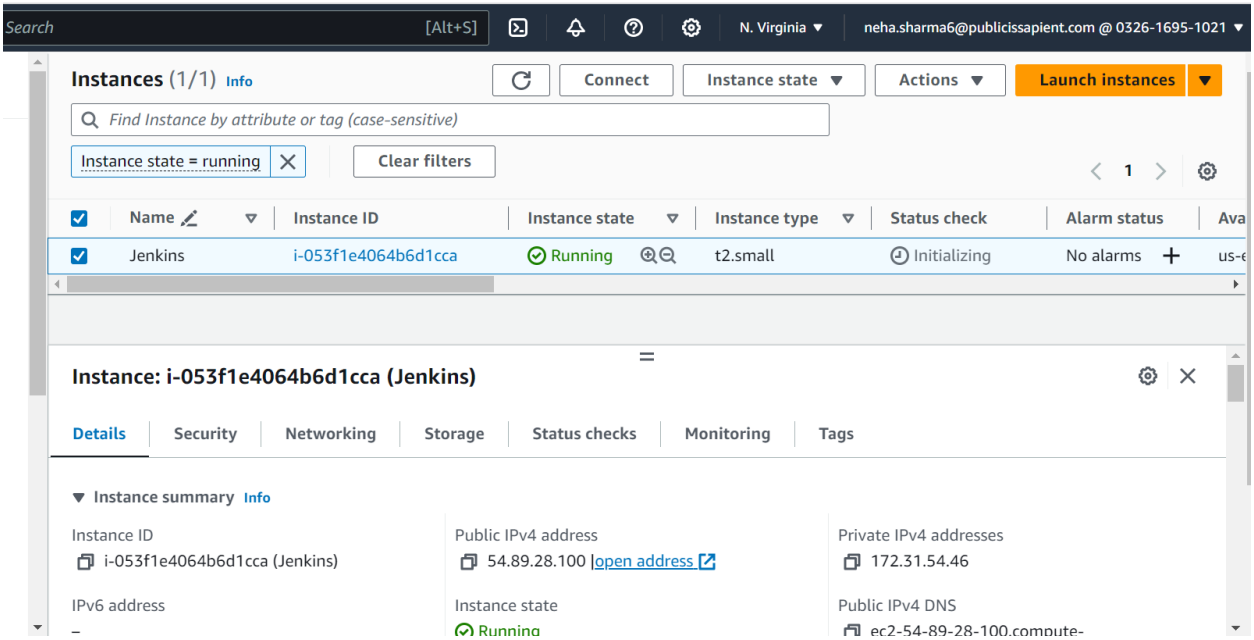
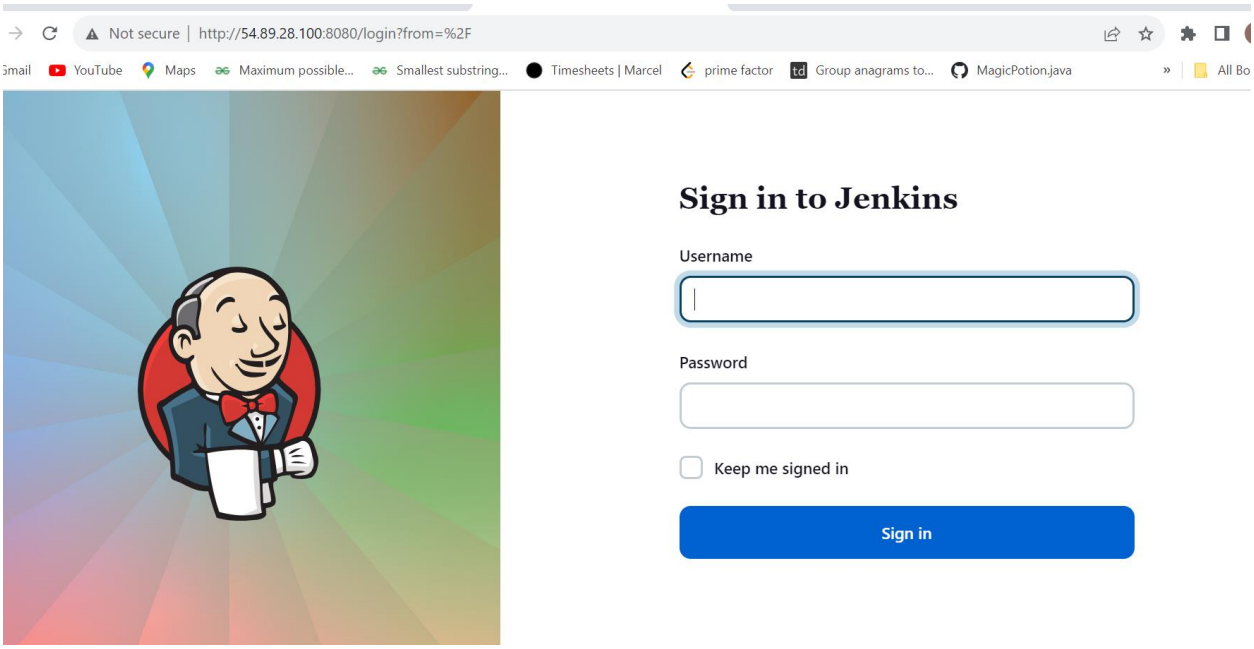
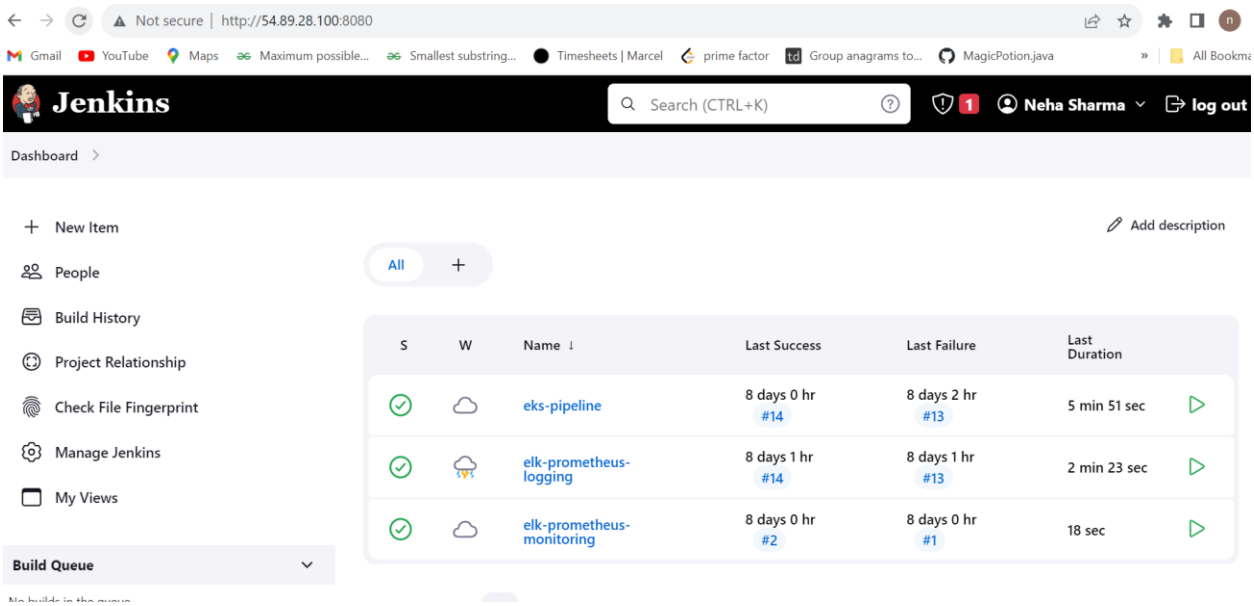
1) Jenkins EC2:



Jenkins UI:



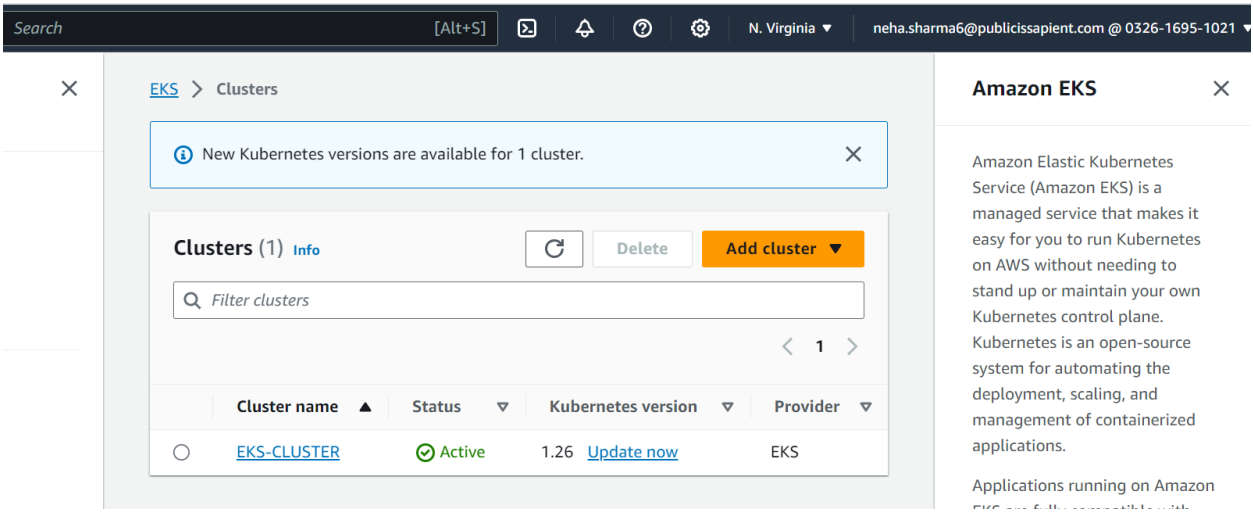


EKS – Elastic Kubernetes Service:

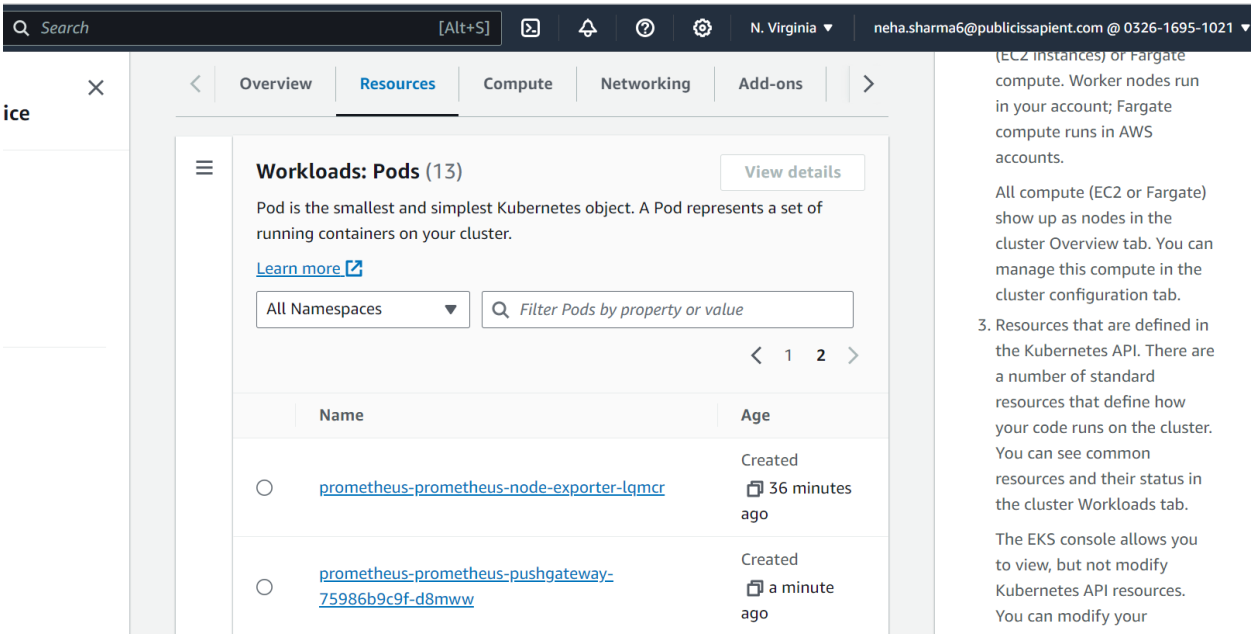
Git URL:- https://pscode.lioncloud.net/eca-nehsharm22/aws-eks-setup

Stage View:

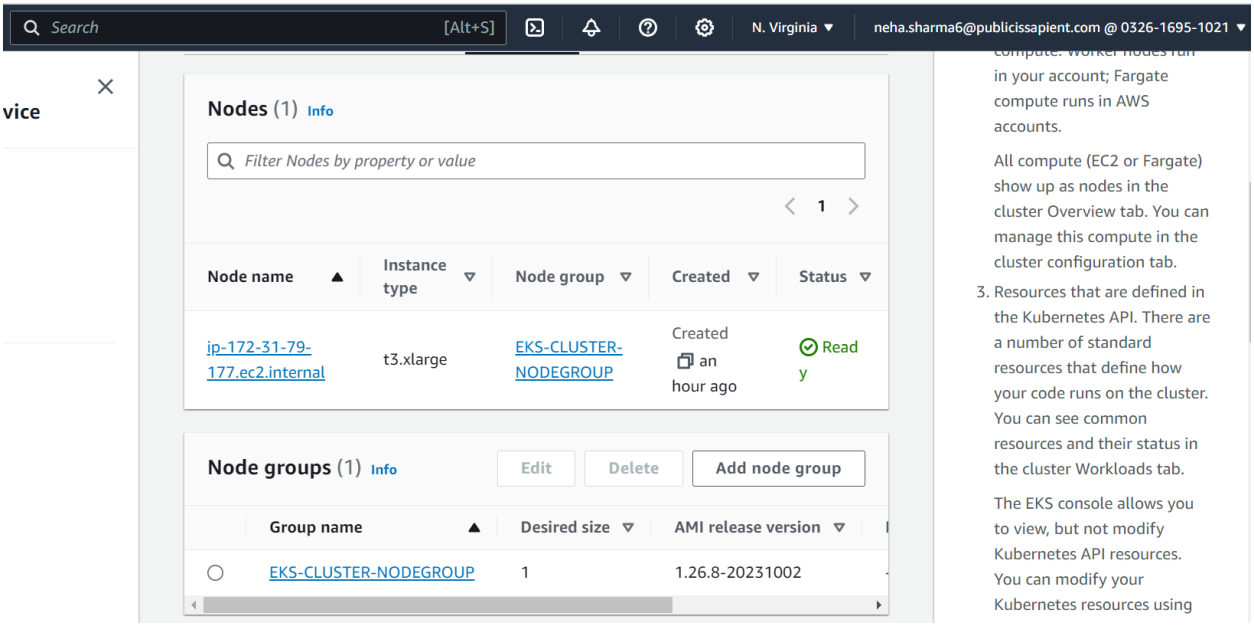
Cluster:


Search
[Alt+S]
N. Virginia
neha.sharma6@publicissapient.com @ 0326-1695-1021
EKS > Clusters
New Kubernetes versions are available for 1 cluster.
Clusters (1) Info
Delete
Add cluster
Filter clusters
1
Cluster name
Status
Kubernetes version
Provider
EKS-CLUSTER
Active
1.26 Update now
EKS
Amazon EKS
Amazon Elastic Kubernetes Service (Amazon EKS) is a managed service that makes it easy for you to run Kubernetes on AWS without needing to stand up or maintain your own Kubernetes control plane. Kubernetes is an open-source system for automating the deployment, scaling, and management of containerized applications.
Applications running on Amazon

Pods:


Search
[Alt+S]
N. Virginia
neha.sharma6@publicissapient.com @ 0326-1695-1021
ice
Overview
Resources
Compute
Networking
Add-ons
Workloads: Pods (13)
View details
Pod is the smallest and simplest Kubernetes object. A Pod represents a set of running containers on your cluster.
Learn more
All Namespaces
Filter Pods by property or value
1
2
Name
Age
prometheus-prometheus-node-exporter-lqmcr
Created 36 minutes ago
prometheus-prometheus-pushgateway-75986b9c9f-d8mww
Created a minute ago
(EC2 instances) or Fargate compute. Worker nodes run in your account; Fargate compute runs in AWS accounts.
All compute (EC2 or Fargate) show up as nodes in the cluster Overview tab. You can manage this compute in the cluster configuration tab.
3. Resources that are defined in the Kubernetes API. There are a number of standard resources that define how your code runs on the cluster. You can see common resources and their status in the cluster Workloads tab.
The EKS console allows you to view, but not modify Kubernetes API resources. You can modify your

Nodes Groups:



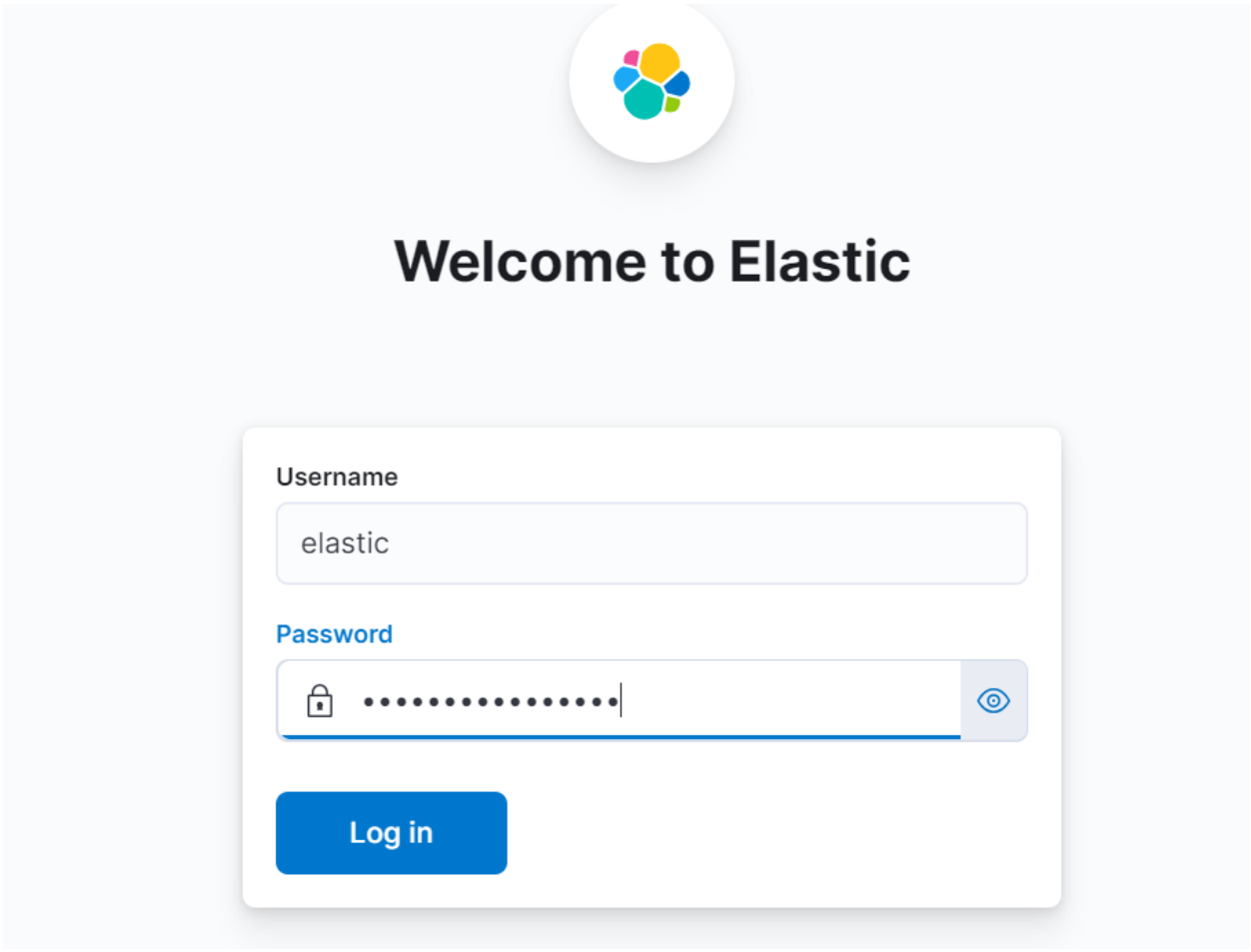
ELK setup

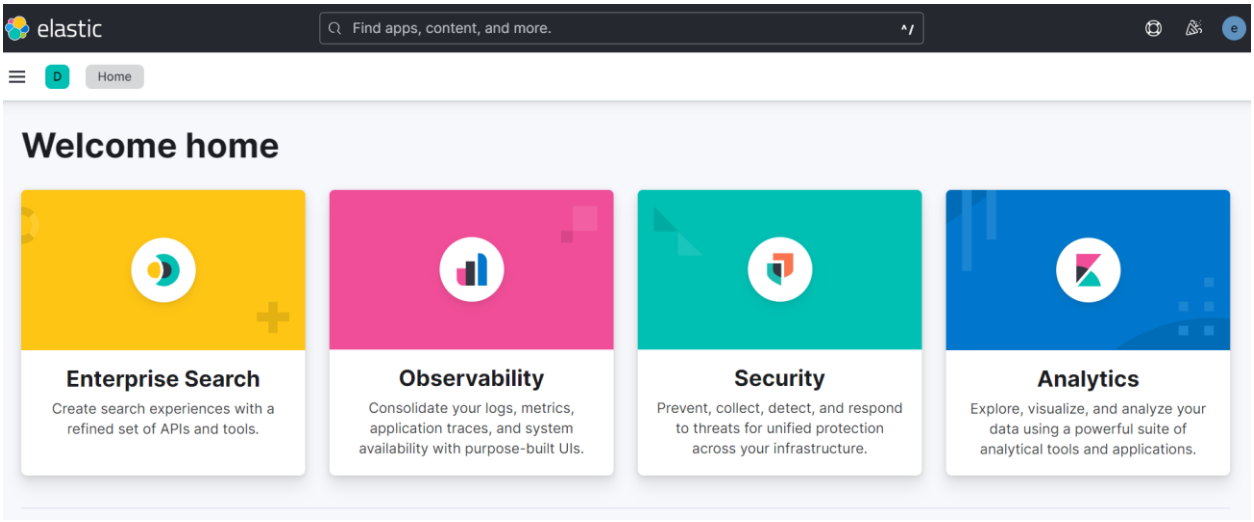
Logging: Kibana

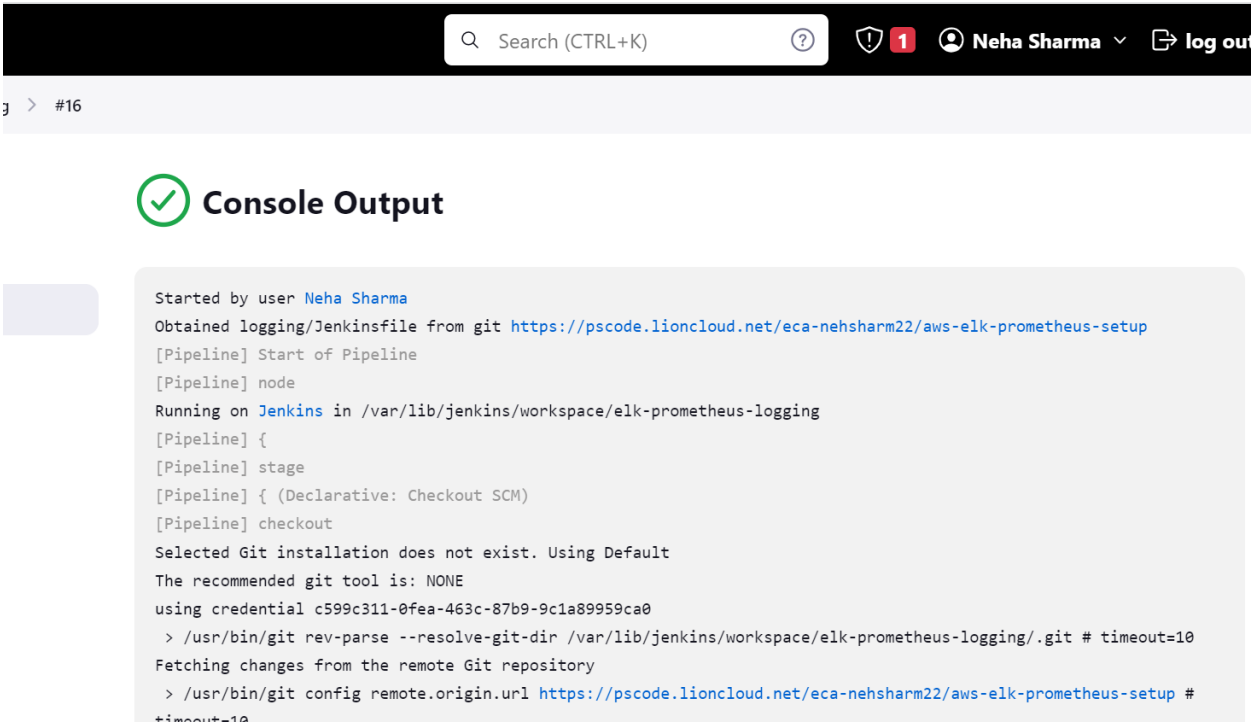
Repo URL :

