Production Factory: Office Server Configuration

Group 7

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Class : 2CS1

Faculty : Ivan Firdaus, S.T.

CEP CCIT

FAKULTAS TEKNIK UNIVERSITAS INDONESIA

2024

PROJECT ON

Developed by

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3. **Asia Illumina Lessy**

Production Factory: Office Server Configuration

Batch Code : 2CS1

Start Date : 18 June 2024

End Date : 30 June 2024

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Names of Developer :

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Date of Submission: 30 June 2024

NIIT

CERTIFICATE

This is to certify that this report titled "Production Factory: Office Server Configuration" embodies the original work done by Bergas Ahmad Ardiansyah, Nur Iqbal Maulana, and Asia Illumina Lessy. Project in partial fulfillment of their course requirement at NIIT.

Coordinator:

Mr.Ivan Firdaus, S.T.

ACKNOWLEDGEMENT

Thank you, the writer wishes to God the Almighty for His blessings, we can complete this project. We don’t forget to thank especially to Mr. Ivan Firdaus, S.T. who always guiding and helping us to finish this project.

This project discusses our implementation of Windows Server, configured for a manufactory environment. Hopefully, this paper can be useful for supplementing user knowledge regarding the topic. We duly acknowledge the paper's mistakes and imperfections, and we welcome constructive criticism and any suggestions from the viewer to assist in our effort to better this paper. We realizes that this paper is far from perfect. Therefore, we really expect for critic and suggestion from readers in order to help us to improve our paper.

System Analysis

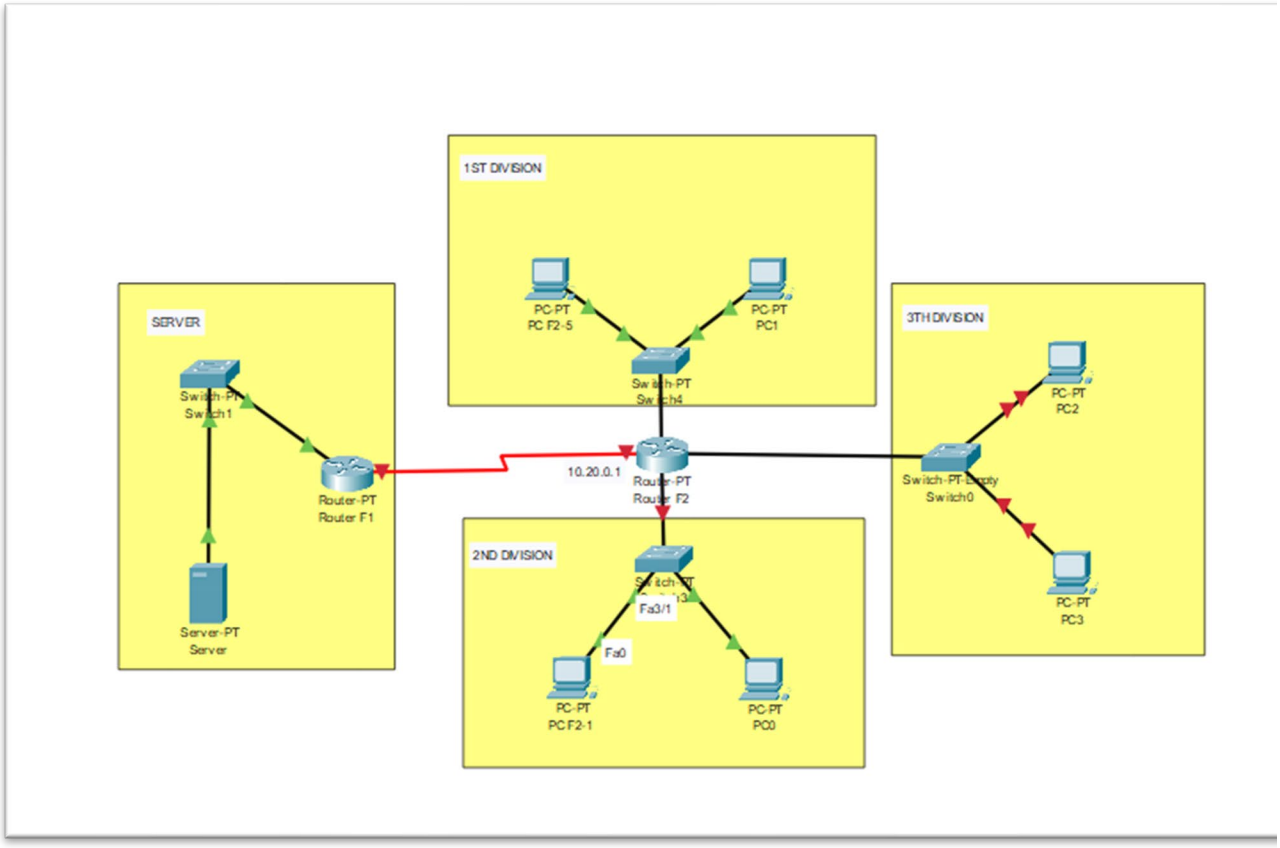
In this project, we aim to implement a computer network using Windows Server as the primary server and Windows 8 as the client. The system is designed to support an efficient and integrated network by leveraging several key services. One of the main services to be implemented is Active Directory Domain Services (AD DS), which helps manage identities and relationships within a domain, providing better control over access and resources. Additionally, the Domain Name System (DNS) will be used to convert domain names into IP addresses, facilitating easier communication within the network. The Dynamic Host Configuration Protocol (DHCP) will also be applied to automatically assign IP addresses to devices connected to the network, thereby minimizing manual intervention and enhancing efficiency.

Other services to be implemented include File Sharing, which will allow users to easily and securely share files and folders across the network, thereby improving collaboration and access to important data. Furthermore, Internet Information Services (IIS) will be used as a web server to support the hosting of websites and web applications, providing a reliable and secure platform for web-based application needs. With this combination of services, the network system being built is expected to offer a dependable, secure, and easy-to-manage solution that meets the communication and resource management needs in a centralized network environment.

IP Table

DIVISION	IPV4
Gateway	192.69.69.1
Server	192.69.69.10
Finance	192.69.69.20 - 192.69.69.22
Logistics	192.69.69.24 - 192.69.69.26
Sale	192.69.69.28 - 192.69.69.30

Network Topology



Services

System process:

1. Active Directory

Active Directory (AD) is a Microsoft service for managing network objects like users and devices. It provides centralized authentication, authorization, and Group Policy implementation. AD's hierarchical structure simplifies management, and its scalability suits any organization size. It integrates well with Microsoft products like Exchange Server and SharePoint.

2. DNS

The Domain Name System (DNS) translates human-readable domain names, like www.example.com, into numerical IP addresses that computers use to communicate. Acting like an internet phone book, DNS allows users to access websites using easy-to-remember names instead of complex addresses. It is essential for web navigation, email, and cloud services, enhancing reliability and performance through load balancing and redundancy.

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3. DHCP

Dynamic Host Configuration Protocol (DHCP) is a network management protocol used to automatically assign IP addresses and other network configuration parameters to devices on a network. This automation simplifies network administration by dynamically allocating IP addresses, ensuring efficient IP address management and reducing the risk of address conflicts. DHCP enhances the ease of connecting devices to the network, supporting both small and large-scale network environments.

4. OU+user

An Organizational Unit (OU) in Active Directory is a container used to organize and manage a group of objects, such as users, within a domain. Users within an OU can have specific policies and permissions applied to them, allowing for efficient management and administration. This structure helps streamline tasks like policy application, access control, and resource allocation, enhancing overall network organization and security.

Services

5. GPO

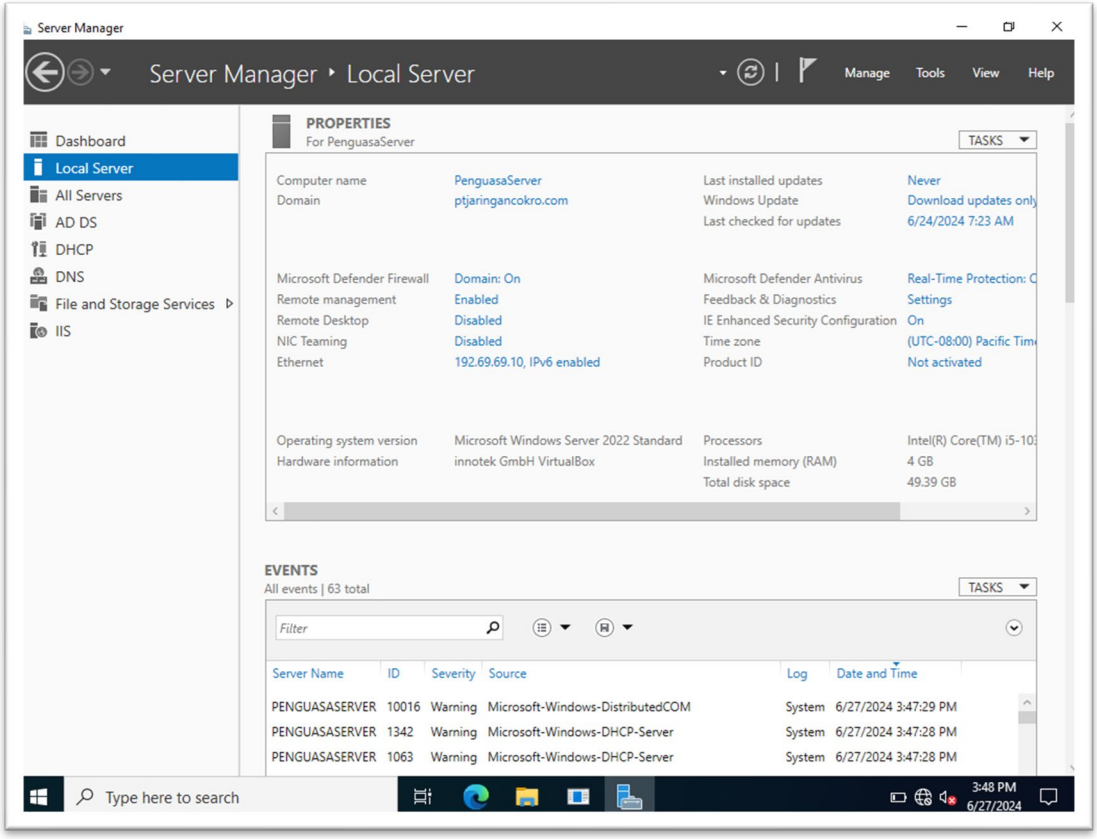
A Group Policy Object (GPO) is a feature of Microsoft Active Directory that provides centralized management and configuration of operating systems, applications, and user settings in a network environment. GPOs allow administrators to define policies for both users and computers, such as security settings, software installation, and maintenance tasks. By applying GPOs to specific groups or organizational units, administrators can ensure consistent and secure configurations across the network.

6. Folder Sharing Management

In the context of Windows Server, management of folder and file sharing involves using tools like File Server Resource Manager (FSRM) and Active Directory to control and secure access to data. Administrators can set permissions on shared folders and files to determine who can read, write, or modify them, ensuring that only authorized users have access. This management also includes configuring sharing settings, implementing quotas, monitoring access and usage, and performing regular backups to maintain data integrity and security. These processes help create an organized, secure, and efficient file-sharing environment within a Windows Server network.

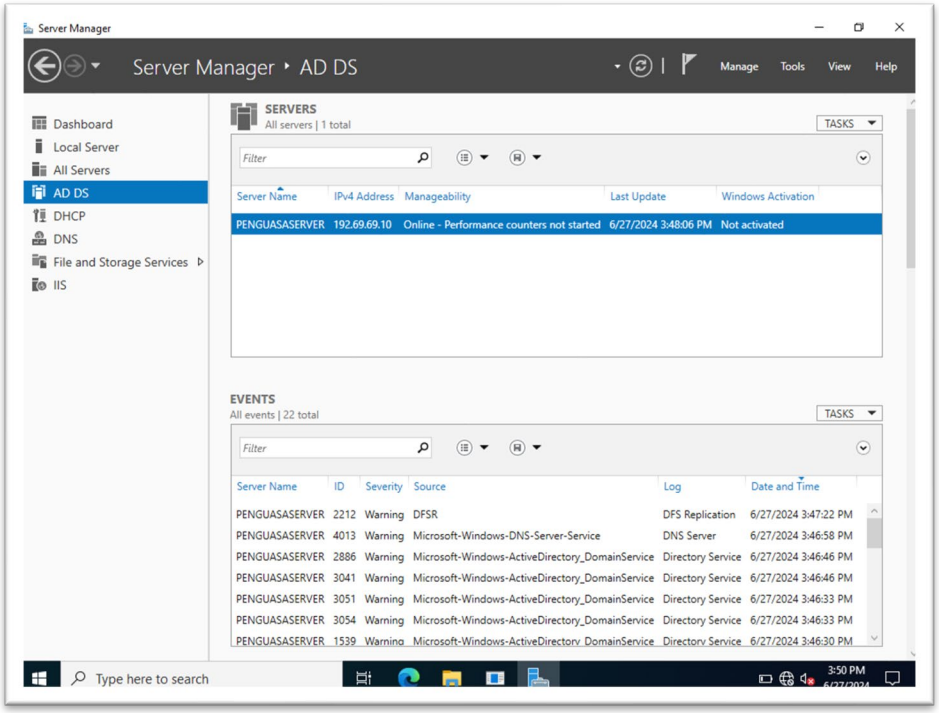
Network Configuration

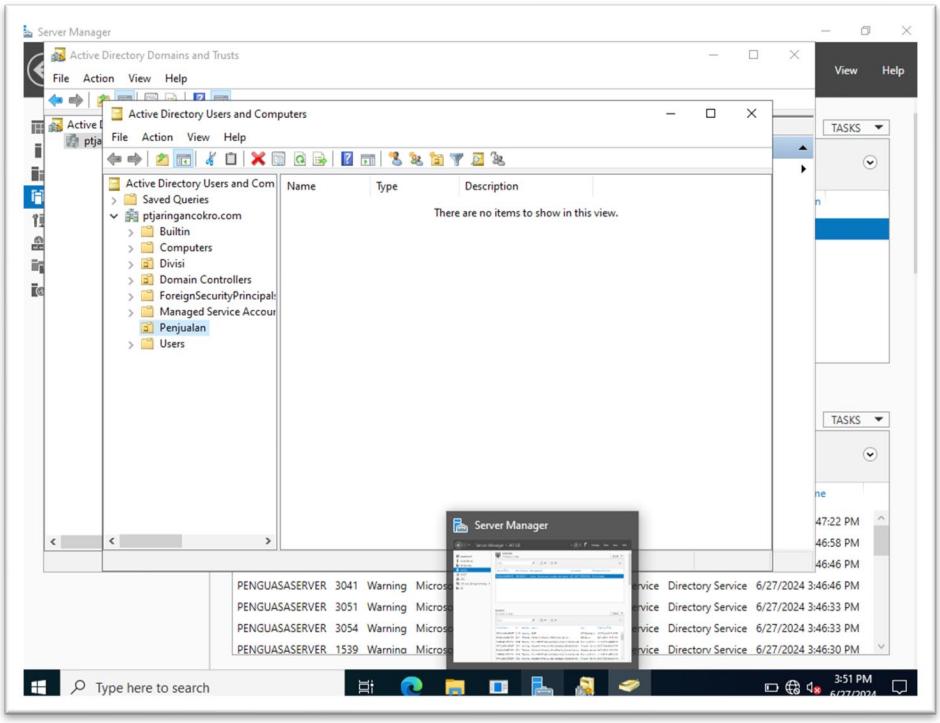
Local Server Configuration



Network Configuration

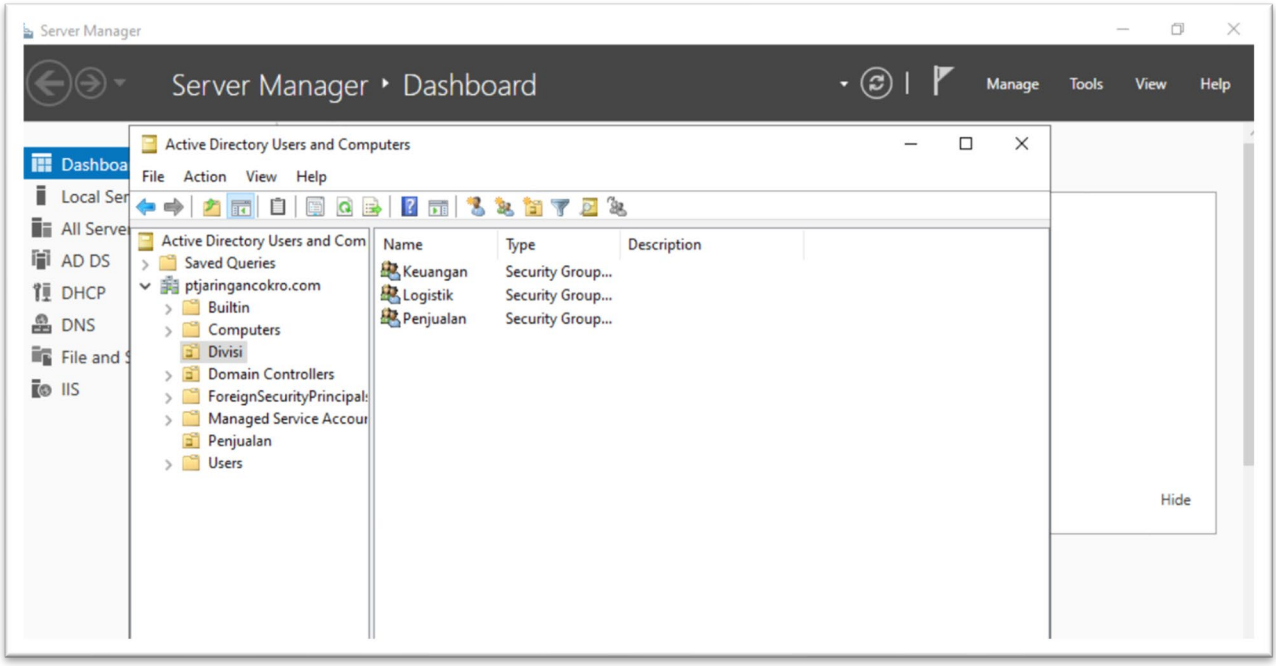
DNS & OU Configuration

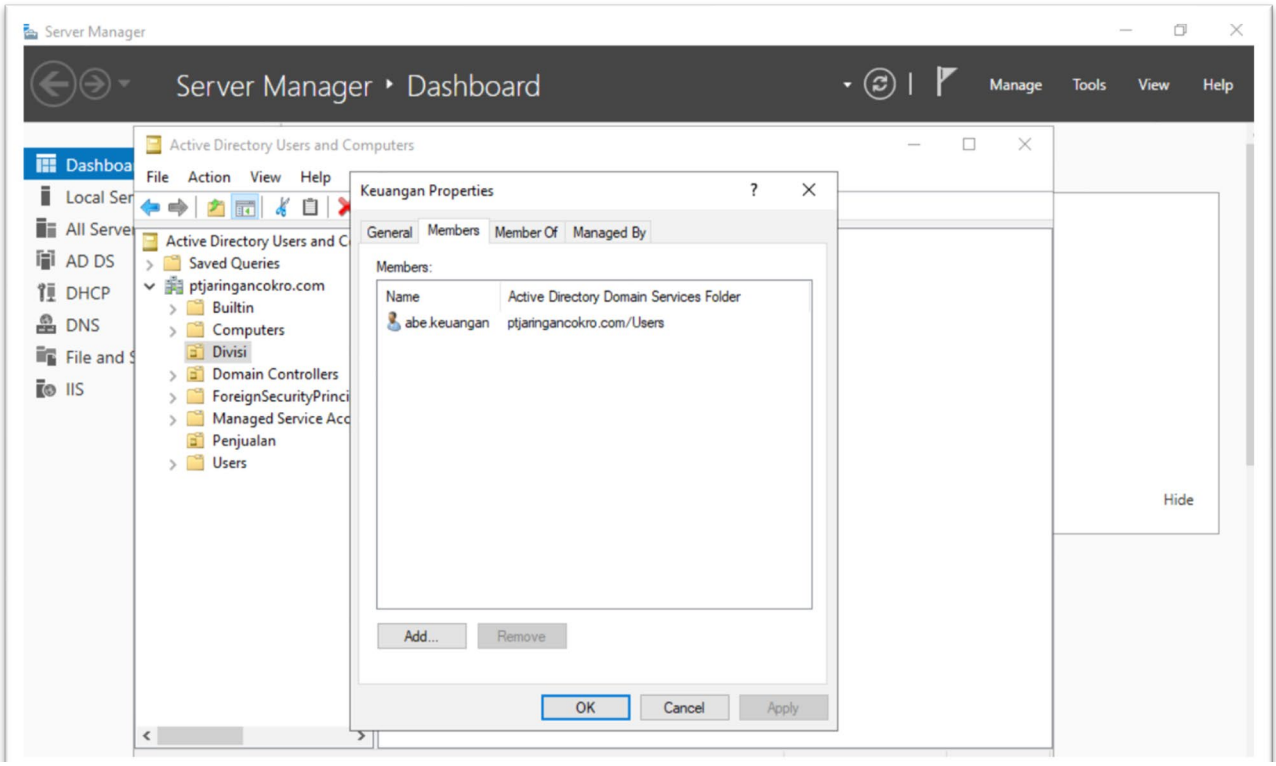




Network Configuration

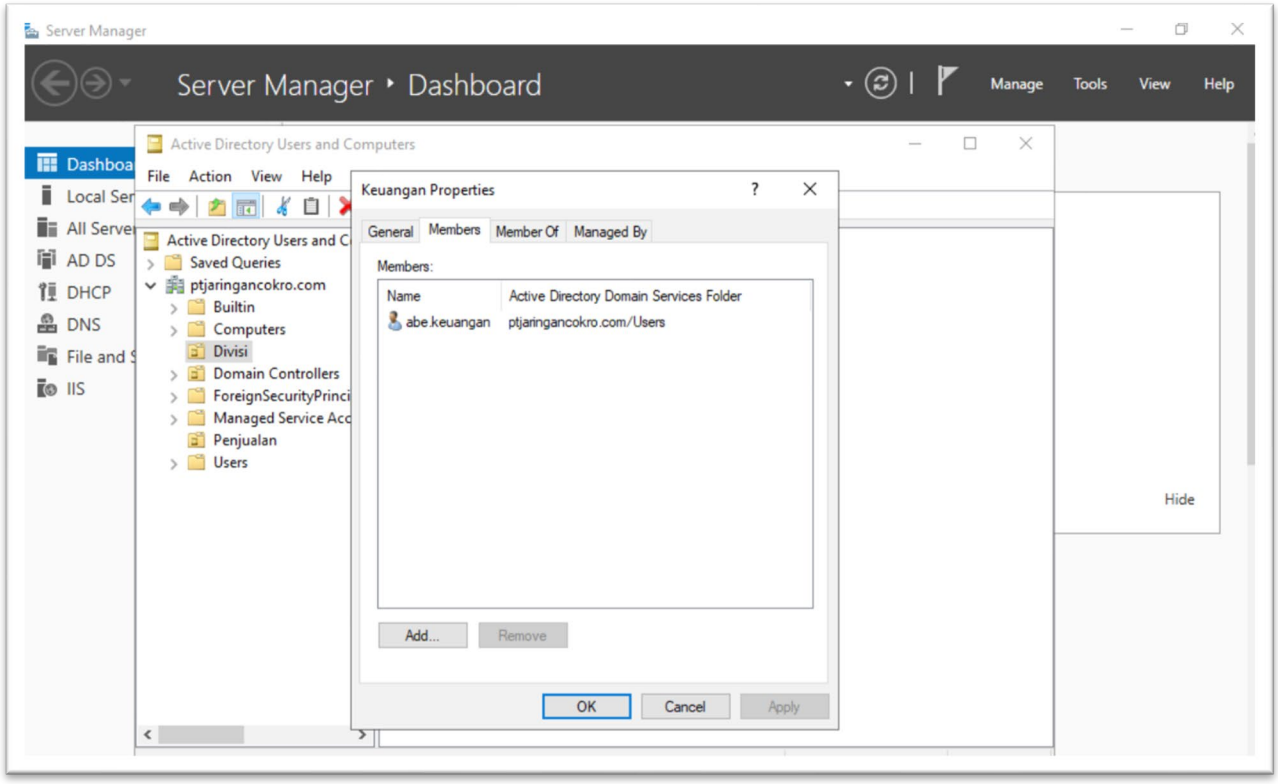
DNS & OU CONFIGURATION





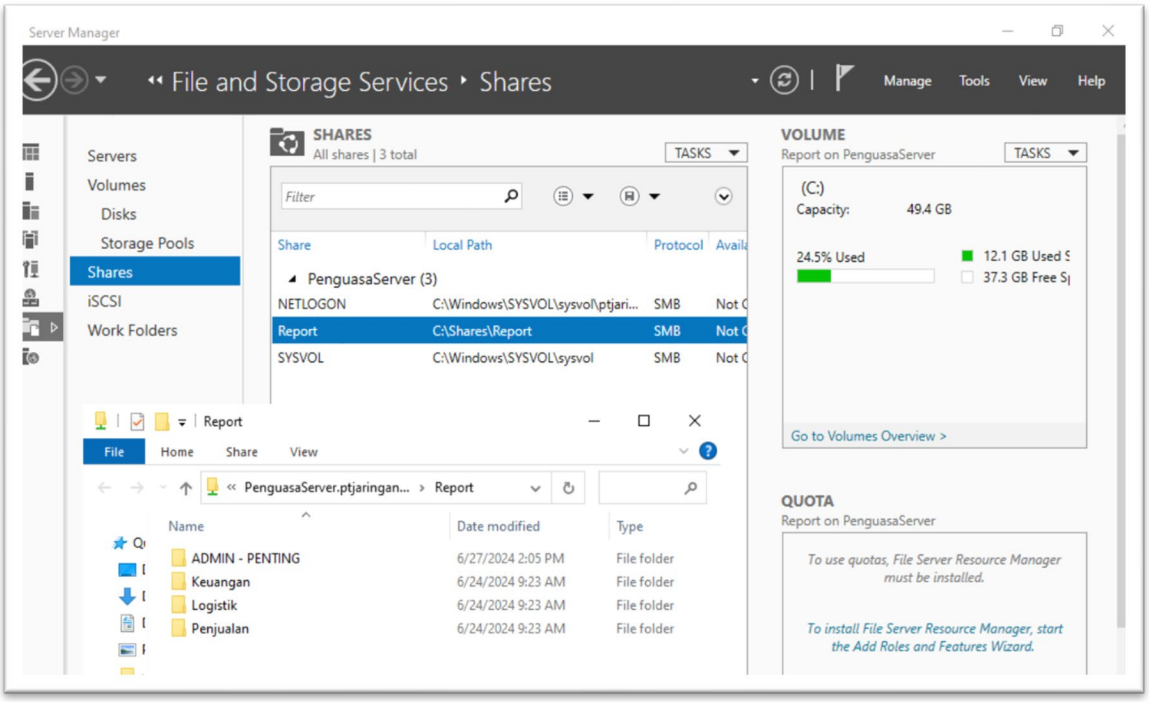
Network Configuration

DHCP



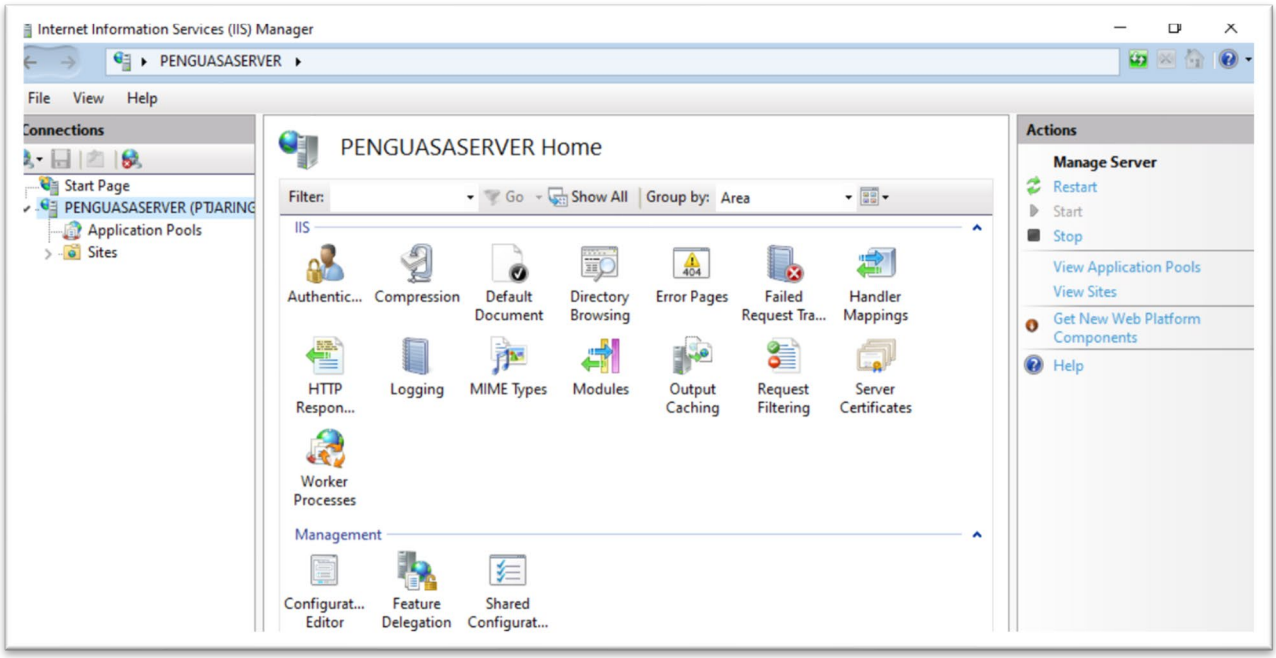
Network Configuration

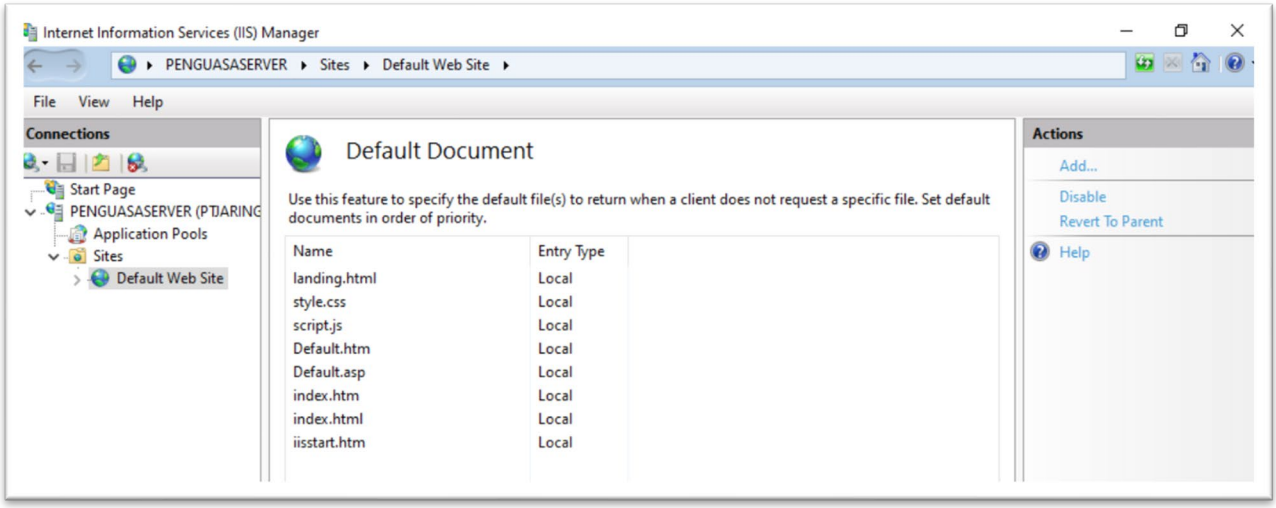
FILE SHARING



Network Configuration

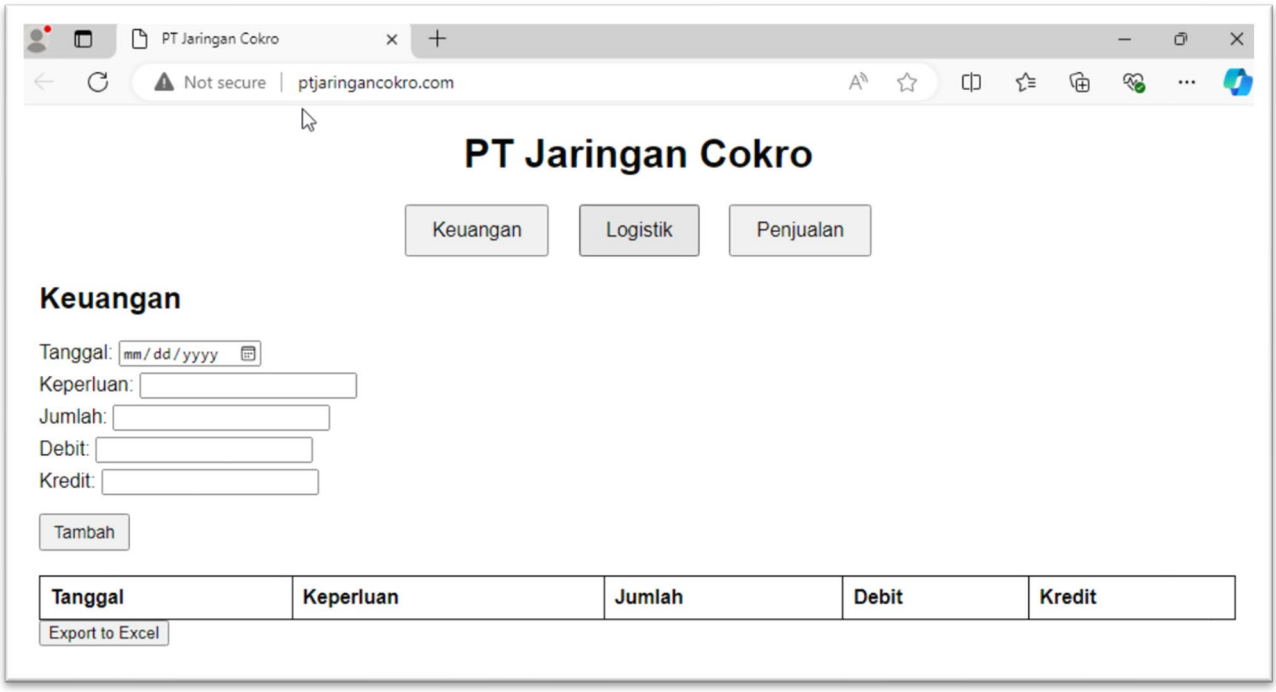
WEB SERVER IIS

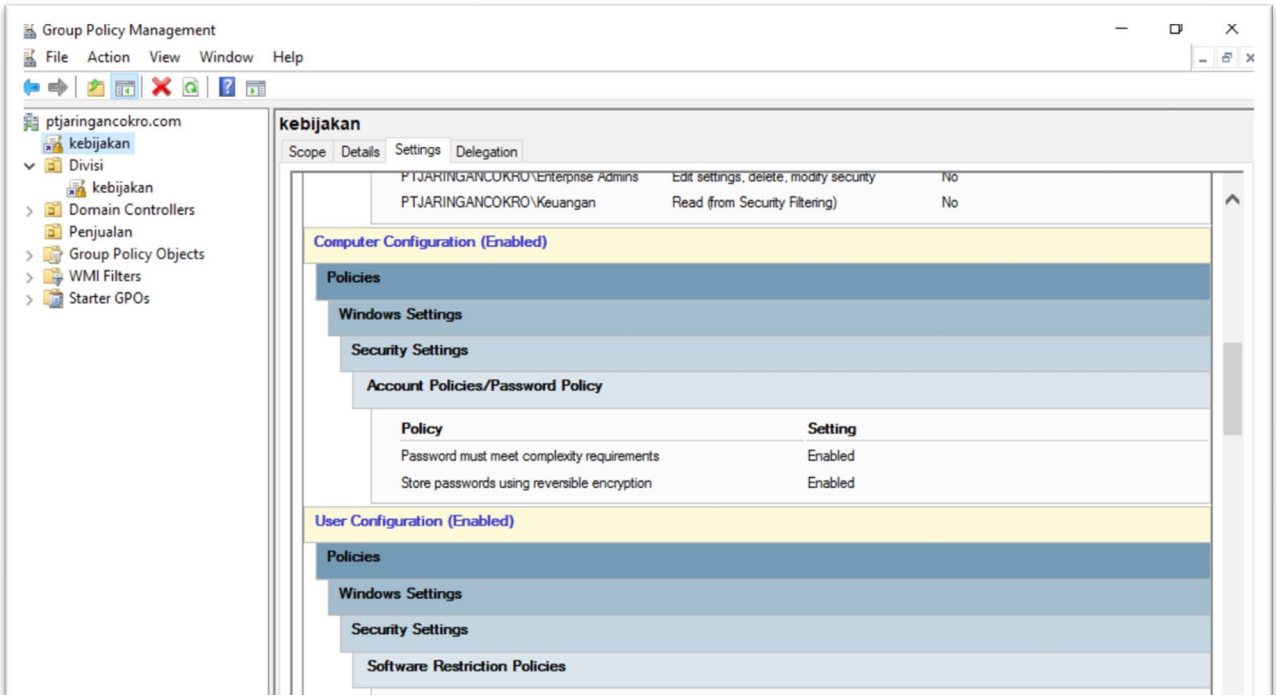




Network Configuration

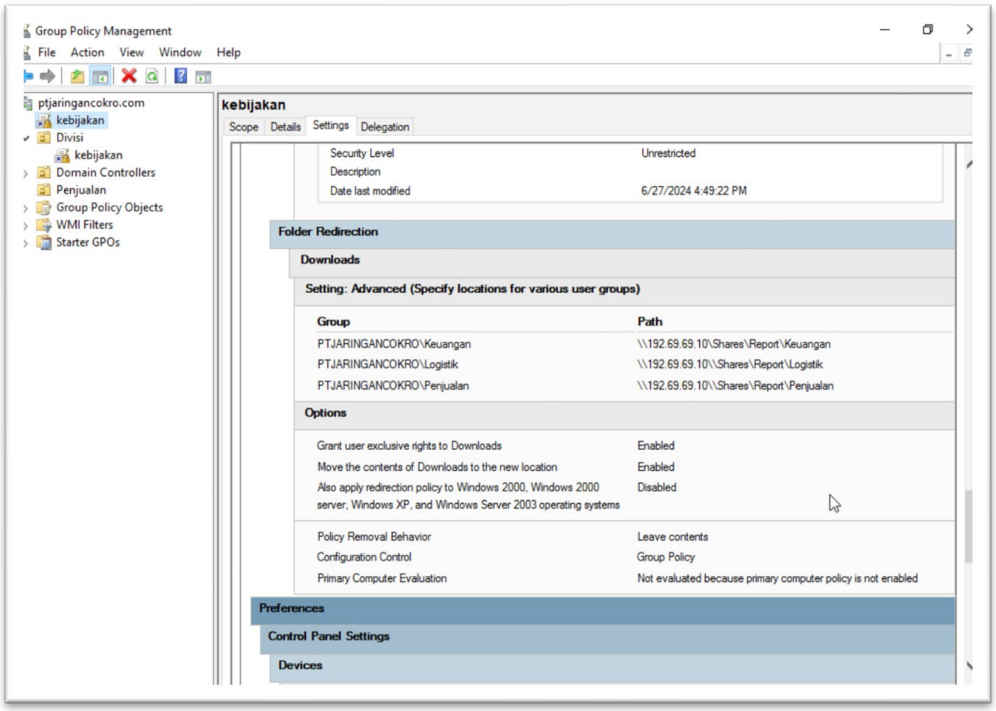
WEB SERVER & GPO

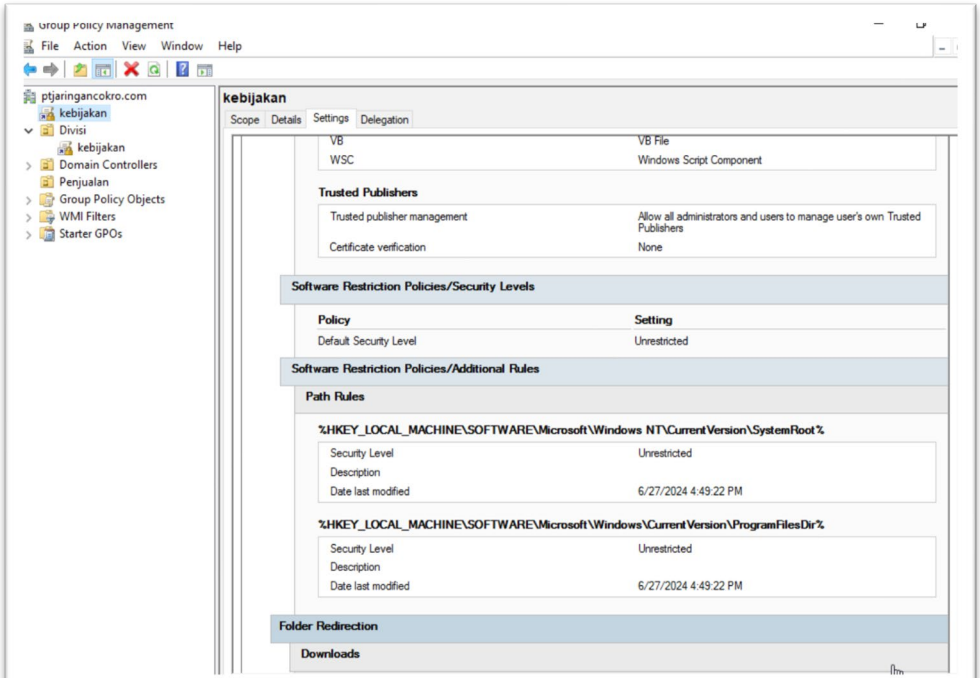




Network Configuration

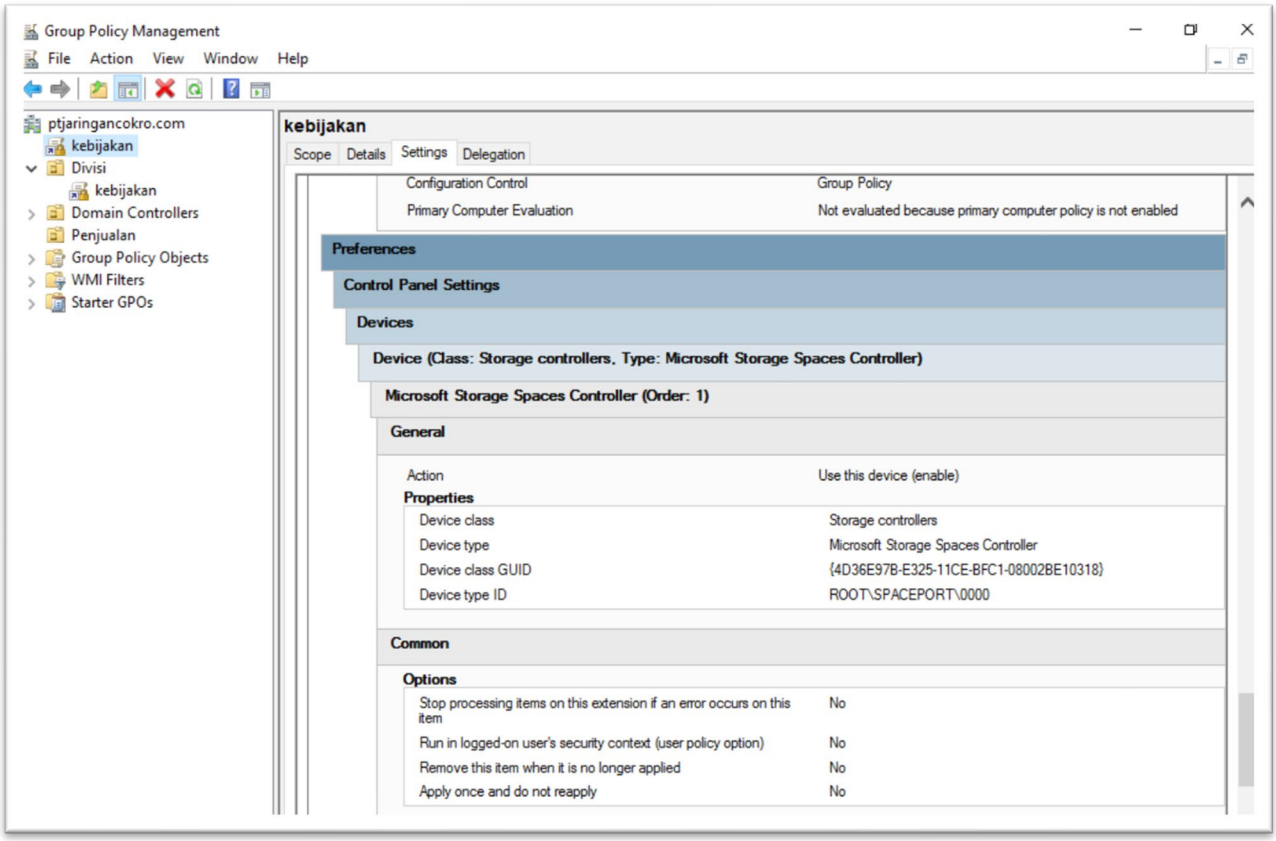
GPO

