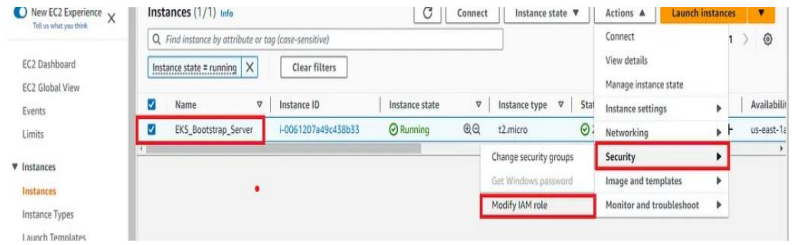
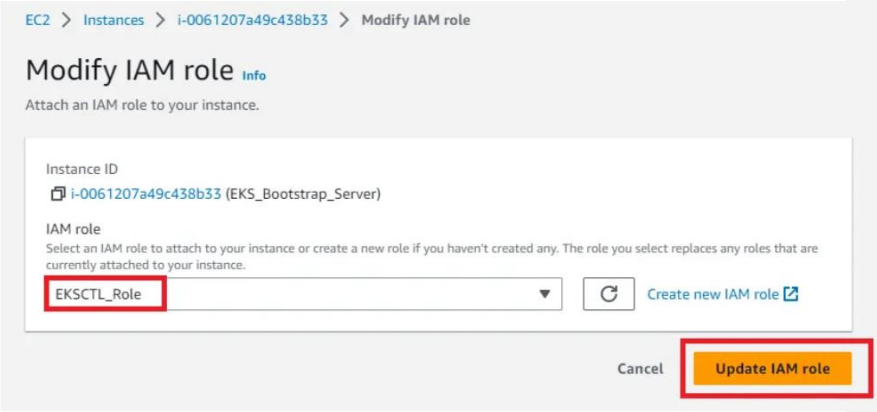
After creating the role we need to add this role to our Bootstrap EC2 Instance:



Select the role and click on **Update IAM role** as shown below, for now provide the role access with full admin rights



AWS CLI *— A command line tool for working with AWS services, including Amazon EKS. This guide requires that you use the version* `2.11.3` *or later or* `1.27.93` *or later*

```
curl "https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip" -o
"awscliv2.zip"
unzip awscliv2.zip
sudo ./aws/install
```

```
[root@ip-172-31-92-254 ~]# aws --version
aws-cli/2.11.21 Python/3.11.3 Linux/5.10.178-162.673.amzn2.x86_64
exe/x86_64.amzn.2 prompt/off
```

Setup kubectl

a. Download kubectl version 1.26

b. Grant execution permissions to kubectl executable

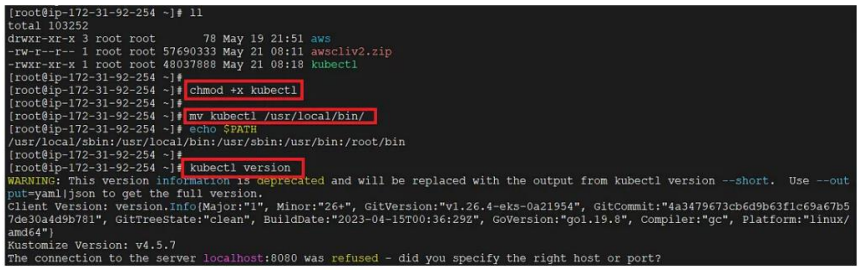
c. Move kubectl onto /usr/local/bin

d. Test that your kubectl installation was successful

```
curl -O https://s3.us-west-2.amazonaws.com/amazon-eks/1.26.4/2023-05-11/bin/linux/amd64/kubectl

chmod +x kubectl

mv kubectl /usr/local/bin
```



Setup eksctl

a. Download and extract the latest release

b. Move the extracted binary to /usr/local/bin

c. Test that your eksclt installation was successful

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

Commented [jt1]:

Create your cluster and nodes

To set up our first Kubernetes cluster we will use the below command in which we have to provide the name of our cluster, the region in which it will be created, and the size of our Instance.

```
eksctl create cluster --name=eksdemo1 --region=us-east-1 --zones=us-east-1a,us-east-1b --nodes 1 --node-type t2.small

kubectl get nodes
```

Create a Pod using Kubectl to Validate the Cluster

Let's create a Pod using the kubectl command "**kubectl run webapp — image=httpd**", where webapp is the name of our first pod and httpd is the image name.

Eksctl delete cluster --name=eksdemo1