



**Project-10**

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**Project:** [Wordpress-EKS(eksctl)]

Project: **Deploy Wordpress on EKS cluster thru eksctl with Helm**

[AWS EKS + Cloudshell + CloudFormation]

Reference Video: <https://youtu.be/LoJM3eP9ow0> [Atiq Rahman]

Step 1: open cloudshell in AWS and run all the below commands step wise

Step 2: check for the Wordpress website in browser by using Load Balancer DNS link in 8080 port

### **Task-1 Create Cluster**

```
1. curl --silent --location
"https://github.com/weaveworks/eksctl/releases/latest/download/eksctl_$(uname -s)_amd64.tar.gz" |
tar xz -C /tmp
2. sudo mv /tmp/eksctl /usr/local/bin
3. eksctl create cluster --name wordpress-cluster

4. aws eks update-kubeconfig --region ap-south-1 --name wordpress-cluster
```

### **Task-2 Install Helm**

```
1. sudo yum install openssl -y
2. curl https://raw.githubusercontent.com/helm/helm/master/scripts/get-helm-3 > get_helm.sh
3. chmod 700 get_helm.sh
4. ./get_helm.sh
```

### **Task-3 Setup EBS CSI addon (OIDC IAM) for EKS:**

```
1. oidc_id=$(aws eks describe-cluster --name wordpress-cluster --query
  "cluster.identity.oidc.issuer" --output text | cut -d '/' -f 5)
2. aws iam list-open-id-connect-providers | grep $oidc_id | cut -d "/" -f4
3. eksctl utils associate-iam-oidc-provider --cluster wordpress-cluster --approve
```

### **Task-4 IAM Role for eksctl:**

```
eksctl create iamserviceaccount \
--name ebs-csi-controller-sa \
--namespace kube-system \
--cluster wordpress-cluster \
--attach-policy-arn arn:aws:iam::aws:policy/service-role/AmazonEBSCSIDriverPolicy \
--approve \
--role-only \
--role-name AmazonEKS_EBS_CSI_DriverRoleWordpress
```

### **#Adding EBS CSI to EKS:**

```
eksctl create addon --name aws-ebs-csi-driver --cluster wordpress-cluster --service-account-role-
arn arn:aws:iam::167613117387:role/AmazonEKS_EBS_CSI_DriverRoleWordpress --force
```

### **#Install Wordpress thru Helm:**

```
helm repo add bitnami https://charts.bitnami.com/bitnami
helm install my-release --set wordpressUsername=admin --set wordpressPassword=defaultpass
bitnami/wordpress
```

(check for Wordpress website with LoadBalancer DNS link)

### **#delete Total Cluster**

```
eksctl delete cluster wordpress-cluster
```