

Identity and Access Management (IAM) Project
Active Directory (On-Premises) Deployment For
Bammycybertech Solutions

**Implementation of On-Premises Active Directory for Centralized Identity and Access
Management**

Organisation: Bammycybertech

Date: 25 September 2025

Prepared By: Bamidele Olaleke (Cybersecurity Analyst)

1. Project Overview

This project focused on deploying an **on-premises Active Directory Domain Controller** to provide centralized **Identity and Access Management (IAM)** for Bammycybertech Solutions. The implementation included domain setup, client integration, creation of Organizational Units (OUs) aligned to regional offices, security group design, user provisioning, and enforcement of access control policies using Group Policy Objects (GPOs).

2. Company IT Structure

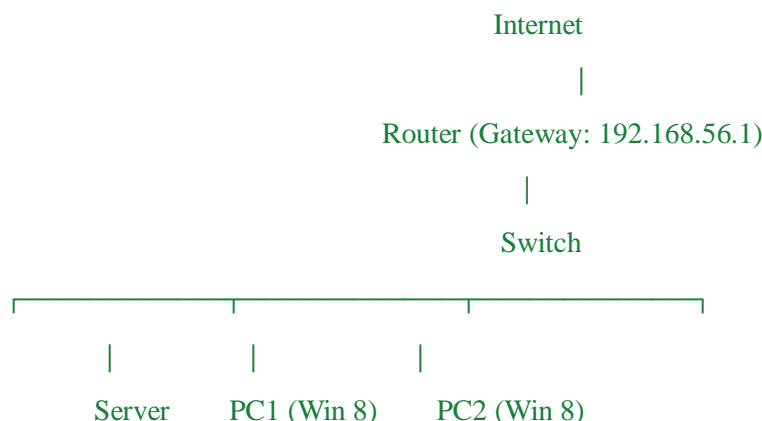
The simulated environment reflected a small IT services firm with distributed offices:

- **1 x Windows Server** – Domain Controller (AD DS + DNS)
- **2 x Client PCs** – Windows 8
- **Three regional OUs** – Ibadan, Canada, and Lagos
- **Departmental Groups** – Created within each OU to represent business functions

3. Project Objectives

- Deploy **Active Directory Domain Services (AD DS)** for centralized IAM.
- Configure regional **Organizational Units (OUs)** to mirror company structure.
- Provision **security groups** to manage access by department.
- Create **user accounts** and assign them to relevant groups.
- Apply **Group Policies** to enforce access restrictions.
- Demonstrate IAM governance in an on-premises enterprise setup.

4. Network Design



Device	IP Address	Role
Windows Server	192.168.18.108	AD Domain Controller (DC)
Windows 8 PC 1	DHCP	Client (Canada OU – IT)
Windows 8 PC 2	DHCP	Client (Lagos OU – Finance)

5. Domain Configuration

- **Domain Name:** bammycybertech.local
- **Server Name:** BAMMYCYBERTECH
- **Static IP:** 192.168.18.108
- **Roles Installed:**
 - Active Directory Domain Services (AD DS)
 - DNS Server

6. Organizational Units (OUs) and Groups

The directory structure was created as follows:

Bammycybertech.local

├─ OU: Lagos

| └─ Group: Finance

| └─ Group: Human Resource

|

├─ OU: Canada

| └─ Group: IT

| └─ Group: Directors

|

└─ OU: Ibadan

└─ Group: Sales

└─ Group: Customer Services

7. Users and Group Memberships

Two test users were provisioned to demonstrate IAM principles:

Username	OU	Group Membership	Assigned Policy
BamiOla.Finance	Lagos OU	Finance	Unable to shutdown
DanBami.hr	Lagos	HR	Disable removable disk access

8. Group Policy (GPO) Implementation

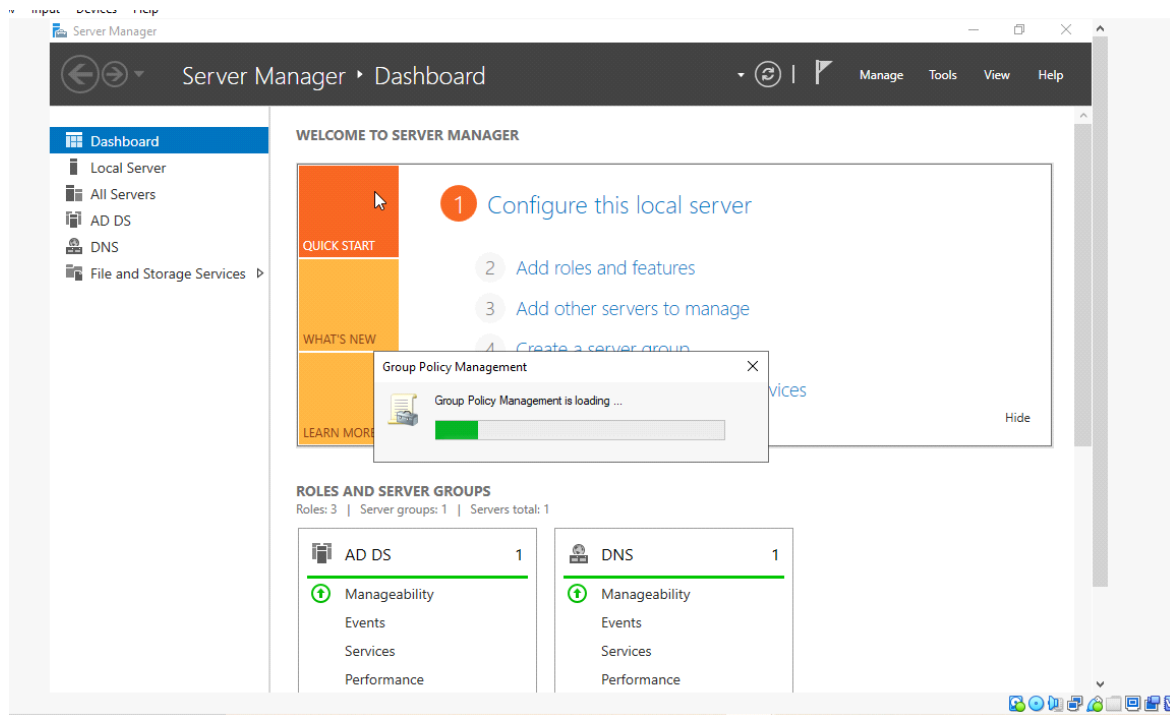
Two GPOs were created and linked to specific users through security filtering:

- **GPO Name:** NoShutdown
 - **Linked To:** Lagos OU (Finance User – BamiOla)
 - **Policy:**
User Configuration → Administrative Templates → Start Menu and Taskbar → Remove and prevent access to the Shut Down, Restart, Sleep, and Hibernate commands
 - **Result:** BamiOla cannot shut down the assigned PC.
- **GPO Name:** DisableRemovableDrives
 - **Linked To:** Lagos OU (HR User – DanBami)
 - **Policy:**
Computer Configuration → Administrative Templates → System → Removable Storage Access → Deny all access
 - **Result:** DanBami cannot use USB or external drives.

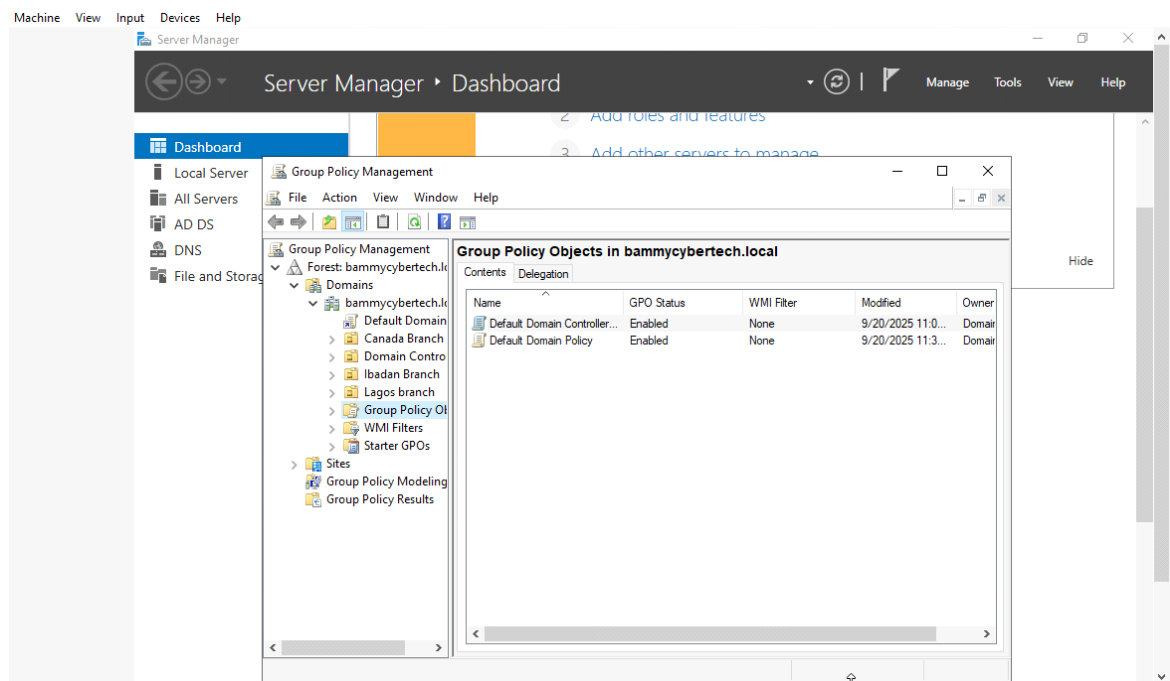
9. Screenshots (Evidence)

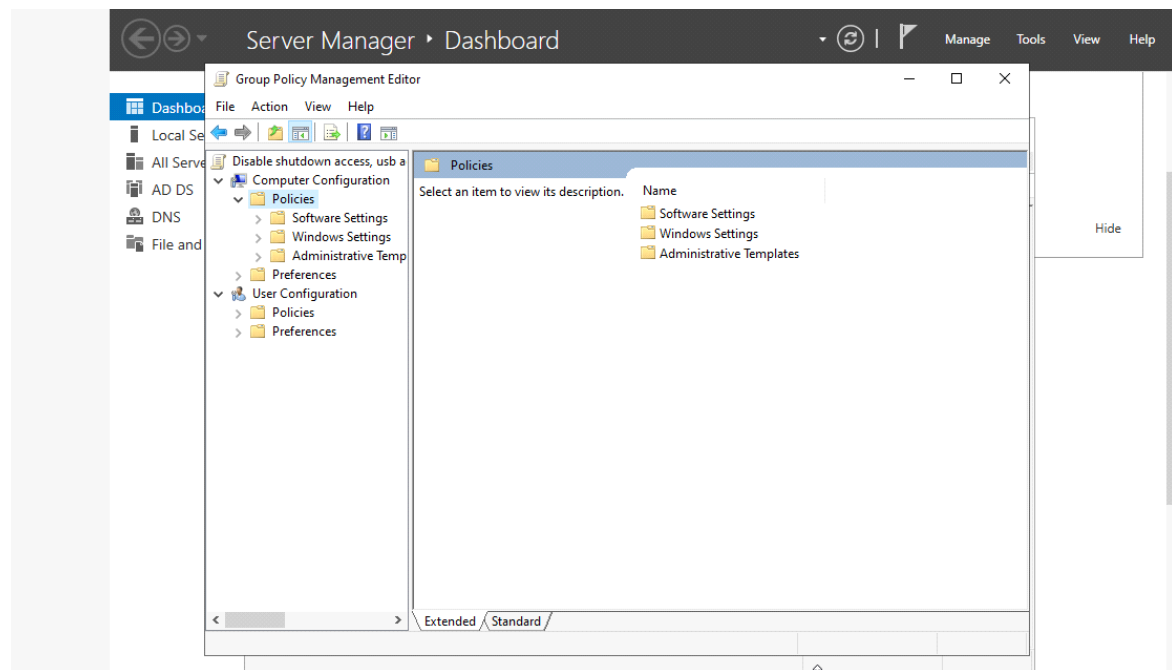
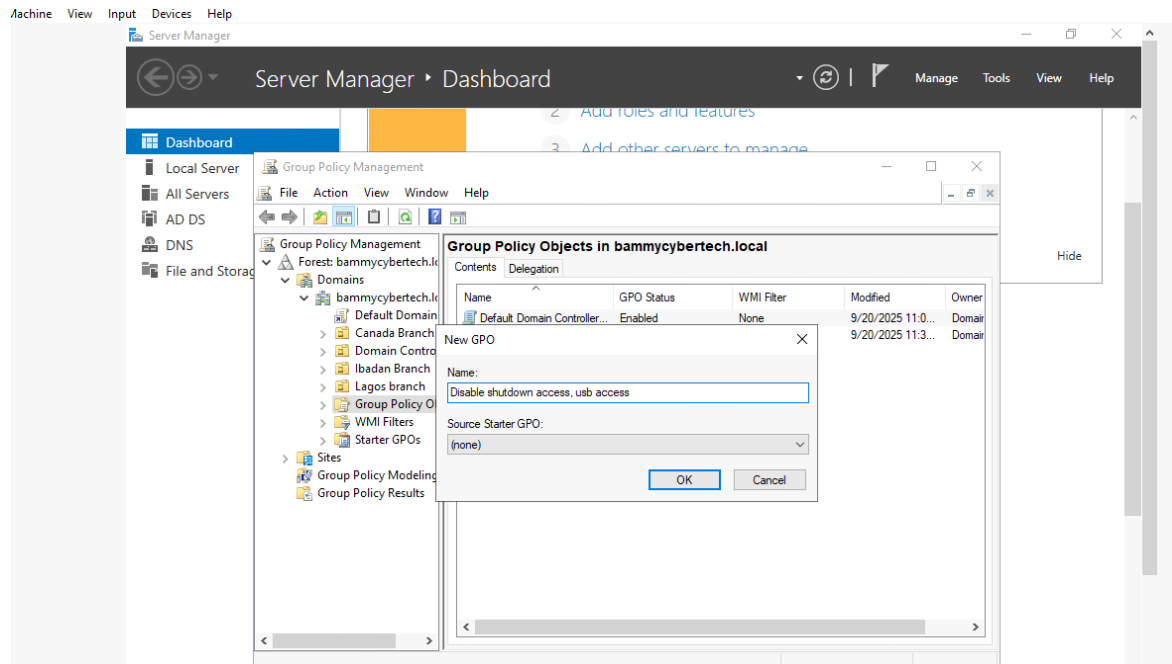
- OU and group structure in ADUC
- GPO editor settings
- User login results showing applied restrictions

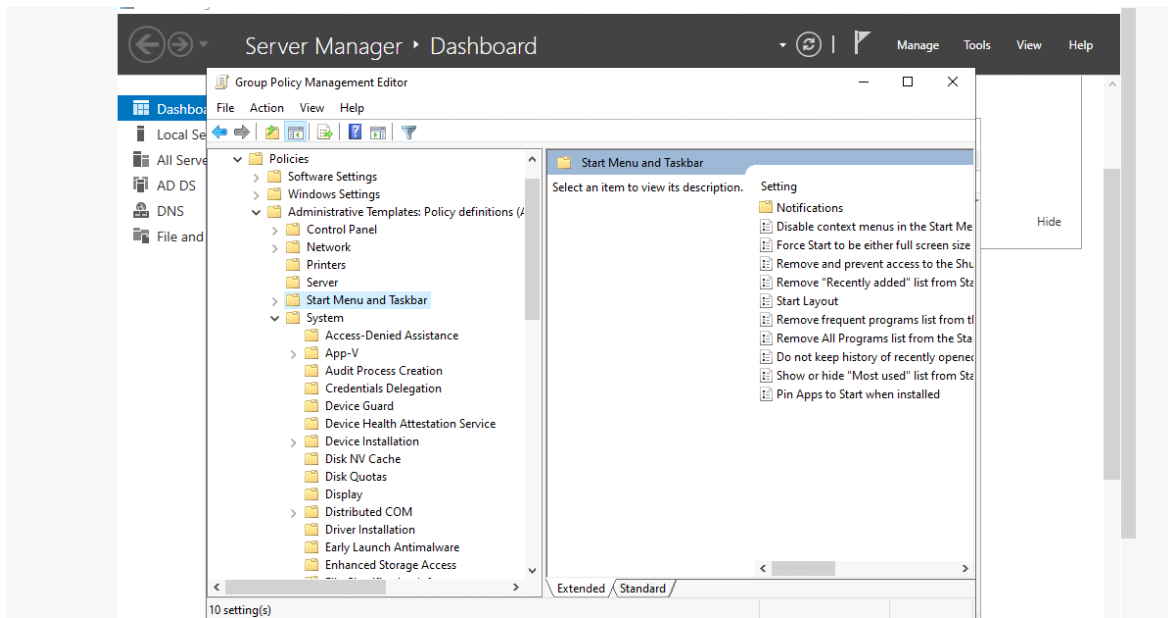
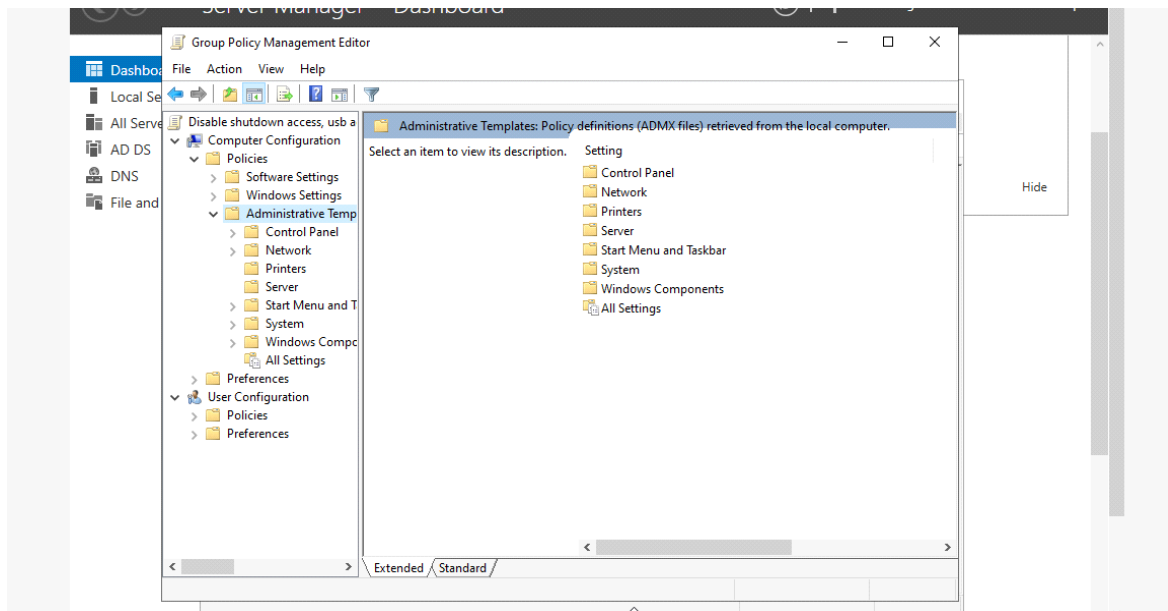
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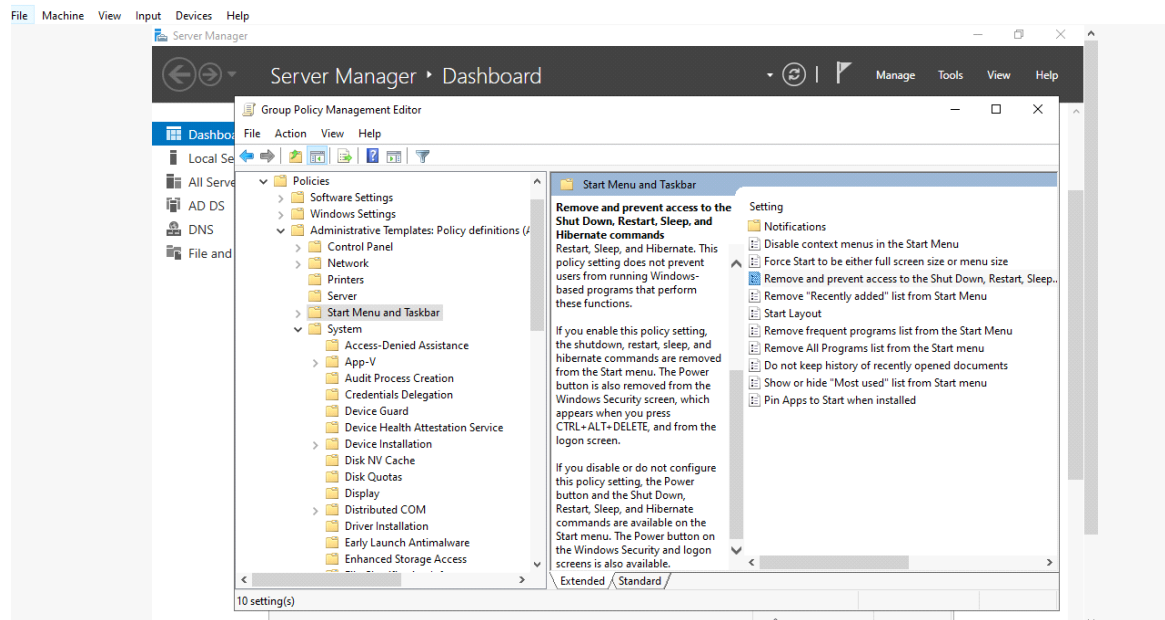


Screenshots stored in project evidence folder)

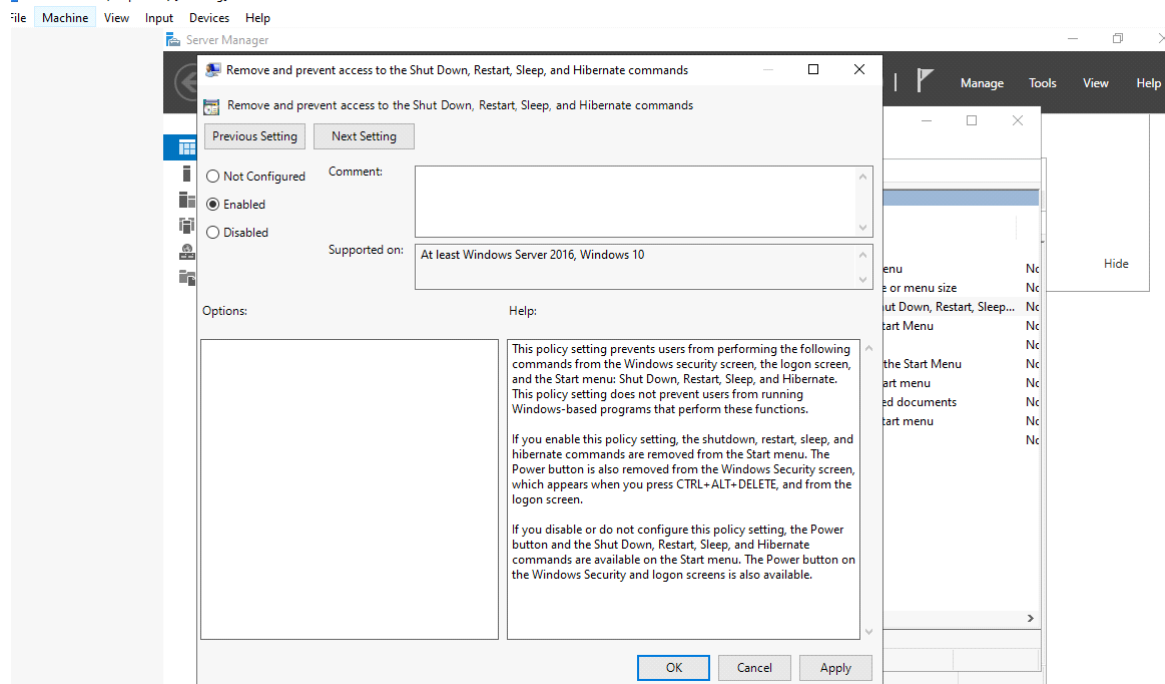


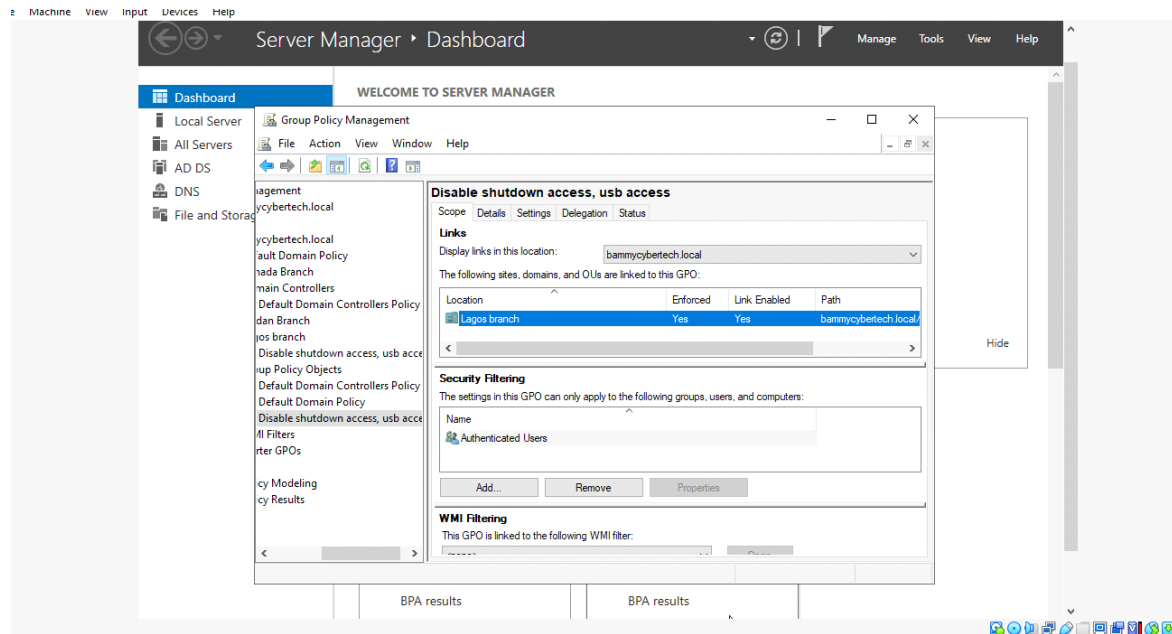




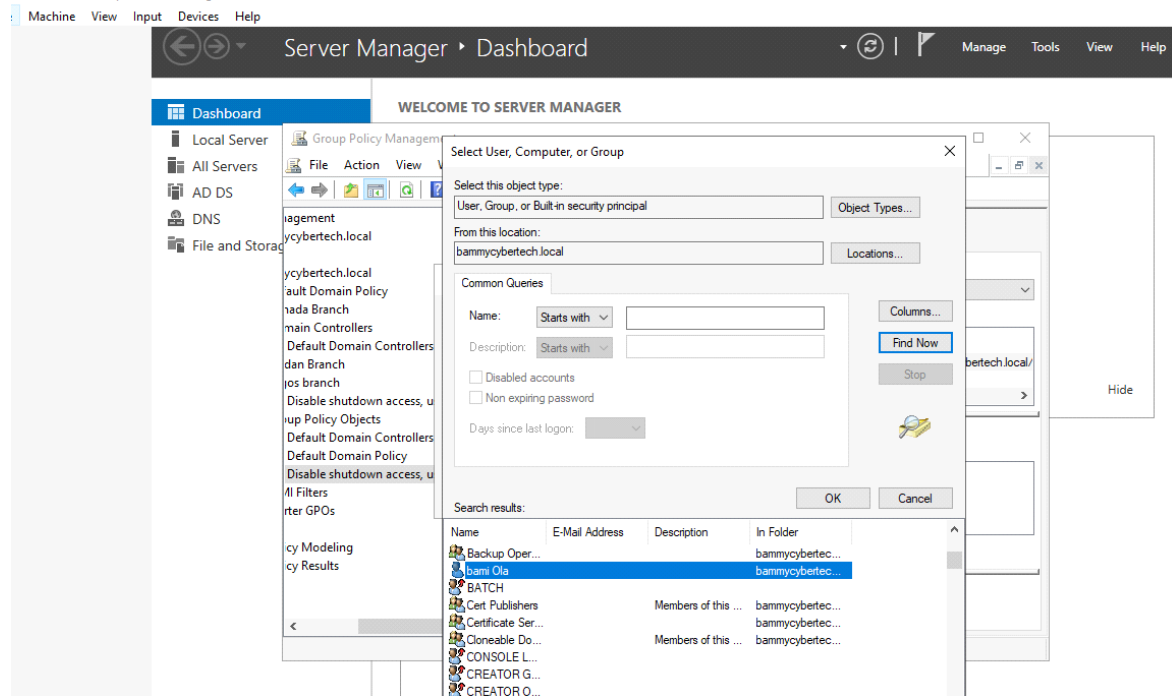


Window Server (Snapshot 2) [Running] - Oracle VirtualBox





Window Server (Snapshot 2) [Running] - Oracle VirtualBox



Dashboard

WELCOME TO SERVER MANAGER

Local Server

All Servers

AD DS

DNS

File and Storage

Group Policy Management

File Action View Window Help

Group Policy Management

Forest: bammycybertech.local

Domains

bammycybertech.local

Default Domain Policy

Canada Branch

Domain Controllers

Default Domain Controllers Policy

Ibadan Branch

Lagos branch

Disable shutdown access, usb access

Group Policy Objects

Default Domain Controllers Policy

Default Domain Policy

Disable shutdown access, usb access

WMI Filters

Starter GPOs

Group Policy Modeling

Group Policy Results

Disable shutdown access, usb access

Scope Details Settings Delegation Status

Links

Display links in this location: bammycybertech.local

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

Location	Enforced	Link Enabled	Path
Lagos branch	Yes	Yes	bammycybertech.local/Lagos branch

Security Filtering

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

Name
Authenticated Users
bami Ola (bamiola.finance@bammycybertech.local)

WMI Filtering

This GPO is linked to the following WMI filter:

BPA results

BPA results

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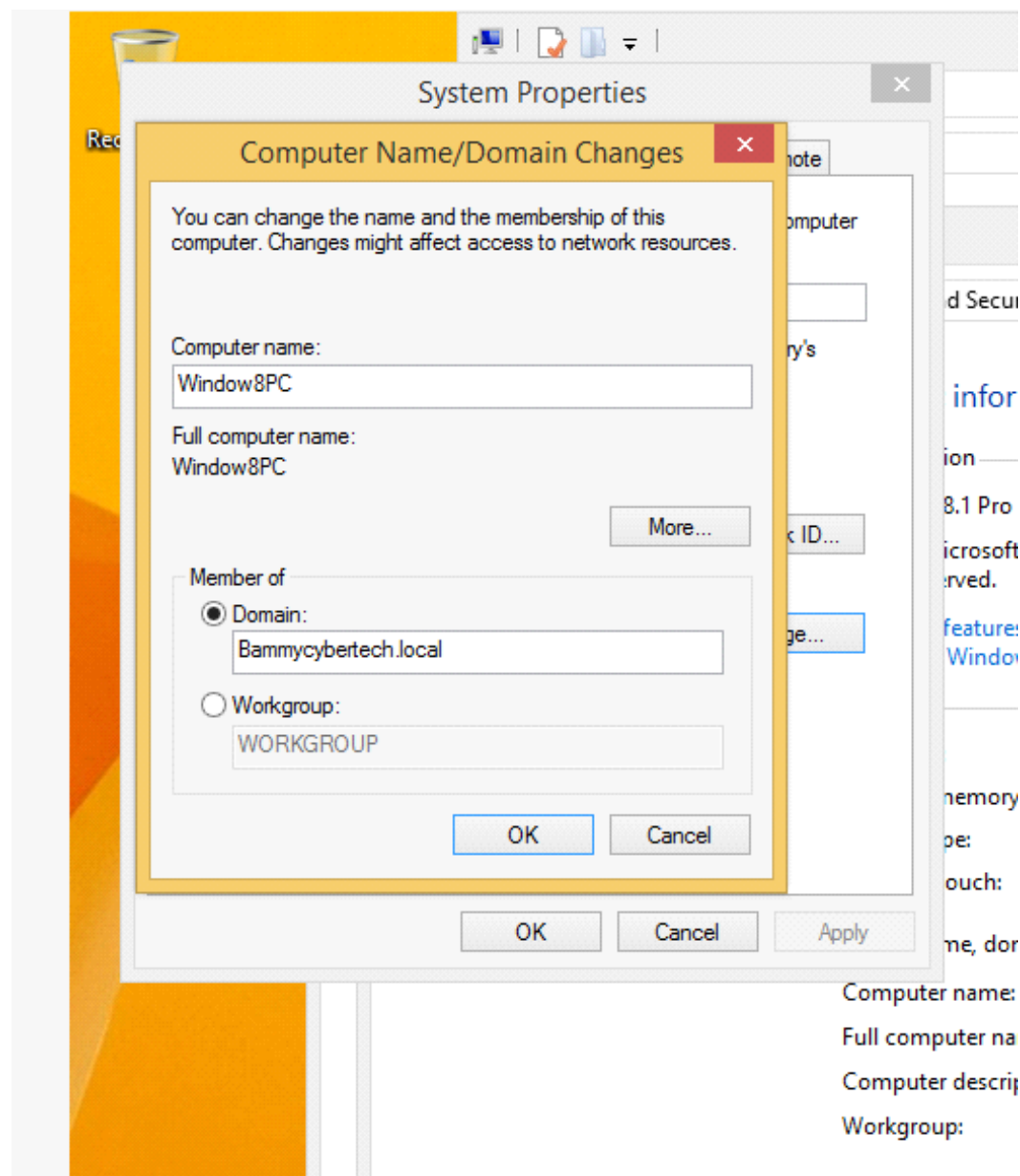
Name
bami Ola (bamiola.finance@bammycybertech.local)
Finance Dept (BAMMYCYBERTECH-Finance Dept)

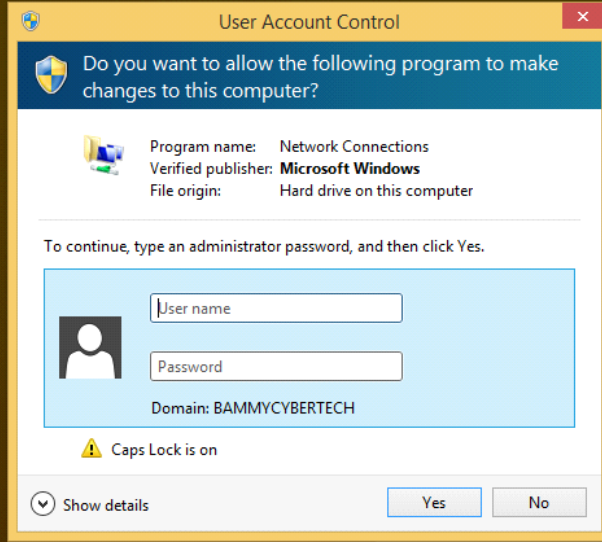
WMI Filtering

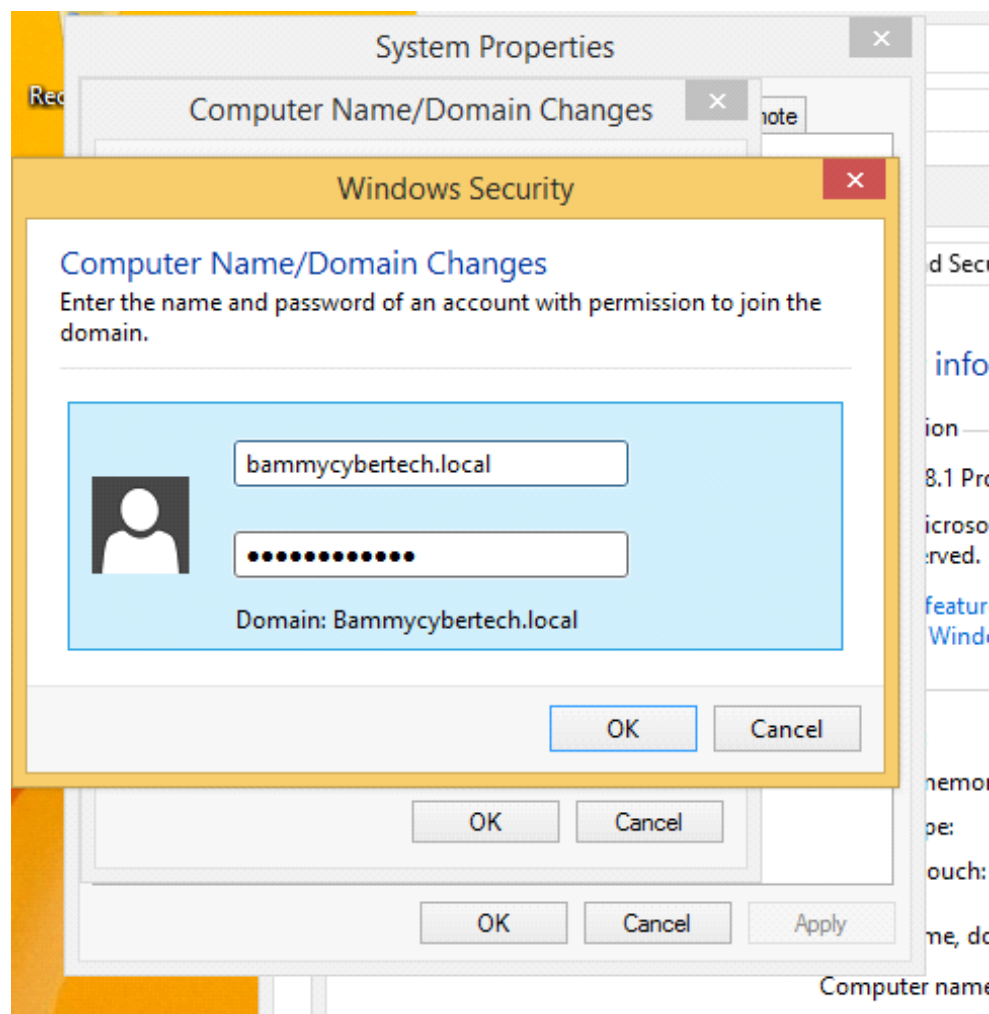
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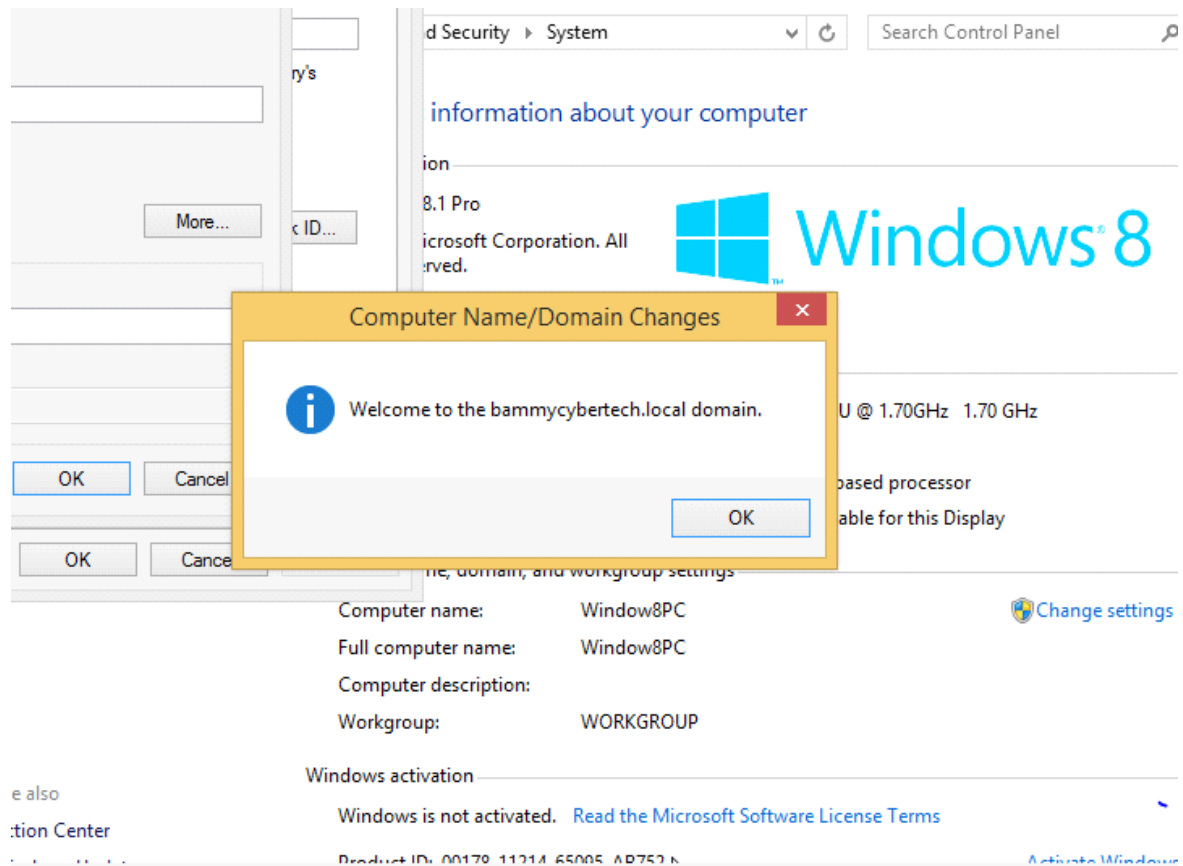
BPA results

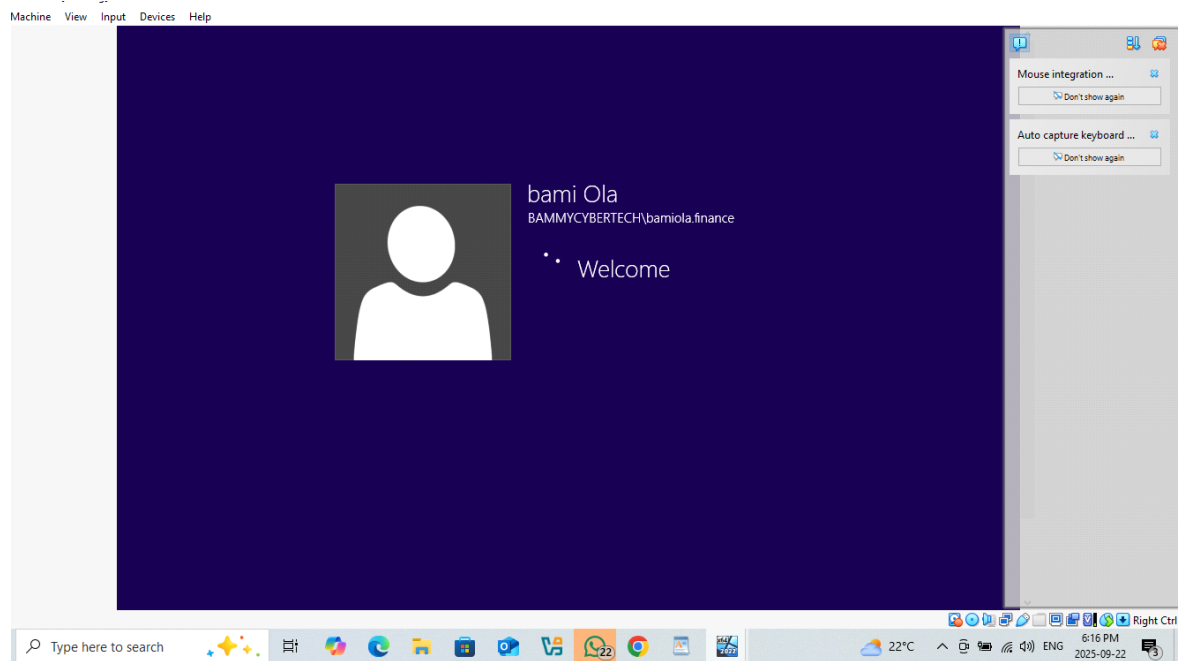
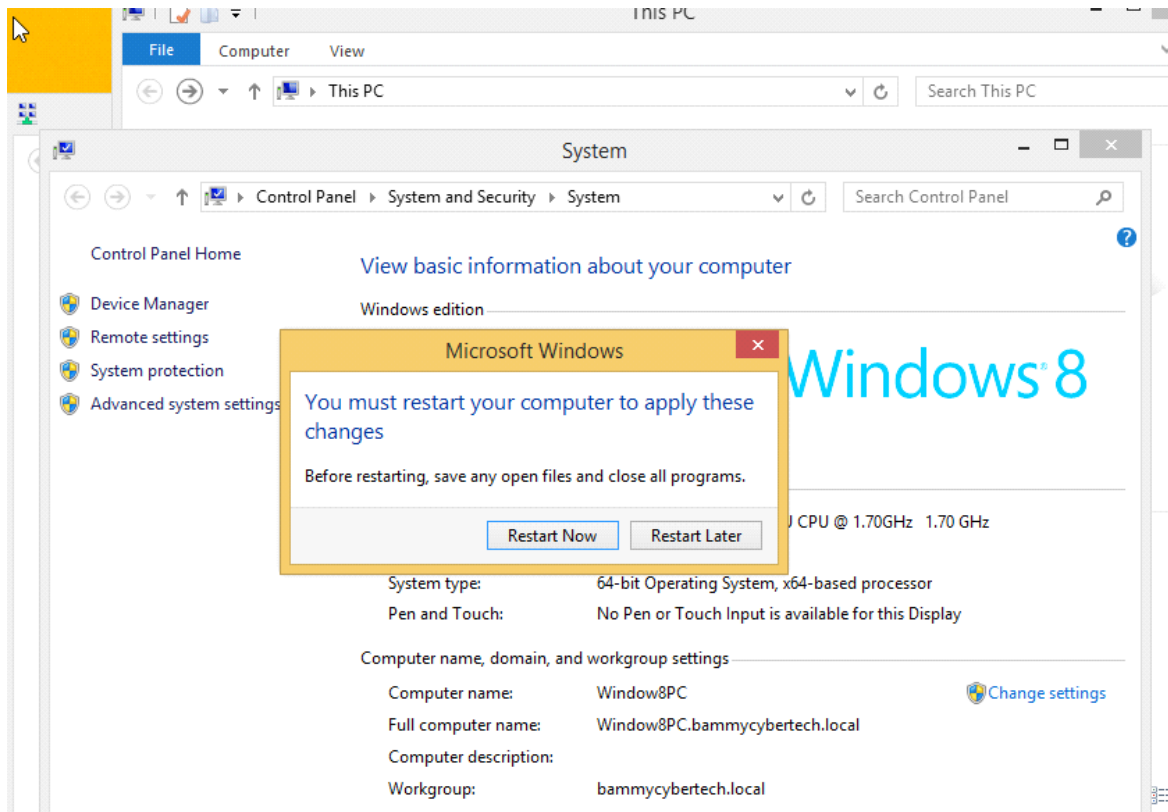
BPA results

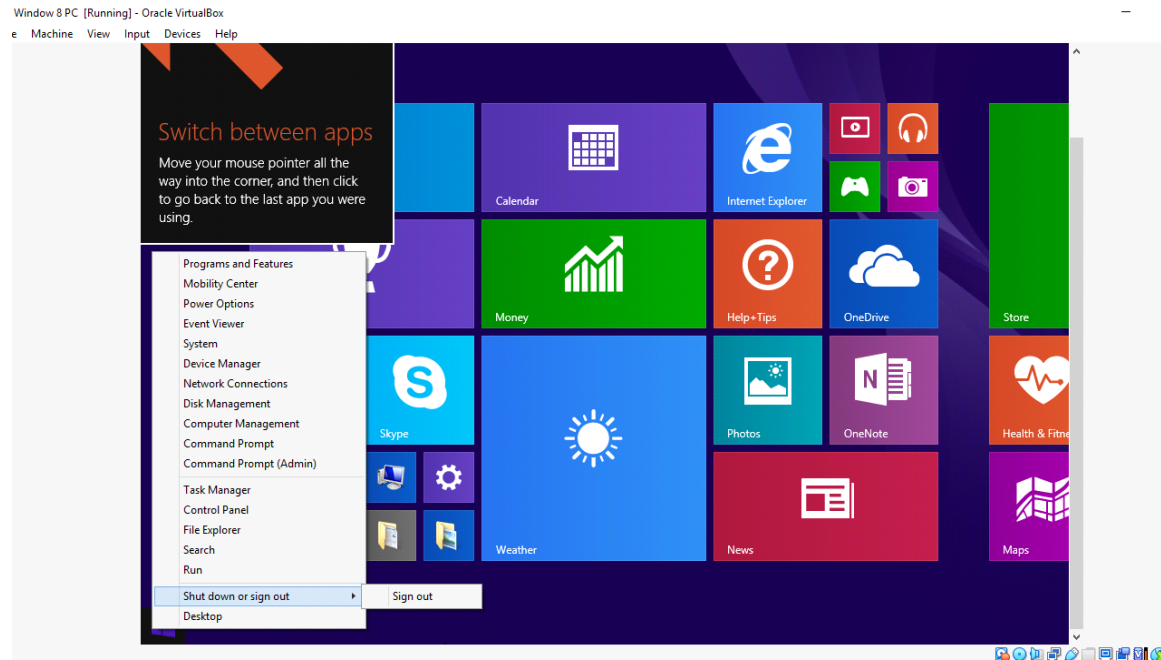












10. Key Takeaways

- Successfully implemented an **IAM framework** on Active Directory.
- Mapped **business structure (regions and departments)** into OUs and groups.
- Demonstrated **access control enforcement** using Group Policy Objects (GPOs).
- Learned how to provision and manage **users, groups, and security policies**.
- Applied **identity governance principles** in a real-world simulated enterprise environment.