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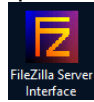
La Universidad Católica de Loja

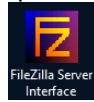
**TITULACIÓN: SISTEMAS INFORMÁTICOS Y COMPUTACIÓN**

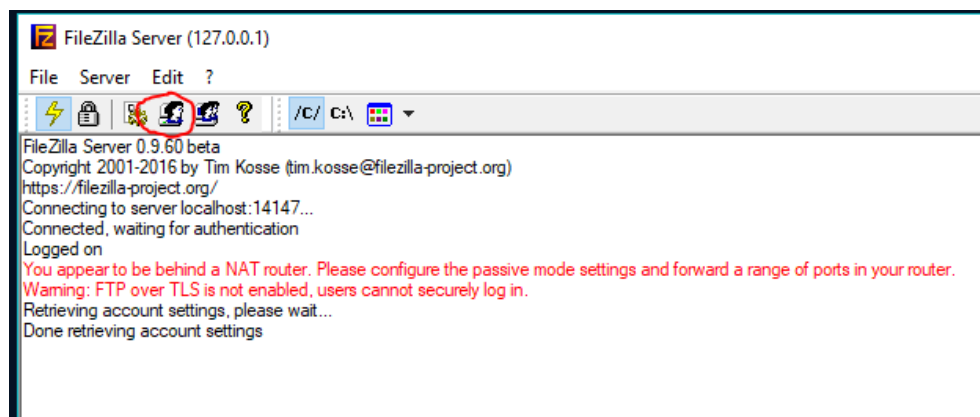
PRACTICA #4: CONFIGURACIÓN E IMPLEMENTACIÓN DE UN SERVIDOR FTP	
PERIODO ACADÉMICO:	OCT/2019 – FEB/2020
COMPONENTE:	Arquitectura y seguridad de redes
TITULACIÓN	Sistemas Informáticos y Computación
PARALELO:	A y B
DOCENTE:	Ing. Javier F. Martínez, Mgs
OBJETIVO GENERAL	Configurar e implementar un servidor FTP
OBJETIVOS ESPECÍFICOS	<ul style="list-style-type: none"><li>• Identificar los distintos comandos de FTP</li><li>• Configurar un servidor FTP y su cliente</li></ul>

## 1. DESARROLLO DE LA PRÁCTICA

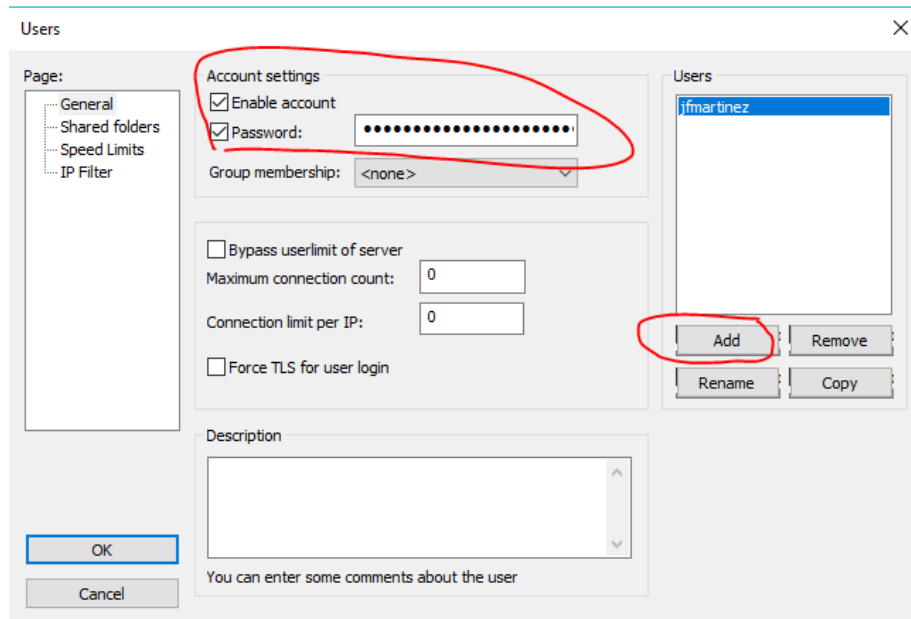
- Se va a trabajar en grupo, donde una máquina será el servidor FTP, y las demás serán los clientes. El servidor será Windows ya que el programa con el que se trabajará solo trabaja bajo esa plataforma, los clientes pueden ser Windows, Linux o MAC.
- Descargar el servidor y cliente de la siguiente página <https://filezilla-project.org/>
- Instalamos FileZilla Server en la máquina que fungirá de servidor, los Filezilla Client en las máquinas que serán los hosts.
- En el servidor creamos una carpeta en C: que se llamará servidor\_ftp, dentro de esa carpeta se creará una carpeta para cada cliente(miembro del grupo).



- Abrir la interface del servidor  para configurar los usuarios y directorios. Y en el ícono de usuarios
- Utilizar wireshark para hacer captura de tráfico y documentar la práctica.

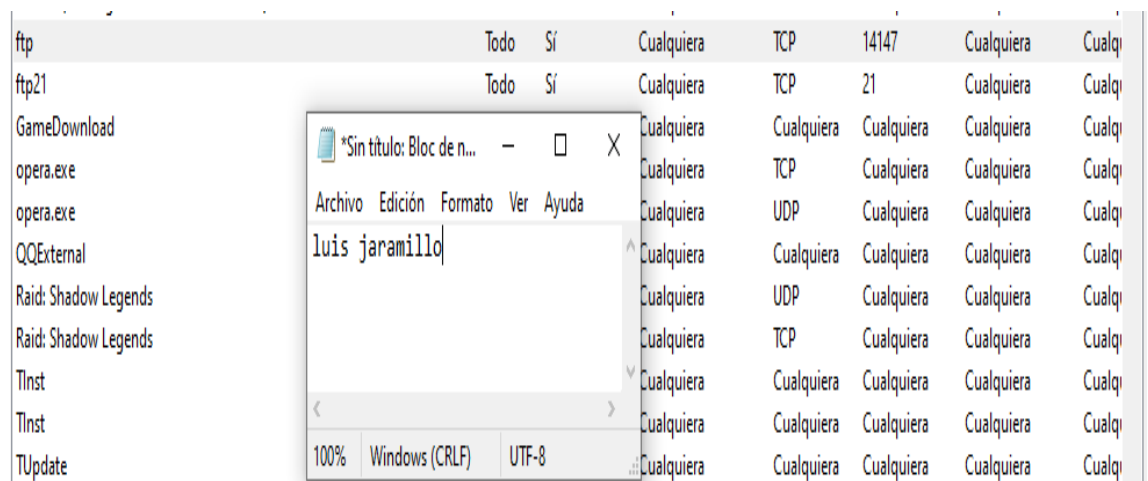


Y aquí configuramos los nombres de los usuarios, contraseñas y directorios para cada usuario.

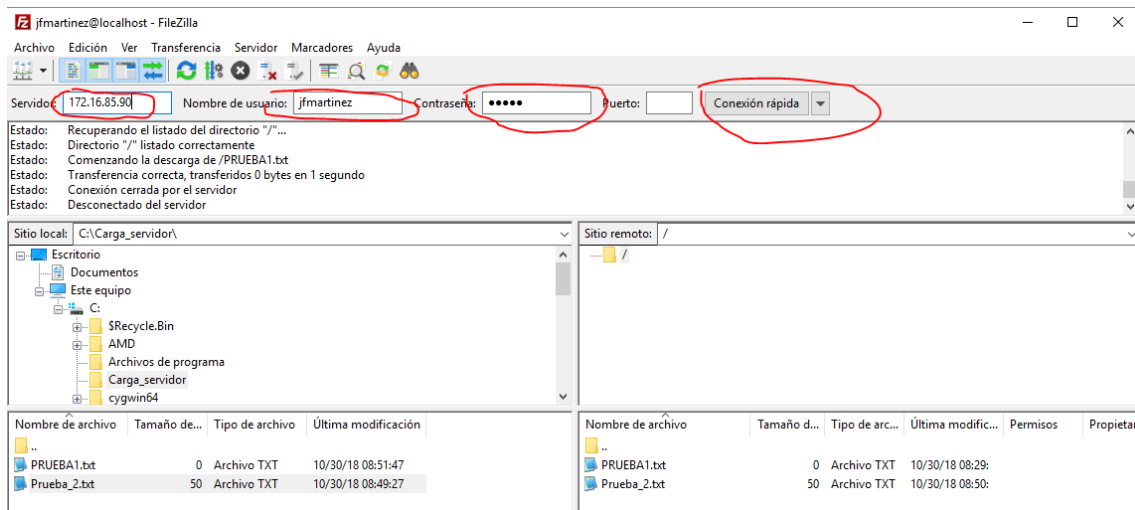


Hacemos lo mismo para cada cliente (miembro del grupo), de esta manera los clientes podrán tener su propio directorio donde podrán copiar, crear carpetas, en el directorio del servidor FTP.

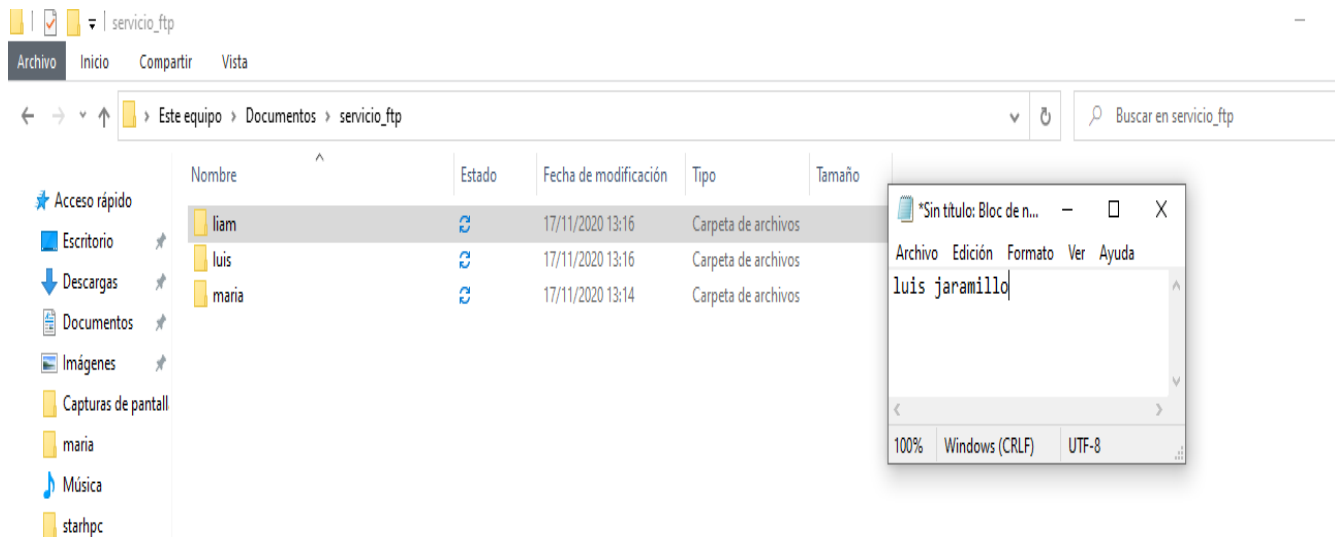
- g) Una vez configurados los usuarios, acceder usando el programa cliente, pero manteniendo abierta la interfaz del servidor, donde se podrán ver los comandos que intercambian entre cliente y servidor FTP.
- **Nota: Aquí se ha tenido que configurar nuestros puertos tanto el 14147 como el puerto 21 para poder tener una conexión entre cliente y servidor. Esto lo deberemos hacer en la maquina donde tenemos nuestro servidor**



- h) Usamos el cliente para acceder, ingresamos la IP del servidor, usuario y contraseña configurados.

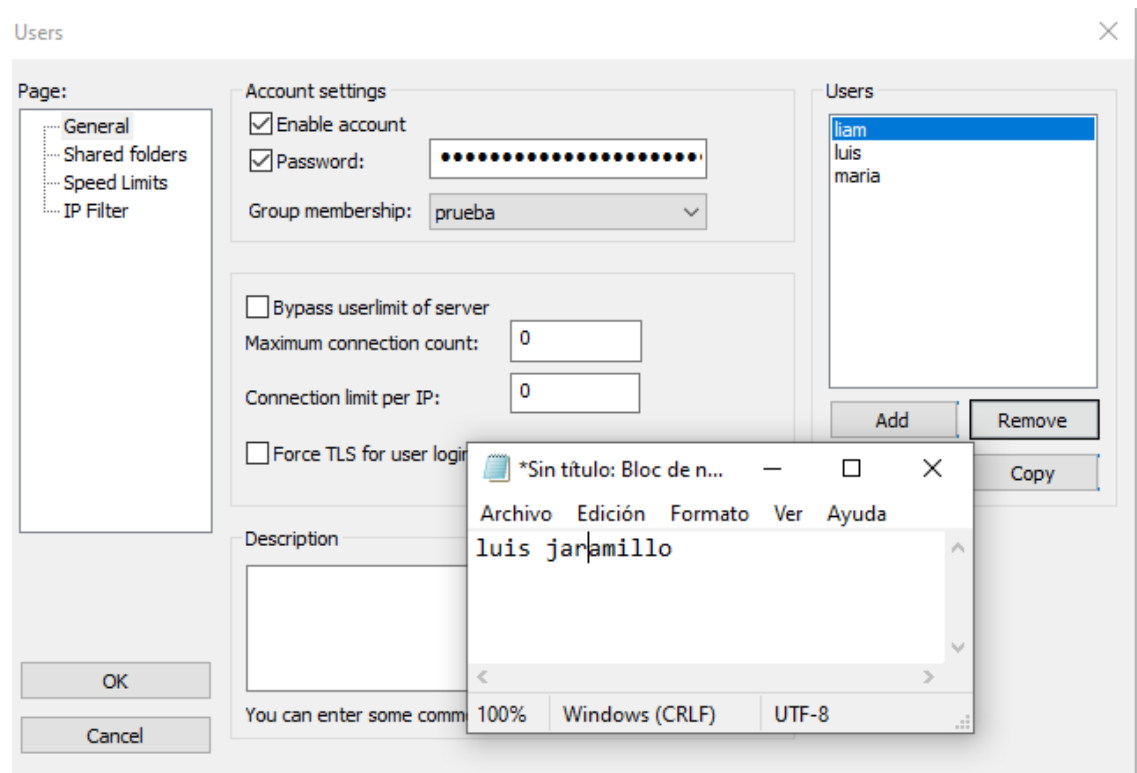


- i) Cada cliente deberá copiar dos archivos de texto, copiar dos archivos desde su directorio local, y crear dos carpetas personales en el servidor.



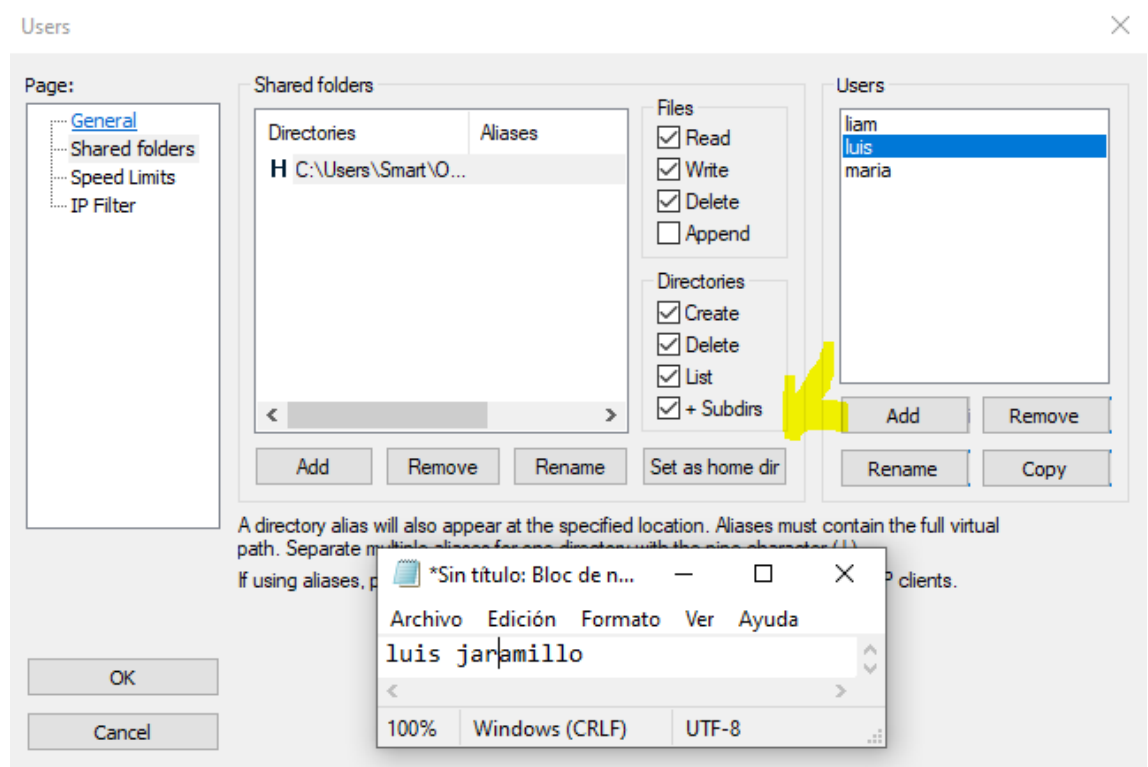
- Aquí debemos crear una carpeta para cada cliente las cuales serán después asignadas

