Lab 2

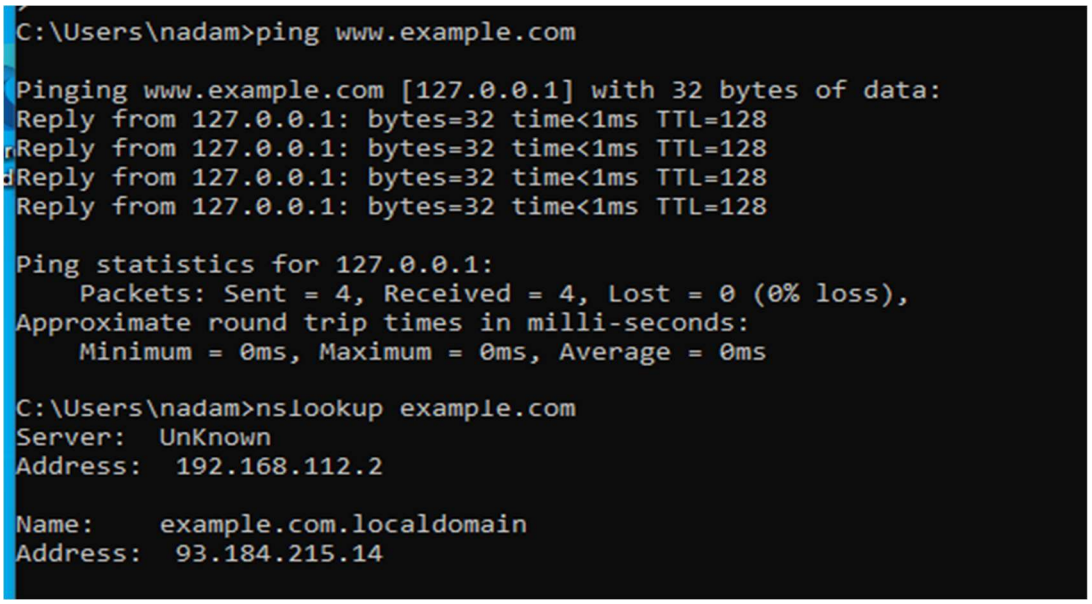
Computer Networks & Cyber Security

Name : Nada Mohamed Ahmed Hassan Eleshmawy.

Track : Open Source Mansoura

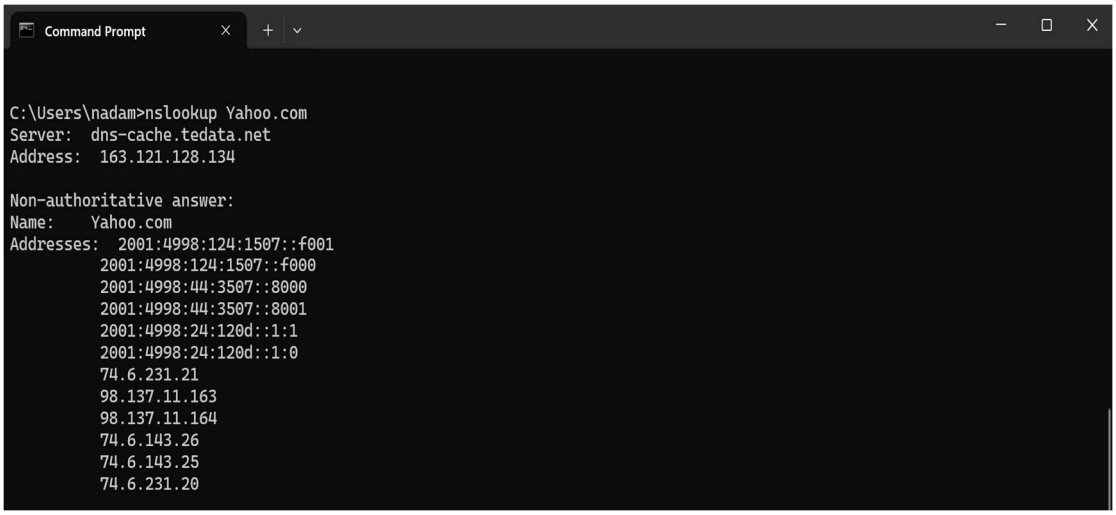
Domain name System: Translating human-friendly computer hostnames (URL) into IP addresses. For example, the domain name **www.example.com** translates to the **addresses: 93.184.216.34 (IPv4) and : 2606:2800:220:1:248:1893:25c8:1946 (IPv6).**

