

LAPORAN RESMI
PRAKTIKUM ORGANISASI DAN ARSITEKTUR KOMPUTER



JUDUL:
Menginstall Wordpress Menggunakan VirtualBox Ubuntu Server

Disusun Oleh :

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PROGRAM STUDI TEKNIK KOMPUTER
FAKULTAS ILMU KOMPUTER
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I. Dasar Teori

A. Definisi Virtual Machine

Apache, MySQL, PHP, dan WordPress adalah empat elemen kunci yang sering digunakan dalam pengembangan web. Apache adalah server web sumber terbuka yang menyediakan platform untuk meng-host situs web dan menyampaikan kontennya kepada pengguna melalui protokol HTTP. MySQL, di sisi lain, adalah sistem manajemen basis data relasional yang digunakan untuk menyimpan dan mengelola data pada situs web. PHP adalah bahasa pemrograman server-side yang sering digunakan untuk membuat halaman web dinamis dan berinteraksi dengan database, sehingga memungkinkan pengembang untuk membuat situs web yang responsif dan interaktif.

WordPress, pada dasarnya, adalah sistem manajemen konten (CMS) yang dibangun dengan menggunakan PHP dan MySQL. Ini menyediakan platform yang memungkinkan pengguna, bahkan tanpa pengetahuan pemrograman yang mendalam, untuk membuat dan mengelola situs web dengan mudah. WordPress menawarkan antarmuka pengguna yang ramah, banyak tema yang dapat disesuaikan, dan dukungan untuk plugin, yang memungkinkan pengguna untuk menyesuaikan fungsionalitas situs mereka sesuai kebutuhan. Dengan menggunakan Apache sebagai server web, MySQL sebagai basis data, dan PHP sebagai bahasa pemrograman, WordPress menjadi solusi lengkap untuk pembuatan dan pengelolaan situs web yang dinamis dan berskala besar.

Komponen yang diperlukan

1. Virtual Machine (Virtual Box 7.0.12)
2. File Iso Linux Ubuntu

STEP 1 : INSTALL APACHE

azza@azza-server:~\$ **sudo apt-get update**

```
azza@azza-server: ~
azza@azza-server:~$ sudo apt-get update
[sudo] password for azza:
Hit:1 http://id.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://id.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://id.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://id.archive.ubuntu.com/ubuntu jammy-security InRelease
```

azza@azza-server:~\$ **sudo apt install apache2**

```
azza@azza-server:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.52-1ubuntu4.6).
The following packages were automatically installed and are no longer required:
  libevent-pthreads-2.1-7 libflashrom1 libftdi1-2 libmecab2 libprotobuf-lite23
  mecab-ipadic mecab-ipadic-utf8 mecab-utils
```

azza@azza-server:~\$ **sudo systemctl enable apache2**

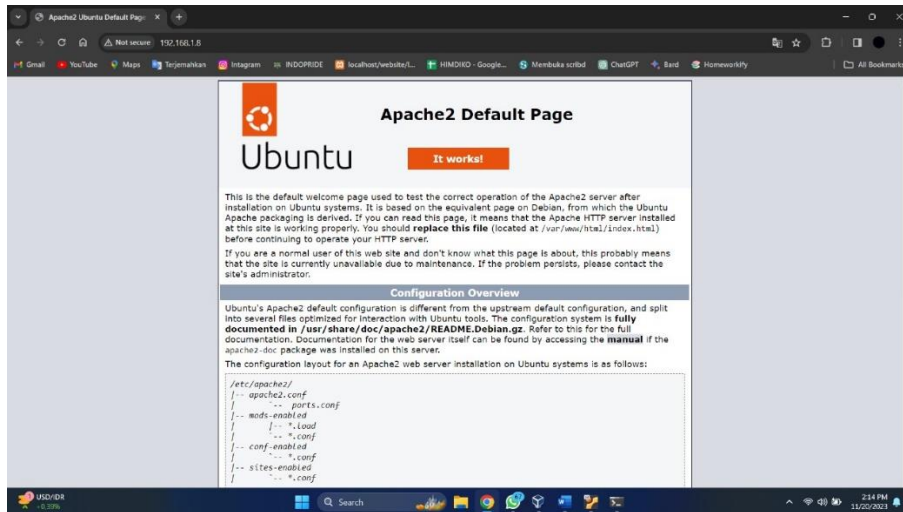
```
azza@azza-server:~$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/systemd/s
Executing: /lib/systemd/systemd-sysv-install enable apache2
```

