

# Drupal 11 Deployment + CI/CD on Amazon Linux 2 (t2.micro Free Tier)

## 1■■ Launch EC2 Instance

- AMI: Amazon Linux 2
- Instance type: t2.micro
- Security Group: Allow HTTP (80), SSH (22), Jenkins (8080), and MySQL (3306)

SSH into EC2:

```
ssh -i your-key.pem ec2-user@your-ec2-public-ip
```

## 2■■ Install Apache, PHP, MySQL Client, Composer

```
sudo yum update -y
sudo amazon-linux-extras enable php8.1
sudo yum install -y httpd php php-mysqlnd php-cli php-gd php-json php-xml unzip git mysql
sudo systemctl start httpd
sudo systemctl enable httpd
curl localhost
```

## 3■■ Install Composer

```
php -r "copy('https://getcomposer.org/installer', 'composer-setup.php');"
php composer-setup.php --install-dir=/usr/local/bin --filename=composer
composer --version
```

## 4■■ Install Drupal

```
cd /var/www/html
sudo git clone https://github.com/yourusername/drupal-site.git
sudo chown -R apache:apache /var/www/html/drupal-site
```

Update Apache config:

```
sudo nano /etc/httpd/conf/httpd.conf
```

Set DocumentRoot and Directory permissions:

```
DocumentRoot "/var/www/html/drupal-site"
<Directory "/var/www/html/drupal-site">
    AllowOverride All
    Require all granted
</Directory>
```

```
sudo systemctl restart httpd
```

## 5■■ Set up AWS RDS (MySQL)

Launch RDS MySQL instance, publicly accessible, allow inbound 3306 from EC2 security group.

Test connection:

```
mysql -h your-rds-endpoint -u your-db-user -p
```

## 6■■ Install Jenkins

```
sudo amazon-linux-extras install java-openjdk17 -y
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
sudo yum upgrade
sudo yum install jenkins -y
sudo systemctl enable jenkins
sudo systemctl start jenkins
```