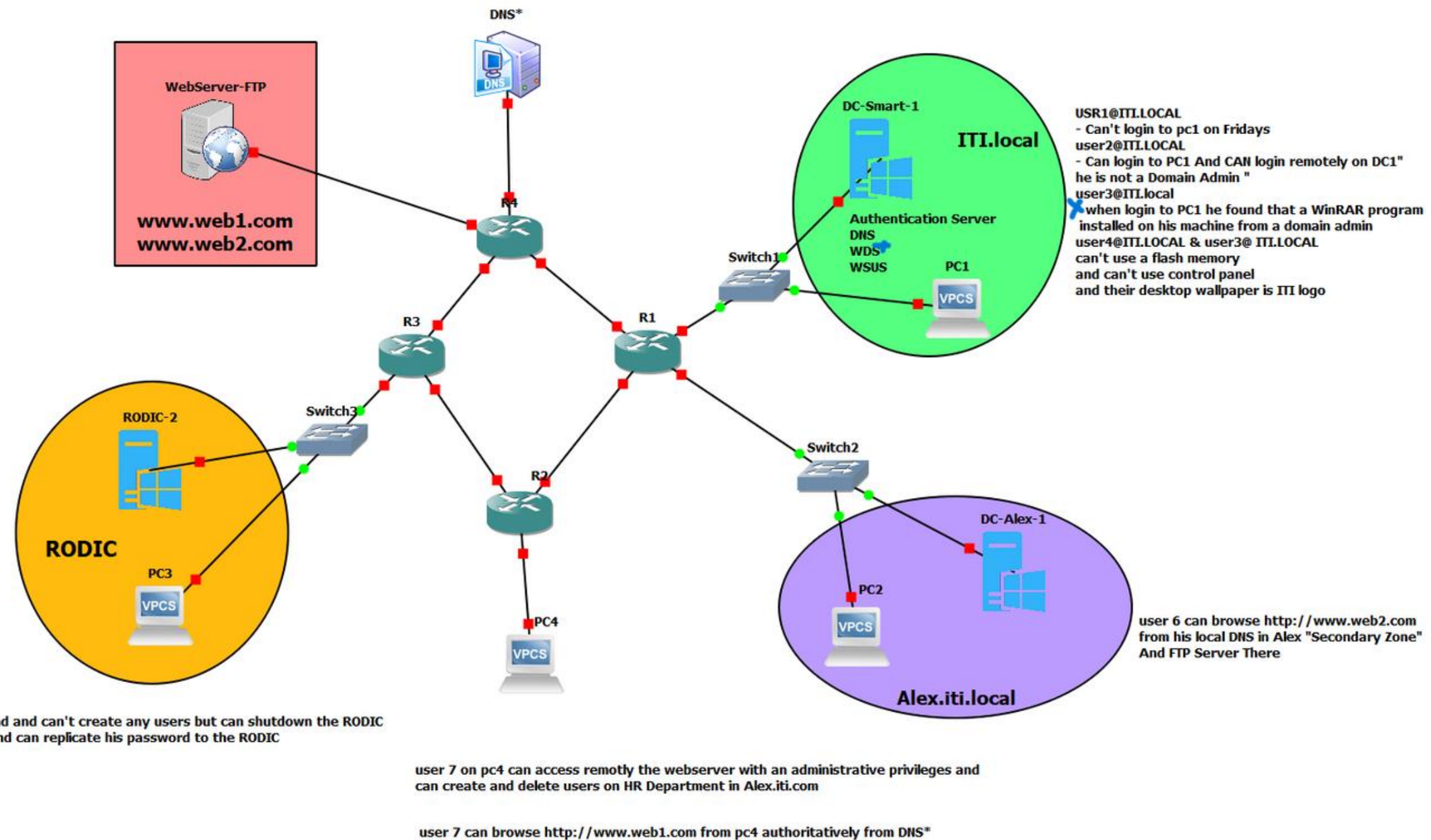


WINDOWS SERVER PROJECT





PROJECT MAP

PROJECT OBJECTIVES

Implement Secure User Management

Enhance Access Control

Enhance System Reliability

Ensure Compliance with Security Policies

Streamline User Creation and Deletion

Optimize Resource Access

Provide a Scalable Solution

Restrict Unauthorized Actions

Improve Remote Access Management

DC-SMART

Primary Role:

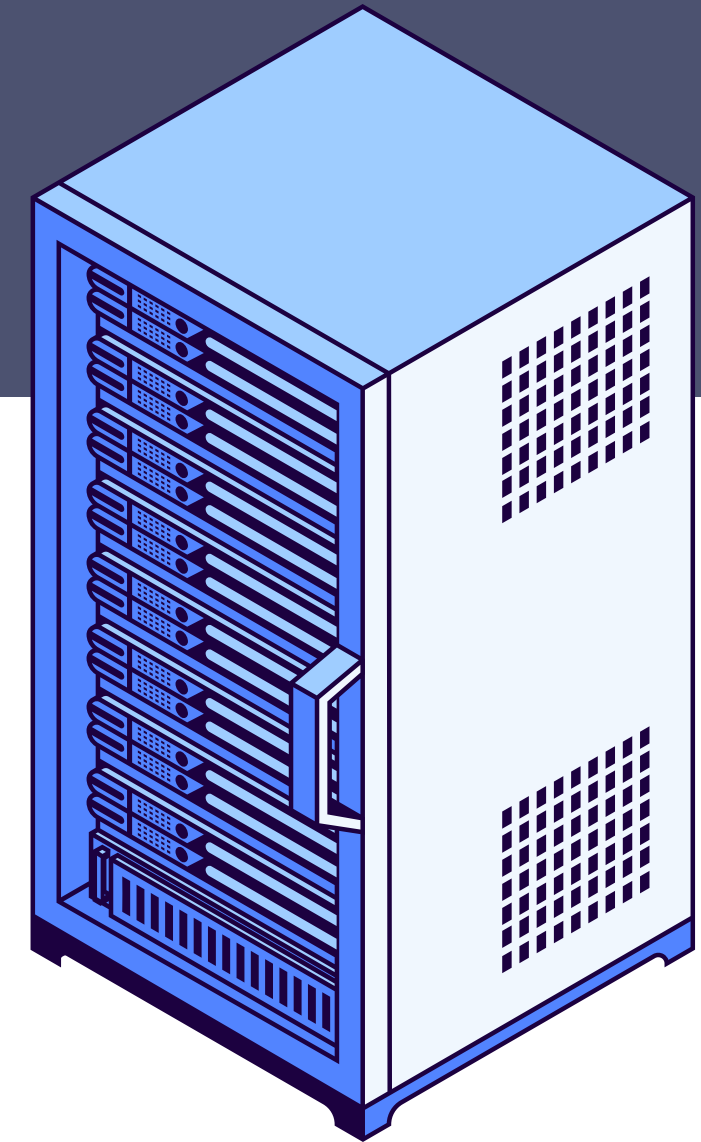
- Serves as the main branch for managing core services in the Windows Server environment.

Key Functions:

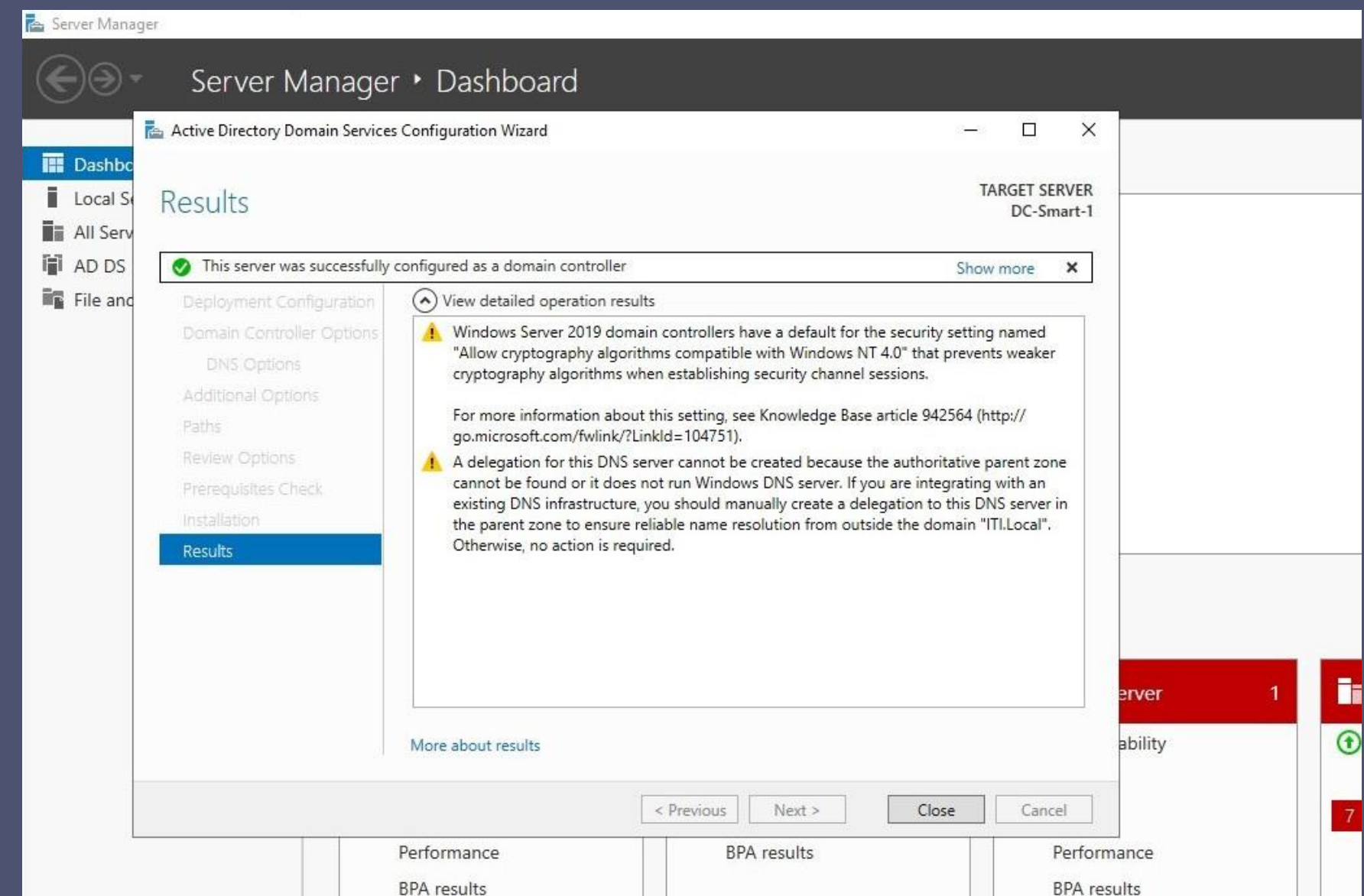
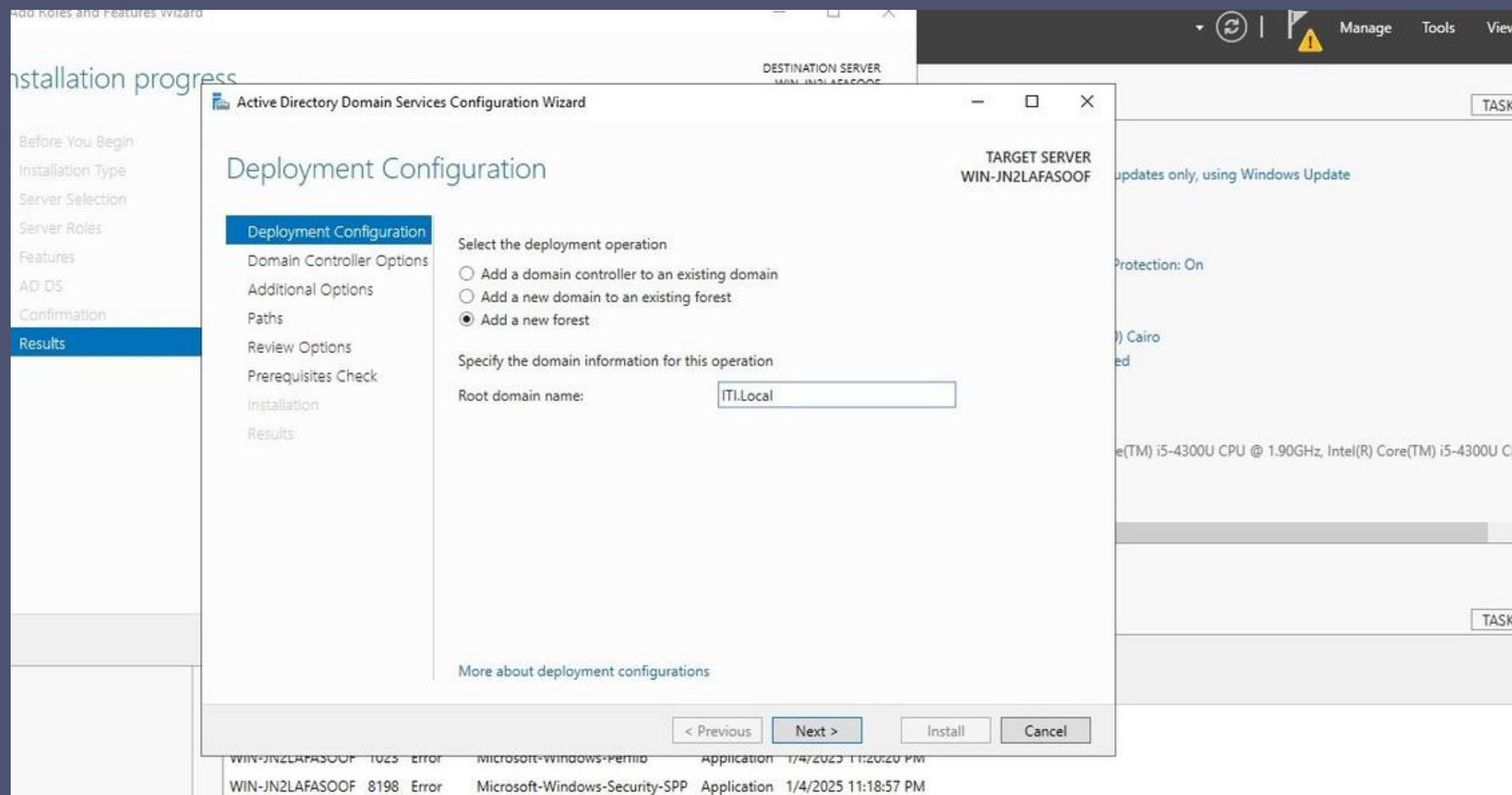
- Authentication Server.
- Windows Deployment Services (WDS).
- Windows Server Update Services (WSUS).
- Domain Name System (DNS).
- Device Management (PC1, VPCS).

Key Features:

- Centralization.
- Security.
- Scalability.

