پروژه درس شبکه

لغو

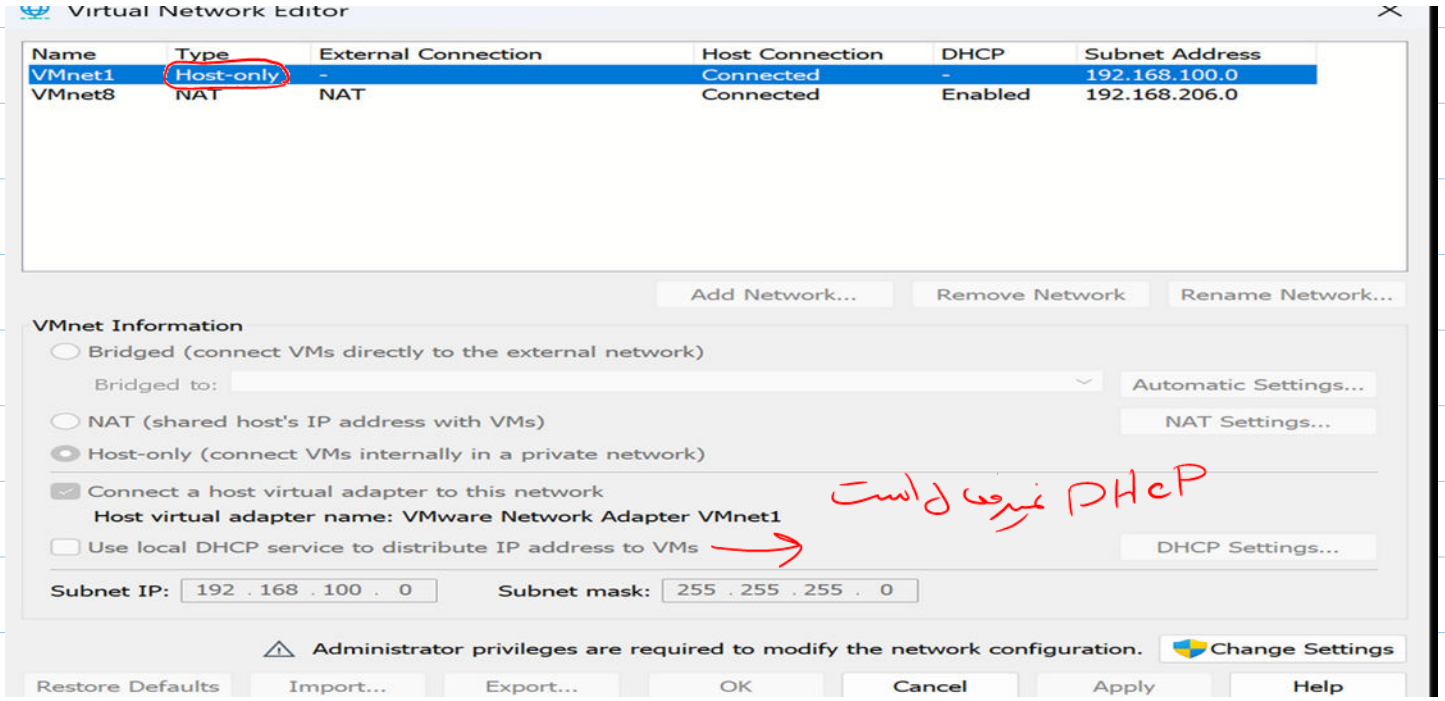
مصطفی سوزی

۱۴۰۱۰۲۰۱۱۱۱

ماشین اول ← ویندوز سرور ۲۰۱۹ نصب شد

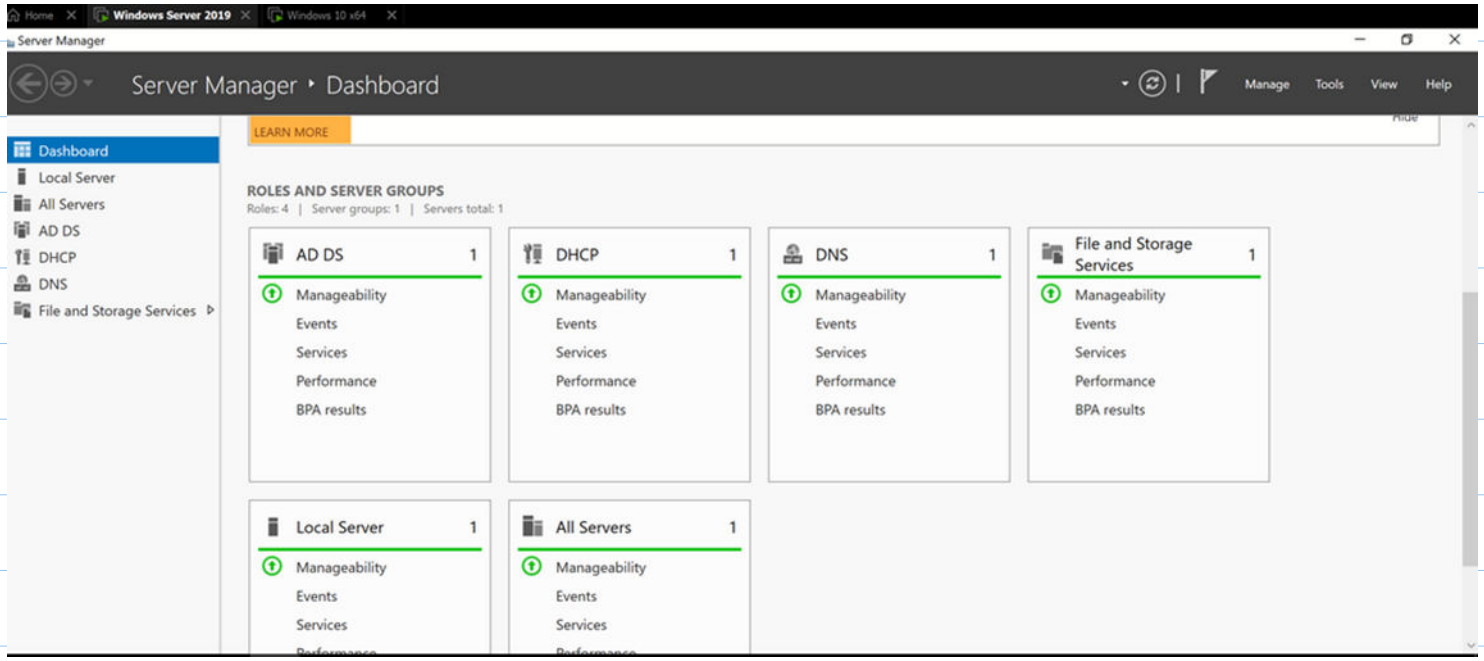
ماشین دوم ← ویندوز ۱۰ به عنوان کلاینت نصب شد.

کارت شبکه هر دو ماشین بر روی Host-only قرار گرفت



DHCP غیرفعال است

بعد از نصب ویندوز سرور، DNS server ، Active directory domain service و DHCP server نصب شدند



سرور به domain controller ، Promote شد

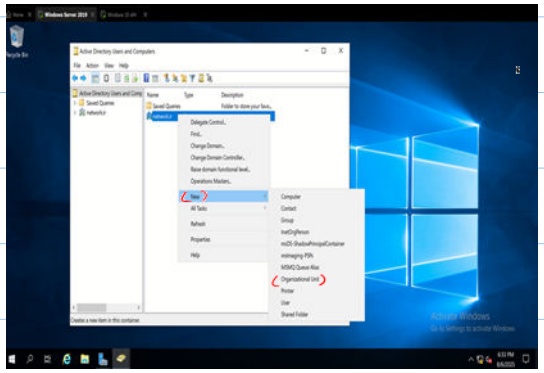
یه اخطار زرد رنگ وجود دارد ⚠ به این شکل ← add new forest

← سپس در قسمت Root domain name می‌نویسیم Network.ir

← بعد از اتمام نصب خودکار سرور ریستارت می‌شود

(رمز adminstrator در این بخش بسیار مهم می‌باشد که باید رمز قوی‌ای باشد)

در قسمت Active directory users and computers یک OU جدید



به اسم Network ایجاد می‌کنیم

New → orginzation unit → اسم (میزایم Network)

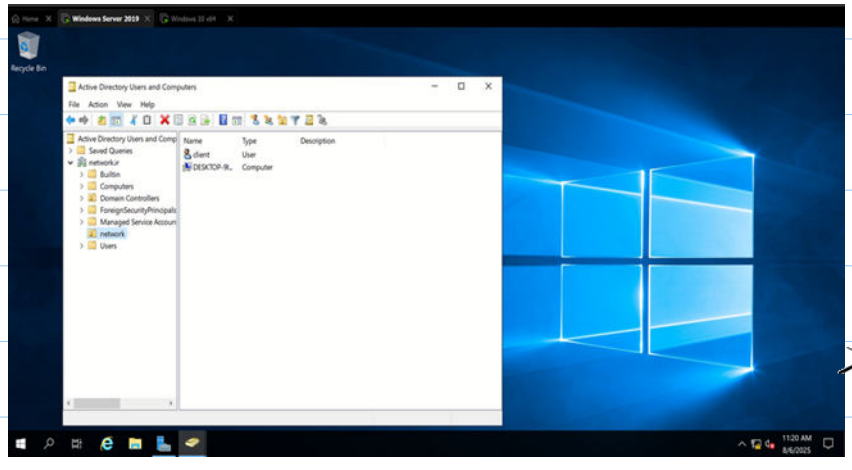
حالا روی OU که Network است کلیک راست می‌کنیم

new → user → firstname = client

→ user login nam = client1011 → رمز عبور

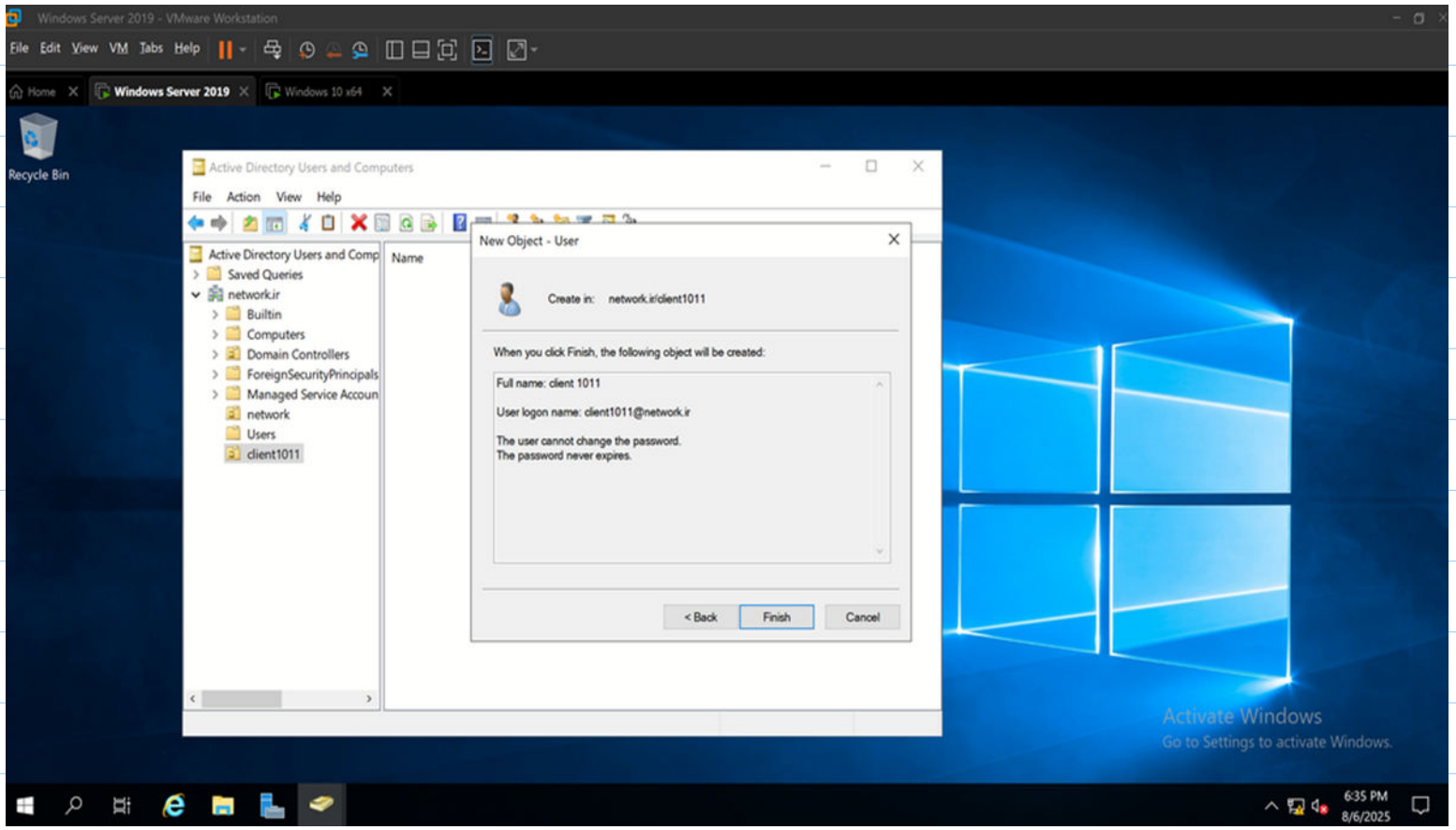
انتهای شماره‌ی دانشجویی خودم

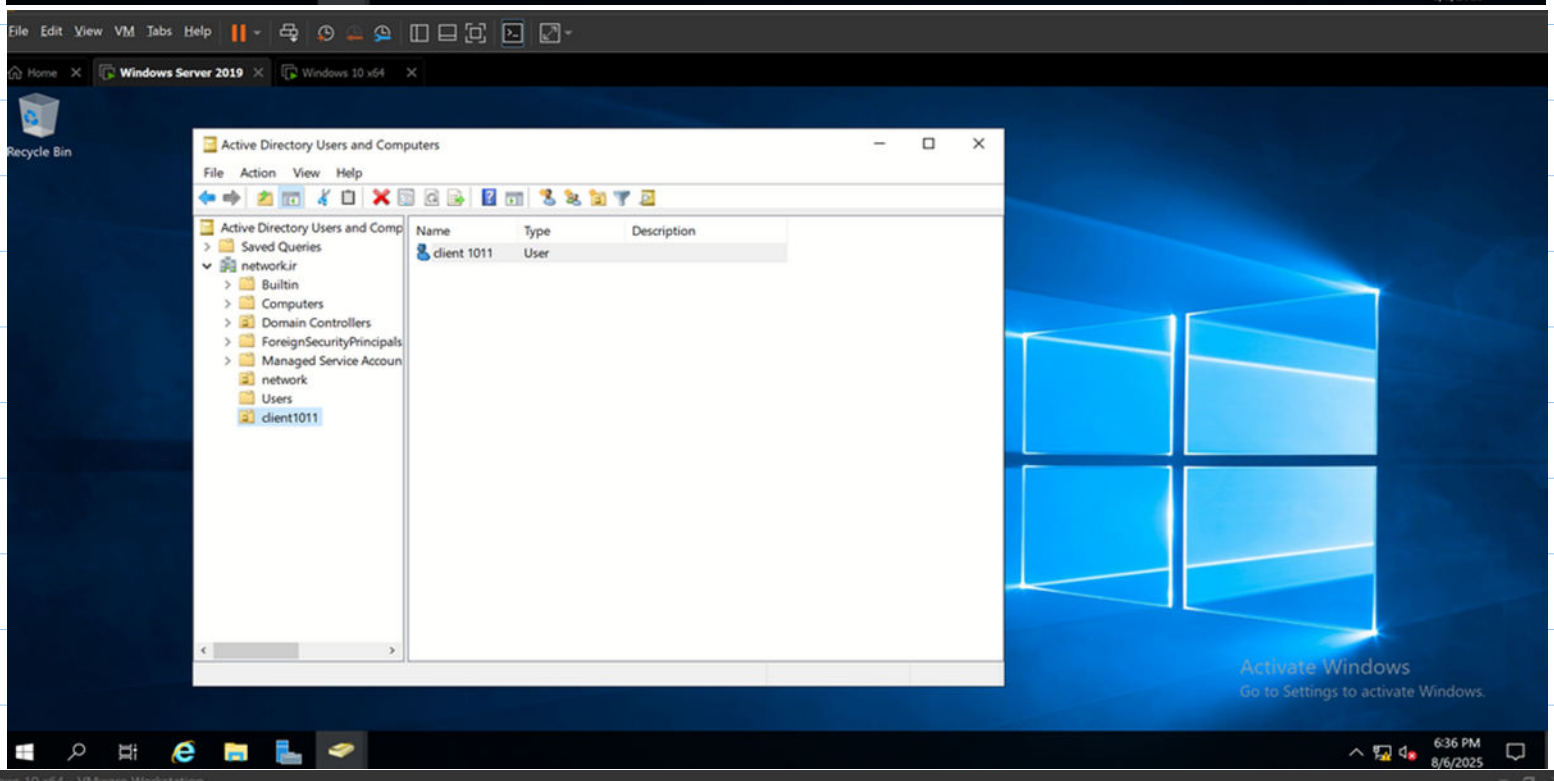
finish

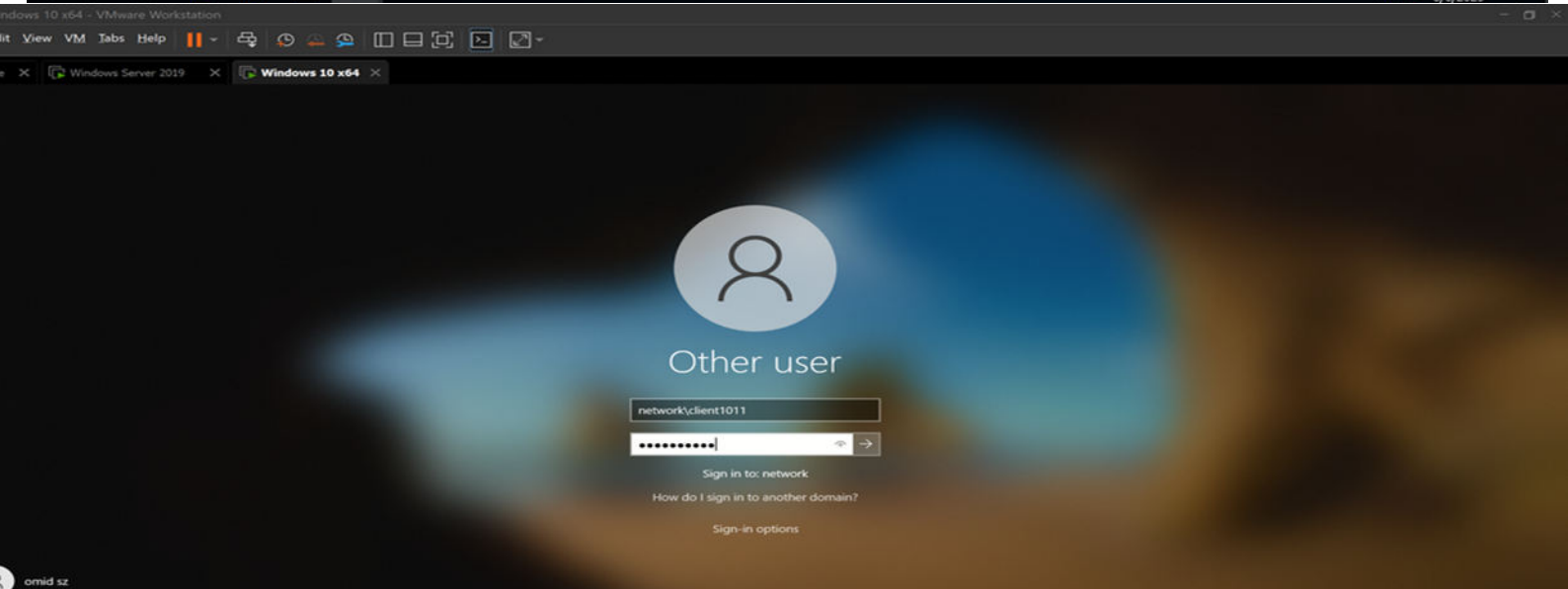


حالا کاربر تعریف شد.

باید در کلاینت جوین شود


Windows Server 2019 - VMware Workstation
File Edit View VM Tabs Help
Home
Windows Server 2019
Windows 10 x64
Recycle Bin
Active Directory Users and Computers
File Action View Help
Active Directory Users and Comp
Saved Queries
network.ir
Builtin
Computers
Domain Controllers
ForeignSecurityPrincipals
Managed Service Accoun
network
Users
client1011
Name
New Object - User
Create in: network.ir/client1011
When you click Finish, the following object will be created:
Full name: client 1011
User logon name: client1011@network.ir
The user cannot change the password.
The password never expires.
< Back
Finish
Cancel
Activate Windows
Go to Settings to activate Windows.
6:35 PM
8/6/2025


File Edit View VM Tabs Help
Home
Windows Server 2019
Windows 10 x64
Recycle Bin
Active Directory Users and Computers
File Action View Help
Active Directory Users and Comp
Saved Queries
network.ir
Builtin
Computers
Domain Controllers
ForeignSecurityPrincipals
Managed Service Accoun
network
Users
client1011
Name
Type
Description
client 1011
User
Activate Windows
Go to Settings to activate Windows.
6:36 PM
8/6/2025


Windows 10 x64 - VMware Workstation
View VM Tabs Help
Windows Server 2019
Windows 10 x64
Other user
network\client1011
Sign in to: network
How do I sign in to another domain?
Sign-in options
omid sz

برای جوین کردن در کامپیوتر (ویندوز ۱۰)

setting → system → about → rename this PC

→ change → number of: Domain در قسمت

network.ir باید نوشت

در پنجره ی باز شده همان یوزنیم و پسورد که مهم بودن را وارد

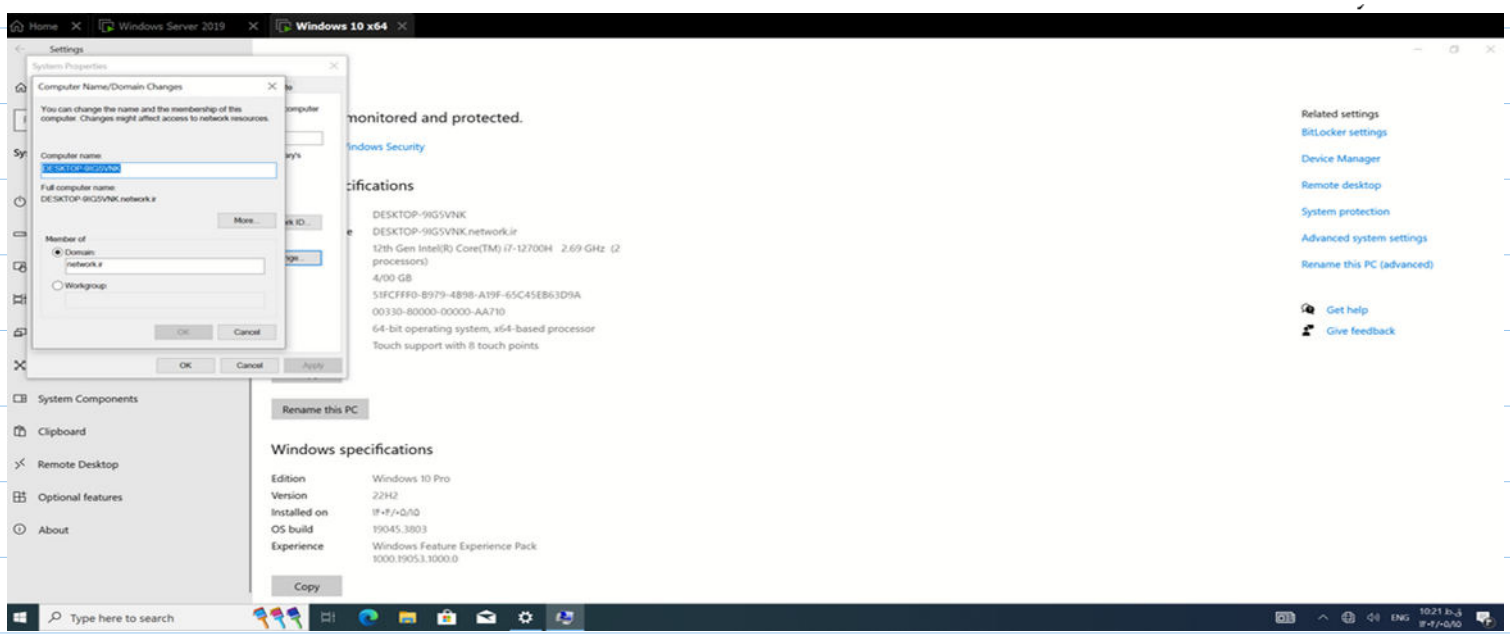
می کنیم. user name = network\Administrator

Password = ------

در ادامه به باگ های متفاوتی از جمله unidentified network خوردم

که به سختی حل شد.

با ipconfig می توانیم ip ها را مشاهده کنیم



سپس ip address باید از DHCP به صورت اتوماتیک

دریافت شود. control panel → network sharing center

→ chang adapater setting → ethernet راست کلیک

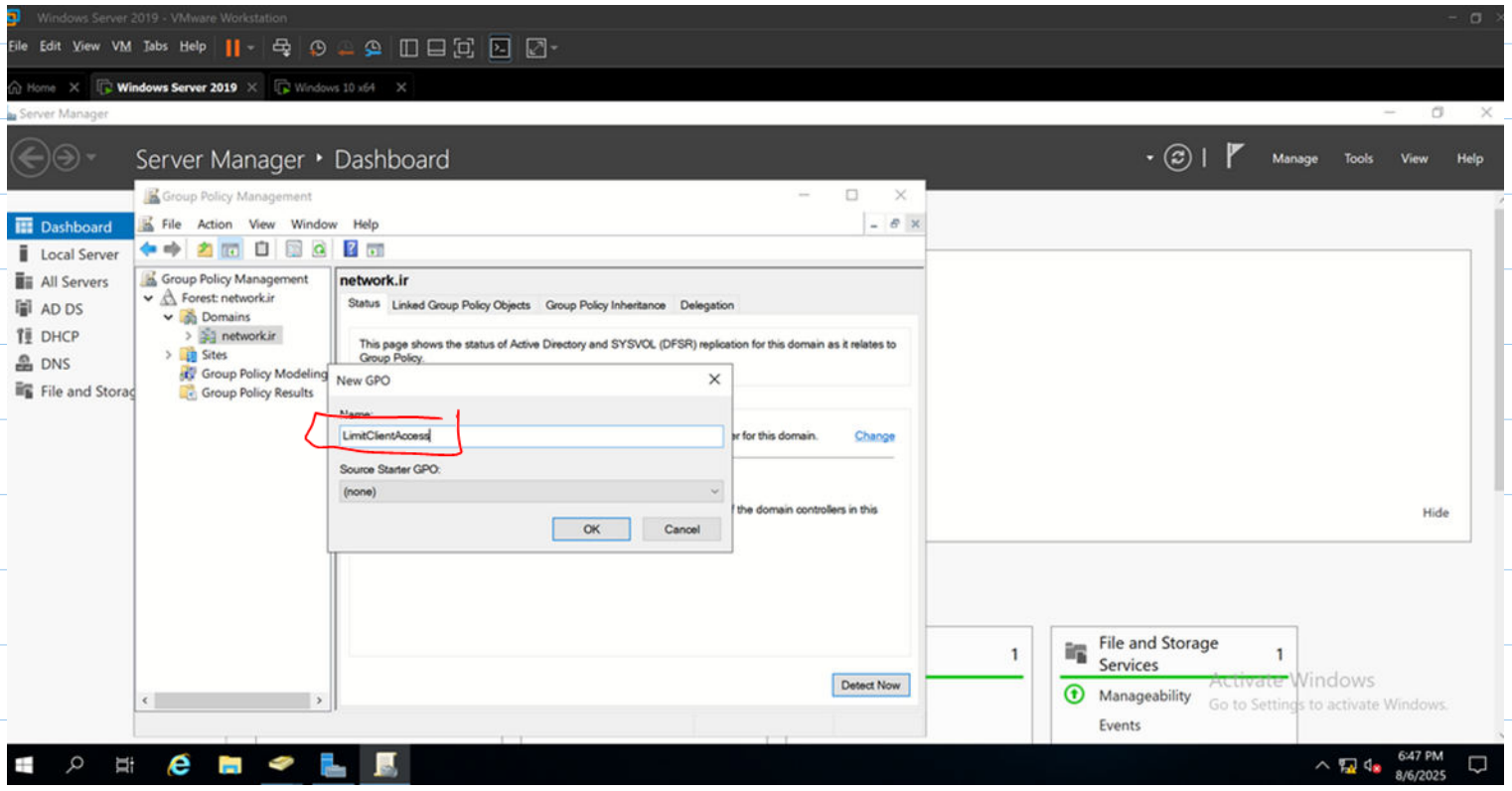
→ ☑ obtain IP address and dns server Automatically

gpo یک group policy managment از طریق OU

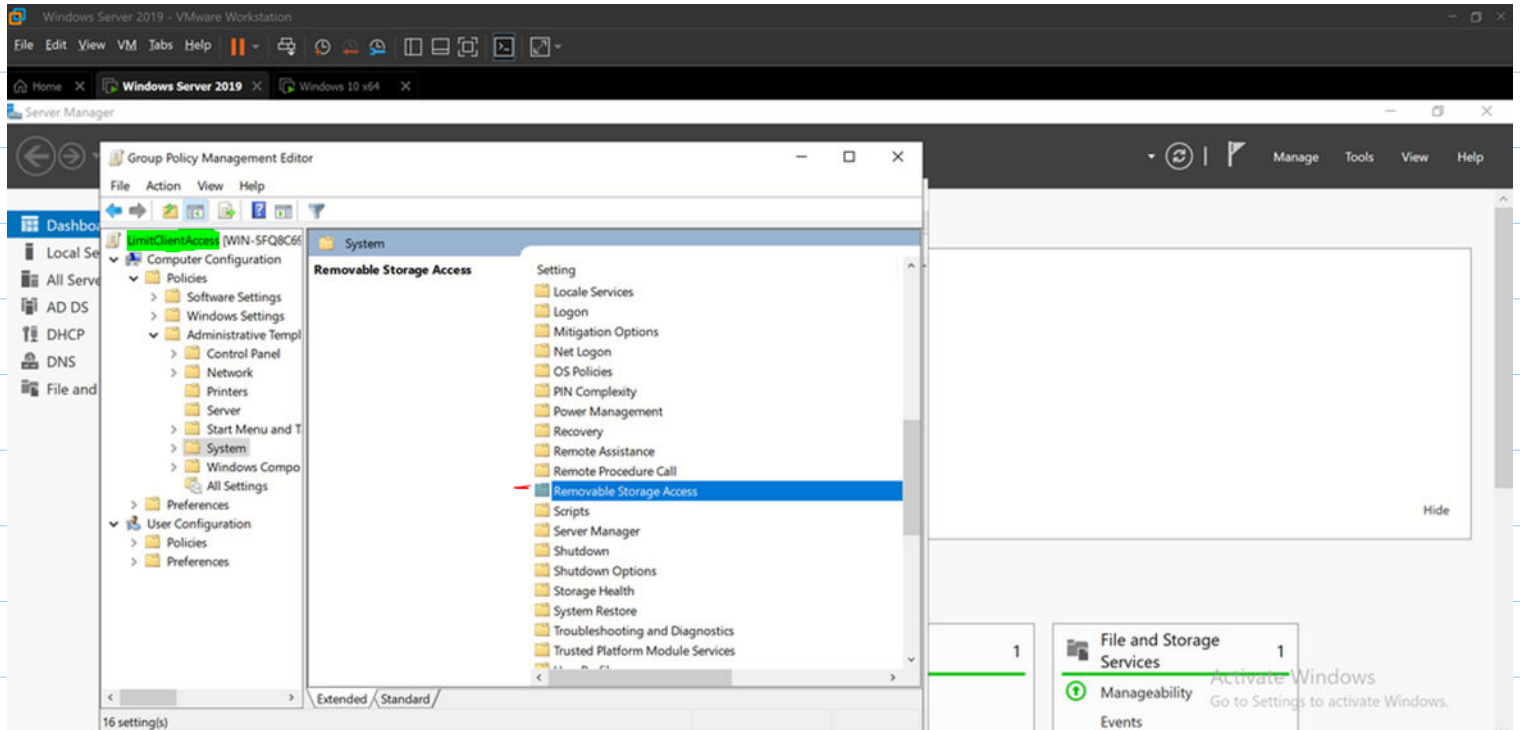
جدید به OU نتورک لینک می‌کنیم.

