

# **Active Directory Domain Services (AD DS)**

## **Project Report**

---



**Submitted To:** Mudassar Hussain

**Name:** Muhammad Usman Shahid **ID:** F2022105038

**Name:** Muhammad Shoaib **ID:** F2022105035

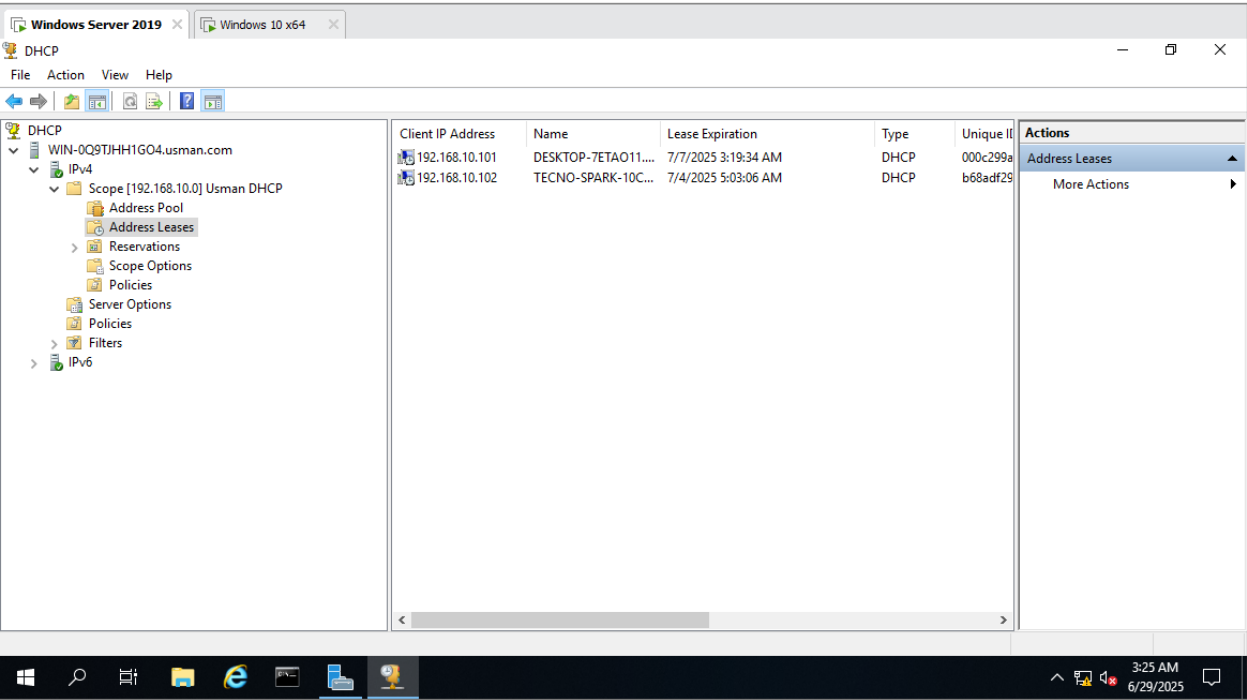
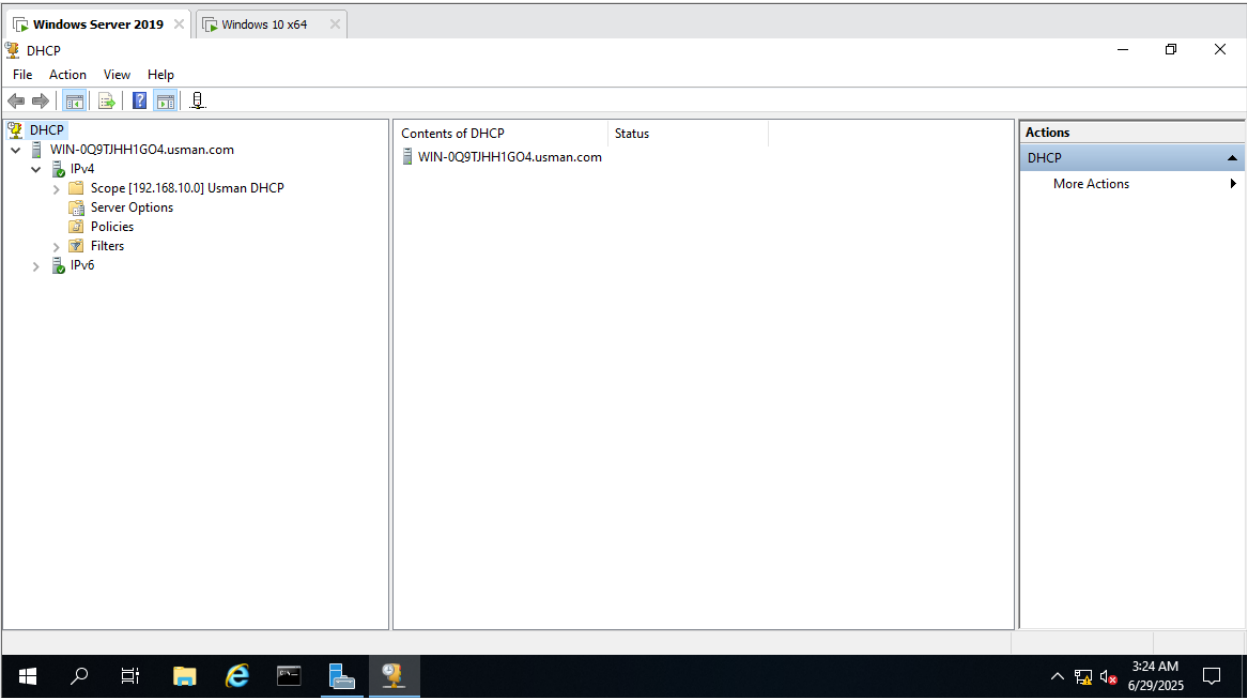
**Section:** Y2

