Assignment

Using Group Policies to Manage a Security Entity

Create a new organizational unit in the domain, which will be called vase_ime. Test (e.g. Peter.Test). In Group Policies, create a new Group Policy object, which will be named vase_imeGPO (e.g. PeterGPO) and link it to the created organizational unit. For GPO set the following:

- *prohibition of launching the regitry editor;*
- *Do not change the icons on the desktop of the user account.*

Create a user account that will be named vase_ime1 (e.g. Peter1). This account is prohibited from creating new Group Policy objects, but it can link them (to link existing GPOs).

Provide the solution in a text document, where you will gradually describe the stages needed to solve the task. The solution description flow should be accompanied by appropriate screenshots for each step of solving the task.

Course: Active Directory Infrastructure

Student: Jovan Ljušić

CONTENT

INTRODUCTION

This document presents a step-by-step approach to solving a specific task, outlining the methodology, execution, and expected outcomes. By following the instructions, the reader will gain hands-on experience in applying technical concepts to practical situations, reinforcing both theoretical knowledge and problem-solving abilities.

The structured approach ensures that each step is clearly defined, making the process easy to follow and implement in professional environments.

Through this task, a step-by-step solution will be presented that will accompany each part of the corresponding screenshot. For the purposes of the task in use, they were:

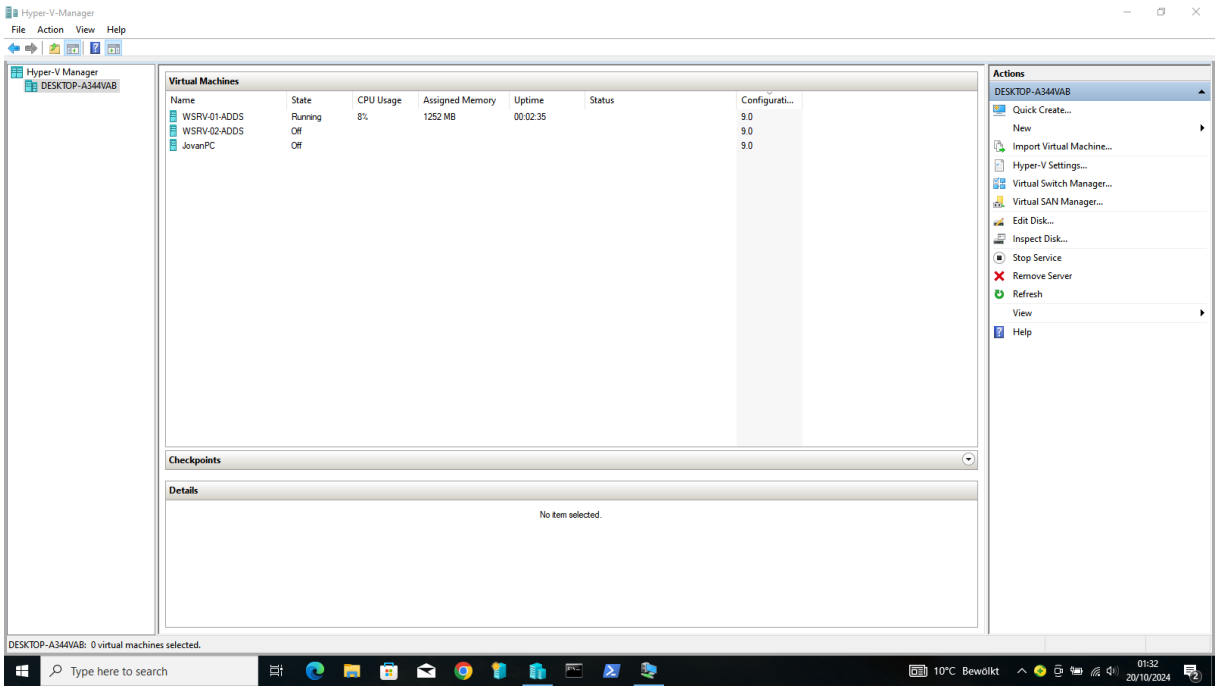
- Windows Server 2016 with the appropriate roles installed
- Windows 11 operating system as a client machine to display achieved solutions

Also, in addition to the graphical representation of all commands, commands via Command Prompt were also in use, some of which are:

- Ipconfig (/all, /renew. /flushdns, /release)
- Nslookup
- Ping (domain – jovan.lan (192.168.10.10))
- Gpupdate
- Regedit

The commands that are shown are used mainly for the option of joining the client machine to the domain.

The following steps follow the action that was started on the Windows server, the following heading will provide a detailed insight into the whole process.



ORG UNIT MANAGEMENT

Through the first step, the action is started on the Server Manager, from which the tools icon is selected in the right corner and it launches the application called Active Directorz Users and Computers

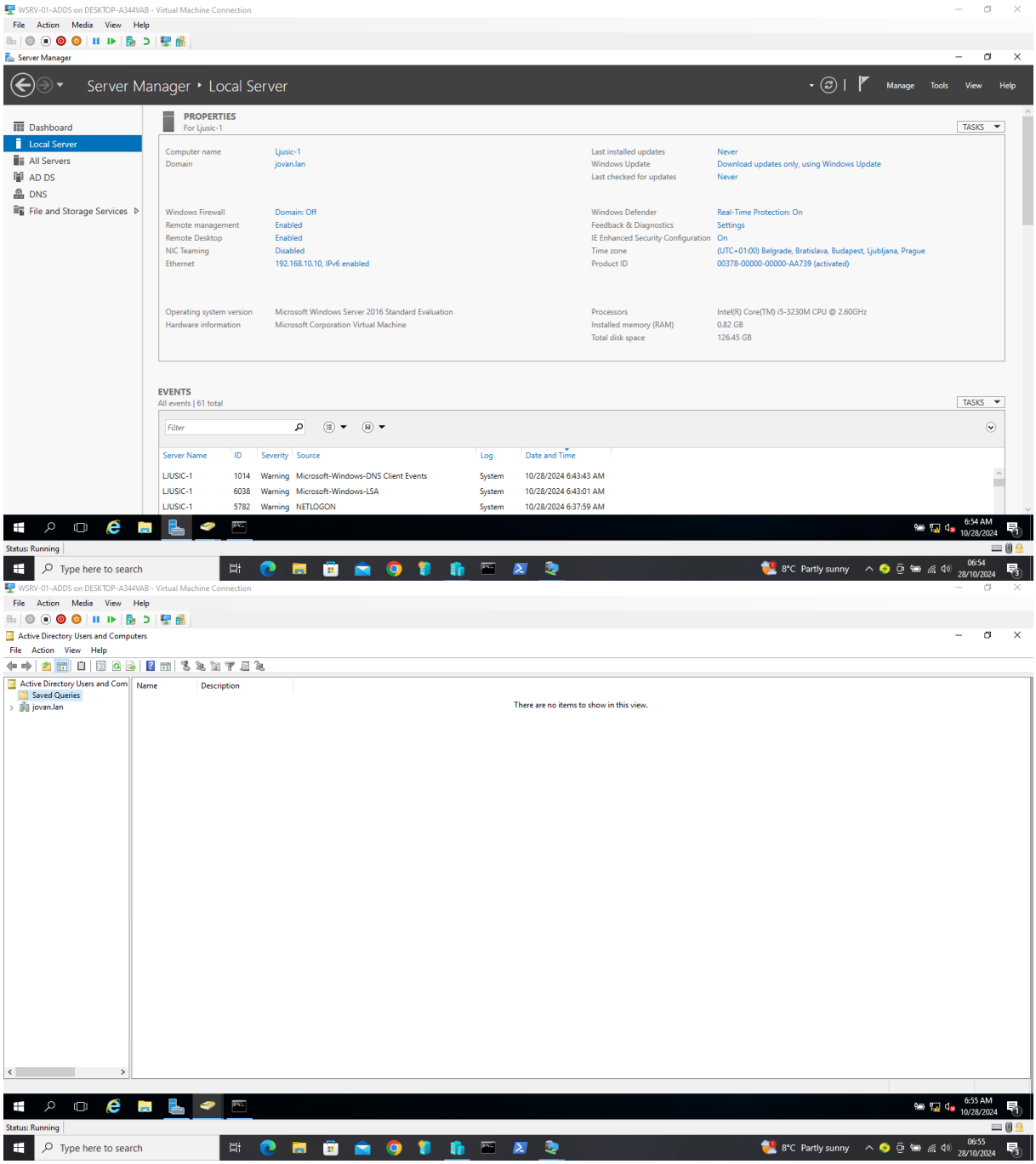
Creating a New Organizational Unit (OU)