https://pscode.lioncloud.net/eca-nehsharm22/aws-elk-prometheus-setup

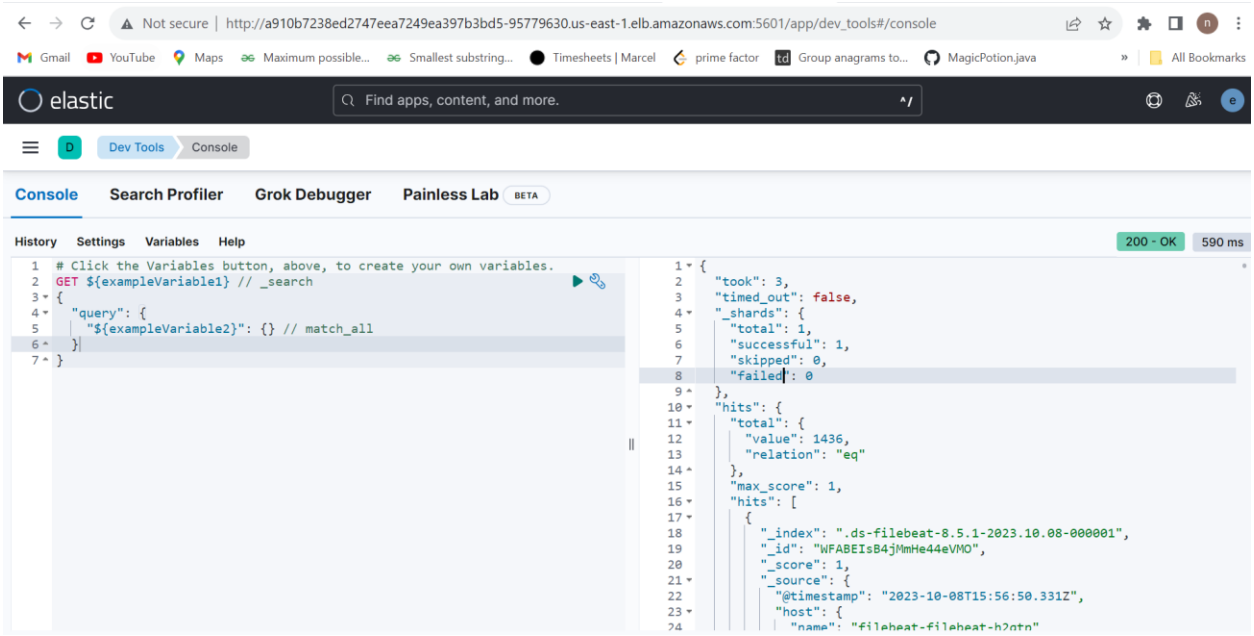
Elastic:

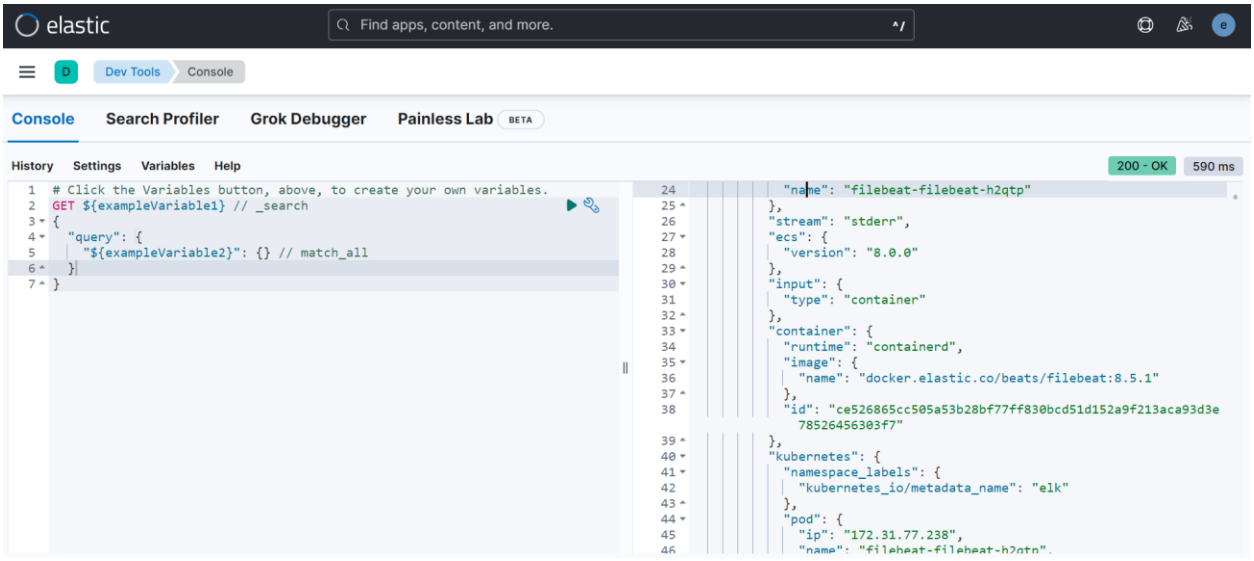

Welcome to Elastic
Username
elastic
Password
Log in


elastic
Find apps, content, and more.
Home
Welcome home
Enterprise Search
Create search experiences with a refined set of APIs and tools.
Observability
Consolidate your logs, metrics, application traces, and system availability with purpose-built UIs.
Security
Prevent, collect, detect, and respond to threats for unified protection across your infrastructure.
Analytics
Explore, visualize, and analyze your data using a powerful suite of analytical tools and applications.



Query Dev Tool:

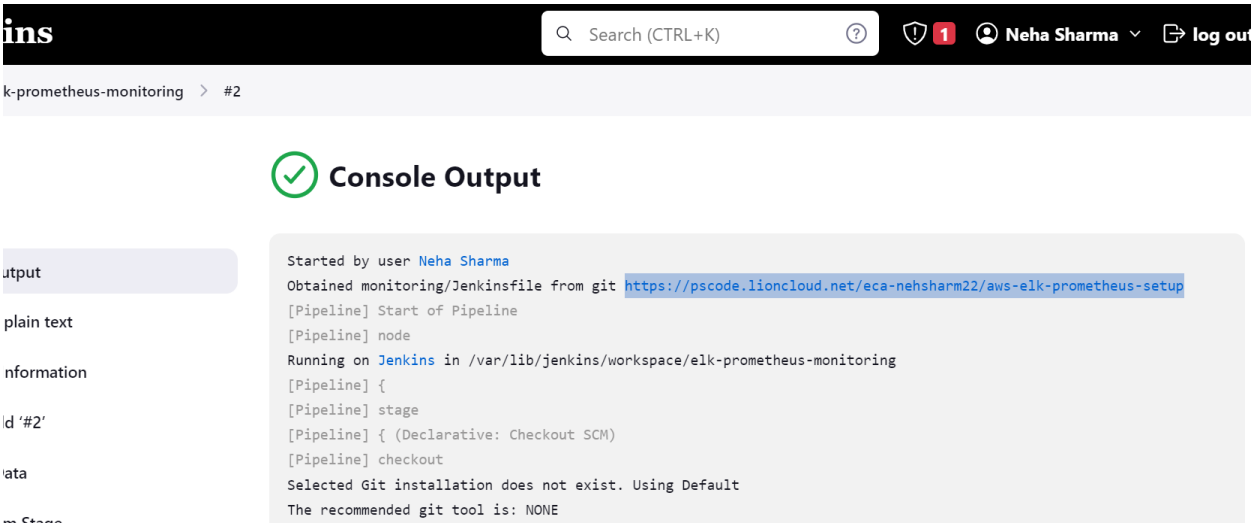




Monitoring:

Grafana:

Repo Url : https://pscode.lioncloud.net/eca-nehsharm22/aws-elk-prometheus-setup

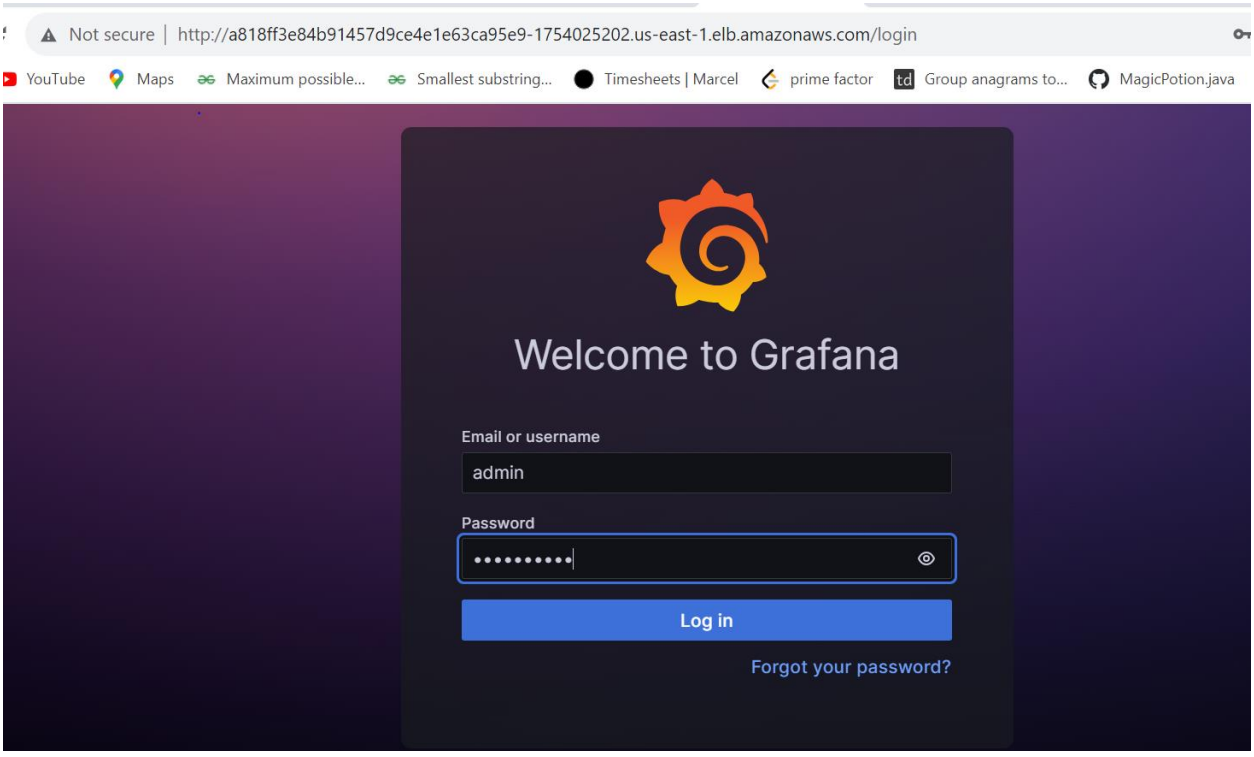


EC2 commands to get Grafana url and checked Grafana is running fine

```
aws  Services  Search  [Alt+S]  N. Virginia  neha.sharma6@publicissapient.com @ 0326-1695-1021
 -d
-bash: $'\E[200~kubectl': command not found
[ec2-user@ip-172-31-54-46 ~]$ kubectl get secrets --namespace=elk elasticsearch-master-credentials -ojsonpath='{.data.password}' | base64 -d
/aRF6Lz37TZnplW5[ec2-user@ip-172-31-54-46 ~]$ ^C
[ec2-user@ip-172-31-54-46 ~]$ kubectl get all -n grafana
No resources found in grafana namespace.
[ec2-user@ip-172-31-54-46 ~]$ kubectl get all -n grafana
NAME                           READY   STATUS    RESTARTS   AGE
pod/grafana-78495b6d6-kk8cq    1/1     Running   0          103s

NAME              TYPE           CLUSTER-IP      EXTERNAL-IP                                                              PORT(S)        AGE
service/grafana   LoadBalancer   10.100.53.119   a818ff3e84b91457d9ce4e1e63ca95e9-1754025202.us-east-1.elb.amazonaws.com   80:32534/TCP   103s

NAME                      READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/grafana   1/1     1            1           103s

NAME                                 DESIRED   CURRENT   READY   AGE
replicaset.apps/grafana-78495b6d6    1         1         1       103s
[ec2-user@ip-172-31-54-46 ~]$
```

```
aws  Services  Search  [Alt+S]  N. Virginia  neha.sharma6@publicissapient.com @ 0326-1695-1021
deployment.apps/grafana   1/1     1            1           103s

NAME                                 DESIRED   CURRENT   READY   AGE
replicaset.apps/grafana-78495b6d6    1         1         1       103s
[ec2-user@ip-172-31-54-46 ~]$ kubectl get secret --namespace grafana grafana -o jsonpath="{.data.admin-password}" | base64 --decode ; echo
secretpass
[ec2-user@ip-172-31-54-46 ~]$ export SERVICE_IP=$(kubectl get svc --namespace grafana grafana -o
 export SERVICE_IP=$(kubectl get svc --namespace grafana grafana -o jsonpath='{.status.loadBalancer.ingress[0].ip}')
 ^C
[ec2-user@ip-172-31-54-46 ~]$ export SERVICE_IP=$(kubectl get svc --namespace grafana grafana -o jsonpath='{.status.loadBalancer.ingress[0].ip}
)
[ec2-user@ip-172-31-54-46 ~]$ export SERVICE_IP=$(kubectl get svc --namespace grafana grafana -o jsonpath='{.status.loadBalancer.ingress[0].ip}
)
[ec2-user@ip-172-31-54-46 ~]$ export SERVICE_IP=$(kubectl get svc --namespace grafana grafana -o
 ^C
[ec2-user@ip-172-31-54-46 ~]$ kubectl get svc --namespace grafana -w grafana
NAME      TYPE           CLUSTER-IP      EXTERNAL-IP                                                              PORT(S)        AGE
grafana   LoadBalancer   10.100.53.119   a818ff3e84b91457d9ce4e1e63ca95e9-1754025202.us-east-1.elb.amazonaws.com   80:32534/TCP   10m
```

Grafana Login Page:



Grafana Dashboard: