

HES-SO Valais Wallis

# Windows FTP Server

Digital Team Academy

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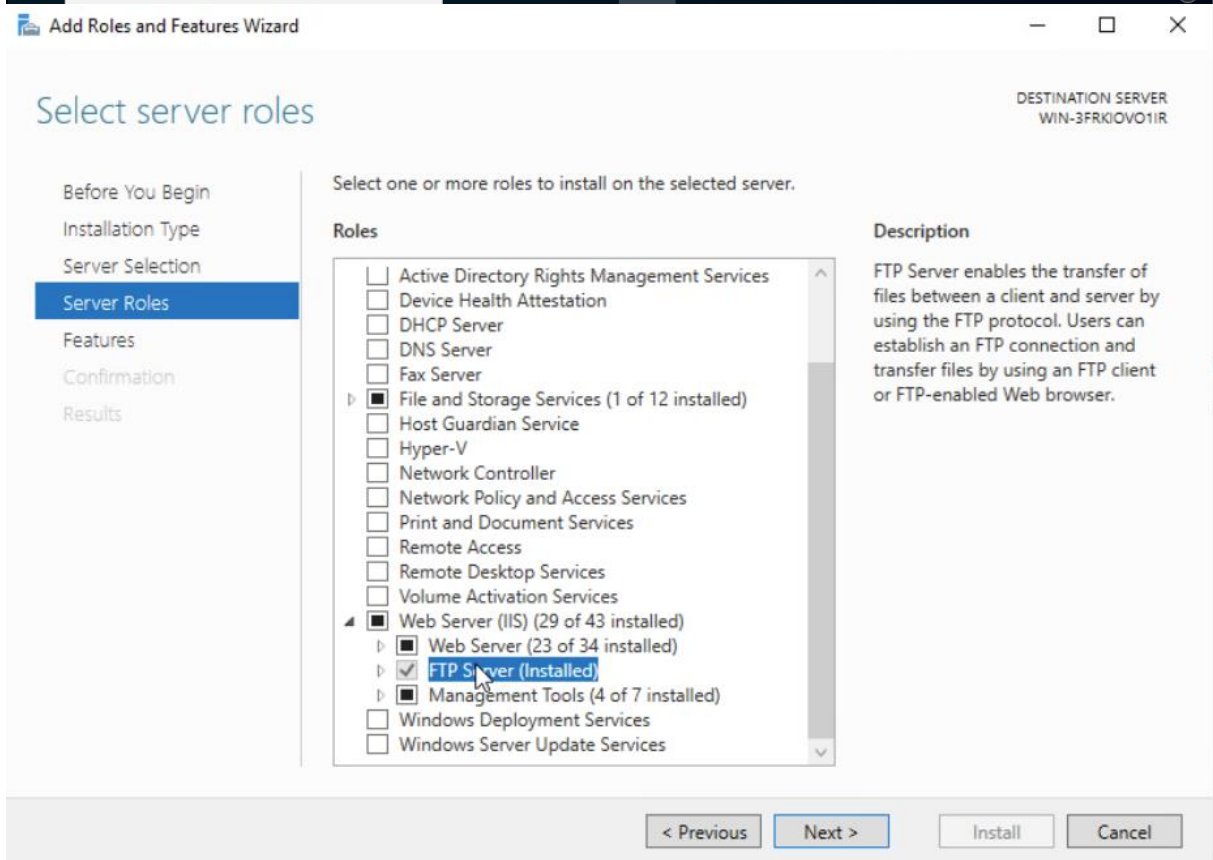
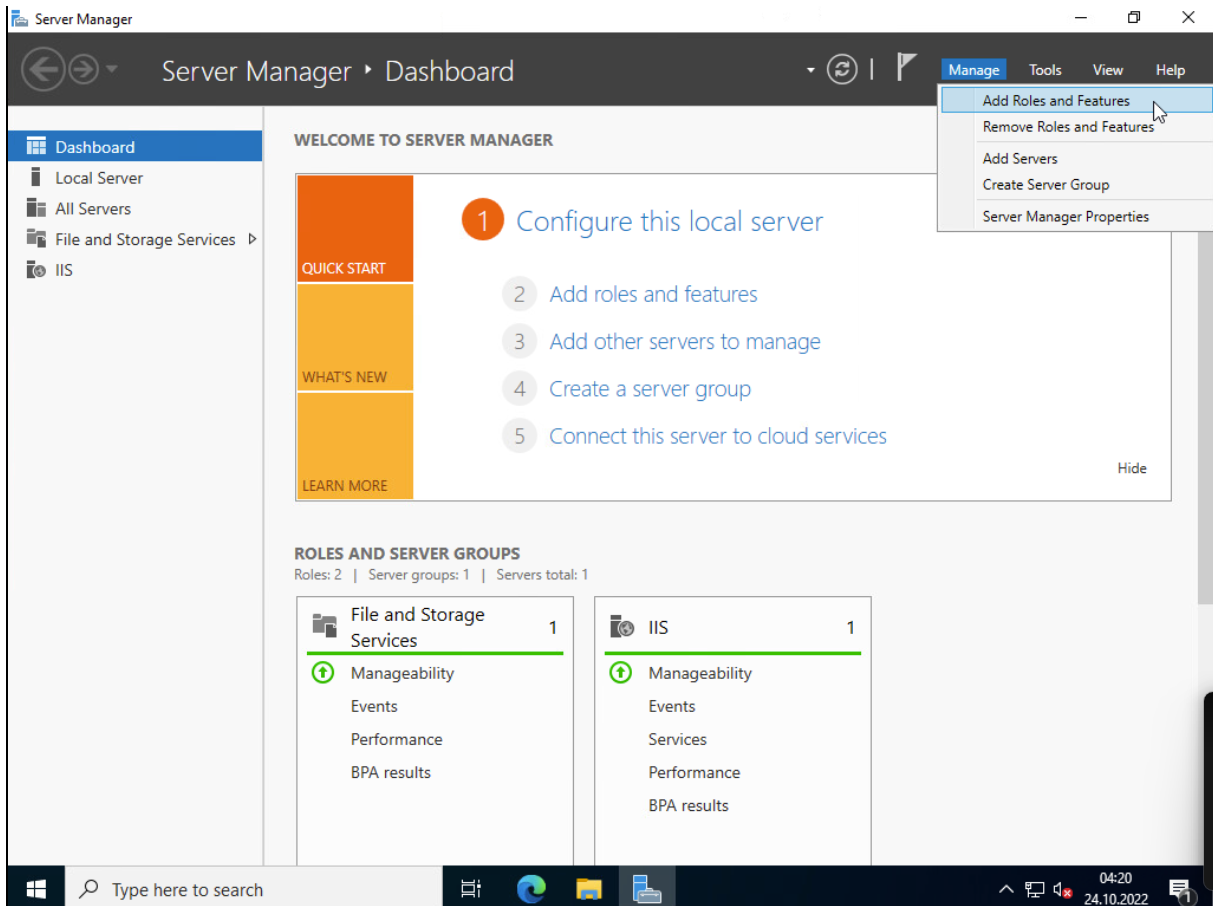
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## FTP service on Windows

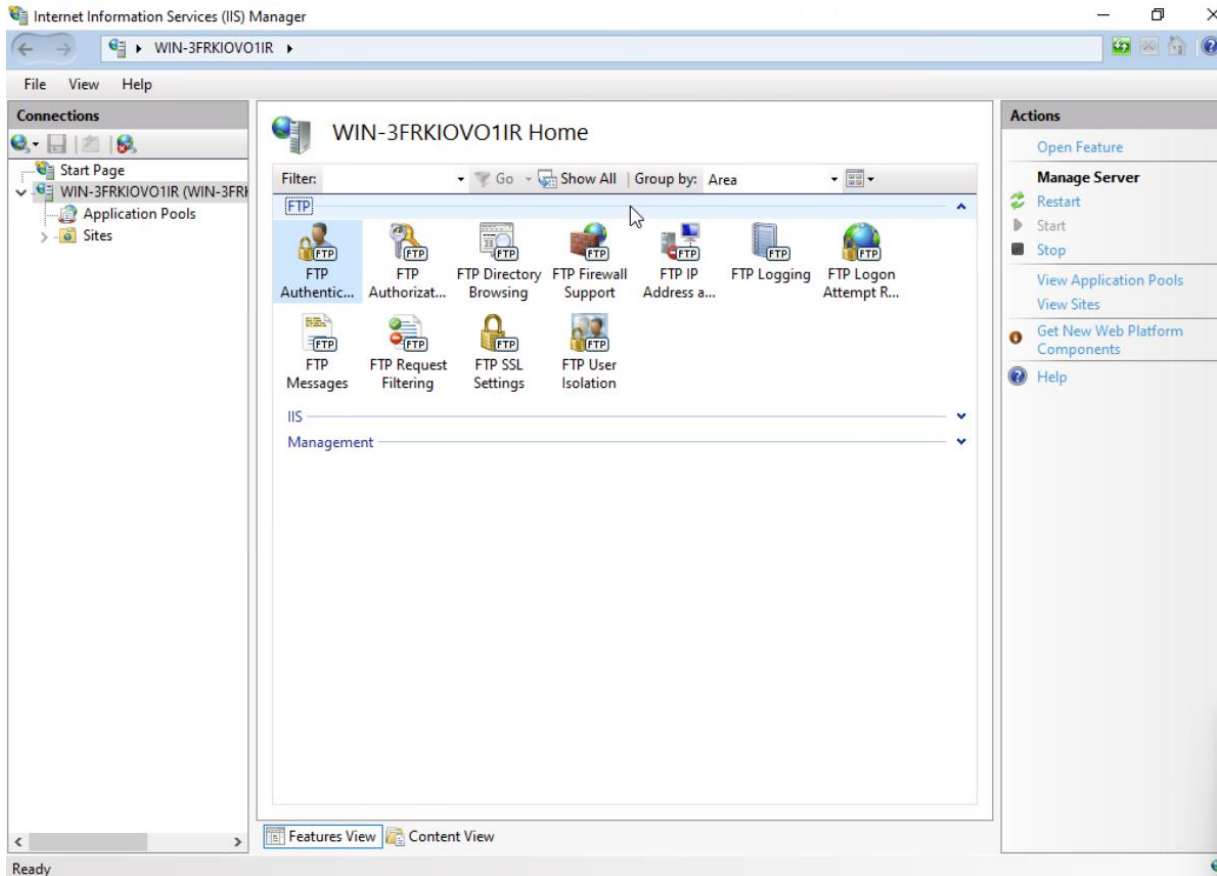
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### Anonymous access

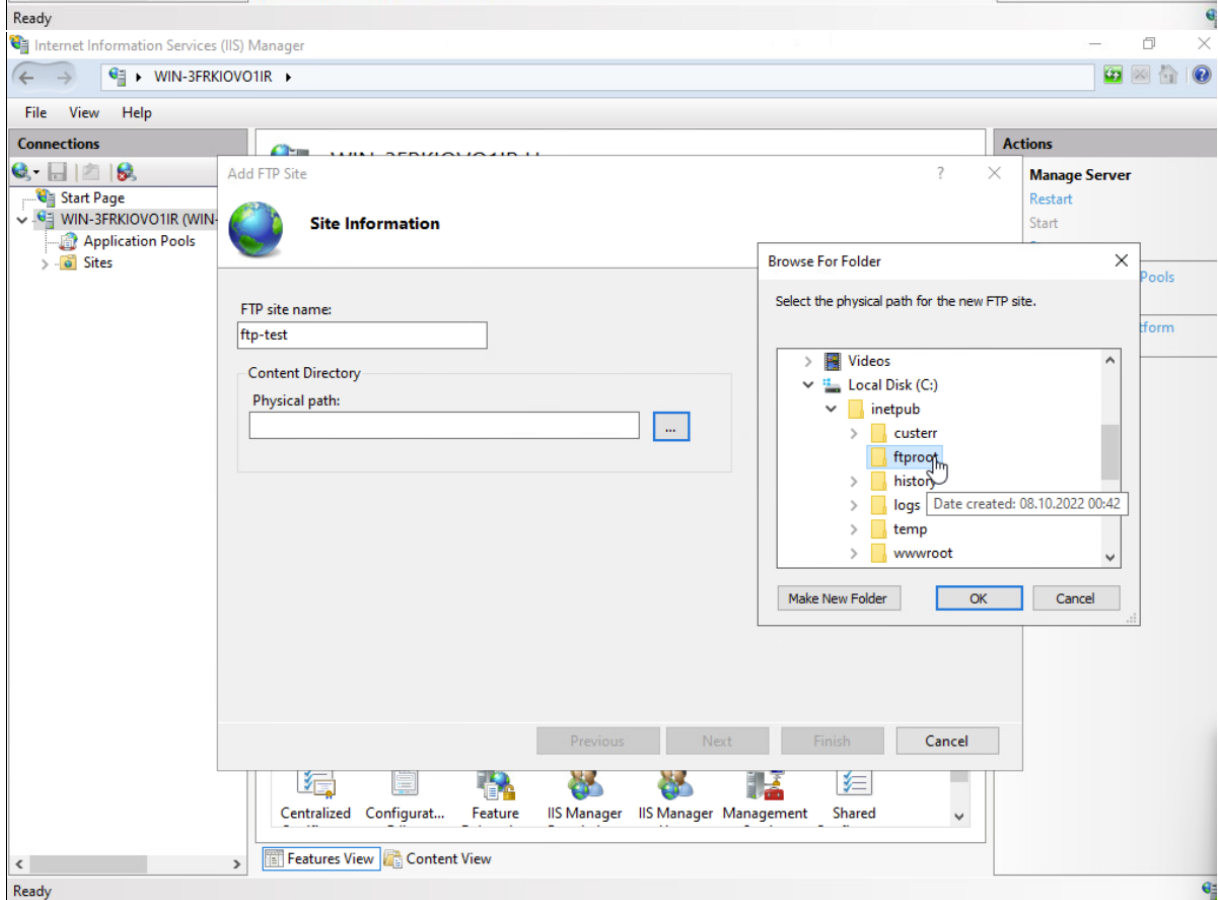
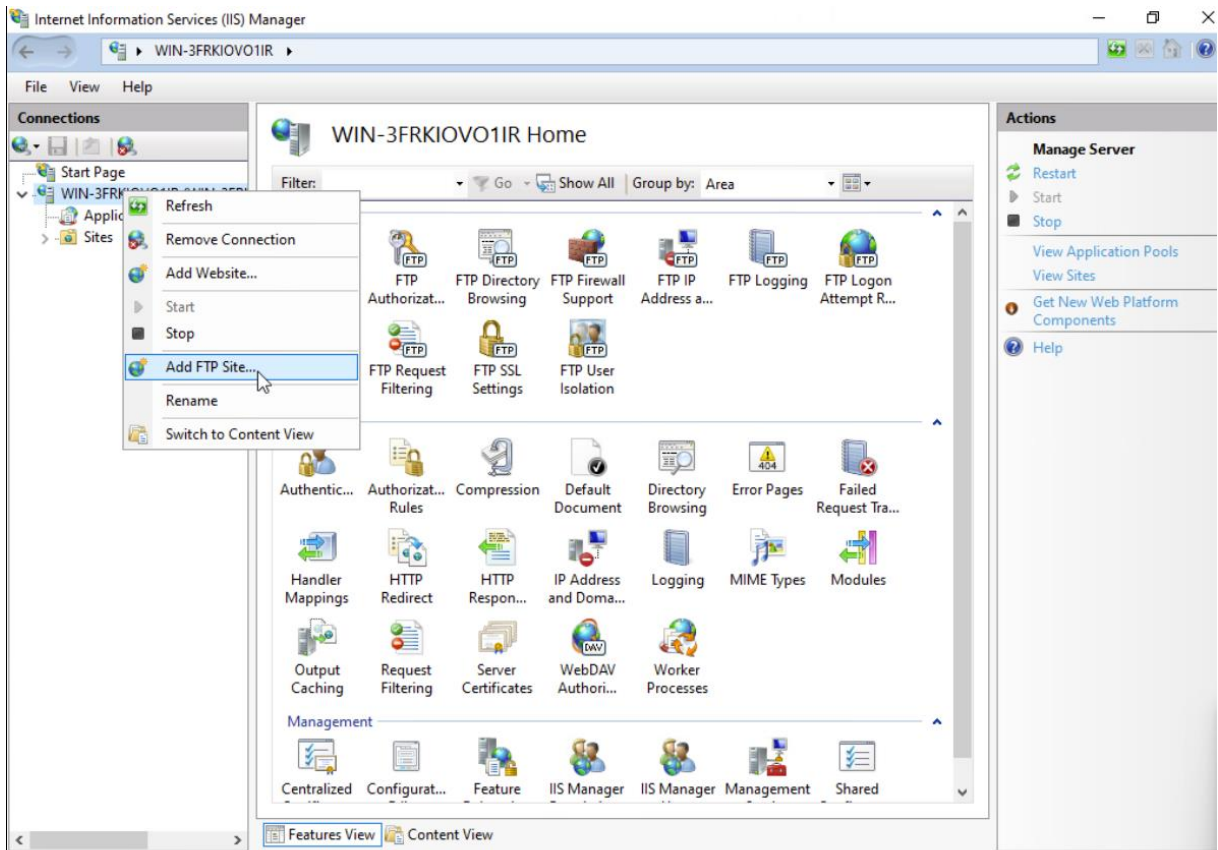
First, we need to install FTP Server, to do this, let's open the server manager and install a new feature as follows:



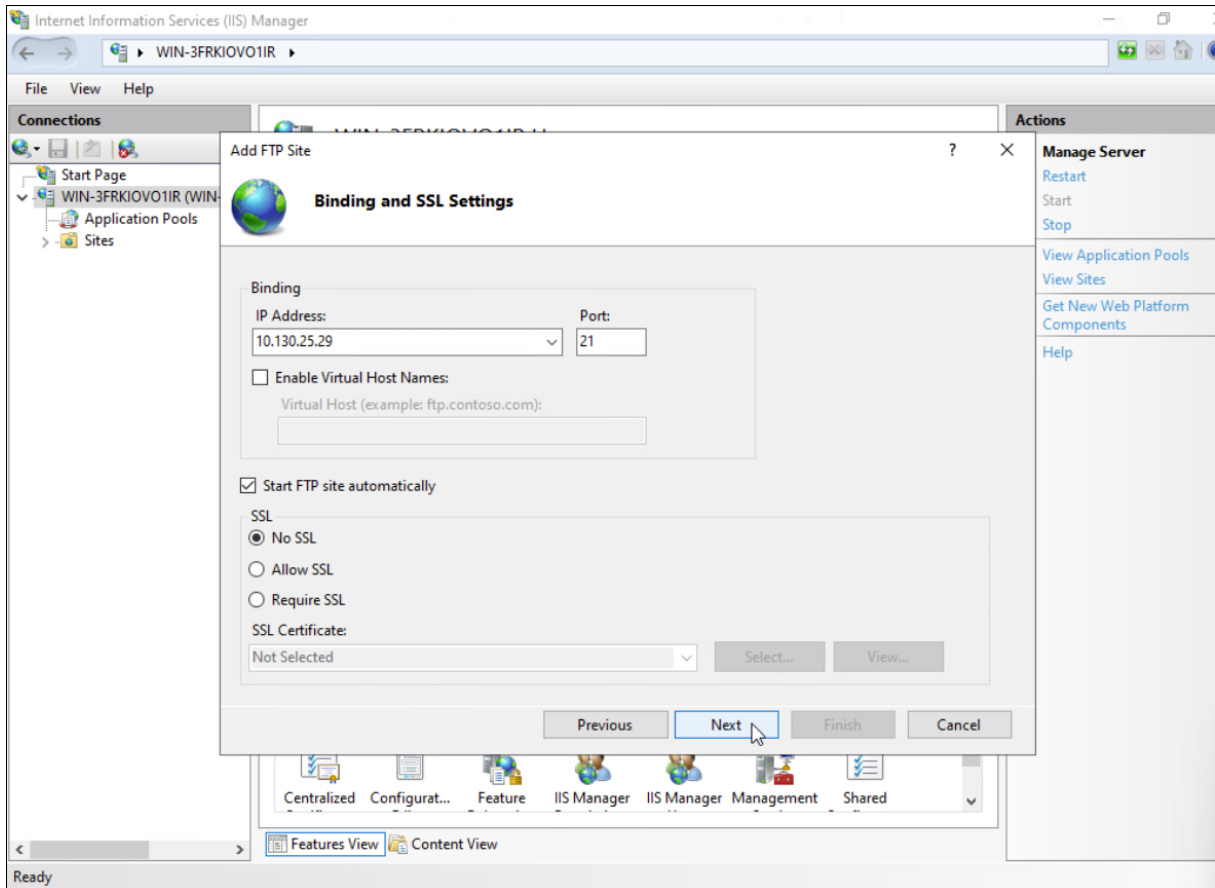
Once the FTP server is installed, you can see that the functionality has been added to IIS.



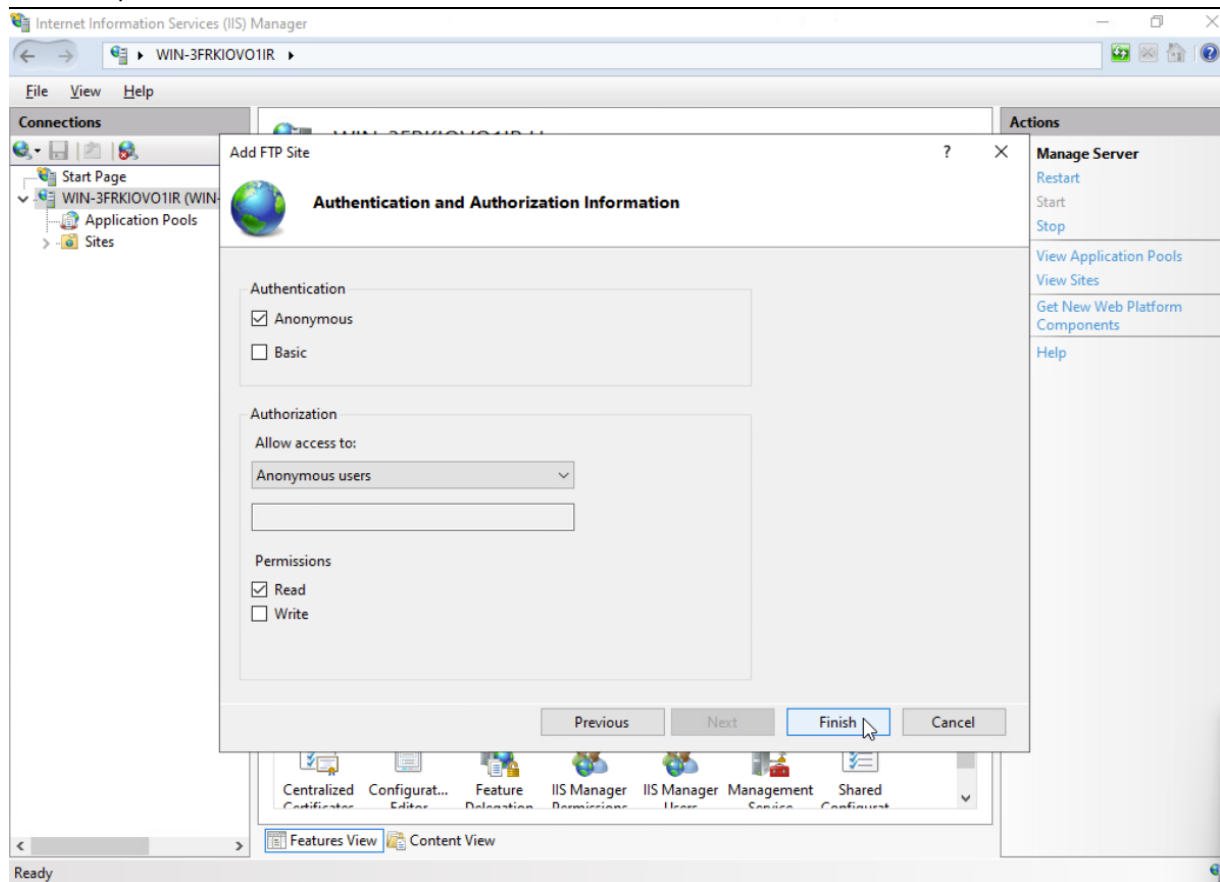
So we add an FTP site and we can name it whatever we want.



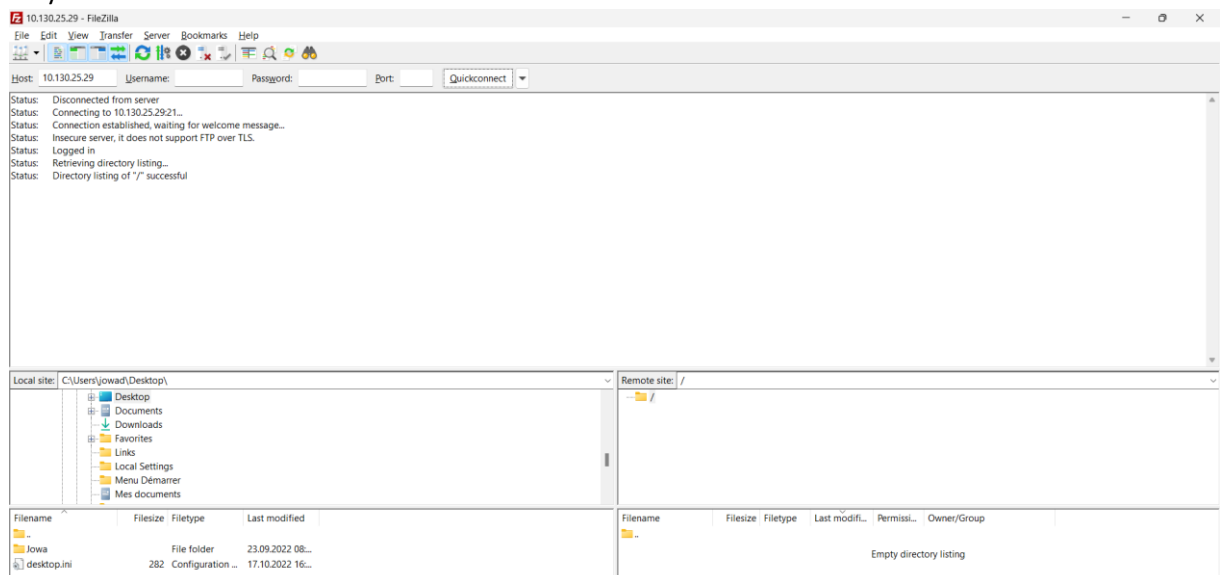
The default port number is 21. SSL encryption is not activated.



We check the anonymous authentication box and for the authorization part, we allow anonymous users and read permission



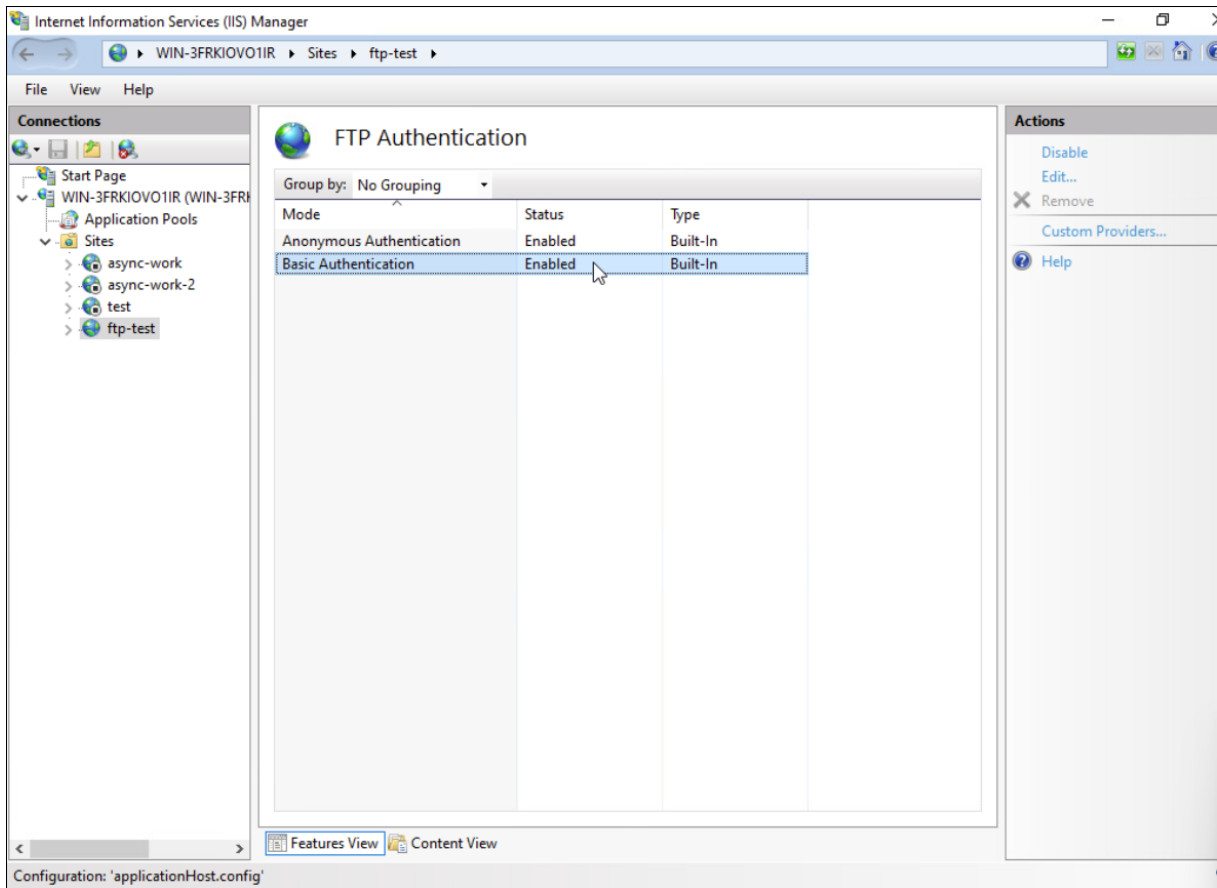
We see that on FileZilla, we can connect as an anonymous user and everything works as expected, we can only read.



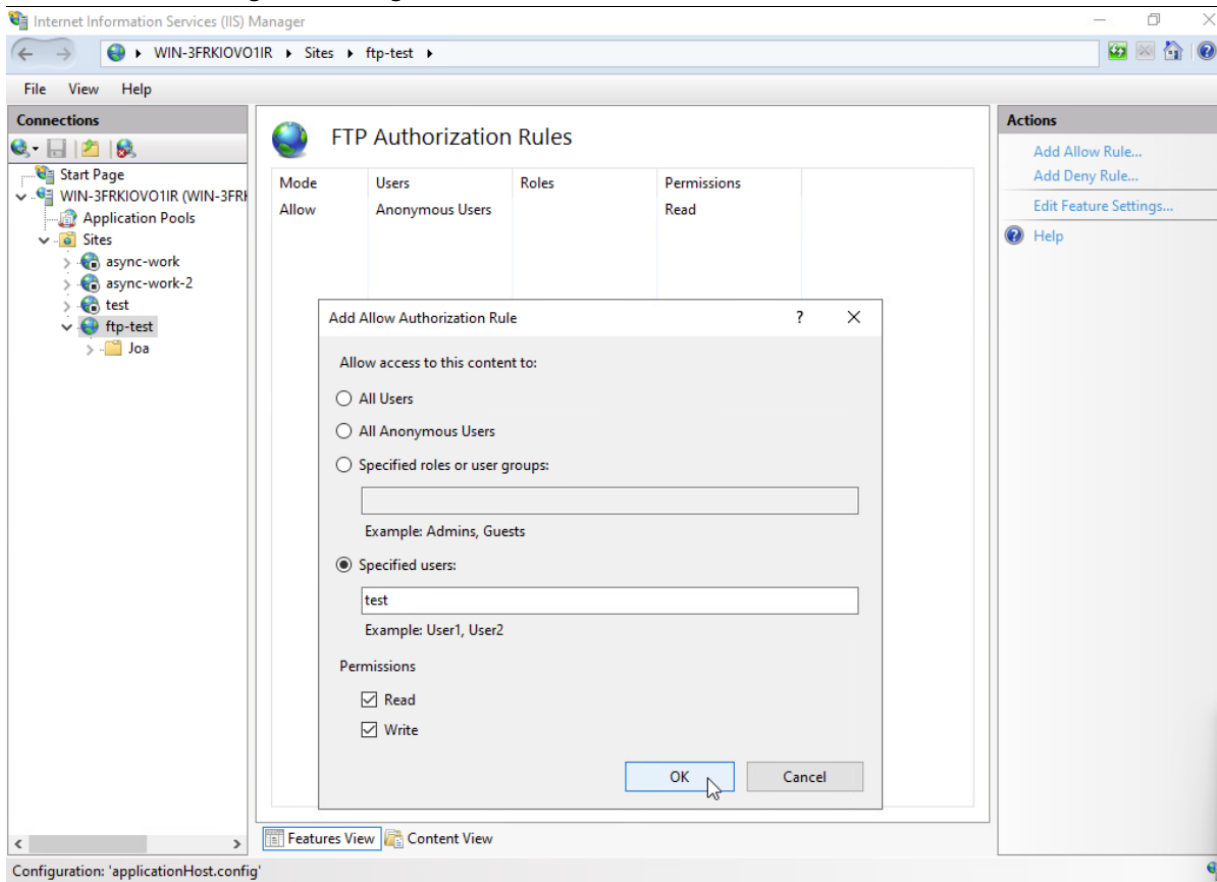
## Authentication

We will enable authentication for reading and writing to registered users. Here is how to enable authentication:

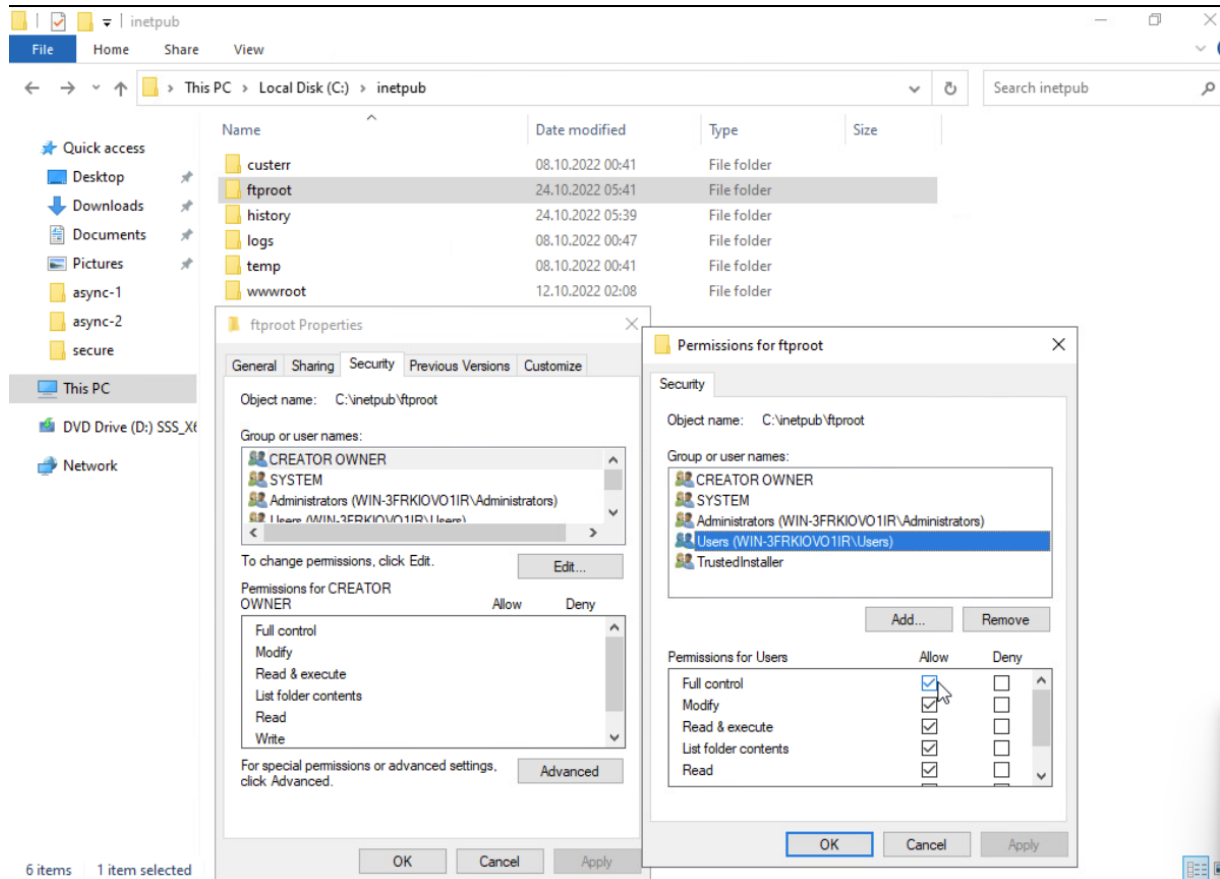




We will enable writing and reading as follows for the "test" user



Here we will go to the properties of the root folder in order to give the rights to the users:



Finally, we can test the upload of the file to the server. Everything is going as it should!

test@10.130.25.29 - FileZilla

File Edit View Transfer Server Bookmarks Help

Host: 10.130.25.29 Username: test Password: ..... Port: Quickconnect

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Local site: C:\Users\jowad\Desktop\Jowa\HES\Infra and Networks\Software\ Remote site: /

Infra and Networks

- Upload
- Add files to queue
- Open
- Edit
- Create directory
- Create directory and enter it
- Refresh
- Delete
- Rename

Filename	Filesize	Filetype	Last modified	Permissi...	Owner/Grou
..					
Cisco Packet Tr...			24.09.2022 14:...		
FileZilla Client...			19.10.2022 09:...		
PuTTY (64-bit).lnk	1008	Shortcut	04.10.2022 18:...		
Wireshark - Shortcu...	1571	Shortcut	04.10.2022 18:...		

Selected 1 file. Total size: 1008 bytes

Server/Local file	Dir...	Remote file	Size	Priority	Time	Reason
10.130.25.29						
C:\Users\jowad\Des...	-->>	/ex-ch6.pptx	148052	Normal	24.10.2022 13:48:30	Could not start transfer

Queued files: **Failed transfers (25)** Successful transfers (3)

Host: 10.130.25.29 Username: test Password: ..... Port: Quickconnect

Status: Connecting to 10.130.25.29:21...  
 Status: Connection established, waiting for welcome message...  
 Status: Insecure server, it does not support FTP over TLS.  
 Status: Logged in  
 Status: Starting upload of C:\Users\jowad\Desktop\Jowa\HES\Infra and Networks\Software\PuTTY (64-bit).lnk  
 Status: File transfer successful, transferred 1008 bytes in 1 second  
 Status: Retrieving directory listing of "/"...  
 Status: Directory listing of "/" successful

Local site: C:\Users\jowad\Desktop\Jowa\HES\Infra and Networks\Software\ Remote site: /

Infra and Networks

- FTP
- HTTP
- IIS
- IP
- Prochains sujets de TP Infra and network
- Software
- Windows FTP

Filename	Filesize	Filetype	Last modified	Permissi...	Owner/Grou
..					
Cisco Packet Tracer ...	1325	Shortcut	24.09.2022 14:...		
FileZilla Client.lnk	1934	Shortcut	19.10.2022 09:...		
PuTTY (64-bit).lnk	1008	Shortcut	04.10.2022 18:...		
Wireshark - Shortcu...	1571	Shortcut	04.10.2022 18:...		

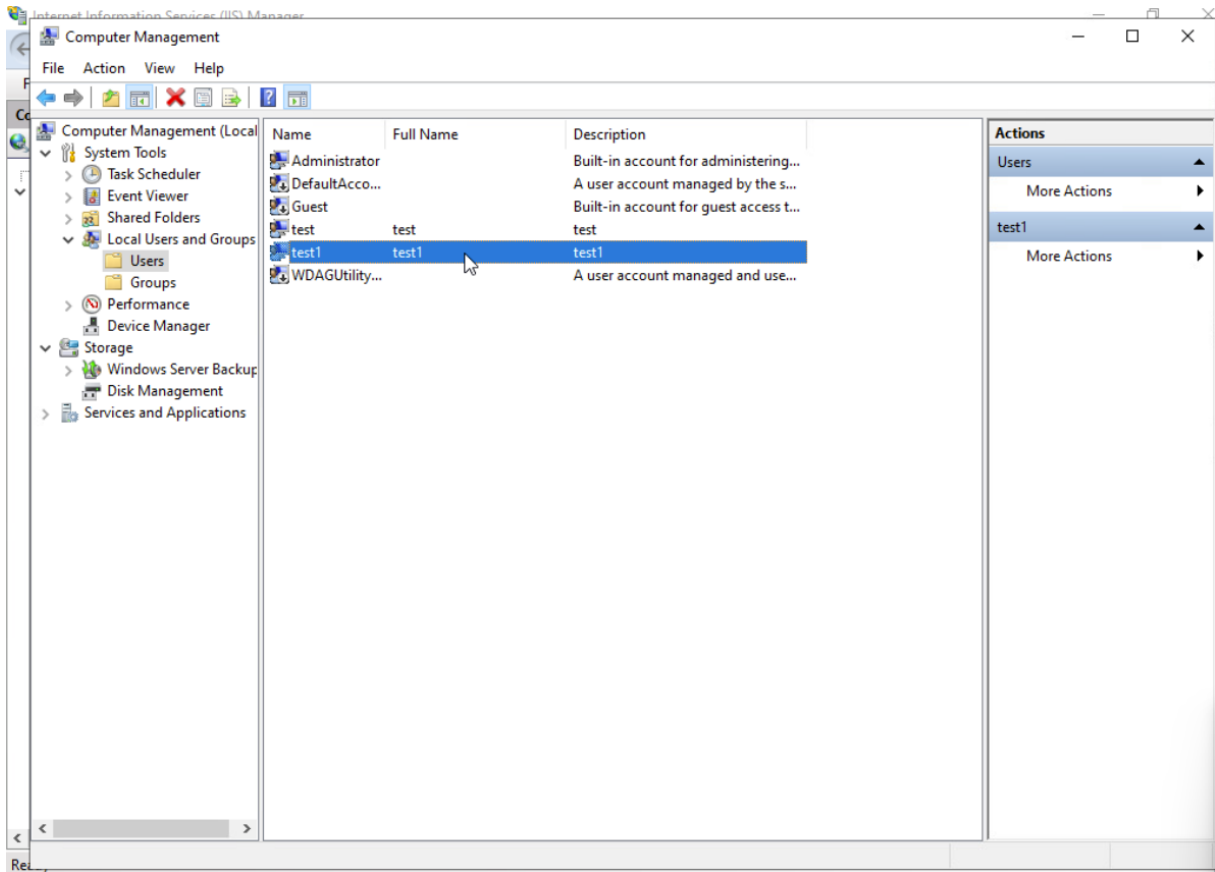
Selected 1 file. Total size: 1008 bytes

Filename	Filesize	Filetype	Last modified	Permissi...	Owner/Grou
..					
PuTTY (64-bit).lnk	1008	Shortcut	24.10.2022 ...		
Joa		File folder	24.10.2022 ...		

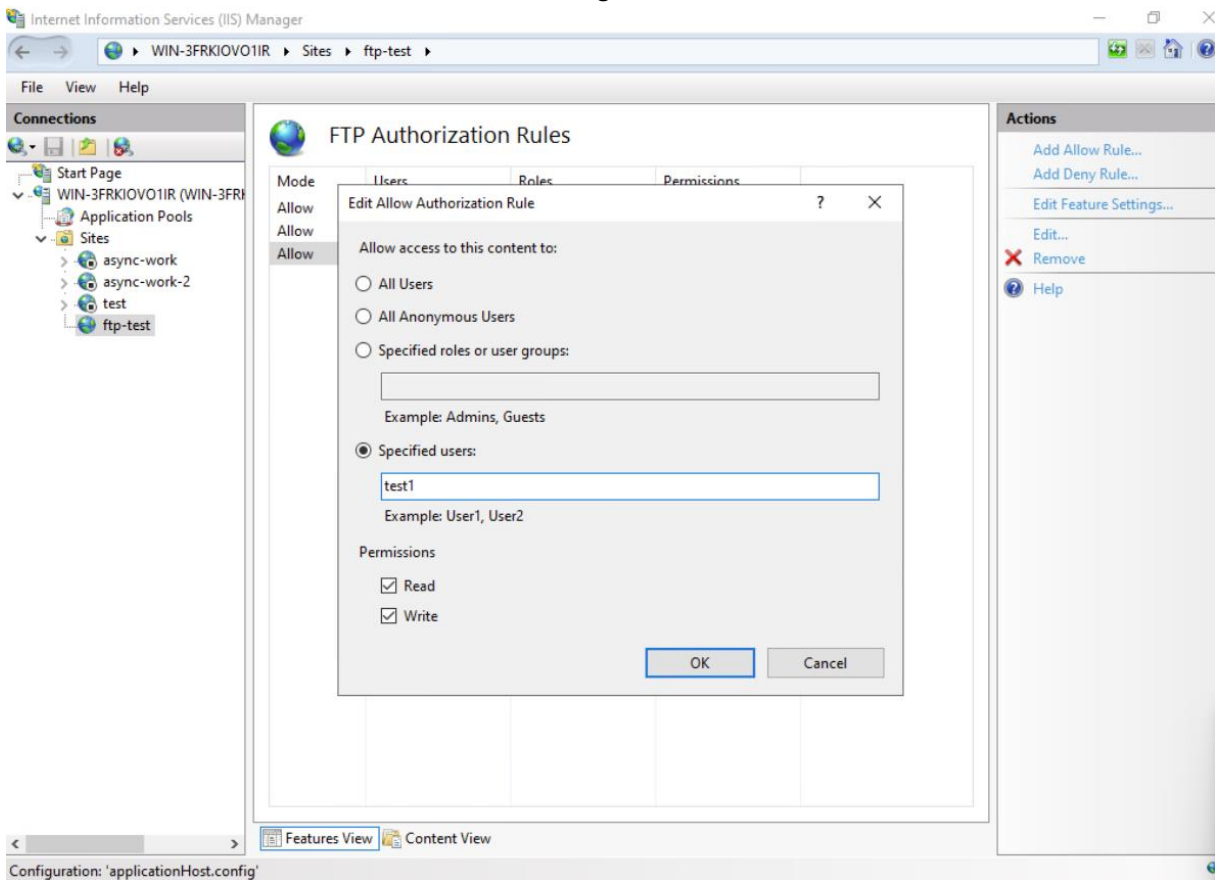
1 file and 1 directory. Total size: 1008 bytes

## Insulation

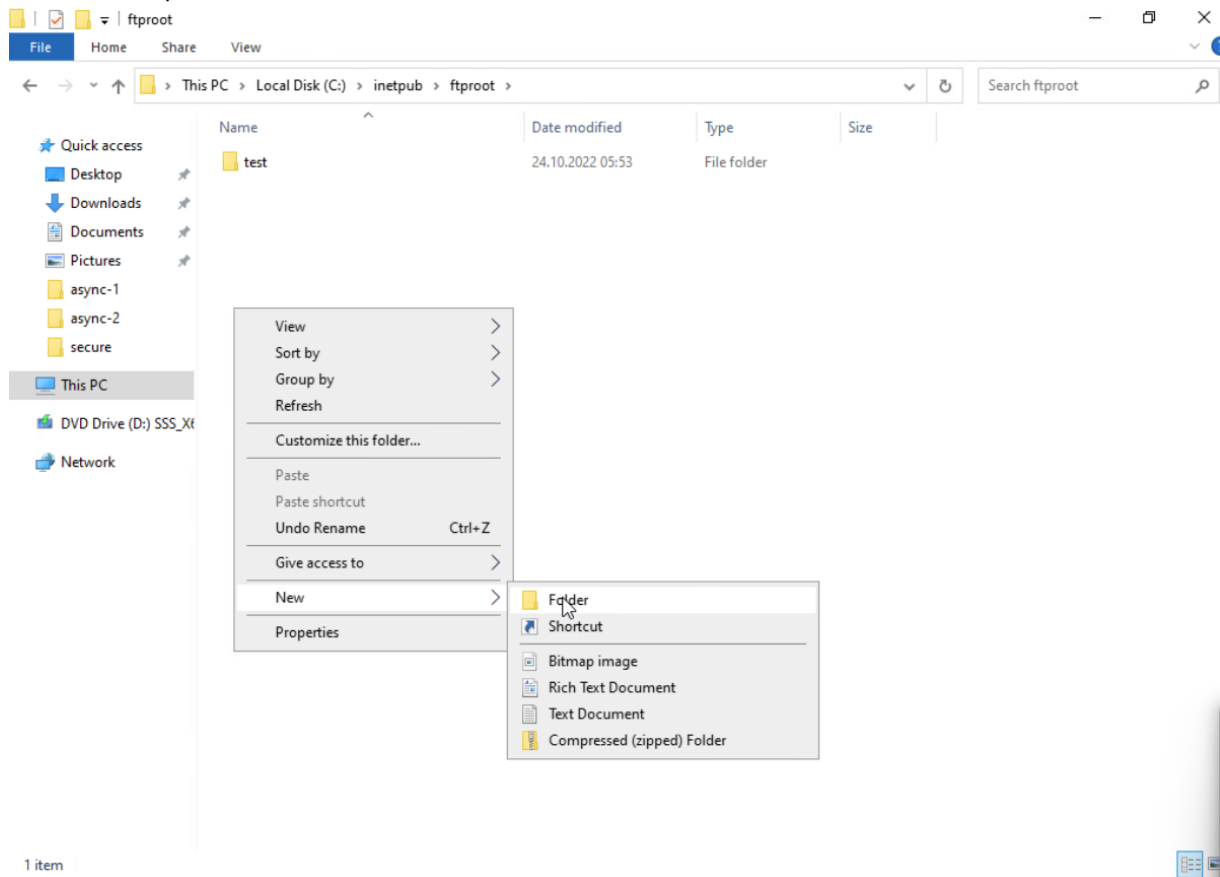
Isolation is a very good method of giving a user specific rights to folders belonging to them.