azza@azza-server:~\$ **sudo systemctl enable apache2**

```
azza@azza-server:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enab
   Docs: https://httpd.apache.org/docs/2.4/
  Main PID: 963 (apache2)
    Tasks: 6 (limit: 1808)
   Memory: 18.2M
      CPU: 4.879s
   CGroup: /system.slice/apache2.service
           └─963 /usr/sbin/apache2 -k start
             └─971 /usr/sbin/apache2 -k start
               └─972 /usr/sbin/apache2 -k start
                 └─973 /usr/sbin/apache2 -k start
                   └─974 /usr/sbin/apache2 -k start
                     └─975 /usr/sbin/apache2 -k start

Nov 20 03:30:21 azza-server systemd[1]: Starting The Apache HTTP Server...
Nov 20 03:30:29 azza-server apachectl[828]: AH00558: apache2: Could not reliably de>Nov
lines 1-19/19 (END)...skipping...
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enab
   Active: active (running) since Mon 2023-11-20 03:30:30 UTC; 10h ago
   Docs: https://httpd.apache.org/docs/2.4/
```

Jika server web Apache2 berjalan, maka akan menampilkan halaman indeks default Apache2.



```
azza@azza-server: ~
Microsoft Windows [Version 10.0.19045.3693]
(c) Microsoft Corporation. All rights reserved.

C:\Users\asus>ssh azza@172.20.10.9
azza@172.20.10.9's password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-88-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Mon Nov 20 01:54:36 PM UTC 2023

System load:  0.02734375      Processes:            146
Usage of /:   70.4% of 11.21GB Users logged in:           1
Memory usage: 20%            IPv4 address for enp0s3: 172.20.10.9
Swap usage:   0%
```

STEP 2 : INSTALL MySQL

```
azza@azza-server:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.20.10.9 netmask 255.255.255.240 broadcast 172.20.10.15
    inet6 fe80::a00:27ff:fe6c:61ea prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:fc:61:ea txqueuelen 1000 (Ethernet)
    RX packets 8175 bytes 5411512 (5.4 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1681 bytes 179931 (179.9 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 1144 bytes 92354 (92.3 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1144 bytes 92354 (92.3 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

azza@azza-server:~\$ sudo apt install mysql-server

```

azza@azza-server:~$ sudo apt install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  cracklib-runtime galera-4 libconfig-inifiles-perl libcrack2 libdaxctl1
  libdbd-mysql-perl libdbi-perl libflashrom1 libftdi1-2 libgflags2.2
  libjudydebian1 libmariadb3 libmysqlclient21 libndctl6 libodbc2 libodbcinst2
  libpcr2-posix3 libpmem1 libsnappy1v5 liburing2 python3-mysqldb rocksdb-tools
  socat unixodbc unixodbc-common wamerican
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  mysql-client-8.0 mysql-client-core-8.0 mysql-server-8.0 mysql-server-core-8.0

```

azza@azza-server:~\$ sudo apt install mysql-server

```

azza@azza-server:~$ sudo mysql_secure_installation

```

Securing the MySQL server deployment.

Enter password for user root:

azza@azza-server:~\$ sudo systemctl enable mysql

azza@azza-server:~\$ sudo systemctl status mysql

STEP 3 : INSTALL PHP

azza@azza-server:~\$ sudo apt install php libapache2-mod php-mysql

```

azza@azza-server:~$ sudo apt install php libapache2-mod-php php-mysql
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
libapache2-mod-php is already the newest version (2:8.1+92ubuntu1).
php is already the newest version (2:8.1+92ubuntu1).
php-mysql is already the newest version (2:8.1+92ubuntu1).
The following packages were automatically installed and are no longer required:
  cracklib-runtime galera-4 libconfig-inifiles-perl libcrack2 libdaxctl1
  libdbd-mysql-perl libdbi-perl libflashrom1 libftdi1-2 libgflags2.2
  libjudydebian1 libmariadb3 libmysqlclient21 libndctl6 libodbc2 libodbcinst2
  libpcr2-posix3 libpmem1 libsnappy1v5 liburing2 python3-mysqldb rocksdb-tools
  socat unixodbc unixodbc-common wamerican
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 7 not upgraded.

```

azza@azza-server:~\$ sudo apt install php-curl php-gd php-mbstring php-xml php-xmlrpc php-soap php-intl php-zip

```

azza@azza-server:~$ sudo apt install php-curl php-gd php-mbstring php-xml php-xmlrpc php-soap php-intl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  cracklib-runtime galera-4 libconfig-inifiles-perl libcrack2 libdaxctl1
  libdbd-mysql-perl libdbi-perl libflashrom1 libftdi1-2 libgflags2.2
  libjudydebian1 libmariadb3 libmysqlclient21 libndctl6 libodbc2 libodbcinst2
  libpcr2-posix3 libpmem1 libsnappy1v5 liburing2 python3-mysqldb rocksdb-tools
  socat unixodbc unixodbc-common wamerican
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libgd3 libonig5 libxmlrpc-epi0 libxpm4 libzip4 php8.1-curl php8.1-gd php8.1-intl
  php8.1-mbstring php8.1-soap php8.1-xml php8.1-xmlrpc php8.1-zip

```

azza@azza-server:~\$ php -v

```

PHP 8.1.2-1ubuntu2.14 (cli) (built: Aug 18 2023 11:41:11) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
with Zend OPcache v8.1.2-1ubuntu2.14, Copyright (c), by Zend Technologies

```

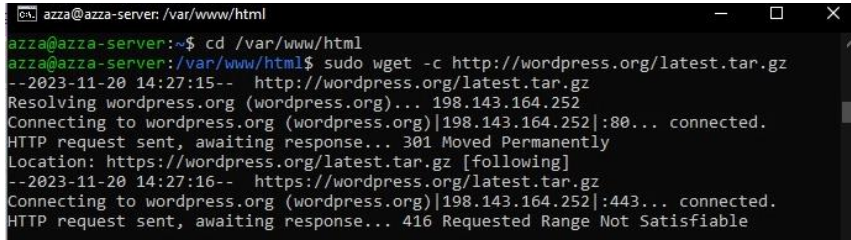
azza@azza-server:~\$ sudo systemctl restart apache2

STEP 4 : INSTALL WORDPRESS

```
azza@azza-server:~$ cd /var/www/html
```

Sekarang unduh instalasi WordPress terbaru dengan perintah berikut.

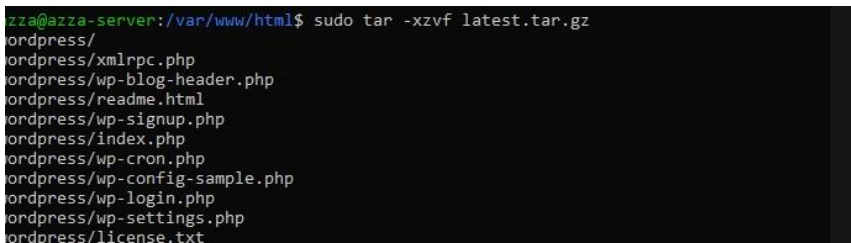
```
azza@azza-server:~$ /var/www/html$ sudo wget -c http://wordpress.org/latest.tar.gz
```



```
azza@azza-server: /var/www/html
azza@azza-server:~$ cd /var/www/html
azza@azza-server:/var/www/html$ sudo wget -c http://wordpress.org/latest.tar.gz
--2023-11-20 14:27:15-- http://wordpress.org/latest.tar.gz
Resolving wordpress.org (wordpress.org)... 198.143.164.252
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:80... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://wordpress.org/latest.tar.gz [following]
--2023-11-20 14:27:16-- https://wordpress.org/latest.tar.gz
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.
HTTP request sent, awaiting response... 416 Requested Range Not Satisfiable
```

```
azza@azza-server:~$ /var/www/html$ sudo tar -xzf latest.tar.gz
```

```
azza@azza-server:~$ /var/www/html$ ls -l
```



```
azza@azza-server:/var/www/html$ sudo tar -xzf latest.tar.gz
wordpress/
wordpress/xmlrpc.php
wordpress/wp-blog-header.php
wordpress/readme.html
wordpress/wp-signup.php
wordpress/index.php
wordpress/wp-cron.php
wordpress/wp-config-sample.php
wordpress/wp-login.php
wordpress/wp-settings.php
wordpress/license.txt
```

```
azza@azza-server:~$ sudo chown -R www-data:www-data /var/www/html/wordpress
```

STEP 5 CREATE A DATABASE FOR WORDPRESS

Selanjutnya, kita akan membuat database WordPress untuk situs tersebut dan menyiapkan akun pengguna. Ini akan mempermudah pengelolaan situs dan meningkatkan keamanannya.

Masuk ke akun root MySQL Anda melalui Terminal dengan memasukkan:

```
azza@azza-server:~$ /var/www/html$ sudo mysql -u root -p
```

```
CREATE DATABASE demo_db;
```

```
CREATE USER demo_user@localhost IDENTIFIED BY 'demo-password';
```

```
GRANT ALL PRIVILEGES ON demo_db. * TO demo_user@localhost;
```

```
FLUSH PRIVILEGES;
```

```
exit;
```

```
azza@azza-server:~$ /var/www/html$ sudo chmod -R 777 wordpress/
```

```
azza@azza-server:~$ /var/www/html$ cd wordpress/
```

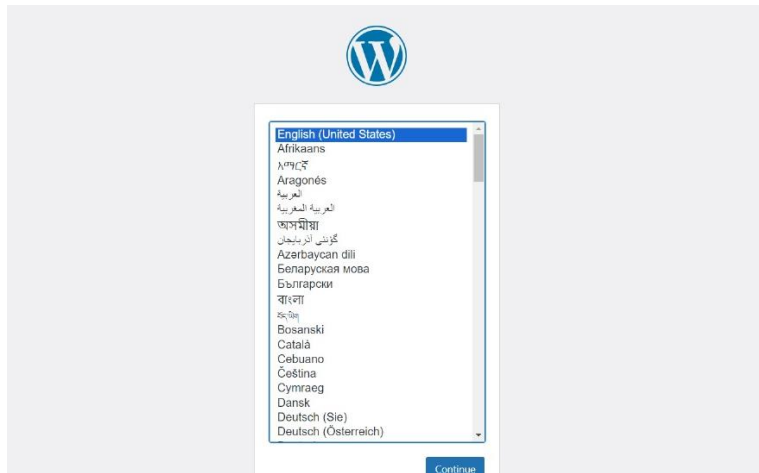
STEP 6 STEP AND CONFIGURE WORDPRESS

Setelah menyiapkan database untuk WordPress, langkah selanjutnya dan terakhir adalah menyiapkan dan mengkonfigurasi WordPress.

Pertama, Anda perlu membuat file konfigurasi untuk WordPress. Jadi, ganti nama contoh file konfigurasi WordPress menggunakan perintah berikut:

```
azza@azza-server:~$ /var/www/html/wordpress$ mv wp-config-sample.php wp-config.php
```

