



PT Jaringan Cokro : Office and Branch Server Integration and Administration

Group 7

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Class : 2CS1

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CEP CCIT

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PROJECT ON

Developed by

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NIIT

PT Jaringan Cokro : Office and Branch Server Integration and Administration

Batch Code : 2CS1

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Date of Submission: 18 July 2024



CERTIFICATE

This is to certify that this report titled “PT Jaringan Cokro : Office and Branch Server Integration and Administration” embodies the original work done by Nur Iqbal Maulana, Asia Illumina Lessy and Muhammad Armed Bintang Pradana. Project in partial fulfillment of their course requirement at NIIT.

Coordinator:

Mr. Ivan Firdaus, S.T.

ACKNOWLEDGEMENT

The authors would like to thank God Almighty for His blessings that enabled us to complete this project. We would also like to thank Mr. Ivan Firdaus, S.T. who always guided and helped us in completing this project.

This project discusses the implementation of Windows Server configured to integrate and to administer at PT Jaringan Cokro. Hopefully this paper can be useful to increase user knowledge on the topic. We realize that this paper still has many flaws and imperfections, and we welcome constructive criticism and suggestions from readers to help us in our efforts to improve this paper. We realize that this paper is far from perfect. Therefore, we would appreciate criticism and suggestions from the reader to help us improve this paper.

System Analysis

In this project, we aim to implement a 2-server network for the main server and branch servers. The system is designed to support an efficient and integrated network by utilizing several key services. One of the key services that will be implemented is two Active Directory Domain Services (AD DS), which helps to connect the main server to the branch server. Distributed File System (DFS) will be used to distribute files from the main server to several branch servers. File Server Resource Manager (FSRM) is also used in this project to manage and monitor data storage on file servers.

Other services that will be implemented include the Active Directory Rights Management Service, which will allow the main server to be the center of all management, hold access rights control and integrate with applications. For branch servers, it can distribute the workload from the main server to several branch servers and reduce the latency of the main server and branch servers.

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. DFS

Distributed File System (DFS), is a set of services in Windows Server that allows administrators to organize and manage file shares across multiple servers in a network. It provides a unified namespace for users to access shared files and folders, regardless of their physical location.

3. FSRM

File Server Resource Manager (FSRM) is a suite of tools in Windows Server that allows administrators to manage and control the storage and classification of data on file servers. It provides several features to help monitor and regulate how data is stored, ensuring efficient use of storage resources and compliance with organizational policies.

4. ADRMS

Active Directory Rights Management Services (AD RMS) is a feature of the Windows Server operating system that provides information protection through persistent usage policies and rights. AD RMS helps safeguard digital information from unauthorized access and use, regardless of where it is stored or how it is shared.

IP Table

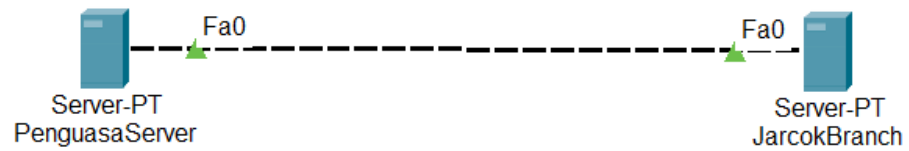
Device	IP Address	Subnet Mask	Default Gateway	DNS
PenguasaServer	192.69.69.10	255.255.255.0	192.69.69.1	192.69.69.10
JarcokBranch	192.69.69.11	255.255.255.0	192.69.69.1	192.69.69.10

Operating system virtual machine specification :

1. Windows Server 2022 (1)
 - 4GB RAM
 - 50GB Storages
 - 1 CPU
 - 1 Internal Network Adapters
2. Windows Server 2022 (2)
 - 2GB RAM
 - 50GB Storages
 - 1 CPU
 - 1 Internal Network Adapters

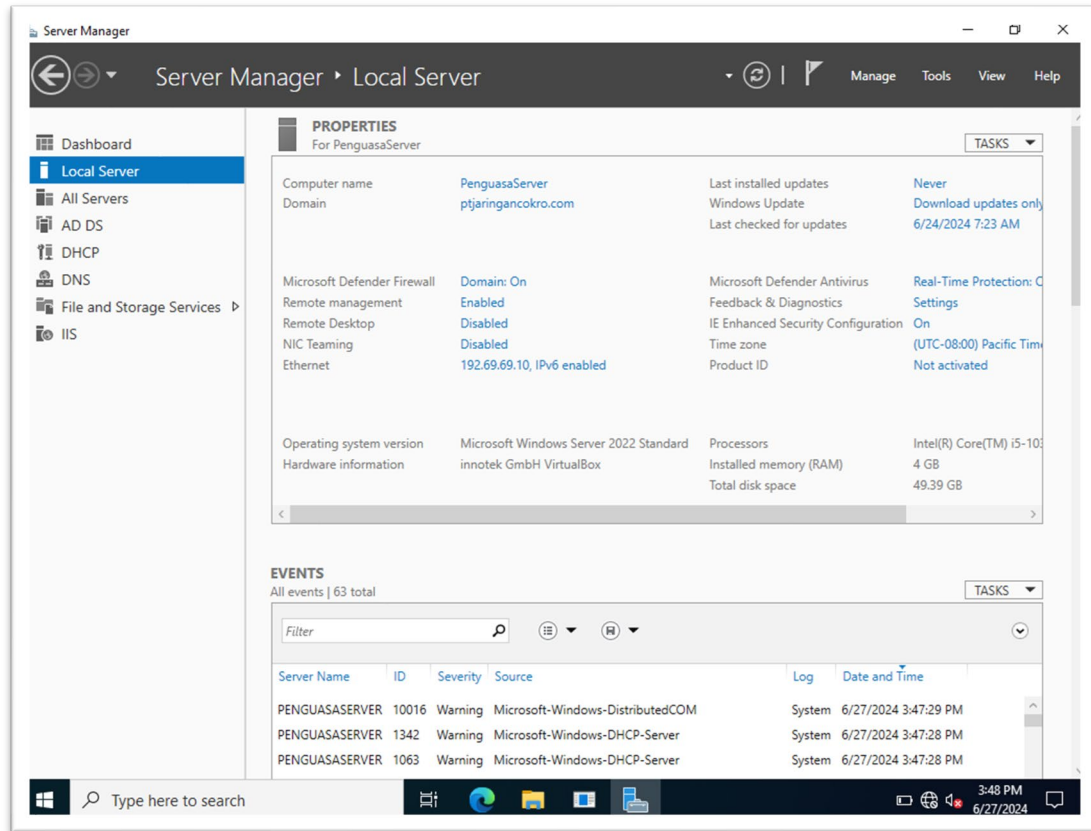
Network Topology

Internal Network Inside Virtual Box Machine



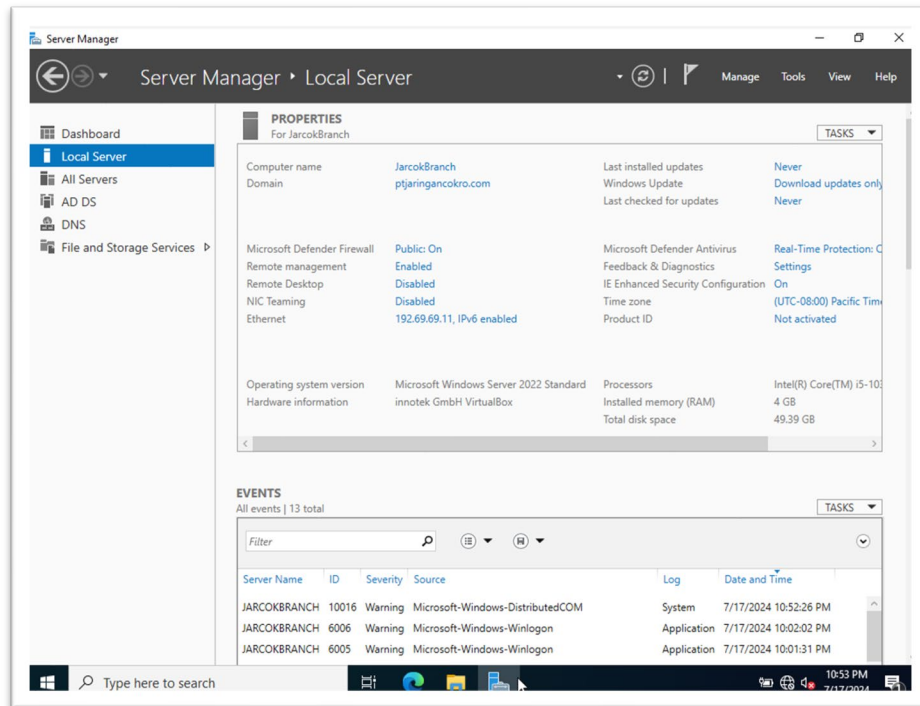
Network Configuration

Main Server Configuration



Network Configuration

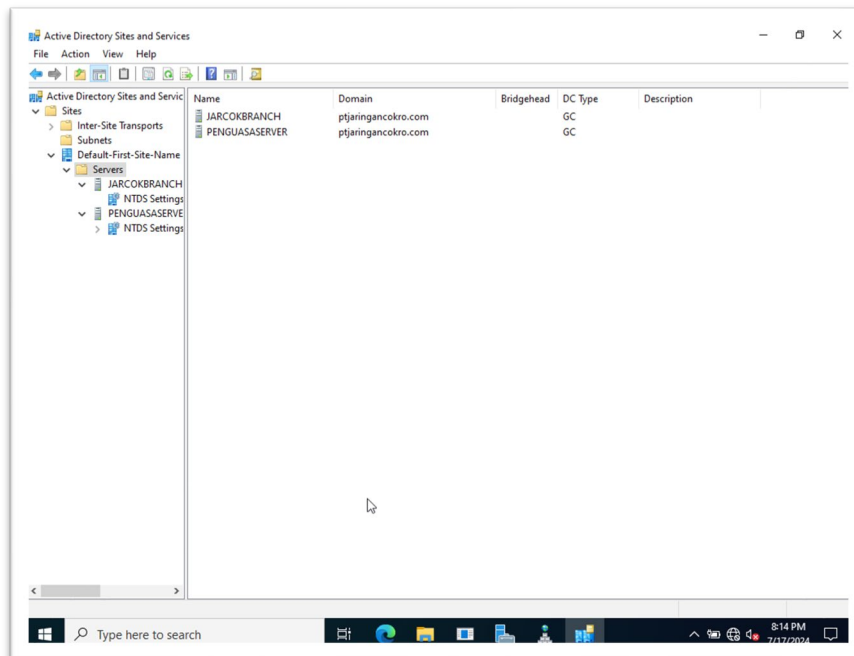
Branch Server Configuration



Network Configuration

