



# FINAL PROJECT

Active Directory and Domain Services Environment

## ABSTRACT

This is my documentation for a fully built and configured Active Directory & Domain Services Environment, making use of Windows Server 2022 and built within VMware Workstation as the virtualization platform.

Jacob Pierre

## Table of Contents

Original Planning Document .....	2
Network Diagram .....	4
ADDS Diagram .....	5
Server #1 Screenshots .....	6
Server #2 Screenshots .....	8
Server #3 Screenshots .....	12
OU Screenshots .....	14
Shared Folder Screenshots .....	17
Client Machine .....	20

## Original Planning Document

- Project Theme: Jujutsu Kaisen
- Domain Name: KyotoGoodwill.net
- Domain Password: Password01
- OS: Windows Server Datacenter

### **Servers Information**

- Server #1 name: TokyoHighF25JP
- Roles: ADDS, DNS
- IP Address: 198.5.0.1
- Subnet Mask: 255.255.255.192
- NO Gateway
- DNS (same as Server #1's IP): 198.5.0.1

- Server #2 name: KyotoHighF25JP
- Roles: ADDS, DNS
- IP Address: 198.5.0.1
- Subnet Mask: 255.255.255.192
- NO Gateway
- DNS: 198.5.0.1

- Server #3 name: DisasterSpiritsF25JP
- Roles: FSRM
- IP Address: 198.5.0.3
- Subnet Mask: 255.255.255.192
- NO Gateway
- DNS: 198.5.0.1

### **Objects Information**

*Note:* User Information is filled out in the format of Full name/Username. All object names include "25F" e.g. John Matthews / jmatthews25F, Objects are OUs, Groups, Usernames, and Client PC Names.

- OU #1 name: 1stYearStudents25F
- Group Name: G\_1stYearStudents25F

- User #1: Yuji Itadori / yitadori25F
- User #2: Megumi Fushiguro / mfushiguro25F
- User #3: Nobara Kugisaki / nkugisaki25F

- OU #2 name: 3rdYearStudents25F
- Group Name: G\_3rdYearStudents25F
- User #1: Aoi Todo / atodo25F
- User #2: Noritoshi Kamo / nkamo25F
- User #3: Momo Nishimiya / mnishimiya25F

- OU #3 name: DisasterSpirits25F
- Group Name: G\_DisasterSpirits25F
- User #1: Mahito / mahito25F
- User #2: Jogo / jogo25F
- User #3: Hanami / hanami25F