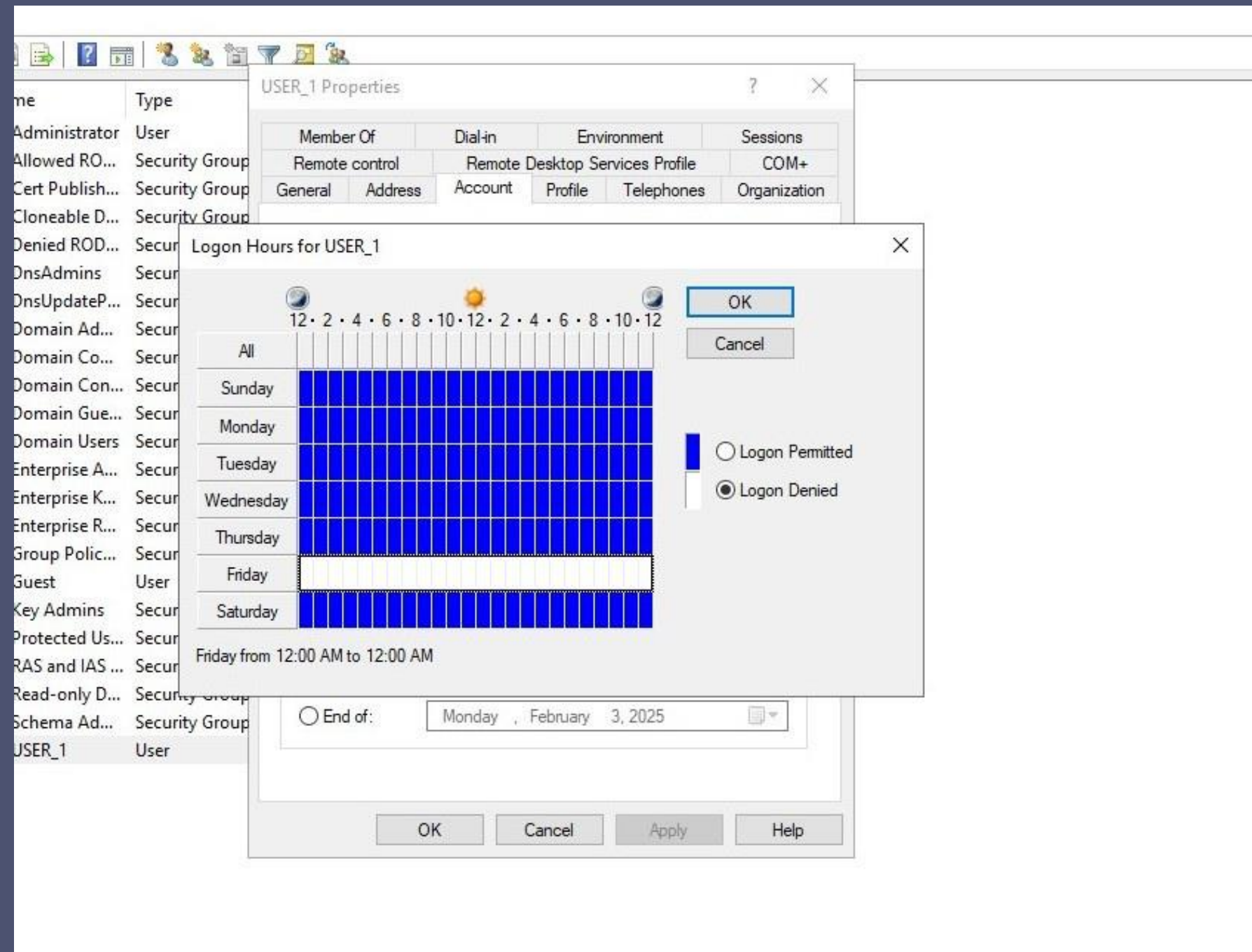


ACTIVE DIRECTORY DOMAIN SERVICES CONFIGURATION :



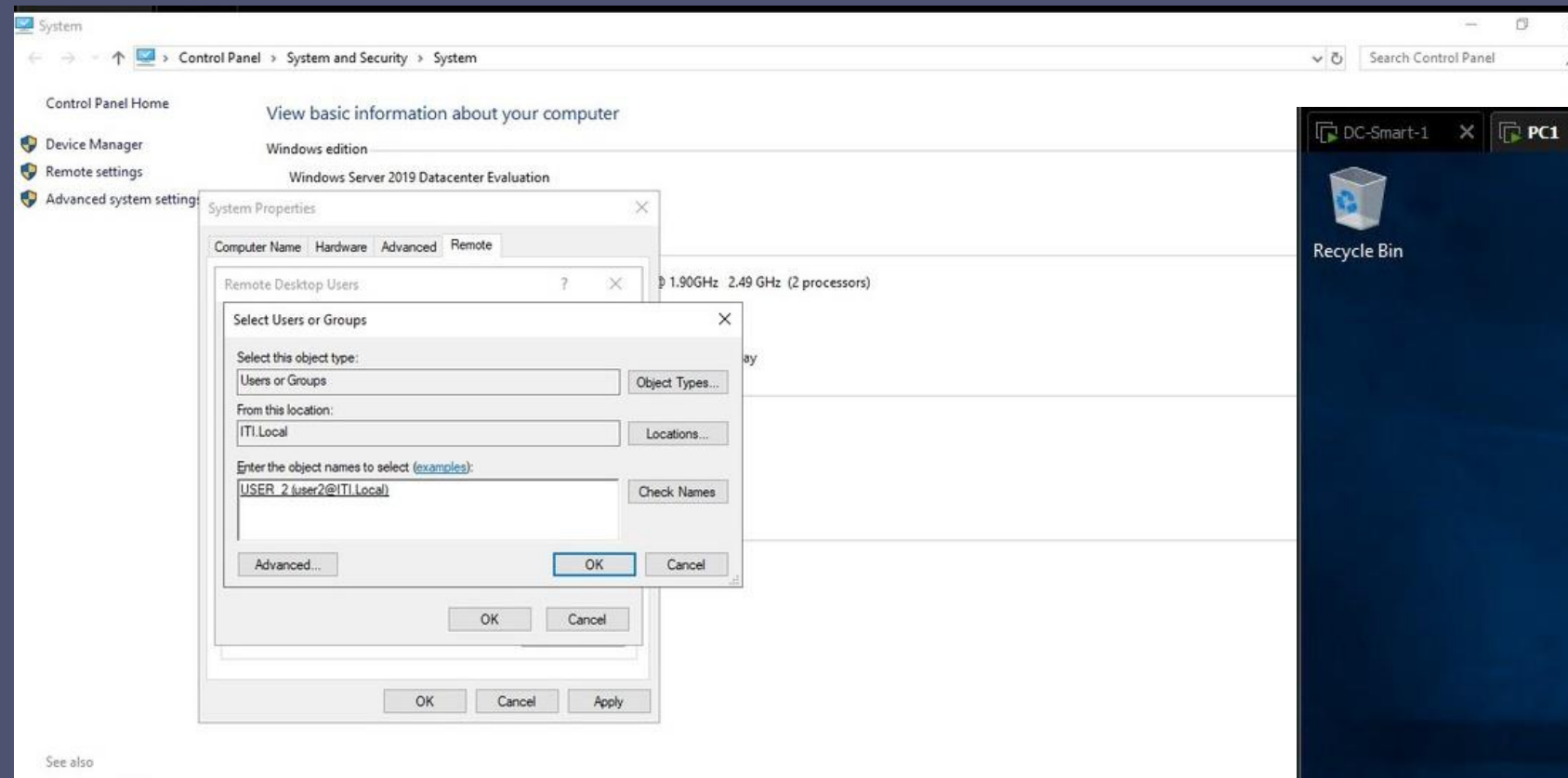
USER1@ITI.LOCAL

- Can't login to PC1 on Fridays



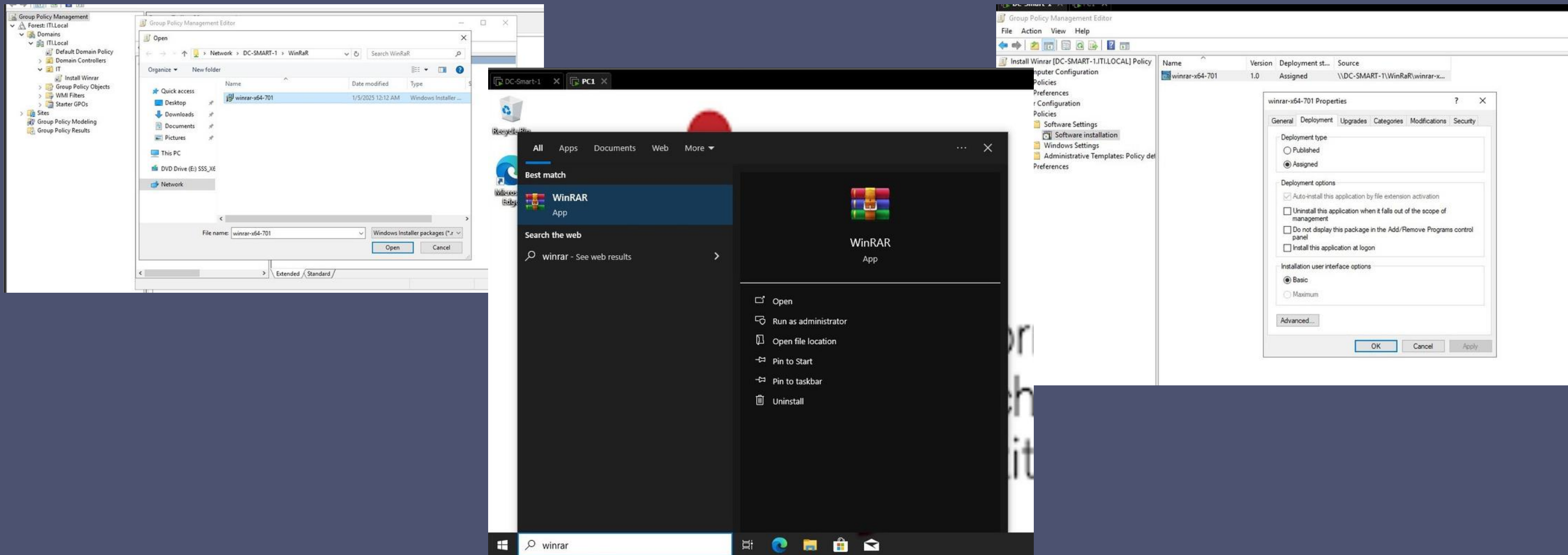
USER2@ITI.LOCAL

Can login to PC1 and can login remotely in DC1 "He is not a Domain Admin".



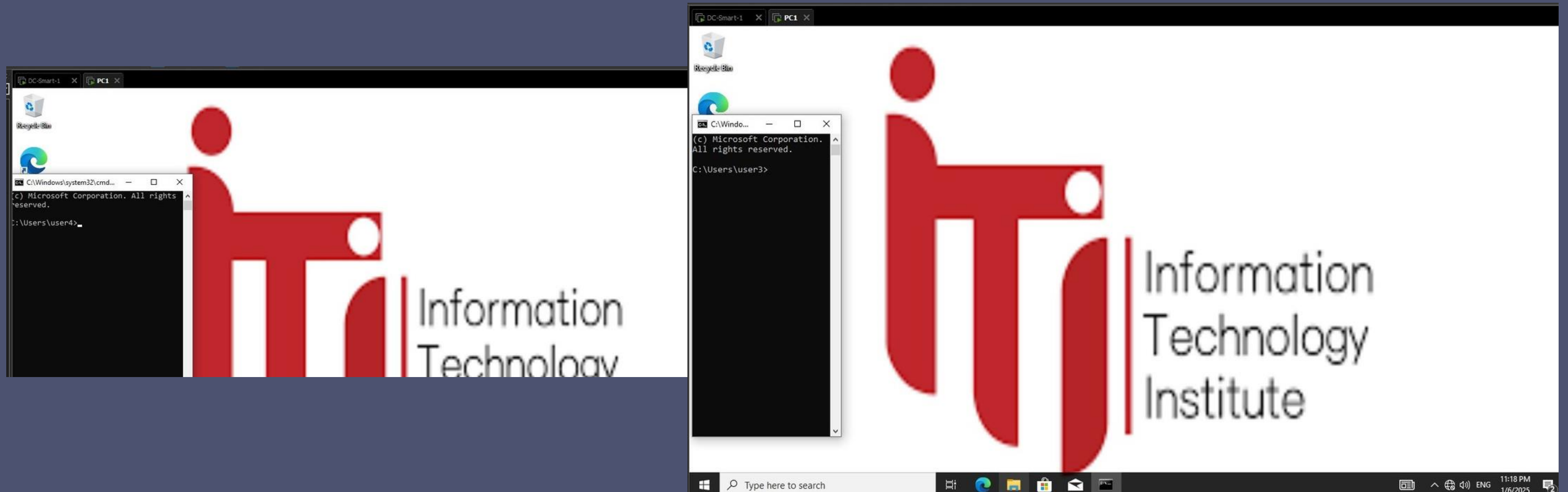
USER3@ITI.LOCAL

When login to PC1 he found that a WinRAR program installed on his machine from a domain admin.



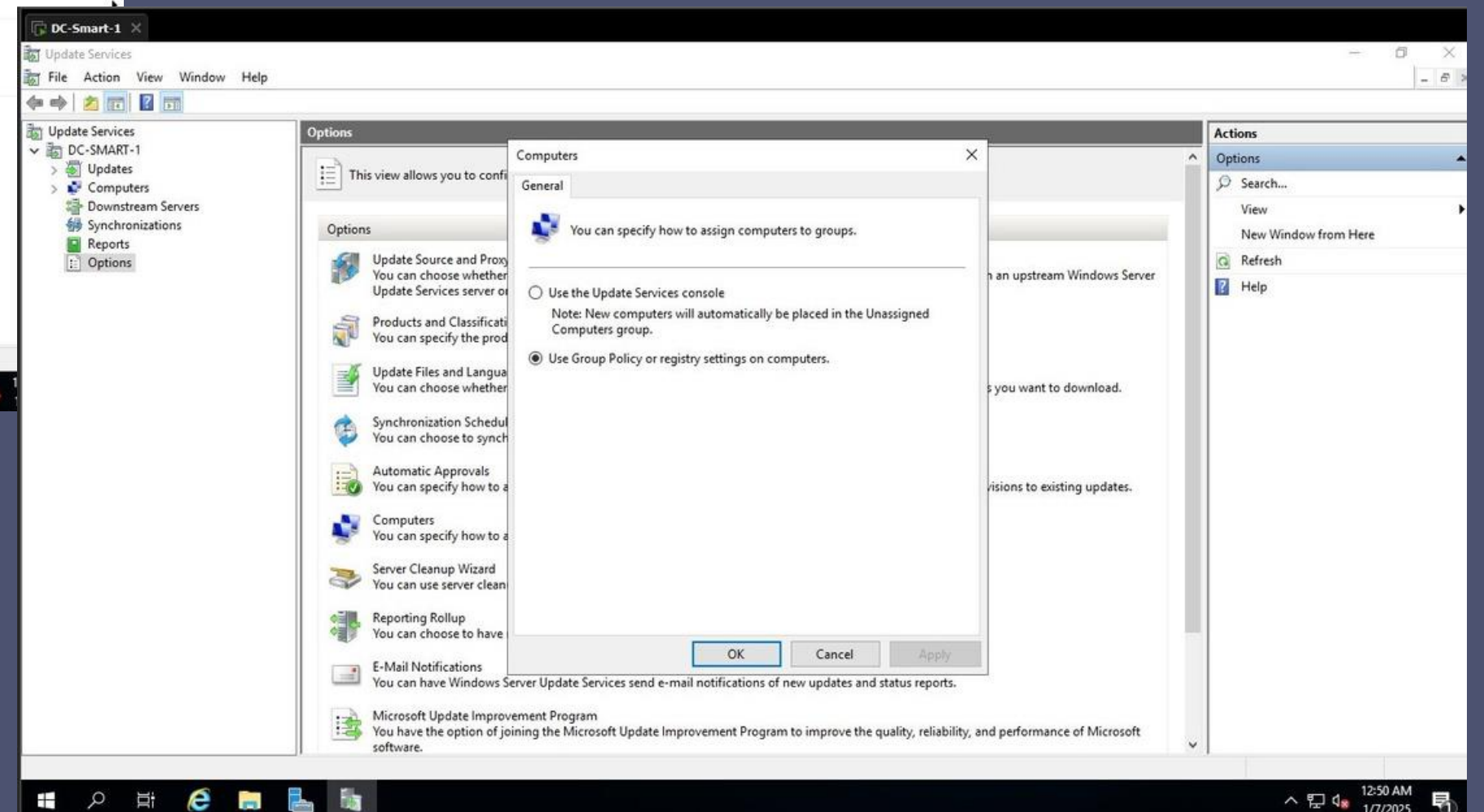
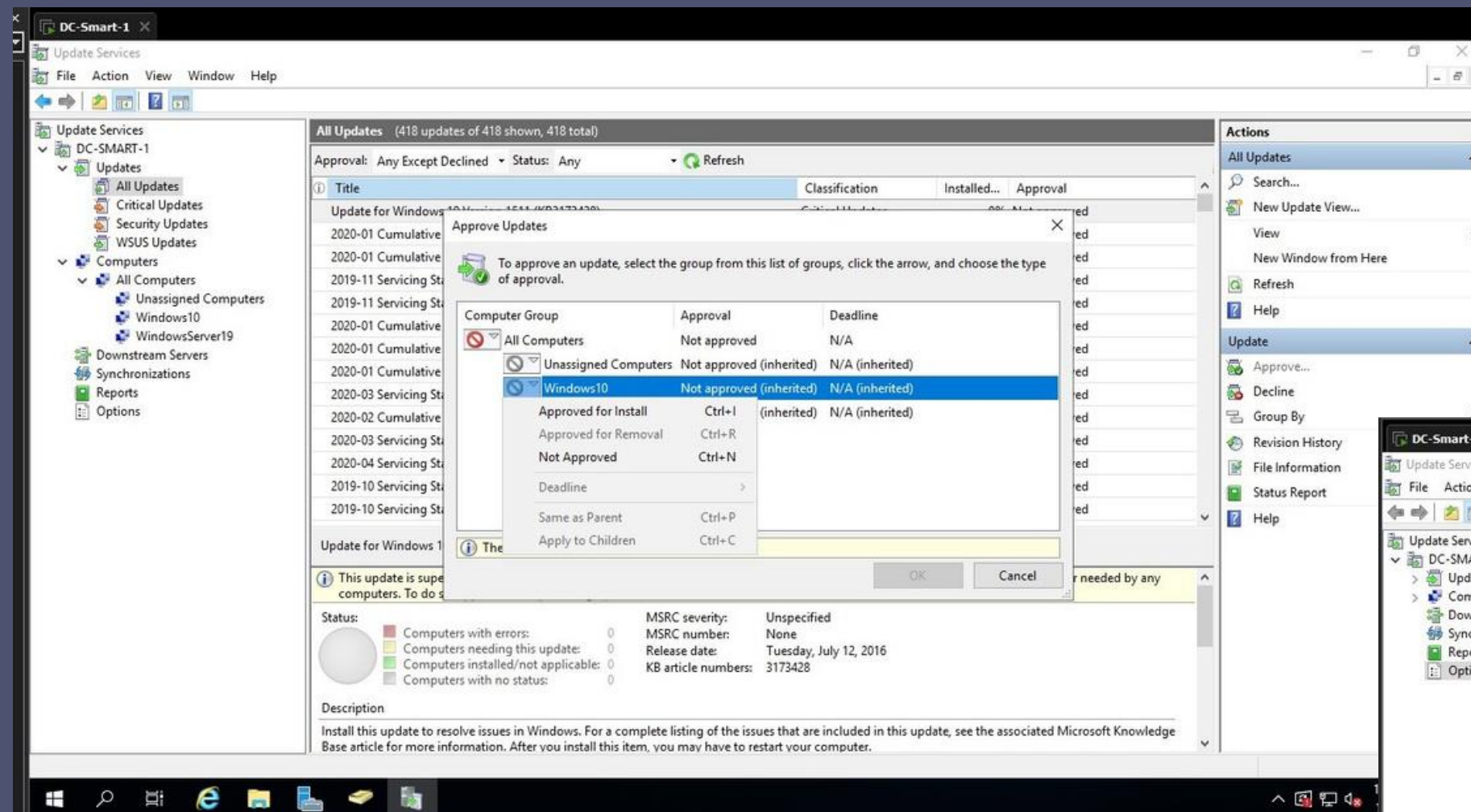
USER3@ITI.LOCAL & USER4@ITI.LOCAL

Their desktop wallpaper is ITI Logo.



WSUS CONFIGURATION

DC-SMART



DC-SMART

WSUS CONFIGURATION FOR PCS

DC-Smart-1

Configure Automatic Updates

Previous SettingNext Setting

Not Configured

Enabled

Disabled

Comment:

Supported on:

Windows XP Professional Service Pack 1 or At least Windows 2000 Service Pack 3
Option 7 only supported on servers of at least Windows Server 2016 edition

Options:

Configure automatic updating:

3 - Auto download and notify for install

The following settings are only required and applicable if 4 is selected.

Install during automatic maintenance

Scheduled install day:

6 - Every Friday

Scheduled install time:

11:00

If you have selected "4 - Auto download and schedule the install" for your scheduled install day and specified a schedule, you also have the option to limit updating to a weekly, bi-weekly or monthly occurrence, using the options below:

Every week

First week of the month

Second week of the month

Third week of the month

Fourth week of the month

Install updates for other Microsoft products

Help:

Specifies whether this computer will use automatic updates.

Note: This policy does not apply to Windows RT.

This setting lets you specify whether to install updates during automatic maintenance. When "Automatic" is selected as the update policy, updates will be installed during the specified maintenance window. When "Download and notify for install" is selected, users can install updates when convenient.

2 = Notify before downloading updates

When Windows finds updates that apply to this computer, it will notify the user before downloading them.

3 = (Default setting) Download updates automatically

When Windows finds updates that apply to this computer, it will download them automatically. When the download is complete, the user will be notified and can then choose to install the updates.

4 = Automatically download updates and schedule the install

When "Automatic" is selected as the update policy, updates will be installed during the specified maintenance window. When "Download and notify for install" is selected, users can install updates when convenient.

Specify the schedule using the options below. Updates will be installed every day at 3:00 AM. If any user is signed in to the computer at the time, updates will be installed at the next available opportunity.

Specify intranet Microsoft update service location

Previous SettingNext Setting

Not Configured

Enabled

Disabled

Comment:

Supported on:

At least Windows XP Professional Service Pack 1 or Windows 2000 Service Pack 3, excluding Windows RT

Options:

Set the intranet update service for detecting updates:

http://DC-Smart-1.ITI.Local:8530

Specifies an intranet server to host updates for computers on your network.

This setting lets you specify a server this service for updates that apply to the computer.

To use this setting, you must set two updates, and the server to which updates are downloaded. The name value can be specified to configure intranet update service.

If the status is set to Enabled, the Automatic download server, instead of Windows Update, organization don't have to go through a proxy.

If the status is set to Disabled or Not Configured, Windows Update client connects directly to the Internet.

The alternate download server configuration is used only if the status is set to Enabled.

The option to download files with no download URLs for files in the update metadata file is only available if the status is set to Enabled.

Note: If the "Configure Automatic Updates" policy is set to "3 - Auto download and notify for install", the "Download files with no URL in the metadata if alternate download server is set" option is not applicable.

Set the intranet statistics server:

http://DC-Smart-1.ITI.Local:8530

Set the alternate download server:

(example: https://IntranetUpd01)

Download files with no URL in the metadata if alternate download server is set.

Do not enforce TLS certificate pinning for Windows Update client for detecting updates.

Select the proxy behavior for Windows Update client for detecting updates:

Only use system proxy for detecting updates (default)

Help:

Specifies an intranet server to host updates for computers on your network.

This setting lets you specify a server this service for updates that apply to the computer.

To use this setting, you must set two updates, and the server to which updates are downloaded. The name value can be specified to configure intranet update service.

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Note: If the "Configure Automatic Updates" policy is set to "3 - Auto download and notify for install", the "Download files with no URL in the metadata if alternate download server is set" option is not applicable.

Unassigned Computers (1 computers of 1 shown, 1 total)

Status: Any Refresh

Name	IP Address	Operating System	Installed/Not App...	Last Status Report
pc-1.itl.local	192.168.1.10	Windows 10 Pro	0%	Not yet reported

pc-1.itl.local

This computer has not reported status yet.

Status

Updates with errors:

0

Updates needed:

0

Updates installed/not applicable:

0

Updates with no status:

418

Group membership:

All Computers, Unassigned Computers

OS:

Windows 10 Pro

OS language:

en-US

Service pack:

None

IP address:

192.168.1.10

Additional Details

Computer make:

VMware, Inc.

Computer model:

VMware Virtual Platform

Actions

Unassigned Computers

Search...

View

New Window from Here

Refresh

Help

Computer

Change Membership...

Delete

Group By

Status Report

Help

1:13 AM

1/7/2025

WDS CONFIGURATION

The image displays three screenshots of the Windows Deployment Services (WDS) console, illustrating the configuration process.

Top Left Screenshot: Shows the "Windows Deployment Services Configuration Wizard" dialog box. The "Remote Installation Folder Location" step is active, prompting the user to enter the path to the remote installation folder. The path "D:\WDS" is entered in the "Path:" field. The wizard includes a "Browse..." button and "Back", "Next >", and "Cancel" navigation buttons.

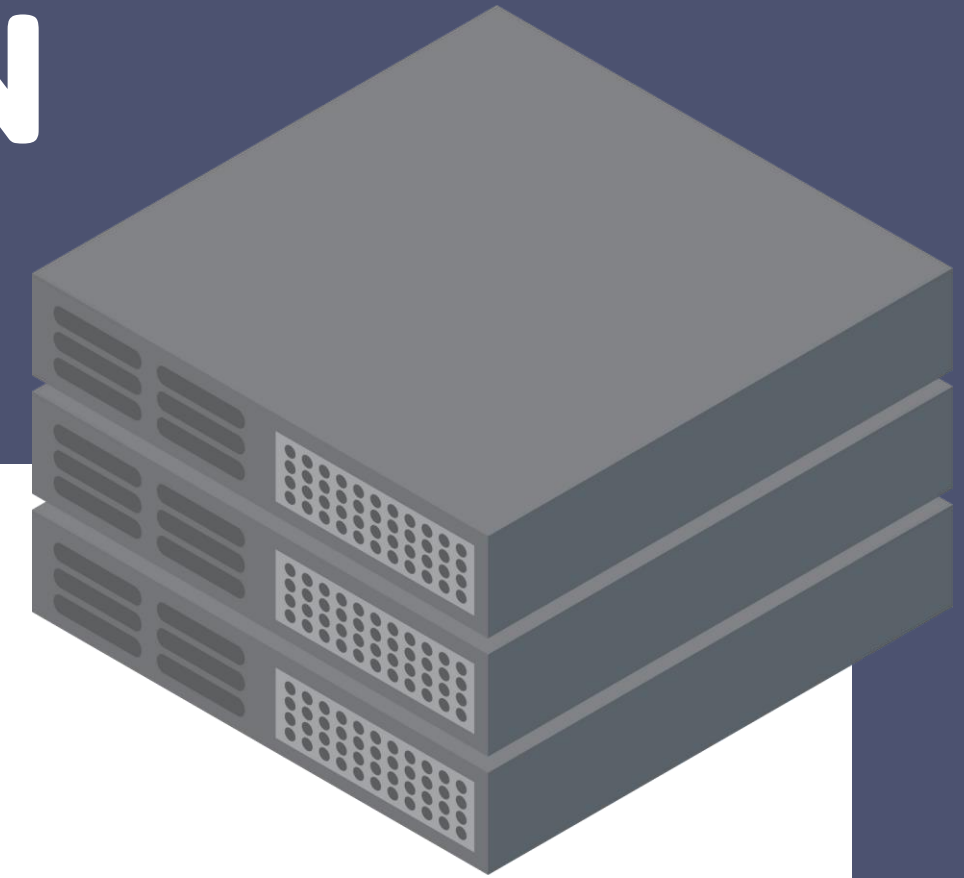
Top Right Screenshot: Shows the "Windows Deployment Services" console with the "DC-Smart-1.ITI.Local" server selected. The "Name" column lists the following folders: Install Images, Boot Images, Pending Devices, Multicast Transmissions, and Drivers.

Bottom Screenshot: Shows the "Windows Deployment Services" console with the "Boot Images" folder selected. A table displays the boot images:

Image Name	Architecture	Status	Expanded Size	Date	OS Version	Priority
Microsoft Windows 10 Setup (x64)	x64	Online	1791 MB	1/8/2...	10.0.17763	500000 ...

Bottom Right Screenshot: Shows a "Server" status window with the message: "Successfully started Windows Deployment Services." and an "OK" button.

RODC (READ-ONLY DOMAIN CONTROLLER)



Primary Role:

- RODC is a Read-Only Domain Controller (RODC), meaning it contains a read-only copy of the Active Directory database.
- It is located in the Sohag site and serves as a secondary domain controller to ensure service continuity in case of a disconnect from the primary server (DC-Smart).

Key Functions:

- Ensuring service continuity.
- Improving performance.
- Enhancing security.
- Managing local users.

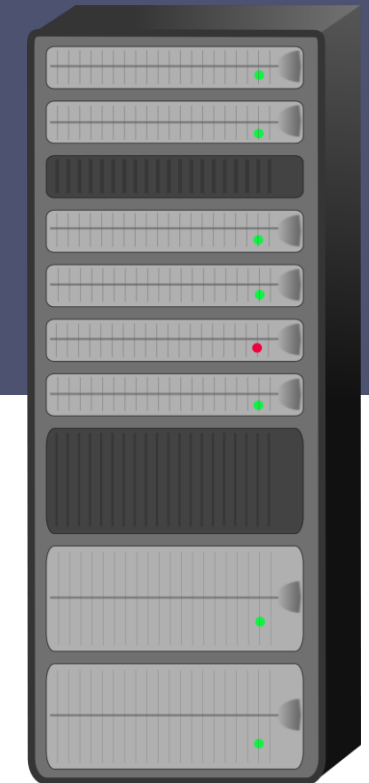
Key Features:

- Read-Only, Autonomy, Integration with DC-Smart.

Benefits:

- Improved performance, Enhanced security, Ensuring service continuity.

RODC (READ-ONLY DOMAIN CONTROLLER)



Primary Role:

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Key Functions:

- Ensuring service continuity.
- Improving performance.
- Enhancing security.
- Managing local users.

Key Features:

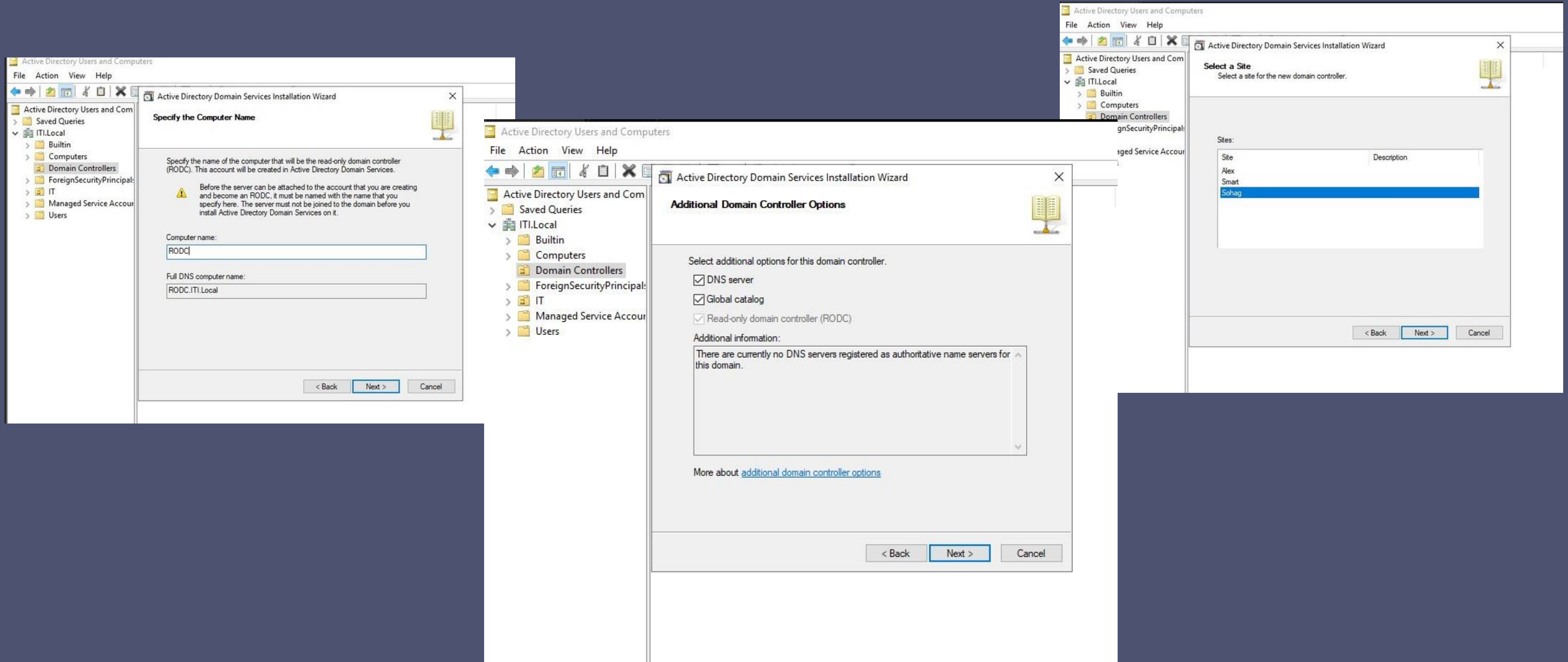
- Read-Only, Autonomy, Integration with DC-Smart.

Benefits:

- Improved performance, Enhanced security, Ensuring service continuity.

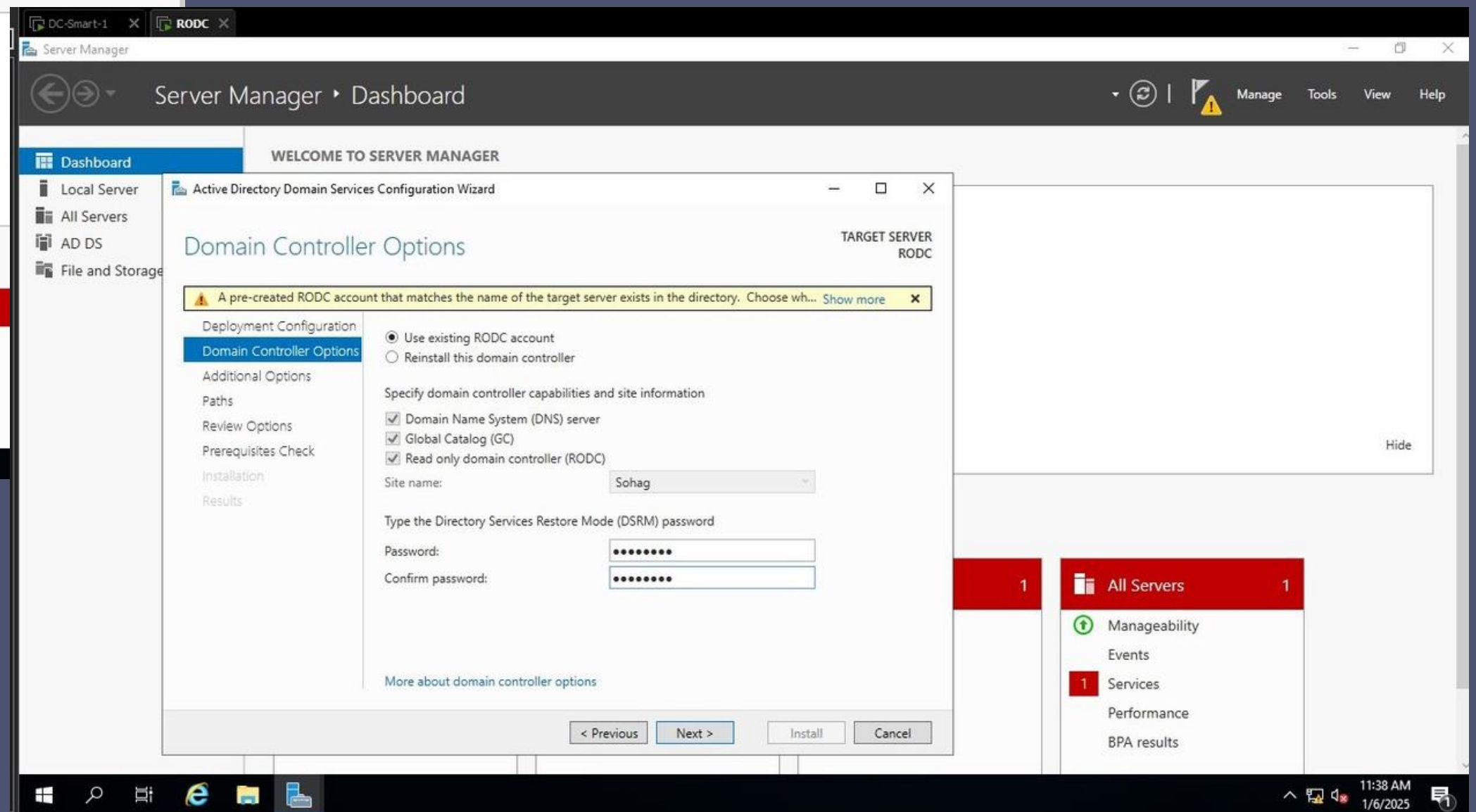
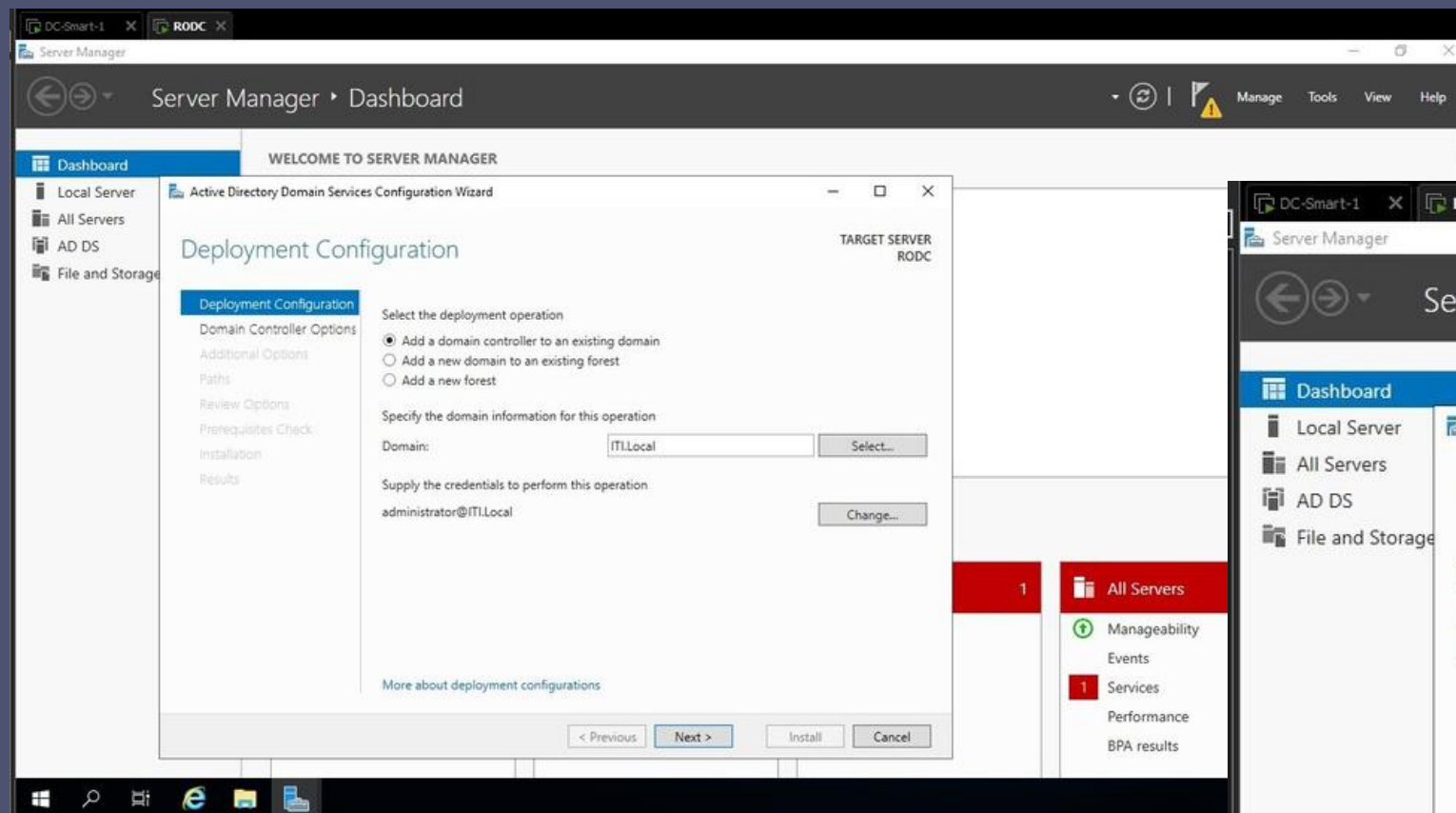
RODC CONFIGURATION

RODC



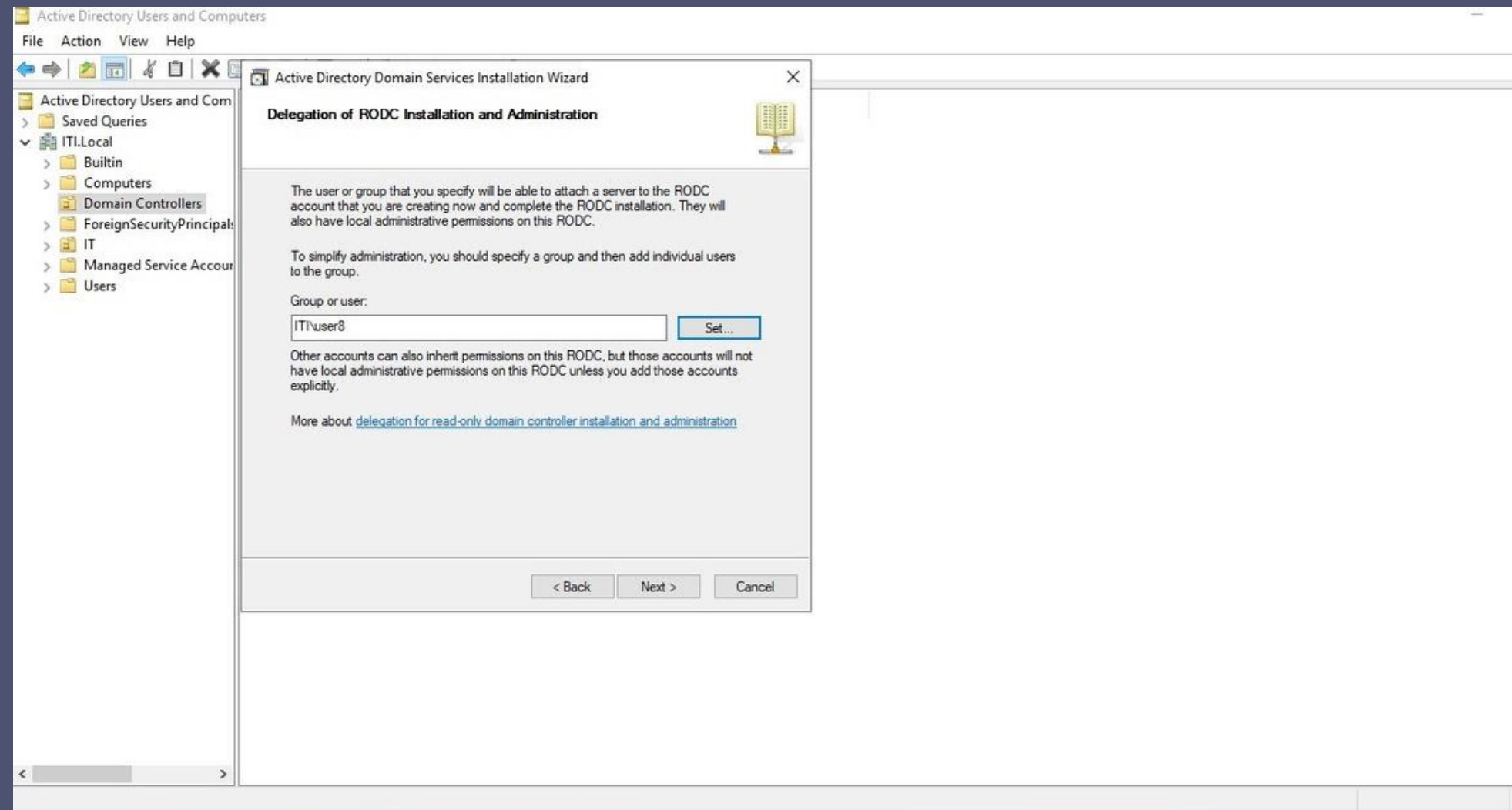
RODC

RODC CONFIGURATION



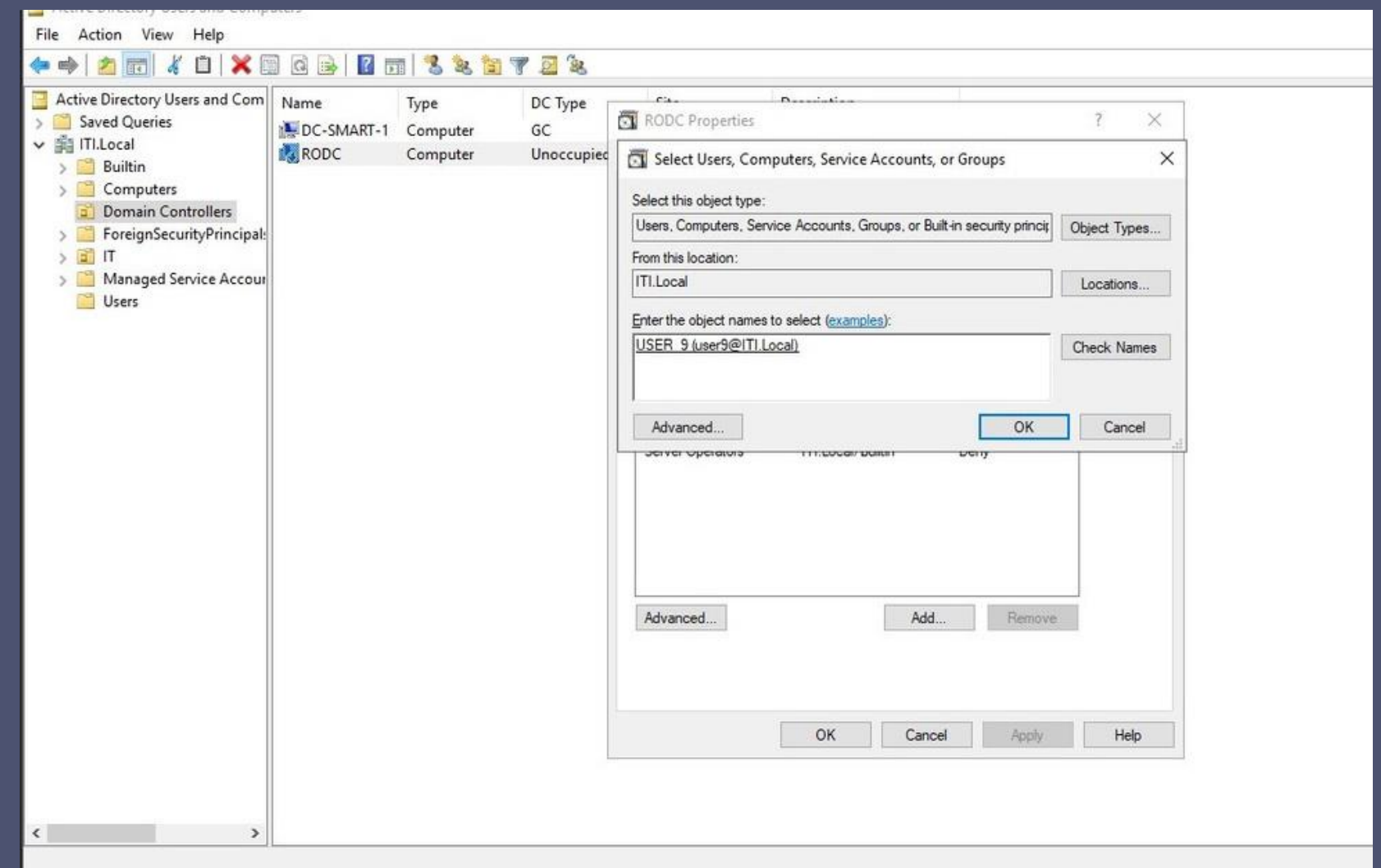
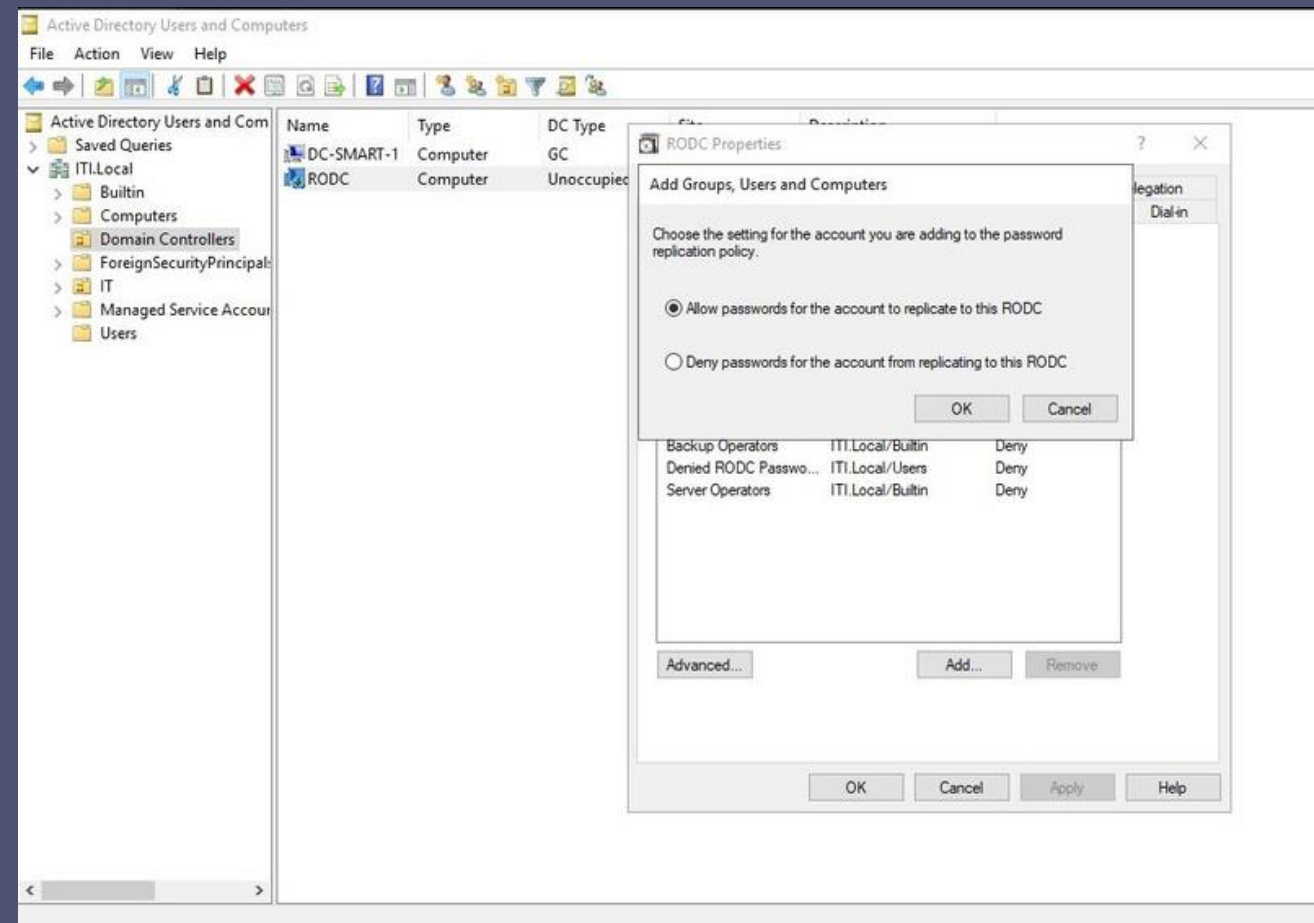
USER8 IN RODC

Can login only RODC and can't create any users but can shutdown the RODC.



USER9 IN RODC

Can login to PC3 and can replicate his password to the RODC.



DC-ALEX

Primary Role:

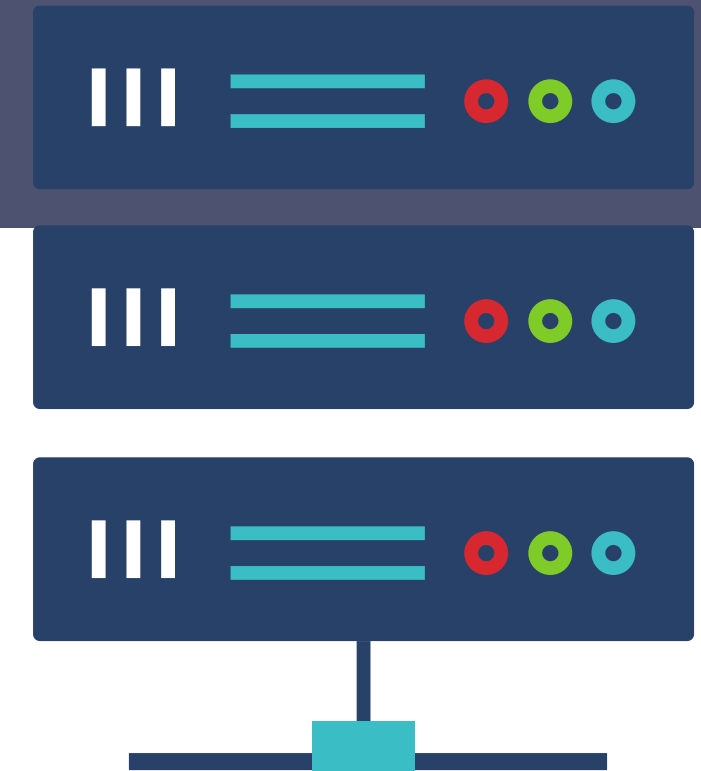
- Serves as a Child Domain Controller in the Alex site.
- Has domain: Alex.ITI.Local

Key Functions:

- Local User and Resource Management.
- Integration with Parent Domain.
- Performance Improvement.
- Enhanced Security.

Key Features:

- Local Management.
- Parent Domain Integration.
- Autonomy.



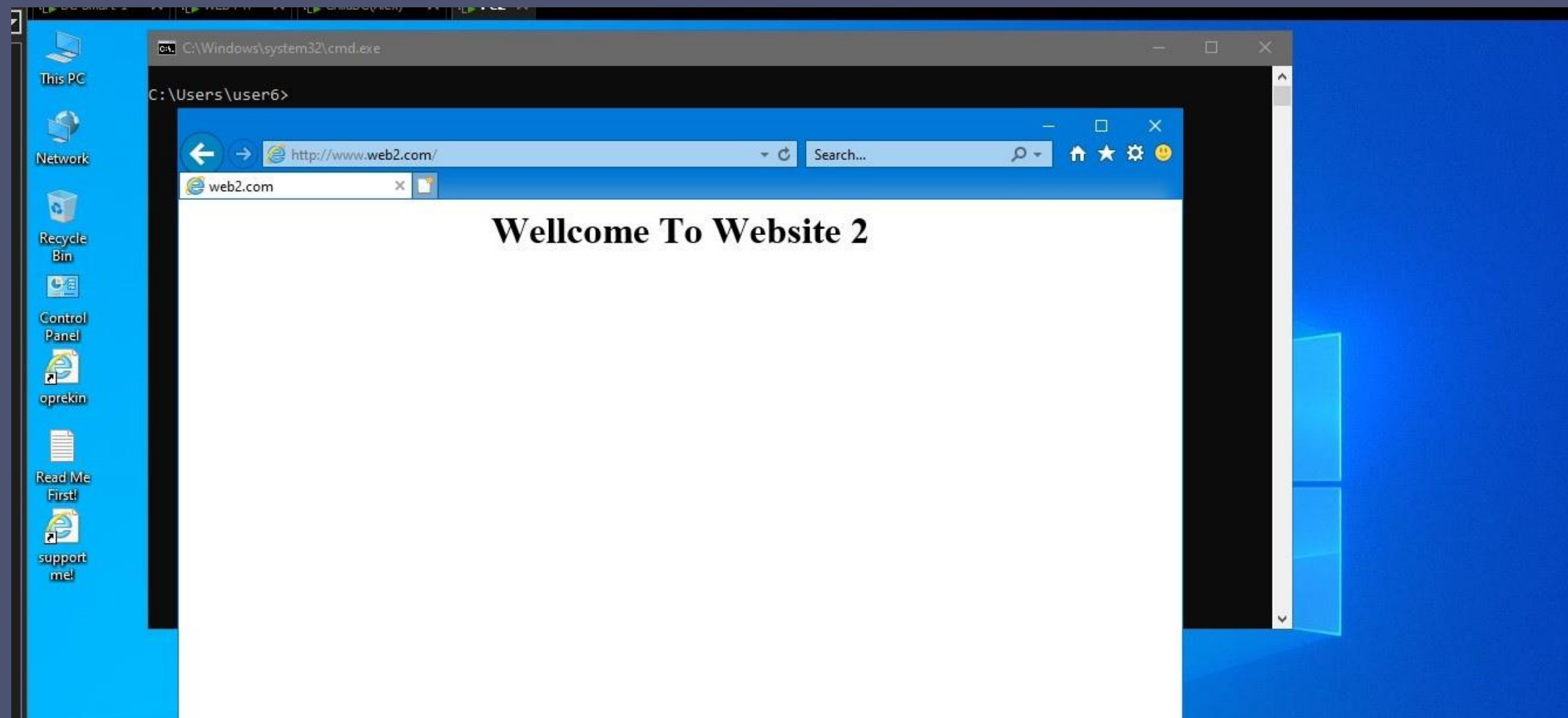
CHILD DOMAIN CONFIG :

The image shows two overlapping screenshots from a Windows Server environment. The background screenshot displays the 'Active Directory Domain Services Configuration Wizard' in the 'Deployment Configuration' step. The 'Add a new domain to an existing forest' option is selected. The 'Parent domain name' is 'ITILocal' and the 'New domain name' is 'Alex'. The 'Supply the credentials to perform this operation' field contains 'administrator@itil.local'. The 'Next >' button is highlighted. The foreground screenshot shows the 'Server Manager' console with the 'Local Server' tab selected. The 'PROPERTIES For Alex-ChildDC' section displays various system and security settings.

PROPERTIES For Alex-ChildDC			
Computer name	Alex-ChildDC	Last installed updates	Never
Domain	Alex.ITILocal	Windows Update	Download updates only, using Windows Update
		Last checked for updates	Never
Windows Defender Firewall	Public: On	Windows Defender Antivirus	Real-Time Protection: On
Remote management	Enabled	Feedback & Diagnostics	Settings
Remote Desktop	Disabled	IE Enhanced Security Configuration	On
NIC Teaming	Disabled	Time zone	(UTC-08:00) Pacific Time (US & Canada)
Ethernet0	192.168.1.200, IPv6 enabled	Product ID	Not activated
Operating system version	Microsoft Windows Server 2019 Standard Evaluation	Processors	Intel(R) Core(TM) i5-4300U CPU @ 1.90GHz, Intel(R) Core(TM) i5-4300U CPU @ 1.90GHz
Hardware information	VMware, Inc. VMware Virtual Platform	Installed memory (RAM)	2.14 GB
		Total disk space	59.46 GB

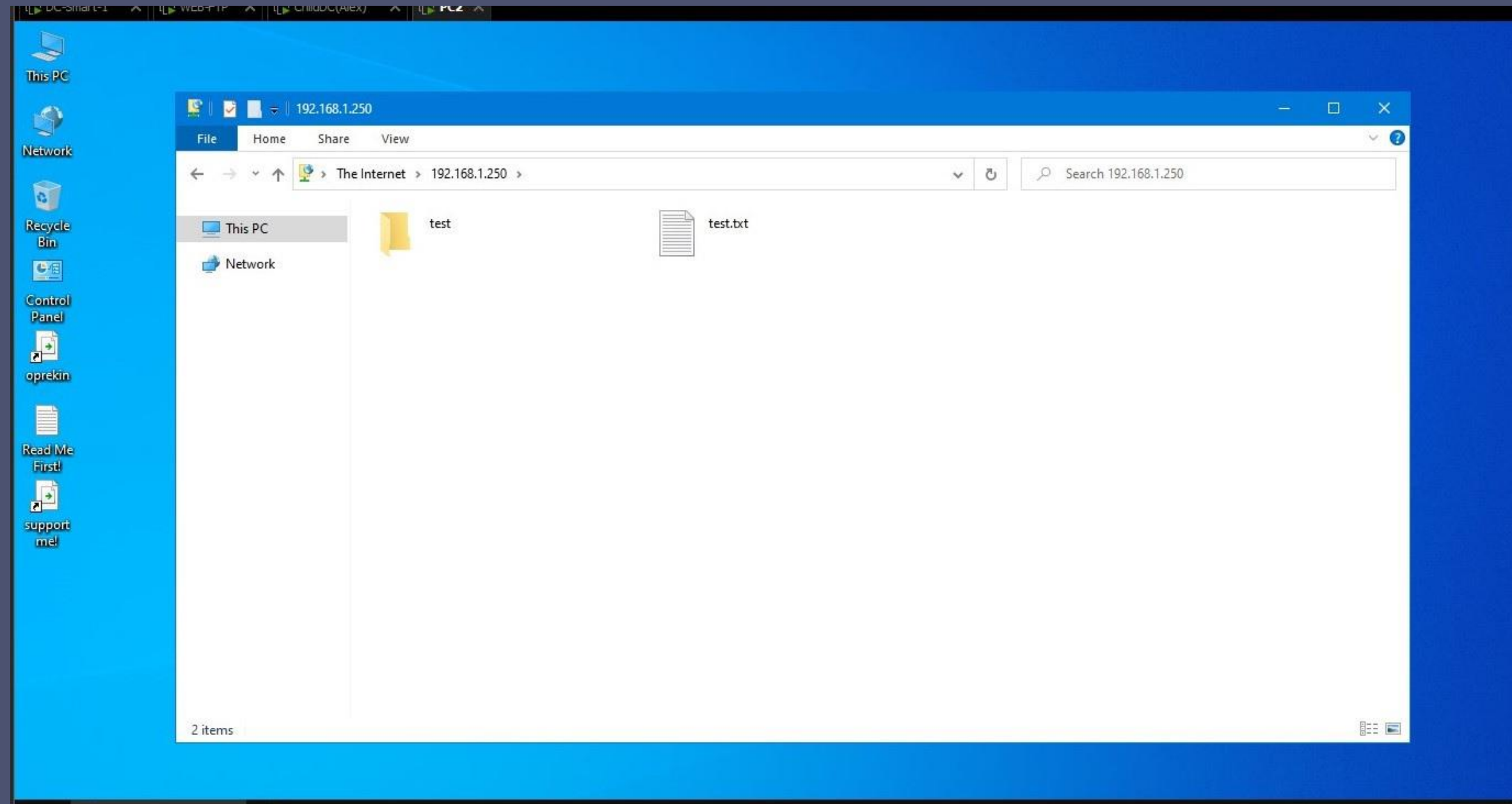
USER6@ALEX.ITI.LOCAL

Can browse <http://www.web2.com> from his local DNS in Alex "Secomdary Zone" .