1. By launching **the Active Directory Users and Computers** application.

2. In the left panel, right-click on your domain name, select **the New** icon and immediately select **the Organizational Unit** option.

3. Give a name to the new organizational unit, in this case the name is **Jovan.Test** .

4. Click OK to finish creating.


WSRV-01-ADDS on DESKTOP-A344VAB - Virtual Machine Connection
File Action Media View Help
Server Manager
Server Manager ▸ Local Server
Manage Tools View Help
Dashboard
Local Server
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DNS
File and Storage Services
PROPERTIES
For Ljusic-1
TASKS
Computer name Ljusic-1
Domain jovan.lan
Last installed updates Never
Windows Update Download updates only, using Windows Update
Last checked for updates Never
Windows Firewall Domain: Off
Remote management Enabled
Remote Desktop Enabled
NIC Teaming Disabled
Ethernet 192.168.10.10, IPv6 enabled
Windows Defender Real-Time Protection: On
Feedback & Diagnostics Settings
IE Enhanced Security Configuration On
Time zone (UTC+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
Product ID 00378-00000-00000-AA739 (activated)
Operating system version Microsoft Windows Server 2016 Standard Evaluation
Hardware information Microsoft Corporation Virtual Machine
Processors Intel(R) Core(TM) i5-3230M CPU @ 2.60GHz
Installed memory (RAM) 0.82 GB
Total disk space 126.45 GB
EVENTS
All events | 61 total
TASKS
Filter
Server Name ID Severity Source Log Date and Time
LJUSIC-1 1014 Warning Microsoft-Windows-DNS Client Events System 10/28/2024 6:43:43 AM
LJUSIC-1 6038 Warning Microsoft-Windows-LSA System 10/28/2024 6:43:01 AM
LJUSIC-1 5782 Warning NETLOGON System 10/28/2024 6:37:59 AM
6:54 AM 10/28/2024
Status: Running
Type here to search
8°C Partly sunny
06:54 28/10/2024
WSRV-01-ADDS on DESKTOP-A344VAB - Virtual Machine Connection
File Action Media View Help
Active Directory Users and Computers
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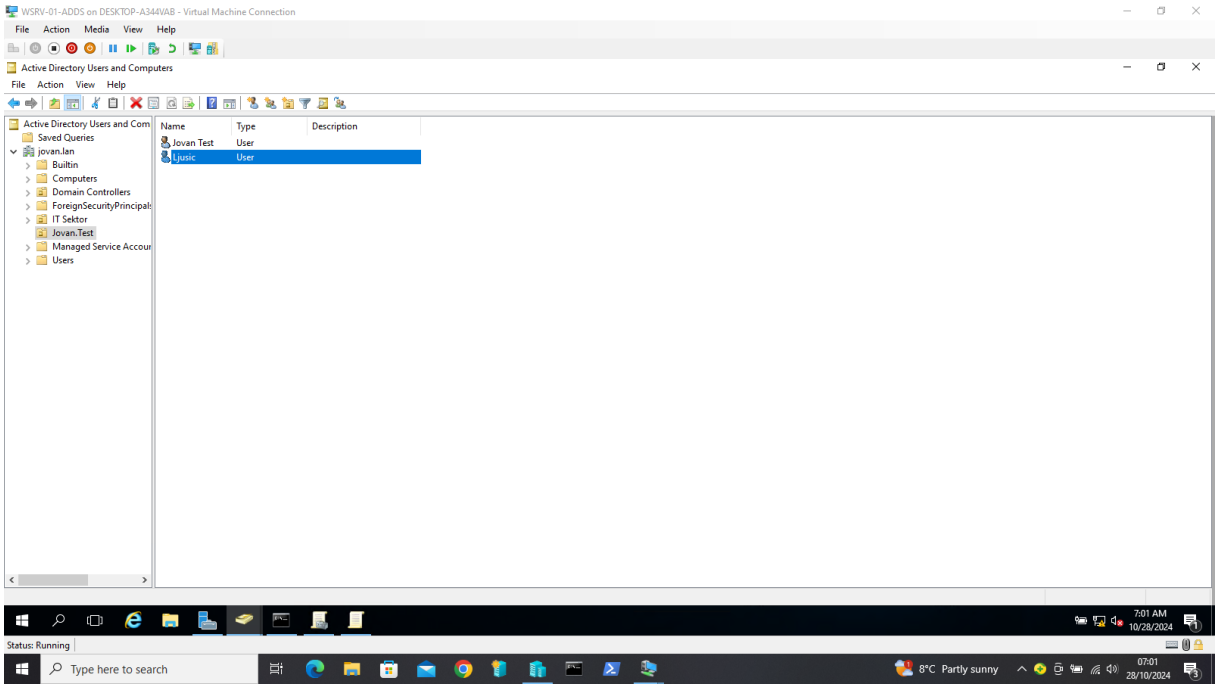
jovan.lan
Name Description
There are no items to show in this view.
6:55 AM 10/28/2024
Status: Running
Type here to search
8°C Partly sunny
06:55 28/10/2024