AD Main Server and AD Branch Server Connected Configuration

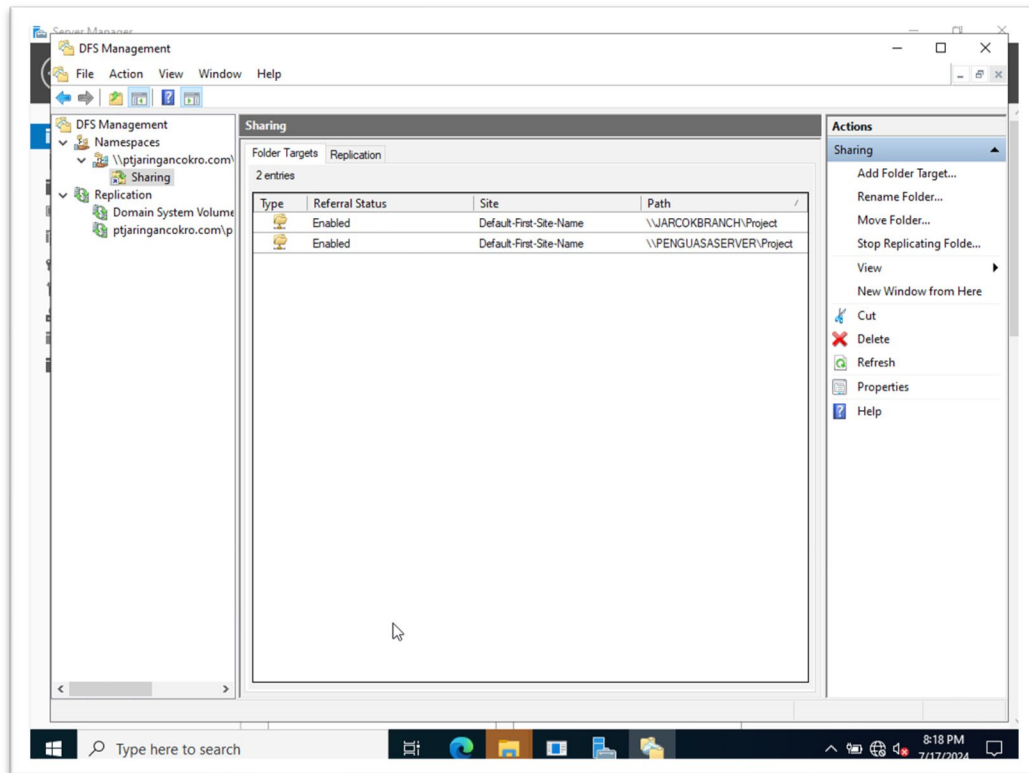
PENGUASASERVER (Main Server)
JARCOKBRANCH (Branch Server)



The branch server connected by adding the Domain to existing domain system, not add to a new forest when it was first time configured

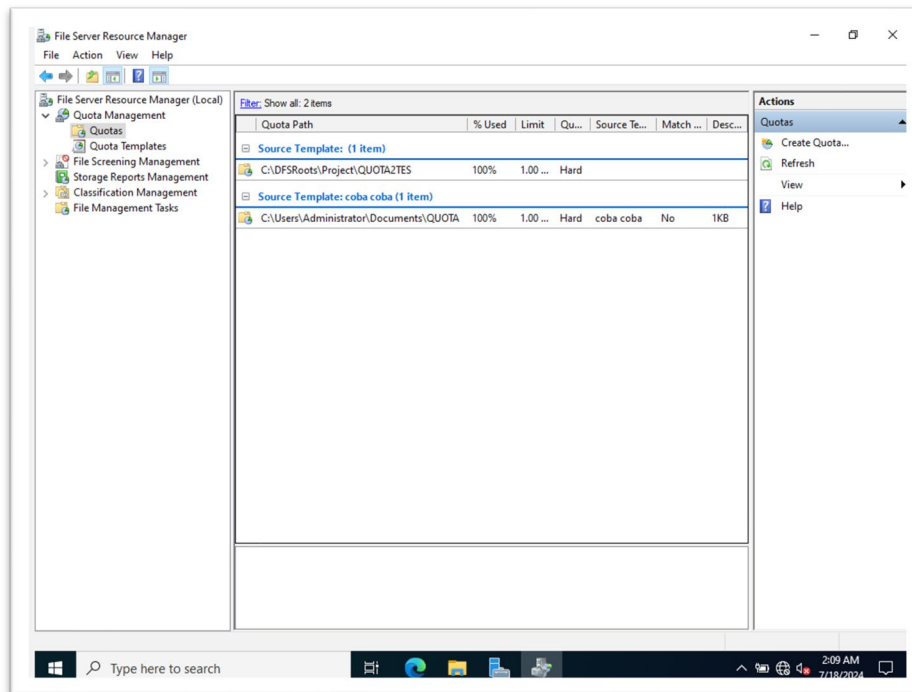
Network Configuration

DFS Configuration



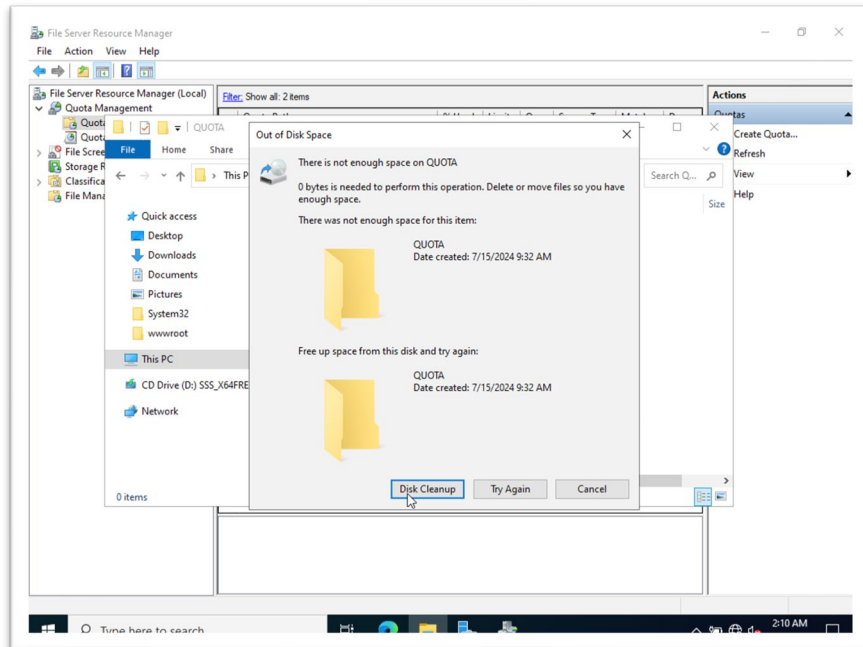
