

Tutorial Seting FTP Server

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Cara instalasi FTP Server dengan Proftpd

1. Jalankan ubuntu, pastikan terkoneksi jaringan lokal. Dalam contoh ini terkoneksi wifi dengan ip address : 192.168.120.233
 2. Masuk console ubuntu kemudian restart ssh server dengan perintah :
`#/etc/init.d/ssh restart`
 3. Akses ssh server ubuntu dengan putty.

4. Pastikan server sudah diupdate dan diupgrade terlebih dahulu. Kemudian instal ProFTPD

```
[root@ubuntu-2204: ~]# apt install proftpd -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Note, selecting 'proftpd-core' instead of 'proftpd'
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2 libllvm13 virtualbox-guest-utils
Use 'apt autoremove' to remove them.
The following additional packages will be installed:
  liblzo2-2 liblz4-1 libzstd-1 libzstd-base libzstd1
[...]
```

5. Tambahkan user baru dengan nama ftpuser

```
root@ubuntu-2204:~# adduser ftpuser
Adding user `ftpuser' ...
Adding new group `ftpuser' (1003) ...
Adding new user `ftpuser' (1003) with group `ftpuser' ...
Creating home directory `/home/ftpuser' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
Changing the user information for ftpuser
Enter the new value, or press ENTER for the default
      Full Name []:
      Room Number []:
      Work Phone []:
      Home Phone []:
      Other []:
Is the information correct? [Y/n] y
root@ubuntu-2204:~#
```

6. buat folder khusus untuk user FTP

```
root@ubuntu-2204:~#
root@ubuntu-2204:~# mkdir -p /home/ftpuser/ftp
root@ubuntu-2204:~# chown nobody:nogroup /home/ftpuser/ftp/
root@ubuntu-2204:~# chmod a-w /home/ftpuser/ftp/
root@ubuntu-2204:~#
```

7. Lalu buat folder upload (agar bisa menulis):

```
root@ubuntu-2204:~# mkdir /home/ftpuser/ftp/upload
root@ubuntu-2204:~# chown ftpuser:ftpuser /home/ftpuser/ftp/upload
root@ubuntu-2204:~#
```

8. Untuk mengedit konfigurasi FTP Server, buka file /etc/proftpd/proftpd.conf

```
root@ubuntu-2204:~#
root@ubuntu-2204:~# nano /etc/proftpd/proftpd.conf
root@ubuntu-2204:~#
```

Dalam contoh ini, abaikan saja sementara konfigurasi tersebut (tidak ada perubahan apapun)

9. Restart FTP Server

```
root@ubuntu-2204: ~
root@ubuntu-2204:~# systemctl restart proftpd
root@ubuntu-2204:~#
```

10. Untuk mengujinya, gunakan command prompt windows

```
Administrator: Command Prompt - ftp 192.168.120.233
```

```
C:\Users\Lenovo>ftp 192.168.120.233
Connected to 192.168.120.233.
220 ProFTPD Server (Debian) [::ffff:192.168.120.233]
200 UTF8 set to on
User (192.168.120.233:(none)): ftpuser
331 Password required for ftpuser
Password:
230 User ftpuser logged in
ftp>
```

11. Untuk mengupload file, gunakan perintah put

```
ftp> put fileupload.txt
200 PORT command successful
150 Opening ASCII mode data connection for fileupload.txt
226 Transfer complete
ftp>
```

12. Periksa isi file dalam folder

```
root@ubuntu-2204:~# ls /home/ftpuser
fileupload.txt  ftp
root@ubuntu-2204:~#
```

13. Untuk mendownload gunakan perintah get namafile atau mget *.txt untuk mendownload multi file

14. Selain cara tersebut, bisa menggunakan web browser atau filezilla

Cara instalasi OpenSSL dengan Proftpd

15. install openssl

```

root@ubuntu-2204:~# apt install openssl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2 liblvm13 virtualbox-guest-utils
Use 'apt autoremove' to remove them.
The following packages will be upgraded:
  openssl
1 upgraded, 0 newly installed, 0 to remove and 295 not upgraded.
Need to get 0 B/1,186 kB of archives.
After this operation, 0 B of additional disk space will be used.

```

16. Buat Sertifikat SSL Sendiri (Self-Signed)

```

root@ubuntu-2204: ~
root@ubuntu-2204:~# openssl req -x509 -nodes -days 365 -newkey rsa:2048 \
> -keyout /etc/ssl/private/proftpd.key \
> -out /etc/ssl/certs/proftpd.crt

```

Bagian Perintah	Artinya
openssl req	Jalankan tool OpenSSL untuk membuat sertifikat
-x509	Minta sertifikat dalam format X.509 (format standar SSL/TLS)
-nodes	No DES → artinya private key tidak diproteksi password (supaya server bisa otomatis jalan tanpa harus ketik password tiap kali restart)
-days 365	Masa berlaku sertifikat → 365 hari (1 tahun)
-newkey rsa:2048	Bikin private key baru pakai algoritma RSA dengan ukuran 2048 bit (aman & umum dipakai)
-keyout /etc/ssl/private/proftpd.key	File hasil untuk private key disimpan di sini
-out /etc/ssl/certs/proftpd.crt	File hasil untuk sertifikat publik (CRT) disimpan di sini

17. Lengkapi pengisian data negara, organisasi dan lainnya

```
Country Name (2 letter code) [AU]:ID
State or Province Name (full name) [Some-State]:Jawa Tengah
Locality Name (eg, city) []:Surakarta
Organization Name (eg, company) [Internet Widgits Pty Ltd]:Computer
Organizational Unit Name (eg, section) []:IT Cyber
Common Name (e.g. server FQDN or YOUR name) []:Ubuntu
Email Address []:adminqq@gmail.com
root@ubuntu-2204:~#
```

18. Edit file proftpd.conf

```
#nano /etc/proftpd/proftpd.conf
```

```
root@ubuntu-2204:~# nano /etc/proftpd/proftpd.conf
```

19. Cari baris # Include /etc/proftpd/tls.conf kemudian hapus tanda pagar tersebut

```
root@ubuntu-2204:~#
GNU nano 6.2          /etc/proftpd/proftpd.conf *
#
# Alternative authentication frameworks
#
#Include /etc/proftpd/ldap.conf
#Include /etc/proftpd/sql.conf

#
# This is used for FTPS connections
#
#Include /etc/proftpd/tls.conf

#
# This is used for SFTP connections
#
```

Selengkapnya

```
Include /etc/proftpd/modules.conf
```

```
UseIPv6 on
```

```
<IfModule mod_ident.c>
```

```
    IdentLookups off
```

```
</IfModule>
```

```
ServerName "Debian"
```

```
ServerType standalone
```

```
DeferWelcome off
```

```
DefaultServer on
ShowSymlinks on
TimeoutNoTransfer 600
TimeoutStalled 600
TimeoutIdle 1200
DisplayLogin welcome.msg
DisplayChdir .message true
ListOptions "-l"
DenyFilter \*.*/
Port 21
PassivePorts 30000 31000
<IfModule mod_dynmasq.c>
# DynMasqRefresh 28800
</IfModule>
MaxInstances 30
User proftpd
Group nogroup
Umask 022 022
AllowOverwrite on
TransferLog /var/log/proftpd/xferlog
SystemLog /var/log/proftpd/proftpd.log
<IfModule mod_quotatab.c>
QuotaEngine off
</IfModule>

<IfModule mod_ratio.c>
Ratios off
</IfModule>
<IfModule mod_delay.c>
DelayEngine on
</IfModule>

<IfModule mod_ctrls.c>
```

```

ControlsEngine off
ControlsMaxClients 2
ControlsLog /var/log/proftpd/controls.log
ControlsInterval 5
ControlsSocket /var/run/proftpd/proftpd.sock
</IfModule>

<IfModule mod_ctrls_admin.c>
AdminControlsEngine off
</IfModule>
Include /etc/proftpd/tls.conf
Include /etc/proftpd/conf.d/