Open C:\Windows\System32\drivers\etc\hosts → add 127.0.0.1 www.example.com → save notepad(admin)



(**know which IP address related to a certain domain name**)

know which IP address related to a certain domain name



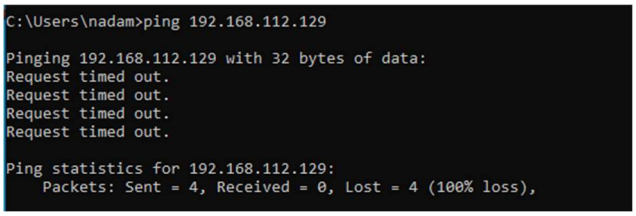
know which domain name mapped to a certain IP address

We make 2 Virtual Machines: client & server

To check connection between client and server

Try in client

Ping 192.168.112.129 (server IP)



and same thing in server with client IP

we note that there is no connection between them

to solve this :

1. Open the **Control Panel in client**.
2. Go to **System and Security → Windows Defender Firewall** → Click on **Turn Windows Defender Firewall on or off**.
3. Select **Turn off Windows Defender Firewall** .

Repeat this on server

After this the 2 VM were be connected

In client :-

```
C:\Users\nadam>ping 192.168.112.129

Pinging 192.168.112.129 with 32 bytes of data:
Reply from 192.168.112.129: bytes=32 time<1ms TTL=128
Reply from 192.168.112.129: bytes=32 time<1ms TTL=128
Reply from 192.168.112.129: bytes=32 time<1ms TTL=128
Reply from 192.168.112.129: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.112.129:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\nadam>
```

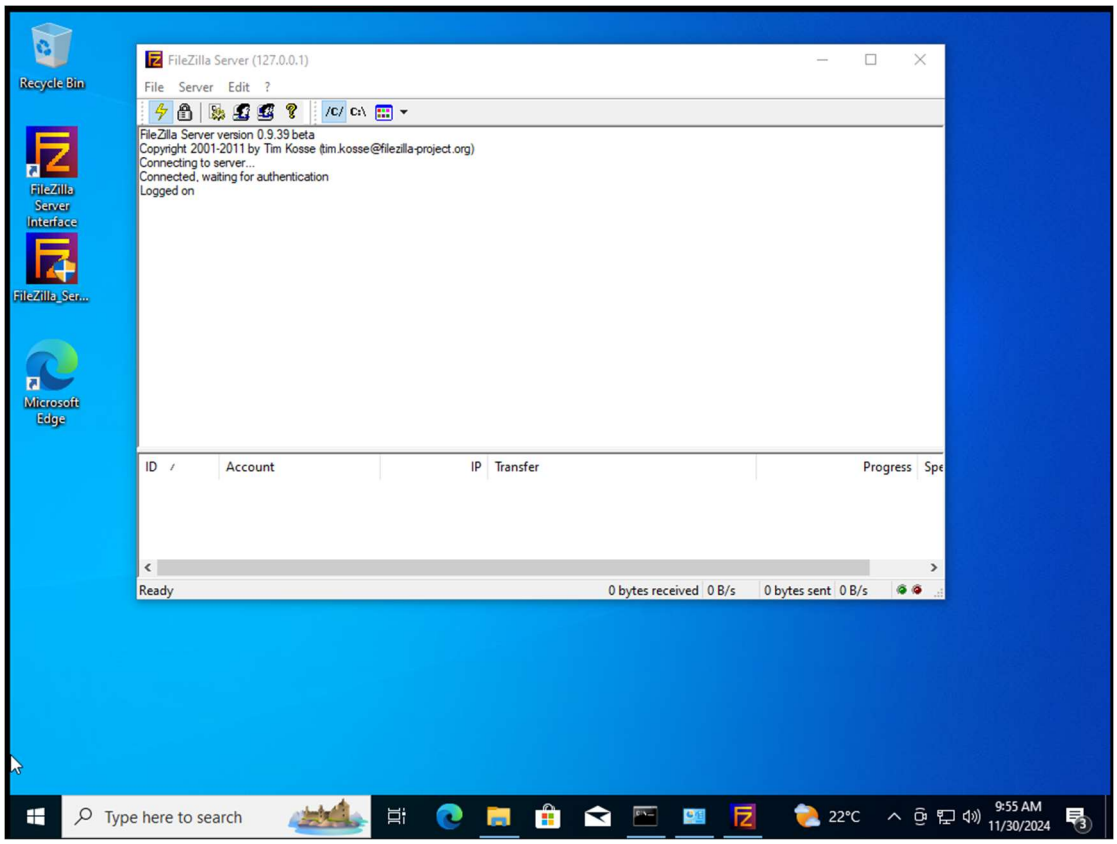
In server :

```
C:\Users\nadam>ping 192.168.112.128

Pinging 192.168.112.128 with 32 bytes of data:
Reply from 192.168.112.128: bytes=32 time<1ms TTL=128
Reply from 192.168.112.128: bytes=32 time<1ms TTL=128
Reply from 192.168.112.128: bytes=32 time<1ms TTL=128
Reply from 192.168.112.128: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.112.128:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\nadam>
```

On server :

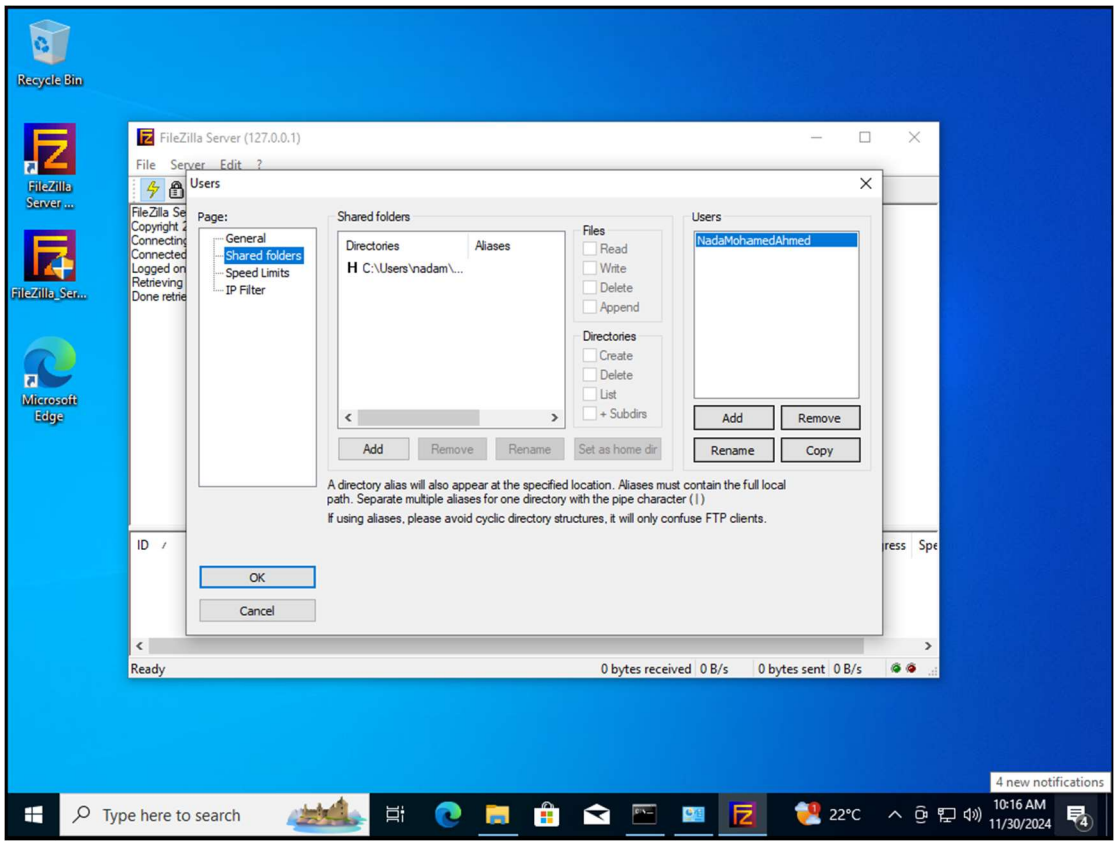
1- Complete this program setup (FileZilla_Server-0_9_39).

2- Open it .

3- 

4- Add account
named : NadaMohamedAhmed
password :1234

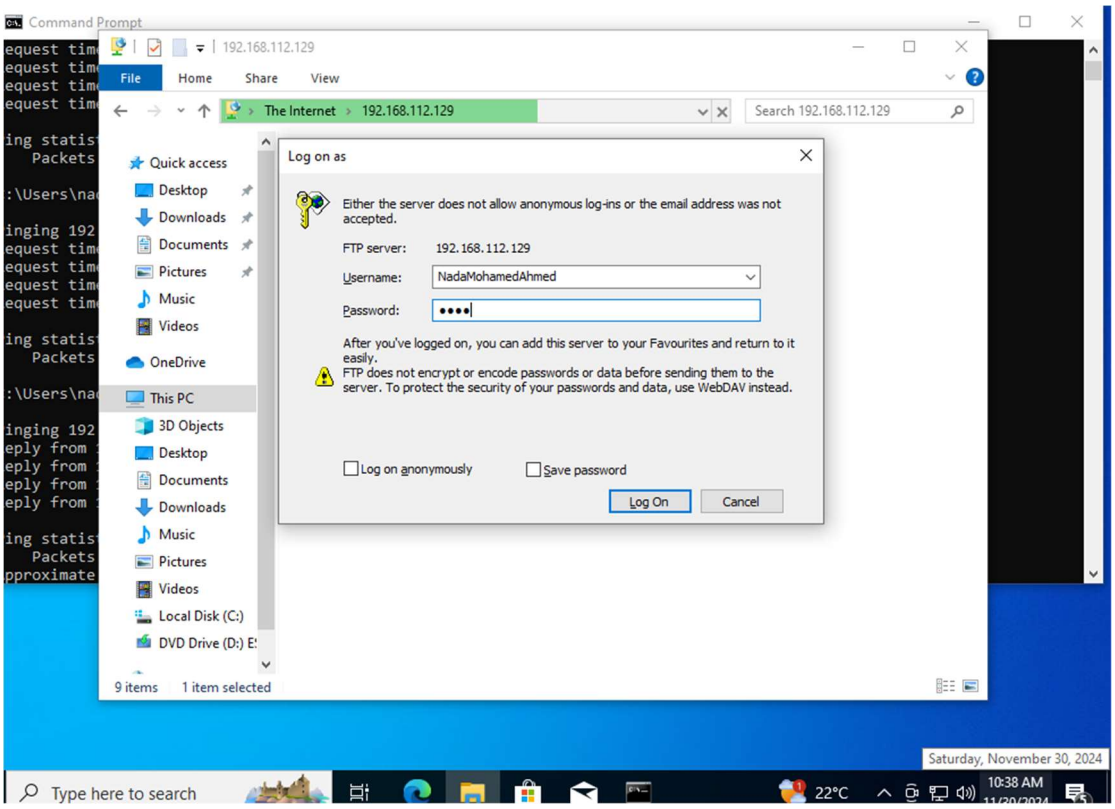
5- Add shared folder and make access read and write.

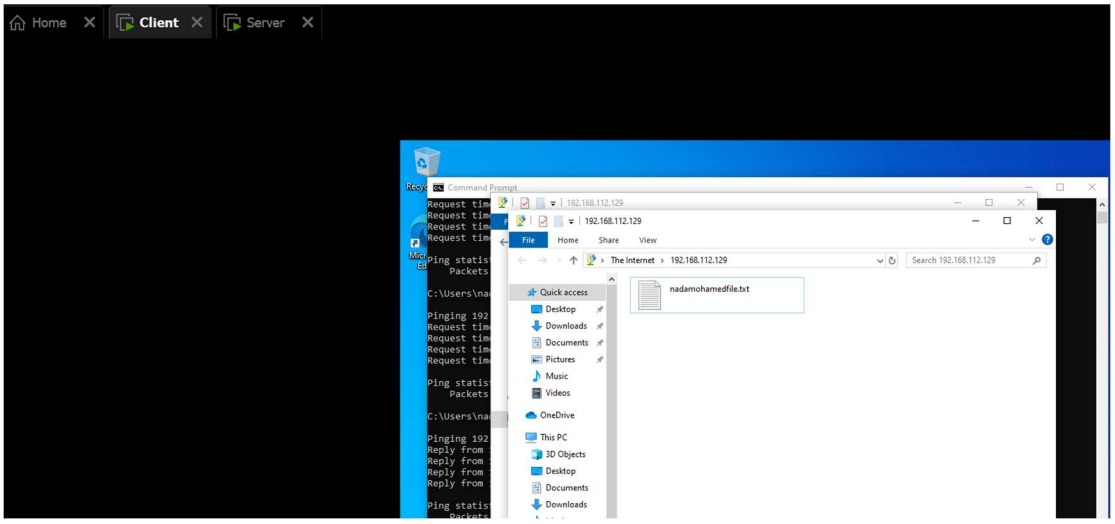


In server all is done

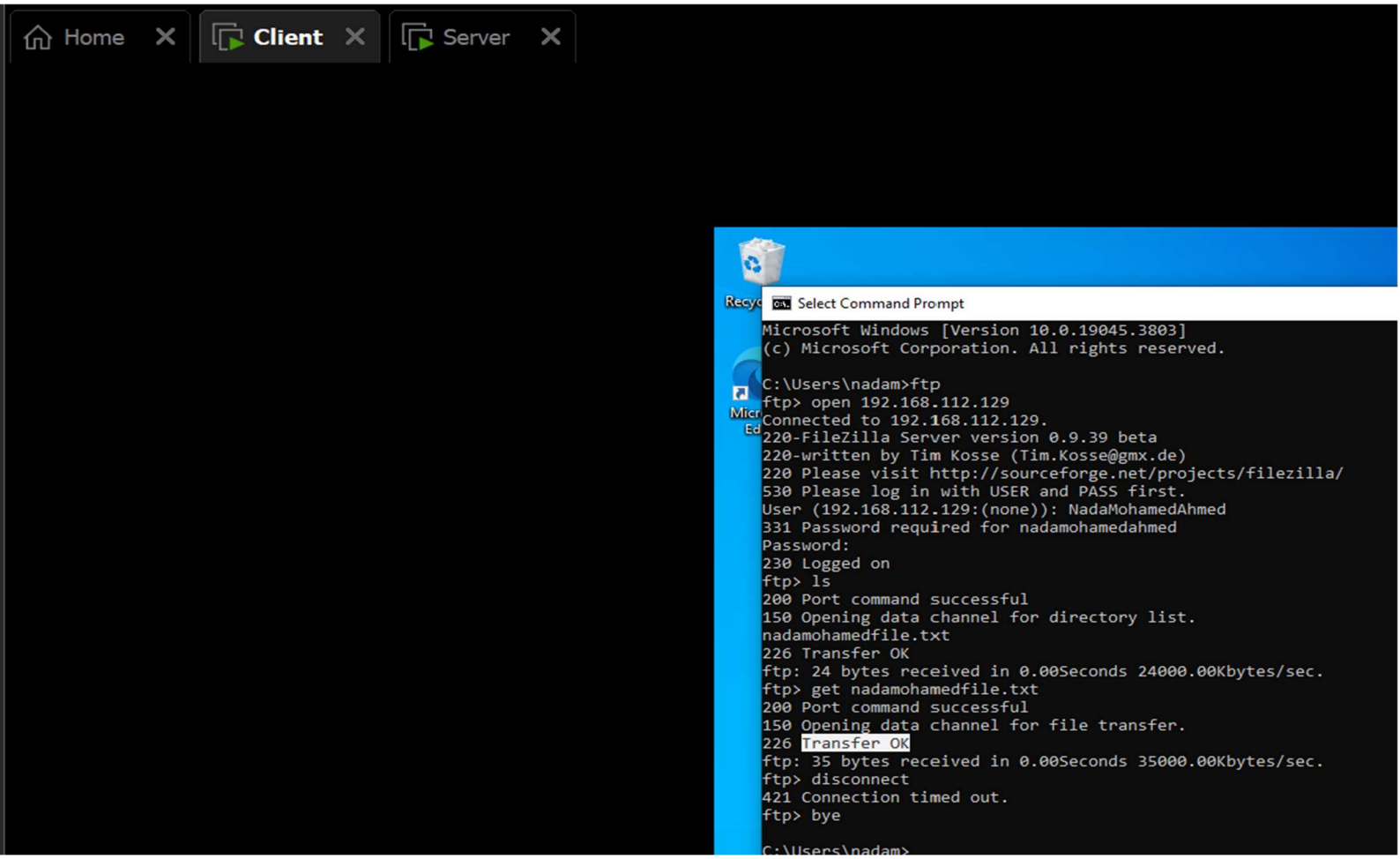
Configure FTP Clients

Method 1 (Using URL)


Command Prompt
192.168.112.129
File
Home
Share
View
The Internet › 192.168.112.129
Search 192.168.112.129
Quick access
Desktop
Downloads
Documents
Pictures
Music
Videos
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
DVD Drive (D:) E:
9 items
1 item selected
Log on as
Either the server does not allow anonymous log-ins or the email address was not accepted.
FTP server: 192.168.112.129
Username: NadaMohamedAhmed
Password: ••••
After you've logged on, you can add this server to your Favourites and return to it easily.
FTP does not encrypt or encode passwords or data before sending them to the server. To protect the security of your passwords and data, use WebDAV instead.
Log on anonymously
Save password
Log On
Cancel
Saturday, November 30, 2024
Type here to search
22°C
10:38 AM