SETTING UP GROUP POLICIES

The next part of the task includes the action in which group policies are set up, according to the instructions of the task, the following should be set up:

- *prohibition of launching the regitry editor;*
- *Do not change the icons on the desktop of the user account.*

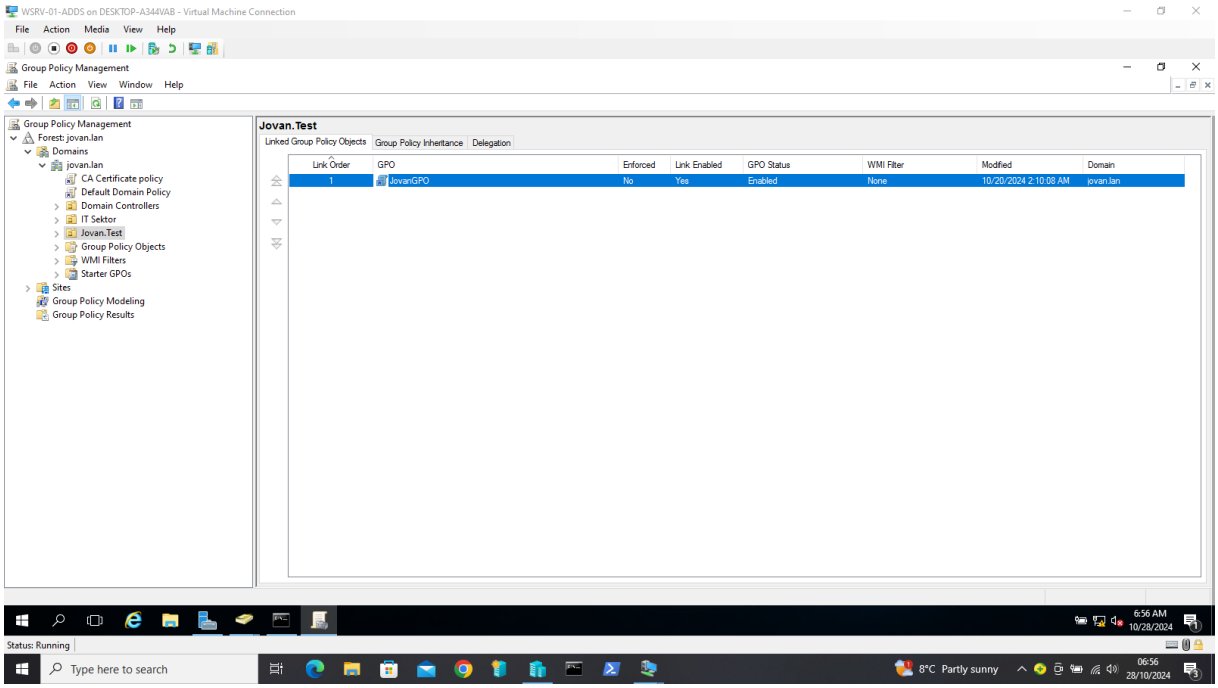
Creating a Group Policy Object (GPO)

1. Open **Group Policy Management** from the **Administrative Tools menu**.

2. In the left panel, right-click on **Group Policy Objects**, select **New**.

3. Enter the name of the new GPO according to the task.

4. Right click on the created GPO, select **Edit**.

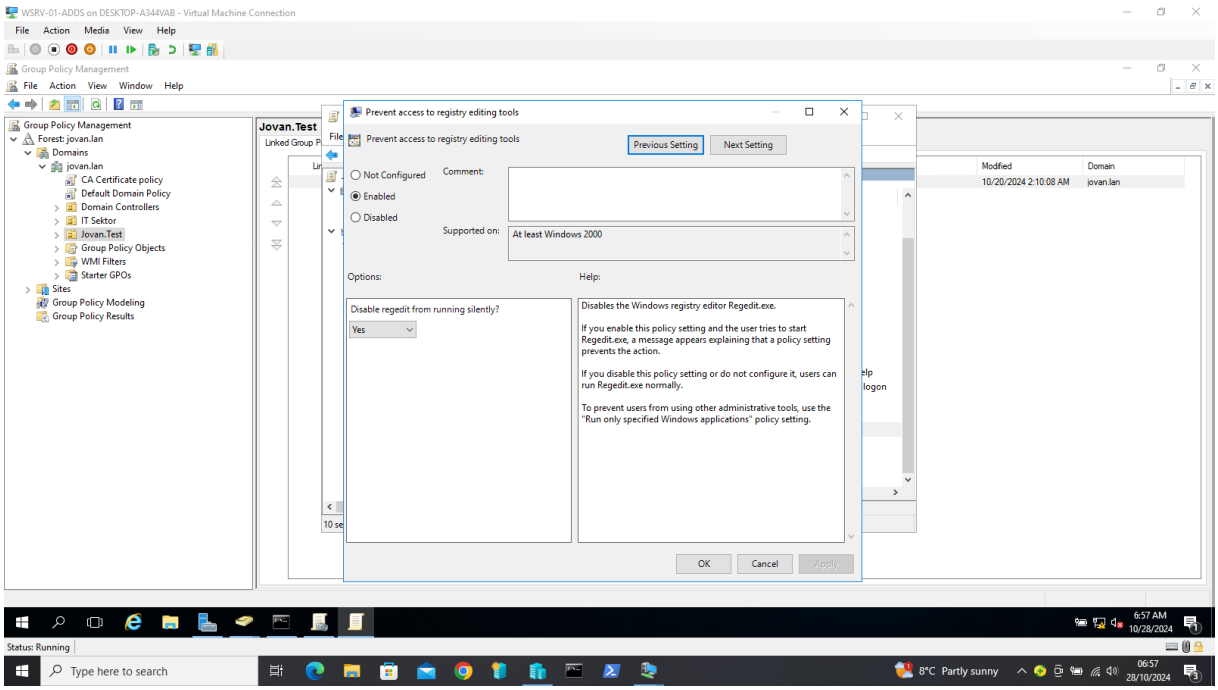


Configure the GPO to deny access to the Registry Editor

In the **GPO Editor**:

User Configuration - Administrative Templates - System.

- Find and double-click on Prevent **access to registry editing tools**.
- Set this option to **Enabled** and click OK**.**

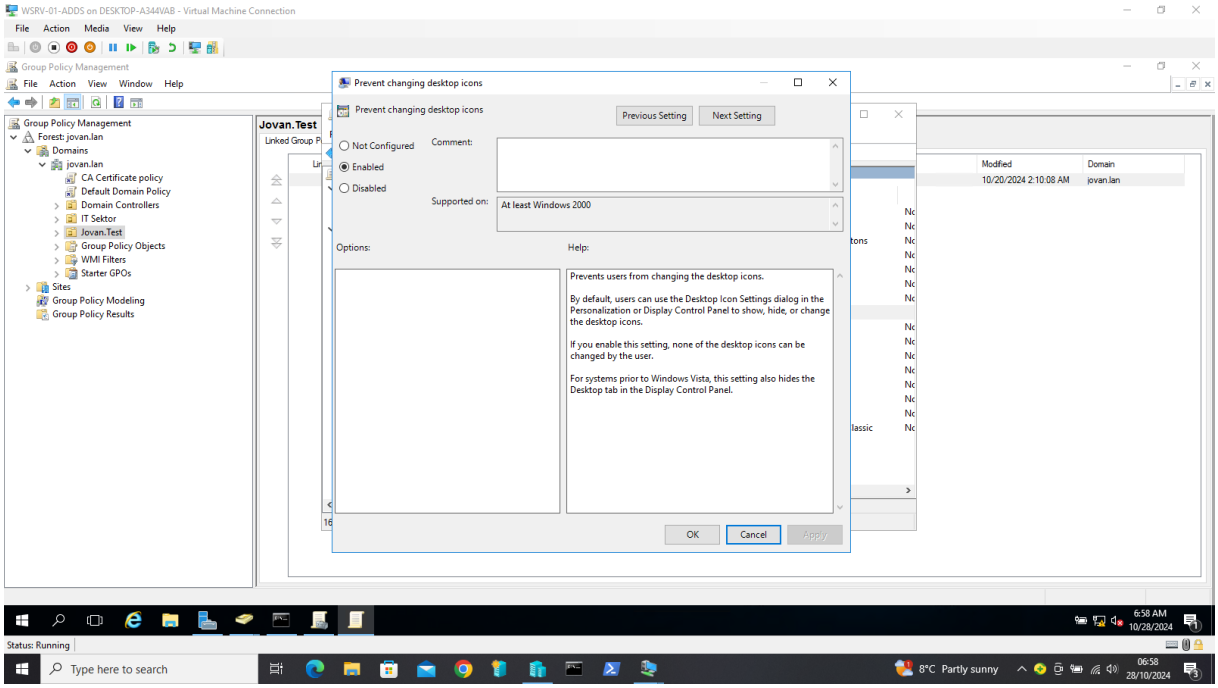


Configuration of the GPO to prohibit the change of icons on the desktop

In the **GPO Editor**:

User Configuration - Administrative Templates - Control Panel - Personalization.

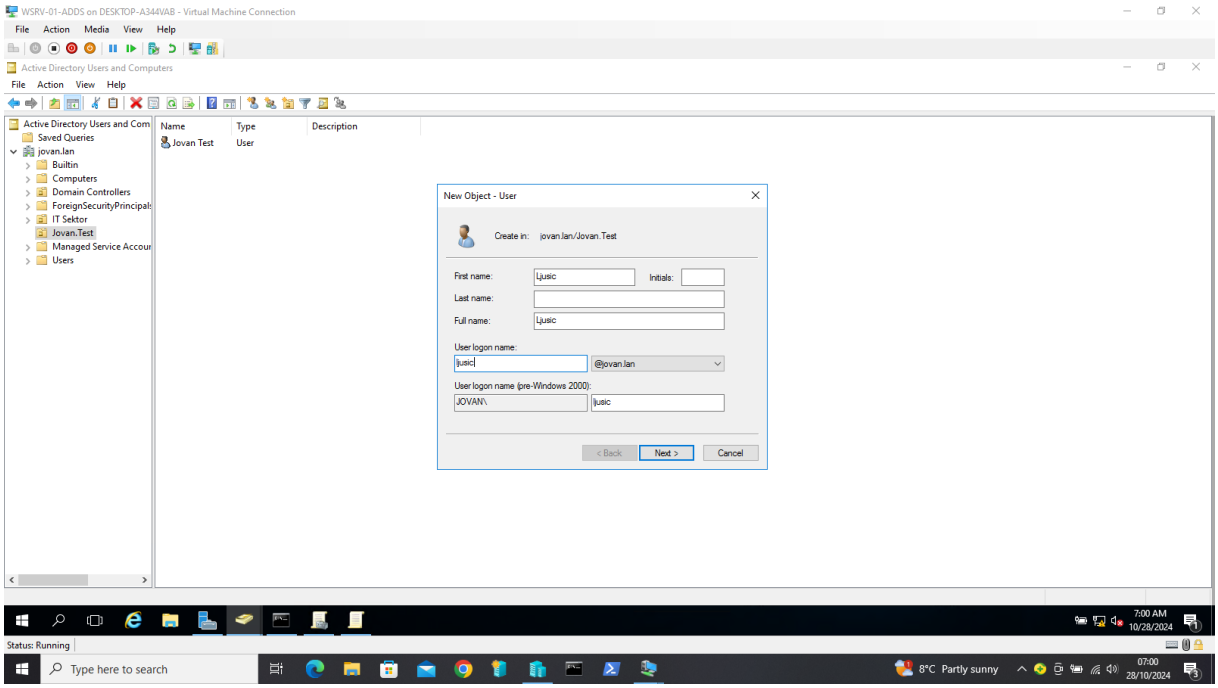
- Double-click on **Prevent changing desktop icons**.
- Set this option to **Enabled** and click OK**.**



