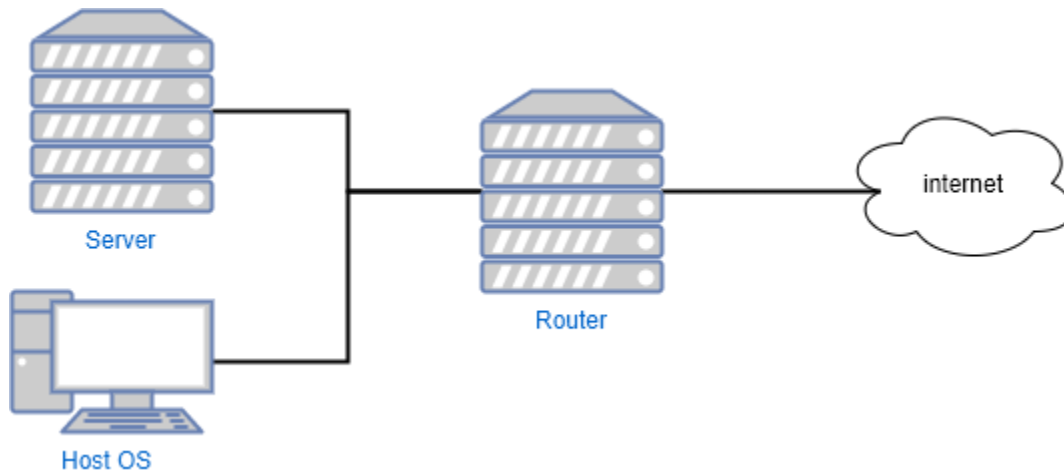


## Worksheet Pertemuan 16. Web & FTP Server

Nama Kelompok : Kelompok 1

NIM Anggota hadir :

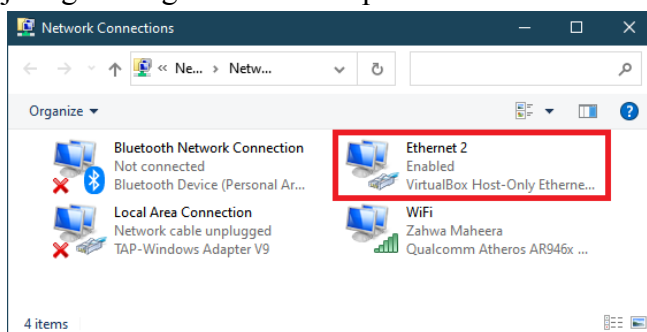
### A. Objektif



1. Melakukan instalasi Server Web dan file transfer berbasis apache2 dan vsftpd
2. Melakukan konfigurasi Server tersebut sehingga dapat digunakan
3. Melakukan pengujian dengan memanfaatkan web browser yang ada pada host OS

### B. Konfigurasi Jaringan Host OS

1. Ubah pengaturan pengalamatan IP server dan router menjadi /29.
2. Berikan alamat IP pada antarmuka “VirtualBox Host-Only Network #2” (*tergantung pengaturan masing-masing*) pada Control Panel Host OS Anda dengan alamat yang satu jaringan dengan Server maupun Router.



3. Pastikan ketiga mesin anda dapat melakukan komunikasi dengan perintah “PING”

### C. Melakukan Instalasi Web Server dan FTP Server

1. Lakukan instalasi apache2, php7.0 dan vsftpd dengan perintah

```
# apt-get install php libapache2-mod-php vsftpd
```

2. Mengecek status dari apache dan vsftpd

```
# service apache2 status  
  
# service vsftpd status
```

```
root@idris:~#  
root@idris:~#  
root@idris:~# service apache2 status  
• apache2.service - The Apache HTTP Server  
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)  
   Active: active (running) since Sat 2021-10-23 17:10:54 UTC; 2min 14s ago  
     Docs: https://httpd.apache.org/docs/2.4/  
  Main PID: 8291 (apache2)  
    Tasks: 6 (limit: 1072)  
   Memory: 12.5M  
   CGroup: /system.slice/apache2.service  
           └─8291 /usr/sbin/apache2 -k start  
             └─8294 /usr/sbin/apache2 -k start  
               └─8295 /usr/sbin/apache2 -k start  
                 └─8296 /usr/sbin/apache2 -k start  
                   └─8297 /usr/sbin/apache2 -k start  
                     └─8298 /usr/sbin/apache2 -k start
```

```
root@idris:~#  
root@idris:~#  
root@idris:~# service vsftpd status  
• vsftpd.service - vsftpd FTP server  
   Loaded: loaded (/lib/systemd/system/vsftpd.service; enabled; vendor preset: enabled)  
   Active: active (running) since Sat 2021-10-23 17:10:44 UTC; 4min 7s ago  
  Main PID: 5836 (vsftpd)  
    Tasks: 1 (limit: 1072)  
   Memory: 588.0K  
   CGroup: /system.slice/vsftpd.service  
           └─5836 /usr/sbin/vsftpd /etc/vsftpd.conf  
  
Oct 23 17:10:44 idris systemd[1]: Starting vsftpd FTP server...  
Oct 23 17:10:44 idris systemd[1]: Started vsftpd FTP server.
```

3. Mengecek versi dari php yang sudah dipasang

```
# php -version
```

```
root@idris:~# php -version  
PHP 7.4.3 (cli) (built: Aug 13 2021 05:39:12) ( NTS )  
Copyright (c) The PHP Group  
Zend Engine v3.4.0, Copyright (c) Zend Technologies  
    with Zend OPcache v7.4.3, Copyright (c), by Zend Technologies  
root@idris:~#
```

## D. Konfigurasi root folder FTP ke /var/www/html

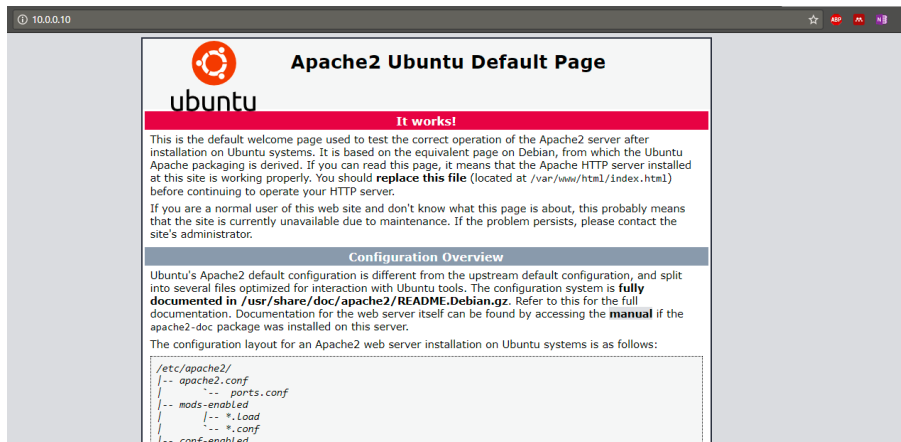
1. Buka konfigurasi vsftpd dengan perintah

```
# nano /etc/vsftpd.conf
```

2. Hilangkan tanda “#” pada bagian **write\_enable=yes**
3. Tambahkan pada bagian bawah baris konfigurasi dengan “**local\_root=/var/www/html**”
4. Simpan konfigurasi dan restart vsftpd service  
service vsftpd restart  
systemctl restart vsftpd

## E. Pengujian Hasil

1. Buka web browser Anda (pada HOST OS) dan akses IP Address dari mesin server, pastikan hasil yang anda dapatkan seperti gambar dibawah ini.



