

# Práctica 2.1. Instalar Servidor FTP

DESPLIEGUE DE APLICACIONES WEB

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## INSTALACIÓN PROGRAMAS

Instalamos todos los programas que vamos a utilizar

```

usuario@usuario-VirtualBox: ~/Escritorio$ sudo apt-get install vsftpd gftp filezilla wireshark
Leyendo lista de paquetes... Hecho
Creando árbol de dependencias... Hecho
Leyendo la información de estado... Hecho
Se instalarán los siguientes paquetes adicionales:
filezilla-common gftp-common gftp-gtk gftp-text i965-va-driver intel-media-va-driver libaacs0 libavcodec60 libavformat
libavutil58 libb2-1 libbcg729-0 libbdplus0 libbluray2 libchromaprint1 libbson1 libcodec2-1.2 libdav1d7
libdouble-conversion3 libegl-mesa0 libfilezilla-common libfilezilla42t64 libgbm1 libgl1-mesa-dri libglapi-mesa
libglx-mesa0 libgme0 libgsm1 libhwy1t64 libigdgmm12 libjxl0.7 liblua5.2-0 libmbedcrypto7t64 libmd4c0 libminizip1t64
libnghttp3-3 libnorm1t64 libopencore-amrnb0 libopenmpt0t64 libpcre2-16-0 libpgm-5.3-0t64 libpugixml1v5
libqt6core5compat6 libqt6core6t64 libqt6dbus6t64 libqt6gui6t64 libqt6multimedia6 libqt6network6t64 libqt6opengl6t64
libqt6printsupport6t64 libqt6qml6 libqt6qmlmodels6 libqt6quick6 libqt6svg6 libqt6waylandclient6 libqt6waylandcomposit
libqt6waylandeglclienthwhintegration6 libqt6waylandeglcompositorhwhintegration6 libqt6widgets6t64
libqt6wslshellintegration6 librabbitmq4 librav1e0 librist4 libshine3 libsmi2t64 libsnappy1v5 libsodium23 libsoxr0
libspandsp2t64 libsrtp1.5-gnutls libssh-gcrypt-4 libsvtav1enc1d1 libswresample4 libswscale7 libts0t64 libudfread0
libva-drm2 libva-x11-2 libva2 libvdpau1 libvpl2 libwireshark-data libwireshark17t64 libwiretap14t64 libwsutil15t64
libwxbase3.2-1t64 libwxgtk3.2-1t64 libx264-164 libx265-199 libxatracker2 libxvidcore4 libzmq5 libzvb1-common libzvb10t
mesa-va-drivers mesa-vdpau-drivers mesa-vulkan-drivers ocl-icd-libopencl1 qt6-gtk-platformtheme qt6-qpas-plugins
qt6-translations-l10n qt6-wayland va-driver-all vdpau-driver-all wireshark-common
Paquetes sugeridos:
i965-va-driver-shaders libcuda1 libnvcuvid1 libnvidia-encode1 libbluray-bdj qt6-qmltooling-plugins snmp-mibs-downloader
geoipupdate geoip-database geoip-database-extra libjs-leaflet libjs-leaflet.markercluster wireshark-doc opencl-icd
libvdpau-va-gli
Se instalarán los siguientes paquetes NUEVOS:
filezilla filezilla-common gftp gftp-common gftp-gtk gftp-text i965-va-driver intel-media-va-driver libaacs0
libavcodec60 libavformat60 libavutil58 libb2-1 libbcg729-0 libbdplus0 libbluray2 libchromaprint1 libbson1 libcodec2-1
libdav1d7 libdouble-conversion3 libfilezilla-common libfilezilla42t64 libgme0 libgsm1 libhwy1t64 libigdgmm12 libjxl0.7
liblua5.2-0 libmbedcrypto7t64 libmd4c0 libminizip1t64 libnghttp3-3 libnorm1t64 libopencore-amrnb0 libopenmpt0t64
libpcre2-16-0 libpgm-5.3-0t64 libpugixml1v5 libqt6core5compat6 libqt6core6t64 libqt6dbus6t64 libqt6gui6t64
libqt6multimedia6 libqt6network6t64 libqt6opengl6t64 libqt6printsupport6t64 libqt6qml6 libqt6qmlmodels6 libqt6quick6
libqt6svg6 libqt6waylandclient6 libqt6waylandcompositor6 libqt6waylandeglclienthwhintegration6
libqt6waylandeglcompositorhwhintegration6 libqt6widgets6t64 libqt6wslshellintegration6 librabbitmq4 librav1e0 librist4
libshine3 libsmi2t64 libsnappy1v5 libsodium23 libsoxr0 libspandsp2t64 libsrtp1.5-gnutls libssh-gcrypt-4 libsvtav1enc1d1

```

Aquí le decimos que si

Configuración de paquetes

### Configuración de wireshark-common

Dumpcap can be installed in a way that allows members of the "wireshark" system group to capture packets. This is recommended over the alternative of running Wireshark/Tshark directly as root, because less of the code will run with elevated privileges.