USER ACCOUNT AND DISPLAY ON THE CLIENT MACHINE

Creating a user account with special permissions

- In Active Directory Users and Computers, right-click on OU **Jovan.Test** by selecting the **New - User icon**.
- Choosing a name for the order, in this case **Ljusic**.
- Setting a password is the next step, which is usually the default.
- To prohibit this account from creating new GPOs, in **the Group Policy Management console**, go to **Delegation** options for the domain or OU.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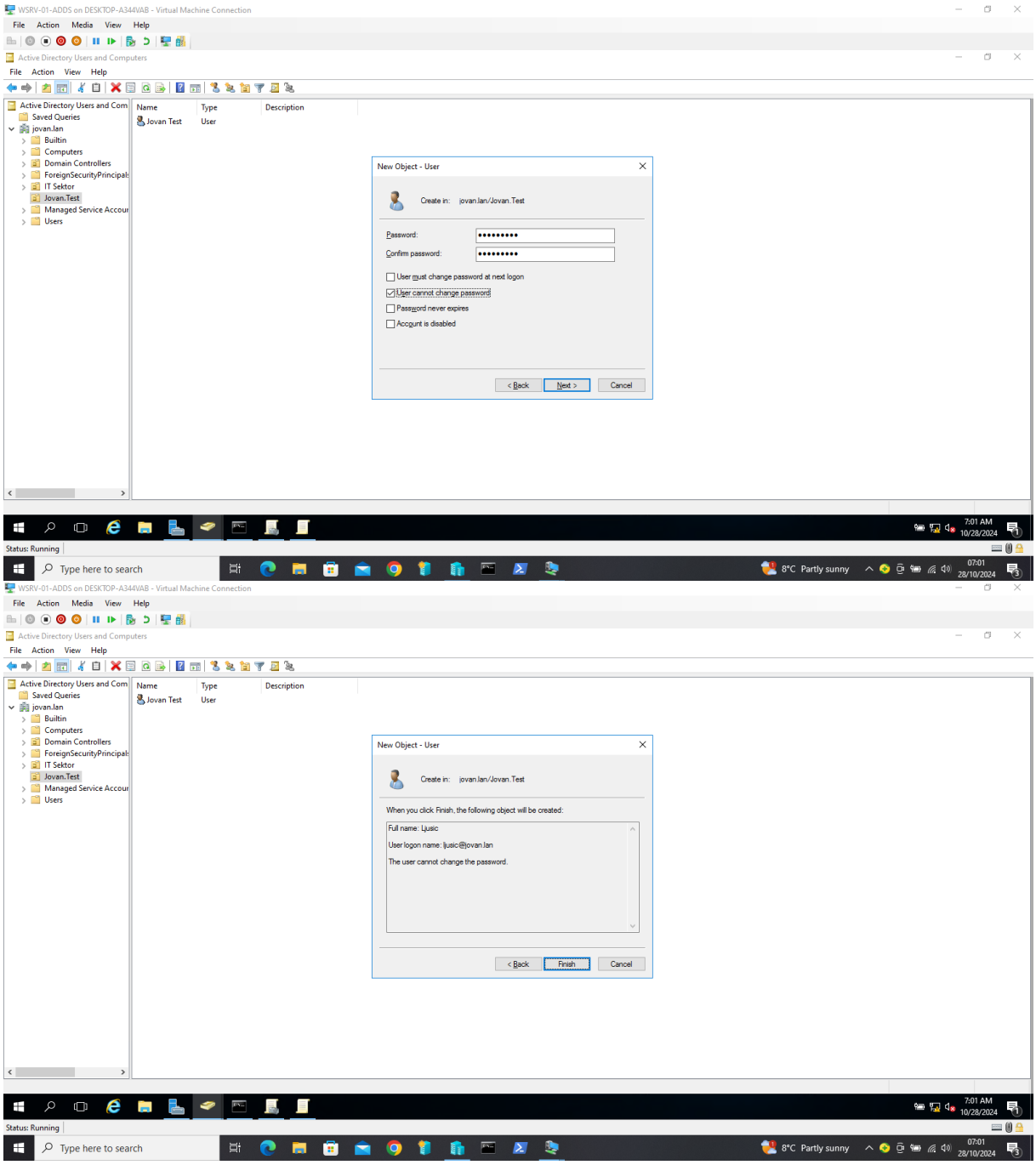
Builtin
Computers
Domain Controllers
ForeignSecurityPrincipals
IT Sektor
Jovan.Test
Managed Service Accour
Users
Name Type Description
Jovan Test User
New Object - User
Create in: jovan.lan/Jovan.Test
First name: Ljusic
Initials:
Last name:
Full name: Ljusic
User logon name:
ljusic
@jovan.lan
User logon name (pre-Windows 2000):
JOVAN\
ljusic
< Back
Next >
Cancel
7:00 AM
10/28/2024
Status: Running
Type here to search
8°C Partly sunny
07:00
28/10/2024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Domain Controllers
ForeignSecurityPrincipals
IT Sektor
Jovan.Test
Managed Service Accour
Users
Name Type Description
Jovan Test User
New Object - User
Create in: jovan.lan/Jovan.Test
Password:
Confirm password:
User must change password at next logon
User cannot change password
Password never expires
Account is disabled
< Back Next > Cancel
7:01 AM 10/28/2024
Status: Running
Type here to search
8°C Partly sunny
07:01 28/10/2024

WSRV-01-ADDS on DESKTOP-A344VAB - Virtual Machine Connection
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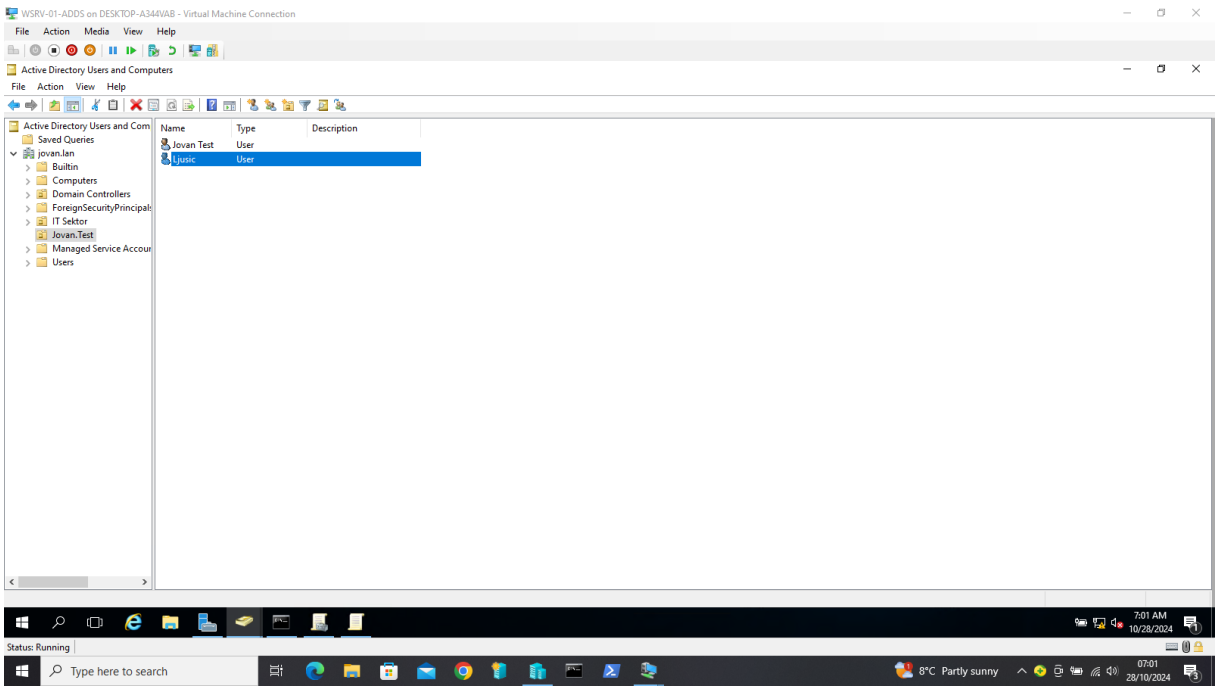
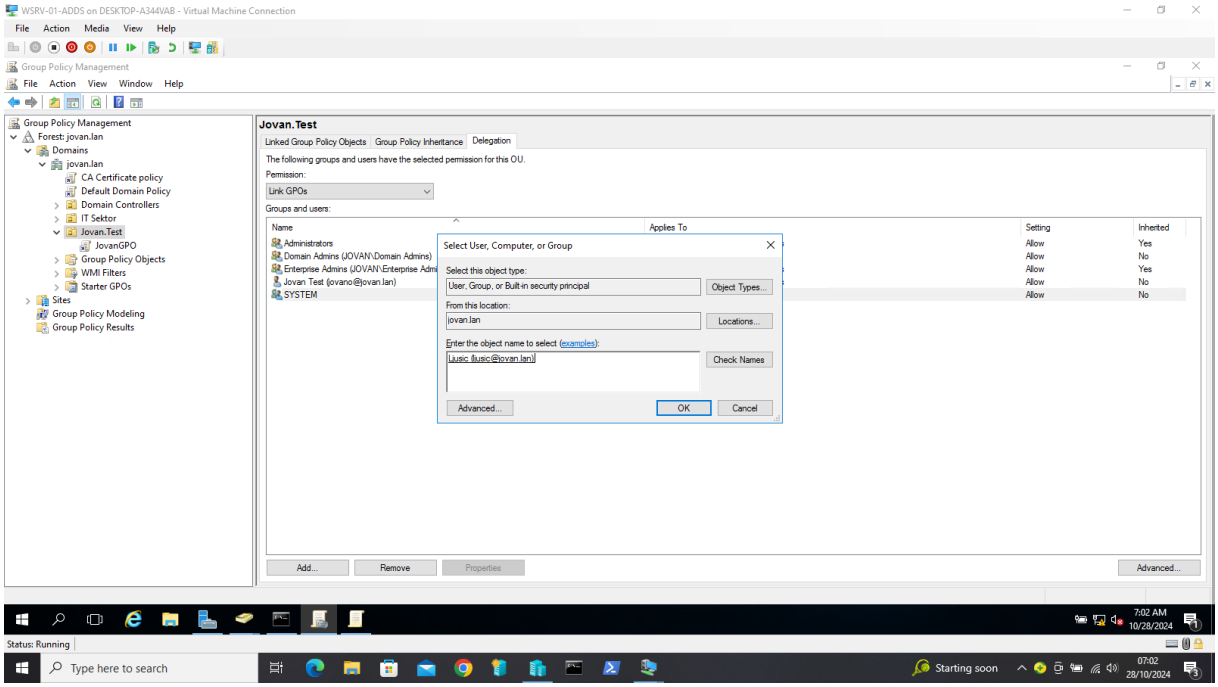
Domain Controllers
ForeignSecurityPrincipals
IT Sektor
Jovan.Test
Managed Service Accour
Users
Name Type Description
Jovan Test User
New Object - User
Create in: jovan.lan/Jovan.Test
When you click Finish, the following object will be created:
Full name: Ljusic
User logon name: ljusic@jovan.lan
The user cannot change the password.
< Back Finish Cancel
7:01 AM 10/28/2024
Status: Running
Type here to search
8°C Partly sunny
07:01 28/10/2024

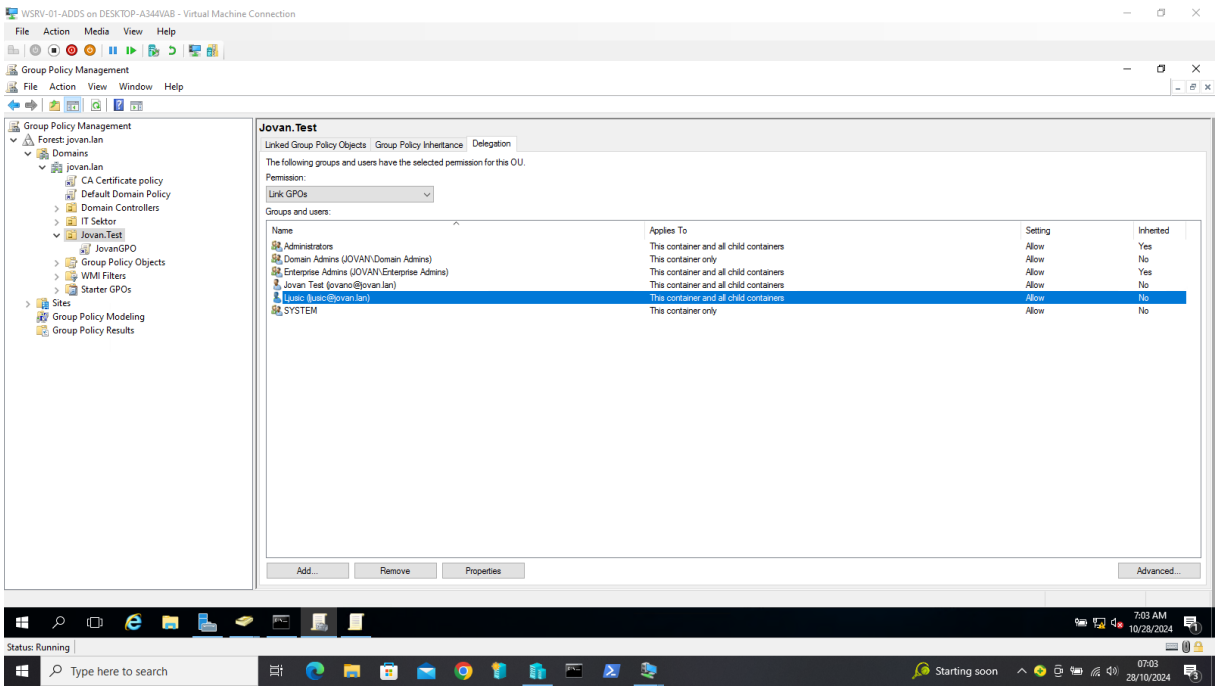


Connecting the GPO to the organizational unit

1. In **the Group Policy Management Console**, right-click on the new GPO, select **Link an Existing GPO.**

2. Select the created **GPO** and click OK**.**





Configuration testing

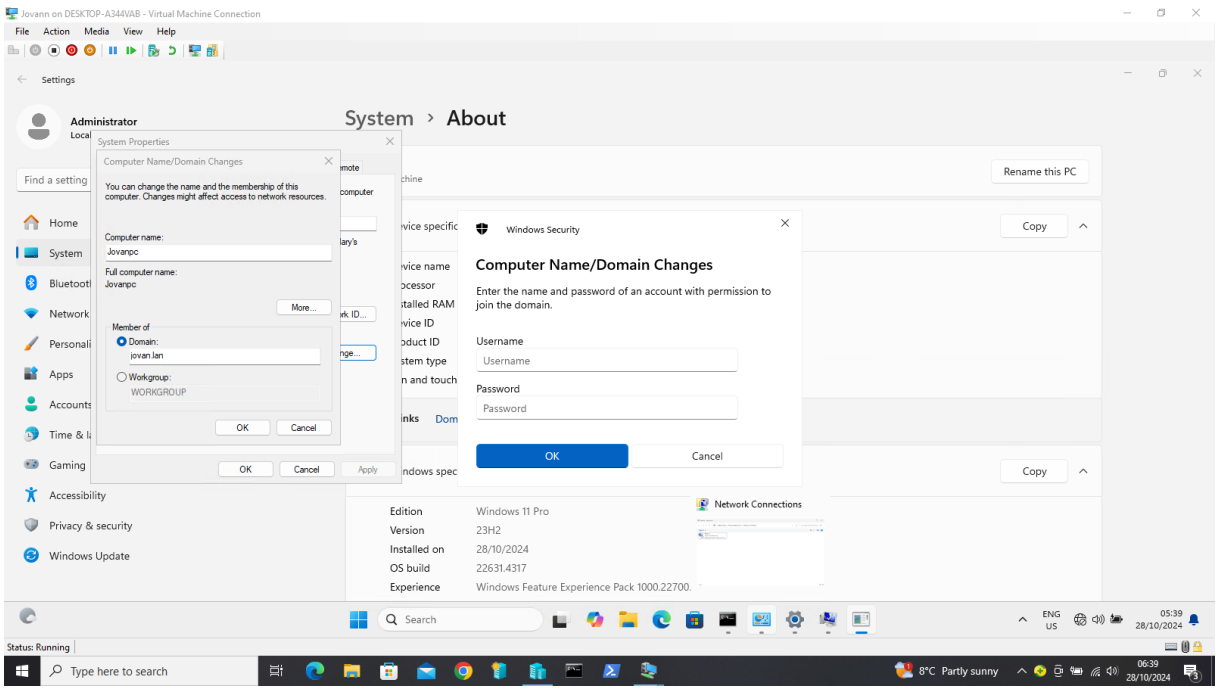
In order for the configuration to be compliant, certain conditions must be met for this verification.

1. Log in to the computer with the account and make sure that the restrictions are active (there is no access to the Registry Editor and there is no possibility to change the icons on the desktop).

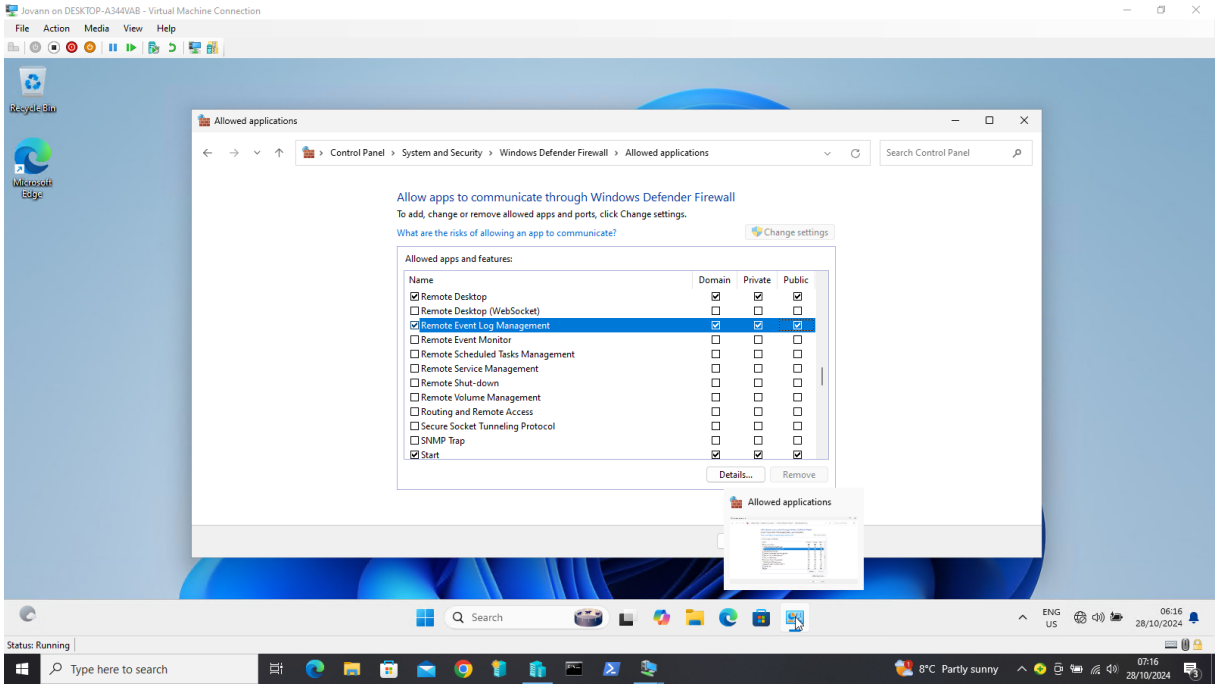
2. Check if the user can link existing GPOs but can't create new ones.

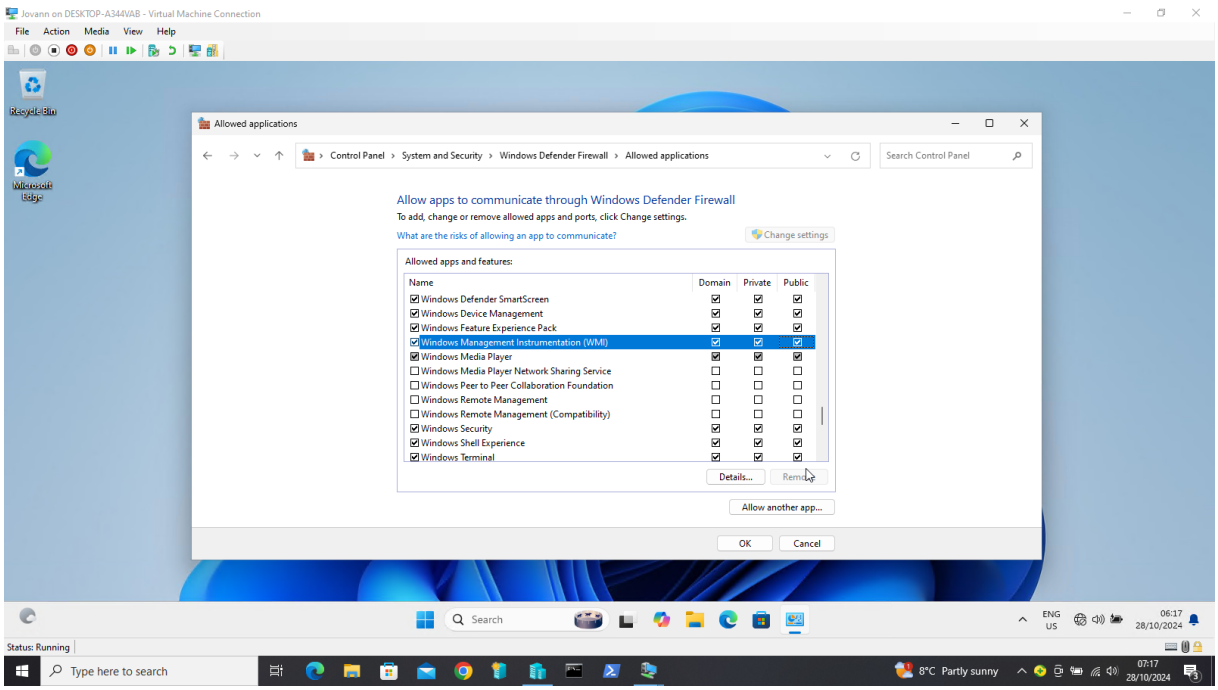
Some of the steps that precede these two are to connect the client machine to an existing domain and enable **Remote Event Log Management** and **WMI.**