Network Configuration

Quota Enabling



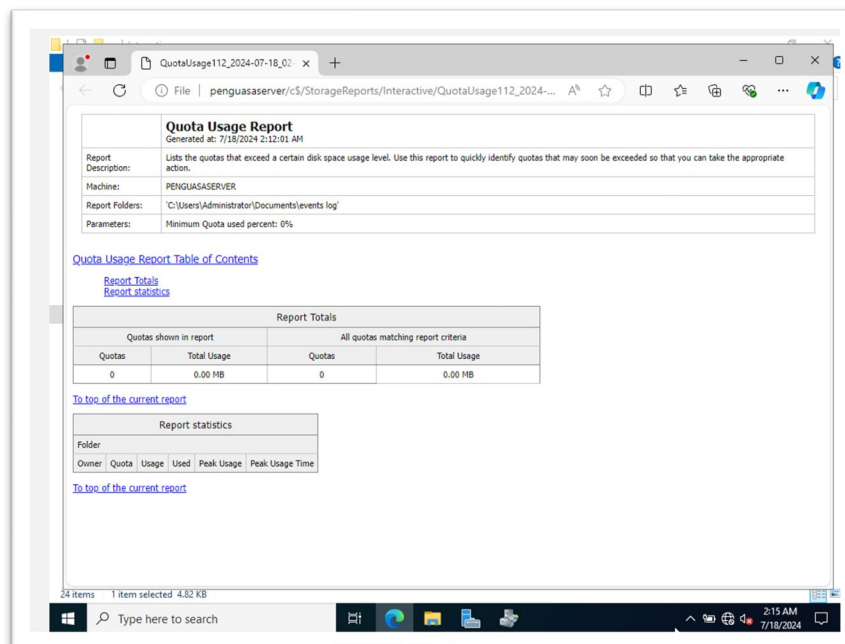
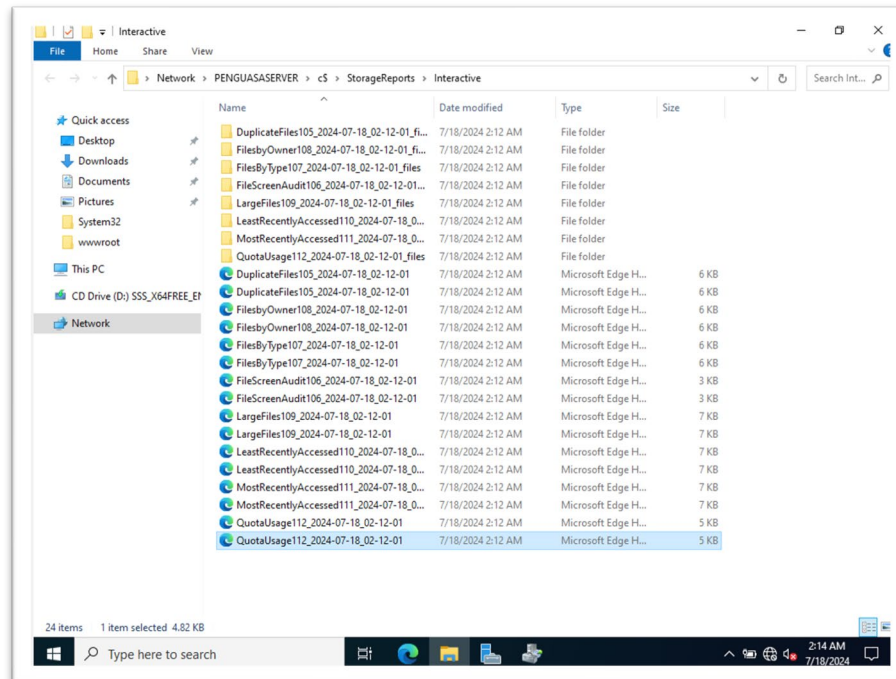
Network Configuration

