

To set up your WordPress and MySQL microservices on two EC2 instances, we need to:

1. **Configure the security groups** for both the WordPress and MySQL instances.
2. **Deploy WordPress** and configure it to connect to the MySQL database.
3. **Create a WordPress homepage** that users can log in to.

Security Groups Configuration

1. **WordPress EC2 Instance (3.90.208.9)**

- **Inbound Rules:**
 - HTTP (port 80) from `0.0.0.0/0` (for public web access)
 - HTTPS (port 443) from `0.0.0.0/0` (for secure web access if using SSL)
 - SSH (port 22) from `49.205.209.240/32` (your IP for secure SSH access)
 - MySQL/Aurora (port 3306) from `172.31.31.200/32` (allow the WordPress instance to communicate with the MySQL instance)
- **Outbound Rules:**
 - All traffic allowed by default (for internet access, updates, etc.)

2. **MySQL EC2 Instance (54.82.112.9)**

- **Inbound Rules:**
 - MySQL/Aurora (port 3306) from `172.31.22.186/32` (allow the WordPress instance to communicate with the database)
 - SSH (port 22) from `49.205.209.240/32` (your IP for secure SSH access)
- **Outbound Rules:**
 - All traffic allowed by default (for package updates, etc.)

WordPress Setup

1. ****Launch the EC2 Instances:****

- Launch two EC2 instances using the `t2.micro` instance type and Ubuntu AMI (`ubuntu-*`).
- Assign the security groups you just configured to each instance.

2. ****Set up the MySQL database:****

- SSH into your MySQL instance using your private key:

```
ssh -i your-key.pem ubuntu@54.82.112.9
```

- Install MySQL:

```
sudo apt update
```

```
sudo apt install mysql-server -y
```

- Log into MySQL as root:

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

- Create the WordPress database and user:

```
CREATE DATABASE wordpress;
```

```
CREATE USER 'wp_user'@'%' IDENTIFIED BY 'varshar';
```

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

```
FLUSH PRIVILEGES;
```

```
EXIT;
```

- Configure MySQL to allow connections from the WordPress instance. Edit the MySQL config file:

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

- Change the bind address to:

bind-address = 0.0.0.0

- Restart MySQL:

```
sudo systemctl restart mysql
```

3. **Set up WordPress:**

- SSH into your WordPress instance using your private key:

```
ssh -i your-key.pem ubuntu@3.90.208.9
```

- Install Apache, PHP, and necessary PHP extensions:

```
sudo apt update
```

```
sudo apt install apache2 php php-mysql -y
```

- Download WordPress:

```
wget https://wordpress.org/latest.tar.gz
```

```
tar -xvzf latest.tar.gz
```

```
sudo mv wordpress/* /var/www/html/
```

- Configure WordPress to connect to the MySQL database. Edit the WordPress config file:

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

Set the database details:

```
php
```

```
define('DB_NAME', 'wordpress');
```

```
define('DB_USER', 'wp_user');  
define('DB_PASSWORD', 'varshasr');  
define('DB_HOST', '172.31.31.200');
```

- Set the proper permissions:

```
sudo chown -R www-data:www-data /var/www/html/  
sudo chmod -R 755 /var/www/html/
```

- Restart Apache:

```
sudo systemctl restart apache2
```

4. ****Create a Welcome Page:****

- Access your WordPress site by navigating to `http://3.90.208.9` in a browser.

if apache comes then,

Verify WordPress Installation: Ensure that WordPress files are in the `/var/www/html/` directory.

SSH into your WordPress instance:

```
ssh -i your-key.pem ubuntu@3.90.208.9
```

Check the contents of the `/var/www/html/` directory:

```
ls /var/www/html/
```

You should see WordPress files such as `index.php`, `wp-config.php`, `wp-admin`, `wp-content`, etc.

If you see the default index.html file from Apache, it's causing the default page to show. You should remove it:

```
bash
```

```
sudo rm /var/www/html/index.html
```

Move WordPress Files: If you haven't already, download and extract the WordPress package:

```
wget https://wordpress.org/latest.tar.gz
```

```
tar -xvzf latest.tar.gz
```

```
sudo mv wordpress/* /var/www/html/
```

Set File Permissions: Set the correct permissions for the WordPress files:

```
sudo chown -R www-data:www-data /var/www/html/
```

```
sudo chmod -R 755 /var/www/html/
```

Configure WordPress Database Connection: Make sure the wp-config.php file is properly configured with the database details. If you haven't done this yet, you can create the wp-config.php file by copying the sample configuration file:

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

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

Update the database connection details:

```
define('DB_NAME', 'wordpress');
```

```
define('DB_USER', 'wp_user');
```

```
define('DB_PASSWORD', 'varshar');
```

```
define('DB_HOST', '172.31.31.200'); // MySQL instance private IP
```

Restart Apache: After making all these changes, restart Apache:

`sudo systemctl restart apache2`

The screenshot displays the AWS Management Console interface. The top section shows the 'Launch an instance' page with the following details:

- Name and tags:** The name field is set to 'wordpress'.
- Application and OS Images (Amazon Machine Image):** A search bar is present with the text 'Search our full catalog including 1000s of application and OS images'.
- Summary:** The number of instances is set to 1. The software image (AMI) is not yet selected. The virtual server type (instance type) is 't3.micro'. The firewall (security group) and storage (volumes) are not yet configured.

A 'Free tier' notification is visible, stating: 'Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per'.

The bottom section shows the 'Instances (1)' list. The table contains one instance:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
wordpress	i-0548565880fa0857f	Running	t3.micro	...	View alarms +	eu-north-1a

The 'Select an instance' dialog is open at the bottom of the screen.

EC2 / Instances / Launch an instance

Launch an instance

Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags

Info

Name

mysql

Add additional tags

Application and OS Images (Amazon Machine Image)

Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Search our full catalog including 1000s of application and OS images

Recents

Quick Start

Summary

Number of instances

Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...read more

ami-0c6da69dd16f45f72

Virtual server type (instance type)

t3.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per

Cancel

Launch instance

HTTPS

TCP

443

Source type

Info

Anywhere

Source

Info

Add CIDR, prefix list or security

0.0.0.0/0

Description - optional

Info

e.g. SSH for admin desktop

Security group rule 3 (TCP, 80, 0.0.0.0/0)

Remove

Type

Info

HTTP

Protocol

Info

TCP

Port range

Info

80

Source type

Info

Anywhere

Source

Info

Add CIDR, prefix list or security

0.0.0.0/0

Description - optional

Info

e.g. SSH for admin desktop

Security group rule 4 (TCP, 3306)

Remove

Type

Info

MYSQL/Aurora

Protocol

Info

TCP

Port range

Info

3306

Source type

Info

Custom

Source

Info

Add CIDR, prefix list or security

Description - optional

Info

e.g. SSH for admin desktop

aws Services Search [Alt+S]

EC2 > Instances > Launch an instance

Success
Successfully initiated launch of instance (i-073414a532d3eca84)

Launch log

Next Steps
What would you like to do next with this instance, for example "create alarm" or "create backup"

Create billing and free tier usage alerts
To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.
[Create billing alerts](#)

Connect to your instance
Once your instance is running, log into it from your local computer.
[Connect to instance](#)
[Learn more](#)

Connect an RDS database
Configure the connection between an EC2 instance and a database to allow traffic flow between them.
[Connect an RDS database](#)
[Create a new RDS database](#)
[Learn more](#)

Create EBS snapshot policy
Create a policy that automates the creation, retention, and deletion of EBS snapshots.
[Create EBS snapshot policy](#)

Inbox (2,747) - dhushettisriva... x aws console login - Yahoo Indi... x Instances | EC2 | eu-north-1 x EC2 Instance Connect x +

eu-north-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0628568163329e5a1&osUser=ubuntu®ion=eu-north-1&sshPort=22#

Gmail Maps YouTube SAMSUNG Galaxy F... All Boc

aws Services Search [Alt+S]

```
wordpress/wp-includes/js/plupload/license.txt
wordpress/wp-includes/js/plupload/wp-plupload.min.js
wordpress/wp-includes/js/plupload/moxie.min.js
wordpress/wp-includes/js/jcrop/
wordpress/wp-includes/js/jcrop/jquery.Jcrop.min.css
wordpress/wp-includes/js/jcrop/jquery.Jcrop.min.js
wordpress/wp-includes/js/jcrop/Jcrop.gif
wordpress/wp-includes/js/wp-custom-header.min.js
wordpress/wp-includes/js/api-request.min.js
wordpress/wp-includes/bookmark-template.php
wordpress/wp-includes/widgets.php
wordpress/wp-includes/class-wp-embed.php
wordpress/wp-includes/class-wp-image-editor-imagick.php
wordpress/wp-includes/class-IXR.php
wordpress/wp-includes/style-engine/
wordpress/wp-includes/style-engine/class-wp-style-engine-processor.php
wordpress/wp-includes/style-engine/class-wp-style-engine.php
wordpress/wp-includes/style-engine/class-wp-style-engine-css-declarations.php
wordpress/wp-includes/style-engine/class-wp-style-engine-css-rules-store.php
wordpress/wp-includes/style-engine/class-wp-style-engine-css-rule.php
wordpress/wp-includes/wp-db.php
wordpress/wp-includes/nav-menu-template.php
wordpress/wp-includes/Formatting.php
wordpress/wp-includes/class-wp-http-streams.php
wordpress/wp-includes/class-wp-metadata-lazyloader.php
wordpress/wp-includes/post-template.php
wordpress/wp-includes/feed-atom-comments.php
wordpress/wp-includes/pluggable-deprecated.php
wordpress/wp-includes/theme.php
```

Inbox (2,747) - dhushettisriva... x Instances | EC2 | eu-north-1 x EC2 Instance Connect x WordPress - Installation x +

Not secure 13.60.179.42/wp-admin/install.php

Gmail Maps YouTube SAMSUNG Galaxy F... All Bookmarks

WordPress logo

English (United States)

Afrikaans

አማርኛ

Aragonés

العربية

العربية المغربية

অসমীয়া

اڤونسي اڤونسي

Azerbaycan dili

Беларуская мова

Български

বাংলা

Беларуская

Bosanski

Català

Cebuano

Čeština

Cymraeg

Dansk

Deutsch (Österreich)

Deutsch (Schweiz)



Username or Email Address

srivarsha

Password

••••••••••



☐ Remember Me

Log In

[Lost your password?](#)

[← Go to project](#)

Browser tabs: Inbox (2,747) - dhushettisrivarsha, Instances | EC2 | eu-north-1, EC2 Instance Connect, Dashboard - project - WordPress


Address bar: Not secure 13.60.179.42/wp-admin/

Navigation: project, New, Howdy, srivarsha, Screen Options, Help

Dashboard


Welcome to WordPress!

[Learn more about the 6.6.1 version.](#)

**Author rich content with blocks and patterns**


Block patterns are pre-configured block layouts. Use them to get inspired or create new pages in a flash.

[Add a new page](#)

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Design everything on your site — from the header down to the footer, all using blocks and patterns.

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**Switch up your site's look & feel with Styles**

Tweak your site, or give it a whole new look! Get creative — how about a new color palette or font?

[Edit styles](#)

Site Health Status Quick Draft