Connecting the Client Machine to the Domain

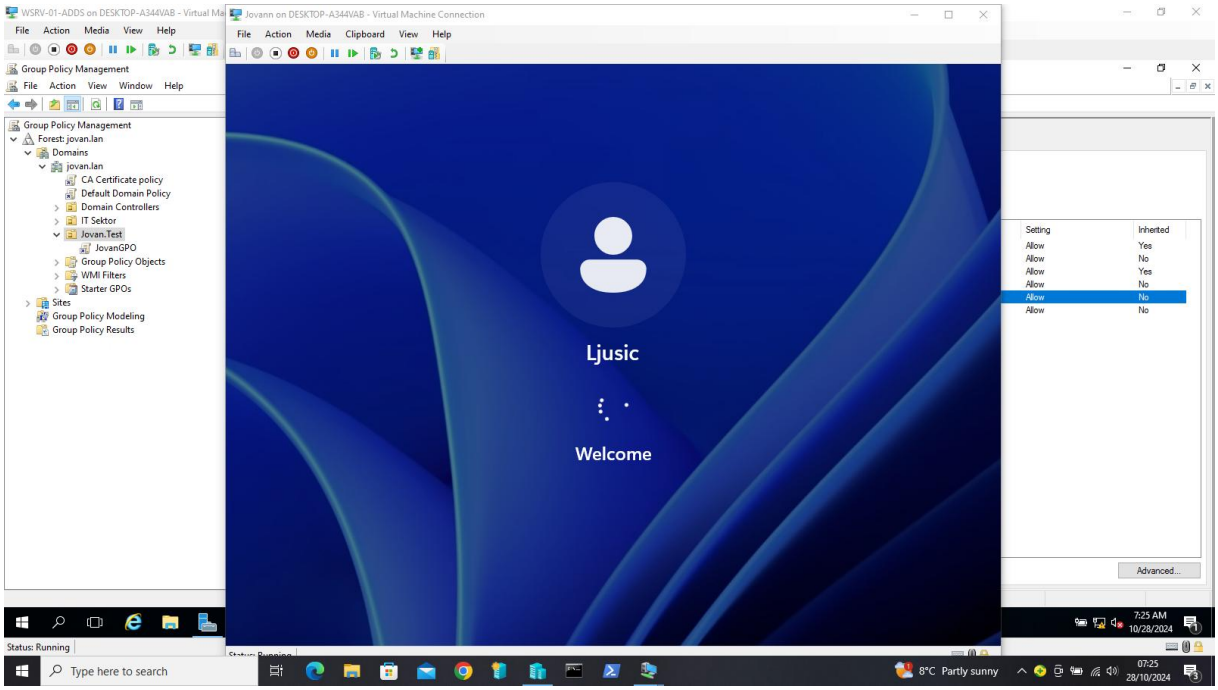


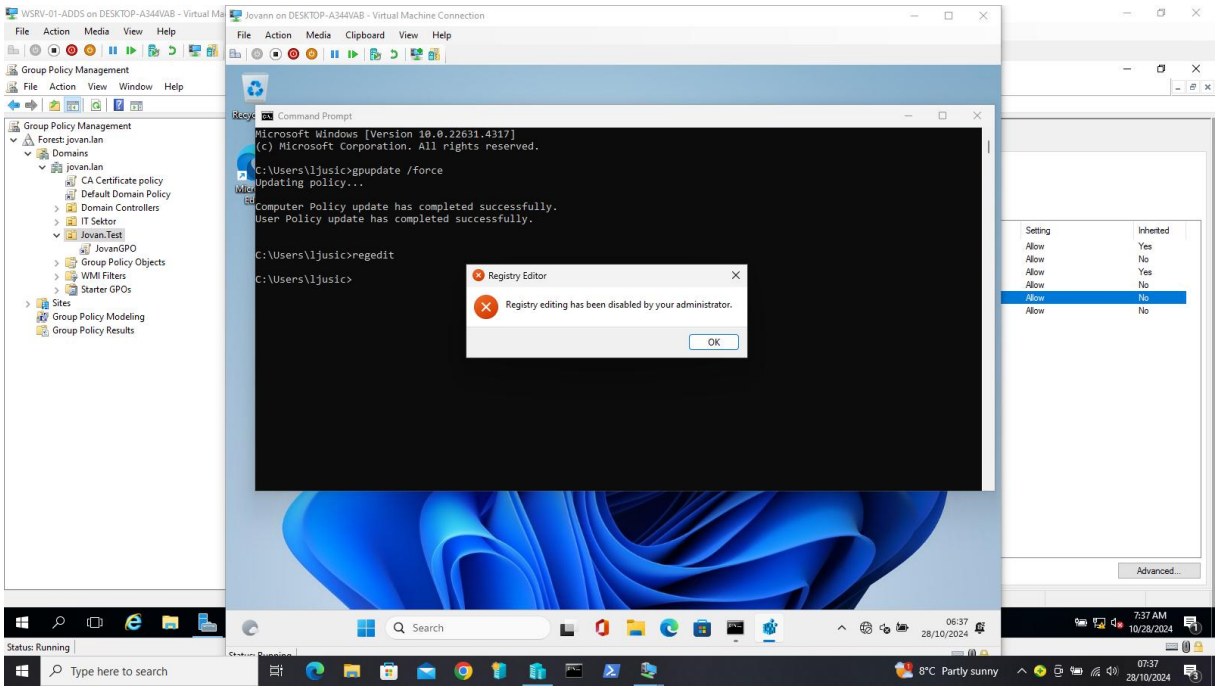
Settings in the administrator account of the client machine





Logging in to the account where group policies are set up





The completion of this task shows that the Group Policies have been updated and that their editing is not possible, thus showing that this task has been successfully completed according to the queries mentioned above.