For more detailed information please see /usr/share/doc/wireshark-common/README.Debian.gz once the package is installed.

Enabling this feature may be a security risk, so it is disabled by default. If in doubt, it is suggested to leave it disabled.

Should non-superusers be able to capture packets?

<Yes>

<No>

## Creamos un fichero de prueba para los usuarios anónimos

```
GNU nano 7.2                                hola.txt *
Hola este es un archivo de prueba para que se lo descargue un usuario anonimo.
```

```
usuario@usuario-VirtualBox:/srv/ftp$ sudo nano /etc/vsftpd.conf
```

```
GNU nano 7.2 /etc/vsftpd.conf *
# Example config file /etc/vsftpd.conf
#
# The default compiled in settings are fairly paranoid. This sample file
# loosens things up a bit, to make the ftp daemon more usable.
# Please see vsftpd.conf.5 for all compiled in defaults.
#
# READ THIS: This example file is NOT an exhaustive list of vsftpd options.
# Please read the vsftpd.conf.5 manual page to get a full idea of vsftpd's
# capabilities.
#
# Run standalone? vsftpd can run either from an inetd or as a standalone
# daemon started from an initscript.
listen=NO
#
# This directive enables listening on IPv6 sockets. By default, listening
# on the IPv6 "any" address (:::) will accept connections from both IPv6
# and IPv4 clients. It is not necessary to listen on *both* IPv4 and IPv6
# sockets. If you want that (perhaps because you want to listen on specific
# addresses) then you must run two copies of vsftpd with two configuration
# files.
listen_ipv6=YES
#
# Allow anonymous FTP? (Disabled by default).
anonymous_enable=YES
#
# Uncomment this to allow local users to log in.
local_enable=YES
#
```

Reiniciamos el servicio

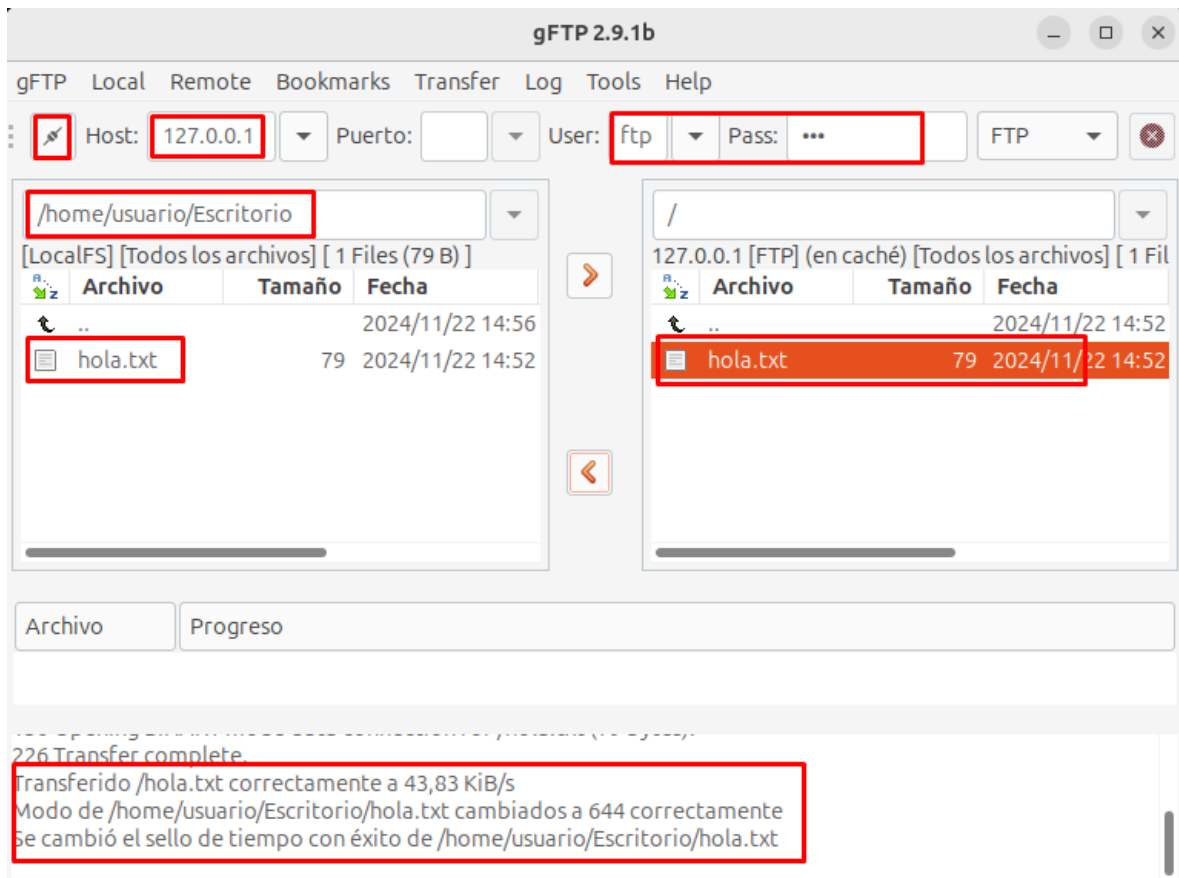
```
usuario@usuario-VirtualBox:/srv/ftp$ sudo service vsftpd restart
```

## CONEXIÓN CON GFTP

Abrimos una nueva pestaña y ejecutamos el programa de gftp

```
usuario@usuario-VirtualBox:/srv/ftp$ gftp
```

Aquí hacemos la conexión poniendo la siguiente ip más usuario y contraseña, luego nos vamos a nuestro escritorio y copiamos el fichero que hemos creado antes, vemos que todo funciona correctamente.

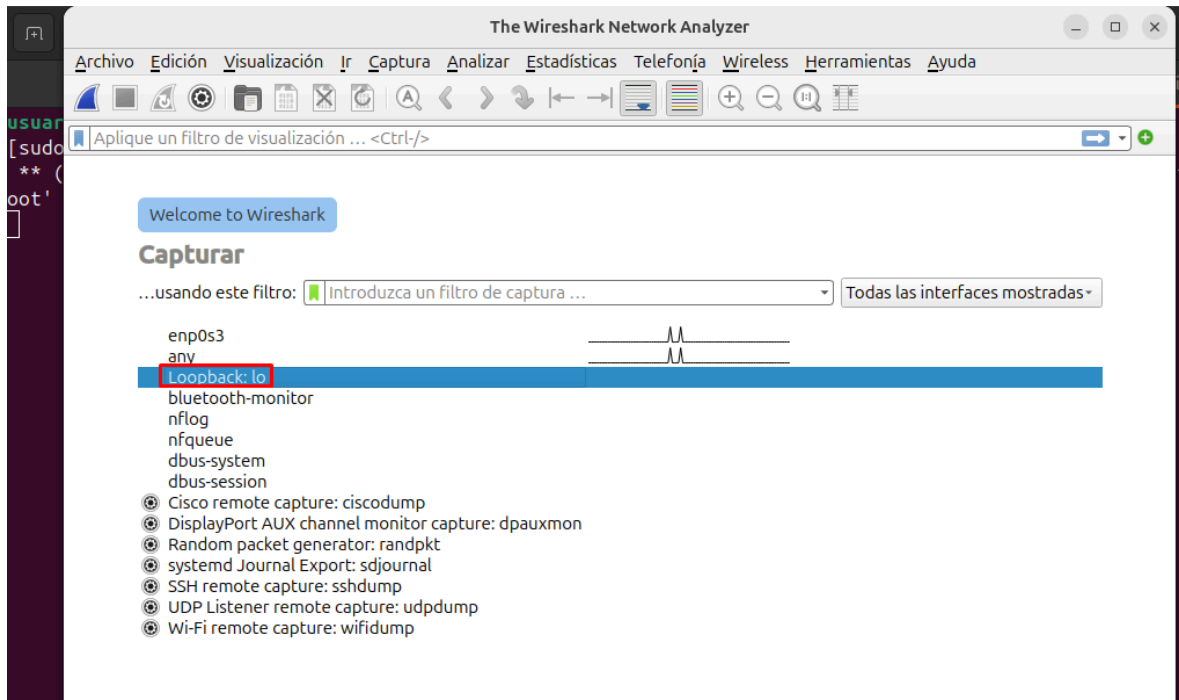


## CONEXIÓN CON FILEZILLA Y ANALIZADO CON WIRESHARK

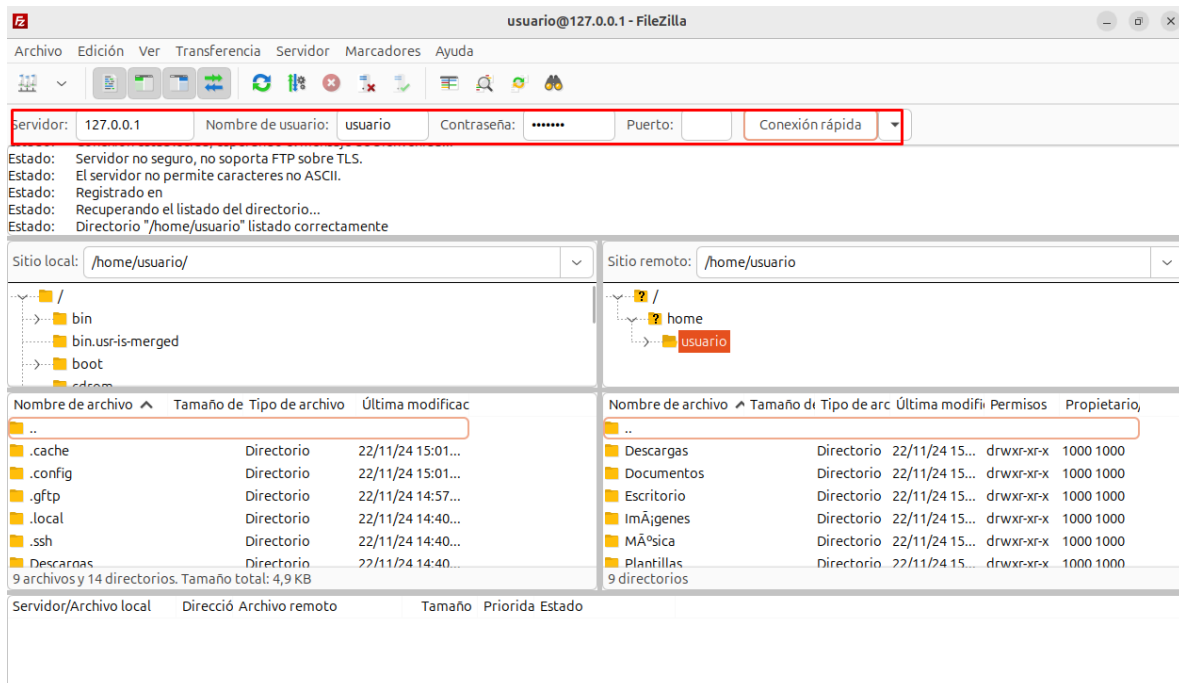