```

20. Edit File TLS Config


root@ubuntu-2204: ~

```

root@ubuntu-2204:~# cp /etc/proftpd/tls.conf /etc/proftpd/tls.conf-ori
root@ubuntu-2204:~# nano /etc/proftpd/tls.conf

```

21. Pastikan isinya seperti ini:


root@ubuntu-2204: ~

```

GNU nano 6.2                               /etc/proftpd/tls.conf *
<IfModule mod_tls.c>
  PassivePorts 30000 31000
  TLSEngine          on
  TLSLog            /var/log/proftpd/tls.log
  TLSProtocol       TLSv1.2 TLSv1.3
  TLSRSACertificateFile /etc/ssl/certs/proftpd.crt
  TLSRSACertificateKeyFile /etc/ssl/private/proftpd.key
  TLSOptions        NoSessionReuseRequired
  TLSVerifyClient   off
  TLSRequired       on
</IfModule>

```

Baris Konfigurasi	Artinya
<IfModule mod_tls.c>	Hanya jalankan konfigurasi ini jika modul TLS aktif (mod_tls)

Baris Konfigurasi	Artinya
TLSEngine on	 Aktifkan fitur TLS/SSL di ProFTPD → FTP jadi FTPS (secure)
TLSLog /var/log/proftpd/tls.log	 Semua log TLS disimpan di file ini → untuk cek error/aktivitas TLS
TLSProtocol TLSv1.2 TLSv1.3	 Hanya izinkan TLS versi 1.2 dan 1.3 (versi aman).  Tidak izinkan versi lawas seperti SSLv3/TLSv1.0/TLSv1.1 yang rawan.
TLSRSACertificateFile /etc/ssl/certs/proftpd.crt	 File sertifikat publik yang server pakai untuk enkripsi
TLSRSACertificateKeyFile /etc/ssl/private/proftpd.key	 File private key yang cocok dengan sertifikat → jangan bocor
TLSOptions NoSessionReuseRequired	 Nonaktifkan sesi TLS yang reuse → meningkatkan kompatibilitas dengan klien FTP tertentu
TLSVerifyClient off	 Tidak wajib client FTP punya sertifikat → user cukup login pakai username/password biasa
TLSRequired on	 Wajib semua koneksi FTP harus pakai TLS → tidak boleh FTP biasa yang unsecure

22. Buka Port Passive di Firewall

```
root@ubuntu-2204: ~
root@ubuntu-2204:~# ufw allow 21/tcp
Rules updated
Rules updated (v6)
root@ubuntu-2204:~# ufw allow 30000:31000/tcp
Rules updated
Rules updated (v6)
root@ubuntu-2204:~# ufw reload
Firewall not enabled (skipping reload)
```

23. Restart ProFTPD

```
root@ubuntu-2204: ~
root@ubuntu-2204:~# systemctl restart proftpd
root@ubuntu-2204:~#
```

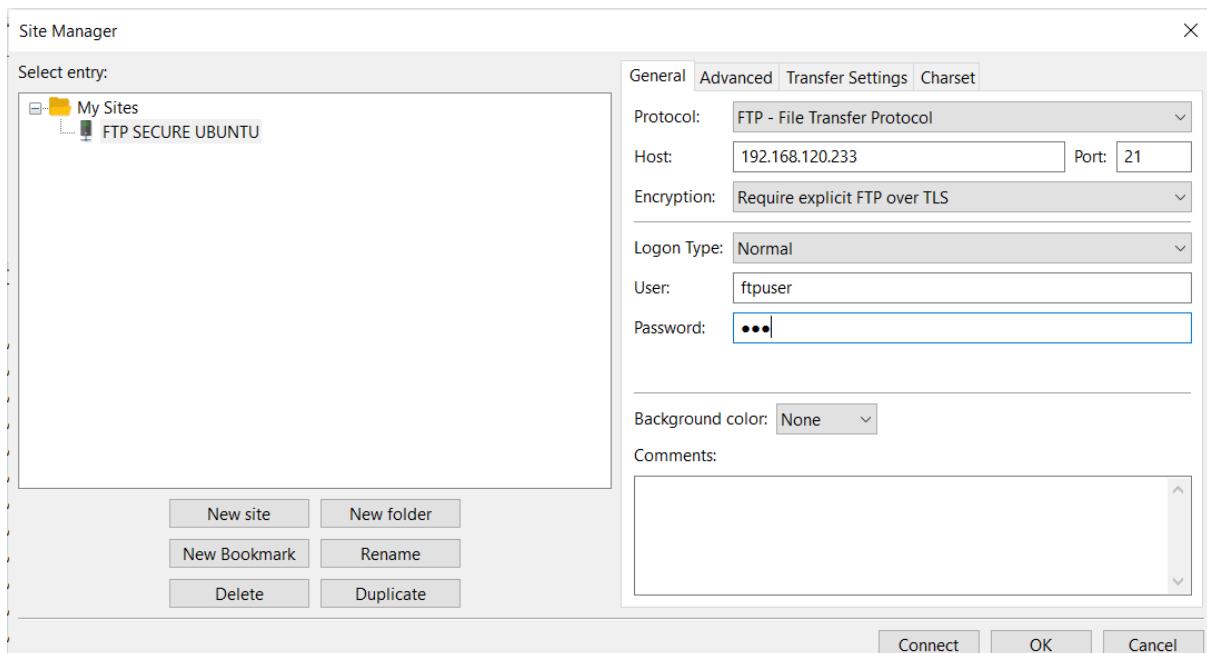
24. Akses ftps dengan filezila. Pilih menu File – Site Manager – klik New Site

a. Isi kolom berikut:

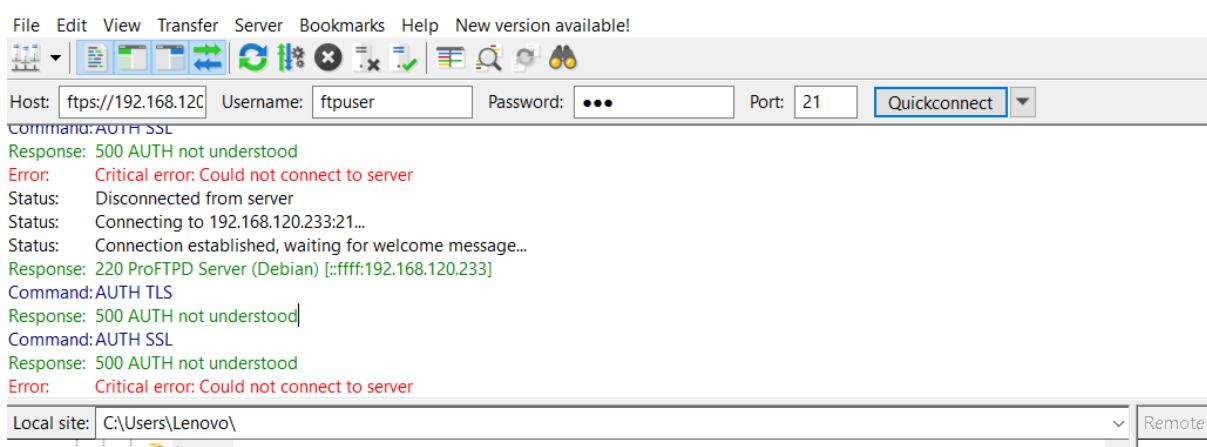
- o **Host → 192.168.120.233**
(Ganti sesuai IP server FTP)
- o **Port → 21**
(Karena kita pakai **Explicit FTP over TLS**, tetap di port 21, bukan 990)
- o **Protocol → Pilih → "FTP - File Transfer Protocol"**
- o **Encryption → Pilih → "Require explicit FTP over TLS"**
→ *Jangan pilih "implicit" karena itu beda protokol dan beda port (990).*
- o **Logon Type → Pilih → "Normal"**
- o **User → Isi dengan username FTP kamu**
(contoh: ftpuser)
- o **Password → Isi dengan password user FTP**

b. Klik "Connect"

- Akan muncul popup "Unknown certificate" (karena pakai sertifikat self-signed).
- **Centang → "Always trust this certificate"**
- Klik **OK** untuk melanjutkan.



25. Jika sampai tahap ini masih muncul error



26. Pastikan modul mod_tls sudah diaktifkan

```
root@ubuntu-2204: ~
root@ubuntu-2204:~# a2enmod tls
ERROR: Module tls does not exist!
root@ubuntu-2204:~#
```

27. Install modul tls

```
root@ubuntu-2204:~# apt install proftpd-mod-crypto
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer
needed:
  libflashrom1 libftdi1-2 libl1lvm13 virtualbox-guest-utils
Use 'apt autoremove' to remove them.
The following NEW packages will be installed:
  proftpd-mod-crypto
```

28. Restart proftpd

```
systemctl restart proftpd
```

29. Periksa apakah mod_tls sudah aktif

```
root@ubuntu-2204:/etc/proftpd# proftpd -vv | grep mod_tls
root@ubuntu-2204:/etc/proftpd#
```

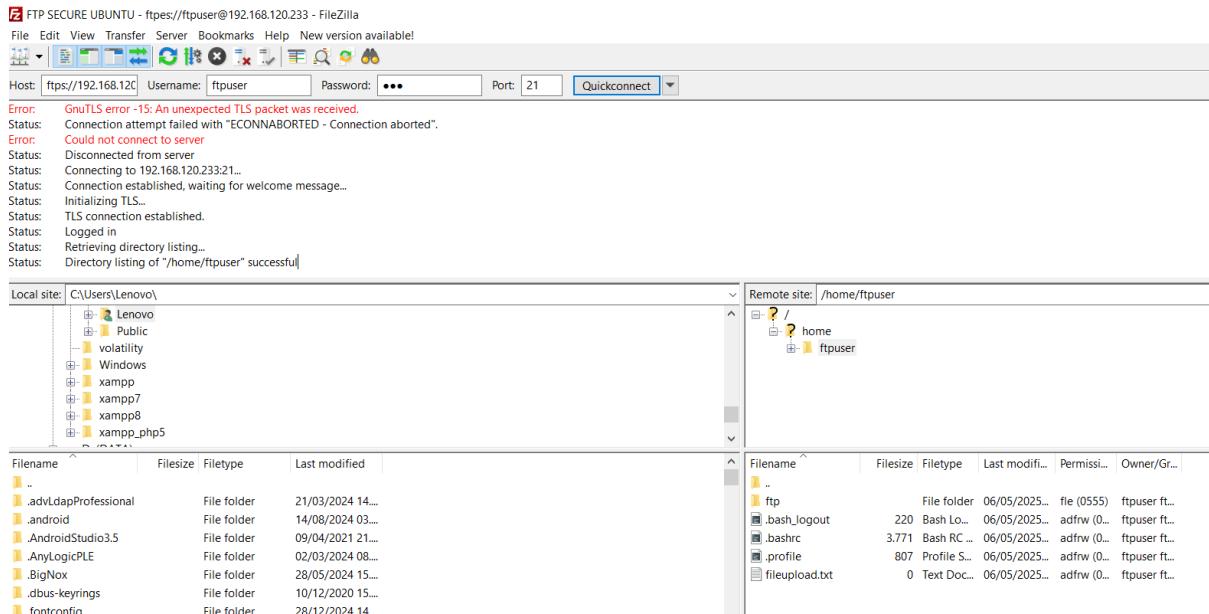
30. Karena tidak muncul lakukan perintah sebagai berikut

```
ln -s /etc/proftpd/modules.conf /etc/proftpd/modules.conf.bak
sed -i 's|#LoadModule mod_tls.c|LoadModule mod_tls.c|' /etc/proftpd/modules.conf
systemctl restart proftpd
```

31. Kemudian periksa kembali

```
root@ubuntu-2204:/etc/proftpd# proftpd -vv | grep mod_tls
mod_tls/2.9
root@ubuntu-2204:/etc/proftpd#
```

32. Lanjutkan koneksi filezilla



33. Selamat dan sukses, Anda telah berhasil menseting FTPS dengan ubuntu

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