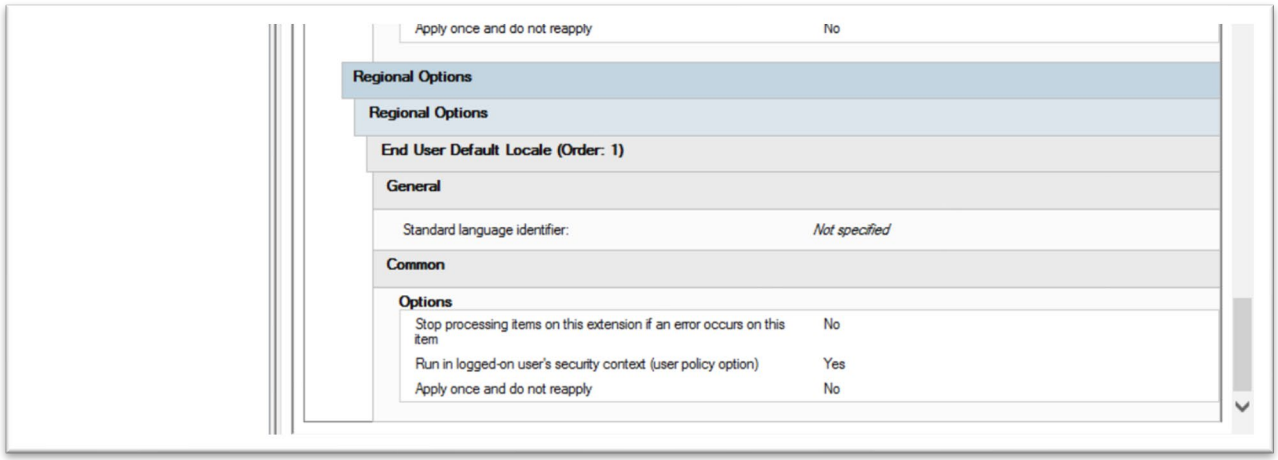




Network Configuration

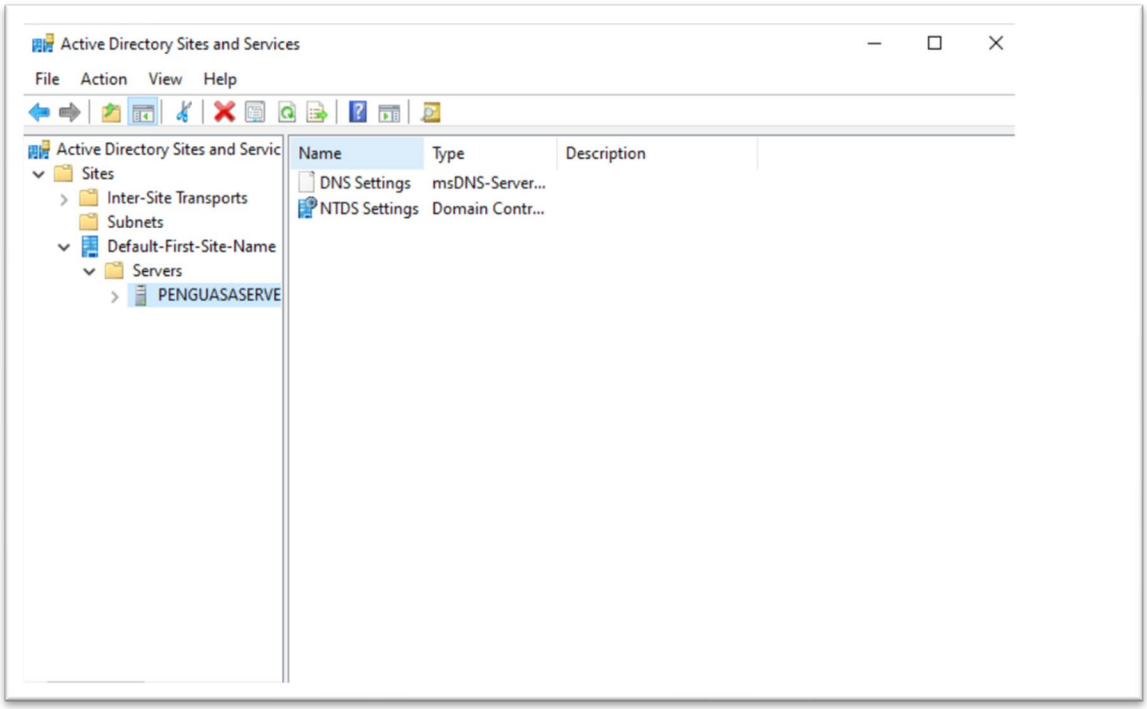
GPO





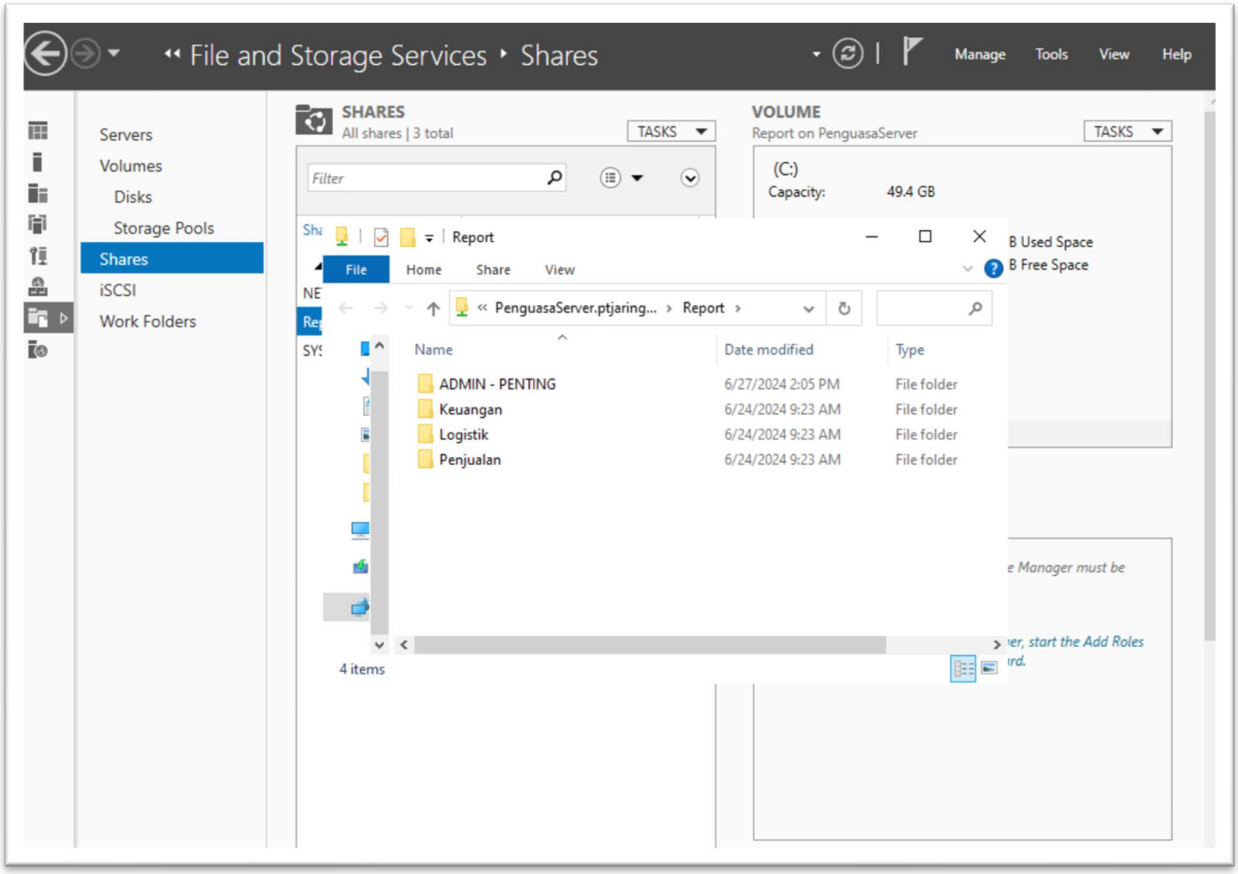
Network Configuration

AD DS

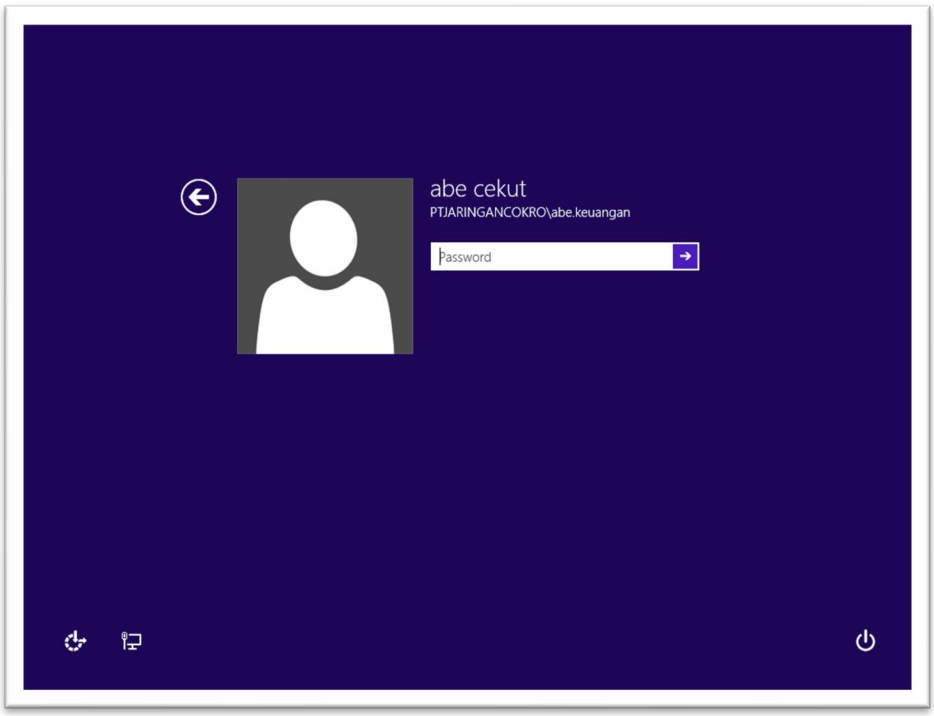


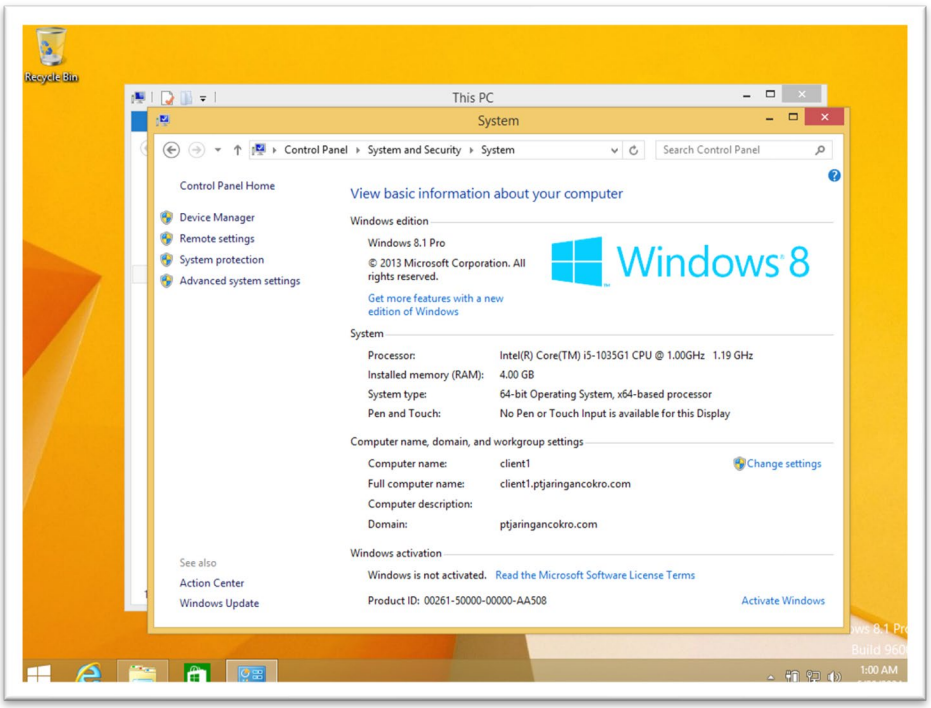
Network Configuration

File Storage Services

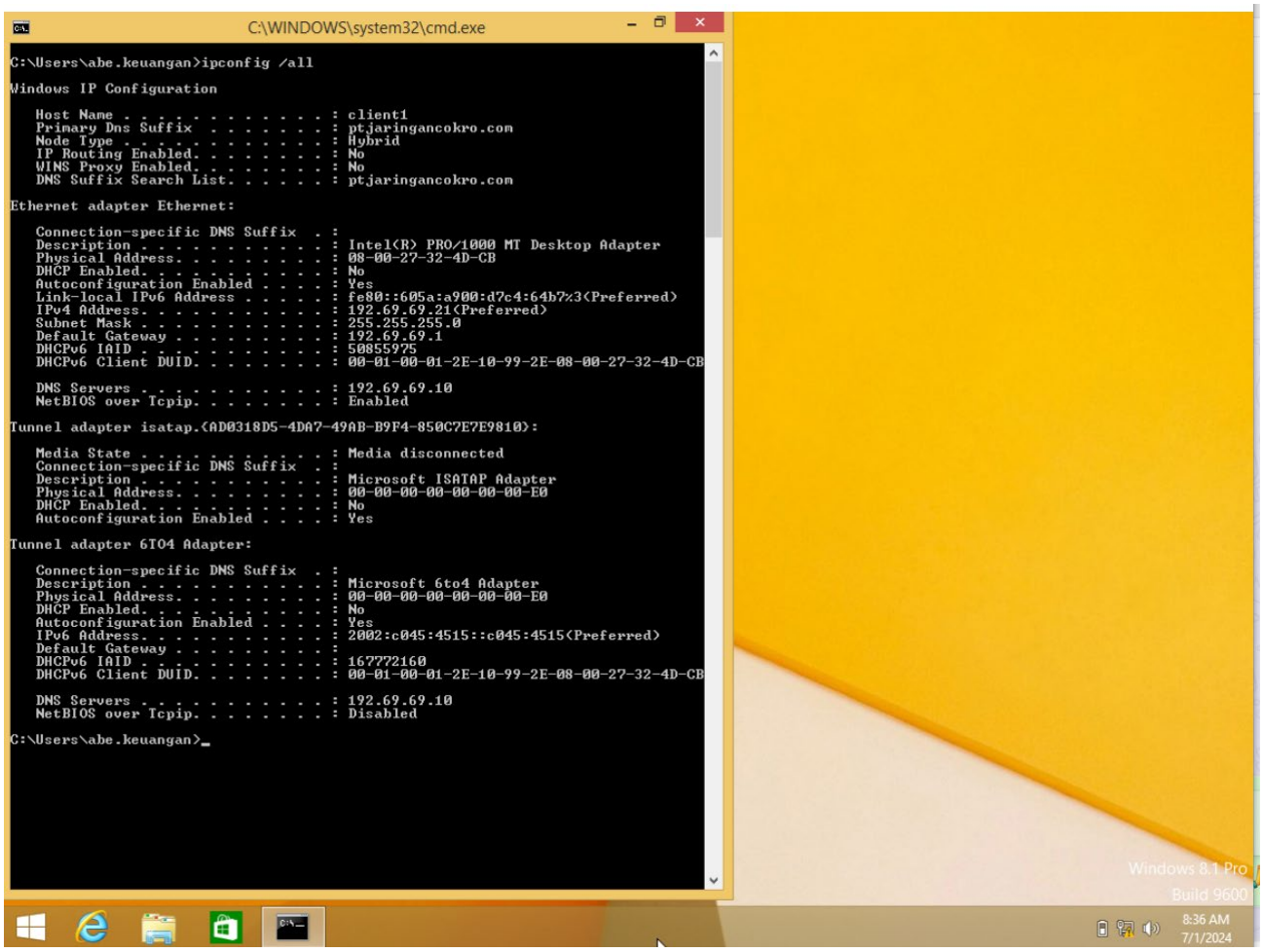


Output

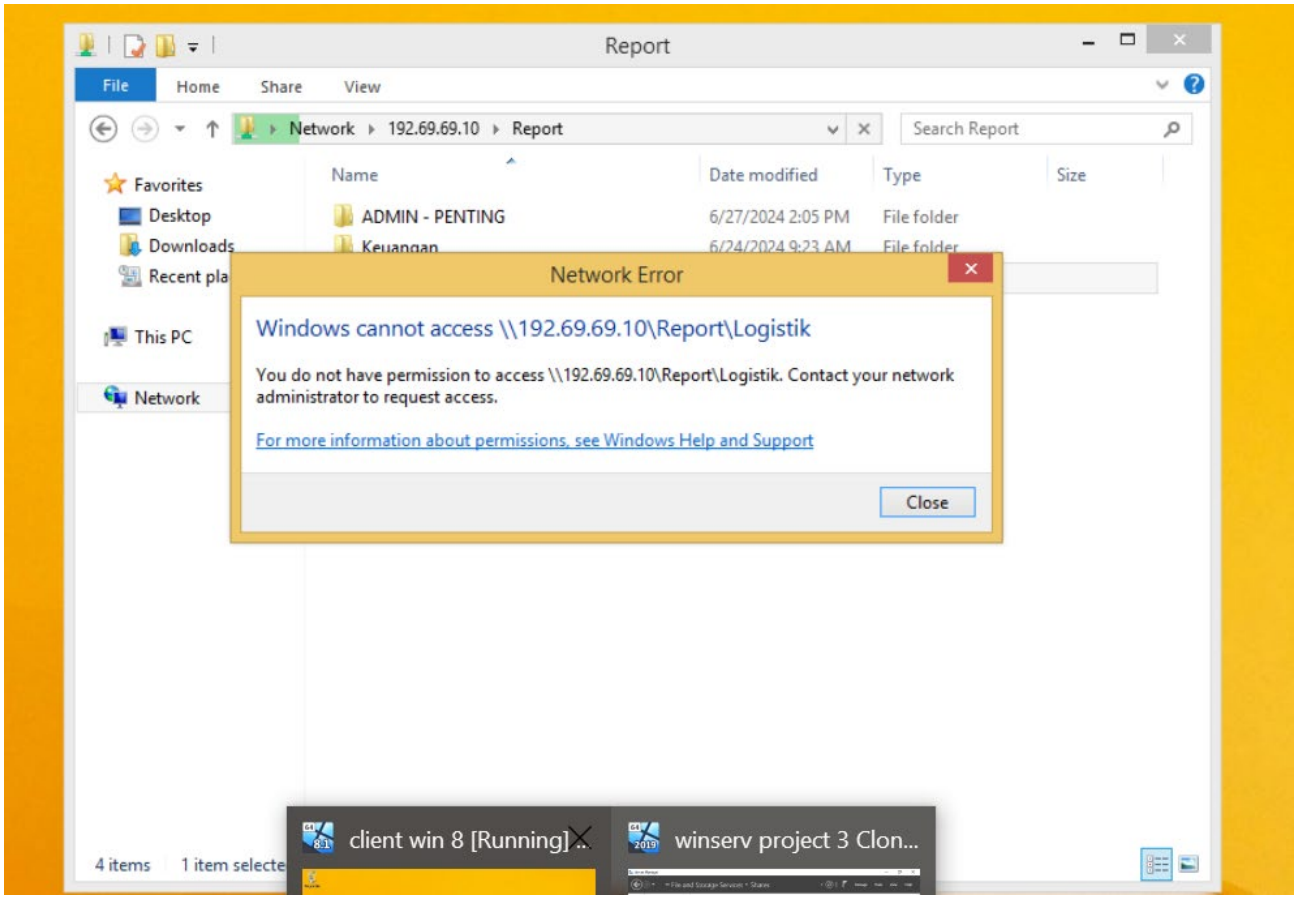

abe cekut
PTJARINGANCOKRO\abe.keuangan
Password


Recycle Bin
This PC
System
Control Panel ▸ System and Security ▸ System
Search Control Panel
Control Panel Home
Device Manager
Remote settings
System protection
Advanced system settings
View basic information about your computer
Windows edition
Windows 8.1 Pro
© 2013 Microsoft Corporation. All rights reserved.
Get more features with a new edition of Windows
Windows 8
System
Processor: Intel(R) Core(TM) i5-1035G1 CPU @ 1.00GHz 1.19 GHz
Installed memory (RAM): 4.00 GB
System type: 64-bit Operating System, x64-based processor
Pen and Touch: No Pen or Touch Input is available for this Display
Computer name, domain, and workgroup settings
Computer name: client1
Change settings
Full computer name: client1.ptjaringancokro.com
Computer description:
Domain: ptjaringancokro.com
Windows activation
Windows is not activated. Read the Microsoft Software License Terms
Product ID: 00261-50000-00000-AA508
Activate Windows
See also
Action Center
Windows Update
1:00 AM

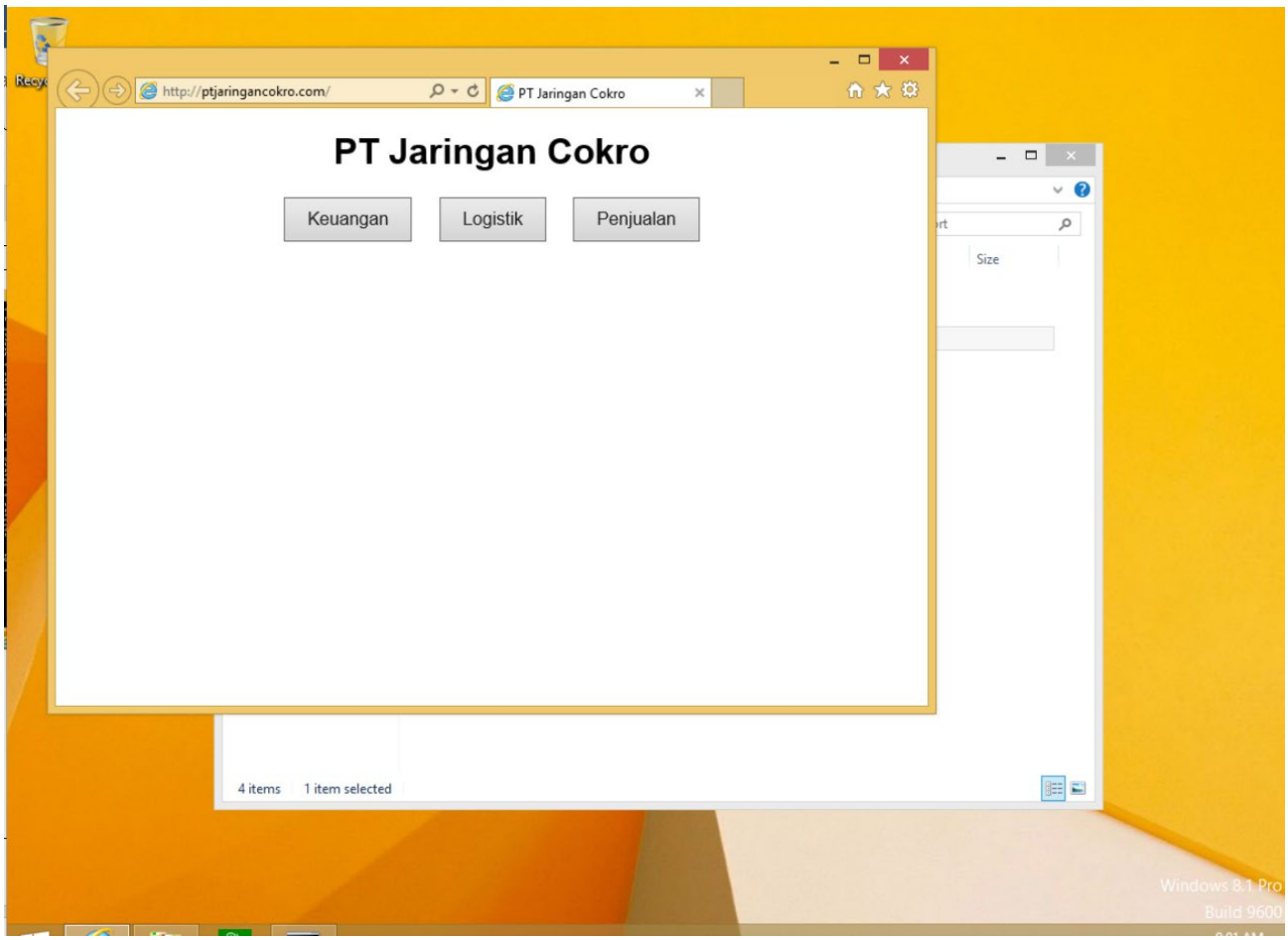
Output


C:\WINDOWS\system32\cmd.exe
C:\Users\abe.keuangan>ipconfig /all
Windows IP Configuration
Host Name . . . . . : client1