Proof For Quota Enabling



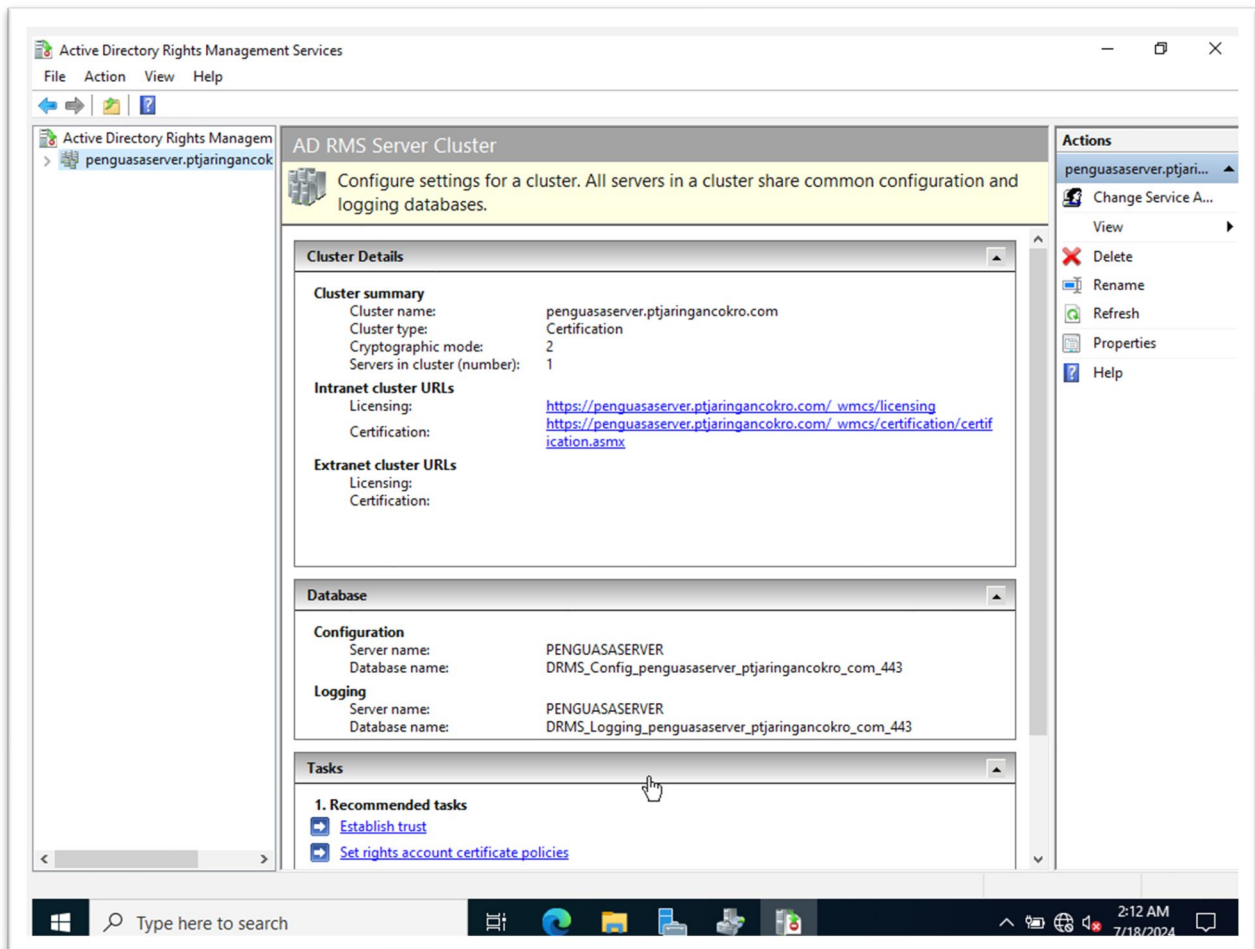
Network Configuration

Interactive Quota Report :



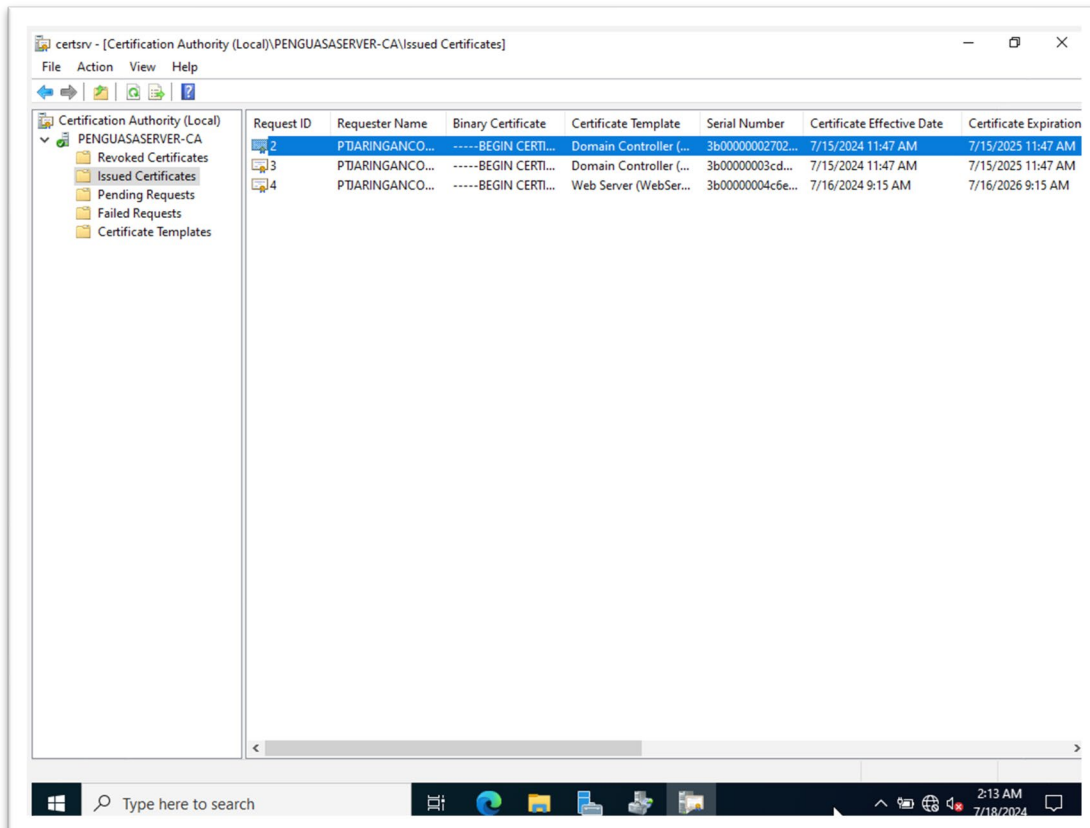
Network Configuration

AD RMS Configuration



Network Configuration

Certificate Authorization



Configuration

Hardware: Lenovo Ideapad Slim 3

Software: - OracleVM Virtual Box

Operating System: Windows Server 2022