Description:

Task: Deploy Application in Monolothic and Microservices Architecture

---- For Monolithic: 1 EC2 Instance, deploy Wordpress and MySQL on the same Instance.

---- For Microservices: 2 EC2 Instances, 1 for Wordpress and 1 for MySQL

---- Configure the necessary security group for the instances.

---- EC2 Instance type: t2. micro, AMI: ubuntu

Step 1 For Monolithic:

Deploy Wordpress and MySQL both on the same Instance.

Step 2 - Update and install commands

a) Server update command: sudo apt- get update

b) install apache web server on the instance: sudo apt install apache2

c) Install php runtime and php mysql sudo apt install php libapache2-mod-php php-mysql.

d) Install mysql-server : sudo apt install mysql-server

Step 3- Login to mysql server: sudo mysql -u root

a) Change authentication plugin to mysql_native_password: ALTER USER ‘root’@’localhost’ IDENTIFIED WITH mysql_native_password by Testpassword@123’;

b) Create a new database user for Wordpress: CREATE USER ‘wp_user’@’localhost’ IDENTIFIED BY ‘Testpassword@123;

c) Create a database for Wordpress: CREATE DATABASE wp;

d) Grant all priviledges on the database WP to the newly created user: GRANT ALL PRIVILEGES ON WP.* TO 'wp_user'@'localhost';

e) Download Wordpress: cd /var/www/html

Wget https://wordpress.org/latest.tar.gz

f) Unzip: tar -xvf latest.tar.gz

Step 4-

Commands to create config file:

• Cd /var/www/html

• Cd wordpress

• Nano wp-config.php

Step 5- Wordpress website:

Error! Filename not specified.

Task 2:

For Microservices: 2 EC2 Instances, 1 for Wordpress and 1 for MySQL:

Step 1- Created 2 EC2 Instances- 1 for Wordpress and 1 for MySQL:

a) Configured the security groups of the instances:

b) Connected to the MySQL server and updated:

Command: sudo apt update

c) install php runtime and php mysql connector sudo apt install php libapache2-mod-php php-mysql

d) Install mysql-server sudo apt install mysql-server

Step 2-

a) Change authentication plugin to mysql_native_password: ALTER USER ‘root’@’localhost’ IDENTIFIED WITH mysql_native_password by Testpassword@123’;

b) Create a new database user for Wordpress: CREATE USER ‘wp_user’@’localhost’ IDENTIFIED BY ‘Testpassword@123;

c) Create a database for Wordpress: CREATE DATABASE wp;

d) Grant all priviledges on the database WP to the newly created user: GRANT ALL PRIVILEGES ON WP.* TO 'wp_user'@'localhost';

Step 3-

a) Connected to the Wordpress server and updated Command: sudo apt update

b) Installing apache webserver on the instance: sudo apt install apache2 -y

b) Install php runtime and php mysql connector: sudo apt install php libapache2-mod-php php-mysql

Step 4-

xiv) Download Wordpress:

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

Step 5-

a) Move Wordpress folder to apache document root: mv wordpress/ /var/www/html

b) Unzip: tar -xvf latest.tar.gz

Step 6-

a) Commands to create config file:

- Cd /var/www/html
- Cd wordpress
- Nano wp-config.php

b) Wordpress website created: