

## Cloud-Hosted E-Commerce Deployment Documentation

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Application Stack: PHP, MySQL, Apache, AWS EC2 (Ubuntu)

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### 1. EC2 Instance Setup

- Create a t2.micro Ubuntu instance
- Allow ports: 22, 80, 443
- Download .pem key

### 2. Connect to EC2 via SSH

```
ssh -i "your_key.pem" ubuntu@your_public_ip
```

### 3. Update System Packages

```
sudo apt update && sudo apt upgrade -y
```

### 4. Install Apache Web Server

```
sudo apt install apache2 -y
```

### 5. Install PHP and Extensions

```
sudo apt install php libapache2-mod-php php-mysql php-mbstring php-xml php-zip php-gd -y
```

### 6. Install MySQL Database

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

### 7. Secure MySQL

```
sudo mysql_secure_installation
```

### 8. Login to MySQL

```
sudo mysql
```

Create Database:

```
CREATE DATABASE ecommerce_db;
```

```
CREATE USER 'ecomuser'@'localhost' IDENTIFIED BY 'StrongPassword123';
```

```
GRANT ALL PRIVILEGES ON ecommerce_db.* TO 'ecomuser'@'localhost';
```

```
FLUSH PRIVILEGES;
```

### 9. Upload Project Files

```
scp -i "your_key.pem" -r /local/project/path ubuntu@your_ip:/var/www/html/
```

### 10. Set Permissions

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

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

### 11. Import SQL Database

```
sudo mysql ecommerce_db < /var/www/html/ecommerce.sql
```

### 12. Restart Apache

```
sudo systemctl restart apache2
```

### 13. Test Website

Open: [http://YOUR\\_PUBLIC\\_IP](http://YOUR_PUBLIC_IP)

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## TROUBLESHOOTING

- Blank website → Check logs: `sudo tail -f /var/log/apache2/error.log`
- Permission denied → `sudo chmod -R 755 /var/www/html`
- DB error → Check db.php credentials
- Apache not running → `sudo systemctl restart apache2`

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## FULL COMMAND HISTORY USED

1 `sudo apt update && sudo apt upgrade -y`

2 `ls`

3 `echo test`

4 `ls`

5 `sudo apt install -y apache2 php php-mysql php-cli php curl php-xml php-mbstring git mysql-server unzip`

6 `sudo systemctl start apache2`

7 `sudo systemctl enable apache2`

```
8 systemctl status apache2
9 q
10 sudo mysql_secure_installation
11 sudo mysql
12 cd /var/www/html
13 cd /var/www/html
14 pwd
15 sudo rm -rf /var/www/html/*
16 https://github.com/Mahalakshmi999999/ecommerce_AWS-deployment.git
17 pwd
18 sudo rm -rf /var/www/html/*
19 https://github.com/mahalakshmi-999999/ecommerce-AWS-deployment.git
20 https://github.com/mahalakshmi-999999/ecommerce_AWS-deployment.git
21 https://github.com/Mahalakshmi999999/ecommerce_AWS-deployment.git
22 https://github.com/Mahalakshmi999999/ecommerce_AWS-deployment.git
23 ls -l /var/www
24 cd /var/www/html
25 sudo rm -rf /var/www/html/*
26 sudo git clone https://github.com/Mahalakshmi999999/ecommerce_AWS-deployment.git
/var/www/html
27 ls -l /var/www/html
28 sudo chown -R www-data:www-data /var/www/html
29 sudo chmod -R 755 /var/www/html
30 ls -l /var/www/html
31 sudo nano /var/www/html/includes/db.php
32 cat /var/www/html/includes/db.php
33 php /var/www/html/test_db.php
34 sudo nano /var/www/html/index.php
35 sudo systemctl restart apache2
36 sudo nano /etc/php/*/apache2/php.ini
37 php -i | grep "Loaded Configuration File"
38 php -i | grep "Server API"
```

```
39 ls /etc/php/
40 apache2ctl -M | grep php
41 sudo nano /etc/php/8.3/apache2/php.ini
42 php -i | grep "Loaded Configuration File"
43 sudo systemctl restart apache2
44 cd ~
45 sudo du -sh /var/lib/mysql
46 whoami
47 pwd
48 ls -a
49 cd /home/ubuntu
50 ls -l
51 sudo mysql -u root -p
52 ls -l
53 sudo systemctl restart apache2
54 sudo mysql -u root
55 USE ecommerce_db;
56 sudo mysql -u root -p
57 sudo nano /var/www/html/pages/index.php
58 sudo nano /var/www/html/css/style.css
59 sudo nano /var/www/html/pages/index.php
60 sudo nano /var/www/html/css/style.css
61 sudo nano /var/www/html/pages/index.php
62 ls
63 history
```

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Deployment Completed Successfully