

Active Directory Deployment & Hardening – Secure domain controller with baseline GPOs

Deployment of a Windows Server Domain Controller (Active Directory)

Company Name: CyberTech Solutions.

It includes domain setup, client configuration, OU design, group policies, and access control in an enterprise environment.

Company Structure:

CyberTech Solutions an IT services firm with the following structure:

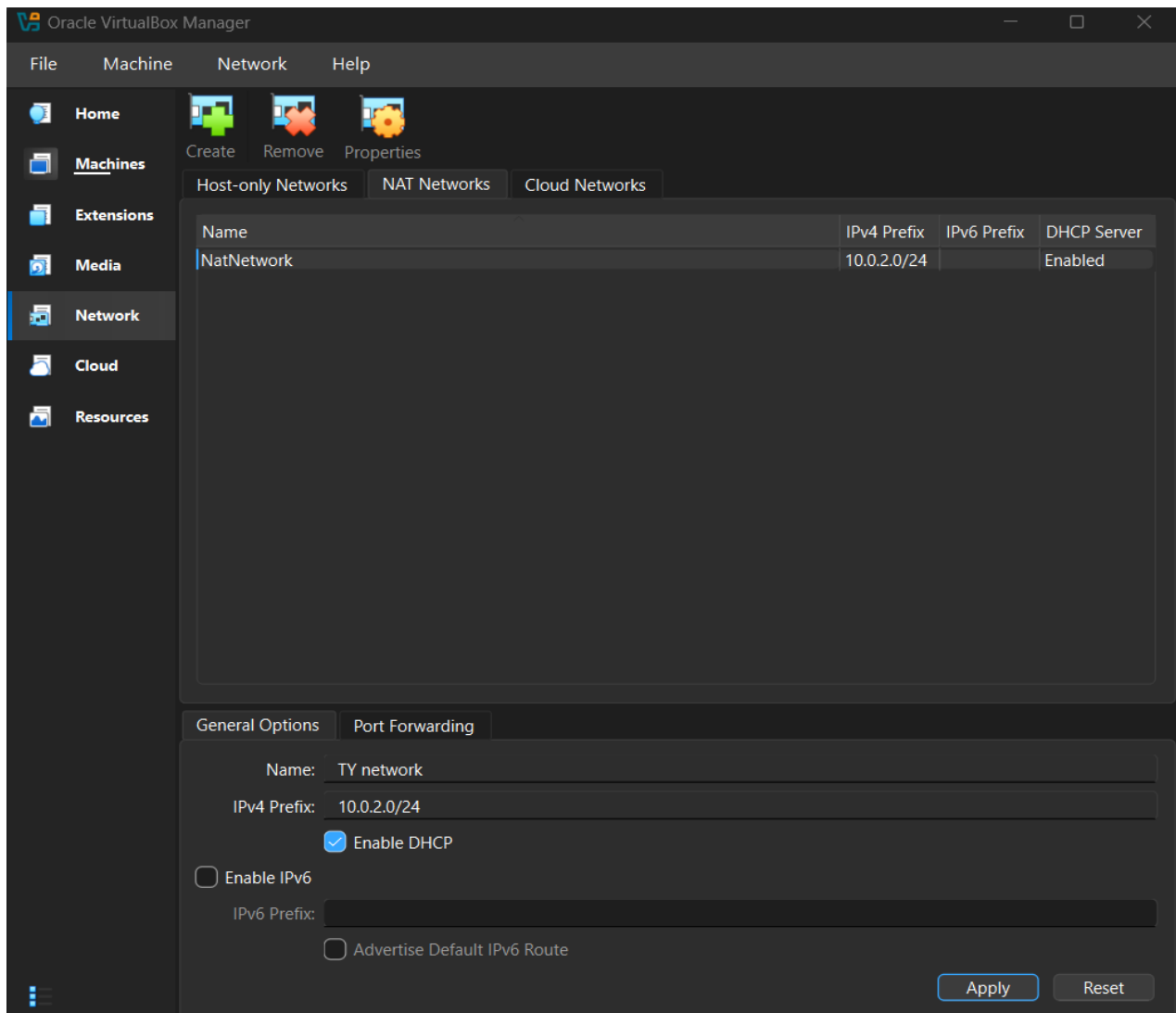
- 1 x Windows Server (AD Domain Controller)
- 1 x Windows 8 A Client PC (IT Department)
- 1 x Windows 8 B Client PC (Sales Departemnt)

Project Objectives:

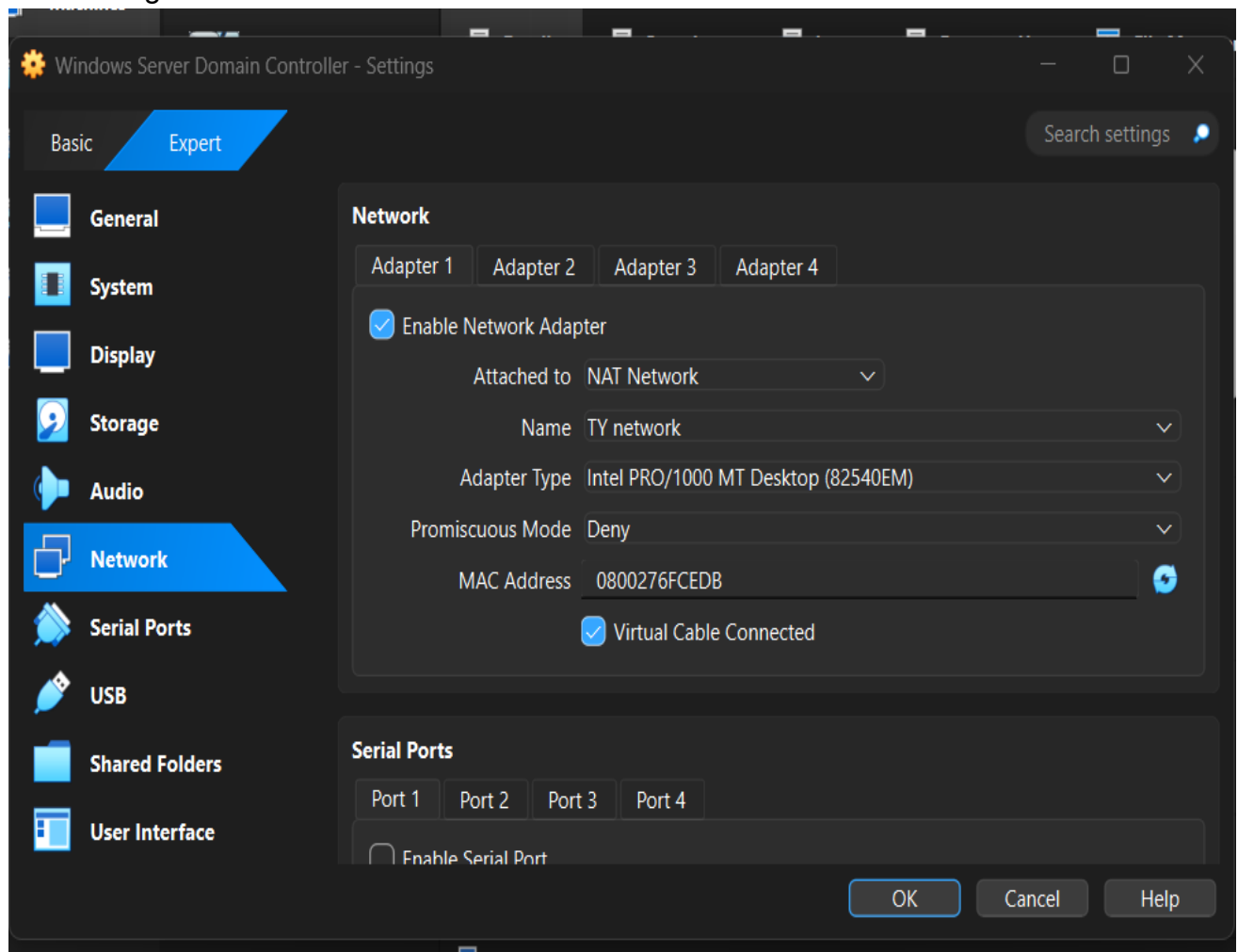
- Configure an AD Domain Controller on Windows Server
- Join client PCs to the domain
- Create Organizational Units (OUs)
- Implement basic Group Policies for access control
- Simulate a centralized IT environment.

See Screenshots below for walkthrough:

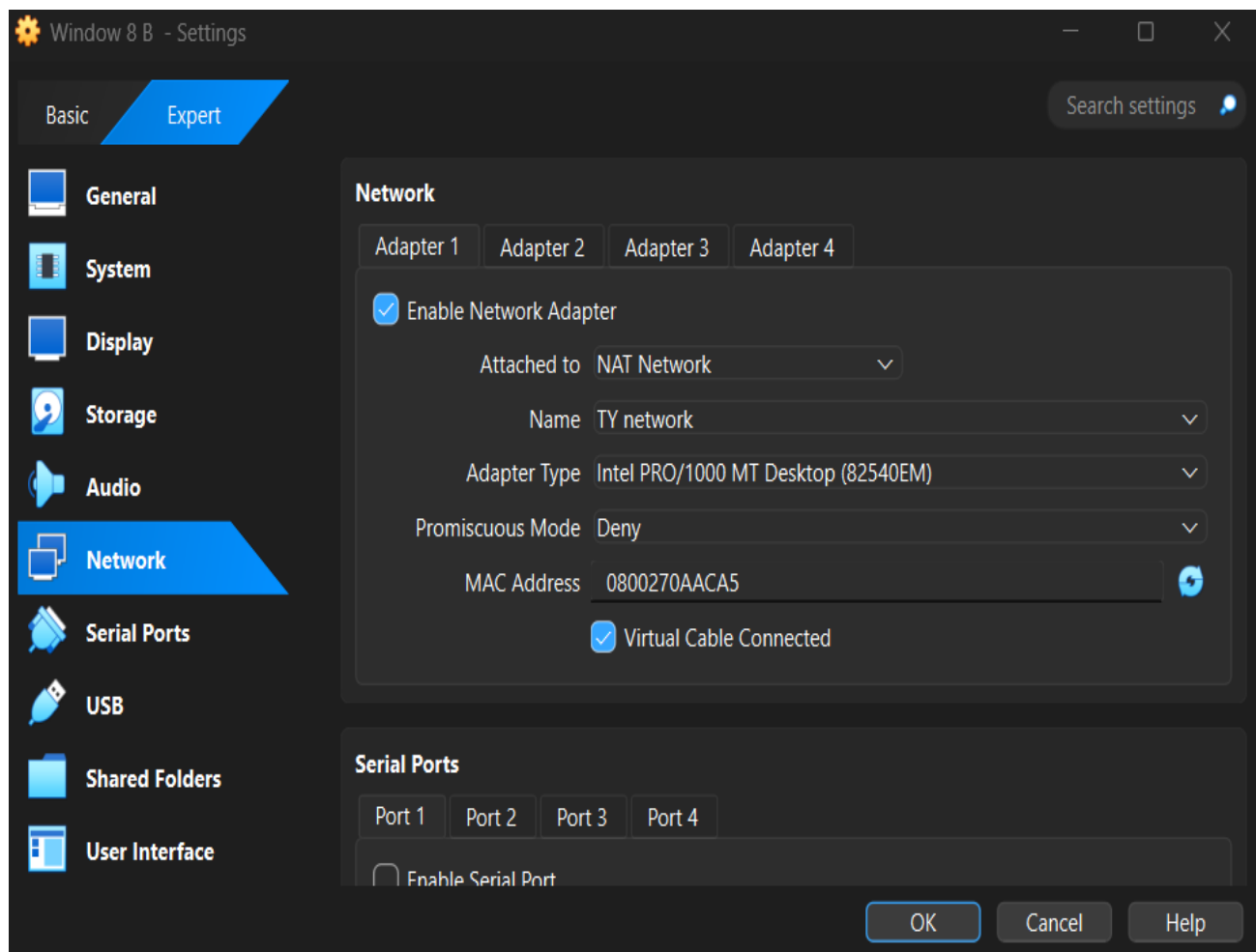
Network creation in VM



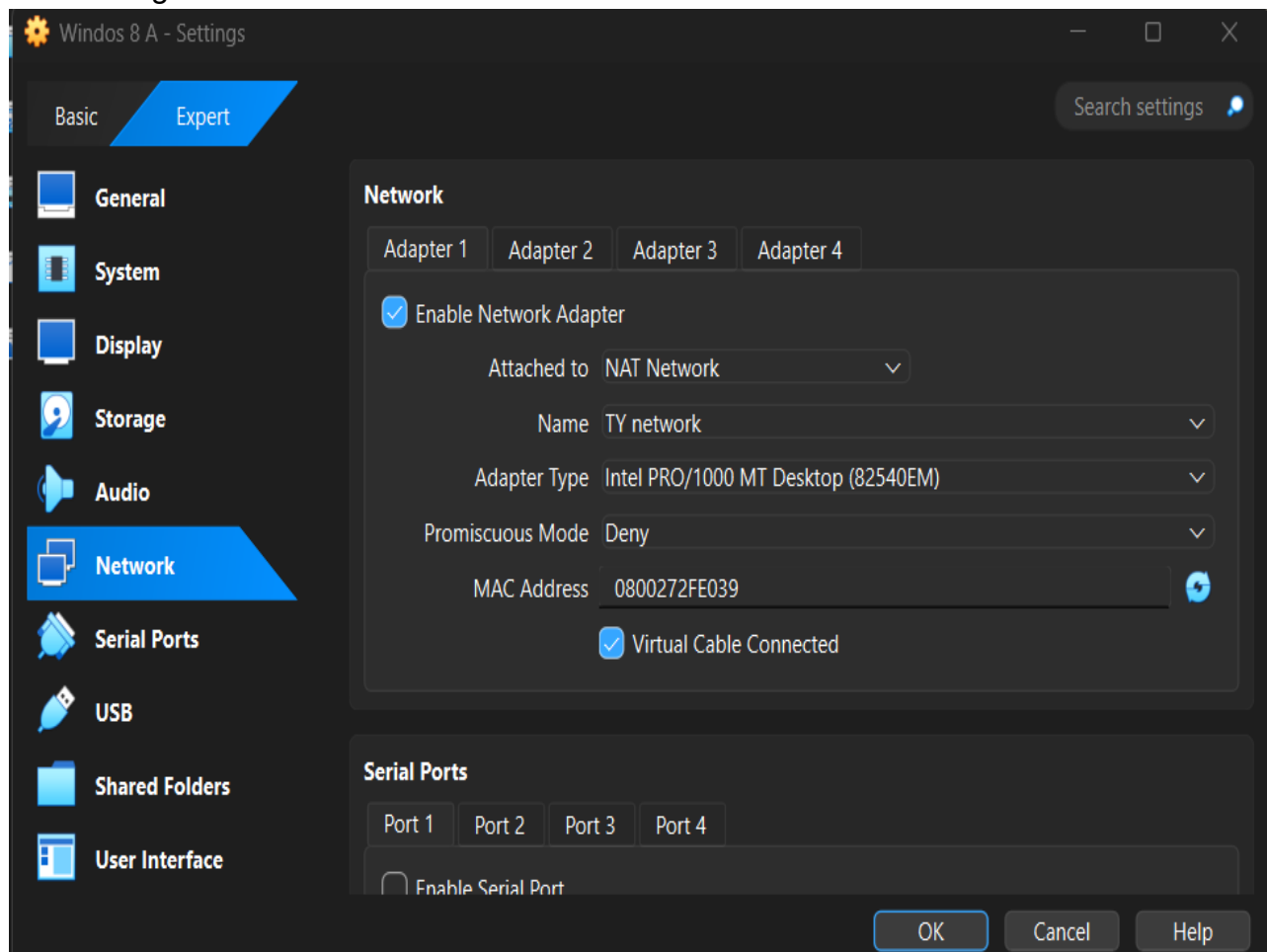
Connecting Network to Windos Server domain



Connecting Network to windows 8 b network

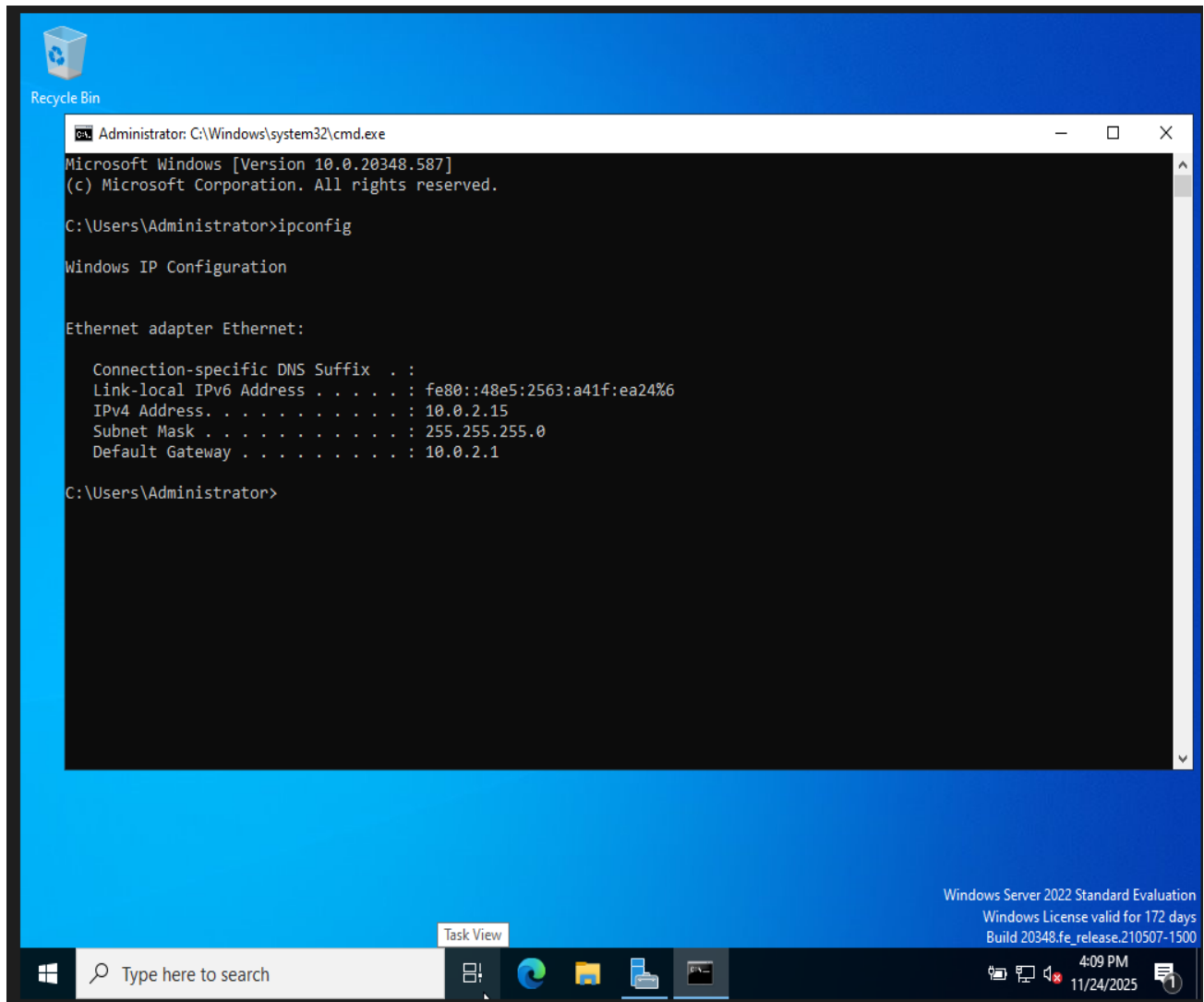


Connecting Network to windows 8 A network

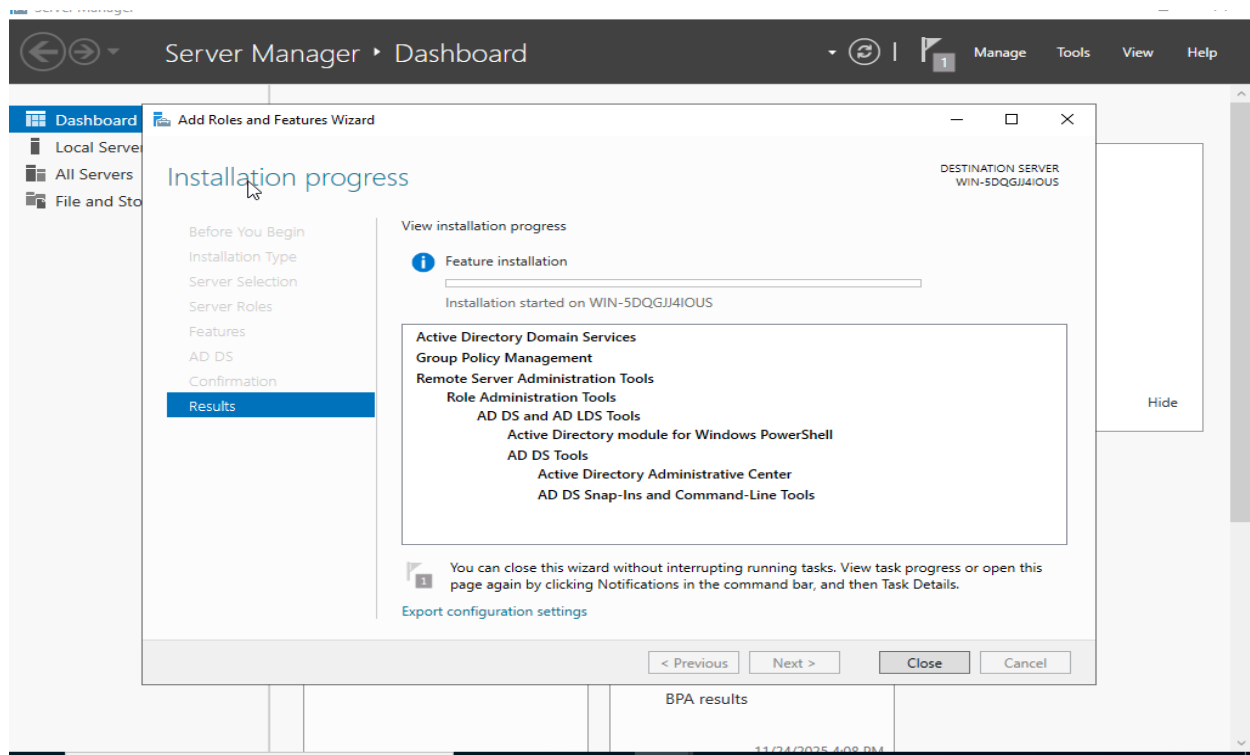


Confirming Server IP – 10.0.2.15

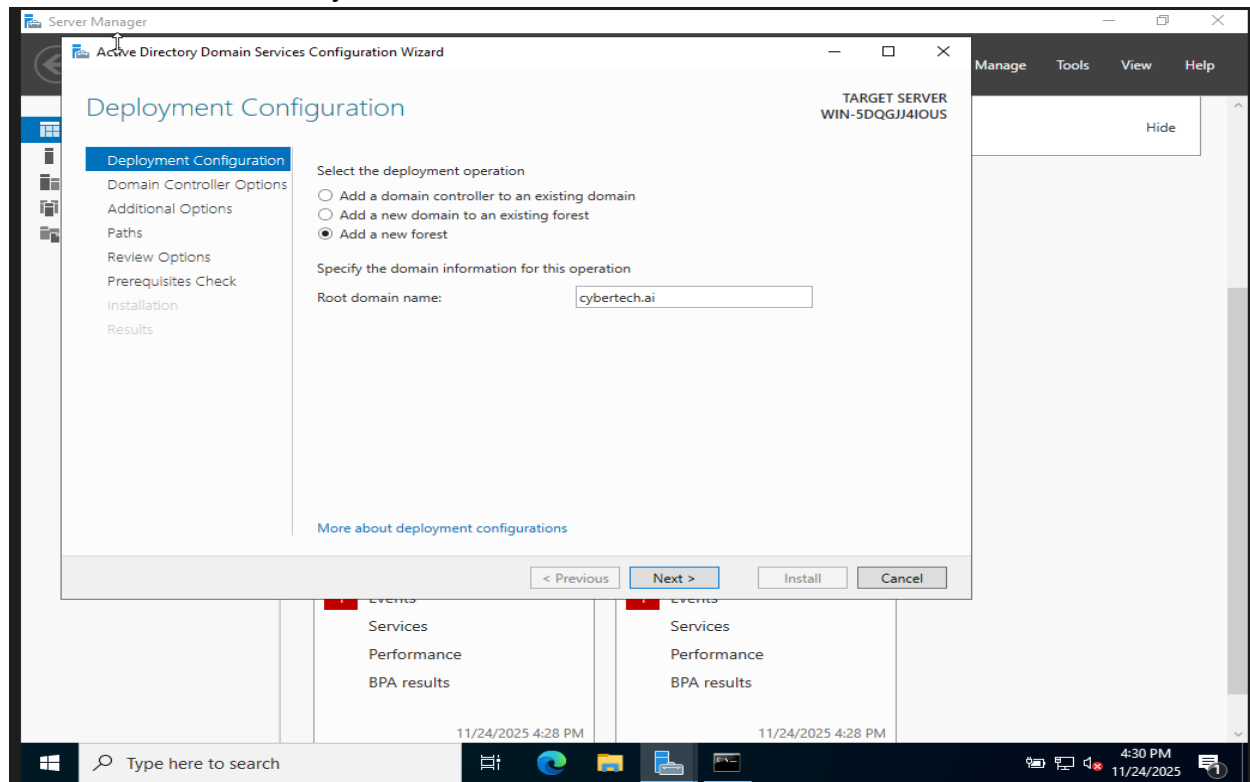
Subnet Mask- 255.255.255.0



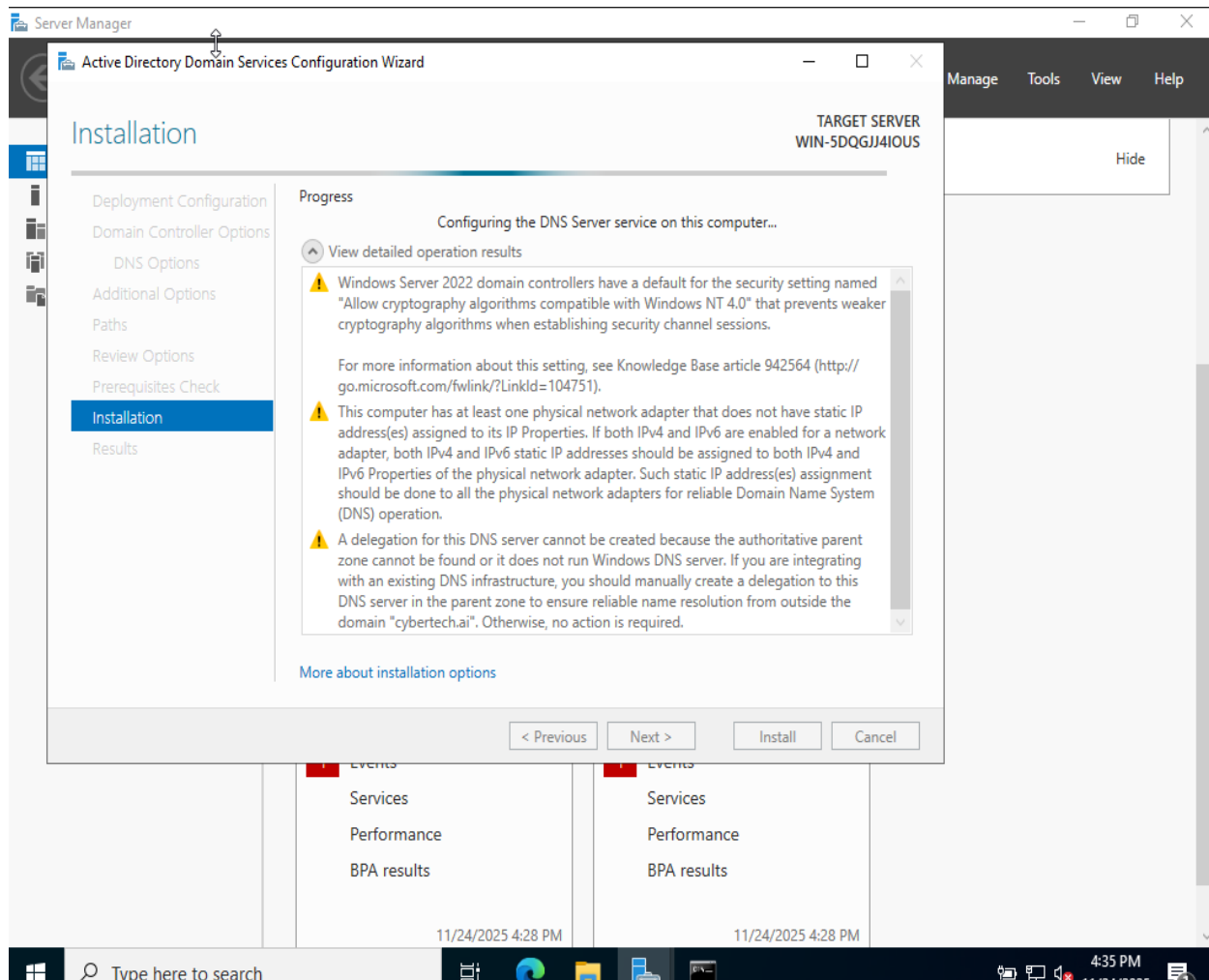
Installation of Active directory



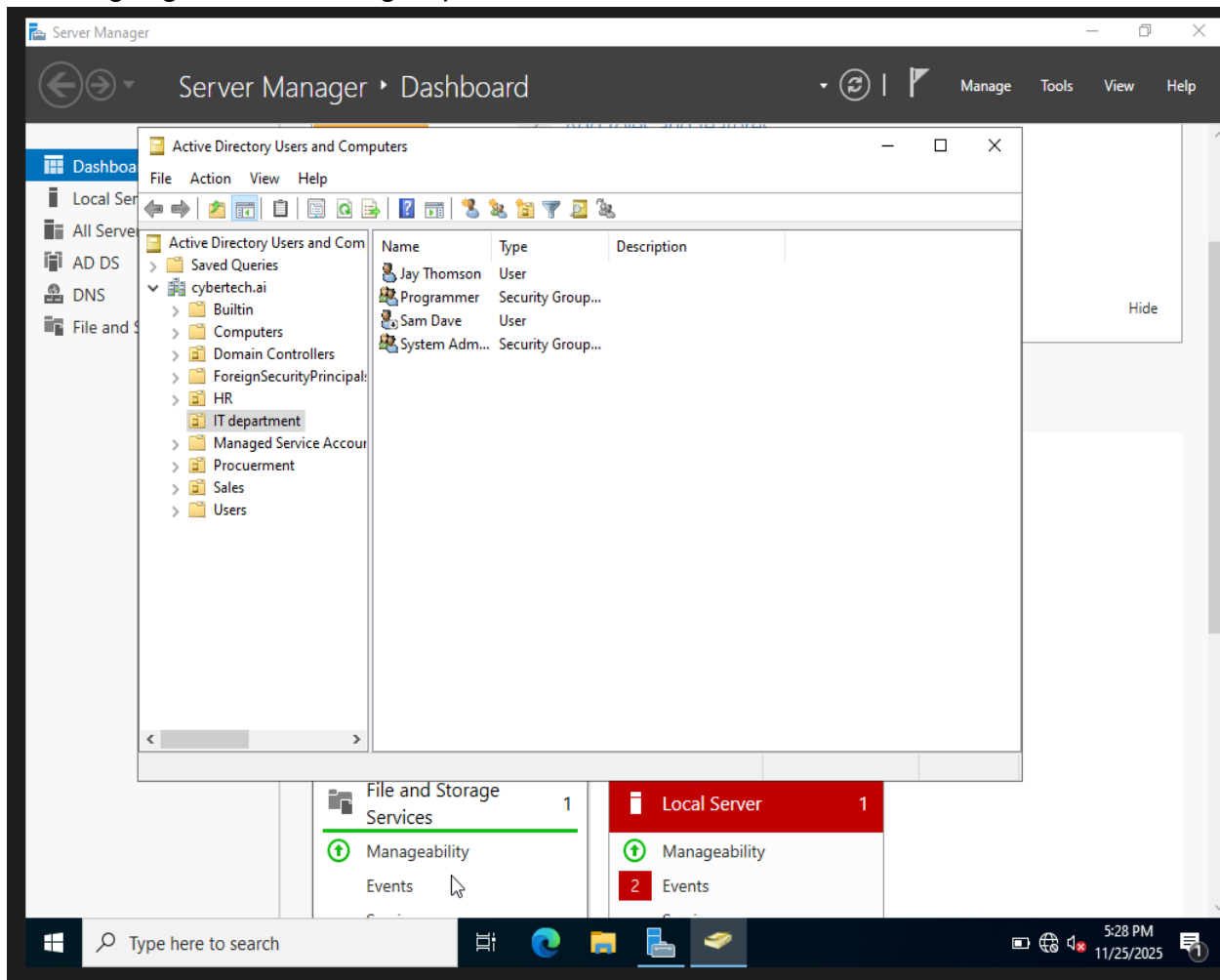
Root domain name – cybertech.ai



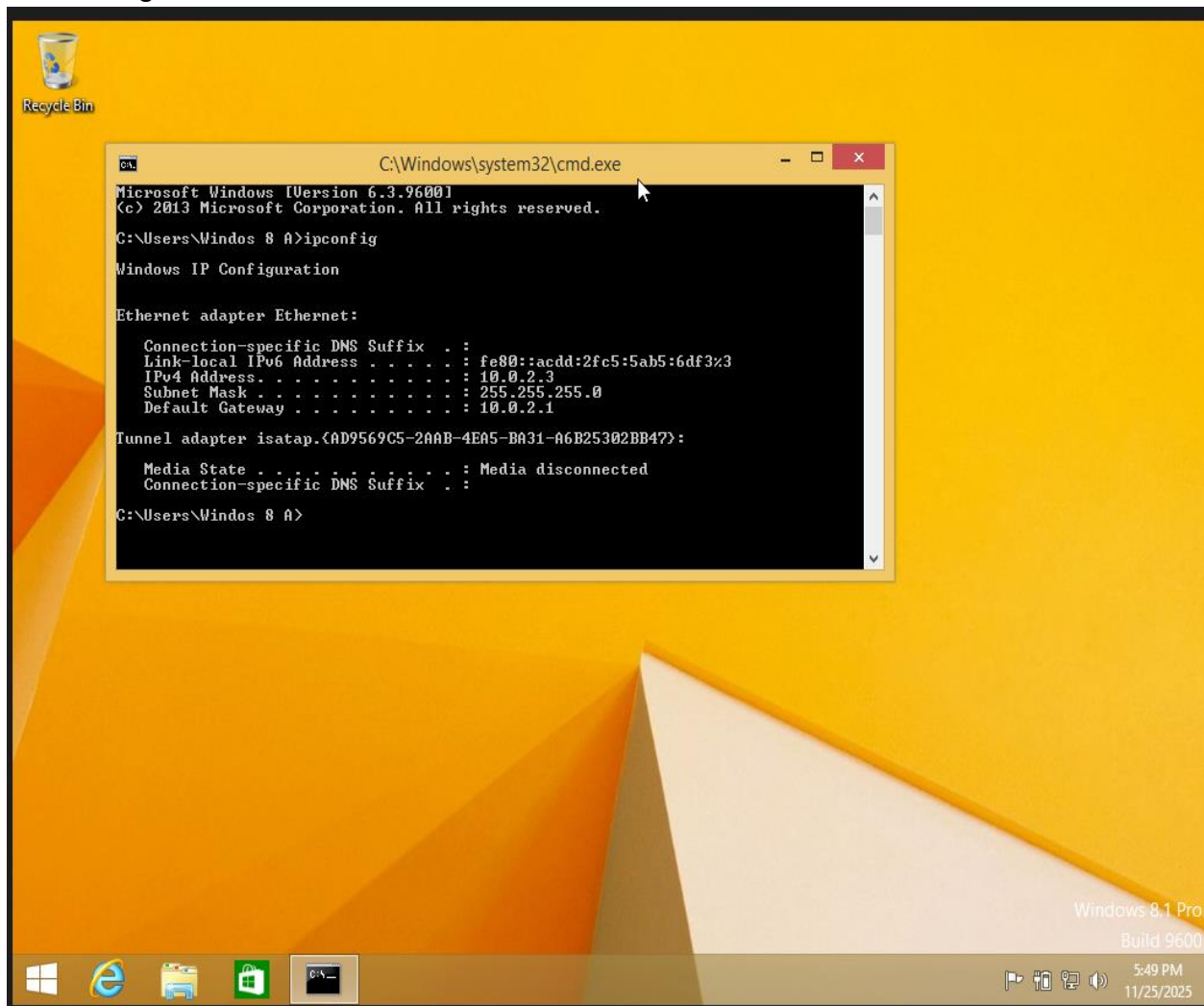
DNS installation



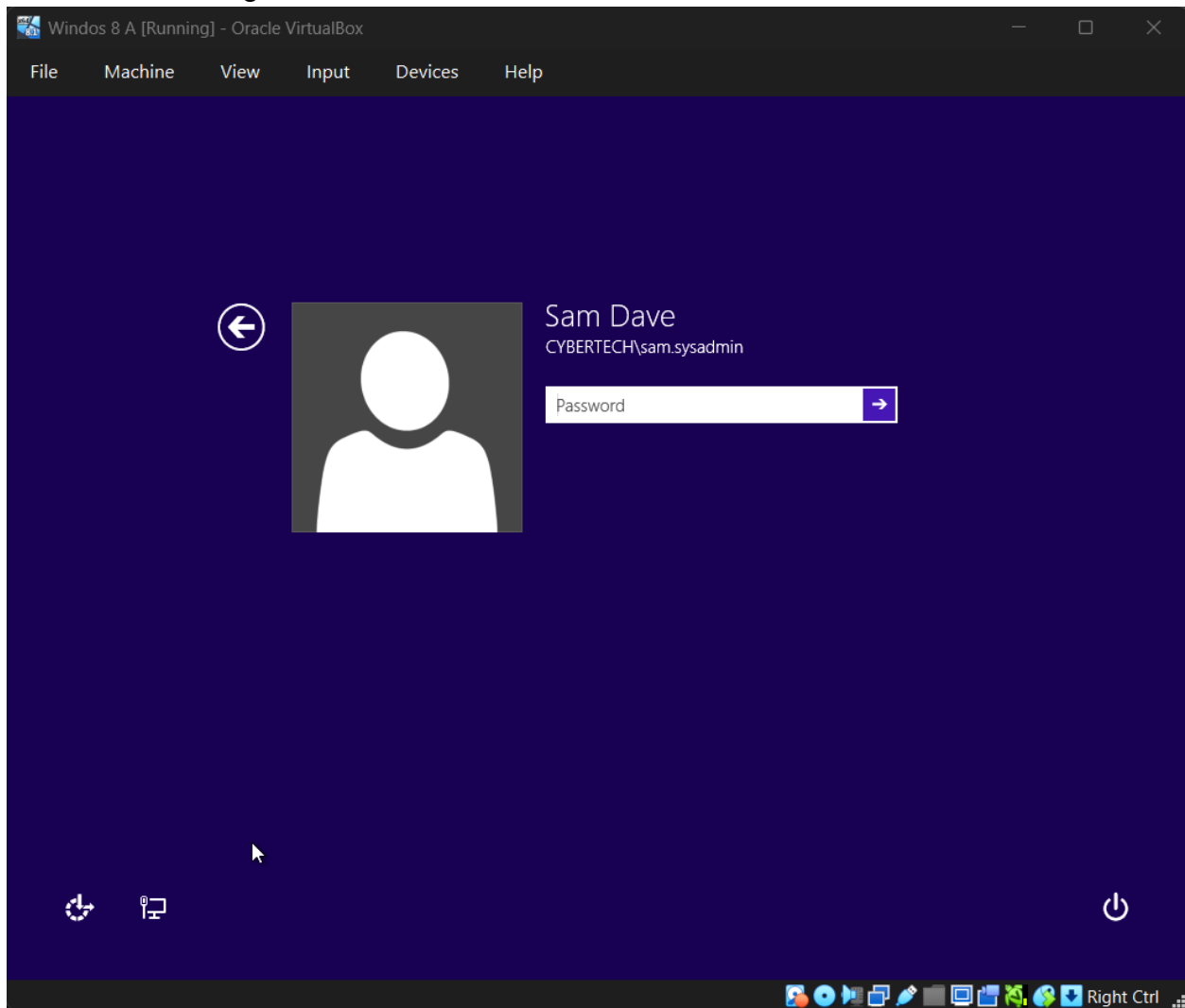
Creating organization unit, groups, users and roles.



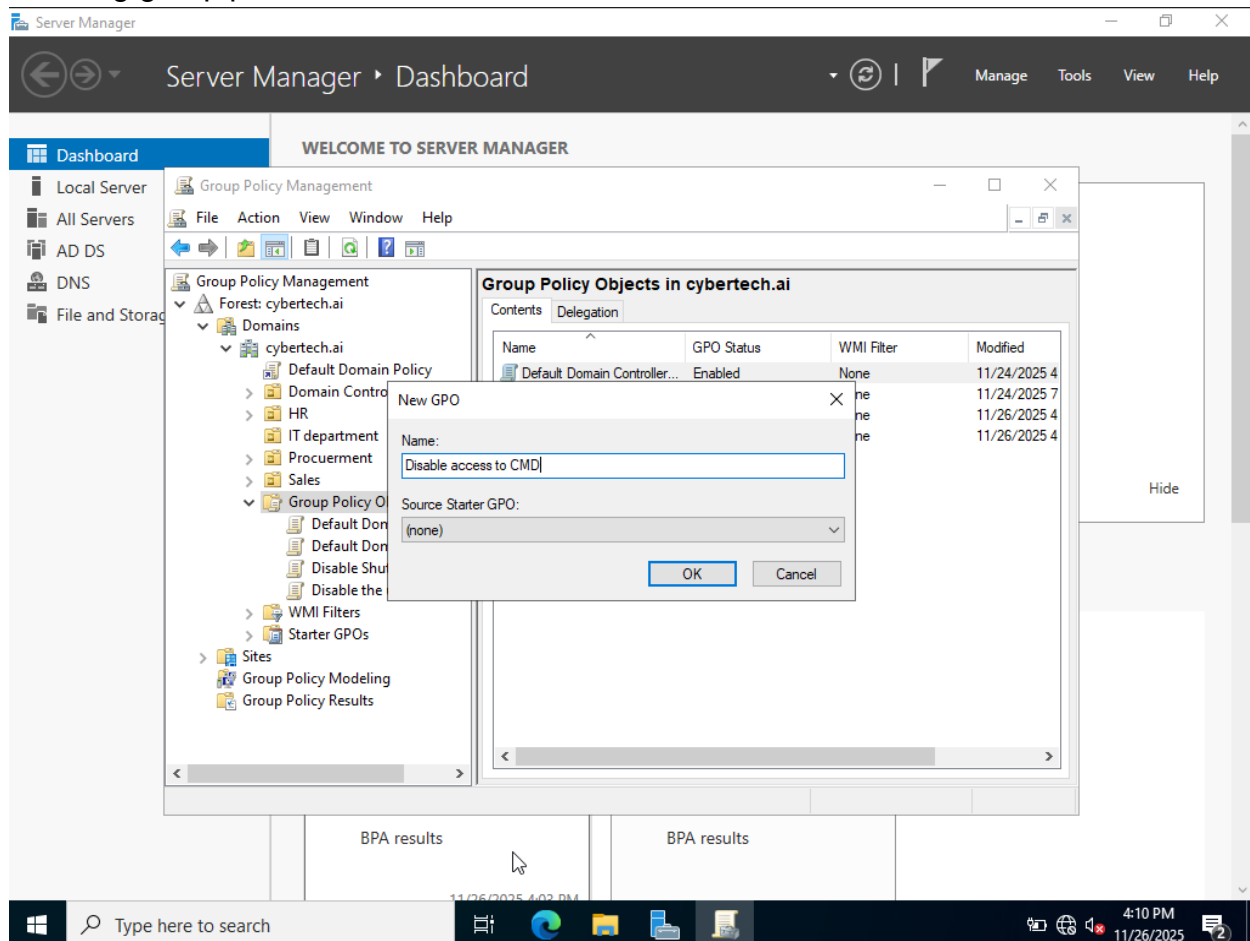
Confirming IP for windows 8 A



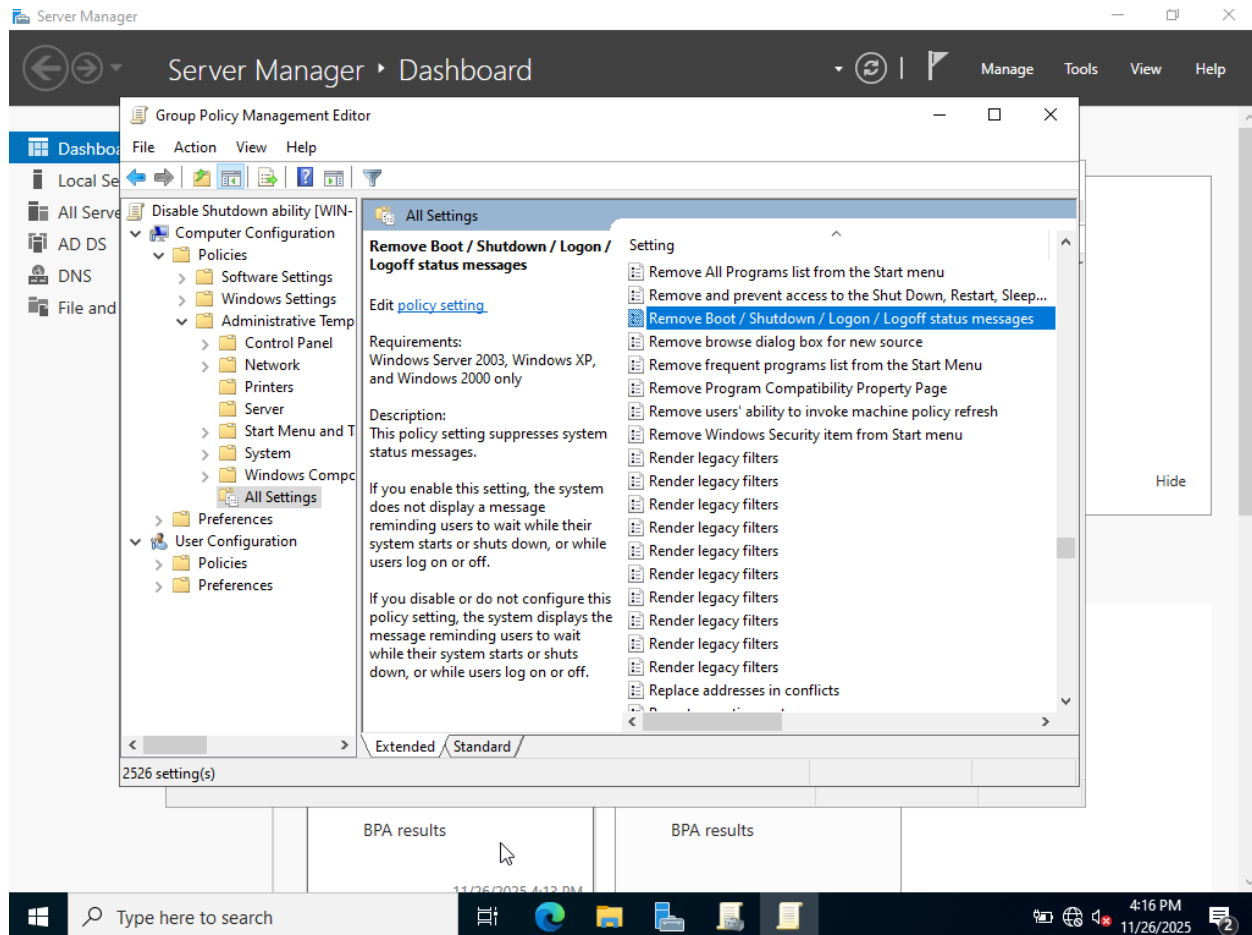
Windows 8 A assigned to User Sam



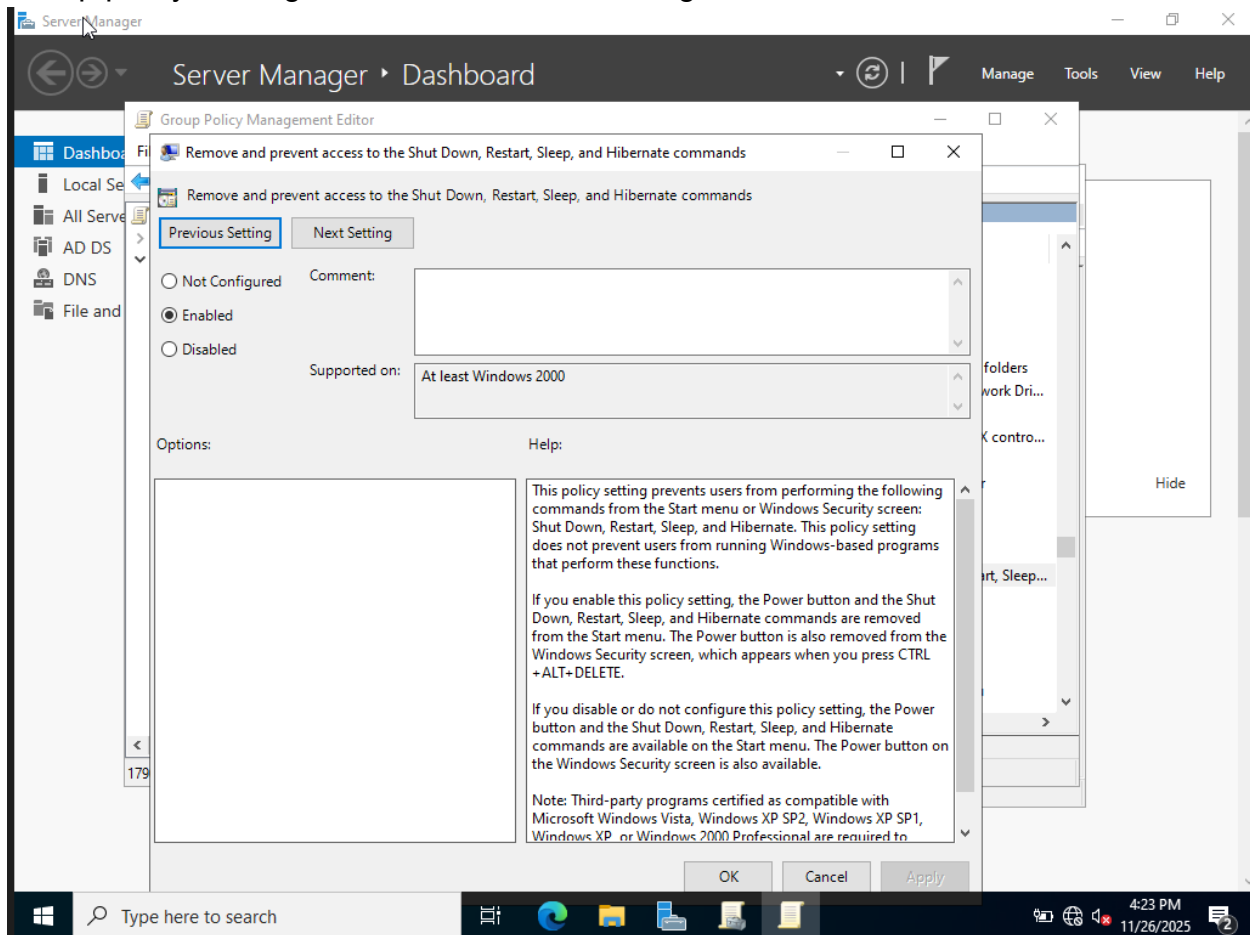
Creating group policies in AD – Disable access to CMD



Group policy management editor on Computer configuration



Group policy management editor on User configuration



Group policy management details

The screenshot displays the Windows Server Manager interface. The left-hand navigation pane shows the hierarchy: **Local Server** > **All Servers** > **AD DS** > **DNS** > **File and Storage**. The main area is titled **WELCOME TO SERVER MANAGER** and contains a **Group Policy Management** window. This window shows the **Forest: cybertech.ai** tree with the **Domains** folder expanded, and the **cybertech.ai** domain selected. The **Group Policy Objects** folder is also expanded, showing the **Disable Shutdown ability** GPO. The right-hand pane displays the details of this GPO, including the **General** tab and a table of properties.

Disable Shutdown ability
Data collected on: 11/26/2025 4:25:33 PM

General

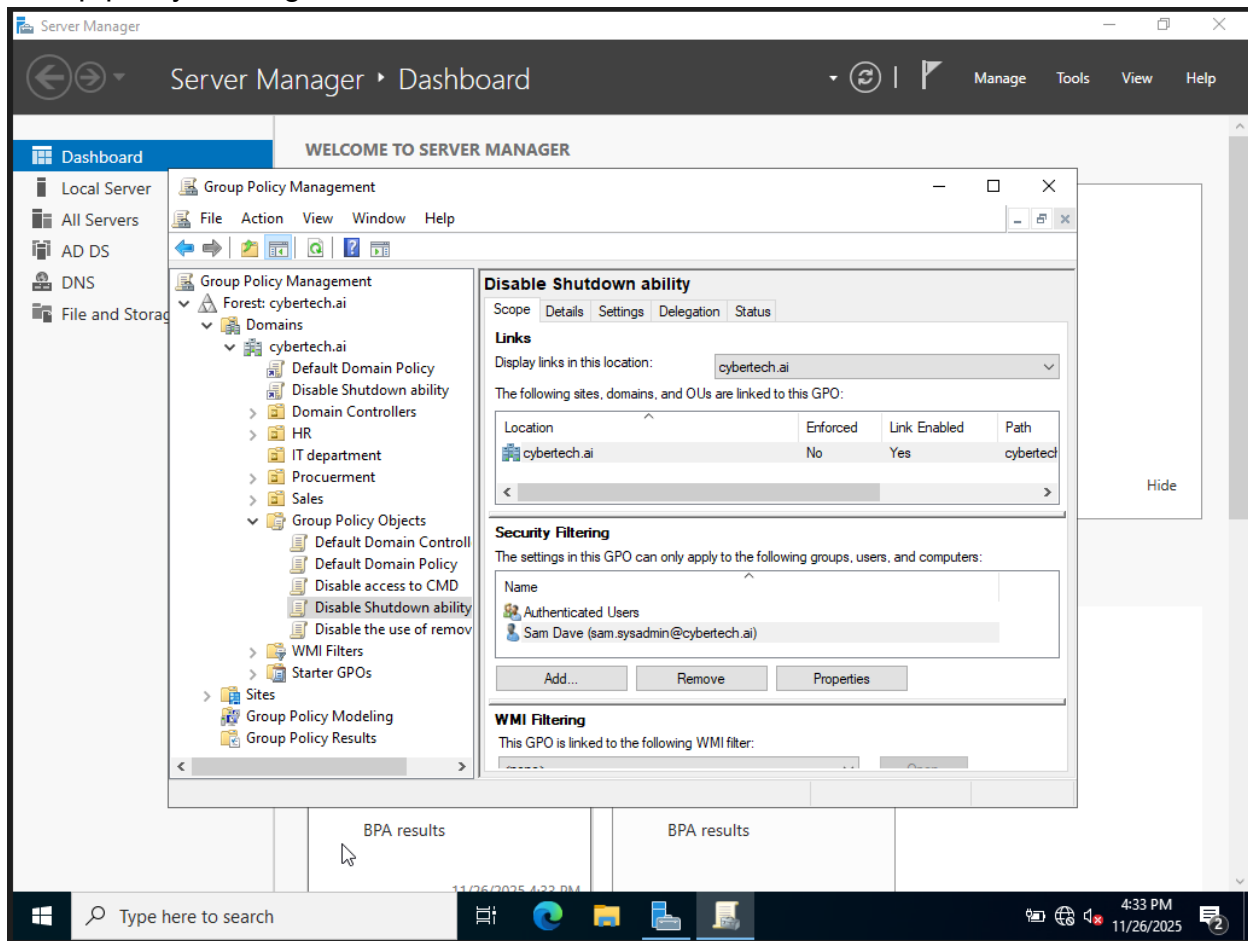
Details

Domain	cybertech.ai
Owner	CYBERTECH\Domain Admins
Created	11/26/2025 4:09:26 PM
Modified	11/26/2025 4:23:10 PM
User Revisions	1 (AD), 1 (SYSVOL)
Computer Revisions	1 (AD), 1 (SYSVOL)
Unique ID	{D3C79E69-B046-4120-A340-AD5781C40628}
GPO Status	Enabled

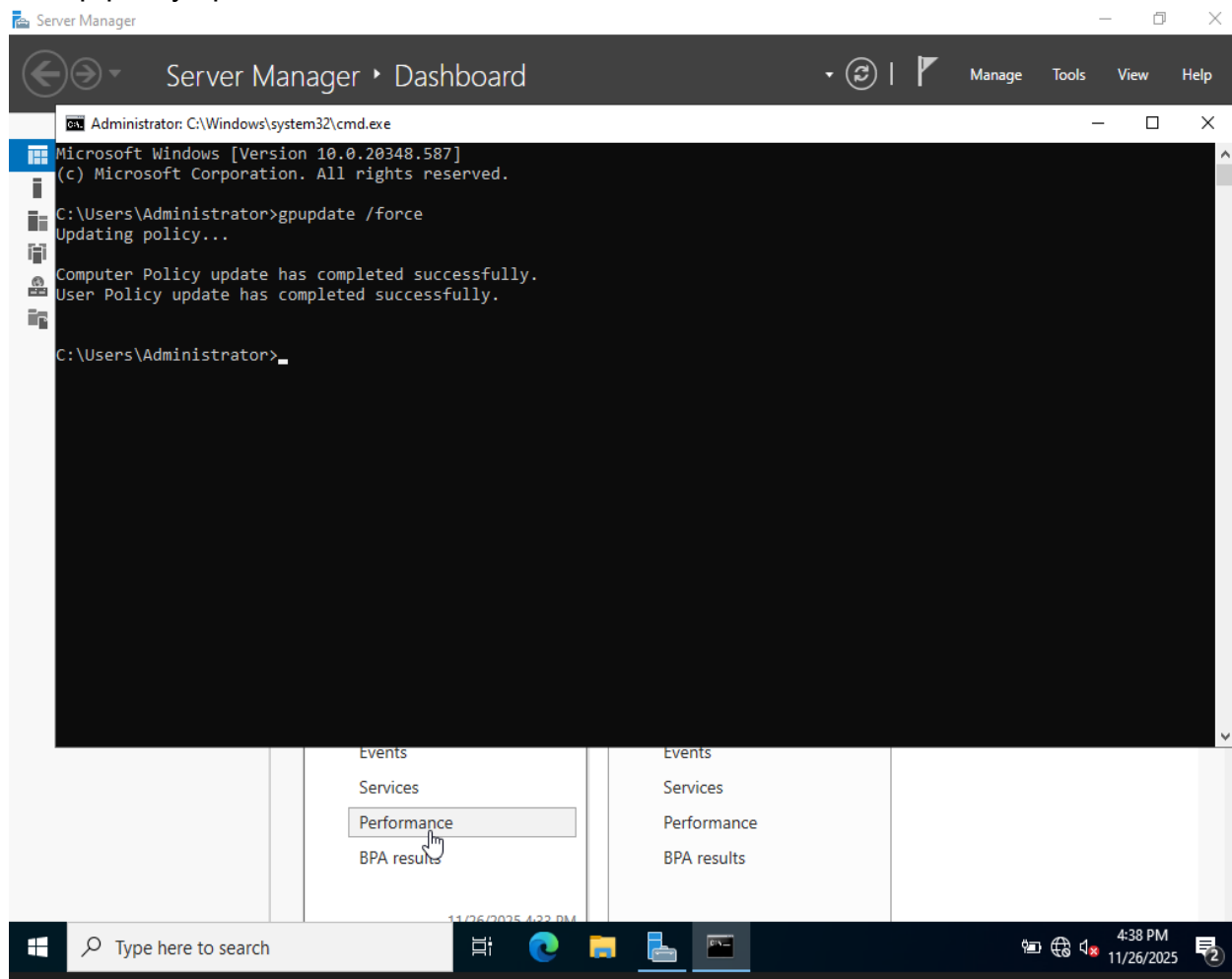
Links

The bottom of the window shows two **BPA results** sections. The taskbar at the bottom includes the Windows logo, a search bar, and several application icons. The system clock shows 4:26 PM on 11/26/2025.

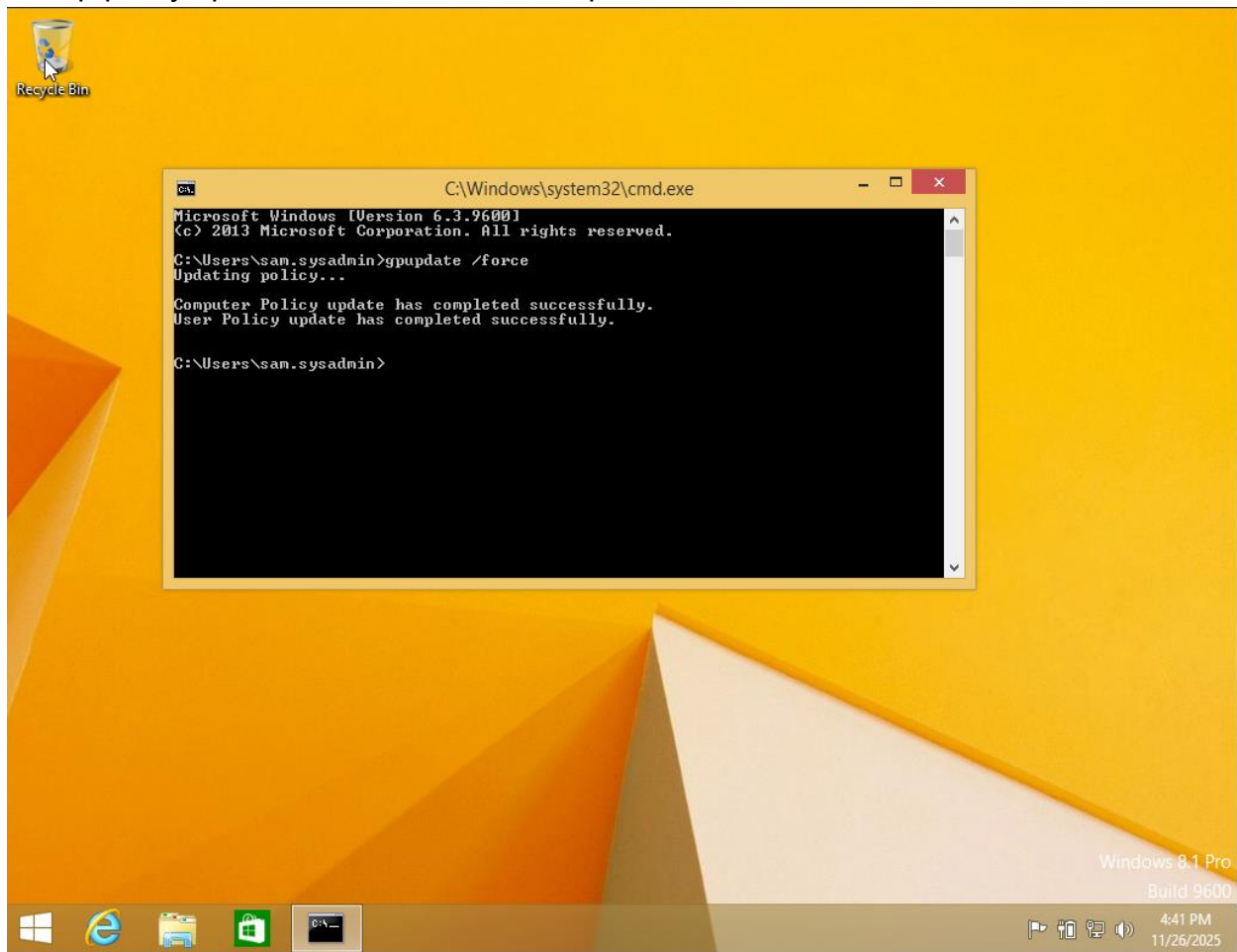
Group policy management attached to a user in OU



Group policy update on Sever in CMD



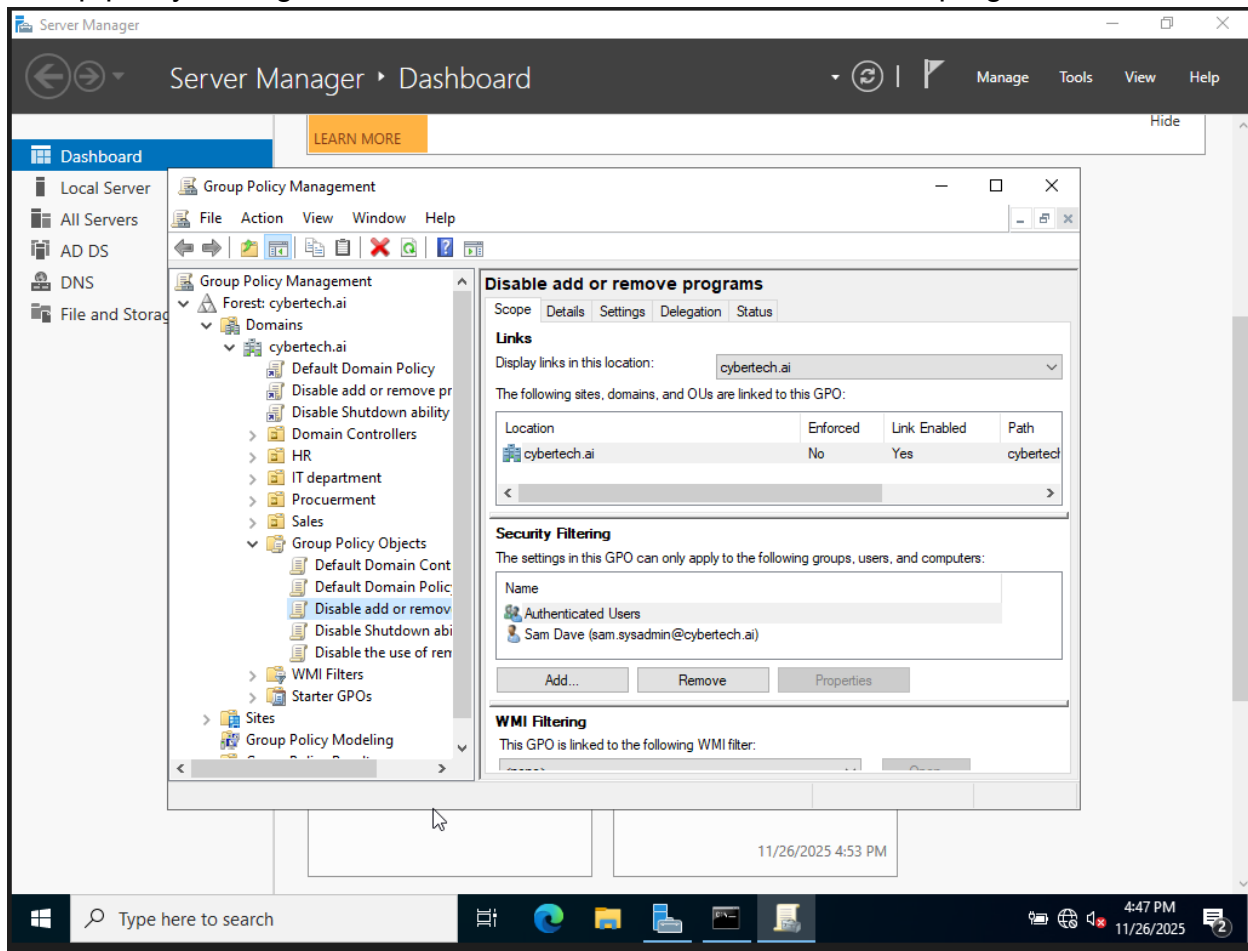
Group policy update on Win 8 A user computer



