



Implementation of Windows Server Advanced Configuration in a Printing Shop Environment

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Class : 2CS2

Group : Group 4

CEP CCIT

FAKULTAS TEKNIK UNIVERSITAS INDONESIA

PROJECT ON

**Implementation of Windows Server Advanced Configuration in a Printing Shop
Environment**

Developed by

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Batch Code : 2 CS 2

Start Date : June 2th, 2025

End Date : June 10th, 2025

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Date of Submission: June 11th, 2025

CERTIFICATE

This is to certify that this report titled “Implementation of Windows Server Advanced Configuration in a Printing Shop Environment.” embodies the original work done by Michael Frenicho Djodys Kustiawan, Muhammad Fakhri Amir, and Zahwa Aprilia in partial fulfillment of their course requirement at NIIT.

Coordinator:

Mr. Ivan Firdaus, S.T

ACKNOWLEDGEMENT

First and foremost, We want to sincerely thank Almighty God for giving me the fortitude, perseverance, and patience We needed to finish this project, " Implementation of Windows Server Advanced Configuration in a Printing Shop Environment." This accomplishment would not have been feasible without supernatural direction and assistance.

We also want to express my sincere gratitude to my instructor/supervisor for all of their help with this project, including their insightful advice, helpful criticism, and unwavering support. Their proficiency with server setup really improved my comprehension and enabled me to put abstract ideas into practice, especially in the context of a printing business where dependable and effective network and printing services are crucial.

Last but not least, we want to express my gratitude to everyone who helped me in any way while we finished this project, especially our family and students who inspired and offered moral support. Research, case studies, and pertinent literature were used to accomplish this assignment, which expanded knowledge and comprehension of Windows Server deployment in small company settings like printing shops.

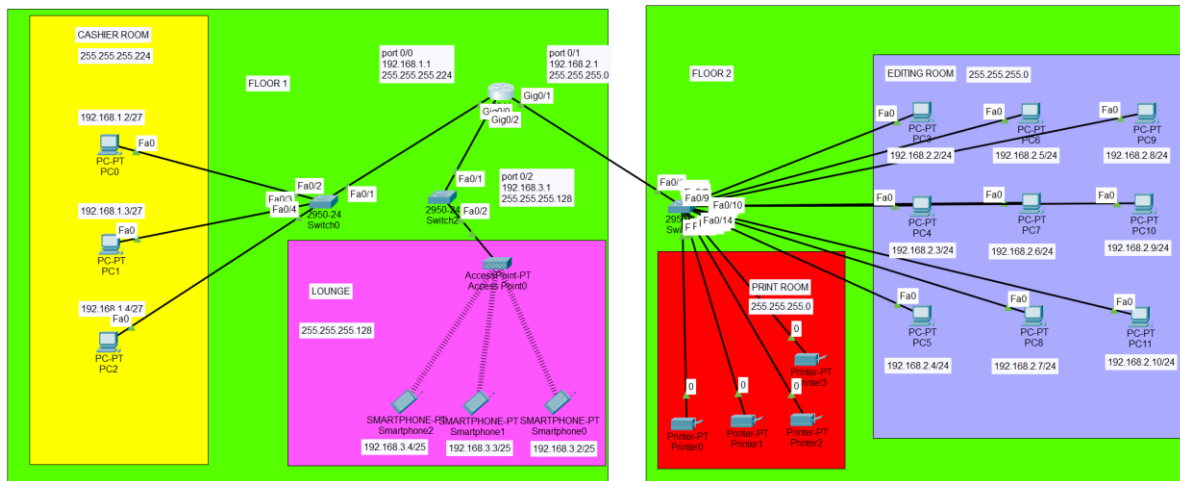
SYSTEM ANALYSIS

A printing shop's deployment of Windows Server incorporates a number of essential capabilities to enhance network administration and performance. FSRM (File Server Resource Manager) is a crucial configuration that aids in managing and tracking storage utilization. Setting quotas, controlling file types, and making sure storage space is used effectively especially for big design or print files are all made easier with this.

The printing business also uses a forest trust (Join Forest) to improve domain administration, which enables two distinct domains to safely exchange resources. When a corporation has several branches or partner companies that require access to shared data or services, this configuration might be helpful. Additionally, DHCP Failover is set up to guarantee that automated IP address distribution keeps working even in the event that one DHCP server fails, maintaining consistent network access for all devices.

Finally, file sharing between several servers with a single namespace is made possible by the usage of DFS (Distributed File System). This enhances file availability and performance by enabling users to view shared files from several places as though they were in one location. When combined, these characteristics offer a Windows Server environment that is dependable, scalable, and effective for the printing shop's operating requirements.

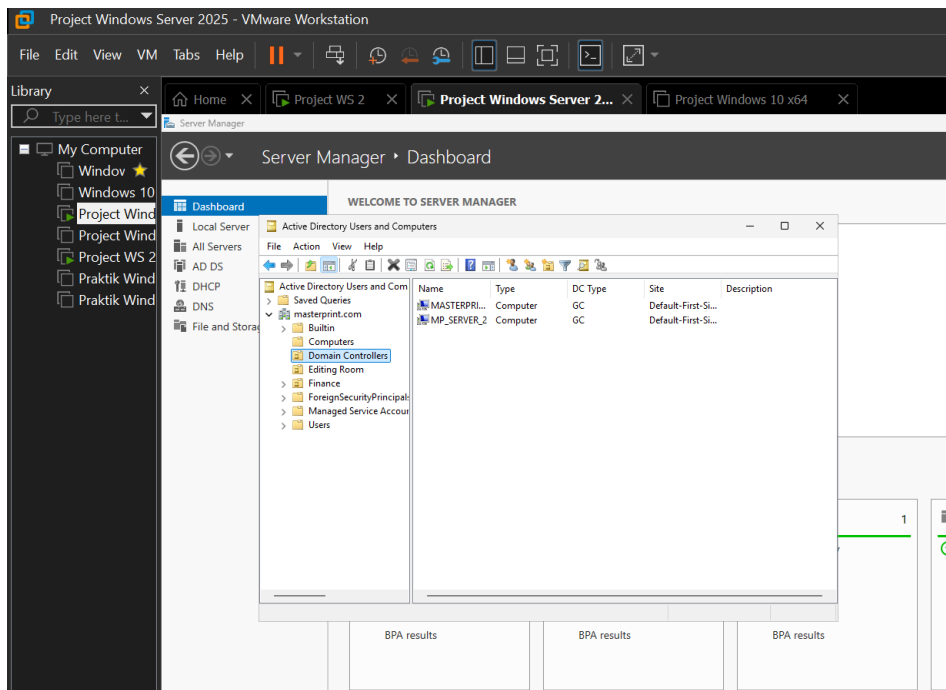
IP TABLE AND TOPOLOGY



No	Operating System	IP Address	Usage
1	Windows Server 2025	192.168.3.10	Join Forest, DHCP Failover, FSRM
2		192.168.3.11	Join Forest, DHCP Failover
3		192.168.2.10	DFS
4		192.168.2.11	DFS

CONFIGURING JOIN FOREST WINDOWS SERVER

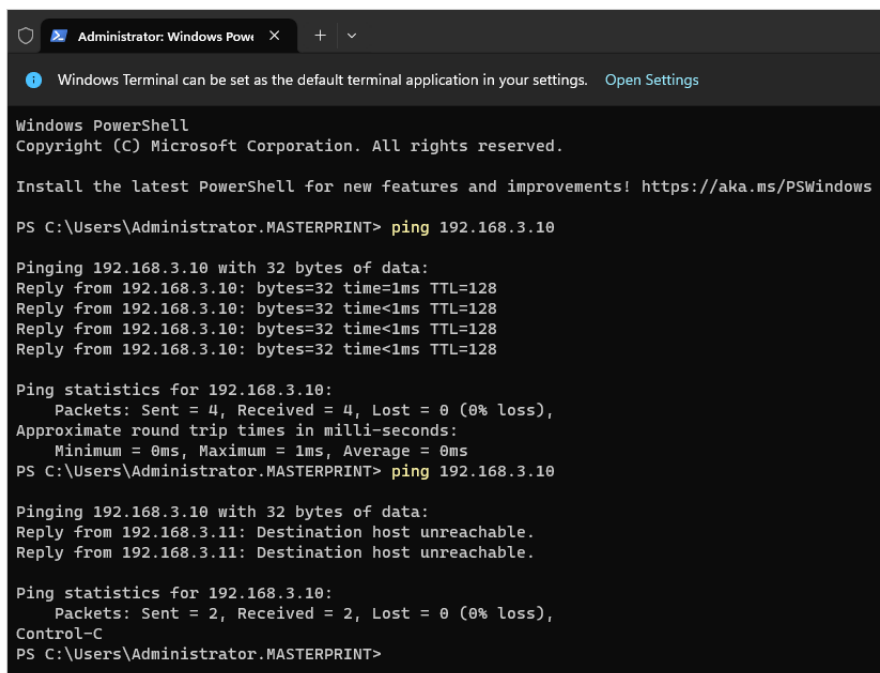
1. Displaying two PCs in server manager that have been added to the domain using active directory users and computers.



CONFIGURING DHCP FAILOVER

WINDOWS SERVER

1. Displaying the ping results to two IP addresses, one of which was able to be accessed while the other did not, suggesting a possible problem with network connectivity.



```
Administrator: Windows Pow...
Windows Terminal can be set as the default terminal application in your settings. Open Settings

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.MASTERPRINT> ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:
Reply from 192.168.3.10: bytes=32 time=1ms TTL=128
Reply from 192.168.3.10: bytes=32 time<1ms TTL=128
Reply from 192.168.3.10: bytes=32 time<1ms TTL=128
Reply from 192.168.3.10: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.3.10:
    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.MASTERPRINT> ping 192.168.3.10

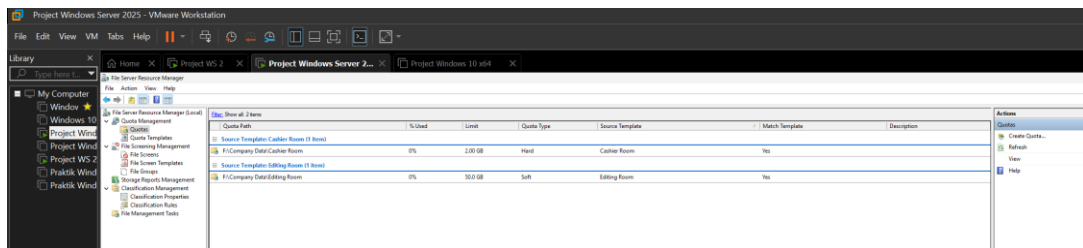
Pinging 192.168.3.10 with 32 bytes of data:
Reply from 192.168.3.11: Destination host unreachable.
Reply from 192.168.3.11: Destination host unreachable.

Ping statistics for 192.168.3.10:
    Packets: Sent = 2, Received = 2, Lost = 0 (0% loss),
Control-C
PS C:\Users\Administrator.MASTERPRINT>
```

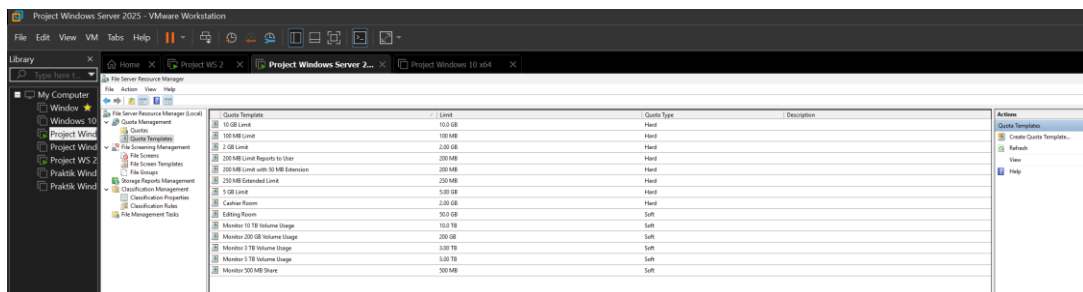
CONFIGURING FSRM WINDOWS SERVER

QUOTA MANAGEMENT

1. Displaying two folders chasier room 2 GB and editing room 50 GB. That have been given storage restrictions using the quota template.



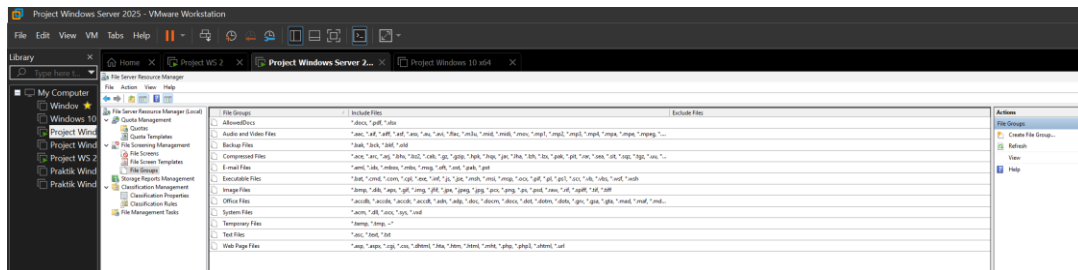
2. Showing a number of pre-made quota templates that may be used to set folder size limits as desired.