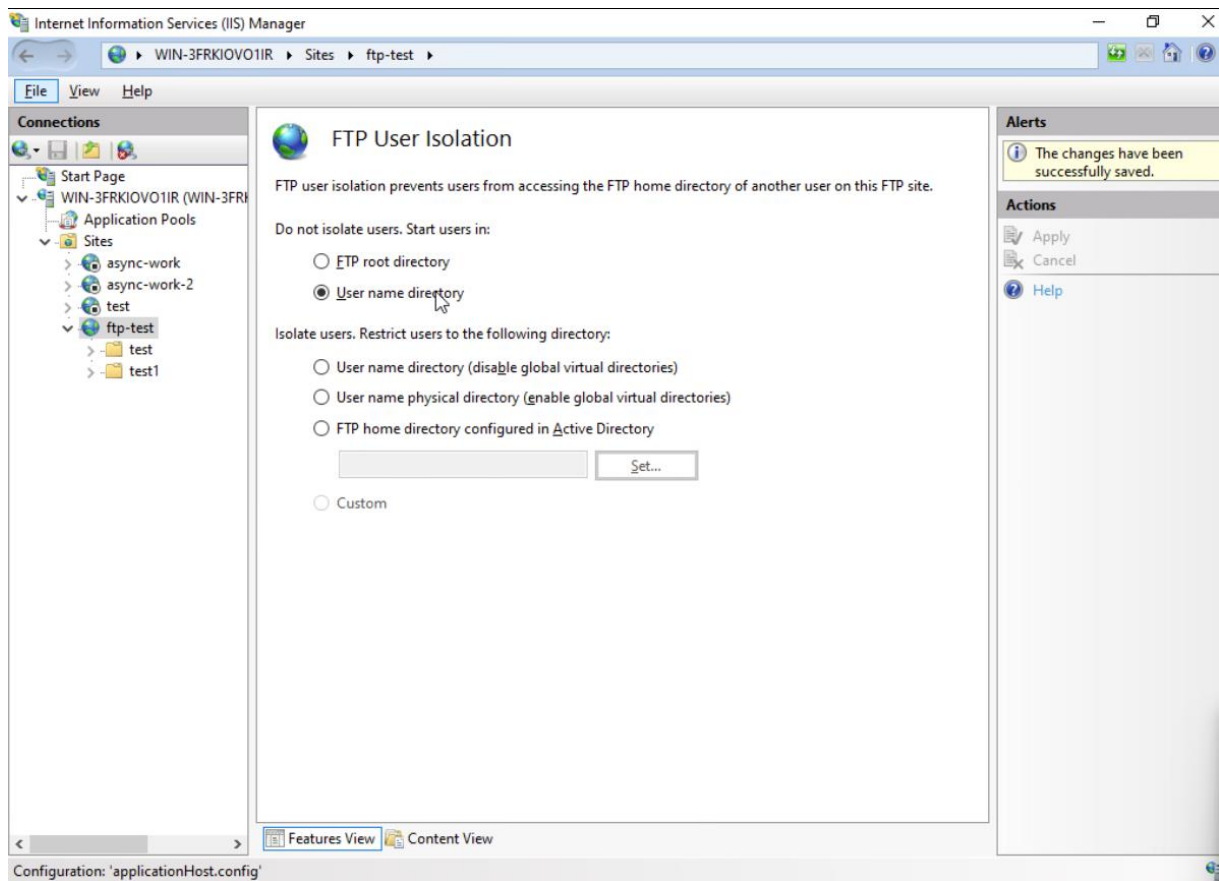
We add a second user "test1" with read and write rights.



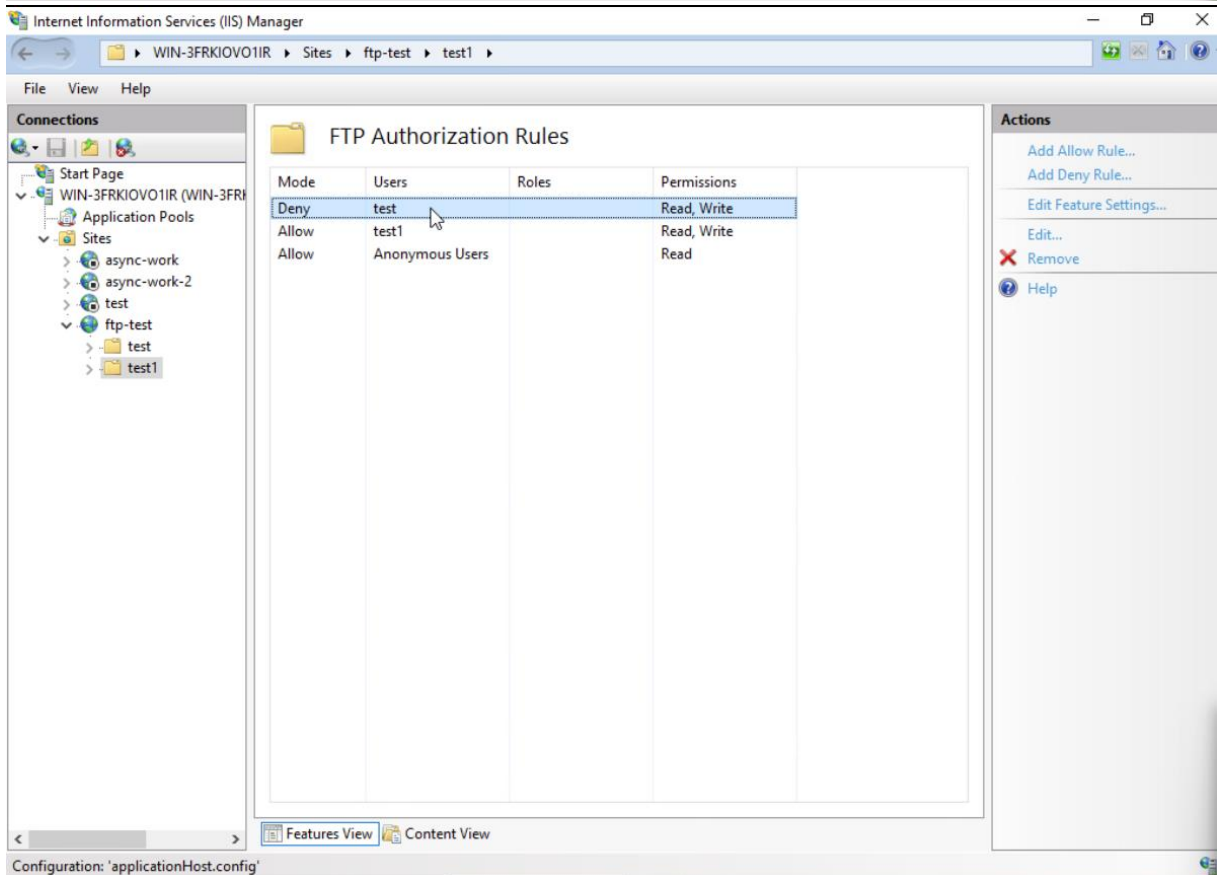
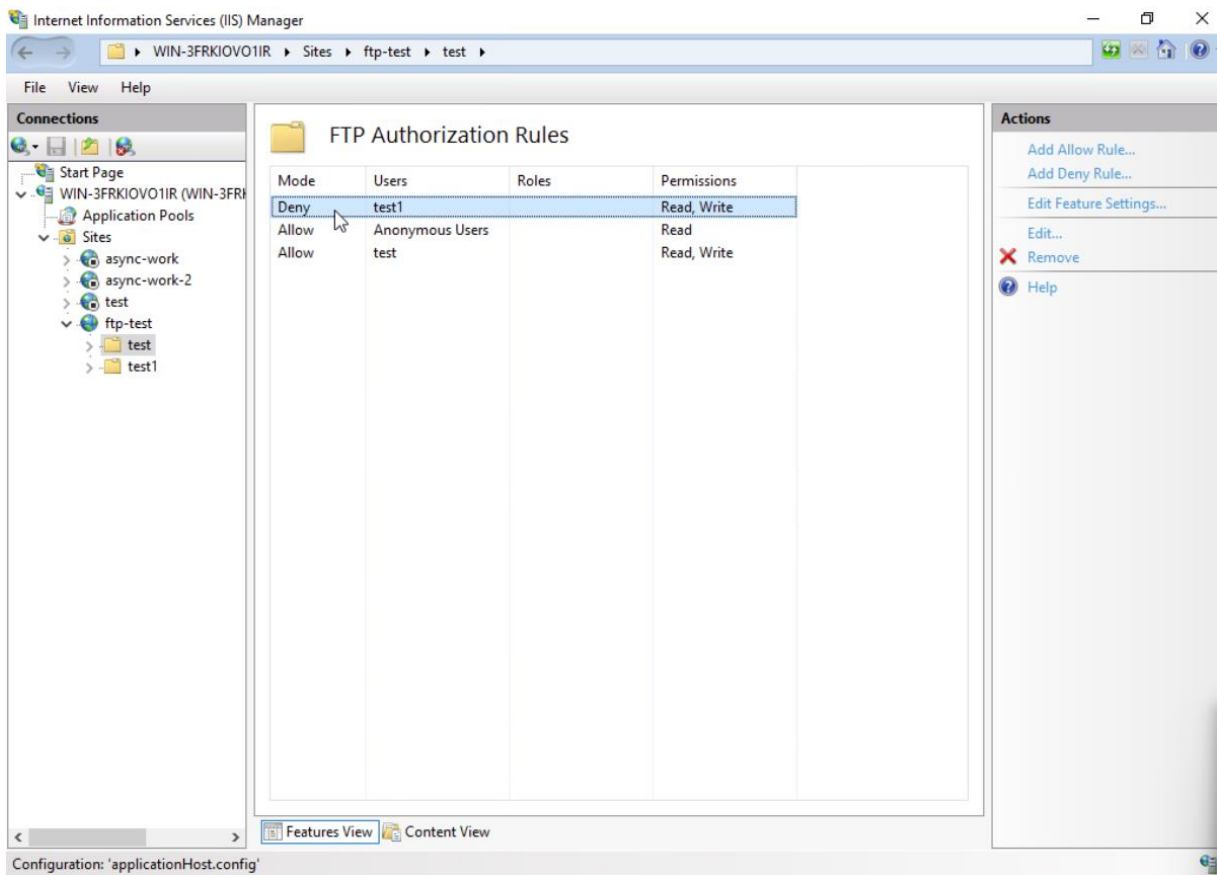
We create a specific folder for him.



And now we can define that users will have direct access to the folder with the same name as the user account when they login.

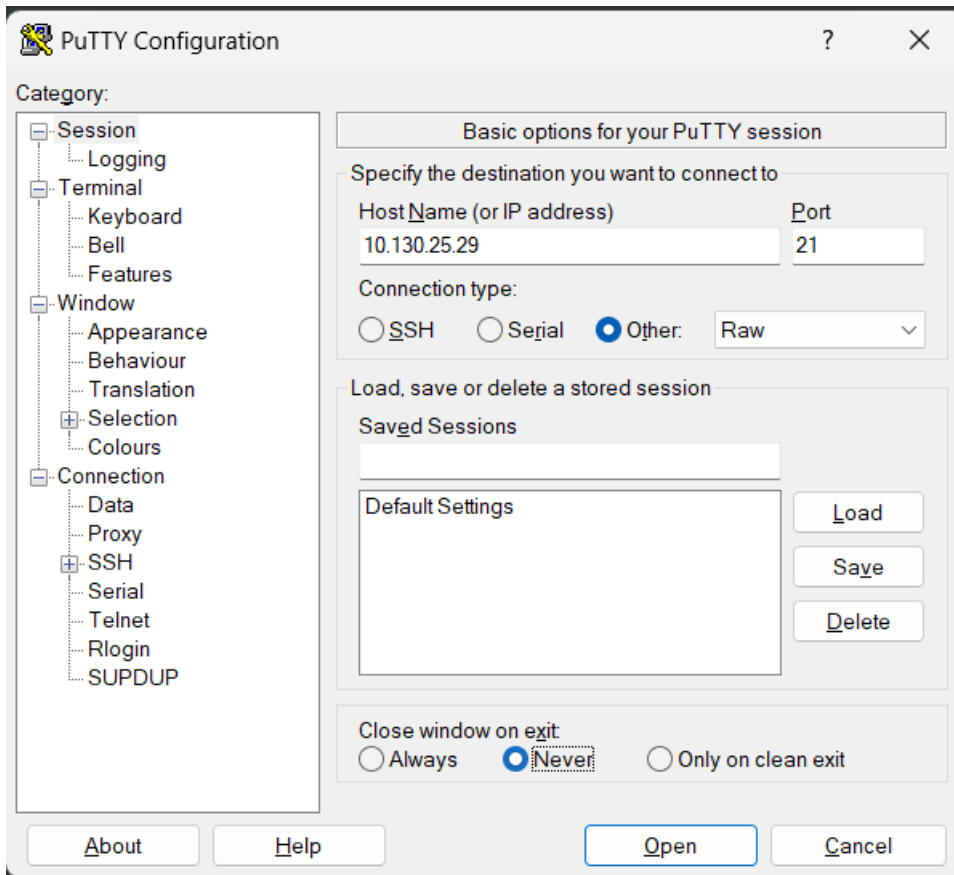


For the following configuration you have to pay attention to the tree structure on the left of the picture. We give rights to one user and deny access to the other folder.

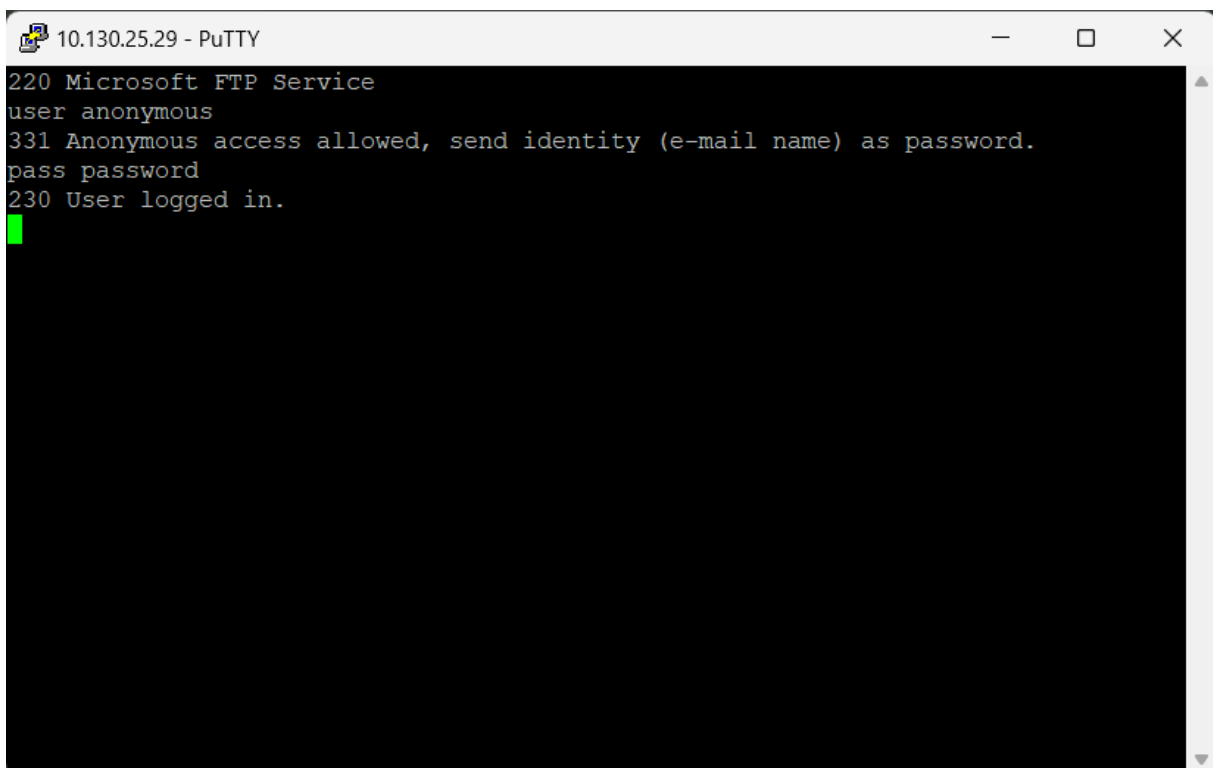


## Download a file

To download a file you need to open a first PuTTY session with the necessary connection information:

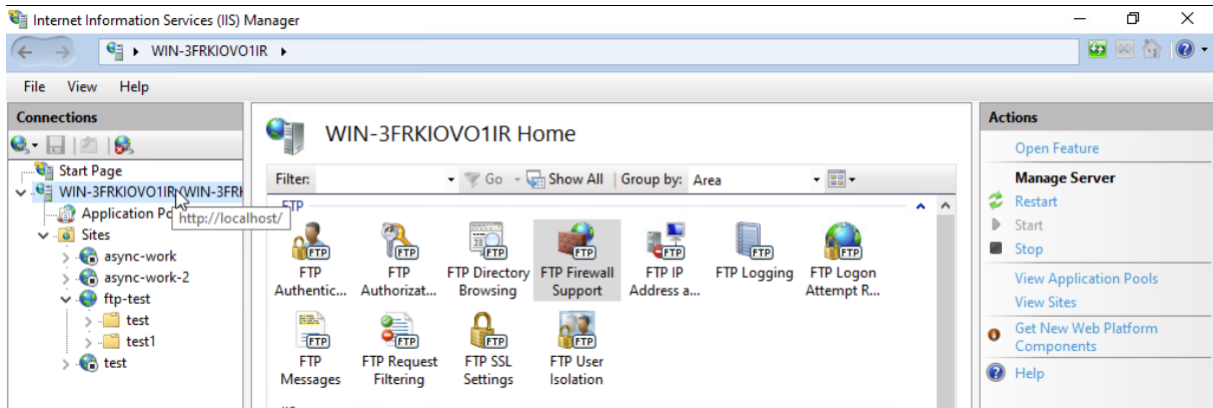


#### Authenticate

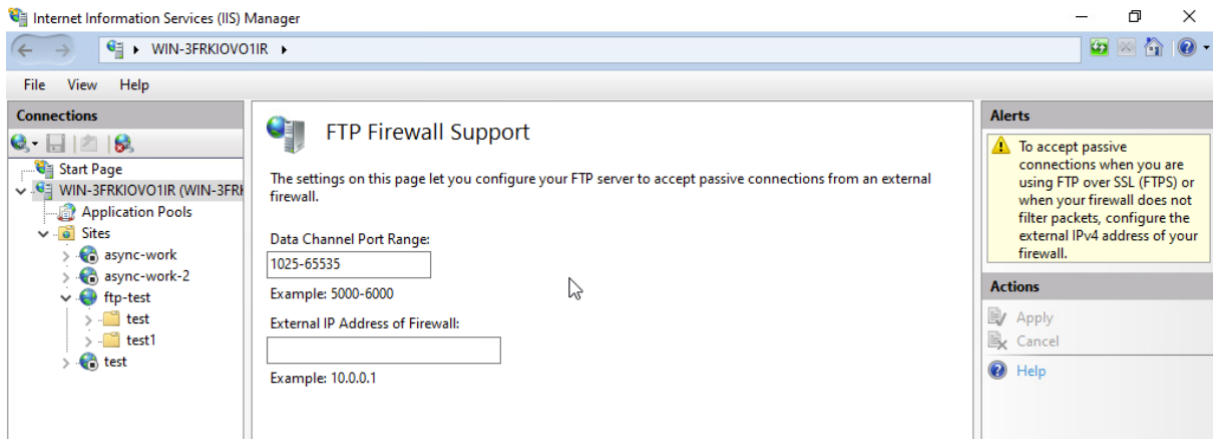




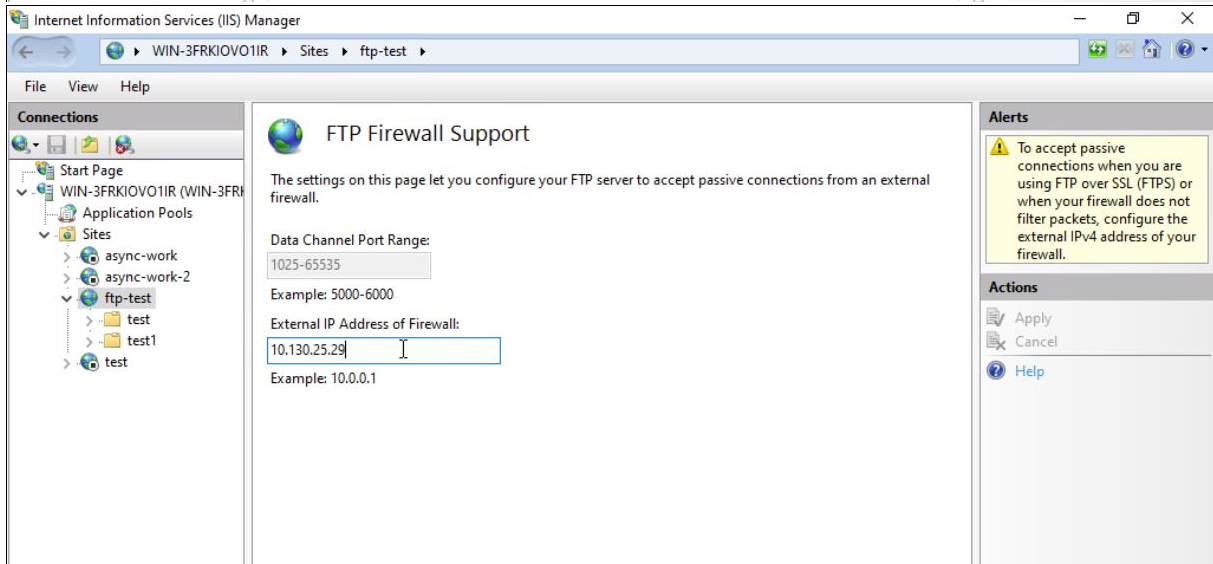
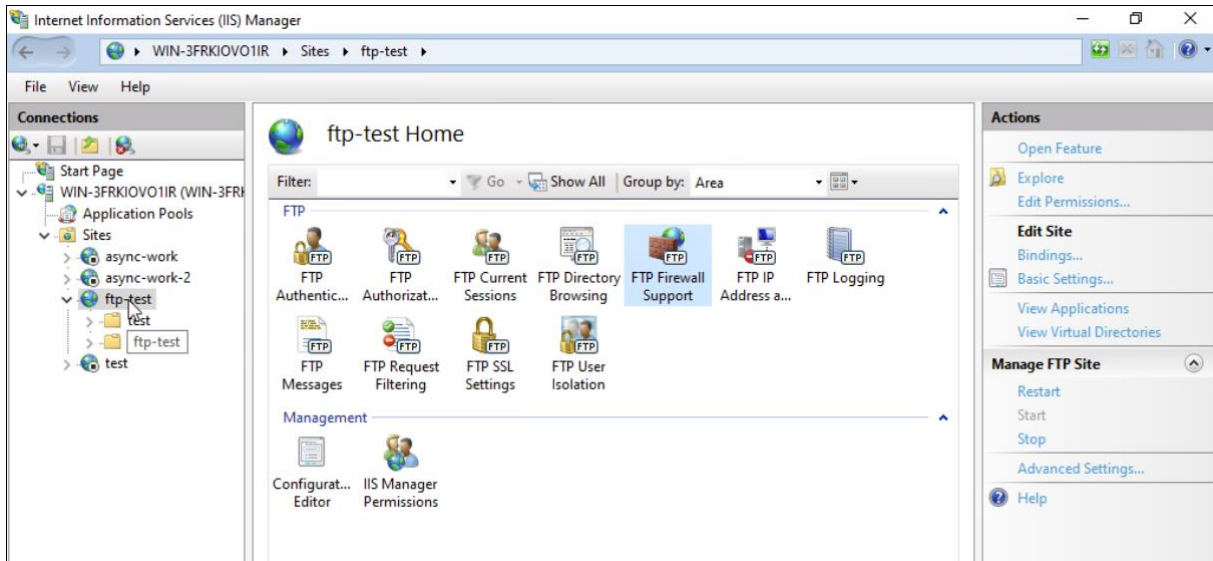
Then we need to configure the firewall of the FTP server



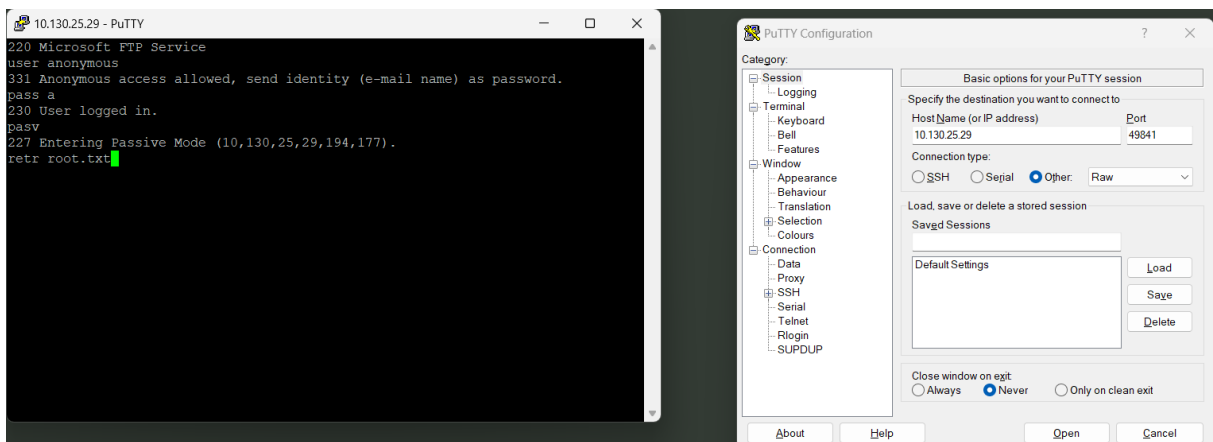
Let's define the port range so that everything can work



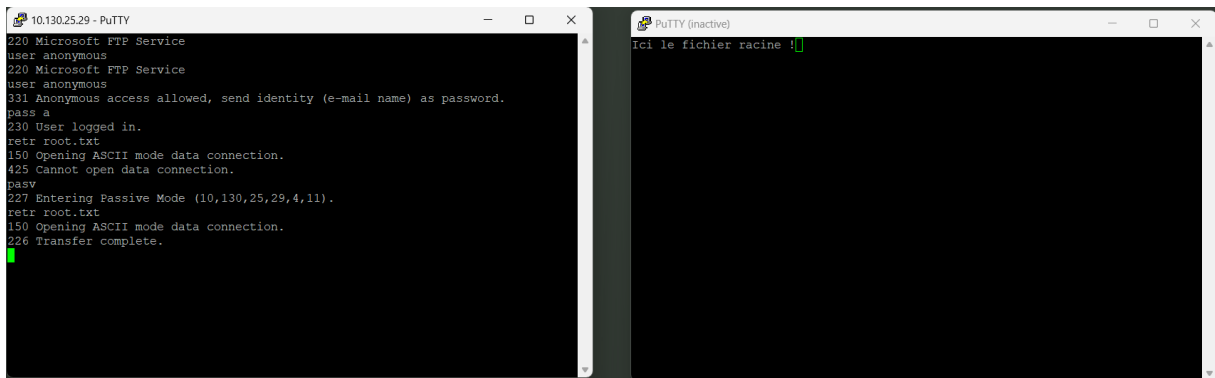
And let's configure the site's firewall with the IP address of the FTP server.



We can then enter passive mode and do the port calculation to open a second session as follows and download the file in CLI mode.

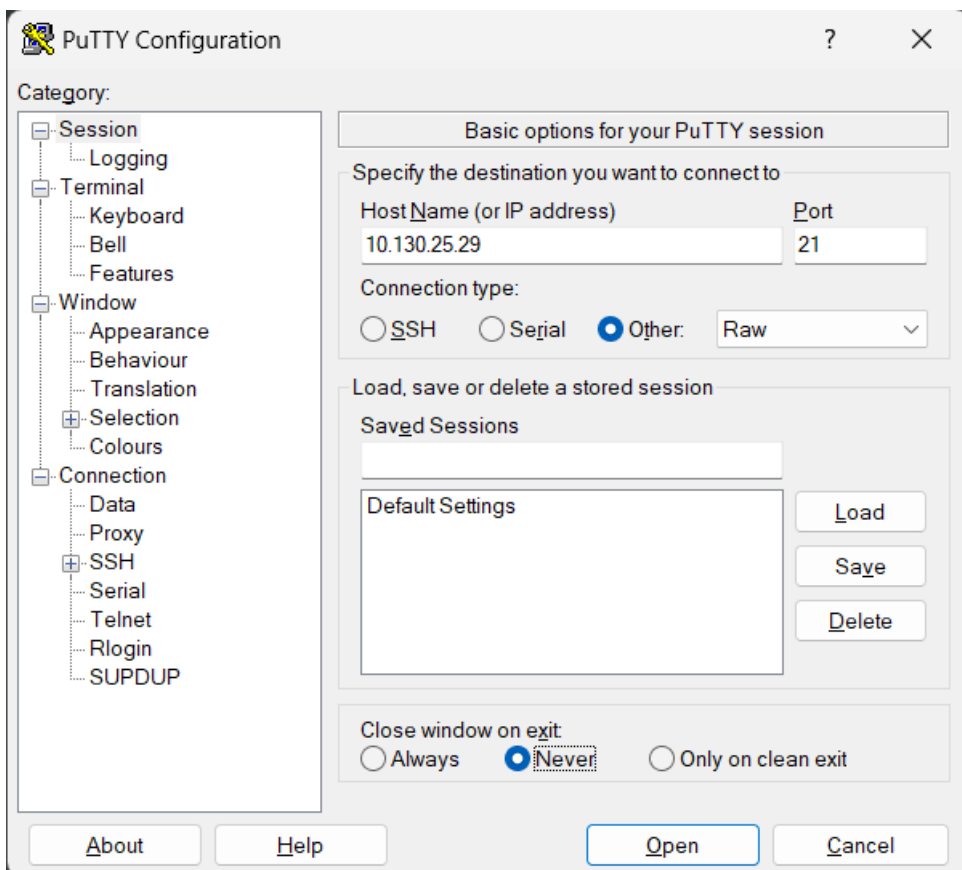


Everything is working fine, we can read the contents of the file from the FTP server in the right-hand window.



## Upload a file

To upload the file we need to log in with a user who has write access, i.e. the "test" account.



We can proceed in the same way as above with the download.