Server manager → tools → group policy managment

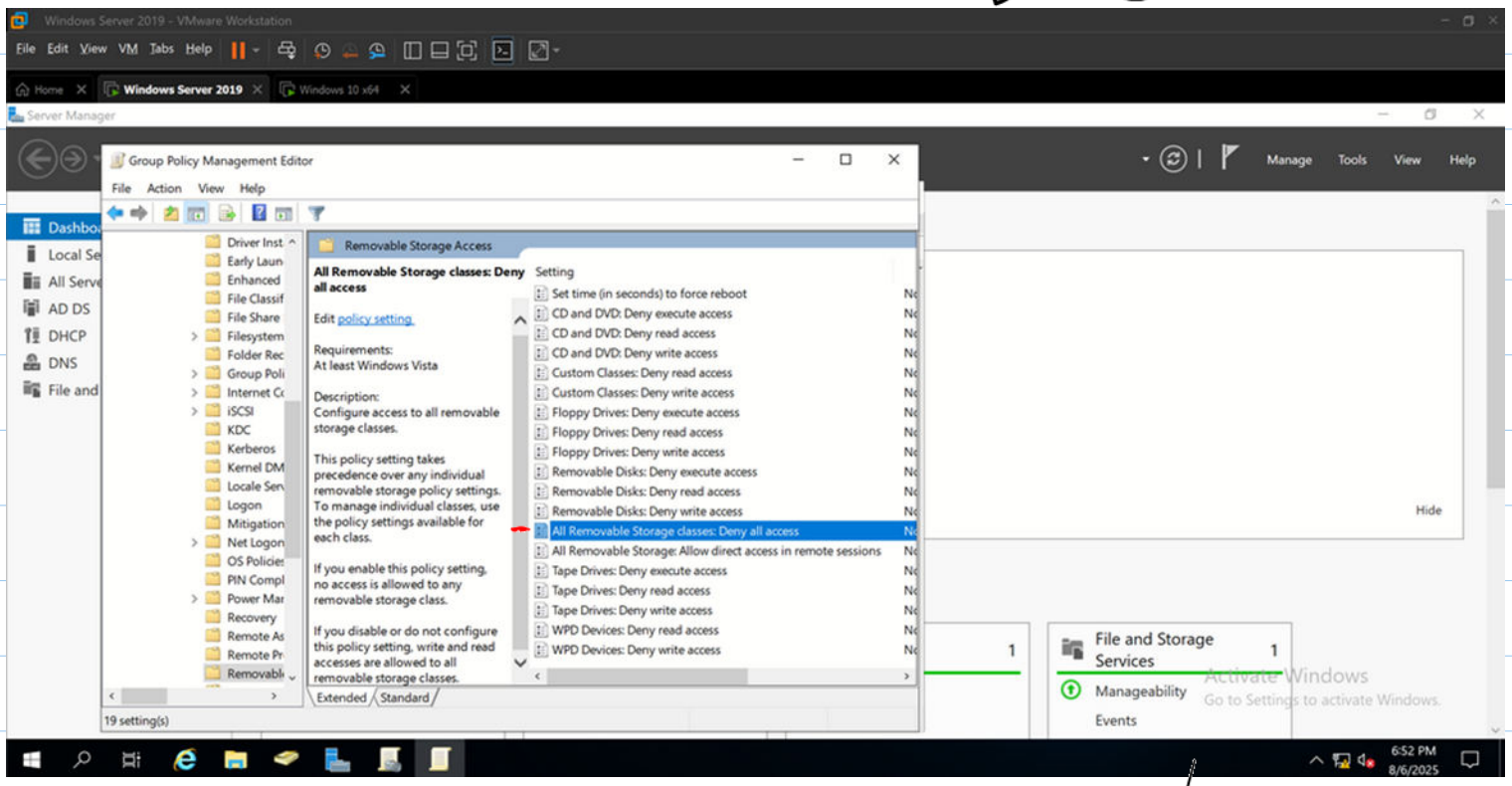
→ Domains → network روی کلیک راست → اسم می‌زاریم



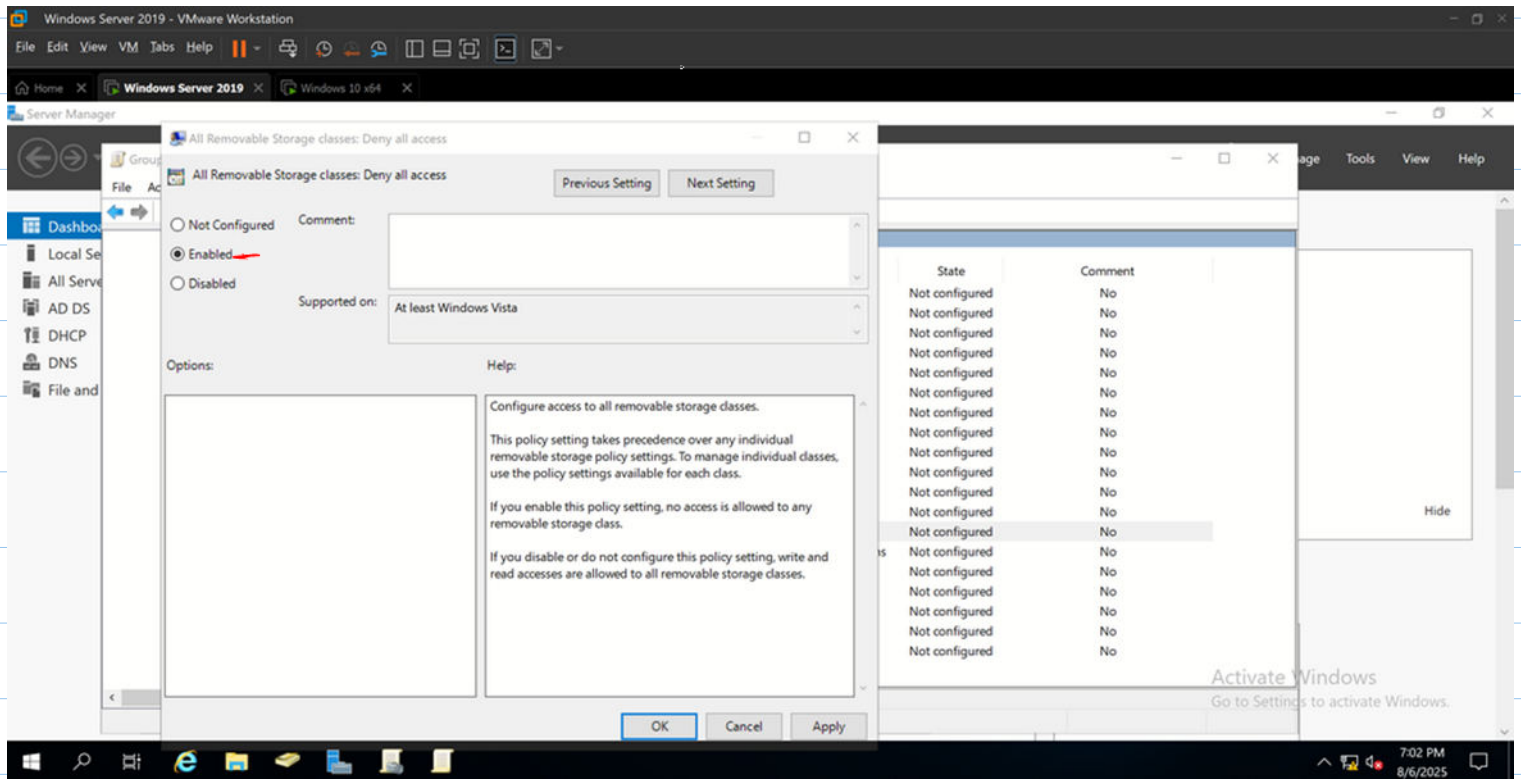
↓ برای مسدودسازی کامل usb storage device



