

## Trend App – End-to-End DevOps CI/CD Deployment on AWS EKS

This project focuses on the design and implementation of a complete **end-to-end DevOps pipeline** for deploying a React-based web application into a **production-ready, scalable, and automated environment** on Amazon Web Services (AWS). With organizations increasingly moving toward cloud-native architectures and automation-driven workflows, this project aims to demonstrate how modern companies build, package, deploy, monitor, and maintain applications with efficiency and consistency using DevOps best practices.

The primary objective of this work is to transform a simple frontend application into a **fully automated cloud deployment system** by integrating key DevOps tools and methodologies. The application was first containerized using **Docker**, ensuring consistency between development, testing, and production environments. Containerization also eliminates dependency issues and makes the application portable across platforms.

A major part of this project is the deployment of the application onto **Amazon Elastic Kubernetes Service (EKS)**, which provides a managed and scalable Kubernetes control plane. EKS ensures that applications can scale automatically based on user demand while maintaining high availability. The Kubernetes resources—including deployments, services, namespaces, and load balancers—were defined using YAML manifests, making the setup declarative and easily reproducible.

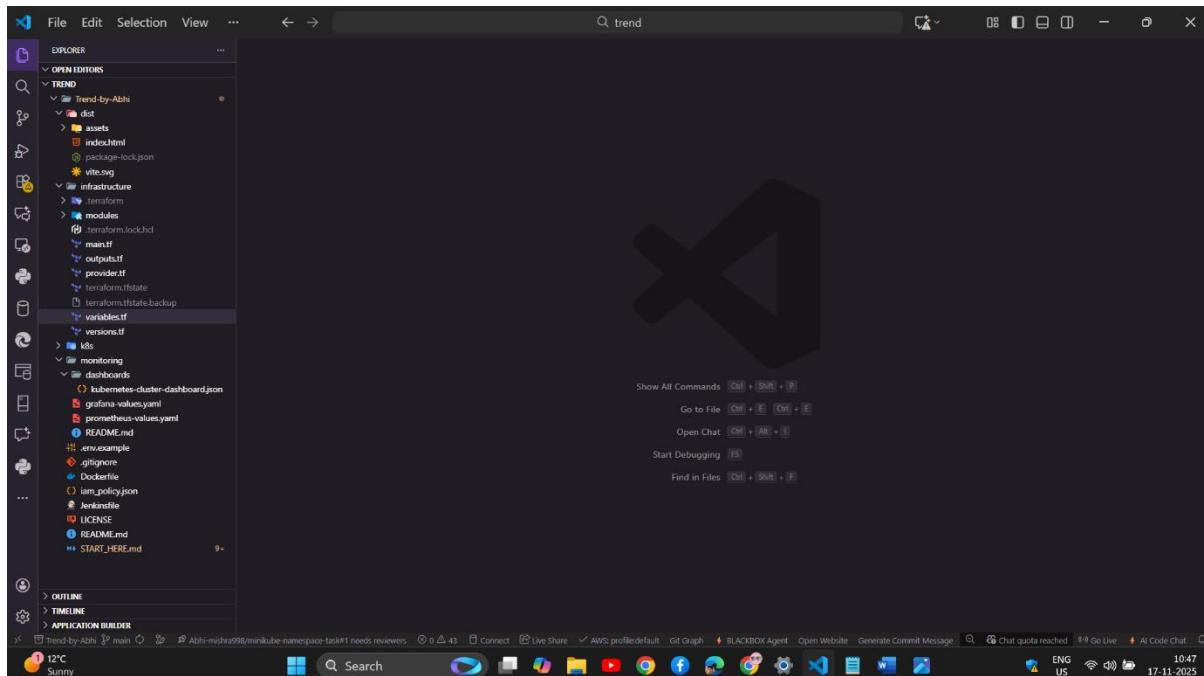
To automate every stage of the software delivery lifecycle, a complete **Continuous Integration and Continuous Deployment (CI/CD) pipeline** was built using **Jenkins**. This pipeline is responsible for fetching the latest source code, installing dependencies, building the application, creating Docker images, pushing them to **DockerHub**, and deploying the updated version to the EKS cluster. The integration between GitHub and Jenkins was achieved through **webhooks**, ensuring that every commit triggers an automated build and deployment, reflecting true modern DevOps culture.

All infrastructure components—such as VPC, subnets, IAM roles, security groups, EKS cluster, and worker nodes—were provisioned using **Terraform**. By leveraging Infrastructure as Code (IaC), the entire cloud environment becomes consistent, version-controlled, and repeatable. This eliminates the risk of manual misconfigurations and enables quick infrastructure recreation in case of failures.

To ensure observability and reliability, the Kubernetes cluster was integrated with **Prometheus** and **Grafana**. Prometheus collects cluster- and application-level metrics, while Grafana provides intuitive dashboards for visualizing system performance, resource usage, application health, pod status, and real-time alerts. This monitoring setup is essential for diagnosing performance bottlenecks and maintaining application uptime in a production-like environment.

Overall, this project demonstrates a realistic and enterprise-grade DevOps workflow—starting from coding and infrastructure provisioning to automated deployment and monitoring. It highlights how cloud-native applications are deployed in modern tech companies and showcases best practices such as automation, scalability, fault tolerance, version control, and continuous improvement. The implementation reflects a strong understanding of DevOps tools, cloud architecture, Kubernetes orchestration, and CI/CD principles, making the project highly relevant for real-world industrial environments.

