

Install Wordpress on EC2 instance

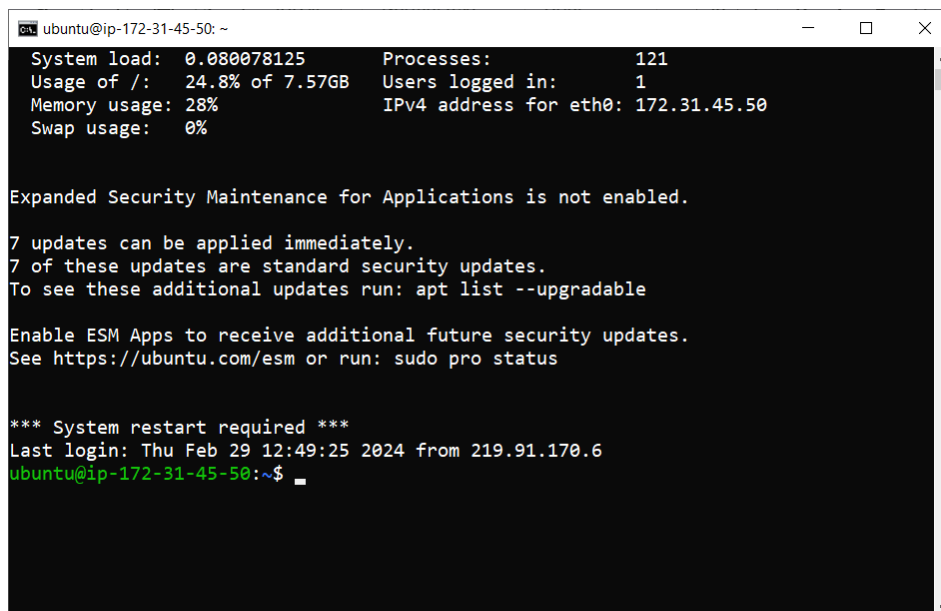
Step 1 : Launch EC2 Instance

Sign-in into your AWS account and go to the EC2 service console.

Select **Launch Instance** option, provide name for your instance and select the machine image you want. I am using an Ubuntu image for this task.

Next select the Key-Pair that you will use to connect to your instance. While adding the security group to your instance make sure that it allows the inbound traffic on port 22 for SSH.

Click on **Launch Instance** to launch your instance. Once the instance is in running state, use any terminal to SSH into your EC2 Instance.



```
ubuntu@ip-172-31-45-50: ~  
System load: 0.080078125    Processes:      121  
Usage of /: 24.8% of 7.57GB    Users logged in: 1  
Memory usage: 28%           IPv4 address for eth0: 172.31.45.50  
Swap usage: 0%  
  
Expanded Security Maintenance for Applications is not enabled.  
  
7 updates can be applied immediately.  
7 of these updates are standard security updates.  
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 ***  
Last login: Thu Feb 29 12:49:25 2024 from 219.91.170.6  
ubuntu@ip-172-31-45-50:~$
```

Run following commands to update and upgrade your Ubuntu EC2 instance.

sudo apt-get update

sudo apt-get upgrade

Step2: Install Apache2 server, mysql server and related libraries.

To install and host a wordpress website, we need to install Apache2 server and mysql server. We can use following command to install apache2 server.

apt-get install apache2

```
root@ip-172-31-43-40: ~  
root@ip-172-31-43-40:~# apt-get 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 2139 kB of archives.  
After this operation, 8518 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libapr1 amd64 1.7.0-8ubuntu0.22.04.1 [108  
kB]  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libaprutil1 amd64 1.6.1-5ubuntu4.22.04.2 [92.8 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.1-5ubuntu4.22.04.2 [11.3 kB]  
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libaprutil1-ldap amd64 1.6.1-5ubuntu4.22.04.2 [9170 B]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 liblua5.3-0 amd64 5.3.6-1build1 [140 kB]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 apache2-bin amd64 2.4.52-1ubuntu4.7 [1346  
kB]
```

Use following command to install mysql.

