

Installation and Configuration of WordPress Web Portal for XYZ E-commerce Startup Based on Cloud Computing

Raven Daniel Martin

PT. XYZ merupakan sebuah perusahaan startup yang bergerak di bidang e-commerce. Mereka meminta anda untuk mengelola sebuah VPS yang mereka miliki. Anda diminta untuk melakukan instalasi dan konfigurasi portal web perusahaan menggunakan **Wordpress** dengan skema sistem sebagai berikut.



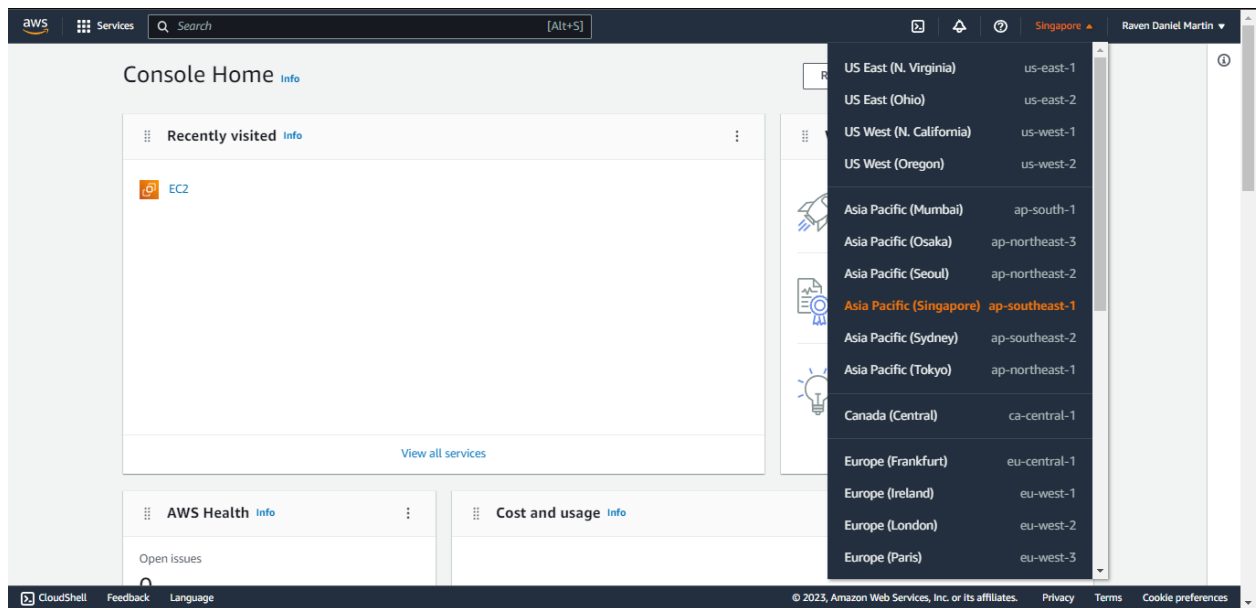
Peran masing-masing layanan tersebut, antara lain :

1. **Client** berperan untuk mengirimkan request sesuai dengan definisi *endpoint* pada Tabel 1. Anda dapat memanfaatkan aplikasi pengirim request HTTP seperti [Postman](#).
2. **EC2 Webserver** yang berperan sebagai komputer virtual tempat Webserver dipasang. Terdapat beberapa jenis webserver yang dapat anda pakai antara lain : Apache2 Webserver, nginx atau lighttpd. Instance EC2 yang dipakai menggunakan sistem operasi Linux dengan distro bebas. Instance ini harus dapat diakses menggunakan alamat IP global yang disediakan oleh AWS.
3. **EC2 MySQL** yang berperan sebagai komputer virtual tempat server MySQL dipasang. Instance EC2 yang dipakai menggunakan sistem operasi Linux dengan distro bebas. Instance ini harus dapat diakses menggunakan IP dari instance **EC2 Webserver**.

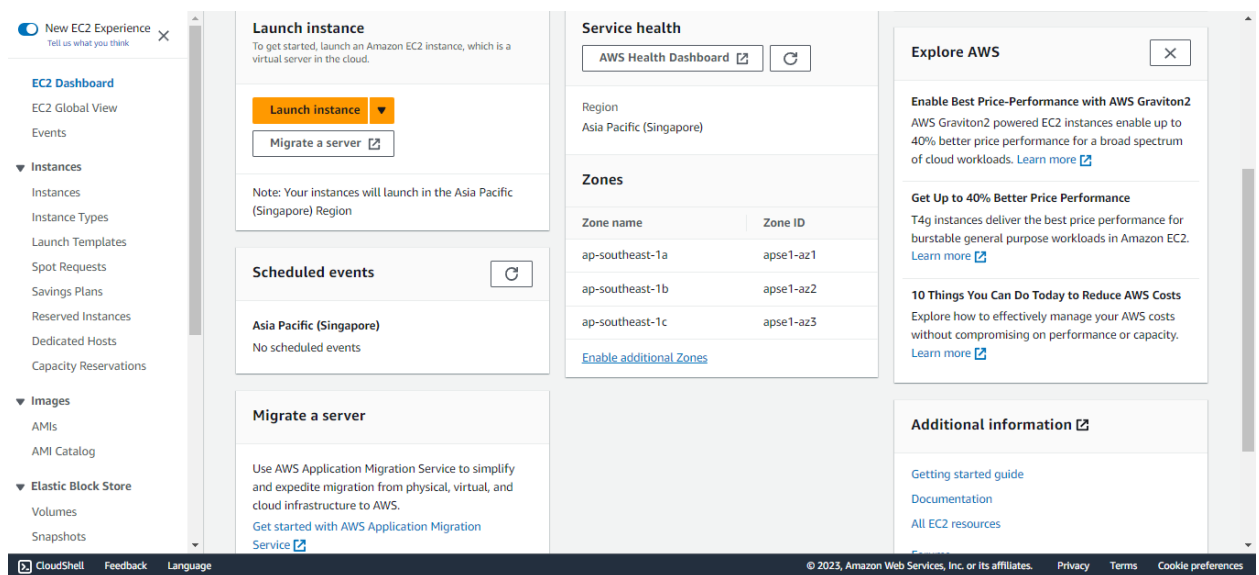
Notes:

1. Overview AWS Compute Services. Online at : <https://docs.aws.amazon.com/whitepapers/latest/aws-overview/compute-services.html>
2. AWS EC2. Online at : <https://aws.amazon.com/ec2/>
3. AWS ECS. Online at : <https://aws.amazon.com/ecs/>
4. AWS Lambda. Online at : <https://aws.amazon.com/lambda/>
5. How to Configure WordPress to use a Remote Database. Online at : <https://www.rosehosting.com/blog/how-to-configure-wordpress-to-use-a-remote-database/>

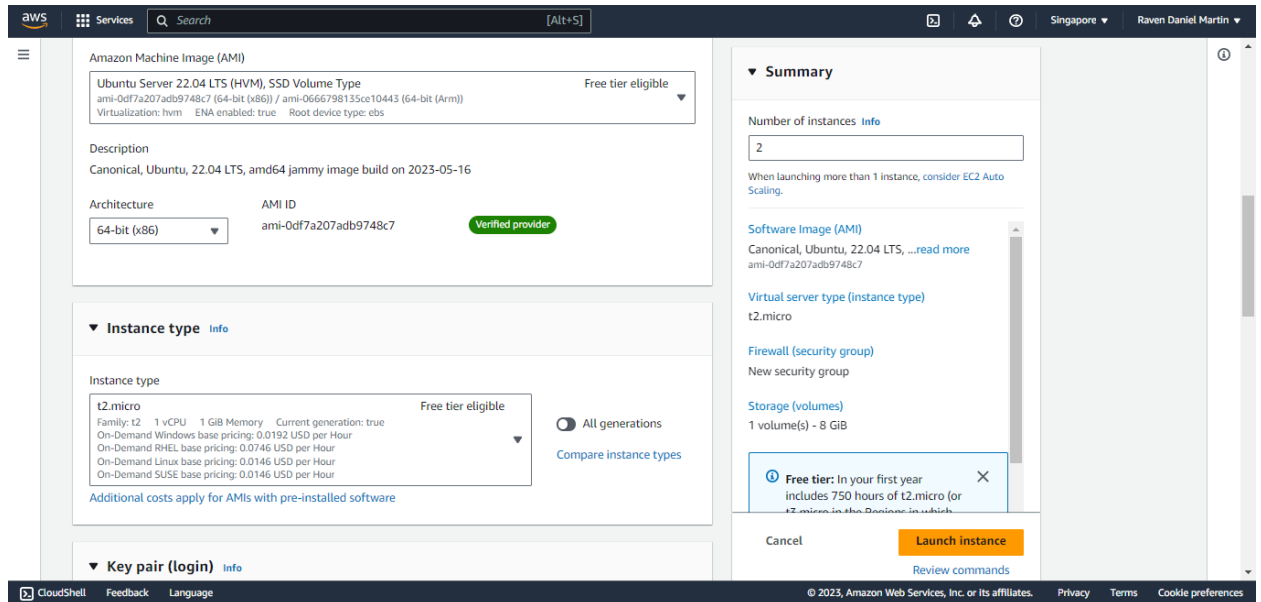
Langkah pertama adalah melakukan registrasi pada website AWS, kemudian pilih lokasi dimana zona server akan dijalankan (Contoh: Singapore). Selanjutnya akses menu EC2 untuk persiapan komputasi cloud.



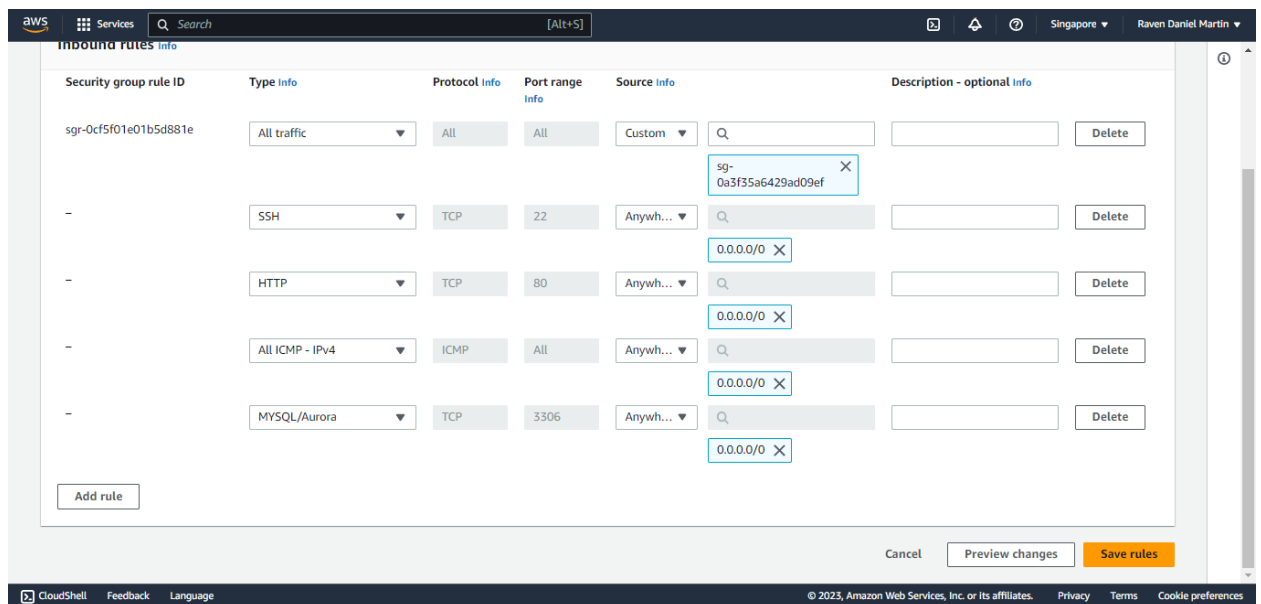
Pada menu EC2 seperti pada gambar, kita lakukan Launch Instance.



Selanjutnya sesuaikan spesifikasi komputasi cloud sesuai kebutuhan. Buat total instances sebanyak 2 untuk digunakan dalam pembuatan WebServer dan MySQL.



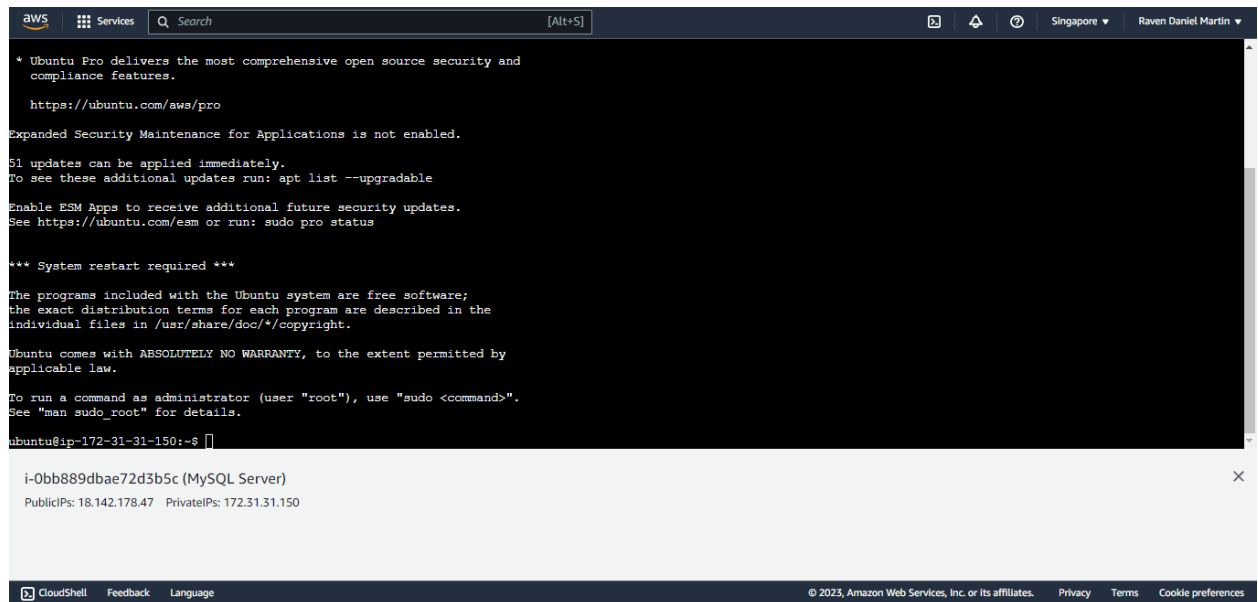
Setelah 2 instances dibuat, perlu dibuat pengaturan keamanan sebagai berikut agar mempermudah akses dan komunikasi diantara 2 instances yang telah dibuat.



1. Pertama kita perlu config instance MySQL terlebih dahulu karena diperuntukkan sebagai database.

-Switch user ke root untuk akses fitur lebih mendalam:

`sudo su - root`



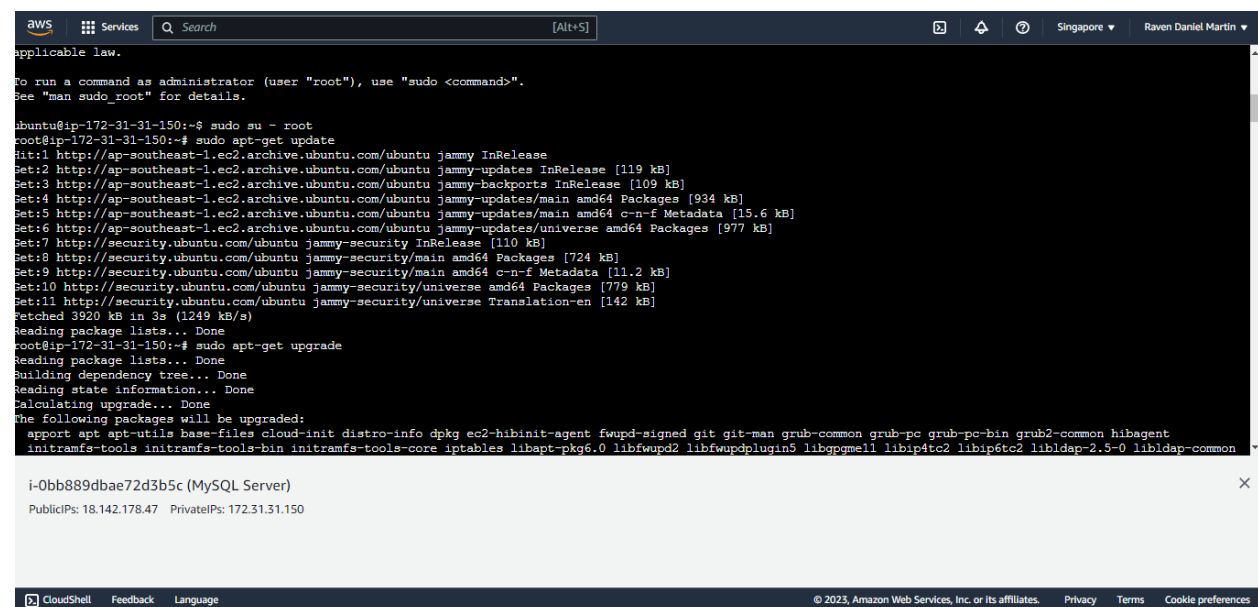
```
aws Services Search [Alt+S] Singapore Raven Daniel Martin
* Ubuntu Pro delivers the most comprehensive open source security and
  compliance features.
  https://ubuntu.com/aws/pro
Expanded Security Maintenance for Applications is not enabled.
51 updates can be applied immediately.
To see these additional updates run: apt list --upgradable
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
*** System restart required ***
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
ubuntu@ip-172-31-31-150:~$

i-0bb889dbae72d3b5c (MySQL Server)
PublicIPs: 18.142.178.47 PrivateIPs: 172.31.31.150

CloudShell Feedback Language © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

-Update serta upgrade sistem yang akan digunakan untuk membuka akses library lainnya:

`sudo apt-get update`
`sudo apt-get upgrade`



```
aws Services Search [Alt+S] Singapore Raven Daniel Martin
applicable law.
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
ubuntu@ip-172-31-31-150:~$ sudo su - root
root@ip-172-31-31-150:~$ sudo apt-get update
Hit:1 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Get:4 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [934 kB]
Get:5 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [15.6 kB]
Get:6 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [977 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [724 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.2 kB]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [779 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [142 kB]
Fetched 3920 kB in 3s (1249 kB/s)
Reading package lists... Done
root@ip-172-31-31-150:~$ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
  apport apt apt-utils base-files cloud-init distro-info dpkg ec2-hibinit-agent fwupd-signed git git-man grub-common grub-pc grub-pc-bin grub2-common hibagent
  initramfs-tools initramfs-tools-bin initramfs-tools-core iptables libapt-pkg6.0 libfwupd2 libfwupdplugin5 libgpgme11 libip4tc2 libip6tc2 liblbdap-2.5-0 liblbdap-common
11 packages can be upgraded. 0 packages are to be removed.
Need to get 10.5 MB of archives.
After this operation, 10.5 MB of additional disk space will be used.
Do you want to continue? [Y/n]
root@ip-172-31-31-150:~$

i-0bb889dbae72d3b5c (MySQL Server)
PublicIPs: 18.142.178.47 PrivateIPs: 172.31.31.150

CloudShell Feedback Language © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

Create server:

sudo apt install mysql-server

```
aws Services Search [Alt+S] Singapore Raven Daniel Martin
No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-31-150:~# sudo apt install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libbgi-fast-perl libbgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0ldbl libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl
  liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0 mysql-client-core-8.0 mysql-common mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
  libdata-dump-perl libipc-sharedcache-perl libbusiness-isbn-perl libwww-perl mailx tinycsa
The following NEW packages will be installed:
  libbgi-fast-perl libbgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0ldbl libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl
  liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0 mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
0 upgraded, 28 newly installed, 0 to remove and 0 not upgraded.
Need to get 29.6 MB of archives.
After this operation, 243 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 mysql-common all 5.8+1.0.8 [7212 B]
Get:2 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-core-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [2754 kB]
Get:3 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [22.7 kB]
Get:4 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libevent-pthreads-2.1-7 amd64 2.1.12-stable-1build3 [7642 B]
Get:5 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libmecab2 amd64 0.996-14build9 [199 kB]
Get:6 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libprotobuf-lite23 amd64 3.12.4-1ubuntu7.22.04.1 [209 kB]
Get:7 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-server-core-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [17.5 MB]
Get:8 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-server-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [1437 kB]
Get:9 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libhtml-tagset-perl all 3.20-4 [12.5 kB]
i-0bb889dbae72d3b5c (MySQL Server)
PublicIPs: 18.142.178.47 PrivateIPs: 172.31.31.150
CloudShell Feedback Language © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

Secure MySQL Server:

mysql_secure-installation

```
aws Services Search [Alt+S] Singapore Raven Daniel Martin
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-31-150:~# mysql_secure_installation

Securing the MySQL server deployment.

Connecting to MySQL using a blank password.

VALIDATE PASSWORD COMPONENT can be used to test passwords
and improve security. It checks the strength of password
and allows the users to set only those passwords which are
secure enough. Would you like to setup VALIDATE PASSWORD component?

Press y|Y for Yes, any other key for No: y

There are three levels of password validation policy:

LOW      Length >= 8
MEDIUM  Length >= 8, numeric, mixed case, and special characters
STRONG Length >= 8, numeric, mixed case, special characters and dictionary      file

Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: 1

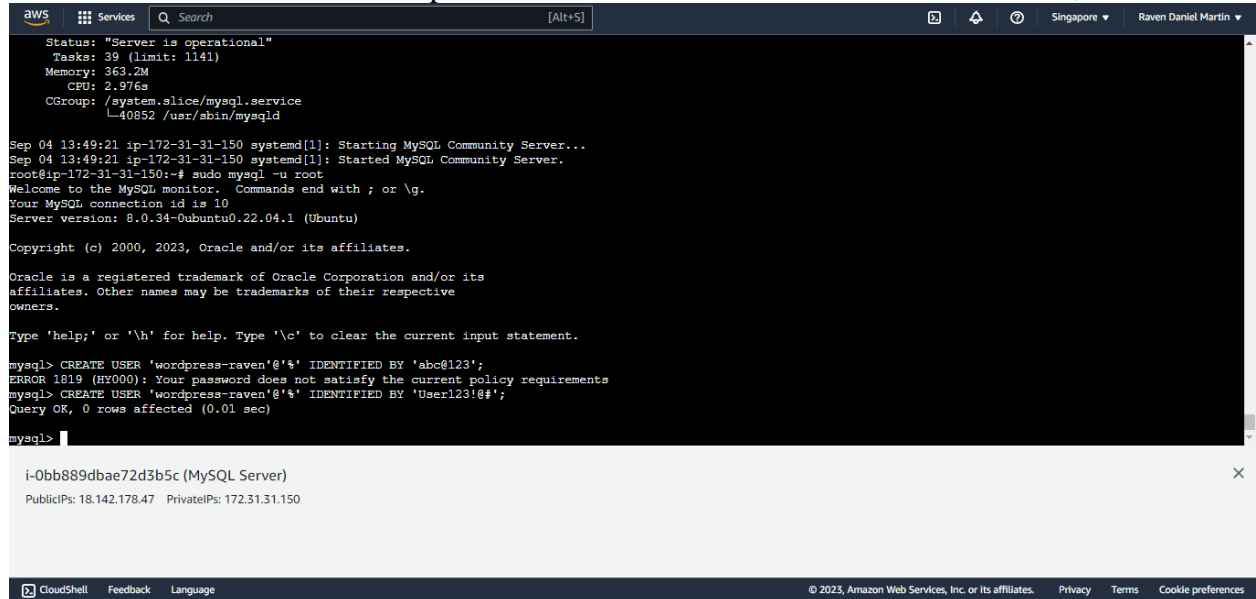
Skipping password set for root as authentication with auth_socket is used by default.
If you would like to use password authentication instead, this can be done with the "ALTER USER" command.
See https://dev.mysql.com/doc/refman/8.0/en/alter-user.html#alter-user-password-management for more information.

i-0bb889dbae72d3b5c (MySQL Server)
PublicIPs: 18.142.178.47 PrivateIPs: 172.31.31.150
CloudShell Feedback Language © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

Setelah beberapa instalasi diatas, sekarang server siap digunakan. Langkah selanjutnya membuat user untuk akses server:

Untuk akun yang saya gunakan adalah wordpress-raven (User) dan User123!@#(Password)

`CREATE USER 'wordpress-raven'@'%' IDENTIFIED BY 'User123!@#';`

The screenshot shows the AWS CloudShell interface. At the top, there's a search bar and navigation icons. Below, a terminal window displays the status of the MySQL service, which is operational. It shows system metrics like tasks, memory, and CPU. The terminal output includes the MySQL startup logs and a prompt to log in as root. The user attempts to run the command to create a new user, but receives an error: 'ERROR 1819 (HY000): Your password does not satisfy the current policy requirements'. The user then tries to create the user with a different password, but the command is not fully visible in the screenshot.

```
aws
Services
Q Search [Alt+S]
Singapore Raven Daniel Martin

Status: "Server is operational"
Tasks: 39 (limit: 1141)
Memory: 363.2M
CPU: 2.976s
CGroup: /system.slice/mysql.service
└─40852 /usr/sbin/mysqld

Sep 04 13:49:21 ip-172-31-31-150 systemd[1]: Starting MySQL Community Server...
Sep 04 13:49:21 ip-172-31-31-150 systemd[1]: Started MySQL Community Server.
root@ip-172-31-31-150:~# sudo mysql -u root
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu)

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE USER 'wordpress-raven'@'%' IDENTIFIED BY 'abc@123';
ERROR 1819 (HY000): Your password does not satisfy the current policy requirements
mysql> CREATE USER 'wordpress-raven'@'%' IDENTIFIED BY 'User123!@#';
Query OK, 0 rows affected (0.01 sec)

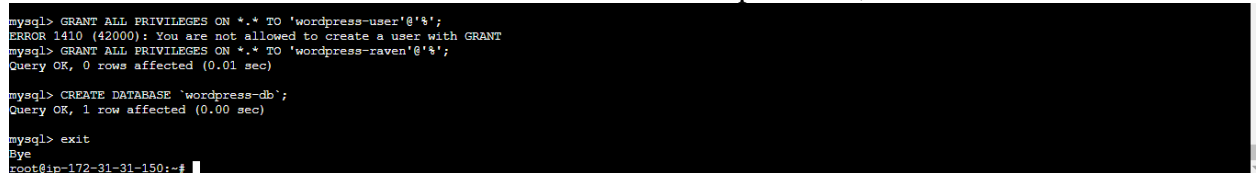
mysql>
```

Setelah user sudah ter-create selanjutnya berikan seluruh hak istimewa kepada user tersebut:

`GRANT ALL PRIVILEGES ON *.* TO 'wordpress-raven'@'%' ;`

Dan tahap terakhir pada config MySQL adalah create database:

`CREATE DATABASE `wordpress-db`;`

The screenshot shows the continuation of the MySQL terminal session. The user successfully runs the GRANT command, and the output shows 'Query OK, 0 rows affected'. Then, the user runs the CREATE DATABASE command, and the output shows 'Query OK, 1 row affected'. Finally, the user types 'exit' and the terminal shows 'Bye' and the root prompt.

```
mysql> GRANT ALL PRIVILEGES ON *.* TO 'wordpress-raven'@'%' ;
ERROR 1410 (42000): You are not allowed to create a user with GRANT
mysql> GRANT ALL PRIVILEGES ON *.* TO 'wordpress-raven'@'%' ;
Query OK, 0 rows affected (0.01 sec)

mysql> CREATE DATABASE `wordpress-db`;
Query OK, 1 row affected (0.00 sec)

mysql> exit
Bye
root@ip-172-31-31-150:~#
```

2. Tahap kedua adalah melakukan config pada instance WebServer sebagai wadah hosting Wordpress, config awal yang perlu dilakukan adalah update dan upgrade sistem:

```
sudo apt-get update
sudo apt-get upgrade
```

Selanjutnya untuk tampilan web, perlu install platform web server. Disini saya gunakan HTTP server yang free dan open-source, yaitu Apache2

```
sudo apt install apache2
```

```
aws Services Search [Alt+S] Singapore Raven Daniel Martin
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-235:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils bzip2 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.3-0 mailcap mime-support ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser bzip2-doc
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils bzip2 libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblua5.3-0 mailcap mime-support ssl-cert
0 upgraded, 13 newly installed, 0 to remove and 3 not upgraded.
Need to get 2137 kB of archives.
After this operation, 8505 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libapr1 amd64 1.7.0-8ubuntu0.22.04.1 [108 kB]
Get:2 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 liblua5.3-0 amd64 5.3.6-1build1 [140 kB]
Get:3 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2-bin amd64 2.4.52-1ubuntu4.6 [1345 kB]
Get:4 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2-data all 2.4.52-1ubuntu4.6 [165 kB]
Get:5 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2-utils amd64 2.4.52-1ubuntu4.6 [89.1 kB]
Get:6 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 mailcap all 3.70+nmulubuntu1 [23.8 kB]
Get:7 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 mime-support all 3.66 [3696 B]
Get:8 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2 amd64 2.4.52-1ubuntu4.6 [97.8 kB]
Get:9 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 bzip2 amd64 1.0.8-5build1 [34.8 kB]
Get:10 http://ap-southeast-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 ssl-cert all 1.1.2 [17.4 kB]
Get:11 http://security.ubuntu.com/ubuntu jammy-security/main amd64 libaprutil1 amd64 1.6.1-5ubuntu4.22.04.2 [92.8 kB]

i-0677feef4cccdcc73 (Web Server)
PublicIPs: 54.255.237.192 PrivateIPs: 172.31.26.235

CloudShell Feedback Language © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

Selanjutnya install wordpress sekaligus extract file wordpress tersebut:

```
sudo wget https://wordpress.org/latest.tar.gz
sudo tar -xzf latest.tar.gz
```

```
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-235:~$ sudo wget https://wordpress.org/latest.tar.gz
--2023-09-04 14:27:45-- https://wordpress.org/latest.tar.gz
Resolving wordpress.org (wordpress.org)... 198.143.164.253
Connecting to wordpress.org (wordpress.org)|198.143.164.253|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 23447259 (22M) [application/octet-stream]
Saving to: 'latest.tar.gz'

latest.tar.gz          100%[=====>] 22.36M  6.55MB/s  in 5.0s

2023-09-04 14:27:51 (4.50 MB/s) - 'latest.tar.gz' saved [23447259/23447259]

ubuntu@ip-172-31-26-235:~$ sudo tar -xzf latest.tar.gz
ubuntu@ip-172-31-26-235:~$ ls
latest.tar.gz  wordpress
ubuntu@ip-172-31-26-235:~$
```

Setelah instalasi wordpress berhasil, dilanjutkan dengan melakukan instal repository, bahasa berbasis PHP, beserta modulnya: (dilakukan secara berurutan)

```
sudo cp -r wordpress/* /var/www/html/
sudo apt install software-properties-common ca-certificates lsb-release apt-transport-https
sudo LC_ALL=C.UTF-8 add-apt-repository ppa:ondrej/php
sudo apt update
sudo apt install php7.4 libapache2-mod-php7.4
sudo apt install php7.4-common php7.4-mysql php7.4-curl php7.4-json php7.4-mbstring
php7.4-xml php7.4-zip php7.4-gd php7.4-soap php7.4-ssh2 php7.4-tokenizer
```

```
aws Services Search [Alt+S] Singapore Raven Daniel Martin

Setting up php7.4-ssh2 (1.4-1+ubuntu22.04.1+deb.sury.org+1) ...
Setting up libgavl0:amd64 (0.17.0-1build1) ...
Setting up libtiff5:amd64 (4.3.0-6ubuntu0.5) ...
Setting up libfontconfig1:amd64 (2.13.1-4.2ubuntu5) ...
Setting up libyuv0:amd64 (0.0-git20220104.b91dfa-2) ...
Setting up libavif13:amd64 (0.9.3-3) ...
Setting up libgd3:amd64 (2.3.3-9+ubuntu22.04.1+deb.sury.org+1) ...
Setting up php7.4-gd (1:7.4.33-8+ubuntu22.04.1+deb.sury.org+1) ...

Creating config file /etc/php/7.4/mods-available/gd.ini with new version
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libapache2-mod-php7.4 (1:7.4.33-8+ubuntu22.04.1+deb.sury.org+1) ...
Processing triggers for php7.4-cli (1:7.4.33-8+ubuntu22.04.1+deb.sury.org+1) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-235:~$

i-0677feef4cccdcc73 (Web Server)
PublicIPs: 54.255.237.192 PrivateIPs: 172.31.26.235

CloudShell Feedback Language © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

Selanjutnya copy wp-config-php file untuk membuat konfigurasi baru dan menjaga file original sebagai backup. Edit menggunakan fitur nano:

```
cd /var/www/html
cp wp-config-sample.php wp-config.php
sudo nano wp-config.php
```

Dilanjutkan dengan sesuaikan DB_Name, DB_USER, DB_PASSWORD, dan DB_HOST berdasarkan user yang sudah di create pada akhir tahap 1 (MySQL).

```
aws Services Search [Alt+S] Singapore Raven Daniel Martin

GNU nano 6.2 wp-config.php
<?php
/**
 * The base configuration for WordPress
 *
 * The wp-config.php creation script uses this file during the installation.
 * You don't have to use the web site, you can copy this file to "wp-config.php"
 * and fill in the values.
 *
 * This file contains the following configurations:
 *
 * * Database settings
 * * Secret keys
 * * Database table prefix
 * * ABSPATH
 *
 * @link https://wordpress.org/documentation/article/editing-wp-config-php/
 *
 * @package WordPress
 */

// ** Database settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define( 'DB_NAME', 'database_name_here' );

[ File 'wp-config.php' is unwritable ]

NS Help      ^O Write Out  ^M Where Is   ^R Cut        ^G Execute   ^G Location  ^U Undo      ^M Set Mark  ^M To Bracket ^M Previous
OX Exit      ^R Read File  ^M Replace   ^R Paste     ^G Justify   ^G Go To Line ^R Redo      ^M Copy      ^M Where Was  ^M Next

i-0677feef4cccdcc73 (Web Server)
PublicIPs: 54.255.237.192 PrivateIPs: 172.31.26.235

CloudShell Feedback Language © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
```

Selanjutnya adalah enable module PHP7.4:

```
sudo a2enmod php7.4
```

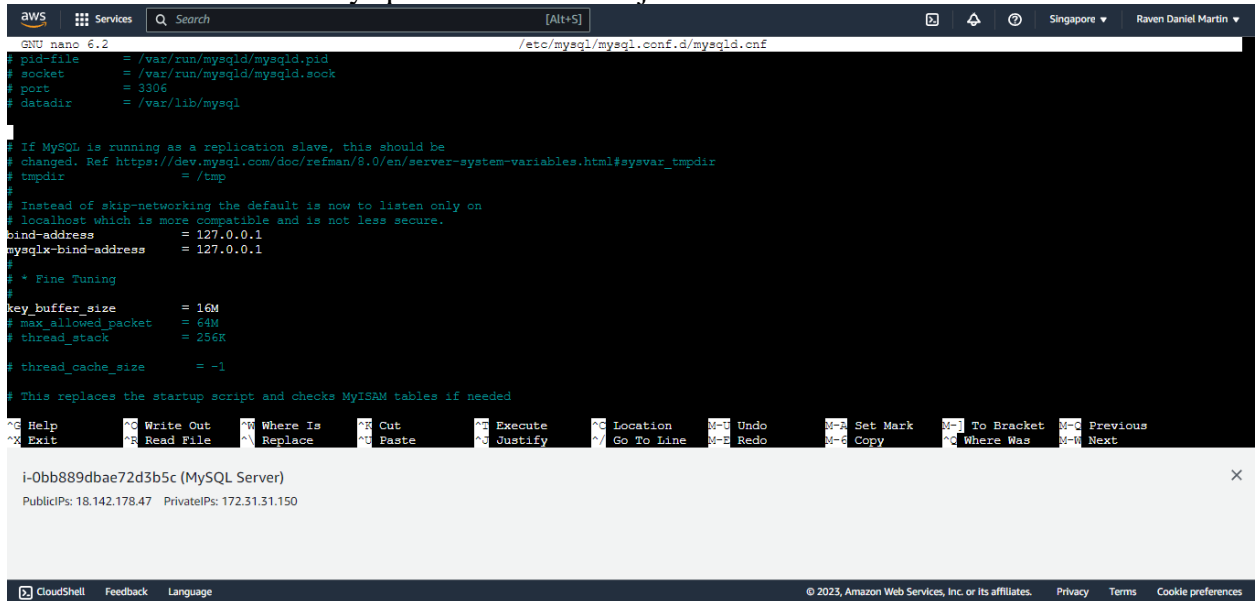


```
ubuntu@ip-172-31-26-235:/var/www/html$ sudo a2enmod php7.4
Considering dependency mpm_prefork for php7.4:
Considering conflict mpm_event for mpm_prefork:
Considering conflict mpm_worker for mpm_prefork:
Module mpm_prefork already enabled
Considering conflict php5 for php7.4:
Module php7.4 already enabled
ubuntu@ip-172-31-26-235:/var/www/html$
```

3. Tahap konfigurasi antara MySQL dan WebServer sudah selesai di tahap 1 dan tahap 2. Selanjutnya perlu bind address antara MySQL dan WebServer, pada MySQL:

```
sudo nano /etc/mysql/mysql.conf.d/mysqld.cnf
```

Ubah bind-address serta mysql-bind-address menjadi 0.0.0.0



```
GNU nano 6.2 /etc/mysql/mysql.conf.d/mysqld.cnf
# pid-file             = /var/run/mysqld/mysqld.pid
# socket               = /var/run/mysqld/mysqld.sock
# port                 = 3306
# datadir              = /var/lib/mysql

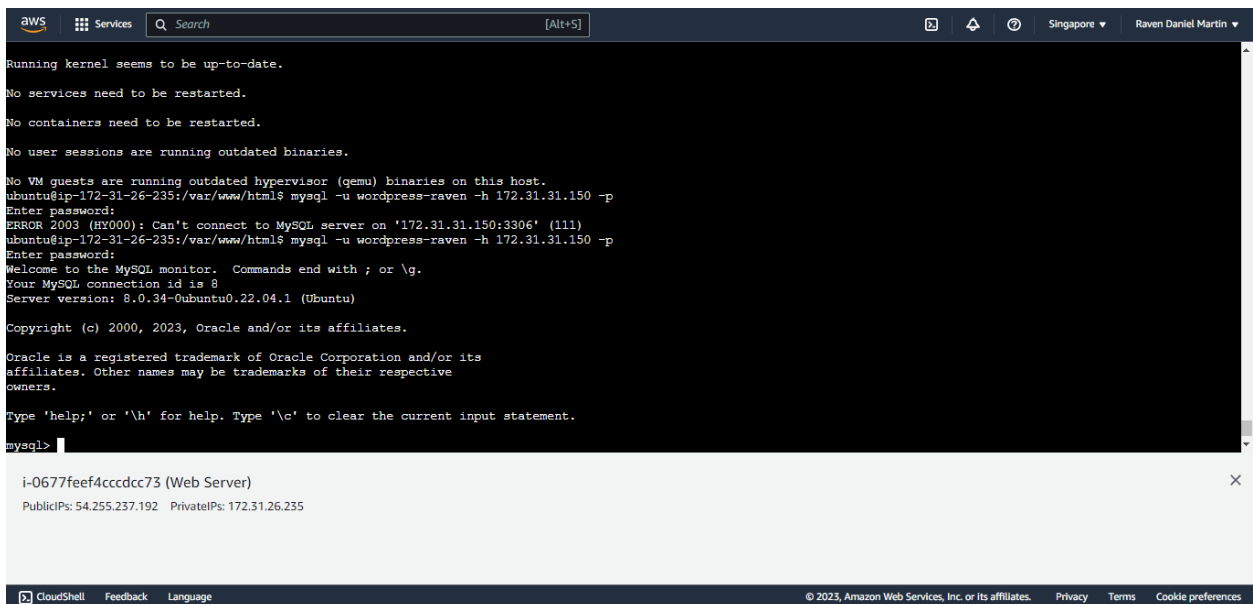
# If MySQL is running as a replication slave, this should be
# changed. Ref https://dev.mysql.com/doc/refman/8.0/en/server-system-variables.html#sysvar_tmpdir
# tmpdir               = /tmp
#
# Instead of skip-networking the default is now to listen only on
# localhost which is more compatible and is not less secure.
bind-address           = 127.0.0.1
mysqlx-bind-address    = 127.0.0.1
#
# * Fine Tuning
#
key_buffer_size        = 16M
# max_allowed_packet   = 64M
# thread_stack         = 256K
# thread_cache_size    = -1

# This replaces the startup script and checks MyISAM tables if needed
```

Selanjutnya tes koneksi pada WebServer:

```
mysql -u wordpress-raven -h 172.31.31.150 -p
```

dan masukkan password



```
Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-235:/var/www/html$ mysql -u wordpress-raven -h 172.31.31.150 -p
Enter password:
ERROR 2003 (HY000): Can't connect to MySQL server on '172.31.31.150:3306' (111)
ubuntu@ip-172-31-26-235:/var/www/html$ mysql -u wordpress-raven -h 172.31.31.150 -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu)

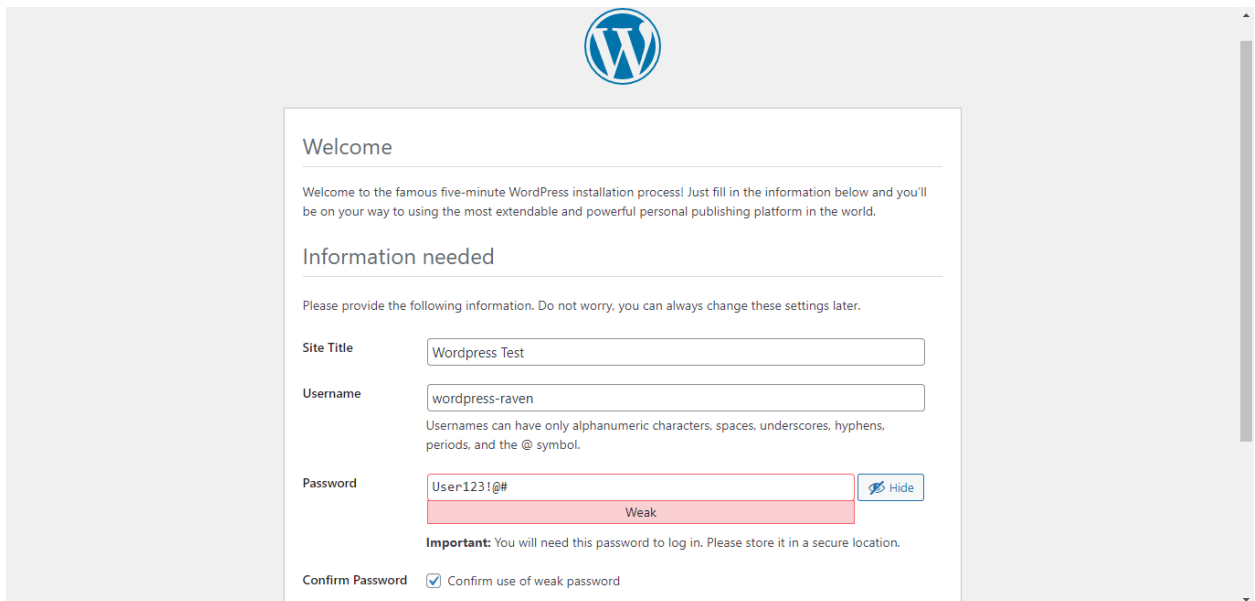
Copyright (c) 2000, 2023, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

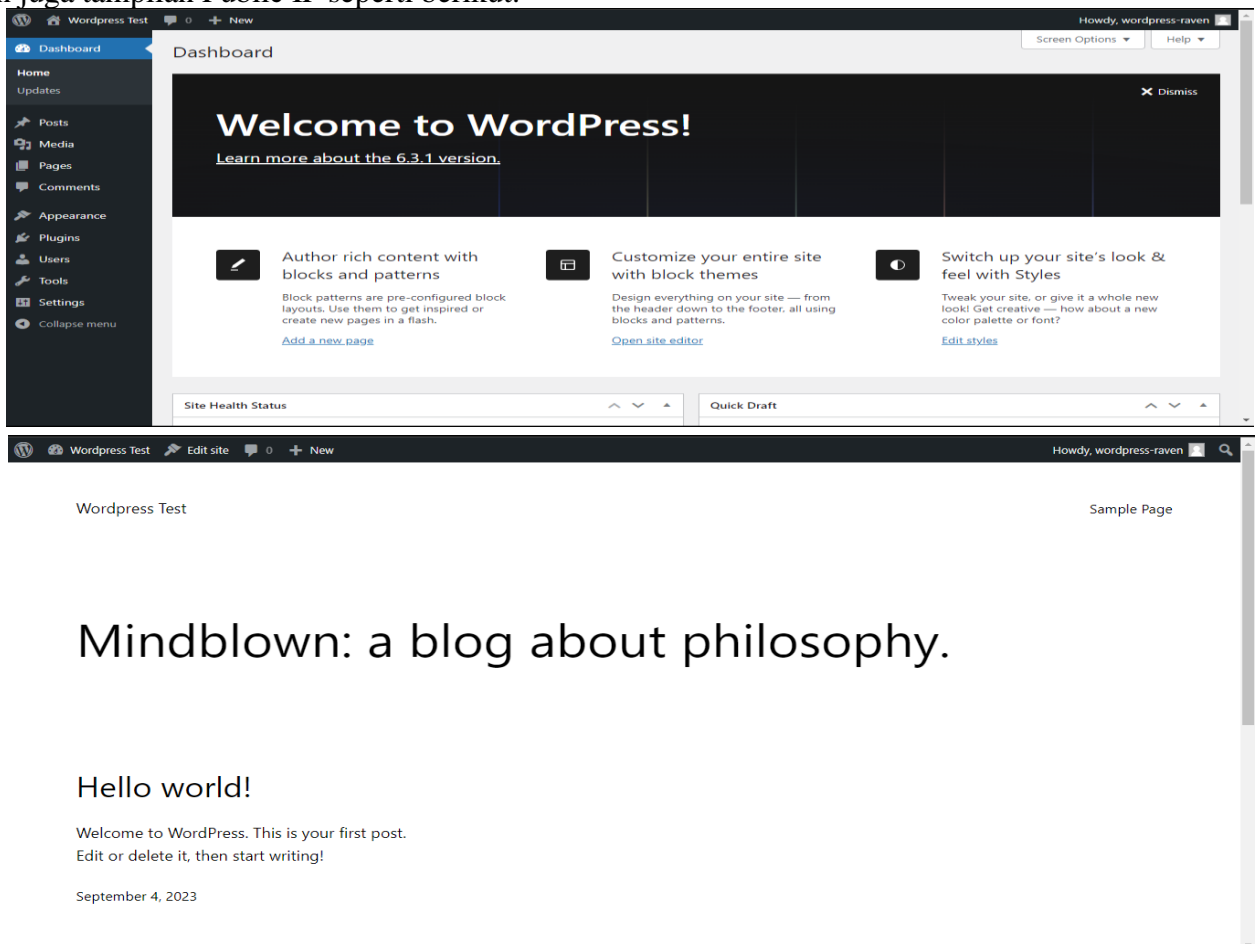
Selanjutnya akses Public'IPS (54.255.257.192) pada WebServer dan akan muncul tampilan seperti pada gambar dibawah. Buat akun untuk admin wordpress.



The image shows the WordPress installation 'Welcome' screen. At the top is the WordPress logo. Below it, a 'Welcome' message states: 'Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.' The 'Information needed' section asks for the following details:

- Site Title:** A text box containing 'Wordpress Test'.
- Username:** A text box containing 'wordpress-raven'. A note below states: 'Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.'
- Password:** A text box containing 'User123!@#'. A red box below the password indicates it is 'Weak'. A 'Hide' button is to the right.
- Important:** A message: 'You will need this password to log in. Please store it in a secure location.'
- Confirm Password:** A checkbox labeled 'Confirm use of weak password' which is checked.

Setelah buat akun admin-wordpress, kita sudah dapat login ke dalam dashboard wordpress. Dan juga tampilan Public IP seperti berikut.



The image displays the WordPress dashboard and a sample page. The top section is the 'Dashboard' with a 'Welcome to WordPress!' banner and links to 'Learn more about the 6.3.1 version', 'Add a new page', 'Open site editor', and 'Edit styles'. Below this are three cards: 'Author rich content with blocks and patterns', 'Customize your entire site with block themes', and 'Switch up your site's look & feel with Styles'. The bottom section shows the 'Site Health Status' and 'Quick Draft' buttons. The bottom part of the image shows a 'Sample Page' with the title 'Mindblown: a blog about philosophy.' and the content 'Hello world! Welcome to WordPress. This is your first post. Edit or delete it, then start writing! September 4, 2023'.

Berikut hasil request dari Postman:

