

Instalasi Wordpress Ubuntu Server + Apache

Oleh : Fathi Muhammad Shalahuddin

Instalasi Server di VirtualBox

Disini saya menggunakan **Ubuntu Server 20.04**

VirtualBox Network Adapter

Mode : Bridge Adapter

Network Connection

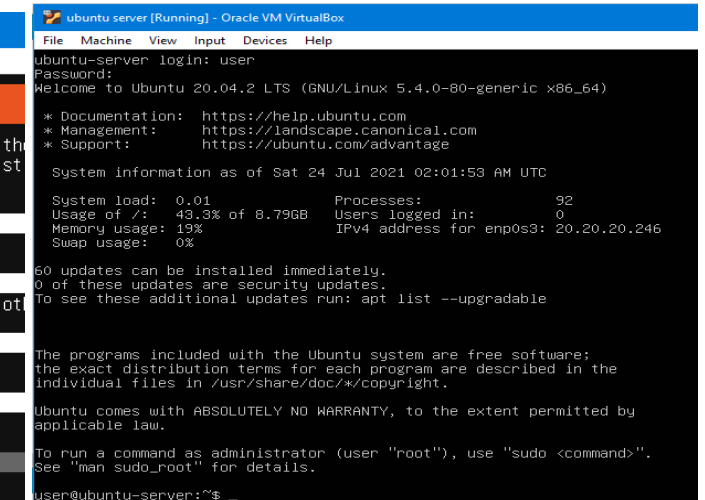
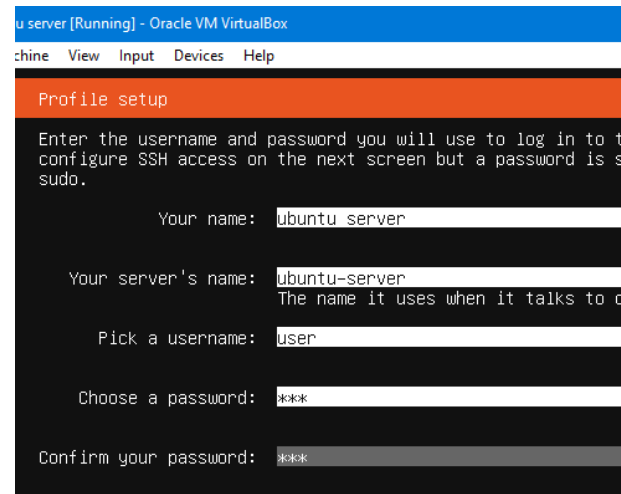
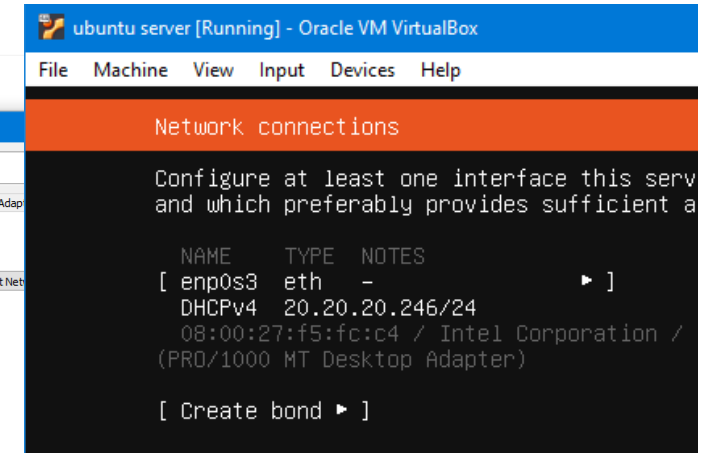
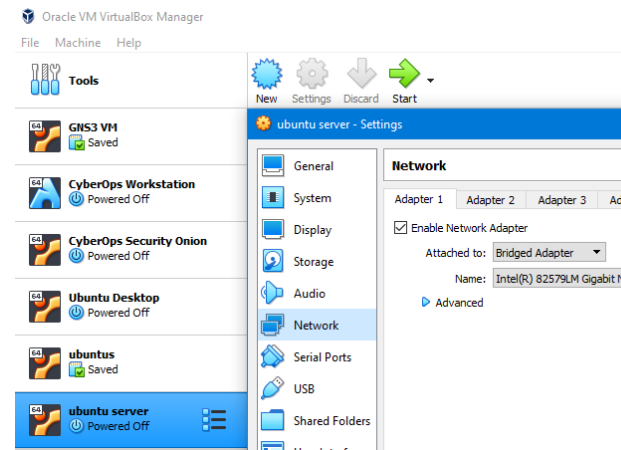
IP DHCP : 20.20.20.246/24

Profile Setup

Server-name : ubuntu-server

Username : user

Password : 123

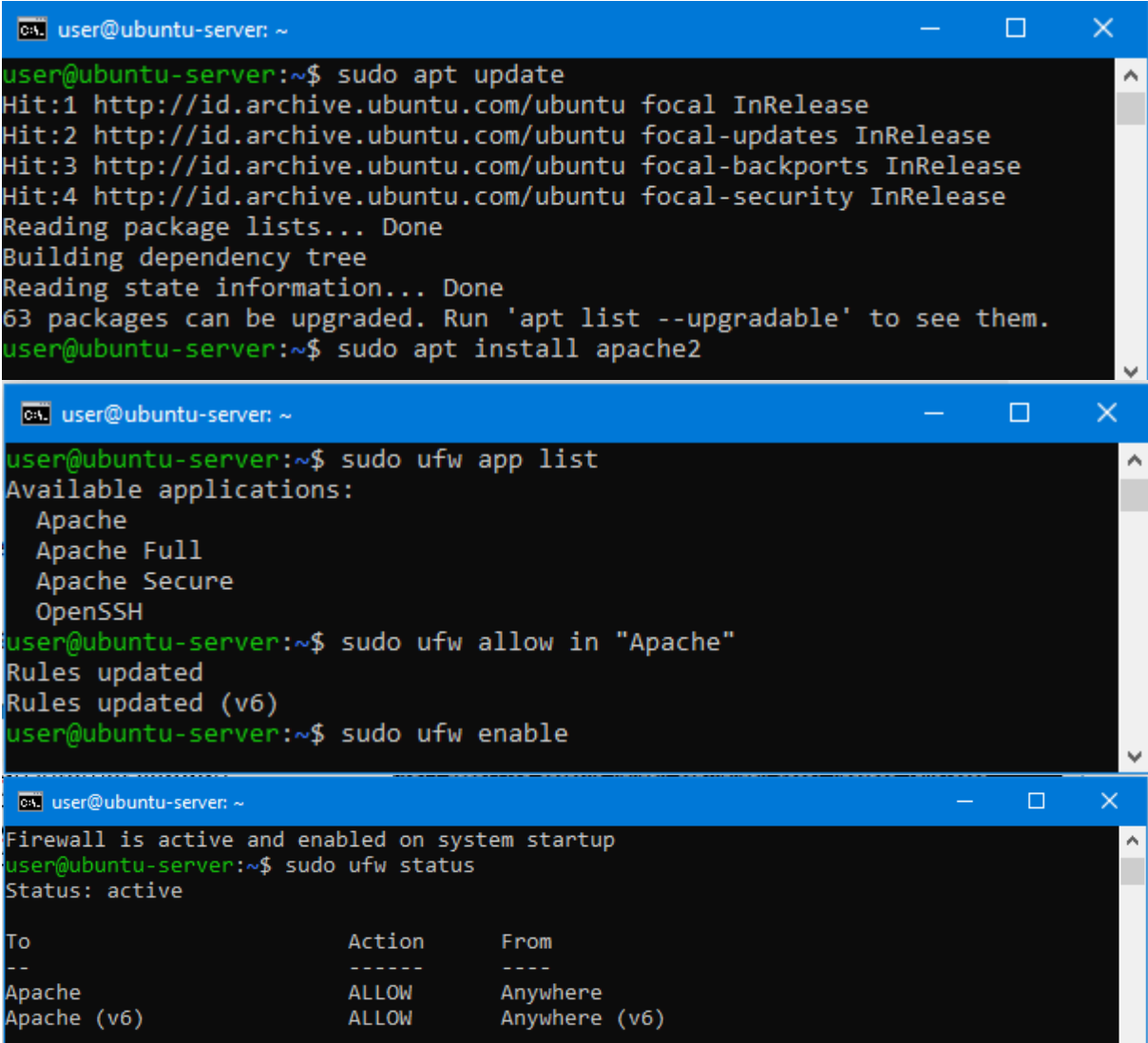


Instalasi Apache

Berikut konfigurasi untuk instalasi web server apache dan juga mengizinkan traffic/lalulintas http untuk webserver apache.

```
sudo apt install apache2  
sudo ufw allow in "Apache"  
sudo ufw enable
```

- **Apache:** Profil ini hanya membuka port 80
- **Apache Full:** Profil ini membuka baik port 80 dan port 443
- **Apache Secure:** Profile ini hanya membuka port 443



```
user@ubuntu-server: ~  
user@ubuntu-server:~$ sudo apt update  
Hit:1 http://id.archive.ubuntu.com/ubuntu focal InRelease  
Hit:2 http://id.archive.ubuntu.com/ubuntu focal-updates InRelease  
Hit:3 http://id.archive.ubuntu.com/ubuntu focal-backports InRelease  
Hit:4 http://id.archive.ubuntu.com/ubuntu focal-security InRelease  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
63 packages can be upgraded. Run 'apt list --upgradable' to see them.  
user@ubuntu-server:~$ sudo apt install apache2  
  
user@ubuntu-server: ~  
user@ubuntu-server:~$ sudo ufw app list  
Available applications:  
  Apache  
  Apache Full  
  Apache Secure  
  OpenSSH  
user@ubuntu-server:~$ sudo ufw allow in "Apache"  
Rules updated  
Rules updated (v6)  
user@ubuntu-server:~$ sudo ufw enable  
  
user@ubuntu-server: ~  
Firewall is active and enabled on system startup  
user@ubuntu-server:~$ sudo ufw status  
Status: active  
  
To Action From  
--  
Apache ALLOW Anywhere  
Apache (v6) ALLOW Anywhere (v6)
```

