Task 5: Multi-Tenant EKS Setup (Namespaces + RBAC + NetworkPolicies + Prometheus + Grafana)

Goal: Implement isolation between internal teams.

Implement a fully isolated multi-tenant architecture within a single AWS EKS cluster. Each tenant (Team-A, Team-B) must have:

· Separate namespaces

· Separate RBAC access

· Network isolation (deny cross-namespace communication)

· Prometheus scraping only allowed for that team

· Grafana dashboards visible only to that team

1. Create cluster
   eksctl create cluster -f cluster.yaml

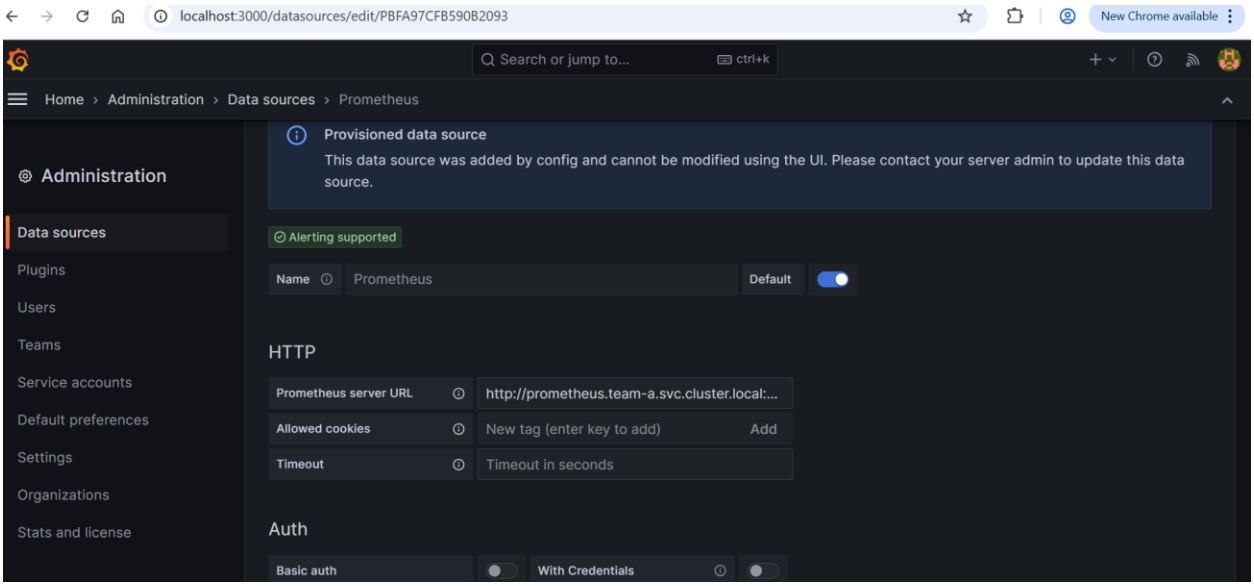
```
PS C:\Users\112256\k8\task\task-5\EKSCluster\eksctl> eksctl create cluster -f cluster.yaml
2025-12-19 08:08:24 [ℹ]  nodegroup "private-ng" has 3 node(s)
2025-12-19 08:08:24 [ℹ]  node "ip-192-168-113-195.ec2.internal" is ready
ady
2025-12-19 08:08:24 [ℹ]  node "ip-192-168-125-114.ec2.internal" is ready
2025-12-19 08:08:24 [ℹ]  node "ip-192-168-93-249.ec2.internal" is ready
2025-12-19 08:08:24 [✓]  created 1 managed nodegroup(s) in cluster "multi-tenant-eks"
2025-12-19 08:08:25 [ℹ]  creating addon: metrics-server
2025-12-19 08:08:26 [ℹ]  successfully created addon: metrics-server
2025-12-19 08:08:29 [ℹ]  kubectl command should work with "C:\\Users\\112256\\.kube\\config", try 'kubectl get
 nodes'
2025-12-19 08:08:29 [✓]  EKS cluster "multi-tenant-eks" in "us-east-1" region is ready
```

```
Apply complete! Resources: 16 added, 0 changed, 0 destroyed.

Outputs:

namespaces = [
  "team-a",
  "team-b",
]
```

kubectl port-forward -n team-a deploy/grafana 3000:3000
http://localhost:3000



Teamb
kubectl port-forward -n team-b deploy/grafana 3001:3000

http://localhost:3001