EKS nginx-ingress-controller

Prerequisites -

1. Create (IAM) OpenID Connect (OIDC) provide

<https://docs.aws.amazon.com/eks/latest/userguide/enable-iam-roles-for-service-accounts.html>

1. Create IAM role <https://docs.aws.amazon.com/eks/latest/userguide/aws-load-balancer-controller.html>

**curl -o iam\_policy.json** [**https://raw.githubusercontent.com/kubernetes-sigs/aws-load-balancer-controller/v2.4.4/docs/install/iam\_policy.json**](https://raw.githubusercontent.com/kubernetes-sigs/aws-load-balancer-controller/v2.4.4/docs/install/iam_policy.json)

**aws iam create-policy \**

**--policy-name *AWSLoadBalancerControllerIAMPolicy* \**

**--policy-document file://iam\_policy.json**

**eksctl create iamserviceaccount \**

**--name aws-node \**

**--namespace kube-system \**

**--cluster *demo* \**

**--role-name "*AmazonEKSVPCCNIRole*" \**

**--attach-policy-arn arn:aws:iam::aws:policy/AmazonEKS\_CNI\_Policy \**

**--override-existing-serviceaccounts \**

**--approve**

1. Install VPC CNI addons Plugin in EKS Cluster
2. Install AWS LoadBalancer Controller or **NGINX Controller**

**AWS -** <https://docs.aws.amazon.com/eks/latest/userguide/aws-load-balancer-controller.html>

**NGINX -** <https://kubernetes.github.io/ingress-nginx/deploy/#aws>

1. Create Dummy deployment/service yaml file then Create ingress.yml file

**NGINX ingress file-**

apiVersion: networking.k8s.io/v1

kind: Ingress

metadata:

name: nginx-ingress

namespace: default

annotations:

kubernetes.io/ingress.class: nginx

nginx.ingress.kubernetes.io/proxy-body-size: 50m

nginx.org/client-max-body-size: 50m

spec:

rules:

- host: kavandalwadi.tech

http:

paths:

- backend:

service:

name: demo-svc

port:

number: 80

path: /

pathType: Prefix

**AWS LB ingress file (ALB)-**

**apiVersion: networking.k8s.io/v1**

**kind: Ingress**

**metadata:**

**namespace: default**

**name: alb-ingress**

**annotations:**

**kubernetes.io/ingress.class: alb**

**alb.ingress.kubernetes.io/scheme: internet-facing**

**alb.ingress.kubernetes.io/target-type: instance**

**alb.ingress.kubernetes.io/success-codes: '404,403'**

**alb.ingress.kubernetes.io/ssl-redirect: '443'**

**alb.ingress.kubernetes.io/listen-ports: '[{"HTTP": 80}, {"HTTPS": 443}]'**

**alb.ingress.kubernetes.io/subnets: subnet-086XXXXXXXX12, subnet-0XXXXXXXXXX152f**

**alb.ingress.kubernetes.io/certificate-arn: arn:aws:acm:us-east-1:XXXXXXXXXXXX:certificate/64XXXXXX47-0f22-41ec-XXXc-4XXXXXXXX8**

**spec:**

**rules:**

**- host: kavandalwadi.tech**

**http:**

**paths:**

**- pathType: Prefix**

**path: /**

**backend:**

**service:**

**name: demo-svc**

**port:**

**number: 80**

**Ref - Nginx Controller** [**https://github.com/kubernetes/ingress-nginx/tree/main/charts/ingress-nginx**](https://github.com/kubernetes/ingress-nginx/tree/main/charts/ingress-nginx)

**AWS ELB Controller -** [**https://github.com/kubernetes-sigs/aws-load-balancer-controller/tree/main/helm/aws-load-balancer-controller**](https://github.com/kubernetes-sigs/aws-load-balancer-controller/tree/main/helm/aws-load-balancer-controller)