Instalasi MariaDB

Berikut konfigurasi untuk instalasi MariaDB dan juga menjalankan konfigurasi keamanan untuk menghapus beberapa pengaturan default yang tidak aman.

```
sudo apt install mariadb-server mariadb-client
sudo mysql_secure_installation
```

```
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...#####
user@ubuntu-server:~$ sudo apt install mariadb-server mariadb-client
```

```
user@ubuntu-server: ~
user@ubuntu-server:~$ sudo mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
      SERVERS IN PRODUCTION USE!  PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current
password for the root user.  If you've just installed MariaDB, and
you haven't set the root password yet, the password will be blank,
so you should just press enter here.
```

```
user@ubuntu-server: ~
Reload privilege tables now? [Y/n] y
... Success!

Cleaning up...

All done!  If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
user@ubuntu-server:~$
```

Instalasi php

Untuk instalasi php kita juga memerlukan beberapa ekstensi tambahan dan modul agar bahasa pemrograman php bisa berkomunikasi dengan basis data MariaDB(MySQL) dan juga web server apache.

```
sudo apt install php libapache2-mod-php php-mysql php-curl  
php-gd php-mbstring php-xml php-xmlrpc php-soap php-intl  
php-zip
```

```
user@ubuntu-server: ~  
user@ubuntu-server:~$ sudo apt install php libapache2-mod-php php-mysql php-curl php-gd  
php-mbstring php-xml php-xmlrpc php-soap php-intl php-zip
```

```
user@ubuntu-server:~$ php -v  
PHP 7.4.3 (cli) (built: Jul  5 2021 15:13:35) ( 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  
user@ubuntu-server:~$
```

```
user@ubuntu-server: ~  
Setting up php-mbstring (2:7.4+75) ...  
Setting up php-xmlrpc (2:7.4+75) ...  
Setting up libtiff5:amd64 (4.1.0+git191117-2ubun  
tu0.20.04.1) ...Setting up libfontconfig1:amd64  
(2.13.1-2ubuntu3) ...  
Setting up libgd3:amd64 (2.2.5-5.2ubuntu2) ...  
Setting up php7.4-gd (7.4.3-4ubuntu2.5) ...  
debconf: unable to initialize frontend: Dialog  
debconf: (Dialog frontend requires a screen at l  
east 13 lines tall and 31 columns wide.)  
debconf: falling back to frontend: Readline  
  
Creating config file /etc/php/7.4/mods-available  
/gd.ini with new version  
Setting up php-gd (2:7.4+75) ...  
Processing triggers for libc-bin (2.31-0ubuntu9.  
2) ...  
Processing triggers for man-db (2.9.1-1) ...  
Processing triggers for libapache2-mod-php7.4 (7  
.4.3-4ubuntu2.5) ...  
Processing triggers for php7.4-cli (7.4.3-4ubunt  
u2.5) ...  
user@ubuntu-server:~$
```

Membuat Virtual Host untuk Website

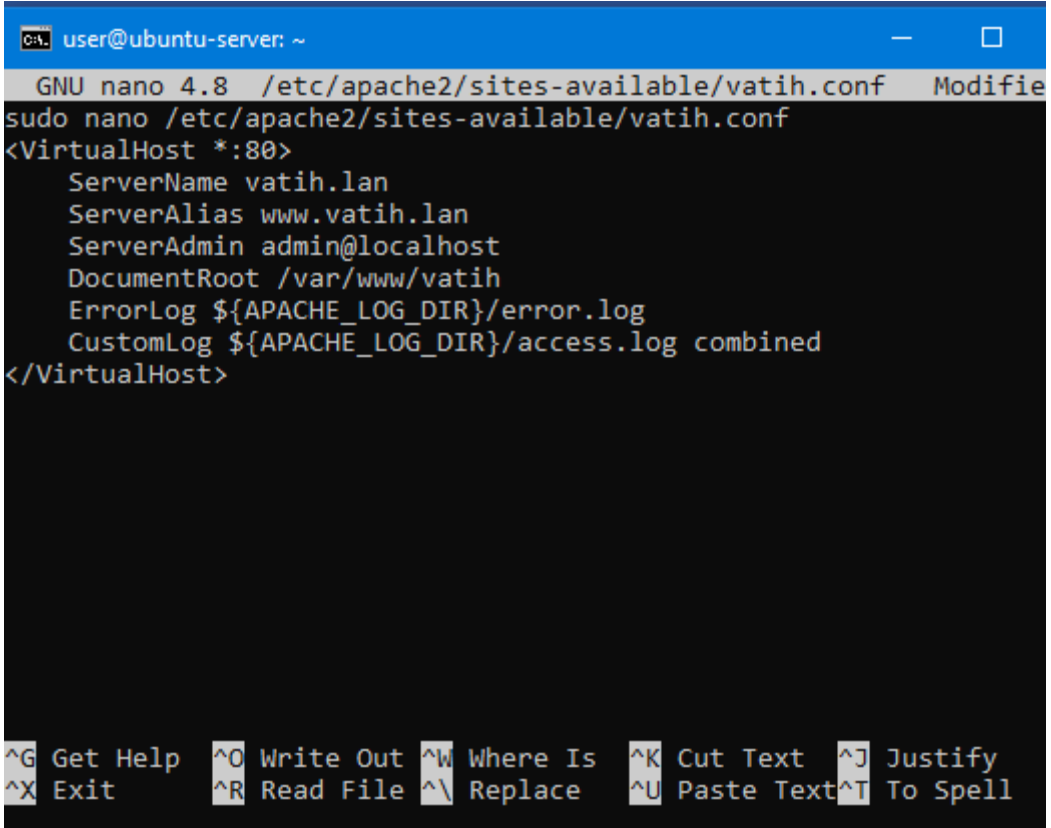
Sebelum membuat virtual host, saya akan membuat direktori baru dan juga menentukan kepemilikan dari direktori tersebut.

Setelah kita membuat direktori barulah kita menambahkan konfigurasi virtual host didalam file .conf

```
sudo mkdir /var/www/vatih
sudo chown -R $USER:$USER /var/www/vatih

sudo nano /etc/apache2/sites-available/vatih.conf
<VirtualHost *:80>
    ServerName vatih.lan
    ServerAlias www.vatih.lan
    ServerAdmin admin@localhost
    DocumentRoot /var/www/vatih
    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

```
user@ubuntu-server:~$ sudo mkdir /var/www/vatih
user@ubuntu-server:~$ sudo chown -R $USER:$USER /var/www/vatih
user@ubuntu-server:~$ sudo nano /etc/apache2/sites-available/vatih.conf
```



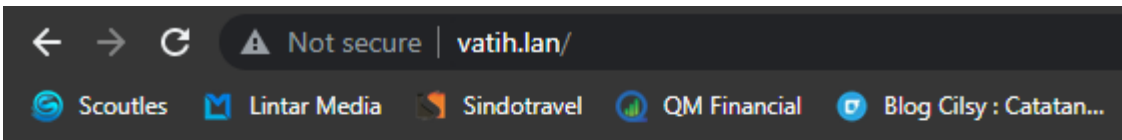
```
GNU nano 4.8 /etc/apache2/sites-available/vatih.conf
sudo nano /etc/apache2/sites-available/vatih.conf
<VirtualHost *:80>
    ServerName vatih.lan
    ServerAlias www.vatih.lan
    ServerAdmin admin@localhost
    DocumentRoot /var/www/vatih
    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>
```

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify
^X Exit ^R Read File ^\ Replace ^U Paste Text ^T To Spell

Membuat Virtual Host untuk Website

Selanjutnya kita menambahkan serta mengaktifkan virtual host dan juga mendisable web host bawaan dari apache web server

```
sudo nano /etc/hosts
sudo a2ensite vatih
sudo a2dissite 000-default
sudo apache2ctl configtest
sudo systemctl reload apache2
```



Index of /

Name	Last modified	Size	Description
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Apache/2.4.41 (Ubuntu) Server at vatih.lan Port 80

```
user@ubuntu-server: ~
GNU nano 4.8 /etc/hosts
127.0.0.1 localhost
127.0.1.1 ubuntu-server
20.20.20.246 vatih.lan

# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet

^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text  ^J Jus
^X Exit      ^R Read File  ^\ Replace   ^U Paste Text ^T To
```

```
user@ubuntu-server: ~$ sudo a2ensite vatih
a2dissite 000-default
sudo apache2ctl configtest
sudo systemctl reload apache2Site vatih already enabled
user@ubuntu-server:~$ sudo a2dissite 000-default
Site 000-default already disabled
user@ubuntu-server:~$ sudo apache2ctl configtest
AH00558: apache2: Could not reliably determine the server's fully
domain name, using 127.0.1.1. Set the 'ServerName' directive glo
uppress this message
Syntax OK
user@ubuntu-server:~$ sudo systemctl reload apache2
```

Membuat Database di MariaDB

Berikut ini beberapa konfigurasi yang saya terapkan untuk membuat database di mariadb.

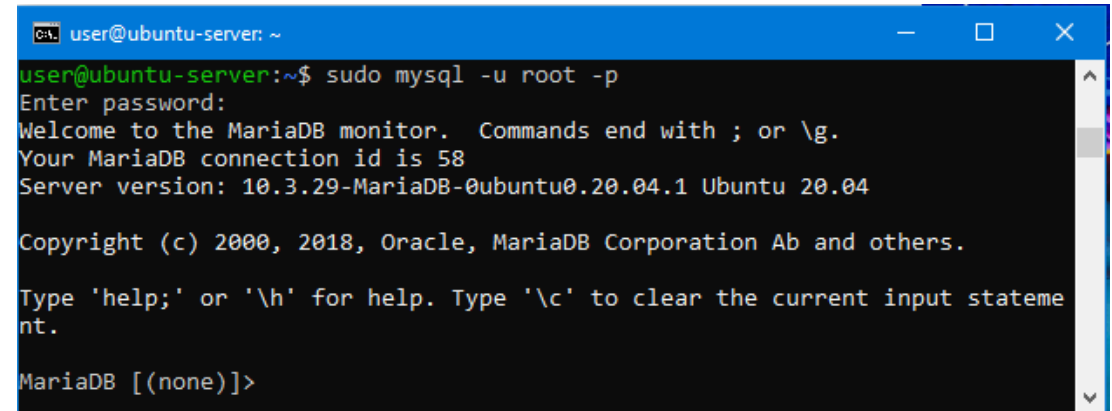
```
sudo mysql -u root -p
```

```
CREATE DATABASE wpdb;
```

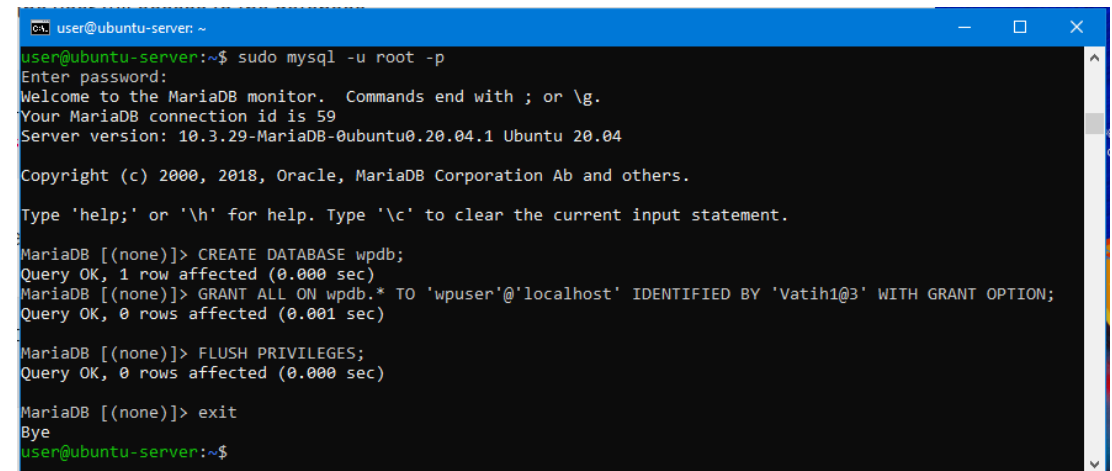
```
CREATE USER 'wpuser'@'localhost' IDENTIFIED BY 'Vatih1@3';
```

```
GRANT ALL ON wpdb.* TO 'wpuser'@'localhost' IDENTIFIED BY 'Vatih1@3' WITH GRANT OPTION;
```

```
FLUSH PRIVILEGES;  
EXIT;
```



```
user@ubuntu-server: ~  
user@ubuntu-server:~$ sudo mysql -u root -p  
Enter password:  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 58  
Server version: 10.3.29-MariaDB-0ubuntu0.20.04.1 Ubuntu 20.04  
  
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
MariaDB [(none)]>
```



```
user@ubuntu-server: ~  
user@ubuntu-server:~$ sudo mysql -u root -p  
Enter password:  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 59  
Server version: 10.3.29-MariaDB-0ubuntu0.20.04.1 Ubuntu 20.04  
  
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
  
MariaDB [(none)]> CREATE DATABASE wpdb;  
Query OK, 1 row affected (0.000 sec)  
MariaDB [(none)]> GRANT ALL ON wpdb.* TO 'wpuser'@'localhost' IDENTIFIED BY 'Vatih1@3' WITH GRANT OPTION;  
Query OK, 0 rows affected (0.001 sec)  
  
MariaDB [(none)]> FLUSH PRIVILEGES;  
Query OK, 0 rows affected (0.000 sec)  
  
MariaDB [(none)]> exit  
Bye  
user@ubuntu-server:~$
```


Instalasi Wordpress

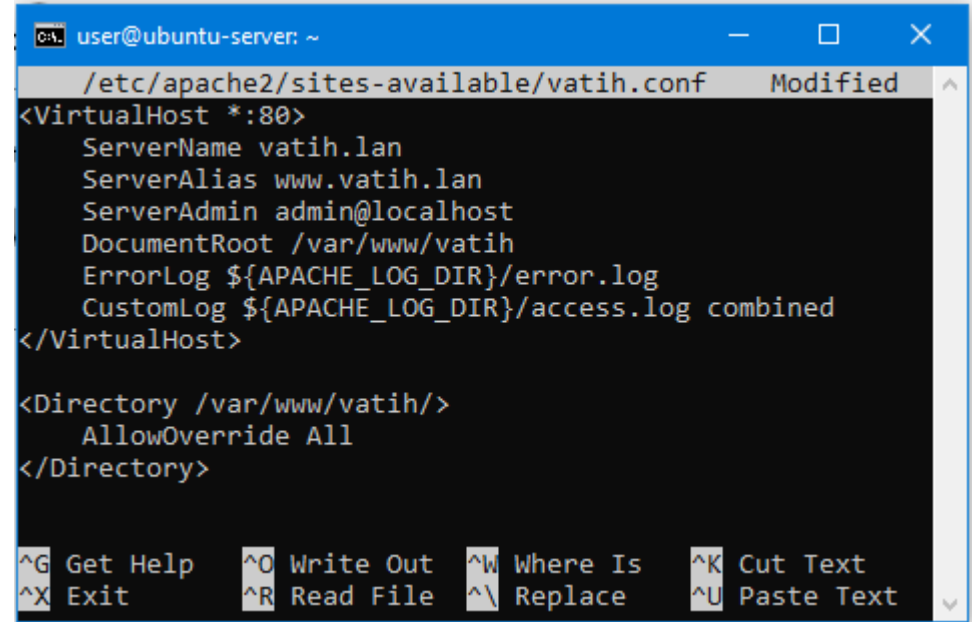
Sebelum menginstall wordpress saya akan mengizinkan berkas .htaccess pada web server apache.

```
sudo nano /etc/apache2/sites-available/vatih.conf
```

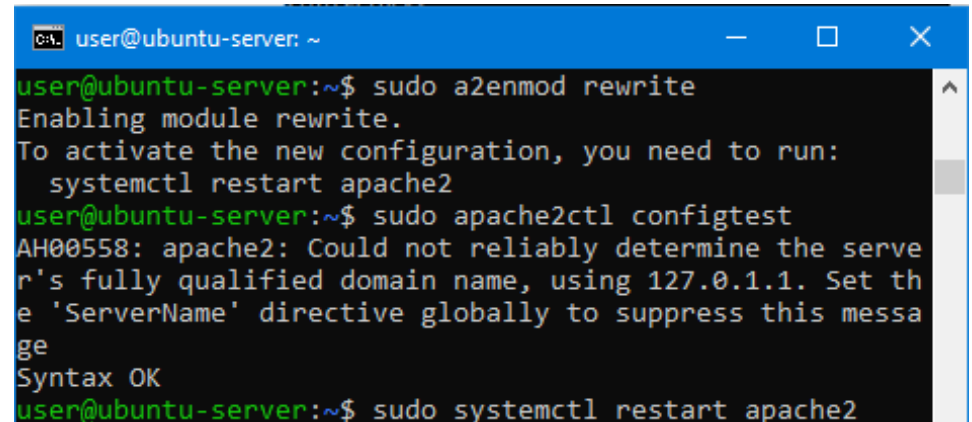
```
<Directory /var/www/vatih/>  
    AllowOverride All  
</Directory>
```

Selanjutnya saya mengaktifkan modul mod_rewrite untuk memanfaatkan fitur permalink.

```
sudo a2enmod rewrite  
sudo apache2ctl configtest  
sudo systemctl restart apache2
```

A screenshot of a terminal window showing the nano text editor editing the file /etc/apache2/sites-available/vatih.conf. The file content is as follows:

```
<VirtualHost *:80>  
    ServerName vatih.lan  
    ServerAlias www.vatih.lan  
    ServerAdmin admin@localhost  
    DocumentRoot /var/www/vatih  
    ErrorLog ${APACHE_LOG_DIR}/error.log  
    CustomLog ${APACHE_LOG_DIR}/access.log combined  
</VirtualHost>  
  
<Directory /var/www/vatih/>  
    AllowOverride All  
</Directory>
```

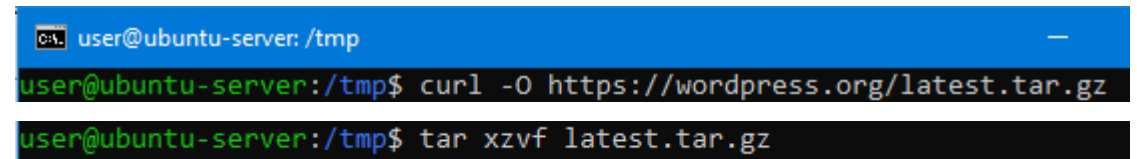
The bottom of the window shows nano editor shortcuts: ^G Get Help, ^O Write Out, ^W Where Is, ^K Cut Text, ^X Exit, ^R Read File, ^\ Replace, ^U Paste Text.A screenshot of a terminal window showing the execution of several commands to enable the rewrite module and restart Apache. The output is as follows:

```
user@ubuntu-server:~$ sudo a2enmod rewrite  
Enabling module rewrite.  
To activate the new configuration, you need to run:  
    systemctl restart apache2  
user@ubuntu-server:~$ sudo apache2ctl configtest  
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 127.0.1.1. Set the 'ServerName' directive globally to suppress this message  
Syntax OK  
user@ubuntu-server:~$ sudo systemctl restart apache2
```

Instalasi Wordpress

Mendownload wordpress dan disimpan di direktori sementara, kemudian mengekstrak file wordpress yang tadi sudah di download.

```
cd /tmp
curl -O https://wordpress.org/latest.tar.gz
tar xzvf latest.tar.gz
```

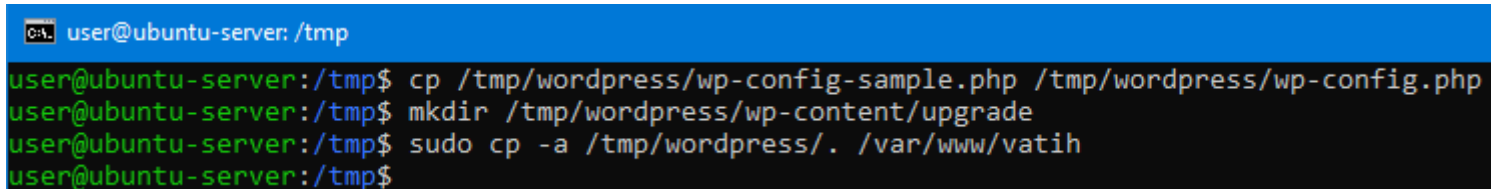


```
user@ubuntu-server: /tmp
user@ubuntu-server:/tmp$ curl -O https://wordpress.org/latest.tar.gz
user@ubuntu-server:/tmp$ tar xzvf latest.tar.gz
```

Selanjutnya kita akan copy file yang sudah diekstrak tadi kedalam direktori yang kita gunakan dan membuat direktori /upgrade agar tidak ada masalah perizinan ketika memperbaharui software

```
cp /tmp/wordpress/wp-config-sample.php /tmp/wordpress/wp-config.php
mkdir /tmp/wordpress/wp-content/upgrade

sudo cp -a /tmp/wordpress/. /var/www/vatih
```



```
user@ubuntu-server: /tmp
user@ubuntu-server:/tmp$ cp /tmp/wordpress/wp-config-sample.php /tmp/wordpress/wp-config.php
user@ubuntu-server:/tmp$ mkdir /tmp/wordpress/wp-content/upgrade
user@ubuntu-server:/tmp$ sudo cp -a /tmp/wordpress/. /var/www/vatih
user@ubuntu-server:/tmp$
```

Konfigurasi Direktori Wordpress

Sebelum mengkonfigurasi direktori kita akan menyesuaikan kepemilikan dan juga izin untuk memodifikasi file.