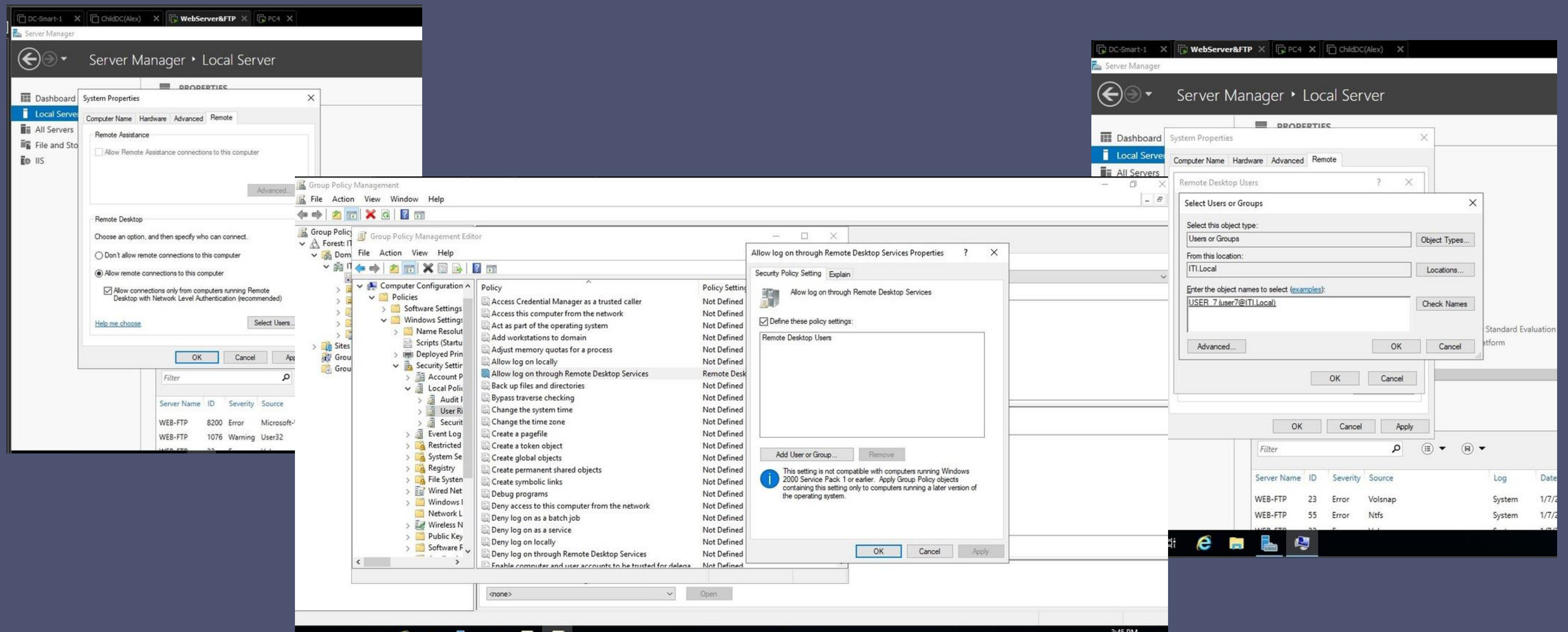
USER6@ALEX.ITI.LOCAL

Can browse FTP Server .



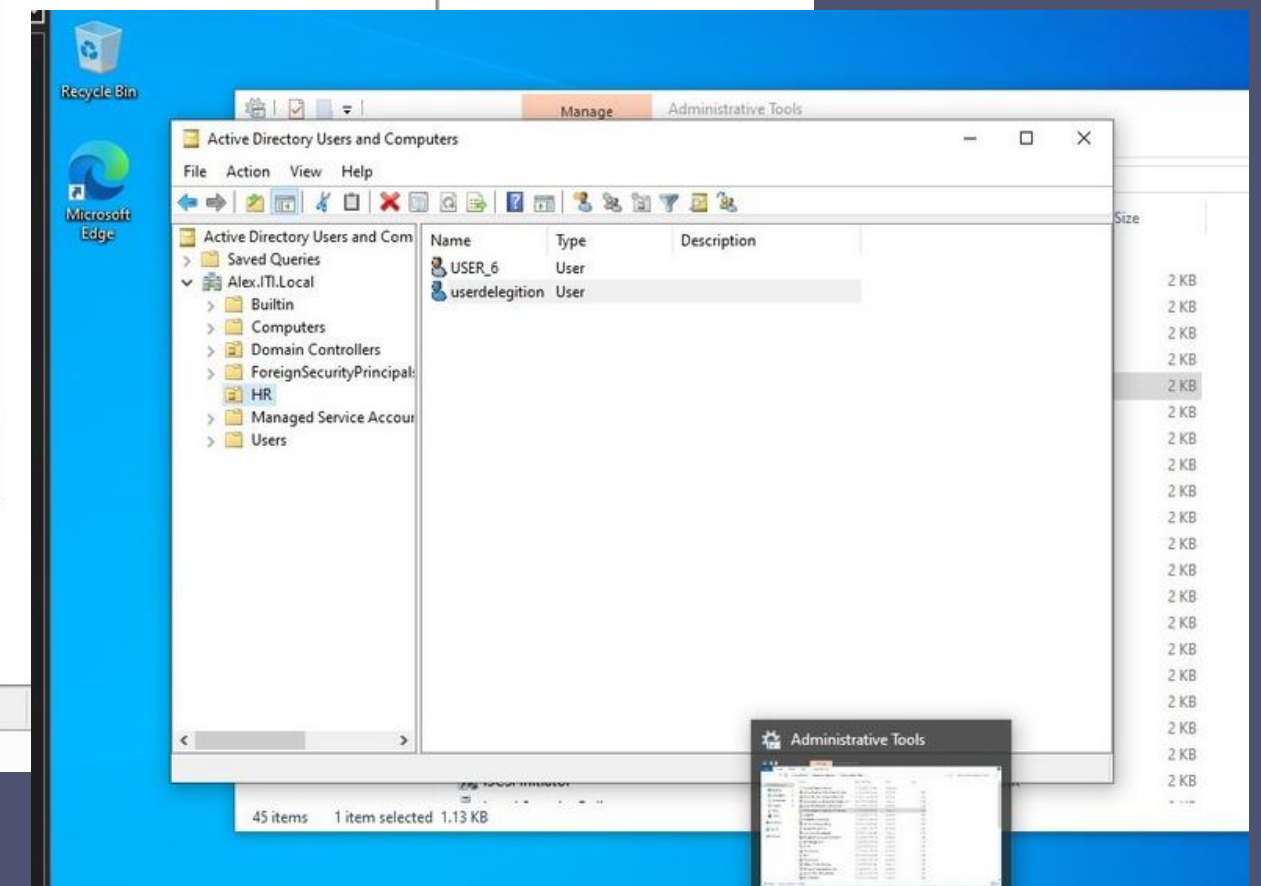
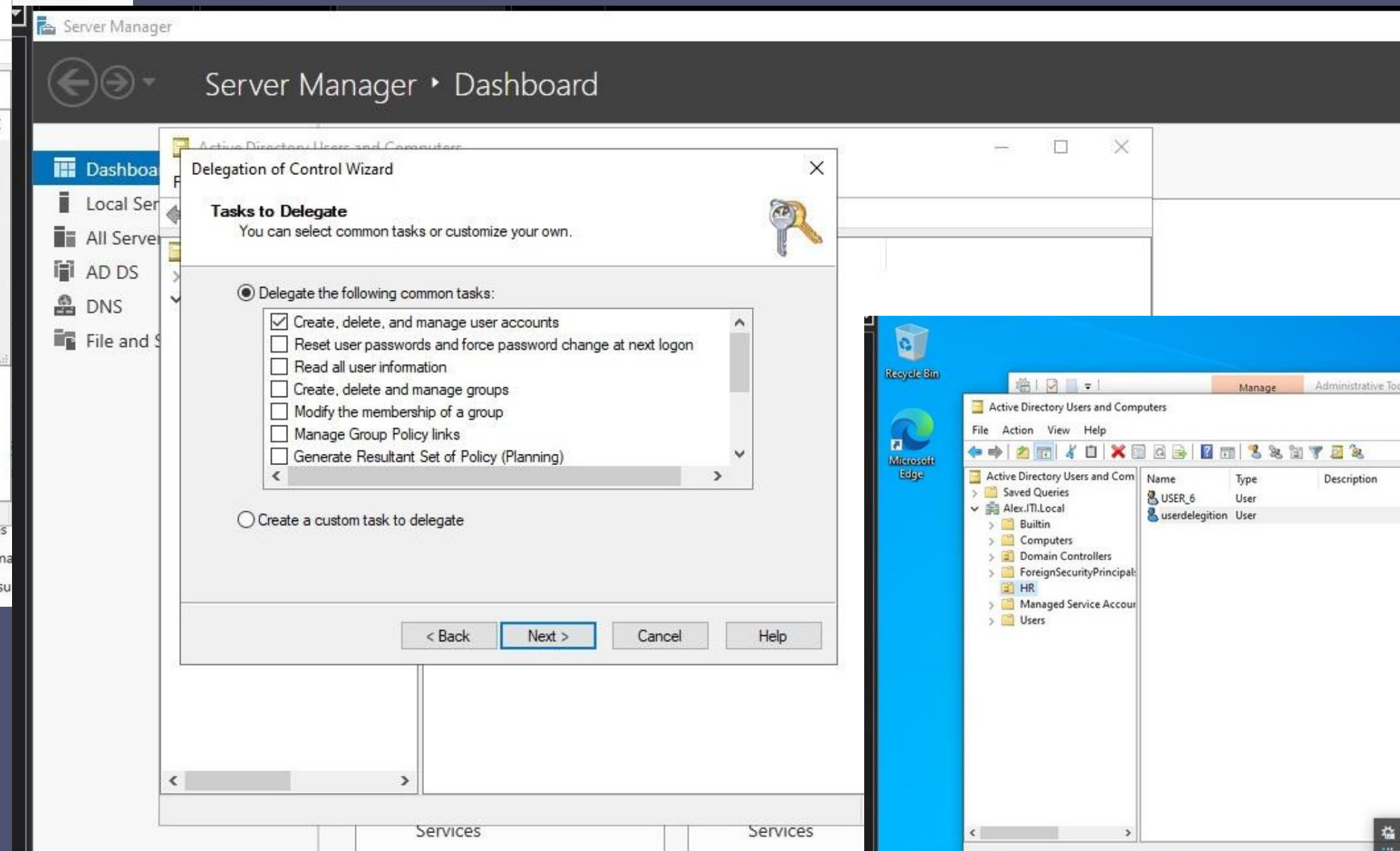
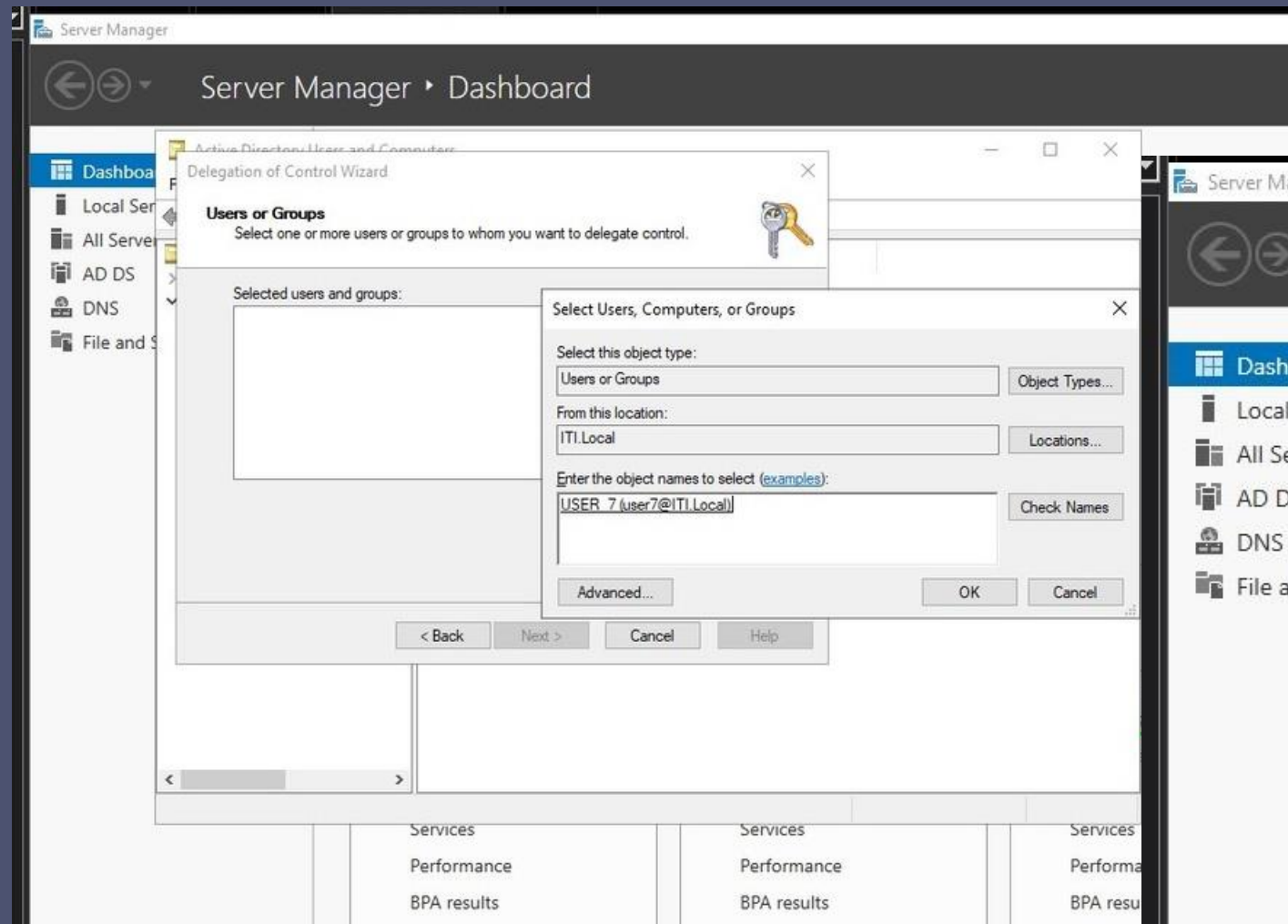
USER7@ALEX.ITI.LOCAL

Can access remotely the webserver with an administrative privileges.



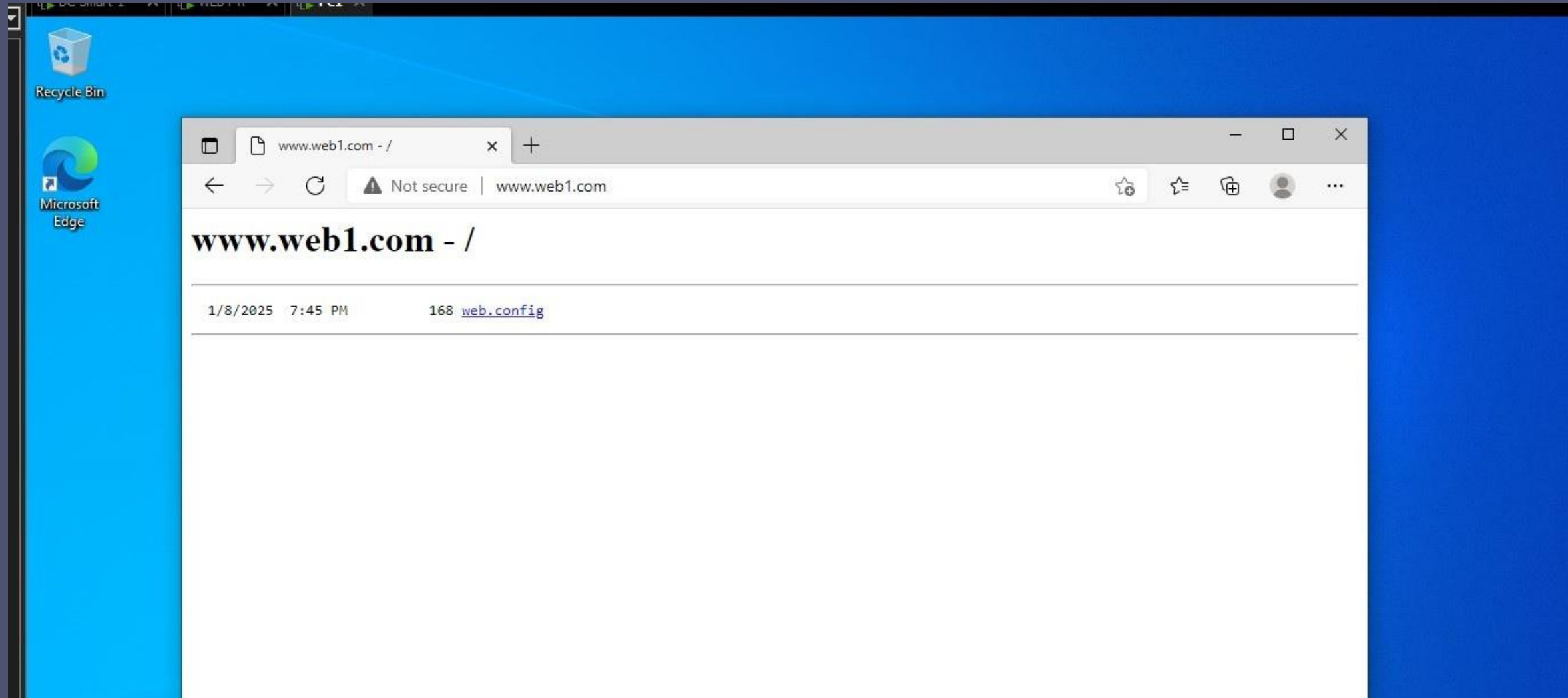
USER7@ALEX.ITI.LOCAL

Can browse <http://www.web1.com>.



USER7@ALEX.ITI.LOCAL

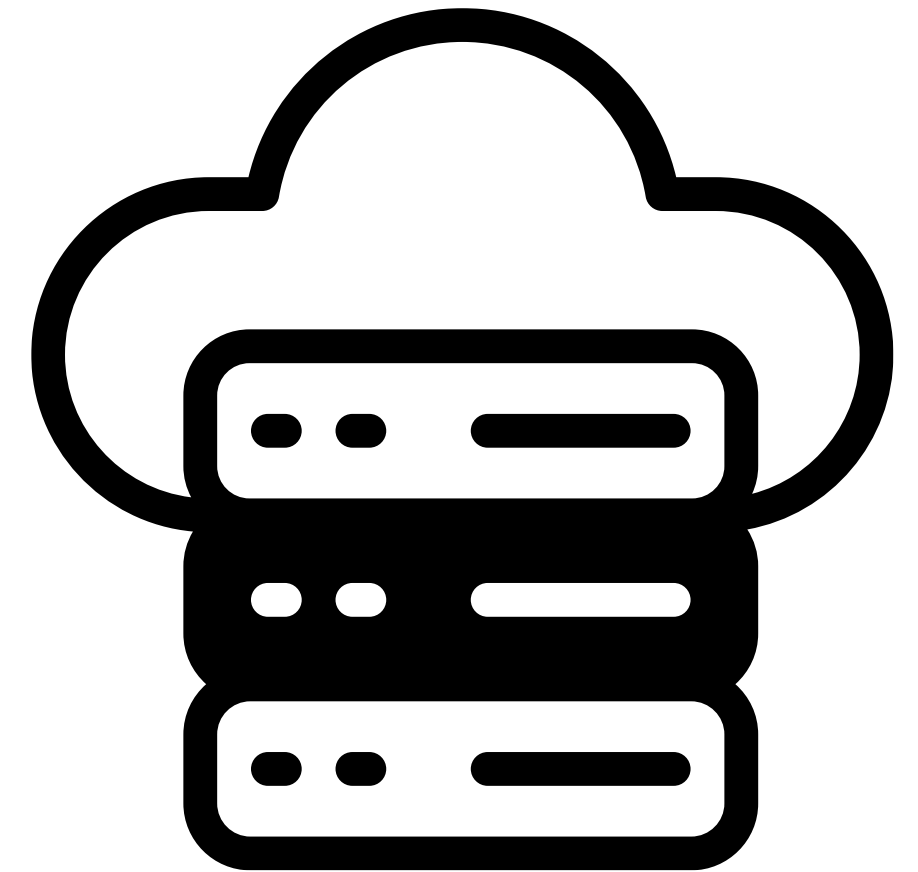
Can browse <http://www.web1.com> .



WEB & FTP

Primary Role:

- Hosts websites (www.web1.com and www.web2.com) and provides FTP services.



Key Functions:

- Web Hosting.
- FTP Services (File Transfer).
- Content Management.
- Enhancing Security.

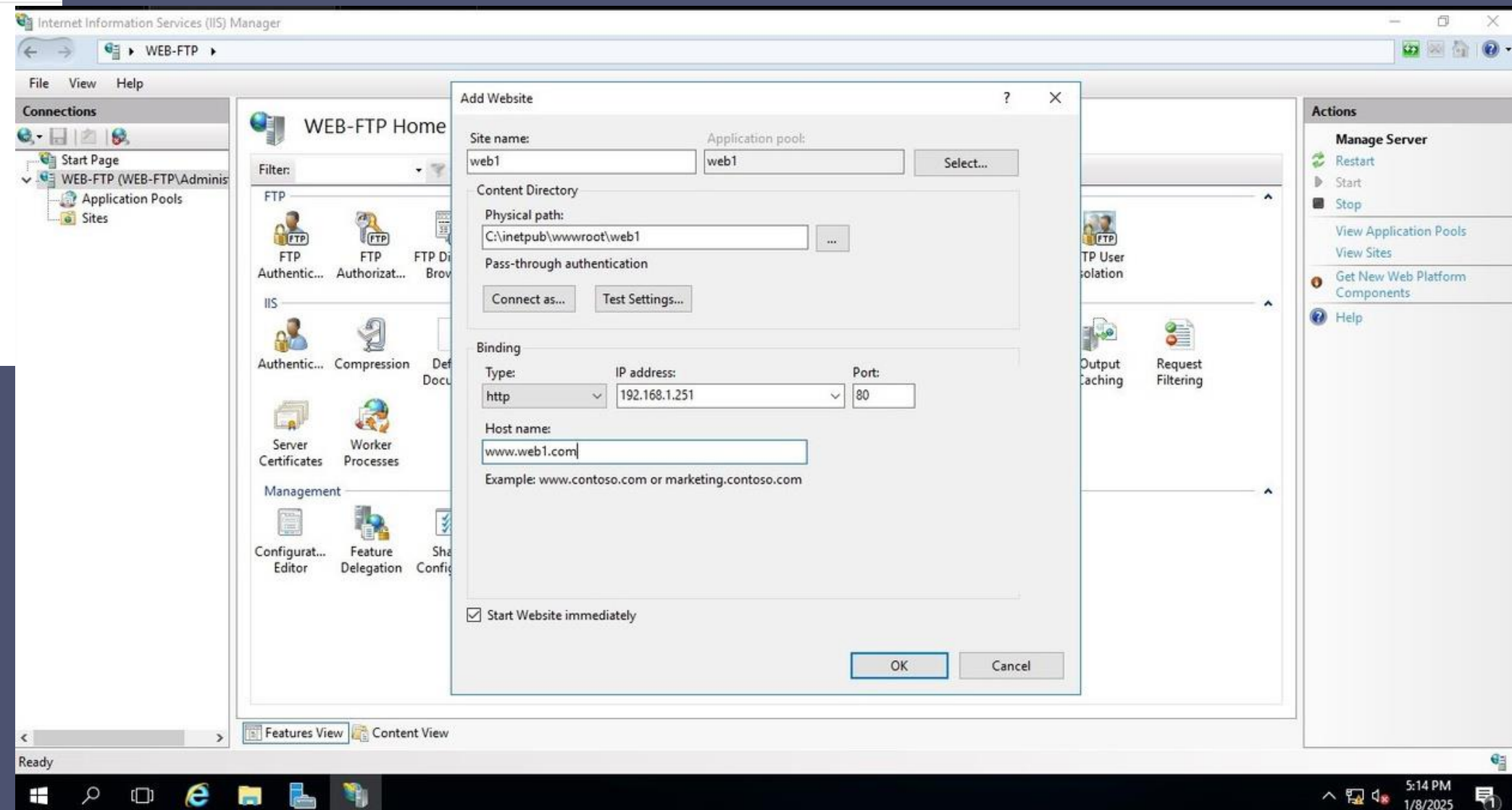
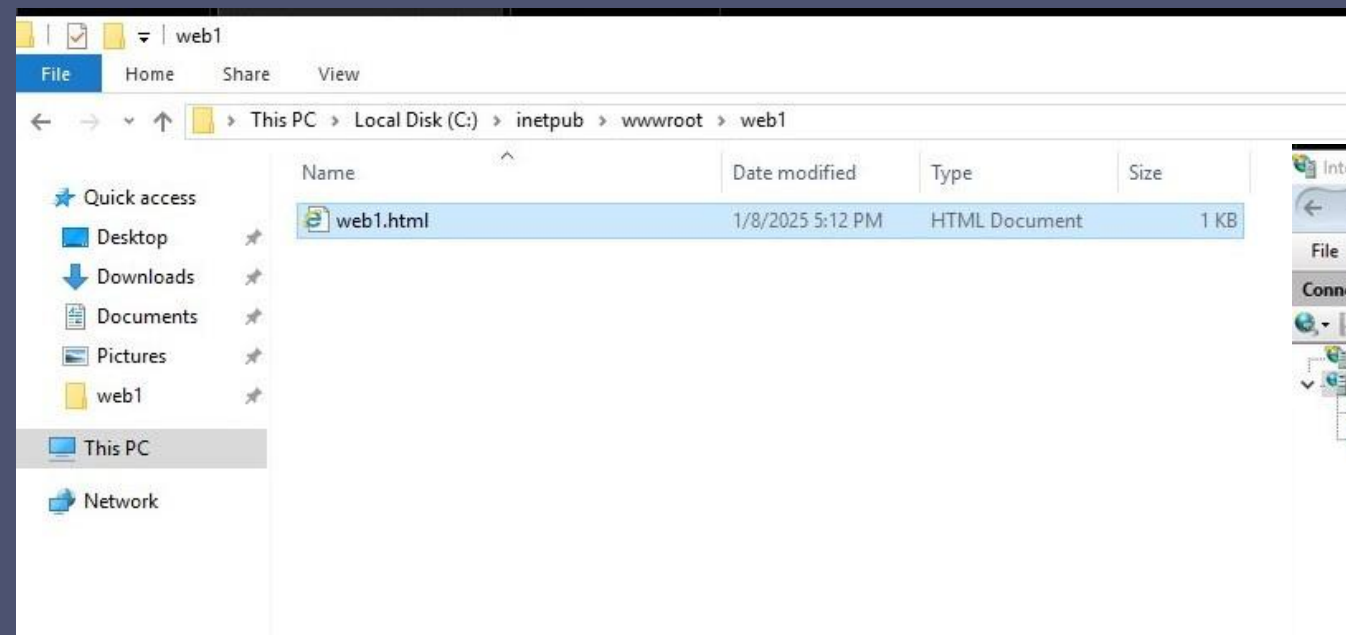
Key Features:

- Multi-Hosting.
- Integrated FTP Services.
- Security.

