T Level Technical Qualification in Digital Support Services

Occupational specialism assessment (OSA)

Digital Infrastructure

Assignment 2 - Workbook - Distinction

Guide standard exemplification materials

v1.1: Specimen assessment materials
January 2023
603/6901/2

Internal reference: DSS-GSEM-24

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Assignment 2

Workbook - Distinction

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About this workbook

Introduction

All evidence should be placed in this workbook.

Save your document regularly as you work through the assignment. It is recommended you save after inserting each piece of evidence.

Submit this workbook in .pdf format at the end of the assignment using the file naming convention.

Surname_Initial_student number_Workbook2

For example Smith_J_123456789_Workbook2.pdf

Evidence

All print screens and photographs should be numbered and linked to the task.

For example, Task 1, Evidence 2 would be shortened to 1.2.

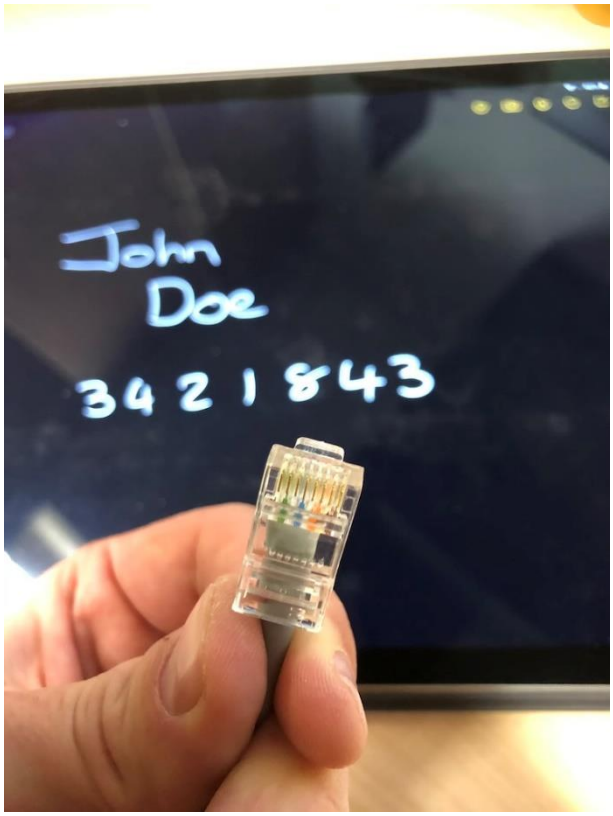
1.2 – Shows the SATA cable being installed

Task 1

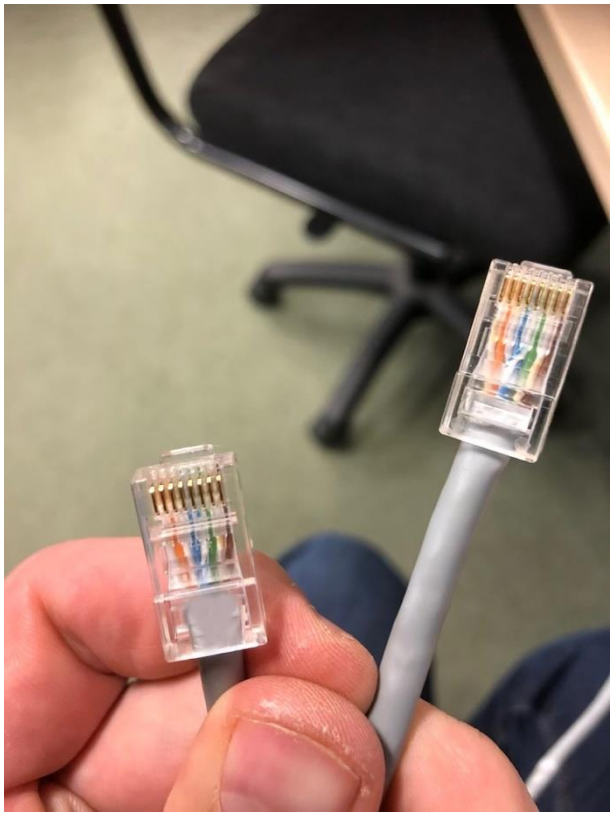
RJ45 connected

All the copper connectors connect with the cable
< Covered in the single photograph below >

All the ends of the cable are arranged correctly

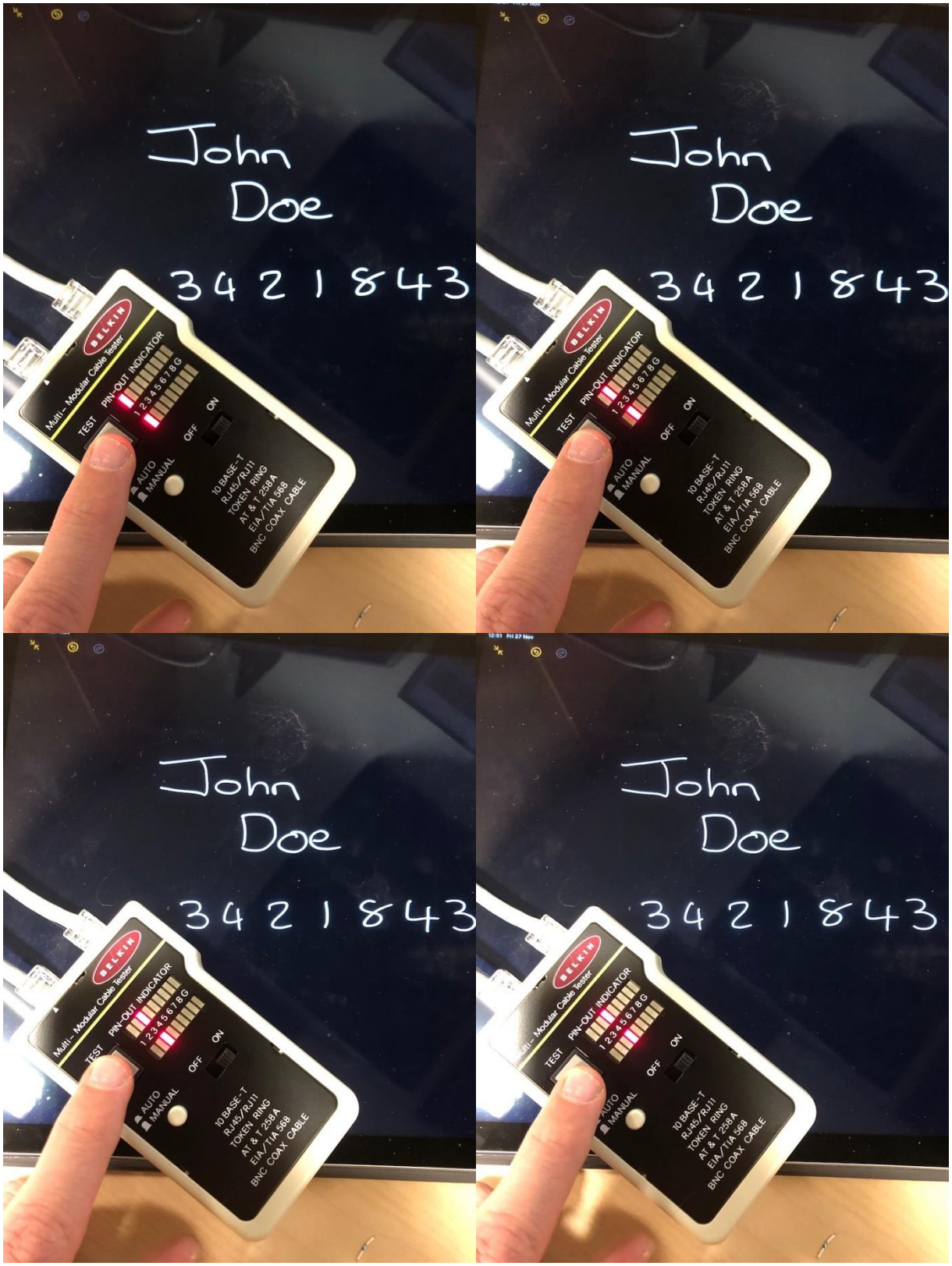


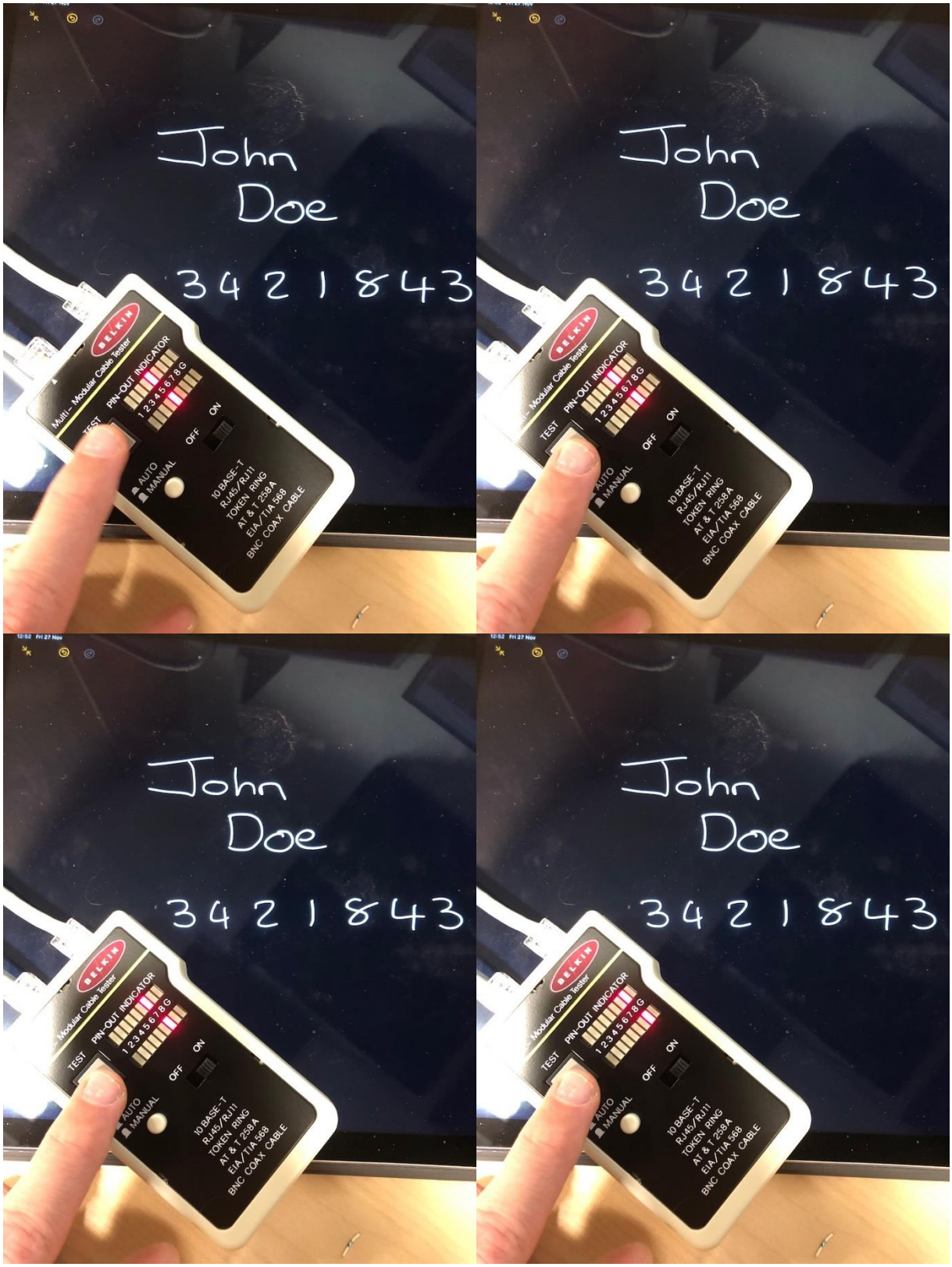
The plastic cover is at the right depth to catch under the fixing in the RJ45 end



Cable testing

The cable tester lights show that each strand is working correctly


John
Doe
3421843
BELKIN
Multi – Modular Cable Tester
TEST
PIN-OUT INDICATOR
1 2 3 4 5 6 7 8 G
ON
OFF
AUTO
MANUAL
10 BASE-T
RJ45/RJ11
TOKEN RING
AT & T 258A
EIA/TIA 568
BNC COAX CABLE



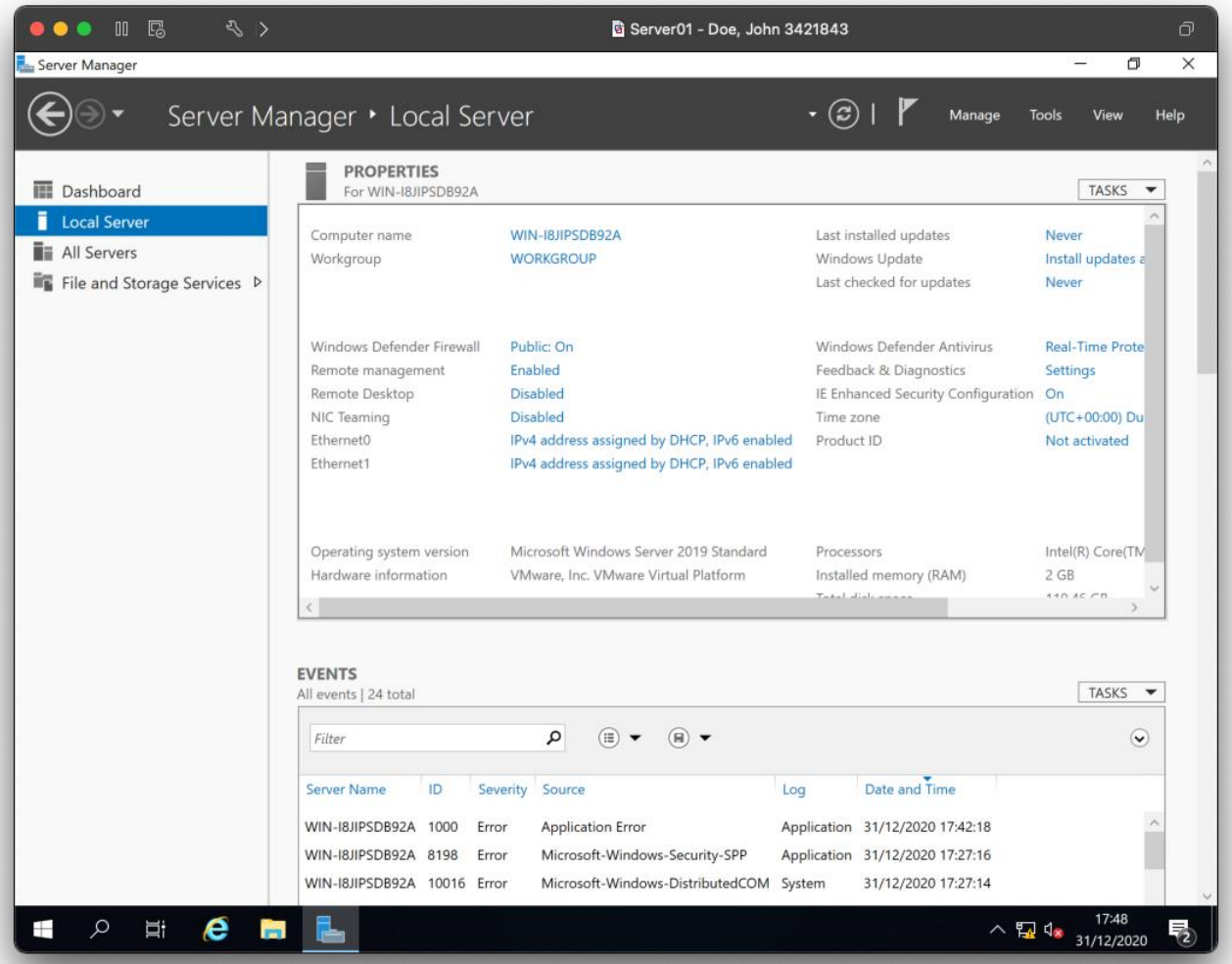
These photos show that the cable is made correctly and tested as working. Each photo shows one of the pins and confirms a signal can be carried on each wire in the cable.

Task 2

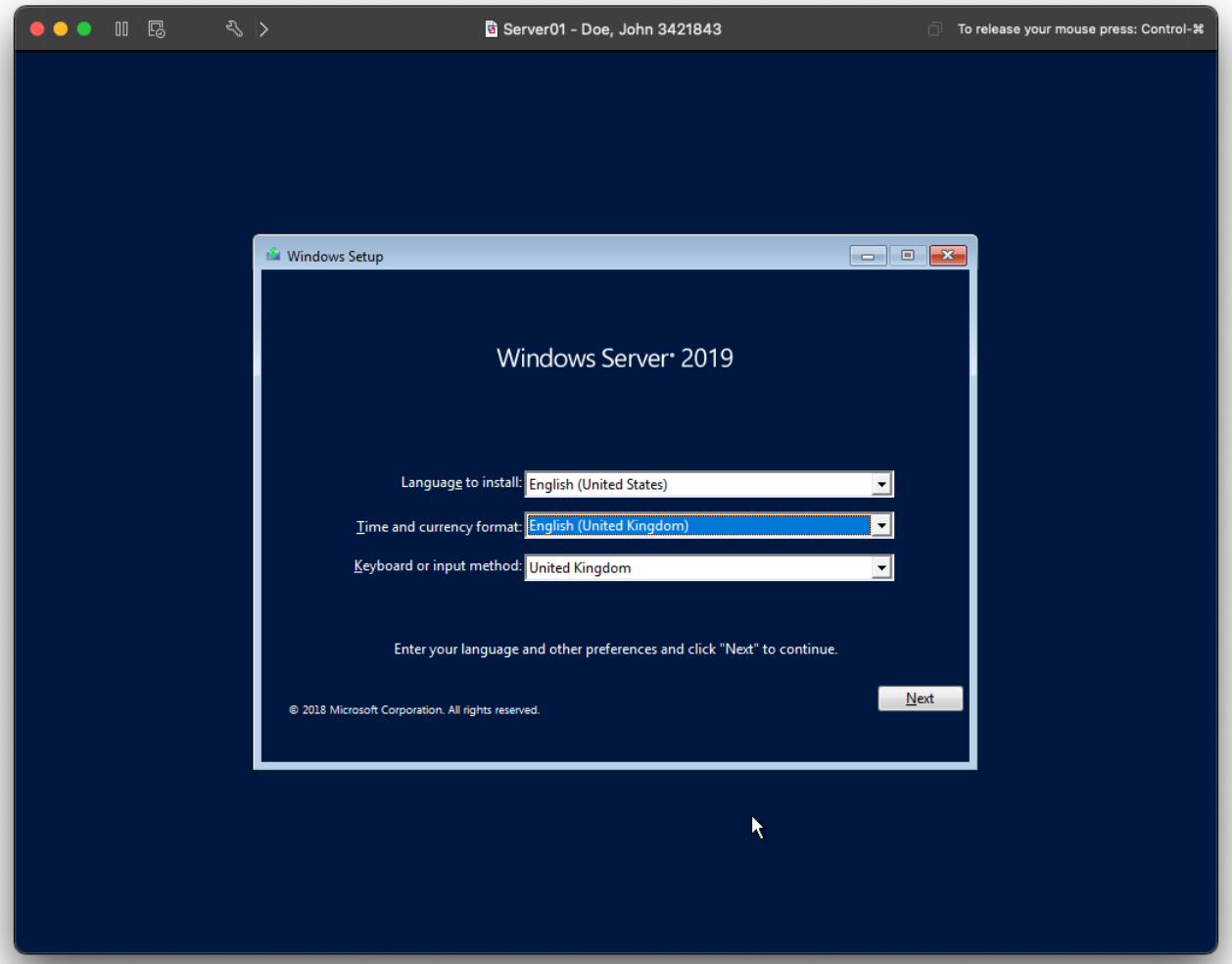
Step A

Server01 installation and configuration

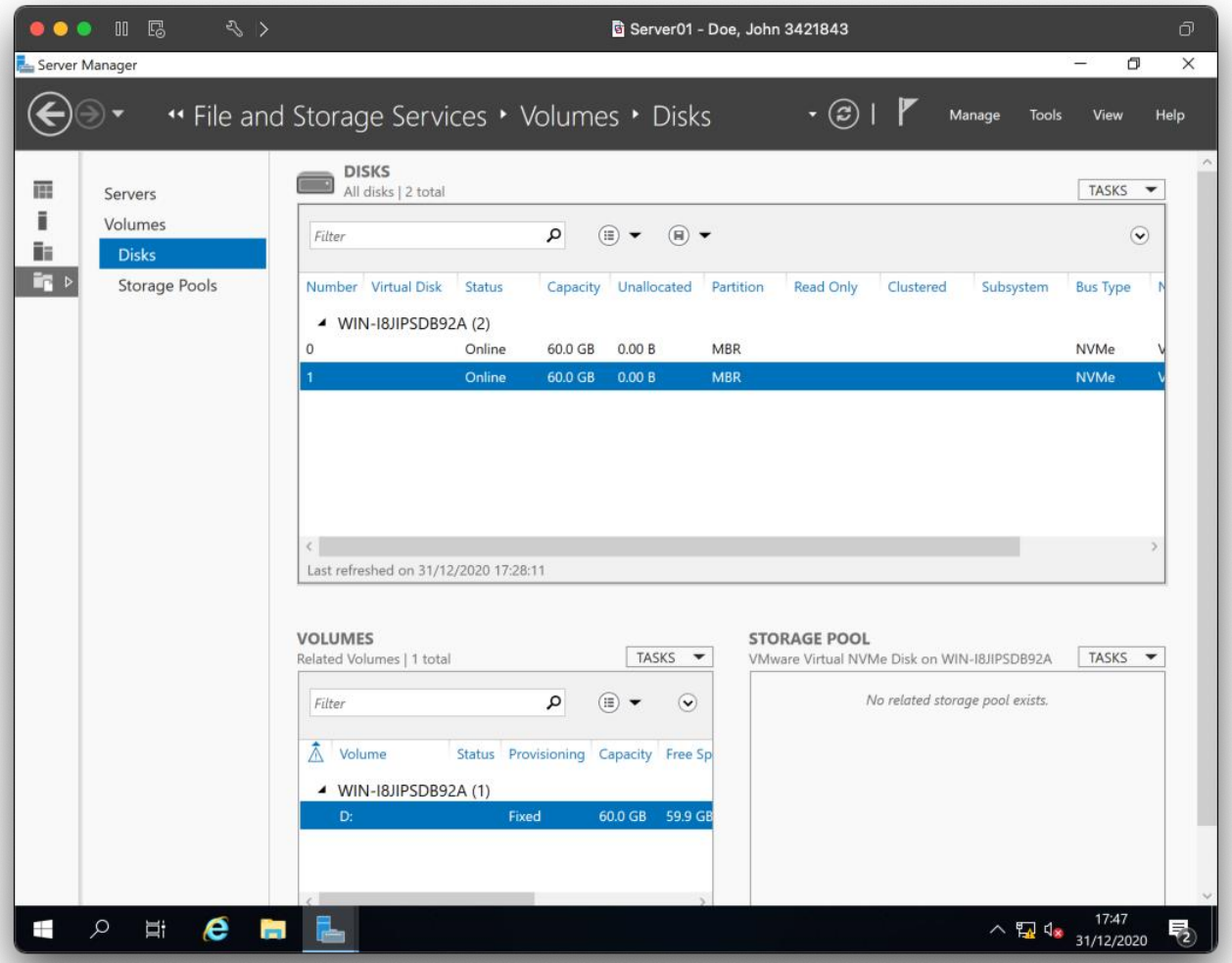
- operating system installed



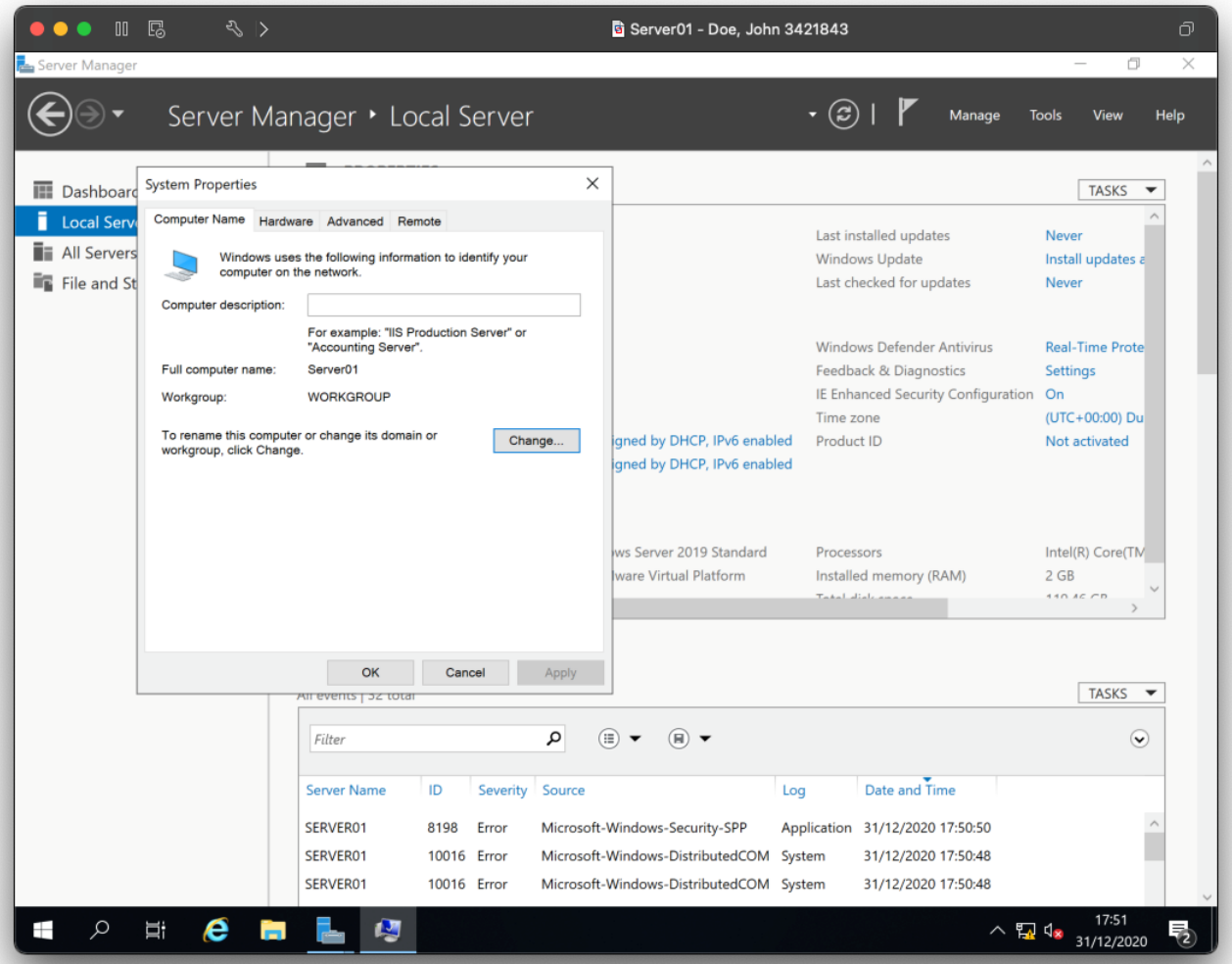
- suitable region and language settings



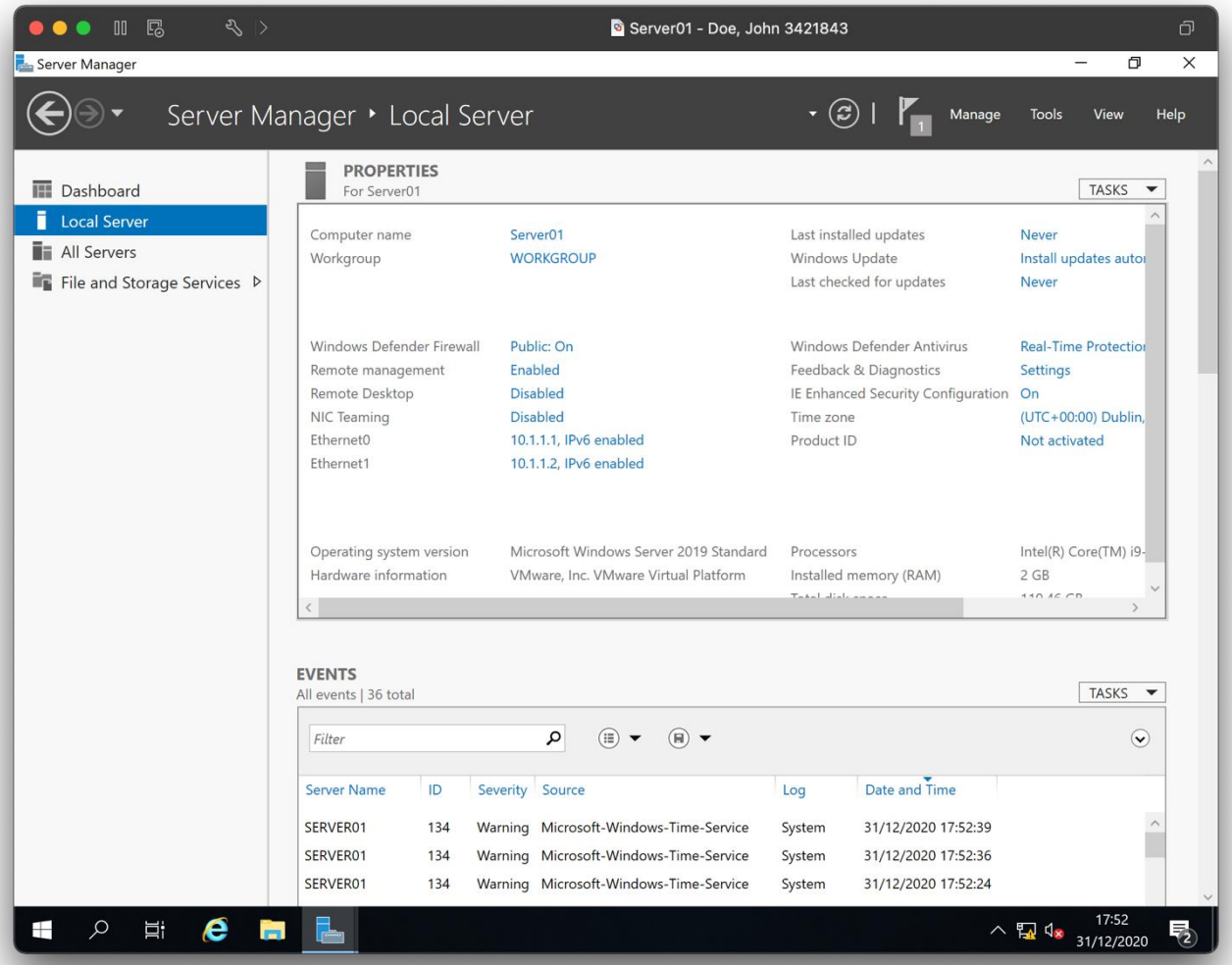
- disk partitions



- machine named correctly

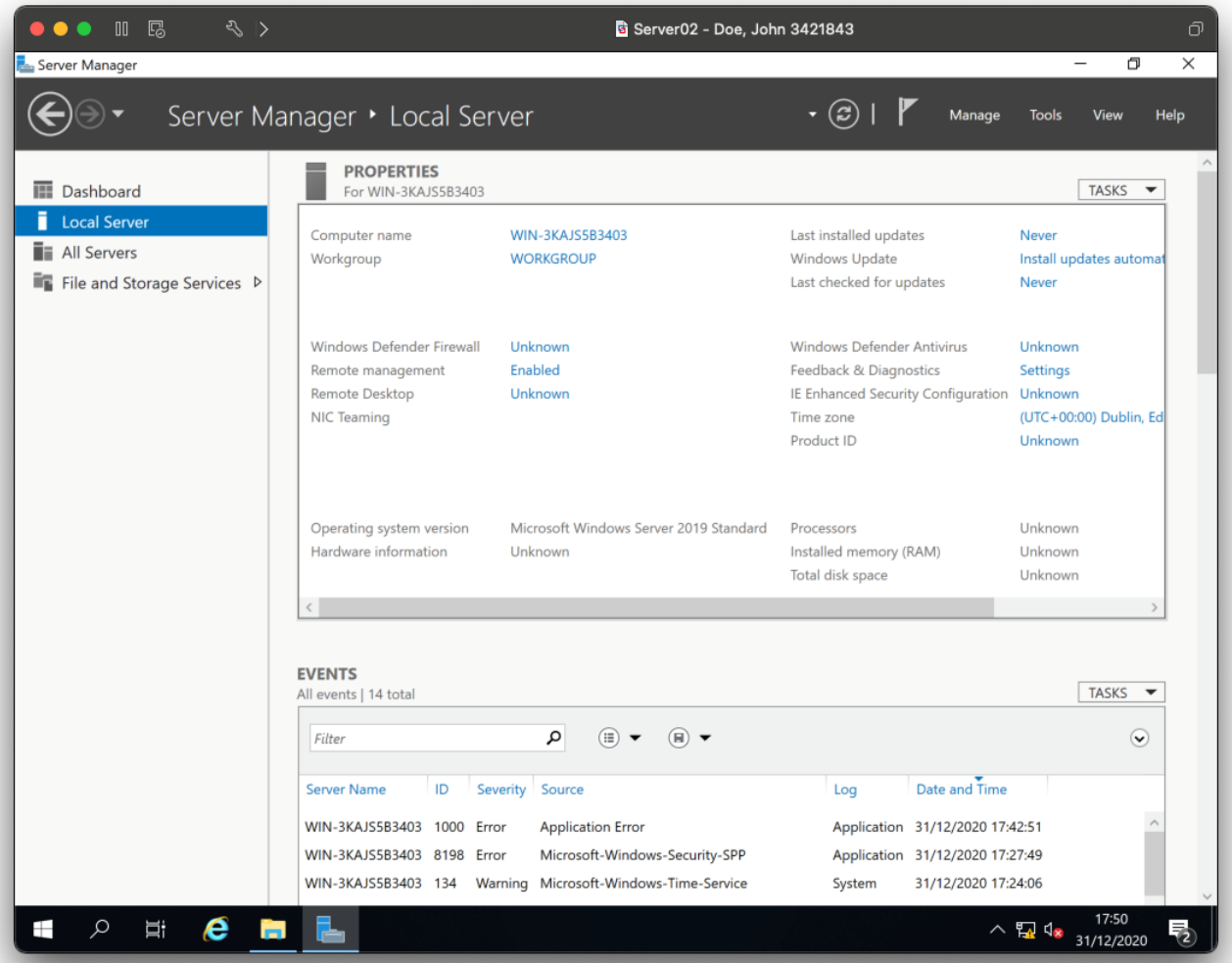


- fixed IP addressing set

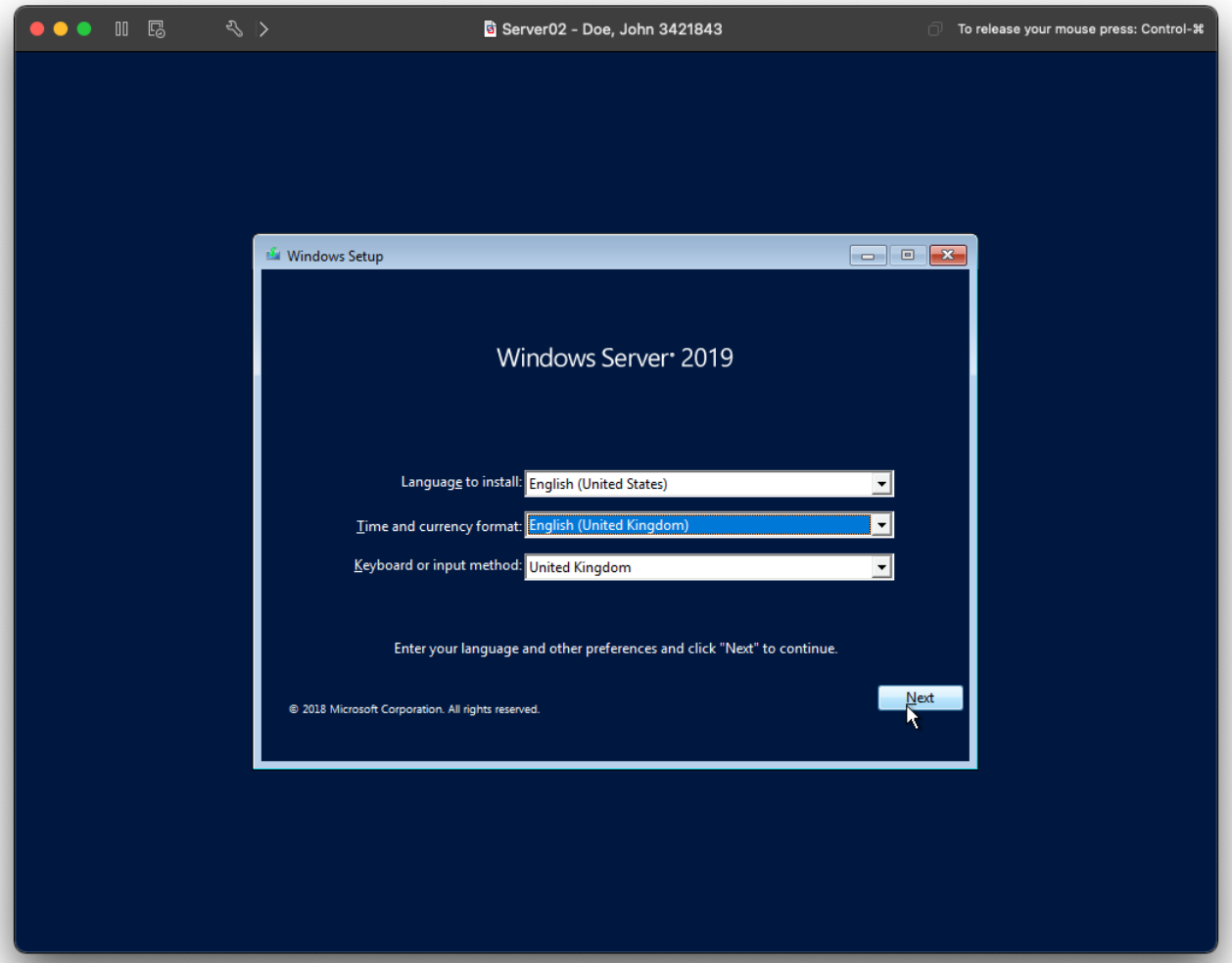


Server02 installation and configuration

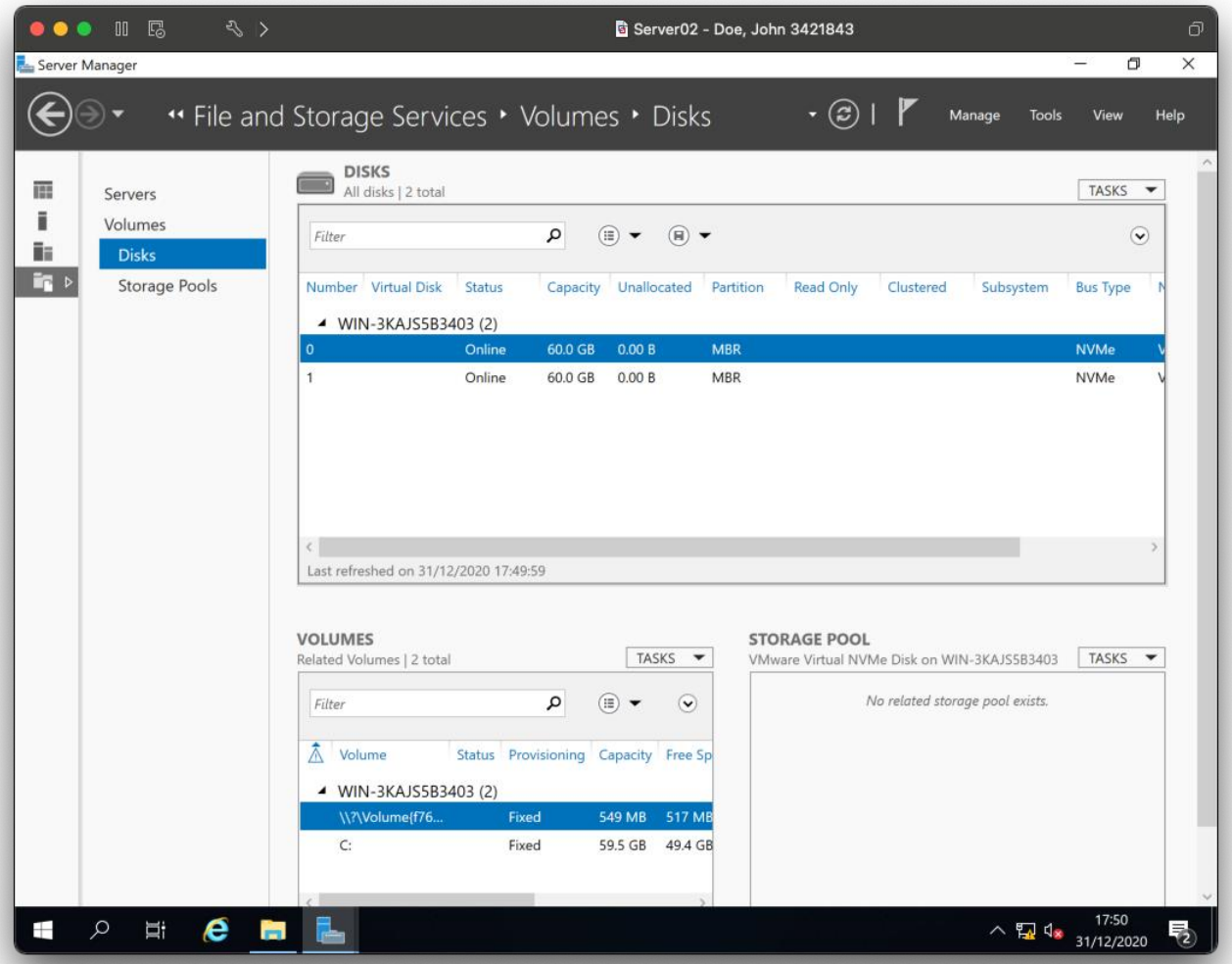
- operating system installed



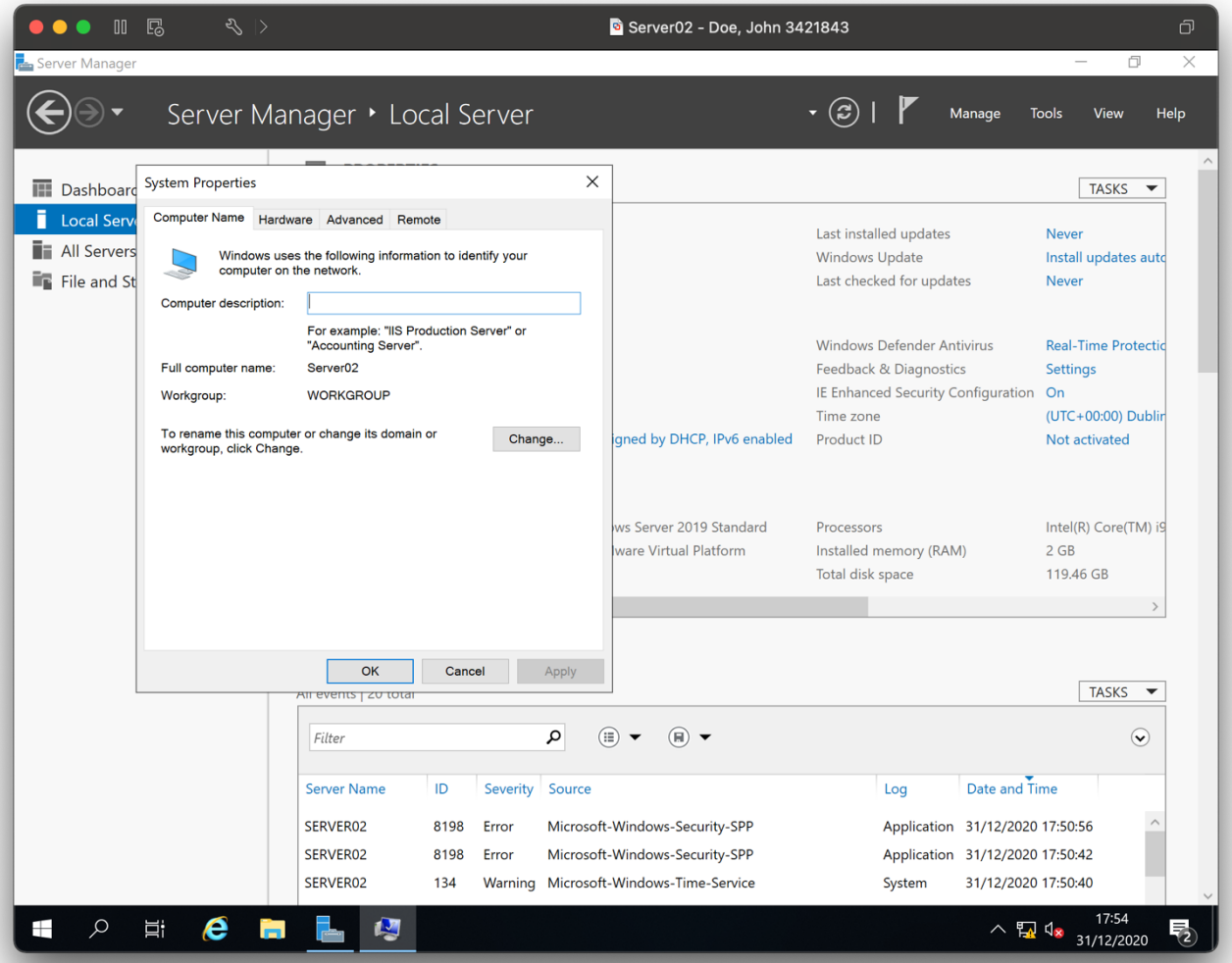
- suitable region and language settings



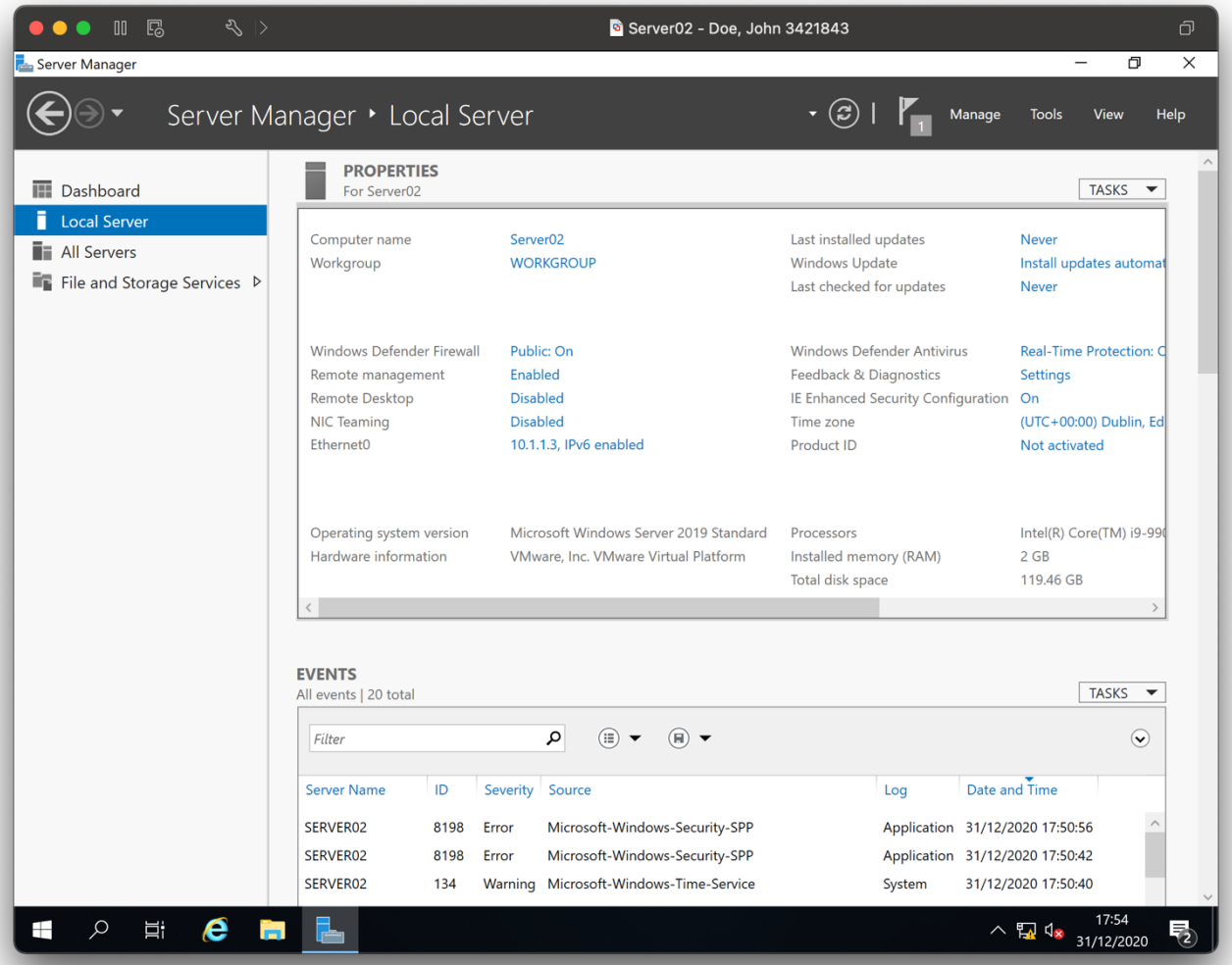
- disk partitions



- machine named correctly

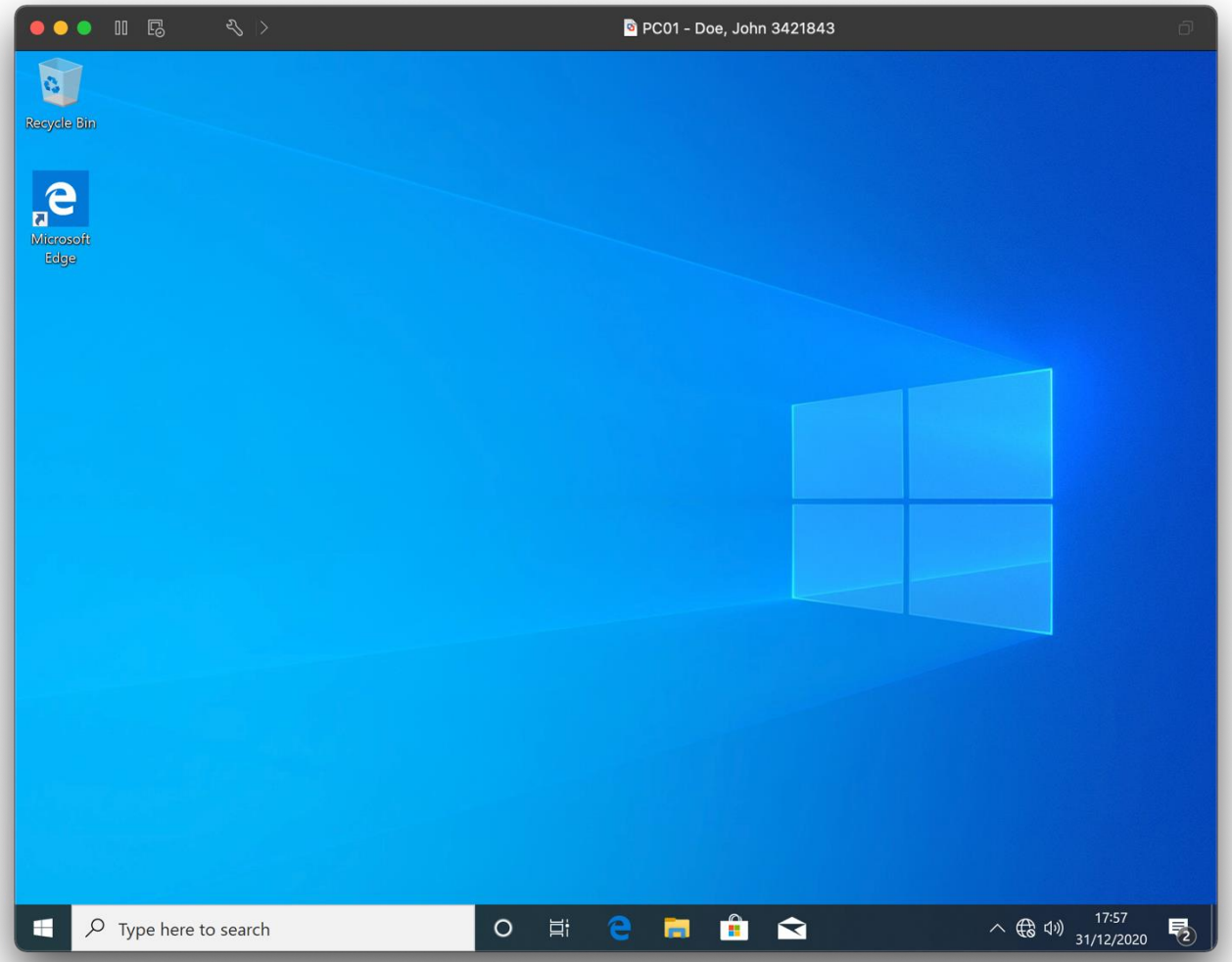


- fixed IP addressing set

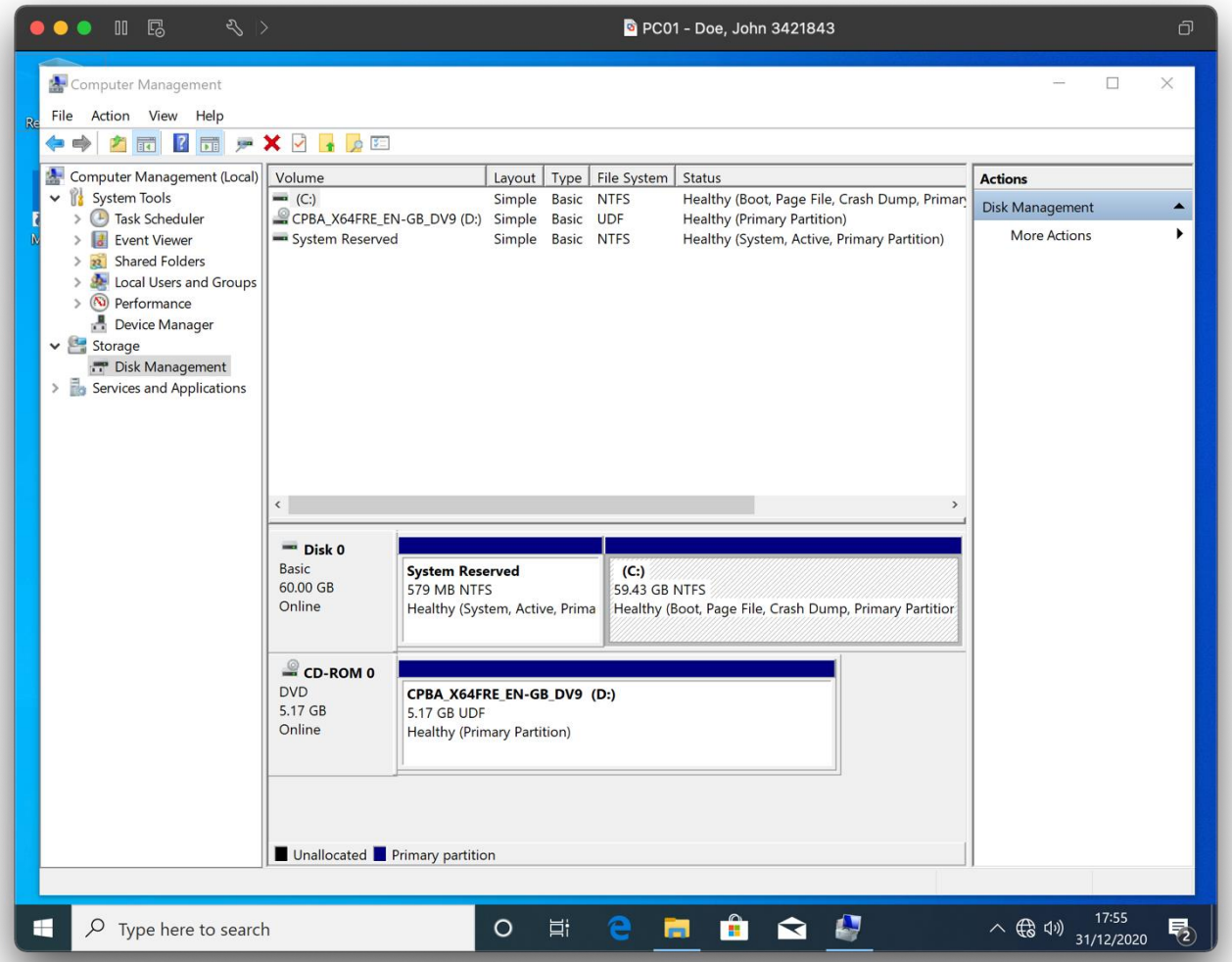


PC01 installation and configuration

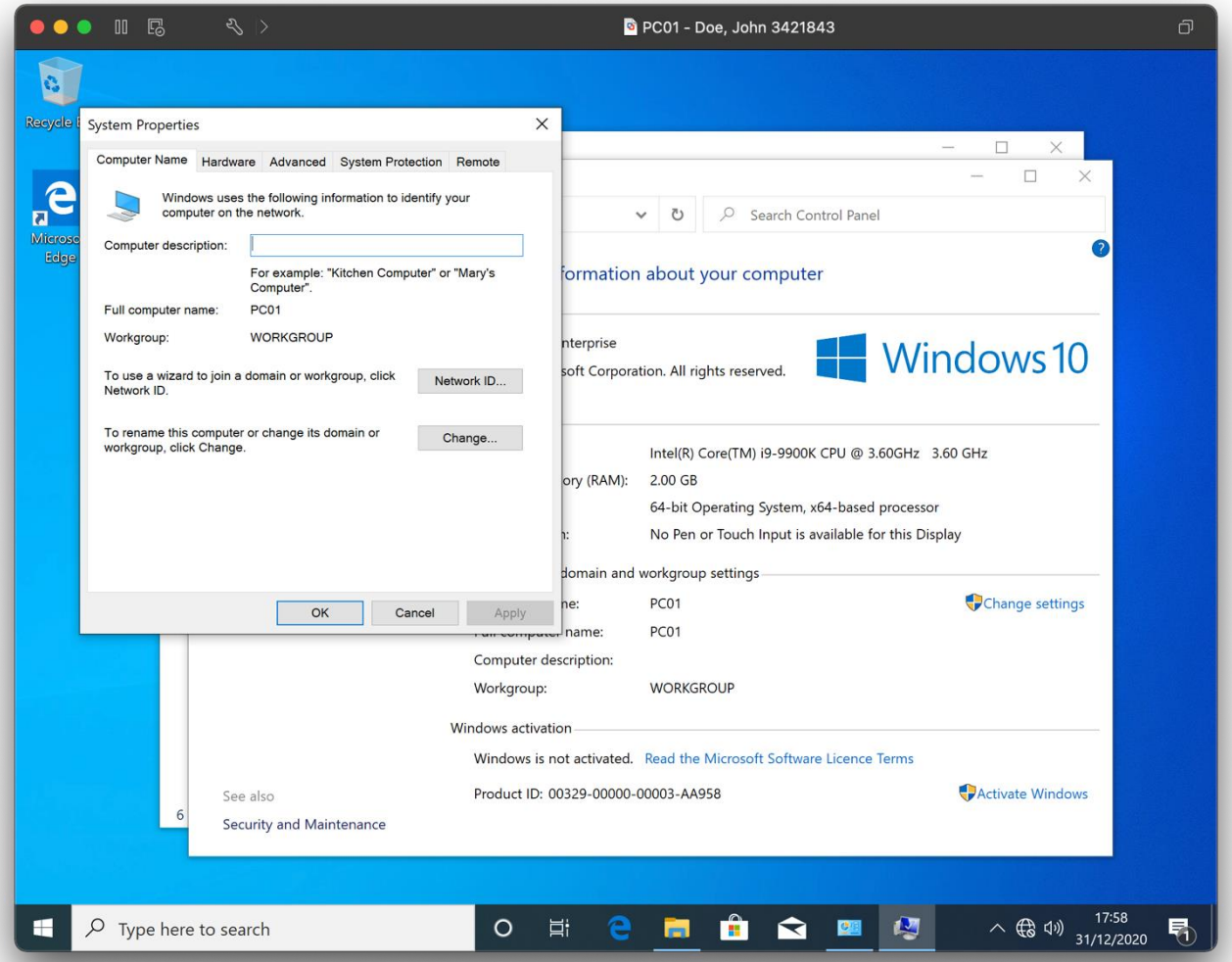
- operating system installed



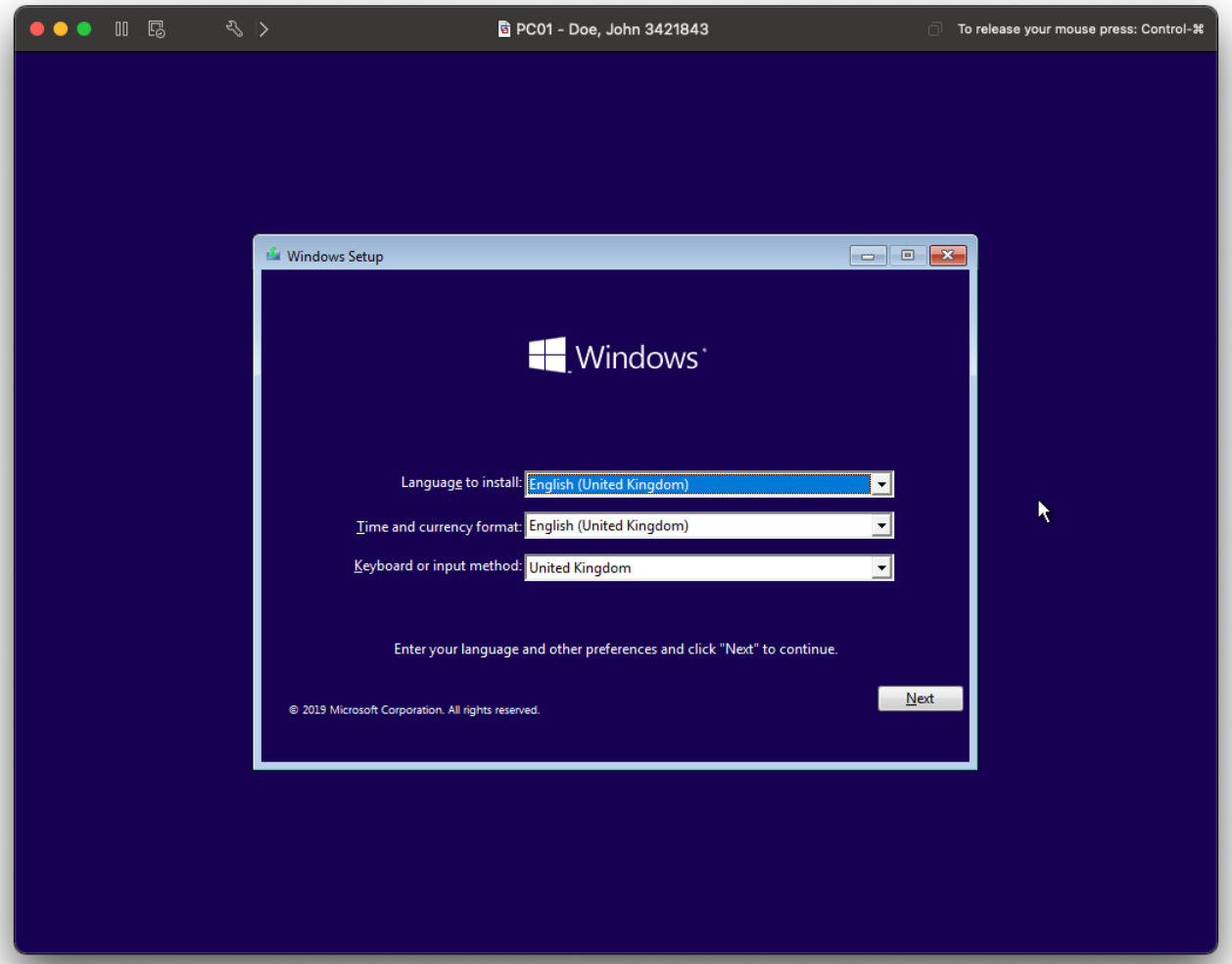
- disk partitions



- machine named correctly

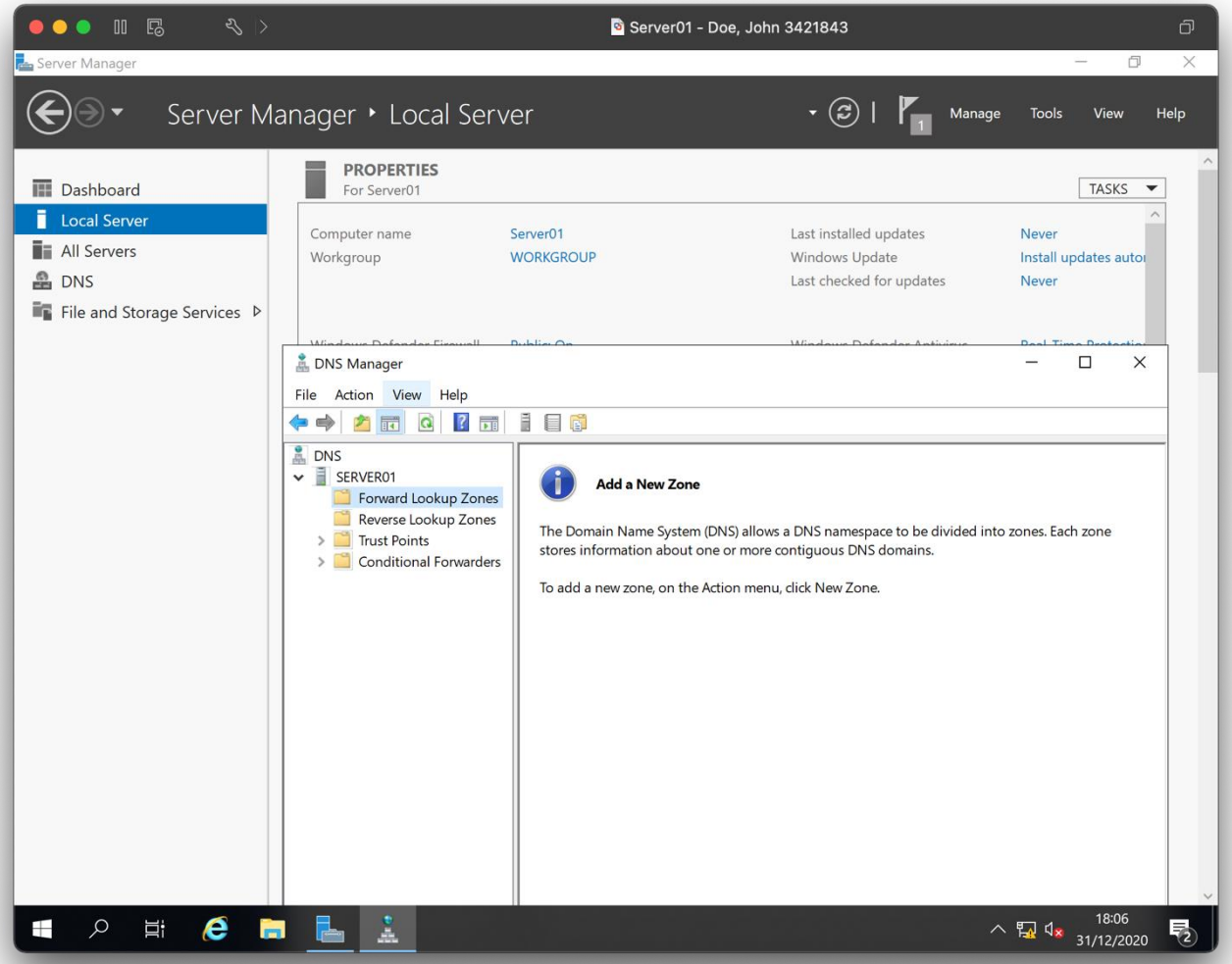


- suitable region and language settings

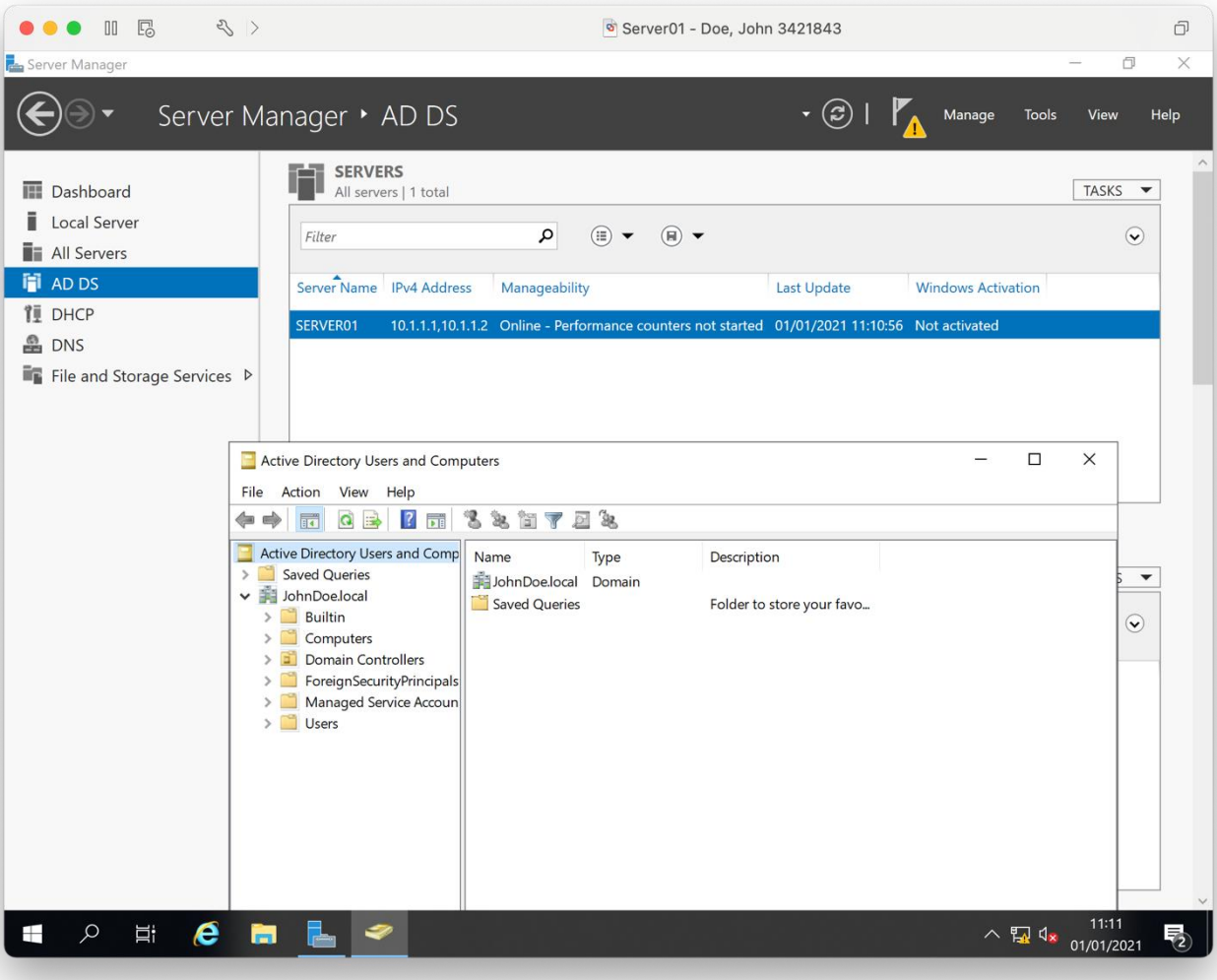


Step B

DNS configuration

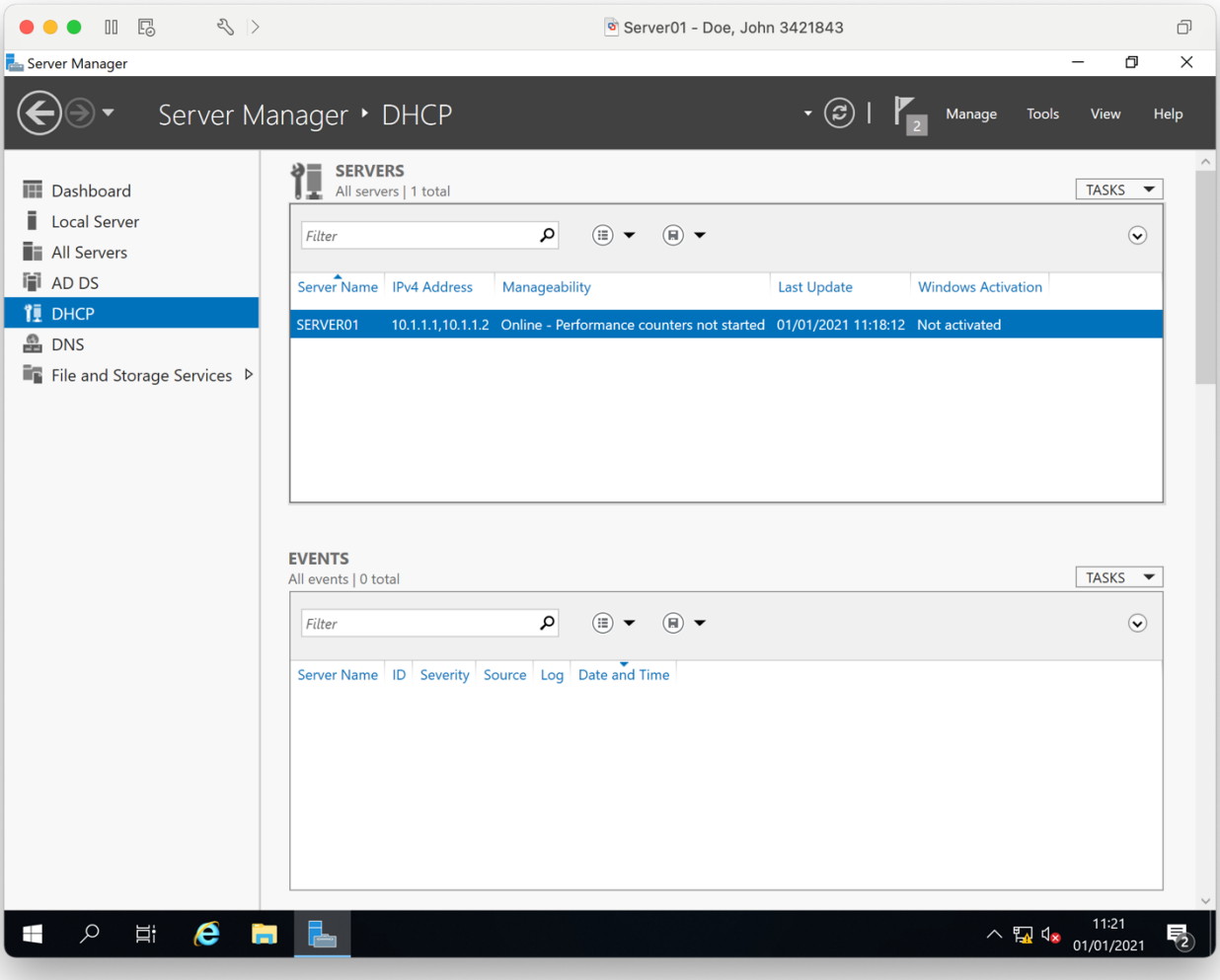


Directory service

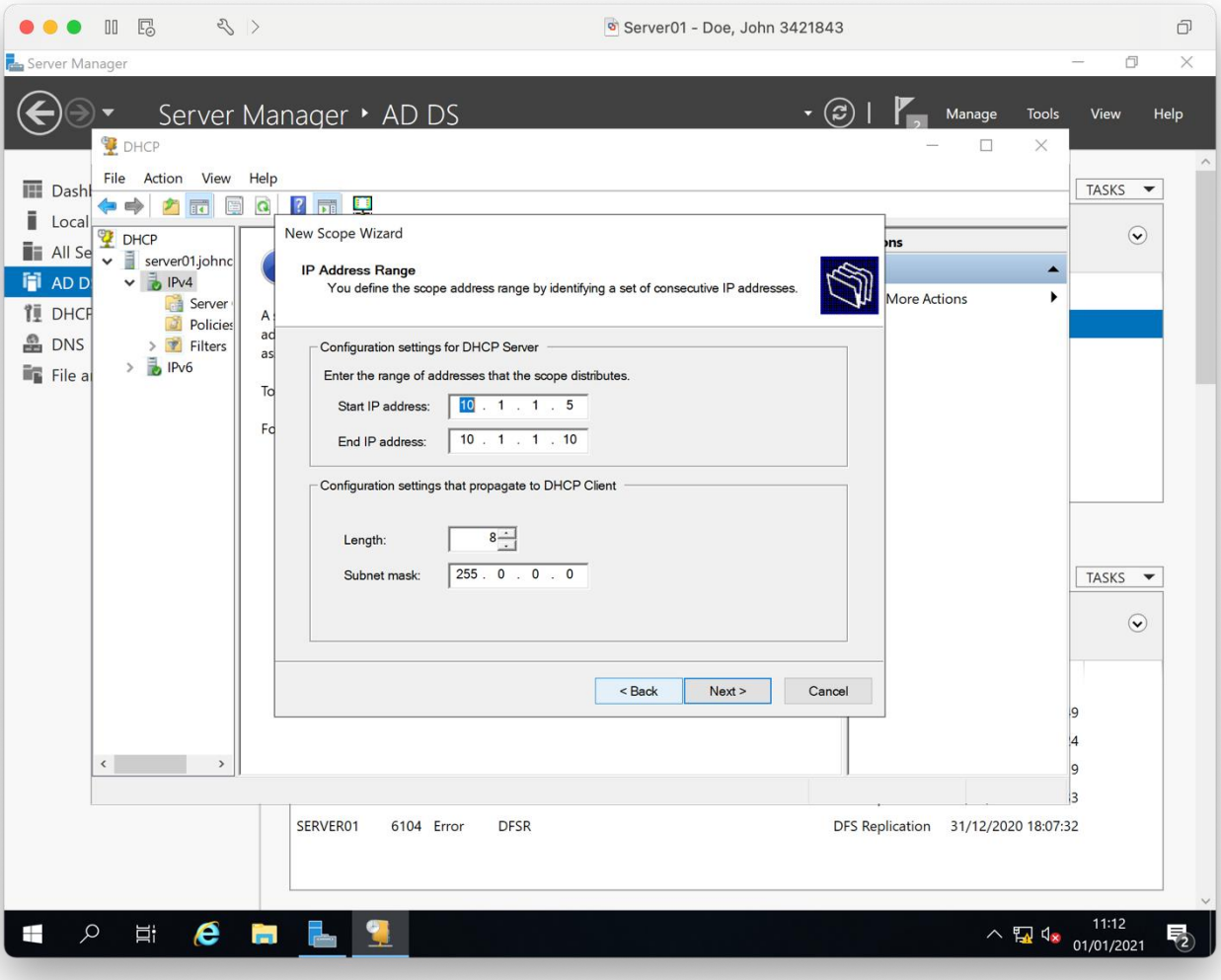


DHCP

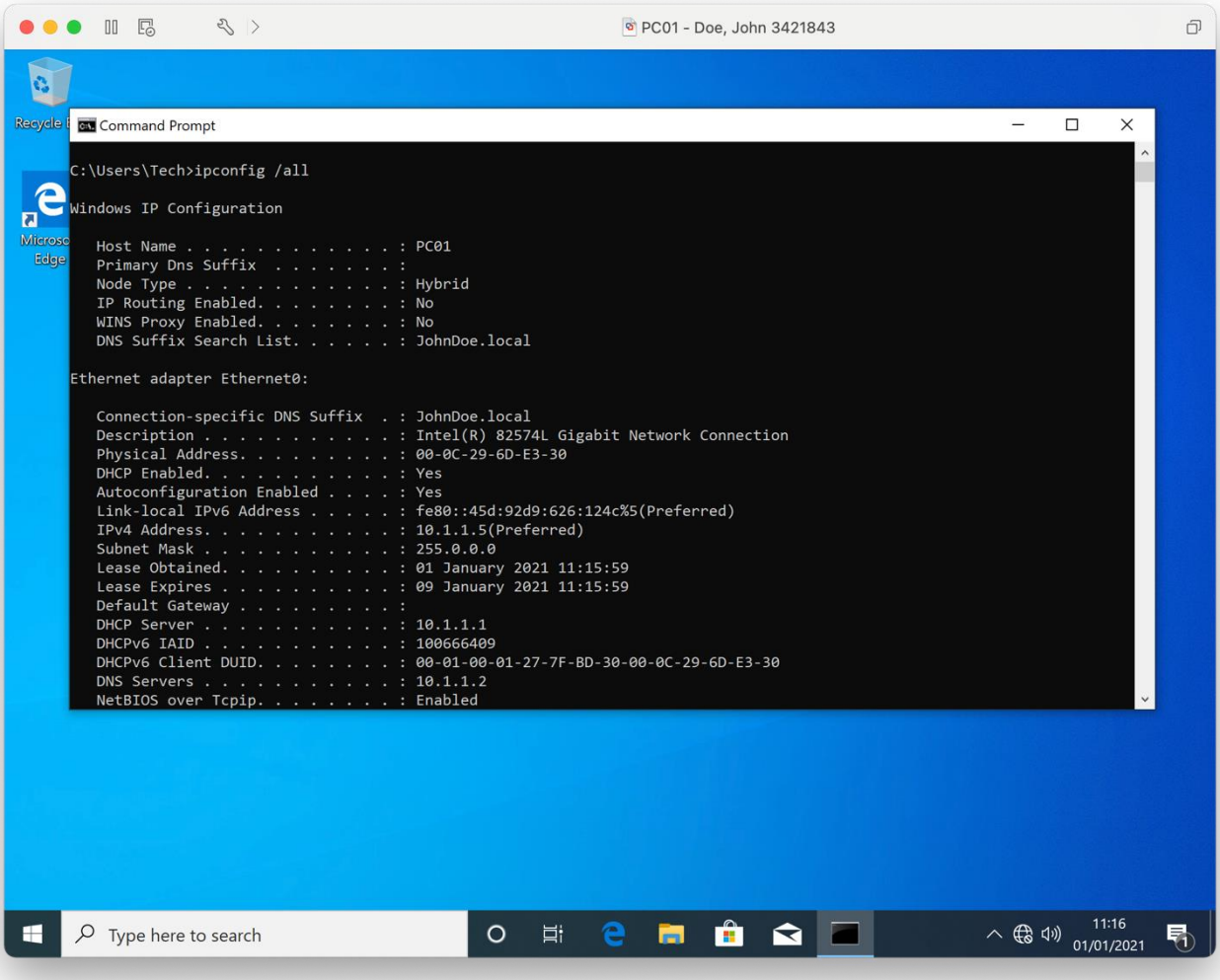
- DHCP service installed



- DHCP scope configured with the settings 10.1.1.5-10.1.1.10

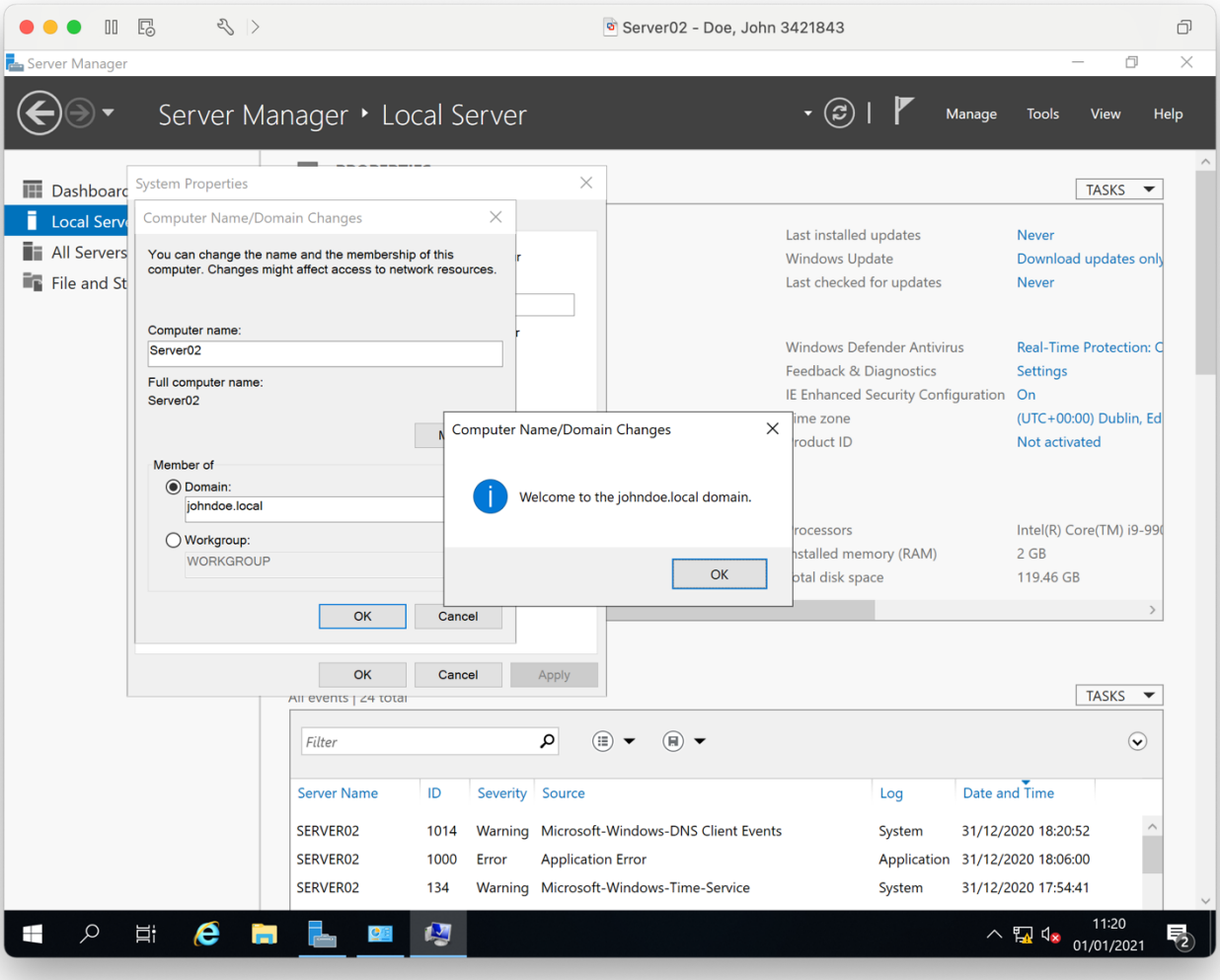


PC01 has been assigned a DHCP address using IPCONFIG /ALL

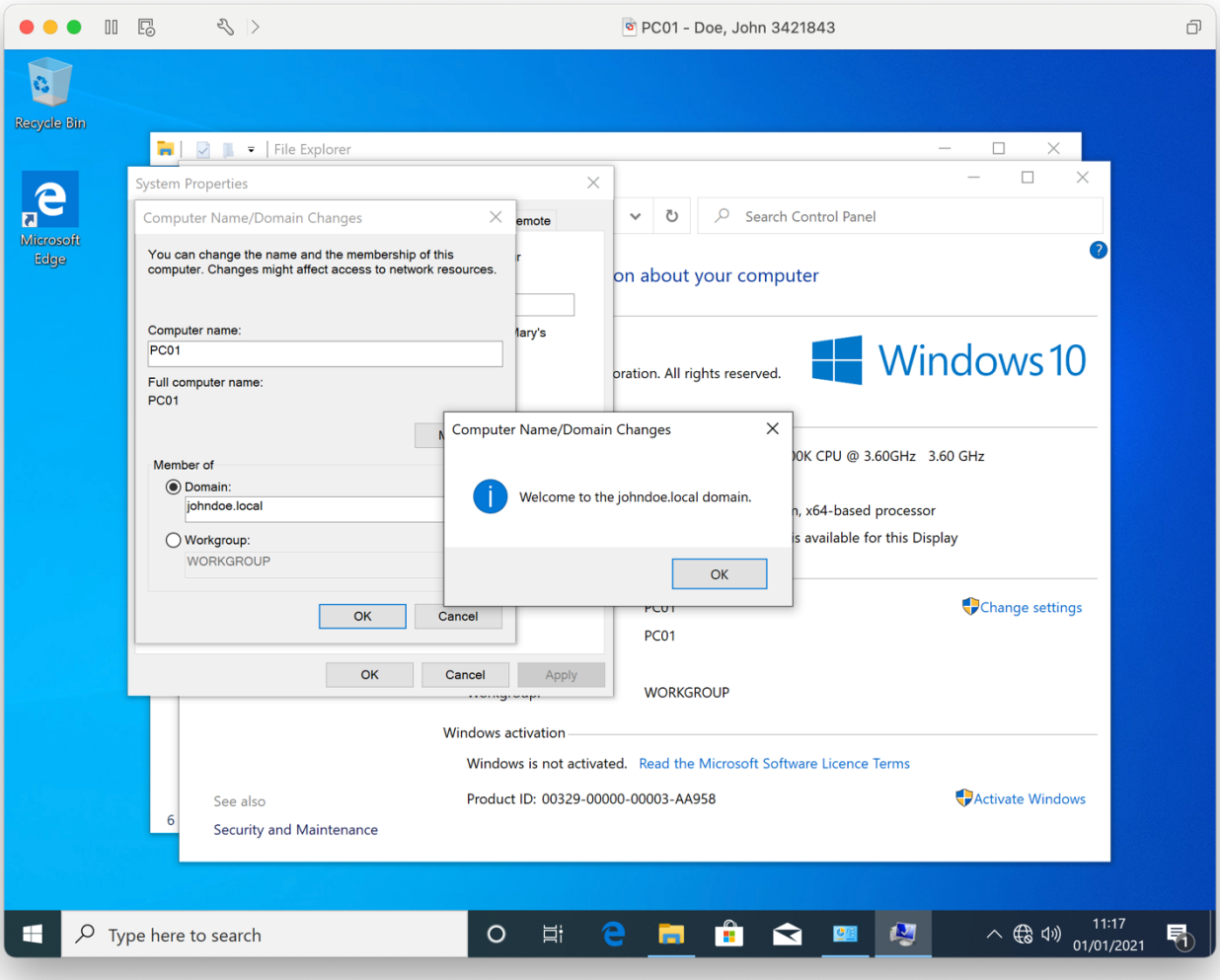


Domain joins

Server02 domain joined to (FirstnameSurname).local>



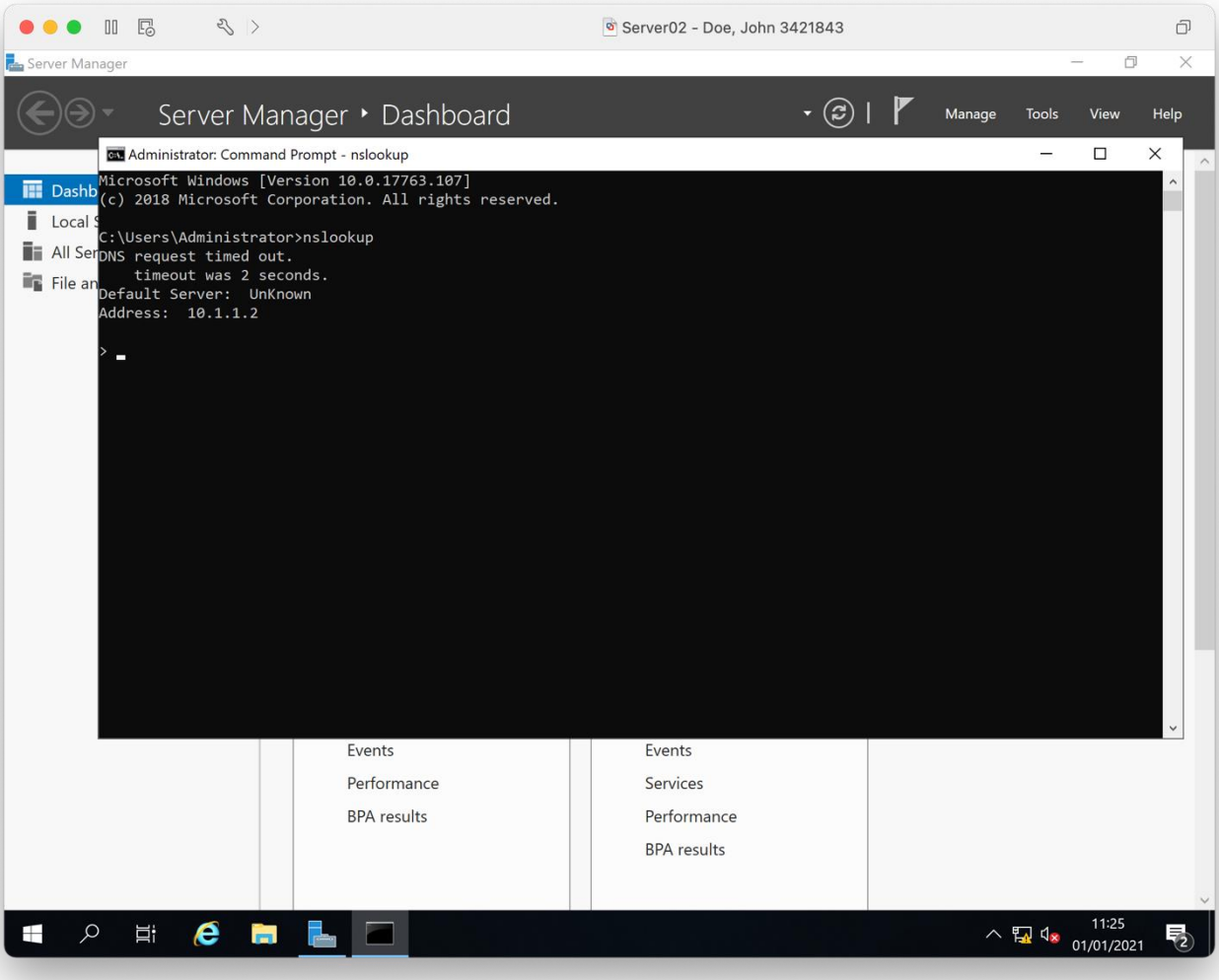
PC01 domain joined at logon to (FirstnameSurname).local



Reverse lookup

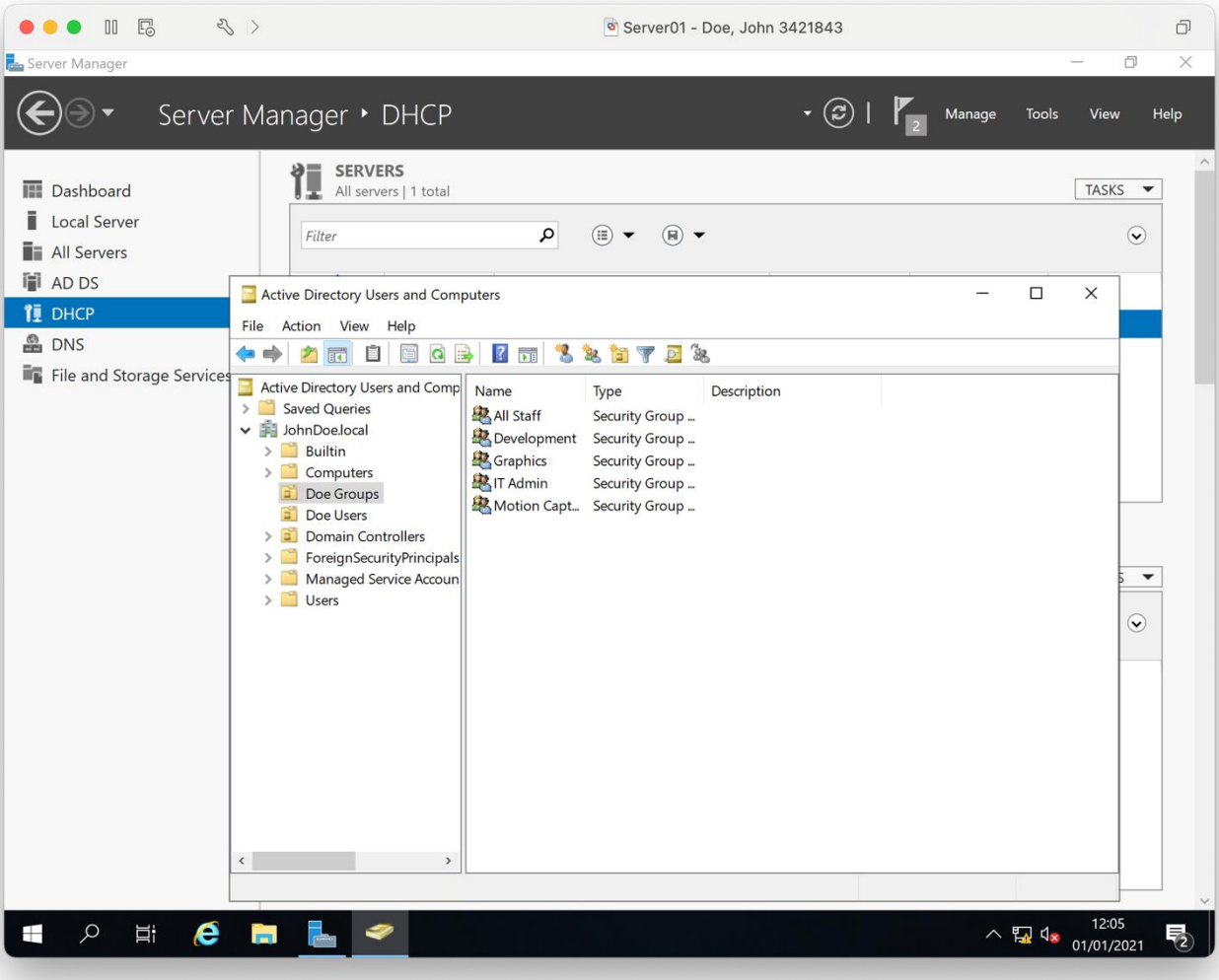
Server02 successfully completed a reverse lookup using NSLOOKUP to Server01

.


Server02 - Doe, John 3421843
Server Manager
Server Manager ‣ Dashboard
Manage
Tools
View
Help
Administrator: Command Prompt - nslookup
Microsoft Windows [Version 10.0.17763.107]
(c) 2018 Microsoft Corporation. All rights reserved.
C:\Users\Administrator>nslookup
DNS request timed out.
timeout was 2 seconds.
Default Server: UnKnown
Address: 10.1.1.2
>
Events
Performance
BPA results
Events
Services
Performance
BPA results
11:25
01/01/2021

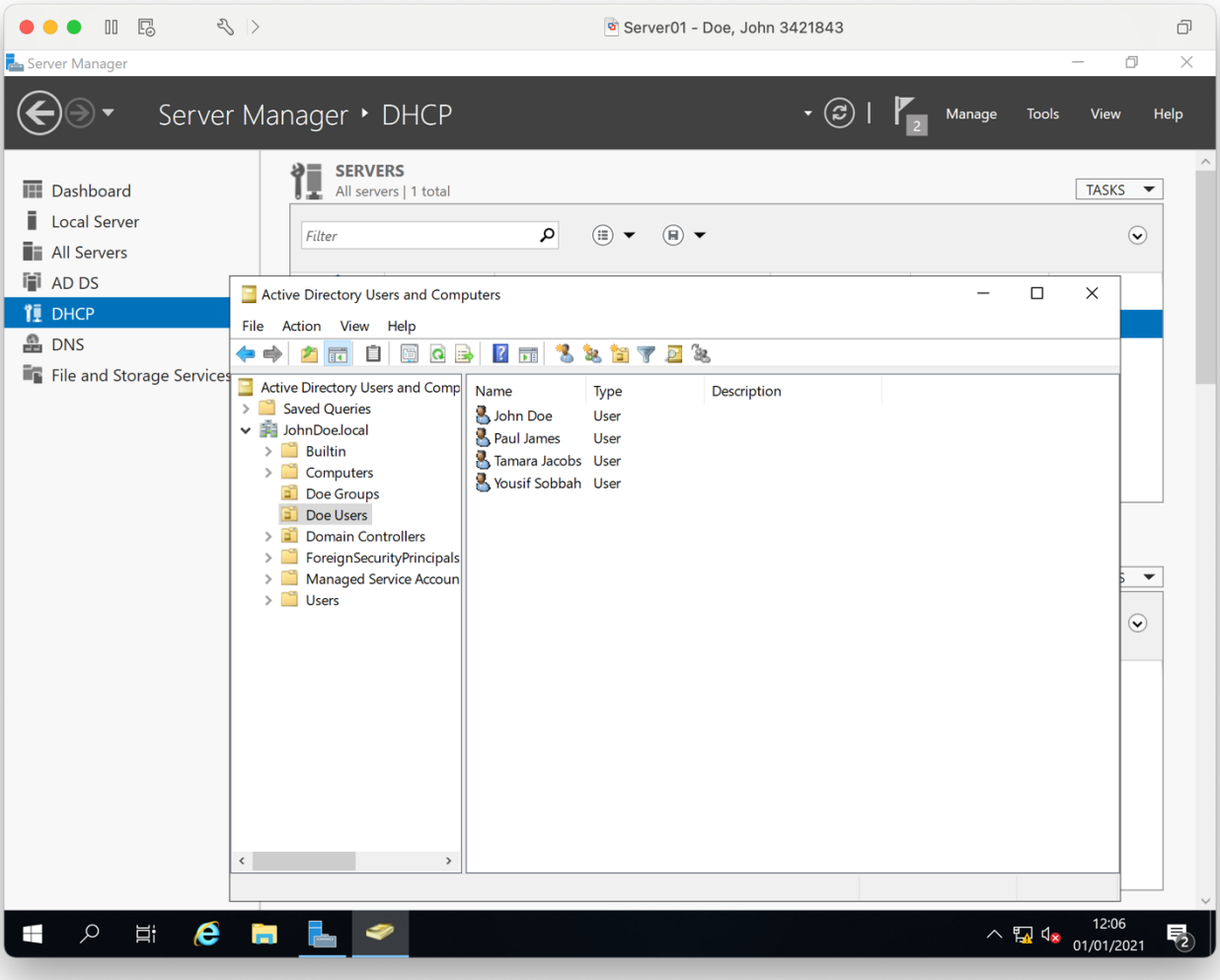
Step C

Group creation

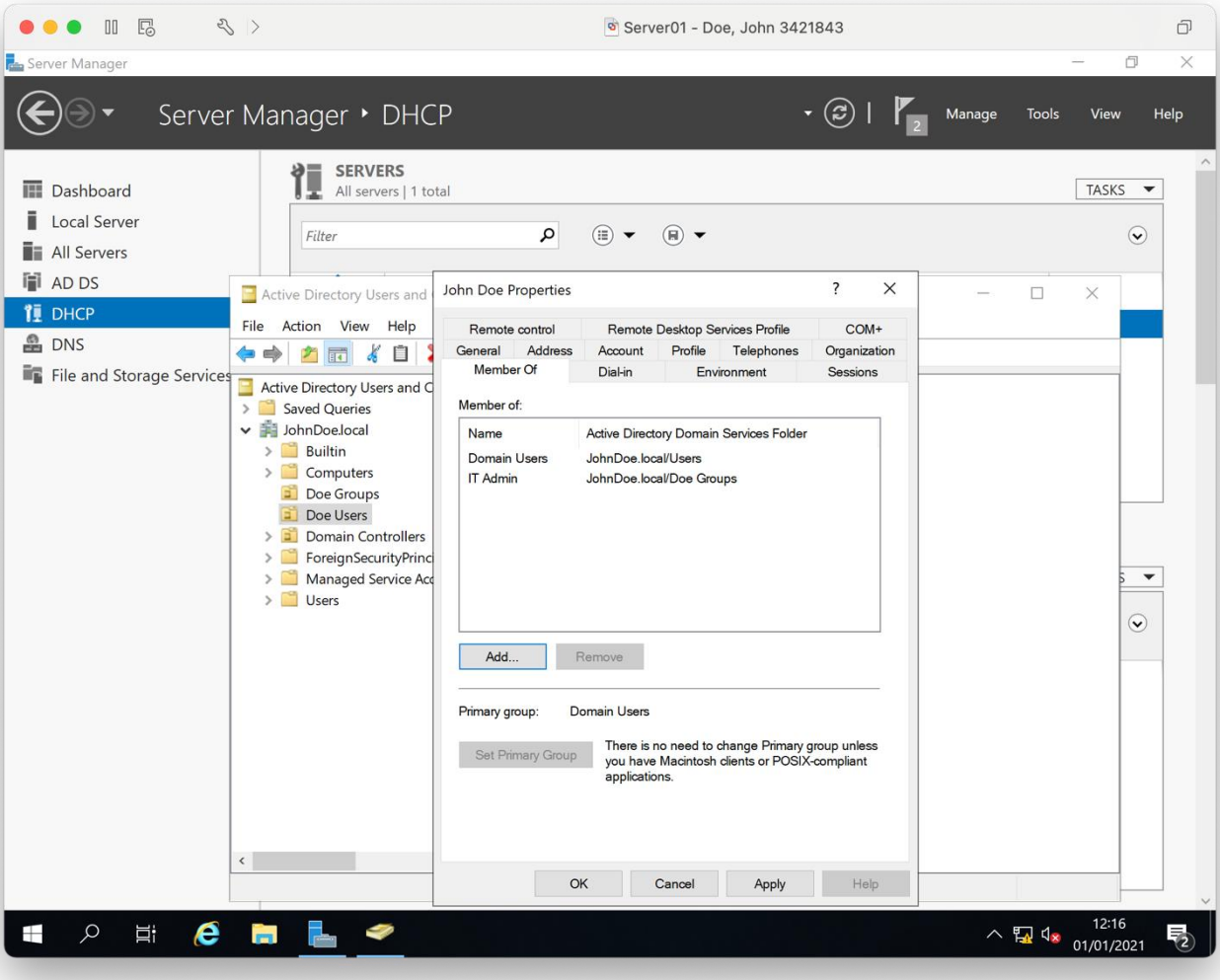


User creation

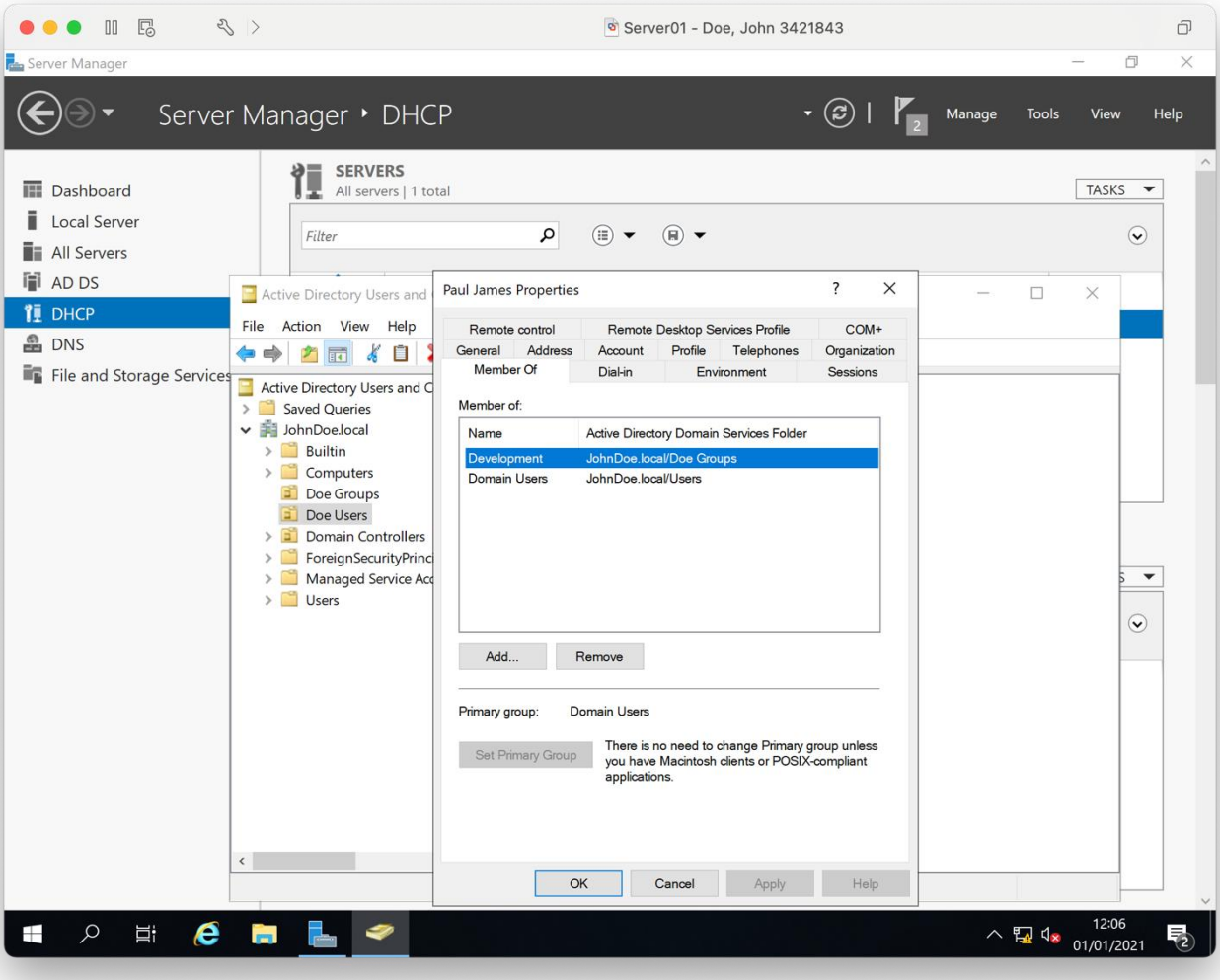
Users -Your first and surname, Paul James, Tamara Jacob and Yousif Sobbah has been created



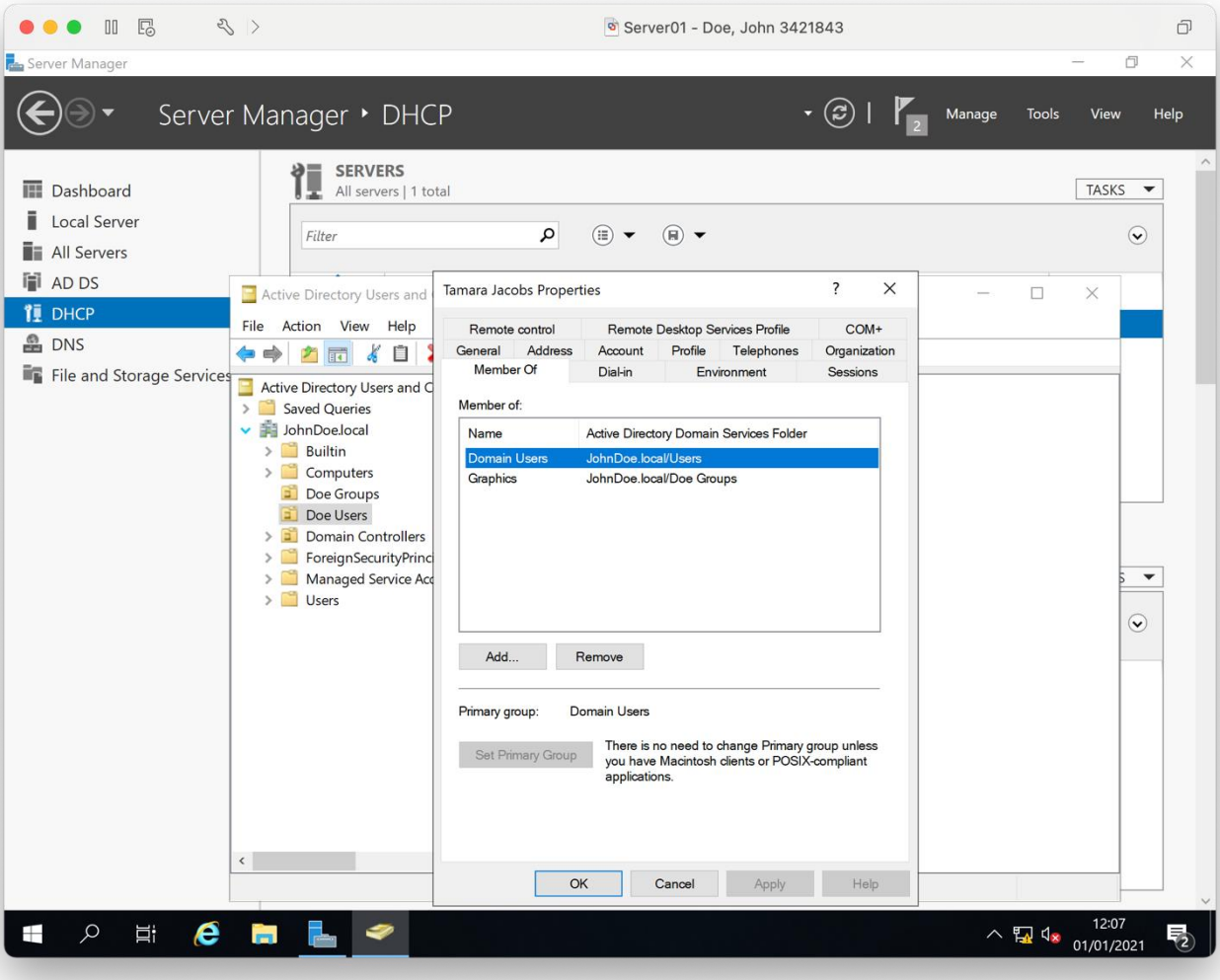
Your first and surname is now a member of the group IT admin



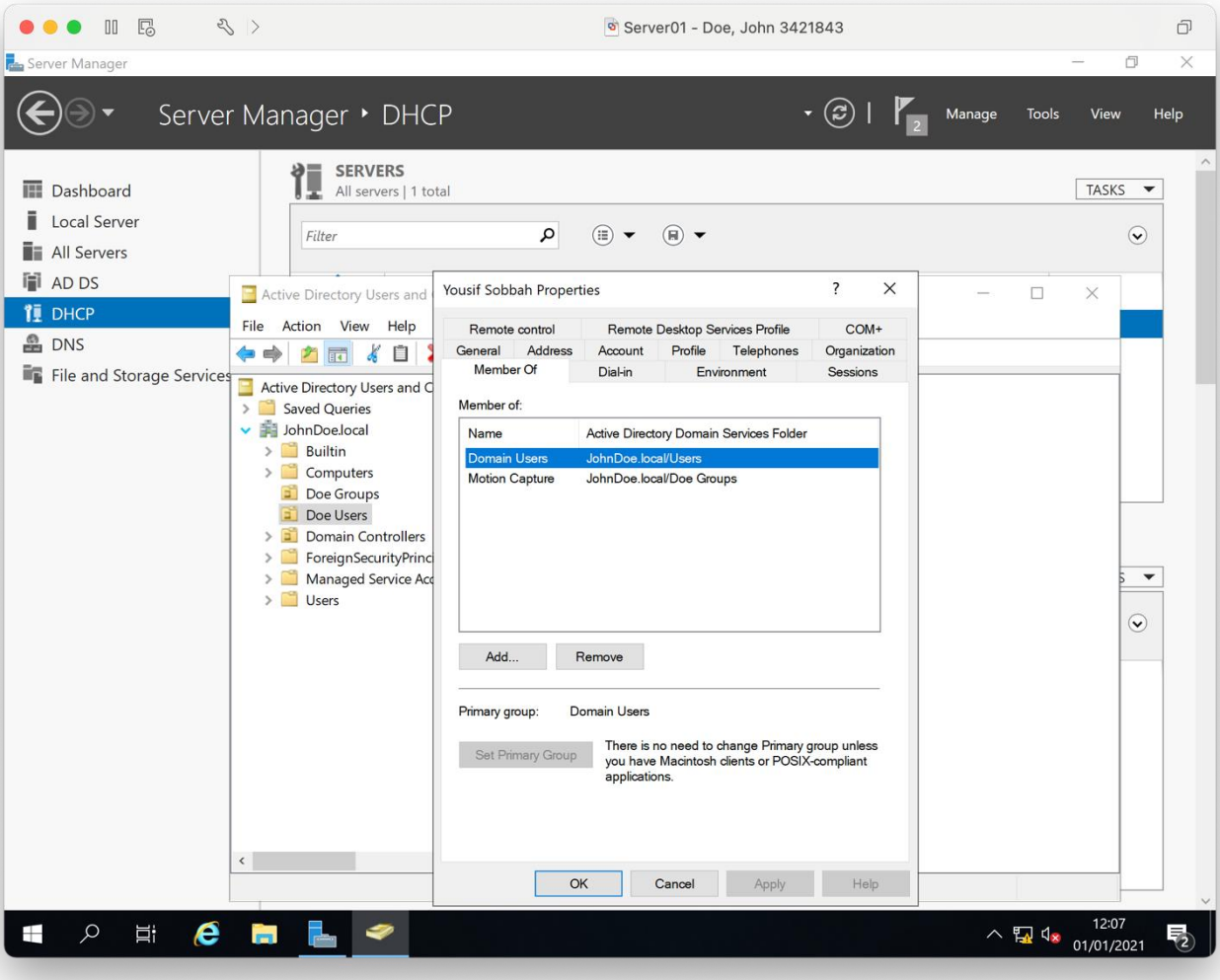
Paul James is now a member of the group Development



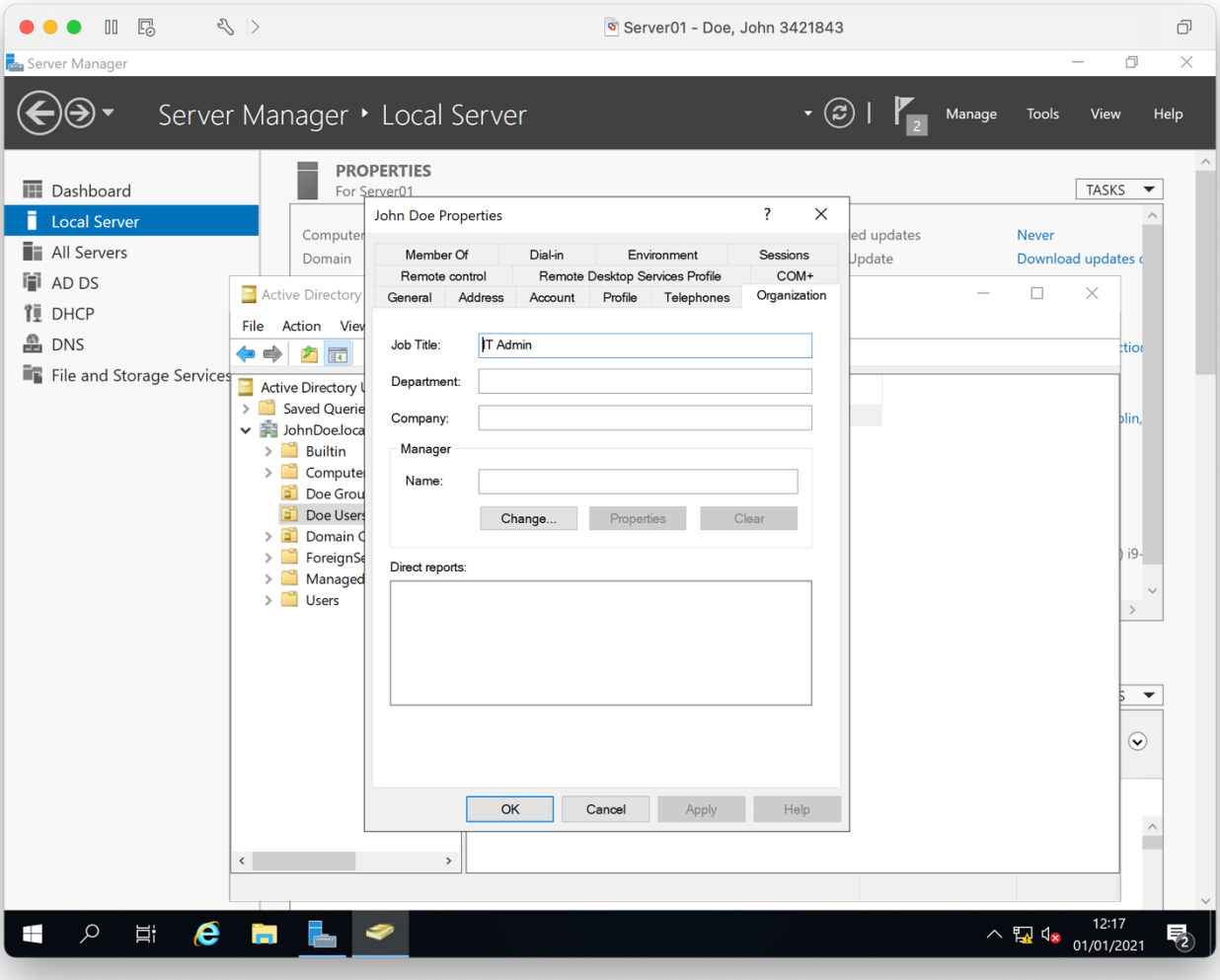
Tamara Jacobs is now a member of the group Graphics



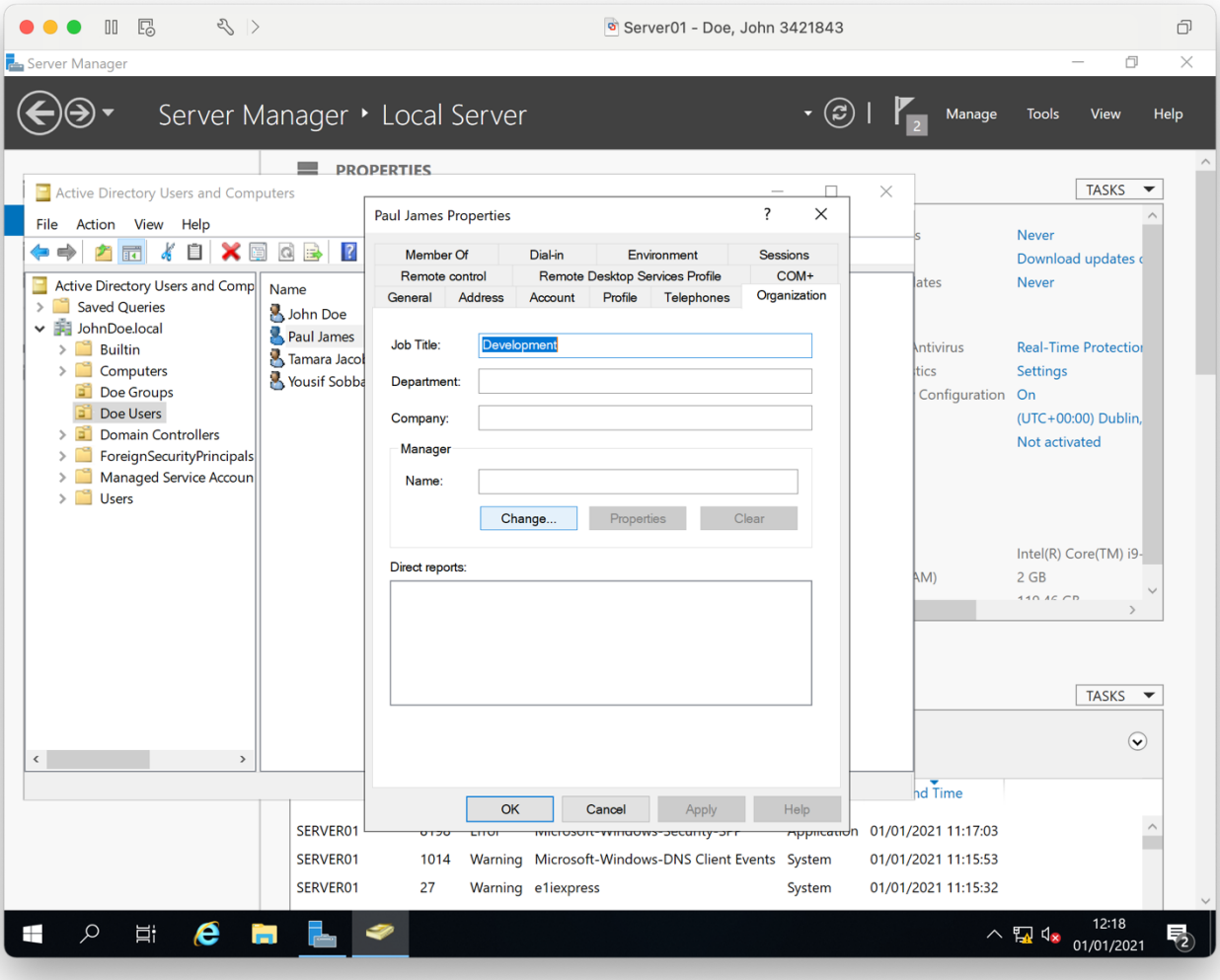
Yousif Sobbah is now a member of the group Motion capture



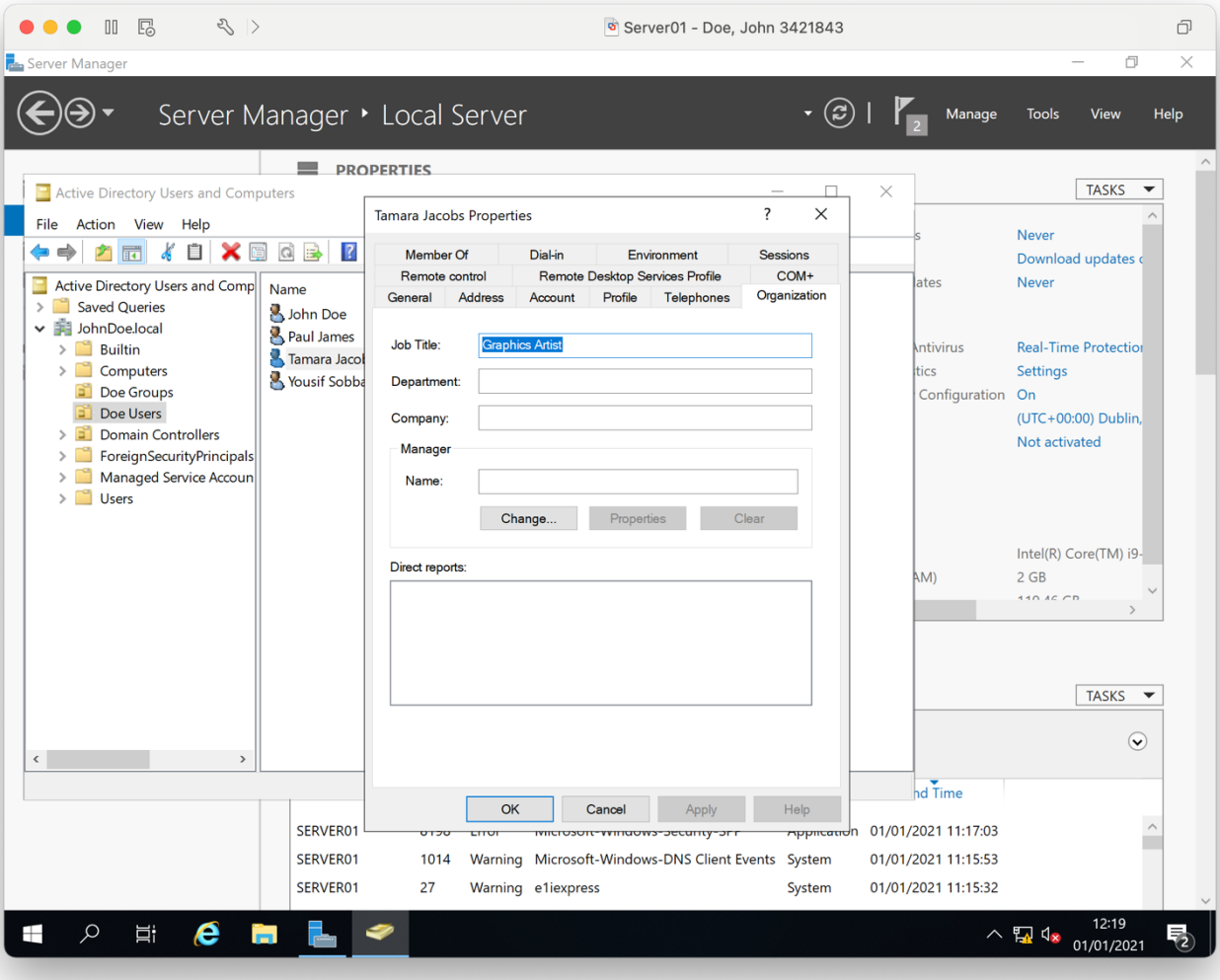
User Your first and surname has the job description of IT admin



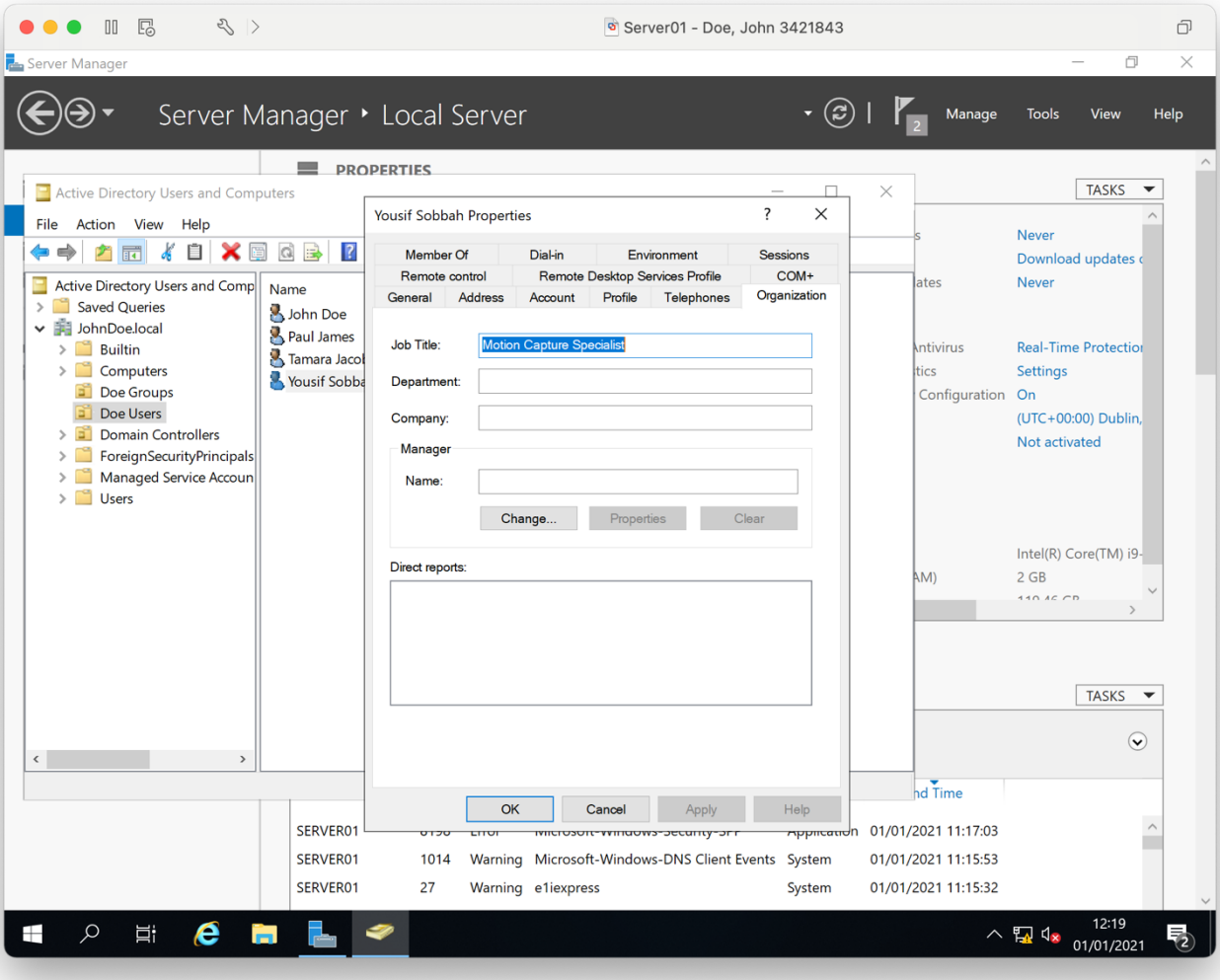
Paul James has the job description of Development



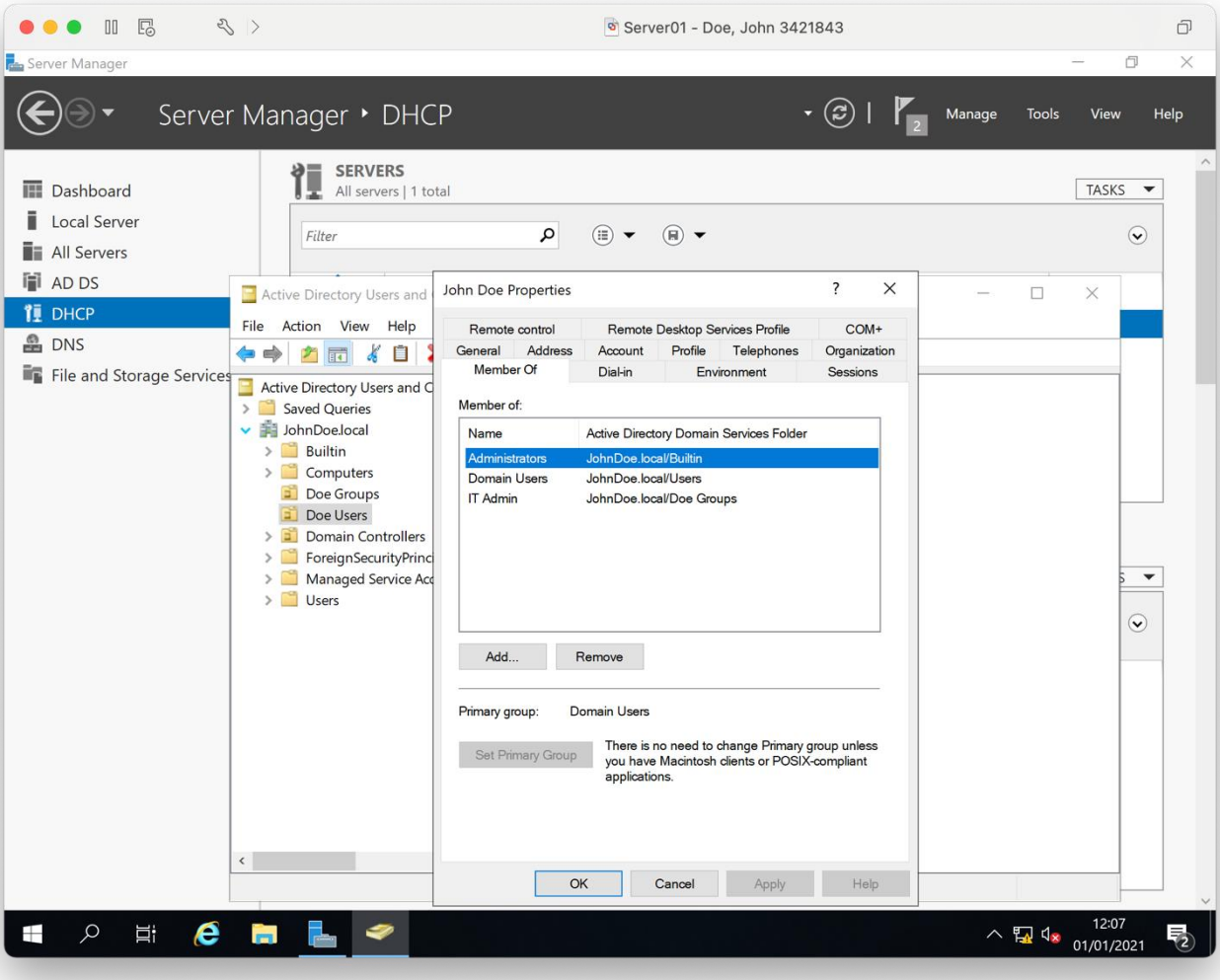
Tamara Jacobs has the job description of Graphics Artist



Yousif Sobbah has the job description of Motion capture specialist

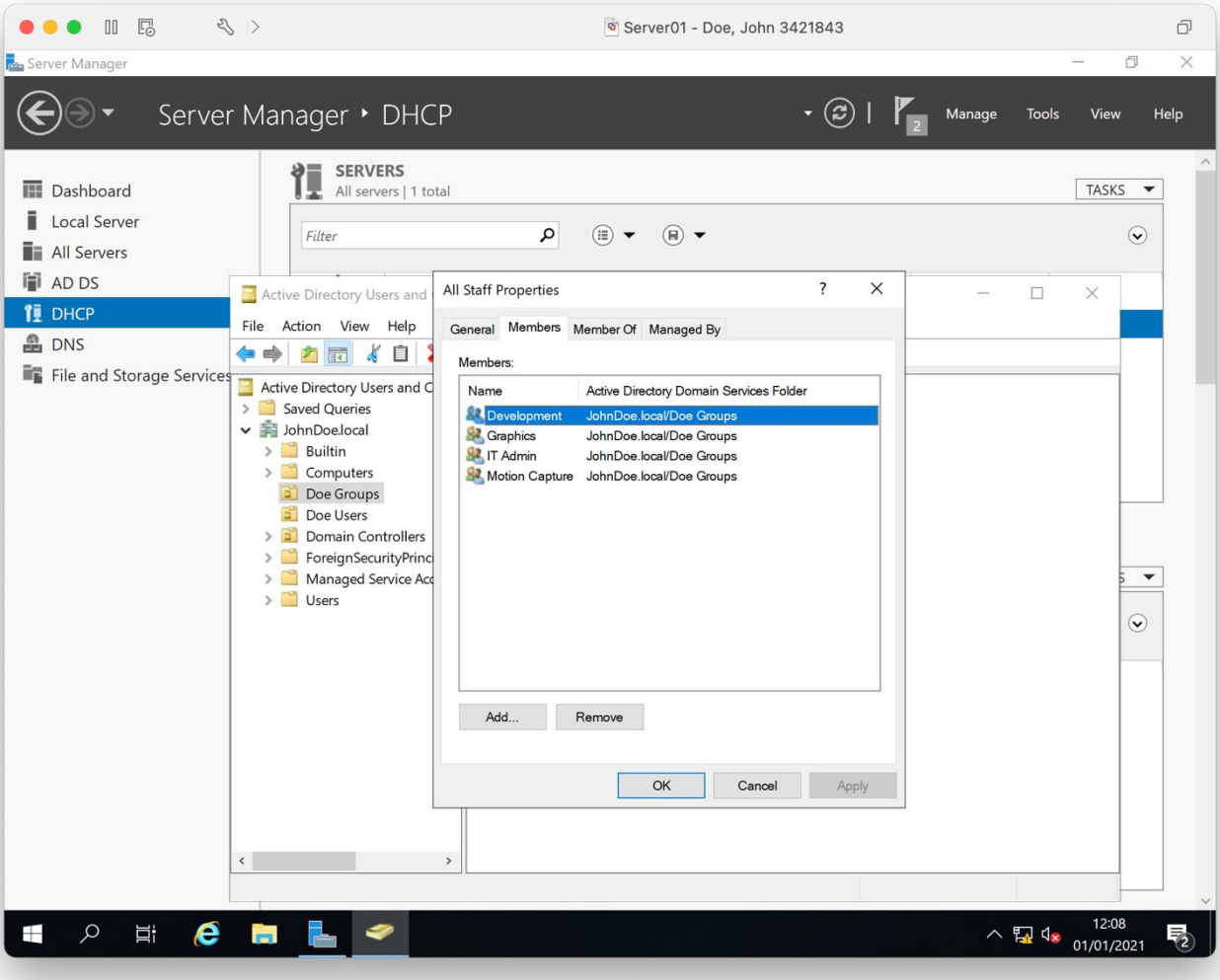


Your first and surname has been made an Administrator



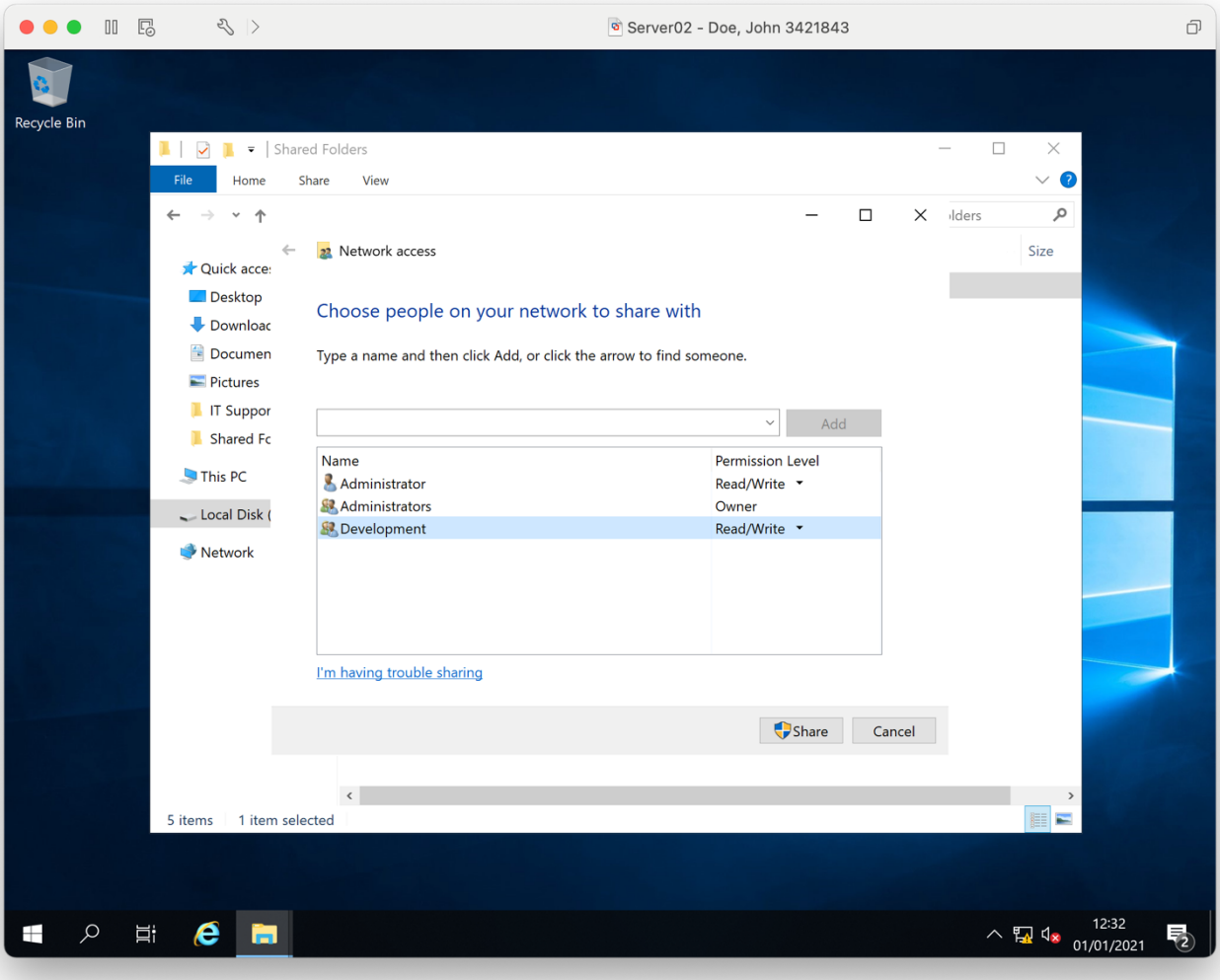
Staff added to groups

The groups developer, graphics, motion capture, IT admin have been added to the All staff group

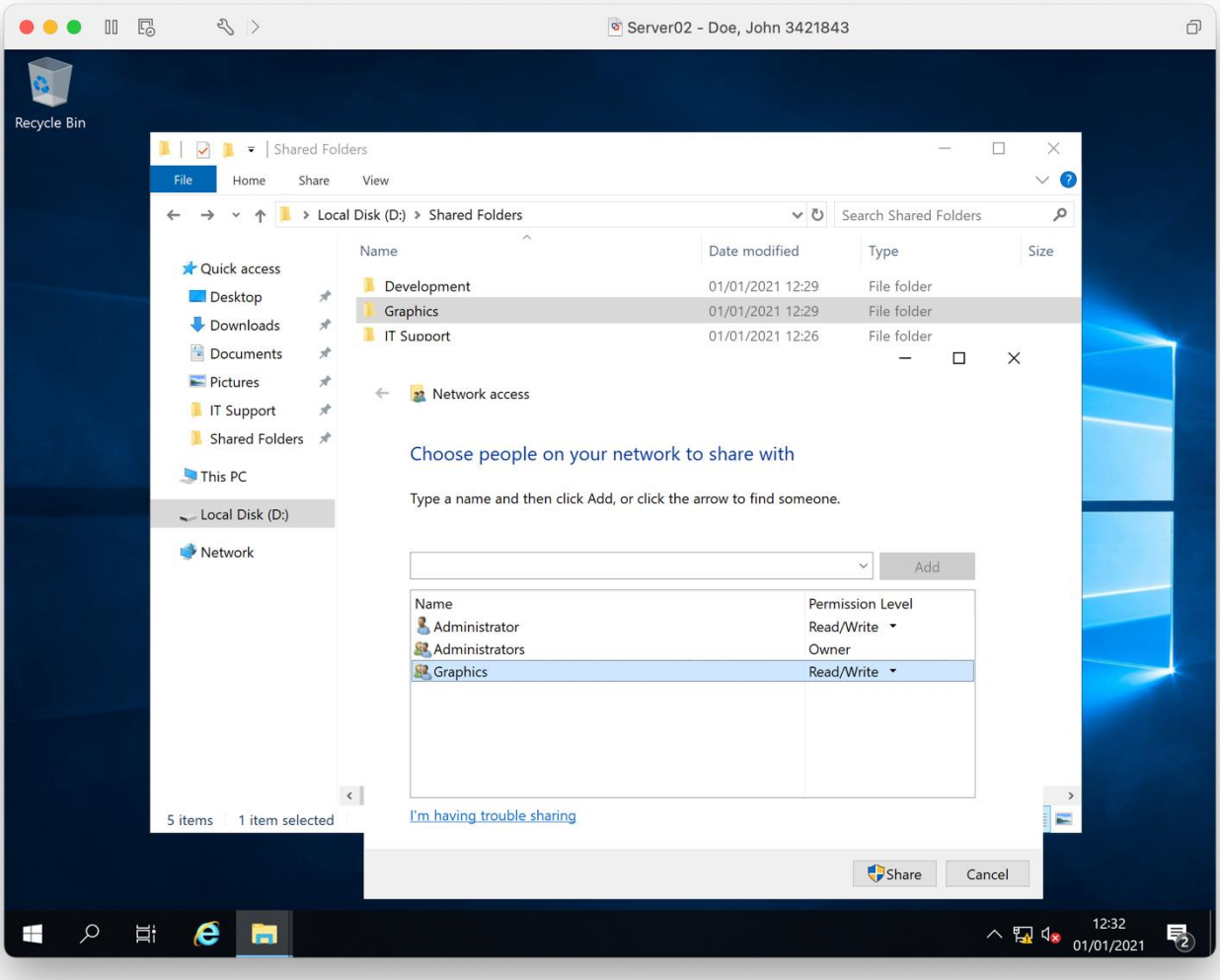


Folder permissions

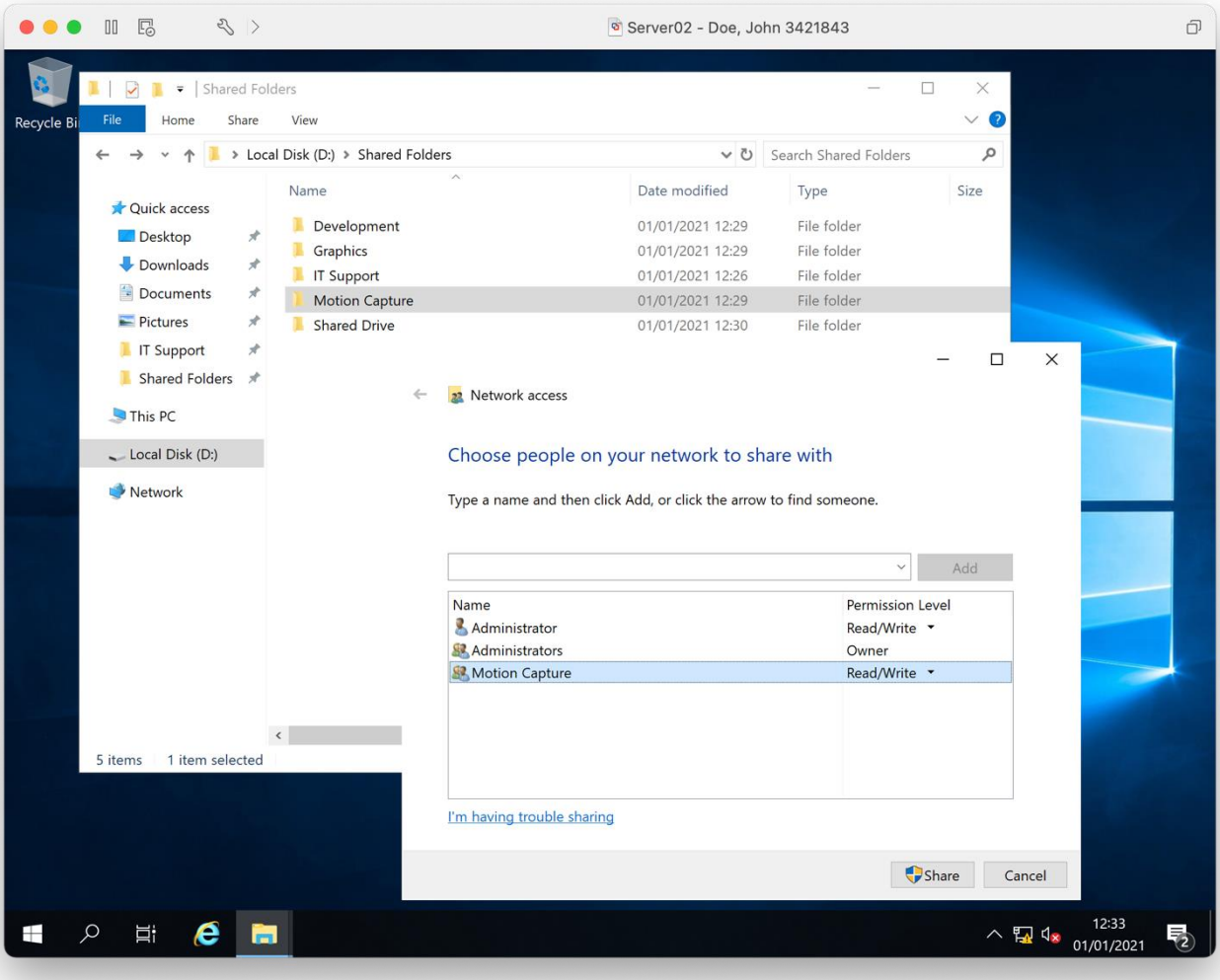
Development folder has the group Development added with Read and write permission



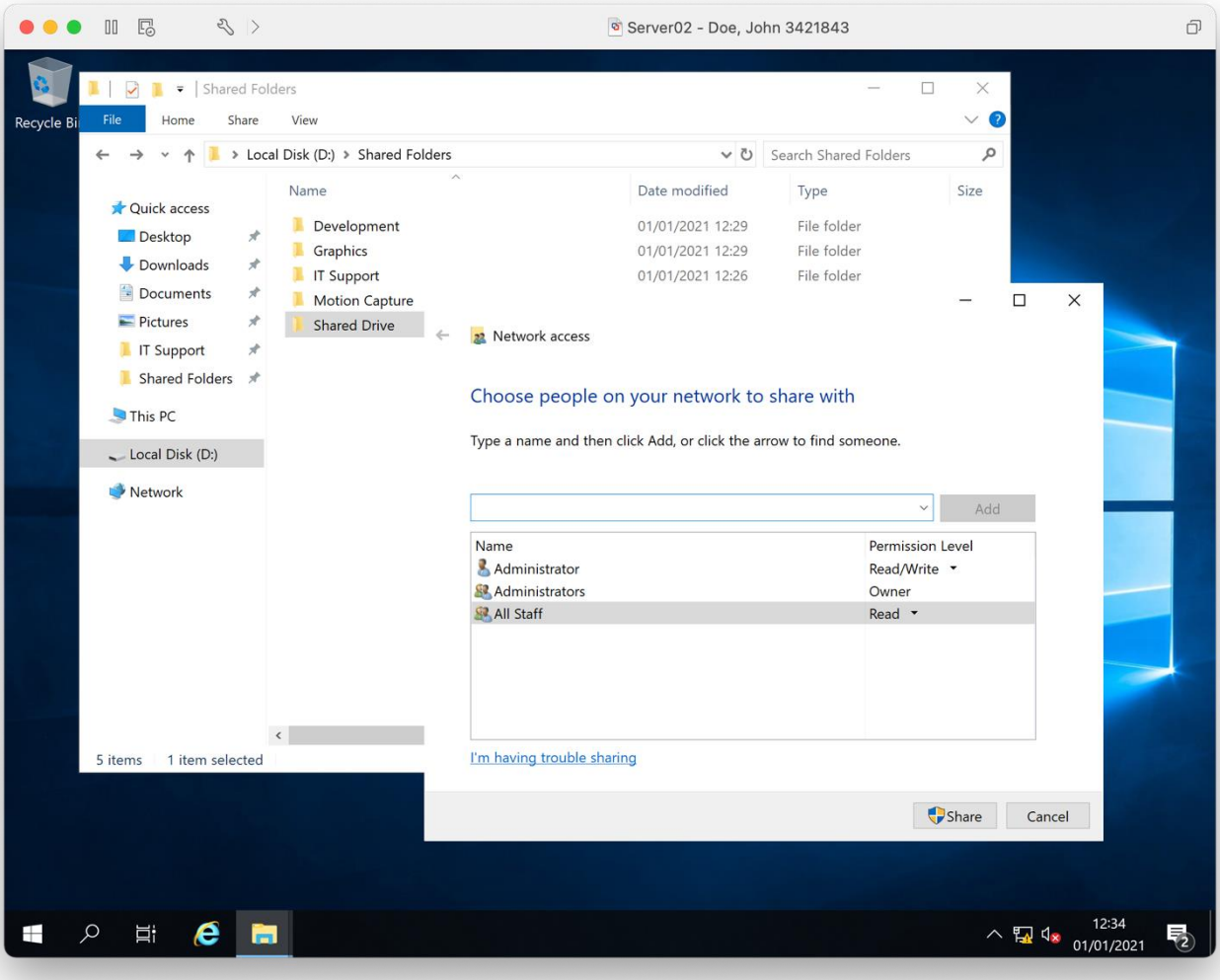
Graphics has the group Graphics added with Read and write permission



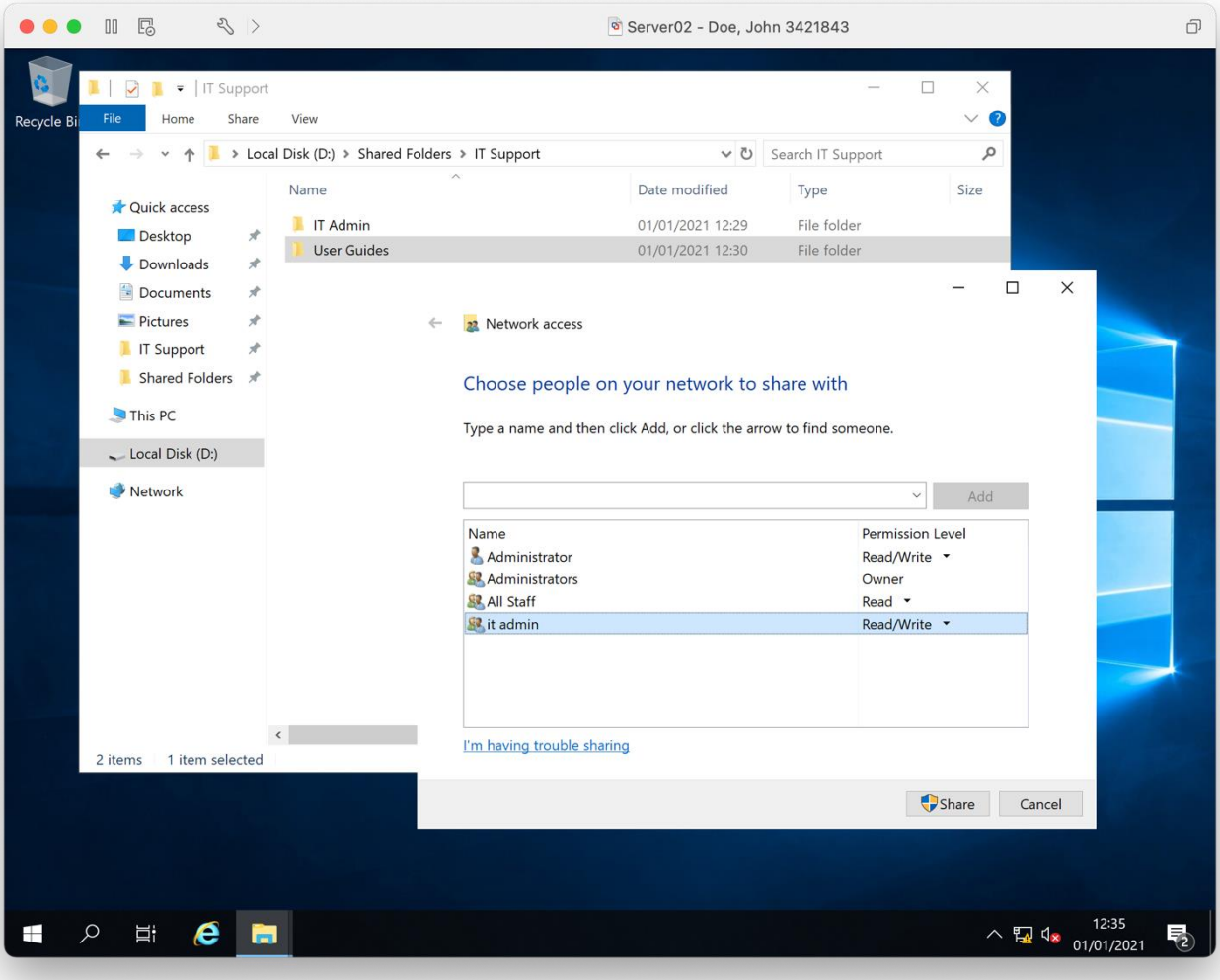
Motion Capture has the group Motion capture added with Read and write permission



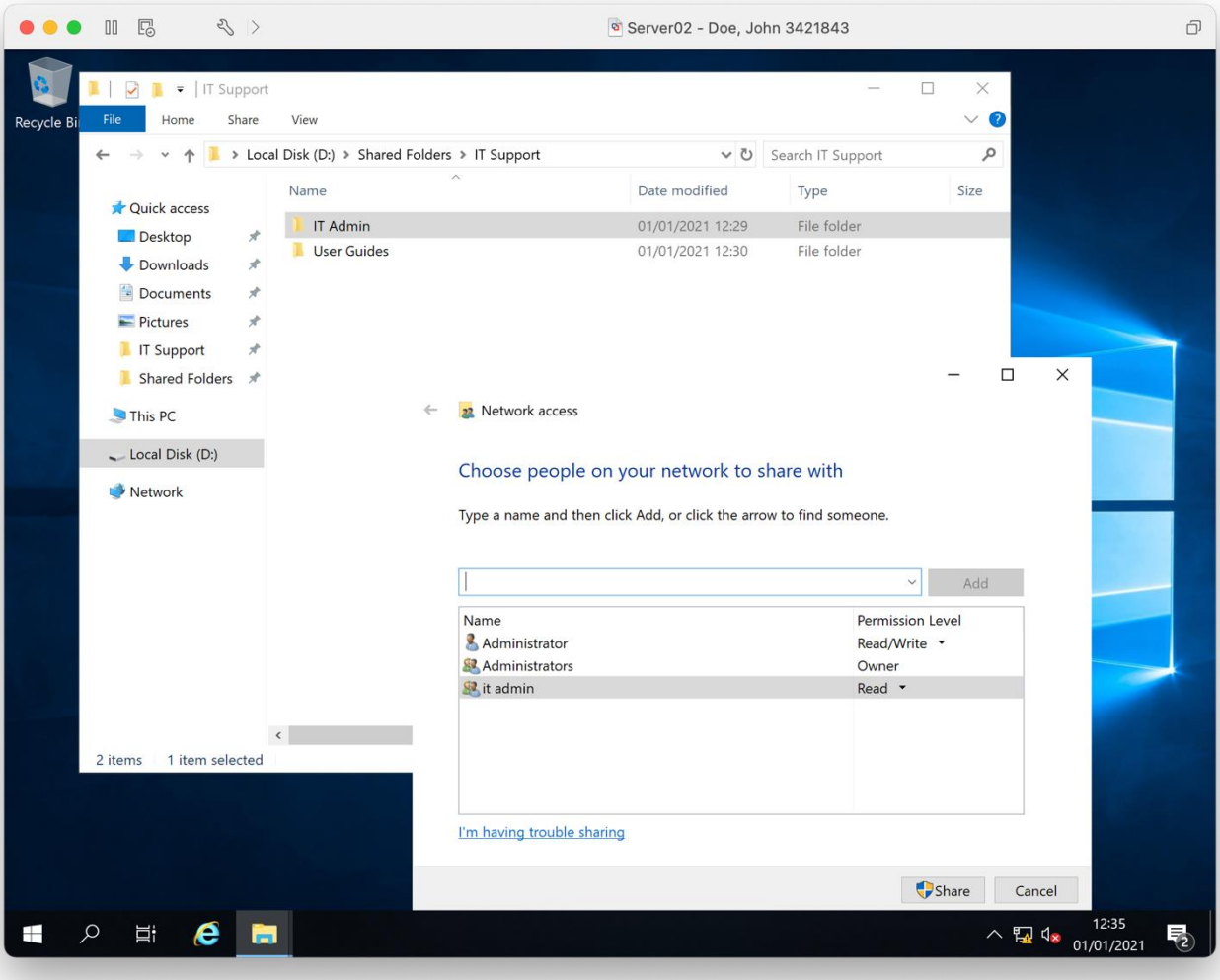
Shared Drive has the group All staff added with Read permission



User Guides has the group All staff added with Read permission and IT admin added with Read and write permission



IT admin has the group IT admin added with Read and write permission



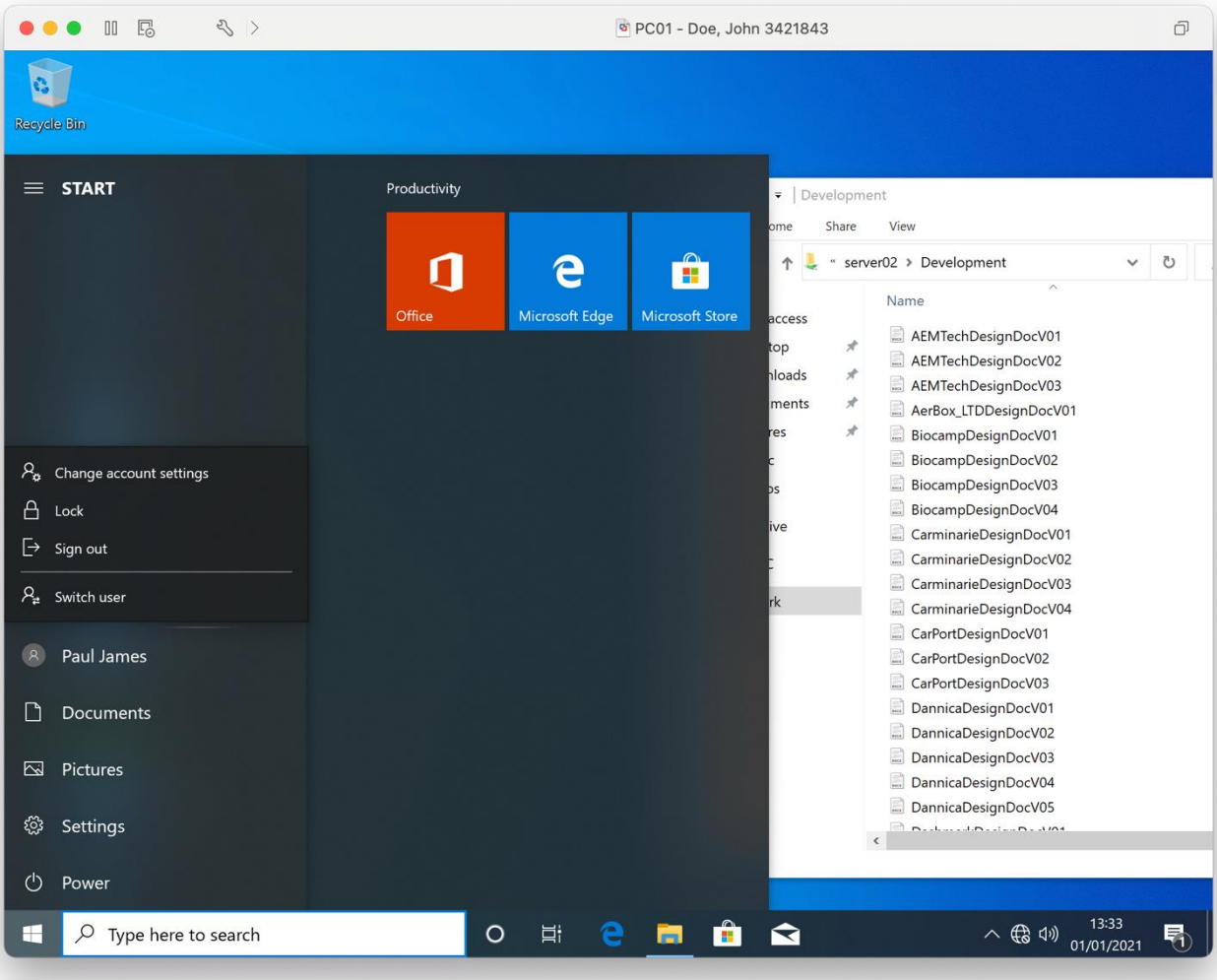
Folder testing

Add more rows to the table as required

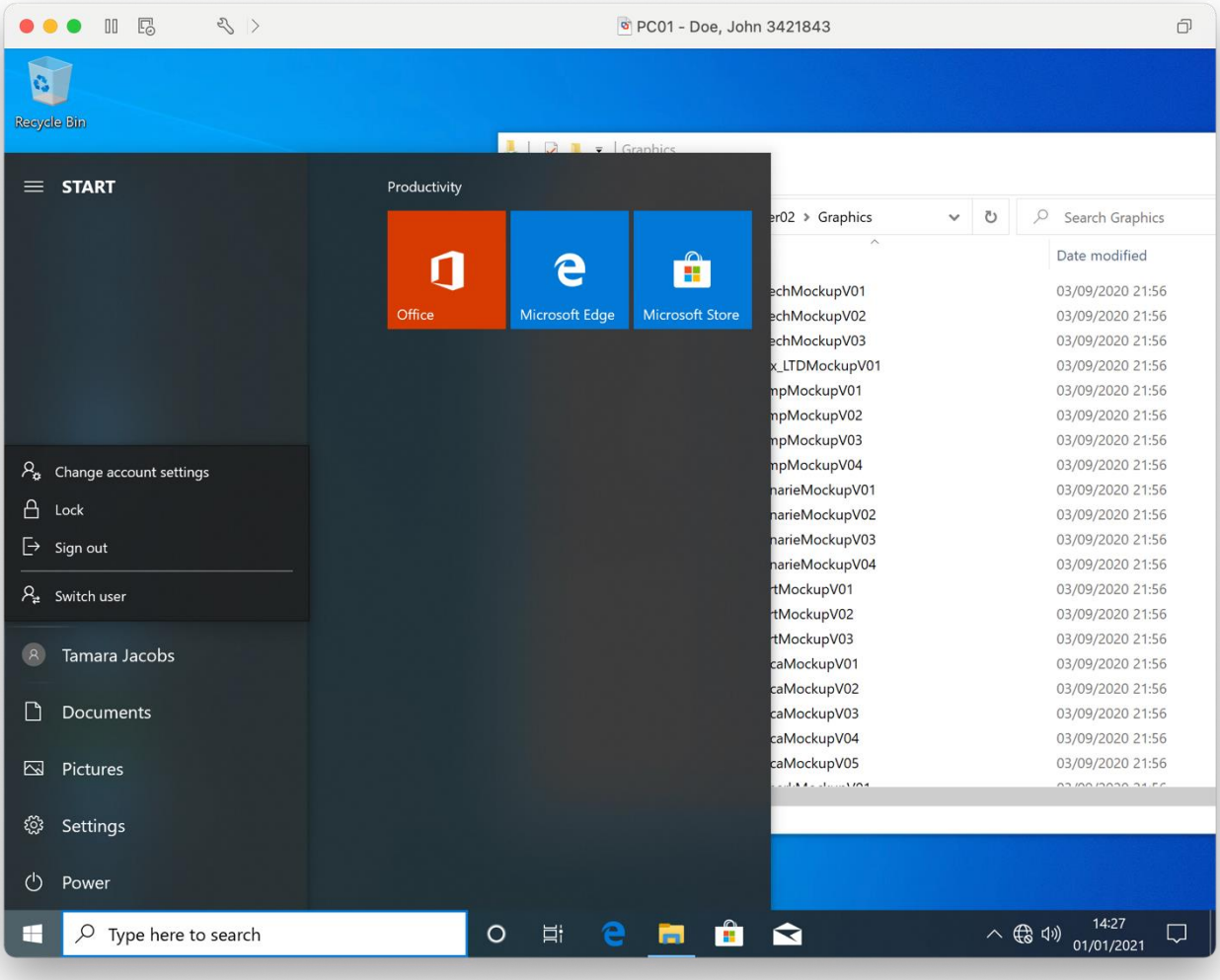
Test ID	**Folder being tested**	**User account** (Test data)	**Test description and expected outcome**	**Actual outcome**
1	Development	Paul James	Testing that a valid member of the Development group as Read access	The user was able to read files stored in the folder
2	Graphics	Tamara Jacobs	Testing that a valid member of the Graphics group as Read access	The user was able to read files stored in the folder
3	Motion Capture	Yousif Sobbah	Testing that a valid member of the Motion capture group as Read access	The user was able to read files stored in the folder
4	Shared Drive	Tamara Jacobs	Testing that a valid member of the All staff group as Read access	The user was able to read files stored in the folder
5	User Guides	Tamara Jacobs	Testing that a valid member of the All staff group as Read access	The user was able to read files stored in the folder
6	User Guides	Your first and Surname	Testing that a valid member of the IT admin group as Read access	The user was able to read files stored in the folder
7	IT admin	Your first and Surname	Testing that a valid member of the IT admin group as Read access	The user was able to read files stored in the folder
8	Development	Paul James	Testing that a valid member of the Development group has Read and write access	The user was able to write to files stored in the folder

9	Graphics	Tamara Jacobs	Testing that a valid member of the Graphics has Read and write access	The user was able to write to files stored in the folder
10	Motion Capture	Yousif Sobbah	Testing that a valid member of the Motion capture group as Read and write access	The user was able to write to files stored in the folder
11	User Guides	Your first and Surname	Testing that a valid member of the IT admin group as Read and write access	The user was able to write to files stored in the folder
12	IT admin	Your first and Surname	Testing that a valid member of the IT admin group as Read and write access	The user was able to write to files stored in the folder
13	Development	Tamara Jacobs	Testing to see if an invalid user has Read access	The user was unable to write to files stored in the folder
14	Graphics	Yousif Sobbah	Testing to see if an invalid user has Read access	The user was unable to read files stored in the folder
15	Motion Capture	Paul James	Testing to see if an invalid user has Read access	The user was unable to read files stored in the folder
16	User Guides	Tamara Jacobs	Testing to see if an invalid user has Read access	The user was unable to read files stored in the folder
17	IT admin	Tamara Jacobs	Testing to see if an invalid user has Read access	The user was unable to read files stored in the folder

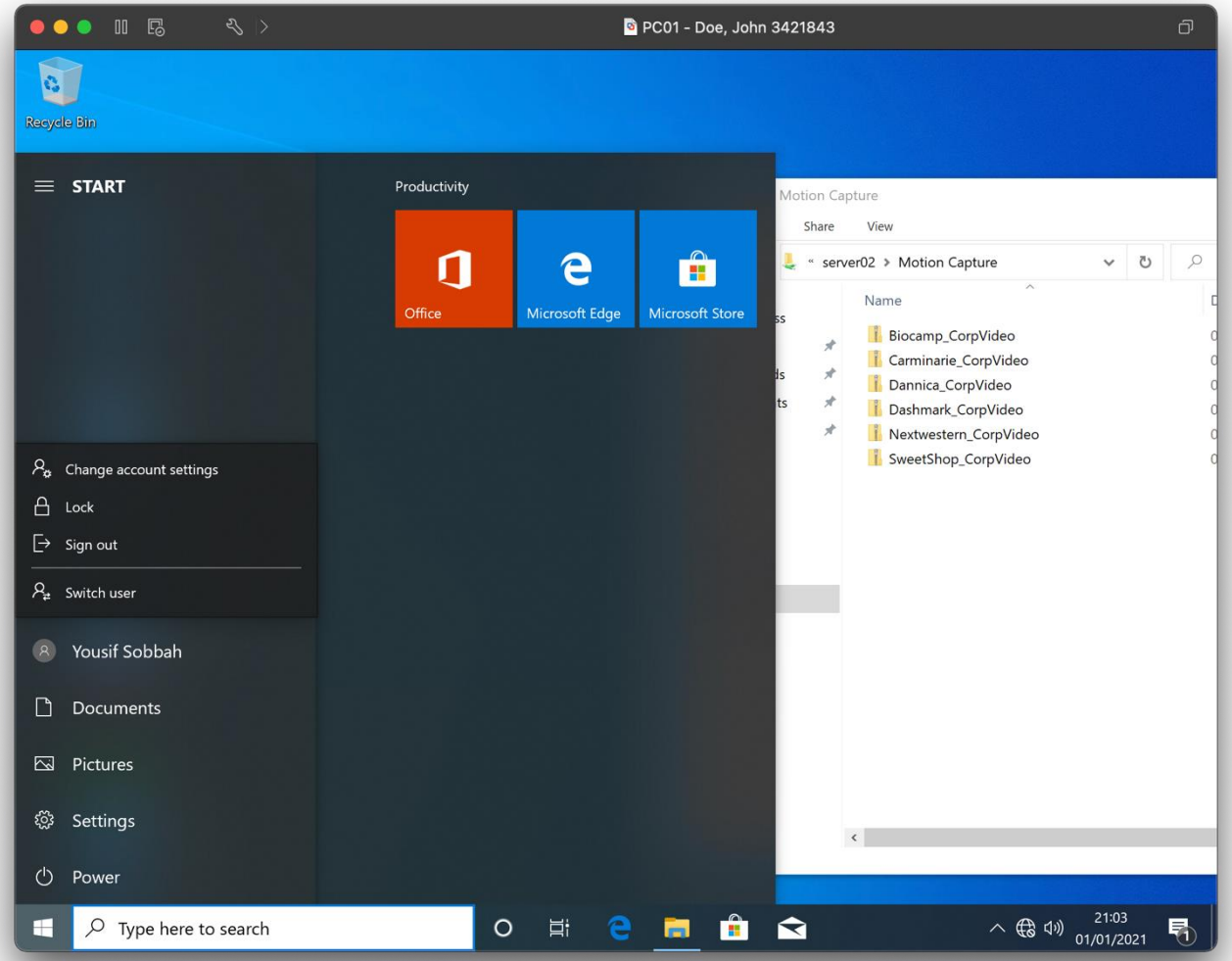
Print screen showing the result of test number 1, showing the folder opens correctly



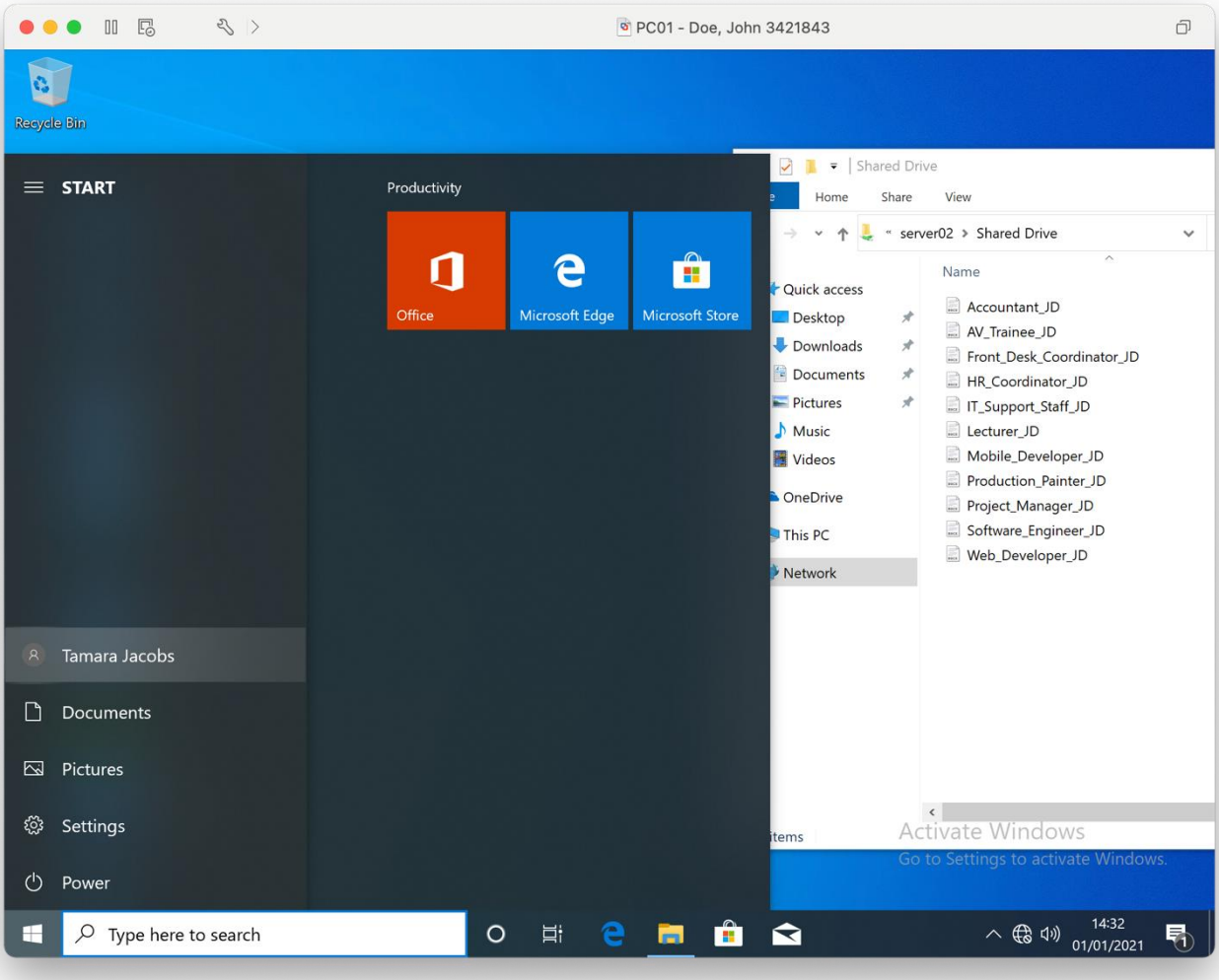
Print screen showing the result of test number 2, showing the folder opens correctly



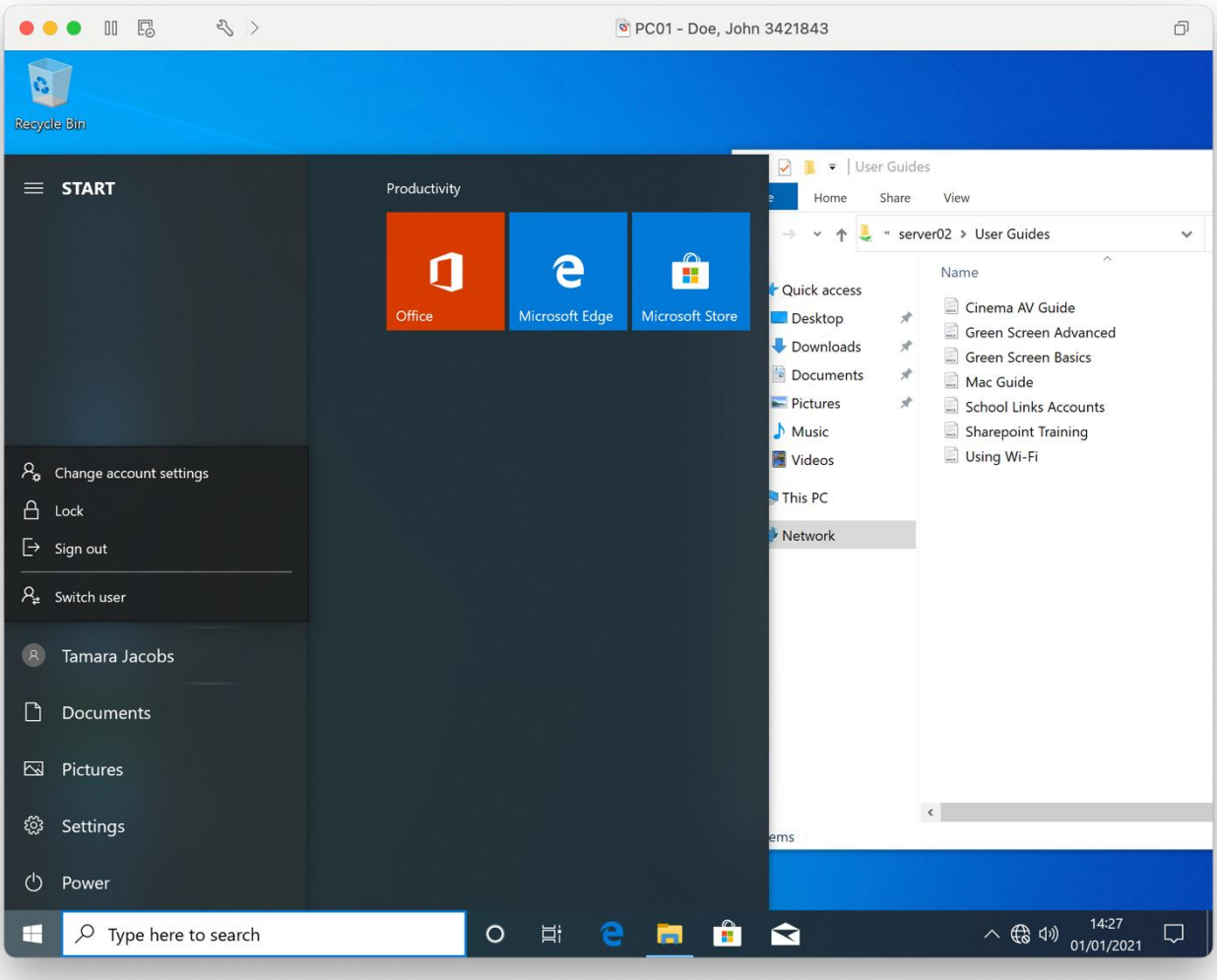
Print screen showing the result of test number 3, showing the folder opens correctly



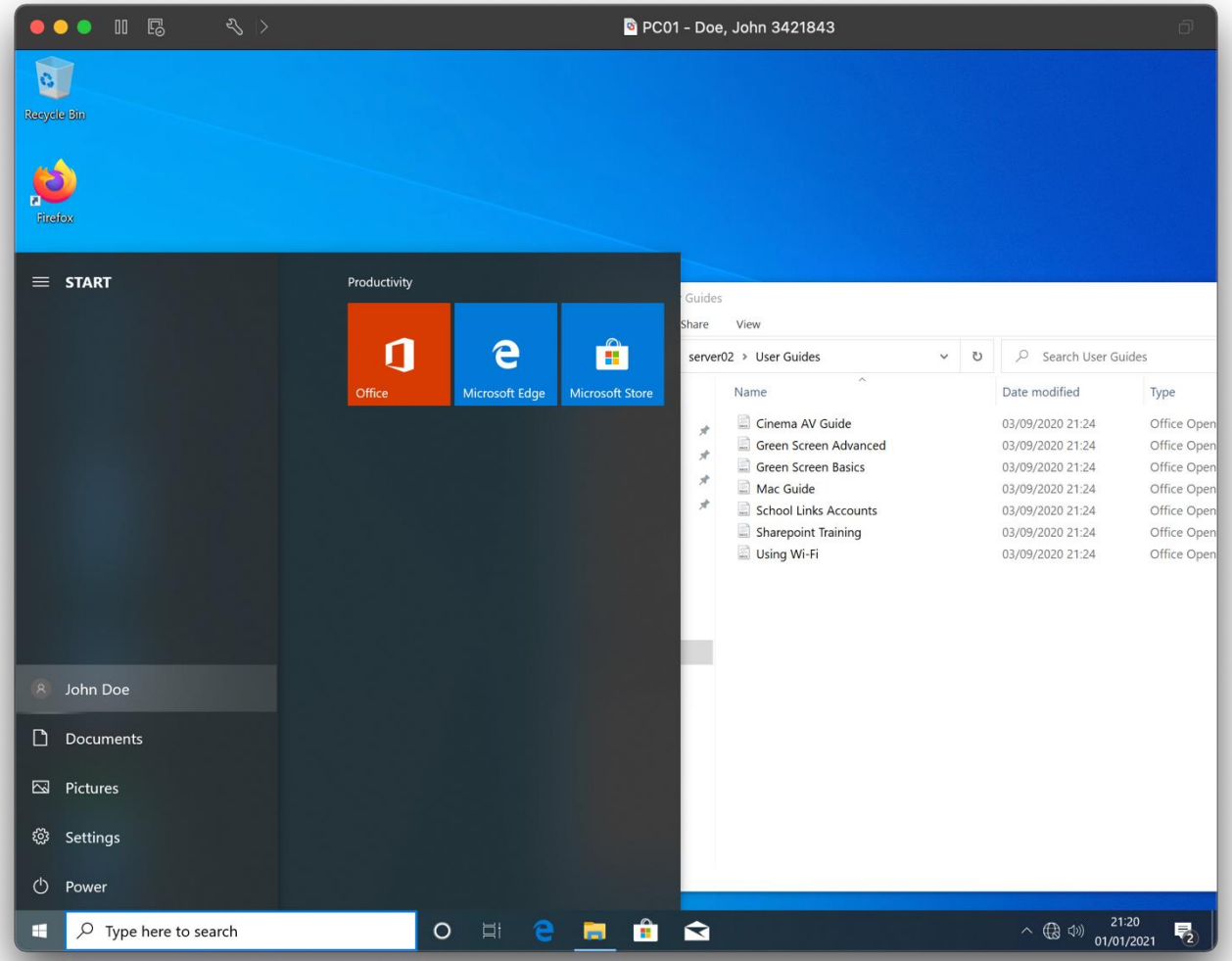
Print screen showing the result of test number 4, showing the folder opens correctly



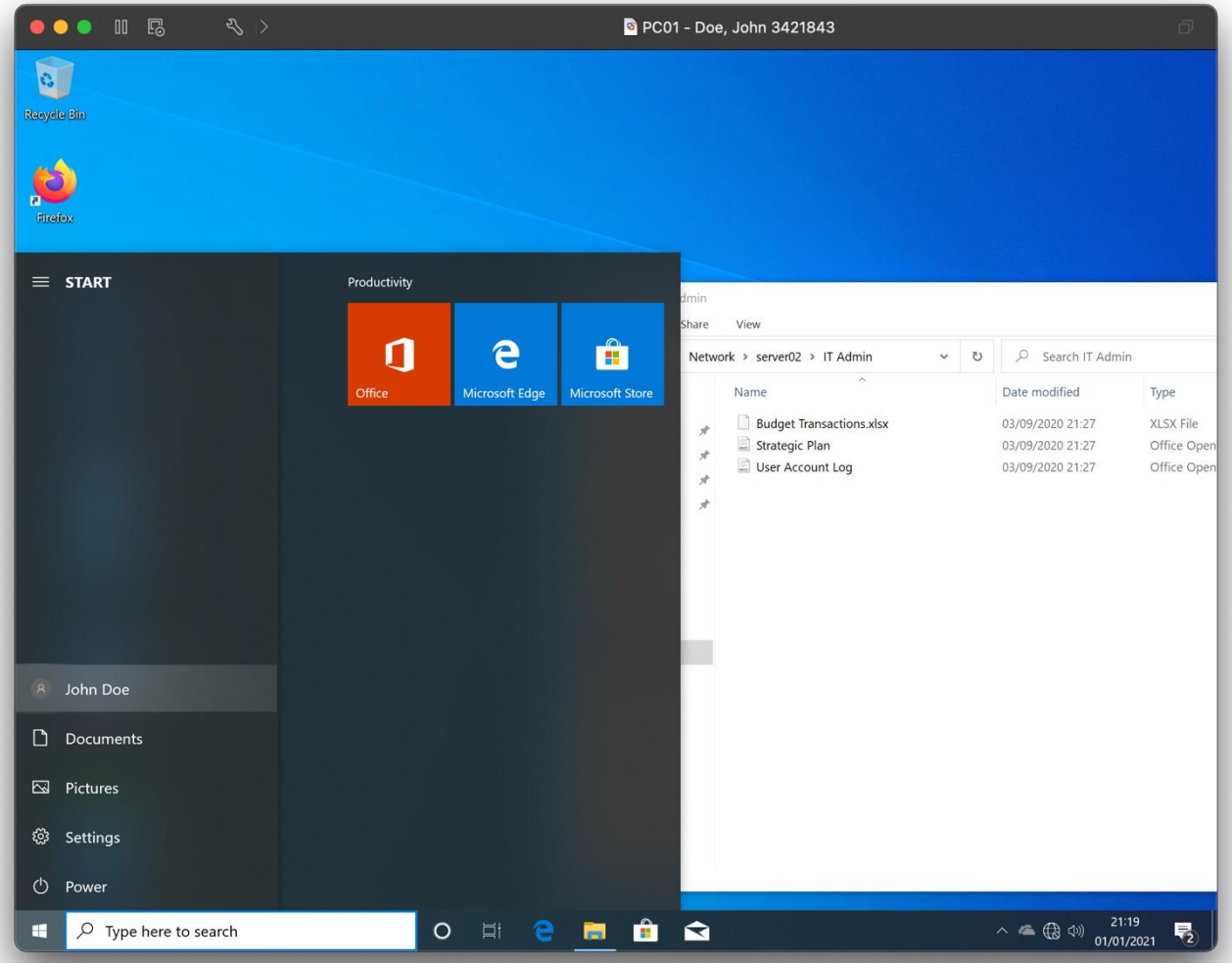
Print screen showing the result of test number 5, showing the folder opens correctly



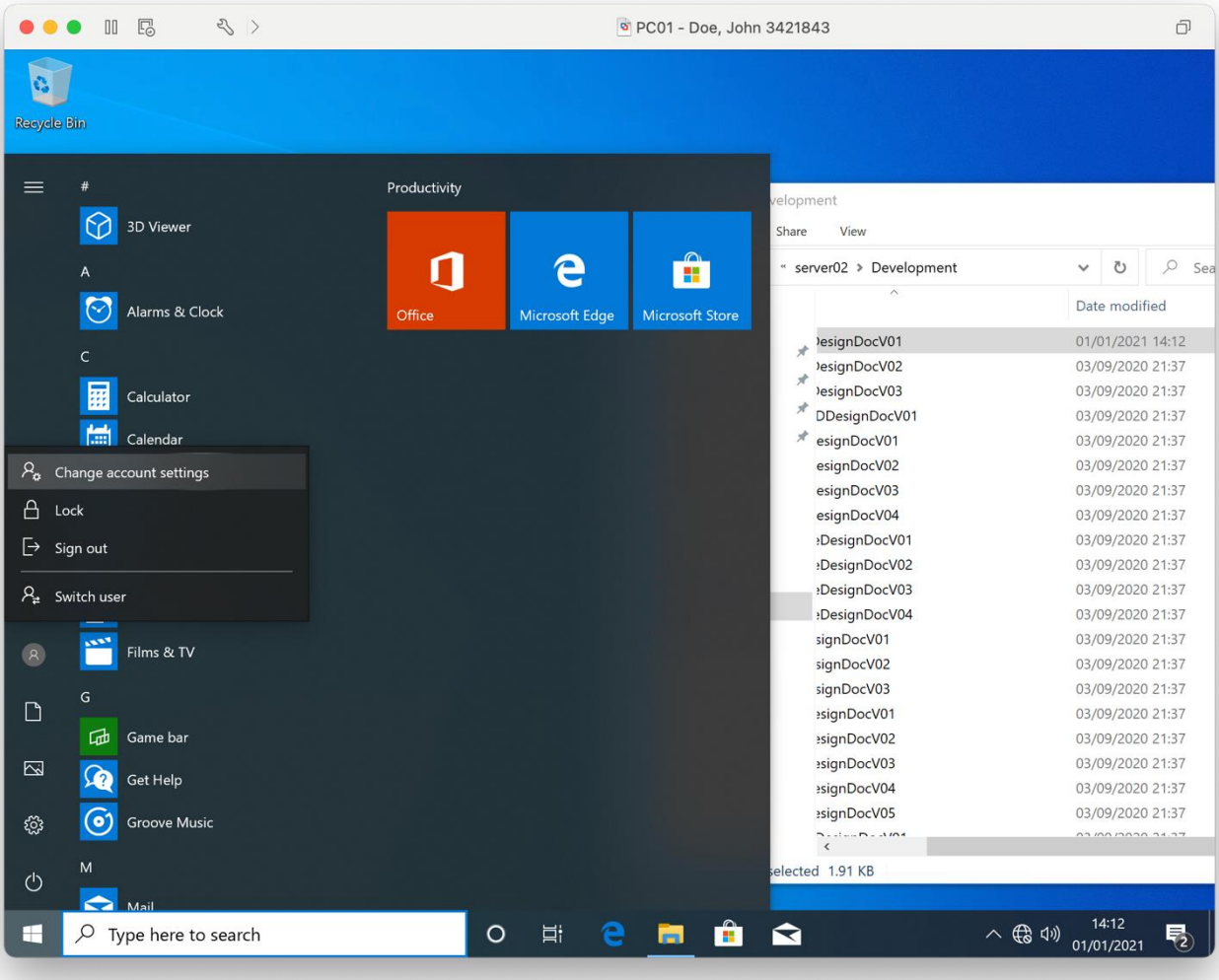
Print screen showing the result of test number 6, showing the folder opens correctly



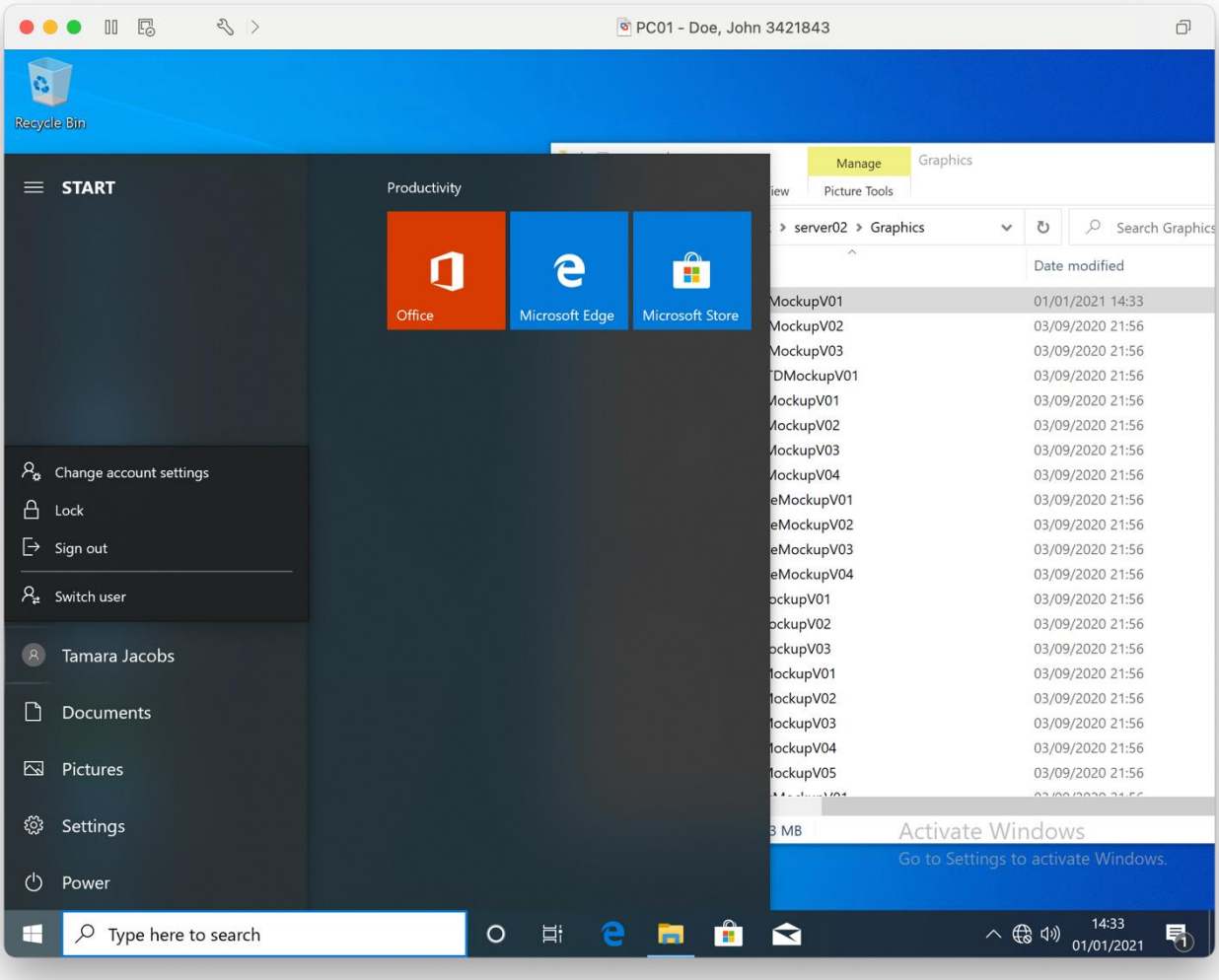
Print screen showing the result of test number 7, showing the folder opens correctly



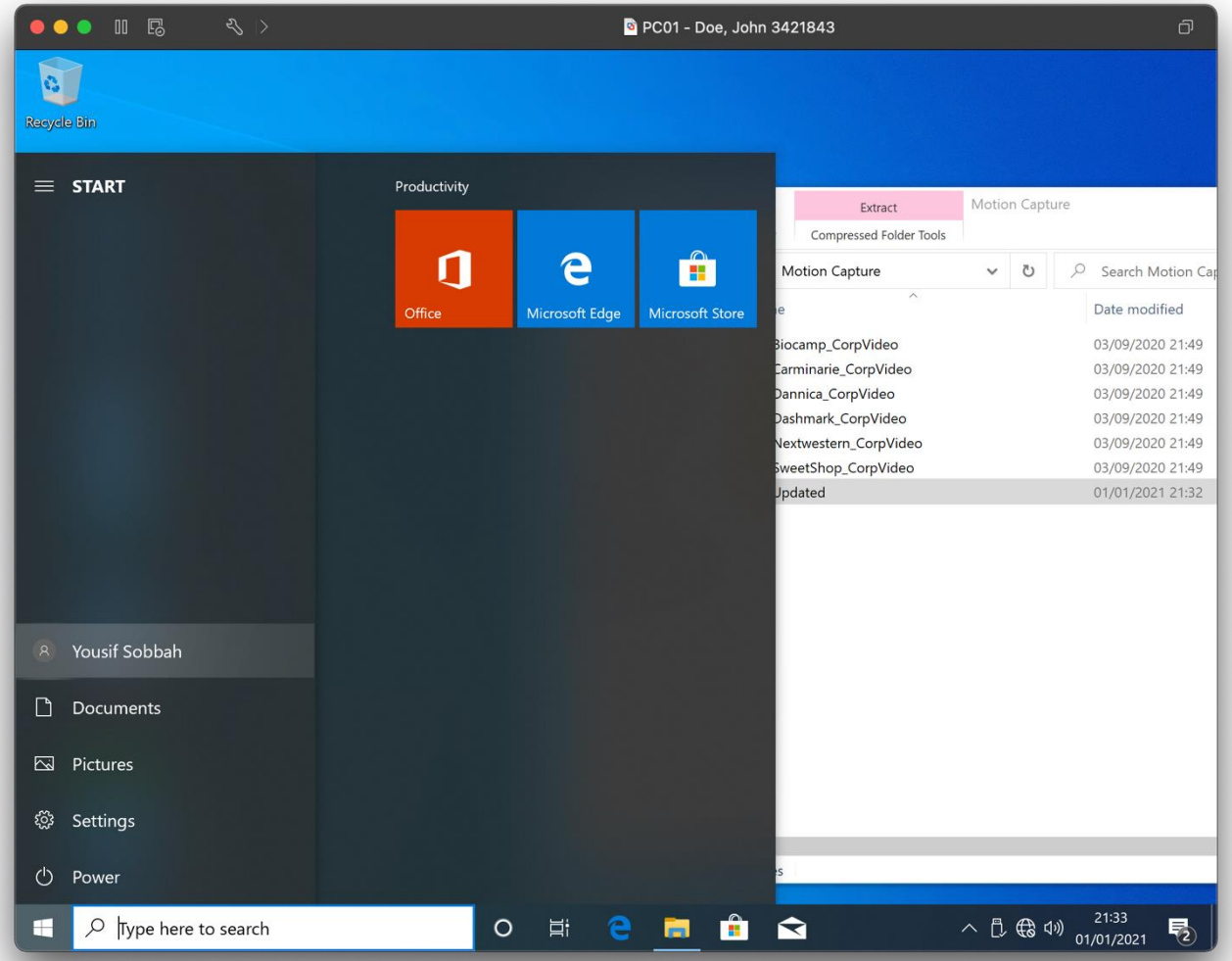
Print screen showing the result of test number 8, showing the file has been opened and saved back correctly



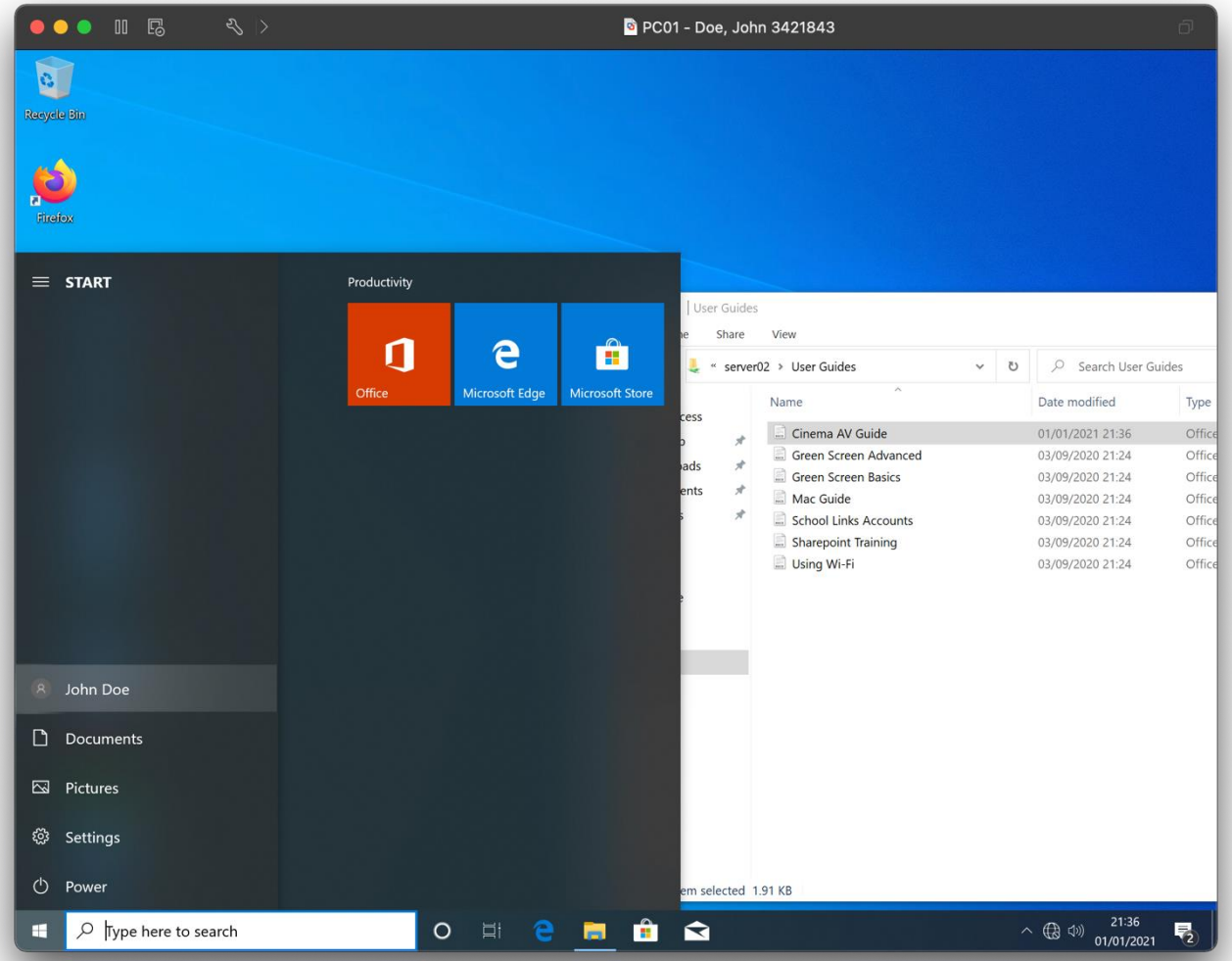
Print screen showing the result of test number 9, showing the file has been opened and saved back correctly



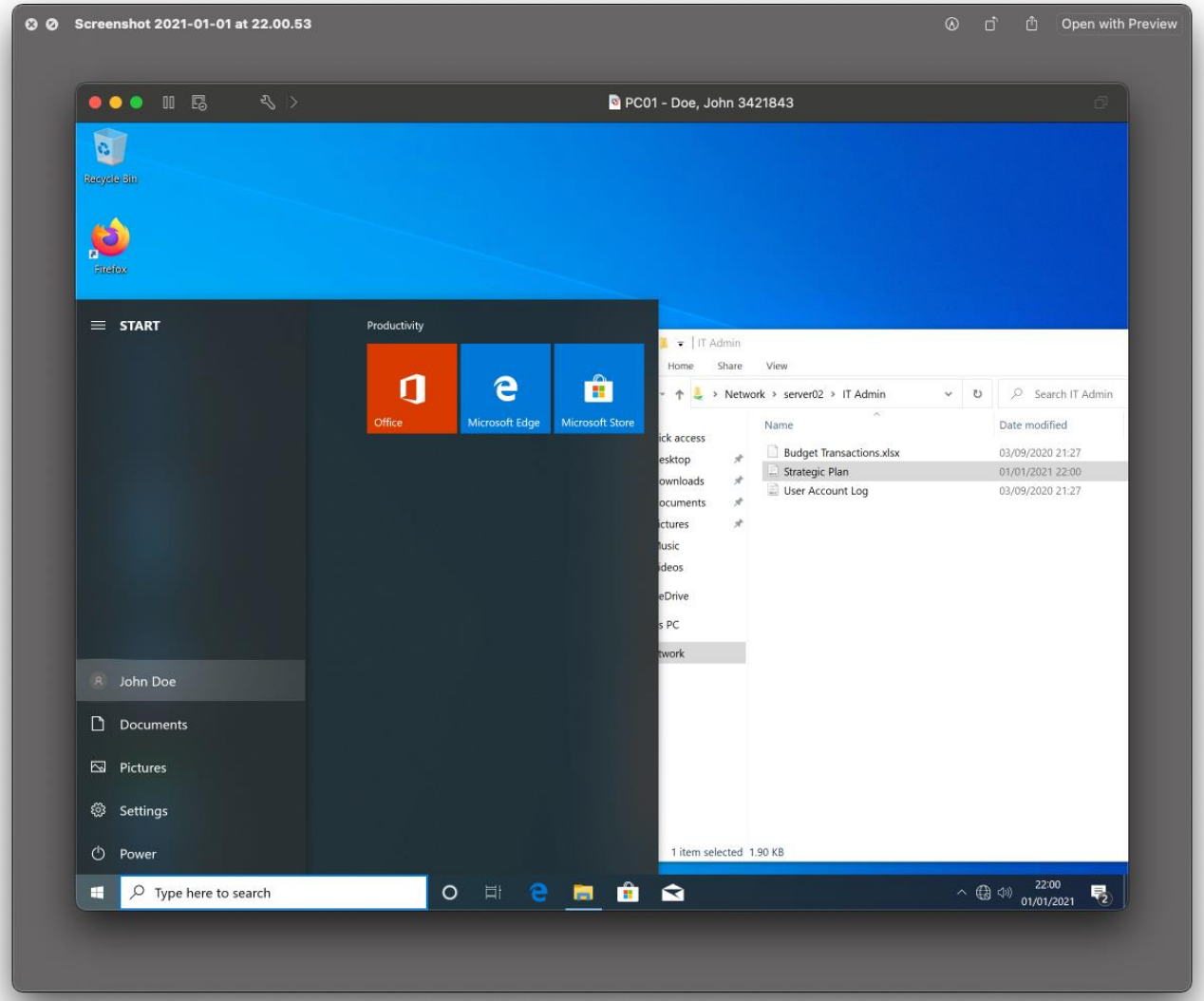
Print screen showing the result of test number 10, showing the file has been opened and saved back correctly

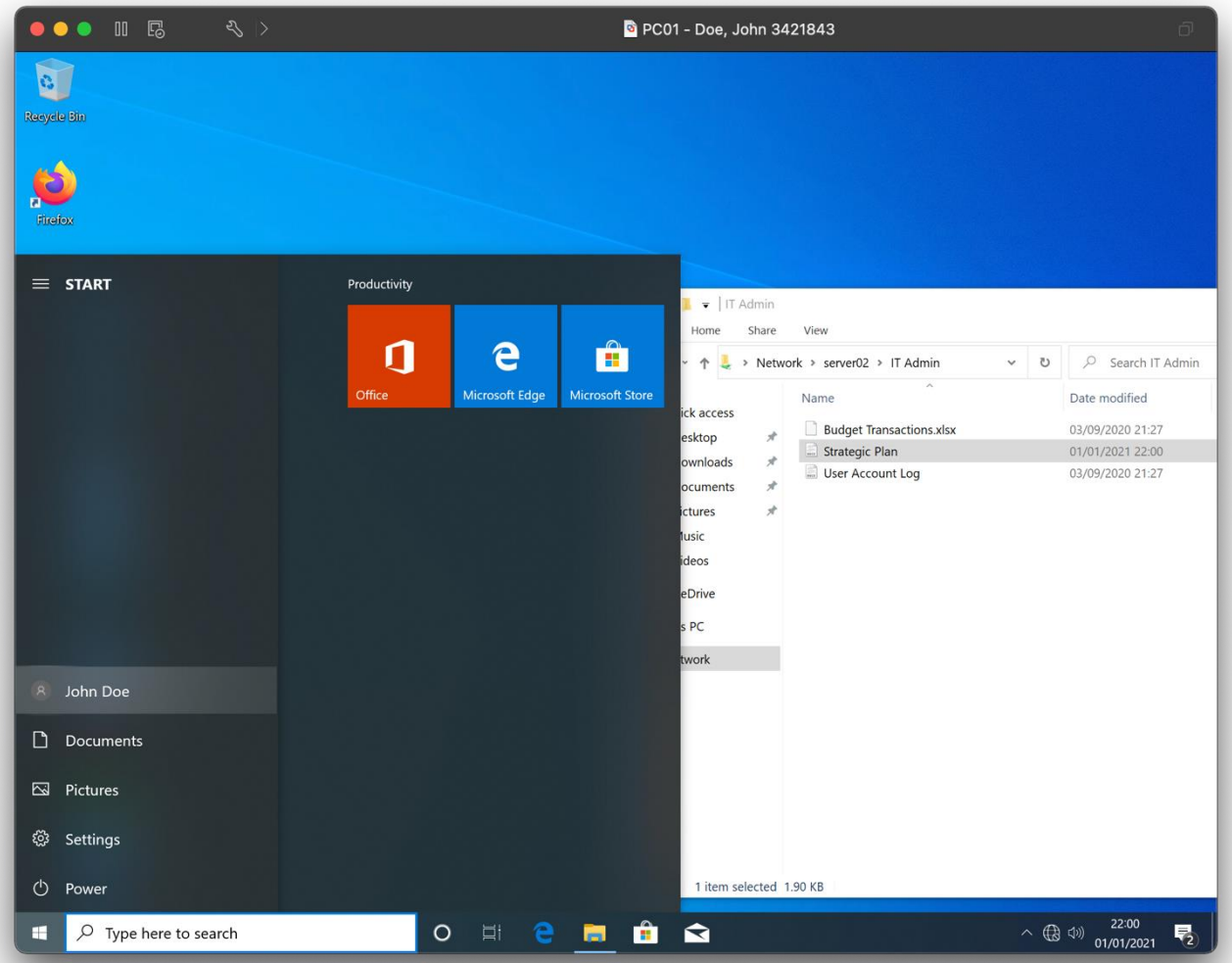


Print screen showing the result of test number 11, showing the file has been opened and saved back correctly

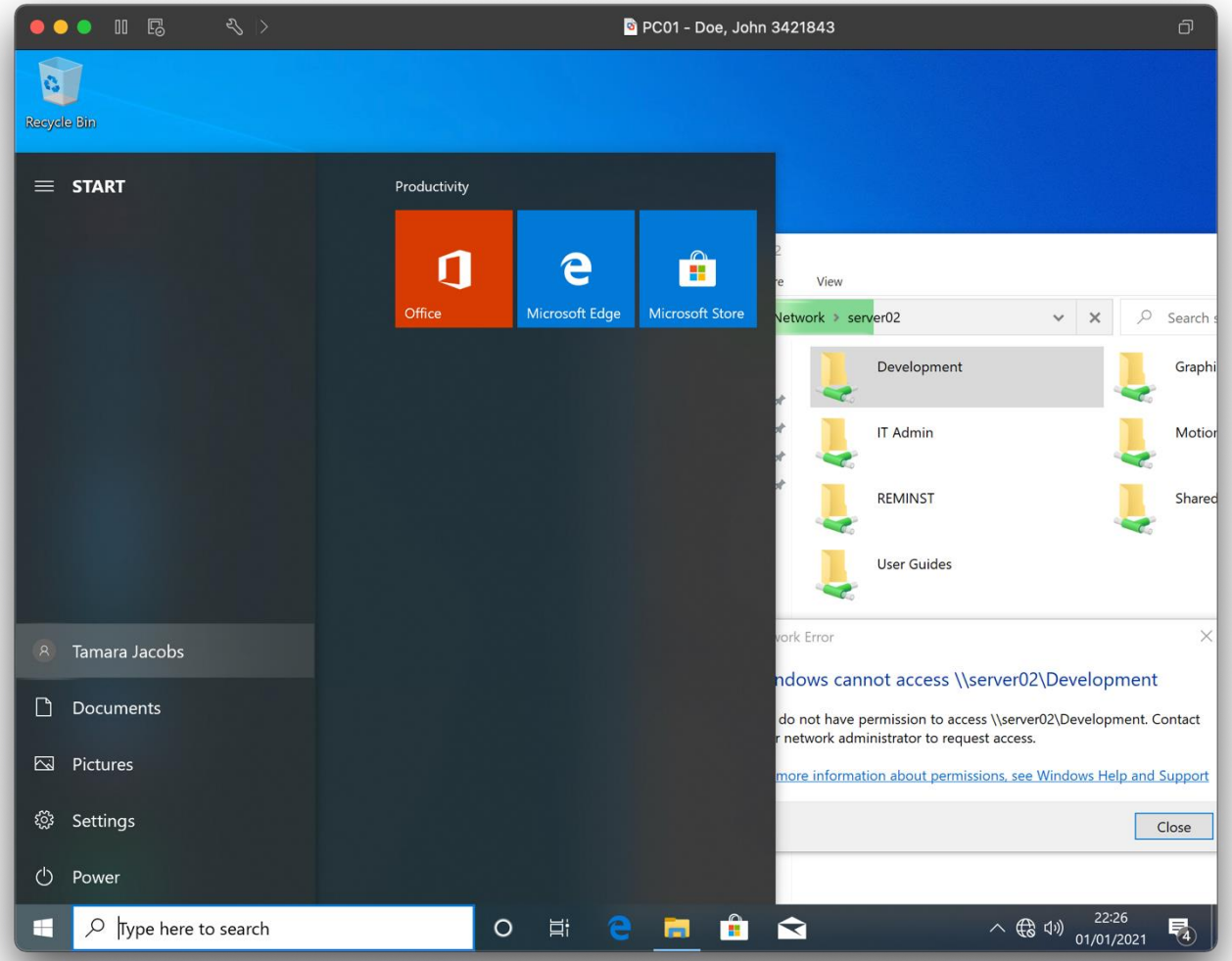


Print screen showing the result of test number 12, showing the file has been opened and saved back correctly

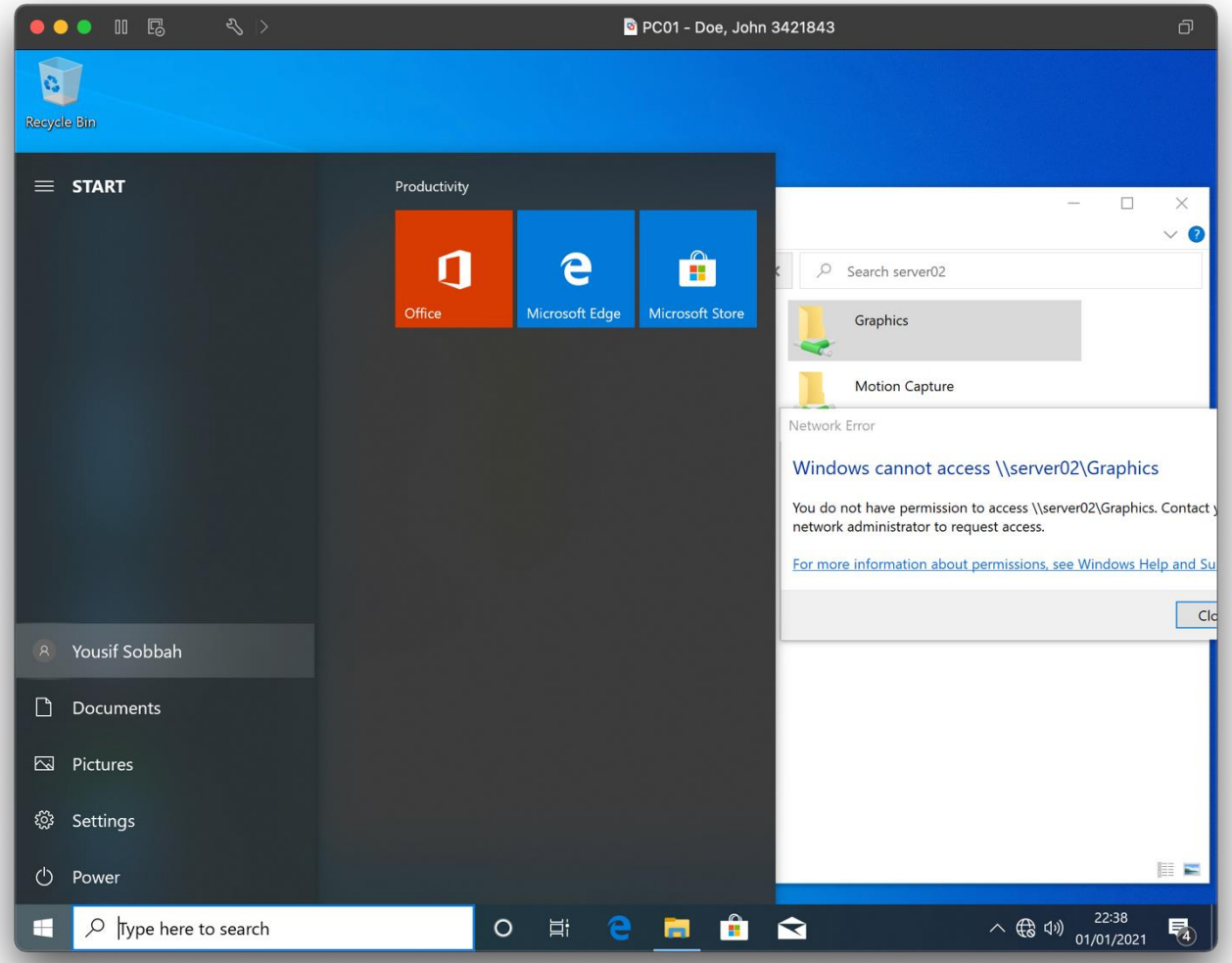



PC01 - Doe, John 3421843
Recycle Bin
Firefox
START
Productivity
Office
Microsoft Edge
Microsoft Store
John Doe
Documents
Pictures
Settings
Power
Type here to search
IT Admin
Home
Share
View
Network
server02
IT Admin
Search IT Admin
Name
Date modified
Budget Transactions.xlsx
03/09/2020 21:27
Strategic Plan
01/01/2021 22:00
User Account Log
03/09/2020 21:27
1 item selected 1.90 KB
22:00
01/01/2021

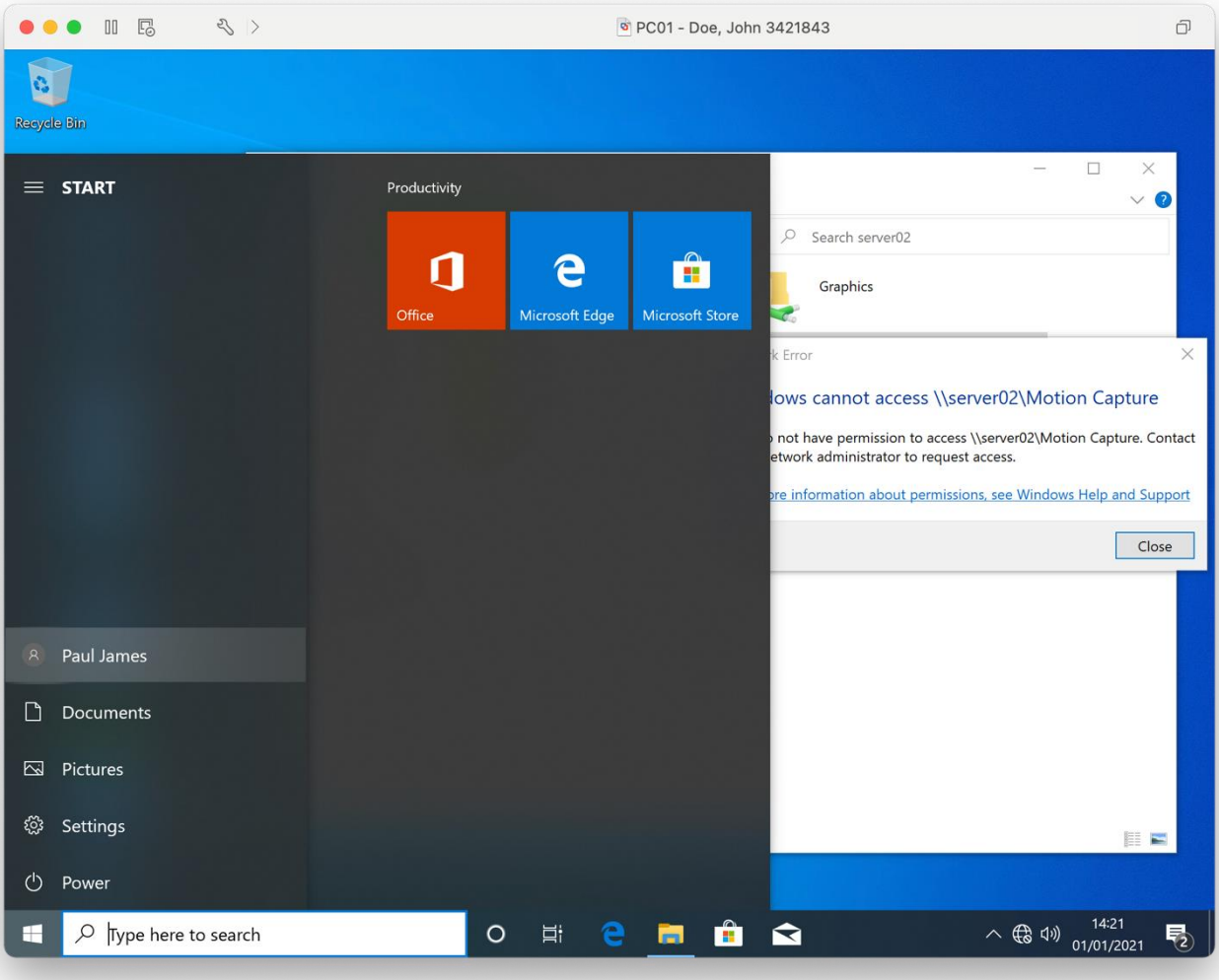
Print screen showing the result of test number 13, showing a user was unable to open the folder



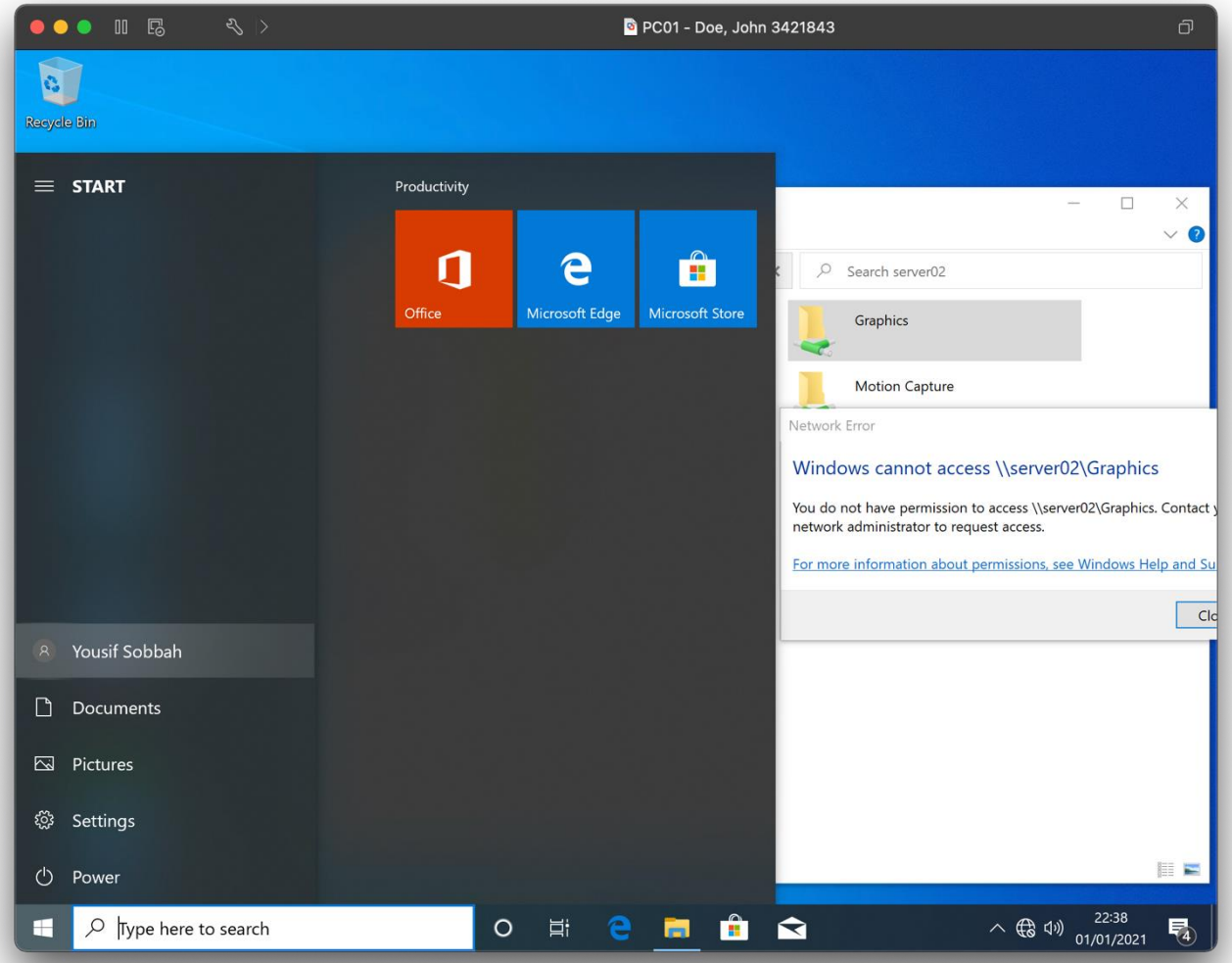
Print screen showing the result of test number 14, showing a user was unable to open the folder



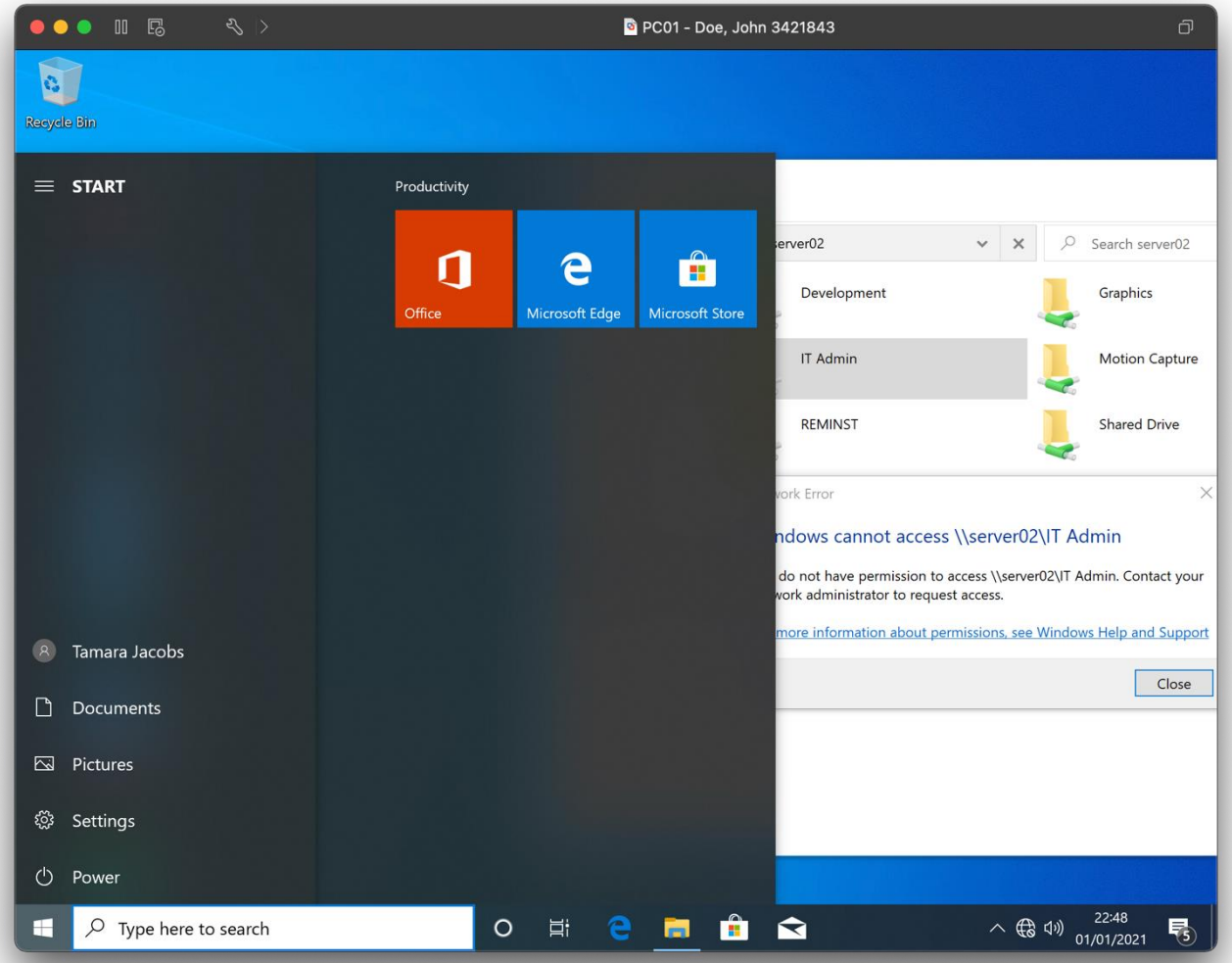
Print screen showing the result of test number 15, showing a user was unable to open the folder



Print screen showing the result of test number 16, showing the user was unable to open the folder



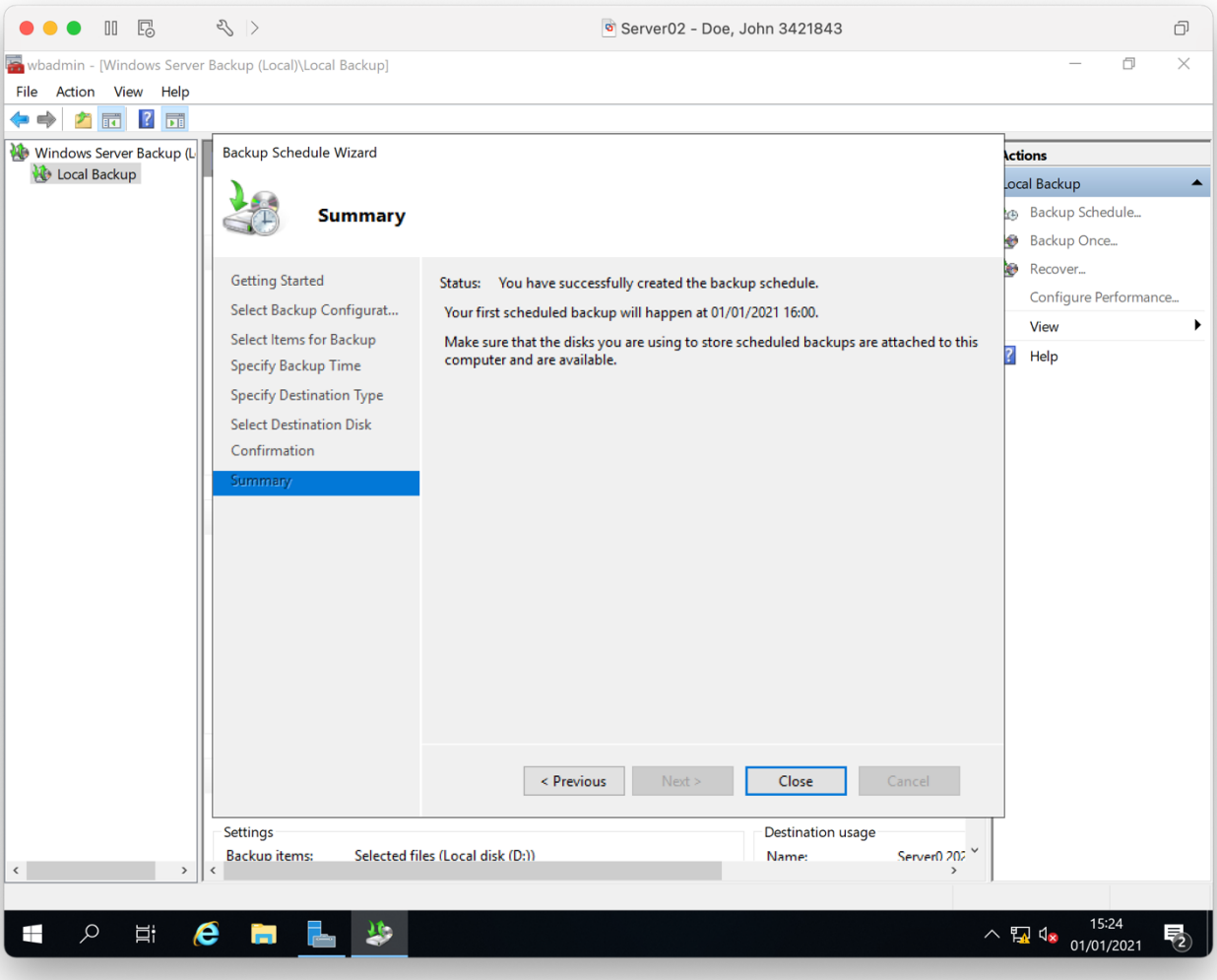
Print screen showing the result of test number 17, showing the user was unable to open the folder



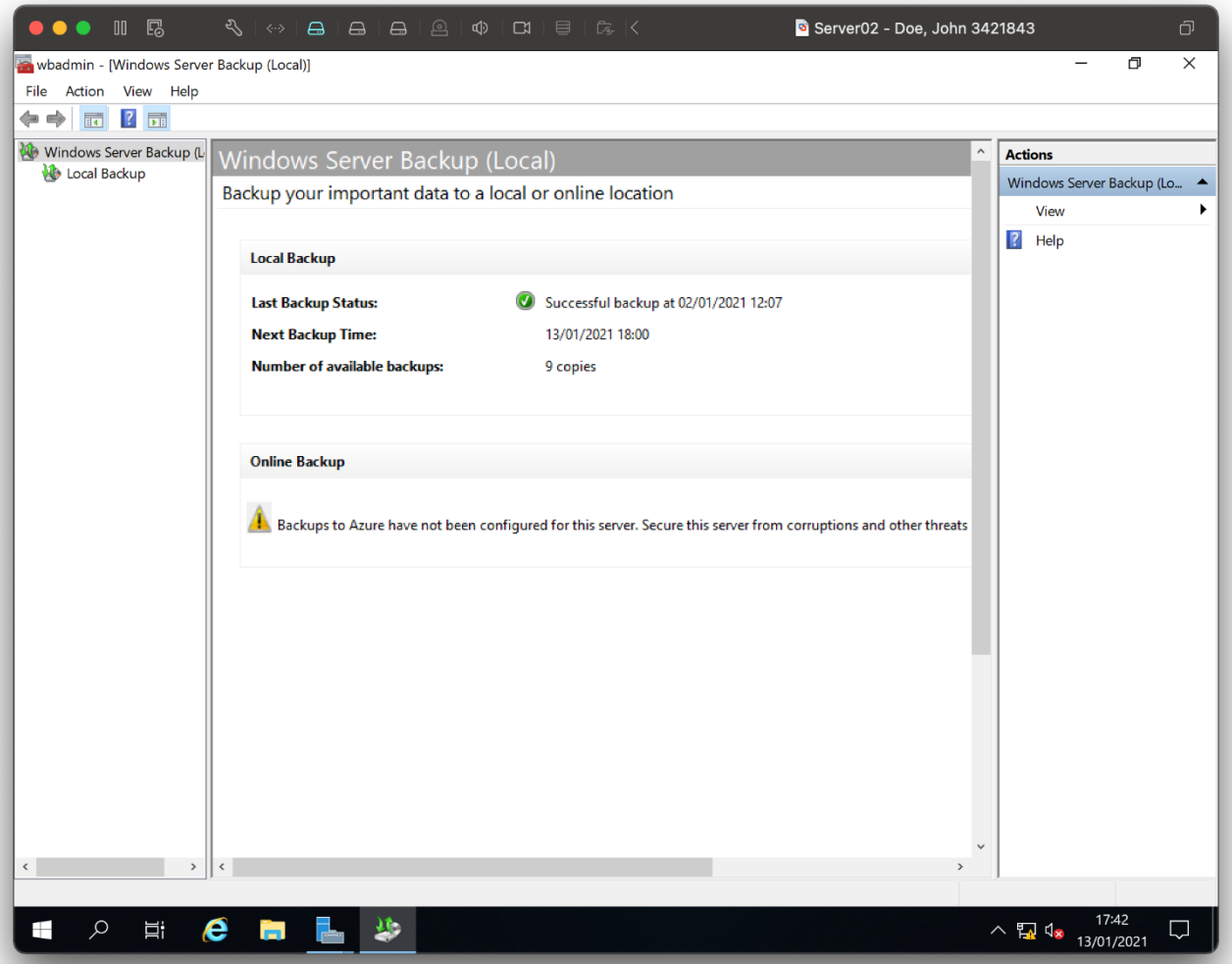
Step D

Create backup

Print screen showing the scheduled backup has been put in place from the backup manager dialogue box

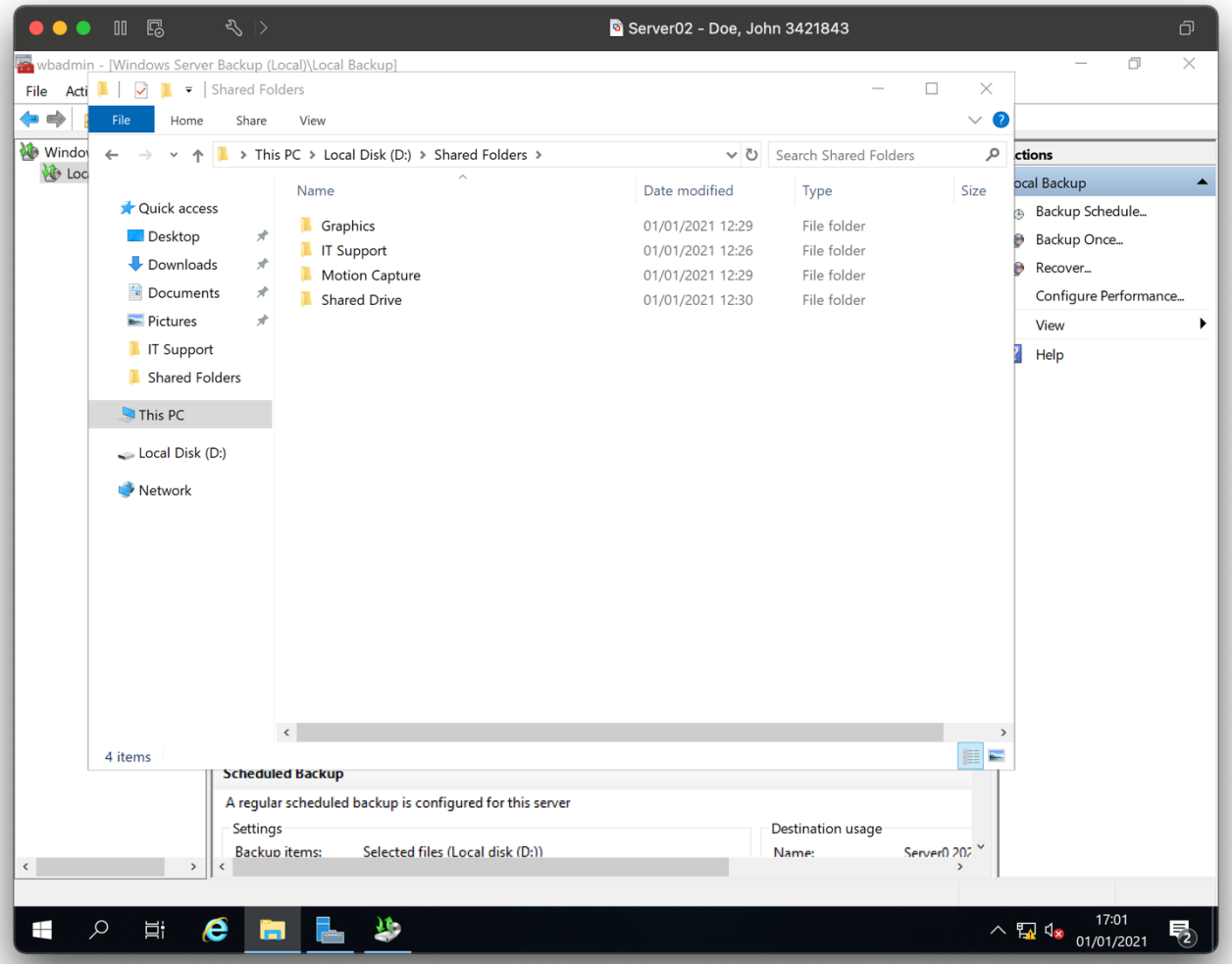


Print screen showing the scheduled backup has been completed from the backup manager dialogue box

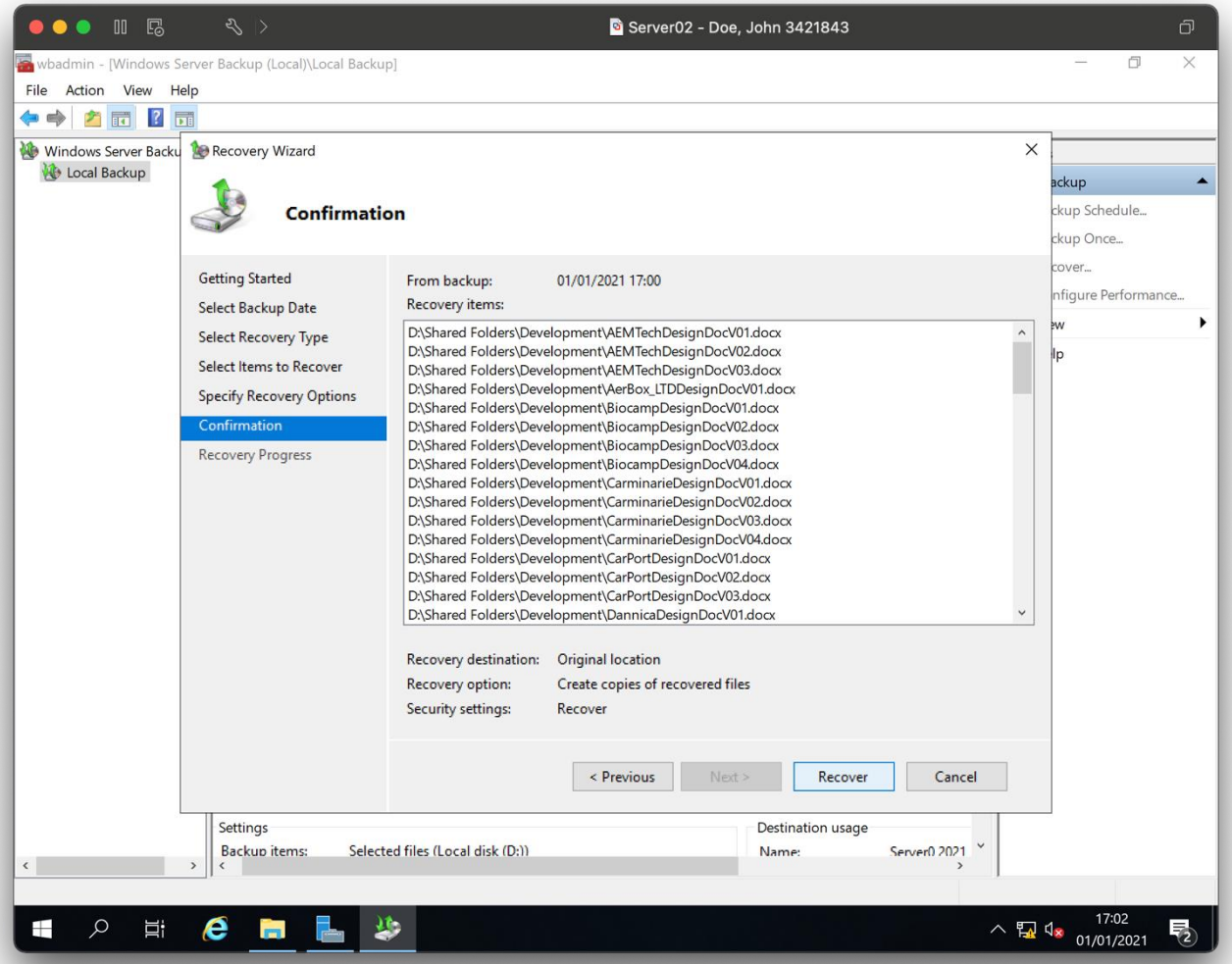


Backup restoration

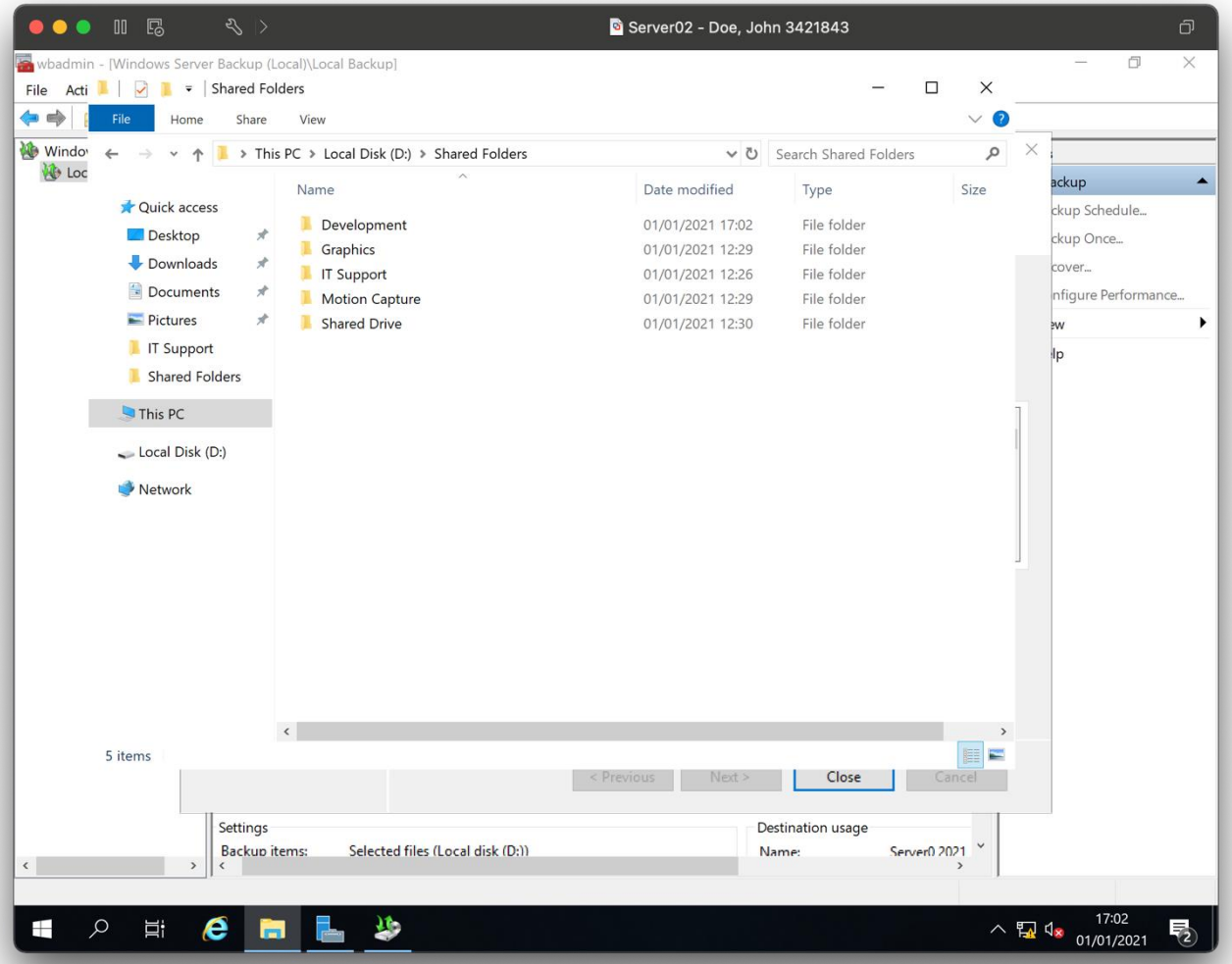
Showing that the folder development has been deleted



Print screen showing the file selected in the restoration dialogue box



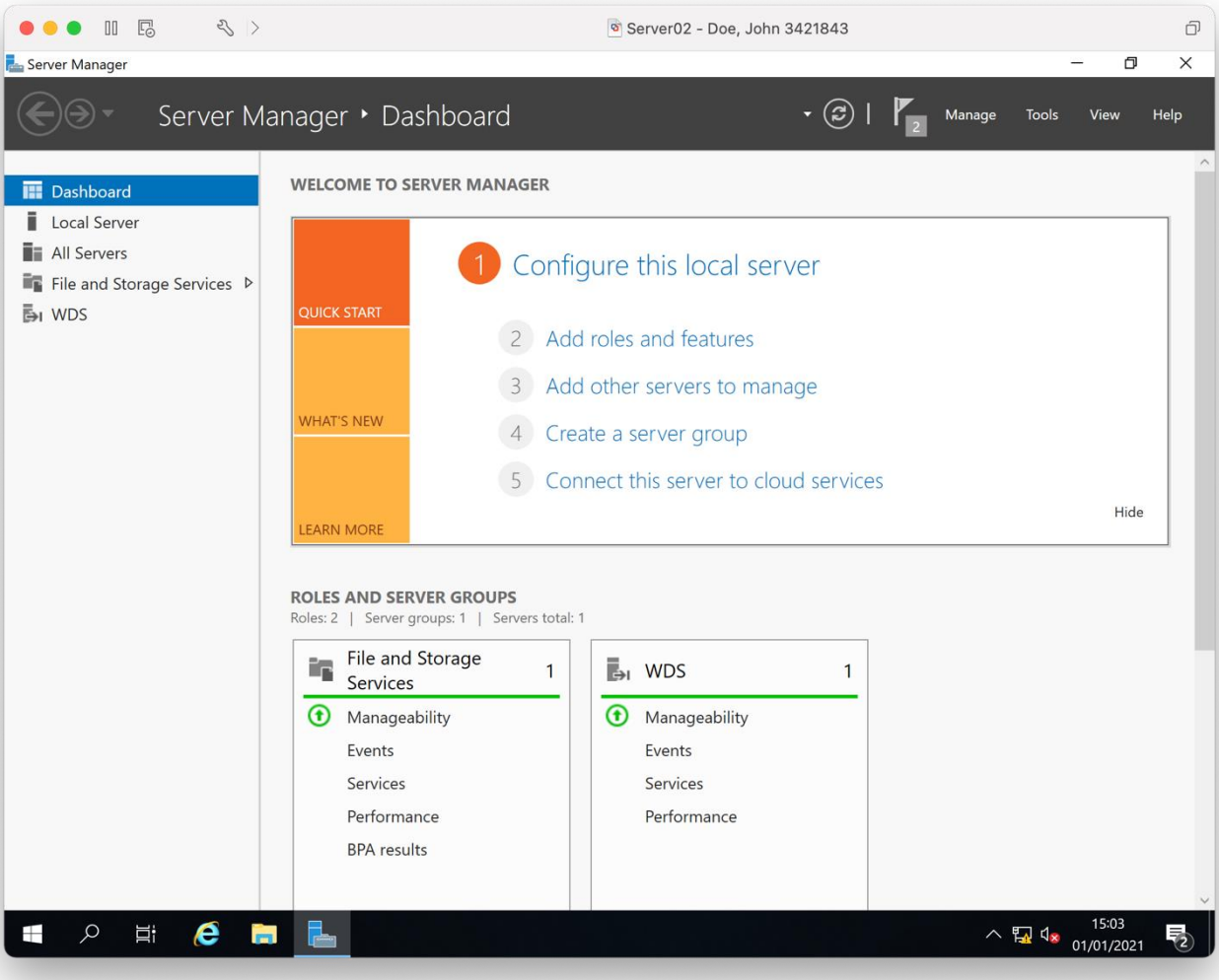
Print screen showing the successful restoration of the folder back to a suitable location



Step E

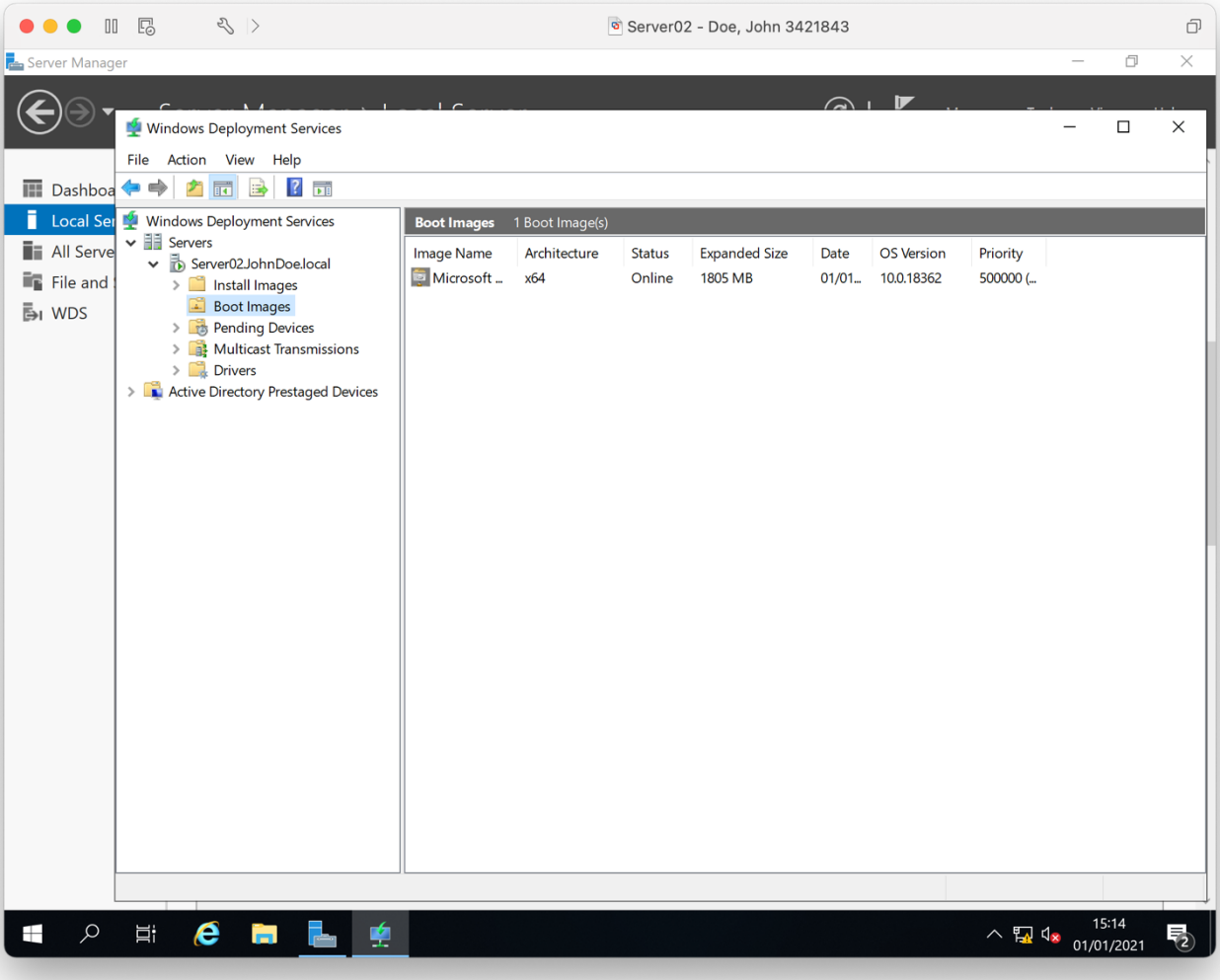
Role installation

Print screen showing the Windows Deployment Role has been installed and shown in Server Manager dialogue box

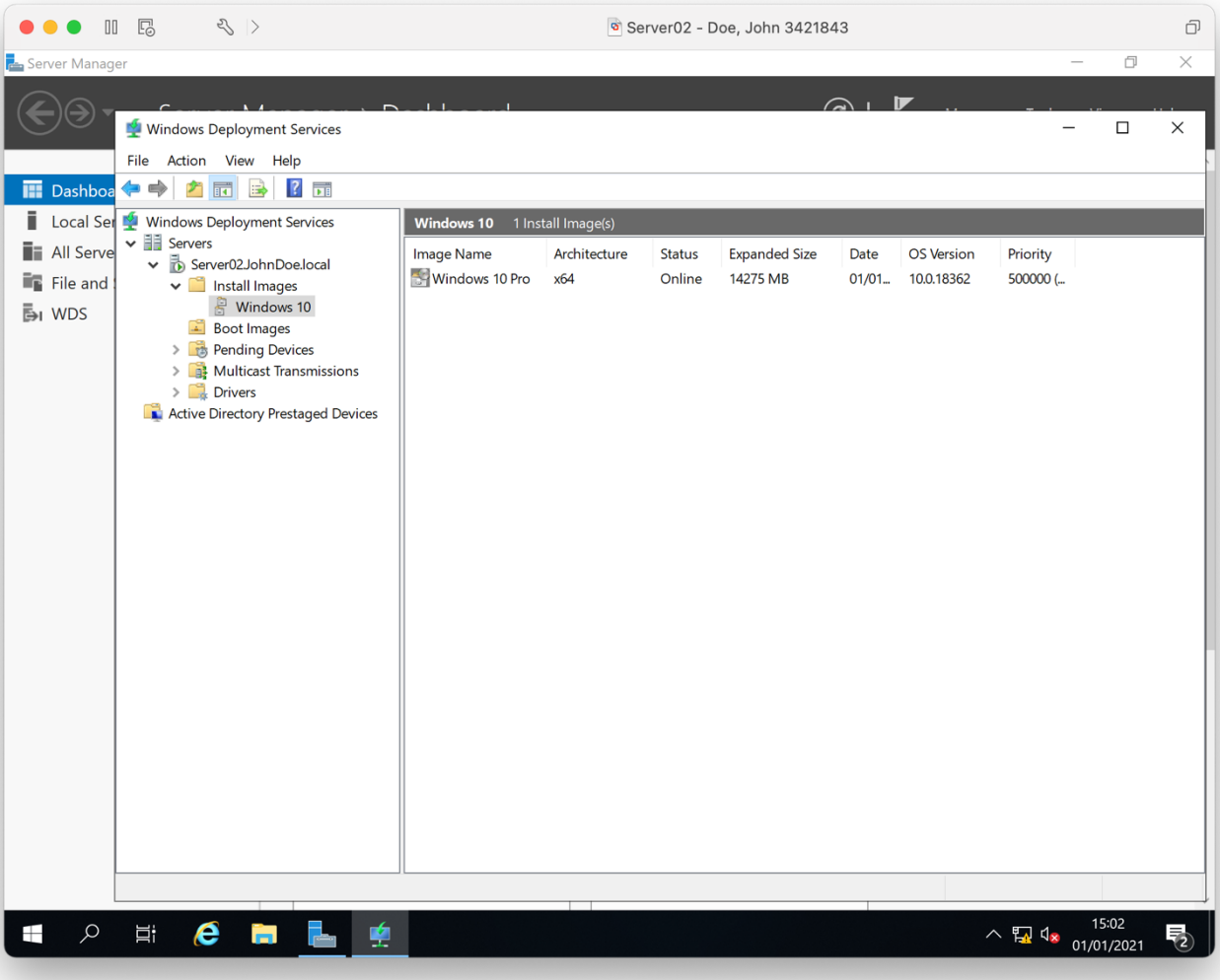


Configuration

Windows Deployment Role has been configured on Server showing boot image added

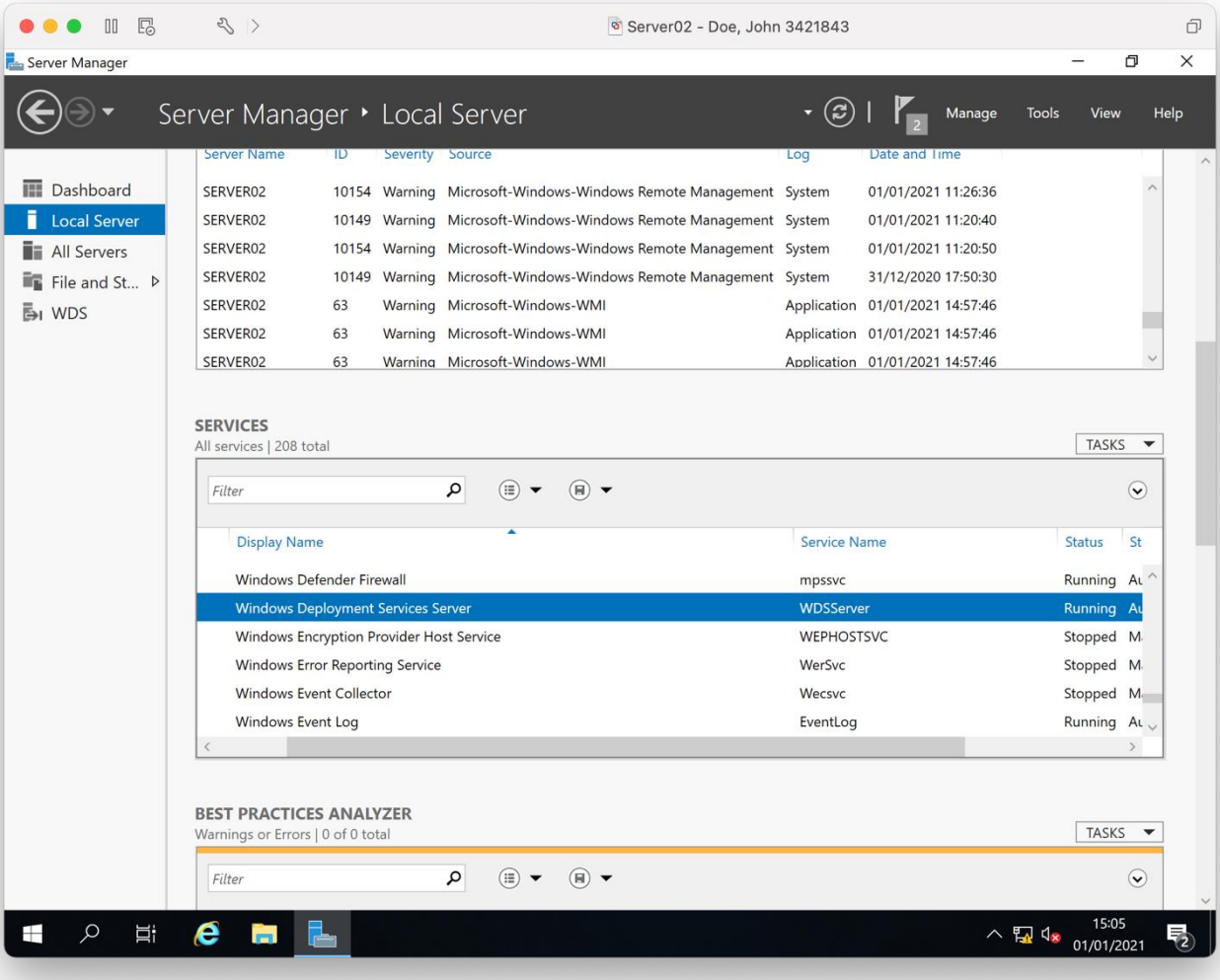


Windows Deployment Role has been configured on Server showing install image added



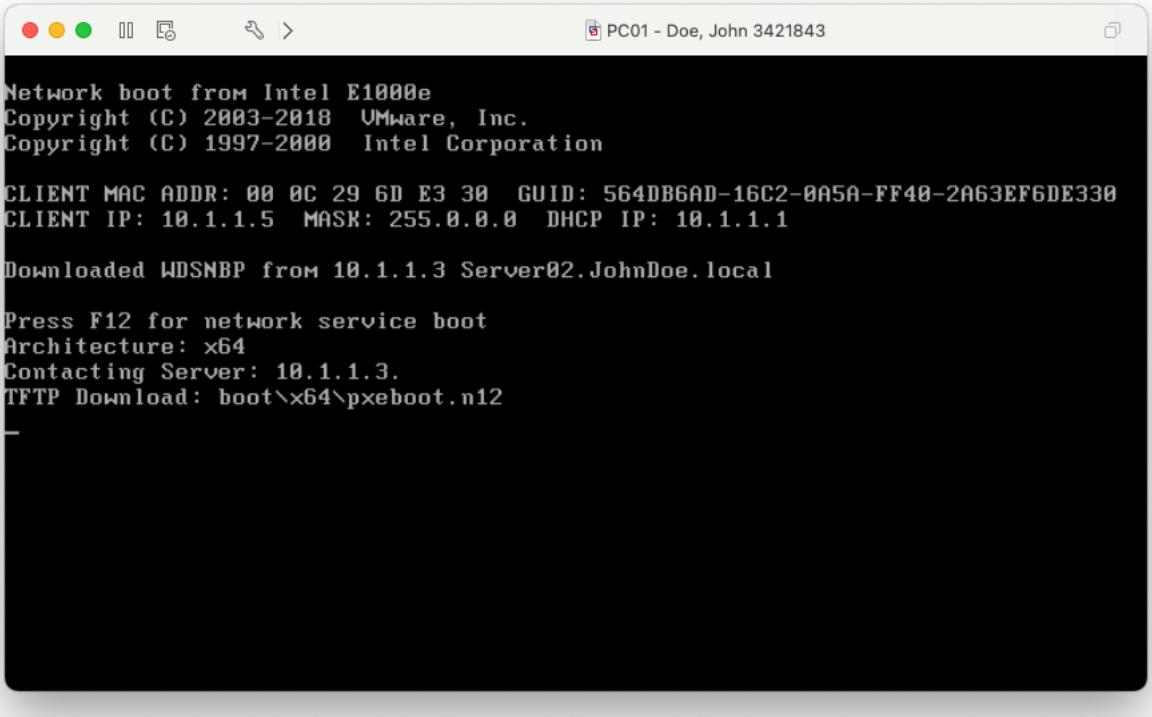
Activation

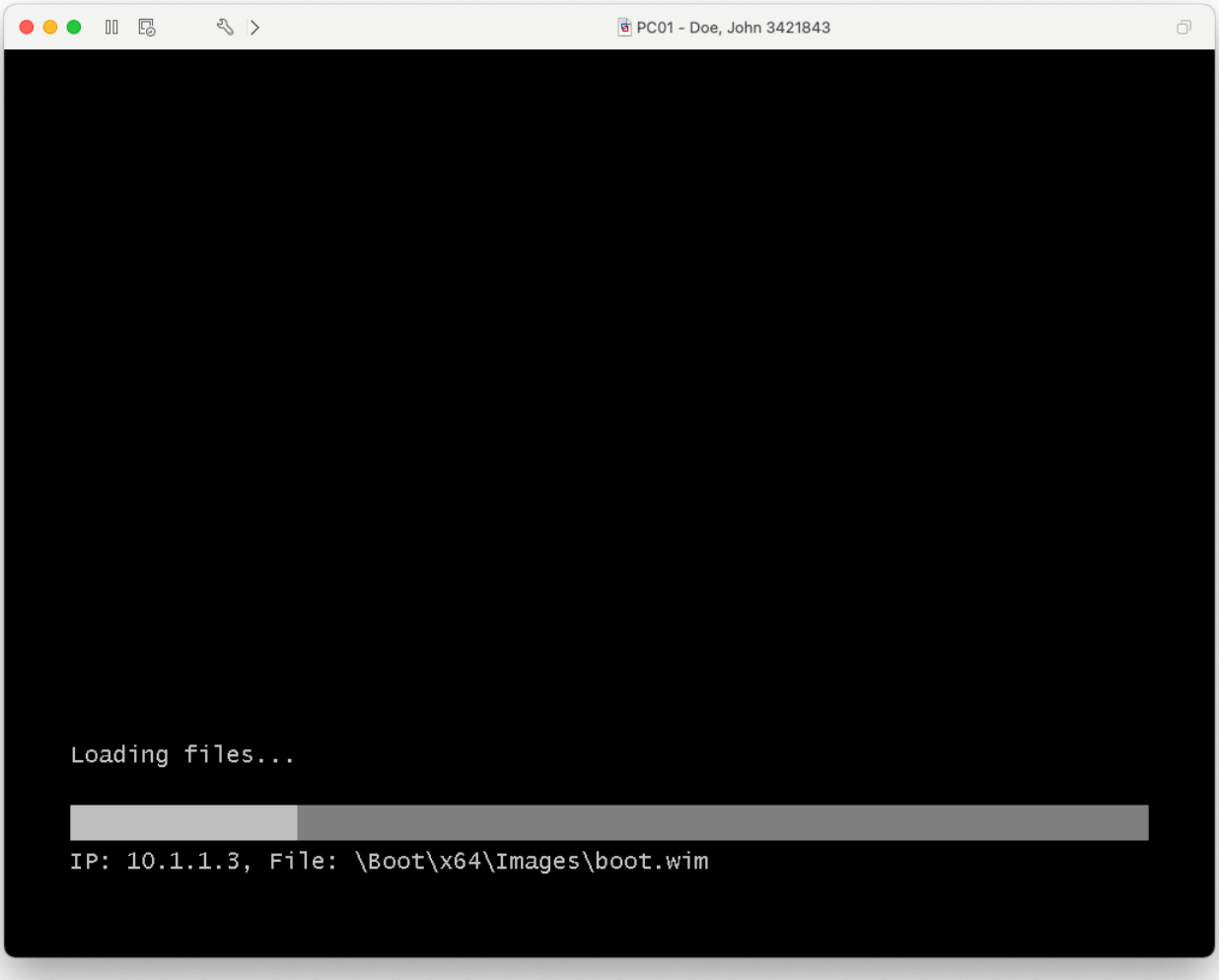
Windows Deployment Role is running using Server Manager, Task manager dialogue box



Role testing

PC01 network boots, it can make a connection with the Windows Deployment Server

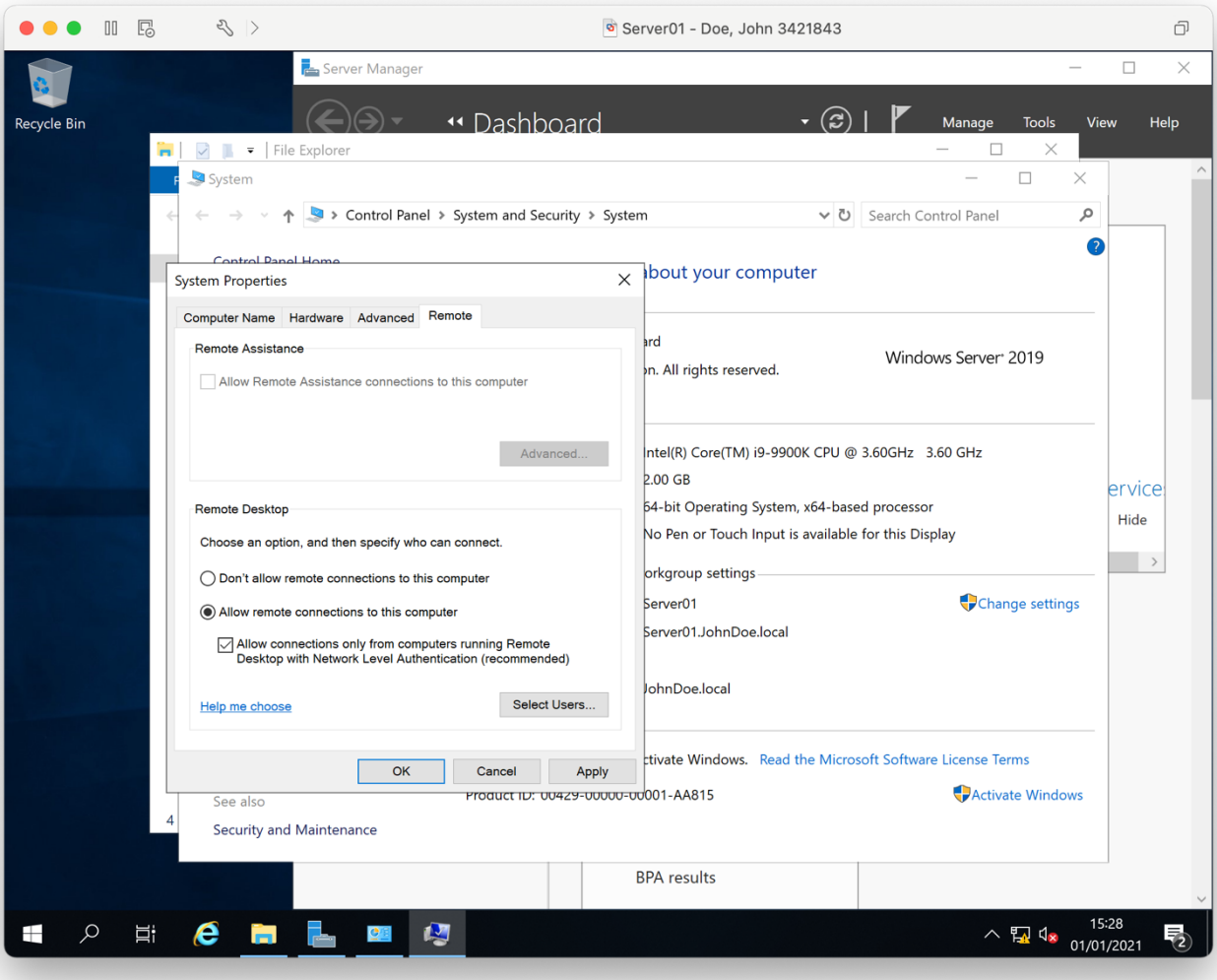



PC01 - Doe, John 3421843
Loading files...
IP: 10.1.1.3, File: \Boot\x64\Images\boot.wim

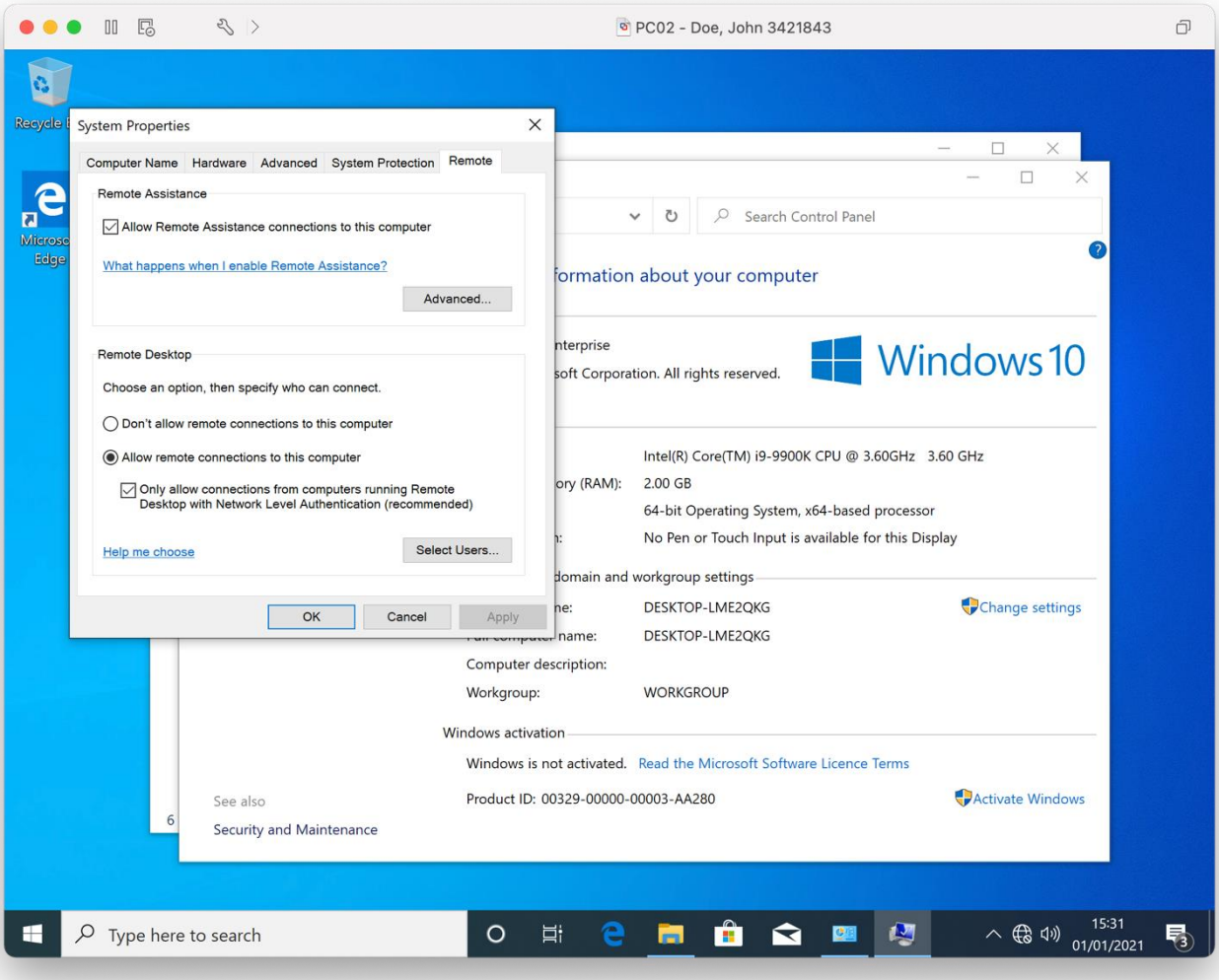
Step F

Configuration

Print screen showing the remote desktop has been enabled on the Server in system properties

