

JOBSHEET

Instalasi DNS Dan FTP Server

Praktek : Melakukan instalasi DNS Dan FTP SERVER .	Nama :
	Kelas :

1. Tujuan

1. Siswa dapat memahami DNS Dan FTP Server.
2. Siswa dapat melakukan instalasi DNS Dan FTP Server.

2. Pendahuluan

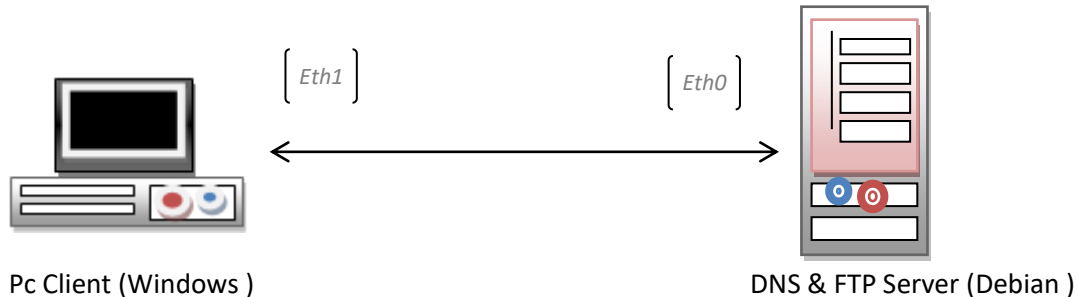
Server adalah sebuah sistem komputer yang menyediakan jenis layanan tertentu dalam sebuah jaringan komputer. Server didukung dengan prosesor yang bersifat scalable dan RAM yang besar, juga dilengkapi dengan sistem operasi khusus, yang disebut sebagai sistem operasi jaringan. Server juga menjalankan perangkat lunak administratif yang mengontrol akses terhadap jaringan dan sumber daya yang terdapat di dalamnya, seperti halnya berkas atau pencetak, dan memberikan akses kepada stasiun kerja anggota jaringan.

3. Peralatan

1. Komputer dengan sistem operasi debian.
2. Pc Client 2 unit.
 - a. Pc Client 1 dengan sistem operasi Debian
 - b. Pc Client 2 dengan sisrem operasi Windows
3. Cd Debian

4. Langkah Kerja

Desain instalasi sistem operasi :



➤ Konfigurasi Repositori Linux Debian

Linux repository (repositori di Linux) merupakan sebuah lokasi penyimpanan tempat di mana sistem operasi Linux mengambil dan menginstal pembaruan sistem operasi atau aplikasi. Setiap repository adalah kumpulan perangkat lunak yang di-hosting pada remote server. Saat Anda menjalankan perintah seperti `sudo apt update` atau `sudo apt upgrade`, Anda sebenarnya menarik informasi dan pembaruan paket dari sejumlah repository.

▫ Update repository pada linux Debian 9

▫ #nano /etc/apt/sources.list

```
GNU nano 2.7.4 File: sources.list
#
# deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stretch$
deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stretch $
# Line commented out by installer because it failed to verify:
#deb http://security.debian.org/debian-security stretch/updates main contrib
# Line commented out by installer because it failed to verify:
#deb-src http://security.debian.org/debian-security stretch/updates main contrib
#
# stretch-updates, previously known as 'volatile'
# A network mirror was not selected during install. The following entries
# are provided as examples, but you should amend them as appropriate
# for your mirror of choice.
#
# deb http://deb.debian.org/debian/ stretch-updates main contrib
# deb-src http://deb.debian.org/debian/ stretch-updates main contrib
```

Terlihat hanya satu dvd Debian yang ada di source list, selanjutnya kita tambahkan dvd 2 dan 3 debian 9 keluar dari file source list **ctrl + X**

- Masukkan dvd 1 debian 9 di virtual box kemudian ketik perintah di bawah ini

- **# apt-cdrom add**

```
root@debian:/etc/apt# apt-cdrom add
Using CD-ROM mount point /media/cdrom/
Unmounting CD-ROM...
Waiting for disc...
Please insert a Disc in the drive and press [Enter]
Mounting CD-ROM...
Identifying... [15e066996f0c98512a822fab41b77e9b-2]
Scanning disc for index files...
Found 2 package indexes, 0 source indexes, 3 translation indexes and 0 signatures
This disc is called:
'Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29'
Reading Package Indexes... Done
Reading Translation Indexes... Done
Writing new source list
Source list entries for this disc are:
deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29]/ stretch
ontrib main
Unmounting CD-ROM...
Repeat this process for the rest of the CDs in your set.
root@debian:/etc/apt# eject
root@debian:/etc/apt#
```

- Setelah itu ketik perintah **eject**

- Masukkan dvd 2 debian 9 di virtual box kemudian ketik perintah di bawah ini

- **# apt-cdrom add**

```
root@debian:/etc/apt# apt-cdrom add
Using CD-ROM mount point /media/cdrom/
Unmounting CD-ROM...
Waiting for disc...
Please insert a Disc in the drive and press [Enter]
Mounting CD-ROM...
Identifying... [c18c7be02099e2849d6cdc513682ecac-2]
Scanning disc for index files...
Found 2 package indexes, 0 source indexes, 3 translation indexes and 0 signatures
This disc is called:
'Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29'
Reading Package Indexes... Done
Reading Translation Indexes... Done
Writing new source list
Source list entries for this disc are:
deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29]/ stretch
ontrib main
Unmounting CD-ROM...
Repeat this process for the rest of the CDs in your set.
root@debian:/etc/apt# eject
root@debian:/etc/apt# _
```

- Setelah itu ketik perintah **eject**
- Masukkan dvd 3 debian 9 di virtual box kemudian ketik perintah di bawah ini
- **# apt-cdrom add**

```

root@debian:/etc/apt# apt-cdrom add
Using CD-ROM mount point /media/cdrom/
Unmounting CD-ROM...
Waiting for disc...
Please insert a Disc in the drive and press [Enter]
Mounting CD-ROM...
Identifying... [26d8d3a0ee1e89e90896aec7001aa5f3-2]
Scanning disc for index files...
Found 2 package indexes, 0 source indexes, 3 translation indexes and 0 signatures
Found label 'Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-3 20200718-12:29'
This disc is called:
'Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-3 20200718-12:29'
Reading Package Indexes... Done
Reading Translation Indexes... Done
Writing new source list
Source list entries for this disc are:
deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-3 20200718-12:29]/ stretch
contrib main
Unmounting CD-ROM...
Repeat this process for the rest of the CDs in your set.
root@debian:/etc/apt# eject
root@debian:/etc/apt#

```

- Setelah itu ketik perintah **eject**
- Setelah semua masuk ketik perintah **apt update** di linux
- Setelah itu ketik perintah **apt-get update** atau **apt update**

```

ch/main all Packages
Ign:16 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-3 20200718-12:29] stret
ch/main Translation-id_ID
Ign:17 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stret
ch/contrib all Packages
Ign:19 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stret
ch/contrib Translation-id
Ign:21 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stret
ch/contrib Translation-id_ID
Ign:22 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stret
ch/main all Packages
Ign:24 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stret
ch/main Translation-id_ID
Ign:28 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stret
ch/contrib all Packages
Ign:29 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stret
ch/contrib Translation-id_ID
Ign:31 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stret
ch/contrib Translation-id
Ign:32 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stret
ch/main all Packages
Ign:34 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stret
ch/main Translation-id_ID
Reading package lists... Done
W: The repository 'cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-3 20200718-
12:29] stretch Release' does not have a Release file.
N: Data from such a repository can't be authenticated and is therefore potentially dangerous to use.
N: See apt-secure(8) manpage for repository creation and user configuration details.
W: The repository 'cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-
12:29] stretch Release' does not have a Release file.
N: Data from such a repository can't be authenticated and is therefore potentially dangerous to use.
N: See apt-secure(8) manpage for repository creation and user configuration details.
W: The repository 'cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-
12:29] stretch Release' does not have a Release file.
N: Data from such a repository can't be authenticated and is therefore potentially dangerous to use.
N: See apt-secure(8) manpage for repository creation and user configuration details.
root@debian:/etc/apt#

```

□ Kemudian masuk Kembali ke direktori sources.list untuk mengecek apakah semua dvd sudah terbaca atau belum

□ **#nano /etc/apt/sources.list**

```

GNU nano 2.7.4                                File: sources.list
# deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29]/ stretch$
deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-3 20200718-12:29]/ stretch $
deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29]/ stretch $
deb cdrom:[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29]/ stretch $

# Line commented out by installer because it failed to verify:
#deb http://security.debian.org/debian-security stretch/updates main contrib
# Line commented out by installer because it failed to verify:
#deb-src http://security.debian.org/debian-security stretch/updates main contrib

# stretch-updates, previously known as 'volatile'
# A network mirror was not selected during install. The following entries
# are provided as examples, but you should amend them as appropriate
# for your mirror of choice.
#
# deb http://deb.debian.org/debian/ stretch-updates main contrib
# deb-src http://deb.debian.org/debian/ stretch-updates main contrib

```

□

- Akan terlihat semua dvd 1,2,3 Debian 9 akan masuk kedalam repository atau source list pada linux Debian 9

□ Konfigurasi Alamat IP

- Konfigurasi Alamat IP Host dan Alamat IP Gateway Berikut adalah tahapan konfigurasi alamat IP Host dan alamat IP Gateway pada sistem operasi Linux Debian.
- Selanjutnya konfigurasi IP address pada linux Debian 9
 - Cek Lan Card yang terpasang
#ip a
 - Backup file konfigurasi
#cp /etc/network/interfaces /etc/network/interfaces.old
 - Edit file konfigurasi
#nano /etc/network/interfaces
auto enp0s3
iface enp0s3 inet static
address 192.168.10.1
netmask 255.255.255.0
save tekan ctrl + x tekan "Y" lalu "enter")
 - Restart service networking

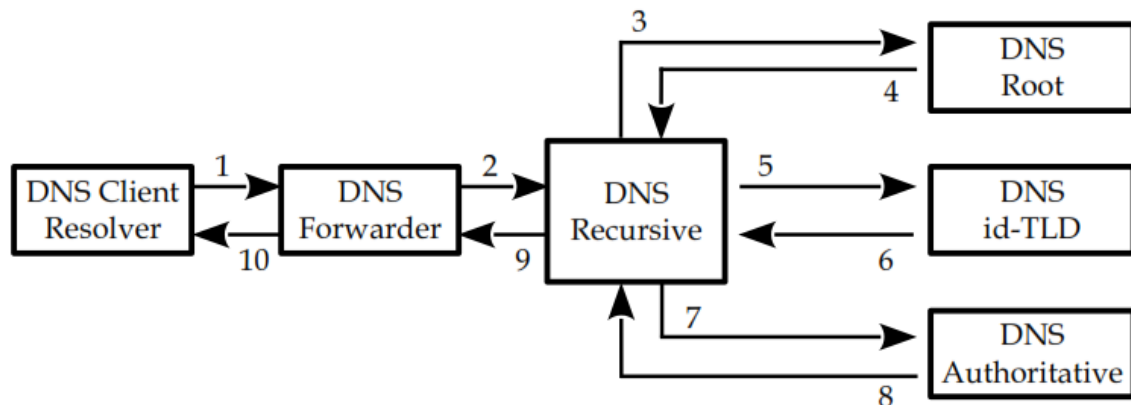
```
#/etc/init.d/networking restart
```

- Cek ip address telah terkonfigurasi atau belum

```
#ip a
```

▪ Instalasi dan Konfigurasi Layanan DNS

Layanan DNS memiliki peran yang sangat penting karena fungsinya yang memudahkan pengguna dalam mengakses sebuah mesin *server* yang tersebar di *internet*. Pengguna umumnya lebih mudah mengingat alamat berupa nama (**alamat domain**) dibanding alamat berupa rangkaian angka (**alamat IP**), karena fungsi dasar dari layanan DNS adalah menerjemahkan alamat nama (domain) menjadi alamat IP. Berikut akan dijelaskan secara singkat cara kerja layanan DNS secara keseluruhan, ketika komputer *client* membutuhkan penerjemahan sebuah alamat nama (misal, smknasionaldepok.sch.id) ke alamat IP, seperti diilustrasikan pada gambar 5.1.



Gambar 5.1. Prinsip kerja layanan DNS

- Selanjutnya kita akan menginstall DNS Pada Linux Debian 9

▪ # apt install bind9 dnsutils

```
root@debian:/etc/apt# apt install bind9 dnsutils
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  bind9-host bind9utils bzip2 dh-python file geoip-database krb5-locales libbind9-140 libdns162
  libgeoip1 libgssapi-krb5-2 libicu57 liblrs141 libisc160 libisccc140 libiscfg140 libk5crypto3
  libkeyutils1 libkrb5-3 libkrb5support0 liblwres141 libmagic-mgc libmagic1 libmpdec2
  libpython3-stdlib libpython3.5-minimal libpython3.5-stdlib libxml2 mime-support net-tools
  python3 python3-minimal python3.5 python3.5-minimal sgml-base xml-core xz-utils
Suggested packages:
  bind9-doc resolvconf ufw bzip2-doc libdpkg-perl rblcheck geoip-bin krb5-doc krb5-user
  python3-doc python3-tk python3-venv python3.5-venv python3.5-doc binutils binfmt-support
  sgml-base-doc debhelper
The following NEW packages will be installed:
  bind9 bind9-host bind9utils bzip2 dh-python dnsutils file geoip-database krb5-locales
  libbind9-140 libdns162 libgeoip1 libgssapi-krb5-2 libicu57 liblrs141 libisc160 libisccc140
  libiscfg140 libk5crypto3 libkeyutils1 libkrb5-3 libkrb5support0 liblwres141 libmagic-mgc
  libmagic1 libmpdec2 libpython3-stdlib libpython3.5-minimal libpython3.5-stdlib libxml2
  mime-support net-tools python3 python3-minimal python3.5 python3.5-minimal sgml-base xml-core
  xz-utils
0 upgraded, 39 newly installed, 0 to remove and 0 not upgraded.
Need to get 0 B/21,9 MB of archives.
After this operation, 87,0 MB of additional disk space will be used.
Do you want to continue? [Y/n] _
```