**School of System & Technology**

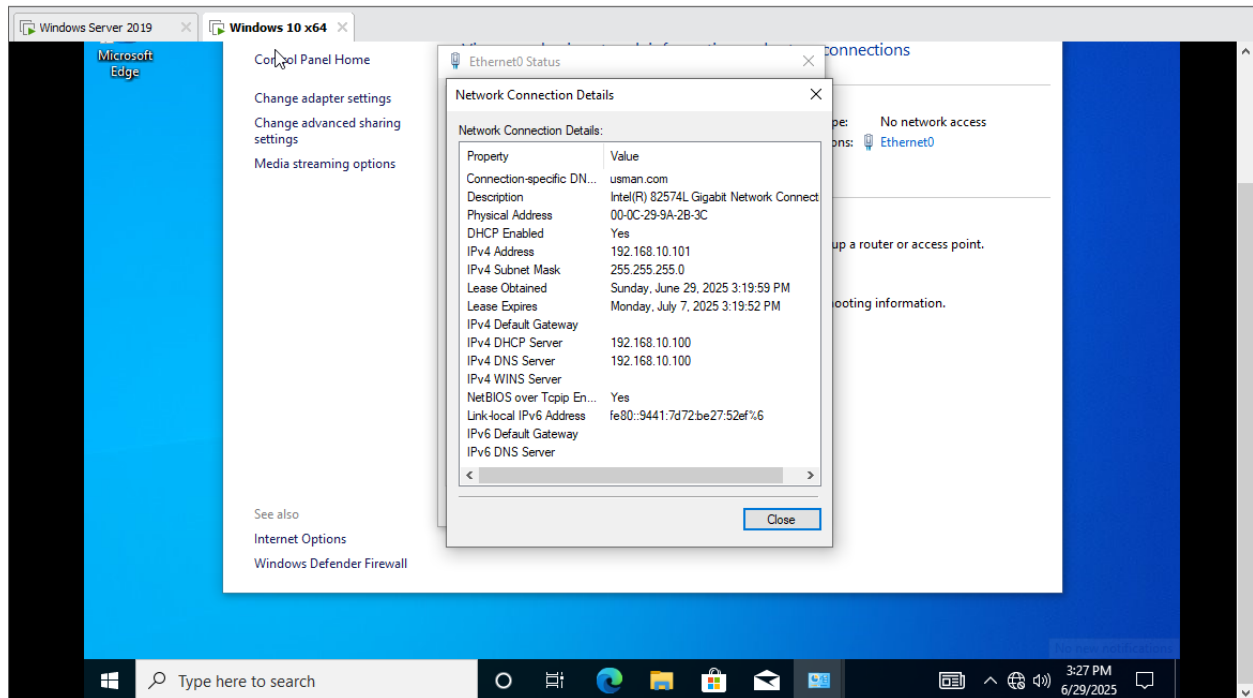
**Department of Informatics & Systems**

**University of Management & Technology Lahore Pakistan**

# Implementation OF DHCP



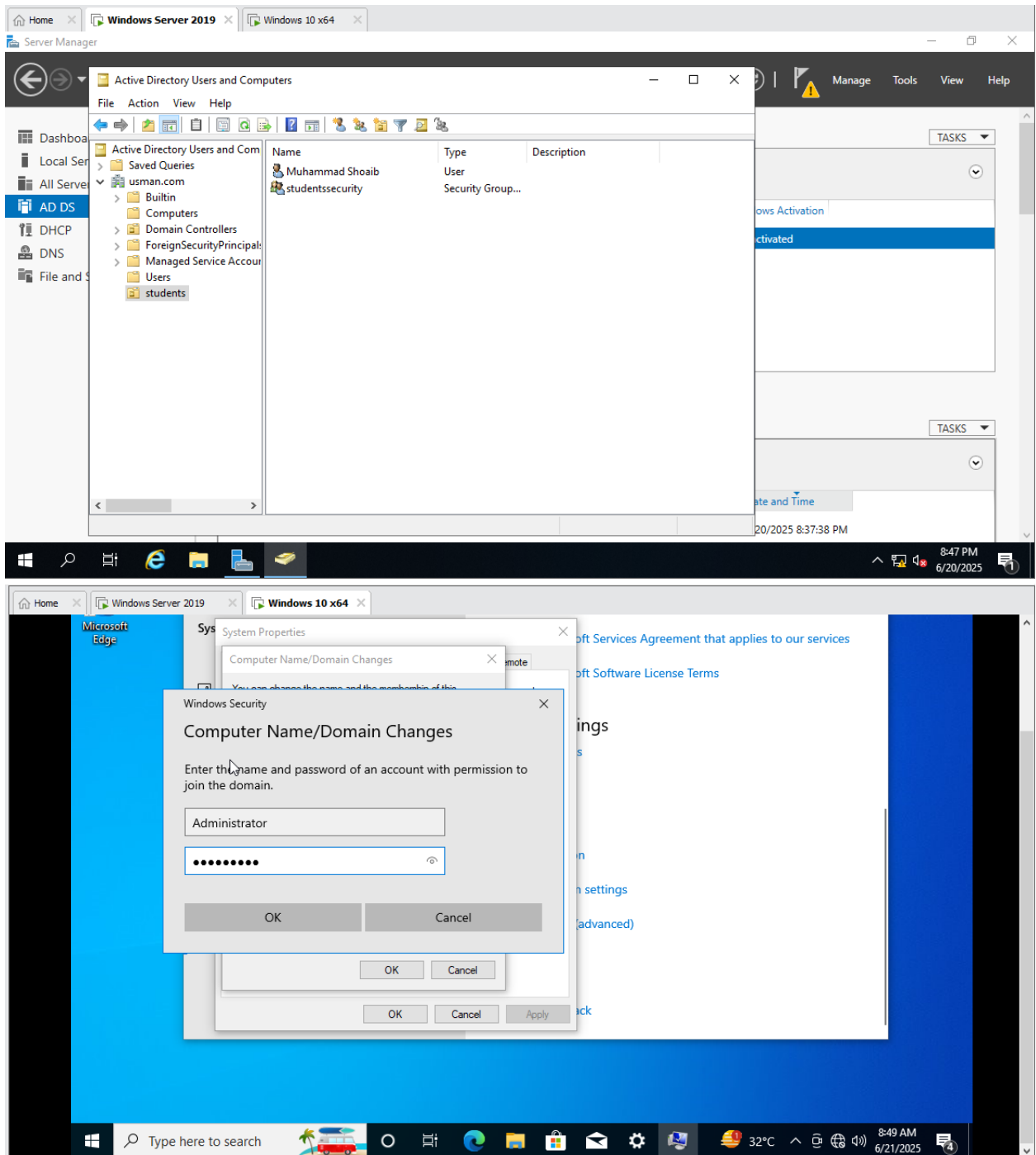
## Testing on Client

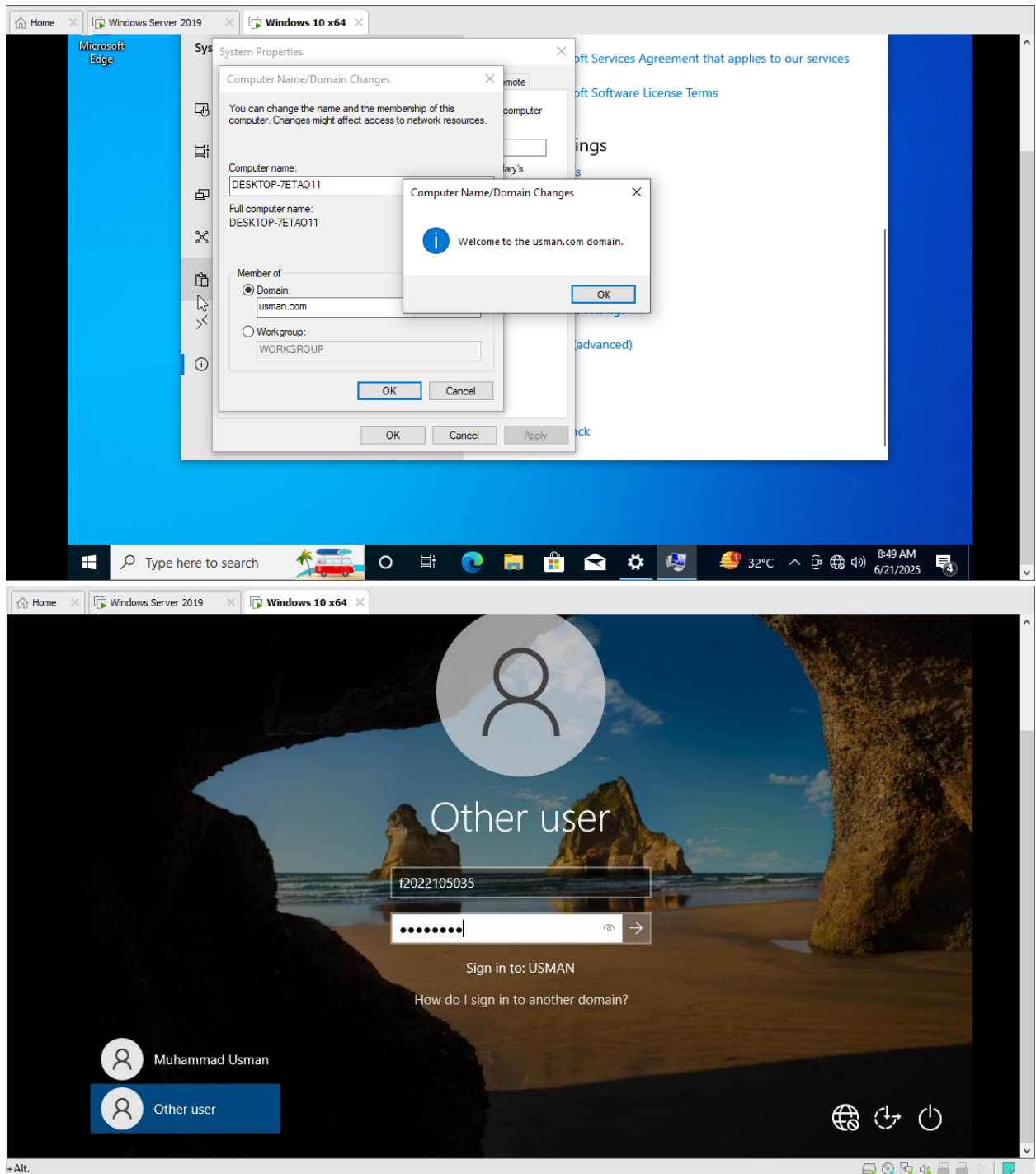


## Windows Server 2019 - Active Directory Domain Services (AD DS)

### Centralized User Management

- **Active Directory Users and Computers (ADUC) Console:**
  - Shows the organizational structure of the domain (usman.com) with containers like **Users**, **Computers**, and **Domain Controllers**.
  - Highlights created user accounts (e.g., Muhammad Shoaib) and security groups (e.g., Students, Staff).
  - **Permissions Tab:** Demonstrates how security groups (e.g., Staff) are assigned permissions (e.g., Full Control, Read) for shared resources.
- **Purpose:**
  - Illustrates centralized user/group creation and role-based access control (RBAC).

