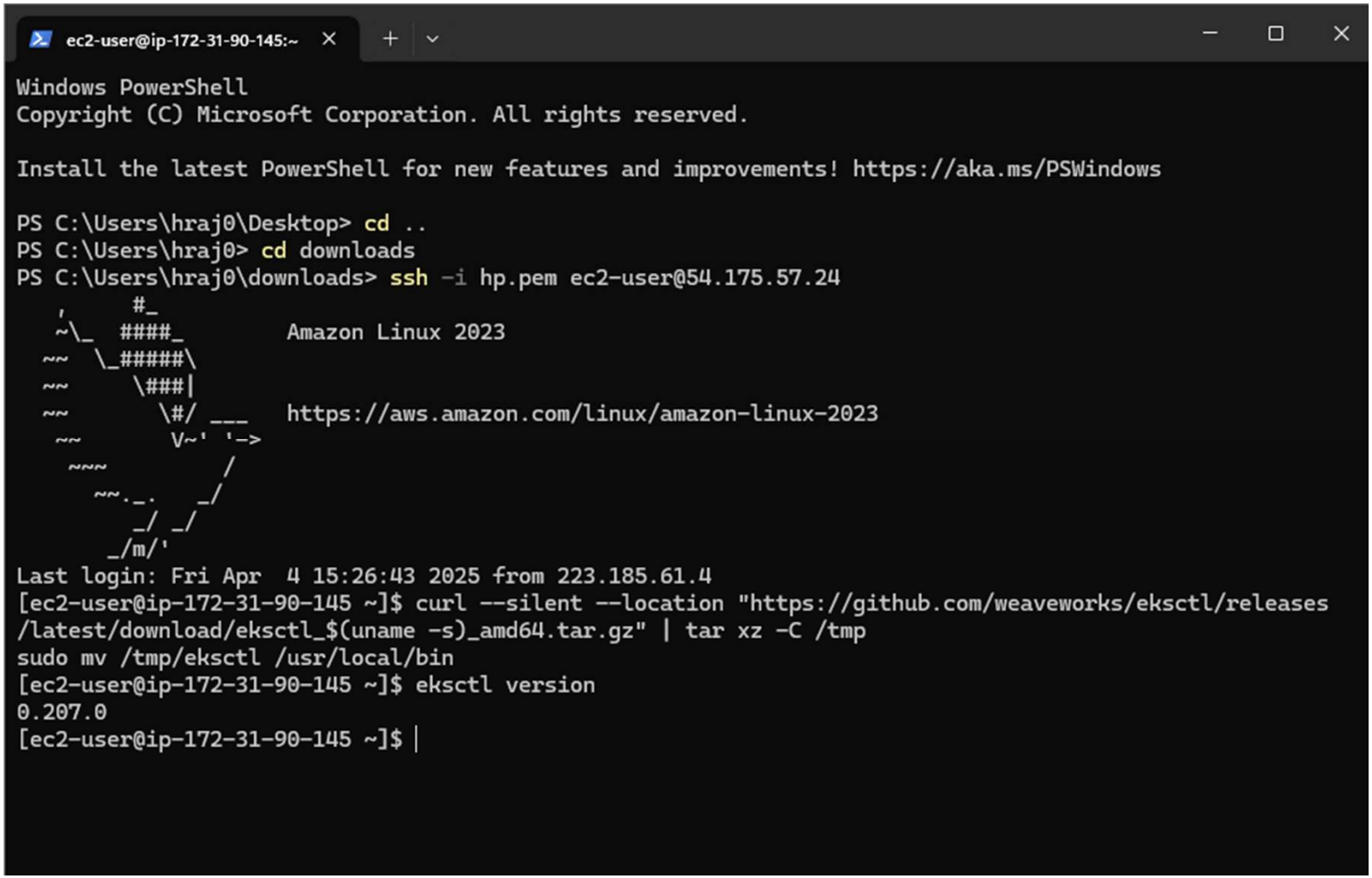
Kubernetes Task - 2

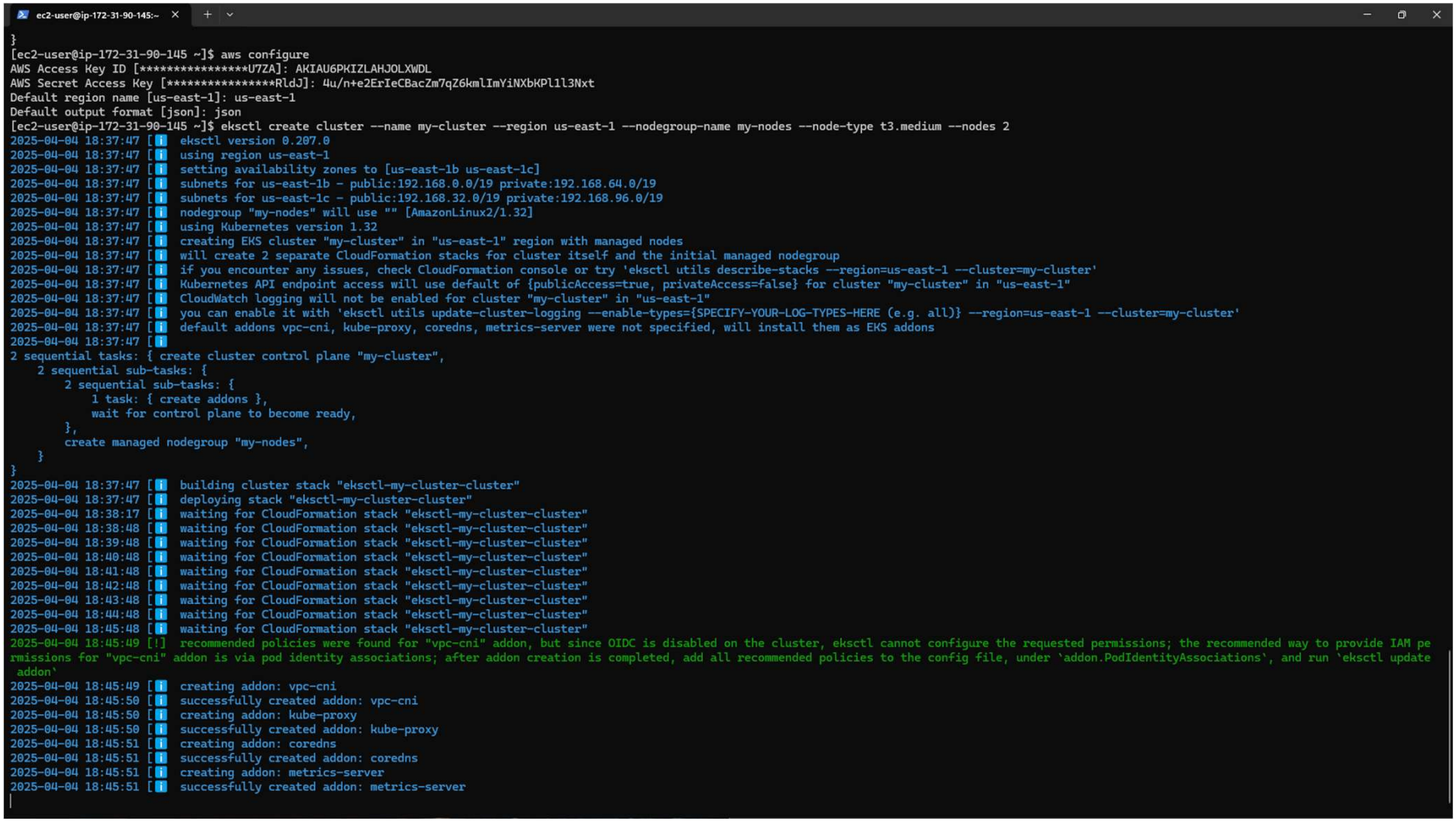
Eksctl Install

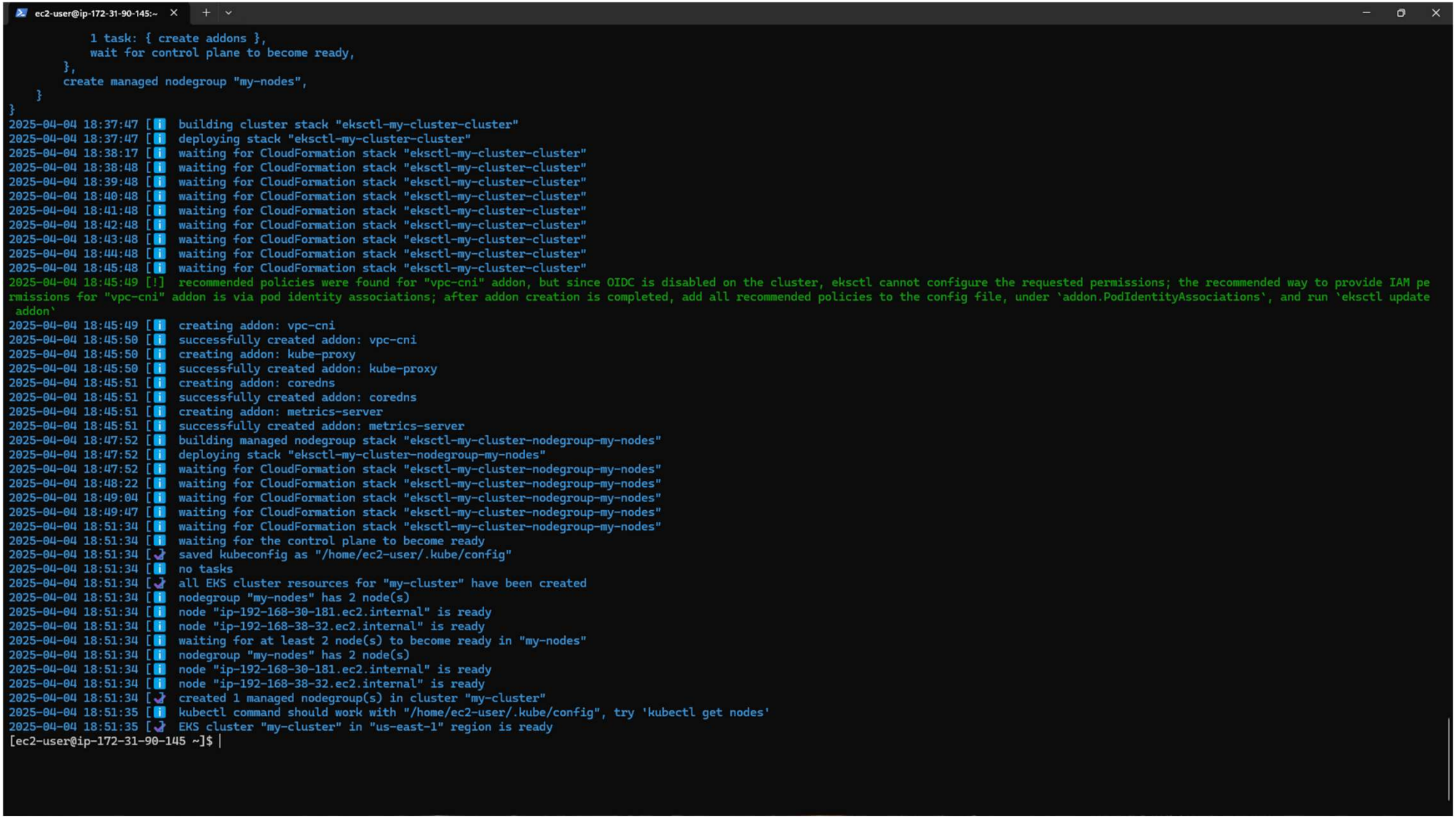


Kubectl Install

```
[ec2-user@ip-172-31-90-145 ~]$ eksctl version
0.207.0
[ec2-user@ip-172-31-90-145 ~]$ curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/rele
ase/stable.txt)/bin/linux/amd64/kubectl"
chmod +x kubectl
sudo mv kubectl /usr/local/bin
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   138  100   138    0     0   3268      0 --:--:-- --:--:-- --:--:--  3285
100 54.6M  100 54.6M    0     0  70.4M      0 --:--:-- --:--:-- --:--:-- 70.4M
[ec2-user@ip-172-31-90-145 ~]$
```

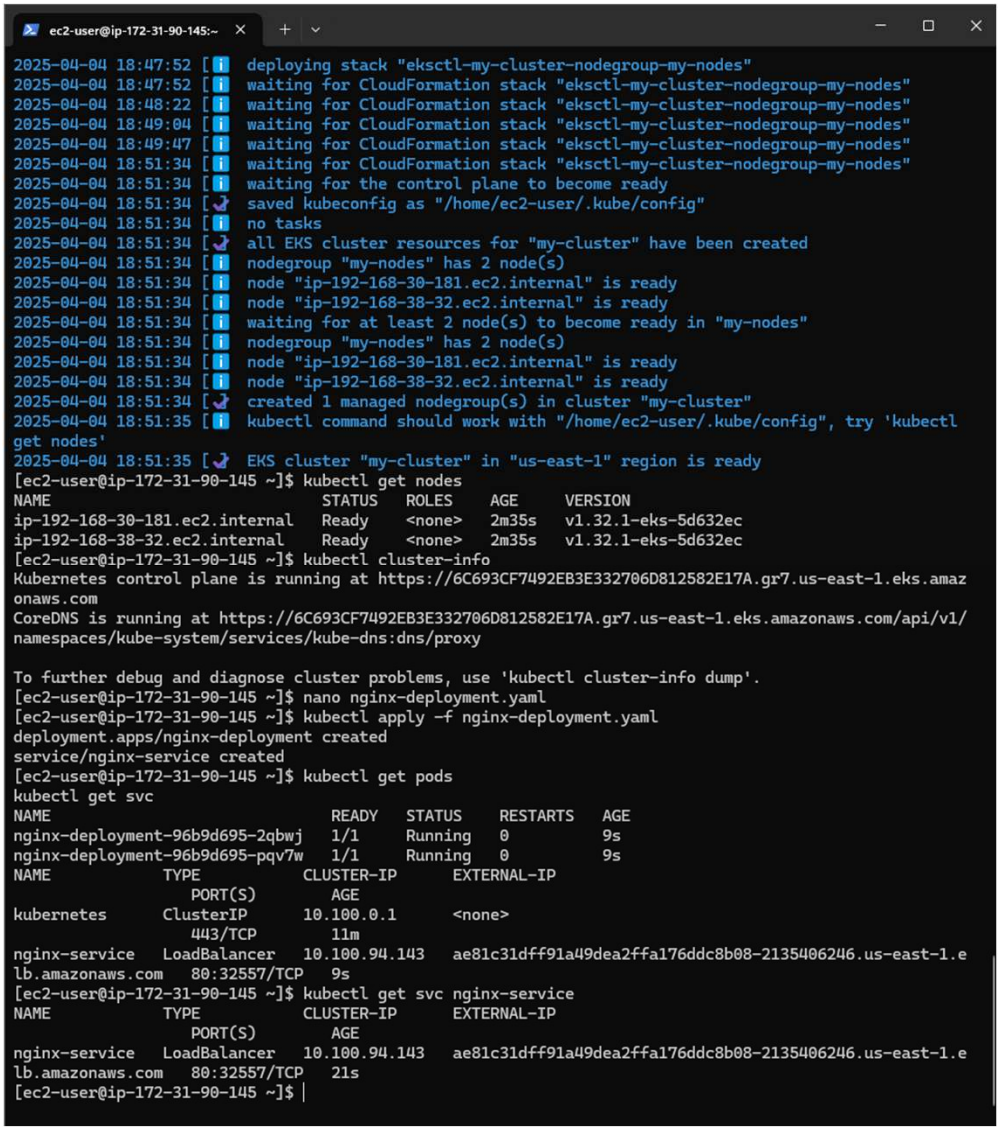
AWS EKS Cluster Create




ec2-user@ip-172-31-90-145:~
1 task: { create addons },
wait for control plane to become ready,
},
