

DEPLOYING A WORDPRESS HOMEPAGE IN MONOLITHIC ARCHITECTURE

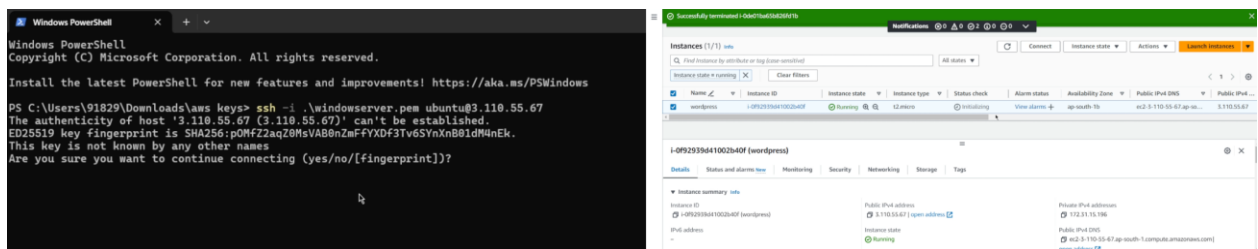
Description:

- Create 1 EC2 Instance and Deploy wordpress and MYSQL on that Instance.
- Configure the Security Group for your instances.
- EC2 instance type: t2-micro, and USE AMI: Ubuntu
- Create a welcome page in wordpress that will be the homepage

STEPS:

1. Log in to your AWS Management Console.
2. Navigate to the EC2 Dashboard and click on "Launch Instance".
3. Give the instance a unique name like "Monolithic_Server".
4. Select an appropriate Amazon Machine Image (AMI) based on your requirements. For this example, let's choose the latest Ubuntu Server.
5. Choose the instance type according to your needs. We'll go with a t2.micro(Free Tier) instance.
6. Configure instance details including the number of instances, network settings, and storage. Ensure to create or select a security group that permits inbound traffic on HTTP (port 80) and SSH (port 22).
7. Review the configurations and click on the "Launch Instance" button.

This setup should get you started with your EC2 instance running a WordPress server on a monolithic architecture.



COMMANDS TO FOLLOW:

1. Install Apache server on Ubuntu:

- sudo apt update
- sudo apt install apache2

2. Install PHP runtime and PHP MySQL connector:

- sudo apt install php libapache2-mod-php php-mysql

3. Install MySQL server:

- sudo apt install mysql-server

4. Login to MySQL server:

- sudo mysql -u root

5. Change authentication plugin to mysql_native_password (change the password to something strong):

- ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password by 'shashwat12';

6. Create a new database user for WordPress (change the password to something strong):

- CREATE USER 'shashwat_user'@'localhost' IDENTIFIED BY 'shashwat12';

7. Create a database for WordPress:

- CREATE DATABASE wordpress_Tech;

8. Grant all privileges on the database 'wp' to the newly created user:

- GRANT ALL PRIVILEGES ON wp.* TO 'shashwat_user'@'localhost';
- exit;

9. Download WordPress:

- cd /tmp
- wget <https://wordpress.org/latest.tar.gz>

10. Unzip:

- tar -xvf latest.tar.gz

11. Move WordPress folder to Apache document root:

- sudo mv wordpress/ /var/www/html

12. Command to restart/reload Apache server:

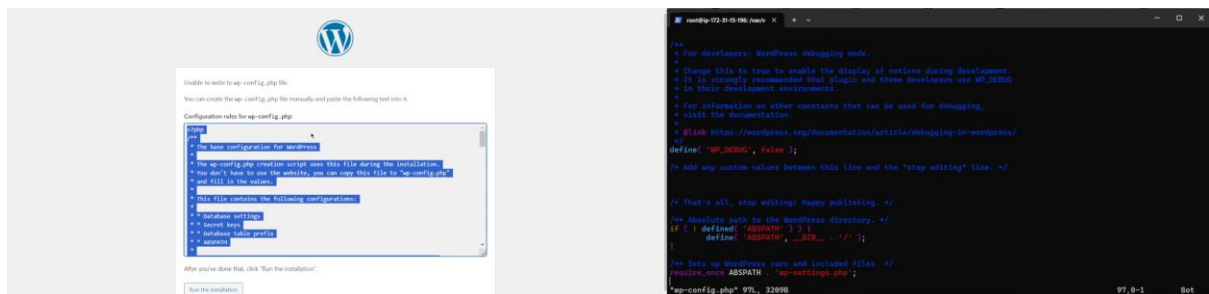
- sudo systemctl restart apache2

13. Now, navigate to the WordPress directory and configure the wp-config.php file:

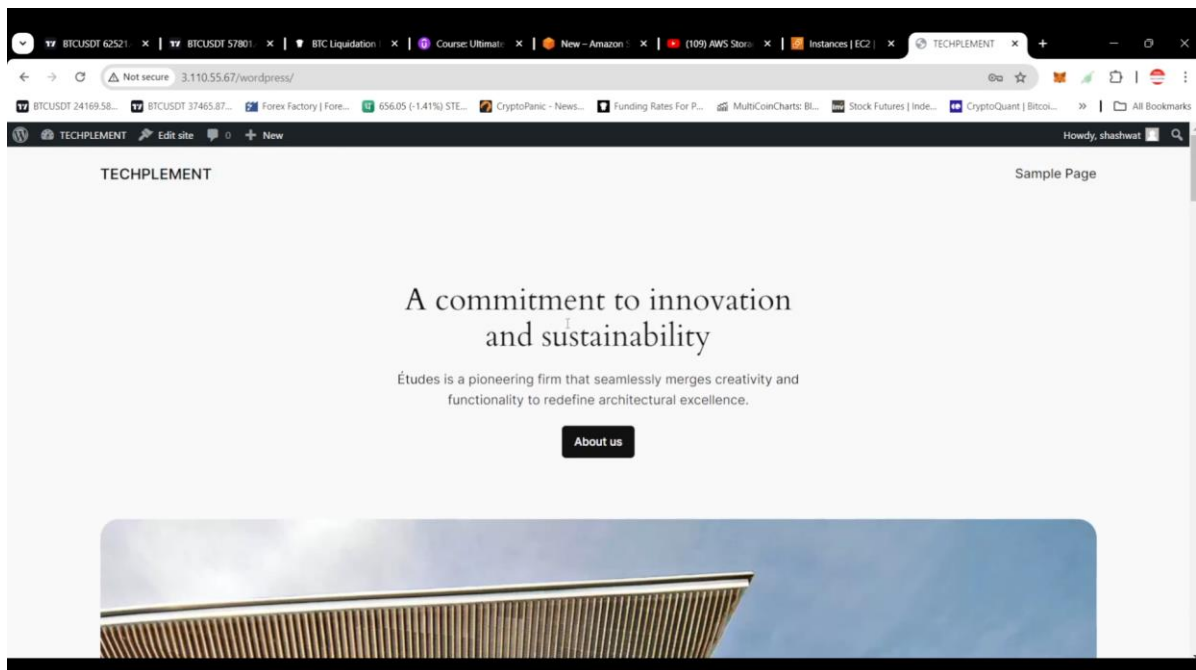
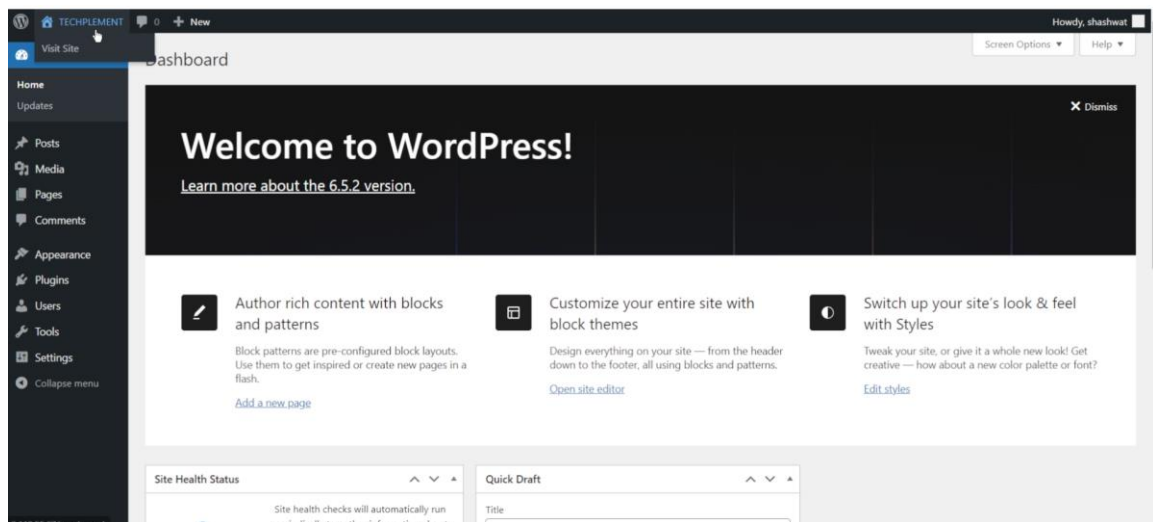
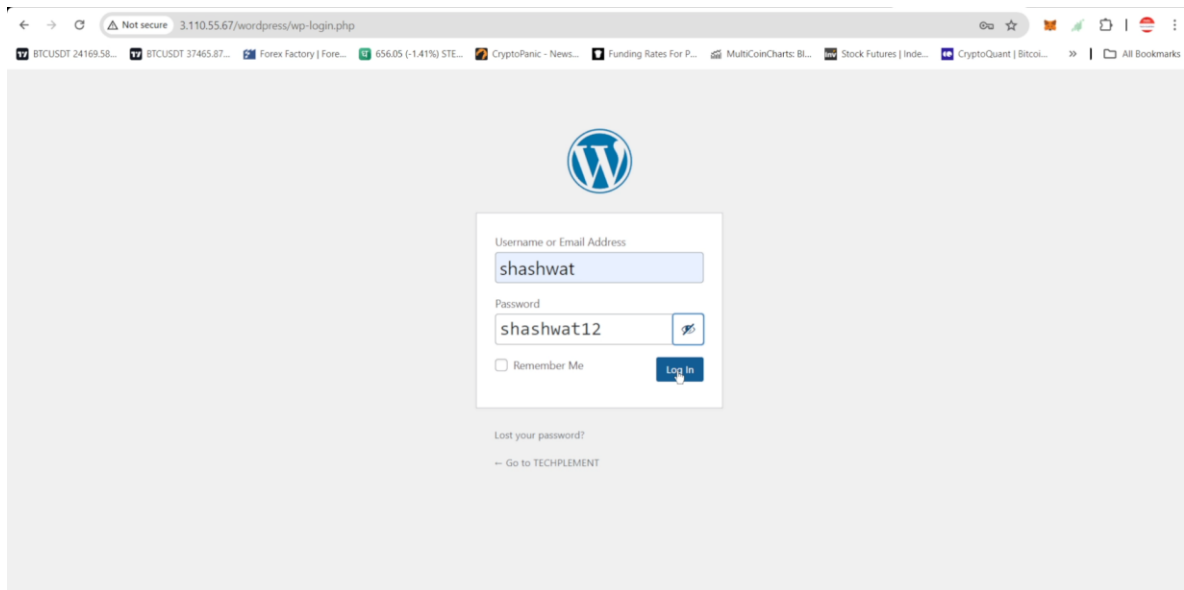
- cd /var/www/html/wordpress
- sudo cp wp-config-sample.php wp-config.php
- sudo vim wp-config.php