سپس

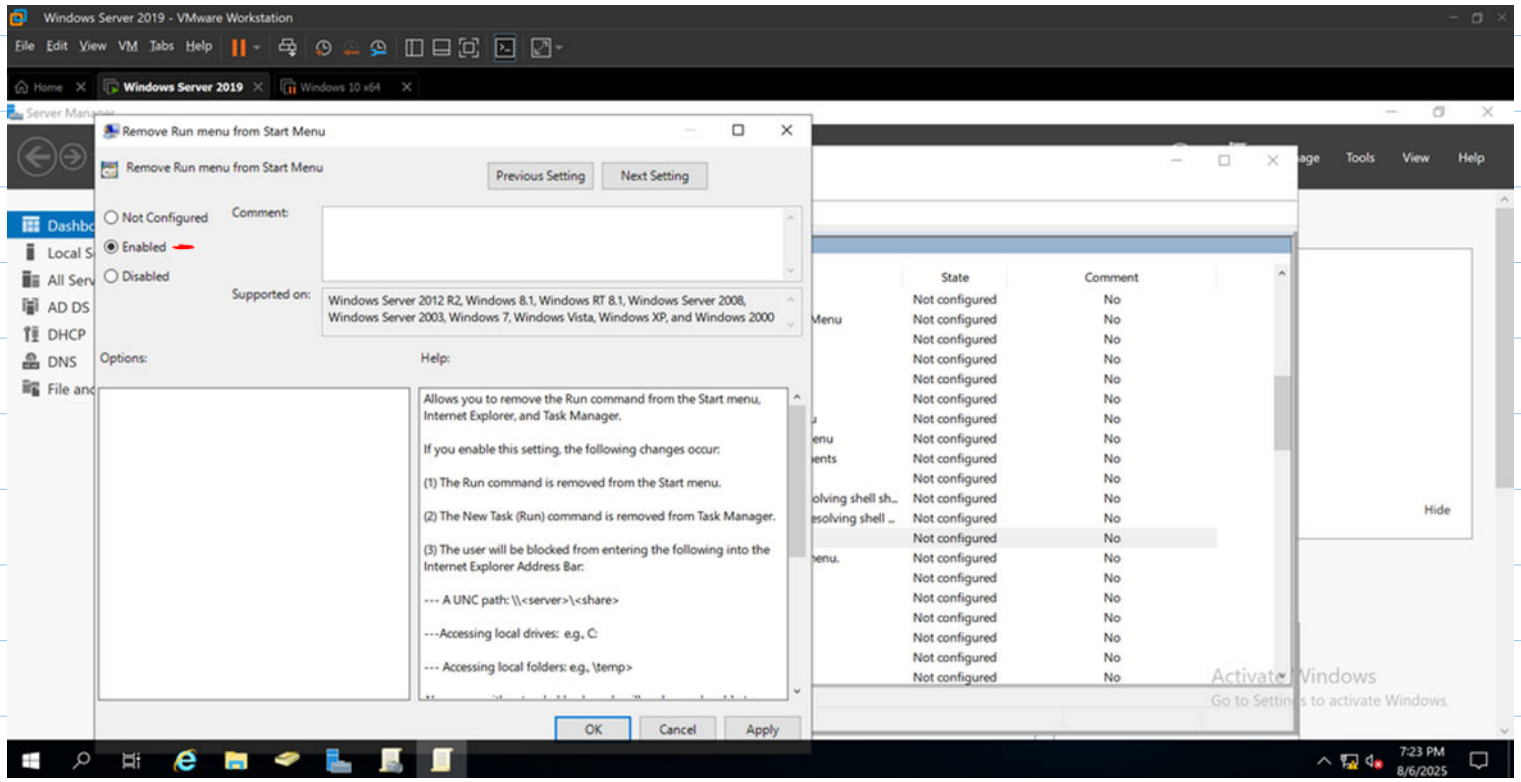


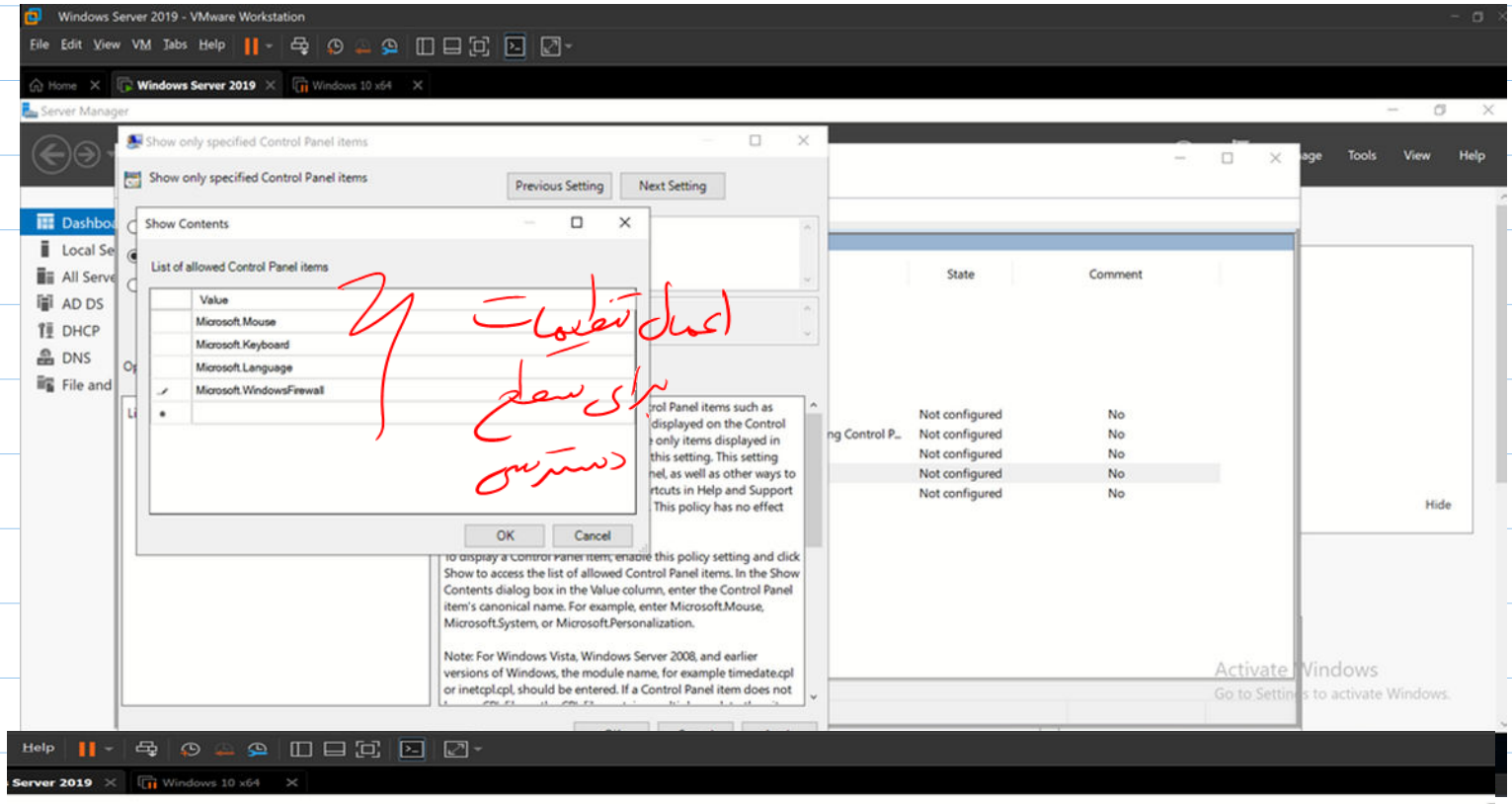
سپس

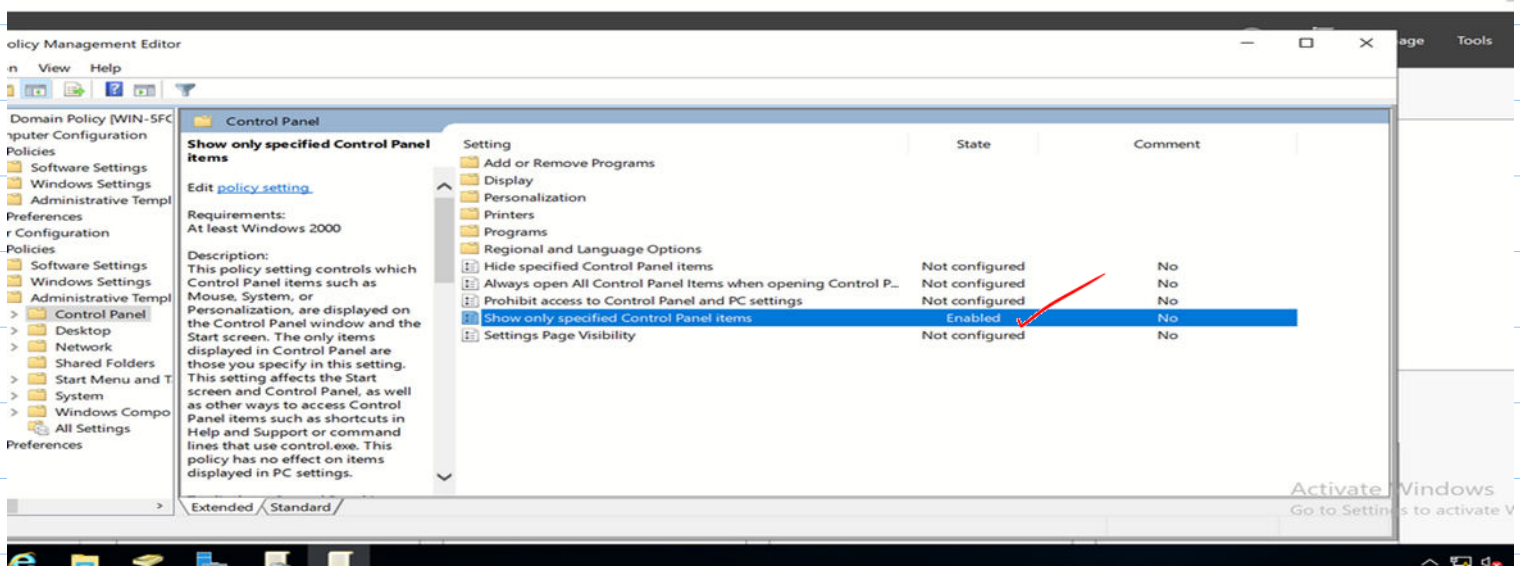


حال برای محدود سازی کنترل پنل مراحل زیر را انجام می دهیم

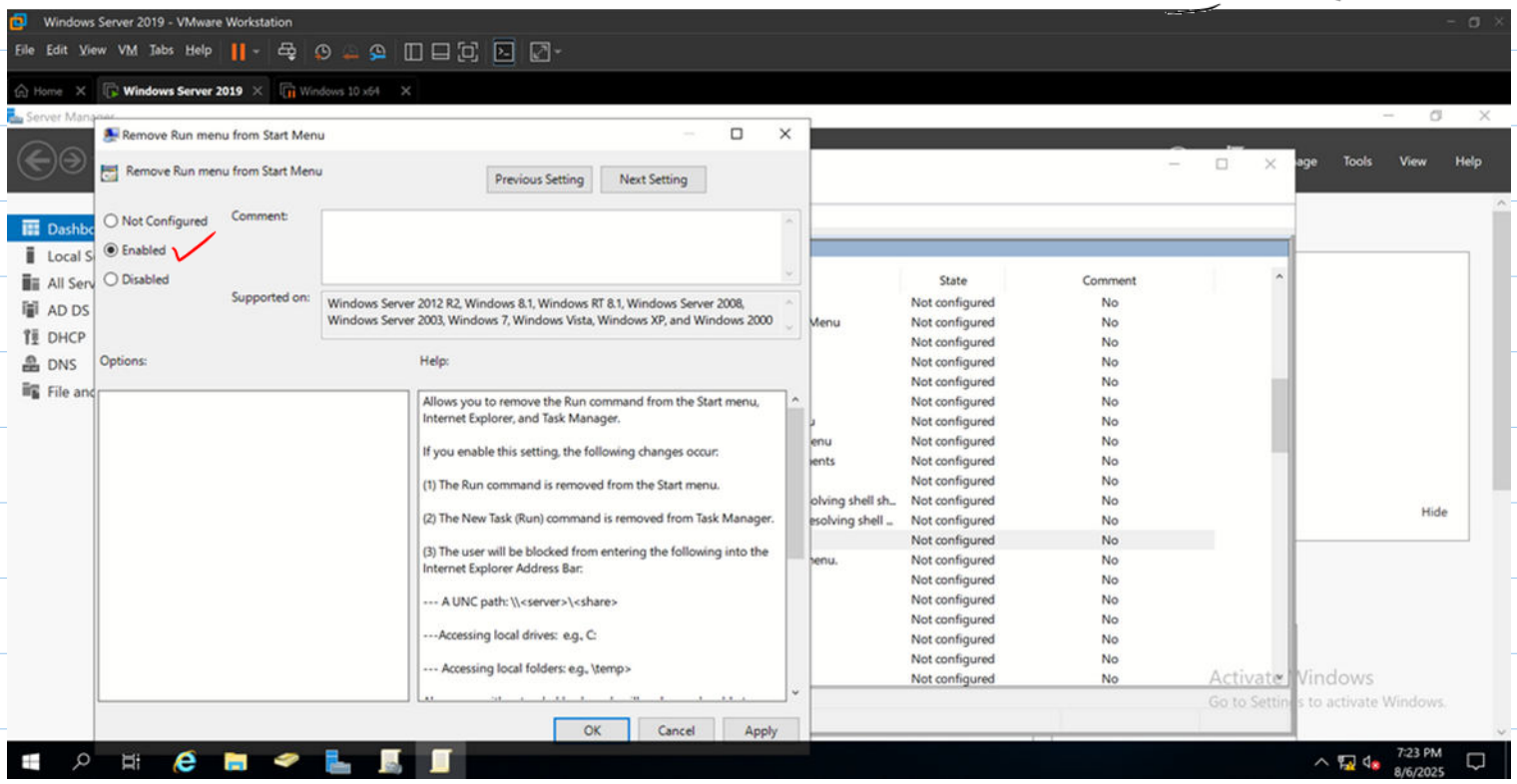
↓


Windows Server 2019 - VMware Workstation
Remove Run menu from Start Menu
Previous Setting
Next Setting
Not Configured
Enabled
Disabled
Comment:
Supported on:
Windows Server 2012 R2, Windows 8.1, Windows RT 8.1, Windows Server 2008, Windows Server 2003, Windows 7, Windows Vista, Windows XP, and Windows 2000
Options:
Help:
Allows you to remove the Run command from the Start menu, Internet Explorer, and Task Manager.
If you enable this setting, the following changes occur:
(1) The Run command is removed from the Start menu.
(2) The New Task (Run) command is removed from Task Manager.
(3) The user will be blocked from entering the following into the Internet Explorer Address Bar:
--- A UNC path: \\<server>\<share>
---Accessing local drives: e.g., C:
--- Accessing local folders: e.g., \temp>
OK
Cancel
Apply
State
Comment
Not configured
No
Hide
Activate Windows
Go to Settings to activate Windows.
7:23 PM
8/6/2025