WEB 1

WEB & FTP

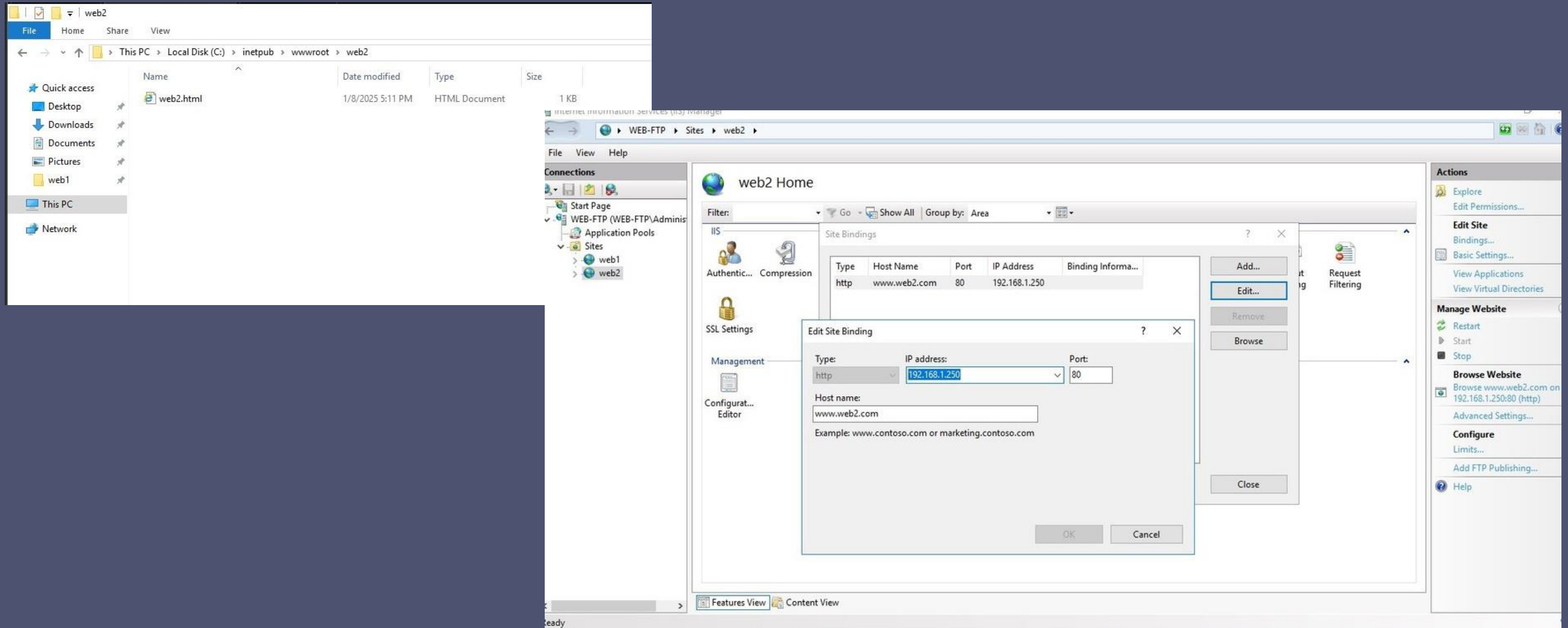
HTTP://WWW.WEB1.COM



WEB 2

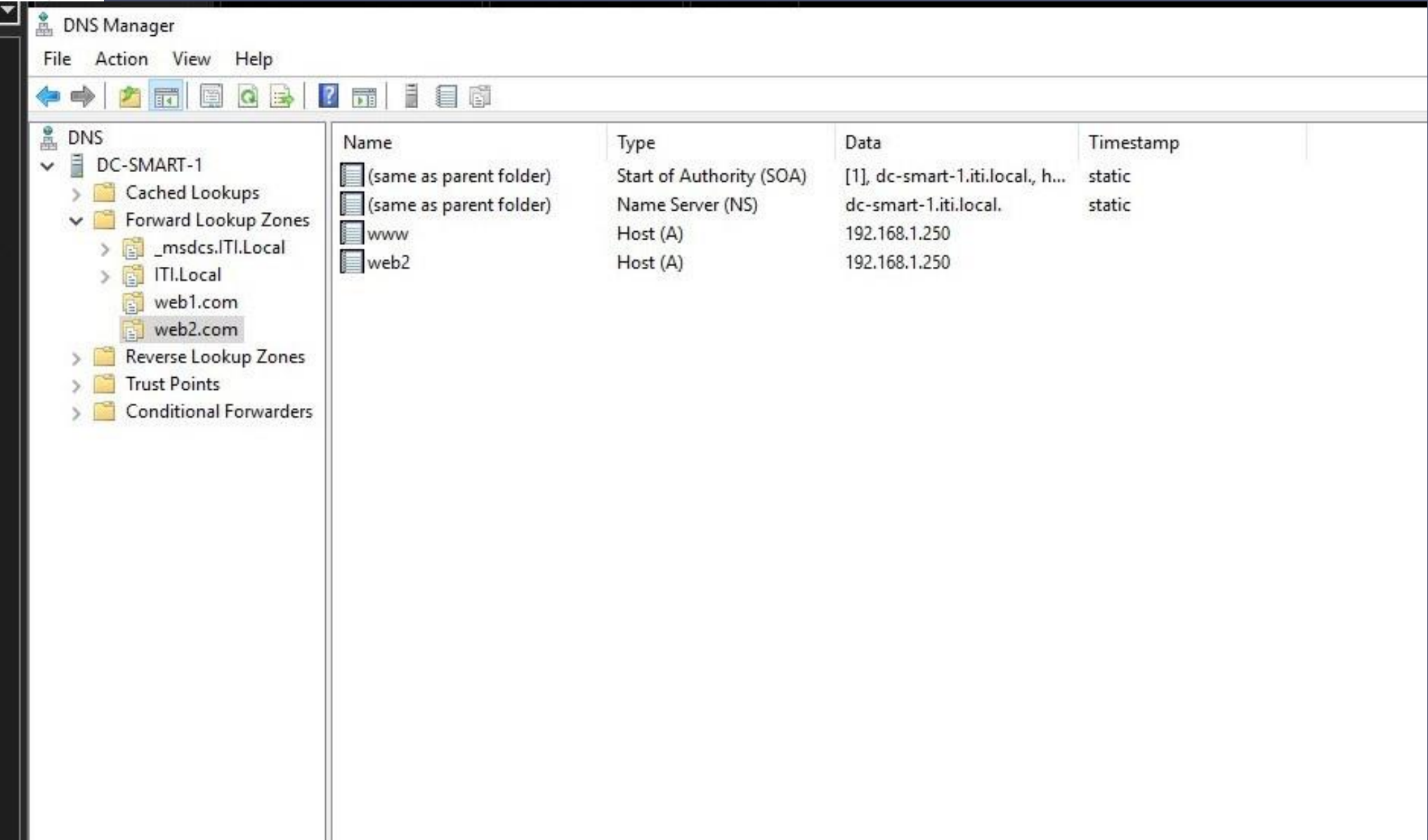
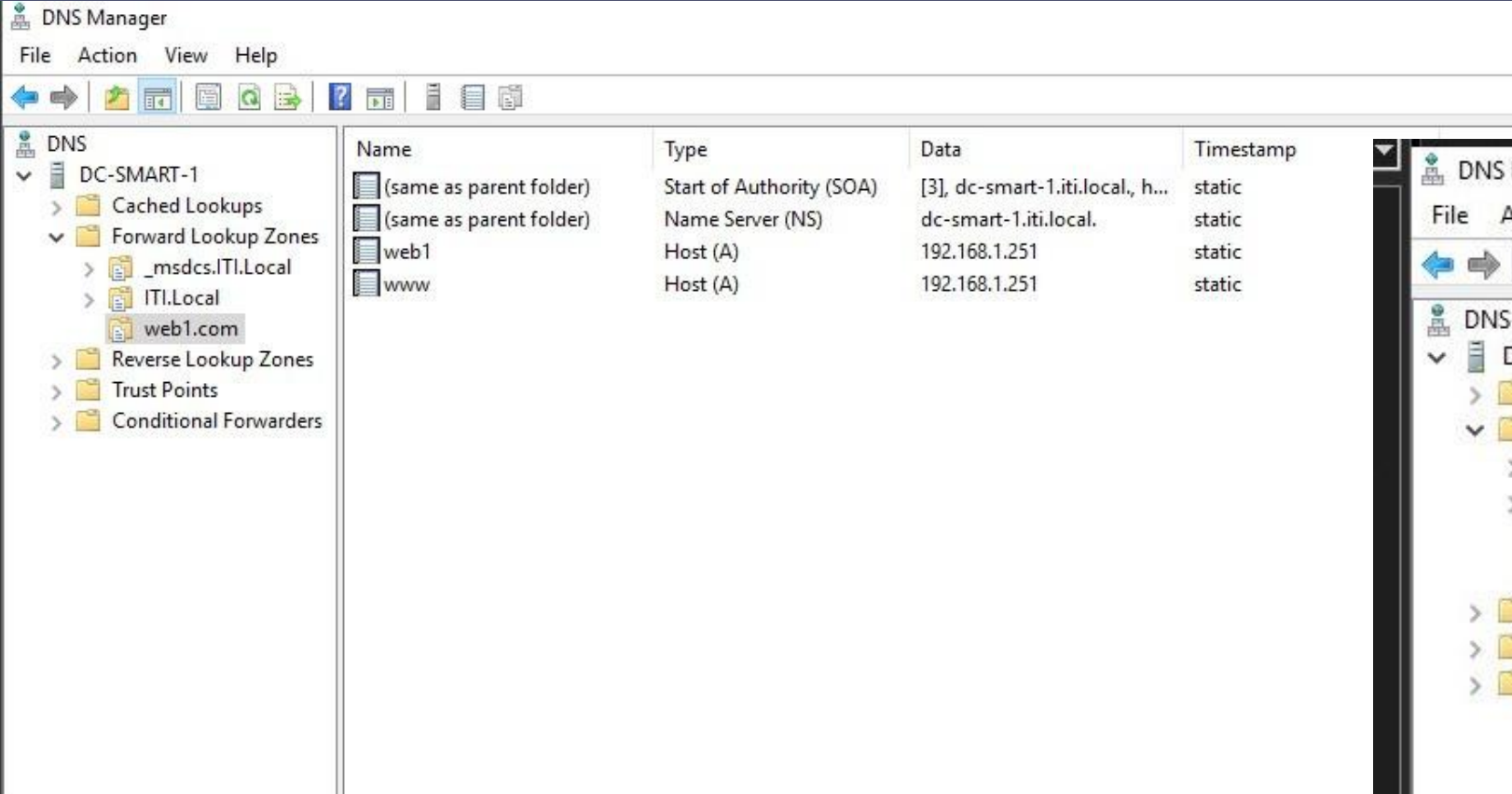
WEB & FTP

HTTP://WWW.WEB2.COM



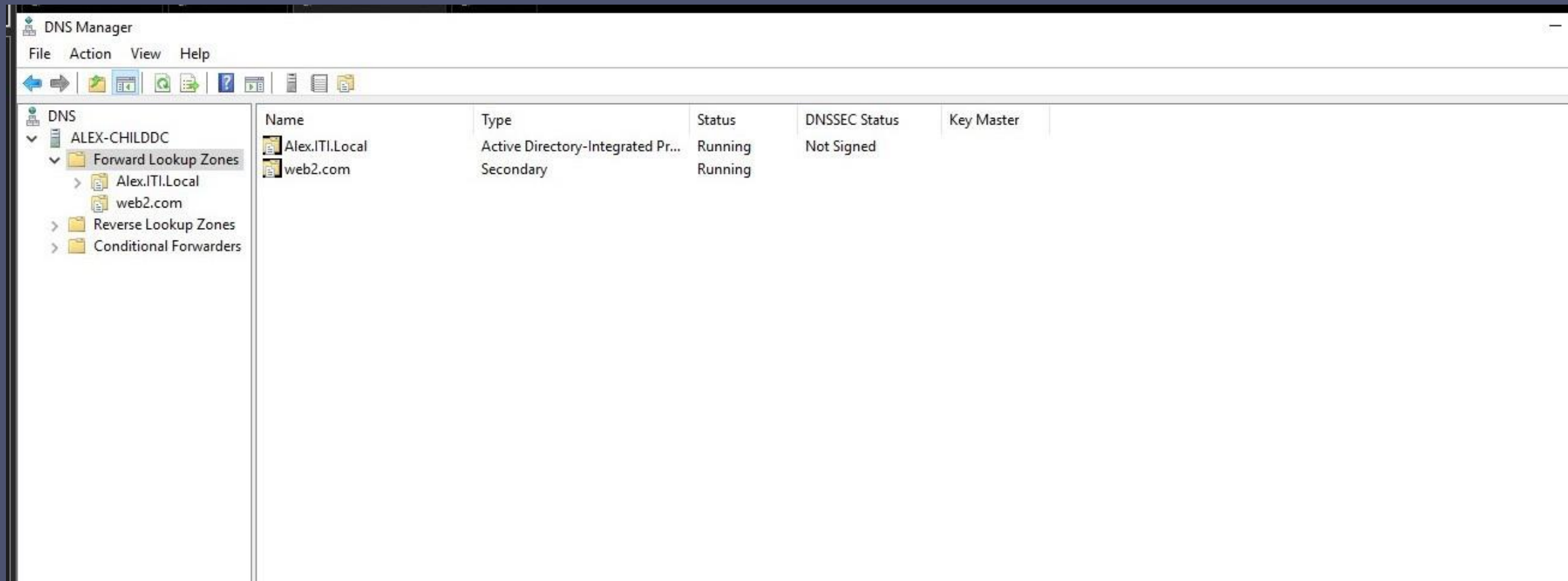
CREATE PRIMARTY ZONES

In DC-Smart (ITI.Local)



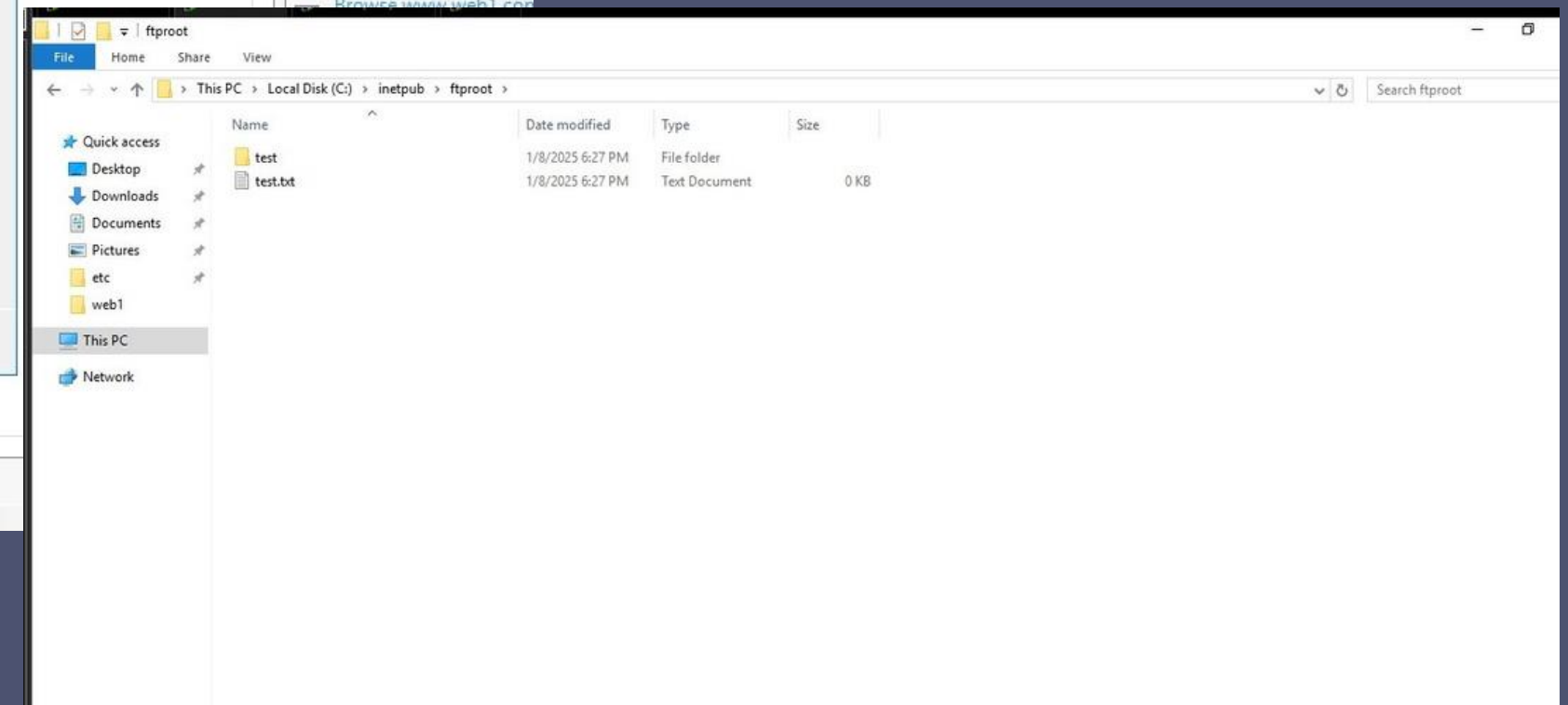
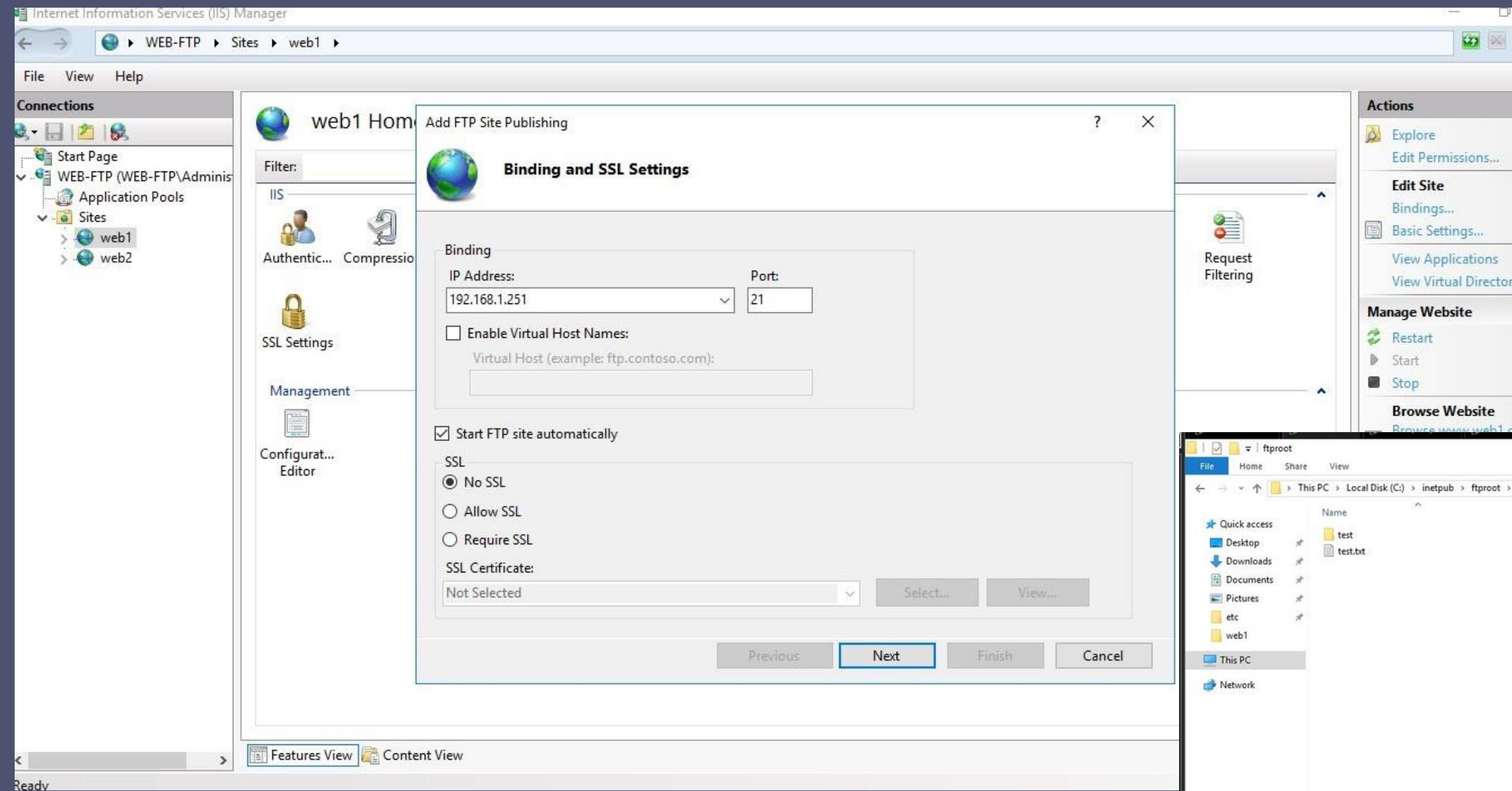
CREATE SECONDARY ZONES

In DC-Alex (Alex.ITI.Local)



FTP SERVICE

WEB & FTP



Thank You