**Step 1: Update the System**

First, update all existing packages:

sudo yum update -y

**Step 2: Install Docker**

Amazon Linux 2 does not come with Docker pre-installed, so install it:

sudo yum install docker -y

After installation, start the Docker service:

sudo systemctl start docker

Enable Docker to start on boot:

sudo systemctl enable docker

Verify Docker installation:

docker --version

**Step 3: Add User to Docker Group (Optional)**

To run Docker commands without sudo, add the current user to the docker group:

sudo usermod -aG docker $USER

newgrp docker

Now, you can run Docker commands without sudo.

**Step 4: Install Docker Compose**

Amazon Linux does not include Docker Compose by default. Install it using:

sudo curl -L "https://github.com/docker/compose/releases/latest/download/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose

Make it executable:

sudo chmod +x /usr/local/bin/docker-compose

Verify installation:

docker-compose --version

**Step 5: Set Up WordPress and MySQL Using Docker Compose**

**Create a Project Directory**

Navigate to your home directory and create a wordpress folder:

mkdir wordpress && cd wordpress

**Create a Docker Compose File**

Create a new file:

nano docker-compose.yml

Paste the following content:

version: '3.8'

services:

db:

image: mysql:5.7

container\_name: wordpress\_db

restart: always

environment:

MYSQL\_ROOT\_PASSWORD: rootpass

MYSQL\_DATABASE: wordpress

MYSQL\_USER: wpuser

MYSQL\_PASSWORD: wppass

volumes:

- db\_data:/var/lib/mysql

wordpress:

depends\_on:

- db

image: wordpress:latest

container\_name: wordpress\_app

restart: always

ports:

- "80:80"

environment:

WORDPRESS\_DB\_HOST: db:3306

WORDPRESS\_DB\_USER: wpuser

WORDPRESS\_DB\_PASSWORD: wppass

WORDPRESS\_DB\_NAME: wordpress

volumes:

- wp\_data:/var/www/html

volumes:

db\_data:

wp\_data:

Save and exit:  
**Press CTRL+X, then Y, then Enter.**

**Step 6: Start WordPress and MySQL Services**

Run the following command to start the containers:

docker-compose up -d

Check if the containers are running:

docker ps

**Step 7: Access WordPress**

* Open a **web browser**.
* Enter: [**http://your-ec2-public-ip/**](http://your-ec2-public-ip/)
* The WordPress installation page should appear.

Find your **EC2 public IP** using:

curl http://checkip.amazonaws.com

Use that IP in the browser.

**Step 8: Verify MySQL Connection**

During WordPress setup, enter the following details:

* **Database Name:** wordpress
* **Username:** wpuser
* **Password:** wppass
* **Database Host:** db

Click **Submit** and follow the installation steps.

**Step 9: Manage Your Docker Services**

* **To stop the services:**
* docker-compose stop
* **To restart:**
* docker-compose start
* **To remove containers (without deleting data):**
* docker-compose down
* **To remove everything (including volumes):**
* docker-compose down -v

**Step 10: (Optional) Secure WordPress**

1. Assign an **Elastic IP** in AWS so the IP remains static.
2. Set up **HTTPS using Let's Encrypt**.
3. Use **AWS RDS** for a managed MySQL database.

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