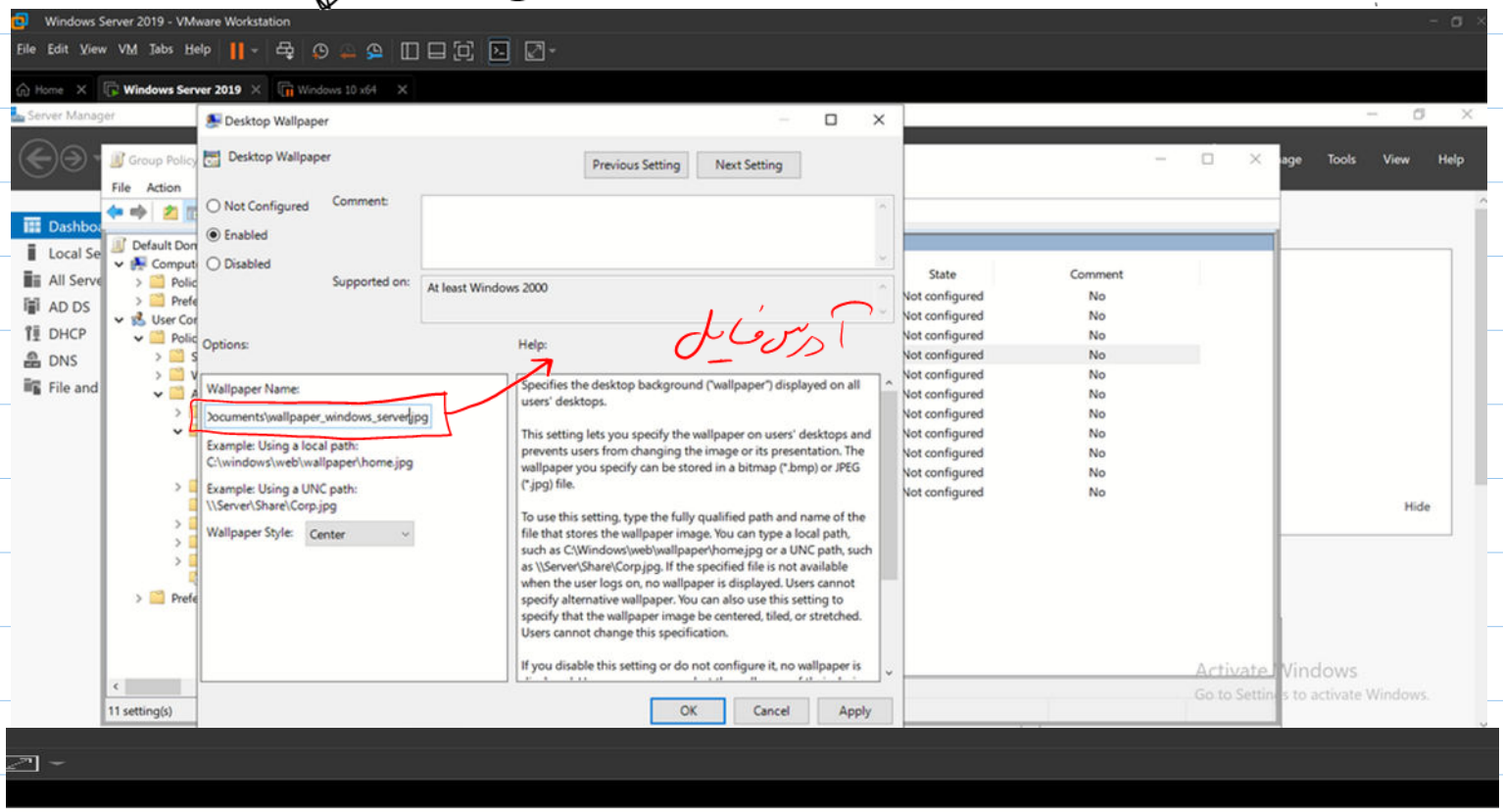

Windows Server 2019 - VMware Workstation
Show only specified Control Panel items
Previous Setting
Next Setting
Show Contents
List of allowed Control Panel items
Value
Microsoft.Mouse
Microsoft.Keyboard
Microsoft.Language
Microsoft.WindowsFirewall
OK
Cancel
اعمال تنظیمات برای سطح دسترسی
Show Contents dialog box in the Value column, enter the Control Panel item's canonical name. For example, enter Microsoft.Mouse, Microsoft.System, or Microsoft.Personalization.
Note: For Windows Vista, Windows Server 2008, and earlier versions of Windows, the module name, for example timedate.cpl or inetcpl.cpl, should be entered. If a Control Panel item does not
State
Comment
Not configured
No
Hide
Activate Windows
Go to Settings to activate Windows.


Policy Management Editor
Control Panel
Show only specified Control Panel items
Edit policy setting
Requirements:
At least Windows 2000
Description:
This policy setting controls which Control Panel items such as Mouse, System, or Personalization, are displayed on the Control Panel window and the Start screen. The only items displayed in Control Panel are those you specify in this setting. This setting affects the Start screen and Control Panel, as well as other ways to access Control Panel items such as shortcuts in Help and Support or command lines that use control.exe. This policy has no effect on items displayed in PC settings.
Setting
State
Comment
Add or Remove Programs
Display
Personalization
Printers
Programs
Regional and Language Options
Hide specified Control Panel items
Not configured
No
Always open All Control Panel Items when opening Control P...
Not configured
No
Prohibit access to Control Panel and PC settings
Not configured
No
Show only specified Control Panel items
Enabled
No
Settings Page Visibility
Not configured
No
Extended
Standard
Activate Windows
Go to Settings to activate Windows.

Run حالا برای غیرفعال سازی

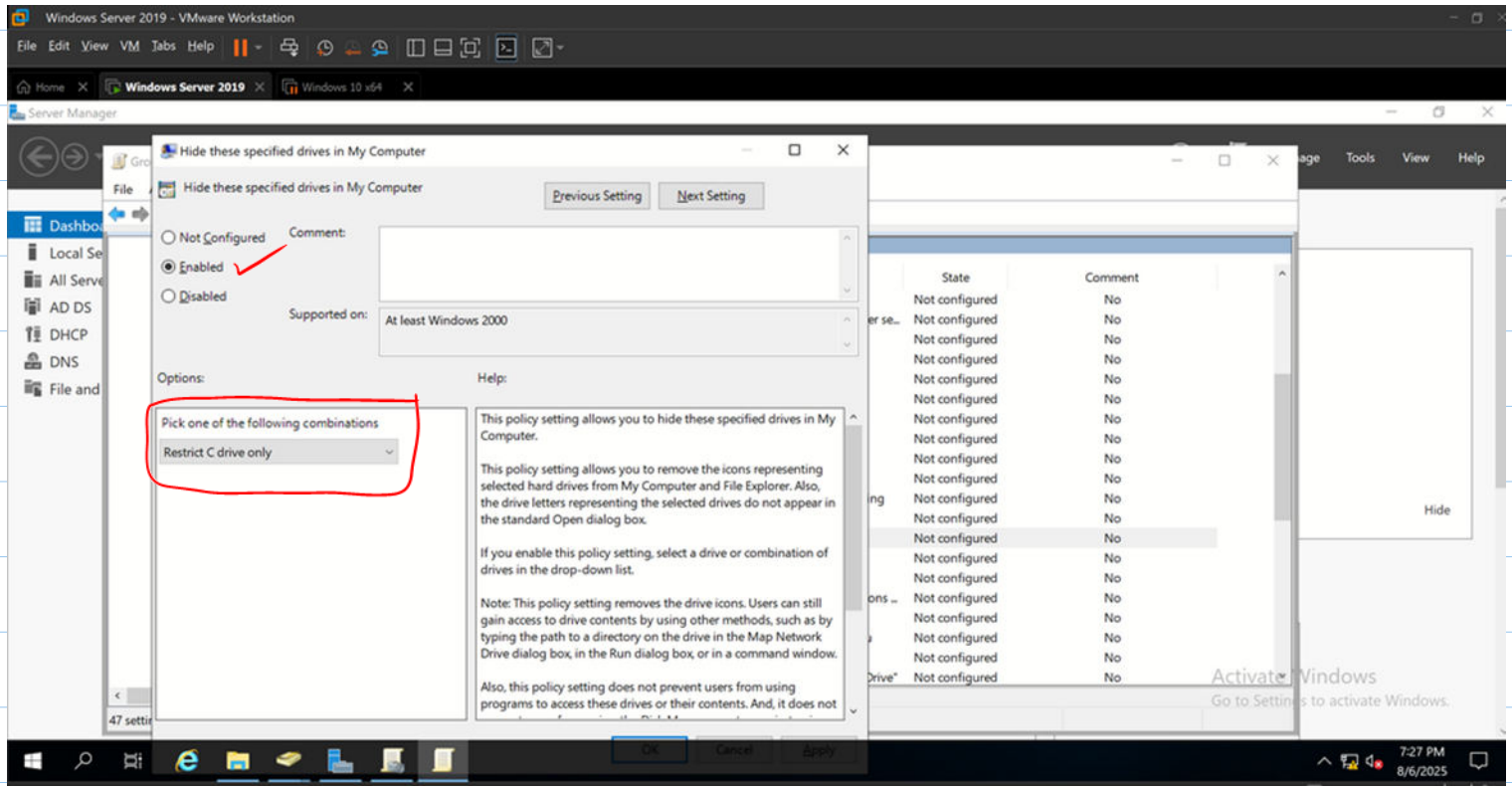


برای اعمال والپیپر سازمانی با قفل بودن



Setting	State	Comment
Enable Active Desktop	Not configured	No
Disable Active Desktop	Not configured	No
Prohibit changes	Not configured	No
Desktop Wallpaper	Enabled	No
Prohibit adding items	Not configured	No
Prohibit closing items	Not configured	No
Prohibit deleting items	Not configured	No
Prohibit editing items	Not configured	No
Disable all items	Not configured	No
Add/Delete items	Not configured	No
Allow only bitmapped wallpaper	Not configured	No

پنهان کردن درایو C برای کاربران



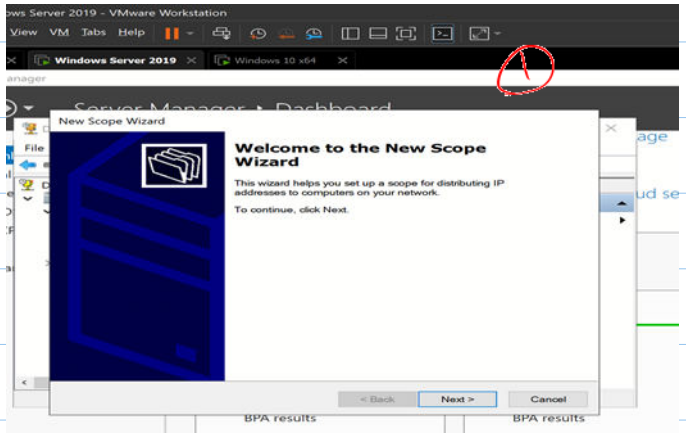
پس از این باید دستور gpupdate/force بزنیم

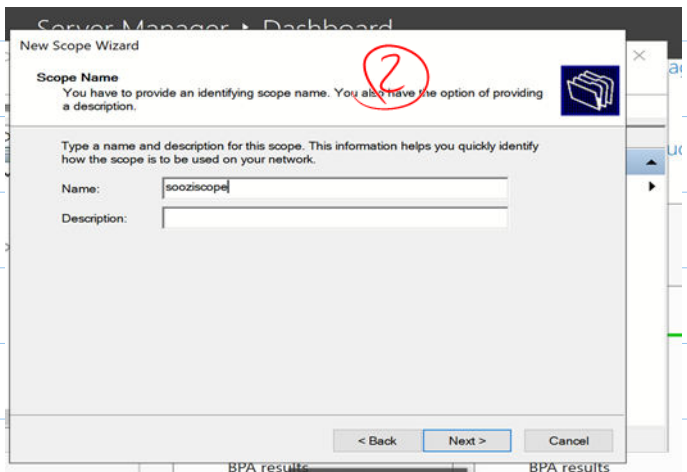
تا اعمال شوند

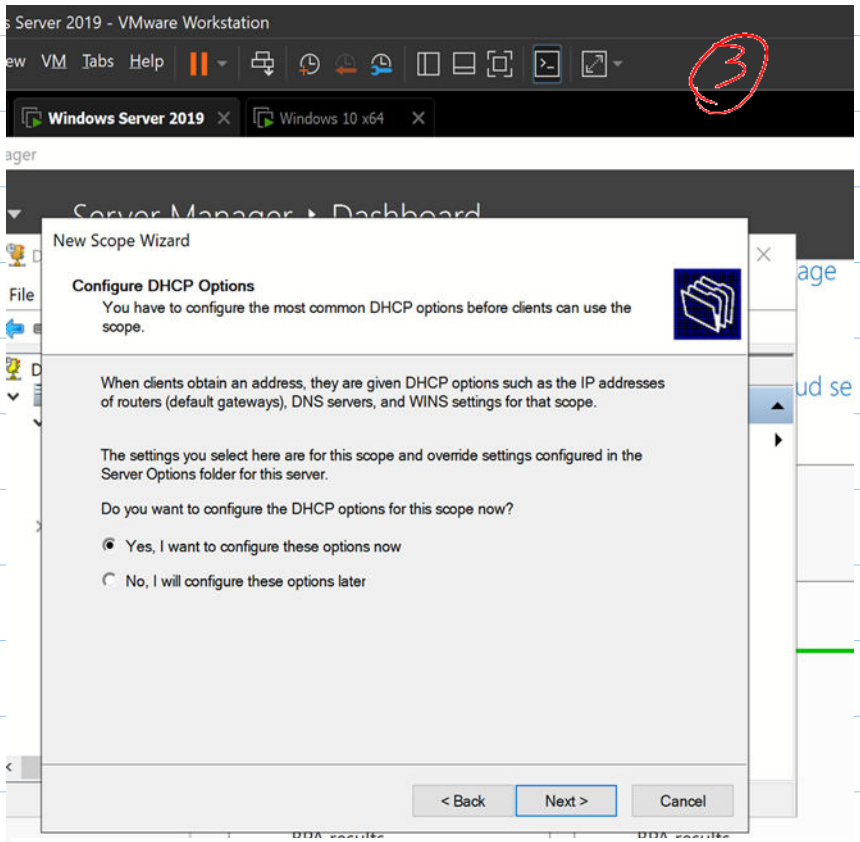
حال برای تعریف scope جدید

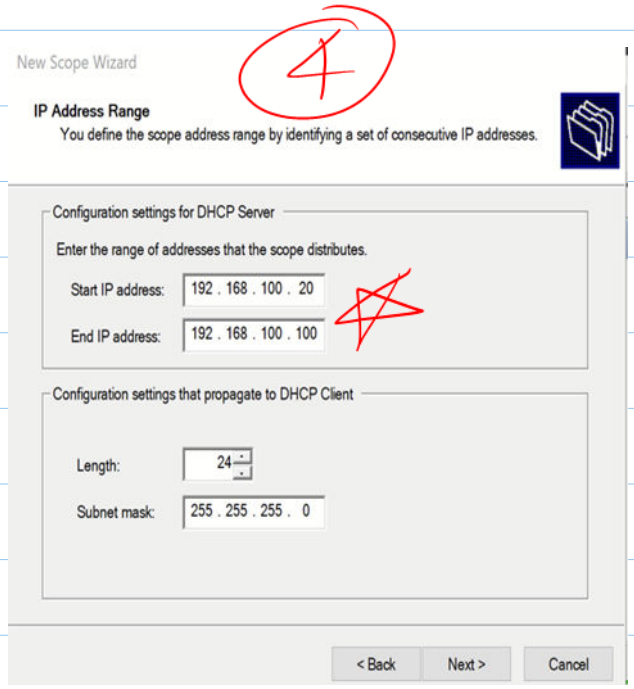
server manger → tools → DHCP → روی نام سرور (اسم سرور) network

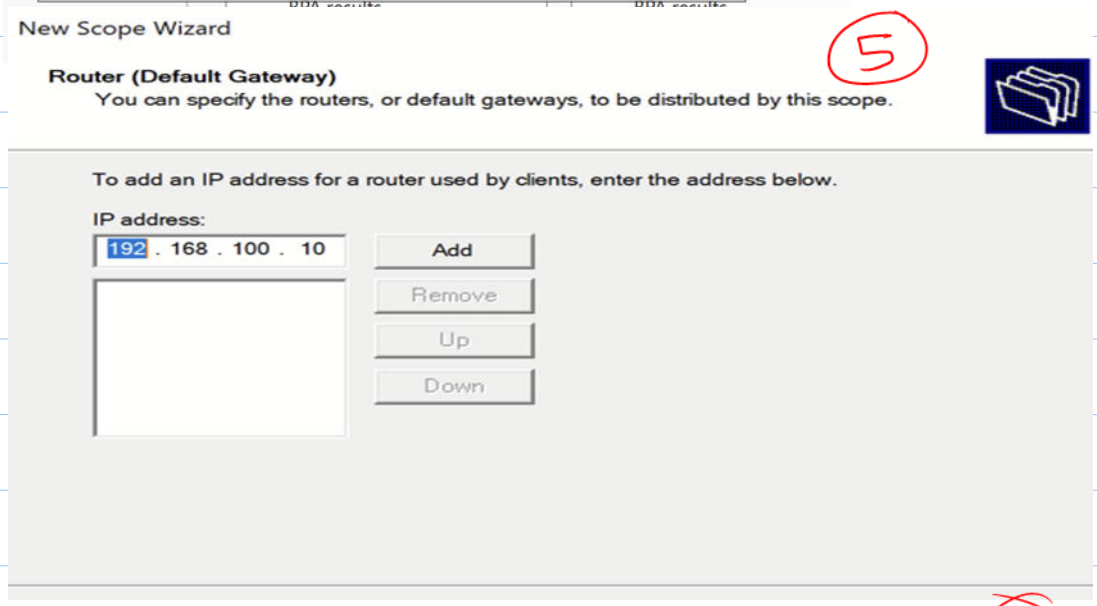
→ IPv4 کلیک راست → new scope → new scope wizard

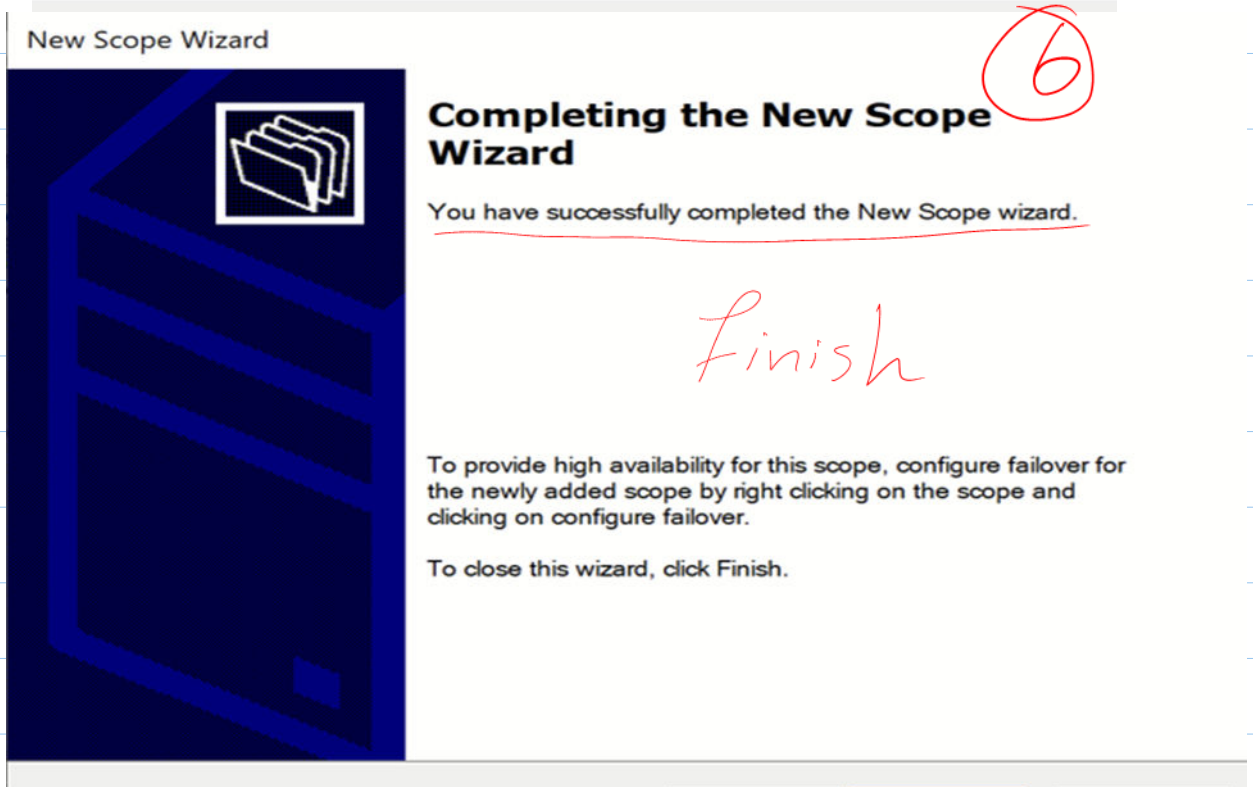





Server 2019 - VMware Workstation
ew VM Tabs Help
Windows Server 2019
Windows 10 x64
3
Server Manager • Dashboard
New Scope Wizard
Configure DHCP Options
You have to configure the most common DHCP options before clients can use the scope.
When clients obtain an address, they are given DHCP options such as the IP addresses of routers (default gateways), DNS servers, and WINS settings for that scope.
The settings you select here are for this scope and override settings configured in the Server Options folder for this server.
Do you want to configure the DHCP options for this scope now?
Yes, I want to configure these options now
No, I will configure these options later
< Back
Next >
Cancel


New Scope Wizard
4
IP Address Range
You define the scope address range by identifying a set of consecutive IP addresses.
Configuration settings for DHCP Server
Enter the range of addresses that the scope distributes.
Start IP address: 192 . 168 . 100 . 20
End IP address: 192 . 168 . 100 . 100
Configuration settings that propagate to DHCP Client
Length: 24
Subnet mask: 255 . 255 . 255 . 0
< Back
Next >
Cancel


New Scope Wizard
5
Router (Default Gateway)
You can specify the routers, or default gateways, to be distributed by this scope.
To add an IP address for a router used by clients, enter the address below.
IP address:
192 . 168 . 100 . 10
Add
Remove
Up
Down


New Scope Wizard
6
Completing the New Scope Wizard
You have successfully completed the New Scope wizard.
Finish
To provide high availability for this scope, configure failover for the newly added scope by right clicking on the scope and clicking on configure failover.
To close this wizard, click Finish.