- Kemudian ketik tombol y lalu enter

```

Unpacking dh-python (2.20170125) ...
Sedang menata libpython3.5-minimal:i386 (3.5.3-1+deb9u1) ...
Sedang menata python3.5-minimal (3.5.3-1+deb9u1) ...
Sedang menata python3-minimal (3.5.3-1) ...
Selecting previously unselected package python3.
(Sedang membaca basis data ... 16920 berkas atau direktori telah terpasang.)
Preparing to unpack .../00-python3_3.5.3-1_i386.deb ...
Unpacking python3 (3.5.3-1) ...
Selecting previously unselected package sgml-base.
Preparing to unpack .../01-sgml-base_1.29_all.deb ...
Unpacking sgml-base (1.29) ...
Selecting previously unselected package libgeoip1:i386.
Preparing to unpack .../02-libgeoip1_1.6.9-4_i386.deb ...
Unpacking libgeoip1:i386 (1.6.9-4) ...
Selecting previously unselected package libkeyutils1:i386.
Preparing to unpack .../03-libkeyutils1_1.5.9-9_i386.deb ...
Unpacking libkeyutils1:i386 (1.5.9-9) ...
Selecting previously unselected package libkrb5support0:i386.
Preparing to unpack .../04-libkrb5support0_1.15-1+deb9u1_i386.deb ...
Unpacking libkrb5support0:i386 (1.15-1+deb9u1) ...
Selecting previously unselected package libk5crypto3:i386.
Preparing to unpack .../05-libk5crypto3_1.15-1+deb9u1_i386.deb ...
Unpacking libk5crypto3:i386 (1.15-1+deb9u1) ...
Selecting previously unselected package libkrb5-3:i386.
Preparing to unpack .../06-libkrb5-3_1.15-1+deb9u1_i386.deb ...
Unpacking libkrb5-3:i386 (1.15-1+deb9u1) ...
Selecting previously unselected package libgssapi-krb5-2:i386.
Preparing to unpack .../07-libgssapi-krb5-2_1.15-1+deb9u1_i386.deb ...
Unpacking libgssapi-krb5-2:i386 (1.15-1+deb9u1) ...
Selecting previously unselected package libc57:i386.
Preparing to unpack .../08-libc57_57.1-6+deb9u4_i386.deb ...
Unpacking libc57:i386 (57.1-6+deb9u4) ...
Selecting previously unselected package libxml2:i386.
Preparing to unpack .../09-libxml2_2.9.4+dfsg1-2.2+deb9u2_i386.deb ...
Unpacking libxml2:i386 (2.9.4+dfsg1-2.2+deb9u2) ...
Progress: [ 32%] [#####]

```

- Proses install dns

```

Sedang menata bzip2 (1.0.6-8.1) ...
Sedang menata libmagic1:i386 (1:5.30-1+deb9u3) ...
Sedang menata krb5-locales (1.15-1+deb9u1) ...
Processing triggers for libc-bin (2.24-11+deb9u4) ...
Sedang menata xz-utils (5.2.2-1.2+b1) ...
update-alternatives: using /usr/bin/xz to provide /usr/bin/lzma (lzma) in auto mode
Sedang menata liblures141:i386 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata xml-core (0.17) ...
Sedang menata libkeyutils1:i386 (1.5.9-9) ...
Sedang menata net-tools (1.60+git20161116.90da8a0-1) ...
Sedang menata libmpdec2:i386 (2.4.2-1) ...
Sedang menata libisc160:i386 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata libpython3.5-stdlib:i386 (3.5.3-1+deb9u1) ...
Sedang menata file (1:5.30-1+deb9u3) ...
Sedang menata libkrb5support0:i386 (1.15-1+deb9u1) ...
Sedang menata libisccc140:i386 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata python3.5 (3.5.3-1+deb9u1) ...
Sedang menata libpython3-stdlib:i386 (3.5.3-1) ...
Sedang menata libk5crypto3:i386 (1.15-1+deb9u1) ...
Sedang menata libkrb5-3:i386 (1.15-1+deb9u1) ...
Sedang menata libgssapi-krb5-2:i386 (1.15-1+deb9u1) ...
Sedang menata libdns162:i386 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata libiscfg140:i386 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata libirs141:i386 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata libbind9-140:i386 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata bind9-host (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata dnstools (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata python3 (3.5.3-1) ...
running python rtupdate hooks for python3.5...
running python post-rtupdate hooks for python3.5...
Sedang menata dh-python (2.20170125) ...
Processing triggers for libc-bin (2.24-11+deb9u4) ...
Processing triggers for sgml-base (1.29) ...
Media change: please insert the disc labeled
'Debian GNU/Linux 9.13.0 Stretch - Official i386 DVD Binary-2 20200718-12:29'
in the drive '/media/cdrom/' and press [Enter]

```


- Kemudian masukan dvd ke 2 debian 9

```
Sedang menata python3 (3.5.3-1) ...
running python rtupdate hooks for python3.5...
running python post-rtupdate hooks for python3.5...
Sedang menata dh-python (2.20170125) ...
Processing triggers for libc-bin (2.24-11+deb9u4) ...
Processing triggers for sgml-base (1.29) ...
Media change: please insert the disc labeled
'Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29'
in the drive '/media/cdrom/' and press [Enter]

Get:1 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stretch/main i386 bind9utils i386 1:9.10.3.dfsg.P4-12.3+deb9u6 [380 kB]
Get:2 cdrom://[Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stretch/main i386 bind9 i386 1:9.10.3.dfsg.P4-12.3+deb9u6 [565 kB]
Prakonfigurasi paket ...
Selecting previously unselected package bind9utils.
(Sedang membaca basis data ... 17324 berkas atau direktori telah terpasang.)
Preparing to unpack .../bind9utils_9.10.3.dfsg.P4-12.3+deb9u6_i386.deb ...
Unpacking bind9utils (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Selecting previously unselected package bind9.
Preparing to unpack .../bind9_9.10.3.dfsg.P4-12.3+deb9u6_i386.deb ...
Unpacking bind9 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata bind9utils (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Sedang menata bind9 (1:9.10.3.dfsg.P4-12.3+deb9u6) ...
Adding group 'bind' (GID 109) ...
Done.
Adding system user 'bind' (UID 105) ...
Adding new user 'bind' (UID 105) with group 'bind' ...
Not creating home directory '/var/cache/bind'.
wrote key file "/etc/bind/rndc.key"
#
Created symlink /etc/systemd/system/multi-user.target.wants/bind9.service → /lib/systemd/system/bind9.service.
Processing triggers for systemd (232-25+deb9u12) ...
W: APT had planned for dpkg to do more than it reported back (197 vs 199).
Affected packages:
root@debian:/etc/apt#
```

- Selesai instalasi DNS Server
- Selesai install dns Debian 9 selajutnya kita konfigursai dns server
- Masuk ke direktori konfigurasi bind dan buka file konfigurasi **named.conf.options**.
- **# cd /etc/bind**
- **nano named.conf.options**
- Tambah dan ubah menjadi seperti di bawah ini.

listen-on-v6 { none; };

listen-on port 53 { localhost; 192.168.10.0/24; };

allow-query { localhost; 192.168.10.0/24; };

recursion yes;

```
GNU nano 2.7.4 File: named.conf.options
options {
    directory "/var/cache/bind";

    // If there is a firewall between you and nameservers you want
    // to talk to, you may need to fix the firewall to allow multiple
    // ports to talk. See http://www.kb.cert.org/vuls/id/800113

    // If your ISP provided one or more IP addresses for stable
    // nameservers, you probably want to use them as forwarders.
    // Uncomment the following block, and insert the addresses replacing
    // the all-0's placeholder.

    // forwarders {
    //     0.0.0.0;
    // };

    //=====
    // If BIND logs error messages about the root key being expired,
    // you will need to update your keys. See https://www.isc.org/bind-keys
    //=====
    dnssec-validation auto;

    auth-nxdomain no;    # conform to RFC1035
    listen-on-v6 { none; };
    listen-on port 53 {localhost; 192.168.10.0/24;};
    allow-query {localhost; 192.168.10.0/24;};
    recursion yes;
};

root@debian:/etc/bind#
```

- Buka file konfigurasi **named.conf.local**.

zone "smknasionaldepok.sch.id" {

type master;

file "/etc/bind/forward.smknasionaldepok.sch.id";

};

zone "10.168.192.in-addr.arpa" {

type master;

file "/etc/bind/reverse.smknasionaldepok.sch.id";

};

-

```

GNU nano 2.7.4                                File: named.conf.local
//
// Do any local configuration here
//
// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "smknasionaldepok.sch.id" {
    type master;
    file "/etc/bind/forward.smknasionaldepok.sch.id";
};

zone "10.168.192.in-addr.arpa" {
    type master;
    file "/etc/bind/reverse.smknasionaldepok.sch.id";
};

```

- Selanjutnya membuat file konfigurasi **forward.smknasionaldepok.sch.id**.

- ***cp db.local forward.smknasionaldepok.sch.id***
- ***nano forward.smknasionaldepok.sch.id***

```

File  Machine  View  Input  Devices  Help
GNU nano 2.7.4                                File: forward.smknasionaldepok.sch.id

; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      smknasionaldepok.sch.id. root.smknasionaldepok.sch.id. (
                        2      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       ns1.smknasionaldepok.sch.id.
@         IN      NS       ns2.smknasionaldepok.sch.id.
@         IN      A        192.168.10.1
ns1       IN      A        192.168.10.1
ns2       IN      A        192.168.10.1
ftp       IN      A        192.168.10.1
www       IN      CNAME     smknasionaldepok.sch.id.

```

- Selanjutnya file konfigurasi **reverse.smknasionaldepok.sch.id**.

- ***cp db.127 reverse.smknasionaldepok.sch.id***
- ***nano reverse.smknasionaldepok.sch.id***

```

File Machine View Input Devices Help
GNU nano 2.7.4 File: reverse.smknasionaldepok.sch.id

;
; BIND reverse data file for local loopback interface
;
$TTL 604800
@ IN SOA smknasionaldepok.sch.id. root.smknasionaldepok.sch.id. (
    1 ; Serial
    604800 ; Refresh
    86400 ; Retry
    2419200 ; Expire
    604800 ) ; Negative Cache TTL
;

IN NS ns1.smknasionaldepok.sch.id.
IN NS ns2.smknasionaldepok.sch.id.
ns1 IN A 192.168.10.1
ns2 IN A 192.168.10.1
@ IN A 192.168.10.1
1 IN PTR smknasionaldepok.sch.id.
1 IN PTR ftp.smknasionaldepok.sch.id.

```

- Restart service bind9, cek statusnya beserta file konfigurasi named.conf.

- `systemctl restart bind9`
- `systemctl status bind9`
- `named-checkconf`

```

root@debian:/etc/bind# systemctl restart bind9
root@debian:/etc/bind# systemctl status bind9
■ bind9.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/bind9.service; enabled; vendor preset: enabled)
   Active: active (running) since Wed 2023-08-02 15:17:14 WIB; 8s ago
     Docs: man:named(8)
  Main PID: 1218 (named)
    Tasks: 4 (limit: 4915)
   CGroup: /system.slice/bind9.service
           └─1218 /usr/sbin/named -f -u bind

Agu 02 15:17:14 debian named[1218]: network unreachable resolving './NS/IN': 198.97.190.53#53
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './DNSKEY/IN': 2001:500:2d::d#53
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './NS/IN': 2001:500:2d::d#53
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './DNSKEY/IN': 192.112.36.4#53
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './NS/IN': 192.112.36.4#53
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './DNSKEY/IN': 192.33.4.12#53
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './NS/IN': 192.33.4.12#53
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './DNSKEY/IN': 2001:500:2::c#53
Agu 02 15:17:14 debian named[1218]: managed-keys-zone: Unable to fetch DNSKEY set '': SERVFAIL
Agu 02 15:17:14 debian named[1218]: network unreachable resolving './NS/IN': 2001:500:2::c#53
root@debian:/etc/bind# named-checkconf
root@debian:/etc/bind#

```

- Tambahkan nama domain dan IP address server pada file konfigurasi DNS resolver. File ini sebelumnya sudah diisi dengan IP address dari DNS server Google dan Cloudflare.

- `nano /etc/resolv.conf`

```
GNU nano 2.7.4                               File: /etc/resolv.conf

search smknasionaldepok.sch.id
nameserver 192.168.10.1
nameserver 8.8.8.8
nameserver 1.1.1.1
```

- Uji konfigurasi DNS server dengan menjalankan perintah **nslookup** atau **dig**.

```
root@debian:/etc/bind# nslookup smknasionaldepok.sch.id
Server:      192.168.10.1
Address:     192.168.10.1#53

Name:   smknasionaldepok.sch.id
Address: 192.168.10.1

root@debian:/etc/bind# dig smknasionaldepok.sch.id

; <<>> DiG 9.10.3-P4-Debian <<>> smknasionaldepok.sch.id
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 41819
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 2, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:: udp: 4096
;; QUESTION SECTION:
;smknasionaldepok.sch.id.      IN      A

;; ANSWER SECTION:
smknasionaldepok.sch.id. 604800 IN      A      192.168.10.1

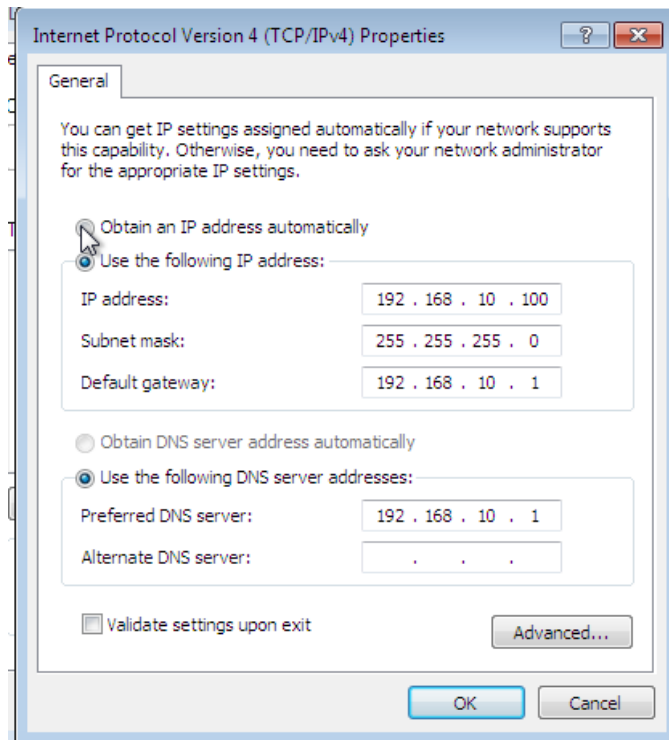
;; AUTHORITY SECTION:
smknasionaldepok.sch.id. 604800 IN      NS      ns1.smknasionaldepok.sch.id.
smknasionaldepok.sch.id. 604800 IN      NS      ns2.smknasionaldepok.sch.id.

;; ADDITIONAL SECTION:
ns1.smknasionaldepok.sch.id. 604800 IN A      192.168.10.1
ns2.smknasionaldepok.sch.id. 604800 IN A      192.168.10.1

;; Query time: 0 msec
;; SERVER: 192.168.10.1#53(192.168.10.1)
;; WHEN: Wed Aug 02 15:26:41 WIB 2023
;; MSG SIZE rcvd: 136

root@debian:/etc/bind#
```

- Kemudian Uji coba pada windows untuk melihat hasilnya
- Seting ip address pada windows



- Kemudian buka cmd pada windows dan ketikan nslookup smknasionaldepok.sch.id dan [ftp.smknasionaldepok.sch.id](ftp://ftp.smknasionaldepok.sch.id)

```
Command Prompt
Microsoft Windows [Version 10.0.22621.2215]
(c) Microsoft Corporation. All rights reserved.

C:\Users\andry>nslookup smknasionaldepok.sch.id
Server: smknasionaldepok.sch.id
Address: 192.168.10.1

Name: smknasionaldepok.sch.id
Address: 192.168.10.1

C:\Users\andry>nslookup ftp.smknasionaldepok.sch.id
Server: ftp.smknasionaldepok.sch.id
Address: 192.168.10.1

Name: ftp.smknasionaldepok.sch.id
Address: 192.168.10.1

C:\Users\andry>
```

▪ Install FTP SERVER

- apt-get install proftpd

```
root@debian:/etc/bind# apt-get install proftpd
Reading package lists... Done
Building dependency tree
Reading state information... Done
Note, selecting 'proftpd-basic' instead of 'proftpd'
The following additional packages will be installed:
  libmemcached11 libmemcachedutil2 libsasl2-2 libsasl2-modules libsasl2-modules-db libwrap0 tcpd
Suggested packages:
  libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal libsasl2-modules-ldap
  libsasl2-modules-otp libsasl2-modules-sql openbsd-inetd | inet-superserver openssl proftpd-doc
  proftpd-mod-ldap proftpd-mod-mysql proftpd-mod-odbc proftpd-mod-pgsql proftpd-mod-sqlite
  proftpd-mod-geoip
The following NEW packages will be installed:
  libmemcached11 libmemcachedutil2 libsasl2-2 libsasl2-modules libsasl2-modules-db libwrap0
  proftpd-basic tcpd
0 upgraded, 8 newly installed, 0 to remove and 0 not upgraded.
Need to get 0 B/3.019 kB of archives.
After this operation, 5.834 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

- Kemudian tekan tombol y untuk melanjutkan instalasi

```
Ign:4 cdrom://Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stretc
h/main i386 libmemcached11 i386 1.0.18-4.1
Ign:5 cdrom://Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stretc
h/main i386 libmemcachedutil2 i386 1.0.18-4.1
Get:6 cdrom://Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stretc
h/main i386 libsasl2-modules i386 2.1.27~101-g0780600+dfsg-3+deb9u1 [106 kB]
Ign:7 cdrom://Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29] stretc
h/main i386 proftpd-basic i386 1.3.5b-4+deb9u5
Get:8 cdrom://Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-1 20200718-12:29] stretc
h/main i386 tcpd i386 7.6.q-26 [24.4 kB]
Selecting previously unselected package libsasl2-modules-db:i386.
(Sedang membaca basis data ... 17443 berkas atau direktori telah terpasang.)
Preparing to unpack .../libsasl2-modules-db_2.1.27~101-g0780600+dfsg-3+deb9u1_i386.deb ...
Unpacking libsasl2-modules-db:i386 (2.1.27~101-g0780600+dfsg-3+deb9u1) ...
Selecting previously unselected package libsasl2-2:i386.
Preparing to unpack .../libsasl2-2_2.1.27~101-g0780600+dfsg-3+deb9u1_i386.deb ...
Unpacking libsasl2-2:i386 (2.1.27~101-g0780600+dfsg-3+deb9u1) ...
Selecting previously unselected package libwrap0:i386.
Preparing to unpack .../libwrap0_7.6.q-26_i386.deb ...
Unpacking libwrap0:i386 (7.6.q-26) ...
Selecting previously unselected package libsasl2-modules:i386.
Preparing to unpack .../libsasl2-modules_2.1.27~101-g0780600+dfsg-3+deb9u1_i386.deb ...
Unpacking libsasl2-modules:i386 (2.1.27~101-g0780600+dfsg-3+deb9u1) ...
Selecting previously unselected package tcpd.
Preparing to unpack .../tcpd_7.6.q-26_i386.deb ...
Unpacking tcpd (7.6.q-26) ...
Sedang menata libsasl2-modules-db:i386 (2.1.27~101-g0780600+dfsg-3+deb9u1) ...
Sedang menata libsasl2-2:i386 (2.1.27~101-g0780600+dfsg-3+deb9u1) ...
Processing triggers for libc-bin (2.24-11+deb9u4) ...
Sedang menata libsasl2-modules:i386 (2.1.27~101-g0780600+dfsg-3+deb9u1) ...
Sedang menata libwrap0:i386 (7.6.q-26) ...
Sedang menata tcpd (7.6.q-26) ...
Processing triggers for libc-bin (2.24-11+deb9u4) ...
Media change: please insert the disc labeled
'Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29'
in the drive '/media/cdrom/' and press [Enter]
```

- Kemudian masukan dvd ke 2

Kemudian buat user baru untuk ftp

- adduser guru

```

root@debian:/etc/bind# adduser guru
Adding user `guru' ...
Adding new group `guru' (1001) ...
Adding new user `guru' (1001) with group `guru' ...
Creating home directory `/home/guru' ...
Copying files from `/etc/skel' ...
Masukkan sandi Unix yang baru :
Ketik ulang sandi Unix:
passwd: kata sandi diperbaharui dengan sukses
Mengubah informasi pengguna dari guru
Masukkan nilai baru atau tekan ENTER untuk nilai bawaan
    Nama Lengkap []:
    Nomor Ruangan []:
    Telepon Kantor []:
    Telepon Rumah []:
    Lain-lain []:
Is the information correct? [Y/n] y
root@debian:/etc/bind#

```

- cp /etc/proftpd/proftpd.conf /etc/proftpd/proftpd.conf.old
- nano /etc/proftpd/proftpd.conf

Setelah terbuka, cari dan rubah konfigurasi sebagai berikut :

UseIPv6 Rubah menjadi off

ServerName rubah menjadi nama domain "ftp.smknasionaldepok.sch.id"

Kemudian Tambahkan paling bawah konfigurasi sebagai berikut

<Anonymous /home/guru> atau ubah menjadi **/home/nama_anda/share/** di dalam **anonymous**

User guru —→ **atau rubah menjadi nama_anda**

<Directory *>

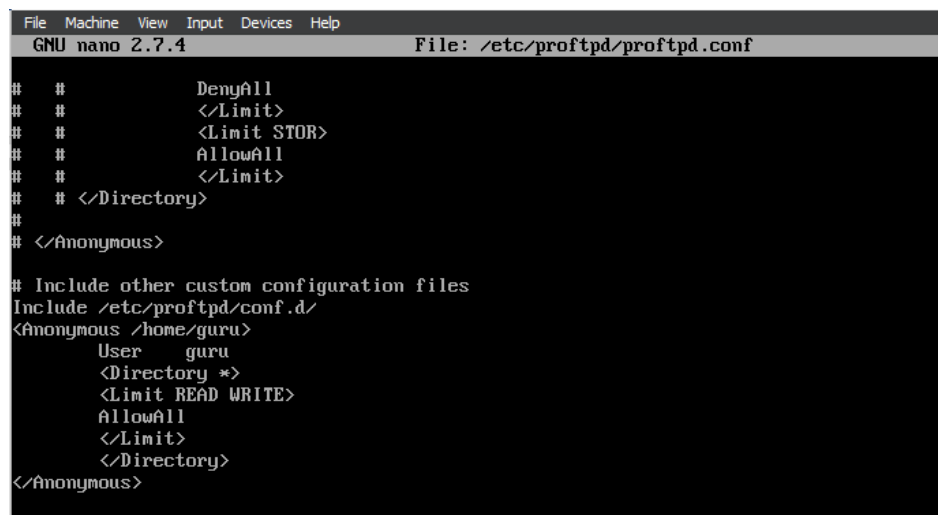
<Limit READ WRITE>

AllowAll

</Limit>

</Directory>

</Anonymous>



```

File  Machine  View  Input  Devices  Help
GNU nano 2.7.4 File: /etc/proftpd/proftpd.conf
# # DenyAll
# # </Limit>
# # <Limit STOR>
# # AllowAll
# # </Limit>
# # </Directory>
#
# </Anonymous>
#
# Include other custom configuration files
Include /etc/proftpd/conf.d/
<Anonymous /home/guru>
    User guru
    <Directory *>
    <Limit READ WRITE>
    AllowAll
    </Limit>
    </Directory>
</Anonymous>

```

- Kemudian simpan konfigurasi dengan ketik perintah **CTRL+X** lalu **Y** dan **ENTER**.
- Restart proftpd
/etc/init.d/proftpd restart


```
root@debian:/home# /etc/init.d/proftpd restart
[ ok ] Restarting proftpd (via systemctl): proftpd.service.
root@debian:/home#
```

- Uji koneksi ftp pada windows dengan menggunakan cmd ketikan perintah
C:\>ftp ftp.smknasionaldepok.sch.id

```
Command Prompt - ftp ftp.smknasionaldepok.sch.id

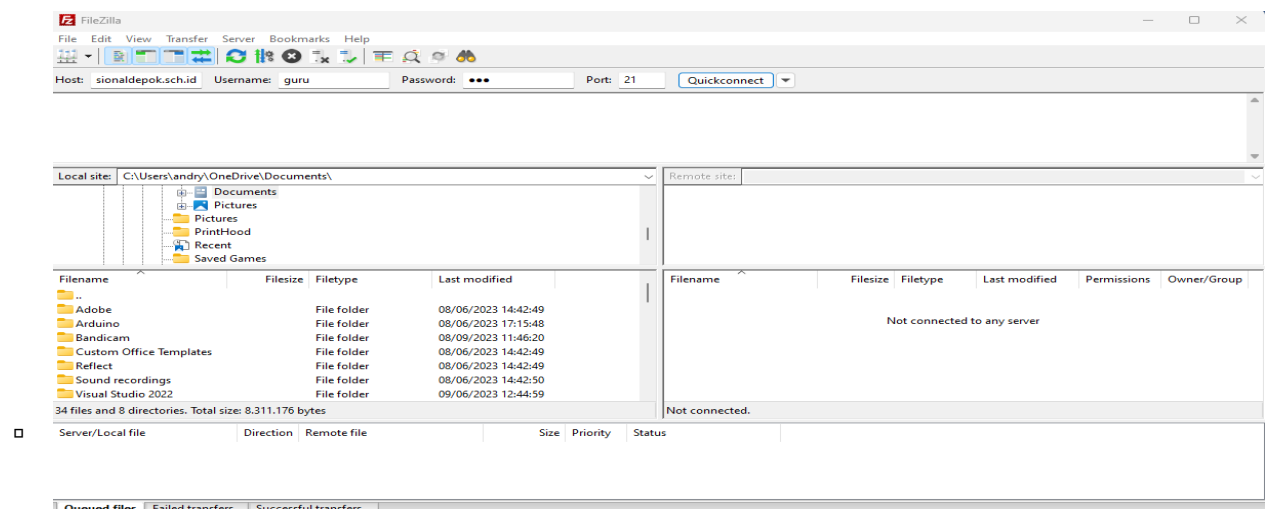
C:\Users\andry>ftp ftp.smknasionaldepok.sch.id
Connected to ftp.smknasionaldepok.sch.id.
220 ProFTPD 1.3.5b Server (ftp.smknasionaldepok.sch.id) [192.168.10.1]
200 UTF8 set to on
User (ftp.smknasionaldepok.sch.id:(none)): guru
331 Anonymous login ok, send your complete email address as your password
Password:
```

- Kemudian masukan user name dan password yang tadi kita sudah buat
- Kemudian ketikan ls untuk tes ftp

```
Select Command Prompt - ftp ftp.smknasionaldepok.sch.id

C:\Users\andry>ftp ftp.smknasionaldepok.sch.id
Connected to ftp.smknasionaldepok.sch.id.
220 ProFTPD 1.3.5b Server (ftp.smknasionaldepok.sch.id) [192.168.10.1]
200 UTF8 set to on
User (ftp.smknasionaldepok.sch.id:(none)): guru
331 Anonymous login ok, send your complete email address as your password
Password:
230 Anonymous access granted, restrictions apply
ftp> ls
200 PORT command successful
150 Opening ASCII mode data connection for file list
226 Transfer complete
ftp>
```

- Jika user dan password yang dimasukkan sesuai maka akan muncul halaman seperti di atas
sekarang kita mencoba memasukan file kedalam ftp dengan menggunakan aplikasi filezilla



- Host di isi dengan alamat IP Address linux Debian atau nama sub domain

Contoh : [\\192.168.10.1](http://192.168.10.1) atau ftp.smknasionaldepok.sch.id

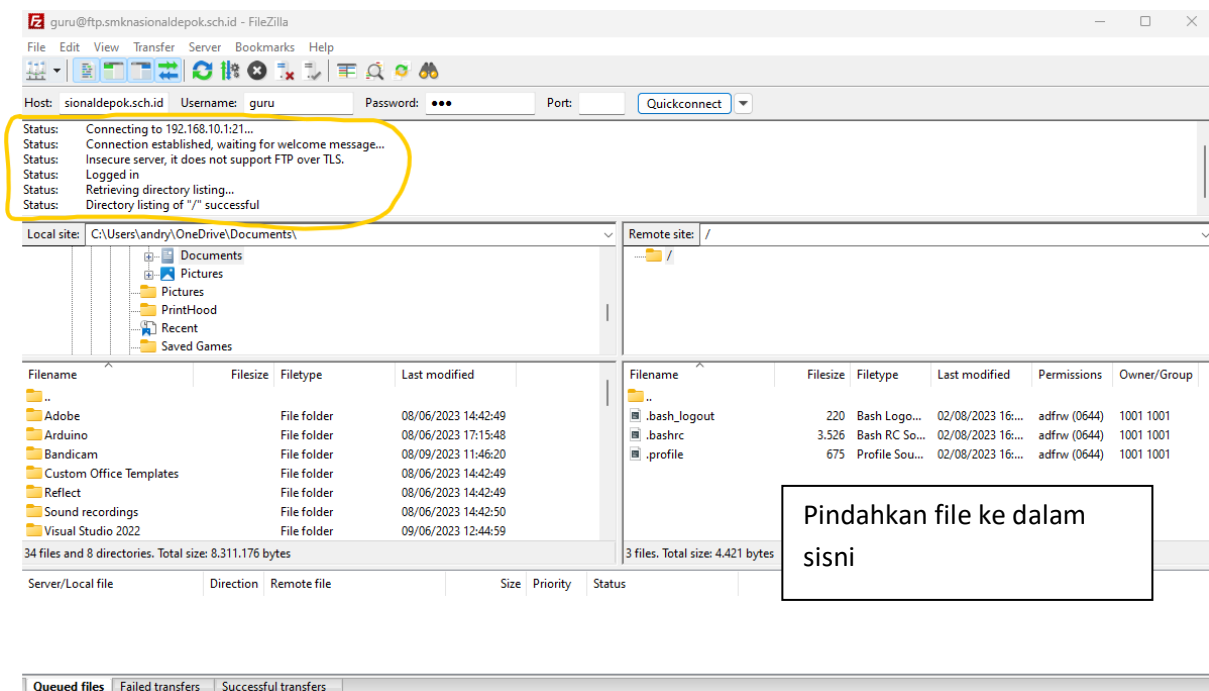
Username di isi dengan user yang kita buat sebelumnya

Contoh : guru

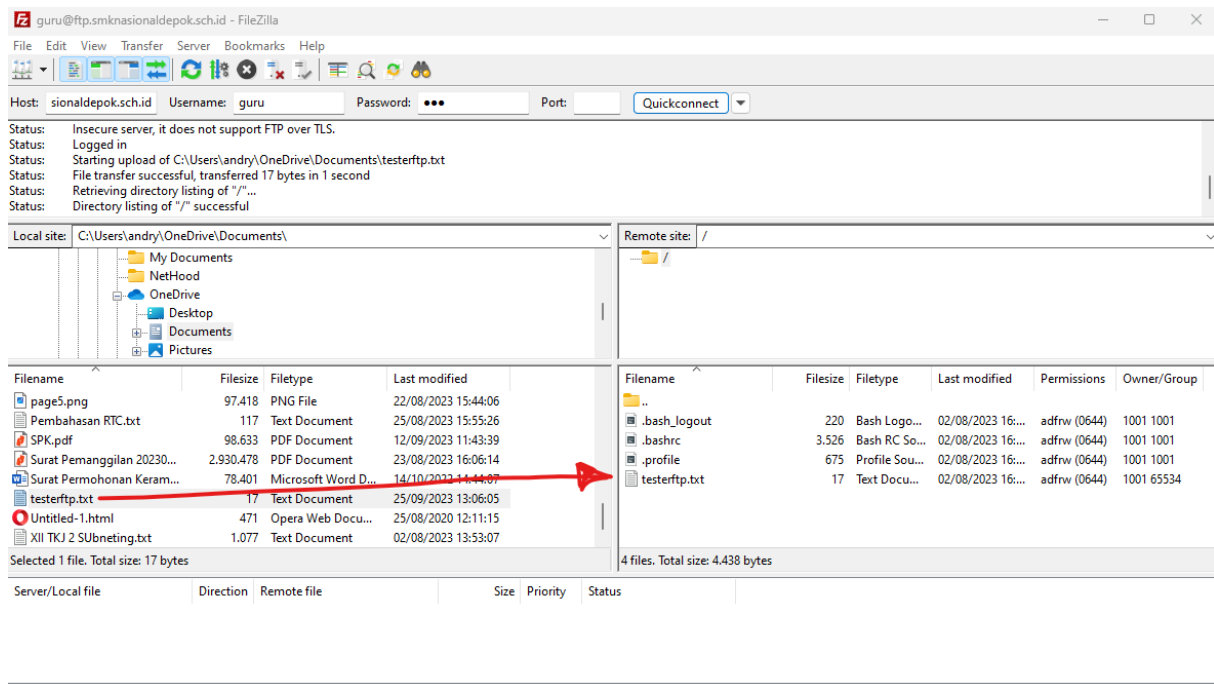
Password di isi dengan password yang kita buat bersamaan dengan membuat username ftp

Port di isi dengan port default ftp yaitu 21, kemudian tekan tombol **Quickconnect**

Jika pengisian host, username, password dan port sudah benar maka akan muncul seperti gambar di bawah ini



- Lihat yang saya lingkari jika terdapat tulisan successful maka tandanya ftp berhasil dan kita bisa memasukan file dari windows ke dalam direktori ftp yang sudah kita buat
- Sekarang kita coba pindahkan file dari windows ke ftp dengan cara drag and drop maka hasilnya seperti gambar di bawah ini

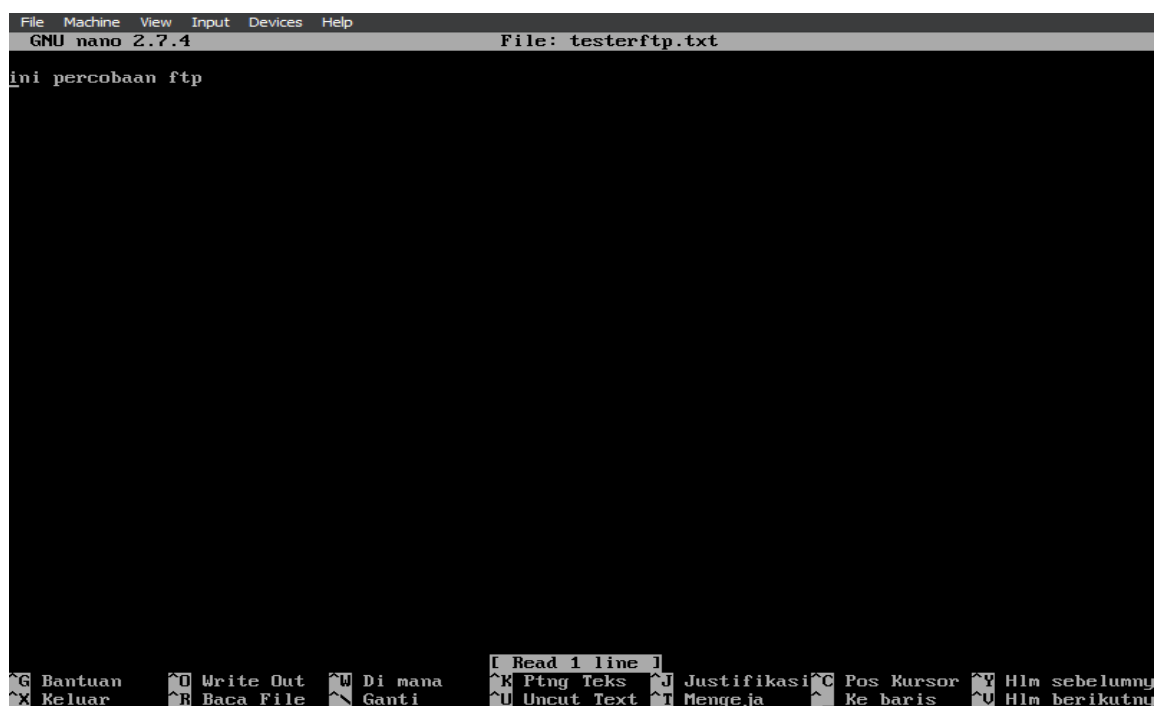


- Selanjutnya kita buka Kembali linux debian untuk melihat hasilnya

Masukan perintah **cd /home/guru** kemudian ketik **ls** untuk melihat filenya

```
root@debian:/etc/bind# cd /home/guru/
root@debian:/home/guru# ls
testerftp.txt
root@debian:/home/guru# _
```

- Maka akan terlihat file hasil yang tadi kita masukan maka ftp sudah berjalan dengan baik
- Ketikan nano nama file tersebut sesuai tidak isi dari file tersebut



- Membuat Ftp agar bisa di akses di web browser
 - Install web server terlebih dahulu dengan cara
 - `# apt-get install apache2 php7.0 -y`

```
root@debian:/etc/bind# apt-get install apache2 php7.0
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapache2-mod-php7.0 libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap libedit2 libldap-2.4-2 libldap-common liblua5.2-0
  libnghttp2-14 libperl5.24 libsasl2-2 libsasl2-modules libsasl2-modules-db openssl perl
  perl-modules-5.24 php-common php7.0-cli php7.0-common php7.0-json php7.0-opcache php7.0-readline
  psmisc rename ssl-cert
Suggested packages:
  www-browser apache2-doc apache2-suexec-pristine | apache2-suexec-custom php-pear
  libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal libsasl2-modules-ldap
  libsasl2-modules-otp libsasl2-modules-sql ca-certificates perl-doc libterm-readline-gnu-perl
  | libterm-readline-perl-perl make openssl-blacklist
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapache2-mod-php7.0 libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap libedit2 libldap-2.4-2 libldap-common liblua5.2-0
  libnghttp2-14 libperl5.24 libsasl2-2 libsasl2-modules libsasl2-modules-db openssl perl
  perl-modules-5.24 php-common php7.0-cli php7.0-common php7.0-json php7.0-opcache
  php7.0-readline psmisc rename ssl-cert
0 upgraded, 31 newly installed, 0 to remove and 0 not upgraded.
Need to get 0 B/13,7 MB of archives.
After this operation, 58,5 MB of additional disk space will be used.
Do you want to continue? [Y/n] _
```

- Kemudian tekan tombol y

```
Enabling module access_compat.
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /lib/systemd/system/apache-htcacheclean.service.
Sedang menata php7.0-cli (7.0.33-0+deb9u8) ...
update-alternatives: using /usr/bin/php7.0 to provide /usr/bin/php (php) in auto mode
update-alternatives: using /usr/bin/phar7.0 to provide /usr/bin/phar (phar) in auto mode
update-alternatives: using /usr/bin/phar.phar7.0 to provide /usr/bin/phar.phar (phar.phar) in auto mode
Creating config file /etc/php/7.0/cli/php.ini with new version
Processing triggers for libc-bin (2.24-11+deb9u4) ...
Processing triggers for systemd (232-25+deb9u12) ...
Media change: please insert the disc labeled
'Debian GNU/Linux 9.13.0 _Stretch_ - Official i386 DVD Binary-2 20200718-12:29'
in the drive '/media/cdrom/' and press [Enter]
```

- Kemudian masukan dvd ke 2 debian 9

```
Selecting previously unselected package libapache2-mod-php7.0.
(Sedang membaca basis data ... 20374 berkas atau direktori telah terpasang.)
Preparing to unpack .../libapache2-mod-php7.0_7.0.33-0+deb9u8_i386.deb ...
Unpacking libapache2-mod-php7.0 (7.0.33-0+deb9u8) ...
Selecting previously unselected package php7.0.
Preparing to unpack .../php7.0_7.0.33-0+deb9u8_all.deb ...
Unpacking php7.0 (7.0.33-0+deb9u8) ...
Sedang menata libapache2-mod-php7.0 (7.0.33-0+deb9u8) ...

Creating config file /etc/php/7.0/apache2/php.ini with new version
php_invoke: Enable module sysvsem for apache2 sapi
php_invoke: Enable module json for apache2 sapi
php_invoke: Enable module phar for apache2 sapi
php_invoke: Enable module sysvmsg for apache2 sapi
php_invoke: Enable module posix for apache2 sapi
php_invoke: Enable module iconv for apache2 sapi
php_invoke: Enable module readline for apache2 sapi
php_invoke: Enable module sockets for apache2 sapi
php_invoke: Enable module sysvshm for apache2 sapi
php_invoke: Enable module ftp for apache2 sapi
php_invoke: Enable module fileinfo for apache2 sapi
php_invoke: Enable module pdo for apache2 sapi
php_invoke: Enable module tokenizer for apache2 sapi
php_invoke: Enable module opcache for apache2 sapi
php_invoke: Enable module exif for apache2 sapi
php_invoke: Enable module ctype for apache2 sapi
php_invoke: Enable module calendar for apache2 sapi
php_invoke: Enable module shmop for apache2 sapi
php_invoke: Enable module gettext for apache2 sapi
Module mpm_event disabled.
Enabling module mpm_prefork.
apache2_switch_mpm Switch to prefork
apache2_invoke: Enable module php7.0
Sedang menata php7.0 (7.0.33-0+deb9u8) ...
W: apt had planned for dpkg to do more than it reported back (155 vs 157).
Affected packages:
root@debian:/etc/bind# _
```

- Selesai proses instalasi apache2 dan php7.0
- Kemudian konfigurasi web server
- **cd /etc/apache2/sites-available**

```
root@debian:~# cd /etc/apache2/sites-available/
root@debian:/etc/apache2/sites-available# ls
000-default.conf default-ssl.conf
root@debian:/etc/apache2/sites-available#
```

- **nano smknasionaldepok.sch.id.conf**
- Kemudian cp 000-default.conf 000-default.conf.old

```
root@debian:/etc/apache2/sites-available# cp 000-default.conf 000-default.conf.old
root@debian:/etc/apache2/sites-available# ls
000-default.conf 000-default.conf.old default-ssl.conf
root@debian:/etc/apache2/sites-available#
```

- Kemudian masuk ke file 000-default.conf dengan perintah **nano 000-default.conf**
- Kemudian rubah file DocumentRoot berikut :

```
File Machine View Input Devices Help
GNU nano 2.7.4 File: 000-default.conf

<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
DocumentRoot /var/www/html

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf
</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet

[ Unbound key: M- ]
^G Bantuan ^O Write Out ^W Di mana ^K Png Teks ^J Justifikasi ^C Pos Cursor ^V Hlm sebelum
^X Keluar ^R Baca File ^G Ganti ^U Uncut Text ^T Mengeja ^_ Ke baris ^U Hlm berikutnya
```

- Ubah menjadi seperti berikut ini

```
File Machine View Input Devices Help
GNU nano 2.7.4 File: /etc/apache2/sites-available/000-default.conf Modified

<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
DocumentRoot /home/guru/_

# Available loglevels: trace0, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf
</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet

Bantuan Write Out Di mana Ptng Teks Justifikasi Pos Cursor Hlm sebelum
Keluar Baca File Ganti Uncut Text Mengeja Ke baris Hlm berikutnya
```

- Kemudian simpan filenya
- Kemudian rubah apache2.conf dengan ketik perintah
- **# nano /etc/apache2/apache2.conf**
- Rubah file berikut ini :

```
File Machine View Input Devices Help
GNU nano 2.7.4 File: apache2.conf

<Directory />
Options FollowSymLinks
AllowOverride None
Require all denied
</Directory>

<Directory /usr/share>
AllowOverride None
Require all granted
</Directory>

<Directory /var/www/>
Options Indexes FollowSymLinks
AllowOverride None
Require all granted
</Directory>

#<Directory /srv/>
#Options Indexes FollowSymLinks
#AllowOverride None
#Require all granted
#</Directory>

# AccessFileName: The name of the file to look for in each directory
# for additional configuration directives. See also the AllowOverride
# directive.
AccessFileName .htaccess
```

- o Menjadi seperti gambar di bawah ini

```
File Machine View Input Devices Help
<Directory />
    Options FollowSymLinks
    AllowOverride None
    Require all denied
</Directory>

<Directory /usr/share>
    AllowOverride None
    Require all granted
</Directory>
<Directory /home/guru/>
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>

#<Directory /srv/>
#     Options Indexes FollowSymLinks
#     AllowOverride None
#     Require all granted
#</Directory>

# AccessFileName: The name of the file to look for in each directory
# for additional configuration directives. See also the AllowOverride
# directive.
#
AccessFileName .htaccess
```

- Kemudian simpan file konfigurasinya
- Kemudian aktifkan, mod_rewrite, dan restart apache2 seperti perintah di bawah ini.
 - **a2ensite 000-default.conf**
 - **systemctl restart apache2**
- Kemudian buka web browser di windows dan ketikan url ftp.smknasionaldepok.sch.id maka akan tampil file atau folder ftp