Imagen1: directorios a lo cuales se les direccionará a los usuarios



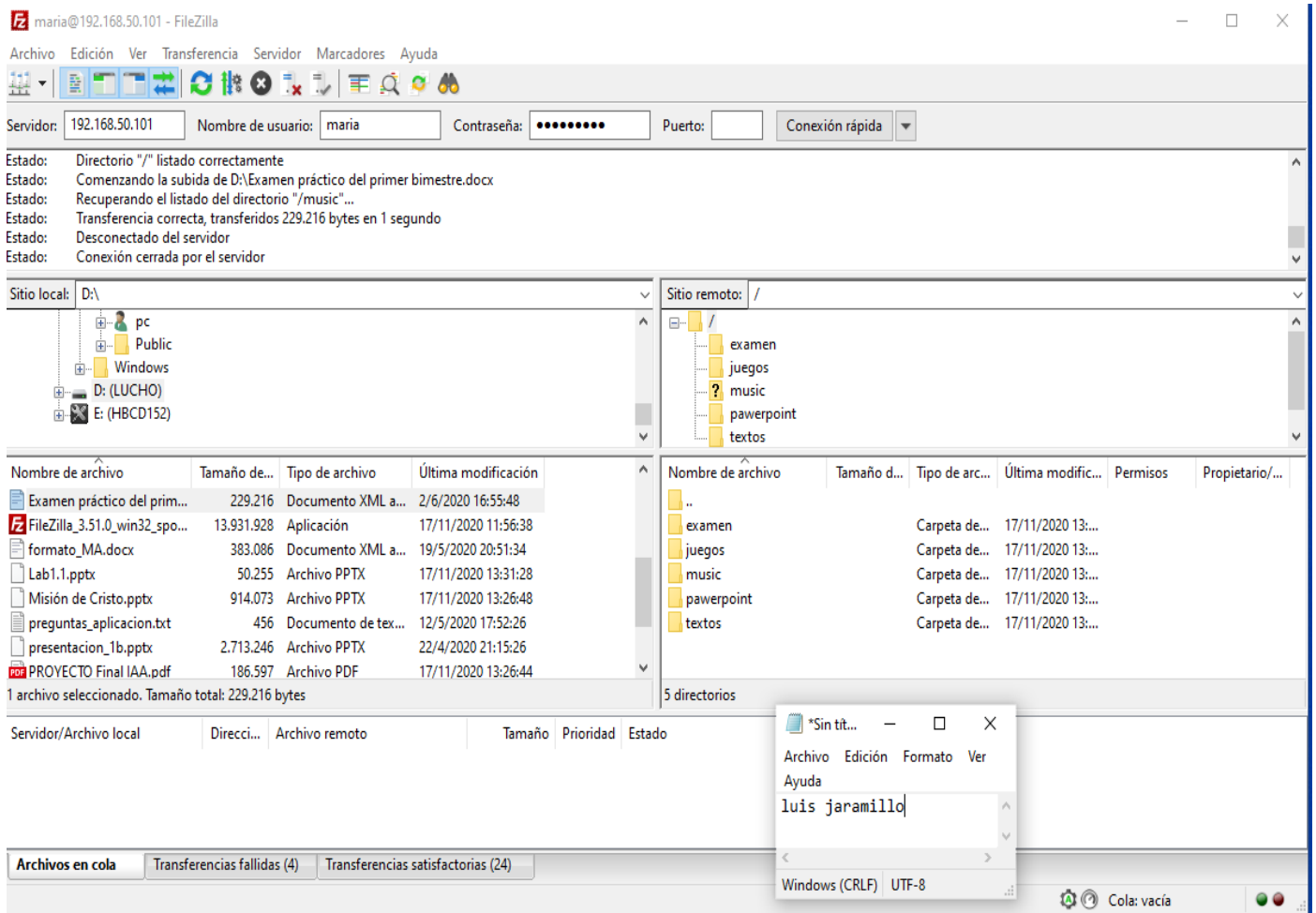
- Aquí debemos crear los tres clientes a los cuales asignaremos una contraseña cada uno

Imagen 2: Creación de los clientes con su contraseña



- Aquí debemos asignarle como directorio home a cada cliente las carpetas anteriormente generadas y así mismo debemos darles los diferentes roles

Imagen 3: asignación del directorio para cada cliente, se le debe asignar como home al directorio

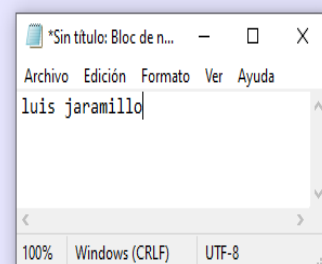


- Aquí hay una de las muchas interacciones que se hicieron en la cual debemos poner como servidor nuestro ip del servidor, junto al nombre del usuario y su contraseña. Al darle conexión rápida el puerto por defecto es 21, el cual autorizamos anteriormente en nuestra computadora del servidor

Imagen 4: conexión del cliente ftp con el servidor ftp

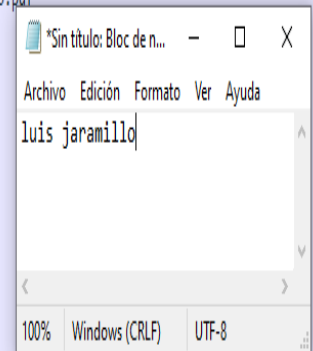
- **Nota:** Antes de comenzar la interacción entre cliente y servidor si tenemos un antivirus en nuestro servidor debemos detener los cortafuegos del mismo, el tiempo que dure nuestra interacción, dado que no dejaría acceder a ningún cliente al servidor por temas de seguridad
- j) En la interfaz en el servidor ir observado y anotando todos los comandos que se intercambian entre los cliente y host. Investigar y anotar para que sirve cada uno de ellos.

No.	Time	Source	Destination	Protocol	Length	Info
4891	6.710713	192.168.50.101	192.168.50.103	FTP	197	Response: 220-FileZilla Server 0.9.60 beta
4894	6.714178	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH TLS
4895	6.714422	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
4919	6.719844	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH SSL
4923	6.720185	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
5038	6.734559	192.168.50.103	192.168.50.101	FTP	65	Request: USER liam
5041	6.734797	192.168.50.101	192.168.50.103	FTP	86	Response: 331 Password required for liam
5047	6.738362	192.168.50.103	192.168.50.101	FTP	69	Request: PASS liam1992
5049	6.738897	192.168.50.101	192.168.50.103	FTP	69	Response: 230 Logged on
5078	6.749034	192.168.50.103	192.168.50.101	FTP	59	Request: PWD
5079	6.749230	192.168.50.101	192.168.50.103	FTP	85	Response: 257 "/" is current directory.
9328	13.769072	192.168.50.101	192.168.50.103	FTP	197	Response: 220-FileZilla Server 0.9.60 beta
9329	13.771311	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH TLS
9330	13.771500	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
9331	13.773868	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH SSL
9332	13.774057	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
9334	13.781236	192.168.50.103	192.168.50.101	FTP	65	Request: USER liam
9335	13.781530	192.168.50.101	192.168.50.103	FTP	86	Response: 331 Password required for liam
9336	13.784306	192.168.50.103	192.168.50.101	FTP	69	Request: PASS liam1992
9337	13.784859	192.168.50.101	192.168.50.103	FTP	69	Response: 230 Logged on
9345	13.790074	192.168.50.103	192.168.50.101	FTP	61	Request: CWD /
9346	13.790593	192.168.50.101	192.168.50.103	FTP	101	Response: 250 CWD successful. "/" is current directory.
9359	13.806638	192.168.50.103	192.168.50.101	FTP	62	Request: TYPE I
9360	13.806840	192.168.50.101	192.168.50.103	FTP	73	Response: 200 Type set to I
9361	13.810092	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
9362	13.810575	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,253,151)
9363	13.813701	192.168.50.103	192.168.50.101	FTP	74	Request: RETR Taller 6.docx
9367	13.819085	192.168.50.101	192.168.50.103	FTP	130	Response: 150 Opening data channel for file download from server of "/Taller 6.docx"
9378	13.819944	192.168.50.101	192.168.50.103	FTP	101	Response: 226 Successfully transferred "/Taller 6.docx"
11343	16.965160	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
11344	16.965474	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,220,246)
11345	16.968363	192.168.50.103	192.168.50.101	FTP	79	Request: RETR Taller6_grupo3.pdf



- Aquí en la primera imagen al principio podemos ver algunos errores ue nos capturo el wharshare dado que no se había desactivado el cortafuegos en nuestro servidor par poder acceder al directorio.
- Podemos observar también la descargr de archivos del servidor hcia el cliente

No.	Time	Source	Destination	Protocol	Length	Info
11349	16.972629	192.168.50.101	192.168.50.103	FTP	135	Response: 150 Opening data channel for file download from server of "/Taller6_grupo3.pdf"
11360	16.974185	192.168.50.101	192.168.50.103	FTP	106	Response: 226 Successfully transferred "/Taller6_grupo3.pdf"
31583	43.730062	192.168.50.103	192.168.50.101	FTP	71	Request: MKD liam_prueba
31584	43.730766	192.168.50.101	192.168.50.103	FTP	95	Response: 257 "/liam_prueba" created successfully
38643	56.020736	192.168.50.103	192.168.50.101	FTP	69	Request: MKD redes2020
38661	56.021865	192.168.50.101	192.168.50.103	FTP	93	Response: 257 "/redes2020" created successfully
42386	63.311864	192.168.50.101	192.168.50.103	FTP	197	Response: 220-FileZilla Server 0.9.60 beta
42387	63.328239	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH TLS
42388	63.328495	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
42396	63.356992	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH SSL
42397	63.357360	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
42407	63.375931	192.168.50.103	192.168.50.101	FTP	65	Request: USER liam
42411	63.376369	192.168.50.101	192.168.50.103	FTP	86	Response: 331 Password required for liam
42415	63.385300	192.168.50.103	192.168.50.101	FTP	69	Request: PASS liam1992
42416	63.385767	192.168.50.101	192.168.50.103	FTP	69	Response: 230 Logged on
42426	63.399711	192.168.50.103	192.168.50.101	FTP	70	Request: CWD /redes2020
42427	63.400238	192.168.50.101	192.168.50.103	FTP	110	Response: 250 CWD successful. "/redes2020" is current directory.
42434	63.411243	192.168.50.103	192.168.50.101	FTP	59	Request: PWD
42435	63.411457	192.168.50.101	192.168.50.103	FTP	94	Response: 257 "/redes2020" is current directory.
42439	63.417245	192.168.50.103	192.168.50.101	FTP	62	Request: TYPE I
42440	63.417447	192.168.50.101	192.168.50.103	FTP	73	Response: 200 Type set to I
42447	63.425940	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
42448	63.426245	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,254,245)
42452	63.438088	192.168.50.103	192.168.50.101	FTP	60	Request: MLSD
42464	63.447177	192.168.50.101	192.168.50.103	FTP	118	Response: 150 Opening data channel for directory listing of "/redes2020"
42468	63.447588	192.168.50.101	192.168.50.103	FTP	97	Response: 226 Successfully transferred "/redes2020"
42491	63.476919	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
42492	63.477546	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,222,220)
42496	63.481683	192.168.50.103	192.168.50.101	FTP	102	Request: STOR Examen práctico del primer bimestre.docx
42532	63.512360	192.168.50.101	192.168.50.103	FTP	164	Response: 150 Opening data channel for file upload to server of "/redes2020/Examen práctico del primer bimestre..
✓ 42758	63.859996	192.168.50.101	192.168.50.103	FTP	139	Response: 226 Successfully transferred "/redes2020/Examen práctico del primer bimestre.docx"
42770	63.887566	192.168.50.103	192.168.50.101	FTP	61	Request: CWD /