apt-get install mysql*

```
root@ip-172-31-43-40: ~  
root@ip-172-31-43-40:~# apt-get install mysql*  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
Note, selecting 'mysql-testsuite' for glob 'mysql*'  
Note, selecting 'mysql-server-5.5' for glob 'mysql*'  
Note, selecting 'mysql-server-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server-5.7' for glob 'mysql*'  
Note, selecting 'mysql-server-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client-5.5' for glob 'mysql*'  
Note, selecting 'mysql-client-5.6' for glob 'mysql*'  
Note, selecting 'mysql-client-5.7' for glob 'mysql*'  
Note, selecting 'mysql-client-8.0' for glob 'mysql*'  
Note, selecting 'mysql-common' for glob 'mysql*'  
Note, selecting 'mysqldb' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.5' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.6' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-5.7' for glob 'mysql*'  
Note, selecting 'mysql-testsuite-8.0' for glob 'mysql*'  
Note, selecting 'mysql-client' for glob 'mysql*'  
Note, selecting 'mysql-router' for glob 'mysql*'  
Note, selecting 'mysql-sandbox' for glob 'mysql*'  
Note, selecting 'mysqldb' for glob 'mysql*'  
Note, selecting 'mysql-common-5.6' for glob 'mysql*'  
Note, selecting 'mysql-server' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.5' for glob 'mysql*'  
Note, selecting 'mysql-server-core-5.6' for glob 'mysql*'
```

We require php, libapache2-mod-php, php-mysql packages. We can install this packages using following command.

apt-get install php libapache2 php-mysql

```
root@ip-172-31-43-40: ~  
root@ip-172-31-43-40:~# apt-get install php libapache2-mod-php php-mysql  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  libapache2-mod-php8.1 php-common php8.1 php8.1-cli php8.1-common php8.1-mysql php8.1-opcache php8.1-readline  
Suggested packages:  
  php-pear  
The following NEW packages will be installed:  
  libapache2-mod-php libapache2-mod-php8.1 php php-common php-mysql php8.1 php8.1-cli php8.1-common php8.1-mysql  
  php8.1-opcache php8.1-readline  
0 upgraded, 11 newly installed, 0 to remove and 3 not upgraded.  
Need to get 5265 kB of archives.  
After this operation, 21.8 MB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 php-common all 2:92ubuntu1 [12.4 kB]  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-common amd64 8.1.2-1ubuntu2.14 [112  
7 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-opcache amd64 8.1.2-1ubuntu2.14 [36  
5 kB]  
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-readline amd64 8.1.2-1ubuntu2.14 [1  
3.6 kB]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-cli amd64 8.1.2-1ubuntu2.14 [1834 k  
B]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libapache2-mod-php8.1 amd64 8.1.2-1ubuntu2  
.14 [1766 kB]  
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libapache2-mod-php all 2:8.1+92ubuntu1 [2898 B]
```

Step 3 : Install wordpress

Now to install wordpress, we first download latest.tar.gz file from www.wordpress.com using following command. We download this file in /var/www/html/ directory.

wget <http://wordpress.com/latest.tar.gz>

```
root@ip-172-31-43-40: /var/www/html
root@ip-172-31-43-40:~# cd /var/www/html/
root@ip-172-31-43-40:/var/www/html# wget http://wordpress.org/latest.tar.gz
--2024-02-29 08:00:34-- 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]
--2024-02-29 08:00:34-- https://wordpress.org/latest.tar.gz
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 24482912 (23M) [application/octet-stream]
Saving to: 'latest.tar.gz'

latest.tar.gz          100%[=====] 23.35M  43.7MB/s   in 0.5s
2024-02-29 08:00:34 (43.7 MB/s) - 'latest.tar.gz' saved [24482912/24482912]

root@ip-172-31-43-40:/var/www/html# ls
index.html  latest.tar.gz
root@ip-172-31-43-40:/var/www/html#
```

After downloading the file, we will extract it using tar command, use following command to extract the file.

tar -xvzf latest.tar.gz

```
root@ip-172-31-43-40: /var/www/html
root@ip-172-31-43-40:/var/www/html# tar -xvzf 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
wordpress/wp-content/
wordpress/wp-content/themes/
wordpress/wp-content/themes/twentytwentythree/
wordpress/wp-content/themes/twentytwentythree/theme.json
wordpress/wp-content/themes/twentytwentythree/parts/
wordpress/wp-content/themes/twentytwentythree/parts/footer.html
wordpress/wp-content/themes/twentytwentythree/parts/comments.html
wordpress/wp-content/themes/twentytwentythree/parts/header.html
wordpress/wp-content/themes/twentytwentythree/parts/post-meta.html
wordpress/wp-content/themes/twentytwentythree/patterns/
wordpress/wp-content/themes/twentytwentythree/patterns/hidden-404.php
wordpress/wp-content/themes/twentytwentythree/patterns/post-meta.php
wordpress/wp-content/themes/twentytwentythree/patterns/hidden-no-results.php
wordpress/wp-content/themes/twentytwentythree/patterns/call-to-action.php
wordpress/wp-content/themes/twentytwentythree/patterns/footer-default.php
```

Step 4 : Create database and database user for Wordpress.

We have to create a database for wordpress, so we login to mysql server and create a database for wordpress and alter some user settings of mysql database.

ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password by 'Testpassword@123';
[change the password of root user]

CREATE USER 'wp_user'@localhost IDENTIFIED BY 'Testpassword@123';
[Create database user 'wp_user' and assign password to user]

CREATE DATABASE wp;
[Create database named 'wp']

EXIT

[Exit from mysql]

```
root@ip-172-31-43-40: ~
Your MySQL connection id is 20
Server version: 8.0.36-0ubuntu0.22.04.1 (Ubuntu)

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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> ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password by 'Testpassword@123';
Query OK, 0 rows affected (0.01 sec)

mysql> CREATE USER 'wp_user'@localhost IDENTIFIED BY 'Testpassword@123';
Query OK, 0 rows affected (0.02 sec)

mysql> create database wp;
Query OK, 1 row affected (0.01 sec)

mysql> GRANT ALL PRIVILEGES ON wp.* TO 'wp_user'@localhost;
Query OK, 0 rows affected (0.00 sec)

mysql> exit
Bye
root@ip-172-31-43-40:~# vim /var/www/html/wordpress/wp-config.php
root@ip-172-31-43-40:~# root@ip-172-31-43-40:~#
```

Step 5 : Changing the php configuration file for wordpress.

Navigate to /var/www/html/wordpress/ directory, and create a file named wp-config.php and add following content in that file.

```
root@ip-172-31-43-40: ~
*
* @package WordPress
*/

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

/** Database username */
define( 'DB_USER', 'wp_user' );

/** Database password */
define( 'DB_PASSWORD', 'Testpassword@123' );

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

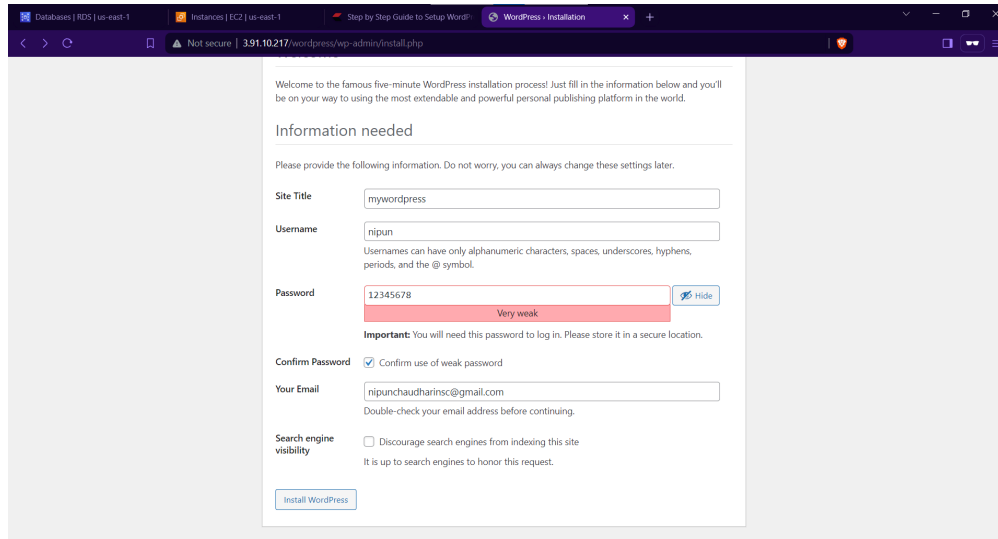
/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8' );

/** The database collate type. Don't change this if in doubt. */
define( 'DB_COLLATE', '' );

/**#@+
 * Authentication unique keys and salts.
 */
37,22 22%
```

Step 6 : Hit the wordpress site

Now as we have completed all configuration, we can copy Public IP of our instance and paste it in browser. We will get following page.



The screenshot shows a web browser window with the URL `391.10.217/wordpress/wp-admin/install.php`. The page is titled "WordPress - Installation" and contains a form for installing WordPress. The form includes fields for Site Title, Username, Password, Confirm Password, Your Email, and Search engine visibility. The "Install WordPress" button is at the bottom.

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.

Information needed

Please provide the following information. Do not worry, you can always change these settings later.

Site Title: mywordpress

Username: nipun
Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password: 12345678
Very weak

Confirm Password: ☒ Confirm use of weak password

Your Email: nipunchaudharinsc@gmail.com
Double-check your email address before continuing.

Search engine visibility: ☐ Discourage search engines from indexing this site
It is up to search engines to honor this request.

Install WordPress

Here we provide basic information and then click 'Install Wordpress' button.

Then we hit our Public IP again to see following page.

