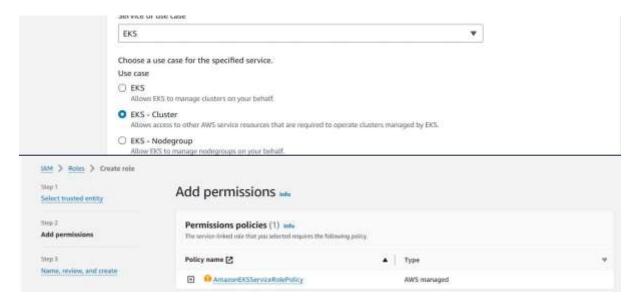
TASK = create a Amazon EKS (Elatsic kubernets services)

NAME = Akshay choudhary

CDEC BATCH 24

Step 1

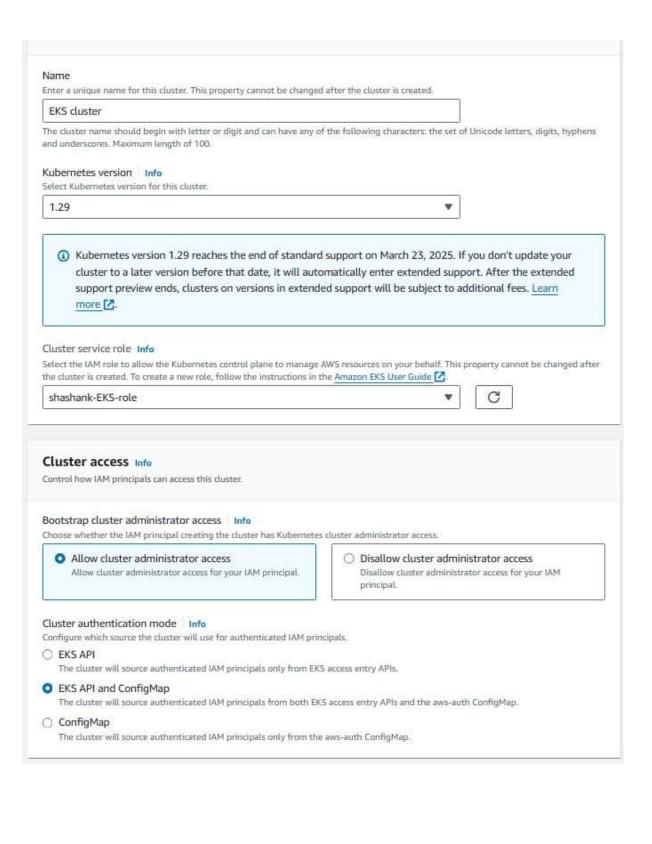
- Set up IAM ROLE for EKS
- Go to a IAM service and create a new role for eks



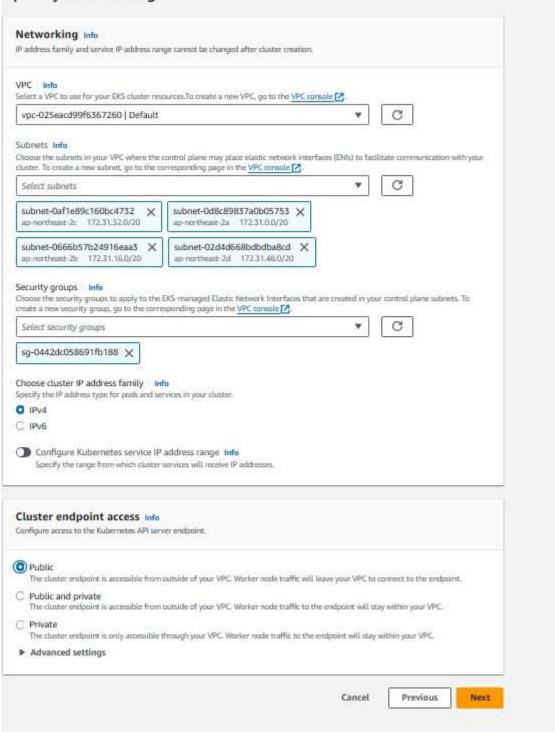
Step 2

Create a EKS cluster

• Open the amazon EKS console

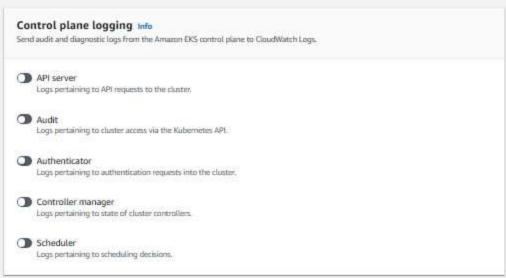


Specify networking



Configure observability

Metrics Prometheus Info Send Prometheus metrics to Amazon Managed Service for Prometheus Monstor your application and infrastructure metrics with Amazon Managed Service for Prometheus. These metrics include system housth and performance data. (a) Agentiess Prometheus metrics collection requires the cluster API server to be available privately. To make the following toggle available, select either the Public and private option or the Private option for Cluster endpoint access in Specify networking. CloudWatch Info (a) You can enable CloudWatch Container insights in your clusters through the CloudWatch Observability addon. After your cluster is created, navigate to the add-ons tab and install CloudWatch Observability add-on to enable Container Insights and start ingesting infrastructure telemetry into CloudWatch.



Cancel

Previous

Next

Select add-ons

Review the add-ons from multiple categories, then select add-ons to enhance your cluster.

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V

Amazon EKS add-ons (5) Info

CoreDNS Info

Enable service discovery within your cluster.

Category networking

O Installed by default

kube-proxy Info

Enable service networking within your cluster:

Category networking

(a) Installed by default

Amazon VPC CNI Info

Enable pod networking within your cluster.

Category networking

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(a) Installed by default

Amazon EKS Pod Identity Agent Info

Install EKS Pod Identity Agent to use EKS Pod Identity to grant AWS IAM permissions to pods through Kubernetes service accounts.

Category security

Amazon GuardDuty EKS Runtime Monitoring Info

Install EKS Runtime Monitoring add-on within your cluster. Ensure to enable EKS Runtime Monitoring within Amazon GuardDuty.

Category security

Cancel

Previous

Next

Configure selected add-ons settings Configure the add-ons for your cluster by selecting settings. CoreDNS Info Category Status (a) Installed by default networking Version Select the version for this add-on. v1.11.1-eksbuild.4 kube-proxy Info Category networking Version Select the version for this add-ors v1.29.0-eksbuild,1 ٠ Amazon VPC CNI Info Status Category networking Select the version for this add-on. v1.16,0-eksbuild.1 . Amazon EKS Pod Identity Agent Info Remove add-on Category security Ready to install

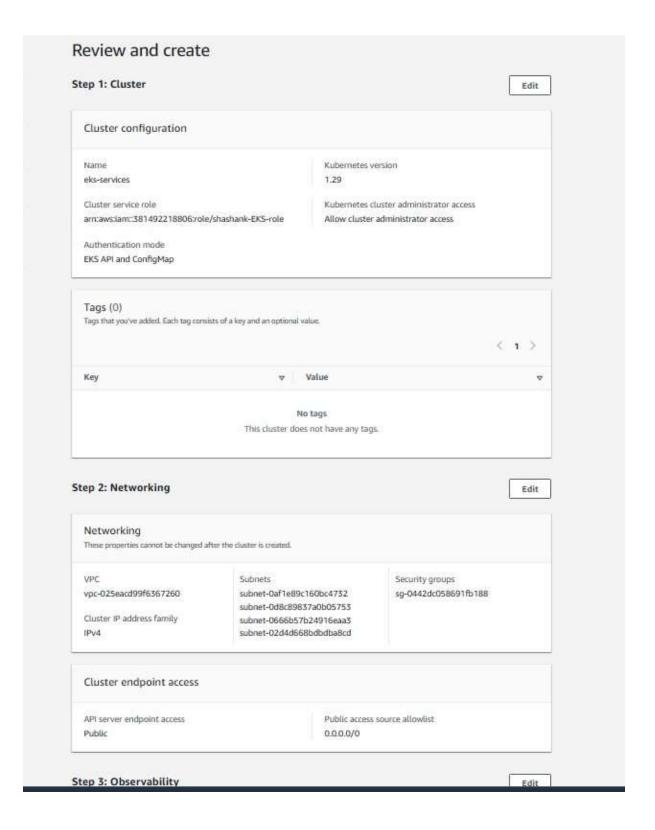
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Cancel

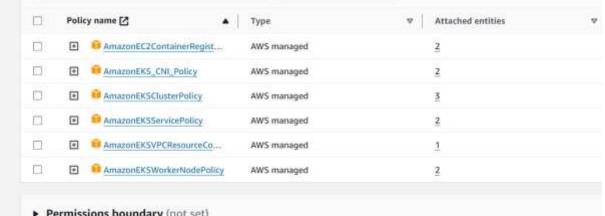
Previous

Next

Select the version for this add-on. v1.2.0-eksbuild.1



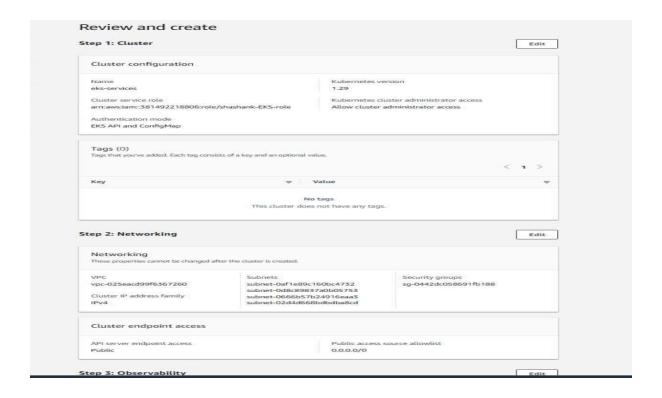
#set up IAM ROLES for ec2



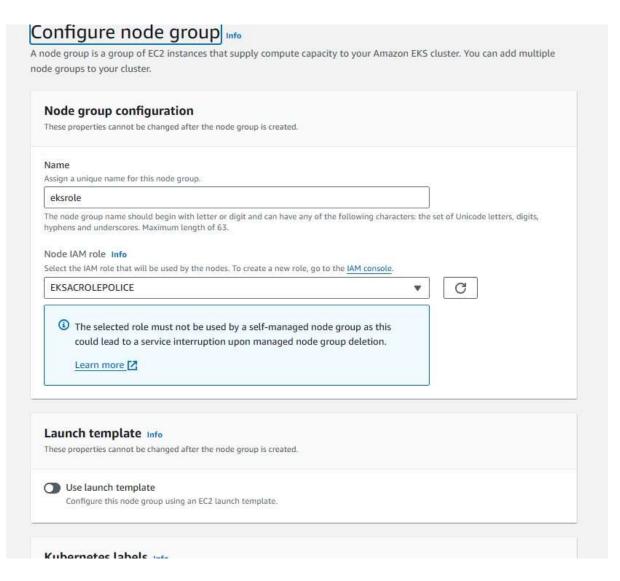
Permissions boundary (not set)

```
[cloudshell-user@ip-10-2-29-13 ~]$ aws configure [cloudshell-user@ip-10-2-29-13 ~]$ aws configure AWS Access Key ID [None]: AKIAVRUVVJO3BFRKTUIY AWS Secret Access Key [None]: LjjjjG7FHHsNbfBU+knVYyvu+3vqEZG4OlAlqSdW3 Default region name [None]: Default output format [None]: [cloudshell-user@ip-10-2-29-13 ~]$ [
```

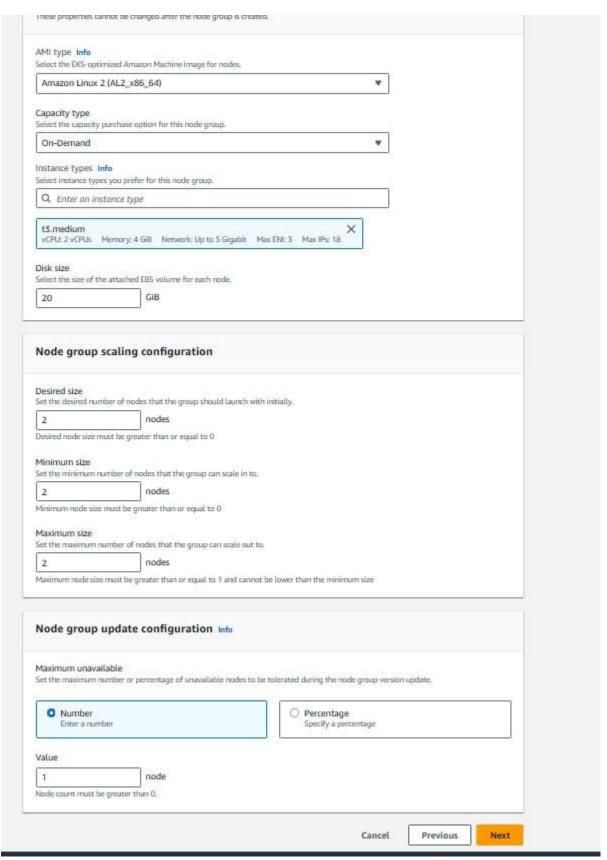
- Add the aws EKS console select your cluster
- In cluster go the compute services



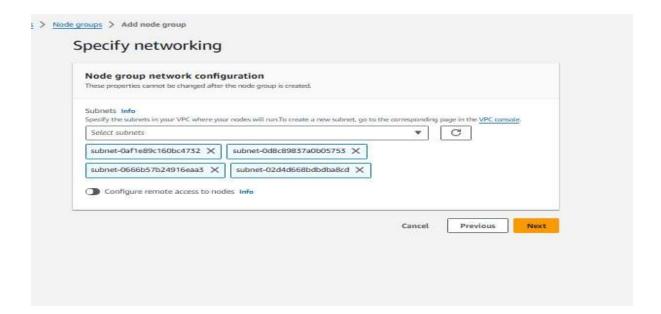
- Click on ADD node group
- Select the name & IAM ROLE



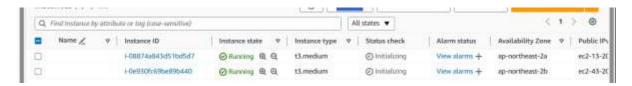
On click next



- Click on the next
- Select the subnet



- Click on the next & than create
- Go the EC2 AWS console &check the your node is running\



- Verify the cluster
- Open the cloudshell
- #aws –region < regain name > update -kubeconfig –name < cluster name >

```
[classical] secretary to 2.20-13-35 kebetl cluster-info
tash) backli command not found in the cluster-info
[classical] secretary to 2.20-13-35 kebetl cluster-info
[classical] secretary to 2.20-13-35 kebetl cluster-info
[classical] secretary to 2.20-13-35 kebetl cluster-info
[classical] secretary to 1.20-13-35 kebetl cluster-info
[classical] secretary to 1.20-13-35
```

- Create a nginx page in k8S
- Create a EKS CLUSTER & NODE
- Command =

#kubectl run Akshay –image=nginx

#kubectl expose pod Akshay --port=80 --target-port=80 -type=NodePort

#kubectl get services

- Out put on the screen in hit ip &port number
- EXAM =43.210.77.10:32623