Primary Dns Suffix . . . . . : ptjaringancokro.com
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : ptjaringancokro.com
Ethernet adapter Ethernet:
Connection-specific DNS Suffix . :
Description . . . . . : Intel(R) PRO/1000 MT Desktop Adapter
Physical Address. . . . . : 08-00-27-32-4D-CB
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::605a:a900:d7c4:64b7%3(Preferred)
IPv4 Address. . . . . : 192.69.69.21(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.69.69.1
DHCPv6 IAID . . . . . : 50855975
DHCPv6 Client DUID. . . . . : 00-01-00-01-2E-10-99-2E-08-00-27-32-4D-CB
DNS Servers . . . . . : 192.69.69.10
NetBIOS over Tcpip. . . . . : Enabled
Tunnel adapter isatap.{AD0318D5-4DA7-49AB-B9F4-850C7E7E9810}:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Description . . . . . : Microsoft ISATAP Adapter
Physical Address. . . . . : 00-00-00-00-00-00-00-E0
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
Tunnel adapter 6TO4 Adapter:
Connection-specific DNS Suffix . :
Description . . . . . : Microsoft 6to4 Adapter
Physical Address. . . . . : 00-00-00-00-00-00-00-E0
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes
IPv6 Address. . . . . : 2002:c045:4515::c045:4515(Preferred)
Default Gateway . . . . . :
DHCPv6 IAID . . . . . : 167772160
DHCPv6 Client DUID. . . . . : 00-01-00-01-2E-10-99-2E-08-00-27-32-4D-CB
DNS Servers . . . . . : 192.69.69.10
NetBIOS over Tcpip. . . . . : Disabled
C:\Users\abe.keuangan>
Windows 8.1 Pro
Build 9600
8:36 AM
7/1/2024

Output


Report
File
Home
Share
View
Network ▸ 192.69.69.10 ▸ Report
Search Report
Favorites
Desktop
Downloads
Recent pla
This PC
Network
Name
Date modified
Type
Size
ADMIN - PENTING
6/27/2024 2:05 PM
File folder
Keuangan
6/24/2024 9:23 AM
File folder
Network Error
Windows cannot access \\192.69.69.10\Report\Logistik
You do not have permission to access \\192.69.69.10\Report\Logistik. Contact your network administrator to request access.
For more information about permissions, see Windows Help and Support
Close
4 items
1 item selecte
client win 8 [Running]...
winserv project 3 Clon...

Output


http://ptjaringancokro.com/
PT Jaringan Cokro
PT Jaringan Cokro
Keuangan
Logistik
Penjualan
Size
4 items
1 item selected
Windows 8.1 Pro
Build 9600

Configuration

Hardware: ASUS TUF F15 2022

Software: - OracleVM Virtual Box

Operating System: Windows 11,Windows Server 2022, Windows 8.1