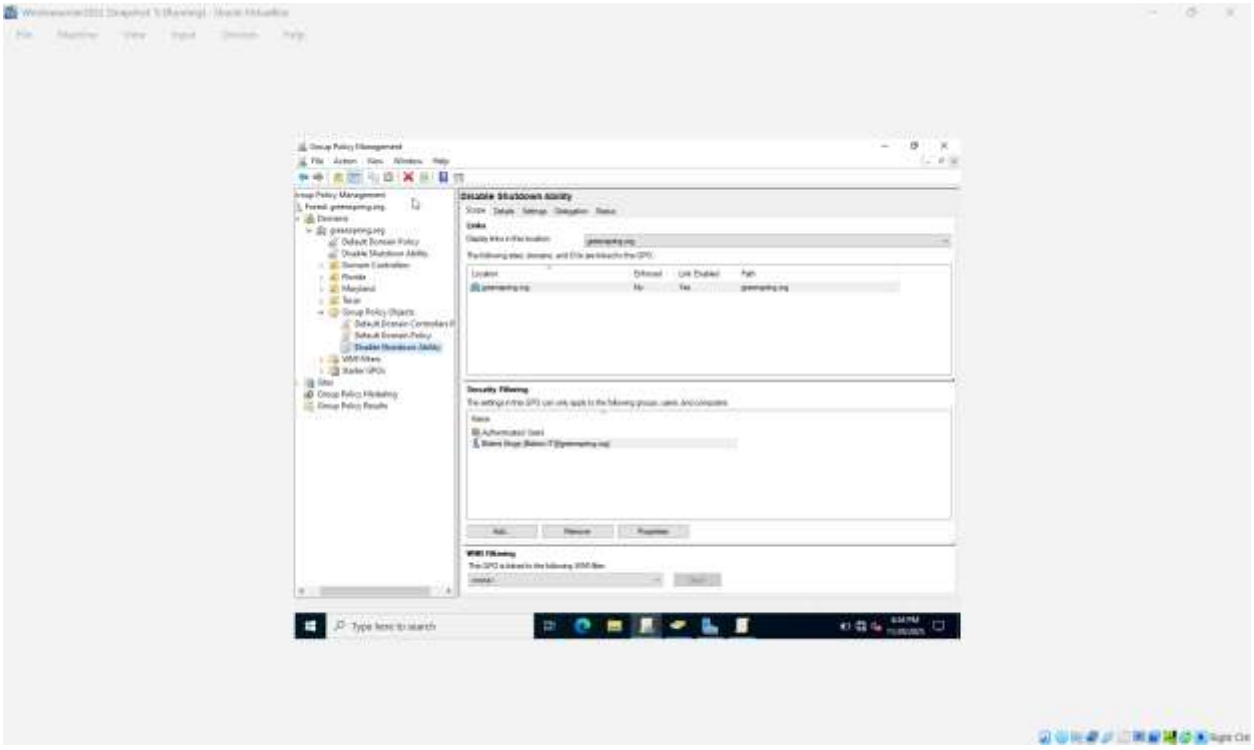
Creation of Organizational Units- Texas, Maryland & Florida