Open your browser and navigate to your WordPress instance's public IP address. Follow the WordPress installation wizard to complete the setup.

The screenshot shows the WordPress installation wizard's database configuration screen. The URL in the browser is 3.110.55.67/wordpress/wp-admin/setup-config.php?step=1. The page has the WordPress logo at the top. Below it, a message says: "Below you should enter your database connection details. If you are not sure about these, contact your host." There are five input fields: "Database Name" (wordpress_tech), "Username" (shashwat_user), "Password" (shashwat12), "Database Host" (localhost), and "Table Prefix" (wp_). Each field has a small text description below it. A "Submit" button is at the bottom left.



NOW COPY AND PASTE IT IN wp-config.php file..



YOU HAVE SUCCESSFULLY DEPLOYED WORDPRESS HOMPAGE IN MONOLITHIC ARCHITECTURE

Deploying a WordPress Homepage in Microservice Architecture

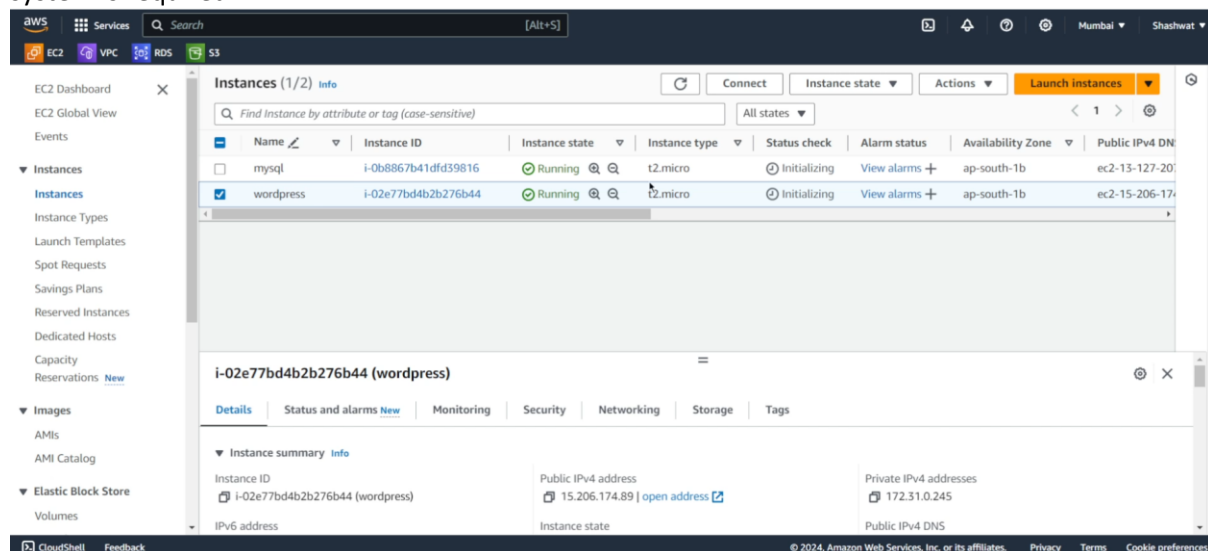
Description:

- Setting up Wordpress and MYSQL in two different EC2 instances
- Configure the necessary security group for the instances.
- EC2 instance type: t2-micro, AML: ubuntu-*
- Create a welcome page in wordpress that will be the homepage.

Creating 2 Instances 1 for Wordpress as well AS 1 for MySQL (STEPS)

1. Access your AWS Management Console.
2. Go to the EC2 Dashboard and hit "Launch Instance".
3. Name your instance "MYSQL".
4. Pick an appropriate Amazon Machine Image (AMI). I will Opt for Ubuntu Latest Version.
5. Select the instance type based on your needs. I'll go with a t2.micro(free-tier) instance.
6. Configure instance details like the number of instances, network settings, and storage. Ensure to include a security group allowing inbound traffic on HTTP (port 80), SSH (port 22) & MYSQL (port 3306) .
7. Review your settings and proceed by clicking "Launch instance".

Note: These steps are similar for both instances. For the "WORDPRESS" setup, SSH login to the system is required.



I Will be Setting Up MYSQL First:

1. Install MySQL on MySQL Instance:

- `sudo apt update`
- `sudo apt install mysql-server`

2. Secure MySQL Installation(optional if you want):

- `sudo mysql_secure_installation`

3. Create MySQL Database:

- `mysql -u root -p`
- `ALTER USER 'root'@'localhost' IDENTIFIED BY 'shashwat12';`
- `CREATE DATABASE tech_db;`
- `CREATE USER 'tech_user'@'%' IDENTIFIED BY 'shashwat12';`
- `GRANT ALL PRIVILEGES ON tech_db.* TO 'tech_user'@'%';`
- `FLUSH PRIVILEGES;`

- Exit

4. Next

- `sudo nano /etc/mysql/mysql.conf.d/mysqld.cnf` (change bind to address 0.0.0.0)
- `systemctl restart mysql`

Now Install PHP and Other Dependencies on WordPress Instance:

- `sudo apt update`
- `sudo apt install apache2`
- `sudo apt install php libapache2-mod-php php-mysql`
- `sudo systemctl restart apache2`

Download WordPress:

- `wget https://wordpress.org/latest.tar.gz`
- `tar xzvf latest.tar.gz` (extract)
- `sudo mv wordpress /var/www/html/` (moving wordpress)
- `cd /var/www/html/wordpress` (changing directory)

