

1. Install Argo CD on EKS

Step 1: Create Namespace

```
kubectl create namespace argocd
```

Step 2: Install Argo CD Components

```
kubectl apply -n argocd -f https://raw.githubusercontent.com/argoproj/argo-cd/stable/manifests/install.yaml
```

2. Access Argo CD UI (From Browser Outside EC2)

Since you are on EC2, and want to access the UI remotely (e.g., from your local laptop/browser), the best approach is to expose the Argo CD server using **NodePort** or **LoadBalancer**.

Option A: Expose Argo CD via NodePort

Step 1: Edit Argo CD Server Service

```
kubectl edit svc argocd-server -n argocd
```

Change:

type: ClusterIP

To:

type: NodePort

Save and exit.

Step 2: Get the Assigned NodePort

```
kubectl get svc argocd-server -n argocd
```

Look for the PORT(S) field like:

443:<node-port>/TCP

E.g., 443:31984/TCP

Step 3: Get the EKS Node Public IP

```
kubectl get nodes -o wide
```

Use the **Public IP** of any EKS worker node.

Tip: If your nodes don't have public IPs, you can SSH from EC2 into a node or use a LoadBalancer instead.

Step 4: Open EC2 Security Group

Go to the **Security Group** of your EKS nodes and allow inbound traffic on the **NodePort** (e.g., 31984) from your IP.

Step 5: Access Argo CD in Browser

Use:

```
https://<EKS_NODE_PUBLIC_IP>:<NodePort>
```

Ignore the TLS warning and proceed.

3. Get Argo CD Initial Admin Password

```
kubectl get secret argocd-initial-admin-secret -n argocd \
-o jsonpath="{.data.password}" | base64 -d && echo
```

Login with:

- **Username:** admin
- **Password:** (from above)