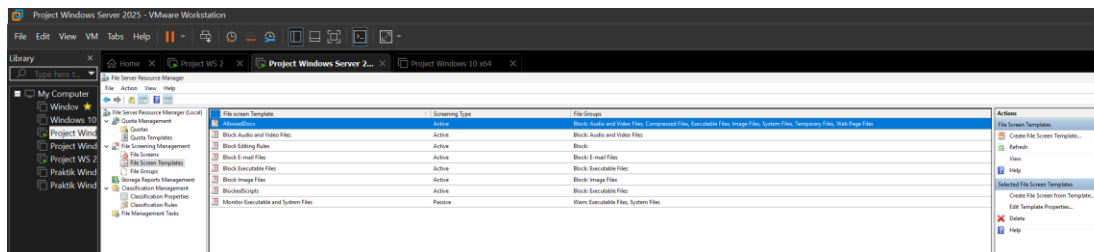
CONFIGURING FSRM WINDOWS SERVER

FILE SCREENING MANAGEMENT

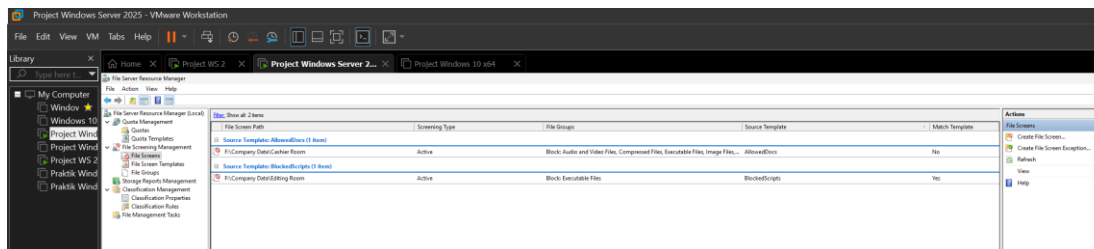
1. Showing the collection of quota templates used to place storage restrictions on particular folders.



2. Displaying, in accordance with their respective templates, the quota settings applied to the editing room and cashier room folders.



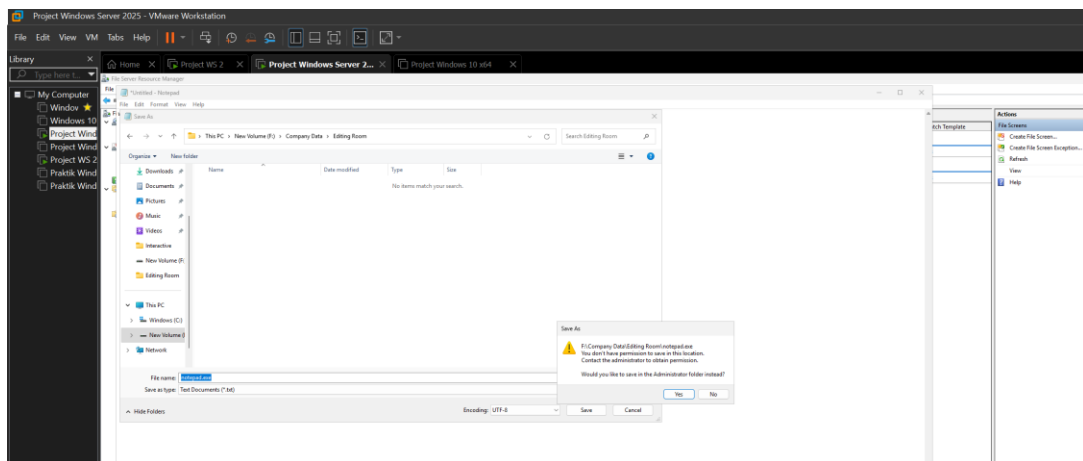
3. File setting that prevents specific file types from being stored in the folder is displayed on the screen.



CONFIGURING FSRM WINDOWS SERVER

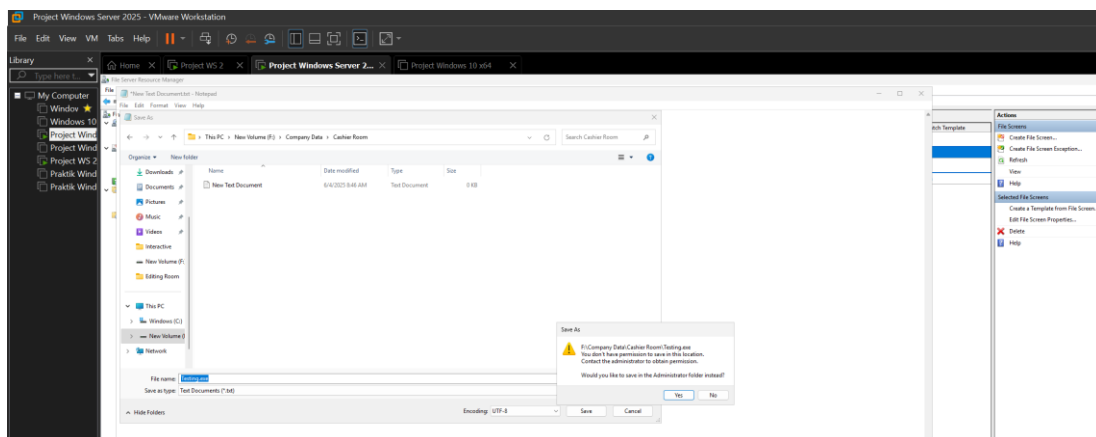
TESTING EDITING ROOM

4. Displays the test result if the file cannot be copied to the editing room folder because of quota or file screening.



TESTING CASHIER ROOM

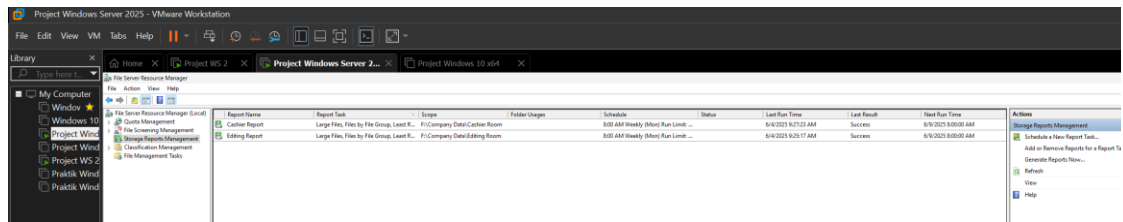
5. Testing in the casheer room that is still able to receive files since the file screen is not blocking it or it has not gone over the quota.



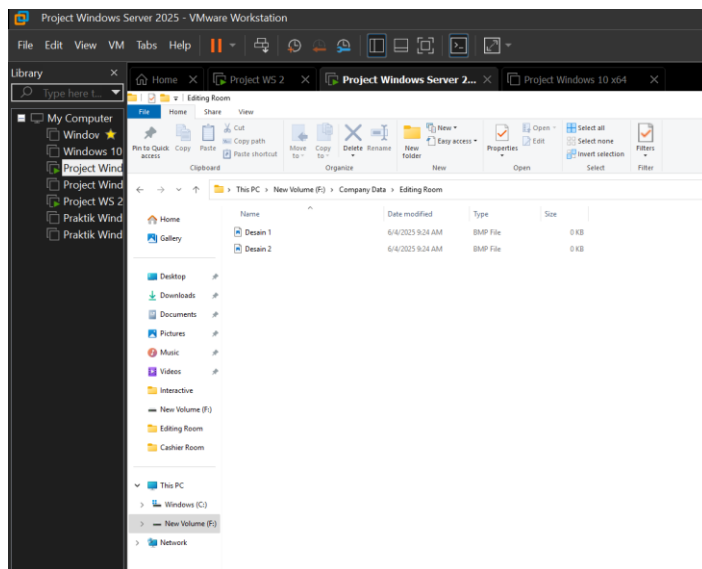
CONFIGURING FSRM WINDOWS SERVER

STORAGE MANAGEMENT

1. Two FSRM reports are planned to keep an eye on the big files in the folders for the cashier room and editing room.



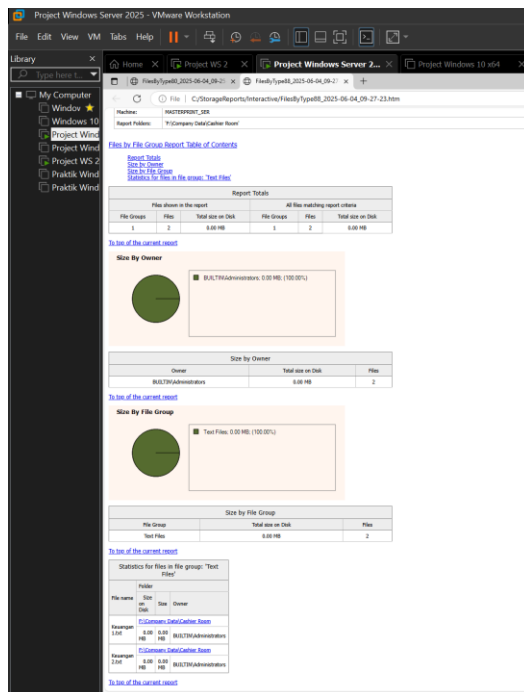
2. Displaying the two empty files that are the outcome of FSRM testing in the editing room folder.



CONFIGURING FSRM WINDOWS SERVER

STORAGE MANAGEMENT

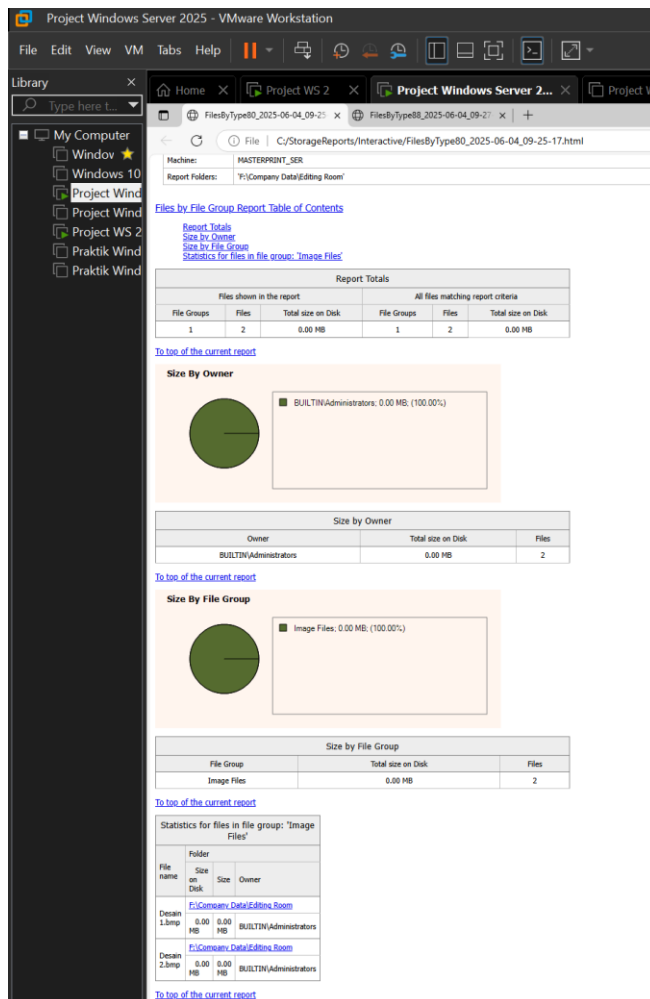
3. The cashier room folder FSRM report result, which shows details about the administrator text file kinds.



CONFIGURING FSRM WINDOWS SERVER

STORAGE MANAGEMENT

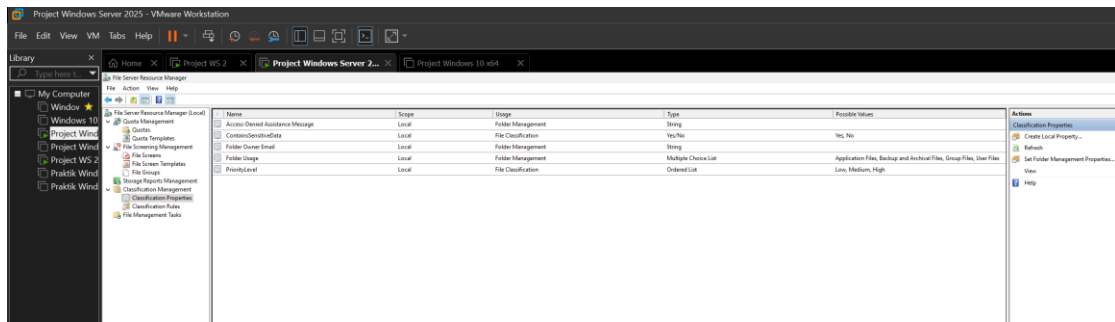
4. The results the FSRM report for the editing room folder, which has image type files that the administrator also uses.



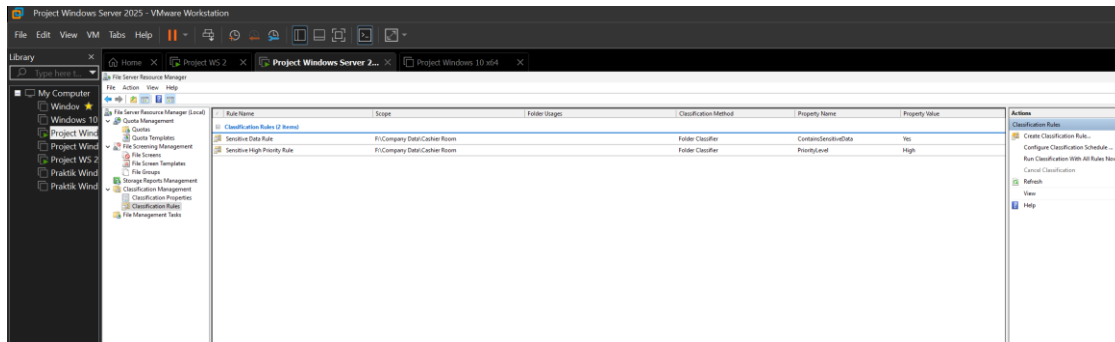
CONFIGURING FSRM WINDOWS SERVER

CLASSIFICATION MANAGEMENT

1. Show the collection of FSRM created classification attributes.



2. Displaying the categorization guidelines that are in effect for a certain folder.

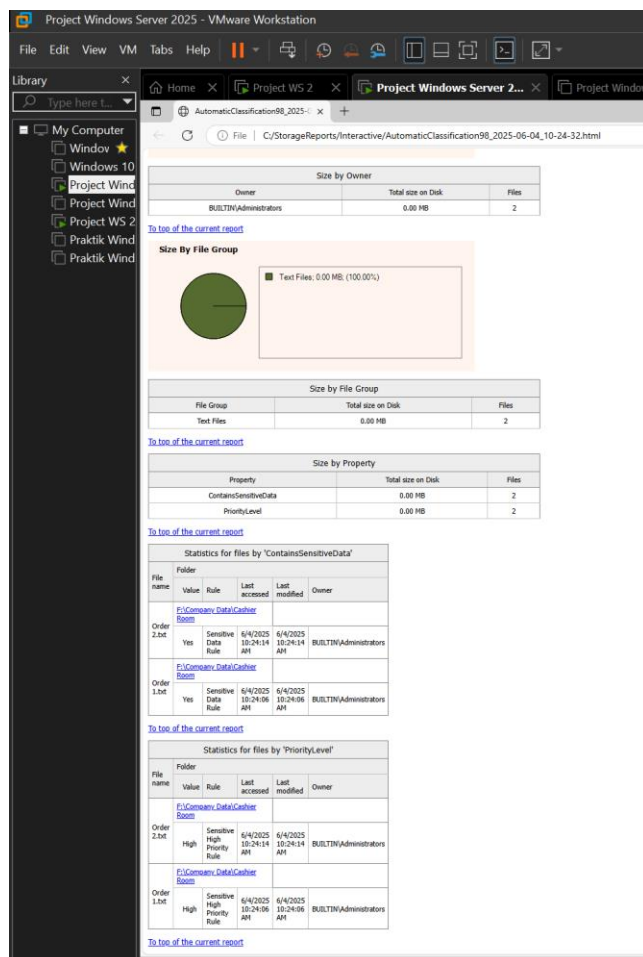


CONFIGURING FSRM

WINDOWS SERVER

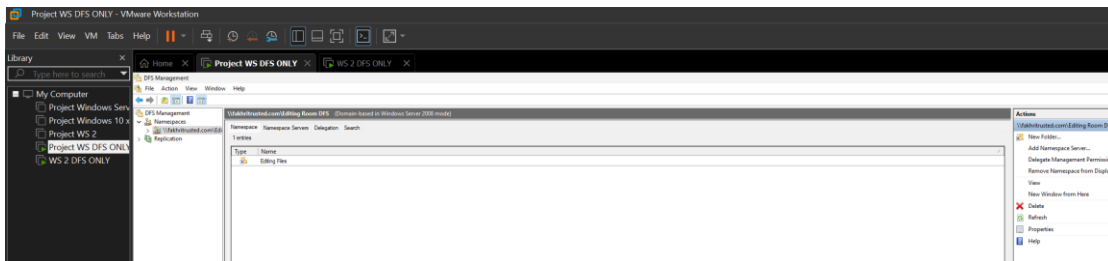
CLASSIFICATION MANAGEMENT

3. The automated categorization reports findings, which indicate that the file was categorized according to its attributes.

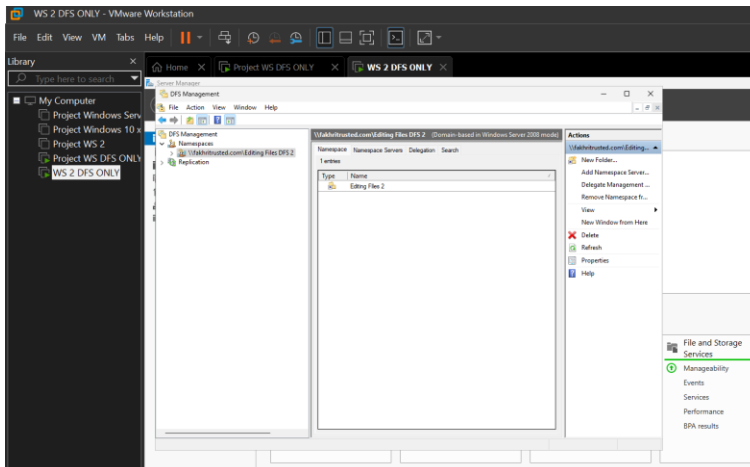


CONFIGURING DFS WINDOWS SERVER

1. DFS setup on the central server, where the primary folder is made and distributed via a namespace that branches will eventually use. This folder will act as the main replication source, and its configuration, including namespace creation and target folder addition, is controlled via the central server DFS management console.

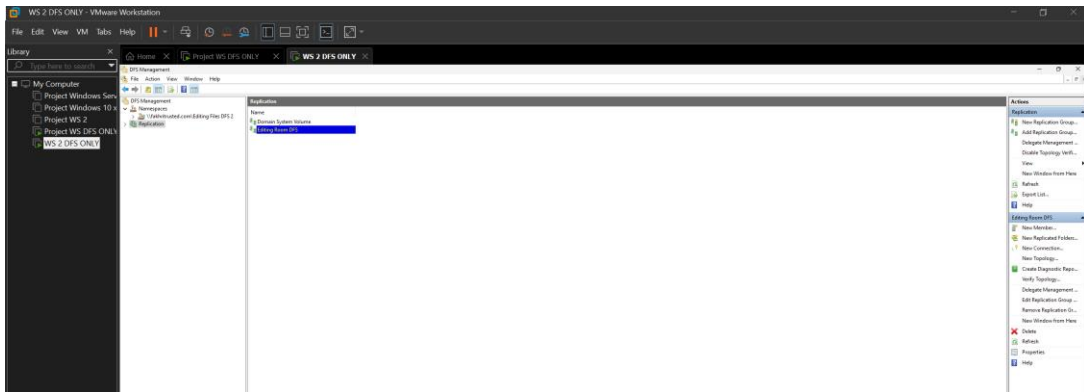


2. Displays the branch's DFS configuration, which adds a local folder as a replication target for two-way synchronization and accesses the central namespace.