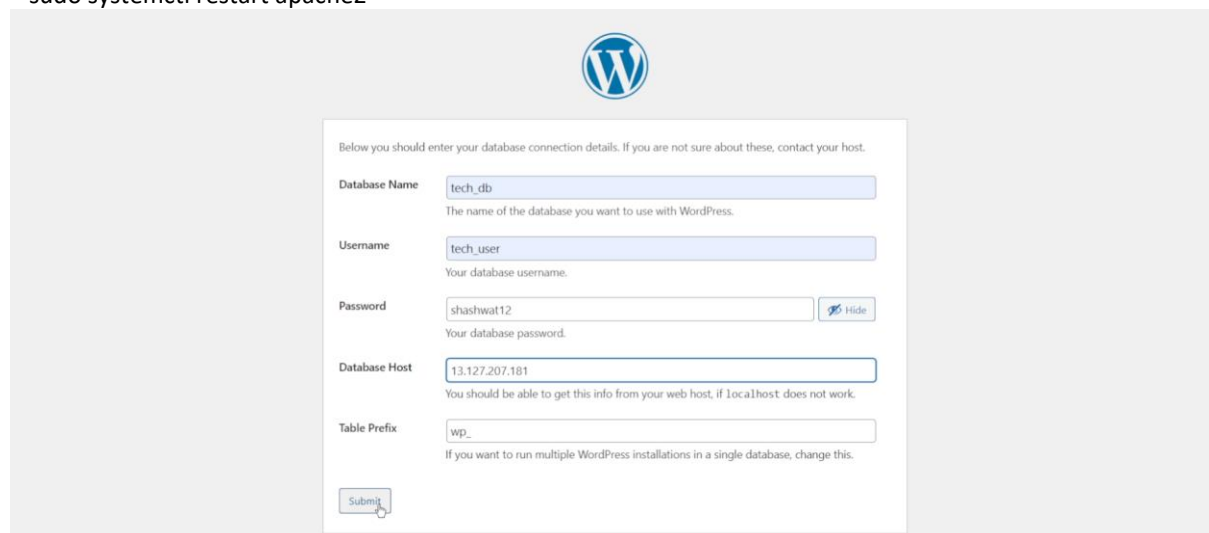
3.Update the database settings:

In the Browser, enter public ip of web server ex: 8.8.8.8/wordpress to finish setup

- Enter ('DB_NAME', 'wordpress_db');
- Enter ('DB_USER', 'bablu_user');
- Enter ('DB_PASSWORD', 'bablu123456');
- Enter ('DB_HOST', 'MySQL_Instance_IP_Address');

4.Now

- `vim wp-config.php` (create file and paste the configuration rules in this file)
- `sudo systemctl restart apache2`



Below you should enter your database connection details. If you are not sure about these, contact your host.

Database Name:
The name of the database you want to use with WordPress.

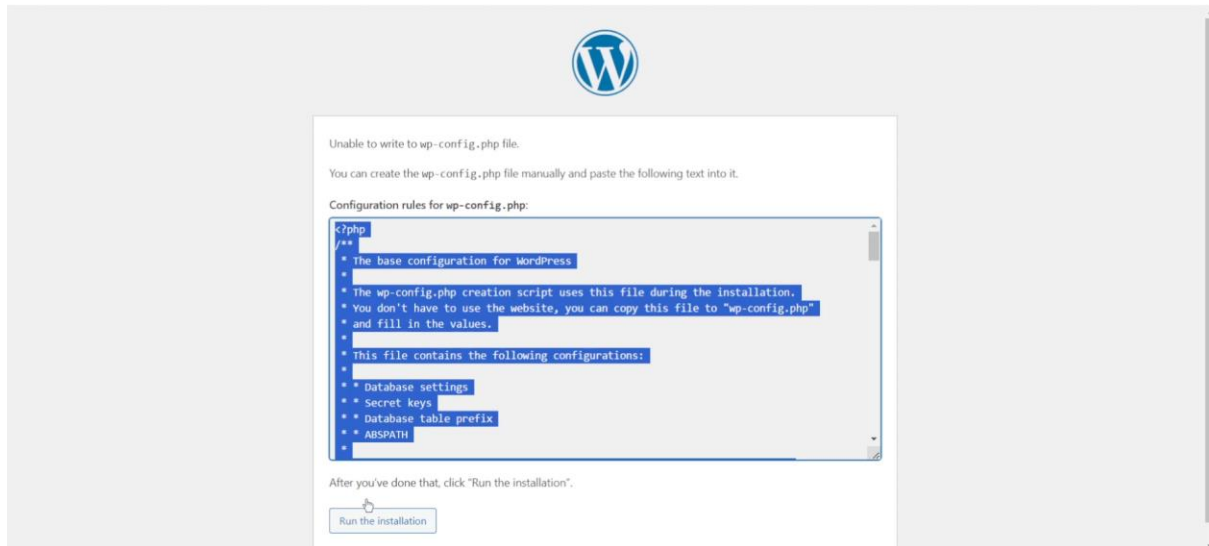
Username:
Your database username.

Password: [Hide](#)
Your database password.

Database Host:
You should be able to get this info from your web host, if localhost does not work.

Table Prefix:
If you want to run multiple WordPress installations in a single database, change this.

ENTER INFORMATION AND CLICK ON SUBMIT



Browse with your public IP/wordpress. Wordpress will automatically connect to the MySQL server on another EC2.