```
azza@azza-server:~$ /var/www/html/wordpress$ gedit wp-config.php
```

A screenshot of the WordPress 'Welcome' screen during installation. The WordPress logo is at the top. The 'Welcome' section contains a message about the five-minute installation process. Below is the 'Information needed' section, which prompts the user to provide site details. It includes input fields for 'Site Title' (containing 'azza'), 'Username' (containing 'azza'), and 'Password' (containing '123'). The password field has a red background and the text 'Very weak' below it. A 'Hide' button is next to the password field. A note states: 'Important: You will need this password to log in. Please store it in a secure location.' At the bottom, there is a 'Confirm Password' section with a checked checkbox and the text 'Confirm use of weak password'.



Success!

WordPress has been installed. Thank you, and enjoy!

Username azza

Password *Your chosen password.*

[Log In](#)



Success!

WordPress has been installed. Thank you, and enjoy!

Username azza

Password *Your chosen password.*

[Log In](#)



You are now logged out.

Username or Email Address

azza

Password

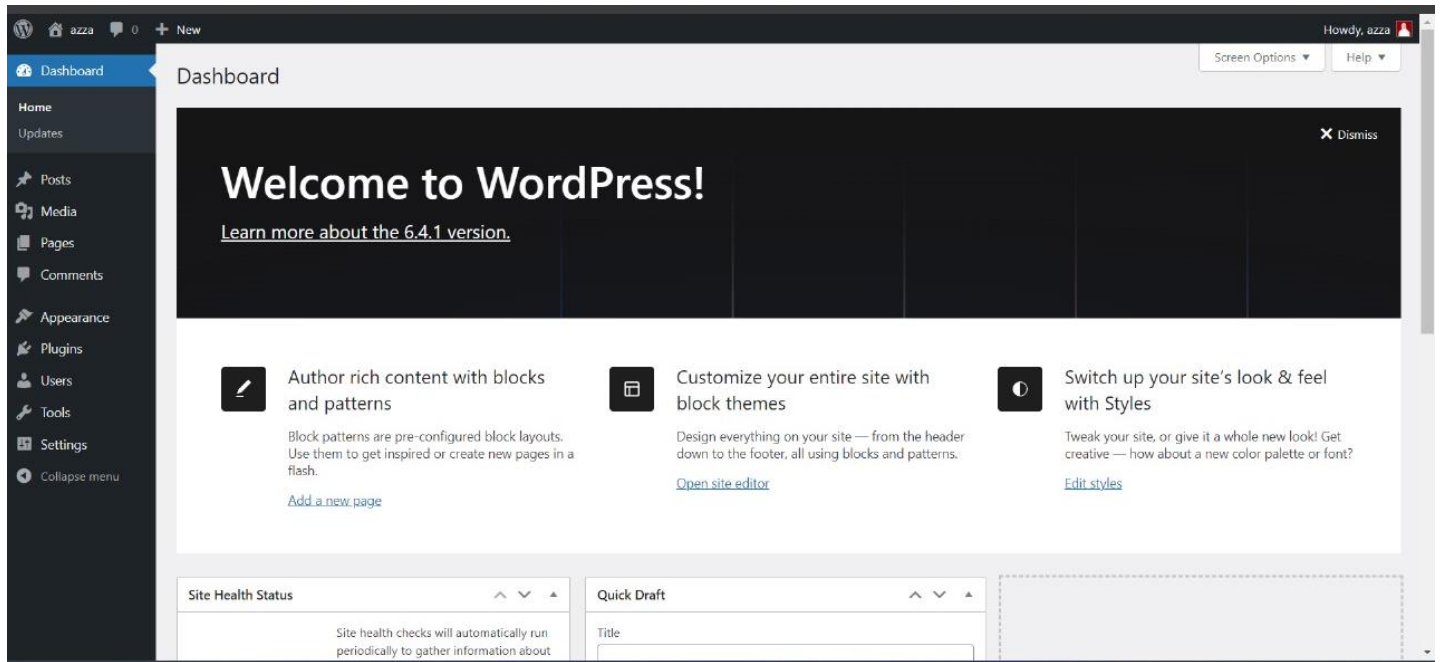
•••

☒ Remember Me

Log In

Lost your password?

← Go to azza



Congratulations, WordPress installation is successful!