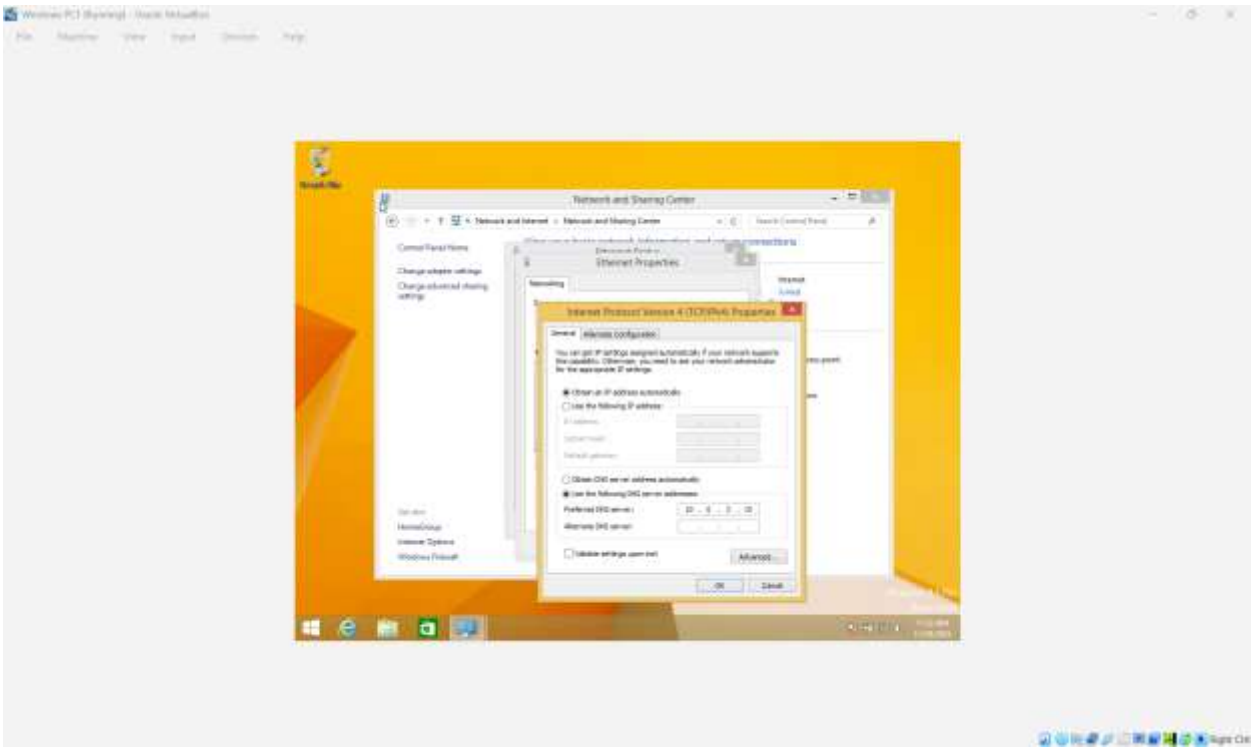
Creation of Group in Maryland OU

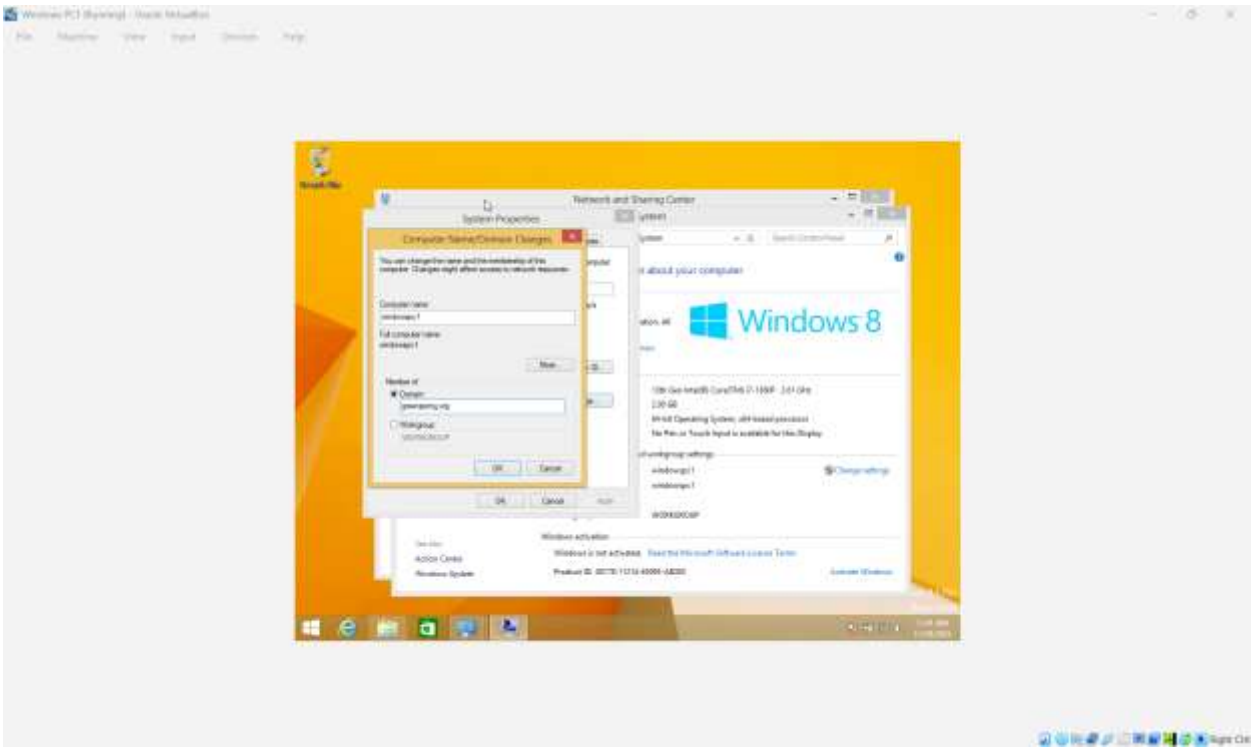


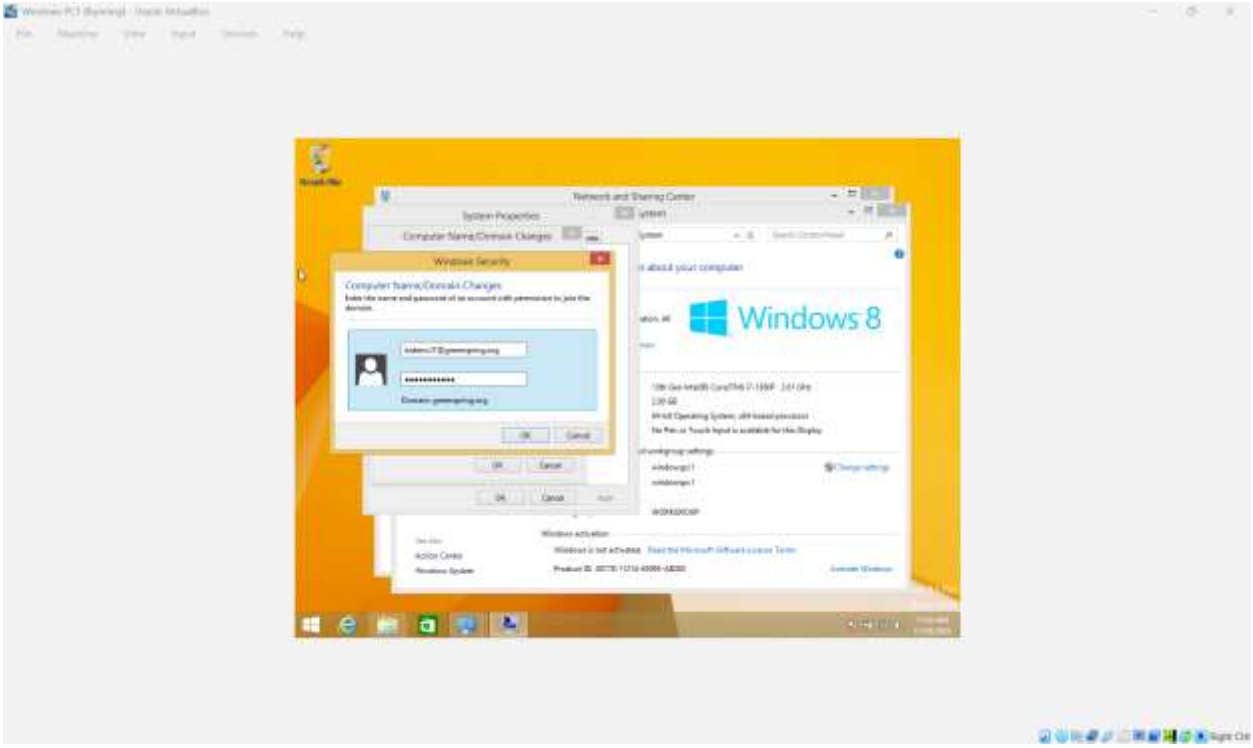
GPO Editor Screenshot



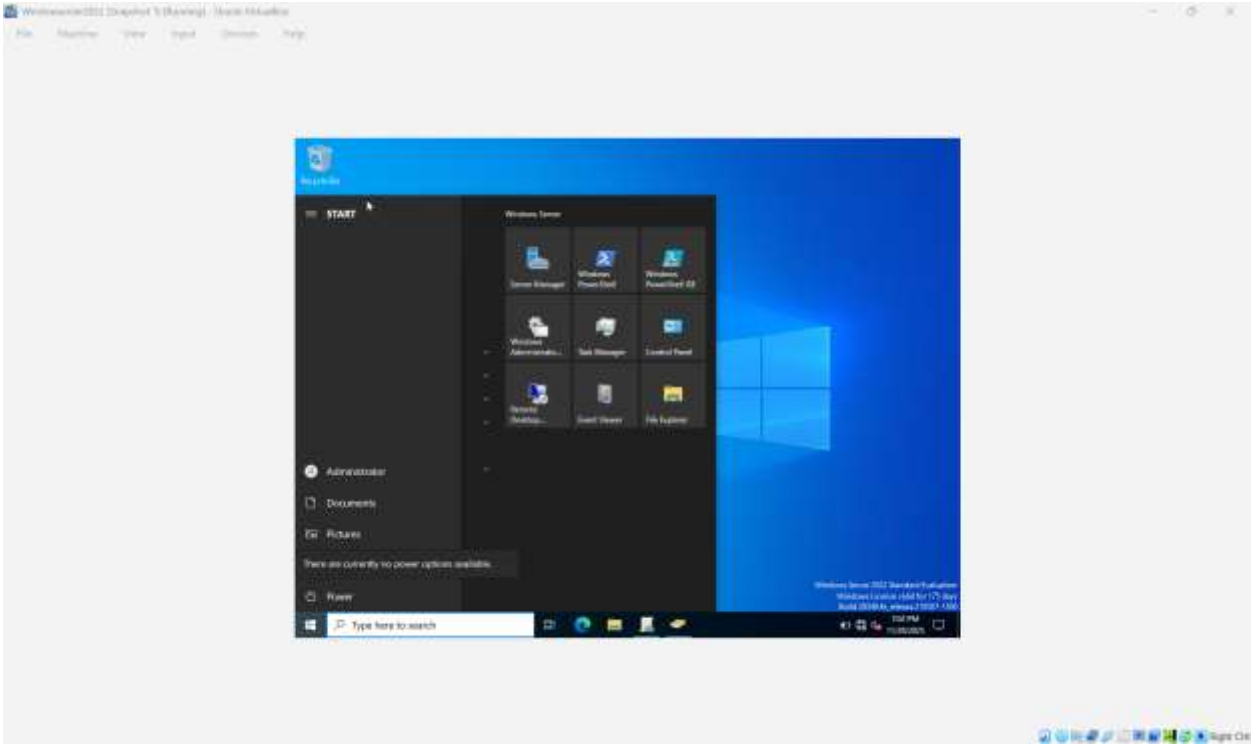
PC joined to domain


Network and Sharing Center
Ethernet Properties
Internet Protocol Version 4 (TCP/IPv4) Properties


Network and Sharing Center
System Properties
Computer Name/Domain Changes
Windows 8



Result of denied shutdown Ability



Key Takeaways

- Gained practical experience with Windows Server roles and domain setup
- Implemented centralized access control using Group Policy
- Learned how to structure users and departments with OUs
- Applied IAM concepts in a real-world simulated environment

Author

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