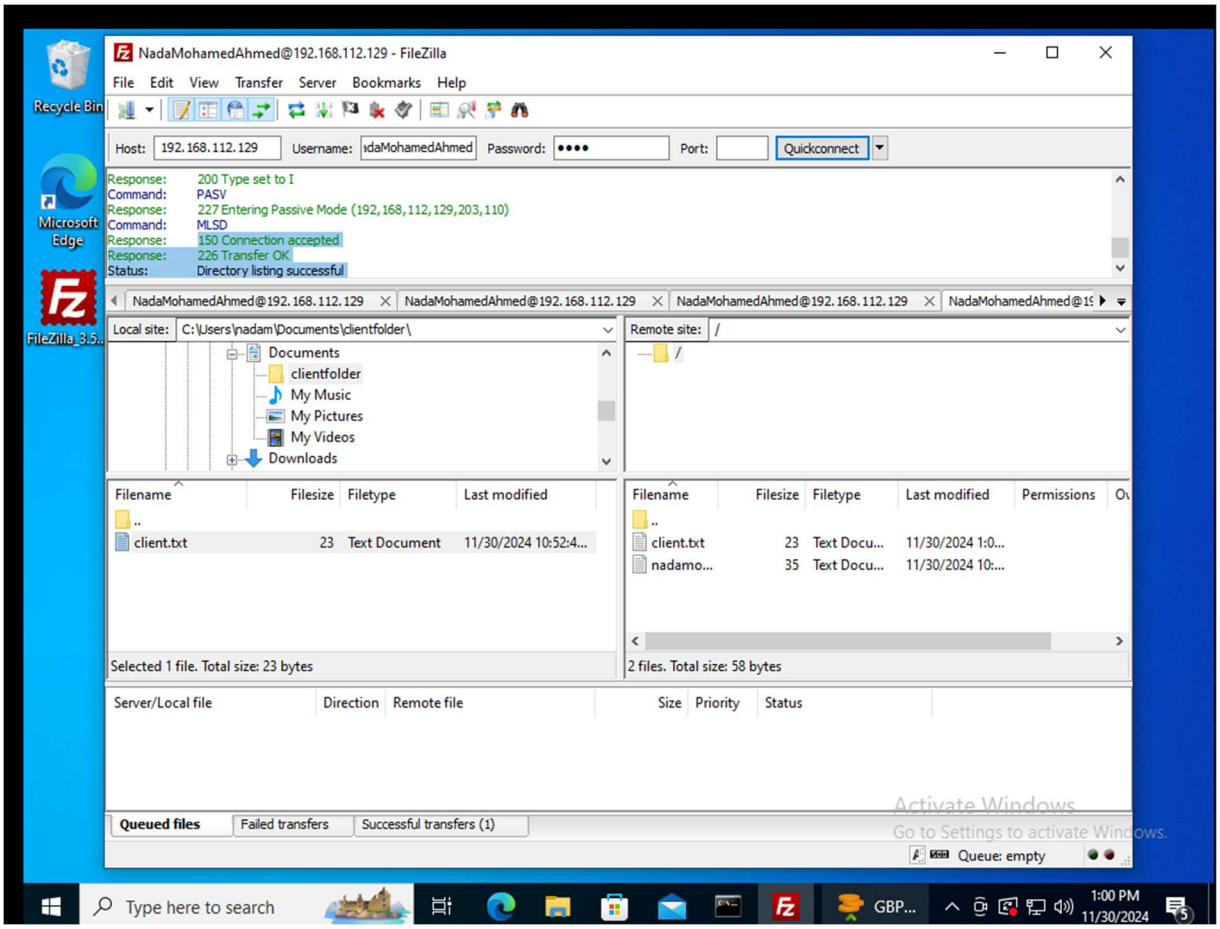

Home
Client
Server
nadamohamedfile.txt

Method 2 (FTP Commands)



Method 3 (FTP FileZilla Client)

Port → 21

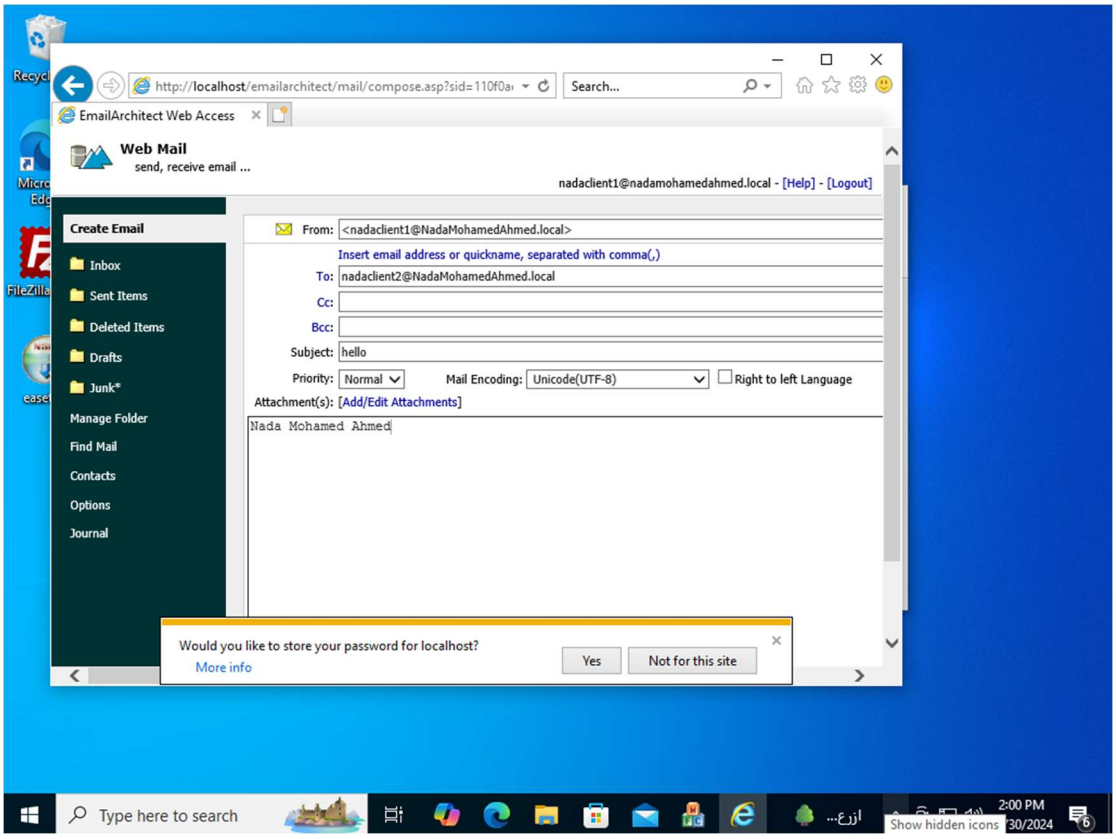


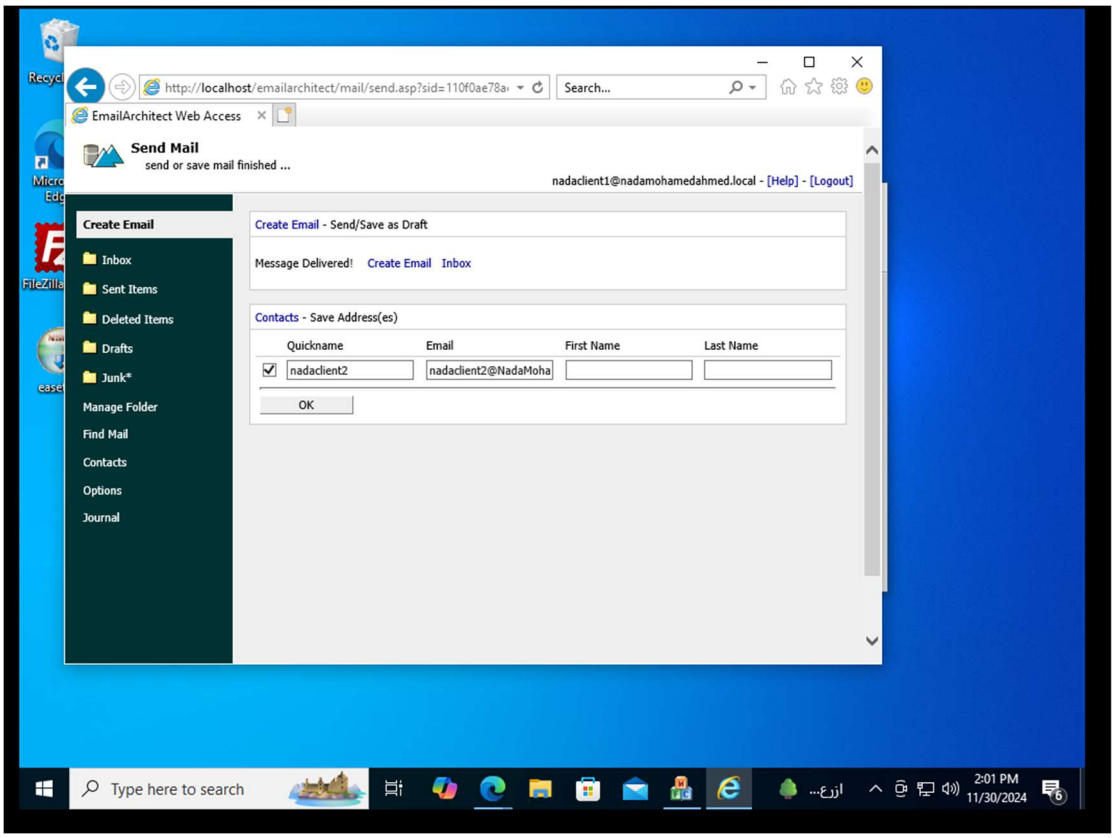
Dealing with Electronic Mail Service

User1: nadaclient1 (nadaclient1@NadaMohamedAhmed.local)

Send mail to

User2: nadaclient2 (nadaclient2@NadaMohamedAhmed.local)





User2: nadaclient2 (nadaclient2@NadaMohamedAhmed.local)

Receive message