Abrimos filezilla y wireshark

```
usuario@usuario-VirtualBox:/srv/ftp$ filezilla
Reading locale option from /home/usuario/.config/filezilla/filezilla.xml
wxD-Bus: Signal from /org/freedesktop/DBus, member NameAcquired
wxD-Bus: Reply with serial 3
wxD-Bus: Reply to RegisterClient, our object path is /org/gnome/SessionManager/Client20
```

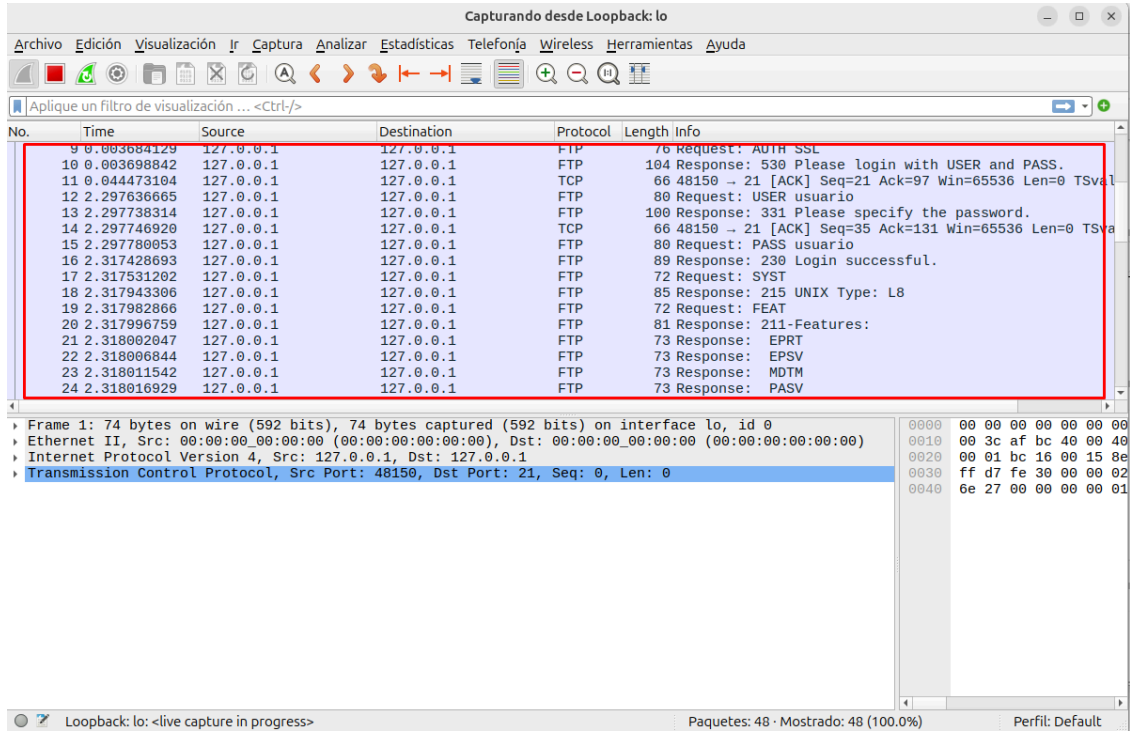
Analizaremos Loopback ya que es la que estamos utilizando para hacer las pruebas



Nos conectamos con filezilla



Y vemos que el wireshark nos está capturando el tráfico y nos muestra la contraseña



## CIFRADO

Editamos este fichero para activar el cifrado

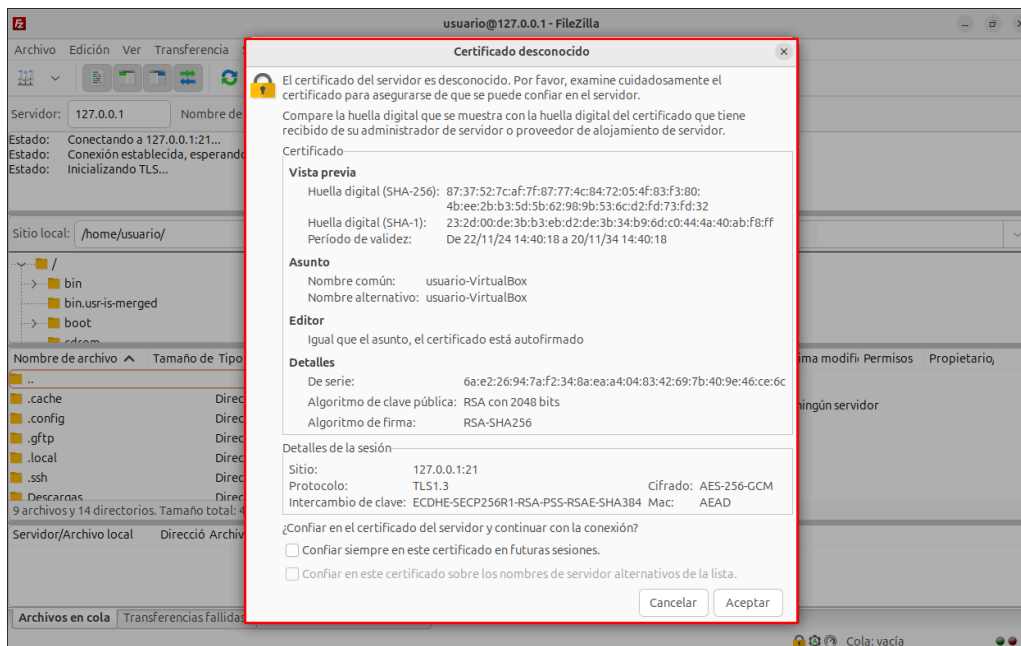
```
GNU nano 7.2 /etc/vsftpd.conf
# the presence of the "-R" option, so there is a strong case for enabling it.
#ls_recurse_enable=YES
#
# Customization
#
# Some of vsftpd's settings don't fit the filesystem layout by
# default.
#
# This option should be the name of a directory which is empty. Also, the
# directory should not be writable by the ftp user. This directory is used
# as a secure chroot() jail at times vsftpd does not require filesystem
# access.
secure_chroot_dir=/var/run/vsftpd/empty
#
# This string is the name of the PAM service vsftpd will use.
pam_service_name=vsftpd
#
# This option specifies the location of the RSA certificate to use for SSL
# encrypted connections.
rsa_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
rsa_private_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
ssl_enable=YES
```



Y reiniciamos el servicio

```
usuario@usuario-VirtualBox:/srv/ftp$ sudo service vsftpd restart
```

Ahora si abrimos de nuevo el filezilla y nos intentamos conectar vemos que salta el certificado



Y si nos vamos al wireshark ya no podremos encontrar la contraseña ya que está cifrado