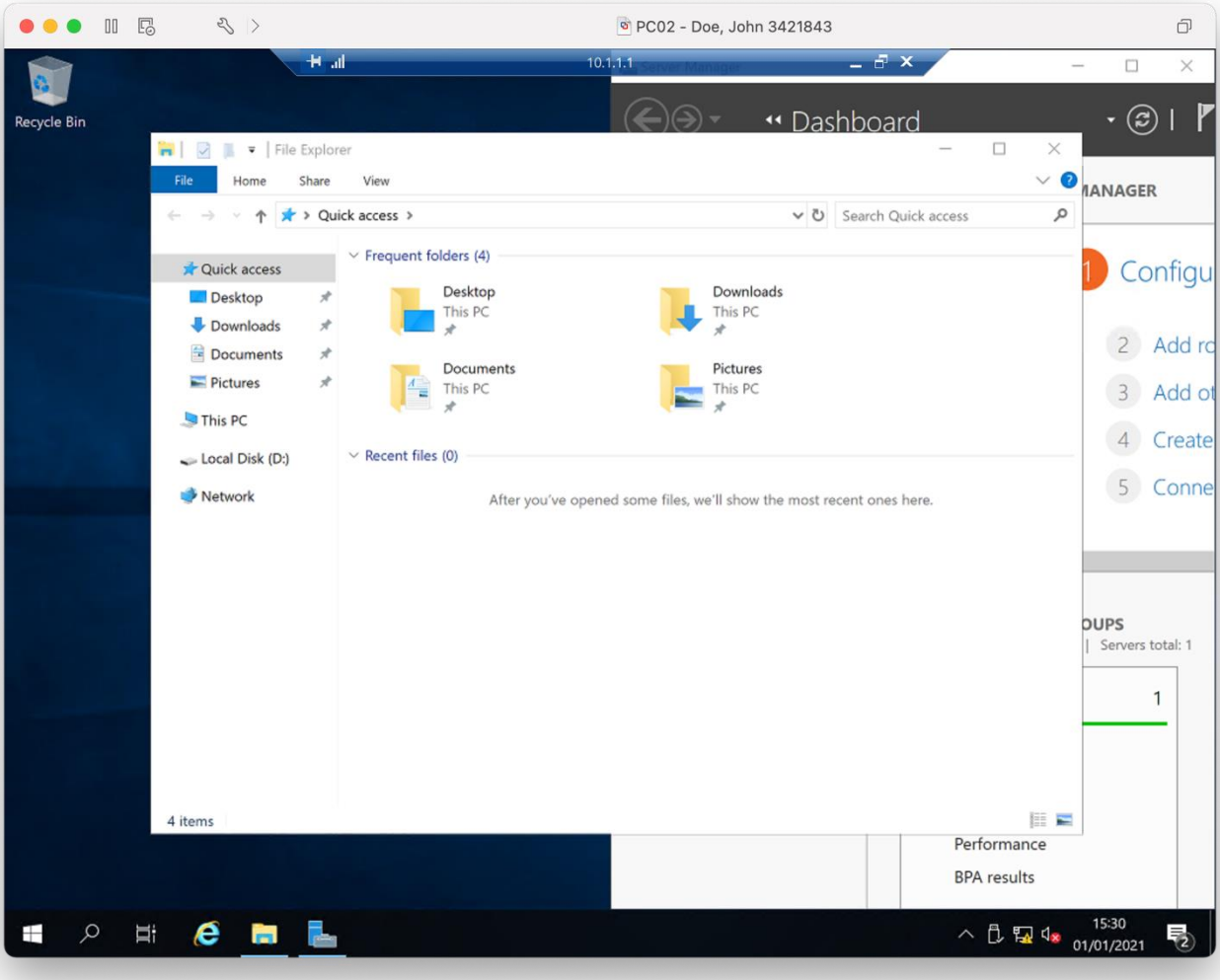


Print screen showing remote access has been enabled for PC02 in system properties



Accessing

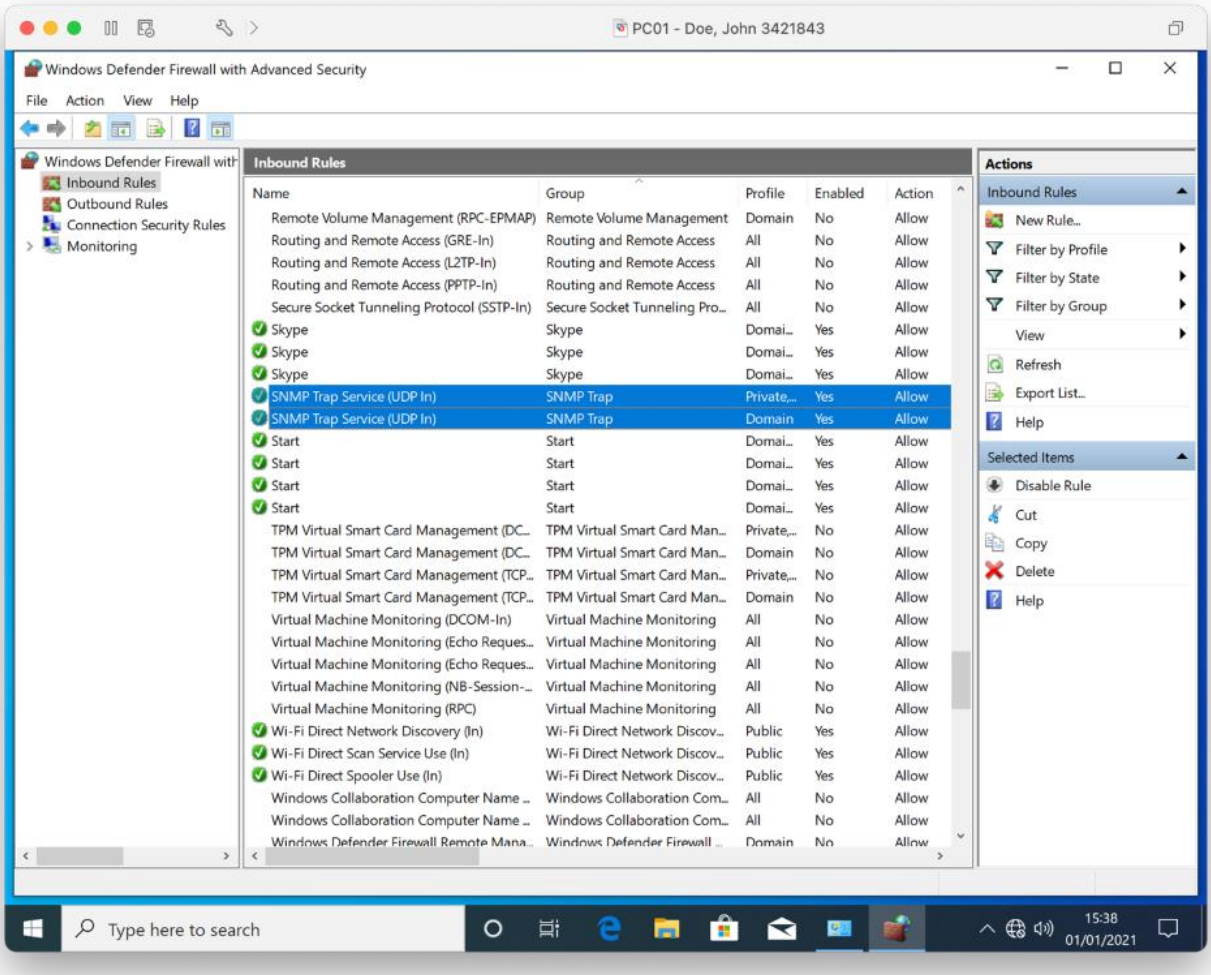
Server in a remote desktop window being administered



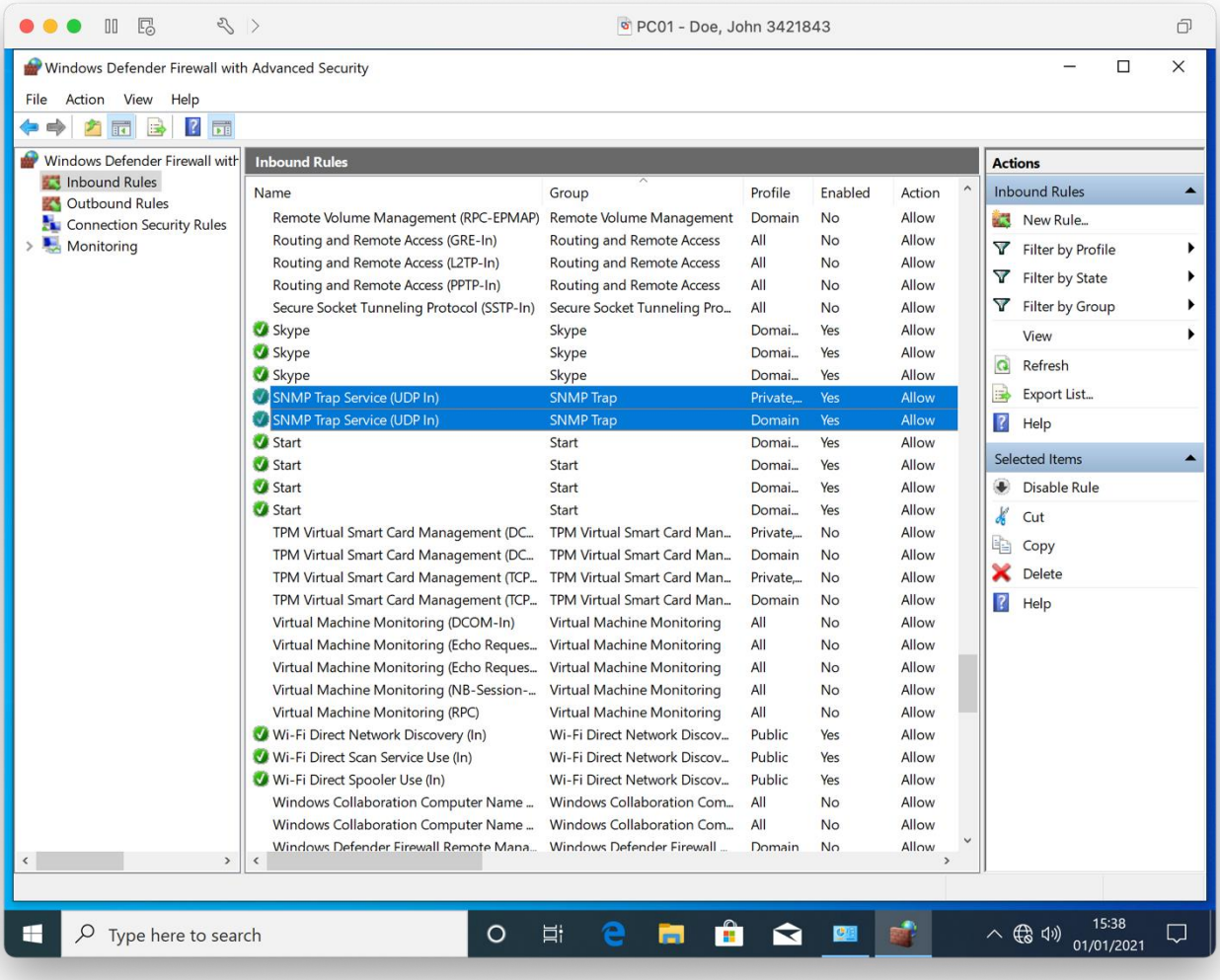
Step G

SNMP enabled

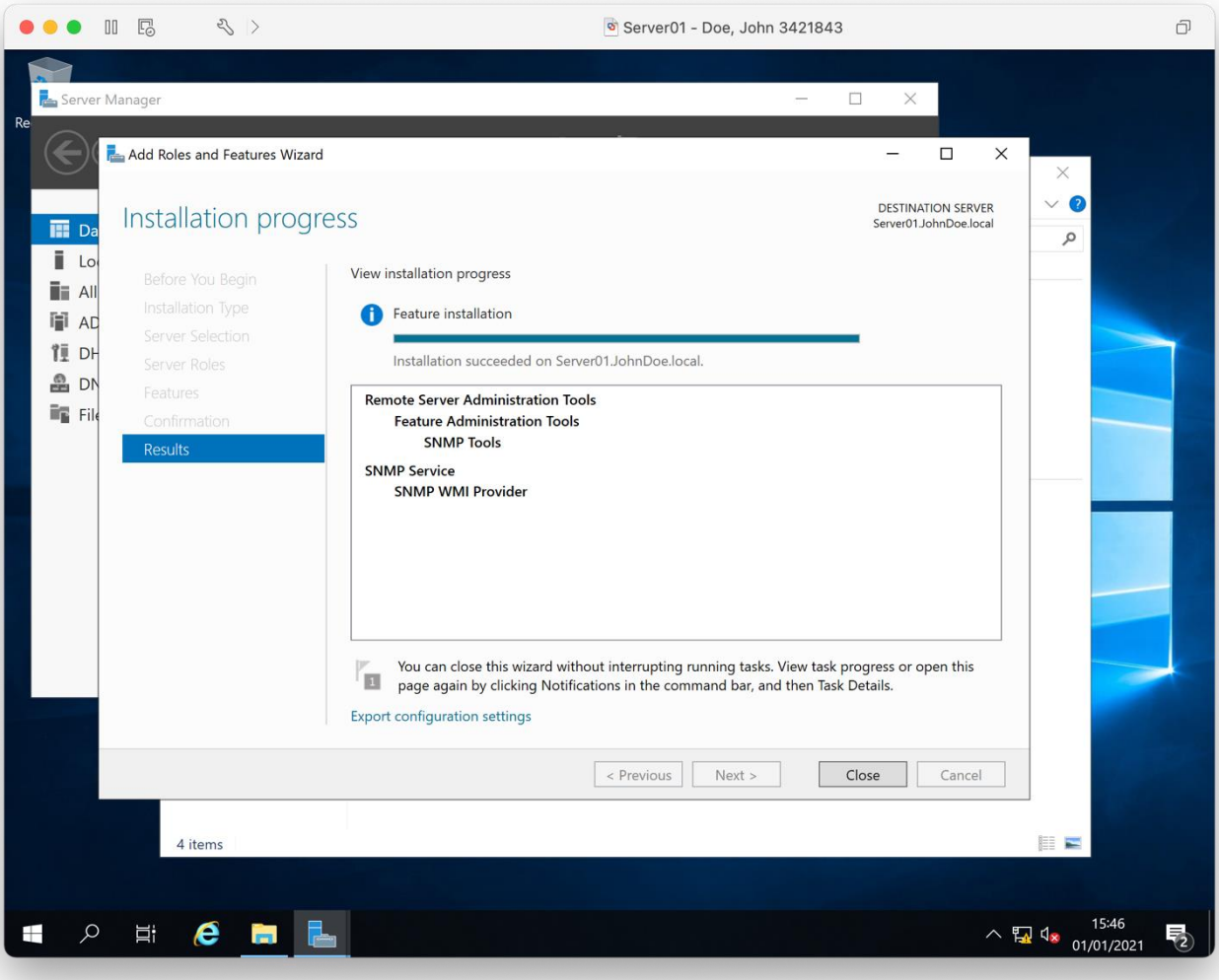
Print screen showing that SNMP has been added to PC01 using application and features



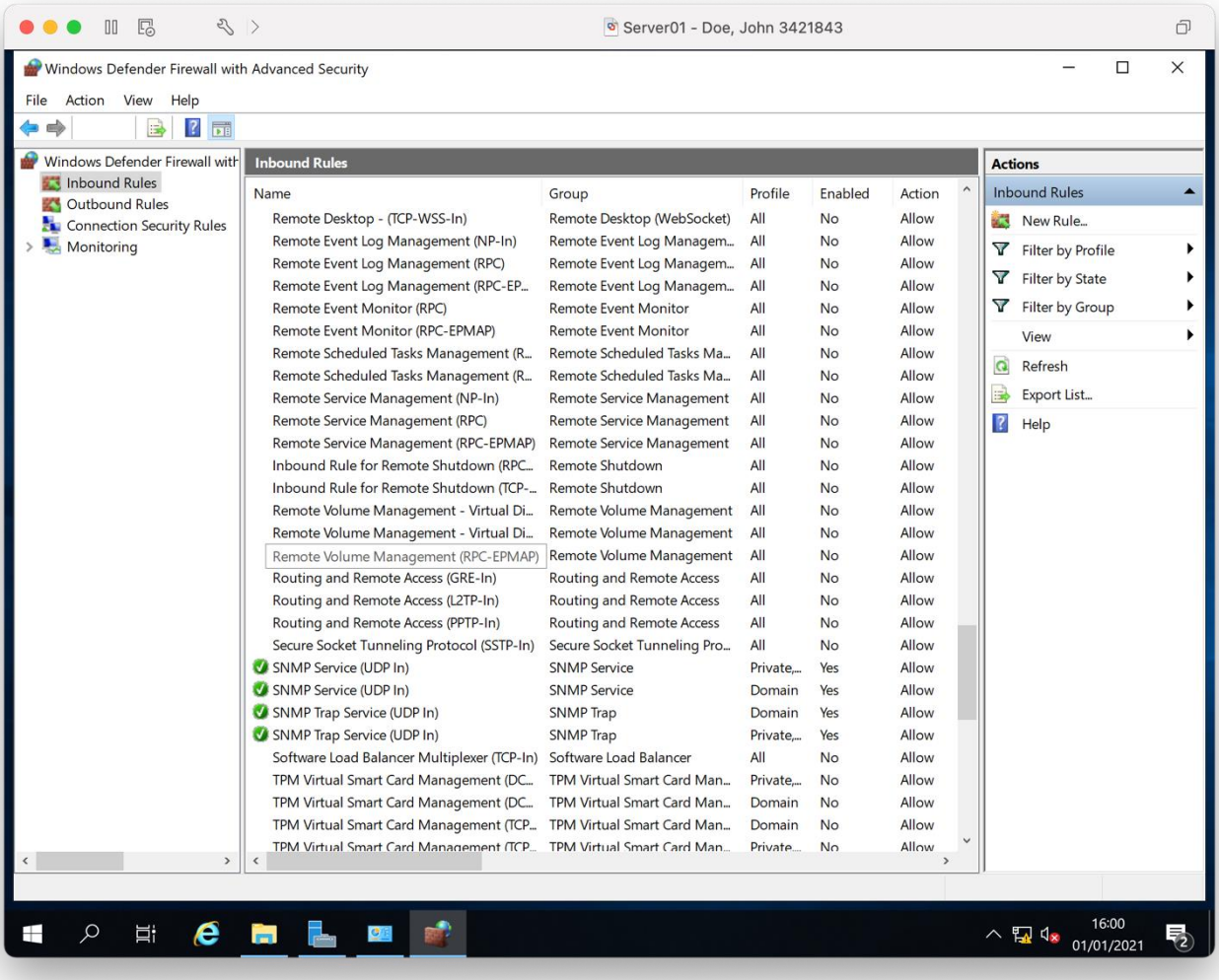
Print screen showing that firewall allows SNMP both in and outbound on the firewall for PC01



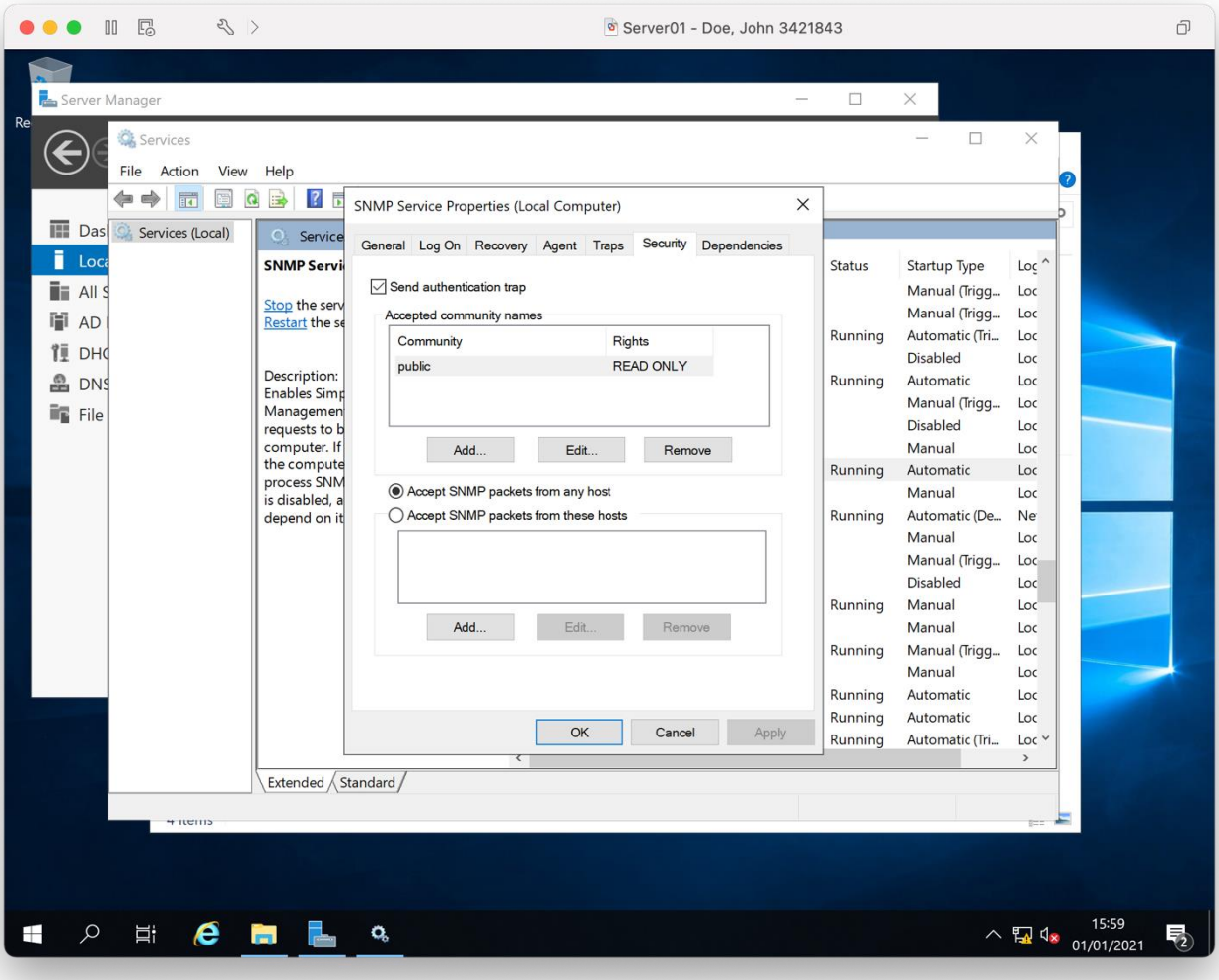
Print screen showing that SNMP has been added to Server01 using application and features



Print screen showing that firewall allows SNMP both in and outbound on the firewall for Server01



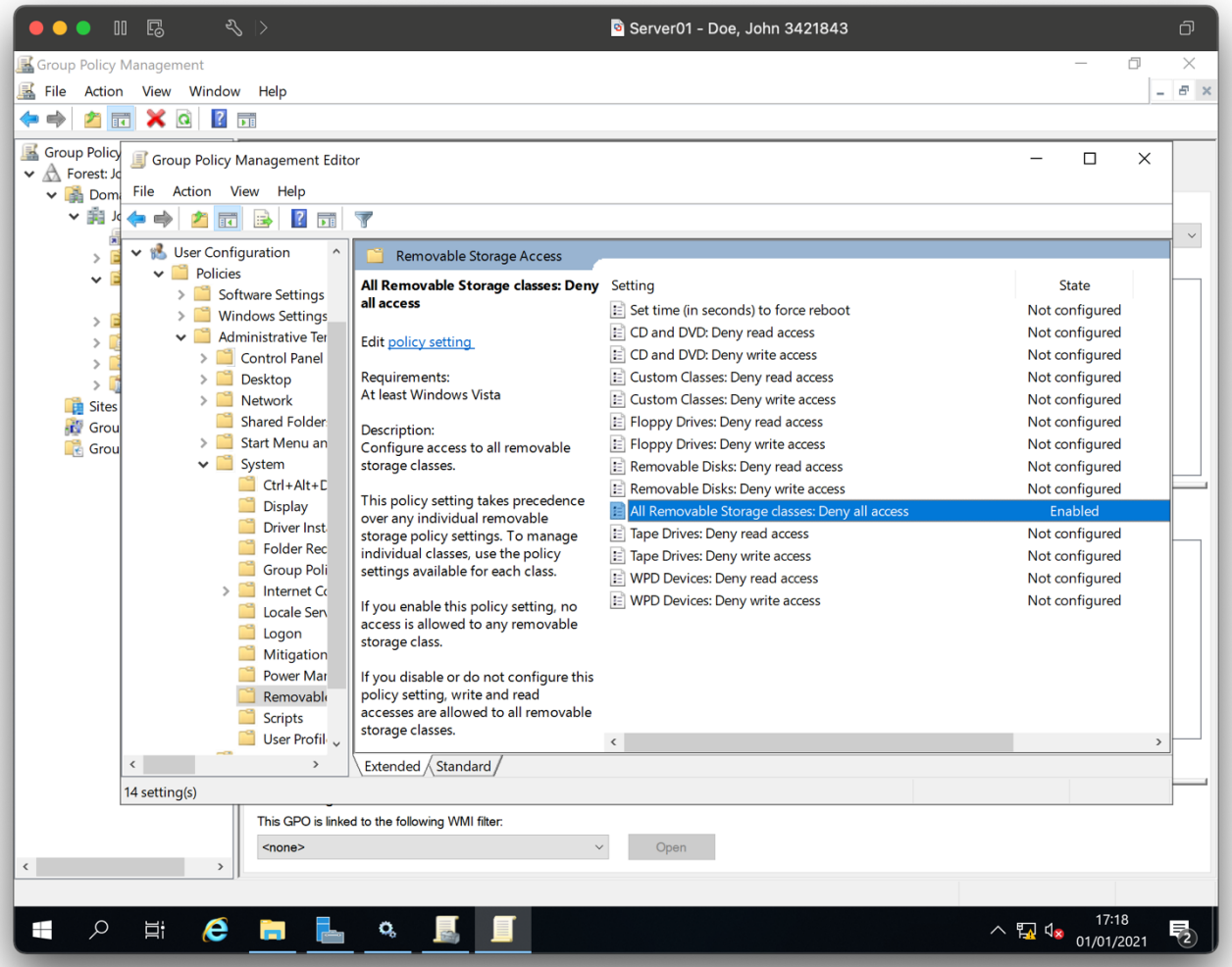
SNMP data collection



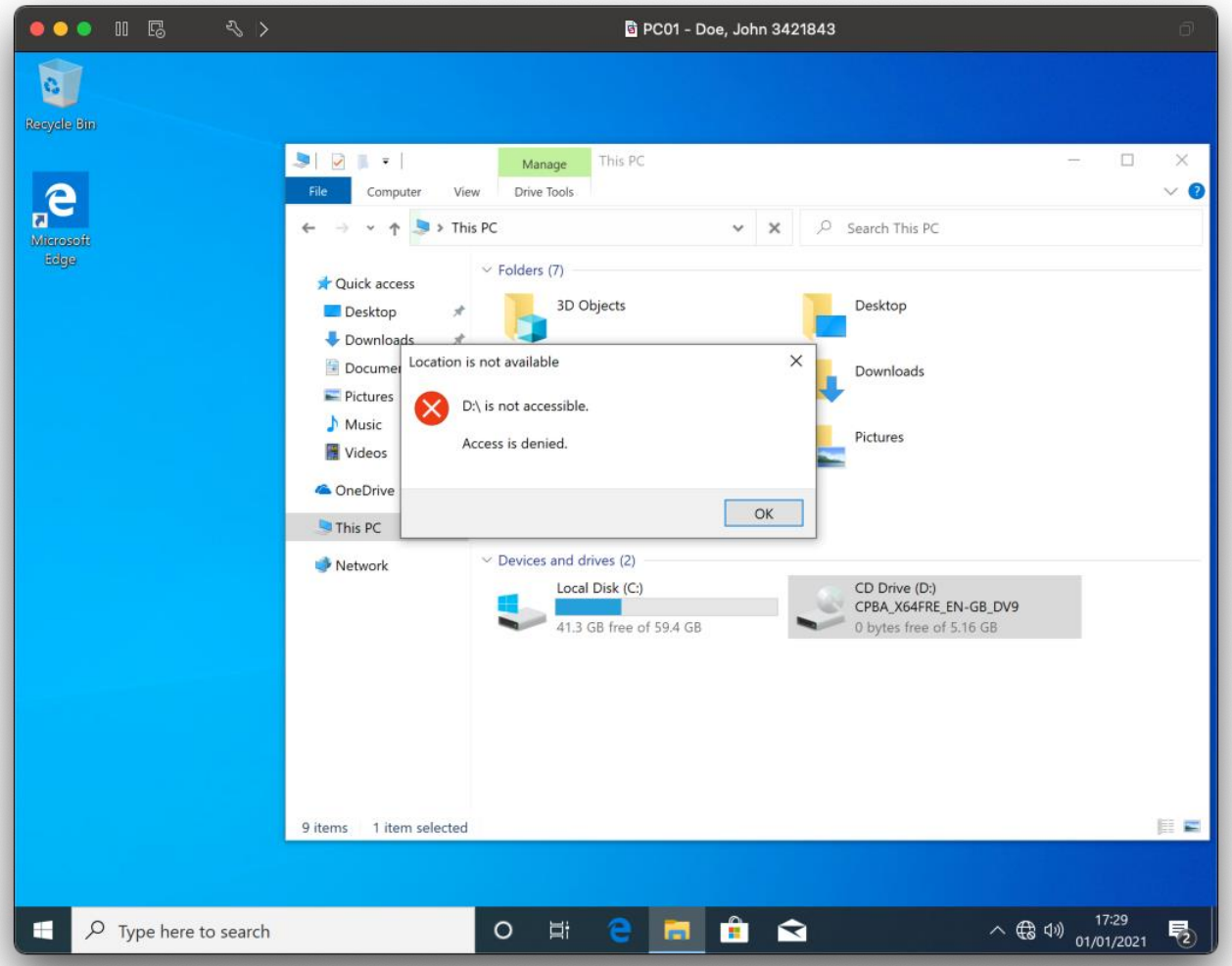
Step H

Policy 1 – disable USB support

Print screen on Server01 showing the blocking of removable devices have been enabled in group policy

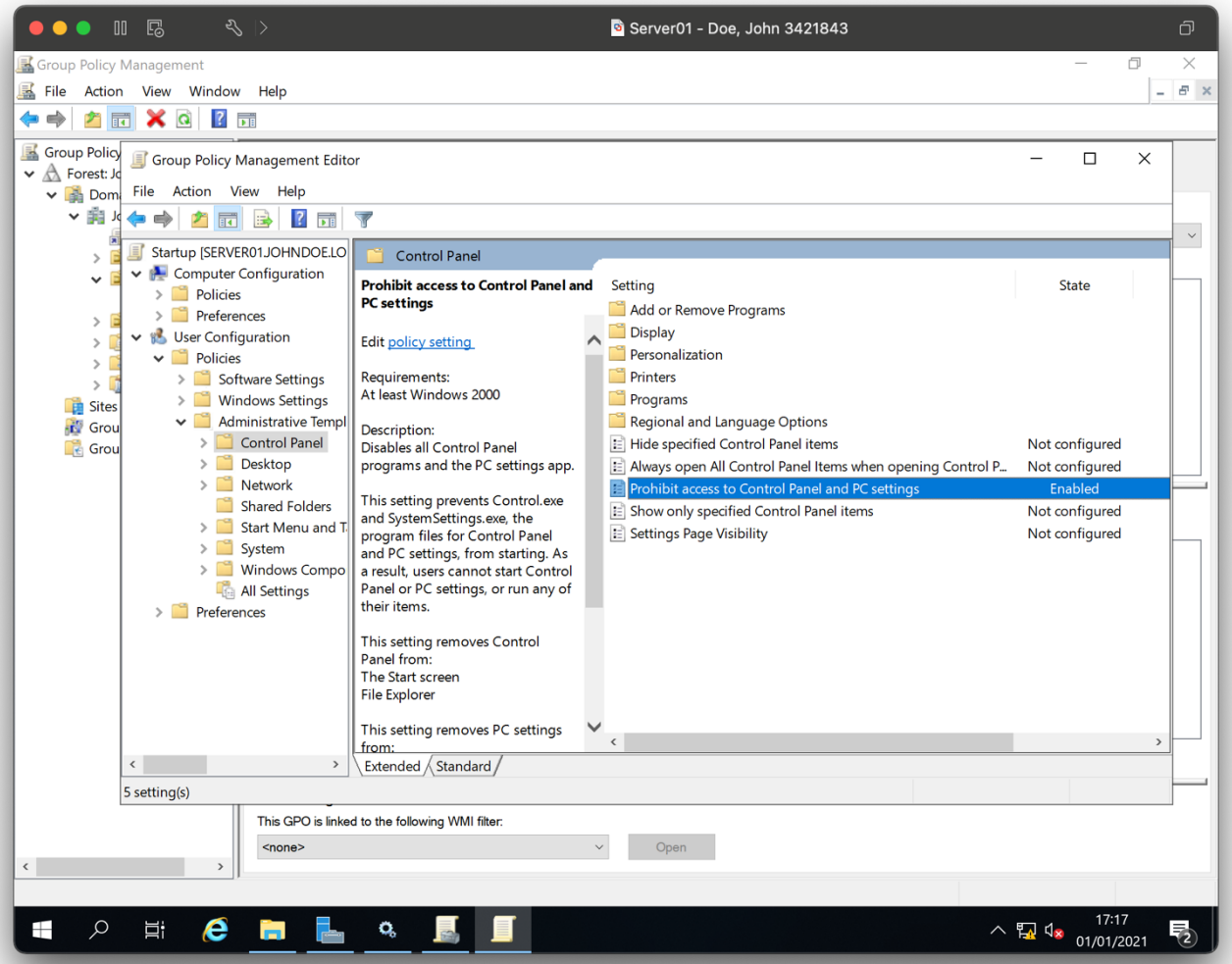


Print screen showing that when a USB is connected to PC01, an error message displays on the screen blocking access

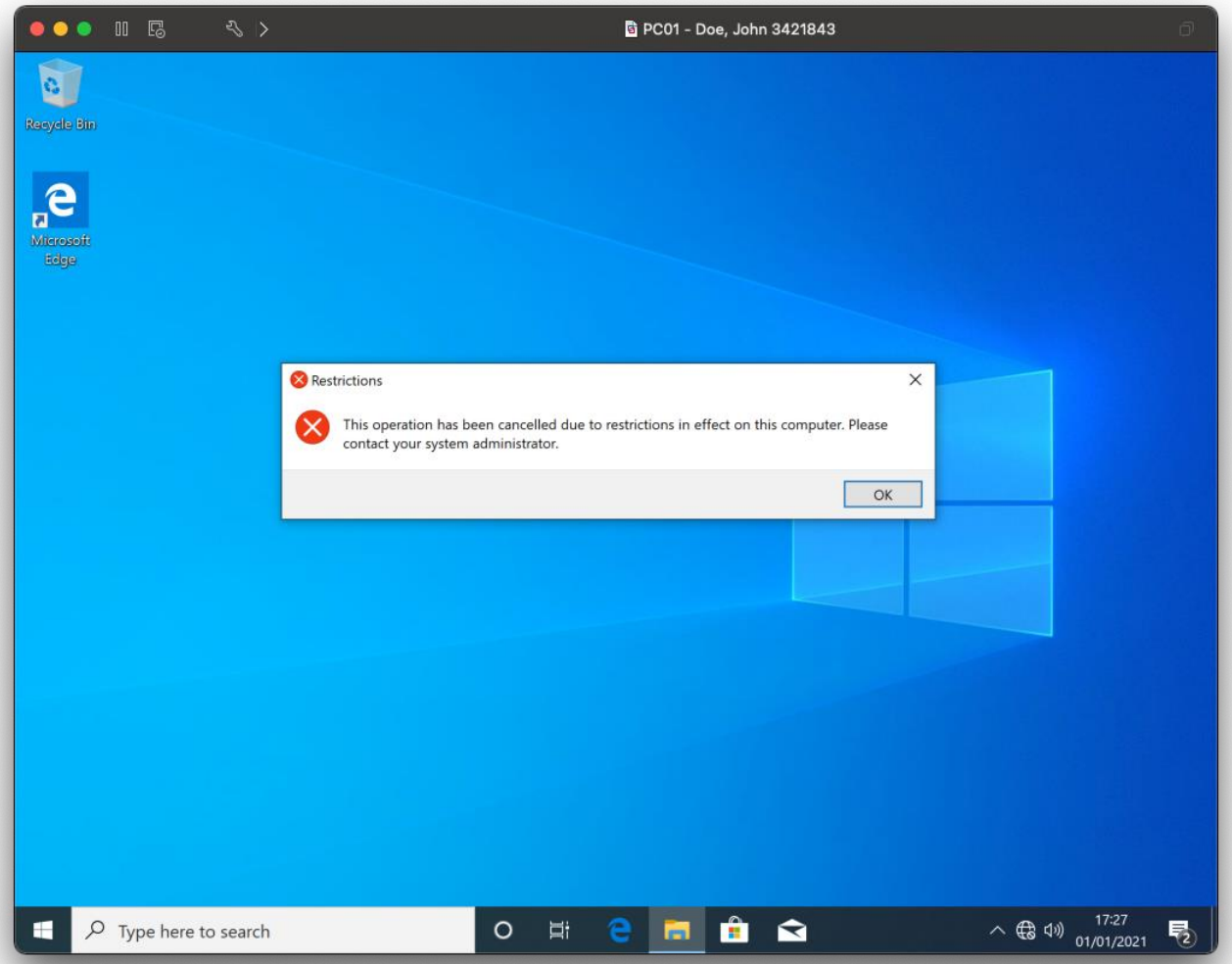

PC01 - Doe, John 3421843
Recycle Bin
Microsoft Edge
Manage
This PC
File
Computer
View
Drive Tools
This PC
Search This PC
Quick access
Desktop
Downloads
Pictures
Music
Videos
OneDrive
This PC
Network
Folders (7)
3D Objects
Desktop
Downloads
Pictures
Location is not available
D:\ is not accessible.
Access is denied.
OK
Devices and drives (2)
Local Disk (C:)
41.3 GB free of 59.4 GB
CD Drive (D:)
CPBA_X64FRE_EN-GB_DV9
0 bytes free of 5.16 GB
9 items
1 item selected
Type here to search
17:29
01/01/2021

Policy 2 – disable access to the control panel

Print screen on Server01 showing control panel access have been enabled in group policy

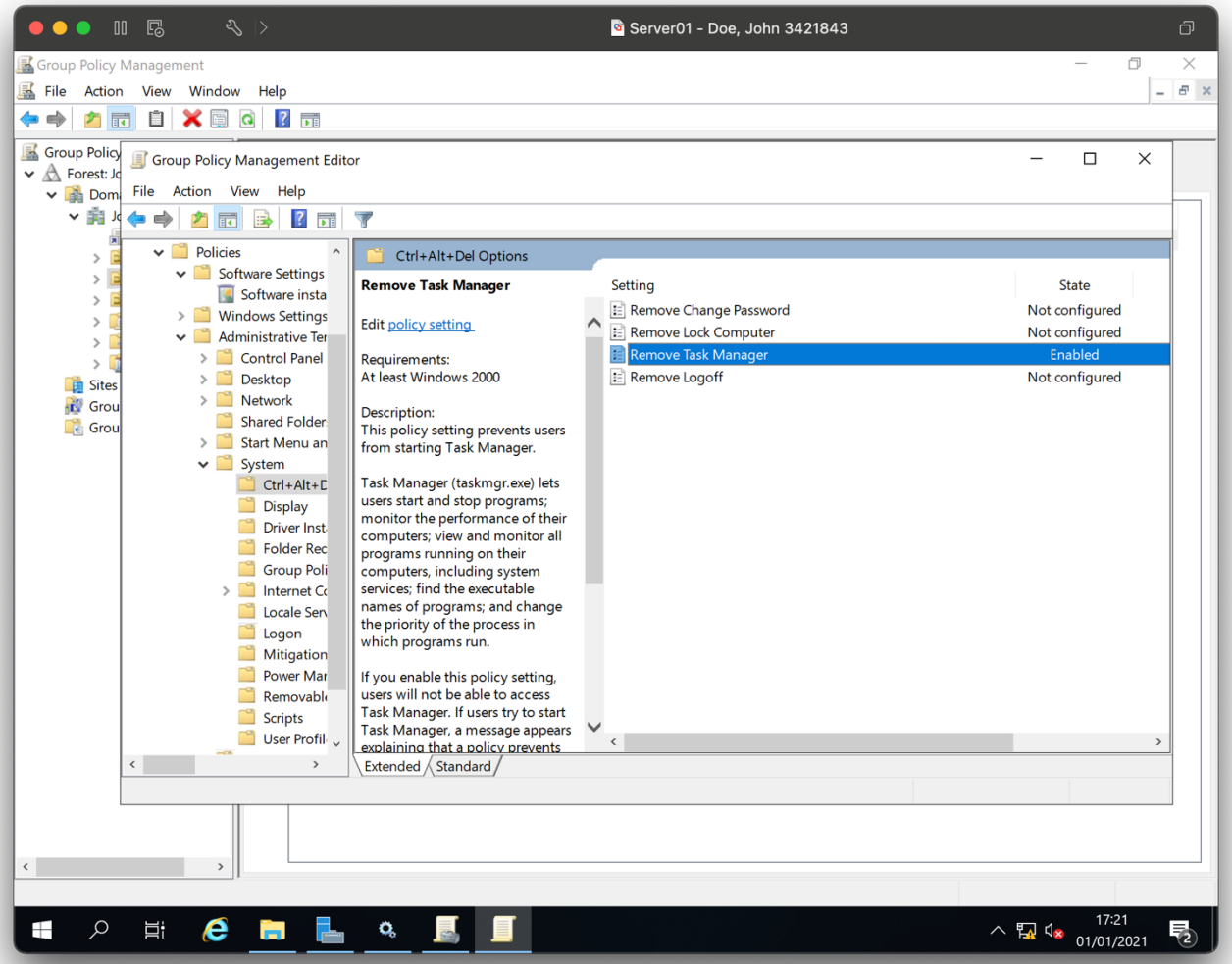


Print screen showing that control panel menu icons have been hidden on PC01

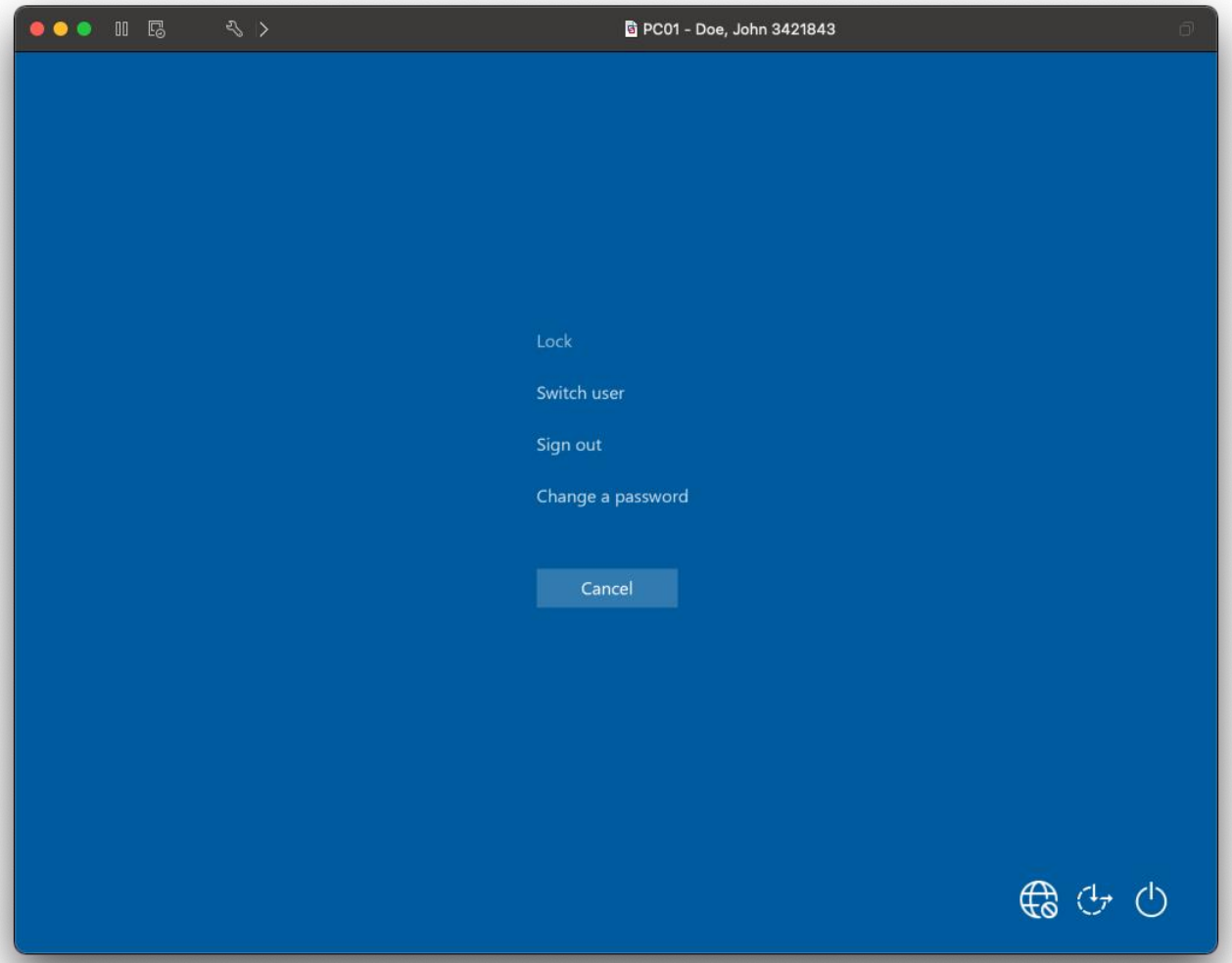

PC01 - Doe, John 3421843
Recycle Bin
Microsoft Edge
Restrictions
This operation has been cancelled due to restrictions in effect on this computer. Please contact your system administrator.
OK
Type here to search
17:27
01/01/2021

Policy 3 – disable task manager access

Print screen on Server01 showing that task manager access is denied in group policy

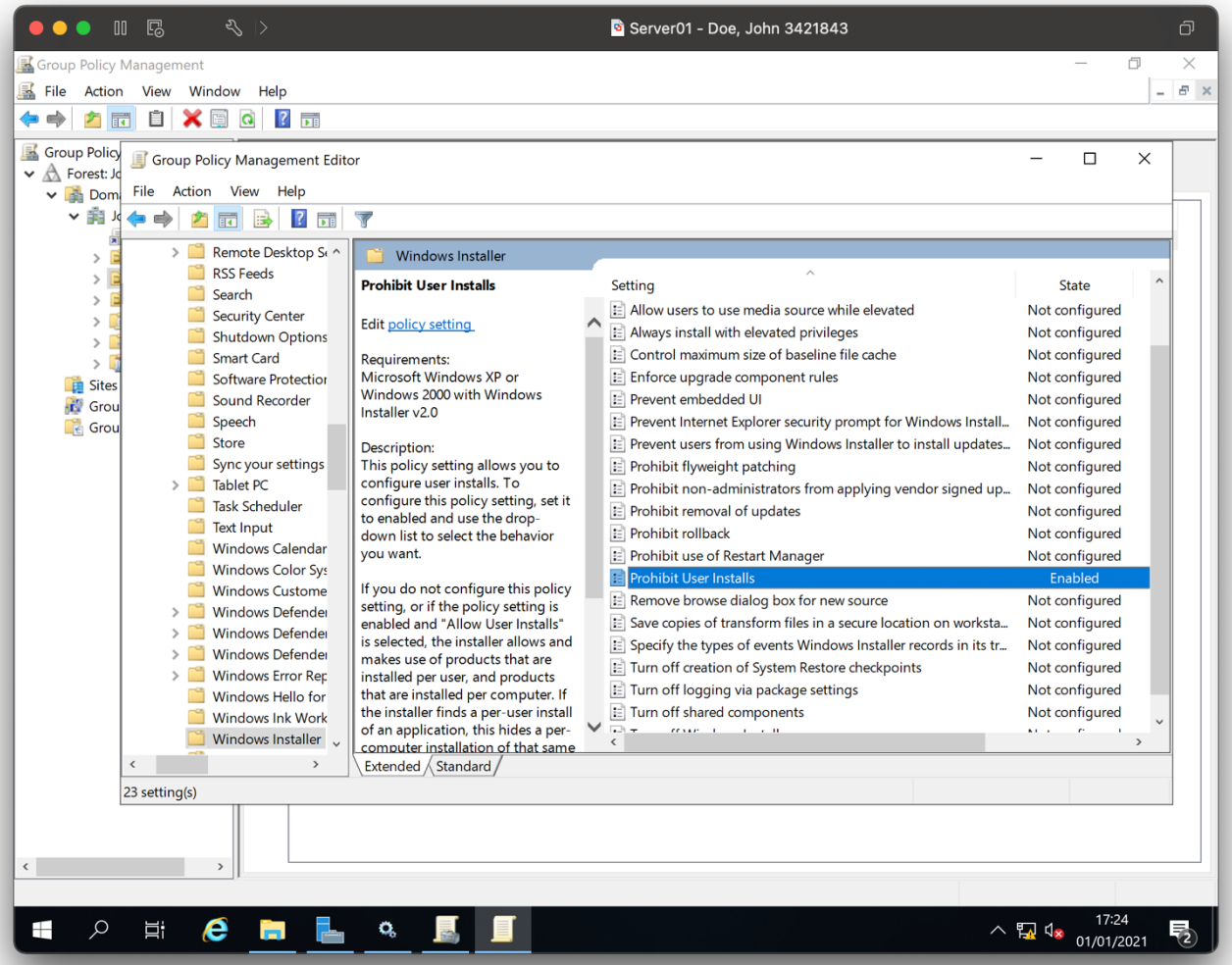


Print screen showing that you cannot access task manager on PC01 as it is hidden from the CTRL+ALT+ Delete screen

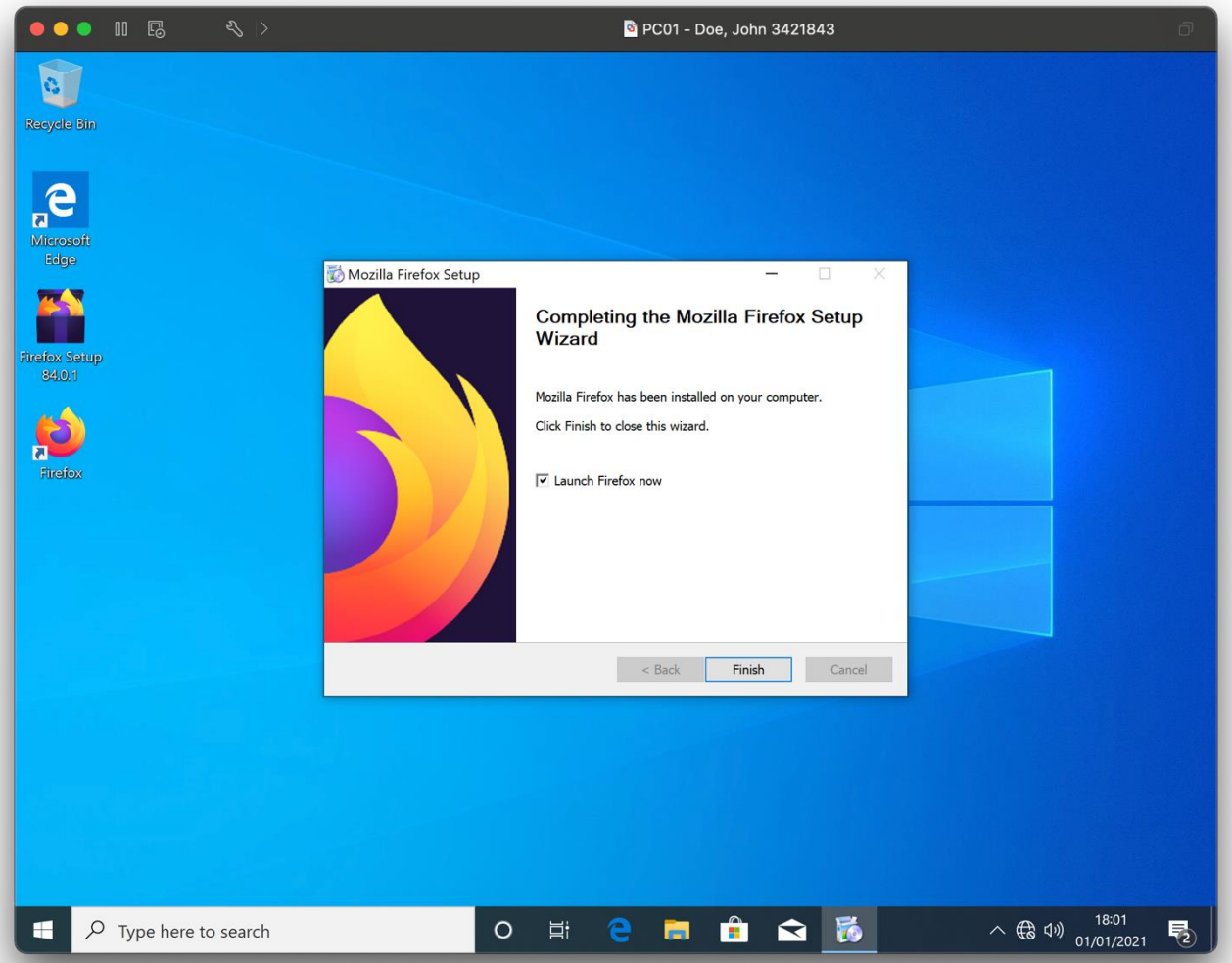

PC01 - Doe, John 3421843
Lock
Switch user
Sign out
Change a password
Cancel

Policy 4 – prevent the installing of applications

Print screen on Server01 showing the prevention of installing applications in group policy

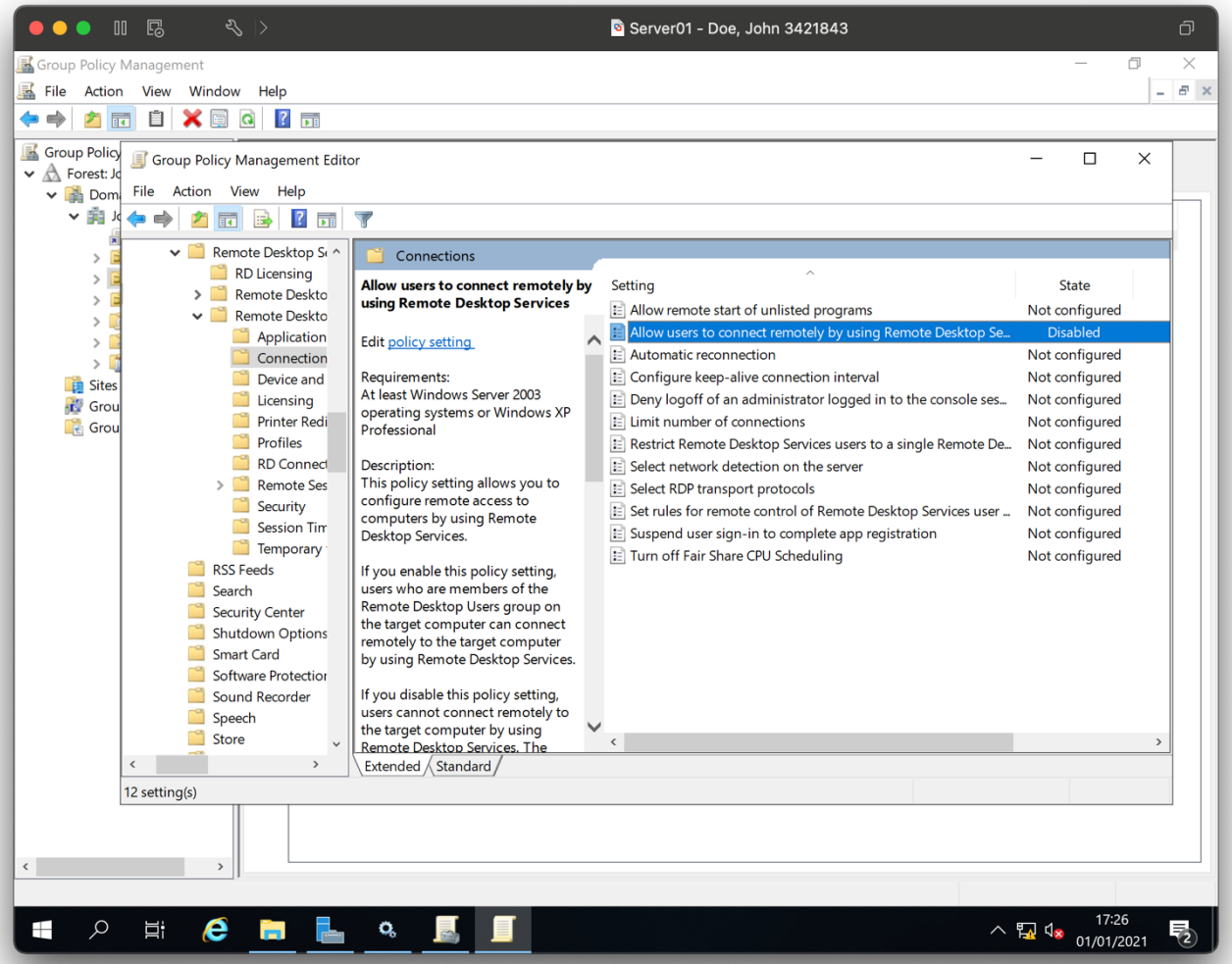


Print screen showing that when an .EXE is clicked, it will not execute and stops with an error message displays on the screen

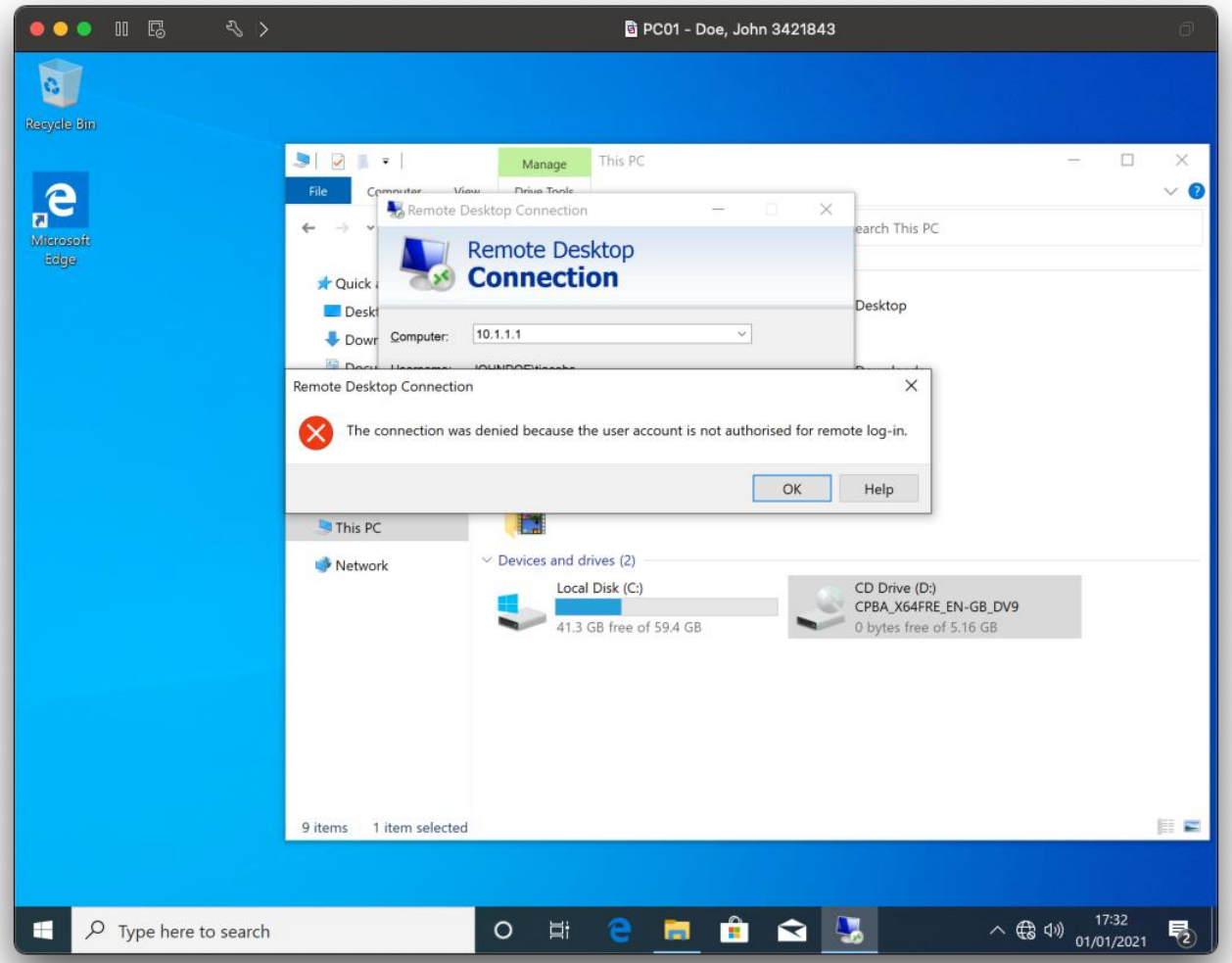

PC01 - Doe, John 3421843
Recycle Bin
Microsoft Edge
Firefox Setup 84.0.1
Firefox
Mozilla Firefox Setup
Completing the Mozilla Firefox Setup Wizard
Mozilla Firefox has been installed on your computer.
Click Finish to close this wizard.
Launch Firefox now
< Back
Finish
Cancel
Type here to search
18:01
01/01/2021

Policy 5 – disable remote desktop]

Print screen on Server01 showing remote desktop has been disabled in group policy



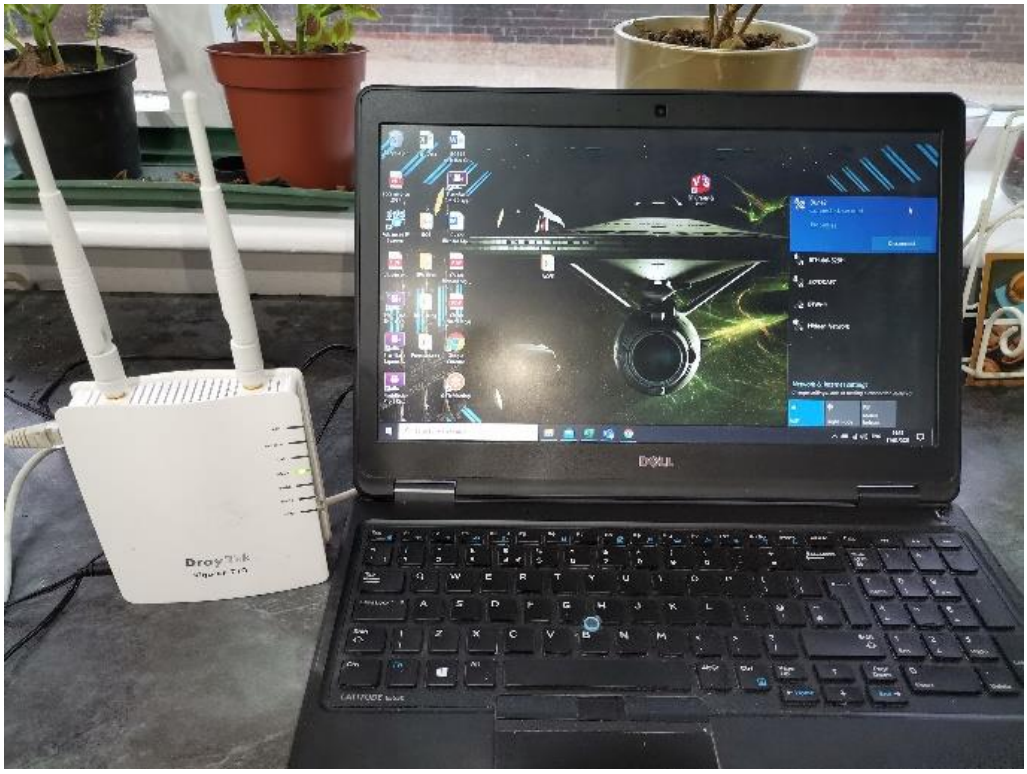
Print screen showing that when a remote desktop connections cannot be made to PC01 from Server01

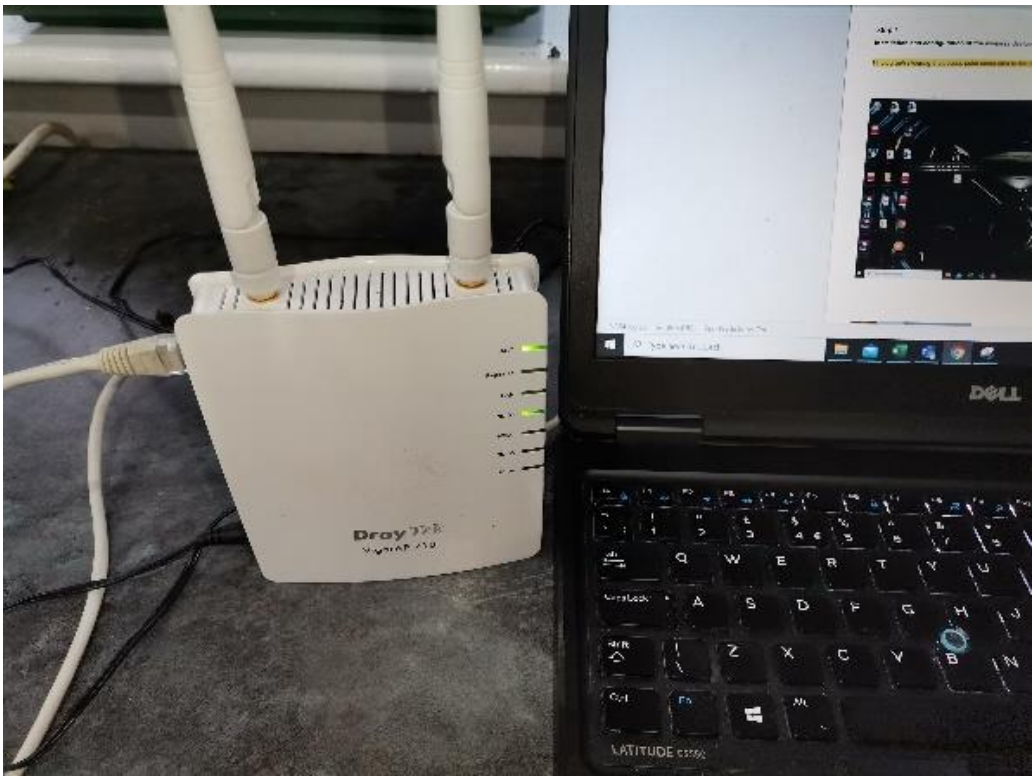

PC01 - Doe, John 3421843
Recycle Bin
Microsoft Edge
Manage
This PC
File
Computer
View
Drive Tools
Remote Desktop Connection
Remote Desktop
Connection
Computer:
10.1.1.1
Remote Desktop Connection
The connection was denied because the user account is not authorised for remote log-in.
OK
Help
Quick access
Desktop
Downloads
This PC
Network
Devices and drives (2)
Local Disk (C:)
41.3 GB free of 59.4 GB
CD Drive (D:)
CPBA_X64FRE_EN-GB_DV9
0 bytes free of 5.16 GB
9 items
1 item selected
Type here to search
17:32
01/01/2021

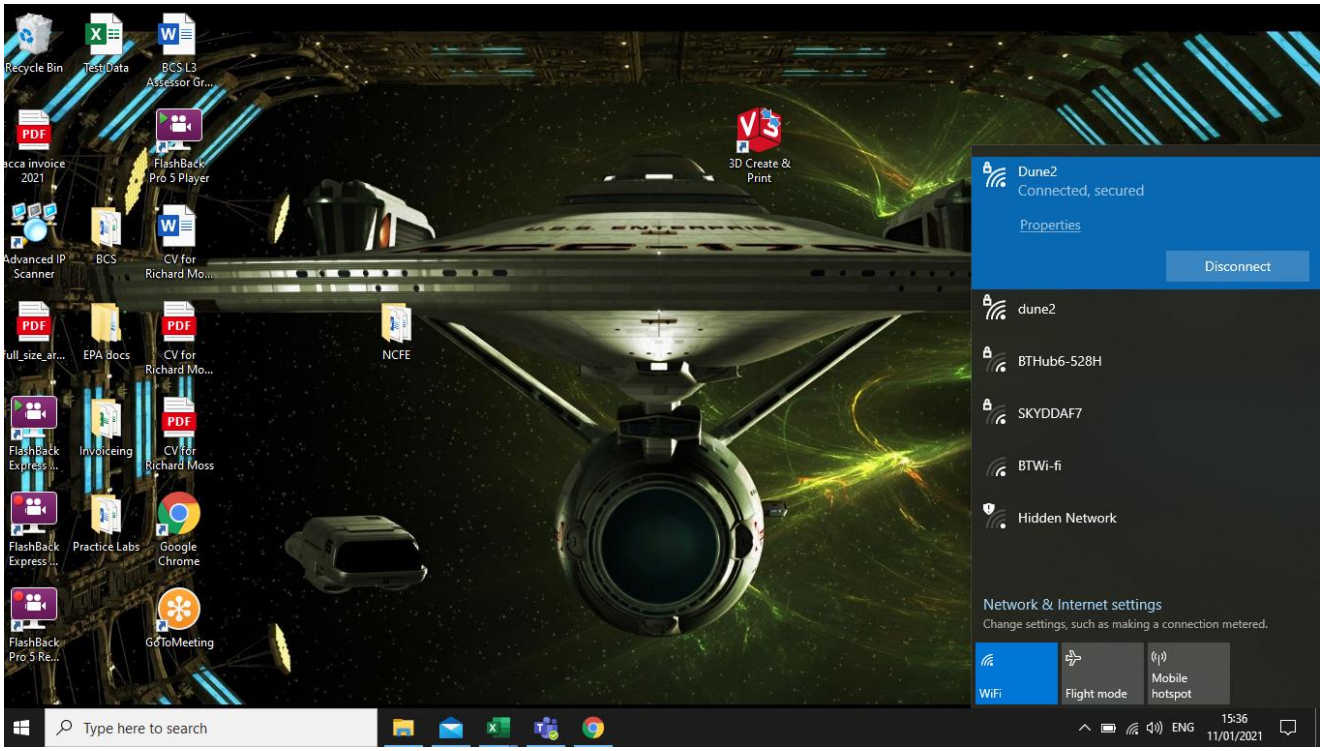
Step I

Installation and configuration of the wireless device

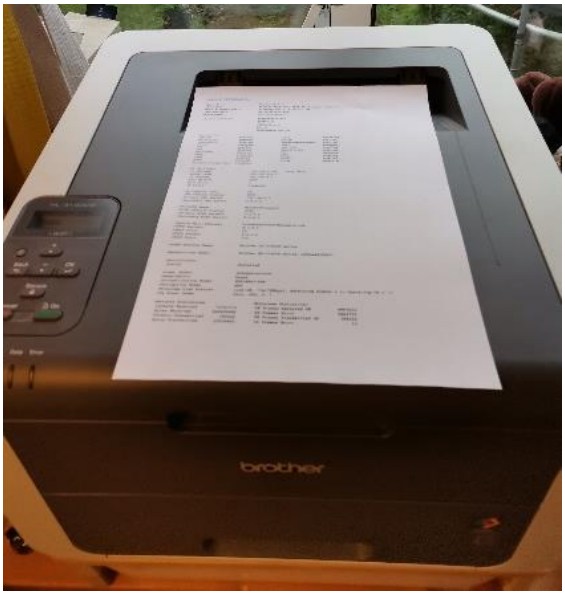
Photograph showing the access point connected to the host machine via an ethernet cable

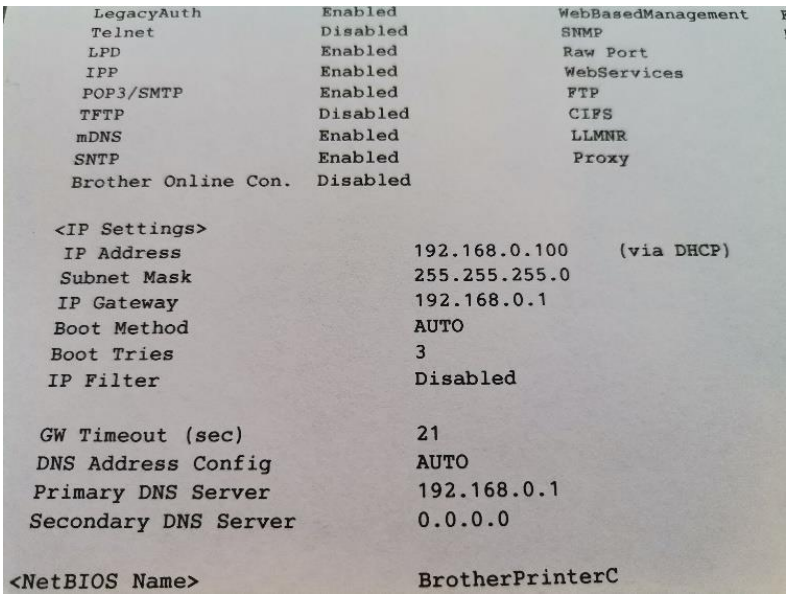



DELL
LATITUDE


Recycle Bin
Test Data
BCS L3 Assessor Gr...
FlashBack Pro 5 Player
Advanced IP Scanner
BCS
CV for Richard Mo...
EPA docs
NCFE
3D Create & Print
Invoiceing
CV for Richard Moss
Practice Labs
Google Chrome
GoToMeeting
Dune2
Connected, secured
Properties
Disconnect
dune2
BTHub6-528H
SKYDDAF7
BTWi-fi
Hidden Network
Network & Internet settings
Change settings, such as making a connection metered.
WiFi
Flight mode
Mobile hotspot
Type here to search
ENG
15:36
11/01/2021

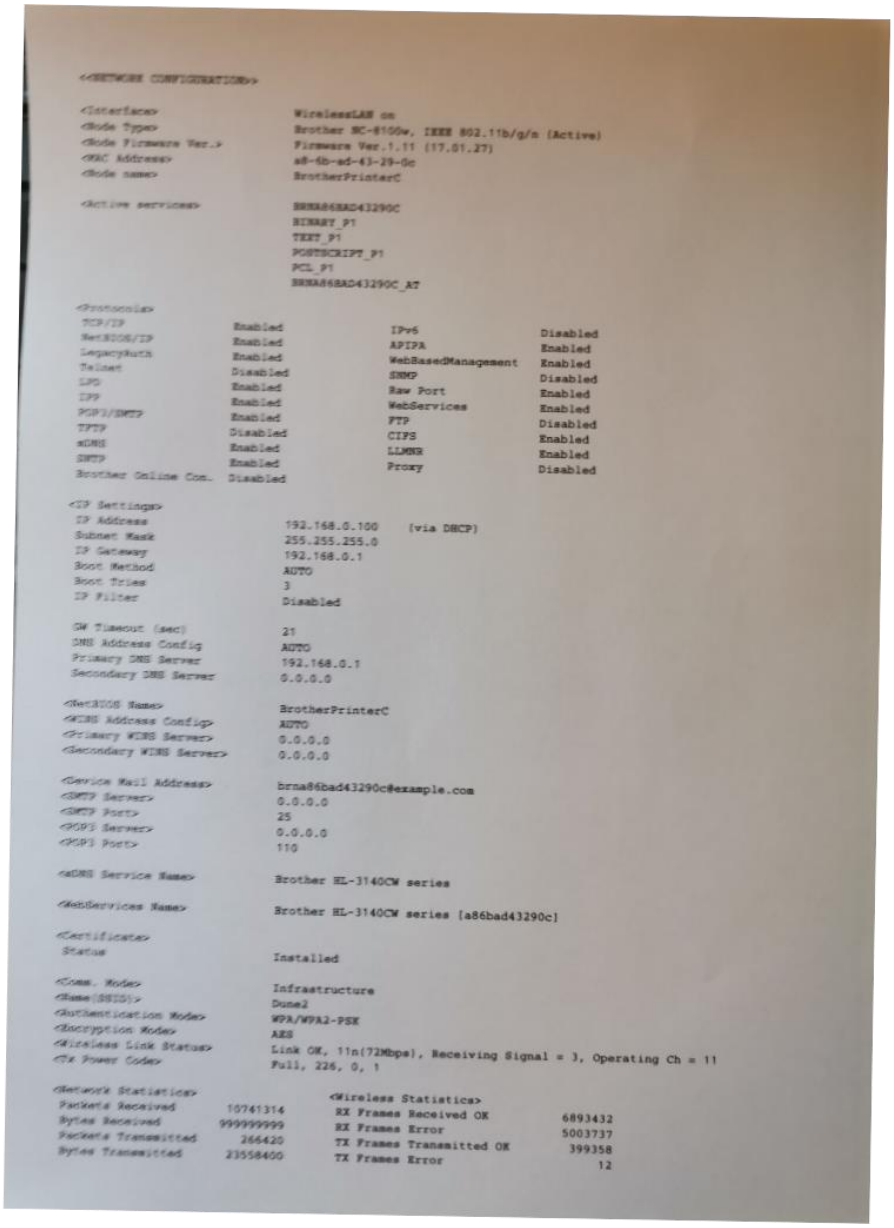
Printing the printers WiFi Settings to show it is connected to the WiFi





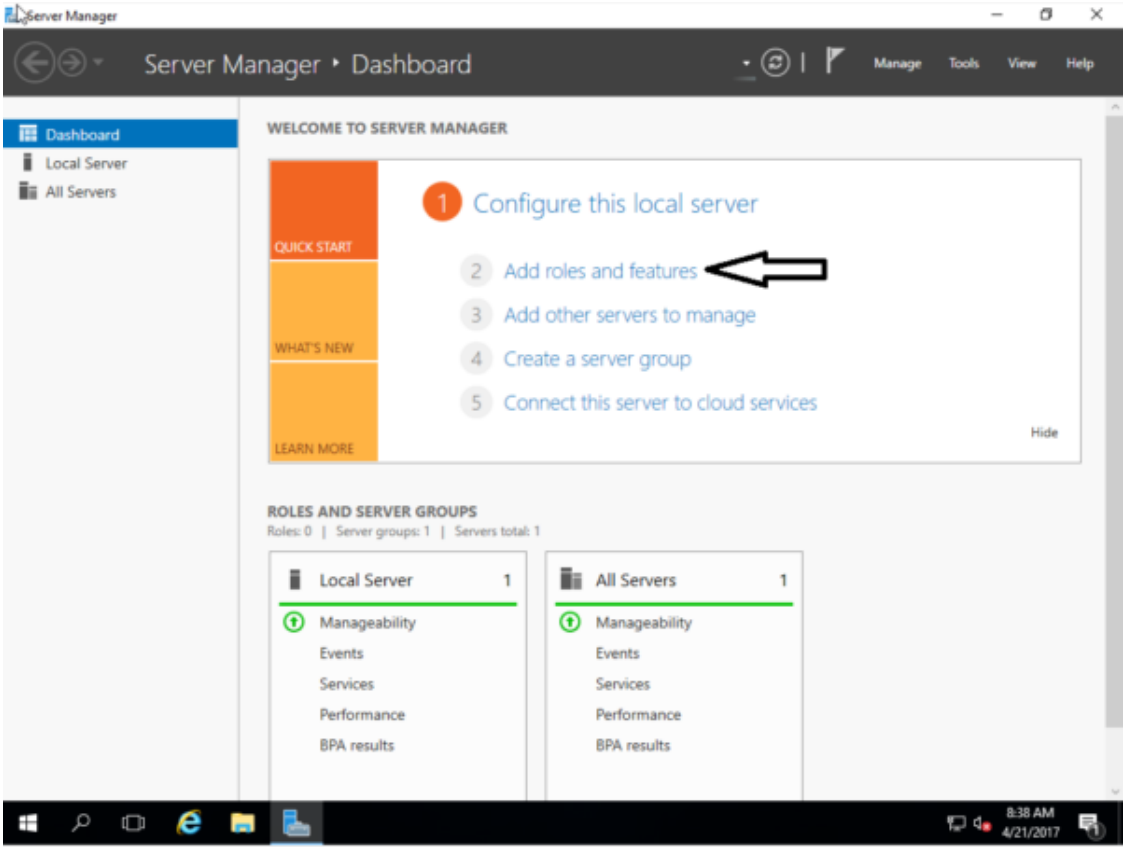
LegacyAuth	Enabled	WebBasedManagement	
Telnet	Disabled	SNMP	
LPD	Enabled	Raw Port	
IPP	Enabled	WebServices	
POP3/SMTP	Enabled	FTP	
TFTP	Disabled	CIFS	
mDNS	Enabled	LLMNR	
SNTP	Enabled	Proxy	
Brother Online Con.	Disabled		

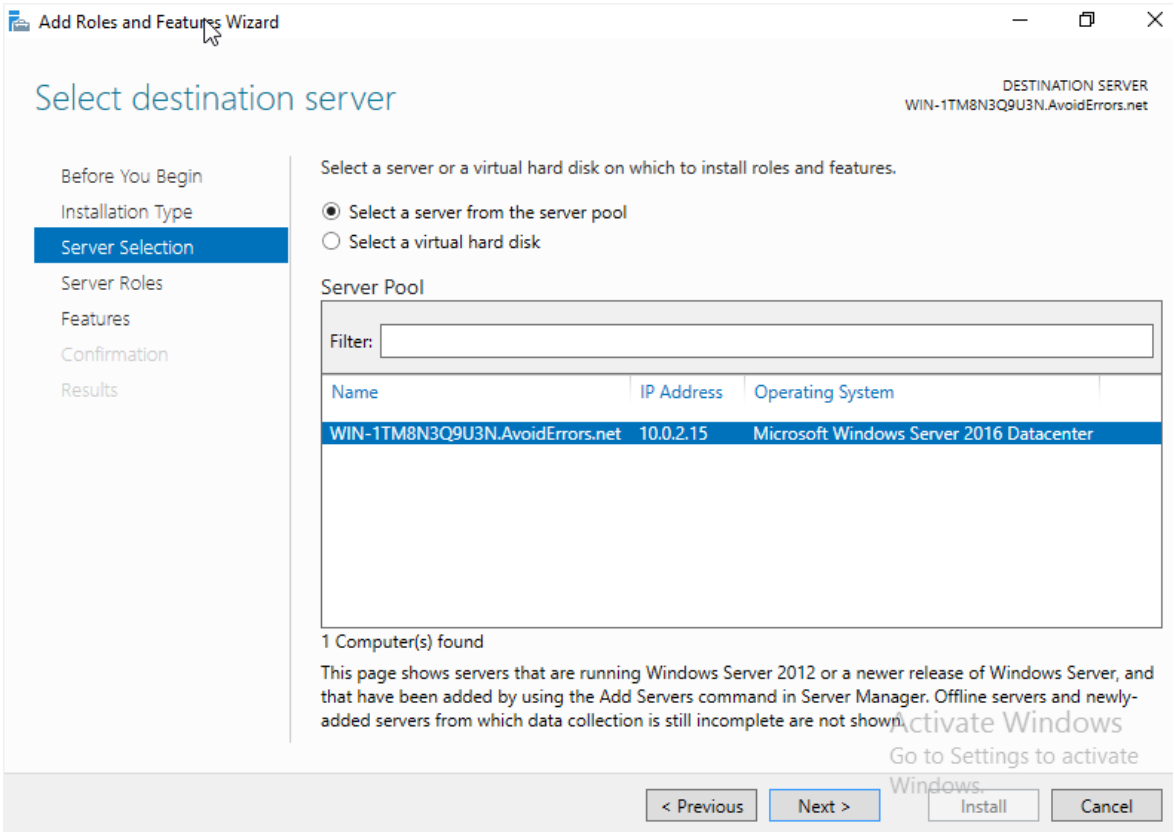
<IP Settings>	
IP Address	192.168.0.100 (via DHCP)
Subnet Mask	255.255.255.0
IP Gateway	192.168.0.1
Boot Method	AUTO
Boot Tries	3
IP Filter	Disabled
GW Timeout (sec)	21
DNS Address Config	AUTO
Primary DNS Server	192.168.0.1
Secondary DNS Server	0.0.0.0
<NetBIOS Name>	BrotherPrinterC

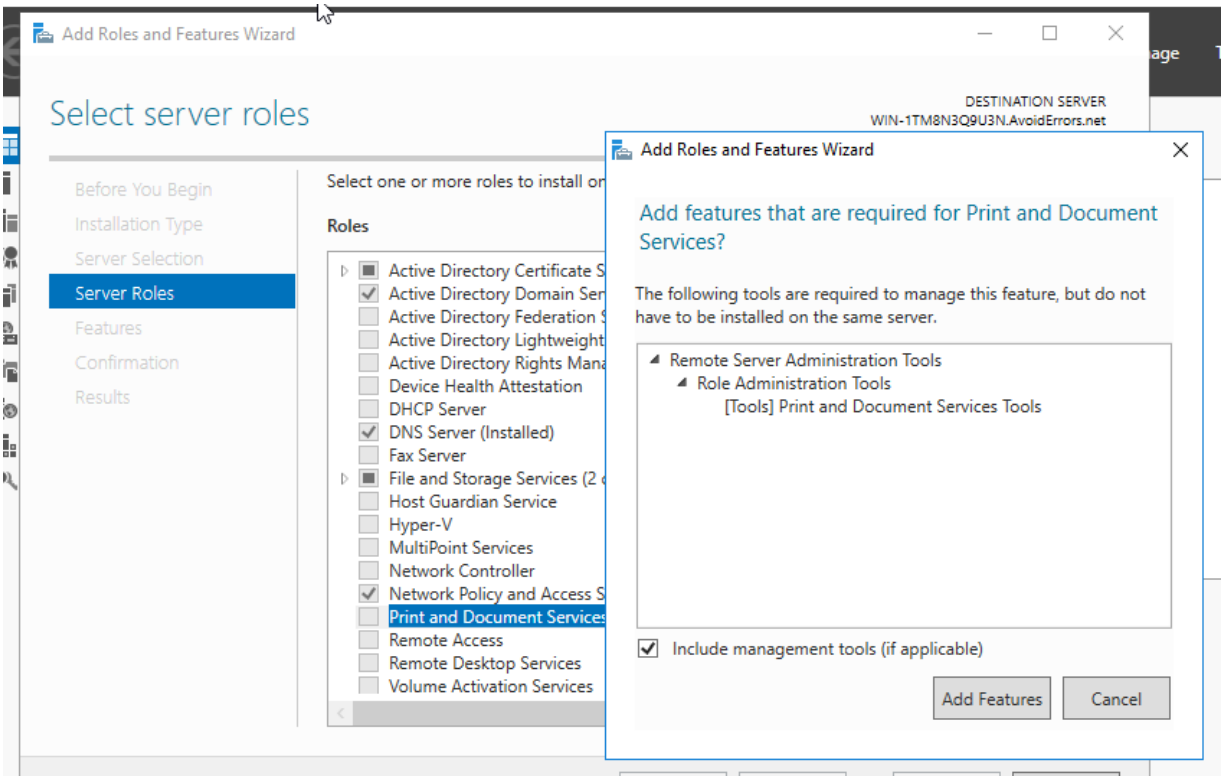


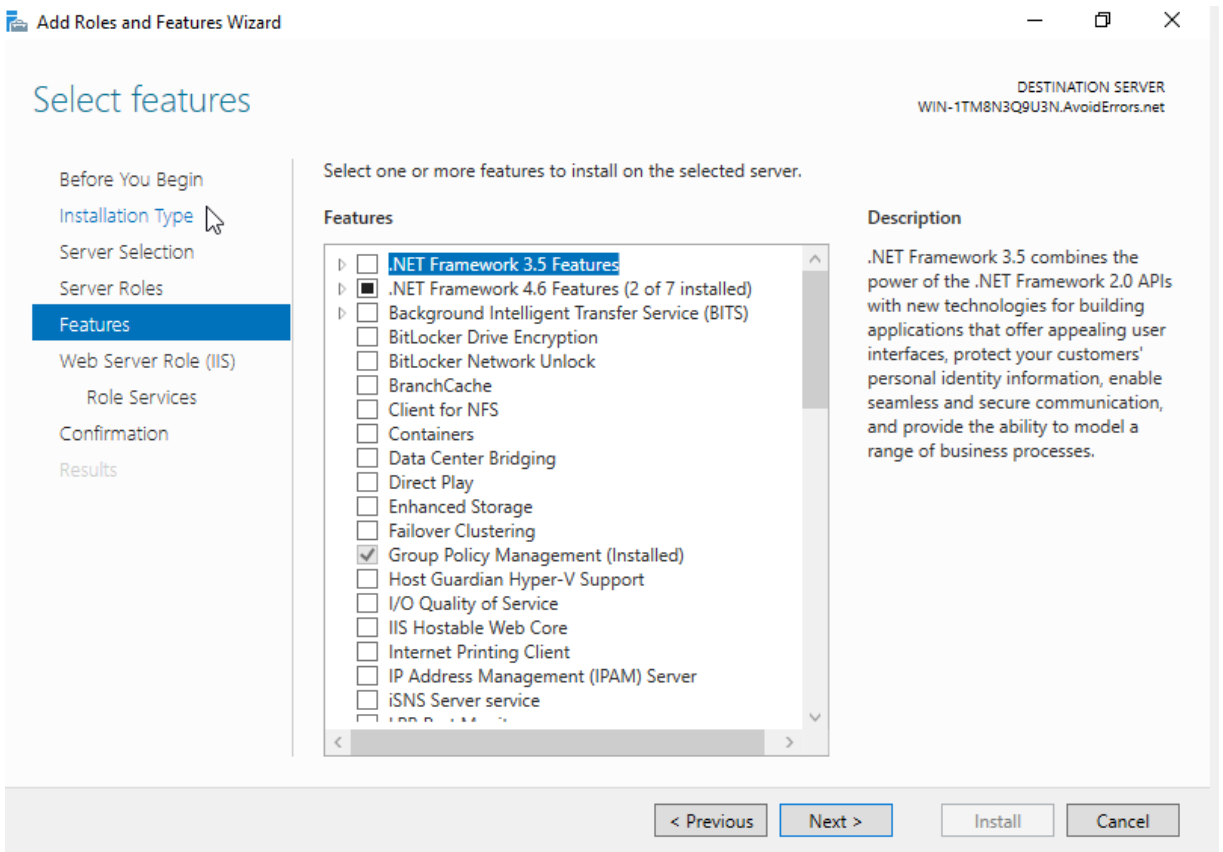
```
<<NETWORK CONFIGURATION>>

<Interface>                  WirelessLAN on
<Node Type>                  Brother NC-8100w, IEEE 802.11b/g/n (Active)
<Node Firmware Ver.>         Firmware Ver.1.11 (17.01.27)
<MAC Address>                a8-6b-ad-43-29-0c
<Node name>                  BrotherPrinterC

<Active services>            BRNA86BAD43290C
                             BINARY_P1
                             TEXT_P1
                             POSTSCRIPT_P1
                             PCL_P1
                             BRNA86BAD43290C_AT

<Protocols>
 TCP/IP                 Enabled          IPv6                  Disabled
 NetBIOS/IP             Enabled          APIPA                 Enabled
 LegacyAuth             Enabled          WebBasedManagement    Enabled
 Telnet                 Disabled         SNMP                  Disabled
 LPD                    Enabled          Raw Port              Enabled
 IPP                    Enabled          WebServices           Enabled
 POP3/SMTP              Enabled          FTP                   Disabled
 TFTP                   Disabled         CIFS                  Enabled
 mDNS                   Enabled          LLMNR                 Enabled
 SNTP                   Enabled          Proxy                 Disabled
 Brother Online Con.    Disabled

<IP Settings>
 IP Address                  192.168.0.100    (via DHCP)
 Subnet Mask                 255.255.255.0
 IP Gateway                  192.168.0.1
 Boot Method                 AUTO
 Boot Tries                  3
 IP Filter                   Disabled

 GW Timeout (sec)            21
 DNS Address Config          AUTO
 Primary DNS Server          192.168.0.1
 Secondary DNS Server        0.0.0.0

<NetBIOS Name>               BrotherPrinterC
<WINS Address Config>        AUTO
<Primary WINS Server>        0.0.0.0
<Secondary WINS Server>      0.0.0.0

<Device Mail Address>        brna86bad43290c@example.com
<SMTP Server>                0.0.0.0
<SMTP Port>                  25
<POP3 Server>                0.0.0.0
<POP3 Port>                  110

<mDNS Service Name>          Brother HL-3140CW series

<WebServices Name>           Brother HL-3140CW series [a86bad43290c]

<Certificate>
 Status                      Installed

<Comm. Mode>                 Infrastructure
<Name(SSID)>                 Dune2
<Authentication Mode>        WPA/WPA2-PSK
<Encryption Mode>            AES
<Wireless Link Status>       Link OK, 11n(72Mbps), Receiving Signal = 3, Operating Ch = 11
<Tx Power Code>              Full, 226, 0, 1

<Network Statistics>                 <Wireless Statistics>
 Packets Received        10741314     RX Frames Received OK        6893432
 Bytes Received         999999999     RX Frames Error              5003737
 Packets Transmitted       266420     TX Frames Transmitted OK      399358
 Bytes Transmitted       23558400     TX Frames Error                   12
```

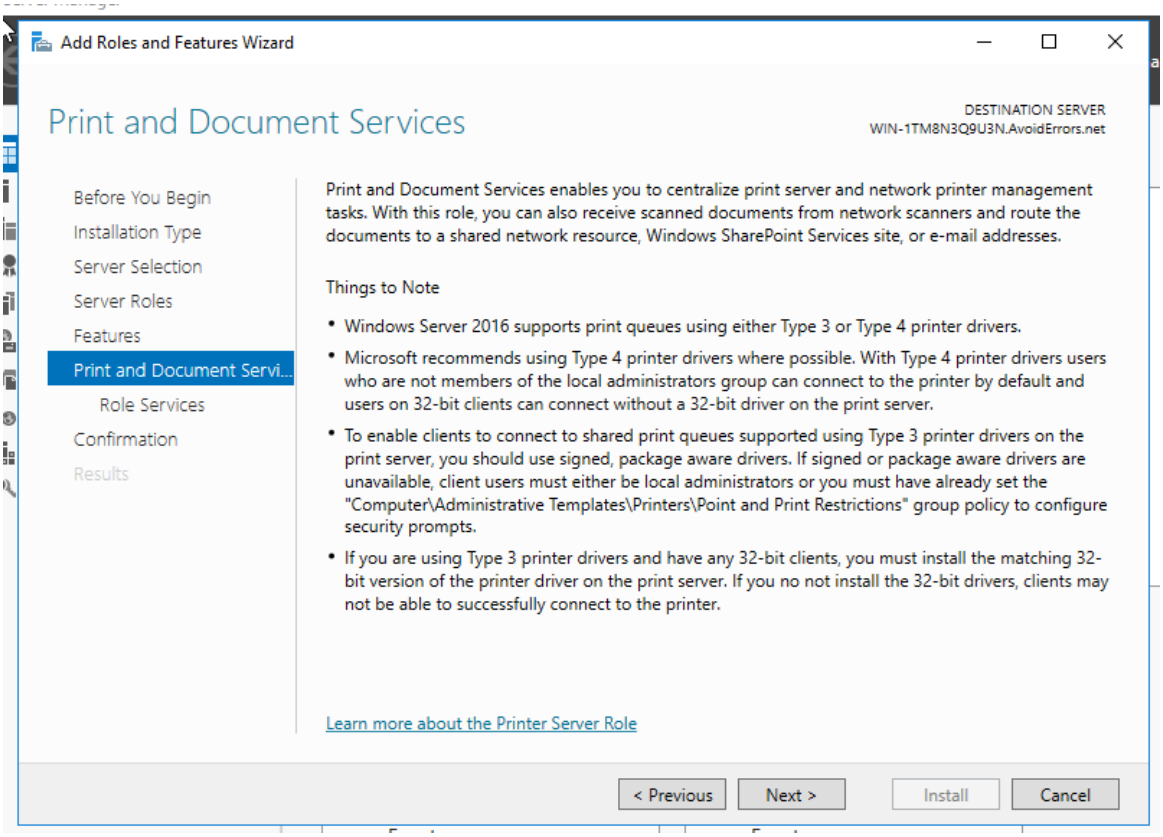
The following images show the adding of the print services to the server and the adding of the WiFi printer.

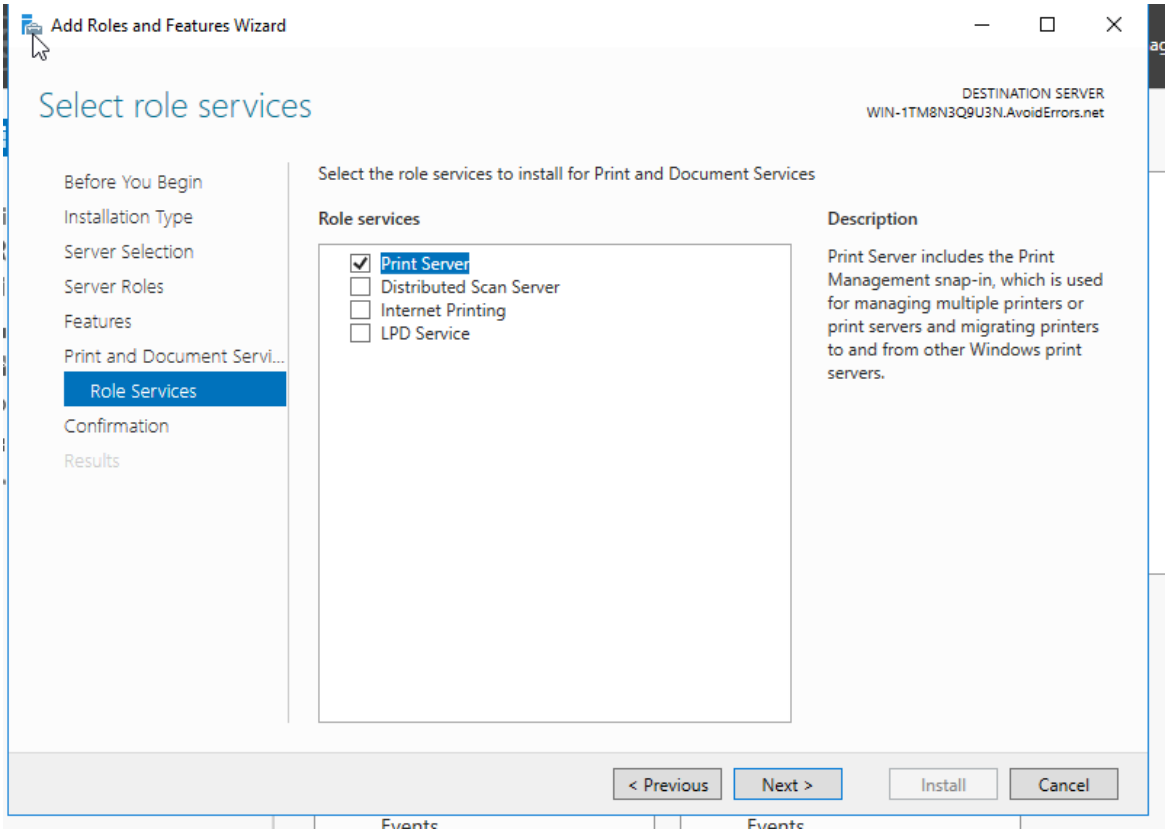


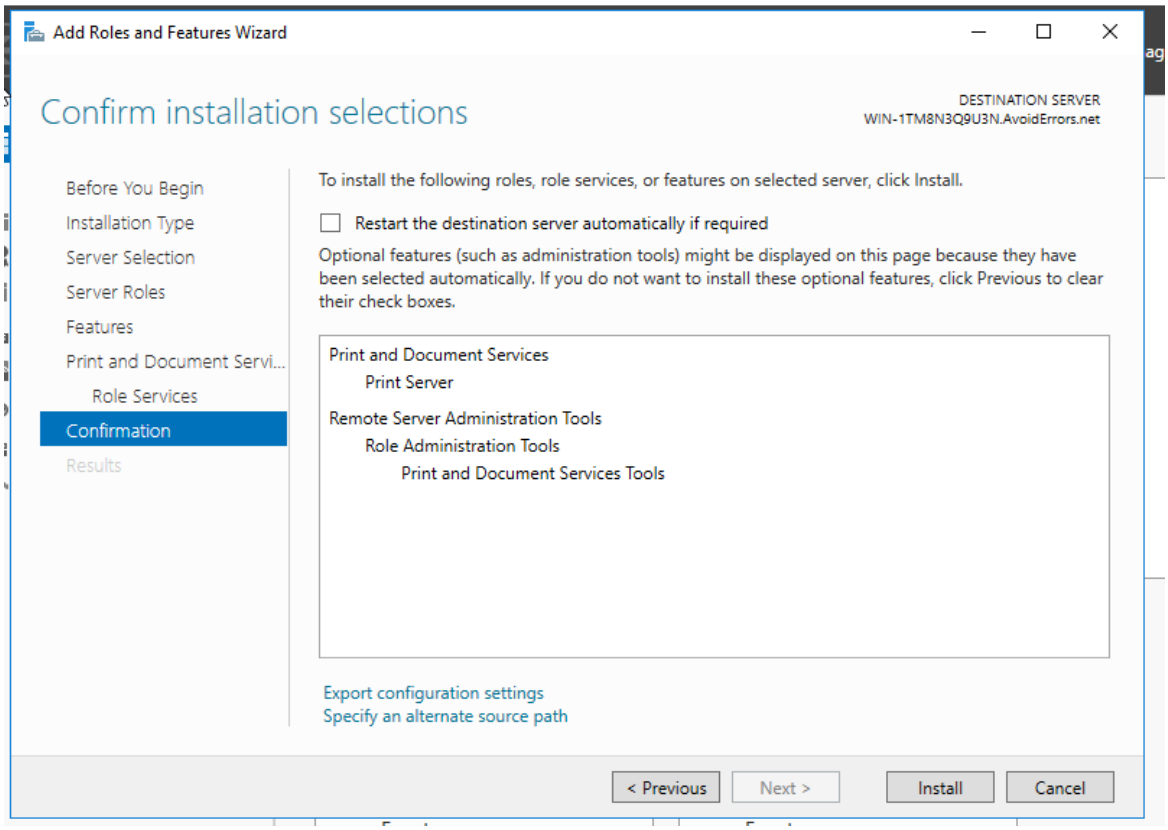


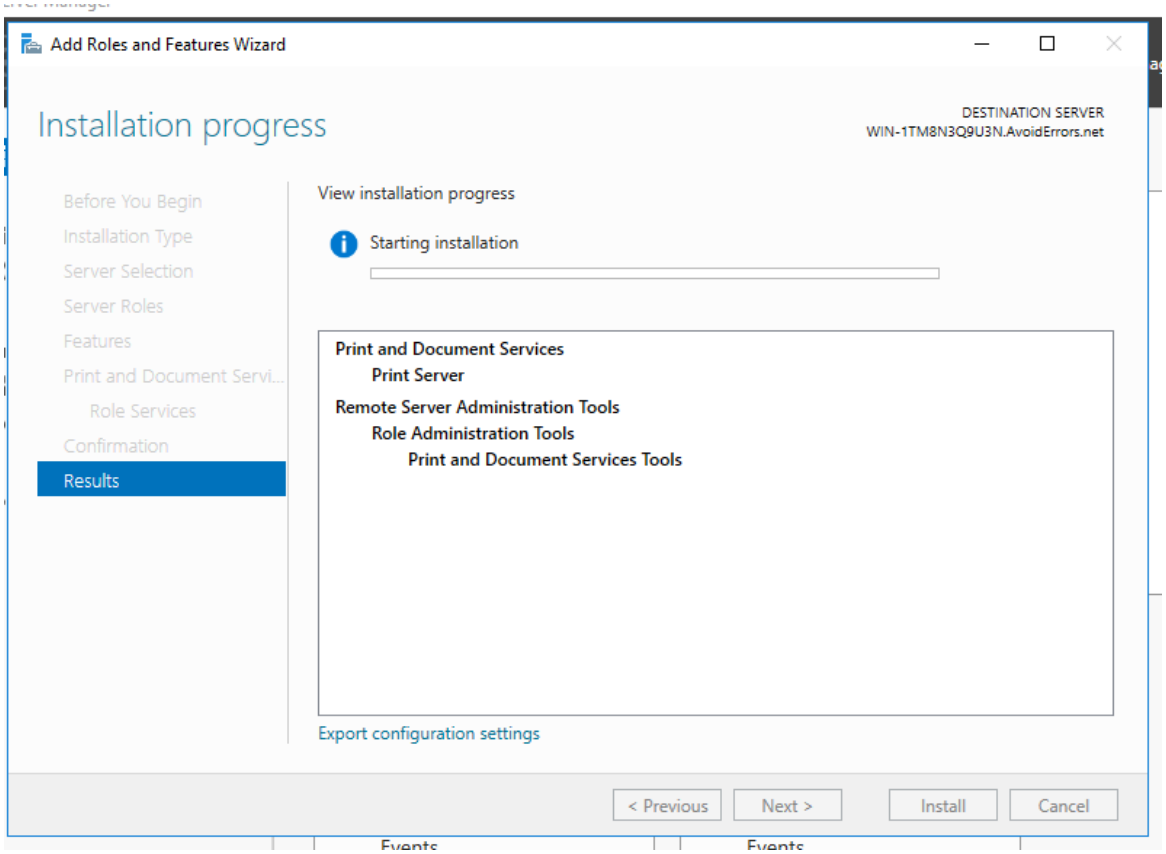

Add Roles and Features Wizard
Select server roles
DESTINATION SERVER
WIN-1TM8N3Q9U3N.AvoidErrors.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles to install or
Roles
Active Directory Certificate S
Active Directory Domain Ser
Active Directory Federation S
Active Directory Lightweight
Active Directory Rights Mana
Device Health Attestation
DHCP Server
DNS Server (Installed)
Fax Server
File and Storage Services (2
Host Guardian Service
Hyper-V
MultiPoint Services
Network Controller
Network Policy and Access S
Print and Document Services
Remote Access
Remote Desktop Services
Volume Activation Services
Add Roles and Features Wizard
Add features that are required for Print and Document Services?
The following tools are required to manage this feature, but do not have to be installed on the same server.
Remote Server Administration Tools
Role Administration Tools
[Tools] Print and Document Services Tools
Include management tools (if applicable)
Add Features
Cancel

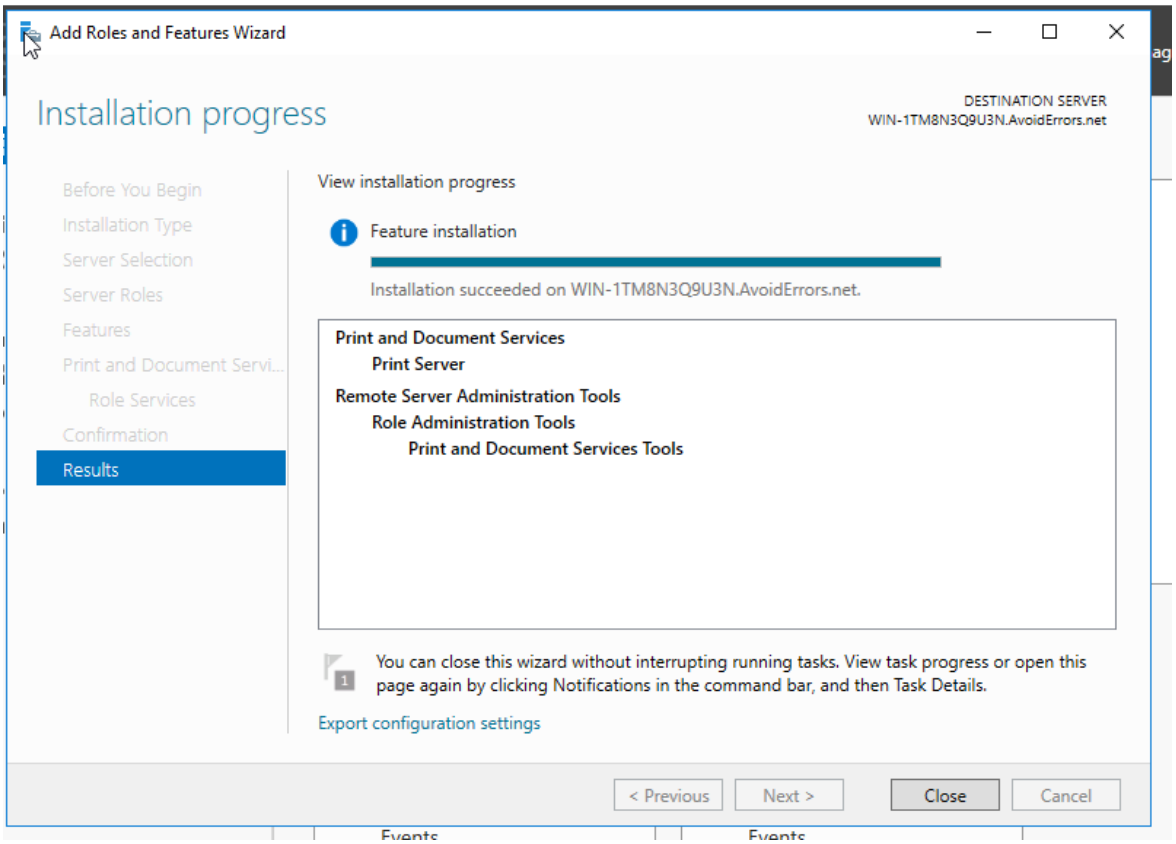

Add Roles and Features Wizard
Select features
DESTINATION SERVER
WIN-1TM8N3Q9U3N.AvoidErrors.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Web Server Role (IIS)
Role Services
Confirmation
Results
Select one or more features to install on the selected server.
Features
.NET Framework 3.5 Features
.NET Framework 4.6 Features (2 of 7 installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BitLocker Network Unlock
BranchCache
Client for NFS
Containers
Data Center Bridging
Direct Play
Enhanced Storage
Failover Clustering
Group Policy Management (Installed)
Host Guardian Hyper-V Support
I/O Quality of Service
IIS Hostable Web Core
Internet Printing Client
IP Address Management (IPAM) Server
iSNS Server service
Description
.NET Framework 3.5 combines the power of the .NET Framework 2.0 APIs with new technologies for building applications that offer appealing user interfaces, protect your customers' personal identity information, enable seamless and secure communication, and provide the ability to model a range of business processes.
< Previous
Next >
Install
Cancel


Add Roles and Features Wizard
Print and Document Services
DESTINATION SERVER
WIN-1TM8N3Q9U3N.AvoidErrors.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Print and Document Servi...
Role Services
Confirmation
Results
Print and Document Services enables you to centralize print server and network printer management tasks. With this role, you can also receive scanned documents from network scanners and route the documents to a shared network resource, Windows SharePoint Services site, or e-mail addresses.
Things to Note
Windows Server 2016 supports print queues using either Type 3 or Type 4 printer drivers.
Microsoft recommends using Type 4 printer drivers where possible. With Type 4 printer drivers users who are not members of the local administrators group can connect to the printer by default and users on 32-bit clients can connect without a 32-bit driver on the print server.
To enable clients to connect to shared print queues supported using Type 3 printer drivers on the print server, you should use signed, package aware drivers. If signed or package aware drivers are unavailable, client users must either be local administrators or you must have already set the "Computer\Administrative Templates\Printers\Point and Print Restrictions" group policy to configure security prompts.
If you are using Type 3 printer drivers and have any 32-bit clients, you must install the matching 32-bit version of the printer driver on the print server. If you no not install the 32-bit drivers, clients may not be able to successfully connect to the printer.
Learn more about the Printer Server Role
< Previous
Next >
Install
Cancel


Add Roles and Features Wizard
Select role services
DESTINATION SERVER
WIN-1TM8N3Q9U3N.AvoidErrors.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Print and Document Servi...
Role Services
Confirmation
Results
Select the role services to install for Print and Document Services
Role services
Print Server
Distributed Scan Server
Internet Printing
LPD Service
Description
Print Server includes the Print Management snap-in, which is used for managing multiple printers or print servers and migrating printers to and from other Windows print servers.
< Previous
Next >
Install
Cancel

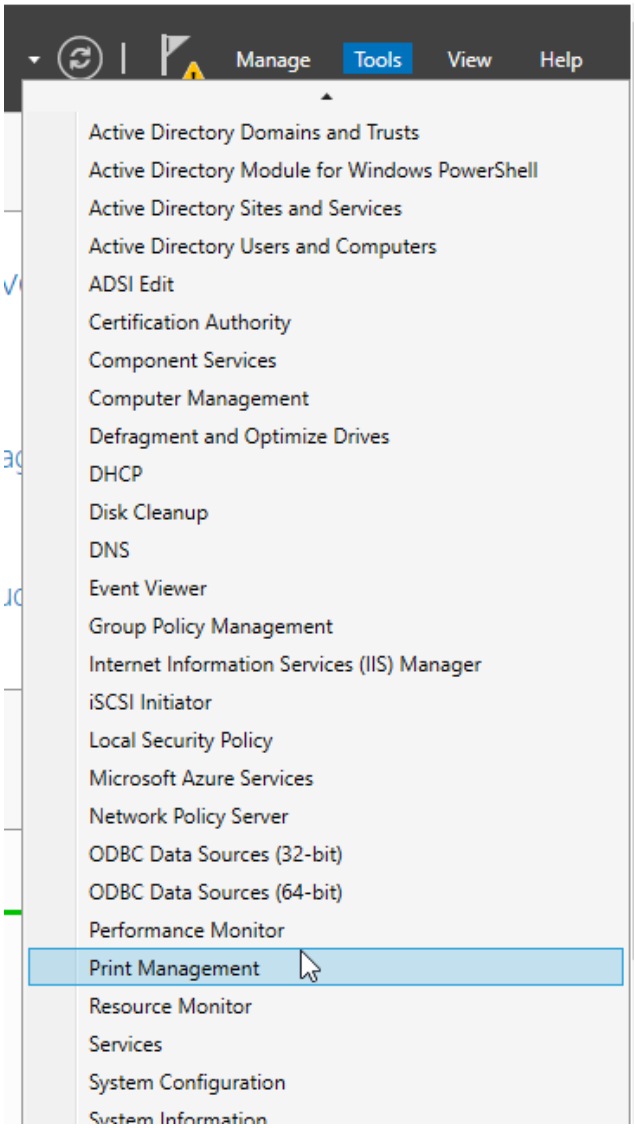

Add Roles and Features Wizard
Confirm installation selections
DESTINATION SERVER
WIN-1TM8N3Q9U3N.AvoidErrors.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Print and Document Servi...
Role Services
Confirmation
Results
To install the following roles, role services, or features on selected server, click Install.
Restart the destination server automatically if required
Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.
Print and Document Services
Print Server
Remote Server Administration Tools
Role Administration Tools
Print and Document Services Tools
Export configuration settings
Specify an alternate source path
< Previous
Next >
Install
Cancel

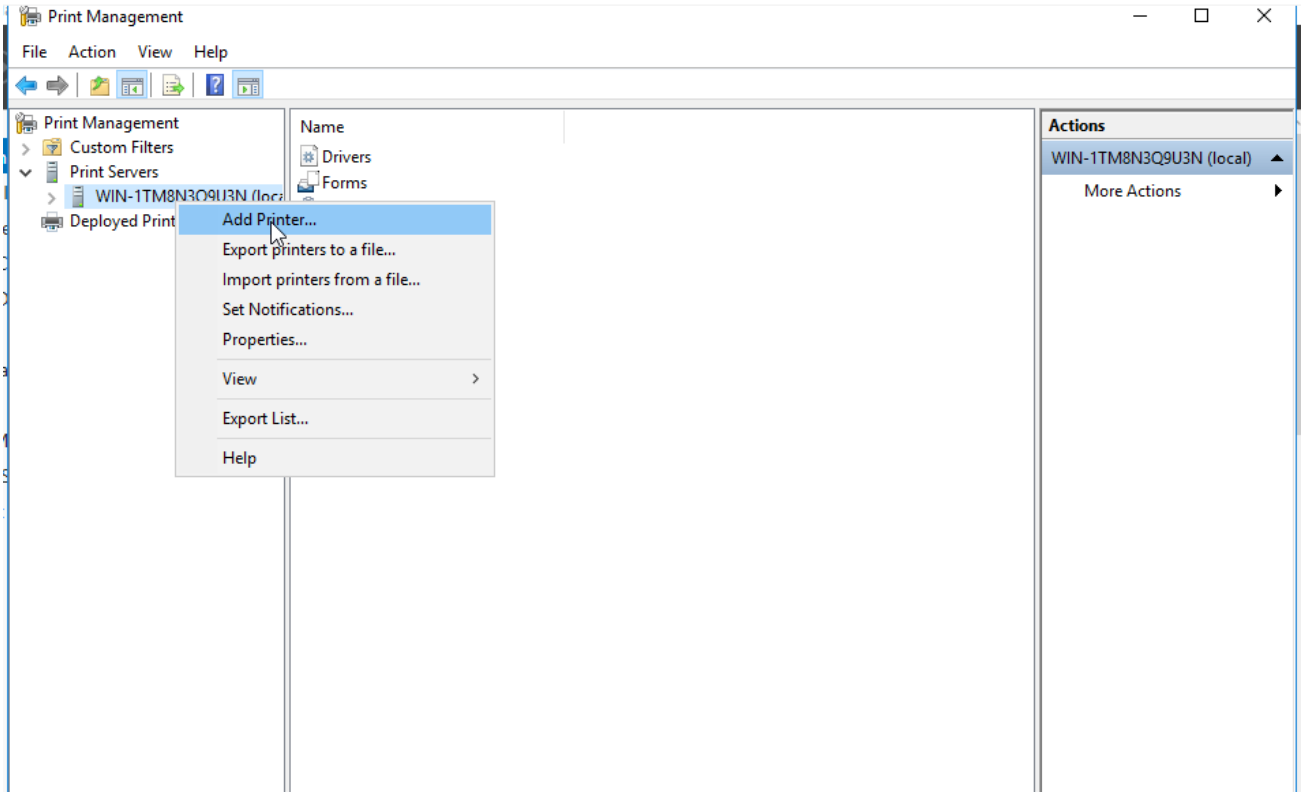

Add Roles and Features Wizard
Installation progress
DESTINATION SERVER
WIN-1TM8N3Q9U3N.AvoidErrors.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Print and Document Servi...
Role Services
Confirmation
Results
View installation progress
Starting installation
Print and Document Services
Print Server
Remote Server Administration Tools
Role Administration Tools
Print and Document Services Tools
Export configuration settings
< Previous
Next >
Install
Cancel

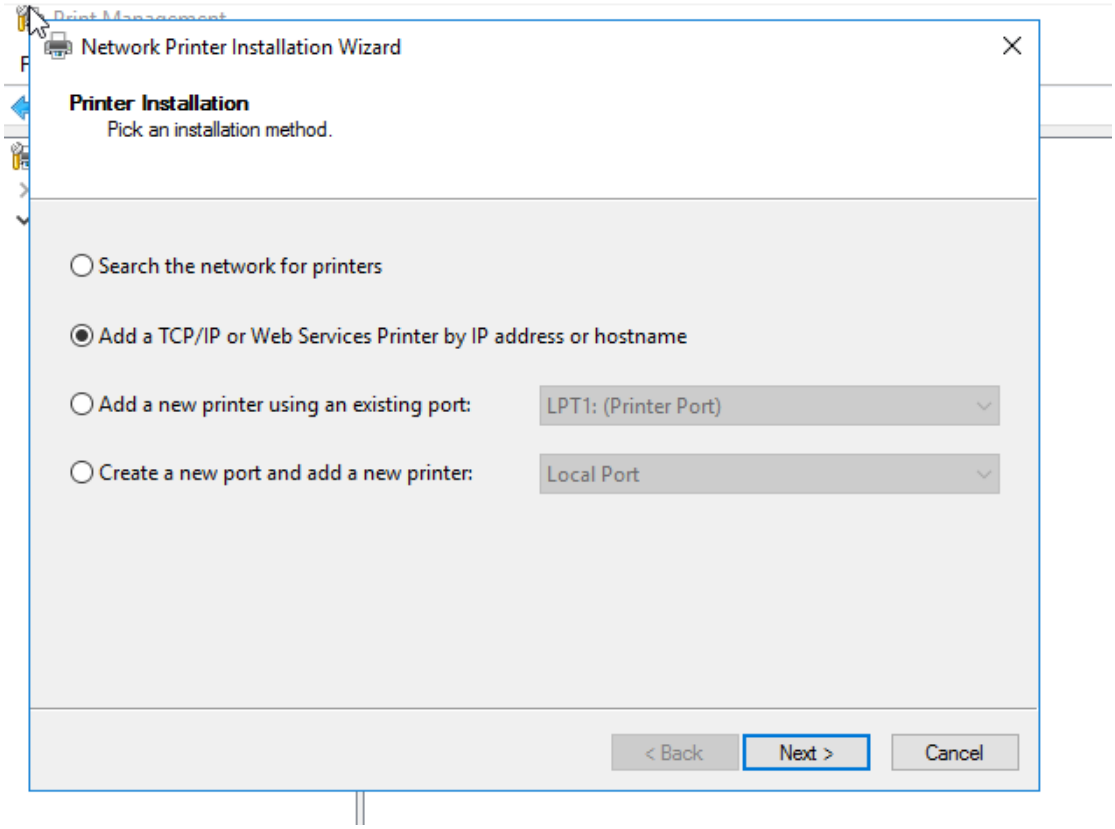

Add Roles and Features Wizard
Installation progress
DESTINATION SERVER
WIN-1TM8N3Q9U3N.AvoidErrors.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Print and Document Servi...
Role Services
Confirmation
Results
View installation progress
Feature installation
Installation succeeded on WIN-1TM8N3Q9U3N.AvoidErrors.net.
Print and Document Services
Print Server
Remote Server Administration Tools
Role Administration Tools
Print and Document Services Tools
You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.
Export configuration settings
< Previous
Next >
Close
Cancel

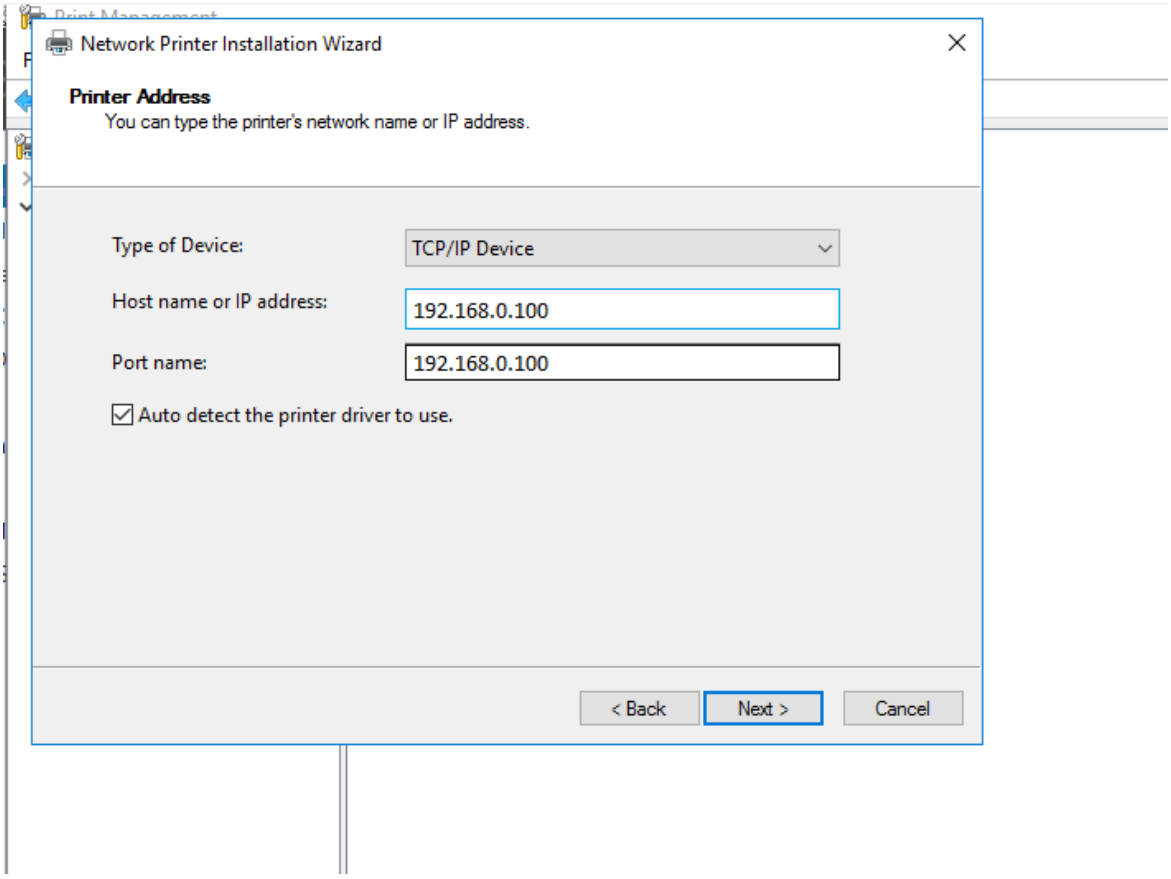
Configure print server and network printer on Windows Server 2016

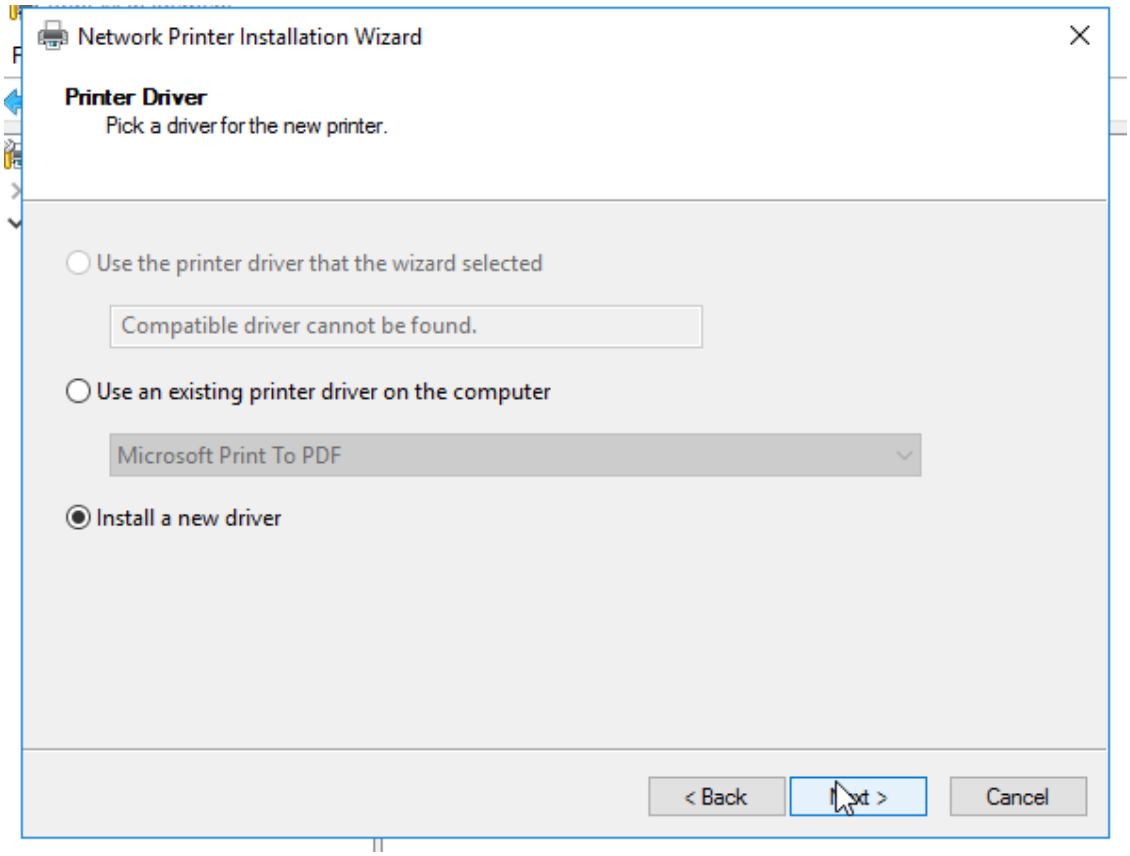
Screen prints showing the connection to the WiFi printer and the installation of the drivers.

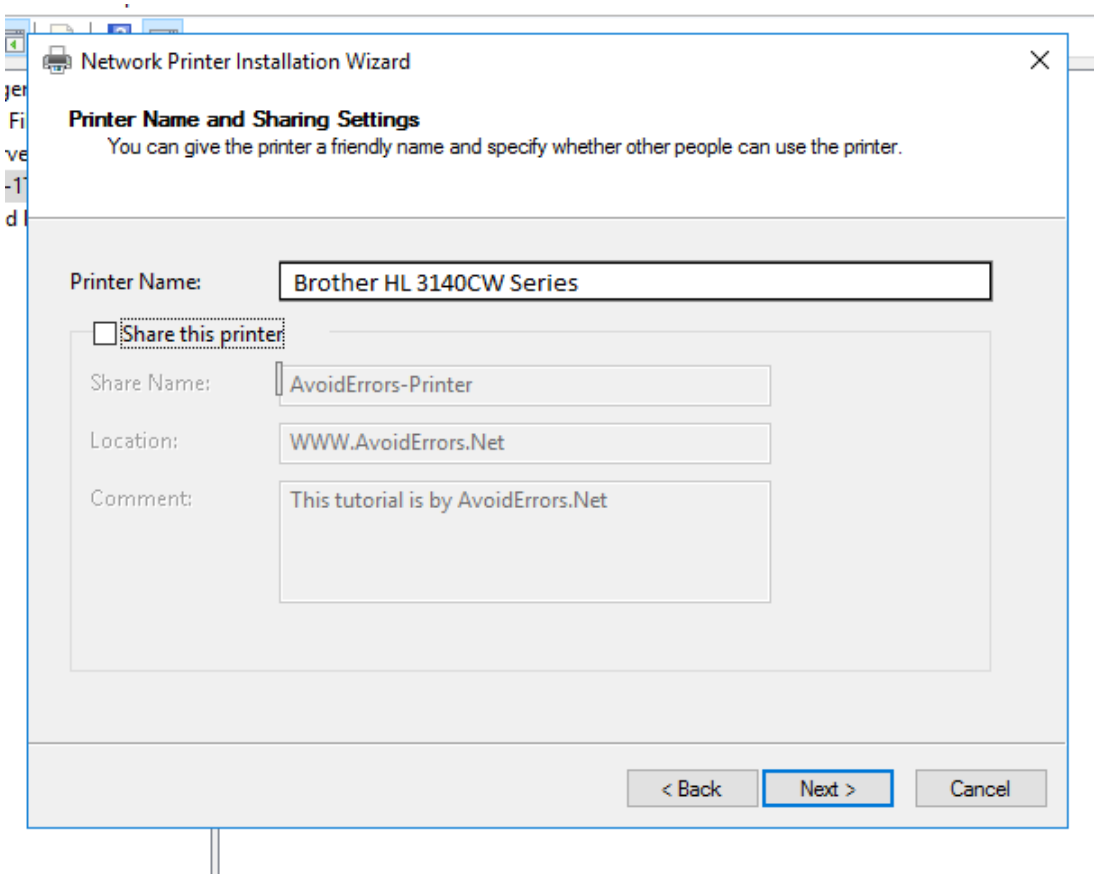


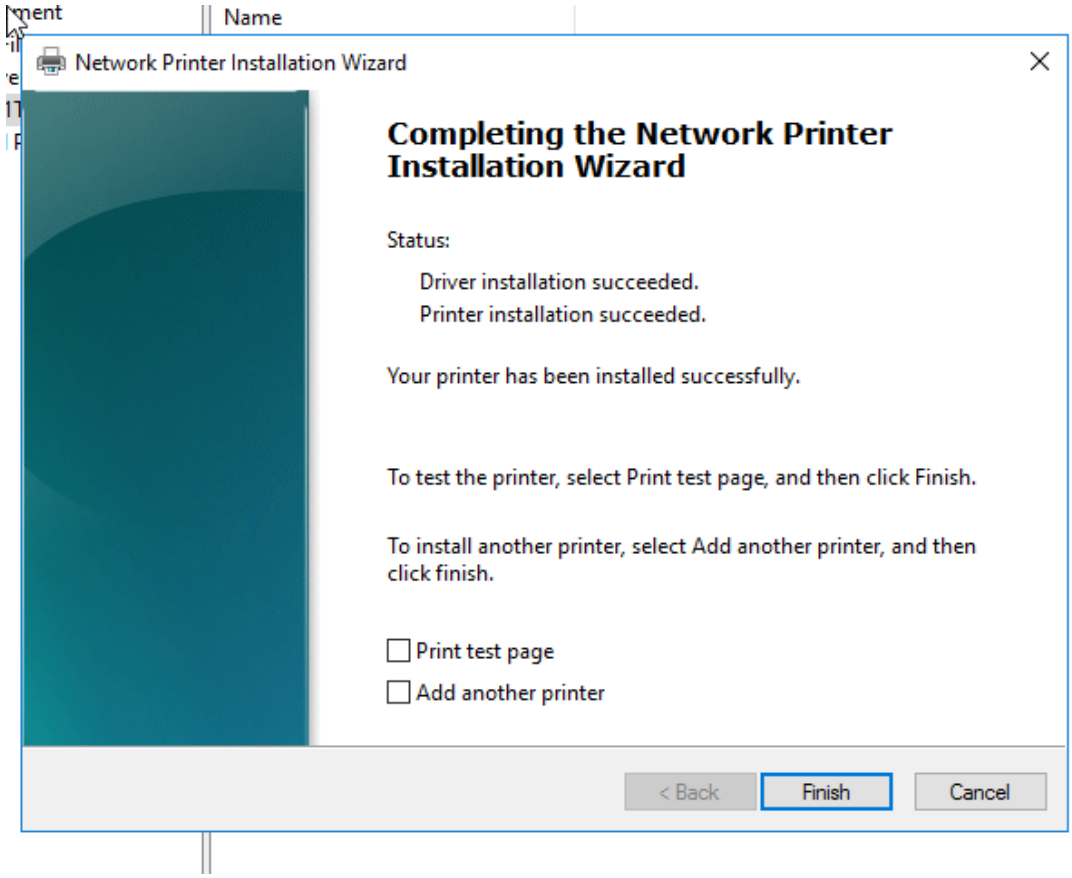

Print Management
File
Action
View
Help
Print Management
Custom Filters
Print Servers
Deployed Print
Name
Drivers
Forms
Add Printer...
Export printers to a file...
Import printers from a file...
Set Notifications...
Properties...
View
Export List...
Help
Actions
WIN-1TM8N3Q9U3N (local)
More Actions


Network Printer Installation Wizard
Printer Installation
Pick an installation method.
Search the network for printers
Add a TCP/IP or Web Services Printer by IP address or hostname
Add a new printer using an existing port:
LPT1: (Printer Port)
Create a new port and add a new printer:
Local Port
< Back
Next >
Cancel

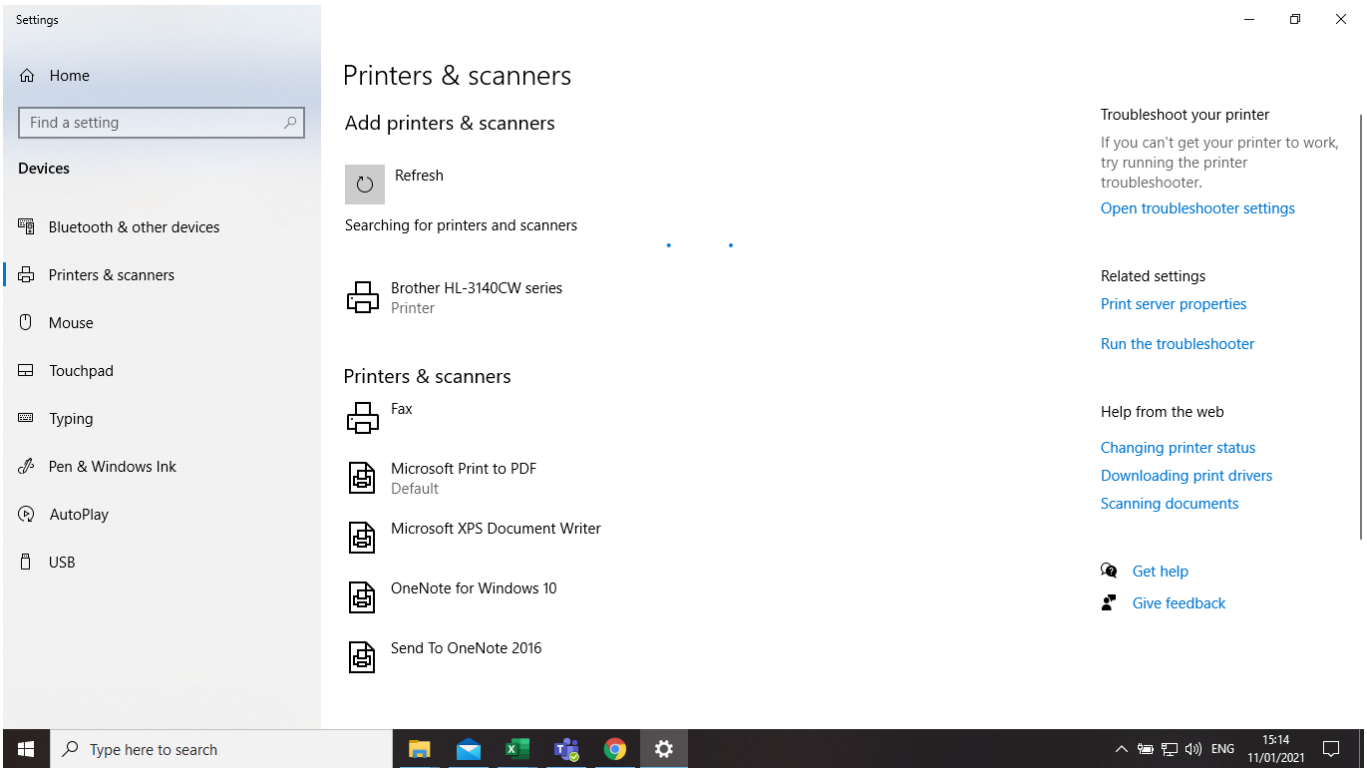

Network Printer Installation Wizard
Printer Address
You can type the printer's network name or IP address.
Type of Device:
TCP/IP Device
Host name or IP address:
192.168.0.100
Port name:
192.168.0.100
Auto detect the printer driver to use.
< Back
Next >
Cancel

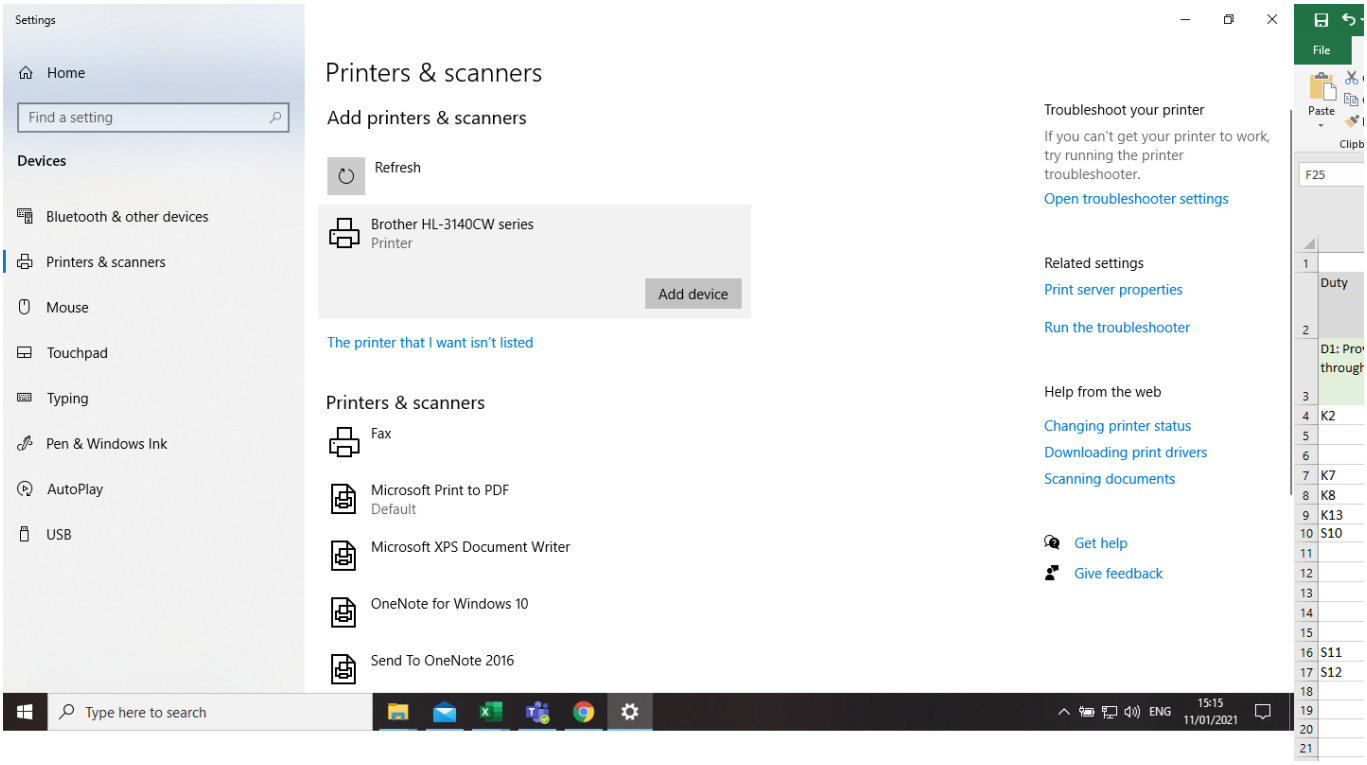

Network Printer Installation Wizard
Printer Driver
Pick a driver for the new printer.
Use the printer driver that the wizard selected
Compatible driver cannot be found.
Use an existing printer driver on the computer
Microsoft Print To PDF
Install a new driver
< Back
Next >
Cancel

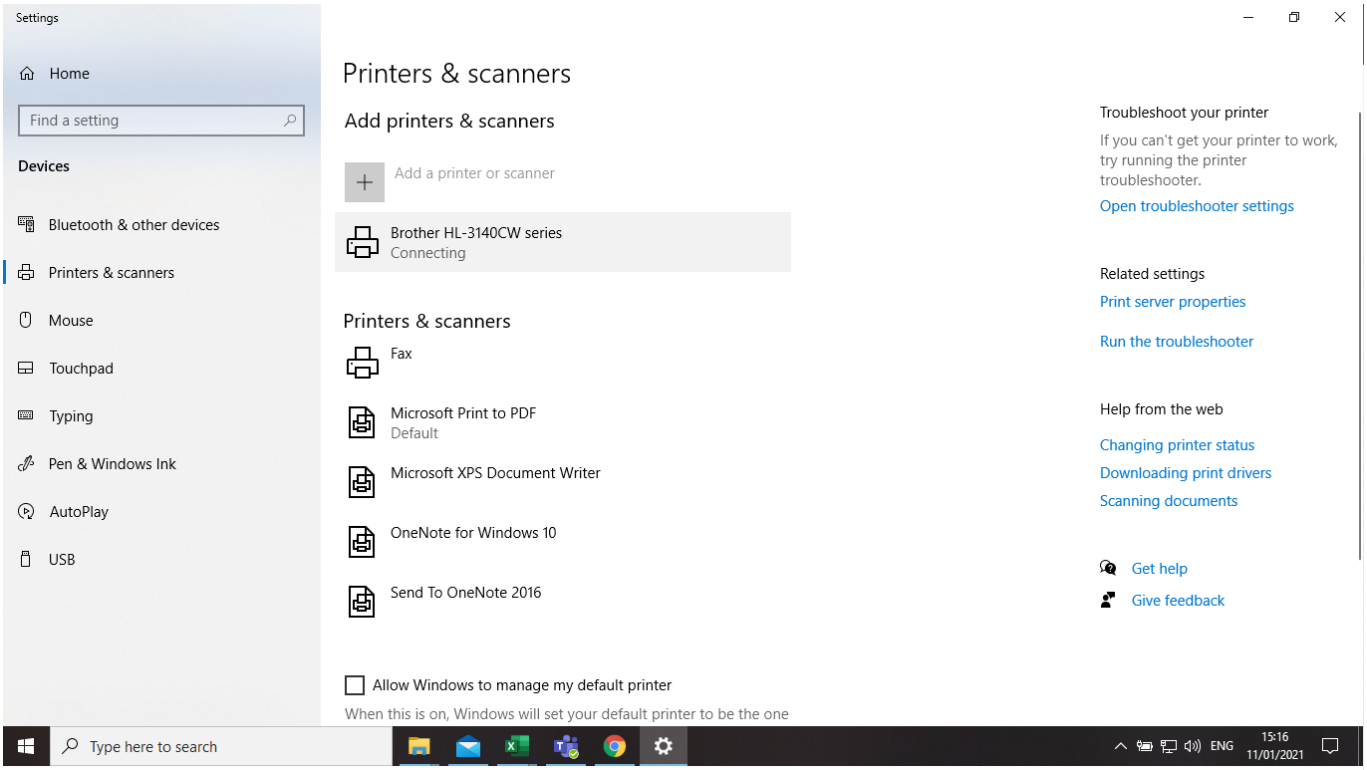

Network Printer Installation Wizard
Printer Name and Sharing Settings
You can give the printer a friendly name and specify whether other people can use the printer.
Printer Name:
Brother HL 3140CW Series
Share this printer
Share Name:
AvoidErrors-Printer
Location:
WWW.AvoidErrors.Net
Comment:
This tutorial is by AvoidErrors.Net
< Back
Next >
Cancel

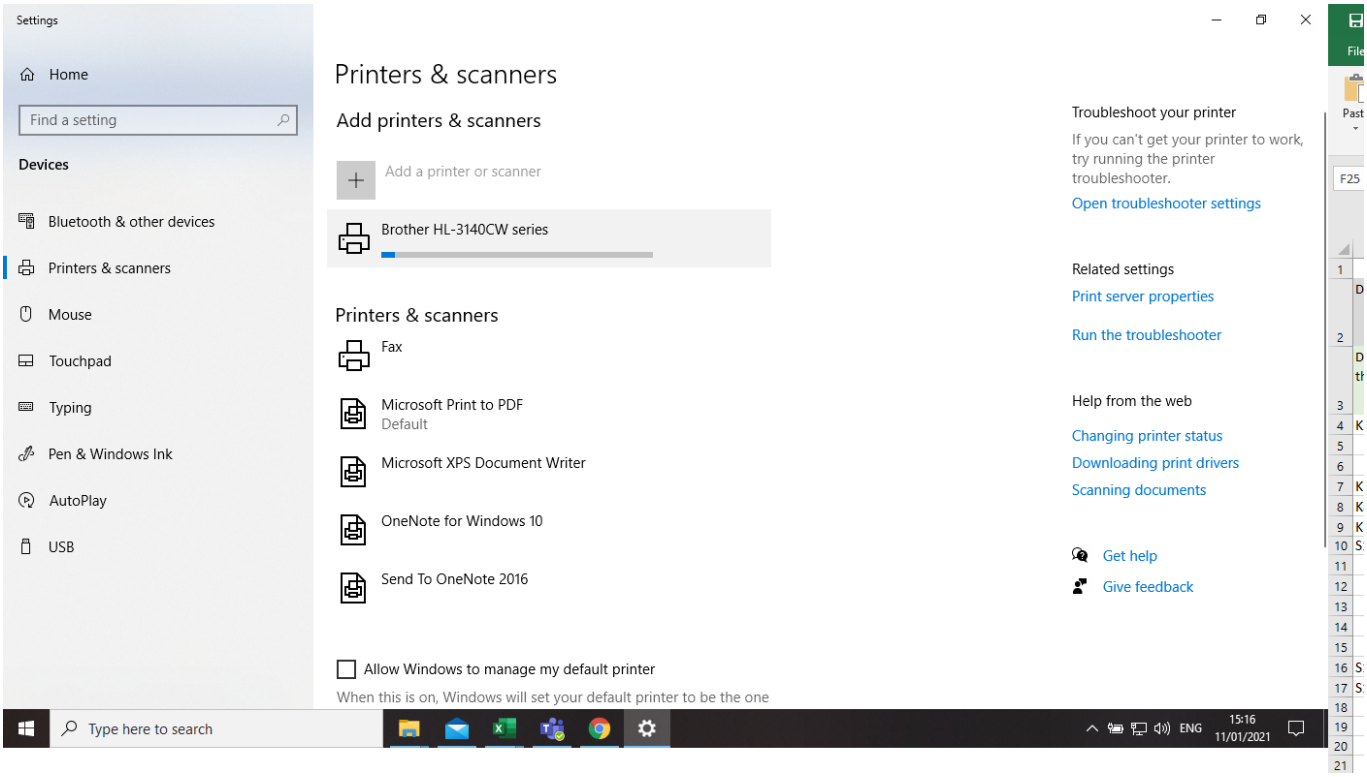

Name
Network Printer Installation Wizard
Completing the Network Printer Installation Wizard
Status:
Driver installation succeeded.
Printer installation succeeded.
Your printer has been installed successfully.
To test the printer, select Print test page, and then click Finish.
To install another printer, select Add another printer, and then click finish.
Print test page
Add another printer
< Back
Finish
Cancel

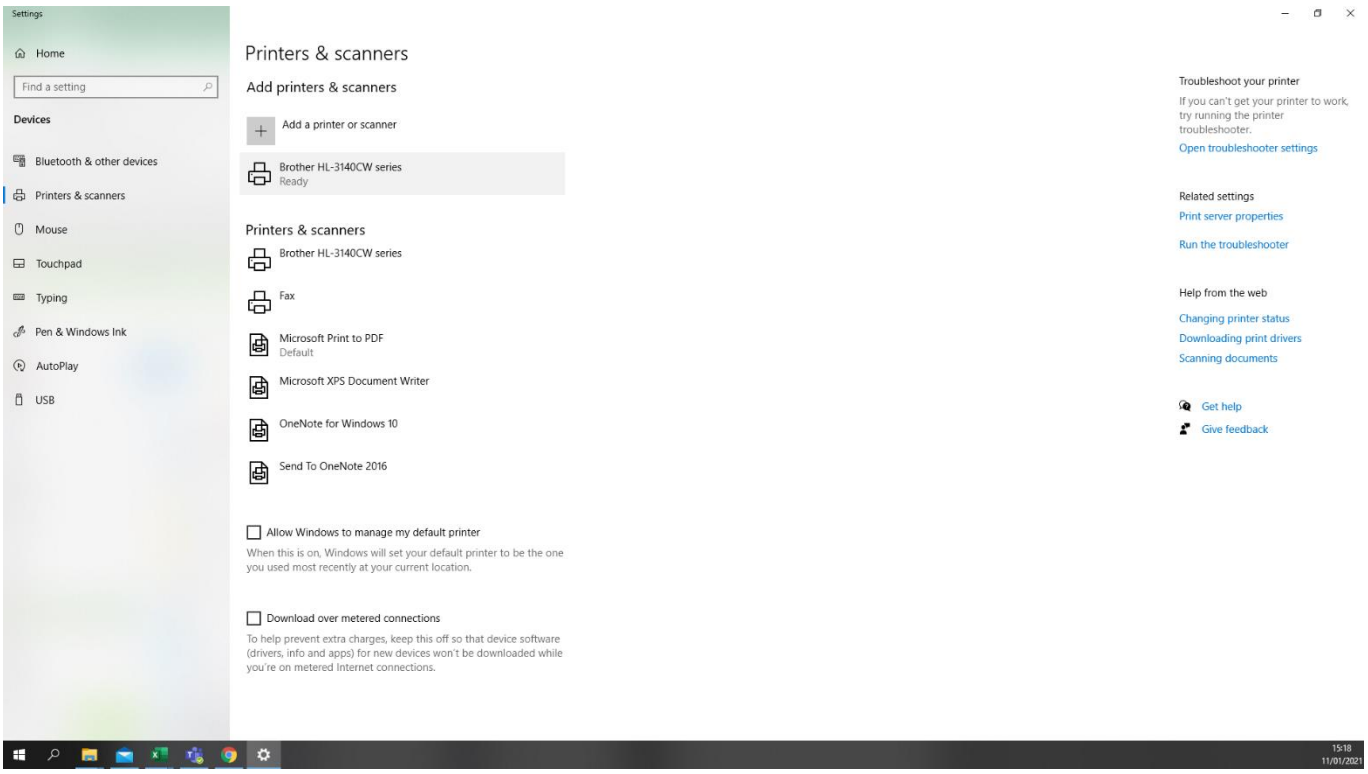
The following images show the installation of the printer onto PC01 (Windows 10)






Settings
Home
Find a setting
Devices
Bluetooth & other devices
Printers & scanners
Mouse
Touchpad
Typing
Pen & Windows Ink
AutoPlay
USB
Printers & scanners
Add printers & scanners
Add a printer or scanner
Brother HL-3140CW series
Connecting
Printers & scanners
Fax
Microsoft Print to PDF
Default
Microsoft XPS Document Writer
OneNote for Windows 10
Send To OneNote 2016
Allow Windows to manage my default printer
When this is on, Windows will set your default printer to be the one
Troubleshoot your printer
If you can't get your printer to work, try running the printer troubleshooter.
Open troubleshooter settings
Related settings
Print server properties
Run the troubleshooter
Help from the web
Changing printer status
Downloading print drivers
Scanning documents
Get help
Give feedback
Type here to search
ENG
15:16
11/01/2021

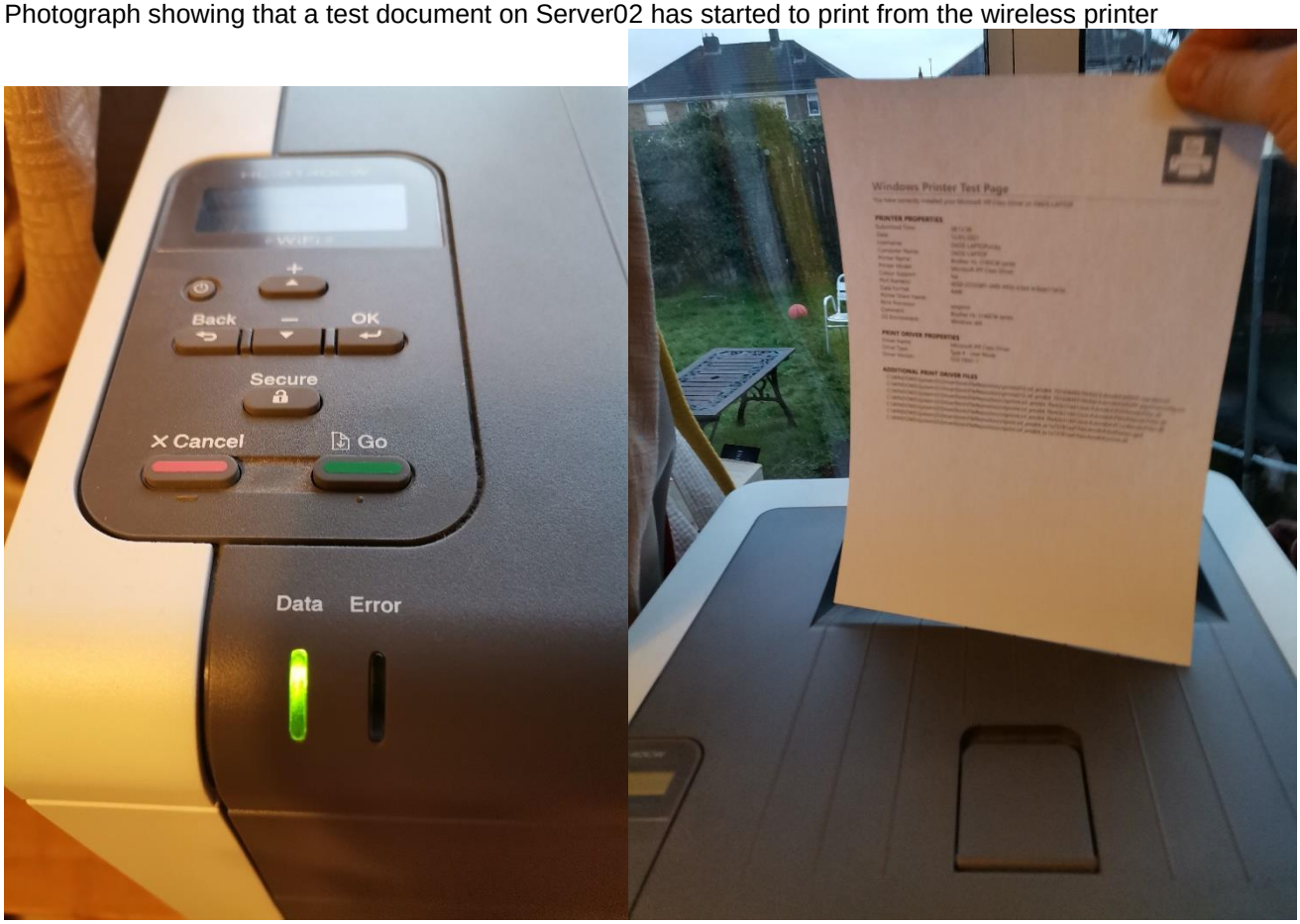

Settings
Home
Find a setting
Devices
Bluetooth & other devices
Printers & scanners
Mouse
Touchpad
Typing
Pen & Windows Ink
AutoPlay
USB
Printers & scanners
Add printers & scanners
Add a printer or scanner
Brother HL-3140CW series
Printers & scanners
Fax
Microsoft Print to PDF
Default
Microsoft XPS Document Writer
OneNote for Windows 10
Send To OneNote 2016
Allow Windows to manage my default printer
When this is on, Windows will set your default printer to be the one
Troubleshoot your printer
If you can't get your printer to work, try running the printer troubleshooter.
Open troubleshooter settings
Related settings
Print server properties
Run the troubleshooter
Help from the web
Changing printer status
Downloading print drivers
Scanning documents
Get help
Give feedback
Type here to search
ENG
15:16
11/01/2021


Settings
Home
Find a setting
Devices
Bluetooth & other devices
Printers & scanners
Mouse
Touchpad
Typing
Pen & Windows Ink
AutoPlay
USB
Printers & scanners
Add printers & scanners
Add a printer or scanner
Brother HL-3140CW series
Ready
Printers & scanners
Brother HL-3140CW series
Fax
Microsoft Print to PDF
Default
Microsoft XPS Document Writer
OneNote for Windows 10
Send To OneNote 2016
Allow Windows to manage my default printer
When this is on, Windows will set your default printer to be the one you used most recently at your current location.
Download over metered connections
To help prevent extra charges, keep this off so that device software (drivers, info and apps) for new devices won't be downloaded while you're on metered Internet connections.
Troubleshoot your printer
If you can't get your printer to work, try running the printer troubleshooter.
Open troubleshooter settings
Related settings
Print server properties
Run the troubleshooter
Help from the web
Changing printer status
Downloading print drivers
Scanning documents
Get help
Give feedback
15:18
11/01/2021

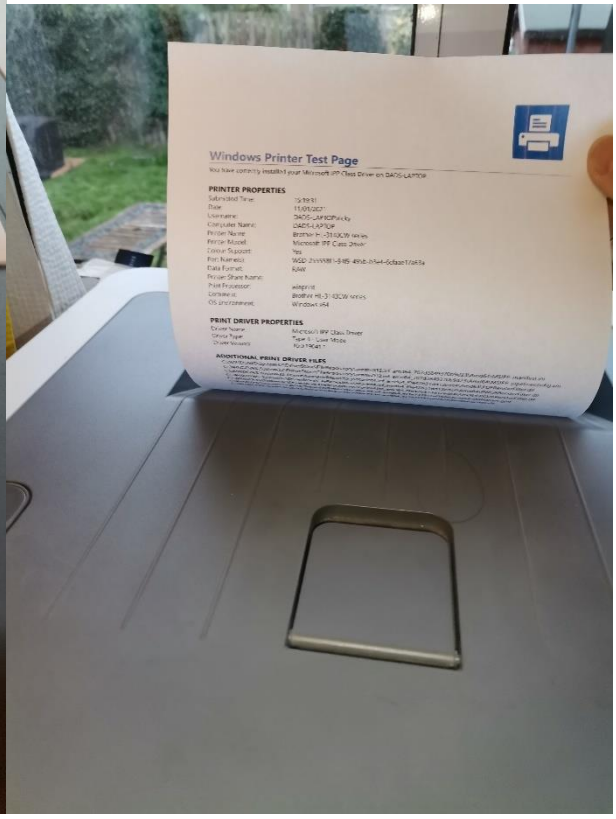
Settings
Brother HL-3140CW series
Manage your device
Printer status: Idle
Open print queue
Set as default
Print a test page
Run the troubleshooter
Printer properties
Printing preferences
Hardware properties
Get help
15:19
11/01/2021

Evidence of testing from 2 machines that the wireless device can be accessed

Photograph showing that a test document on Server02 has started to print from the wireless printer



Photograph showing that a test document on PC01 has printed from the wireless printer



Step A

(3 marks)

Processes	Settings	Marks	Evidence required
Install the provided server operating system on Server01 and Server02 Use suitable configurations that match your current time zone and provide evidence of the successful installation of the server operating system on both Server01 and Server02	All hard disks should be partitioned to a single 100% partition, and the machines named Server01 and Server02 Server01 and Server02 should have fixed IP addresses	**1**	Provide print screen or photographic evidence of the following: ☑ Server01 disk partitions ☑ Server01 IP address (1) Set ☑ Server01 IP address (2) Set ☑ Server01 name set ☑ Server01 regional settings, date and time
		1	☑ Server02 disk partitions ☑ Server02 IP address set ☑ Server02 name set ☑ Server02 regional settings, date and time
Install the provided desktop operating system on PC01	All hard disks should be partitioned to a single 100% partition Use suitable region-specific settings, otherwise the defaults should be taken	**1**	Provide print screen or photographic evidence of the following: ☑ PC01 disk partitions ☑ PC01 name set ☑ PC01 regional settings, date and time

Step B

(8 marks)

Processes	Settings	Marks	Evidence required
Install and configure DNS		**8**	☑ print screen showing DNS has been installed
Install and configure a directory service	Install a directory service with the domain name set as (First nameSurname).local, for example: JohnSmith.local		☑ print screen showing the directory service has been installed and configured
Install DHCP service on Server01			☑ print screen showing the DHCP service installed
Implement a DHCP scope using the IP range provided earlier			☑ print screen showing the DHCP scope configured
Evidence PC01 is using DHCP to join the network			☑ print screen showing PC01 has been assigned a DHCP address
Domain join Server02 and PC01 to Server01 forming the start of the network			☑ print screen showing Server02 domain joined ☑ print screen showing PC01 domain joined
Install and confirm a reverse DNS lookup works on Server02 using **NSLOOKUP**			☑ print screen showing Server02 successfully completed a reverse lookup

Step C

(8 marks)

Processes	Settings	Marks	Evidence required
Requested groups have been created	Personal account has been added to Admin group Paul James has been added to Development Group Tamara Jacobs has been added to Graphics group Yousif Sobbah has been added to Motion Capture Group		
All user accounts have been created			
Job titles have been added	Personal account has JD of IT Admin Paul Jones has JD of Development Tamara Jacobs has JD of Graphics Artist Yousif Sobbah has JD of Motion Capture Specialist		
Local admin role set	Personal account has been added to Administrators group		
Create the following groups in your directory service	All Staff, Developer, Graphics, Motion Capture, IT admin		☑ print screen showing the 5 groups created in your directory service
Folder permissions set	Development added to Development folder with RW permission Graphics group added to Graphics folder with RW permission Motion Capture group added to Motion capture folder with		

	RW permission All staff group added to shared drive with read permission All staff added to User guides folder with read admin IT Admin added to User Guides folder with RW permission IT Admin added to IT Admin folder with RW permission		

Create the following groups in your directory service	All staff, developer, graphics, motion capture, IT admin	**1**	☑ print screen showing the 5 groups created in your directory service

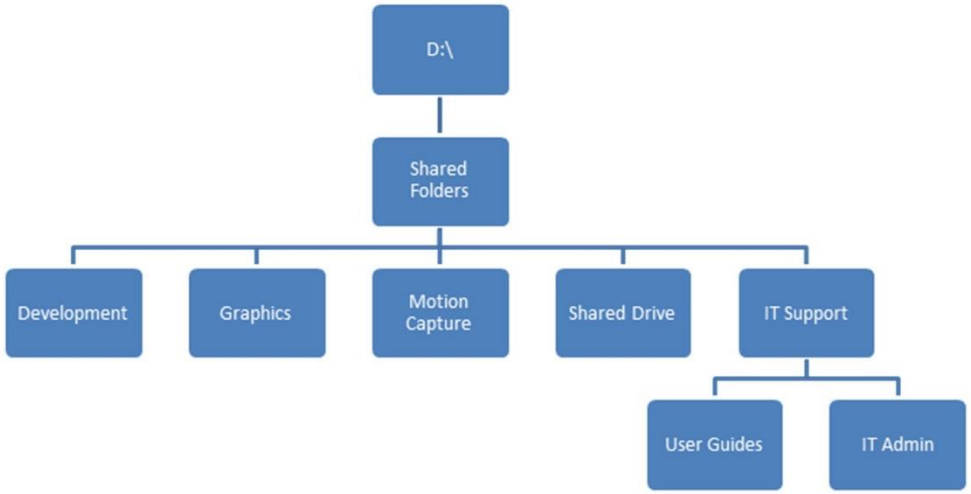
Populate the directory service with the following user accounts making sure they are added to the correct group and each user has the right privilege:

User account	Privileges	Job description	Group(s)
Your first and surname	Administrator	IT admin	IT admin
Paul James	Standard user	Developer	Development
Tamara Jacobs	Standard user	Graphics artist	Graphics
Yousif Sobbah	Standard user	Motion capture specialist	Motion capture

1

☑ print screen evidence that each user has the correct name, privilege, job description and has been added to the correct group

Using the group called **all staff,** add the following groups to this group: • development • graphics • motion capture • IT admin	**1**	☑ print screen showing all 5 groups added to the all staff group

Processes	Settings	Marks	Evidence required
Create the following folder structure on second partition of Server02  		**N/A**	Marks are **not** awarded for creating the folder structure and you do **not** need to submit evidence for this task

<table>
<tr><th>Processes</th><th>Settings</th><th></th><th>Marks</th><th>Evidence required</th></tr>
<tr><td>Apply the following privileges to each of the folders using the groups created earlier</td><td colspan="2"><table>
<tr><th>Folder</th><th>Group</th><th>Permission</th></tr>
<tr><td>Development</td><td>IT admin</td><td>Read/Write</td></tr>
<tr><td>Graphics</td><td>Development</td><td>Read/Write</td></tr>
<tr><td>Motion Capture</td><td>Motion Capture</td><td>Read/Write</td></tr>
<tr><td>Shared Drive</td><td>All staff</td><td>Read</td></tr>
<tr><td>User Guides</td><td>All staff</td><td>Read</td></tr>
<tr><td>IT admin</td><td>IT admin</td><td>Read/Write</td></tr>
</table></td><td></td><td>1</td><td>☑ print screens showing each folder with correct privileges</td></tr>
<tr><td colspan="2">Using the files provided, populate the folder structure</td><td></td><td></td><td></td></tr>
<tr><td colspan="2">Using the test plan template provided in the workbook, prove that the privileges work correctly using both a valid and invalid user

Note: the shared drive only requires a valid user to be tested</td><td></td><td>4</td><td>☑ completed test plan
☑ print screens showing folder privileges have been tested</td></tr>
</table>

Step D

(3 marks)

Processes	Settings	Marks	Evidence required
Using an external hard disk drive or an additional virtual disk to Server02, implement a scheduled backup of the shared folders to run every hour to the second physical hard or external storage device		**3**	☑ print screen showing scheduled backup set
Confirm the backup has been taken successfully by restoring the contents of the backup **Note**: you might need to return to this step later to collect the required evidence			☑ print screens showing a successful backup ☑ print screens showing a successful restoration

Step E

(4 marks)

Processes	Settings	Marks	Evidence required
Using Server02, install **and** configure a **single** application service from the following list: • desktop deployment • media server • database server • IT helpdesk • web server • print server		**4**	☑ print screens showing the service being installed and configured
Prove the service has been tested and works			☑ print screens showing the service is running ☑ print screens showing the service being tested

Step F

(2 marks)

Processes	Settings	Marks	Evidence required
Create a remote connection from PC02 to Server01 **Note**: you are **not** permitted to domain join the computer		**2**	☑ print screens showing the remote connection process

Step G

(4 marks)

Processes	Settings	Marks	Evidence required
Implement a SNMP on all machines on the network		**4**	☑ print screens from PC01 and Server02 showing that SNMP has been enabled
Verify that SNMP data is being collected by the traps and can be viewed			☑ a series of print screens showing the SNMP data is being collected centrally

Step H

(10 marks)

Processes	Settings	Marks	Evidence required
Using policies, implement 5 rules that will make the domain joined PC01 more secure		**10**	☑ provide a short description of each policy and what it will achieve ☑ provide a print screen showing each of the policies created on Server01
Carry out testing to prove the policies have been applied correctly			☑ provide evidence of each policy applied on PC01

Step I

(7 marks)

Processes	Settings	Marks	Evidence required
Using the wireless device provided, integrate the device into your network		**7**	Provide print screen or photographic evidence of the following: ☑ set an IP address for the device ☑ connect to a wireless AP or other such device ☑ install the required drivers or management software ☑ configure the device with suitable settings ☑ evidence that SNMP data is being captured
Test that the device works and is accessible from any 2 machines			☑ a series of print screens and photographs showing connection and configuration of the wireless device

Review and submit

You have now reached the end of the assignment. It is recommended that you review all the evidence required for the assignment to ensure all print screens and photographs have been provided.

Submit this workbook in .pdf format at the end of the assignment using the file naming convention.

Surname_Initial_student number_Workbook2

For example: Smith_J_123456789_Workbook2.pd

Document information

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Owner: Head of Assessment Design

Change History Record

Version	Description of change	Approval	Date of Issue
v1.0	Published final version.		May 2021
v1.1	NCFE rebrand.		January 2023