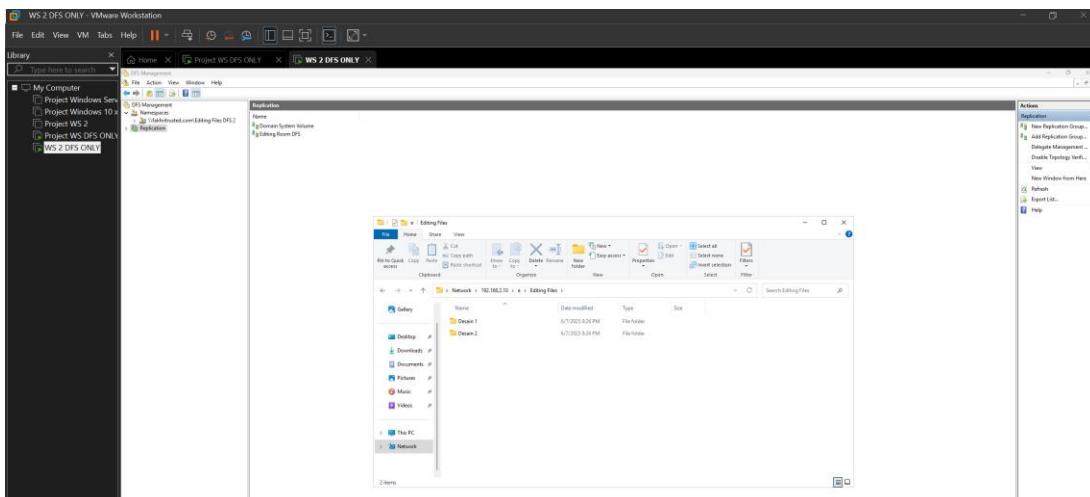


CONFIGURING DFS WINDOWS SERVER

3. Replication configurations, such as scheduling and topology, are made between the central folders and the branches to ensure that data is always automatically synced.

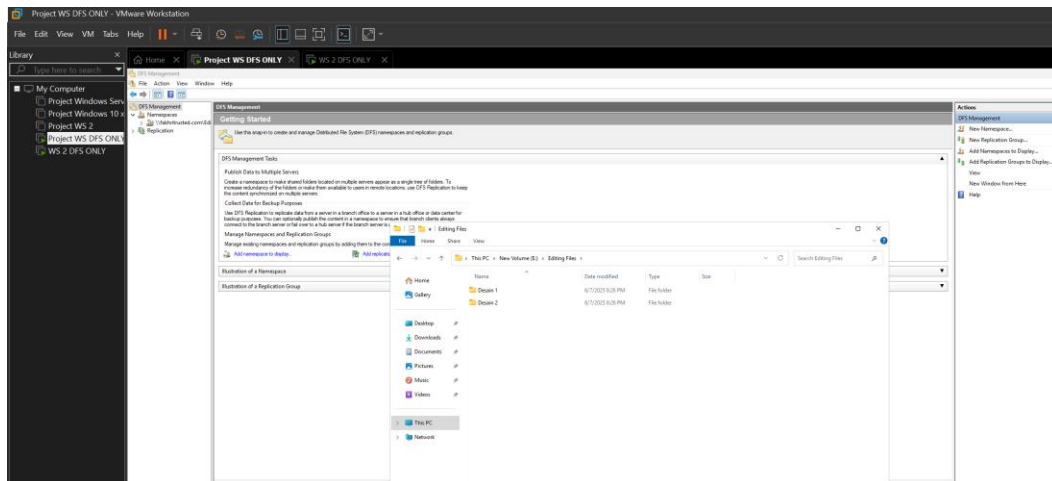


4. Demonstrates that DFS replication is functioning properly by displaying the folder contents that are same across the central and branch.



CONFIGURING DFS WINDOWS SERVER

5. Demonstrating the seamless operation of synchronization via the DFS namespace by displaying files from one place immediately in another.



REQUIREMENT

Hardware :

- 1. Lenovo Legion 5
- 2. Thinkpad X1 Yoga

Operating System :

- 1. Windows Server 2025
- 2. Windows 10 Pro

Software :

- 1. VM ware
- 2. Microsoft Word
- 3. Google Chrome
- 4. Windows Server
- 5. Windows 10 Pro

PROJECT FILE DETAILS

No	File Name	Remarks
1	Project 3 – Kelompok 4	Microsoft Words contain research paper about the project
2	Configuring Secure and Remote Access	File contains Windows Server, Windows 10 Pro, DHCP Failover, FSRM, DFS, Join Forest.
3	Kelompok 4 Project 3.pptx	Presentation file