```
sudo chown -R www-data:www-data /var/www/vatih
sudo find /var/www/vatih/ -type d -exec chmod 750 {} \;
sudo find /var/www/vatih/ -type f -exec chmod 640 {} \;
```

Kemudian kita ambil secret key api wordpress untuk mengamankan database.

<https://api.wordpress.org/secret-key/1.1/salt/>

Terakhir kita masukkan secret key api wordpress dan menyesuaikan nama db, username, dan juga password yang sudah kita buat di MariaDB

```
sudo nano /var/www/vatih/wp-config.php
```

```
user@ubuntu-server: /tmp
user@ubuntu-server:/tmp$ sudo chown -R www-data:www-data /var/www/vatih
user@ubuntu-server:/tmp$ sudo find /var/www/vatih/ -type d -exec chmod 750 {} \;
user@ubuntu-server:/tmp$ sudo find /var/www/vatih/ -type f -exec chmod 640 {} \;
user@ubuntu-server:/tmp$
```

api.wordpress.org/secret-key/1.1/salt/

Scoutles Lintar Media Sindottravel QM Financial Blog Cilsy : Catatan... Data Base Penting

```
define('AUTH_KEY', 'tEn{UDzGFU`@aSLNjI;Ns-^5<+bX99ATU_2C>z$`xv|Cn<BwNL`q+9_u,h)aQc-');
define('SECURE_AUTH_KEY', 'KL<Gu?`rVdm)K@>& -#!{+ajj-pdUeM-hPRJ/oVSR|eN_%KrL_,kzyhx2$SQ#R.Q');
define('LOGGED_IN_KEY', '%A>f_h9mb*Yzq+Zt)C@XPtCeVSI{y-j1*$$.1&4;ccx;=W?+Fk<t81^4GNq:YB0>');
define('NONCE_KEY', 'x6+huav1-;_D7Ztr%wPBR;<;^^Ps]l=u|/s&:5= |8 kX-9Y1.|kN[KZcjQ*Bc|$');
define('AUTH_SALT', 'h3mf7<2:x:JlLu/od+9Mr)HR^URZVG0N[/6aLLSR|1lgJN*-}F13=|b9iT$XLY4M');
define('SECURE_AUTH_SALT', 'h@,Sz]pqu^T9R<8&104$I+zm|h&hCobo-h9;$hU$npD{1nd>#6i#=#DrC$3(1It)&');
define('LOGGED_IN_SALT', '7titu^ZS1>~>^JQ9Ya9<d^~9n{epK~Xwer1{@CBK$}Z8h<T@&:{X}aRK7_>`Uf7');
define('NONCE_SALT',
```

```
GNU nano 4.8 /var/www/vatih/wp-config.php
/** The name of the database for WordPress */
define( 'DB_NAME', 'wpdb' );

/** MySQL database username */
define( 'DB_USER', 'wpuser' );

/** MySQL database password */
define( 'DB_PASSWORD', 'Vatih1@3' );

/** MySQL hostname */
define( 'DB_HOST', 'localhost' );

/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8' );
```

```
GNU nano 4.8 /var/www/vatih/wp-config.php Modified
* You can change these at any point in time to invalidate all existing cookies.
* This will force all users to have to log in again.
*
* @since 2.6.0
define('AUTH_KEY', 'tEn{UDzGFU`@aSLNjI;Ns-^5<+bX99ATU_2C>z$`xv|Cn<BwNL`q+9_u,h)aQc-');
define('SECURE_AUTH_KEY', 'KL<Gu?`rVdm)K@>& -#!{+ajj-pdUeM-hPRJ/oVSR|eN_%KrL_,kzyhx2$SQ#R.Q');
define('LOGGED_IN_KEY', '%A>f_h9mb*Yzq+Zt)C@XPtCeVSI{y-j1*$$.1&4;ccx;=W?+Fk<t81^4GNq:YB0>');
define('NONCE_KEY', 'x6+huav1-;_D7Ztr%wPBR;<;^^Ps]l=u|/s&:5= |8 kX-9Y1.|kN[KZcjQ*Bc|$');
define('AUTH_SALT', 'h3mf7<2:x:JlLu/od+9Mr)HR^URZVG0N[/6aLLSR|1lgJN*-}F13=|b9iT$XLY4M');
define('SECURE_AUTH_SALT', 'h@,Sz]pqu^T9R<8&104$I+zm|h&hCobo-h9;$hU$npD{1nd>#6i#=#DrC$3(1It)&');
define('LOGGED_IN_SALT', '7titu^ZS1>~>^JQ9Ya9<d^~9n{epK~Xwer1{@CBK$}Z8h<T@&:{X}aRK7_>`Uf7');
define('NONCE_SALT',
```

Konfigurasi Direktori Wordpress

Sebelum mengkonfigurasi direktori kita akan menyesuaikan kepemilikan dan juga izin untuk memodifikasi file.

```
sudo chown -R www-data:www-data /var/www/vatih
sudo find /var/www/vatih/ -type d -exec chmod 750 {} \;
sudo find /var/www/vatih/ -type f -exec chmod 640 {} \;
```

Kemudian kita ambil secret key api wordpress untuk mengamankan database.

<https://api.wordpress.org/secret-key/1.1/salt/>

Terakhir kita masukkan secret key api wordpress dan menyesuaikan nama db, username, dan juga password yang sudah kita buat di MariaDB

```
sudo nano /var/www/vatih/wp-config.php
```

```
user@ubuntu-server: /tmp
user@ubuntu-server:/tmp$ sudo chown -R www-data:www-data /var/www/vatih
user@ubuntu-server:/tmp$ sudo find /var/www/vatih/ -type d -exec chmod 750 {} \;
user@ubuntu-server:/tmp$ sudo find /var/www/vatih/ -type f -exec chmod 640 {} \;
user@ubuntu-server:/tmp$
```

api.wordpress.org/secret-key/1.1/salt/

Scoutles Lintar Media Sindottravel QM Financial Blog Cilsy : Catatan... Data Base Penting

```
define('AUTH_KEY', 'tEn{UDzGFU`@aSLNjI;Ns-^5<+bX99ATU_2C>z$`xv|Cn<BwNL`q+9_u,h)aQc-');
define('SECURE_AUTH_KEY', 'KL<Gu?`rVdm|K@>& -#!{+ajj-pdUeM-hPRJ/oVSR|eN_%KrL_,kzyhx2$SQ#R.Q');
define('LOGGED_IN_KEY', '%A>f_h9mb*Yzq+Zt)C@XPtCeVSI{y-j1*$$.1&4;ccx;=W?+Fk<t81^4GNq:YB0>');
define('NONCE_KEY', 'x6+huav1-;_D7Ztr%wPBR;<;^^Ps]l=u|/s&:5= |8 kX-9Y1.|kN[KZcjQ*Bc|$');
define('AUTH_SALT', 'h3mf7<2:x:JlLu/od+9Mr)HR^URZVG0N[/6aLLSR|1lgJN*-}F13=|b9iT$XLY4M');
define('SECURE_AUTH_SALT', 'h@,Sz]pqu^T9R<8&104$I+zm|h&hCobo-h9;$hU$npD{1nd>#6i#=#DrC$3(1It)&');
define('LOGGED_IN_SALT', '7titu^ZS1>~>^JQ9Ya9<d^~9n{epK~Xwer1{@CBK$}Z8h<T@&:{X}aRK7_>`Uf7');
define('NONCE_SALT',
```

```
GNU nano 4.8 /var/www/vatih/wp-config.php
/** The name of the database for WordPress */
define( 'DB_NAME', 'wpdb' );

/** MySQL database username */
define( 'DB_USER', 'wpuser' );

/** MySQL database password */
define( 'DB_PASSWORD', 'Vatih1@3' );

/** MySQL hostname */
define( 'DB_HOST', 'localhost' );

/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8' );
```

```
GNU nano 4.8 /var/www/vatih/wp-config.php Modified
* You can change these at any point in time to invalidate all existing cookies.
* This will force all users to have to log in again.
*
* @since 2.6.0
define('AUTH_KEY', 'tEn{UDzGFU`@aSLNjI;Ns-^5<+bX99ATU_2C>z$`xv|Cn<BwNL`q+9_u,h)aQc-');
define('SECURE_AUTH_KEY', 'KL<Gu?`rVdm|K@>& -#!{+ajj-pdUeM-hPRJ/oVSR|eN_%KrL_,kzyhx2$SQ#R.Q');
define('LOGGED_IN_KEY', '%A>f_h9mb*Yzq+Zt)C@XPtCeVSI{y-j1*$$.1&4;ccx;=W?+Fk<t81^4GNq:YB0>');
define('NONCE_KEY', 'x6+huav1-;_D7Ztr%wPBR;<;^^Ps]l=u|/s&:5= |8 kX-9Y1.|kN[KZcjQ*Bc|$');
define('AUTH_SALT', 'h3mf7<2:x:JlLu/od+9Mr)HR^URZVG0N[/6aLLSR|1lgJN*-}F13=|b9iT$XLY4M');
define('SECURE_AUTH_SALT', 'h@,Sz]pqu^T9R<8&104$I+zm|h&hCobo-h9;$hU$npD{1nd>#6i#=#DrC$3(1It)&');
define('LOGGED_IN_SALT', '7titu^ZS1>~>^JQ9Ya9<d^~9n{epK~Xwer1{@CBK$}Z8h<T@&:{X}aRK7_>`Uf7');
define('NONCE_SALT',
```

Finishing Wordpress

Terakhir tinggal kita setting secara manual baik itu nama website, login user & password wordpress, dan email kita untuk infirmasi yang dibutuhkan dalam mengintall wordpress.

Terima Kasih