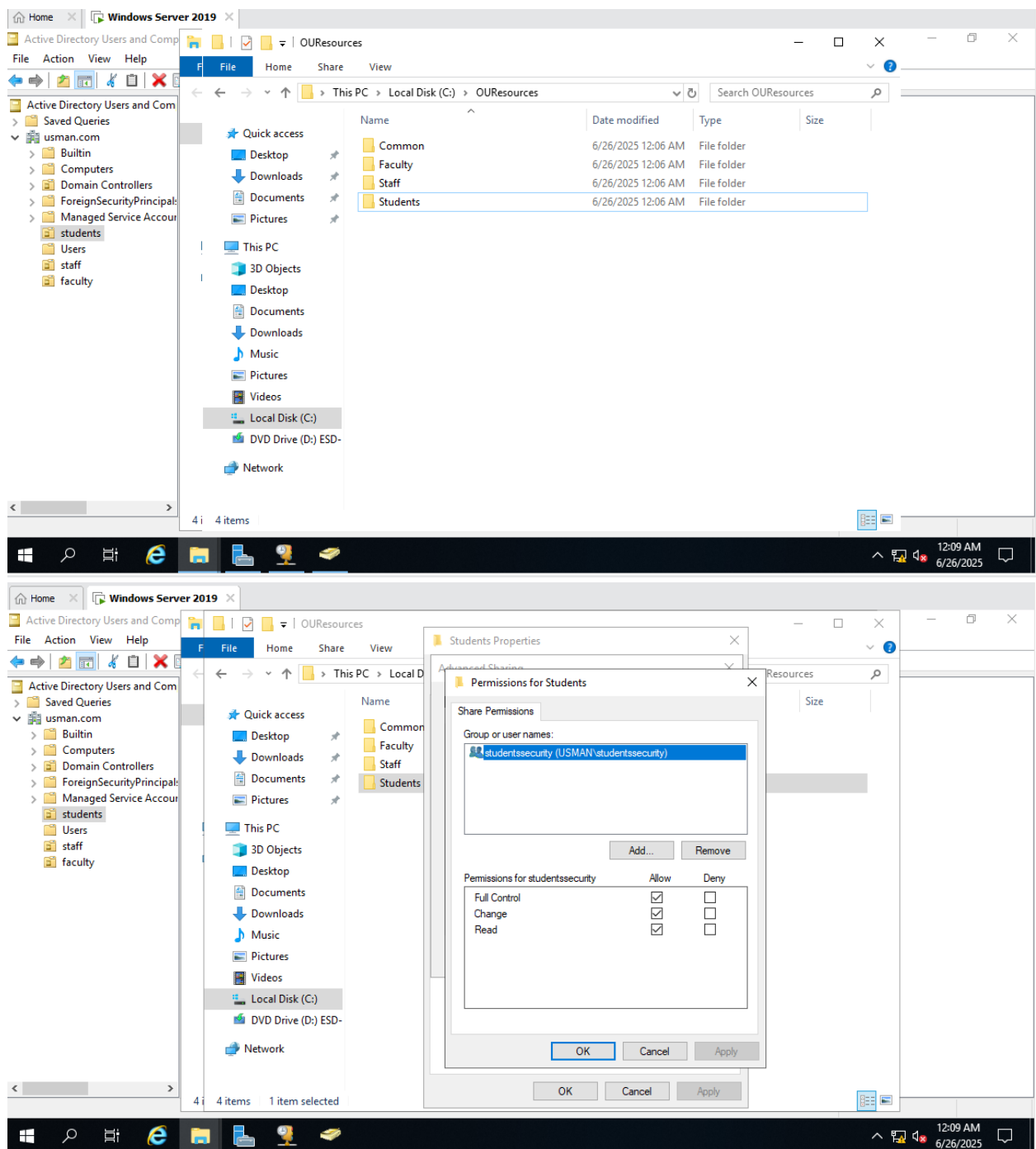


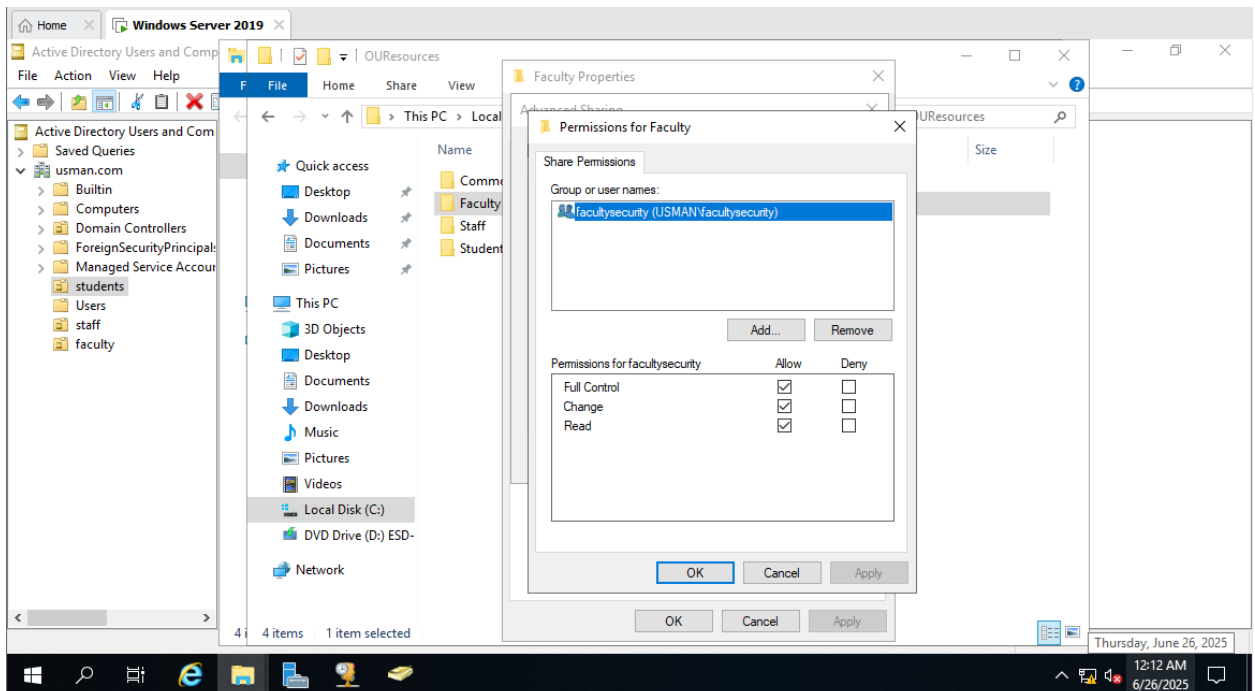
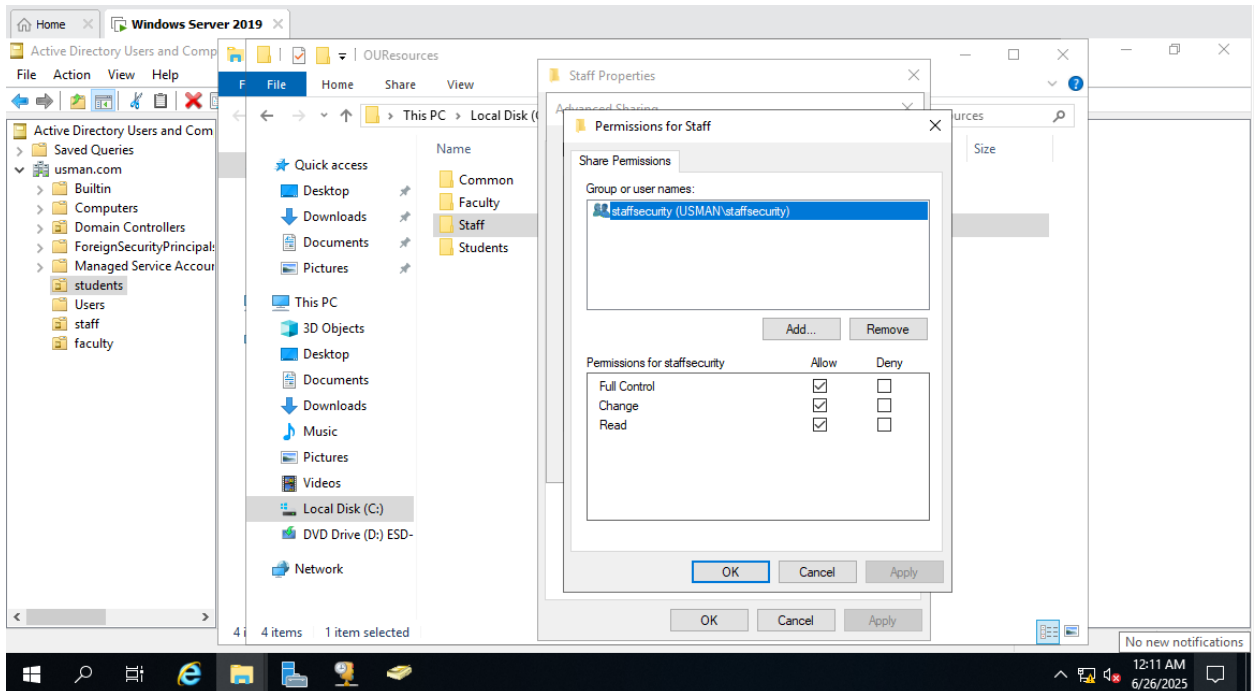


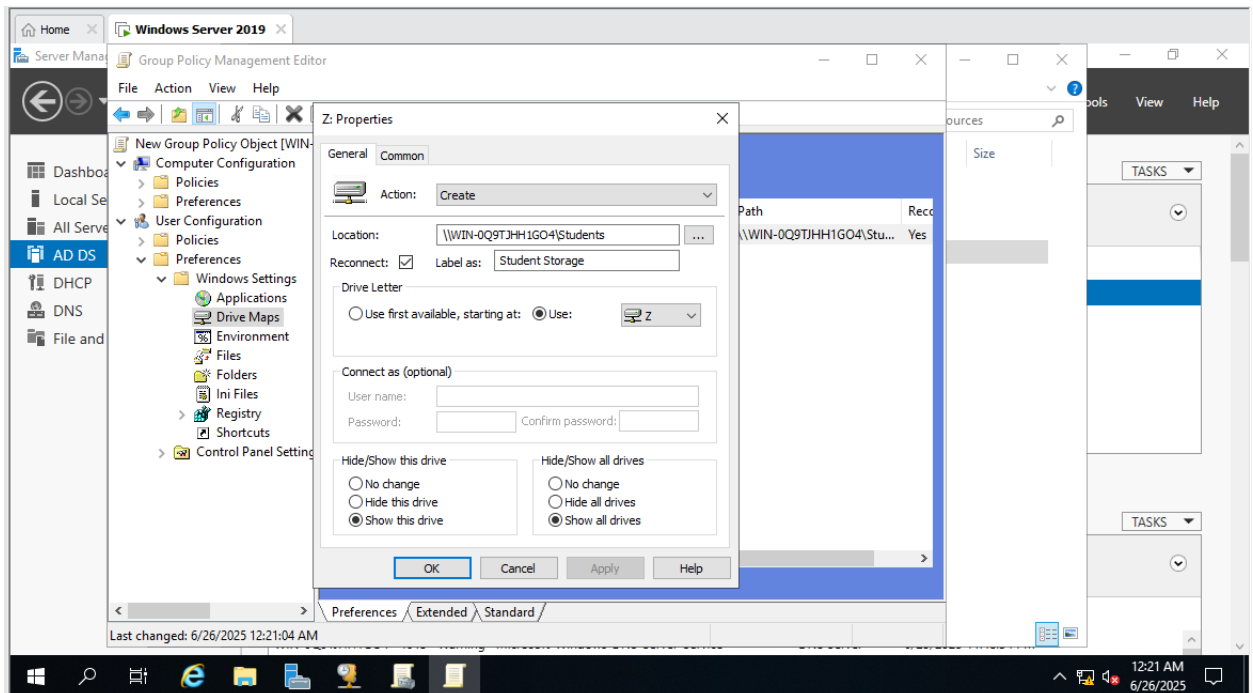
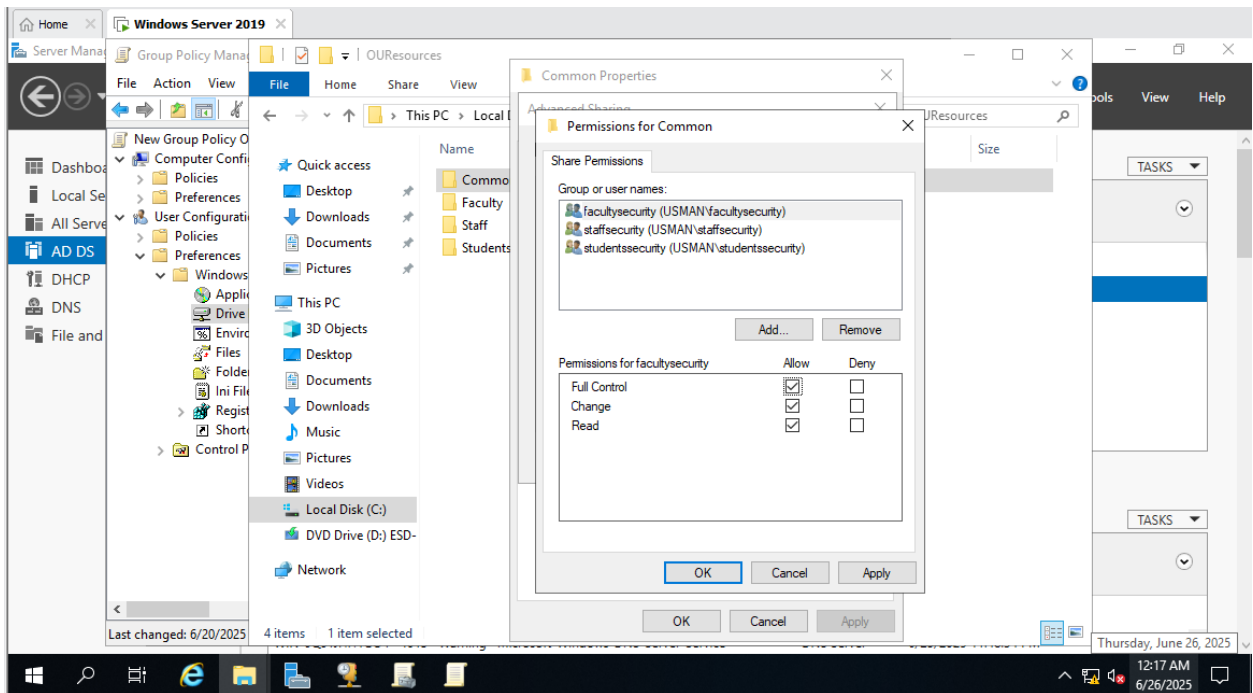
## Authentication & Authorization

- **Computer Joining the Domain (DESKTOP-7ETA011):**
- System Properties window showing the computer successfully joined to the stream.com domain.

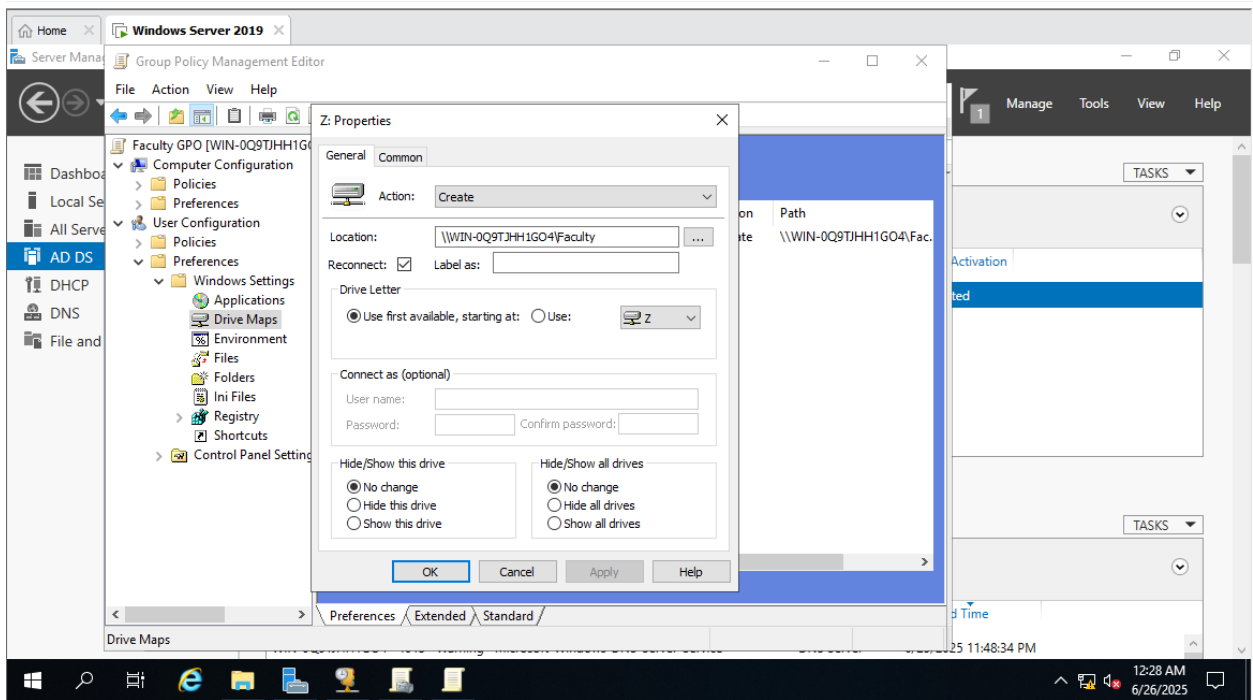
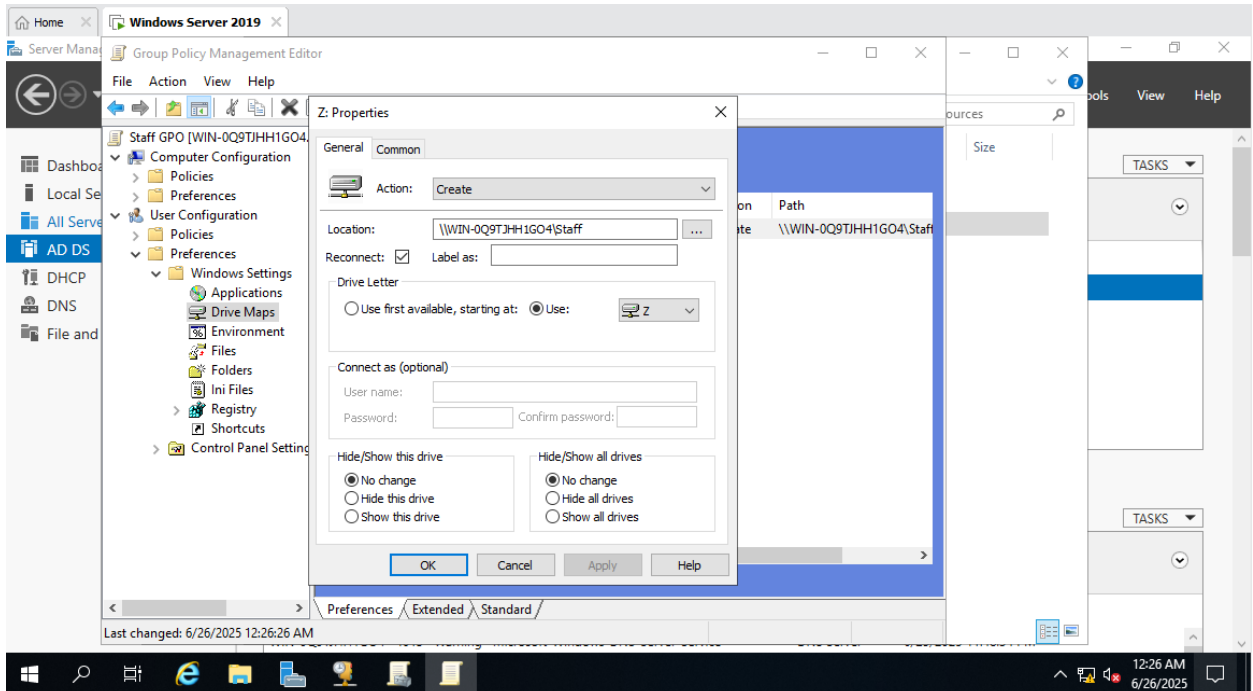
- **Other User Login Screen:** Prompts for domain credentials (e.g., USMAN) to authenticate users against AD.
- Validates domain membership and demonstrates AD-based authentication.

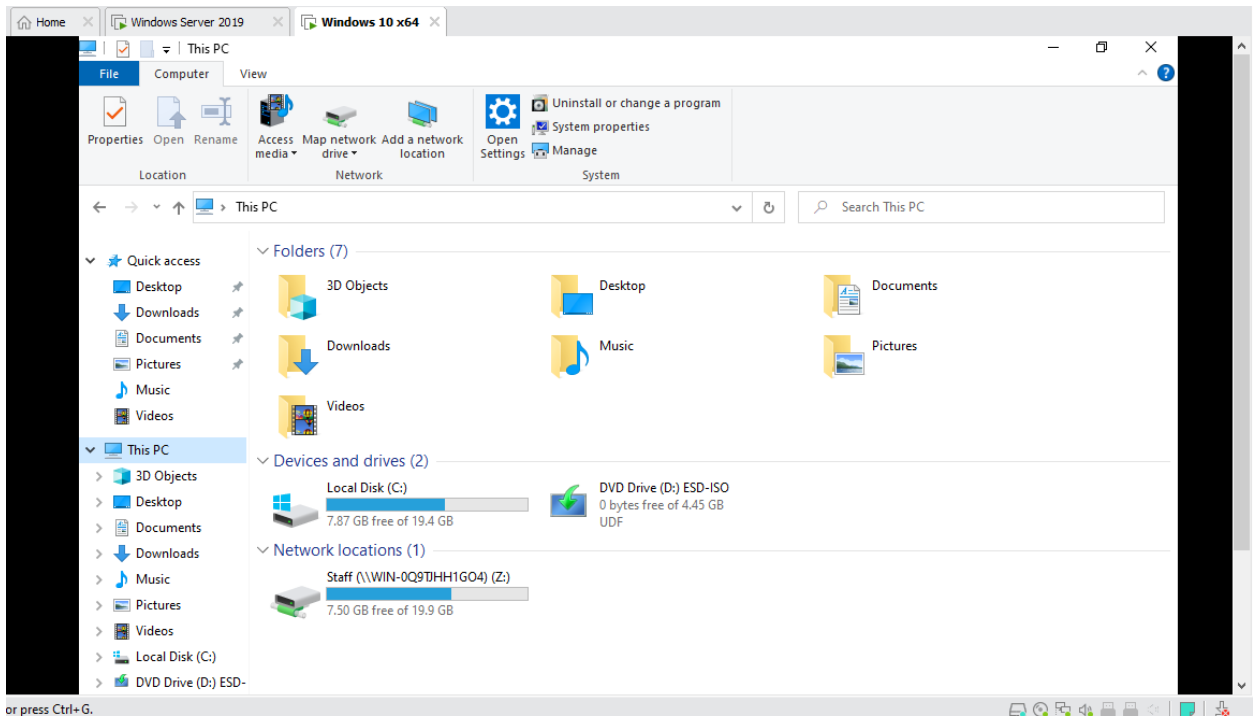






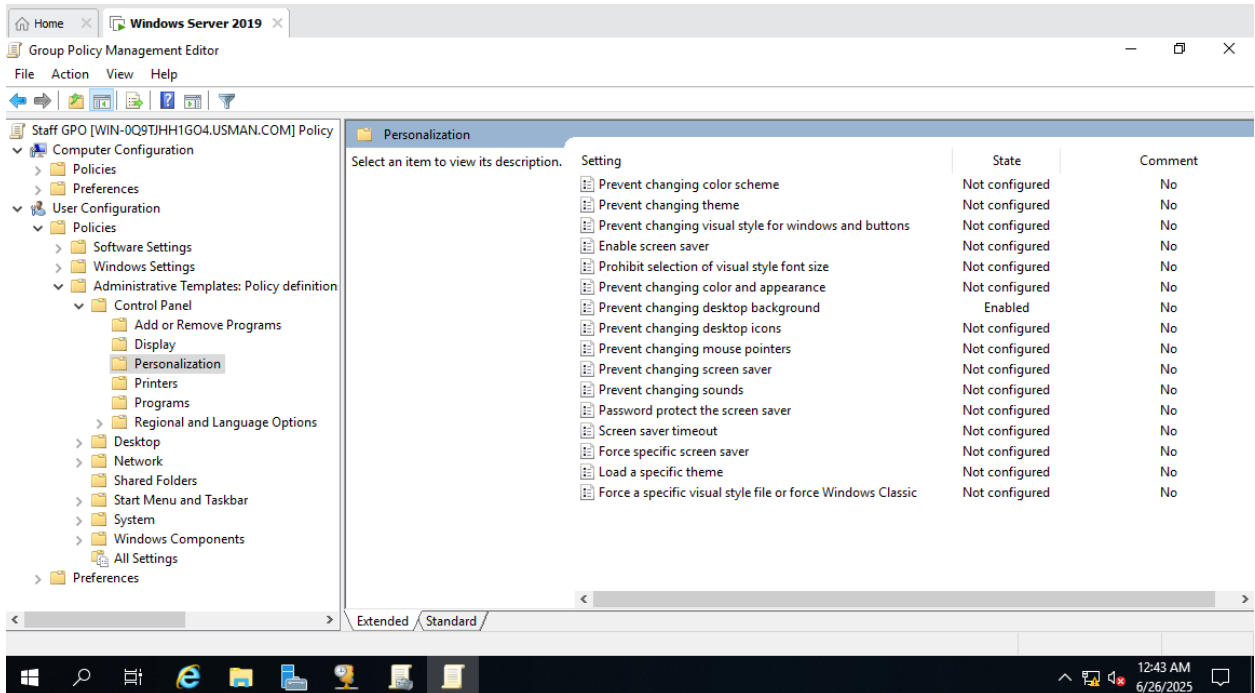
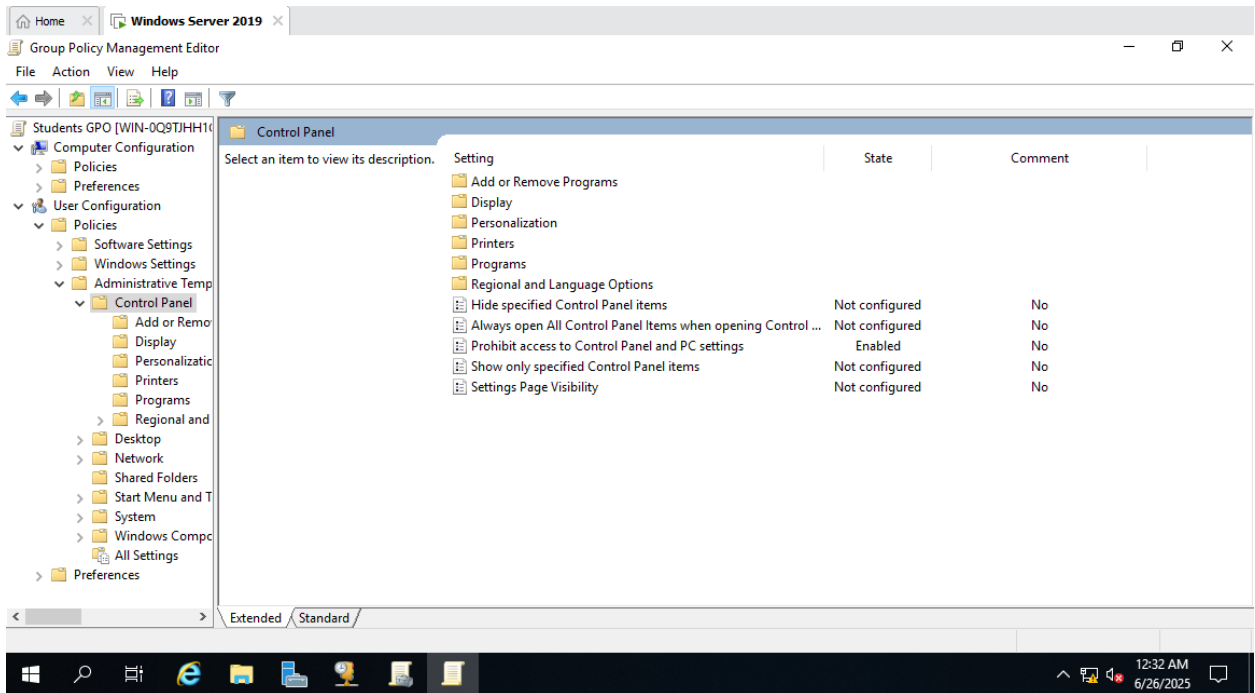


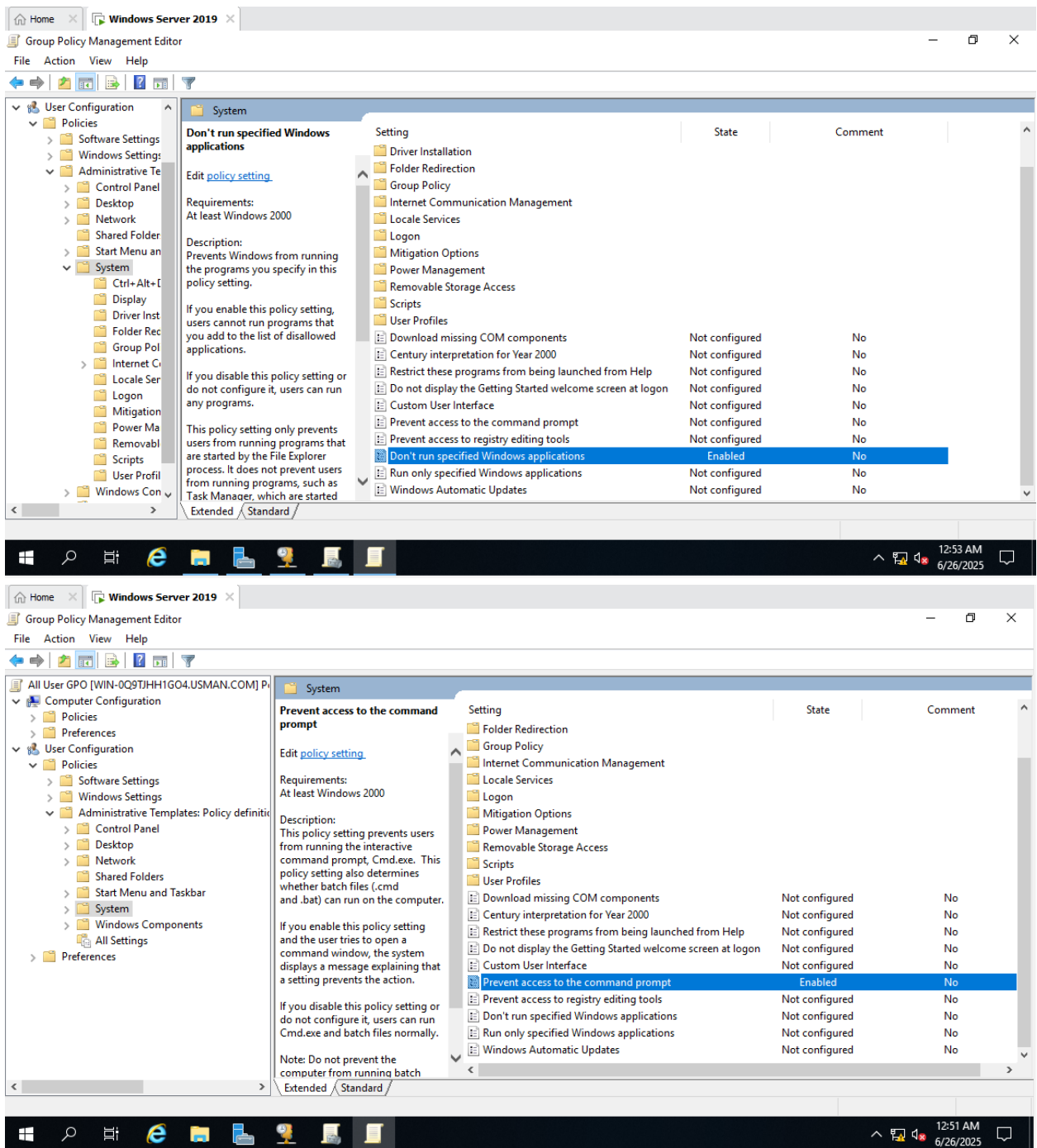


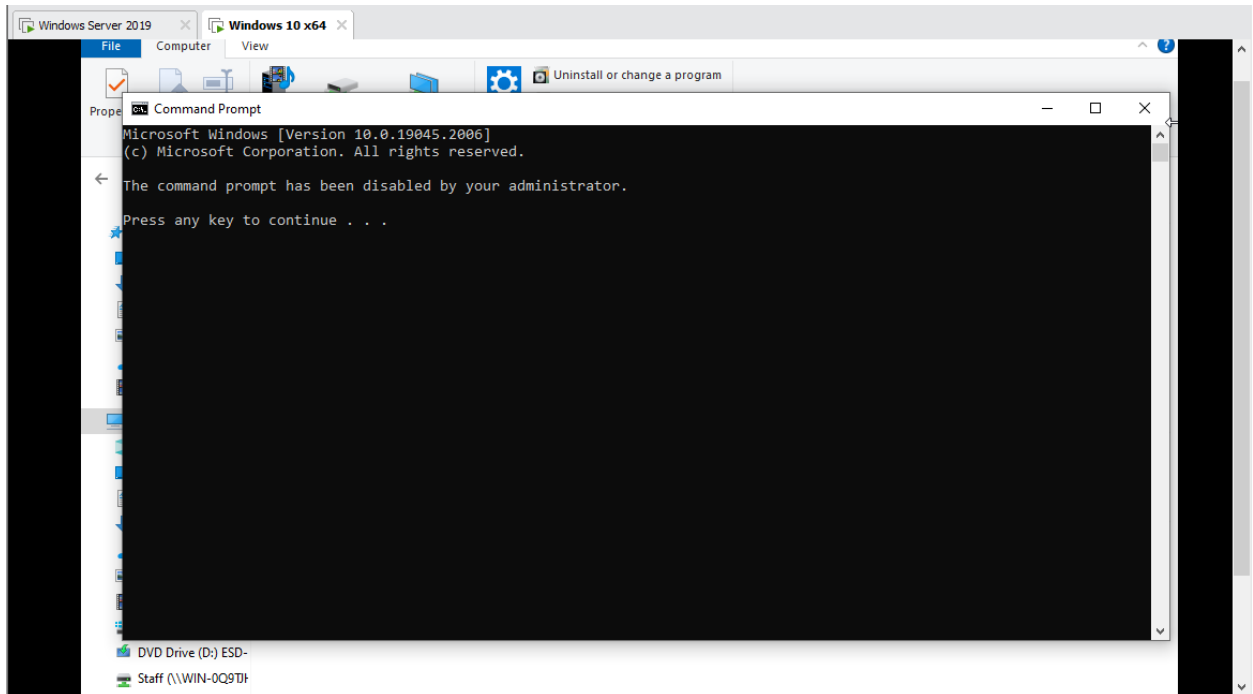


## Group Policy Management

- **Group Policy Management Editor:**
  - Configures **drive mappings** (e.g., Z: drive linked to \\WIN-0Q9TJHH1GO4\Faculty).
  - Policies enforce settings like hiding specific drives or reconnecting mapped drives at login.
- **Security Policies:** Restricts control panel access or deploys software (e.g., Google Chrome).
- **Purpose:**
- Shows automation of device/security policies across the domain.

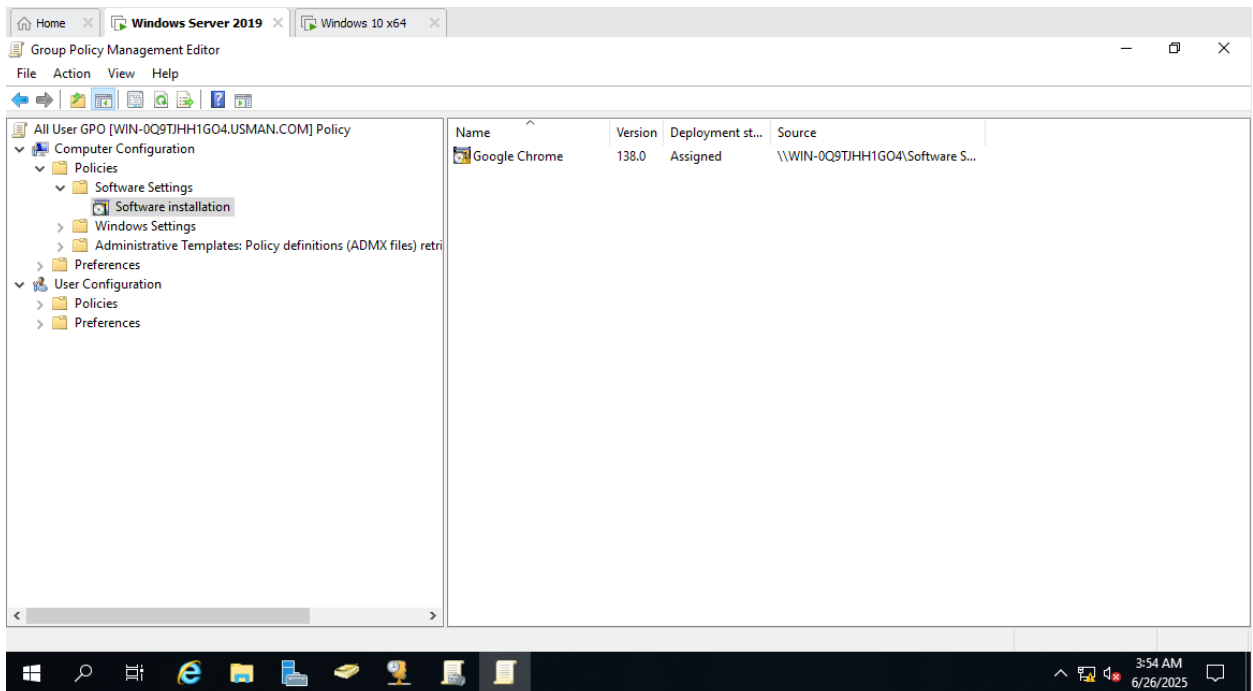






## Computer and Device Management (including software deployment)

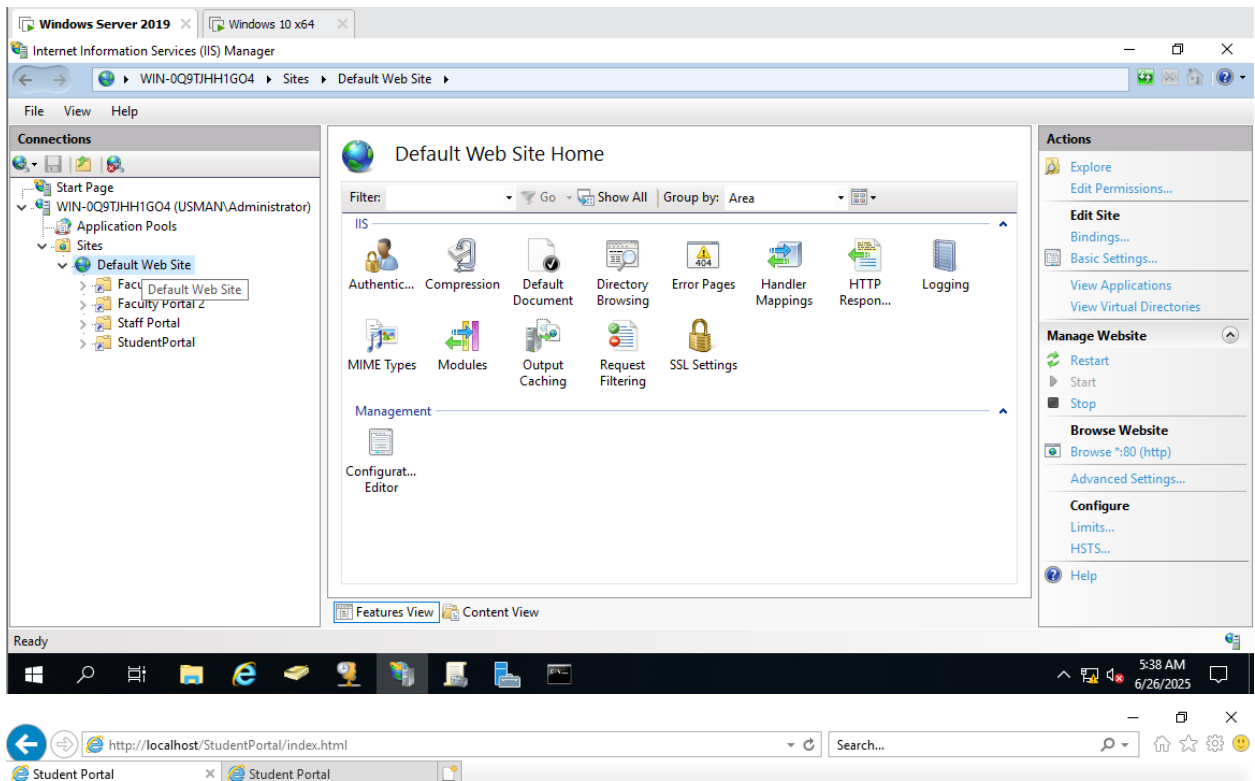
- Deployed software (e.g., Google Chrome) via Group Policy.
- Monitored deployment status in **IIS Manager** ([WIN-0Q9TJHH1GO4.USMAN.COM](http://WIN-0Q9TJHH1GO4.USMAN.COM)).



## Single Sign-On (SSO)

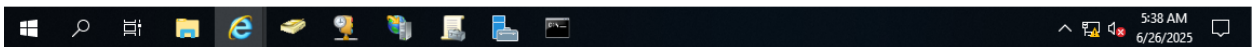
Configured IIS to host portals (e.g., StudentPortal, Staff Portal) with SSO:

- Users accessed portals seamlessly using AD credentials.
- Demonstrated via a **Welcome to Student Portal** HTML page.



## Welcome to the Student Portal

This is a simple HTML page served by IIS.



## Fine-Grained Password Policies (FGPP)

- **Active Directory Administrative Center:**
  - **Password Settings Container:** Configures custom password policies (e.g., complexity, expiration) for specific groups.
- Highlights granular security controls beyond default domain policies.