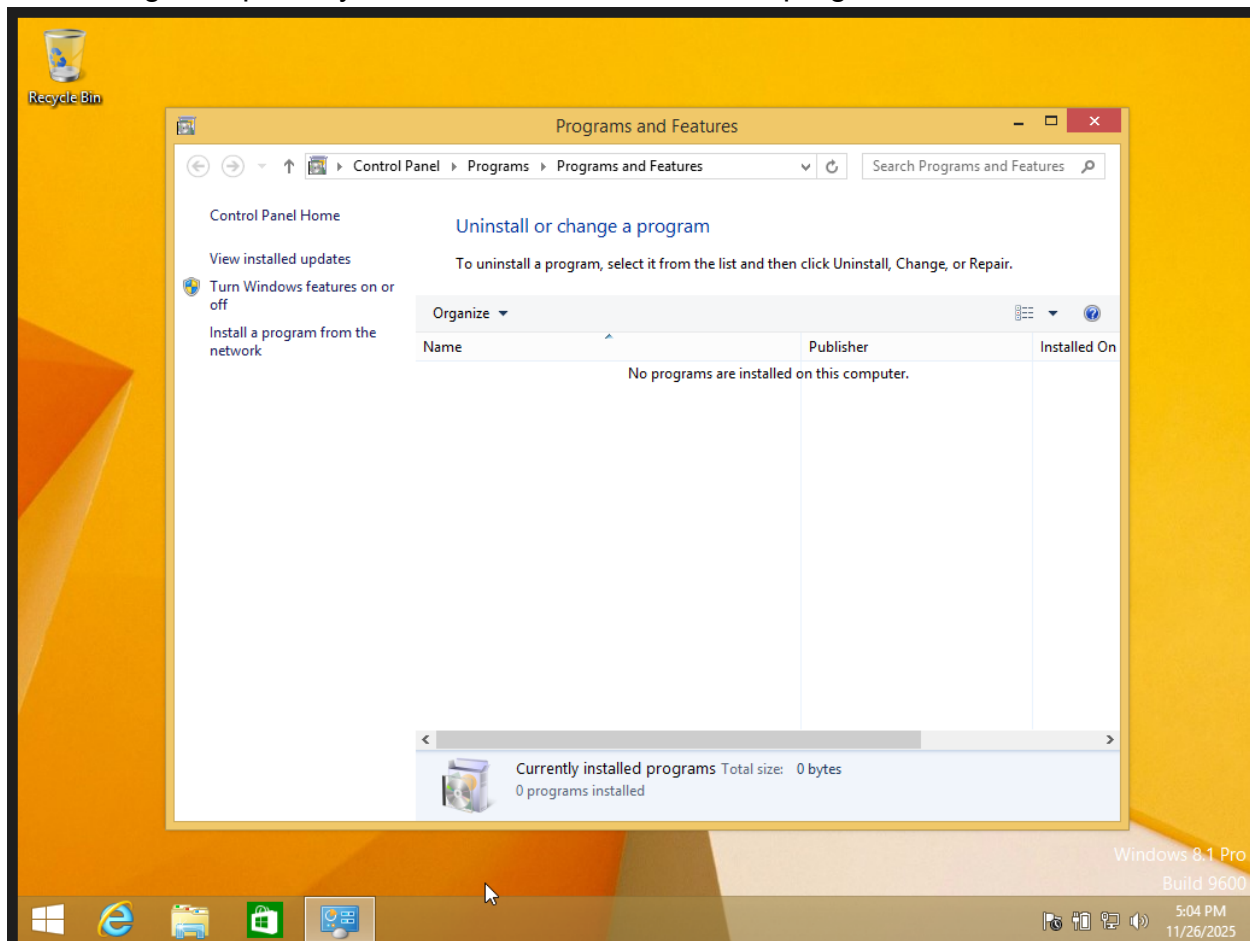
Confirming the Group Policy is effective



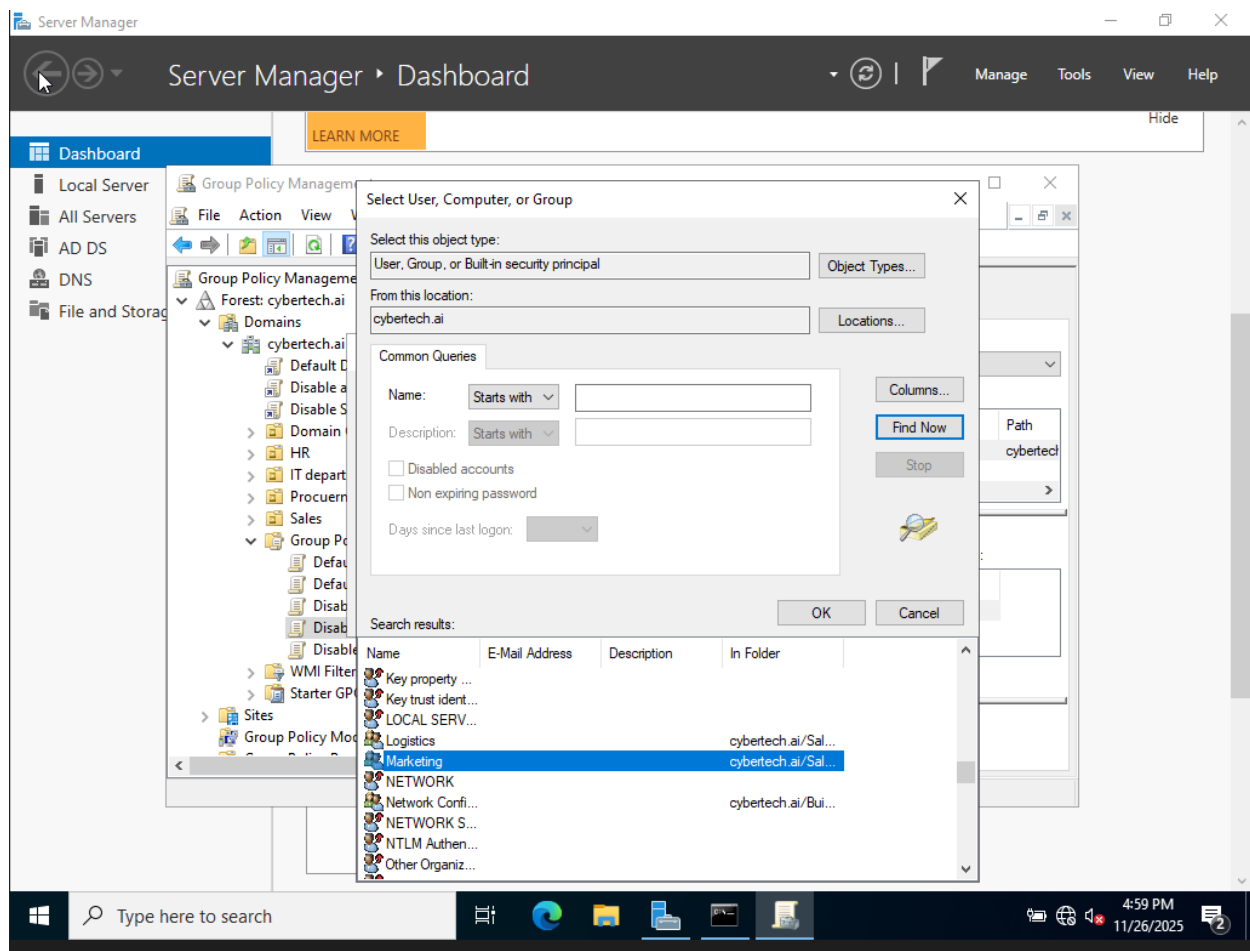
Group policy management is attached to a user to add or remove programs



Confirming Group Policy is effective for add or remove program



Group Policy Management for marketing department



Group Policy Management for marketing2

The screenshot displays the Windows Server Manager interface with the Group Policy Management console open. The left-hand navigation pane shows the hierarchy: Local Server > All Servers > AD DS > Forest: cybertech.ai > Domains > cybertech.ai > Group Policy Objects > Disable Shutdown ability. The main pane shows the configuration for the 'Disable Shutdown ability' GPO, with tabs for Scope, Details, Settings, Delegation, and Status. The 'Details' tab is active, showing the 'Links' section where the GPO is linked to 'cybertech.ai'. Below this, a table lists the linked sites, domains, and OUs. The 'Security Filtering' section shows that the GPO applies to 'Authenticated Users', 'Marketing (CYBERTECH\Marketing)', and 'Sam Dave (sam.sysadmin@cybertech.ai)'. The 'WMI Filtering' section shows that the GPO is linked to the '<none>' WMI filter.

Server Manager Dashboard

Group Policy Management

File Action View Window Help

Group Policy Management

Forest: cybertech.ai

Domains

cybertech.ai

Default Domain Policy

Disable add or remove programs

Disable Shutdown ability

Domain Controllers

HR

IT department

Procurement

Sales

Group Policy Objects

Default Domain Controller

Default Domain Policy

Disable add or remove programs

Disable Shutdown ability

Disable the use of removable storage

WMI Filters

Starter GPOs

Sites

Group Policy Modeling

Group Policy Results

Disable Shutdown ability

Scope Details Settings Delegation Status

Links

Display links in this location: cybertech.ai

The following sites, domains, and OUs are linked to this GPO:

Location	Enforced	Link Enabled	Path
cybertech.ai	No	Yes	cybertech

Security Filtering

The settings in this GPO can only apply to the following groups, users, and computers:

Name
Authenticated Users
Marketing (CYBERTECH\Marketing)
Sam Dave (sam.sysadmin@cybertech.ai)

Add... Remove Properties

WMI Filtering

This GPO is linked to the following WMI filter:

<none> Open

11/26/2025 4:58 PM

11/26/2025 4:58 PM

Type here to search

5:01 PM 11/26/2025

Group Policy update for policy