Authorize را DHCP server باید

معرفی شود Active directory به DHCP server کرد که

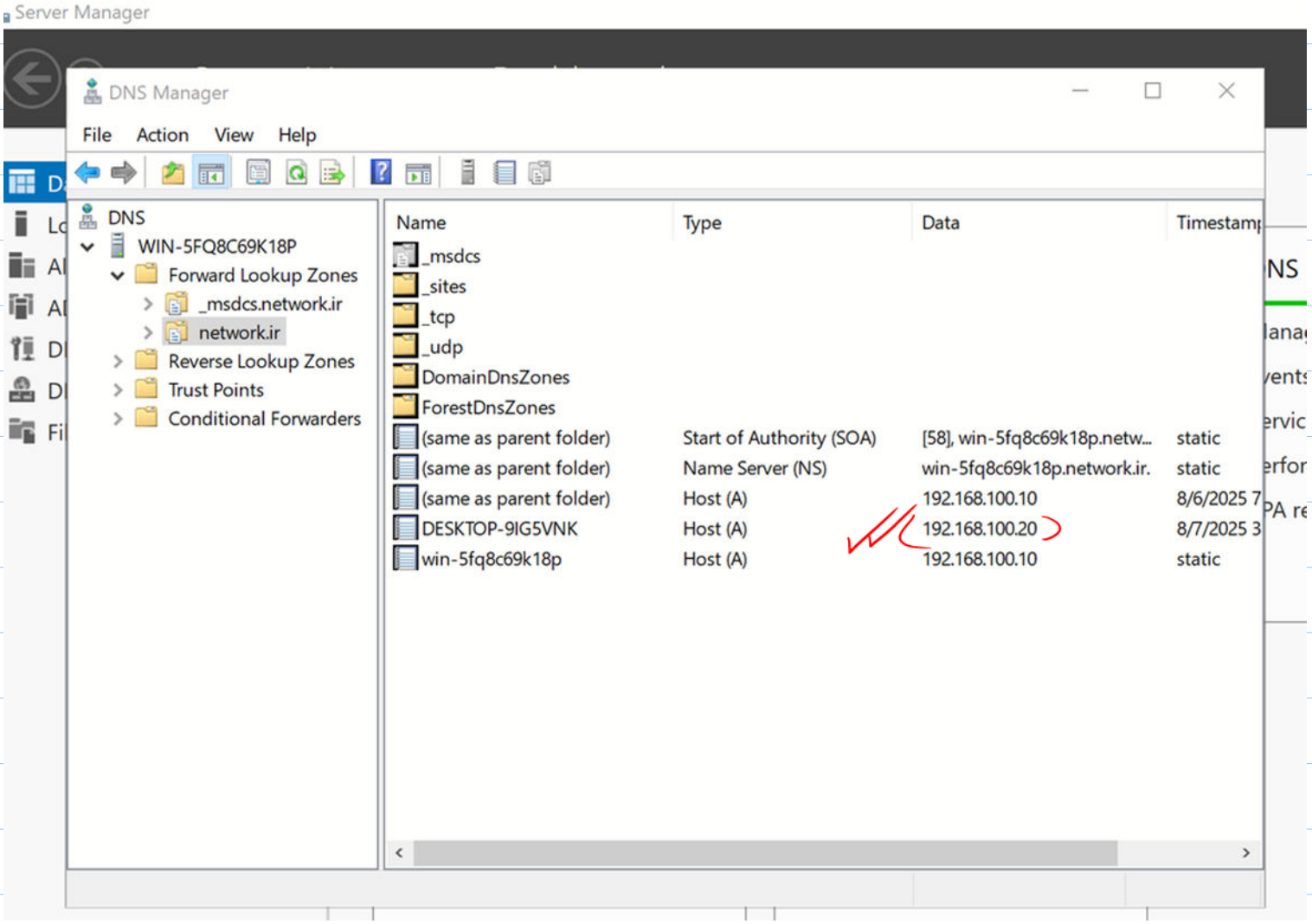
server manager → tool → DHCP →

→ DHCP سمت مرکز unAthorize وجود دارد در کنار رنگ → کلیک راست → Authorize

حالا برای تست نمایی

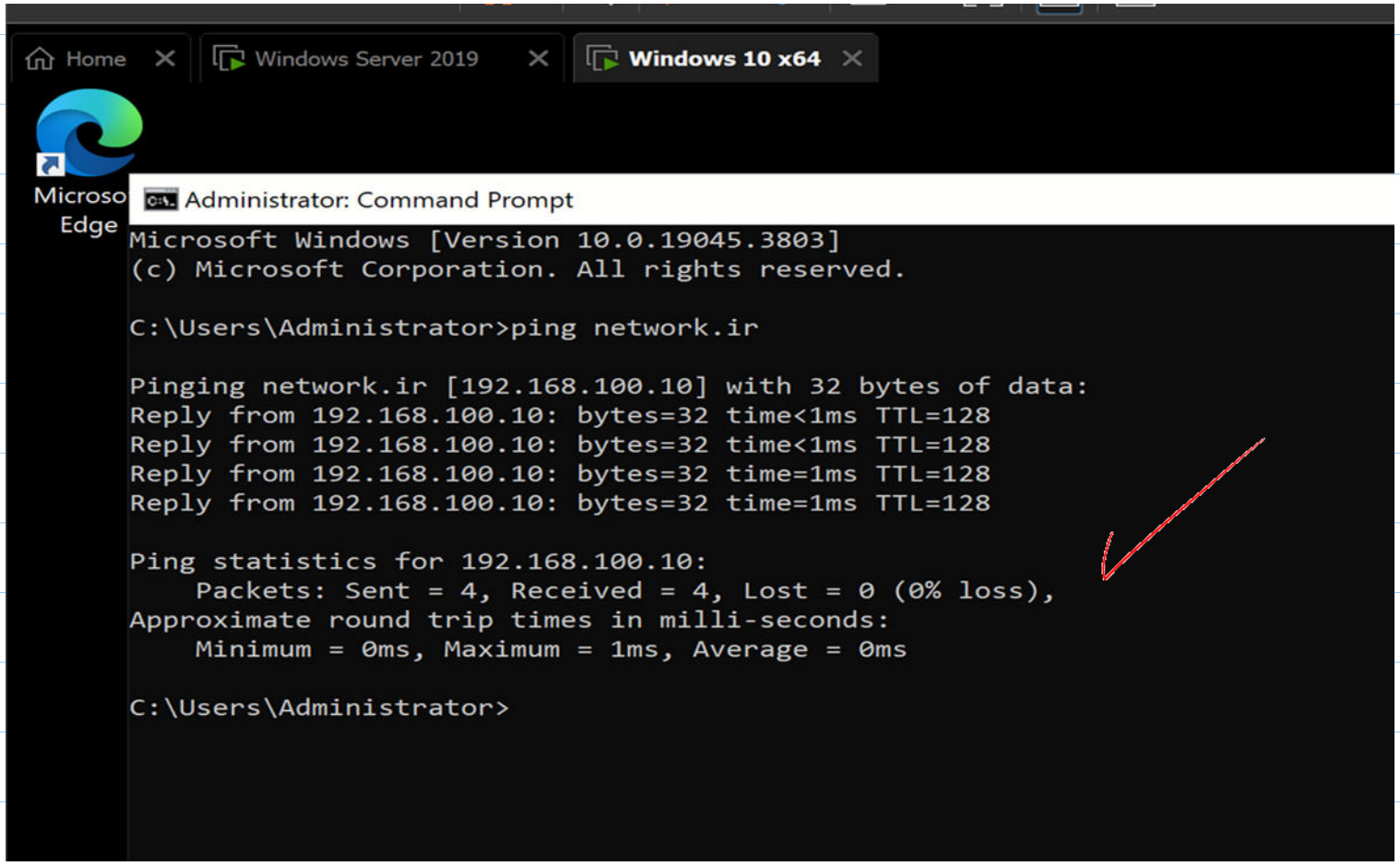
server manager → tools → DNS →

forward lookup zones → Network.ir



اتصال داشتن از کلاینت

cmd → Ping network.ir



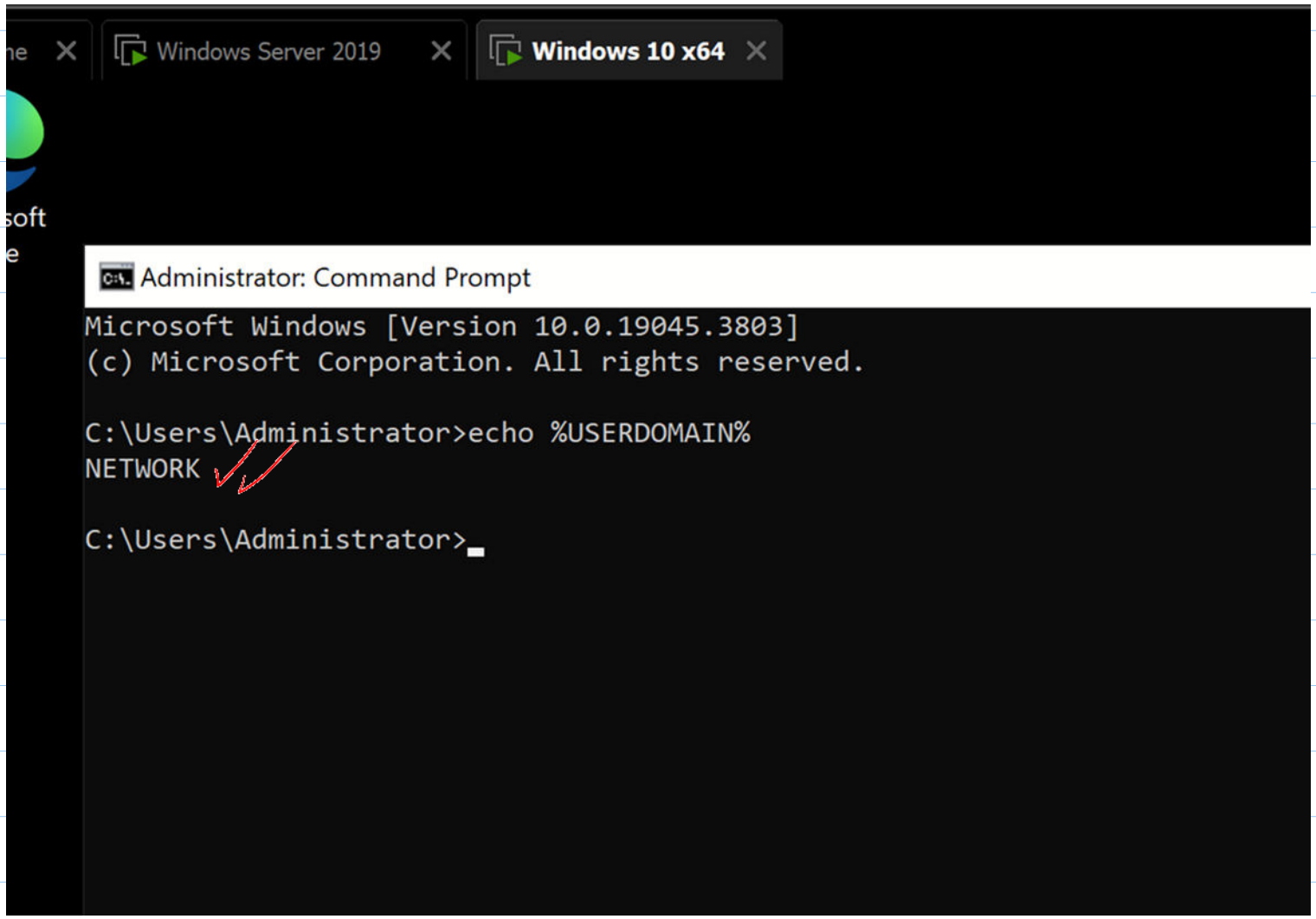
nslookup network.ir

```
C:\Users\Administrator>nslookup network.ir
DNS request timed out.
    timeout was 2 seconds.
Server:  UnKnown
Address:  192.168.100.10

Name:    network.ir
Address:  192.168.100.10


C:\Users\Administrator>_
```

test GPO


Windows Server 2019
Windows 10 x64
Administrator: Command Prompt
Microsoft Windows [Version 10.0.19045.3803]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Administrator>echo %USERDOMAIN%
NETWORK
C:\Users\Administrator>