- Aquí podemos ver la captura de nuestro cliente liam al momento de crear directorios en el servidor
- También se observar la subida de archivos de



No.	Time	Source	Destination	Protocol	Length	Info
69773	103.801222	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
69781	103.807098	192.168.50.103	192.168.50.101	FTP	65	Request: USER luis
69782	103.807425	192.168.50.101	192.168.50.103	FTP	86	Response: 331 Password required for luis
69786	103.810356	192.168.50.103	192.168.50.101	FTP	69	Request: PASS luis1992
69787	103.810930	192.168.50.101	192.168.50.103	FTP	69	Response: 230 Logged on
69788	103.816544	192.168.50.103	192.168.50.101	FTP	61	Request: CWD /
69789	103.817069	192.168.50.101	192.168.50.103	FTP	101	Response: 250 CWD successful. "/" is current directory.
70610	105.977543	192.168.50.103	192.168.50.101	FTP	62	Request: TYPE I
70611	105.977887	192.168.50.101	192.168.50.103	FTP	73	Response: 200 Type set to I
70612	105.980551	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
70613	105.980878	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,216,241)
70614	105.989534	192.168.50.103	192.168.50.101	FTP	83	Request: RETR PROYECTO Final IAA.pdf
70618	105.993733	192.168.50.101	192.168.50.103	FTP	139	Response: 150 Opening data channel for file download from server of
70629	105.997391	192.168.50.101	192.168.50.103	FTP	110	Response: 226 Successfully transferred "/PROYECTO Final IAA.pdf"
72434	109.666204	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
72435	109.666637	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,212,236)
72436	109.670335	192.168.50.103	192.168.50.101	FTP	83	Request: RETR Misión de Cristo.pptx
72450	109.684936	192.168.50.101	192.168.50.103	FTP	139	Response: 150 Opening data channel for file download from server of
73411	110.004189	192.168.50.101	192.168.50.103	FTP	110	Response: 226 Successfully transferred "/Misión de Cristo.pptx"
86108	140.941722	192.168.50.103	192.168.50.101	FTP	84	Request: MKD imteñogencia_artificial
86109	140.942622	192.168.50.101	192.168.50.103	FTP	101	Response: 550 Can't create directory. Permission denied
93417	160.473501	192.168.50.103	192.168.50.101	FTP	76	Request: MKD docu,emos_impor
93418	160.473886	192.168.50.101	192.168.50.103	FTP	101	Response: 550 Can't create directory. Permission denied
1281...	229.769621	192.168.50.103	192.168.50.101	FTP	79	Request: MKD documents_redes2012
1281...	229.772840	192.168.50.101	192.168.50.103	FTP	103	Response: 257 "/documents_redes2012" created successfully
1360...	244.200245	192.168.50.103	192.168.50.101	FTP	70	Request: MKD imagenes3d
1360...	244.201336	192.168.50.101	192.168.50.103	FTP	94	Response: 257 "/imagenes3d" created successfully
1464...	259.844629	192.168.50.101	192.168.50.103	FTP	197	Response: 220-FileZilla Server 0.9.60 beta
1464...	259.856861	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH TLS
1464...	259.857435	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed
1464...	259.866029	192.168.50.103	192.168.50.101	FTP	64	Request: AUTH SSL
1464...	259.866655	192.168.50.101	192.168.50.103	FTP	99	Response: 502 Explicit TLS authentication not allowed

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Archivo

Edición

Formato

luis jaramillo

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Windows (CRLF)

- aquí podemos ver que en las ultimas lineas nos da un error dado que se me habi olvidado darle privilegios de crear, descargar al cliente luis

No.	Time	Source	Destination	Protocol	Length	Info
1464...	259.873241	192.168.50.101	192.168.50.103	FTP	86	Response: 331 Password required for luis
1464...	259.877114	192.168.50.103	192.168.50.101	FTP	69	Request: PASS luis1992
1464...	259.877753	192.168.50.101	192.168.50.103	FTP	69	Response: 230 Logged on
1464...	259.883491	192.168.50.103	192.168.50.101	FTP	71	Request: CWD /imagenes3d
1464...	259.884298	192.168.50.101	192.168.50.103	FTP	111	Response: 250 CWD successful. "/imagenes3d" is current directory.
1464...	259.886752	192.168.50.103	192.168.50.101	FTP	59	Request: PWD
1464...	259.886986	192.168.50.101	192.168.50.103	FTP	95	Response: 257 "/imagenes3d" is current directory.
1464...	259.892135	192.168.50.103	192.168.50.101	FTP	62	Request: TYPE I
1464...	259.892475	192.168.50.101	192.168.50.103	FTP	73	Response: 200 Type set to I
1464...	259.896961	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
1464...	259.897507	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,230,135)
1464...	259.900567	192.168.50.103	192.168.50.101	FTP	60	Request: MLSD
1464...	259.907955	192.168.50.101	192.168.50.103	FTP	119	Response: 150 Opening data channel for directory listing of "/imagen
1464...	259.908337	192.168.50.101	192.168.50.103	FTP	98	Response: 226 Successfully transferred "/imagenes3d"
1464...	259.931096	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
1464...	259.931505	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,237,229)
1464...	259.935269	192.168.50.103	192.168.50.101	FTP	81	Request: STOR BDD_Semánticas.docx
1464...	259.945281	192.168.50.101	192.168.50.103	FTP	144	Response: 150 Opening data channel for file upload to server of "/im
1465...	260.014657	192.168.50.101	192.168.50.103	FTP	119	Response: 226 Successfully transferred "/imagenes3d/BDD_Semánticas.d
1465...	260.053706	192.168.50.103	192.168.50.101	FTP	61	Request: CWD /
1465...	260.054083	192.168.50.101	192.168.50.103	FTP	101	Response: 250 CWD successful. "/" is current directory.
1465...	260.063244	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
1465...	260.063709	192.168.50.101	192.168.50.103	FTP	106	Response: 227 Entering Passive Mode (192,168,50,101,221,187)
1465...	260.068816	192.168.50.103	192.168.50.101	FTP	60	Request: MLSD
1465...	260.138647	192.168.50.101	192.168.50.103	FTP	109	Response: 150 Opening data channel for directory listing of "/"
1465...	260.139445	192.168.50.101	192.168.50.103	FTP	88	Response: 226 Successfully transferred "/"
1528...	271.159692	192.168.50.103	192.168.50.101	FTP	71	Request: CWD /imagenes3d
1528...	271.160181	192.168.50.101	192.168.50.103	FTP	111	Response: 250 CWD successful. "/imagenes3d" is current directory.
1528...	271.179929	192.168.50.103	192.168.50.101	FTP	60	Request: PASV
1528...	271.180433	192.168.50.101	192.168.50.103	FTP	104	Response: 227 Entering Passive Mode (192,168,50,101,254,6)
1528...	271.183786	192.168.50.103	192.168.50.101	FTP	78	Request: STOR cadenadevalor.png
1528...	271.187438	192.168.50.101	192.168.50.103	FTP	141	Response: 150 Opening data channel for file upload to server of "/imagenes3d/cadenadevalor.png"

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Archivo

Edición

Formato

Ver

luis jaramillo

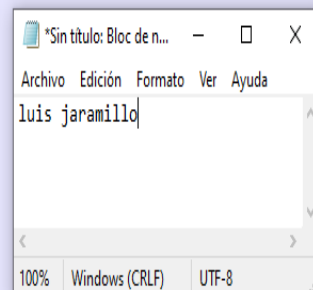
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Windows (CRLF)