#### **Client Information**

- Name: Gojo25F
- OS: Windows 10 or 11
- IP Address: DHCP

#### **DHCP Scope**

- Name: InfiniteVoid25F
- IP Address Range: 198.5.0.4 - 198.5.0.62

#### **Network Shares: Public, Home, OU Shares.**

- Share#1: 1stYearStudents
- Share#2: 3rdYearStudents
- Share#3: DisasterSpirits

#### **Network equipment**

2 switches & 1 Router

## Network Diagram

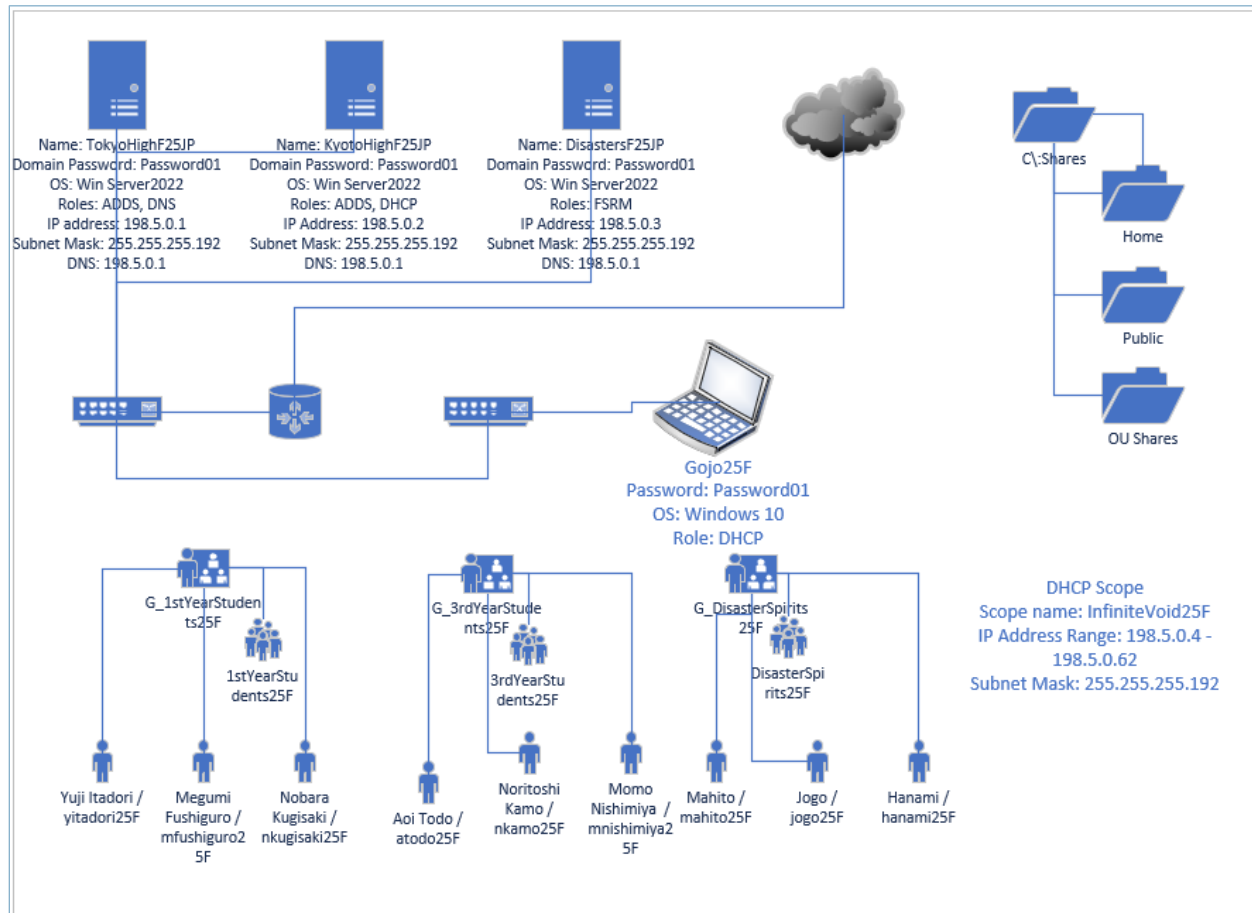


Figure 1 - Network Diagram

## ADDS Diagram

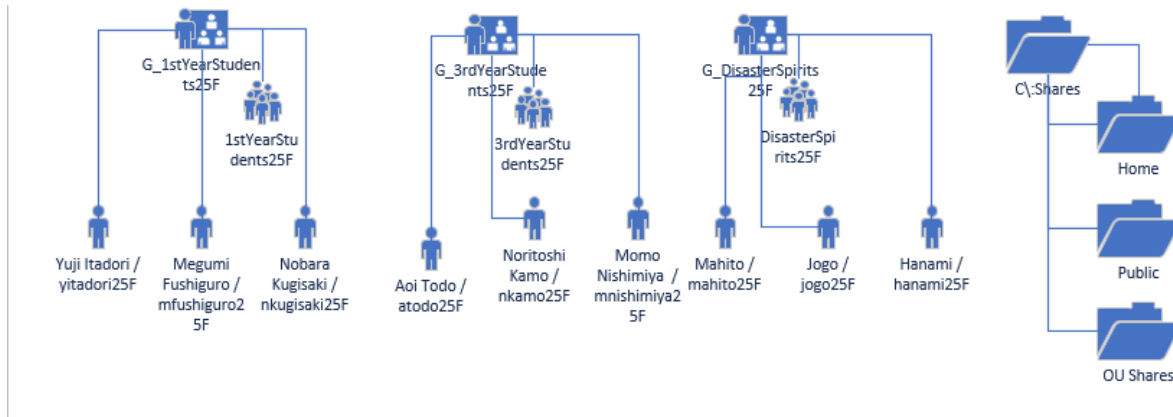


Figure 2 ADDS Diagram

## Server #1 Screenshots

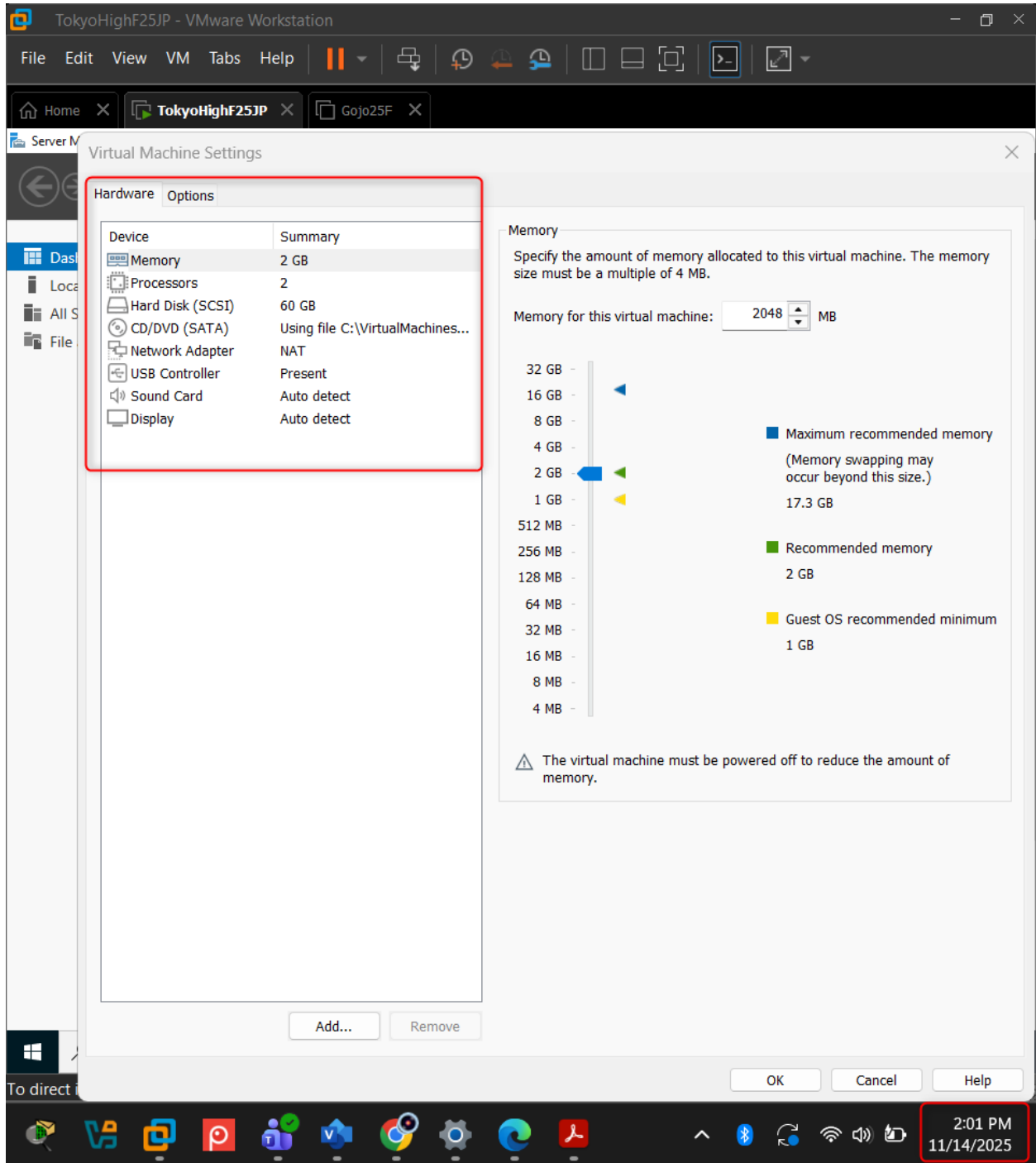


Figure 3 - Server 1 Hardware - Settings and Timestamps Included

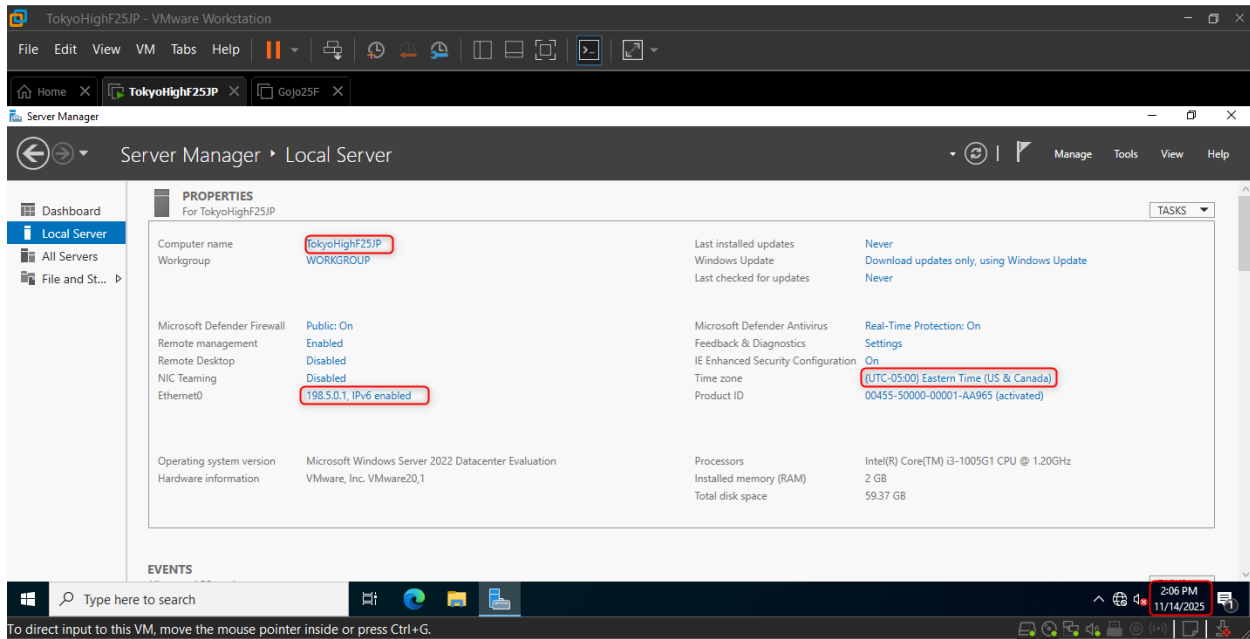


Figure 4 - Server 1 Configuration

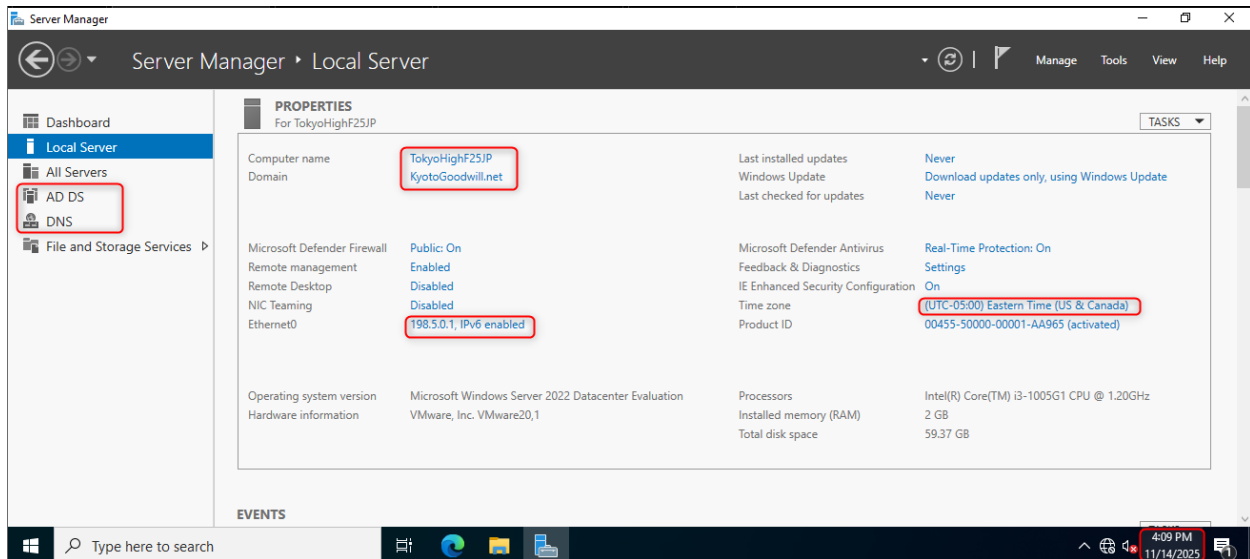


Figure 5 - Local Server Information Showing the server promoted to a Domain Controller



## Server #2 Screenshots

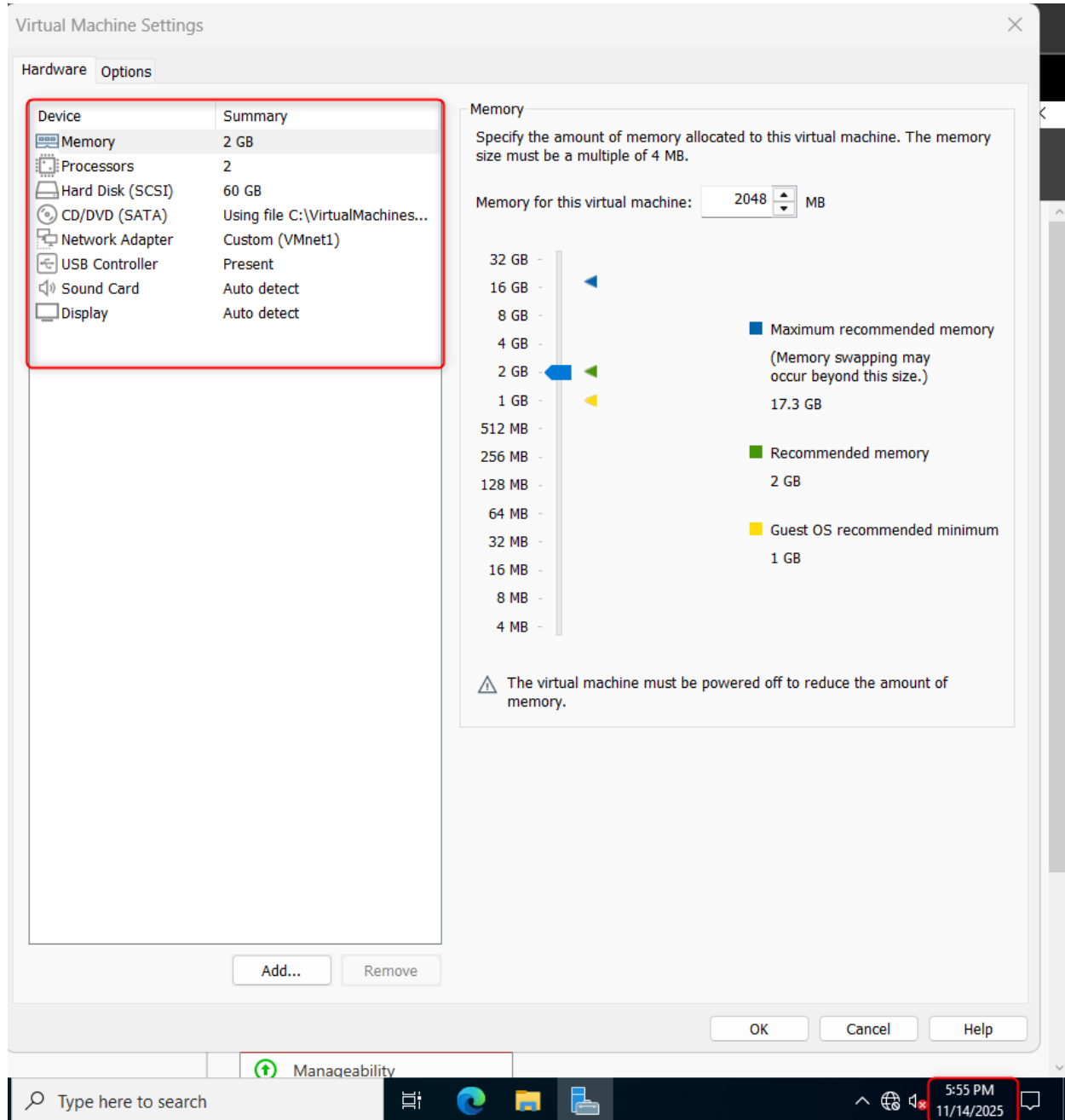


Figure 6 - Server 2 Hardware Settings

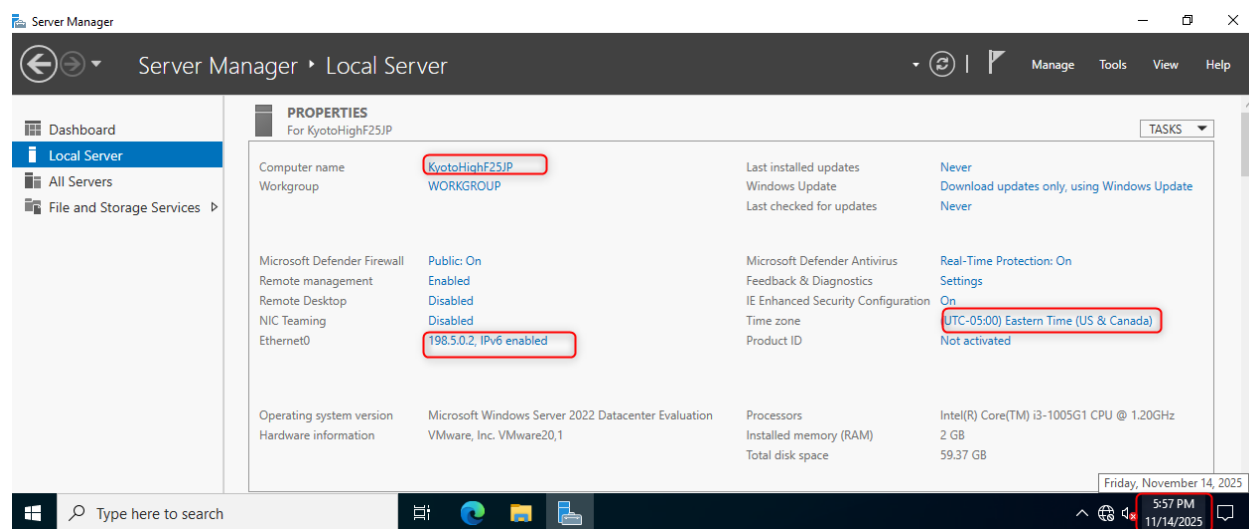


Figure 7 - Server 2 Configuration

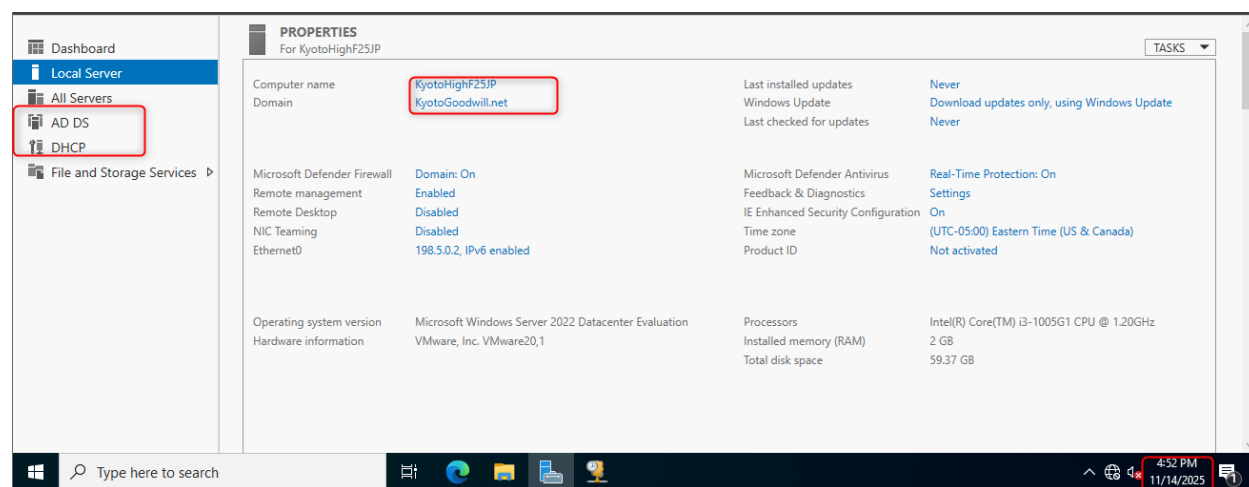


Figure 8 - Server 2 Configuration and Roles

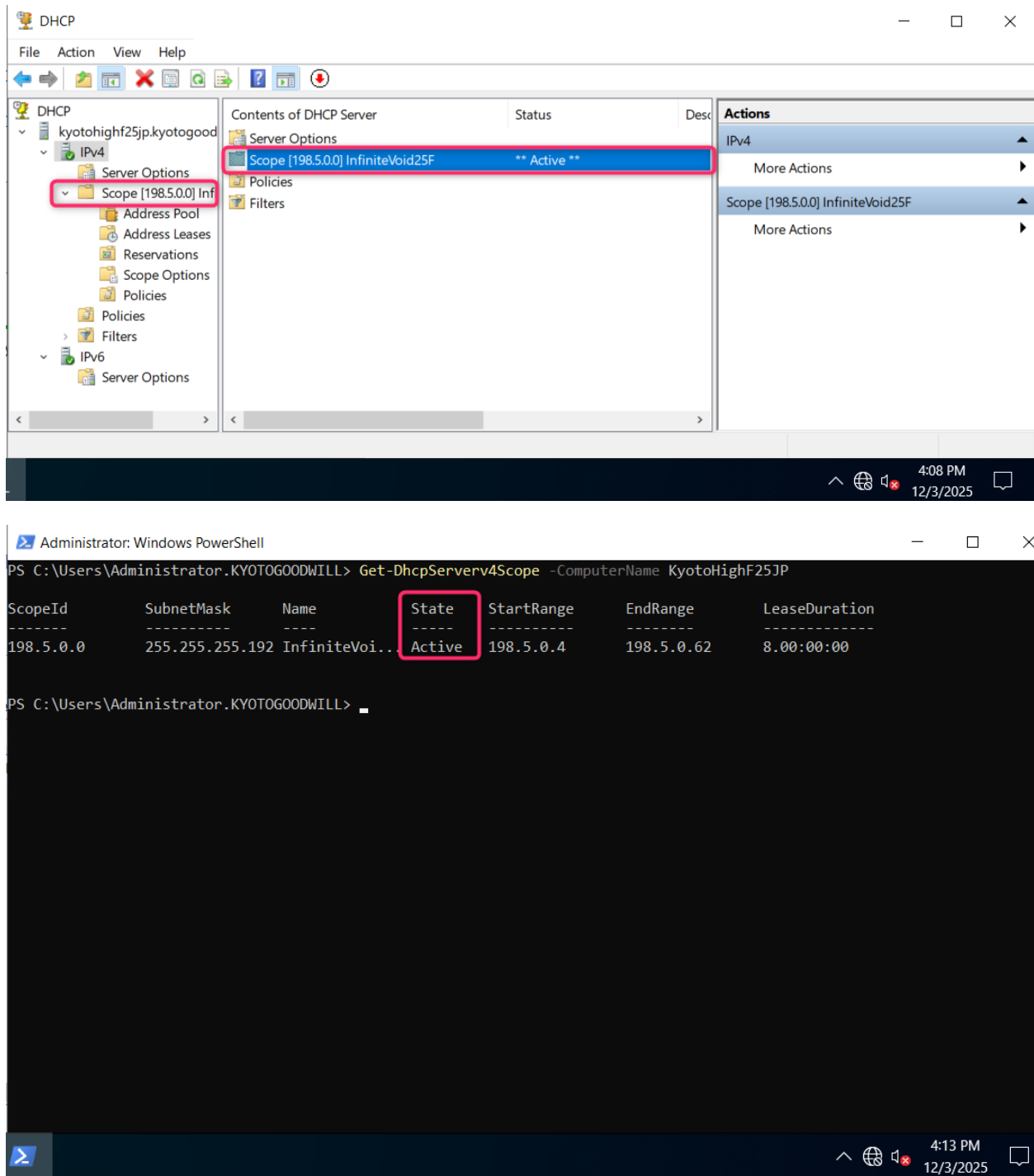
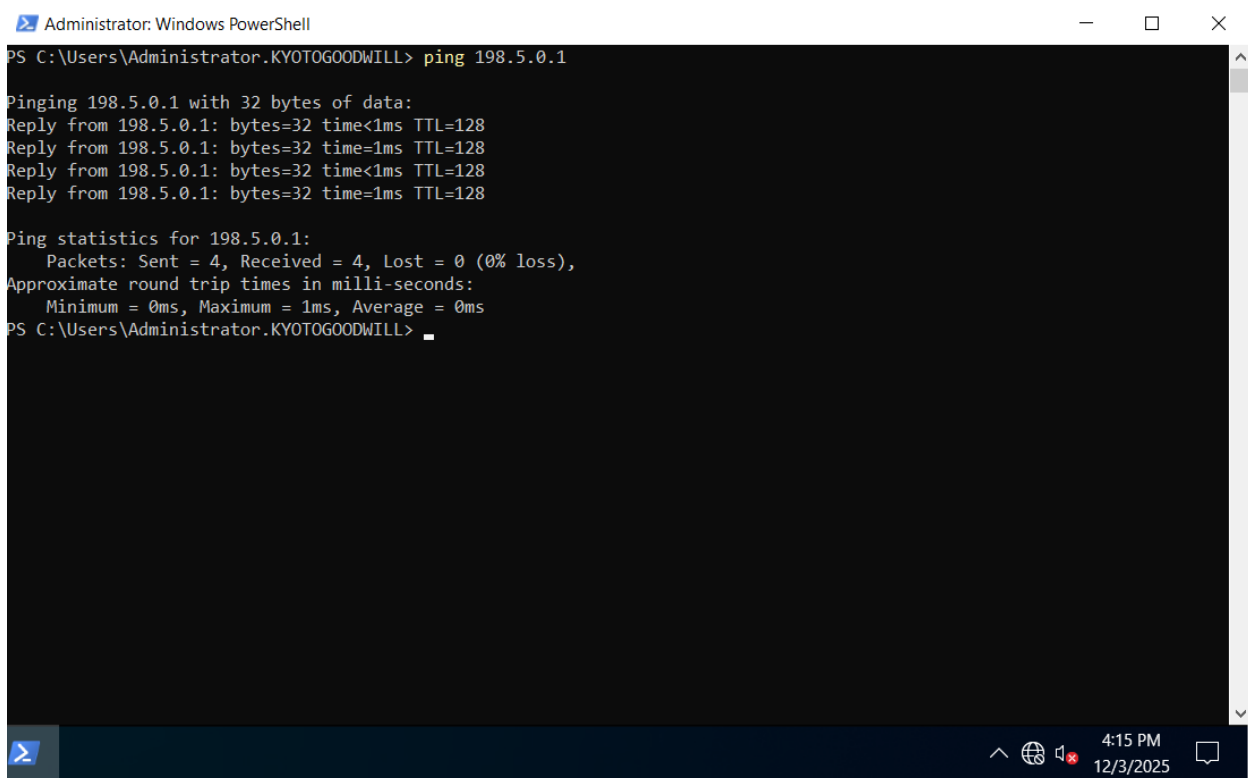


Figure 9 - Screenshot of the DHCP console Showing the scope range



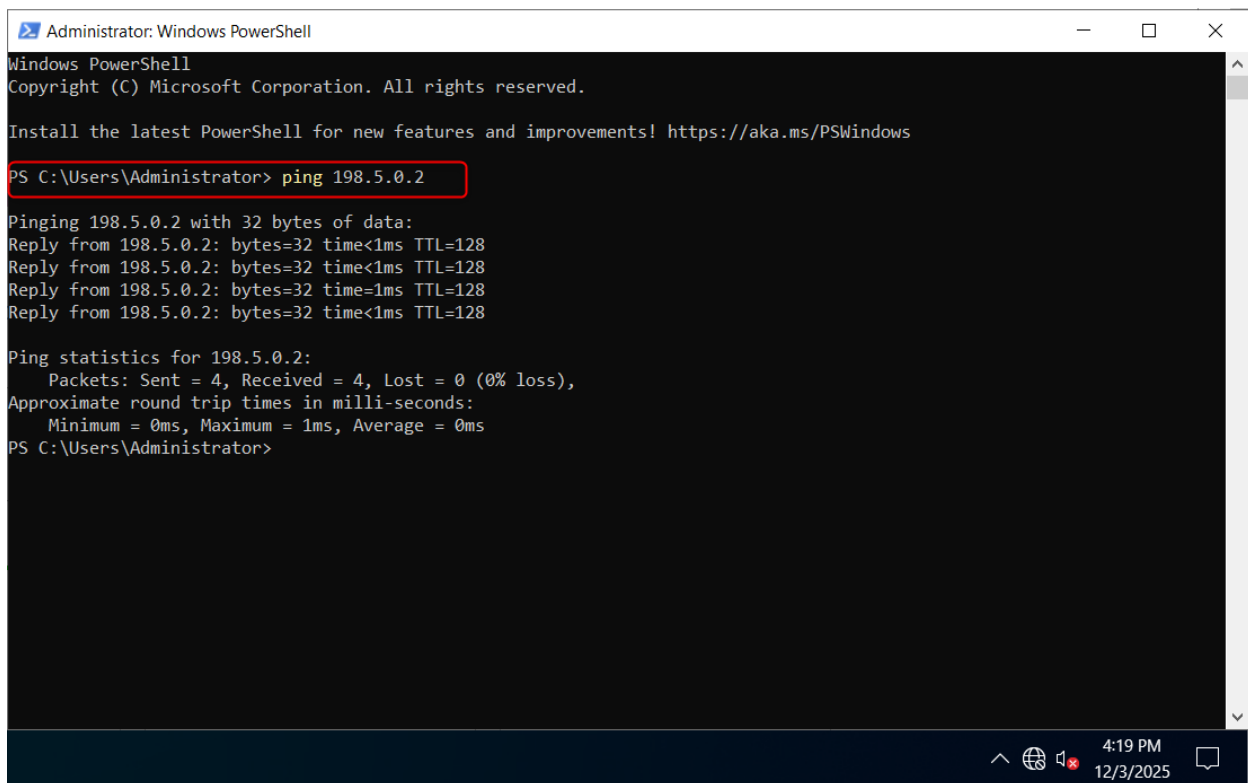
Administrator: Windows PowerShell

```
PS C:\Users\Administrator.KYOTOGOODWILL> ping 198.5.0.1

Pinging 198.5.0.1 with 32 bytes of data:
Reply from 198.5.0.1: bytes=32 time<1ms TTL=128
Reply from 198.5.0.1: bytes=32 time<1ms TTL=128
Reply from 198.5.0.1: bytes=32 time<1ms TTL=128
Reply from 198.5.0.1: bytes=32 time<1ms TTL=128

Ping statistics for 198.5.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
PS C:\Users\Administrator.KYOTOGOODWILL>
```

4:15 PM 12/3/2025



Administrator: Windows PowerShell

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Administrator> ping 198.5.0.2

Pinging 198.5.0.2 with 32 bytes of data:
Reply from 198.5.0.2: bytes=32 time<1ms TTL=128
Reply from 198.5.0.2: bytes=32 time<1ms TTL=128
Reply from 198.5.0.2: bytes=32 time<1ms TTL=128
Reply from 198.5.0.2: bytes=32 time<1ms TTL=128

Ping statistics for 198.5.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
PS C:\Users\Administrator>
```

4:19 PM 12/3/2025

Figure 10 - Command Prompt showing the servers can ping each other

## Server #3 Screenshots

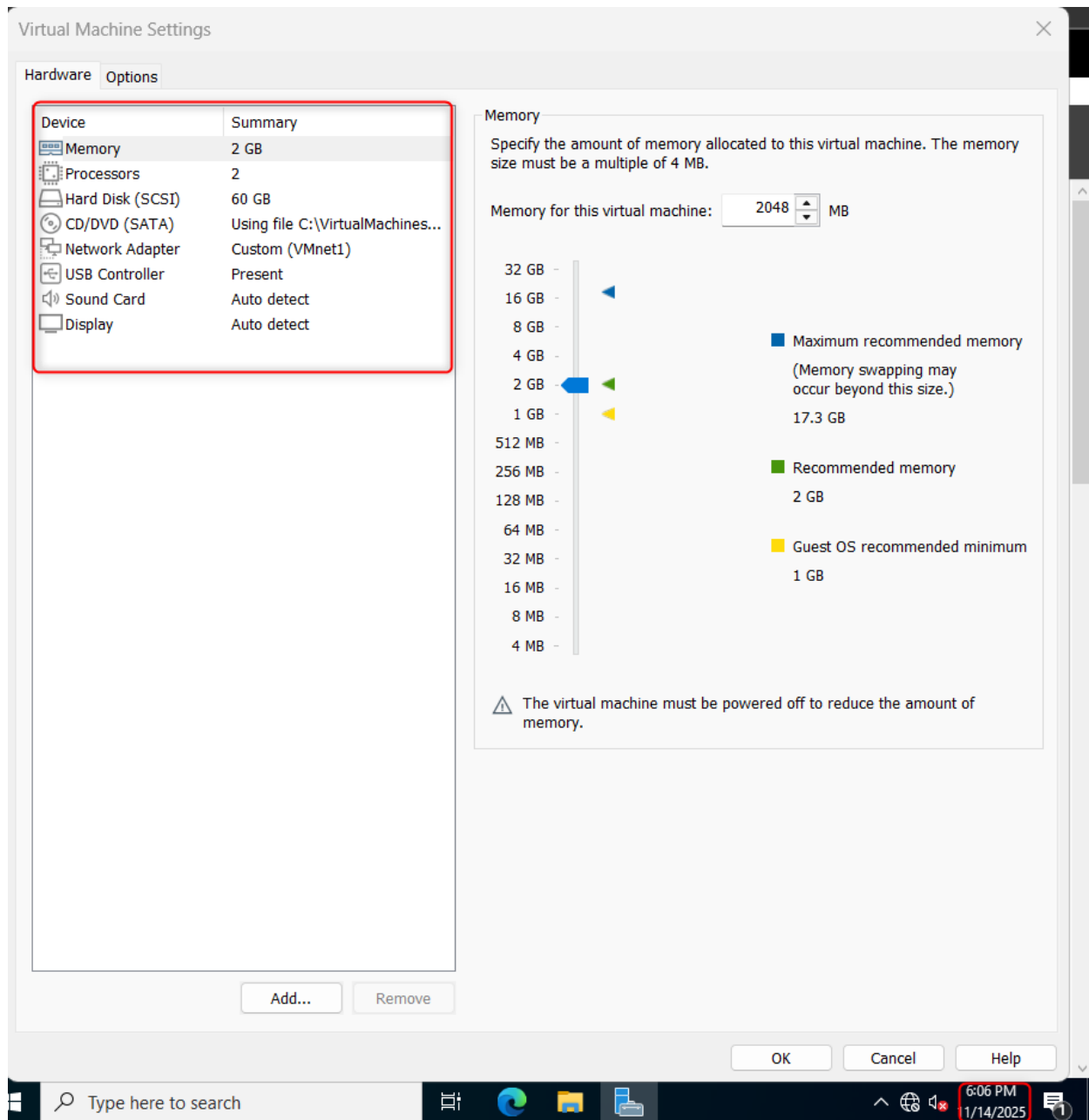


Figure 11 - Server 3 Hardware

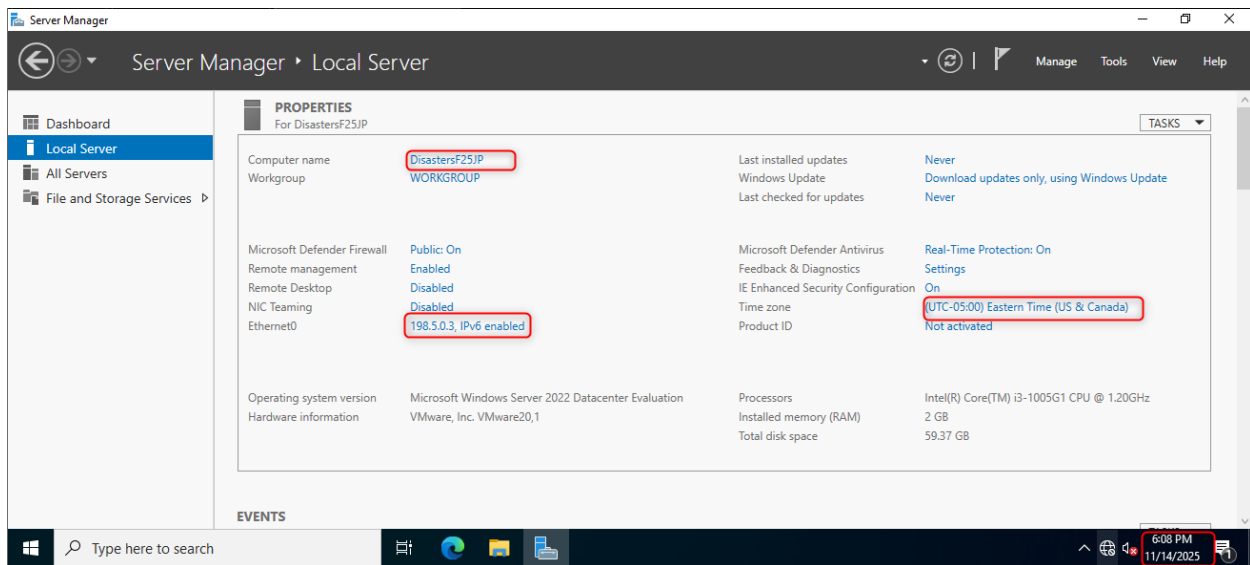


Figure 12 - Server 3 Configuration

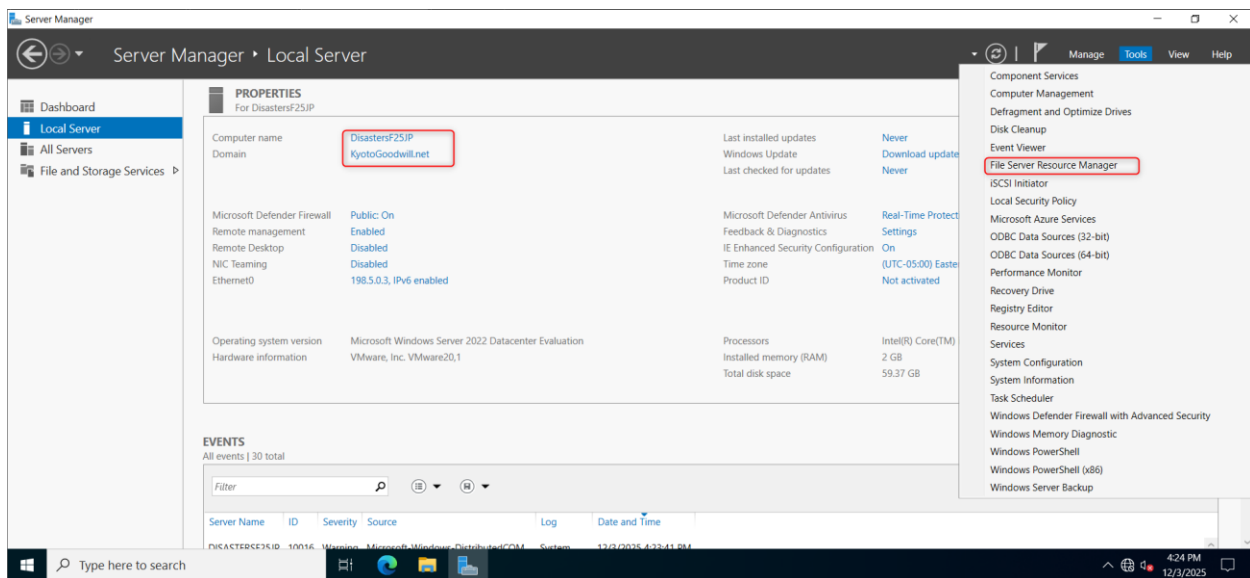


Figure 13 - File Server has FSRM installed

## OU Screenshots

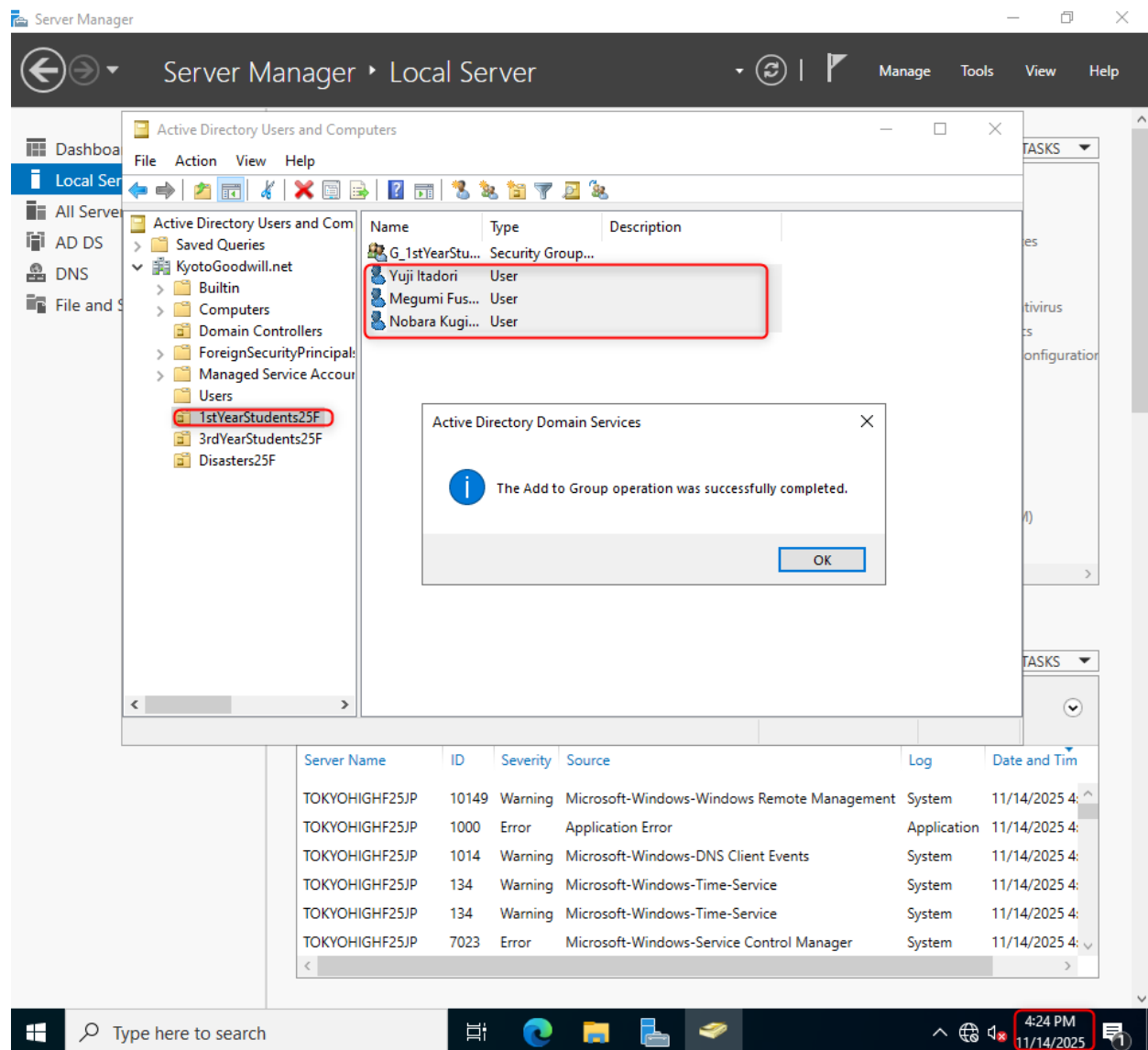


Figure 14 - OU #1

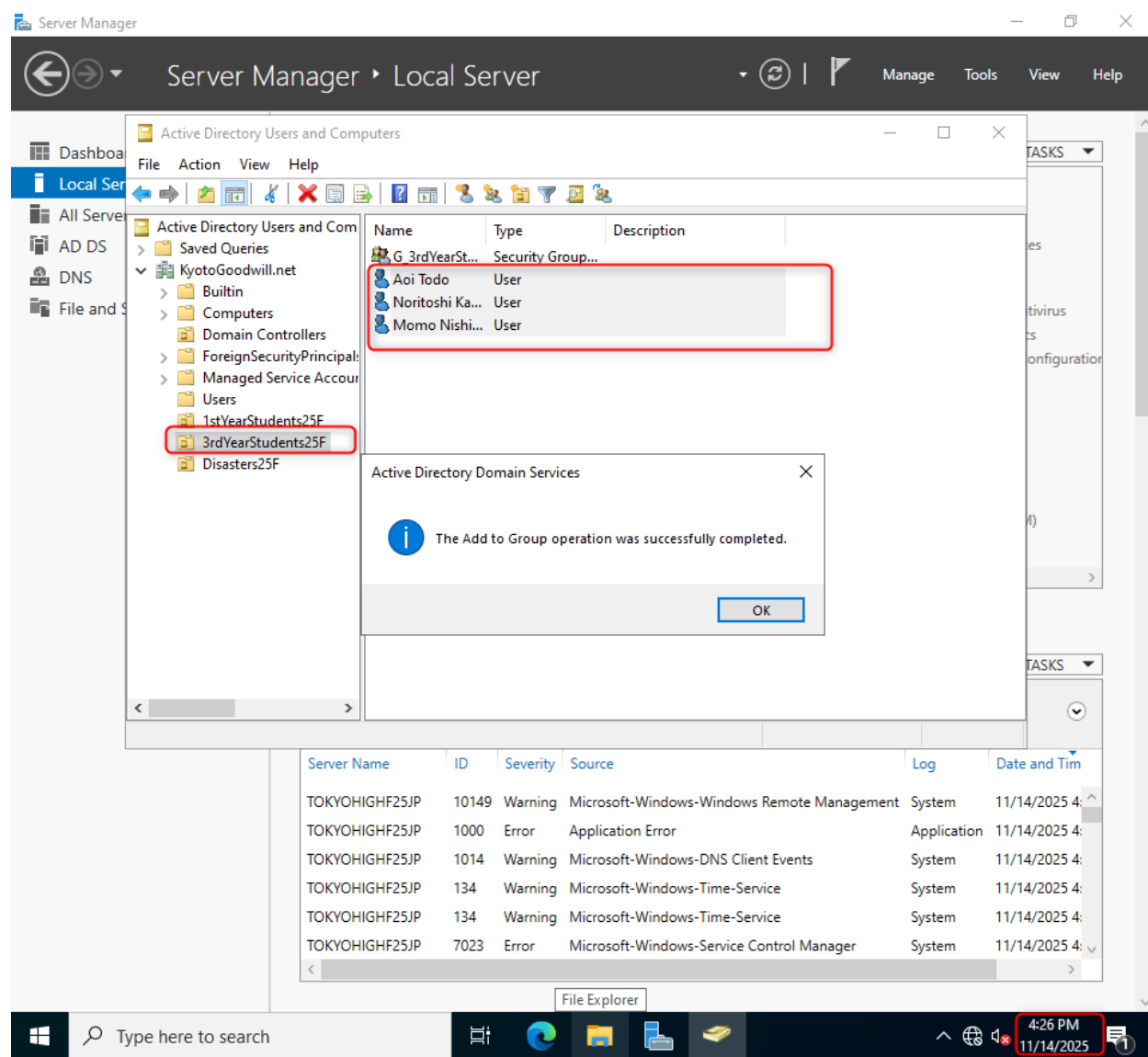


Figure 15 - OU #2



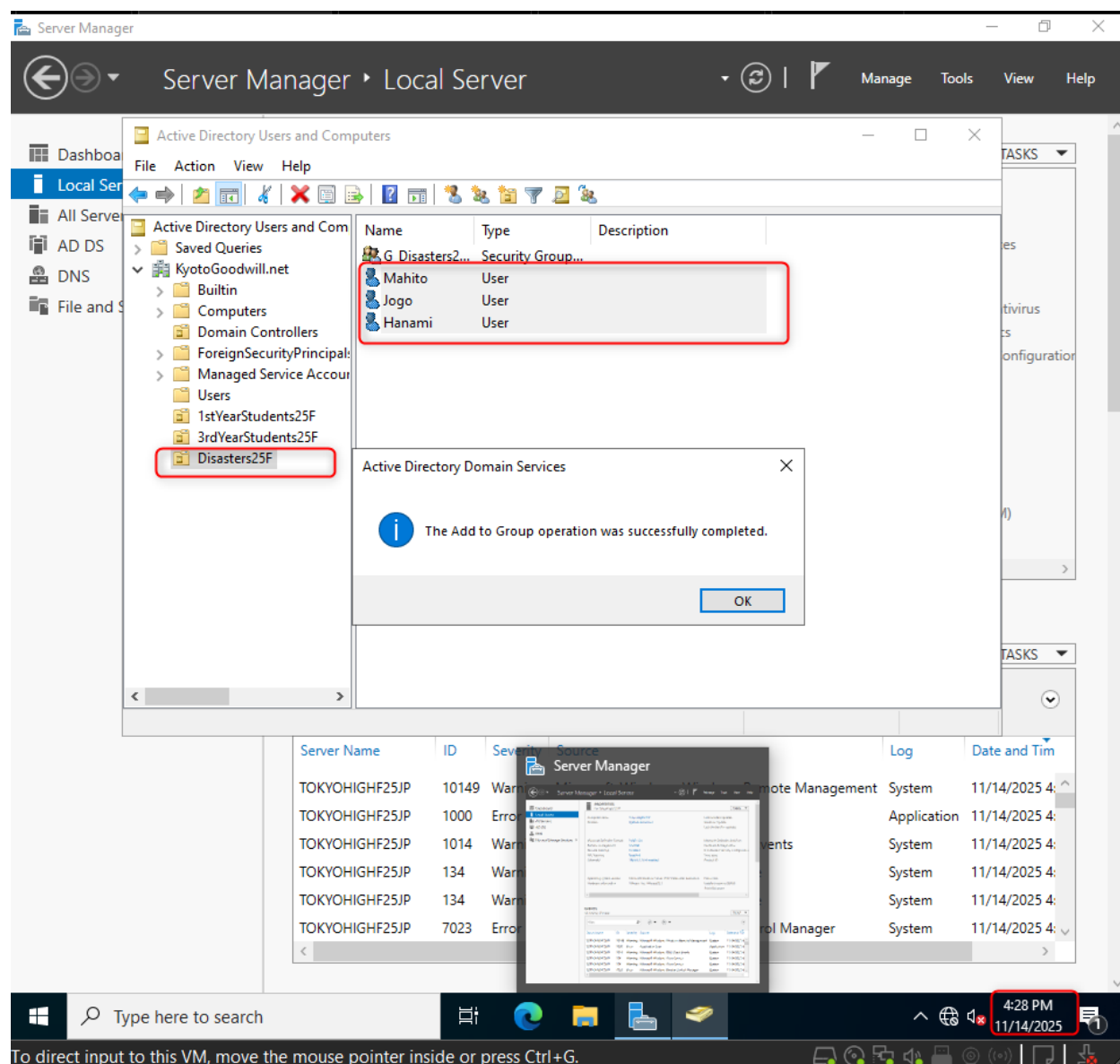


Figure 16 - OU #3

## Shared Folder Screenshots

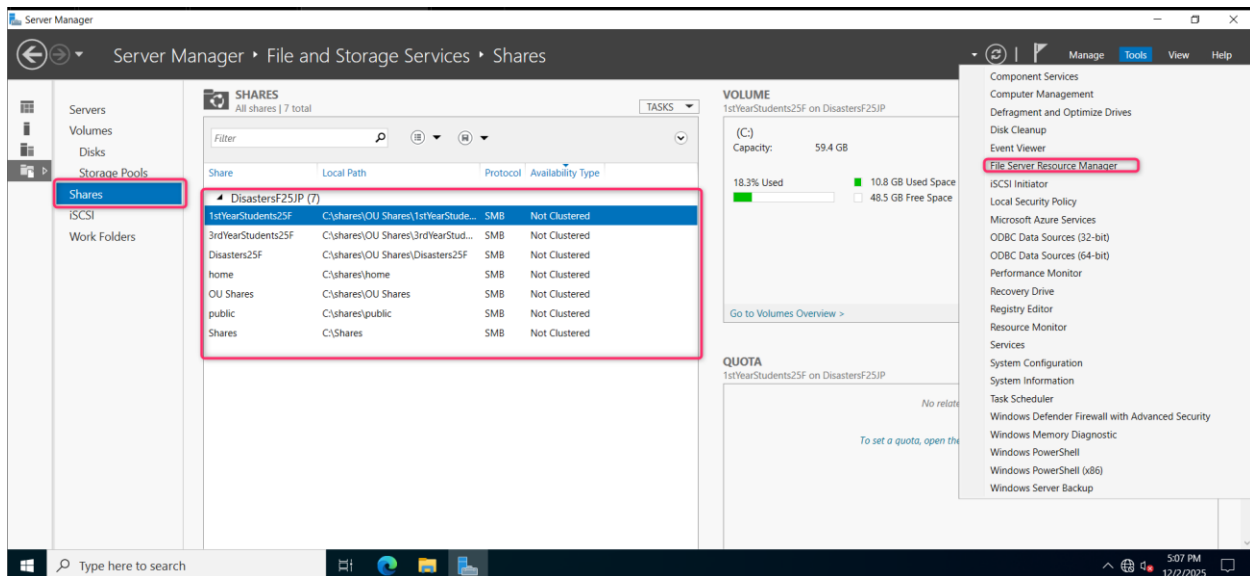


Figure 17 - Proof of FSRM Role Installation and list of folders on file server

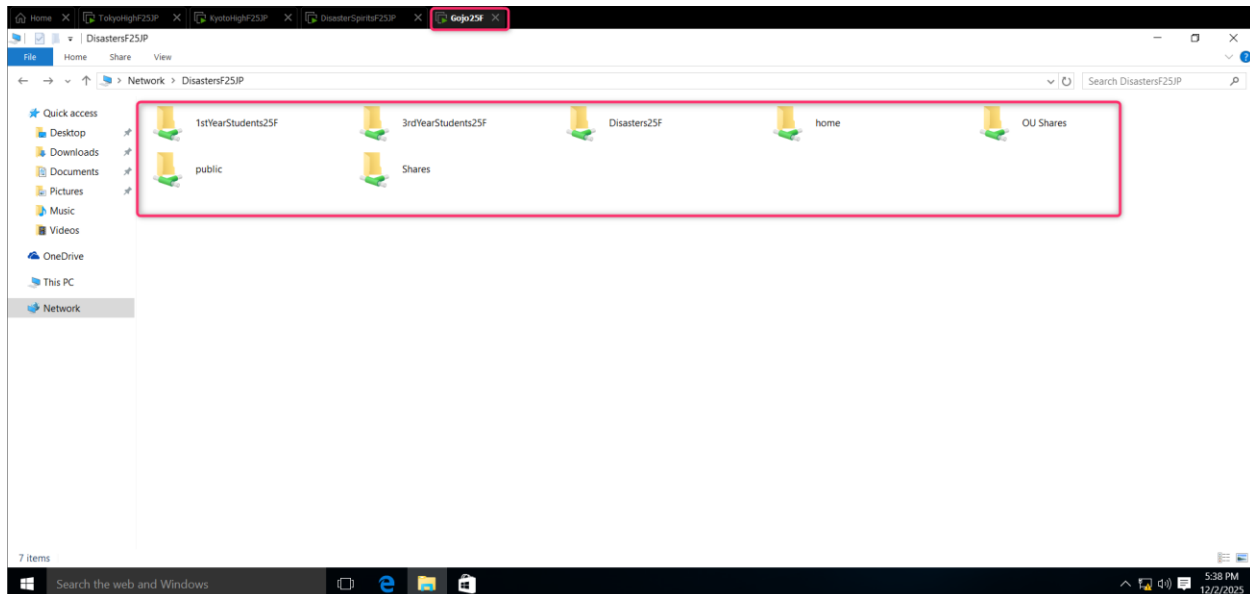


Figure 18 - List of folders on the client machine

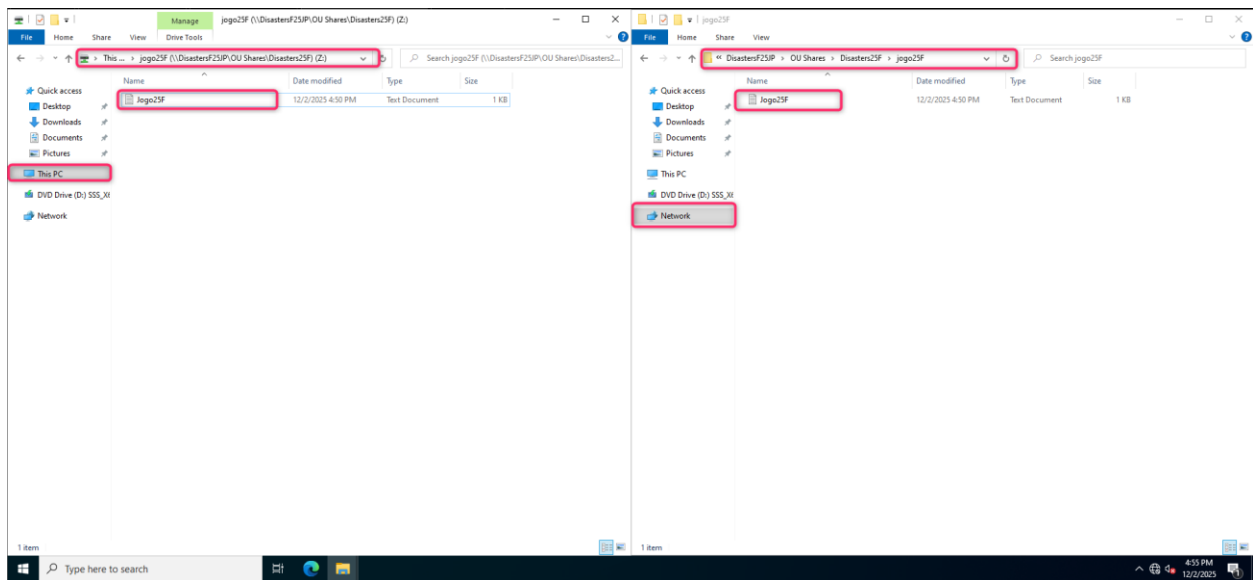


Figure 19 - Document Created on client machine opened on file server

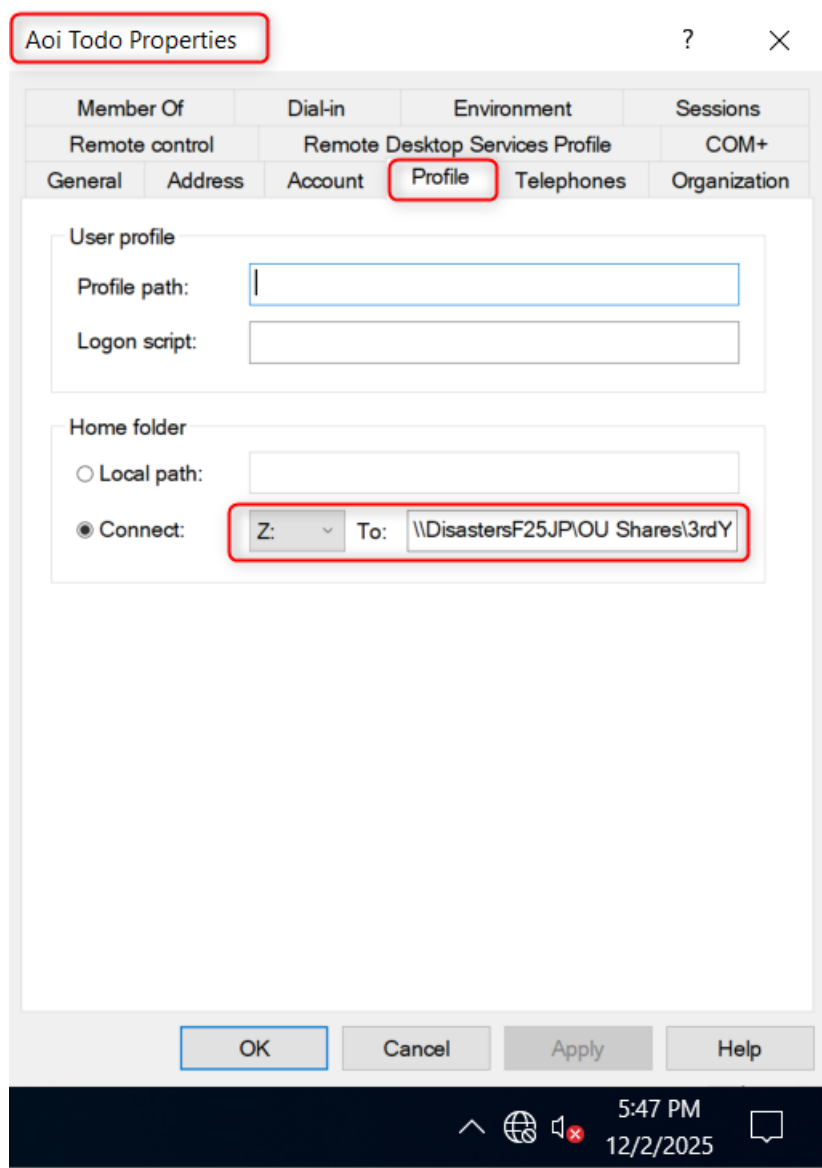


Figure 20 - Profile settings showing the drive letter and the path of the shared folder

## Client Machine

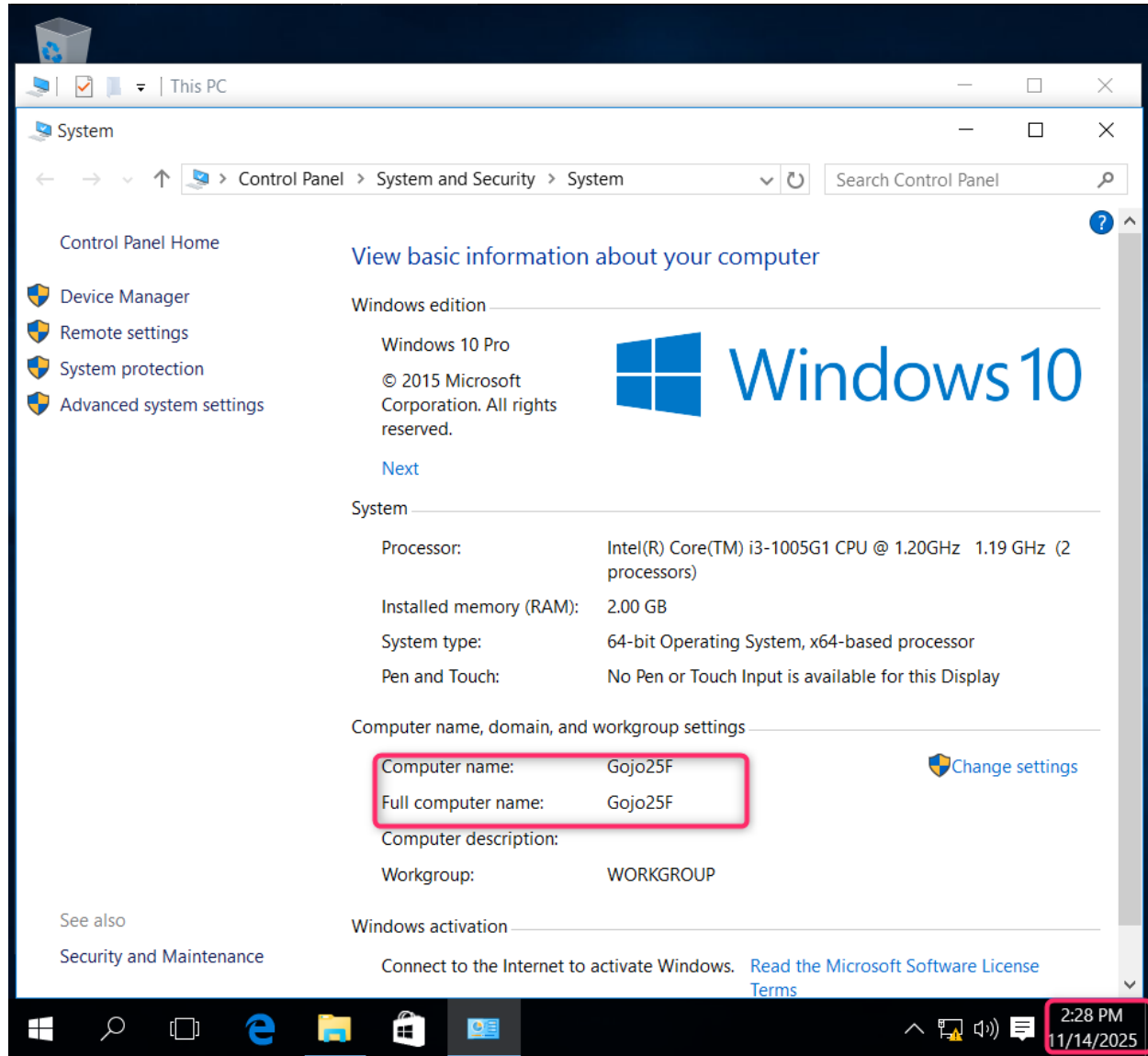


Figure 21 - Windows 10 Machine

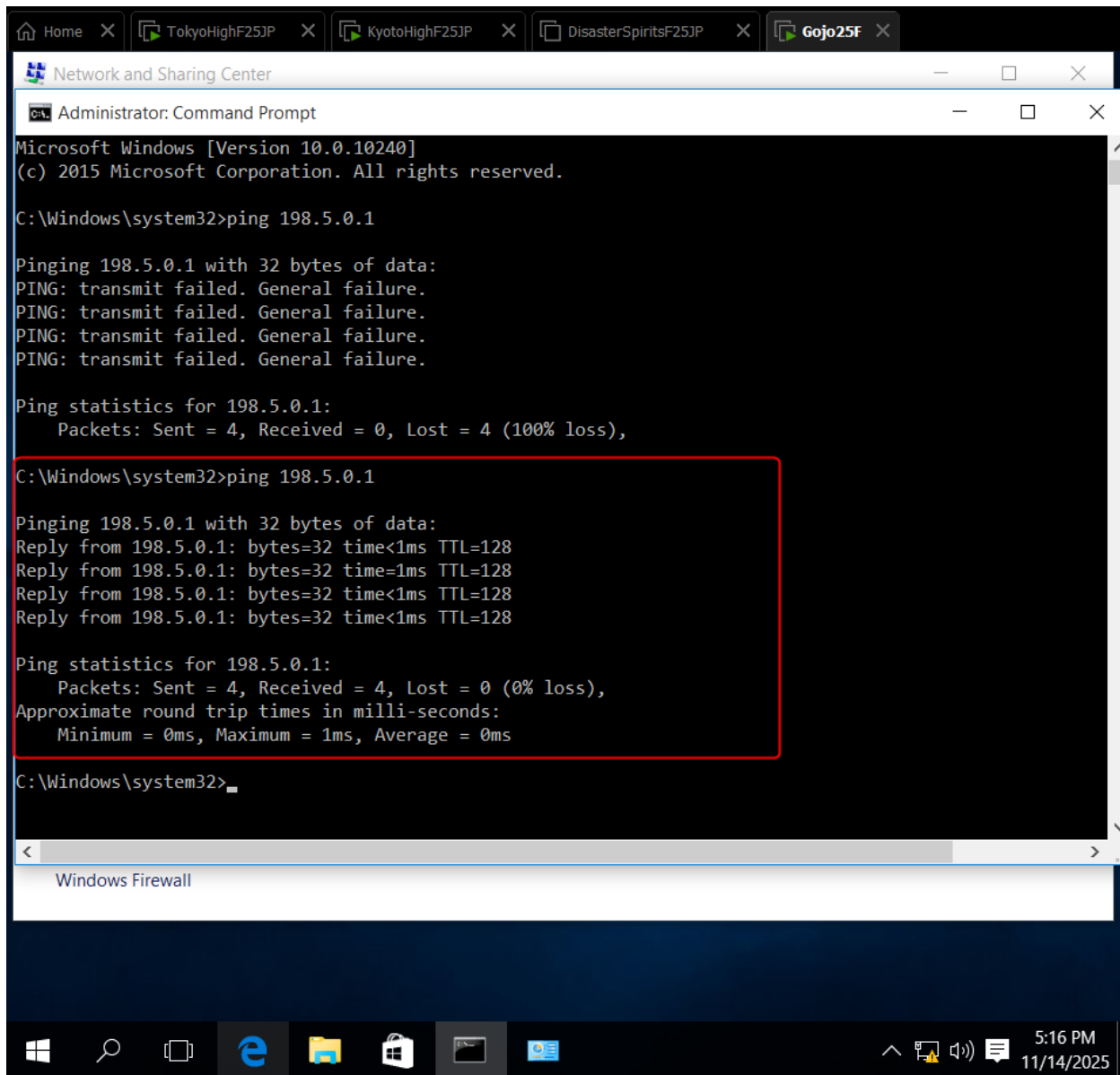


Figure 22 - Connectivity

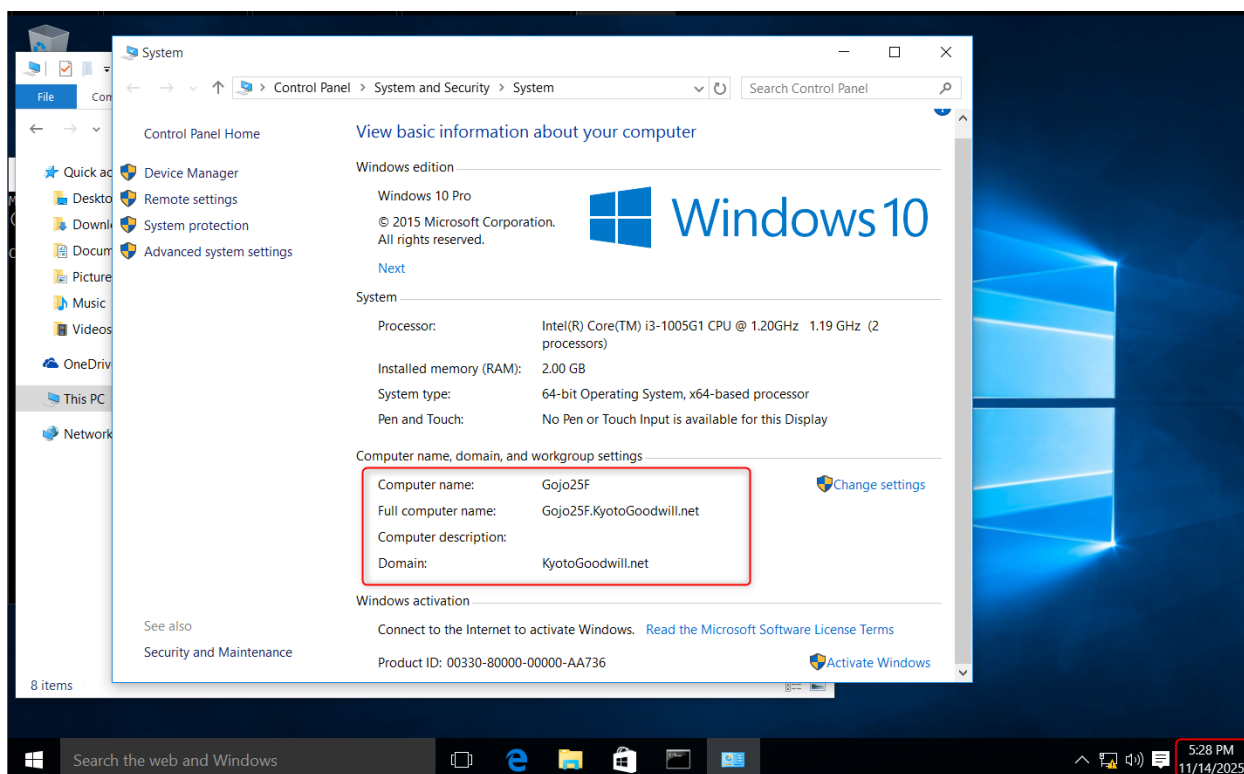


Figure 23 - Client joined to the Network

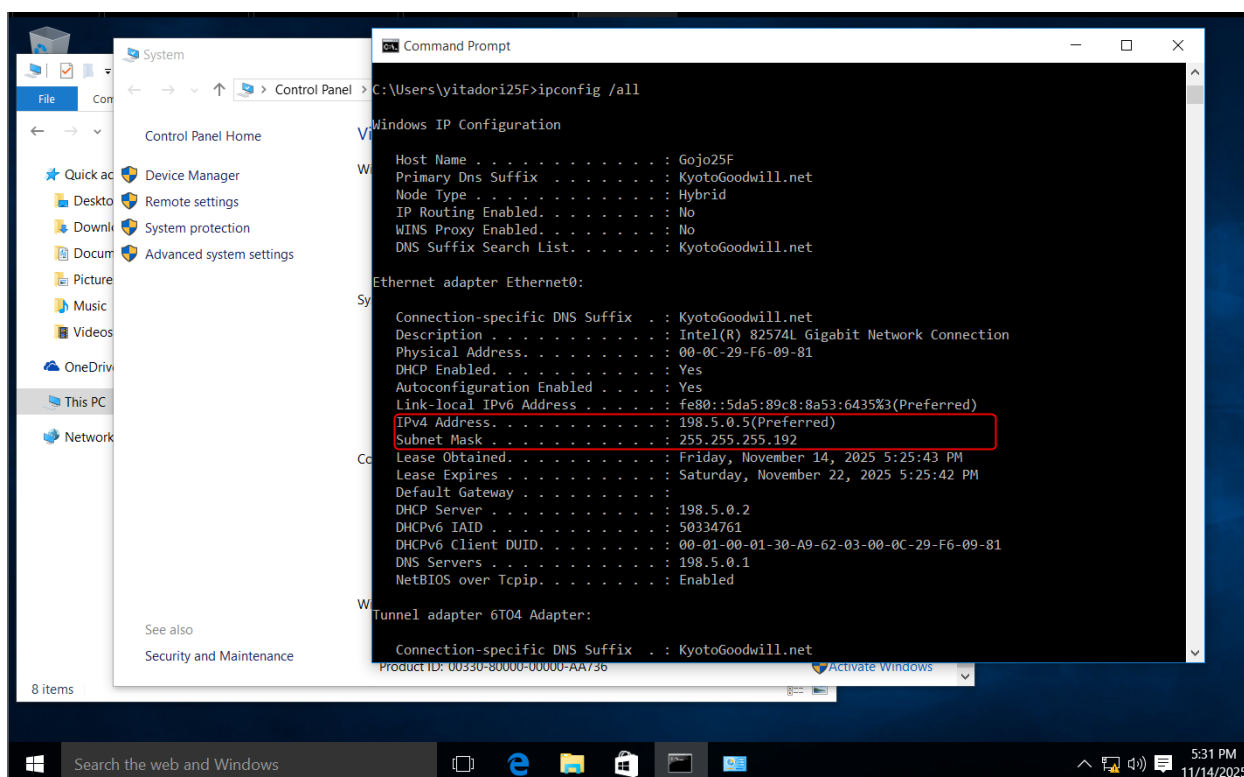


Figure 24 - DHCP console

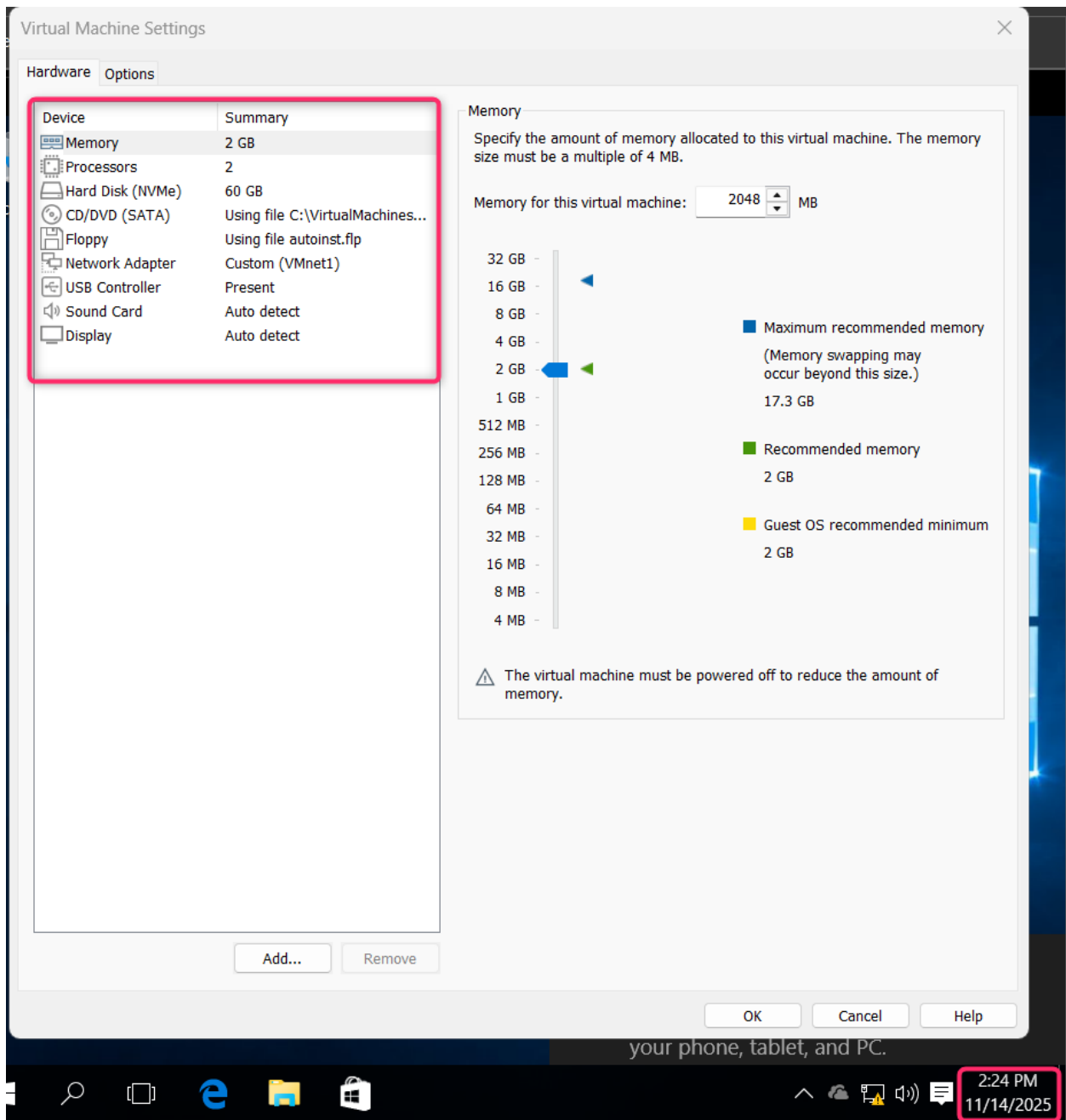


Figure 25 - Client Hardware