How to create Kubernetes cluster in AWS with EKS?

Create IAM role for EKS Master & Node

EKSMasterRole

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Selecy VPC, Subnets, SG & default settings..

Enable Loggin if you need in cloudwatch…

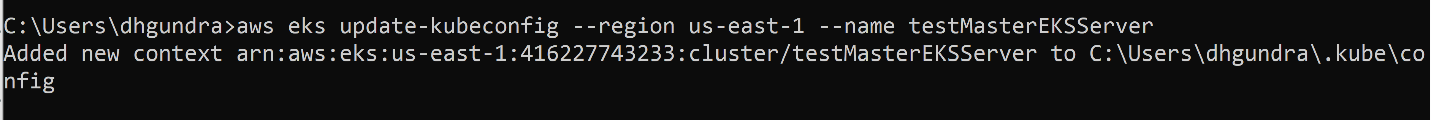
Click Submit.

Install & config AWSCLI

Install kubeCTL with <https://docs.aws.amazon.com/eks/latest/userguide/install-kubectl.html>

Config Master in Kubectl

aws eks update-kubeconfig --region us-east-1 --name testMasterEKSServer



Aws eks --region us-east-1 describe-cluster --name testMasterEKSServer --query cluster.status

To test :

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For config , please follow --> <https://docs.aws.amazon.com/eks/latest/userguide/create-kubeconfig.html>

Setup NodeGroup in EKS

Make sure this is enabled for all subnets while creating the Nodes..

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For Nodes, Assign IAM Role..

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After setup, type kubectl get nodes --watch to check the status of the nodes….

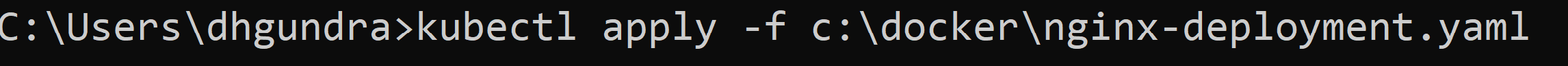
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Create a yaml file & save as .yaml

Refer : <https://kubernetes.io/docs/concepts/workloads/controllers/deployment/>

Run the yaml file to create pods, services, deployment , replica sets & any…



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KubeCTL

Containers

POD

Deployment

Services --> single point of entry

Ingress --> Reverse proxy

NameSpace -->

*namespaces* provides a mechanism for isolating groups of resources within a single cluster. Names of resources need to be unique within a namespace, but not across namespaces

Ingress controllers

Kubernetes manifest yaml file

Helm

Chart meta data