2. Buat file info.php dengan cara

```
# nano /var/www/html/info.php

<?php

phpinfo();

?>
```



System	Linux popmie-server 4.4.0-87-generic #110-Ubuntu SMP Tue Jul 18 12:55:35 UTC 2017 x86_64
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.0/apache2
Loaded Configuration File	/etc/php/7.0/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.0/apache2/conf.d
Additional .ini files parsed	/etc/php/7.0/apache2/conf.d/10-opcache.ini, /etc/php/7.0/apache2/conf.d/10-pdo.ini, /etc/php/7.0/apache2/conf.d/20-calendar.ini, /etc/php/7.0/apache2/conf.d/20-ctype.ini, /etc/php/7.0/apache2/conf.d/20-curl.ini, /etc/php/7.0/apache2/conf.d/20-fileinfo.ini, /etc/php/7.0/apache2/conf.d/20-ftp.ini, /etc/php/7.0/apache2/conf.d/20-gettext.ini, /etc/php/7.0/apache2/conf.d/20-iconv.ini, /etc/php/7.0/apache2/conf.d/20-json.ini, /etc/php/7.0/apache2/conf.d/20-phar.ini, /etc/php/7.0/apache2/conf.d/20-posix.ini, /etc/php/7.0/apache2/conf.d/20-readline.ini, /etc/php/7.0/apache2/conf.d/20-shmop.ini, /etc/php/7.0/apache2/conf.d/20-sockets.ini, /etc/php/7.0/apache2/conf.d/20-sysmsg.ini, /etc/php/7.0/apache2/conf.d/20-syssem.ini, /etc/php/7.0/apache2/conf.d/20-sysvshm.ini, /etc/php/7.0/apache2/conf.d/20-tokenizer.ini
PHP API	20151012
PHP Extension	20151012
Zend Extension	320151012
Zend Extension Build	API320151012.NTS
PHP Extension Build	API20151012.NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	disabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled

3. Buka command prompt ketikkan perintah ftp diikuti alamat IP server
4. Kemudian ketikkan username dan password server Anda, lalu ketikkan perintah “ls”

```
Command Prompt - ftp 10.0.0.2
Microsoft Windows [Version 10.0.19043.12]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Reficul>ftp 10.0.0.2
Connected to 10.0.0.2.
220 (vsFTPd 3.0.3)
200 Always in UTF8 mode.
User (10.0.0.2:(none)): idris
331 Please specify the password.
Password:
230 Login successful.
ftp> ls
200 PORT command successful. Consider us
150 Here comes the directory listing.
index.html
info.php
226 Directory send OK.
ftp: 25 bytes received in 0.00Seconds 12
ftp>
```

5. Masih di bagian ftp (command prompt), ketikkan perintah berikut ini, dan tulis hasilnya

`cd /var/www/html`

`ls -l`

hasil

```
ftp> cd /var/www/html
250 Directory successfully changed.
ftp> ls -l
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rw-r--r--    1 1000    0          10671 Nov 11 02:47 index.html
-rw-r--r--    1 1000    0          20 Nov 11 08:29 info.php
226 Directory send OK.
ftp: 137 bytes received in 0.01Seconds 27.40Kbytes/sec.
ftp> |
```

6. Ubah **permission folder html** dengan perintah berikut. Tulis hasil pengamatan Anda!  
Di server-ubuntu

```
chown -R <username_Anda> /var/www/html
```

Di FTP

```
ls -l
```

hasil

```
ftp> ls -l
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rw-r--r--    1 1000    0          10671 Nov 11 02:47 index.html
-rw-r--r--    1 1000    0          20 Nov 11 08:29 info.php
226 Directory send OK.
ftp: 137 bytes received in 0.01Seconds 27.40Kbytes/sec.
```

- F. Lakukan pengunggahan sebuah berkas ke dalam server dengan memanfaatkan FTP, dokumentasikan proses yang anda lakukan pada kotak di bawah ini!**

Hasil

1.Lakukan server config pada ubuntu server

```
root@satriya:/var/www/html# sudo ufw allow 21/tcp
Skipping adding existing rule
Skipping adding existing rule (v6)
```

