A blue and white logo

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**EKS Cluster Creation**

**A diagram of a computer

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**Step-1**

**1 : Create EKS Management Host in AWS**

**Launch new Ubuntu VM using AWS Ec2 ( t2.micro )**

**2.Connect to machine and install kubectl using below commands.**

**$ curl -o kubectl https://amazon-eks.s3.us-west-2.amazonaws.com/1.19.6/2021-01-05/bin/linux/amd64/kubectl**

**$ chmod +x ./kubectl**

**$ sudo mv ./kubectl /usr/local/bin**

**$ kubectl version --short --client**

**3. Install AWS CLI latest version using below commands**

**$ sudo apt install unzip**

**$ cd**

**$ curl "https://awscli.amazonaws.com/awscli-exe-linux-x86\_64.zip" -o "awscliv2.zip"**

**$ unzip awscliv2.zip**

**$ sudo ./aws/install**

**$ aws --version**

**4. Install eksctl using below commands**

**$ 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**

**Step - 2 :**

**1.Create IAM role & attach to EKS Management Host**

**Create New Role using IAM service ( Select Usecase - ec2 )**

**Add below permissions for the role**

**IAM - fullaccess**

**VPC - fullaccess**

**EC2 - fullaccess**

**CloudFomration - fullaccess**

**Administrator - acces**

**Enter Role Name (eksroleec2)**

**Attach created role to EKS Management Host (Select EC2 🡺 Click on Security 🡺Modify IAM Role 🡺 attach IAM role we have created)**

**Step - 3 :**

**Create EKS Cluster using eksctl**

**Syntax:**

**eksctl create cluster --name cluster-name**

**--region region-name**

**--node-type instance-type**

**--nodes-min 2**

**--nodes-max 2 \ --zones ,**

**N. Virgina: $ eksctl create cluster --name arunit-cluster4 --region us-east-1 --node-type t2.medium --zones us-east-1a,us-east-1b**

**(OR)**

**Mumbai: $ eksctl create cluster --name arunit-cluster4 --region ap-south-1 --node-type t2.medium --zones ap-south-1a,ap-south-1b**

**Note: Cluster creation will take 5 to 10 mins of time (we have to wait). After cluster created, we can check nodes using below command.**

**(Kubeconfig file contains cluster configuration details)**

**Check commands**

**$ kubectl get nodes**