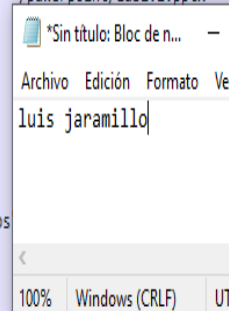
UTF-



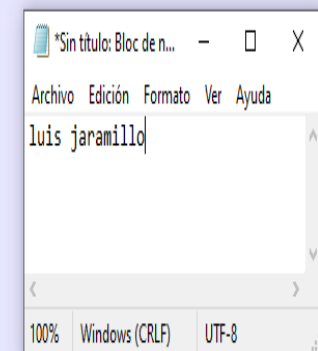
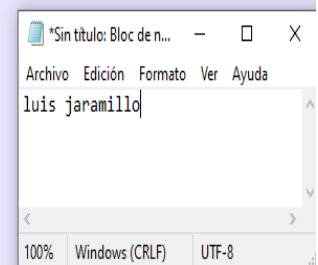
1530...	271.322366	192.168.50.101	192.168.50.103	FTP	116 Response: 226 Successfully transferred "/imagenes3d/cadenadevalor.png"
1977...	364.780250	192.168.50.101	192.168.50.103	FTP	81 Response: 421 Connection timed out.
2022...	376.663173	192.168.50.101	192.168.50.103	FTP	197 Response: 220-FileZilla Server 0.9.60 beta
2022...	376.665732	192.168.50.103	192.168.50.101	FTP	64 Request: AUTH TLS
2022...	376.665941	192.168.50.101	192.168.50.103	FTP	99 Response: 502 Explicit TLS authentication not allowed
2022...	376.669982	192.168.50.103	192.168.50.101	FTP	64 Request: AUTH SSL
2022...	376.670259	192.168.50.101	192.168.50.103	FTP	99 Response: 502 Explicit TLS authentication not allowed
2022...	376.677836	192.168.50.103	192.168.50.101	FTP	66 Request: USER maria
2022...	376.678180	192.168.50.101	192.168.50.103	FTP	87 Response: 331 Password required for maria
2022...	376.680691	192.168.50.103	192.168.50.101	FTP	70 Request: PASS maria1992
2022...	376.681268	192.168.50.101	192.168.50.103	FTP	69 Response: 230 Logged on
2022...	376.690698	192.168.50.103	192.168.50.101	FTP	59 Request: PWD
2022...	376.691055	192.168.50.101	192.168.50.103	FTP	85 Response: 257 "/" is current directory.
2022...	376.693699	192.168.50.103	192.168.50.101	FTP	62 Request: TYPE I
2022...	376.693979	192.168.50.101	192.168.50.103	FTP	73 Response: 200 Type set to I
2022...	376.696595	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2022...	376.697004	192.168.50.101	192.168.50.103	FTP	104 Response: 227 Entering Passive Mode (192,168,50,101,218,5)
2022...	376.701544	192.168.50.103	192.168.50.101	FTP	60 Request: MLSD
2022...	376.704903	192.168.50.101	192.168.50.103	FTP	109 Response: 150 Opening data channel for directory listing of "/"
2022...	376.705279	192.168.50.101	192.168.50.103	FTP	88 Response: 226 Successfully transferred "/"
2054...	384.868148	192.168.50.103	192.168.50.101	FTP	70 Request: CWD powerpoint
2054...	384.868453	192.168.50.101	192.168.50.103	FTP	111 Response: 250 CWD successful. "/powerpoint" is current directory.
2054...	384.870853	192.168.50.103	192.168.50.101	FTP	59 Request: PWD
2054...	384.871078	192.168.50.101	192.168.50.103	FTP	95 Response: 257 "/powerpoint" is current directory.
2054...	384.873345	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2054...	384.873712	192.168.50.101	192.168.50.103	FTP	105 Response: 227 Entering Passive Mode (192,168,50,101,206,82)
2054...	384.876754	192.168.50.103	192.168.50.101	FTP	60 Request: MLSD
2054...	384.880154	192.168.50.101	192.168.50.103	FTP	119 Response: 150 Opening data channel for directory listing of "/powerpoint"
2054...	384.880455	192.168.50.101	192.168.50.103	FTP	98 Response: 226 Successfully transferred "/powerpoint"
2073...	389.678605	192.168.50.101	192.168.50.103	FTP	197 Response: 220-FileZilla Server 0.9.60 beta
2073...	389.689533	192.168.50.103	192.168.50.101	FTP	64 Request: AUTH TLS
2073...	389.689789	192.168.50.101	192.168.50.103	FTP	99 Response: 502 Explicit TLS authentication not allowed



2073...	389.703141	192.168.50.103	192.168.50.101	FTP	66 Request: USER maria
2073...	389.703427	192.168.50.101	192.168.50.103	FTP	87 Response: 331 Password required for maria
2073...	389.727068	192.168.50.103	192.168.50.101	FTP	70 Request: PASS maria1992
2073...	389.727544	192.168.50.101	192.168.50.103	FTP	69 Response: 230 Logged on
2073...	389.734142	192.168.50.103	192.168.50.101	FTP	71 Request: CWD /powerpoint
2073...	389.734567	192.168.50.101	192.168.50.103	FTP	111 Response: 250 CWD successful. "/powerpoint" is current directory.
2073...	389.754736	192.168.50.103	192.168.50.101	FTP	62 Request: TYPE I
2073...	389.754885	192.168.50.101	192.168.50.103	FTP	73 Response: 200 Type set to I
2073...	389.757670	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2073...	389.757990	192.168.50.101	192.168.50.103	FTP	105 Response: 227 Entering Passive Mode (192,168,50,101,205,76)
2073...	389.760732	192.168.50.103	192.168.50.101	FTP	72 Request: RETR Lab1.1.pptx
2073...	389.767902	192.168.50.101	192.168.50.103	FTP	139 Response: 150 Opening data channel for file download from server of "/powerpoint/Lab1.1.pptx"
2073...	389.768441	192.168.50.101	192.168.50.103	FTP	110 Response: 226 Successfully transferred "/powerpoint/Lab1.1.pptx"
2084...	392.678137	192.168.50.103	192.168.50.101	FTP	67 Request: CWD /textos
2084...	392.678433	192.168.50.101	192.168.50.103	FTP	107 Response: 250 CWD successful. "/textos" is current directory.
2084...	392.681865	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2084...	392.682219	192.168.50.101	192.168.50.103	FTP	106 Response: 227 Entering Passive Mode (192,168,50,101,212,121)
2084...	392.685412	192.168.50.103	192.168.50.101	FTP	60 Request: MLSD
2084...	392.690760	192.168.50.101	192.168.50.103	FTP	115 Response: 150 Opening data channel for directory listing of "/textos"
2084...	392.691082	192.168.50.101	192.168.50.103	FTP	94 Response: 226 Successfully transferred "/textos"
2096...	396.230066	192.168.50.103	192.168.50.101	FTP	67 Request: CWD /examen
2096...	396.230725	192.168.50.101	192.168.50.103	FTP	107 Response: 250 CWD successful. "/examen" is current directory.
2096...	396.238145	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2096...	396.238744	192.168.50.101	192.168.50.103	FTP	105 Response: 227 Entering Passive Mode (192,168,50,101,212,24)
2096...	396.241643	192.168.50.103	192.168.50.101	FTP	60 Request: MLSD
2096...	396.246341	192.168.50.101	192.168.50.103	FTP	115 Response: 150 Opening data channel for directory listing of "/examen"
2096...	396.247045	192.168.50.101	192.168.50.103	FTP	94 Response: 226 Successfully transferred "/examen"
2111...	399.531826	192.168.50.103	192.168.50.101	FTP	67 Request: CWD /examen
2111...	399.532189	192.168.50.101	192.168.50.103	FTP	107 Response: 250 CWD successful. "/examen" is current directory.
2120...	401.813574	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2120...	401.814064	192.168.50.101	192.168.50.103	FTP	106 Response: 227 Entering Passive Mode (192,168,50,101,239,241)
2120...	401.817522	192.168.50.103	192.168.50.101	FTP	81 Request: RETR BDD_Semánticas.docx



2120...	401.822500	192.168.50.101	192.168.50.103	FTP	144 Response: 150 Opening data channel for file download from server of "/examen/BDD_Semánticas.docx"
2120...	401.823125	192.168.50.101	192.168.50.103	FTP	115 Response: 226 Successfully transferred "/examen/BDD_Semánticas.docx"
2220...	428.833954	192.168.50.103	192.168.50.101	FTP	61 Request: CWD /
2220...	428.834468	192.168.50.101	192.168.50.103	FTP	101 Response: 250 CWD successful. "/" is current directory.
2220...	428.840970	192.168.50.103	192.168.50.101	FTP	65 Request: MKD music
2220...	428.841863	192.168.50.101	192.168.50.103	FTP	89 Response: 257 "/music" created successfully
2301...	446.272290	192.168.50.103	192.168.50.101	FTP	66 Request: MKD juegos
2301...	446.273116	192.168.50.101	192.168.50.103	FTP	90 Response: 257 "/juegos" created successfully
2359...	455.102638	192.168.50.101	192.168.50.103	FTP	197 Response: 220-FileZilla Server 0.9.60 beta
2359...	455.106230	192.168.50.103	192.168.50.101	FTP	64 Request: AUTH TLS
2359...	455.106970	192.168.50.101	192.168.50.103	FTP	99 Response: 502 Explicit TLS authentication not allowed
2359...	455.110750	192.168.50.103	192.168.50.101	FTP	64 Request: AUTH SSL
2359...	455.111195	192.168.50.101	192.168.50.103	FTP	99 Response: 502 Explicit TLS authentication not allowed
2359...	455.116365	192.168.50.103	192.168.50.101	FTP	66 Request: USER maria
2359...	455.116713	192.168.50.101	192.168.50.103	FTP	87 Response: 331 Password required for maria
2359...	455.118803	192.168.50.103	192.168.50.101	FTP	70 Request: PASS maria1992
2359...	455.119330	192.168.50.101	192.168.50.103	FTP	69 Response: 230 Logged on
2359...	455.124180	192.168.50.103	192.168.50.101	FTP	67 Request: CWD /juegos
2359...	455.124606	192.168.50.101	192.168.50.103	FTP	107 Response: 250 CWD successful. "/juegos" is current directory.
2359...	455.126795	192.168.50.103	192.168.50.101	FTP	59 Request: PWD
2359...	455.127015	192.168.50.101	192.168.50.103	FTP	91 Response: 257 "/juegos" is current directory.
2359...	455.129136	192.168.50.103	192.168.50.101	FTP	62 Request: TYPE I
2359...	455.129306	192.168.50.101	192.168.50.103	FTP	73 Response: 200 Type set to I
2359...	455.131245	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2359...	455.131488	192.168.50.101	192.168.50.103	FTP	106 Response: 227 Entering Passive Mode (192,168,50,101,247,130)
2359...	455.134099	192.168.50.103	192.168.50.101	FTP	60 Request: MLSD
2359...	455.138517	192.168.50.101	192.168.50.103	FTP	115 Response: 150 Opening data channel for directory listing of "/juegos"
2359...	455.138933	192.168.50.103	192.168.50.101	FTP	94 Response: 226 Successfully transferred "/juegos"
2359...	455.167353	192.168.50.101	192.168.50.103	FTP	60 Request: PASV
2359...	455.167619	192.168.50.103	192.168.50.101	FTP	104 Response: 227 Entering Passive Mode (192,168,50,101,196,2)
2359...	455.171876	192.168.50.101	192.168.50.103	FTP	95 Request: STOR Análisis de datos espaciales.pptx
2359...	455.178368	192.168.50.101	192.168.50.103	FTP	154 Response: 150 Opening data channel for file upload to server of "/juegos/Análisis de datos espaciales.pptx"
2361...	455.261314	192.168.50.101	192.168.50.103	FTP	129 Response: 226 Successfully transferred "/juegos/Análisis de datos espaciales.pptx"
2361...	455.283666	192.168.50.103	192.168.50.101	FTP	61 Request: CWD /
2361...	455.284178	192.168.50.101	192.168.50.103	FTP	101 Response: 250 CWD successful. "/" is current directory.
2361...	455.287095	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2361...	455.287667	192.168.50.101	192.168.50.103	FTP	106 Response: 227 Entering Passive Mode (192,168,50,101,200,213)
2361...	455.292163	192.168.50.103	192.168.50.101	FTP	60 Request: MLSD
2361...	455.303102	192.168.50.101	192.168.50.103	FTP	109 Response: 150 Opening data channel for directory listing of "/"
2361...	455.303410	192.168.50.101	192.168.50.103	FTP	88 Response: 226 Successfully transferred "/"
2490...	476.785451	192.168.50.103	192.168.50.101	FTP	66 Request: CWD /music
2490...	476.785771	192.168.50.101	192.168.50.103	FTP	106 Response: 250 CWD successful. "/music" is current directory.
2490...	476.788309	192.168.50.103	192.168.50.101	FTP	59 Request: PWD
2490...	476.788497	192.168.50.101	192.168.50.103	FTP	90 Response: 257 "/music" is current directory.
2490...	476.792722	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2490...	476.793150	192.168.50.101	192.168.50.103	FTP	106 Response: 227 Entering Passive Mode (192,168,50,101,244,197)
2490...	476.796811	192.168.50.103	192.168.50.101	FTP	60 Request: MLSD
2490...	476.802685	192.168.50.101	192.168.50.103	FTP	114 Response: 150 Opening data channel for directory listing of "/music"
2490...	476.802873	192.168.50.101	192.168.50.103	FTP	93 Response: 226 Successfully transferred "/music"
2490...	476.807427	192.168.50.103	192.168.50.101	FTP	60 Request: PASV
2490...	476.807857	192.168.50.101	192.168.50.103	FTP	106 Response: 227 Entering Passive Mode (192,168,50,101,204,254)
2491...	476.812267	192.168.50.103	192.168.50.101	FTP	102 Request: STOR Examen práctico del primer bimestre.docx
2491...	476.827379	192.168.50.101	192.168.50.103	FTP	160 Response: 150 Opening data channel for file upload to server of "/music/Examen práctico del primer bimestre.docx"
2498...	476.939062	192.168.50.101	192.168.50.103	FTP	135 Response: 226 Successfully transferred "/music/Examen práctico del primer bimestre.docx"
2934...	566.806808	192.168.50.101	192.168.50.103	FTP	81 Response: 421 Connection timed out.



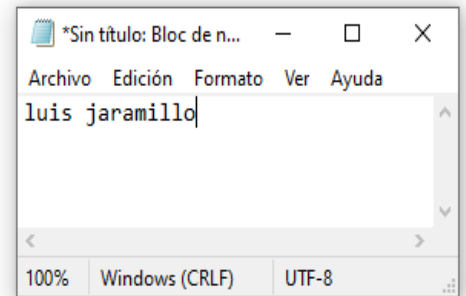
- **Nota:** En las diferentes imágenes se puede ver las diferentes acciones que hicimos con los usuarios que fueron I de crear dos carpetas en el servidor, descargar dos archivos desde el servidor y subir dos archivos desde el servidor hacia el cliente



```

(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> AUTH TLS
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> AUTH SSL
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> USER liam
(000027)17/11/2020 13:24:43 - (not logged in) (192.168.50.103)> 331 Password required for liam
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> PASS *****
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> 230 Logged on
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> PWD
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> 257 "/" is current directory.
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> TYPE I
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> 200 Type set to I
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> PASV
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,236,33)
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> MLSD
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> 150 Opening data channel for directory listing of "/"
(000027)17/11/2020 13:24:43 - liam (192.168.50.103)> 226 Successfully transferred "/"
(000027)17/11/2020 13:25:01 - liam (192.168.50.103)> disconnected.
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> AUTH TLS
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> AUTH SSL
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> USER liam
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> 331 Password required for liam
(000028)17/11/2020 13:25:01 - (not logged in) (192.168.50.103)> PASS *****
(000028)17/11/2020 13:25:01 - liam (192.168.50.103)> 230 Logged on
(000028)17/11/2020 13:25:01 - liam (192.168.50.103)> PWD
(000028)17/11/2020 13:25:01 - liam (192.168.50.103)> 257 "/" is current directory.
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> AUTH TLS
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> AUTH SSL
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> USER liam

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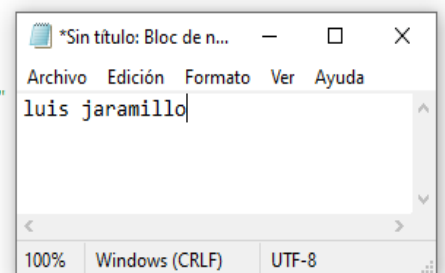


- **Nota: en el capturador del servidor podemos observar como se va generando los diferentes comandos ftp que se están implementando**

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(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> 331 Password required for liam
(000029)17/11/2020 13:25:08 - (not logged in) (192.168.50.103)> PASS *****
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> 230 Logged on
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> CWD /
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> 250 CWD successful. "/" is current directory.
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> TYPE I
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> 200 Type set to I
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> PASV
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,253,151)
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> RETR Taller 6.docx
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> 150 Opening data channel for file download from server of "/Taller 6.docx"
(000029)17/11/2020 13:25:08 - liam (192.168.50.103)> 226 Successfully transferred "/Taller 6.docx"
(000029)17/11/2020 13:25:11 - liam (192.168.50.103)> PASV
(000029)17/11/2020 13:25:11 - liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,220,246)
(000029)17/11/2020 13:25:11 - liam (192.168.50.103)> RETR Taller6_grupo3.pdf
(000029)17/11/2020 13:25:11 - liam (192.168.50.103)> 150 Opening data channel for file download from server of "/Taller6_grupo3.pdf"
(000029)17/11/2020 13:25:11 - liam (192.168.50.103)> 226 Successfully transferred "/Taller6_grupo3.pdf"
(000028)17/11/2020 13:25:38 - liam (192.168.50.103)> MKD liam_prueba
(000028)17/11/2020 13:25:38 - liam (192.168.50.103)> 257 "/liam_prueba" created successfully
(000028)17/11/2020 13:25:50 - liam (192.168.50.103)> MKD redes2020
(000028)17/11/2020 13:25:50 - liam (192.168.50.103)> 257 "/redes2020" created successfully
(000029)17/11/2020 13:25:57 - liam (192.168.50.103)> disconnected.
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> AUTH TLS
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> AUTH SSL
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> USER liam
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> 331 Password required for liam
(000030)17/11/2020 13:25:57 - (not logged in) (192.168.50.103)> PASS *****
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> 230 Logged on
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> CWD /redes2020
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> 250 CWD successful. "/redes2020" is current directory.
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> PWD
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> 257 "/redes2020" is current directory.
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> TYPE I
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> 200 Type set to I
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> PASV
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,254,245)
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> MLSD
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> 150 Opening data channel for directory listing of "/redes2020"
(000030)17/11/2020 13:25:57 - liam (192.168.50.103)> 226 Successfully transferred "/redes2020"

```

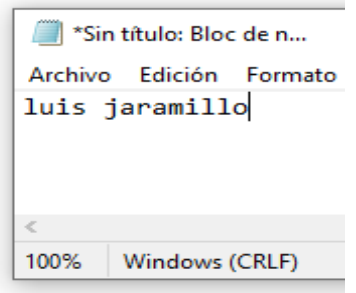
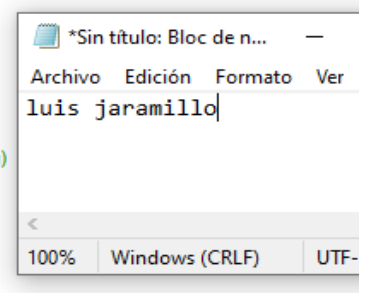


- **Nota:** casi al final de la imagen anterior se puede observar lo que capto el wirwshark , que el usuario no estaba autorizado para hacer esas acciones

```

(000030)17/11/2020 13:25:57 -liam (192.168.50.103)> 226 Successfully transferred "/redes2020"
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> PASV
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,222,220)
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> STOR Examen práctico del primer bimestre.docx
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> 150 Opening data channel for file upload to server of "/redes2020/Examen práctico del primer bimestre.docx"
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> 226 Successfully transferred "/redes2020/Examen práctico del primer bimestre.docx"
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> CWD /
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> 250 CWD successful. "/" is current directory.
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> PASV
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,205,129)
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> MLSD
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> 150 Opening data channel for directory listing of "/"
(000030)17/11/2020 13:25:58 -liam (192.168.50.103)> 226 Successfully transferred "/"
(000030)17/11/2020 13:26:01 -liam (192.168.50.103)> PASV
(000030)17/11/2020 13:26:01 -liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,227,179)
(000030)17/11/2020 13:26:01 -liam (192.168.50.103)> STOR FileZilla_3.51.0_win32_sponsored-setup.exe
(000030)17/11/2020 13:26:01 -liam (192.168.50.103)> 150 Opening data channel for file upload to server of "/FileZilla_3.51.0_win32_sponsored-setup.exe"
(000030)17/11/2020 13:26:09 -liam (192.168.50.103)> 226 Successfully transferred "/FileZilla_3.51.0_win32_sponsored-setup.exe"
(000030)17/11/2020 13:26:09 -liam (192.168.50.103)> PASV
(000030)17/11/2020 13:26:09 -liam (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,194,192)
(000030)17/11/2020 13:26:09 -liam (192.168.50.103)> MLSD
(000030)17/11/2020 13:26:09 -liam (192.168.50.103)> 150 Opening data channel for directory listing of "/"
(000030)17/11/2020 13:26:09 -liam (192.168.50.103)> 226 Successfully transferred "/"
(000028)17/11/2020 13:26:34 -liam (192.168.50.103)> disconnected.
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> AUTH TLS
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> AUTH SSL
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> USER luis
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> 331 Password required for luis
(000031)17/11/2020 13:26:34 - (not logged in) (192.168.50.103)> PASS *****
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> 230 Logged on
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> PWD
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> 257 "/" is current directory.
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> TYPE I
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> 200 Type set to I
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> PASV
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,234,58)
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> MLSD
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> 150 Opening data channel for directory listing of "/"
(000031)17/11/2020 13:26:34 -luis (192.168.50.103)> 226 Successfully transferred "/"
(000030)17/11/2020 13:26:38 -liam (192.168.50.103)> disconnected.
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> AUTH TLS
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> AUTH SSL
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> USER luis
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> 331 Password required for luis
(000032)17/11/2020 13:26:38 - (not logged in) (192.168.50.103)> PASS *****
(000032)17/11/2020 13:26:38 -luis (192.168.50.103)> 230 Logged on
(000032)17/11/2020 13:26:38 -luis (192.168.50.103)> CWD /
(000032)17/11/2020 13:26:38 -luis (192.168.50.103)> 250 CWD successful. "/" is current directory.
(000032)17/11/2020 13:26:40 -luis (192.168.50.103)> TYPE I
(000032)17/11/2020 13:26:40 -luis (192.168.50.103)> 200 Type set to I
(000032)17/11/2020 13:26:40 -luis (192.168.50.103)> PASV
(000032)17/11/2020 13:26:40 -luis (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,216,241)
(000032)17/11/2020 13:26:40 -luis (192.168.50.103)> RETR PROYECTO Final IAA.pdf
(000032)17/11/2020 13:26:40 -luis (192.168.50.103)> 150 Opening data channel for file download from server of "/PROYECTO Final IAA.pdf"
(000032)17/11/2020 13:26:44 -luis (192.168.50.103)> 226 Successfully transferred "/PROYECTO Final IAA.pdf"
(000032)17/11/2020 13:26:44 -luis (192.168.50.103)> PASV
(000032)17/11/2020 13:26:44 -luis (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,212,236)
(000032)17/11/2020 13:26:44 -luis (192.168.50.103)> RETR Misión de Cristo.pptx
(000032)17/11/2020 13:26:44 -luis (192.168.50.103)> 150 Opening data channel for file download from server of "/Misión de Cristo.pptx"
(000032)17/11/2020 13:26:44 -luis (192.168.50.103)> 226 Successfully transferred "/Misión de Cristo.pptx"
(000031)17/11/2020 13:27:15 -luis (192.168.50.103)> MKD interogencia_artificial
(000031)17/11/2020 13:27:15 -luis (192.168.50.103)> 550 Can't create directory. Permission denied
(000031)17/11/2020 13:27:35 -luis (192.168.50.103)> MKD docu,entos_impor
(000031)17/11/2020 13:27:35 -luis (192.168.50.103)> 550 Can't create directory. Permission denied
(000032)17/11/2020 13:27:46 -luis (192.168.50.103)> disconnected.
Retrieving account settings, please wait...
Done retrieving account settings
Sending account settings, please wait...
Done sending account settings.
(000031)17/11/2020 13:28:44 -luis (192.168.50.103)> MKD documents_redes2012
(000031)17/11/2020 13:28:44 -luis (192.168.50.103)> 257 "/documents_redes2012" created successfully
(000031)17/11/2020 13:28:58 -luis (192.168.50.103)> MKD imagenes3d
(000031)17/11/2020 13:28:58 -luis (192.168.50.103)> 257 "/imagenes3d" created successfully
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> AUTH TLS
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> AUTH SSL
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000033)17/11/2020 13:29:14 - (not logged in) (192.168.50.103)> USER luis

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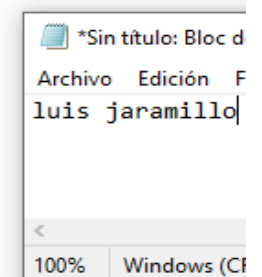
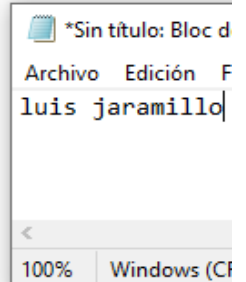




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(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> CWD /imagenes3d
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 250 CWD successful. "/imagenes3d" is current directory.
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> PWD
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 257 "/imagenes3d" is current directory.
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> TYPE I
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 200 Type set to I
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> PASV
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,230,135)
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> MLSD
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 150 Opening data channel for directory listing of "/imagenes3d"
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 226 Successfully transferred "/imagenes3d"
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> PASV
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,237,229)
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> STOR BDD_Semánticas.docx
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 150 Opening data channel for file upload to server of "/imagenes3d/BDD_Semánticas.docx"
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 226 Successfully transferred "/imagenes3d/BDD_Semánticas.docx"
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> CWD /
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 250 CWD successful. "/" is current directory.
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> PASV
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,221,187)
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> MLSD
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 150 Opening data channel for directory listing of "/"
(000033)17/11/2020 13:29:14 - luis (192.168.50.103)> 226 Successfully transferred "/"
(000033)17/11/2020 13:29:25 - luis (192.168.50.103)> CWD /imagenes3d
(000033)17/11/2020 13:29:25 - luis (192.168.50.103)> 250 CWD successful. "/imagenes3d" is current directory.
(000033)17/11/2020 13:29:25 - luis (192.168.50.103)> PASV
(000033)17/11/2020 13:29:25 - luis (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,254,6)
(000033)17/11/2020 13:29:25 - luis (192.168.50.103)> STOR cadenadevalor.png
(000033)17/11/2020 13:29:25 - luis (192.168.50.103)> 150 Opening data channel for file upload to server of "/imagenes3d/cadenadevalor.png"
(000033)17/11/2020 13:29:25 - luis (192.168.50.103)> 226 Successfully transferred "/imagenes3d/cadenadevalor.png"
Retrieving account settings, please wait...
Done retrieving account settings
(000033)17/11/2020 13:30:25 - luis (192.168.50.103)> disconnected.
(000031)17/11/2020 13:30:59 - luis (192.168.50.103)> 421 Connection timed out.
(000031)17/11/2020 13:30:59 - luis (192.168.50.103)> disconnected.
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> AUTH TLS
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> AUTH SSL
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> USER maria
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> 331 Password required for maria
(000034)17/11/2020 13:31:11 - (not logged in) (192.168.50.103)> PASS *****
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> 230 Logged on
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> PWD
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> 257 "/" is current directory.
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> TYPE I
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> 200 Type set to I
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> PASV
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,218,5)
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> MLSD
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> 150 Opening data channel for directory listing of "/"
(000034)17/11/2020 13:31:11 - maria (192.168.50.103)> 226 Successfully transferred "/"
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> CWD powerpoint
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> 250 CWD successful. "/powerpoint" is current directory.
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> PWD
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> 257 "/powerpoint" is current directory.
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> PASV
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,206,82)
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> MLSD
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> 150 Opening data channel for directory listing of "/powerpoint"
(000034)17/11/2020 13:31:19 - maria (192.168.50.103)> 226 Successfully transferred "/powerpoint"
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> AUTH TLS
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> AUTH SSL
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> USER maria
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> 331 Password required for maria
(000035)17/11/2020 13:31:24 - (not logged in) (192.168.50.103)> PASS *****
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> 230 Logged on
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> CWD /powerpoint
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> 250 CWD successful. "/powerpoint" is current directory.
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> TYPE I
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> 200 Type set to I
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> PASV
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,205,76)
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> RETR Lab 1.1.pptx
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> 150 Opening data channel for file download from server of "/powerpoint/Lab 1.1.pptx"
(000035)17/11/2020 13:31:24 - maria (192.168.50.103)> 226 Successfully transferred "/powerpoint/Lab 1.1.pptx"
(000034)17/11/2020 13:31:27 - maria (192.168.50.103)> CWD /textos
(000034)17/11/2020 13:31:27 - maria (192.168.50.103)> 250 CWD successful. "/textos" is current directory.
(000034)17/11/2020 13:31:27 - maria (192.168.50.103)> PASV
(000034)17/11/2020 13:31:27 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,212,121)
(000034)17/11/2020 13:31:27 - maria (192.168.50.103)> MLSD
(000034)17/11/2020 13:31:27 - maria (192.168.50.103)> 150 Opening data channel for directory listing of "/textos"
(000034)17/11/2020 13:31:27 - maria (192.168.50.103)> 226 Successfully transferred "/textos"
(000034)17/11/2020 13:31:30 - maria (192.168.50.103)> CWD /examen
(000034)17/11/2020 13:31:30 - maria (192.168.50.103)> 250 CWD successful. "/examen" is current directory.
(000034)17/11/2020 13:31:30 - maria (192.168.50.103)> PASV

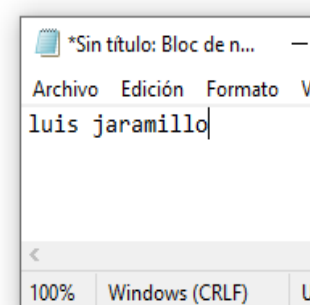
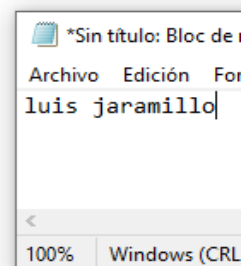
```



```

(000034)17/11/2020 13:31:30 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,212,24)
(000034)17/11/2020 13:31:30 - maria (192.168.50.103)> MLSD
(000034)17/11/2020 13:31:30 - maria (192.168.50.103)> 150 Opening data channel for directory listing of "/examen"
(000034)17/11/2020 13:31:30 - maria (192.168.50.103)> 226 Successfully transferred "/examen"
(000035)17/11/2020 13:31:34 - maria (192.168.50.103)> CWD /examen
(000035)17/11/2020 13:31:34 - maria (192.168.50.103)> 250 CWD successful. "/examen" is current directory.
(000035)17/11/2020 13:31:36 - maria (192.168.50.103)> PASV
(000035)17/11/2020 13:31:36 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,239,241)
(000035)17/11/2020 13:31:36 - maria (192.168.50.103)> RETR BDD_Semánticas.docx
(000035)17/11/2020 13:31:36 - maria (192.168.50.103)> 150 Opening data channel for file download from server of "/examen/BDD_Semánticas.docx"
(000035)17/11/2020 13:31:36 - maria (192.168.50.103)> 226 Successfully transferred "/examen/BDD_Semánticas.docx"
(000034)17/11/2020 13:32:03 - maria (192.168.50.103)> CWD /
(000034)17/11/2020 13:32:03 - maria (192.168.50.103)> 250 CWD successful. "/" is current directory.
(000034)17/11/2020 13:32:03 - maria (192.168.50.103)> MKD music
(000034)17/11/2020 13:32:03 - maria (192.168.50.103)> 257 "/music" created successfully
(000034)17/11/2020 13:32:20 - maria (192.168.50.103)> MKD juegos
(000034)17/11/2020 13:32:20 - maria (192.168.50.103)> 257 "/juegos" created successfully
(000035)17/11/2020 13:32:29 - maria (192.168.50.103)> disconnected.
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> Connected on port 21, sending welcome message...
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> 220-FileZilla Server 0.9.60 beta
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> 220-written by Tim Kosse (tim.kosse@filezilla-project.org)
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> 220 Please visit https://filezilla-project.org/
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> AUTH TLS
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> AUTH SSL
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> 502 Explicit TLS authentication not allowed
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> USER maria
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> 331 Password required for maria
(000036)17/11/2020 13:32:29 - (not logged in) (192.168.50.103)> PASS *****
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 230 Logged on
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> CWD /juegos
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 250 CWD successful. "/juegos" is current directory.
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> PWD
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 257 "/juegos" is current directory.
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> TYPE I
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 200 Type set to I
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> PASV
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,247,130)
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> MLSD
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 150 Opening data channel for directory listing of "/juegos"
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 226 Successfully transferred "/juegos"
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> PASV
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,196,2)
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> STOR Análisis de datos espaciales.pptx
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 150 Opening data channel for file upload to server of "/juegos/Análisis de datos espaciales.pptx"
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 226 Successfully transferred "/juegos/Análisis de datos espaciales.pptx"
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> CWD /
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 250 CWD successful. "/" is current directory.
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> PASV
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,200,213)
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> MLSD
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 150 Opening data channel for directory listing of "/"
(000036)17/11/2020 13:32:29 - maria (192.168.50.103)> 226 Successfully transferred "/"
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> CWD /music
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 250 CWD successful. "/music" is current directory.
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> PWD
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 257 "/music" is current directory.
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> PASV
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,244,197)
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> MLSD
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 150 Opening data channel for directory listing of "/music"
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 226 Successfully transferred "/music"
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> PASV
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 227 Entering Passive Mode (192,168,50,101,204,254)
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> STOR Examen práctico del primer bimestre.docx
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 150 Opening data channel for file upload to server of "/music/Examen práctico del primer bimestre.docx"
(000036)17/11/2020 13:32:51 - maria (192.168.50.103)> 226 Successfully transferred "/music/Examen práctico del primer bimestre.docx"
(000036)17/11/2020 13:33:51 - maria (192.168.50.103)> disconnected.
(000034)17/11/2020 13:34:21 - maria (192.168.50.103)> 421 Connection timed out.
(000034)17/11/2020 13:34:21 - maria (192.168.50.103)> disconnected.

```



- **Nota:** para no ser repetitivo se puede ver en las imágenes a lado de cada cliente, en la parte izquierda la fecha y hora que se conecto y al lado derecho la acción que realizo, para así poder llevar un control de lo que pasa en el servidor
- **AUTH TLS:** Emitido para indicar que la seguridad TLS es obligatoria. Este es el método preferido de acuerdo con el RFC que define FTP sobre TLS. El cliente se conecta al puerto 21 del servidor y comienza una sesión FTP sin cifrar de manera tradicional, pero pide que la seguridad TLS sea usada y realiza la negociación apropiada antes de enviar cualquier dato sensible
- **AUTH SSL:** también conocida como "SSL implícito" o "FTPS implícito". Este es un método antiguo y ya no recomendado para establecer FTP con TLS / SSL, pero todavía es algo común.



- Es la información que el servidor necesita para comunicarse con el cliente mediante SSL. Incluye el número de versión de SSL, la configuración de cifrado y datos específicos de la sesión.
- **CWD (Cambio de directorio de trabajo):** Esta orden permite al usuario trabajar en un directorio o conjunto de datos diferente
- **PASV (Pasivo):** Solicita al servidor que escuche en un puerto de datos distinto del puerto por defecto, y espere a recibir una conexión en lugar de iniciar una al recibir una orden de transferencia. La respuesta a este comando incluye la dirección IP y el puerto donde este servidor está esperando a recibir la conexión.
- **STOR (Almacenar):** Hace que el servidor lea los datos transferidos por la conexión de datos y los guarde en un fichero en el servidor.
- **pwd** Muestra el nombre del directorio de trabajo remoto.

- **Nota: Como se ha explicado antes se ha presentado algunos errores en una cuenta dado que no se le había dado permiso para poder crear , ni descargar o bien no estaba desactivado el cortafuegos del antivirus del servidor**

**k) Investigar ¿qué es el FTP anónimo?, investigue algunos servidores FTP públicos a los que se pueda acceder.**

Característica de ciertos servidores FTP que le permiten al usuario ingresar al servicio FTP sin un nombre de usuario y contraseña que lo identifiquen

- ftp://ftp.uniovi.es/ - Universidad de Oviedo [Muy bueno y excelente contenido variado]
- ftp://ftp.etsimo.uniovi.es/ - Escuela de Minas / Servicio de Informática Gráfica [Igual que la anterior]
- ftp://ftp.etse.urv.es/ - Escola Tecnica Superior d'Enginyeria Universitat Rovira i Virgili [Poco contenido]
- ftp://ftp.udc.es/ - Universidad da Coruña [Distros Linux y recursos de estudio para informática]
- ftp://ftp.ua.es/ - Universitat d'Alacant [Centro de proceso de datos]
- ftp://ftp.usal.es/ - Universidad de Salamanca [Casi vacío]
- ftp://ftp.uv.es/ - Universitat de València [Mirrors y archivos varios]
- ftp://ftp.uma.es/ - Universidad de Málaga [Mirrors y recursos para Windows y Linux, muy bueno]
- ftp://ftp.pwr.wroc.pl/ - Universidad Tecnológica de Wroclaw (Polonia) [Distros y recursos open source]
- ftp://ftp.dit.upm.es/ - DIT - Universidad Politécnica de Madrid [Ahora solo contiene algunos mirrors]
- ftp://ftp.cica.es/ - Centro Informático Científico de Andalucía [Muy poco contenido]
- ftp://ftp.cs.tu-berlin.de/ - Technische Universität Berlin [Mirror simtelnet, aminet y muchas cosas]
- ftp://ftp.uni-paderborn.de/pub/ - Universität Paderborn [CICA, SimTel, Linux, OS/2, Amiga, etc.]

**l) Investigar ¿qué es y para qué se usa TFTP?**

TFTP son las siglas de Trivial file transfer Protocol (Protocolo de transferencia de archivos trivial).

Es un protocolo de transferencia muy simple semejante a una versión básica de FTP. TFTP a menudo se utiliza para transferir pequeños archivos entre computadoras en una red, como cuando un terminal X Window o cualquier otro cliente ligero arranca desde un servidor de red.

**Algunos detalles del TFTP:**

- Utiliza UDP (en el puerto 69) como protocolo de transporte (a diferencia de FTP que utiliza los puertos 20 y 21 TCP).
- No puede listar el contenido de los directorios.
- No existen mecanismos de autenticación o cifrado.
- Se utiliza para leer o escribir archivos de un servidor remoto.
- Soporta tres modos diferentes de transferencia, "netascii", "octet" y "mail", de los que los dos primeros corresponden a los modos "ascii" e "imagen" (binario) del protocolo FTP.

**Bibliografía**

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- <https://www.ecured.cu/Tftp>
- [https://www.duiops.net/manuales/faqinternet/faqinternet15.htm#:~:text=Un%20FTP%20anónimo%20\(Anonymous\)%20es,organizaciones%20dejan%20para%20acceso%20público.](https://www.duiops.net/manuales/faqinternet/faqinternet15.htm#:~:text=Un%20FTP%20anónimo%20(Anonymous)%20es,organizaciones%20dejan%20para%20acceso%20público.)
- <https://www.internetlab.es/post/1431/que-es-un-ftp-anonimo/>