2.close dan login ulang menggunakan cmd agar bisa melakukan perintah put

```
C:\Users\HP>ftp 10.0.0.2
Connected to 10.0.0.2.
220 (vsFTPd 3.0.5)
200 Always in UTF8 mode.
User (10.0.0.2:(none)): satriya
331 Please specify the password.
Password:
230 Login successful.
```

3. ubah directory pada file yang ingin dituju menggunakan cmd

```
ftp> lcd "C:\New folder"
Local directory now C:\New folder.
```

4. letakkan file yang dibuat pada server menggunakan cmd

```
ftp> put rafli.txt
200 PORT command successful. Consider using PASV.
150 Ok to send data.
226 Transfer complete.
ftp: 2114 bytes sent in 0.00Seconds 2114000.00Kbytes/sec.
```

5. lihat directory di server menggunakan cmd

```
ftp> dir
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rw-r--r--  1 1000      0      10671 Nov 11 02:47 index.html
-rw-r--r--  1 1000      0      20 Nov 11 08:29 info.php
-rw-----  1 1000    1000    2114 Nov 16 03:13 rafli.txt
226 Directory send OK.
ftp: 204 bytes received in 0.01Seconds 17.00Kbytes/sec.
```

6. lakukan perintah cd /var/www/html pada server yang tadinya dari home akan pindah ke var/www/html

```
root@satriya:/home/satriya# cd /var/www/html
root@satriya:/var/www/html#
```

7. lakukan perintah chmod 644 NamaFile.txt pada server

```
root@satriya:/home/satriya# cd /var/www/html
root@satriya:/var/www/html# chmod 644 rafli.txt
root@satriya:/var/www/html# _
```

8.lakukan perintah dir,seharusnya tampilan sebagai berikut

```
ftp> dir
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rw-r--r--      1 1000      0          10671 Nov 11 02:47 index.html
-rw-r--r--      1 1000      0           20 Nov 11 08:29 info.php
-rw-r--r--      1 1000    1000       16795 Nov 16 05:14 rafli.txt
226 Directory send OK.
ftp: 204 bytes received in 0.01Seconds 25.50Kbytes/sec.
```

9.ketik 10.0.0.2/NamaFile.txt,seharusnya yang keluar pada web adalah file yang dituju

← → ↻ ⚠ Not secure | 10.0.0.2/rafli.txt

NAMA SAYA RAFLI

Lorem ipsum dolor, sit amet consectetur adipisicing elit. Vero magni qui quo, non blanditiis doloribus id tenetur enim odit quae. Ut quam mollitia ea libero vitae accusamus corrupti id? Sequi, unde vero? Aliquid cumque quae accusantium esse voluptatum officiis doloremque est, minus iure, fugiat excepturi fugit vel sint omnis. Corporis quidem incidunt facere corrupti adipisci, eum libero inventore tempore esse aspernatur at, vitae architecto voluptatibus quasi molestias quam, neque repellat rerum! Fugit minima quia, molestiae sunt modi corrupti laboriosam laborum. Nulla alias cumque doloremque nesciunt repellendus nemo, eum maiores ex consectetur. Veniam, consequuntur tempore neque consequatur asperiores debitis cumque iure ipsum dicta rerum numquam deserunt eveniet voluptates sit! Facere, perferendis totam? Eos magni reprehenderit minus quas voluptatum, maiores amet est sapiente, nemo consequatur quaerat quis architecto earum in esse. Accusamus voluptatibus cupiditate quo nostrum. Laudantium numquam officia distinctio rerum voluptas sint, fuga, animi consectetur mollitia dolorem obcaecati rem optio porro corporis totam esse doloribus harum cum? Reprehenderit natus, consequuntur incidunt assumenda officiis corrupti nulla nemo enim suscipit! Repellendus optio sunt molestiae illum. Minus omnis porro reiciendis, laborum magni dolore, quod nemo mollitia ea harum neque! Nihil ipsum, earum cumque tenetur neque maxime dolores, beatae quam eos laudantium est! Sapiente, ipsam.

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