create managed nodegroup "my-nodes",
}
}
2025-04-04 18:37:47 [ℹ] building cluster stack "eksctl-my-cluster-cluster"
2025-04-04 18:37:47 [ℹ] deploying stack "eksctl-my-cluster-cluster"
2025-04-04 18:38:17 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:38:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:39:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:40:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:41:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:42:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:43:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:44:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:45:48 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-cluster"
2025-04-04 18:45:49 [!] recommended policies were found for "vpc-cni" addon, but since OIDC is disabled on the cluster, eksctl cannot configure the requested permissions; the recommended way to provide IAM pe
rmissions for "vpc-cni" addon is via pod identity associations; after addon creation is completed, add all recommended policies to the config file, under `addon.PodIdentityAssociations`, and run `eksctl update
addon`
2025-04-04 18:45:49 [ℹ] creating addon: vpc-cni
2025-04-04 18:45:50 [ℹ] successfully created addon: vpc-cni
2025-04-04 18:45:50 [ℹ] creating addon: kube-proxy
2025-04-04 18:45:50 [ℹ] successfully created addon: kube-proxy
2025-04-04 18:45:51 [ℹ] creating addon: coredns
2025-04-04 18:45:51 [ℹ] successfully created addon: coredns
2025-04-04 18:45:51 [ℹ] creating addon: metrics-server
2025-04-04 18:45:51 [ℹ] successfully created addon: metrics-server
2025-04-04 18:47:52 [ℹ] building managed nodegroup stack "eksctl-my-cluster-nodegroup-my-nodes"
2025-04-04 18:47:52 [ℹ] deploying stack "eksctl-my-cluster-nodegroup-my-nodes"
2025-04-04 18:47:52 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-nodegroup-my-nodes"
2025-04-04 18:48:22 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-nodegroup-my-nodes"
2025-04-04 18:49:04 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-nodegroup-my-nodes"
2025-04-04 18:49:47 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-nodegroup-my-nodes"
2025-04-04 18:51:34 [ℹ] waiting for CloudFormation stack "eksctl-my-cluster-nodegroup-my-nodes"
2025-04-04 18:51:34 [ℹ] waiting for the control plane to become ready
2025-04-04 18:51:34 [✔] saved kubeconfig as "/home/ec2-user/.kube/config"
2025-04-04 18:51:34 [ℹ] no tasks
2025-04-04 18:51:34 [✔] all EKS cluster resources for "my-cluster" have been created
2025-04-04 18:51:34 [ℹ] nodegroup "my-nodes" has 2 node(s)
2025-04-04 18:51:34 [ℹ] node "ip-192-168-30-181.ec2.internal" is ready
2025-04-04 18:51:34 [ℹ] node "ip-192-168-38-32.ec2.internal" is ready
2025-04-04 18:51:34 [ℹ] waiting for at least 2 node(s) to become ready in "my-nodes"
2025-04-04 18:51:34 [ℹ] nodegroup "my-nodes" has 2 node(s)
2025-04-04 18:51:34 [ℹ] node "ip-192-168-30-181.ec2.internal" is ready
2025-04-04 18:51:34 [ℹ] node "ip-192-168-38-32.ec2.internal" is ready
2025-04-04 18:51:34 [✔] created 1 managed nodegroup(s) in cluster "my-cluster"
2025-04-04 18:51:35 [ℹ] kubectl command should work with "/home/ec2-user/.kube/config", try 'kubectl get nodes'
2025-04-04 18:51:35 [✔] EKS cluster "my-cluster" in "us-east-1" region is ready
[ec2-user@ip-172-31-90-145 ~]$

nginx-deployment.yaml

Check deployment and service



deployment successful