**GitHub-repo:** <https://github.com/Abhi-mishra998/trend.git>



```
PS C:\Users\USER\Downloads\Trend-by-Abhi> docker build -t abhishek0805/trend-app:latest .
[+] Building 3.4s (9/9) FINISHED
=> [internal] load build definition from Dockerfile
=> [internal] load transfer manifest: 14B
=> [internal] load metadata for docker.io/library/node:18-alpine
=> [internal] load .dockerignore
=> [internal] transfer context: 2B
=> [1/4] FROM docker.io/library/node:18-alpine@sha256:8d6421d663b4c28fd3ebc498332f249011d118945588d0a35cb9bc4b8ca09d9e
=> [internal] resolve docker.io/library/node:18-alpine@sha256:8d6421d663b4c28fd3ebc498332f249011d118945588d0a35cb9bc4b8ca09d9e
=> [internal] load build context
=> [internal] transfer context: 3.91kB
=> CACHED [2/4] WORKDIR /app
=> CACHED [3/4] RUN npm install -g serve
=> CACHED [4/4] COPY dist ./dist
=> exporting to image
=> [internal] export layers
=> [internal] export manifest sha256:518e98172c3f670123be8e555ebd69bb52ed574a196f923f522ace31e90586e7
=> [internal] export config sha256:0a1df2825d23f6b4c116f796bacaa26bbbee7ef26afa6fa1c3f35cf7f43ab175e3
=> [internal] export attestation manifest sha256:e68849b552b782583fb99a02ac65d16a27974f3dfec8a587d3ffcf2ffa46fab26
=> [internal] export manifest list sha256:a57c5697a0ed761d819276216e327d245c473f2f6d4c3a8853d0b5800d30d
=> [internal] naming to docker.io/abhishek0805/trend-app:latest
=> [internal] unpacking to docker.io/abhishek0805/trend-app:latest
PS C:\Users\USER\Downloads\Trend-by-Abhi> docker build -t trend-app:latest --progress=plain
```

docker:desktop-linux

```
PROBLEMS 128 OUTPUT TERMINAL PORTS QUERY RESULTS GITLENS DEBUG CONSOLE | powershell + × ☰ ... [x]

-> [internal] load metadata for docker.io/library/node:18-alpine
-> [auth] library/node:pull token for registry-1.docker.io
-> [internal] load build context
-> transferring context: 2B
-> [1/4] FROM docker.io/library/node:18-alpine@sha256:8d6421d663b4c28fd3ebc498332f2498011d118945588a035cb9cb48bcba09d9e
-> resolve docker.io/library/node:18-alpine@sha256:8d6421d663b4c28fd3ebc498332f2498011d118945588a035cb9cb48bcba09d9e
-> [internal] load build context
-> transferring context: 9.24B
-> CACHED [2/4] WORKDIR /app
-> [3/4] RUN npm install -g serve
-> [4/4] COPY dist ./dist
-> exporting to image
-> exporting layers
-> exporting manifest sha256:a13fb6ef1fdc7ffdb62c093181be45c871e569a9a1bd1c77f290dafc3
-> exporting config sha256:a180ec2f97e8a417bb9b94cf4f64726e3fc0ca393959be99bc6204760ce9d9e
-> exporting attestation manifest sha256:7675a6881d7a7c2a7f5f7c1aa2b50cb867cefc9fc34fe7469103151b9682
-> exporting manifest sha256:9539784889194cb85b0e597fae6f065eb3103671233393f912576bc87bc6d1
-> naming to docker.io/library/trend-app:latest
-> unpacking to docker.io/library/trend-app:latest

PS C:\Users\USER\Downloads\trend-by-Abhi> docker build -t trend-app:latest .
[+] Building 2.5s (9/9) FINISHED
-> [internal] load build definition from Dockerfile
-> transferring dockerfile: 1kB
-> [internal] load metadata for docker.io/library/node:18-alpine
-> [internal] load build context
-> transferring context: 2B
-> [1/4] FROM docker.io/library/node:18-alpine@sha256:8d6421d663b4c28fd3ebc498332f2498011d118945588a035cb9cb48bcba09d9e
-> resolve docker.io/library/node:18-alpine@sha256:8d6421d663b4c28fd3ebc498332f2498011d118945588a035cb9cb48bcba09d9e
-> [internal] load build context
-> transferring context: 3.91kB
-> CACHED [2/4] WORKDIR /app
-> CACHED [3/4] RUN npm install -g serve
-> CACHED [4/4] COPY dist ./dist
-> exporting to image
-> exporting layers
-> exporting manifest sha256:69ab6b61e8febf9a3112ed487589a649967a46aec86c60ec260ec262257947f38
-> exporting config sha256:18487cfbed9f79f5925f2ee6b5d1b443c0dfda69835b0b0a4946a2d36946c08
-> exporting attestation manifest sha256:3:ceee67560a900a848a76ebfa000f11db18c71f266a9cceeb121c880a114fa
-> exporting manifest list sha256:4df8fb84325fb38e0fd42acf32f1117b3a1f40af2f9f004d5e5e01a07c550f
-> naming to docker.io/library/trend-app:latest
-> unpacking to docker.io/library/trend-app:latest
PS C:\Users\USER\Downloads\trend-by-Abhi> 
```

```

PS C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure> cd ..
PS C:\Users\USER\Downloads\Trend-by-Abhi> docker push abhishek8056/trend-app:latest
The push refers to repository [docker.io/abhishek8056/trend-app]
49bdcbbe8701: Pushed
dd71dde834b5: Pushed
1e5a4c89ce5: Pushed
f18232172bc9: Pushed
25ff2da83641: Pushed
cf8de4193cd: Pushed
ad66e0714649: Pushed
cabef230f400: Pushed
latest: digest: sha256:a57c5697a00d7616d8192762616e327d245c4c73f2f6d4c3a8853d0b5800d30d size: 856
PS C:\Users\USER\Downloads\Trend-by-Abhi>

```

Repositories / trend-app / General

**abhishek8056/trend-app**

Last pushed 3 minutes ago · Repository size: 55.3 MB · ⚡ 0 · ⌂ 0

Add a description ⓘ ⓘ

Add a category ⓘ ⓘ

General Tags Image Management BETA Collaborators Webhooks Settings

Tag	OS	Type	Pulled	Pushed
latest	🐧	Image	less than 1 day	4 minutes

Using 0 of 1 private repositories.

Docker commands

To push a new tag to this repository:

```
docker push abhishek8056/trend-app:tag
```

EXPLORER

- OPEN EDITORS
  - START\_HERE.md Trend-by-Abhi 9+ M
  - spec-tasks.mdu cloudagents/k8s 1, U
  - service.yaml Trend-by-Abhi\k8s M
  - main.tf Trend-by-Abhi\infrastructure... M
  - variables.tf Trend-by-Abhi\infrastruc... M
  - main.tf Trend-by-Abhi\infrastructure... M
  - variables.tf Trend-by-Abhi\infrastruc... M
- TREND
  - Trend-by-Abhi
    - infrastructure
      - terraform.tfstate
      - terraform.state.backup
      - variables.tf M
      - versions.tf M
    - k8s
      - deployment.yaml
      - hpayaml
      - namespace.yaml
      - network-policy.yaml
      - resource-quota.yaml
      - service-account.yaml
      - service.yaml M
    - monitoring
    - scripts
      - cleanup-all.sh
      - .env.example
      - .gitignore
      - config.yaml.example
      - Dockerfile
    - iam\_policy.json

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```

Microsoft Windows [Version 10.0.26200.7019]
(c) Microsoft Corporation. All rights reserved.

C:\Users\USER\Downloads\trend>cd Trend-by-Abhi && curl -I http://localhost:8080
HTTP/1.1 200 OK
Content-Length: 415
Content-Type: inline; filename="index.html"
Accept-Ranges: bytes
ETag: "23ae1bb36399c80b04139a2ea34543293e0af1a"
Content-Type: text/html; charset=utf-8
Vary: Accept-Encoding
Date: Sun, 16 Nov 2025 05:34:58 GMT
Connection: keep-alive
Keep-Alive: timeout=5

C:\Users\USER\Downloads\trend\Trend-by-Abhi>

```

Trendify | Find What Moves You

localhost:3000

trendify  
—FIND WHAT MOVES YOU—

HOME COLLECTION ABOUT CONTACT

OUR BEST SELLERS

Latest Arrivals

SHOP NOW



LATEST COLLECTIONS

25°C Sunny

Search

ENG US 19:04 14-11-2025

Trendify | Find What Moves You

localhost:3000

trendify  
—FIND WHAT MOVES YOU—

HOME COLLECTION ABOUT CONTACT

Easy Return & Exchange Policy

Our Quality Policy

Best Customer Support

Unlock 20% Off | Subscribe Today!

hello@gmail.com

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GET IN TOUCH

+11-558-669-447  
contact.trendify@info.com

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25°C Sunny

Search

ENG US 19:04 14-11-2025

A screenshot of a web browser showing the Trendify website at 127.0.0.1:8080. The page features a large search bar at the top right. The main content area includes a "Latest Arrivals" section with a "SHOP NOW" button, a "OUR BEST SELLERS" section, and a large image of a woman wearing a black shawl against a pink background. The footer contains a weather widget, a search bar, and various system icons.

```
PS C:\Users\USER\Downloads\Trend-by-Abhi> docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
a0279f1ace5e gcr.io/k8s-minikube/kicbase:v0.0.48 "/usr/local/bin/entr..." 7 weeks ago Up 27 minutes 127.0.0.1:54208->22/tcp, 127.0.0.1:54205->2376/tcp, 127.0.0.1:54209->5000/tcp, 127.0.0.1:54207->8443/tcp, 127.0.0.1:54206->32443/tcp minikube
PS C:\Users\USER\Downloads\Trend-by-Abhi> docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
a0279f1ace5e gcr.io/k8s-minikube/kicbase:v0.0.48 "/usr/local/bin/entr..." 7 weeks ago Up 27 minutes 127.0.0.1:54208->22/tcp, 127.0.0.1:54205->2376/tcp, 127.0.0.1:54209->5000/tcp, 127.0.0.1:54207->8443/tcp, 127.0.0.1:54206->32443/tcp minikube
PS C:\Users\USER\Downloads\Trend-by-Abhi> docker images -a
REPOSITORY TAG IMAGE ID CREATED SIZE
trend-app latest 581103b155ef 4 minutes ago 223MB
abhishek8056/trend-app latest a57c5697a0ed 4 minutes ago 223MB
react-app latest f8498845ea5c 8 weeks ago 767MB
my-apache-site latest b5797df22507 8 weeks ago 175MB
gcr.io/k8s-minikube/kicbase v0.0.48 41454ef774d0 2 months ago 1.84GB
gcr.io/k8s-minikube/kicbase <none> 7171c97a5162 2 months ago 1.84GB
hashicorp/terraform-mcp-server latest fe61c7ff5522f 3 months ago 15.4MB
PS C:\Users\USER\Downloads\Trend-by-Abhi>
```

```
PS C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure> ls

Directory: C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure

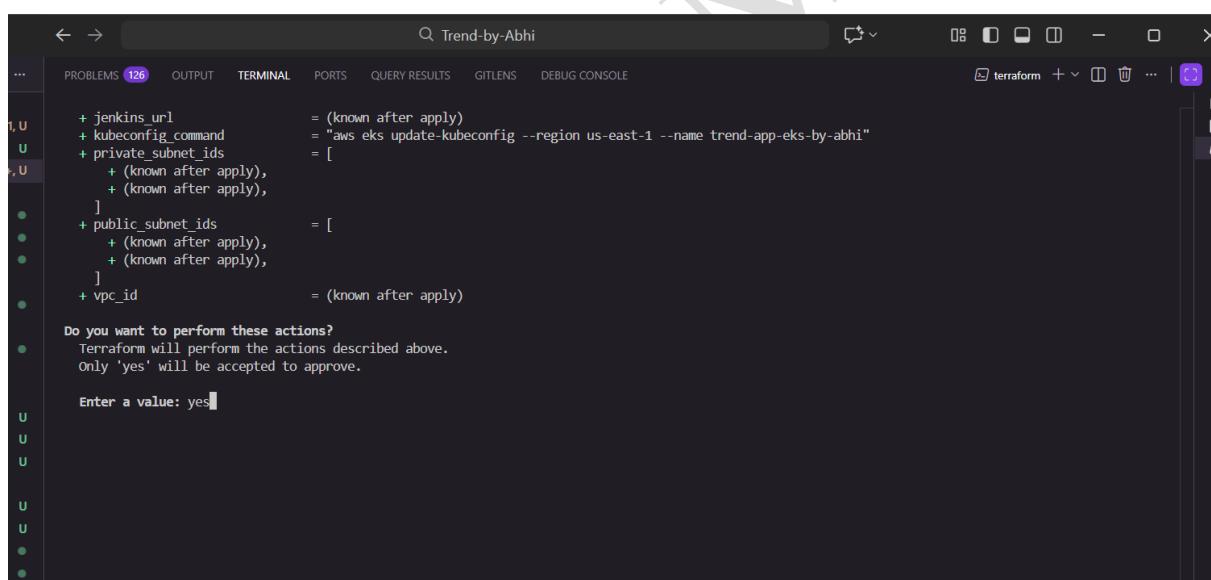
Mode LastWriteTime Length Name
---- -- -- -- --
d---- 13-11-2025 21:34 .terraform
d---- 13-11-2025 18:02 modules
-a--- 13-11-2025 21:34 2489 .terraform.lock.hcl
-a--- 13-11-2025 21:16 2227 main.tf
-a--- 13-11-2025 18:02 1137 outputs.tf
-a--- 13-11-2025 21:19 232 provider.tf
-a--- 14-11-2025 19:11 2771 variables.tf
-a--- 13-11-2025 18:01 555 versions.tf

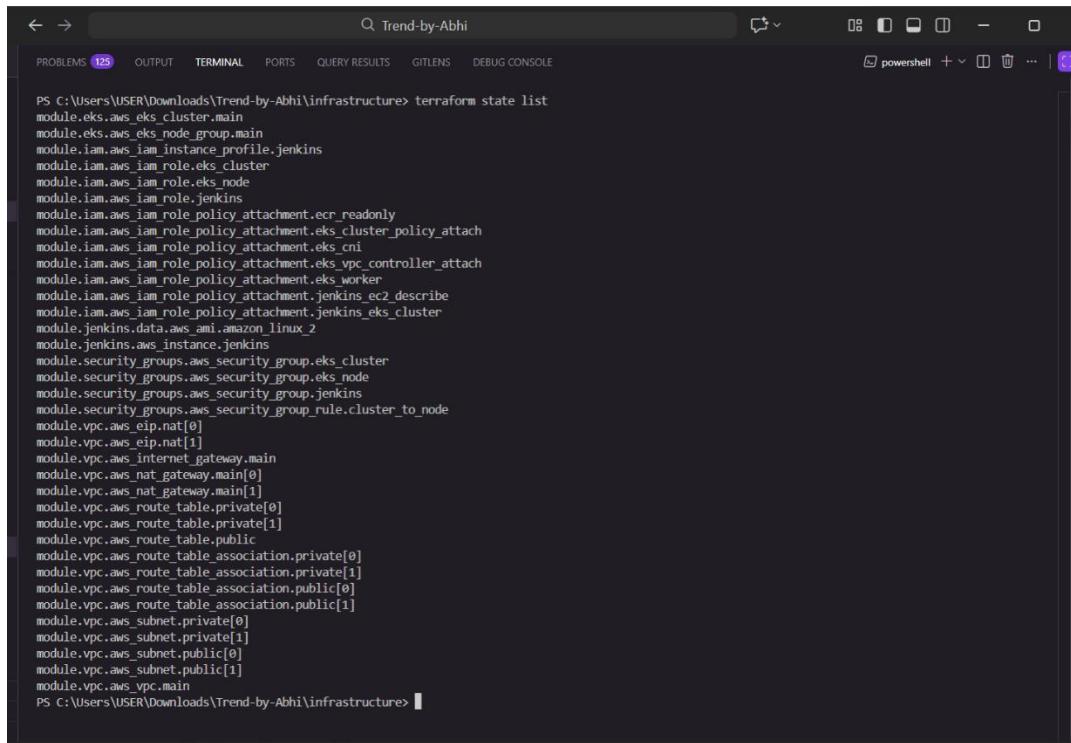
PS C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure> terraform init
Initializing the backend...
Initializing modules...
Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Reusing previous version of hashicorp/kubernetes from the dependency lock file
- Using previously-installed hashicorp/aws v5.100.0
- Using previously-installed hashicorp/kubernetes v2.38.0

Terraform has been successfully initialized!

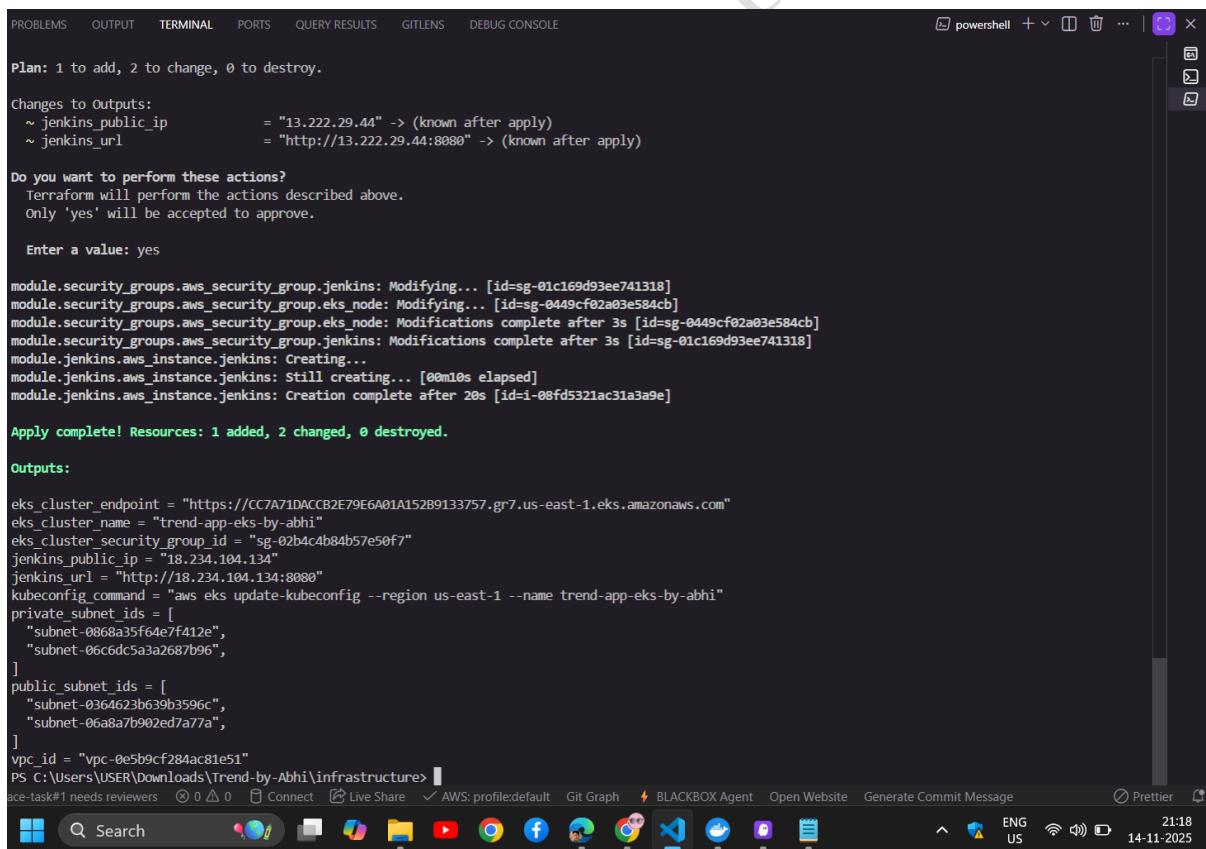
You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
PS C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure>
```





```
PS C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure> terraform state list
module.eks.aws_eks_cluster.main
module.eks.aws_eks_node_group.main
module.iam.aws_iam_instance_profile.jenkins
module.iam.aws_iam_role.eks_cluster
module.iam.aws_iam_role.eks_node
module.iam.aws_iam_role.jenkins
module.iam.aws_iam_role_policy_attachment.ecr_readonly
module.iam.aws_iam_role_policy_attachment.eks_cluster_policy_attach
module.iam.aws_iam_role_policy_attachment.eks_vpc_controller_attach
module.iam.aws_iam_role_policy_attachment.eks_worker
module.iam.aws_iam_role_policy_attachment.jenkins_ec2_describe
module.iam.aws_iam_role_policy_attachment.jenkins_eks_cluster
module.jenkins.data.aws_ami.amazon_linux_2
module.jenkins.aws_instance.jenkins
module.security_groups.aws_security_group.eks_cluster
module.security_groups.aws_security_group.eks_node
module.security_groups.aws_security_group.jenkins
module.security_groups.aws_security_group_rule.cluster_to_node
module.vpc.aws_eip.nat[0]
module.vpc.aws_eip.nat[1]
module.vpc.aws_internet_gateway.main
module.vpc.aws_nat_gateway.main[0]
module.vpc.aws_route_table.private[0]
module.vpc.aws_route_table.private[1]
module.vpc.aws_route_table.public
module.vpc.aws_route_table_association.private[0]
module.vpc.aws_route_table_association.private[1]
module.vpc.aws_route_table_association.public[0]
module.vpc.aws_route_table_association.public[1]
module.vpc.aws_subnet.private[0]
module.vpc.aws_subnet.private[1]
module.vpc.aws_subnet.public[0]
module.vpc.aws_subnet.public[1]
module.vpc.aws_vpc.main
PS C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure>
```



```
PROBLEMS OUTPUT TERMINAL PORTS QUERY RESULTS GITLENS DEBUG CONSOLE
```

```
Plan: 1 to add, 2 to change, 0 to destroy.

Changes to Outputs:
~ jenkins_public_ip          = "13.222.29.44" -> (known after apply)
~ jenkins_url                 = "http://13.222.29.44:8080" -> (known after apply)

Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.

Enter a value: yes

module.security_groups.aws_security_group.jenkins: Modifying... [id=sg-01c169d93ee741318]
module.security_groups.aws_security_group.eks_node: Modifying... [id=sg-0449cf02a03e584cb]
module.security_groups.aws_security_group.eks_node: Modifications complete after 3s [id=sg-0449cf02a03e584cb]
module.security_groups.aws_security_group.jenkins: Modifications complete after 3s [id=sg-01c169d93ee741318]
module.jenkins.aws_instance.jenkins: Creating...
module.jenkins.aws_instance.jenkins: Still creating... [00m10s elapsed]
module.jenkins.aws_instance.jenkins: Creation complete after 20s [id=i-08fd5321ac31a3a9e]

Apply complete! Resources: 1 added, 2 changed, 0 destroyed.

Outputs:

eks_cluster_endpoint = "https://CC7A71DACC2E79E6A01A152B9133757.gr7.us-east-1.eks.amazonaws.com"
eks_cluster_name = "trend-app-eks-by-abhi"
eks_cluster_security_group_id = "sg-02b4c4b84b57e50f"
jenkins_public_ip = "18.234.104.134"
jenkins_url = "http://18.234.104.134:8080"
kubeconfig_command = "aws eks update-kubeconfig --region us-east-1 --name trend-app-eks-by-abhi"
private_subnet_ids = [
    "subnet-0868a35f64e7f412e",
    "subnet-06c6dc5a3a2687b96",
]
public_subnet_ids = [
    "subnet-0364623b639b3596c",
    "subnet-06a8a7b902ed7a77a",
]
vpc_id = "vpc-0e5b9cf284ac81e51"
PS C:\Users\USER\Downloads\Trend-by-Abhi\infrastructure>
```

ace-task#1 needs reviewers  Connect  Live Share  AWS: profile=default  Git Graph  BLACKBOX Agent  Open Website  Generate Commit Message  Prettier

Search                 14-11-2025

The screenshot shows the AWS CloudShell interface. At the top, there are several tabs open, including 'Trendify', 'VPC', 'Roles', 'Cluster', 'Instances', 'EC2 Ins', 'EC2 Ins', 'Security', and 'Dashboard'. The main content area displays the 'Clusters' page of the Amazon Elastic Kubernetes Service (EKS). A single cluster named 'trend-app-eks-by-abhi' is listed, showing it is active, running version 1.28, and has an extended support period until November 26, 2025. The provider is EKS. On the left sidebar, there are sections for 'Amazon Elastic Kubernetes Service', 'Settings', 'Amazon EKS Anywhere', and 'Related services'. The bottom of the screen shows the Windows taskbar with various pinned icons.

The screenshot shows the AWS CloudShell interface. At the top, there are several tabs open, including 'Trendify', 'VPC', 'Roles', 'Cluster', 'Instances', 'EC2 Ins', 'EC2 Ins', 'Security', and 'Dashboard'. The main content area displays the 'Clusters' page of the Amazon Elastic Kubernetes Service (EKS). A single cluster named 'trend-app-eks-by-abhi' is listed, showing it is active, running version 1.28, and has an extended support period until March 23, 2026. The provider is EKS. The 'Compute' tab is selected. Below the cluster details, there are sections for 'Cluster info', 'Nodes', and 'Node groups'. The 'Nodes' section shows two nodes: 'ip-10-0-10-177.ec2.internal' and 'ip-10-0-20-24.ec2.internal', both of which are t3.medium instances managed by the 'trend-app-eks-by-abhi-node-group' and are ready. The 'Node groups' section shows one group named 'trend-app-eks-by-abhi-node-group' with a size of 2, using AMI release version 1.28.15-20251108. The bottom of the screen shows the Windows taskbar with various pinned icons.

Screenshot of the AWS VPC console showing the details of a VPC named `vpc-0e5b9cf284ac81e51`. The VPC is in the `trend-app-vpc-production` environment.

**VPC Details:**

- VPC ID:** vpc-0e5b9cf284ac81e51
- State:** Available
- Tenancy:** default
- Default VPC:** No
- IPv4 CIDR:** 10.0.0.0/16
- IPv6 CIDR:** -
- Block Public Access:** Off
- DHCP option set:** doph-Oaf76d6333fb0a28
- Route 53 Resolver DNS Firewall rule groups:** -
- DNS hostnames:** Enabled
- Main route table:** rtb-0ac1753487dfab51a
- IPv6 pool:** -
- Owner ID:** 323997748752

**Resource Map:** A diagram showing the network structure. It includes a central **VPC** node, four **Subnets** (4), four **Route tables** (4), and three **Network Connections** (3). Subnets are located in regions `us-east-1a` and `us-east-1b`.

```
graph LR; VPC[VPC] --- Subnets[Subnets]; VPC --- RouteTables[Route tables]; VPC --- NetworkConnections[Network Connections]; Subnets --- RouteTables; NetworkConnections --- Subnets;
```

**Logs:** Shows flow logs for the VPC.

Screenshot of the AWS IAM console showing the Roles page. There are 3 roles listed:

Role name	Trusted entities	Last activity
<a href="#">trend-app-eks-cluster-role-production</a>	AWS Service: eks	-
<a href="#">trend-app-eks-node-role-production</a>	AWS Service: ec2	-
<a href="#">trend-app-jenkins-role-production</a>	AWS Service: ec2	-

**Roles Anywhere:** Information on how to authenticate non-AWS workloads using X.509 Standard or Temporary credentials.

**Logs:** Shows access logs from non-AWS workloads.

AWS Global View | Search [Alt+S] | United States (N. Virginia) | Account ID: 3239-9774-8732 | Abhishek.Mishra

**VPC Subnets**

Subnets (5/5) Info

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR	IPv6 CIDR	Actions
trend-app-private-subnet-2-production	subnet-06c6dc5a3a2687b96	Available	vpc-0e59cf284ac81e51	Off	10.0.20.0/24	-	<a href="#">Create subnet</a>
trend-app-public-subnet-2-production	subnet-06a8a7b902ed7a77a	Available	vpc-0e59cf284ac81e51	Off	10.0.2.0/24	-	<a href="#">Edit</a>
public-subnet-1	subnet-00380185ff82c751	Available	vpc-06a89d4b881760241	Off	10.0.0.0/28	-	<a href="#">Edit</a>
trend-app-private-subnet-1-production	subnet-0868a35f64e7f412e	Available	vpc-0e59cf284ac81e51	Off	10.0.10.0/24	-	<a href="#">Edit</a>
trend-app-public-subnet-1-production	subnet-0364623b639b3596c	Available	vpc-0e59cf284ac81e51	Off	10.0.1.0/24	-	<a href="#">Edit</a>

Last updated 3 minutes ago

Subnets: subnet-06c6dc5a3a2687b96, subnet-06a8a7b902ed7a77a, subnet-00380185ff82c751, subnet-0868a35f64e7f412e, subnet-0364623b639b3596c

CloudShell Feedback 25°C Sunny © 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences ENG US 19:27 14-11-2025

https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:v=3;\$case(tags:true%5C,client:false\$regex=ta... | Sign in

EC2 Instances (1/1) Info

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4...	Elastic IP
trend-app-jen...	i-04a74725bd79132c	Running	t3.medium	Initializing	<a href="#">View alarms +</a>	us-east-1a	ec2-13-222-29-44.com...	13.222.29.44	-

i-04a74725bd79132c (trend-app-jenkins-production)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary

Instance ID	13.222.29.44   open address	Private IPv4 address	10.0.1.171
IPv6 address	-	Instance state	Running
Hostname type	IP name: ip-10-0-1-71.ec2.internal	Private IP DNS name (IPv4 only)	ip-10-0-1-71.ec2.internal
Answer private resource DNS name	-	Instance type	t3.medium
Auto-assigned IP address	13.222.29.44 (Public IP)	VPC ID	vpc-0e59cf284ac81e51 (trend-app-vpc-production)
IAM Role	trend-app-jenkins-role-production	Subnet ID	subnet-0364623b639b3596c (trend-app-public-subnet-1-production)

Private IPv4 addresses

Public DNS

Private IPv4 addresses

Public IP addresses

AWS Compute Optimizer finding

Auto Scaling Group name

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**eksctl-trend-app-eks-by-abhi-addon-iamservice-Role1-imEyO4b5XmuK** [Info](#)

[Delete](#)

**Summary**

**Creation date**  
November 16, 2025, 10:08 (UTC+05:30)

**Last activity**  
32 minutes ago

**ARN**  
arn:aws:iam::323997748732:role/eksctl-trend-app-eks-by-abhi-addon-iamservice-Role1-imEyO4b5XmuK

**Maximum session duration**  
1 hour

[Edit](#)

**Permissions** [Trust relationships](#) [Tags \(0\)](#) [Last Accessed](#) [Revoke sessions](#)

**Permissions policies (1) [Info](#)**  
You can attach up to 10 managed policies.

[Search](#) [Filter by Type](#) All types  
 Policy name [AWSLoadBalancerControllerIAMPolicy-Abhi](#) Type Customer managed  
 Attached entities

[Simulate](#) [Remove](#) [Add permissions](#)

**Permissions boundary (not set)**

**Generate policy based on CloudTrail events**  
You can generate a new policy based on the access activity for this role, then customize, create, and attach it to this role. AWS uses your CloudTrail events to identify the services and actions used and generate a policy. [Learn more](#)

[Generate policy](#)  
No requests to generate a policy in the past 7 days.

**trend-app-eks-by-abhi**

**trend-app-eks-by-abhi**

[Delete cluster](#) [Upgrade version](#) [Monitor cluster](#)

[End of standard support for Kubernetes version 1.31 is November 26, 2025.](#)

[Upgrade](#)

**Cluster info** [Info](#)

Status: Active | Kubernetes version: 1.31 | Support period: Standard support until November 26, 2025 | Provider: EKS

Cluster health: 0/0

Upgrade insights: 6

Node health issues: 0/0

[Overview](#) [Resources](#) [Compute](#) [Networking](#) [Add-ons](#) [Access](#) [Observability](#) [Update history & backups](#) [Tags](#)

**Resource types**

- Workloads
  - Pods
  - ReplicaSets
  - Deployments
  - StatefulSets
  - DaemonSets
  - Jobs
  - CronJobs
  - PriorityClasses
  - HorizontalPodAutoscaler
- Cluster
- Service and networking
- Config and secrets
- Storage
- Authentication
- Authorization

**Workloads: ReplicaSets (4)**  
ReplicaSet aims to maintain a set of replica Pods running at any given time. [Learn more](#)

Name	Namespace	Type	Created	Pod count	Status
aws-load-balancer-controller-657b9c79	kube-system	replicaset	a day ago	2	2 Ready   0 Failed   2 Desired
coredns-5f7c9b478	kube-system	replicaset	November 15, 2025, 23:20 (UTC+05:30)	2	2 Ready   0 Failed   2 Desired
trend-app-deployment-6bc448c84d	trend-app	replicaset	a day ago	0	0 Ready   0 Failed   0 Desired
trend-app-deployment-7948bc689	trend-app	replicaset	28 minutes ago	3	3 Ready   0 Failed   3 Desired

**sg-0ee49874f3838e1e4 - trend-app-jenkins-sg-production**

[Actions](#)

**Details**

**Security group name**: trend-app-jenkins-sg-production | **Security group ID**: sg-0ee49874f3838e1e4 | **Description**: Security group for Jenkins EC2 | **VPC ID**: vpc-083ba4e38e3114ac2

**Owner**: 323997748732 | **Inbound rules count**: 6 Permission entries | **Outbound rules count**: 1 Permission entry

[Inbound rules](#) [Outbound rules](#) [Sharing - new](#) [VPC associations - new](#) [Tags](#)

**Inbound rules (6)**

[Search](#) [Manage tags](#) [Edit inbound rules](#)

Name	Security group rule ID	IP version	Type	Protocol	Port range	Source	Description
-	sgr-0318ed3701931b05e	IPv4	Custom TCP	TCP	8080	0.0.0.0/0	Jenkins Web UI
-	sgr-093b60715b2cccc14	IPv4	Custom TCP	TCP	3000	0.0.0.0/0	Grafana
-	sgr-01dac09cd6e672d9a	IPv4	HTTP	TCP	80	0.0.0.0/0	-
-	sgr-09a904f25479ea7e4	IPv4	SSH	TCP	22	0.0.0.0/0	SSH
-	sgr-06a1faaf87ca86eb3	IPv4	Custom TCP	TCP	9090	0.0.0.0/0	prometheus
-	sgr-028a355f051c08ab2	IPv4	Custom TCP	TCP	9100	0.0.0.0/0	Node Exporter

**trend-app-eks-cluster-role-production** [Info](#)

[Delete](#)

### Summary

**Creation date**  
November 15, 2025, 23:13 (UTC+0:30)

**Last activity**  
9 minutes ago

**ARN**  
[arn:aws:iam::323997748732:role/trend-app-eks-cluster-role-production](#)

**Maximum session duration**  
1 hour

[Edit](#)

**Permissions** | Trust relationships | Tags (4) | Last Accessed | Revoke sessions

### Permissions policies (2) [Info](#)

You can attach up to 10 managed policies.

Policy name	Type	Attached entities
<a href="#">AmazonEKSClusterPolicy</a>	AWS managed	6
<a href="#">AmazonEKSVPCResourceController</a>	AWS managed	3

**Permissions boundary (not set)**

**Generate policy based on CloudTrail events**

You can generate a new policy based on the access activity for this role, then customize, create, and attach it to this role. AWS uses your CloudTrail events to identify the services and actions used and generate a policy. [Learn more](#)

[Generate policy](#)

No requests to generate a policy in the past 7 days.

**sg-0ee49874f3838e1e4 - trend-app-jenkins-sg-production**

[Actions](#)

Security group name	Security group ID	Description	VPC ID
<a href="#">trend-app-jenkins-sg-production</a>	<a href="#">sg-0ee49874f3838e1e4</a>	<a href="#">Security group for Jenkins EC2</a>	<a href="#">vpc-083ha4e3114ac2</a>
Owner	323997748732	Inbound rules count 7 Permission entries	Outbound rules count 1 Permission entry

[Inbound rules](#) | [Outbound rules](#) | [Sharing - new](#) | [VPC associations - new](#) | [Tags](#)

### Inbound rules (7)

Name	Security group rule ID	IP version	Type	Protocol	Port range	Source	Description
sgr-0a667e4566246911d	sgr-0a667e4566246911d	IPv4	HTTPS	TCP	443	0.0.0.0/0	-
sgr-0318ed3701931b05e	sgr-0318ed3701931b05e	IPv4	Custom TCP	TCP	8080	0.0.0.0/0	Jenkins Web UI
sgr-093b60715b2ccc14	sgr-093b60715b2ccc14	IPv4	Custom TCP	TCP	3000	0.0.0.0/0	Grafana
sgr-01dc09cda672d9a	sgr-01dc09cda672d9a	IPv4	HTTP	TCP	80	0.0.0.0/0	-
sgr-094904125479ea7e4	sgr-094904125479ea7e4	IPv4	SSH	TCP	22	0.0.0.0/0	SSH
sgr-06a1faaf87ca86eb3	sgr-06a1faaf87ca86eb3	IPv4	Custom TCP	TCP	9090	0.0.0.0/0	prometheus
sgr-028a355f051c0ab2	sgr-028a355f051c0ab2	IPv4	Custom TCP	TCP	9100	0.0.0.0/0	Node Exporter

**Instances** [\[All+5\]](#)

[Search](#)

[EC2](#)

[Dashboard](#) [AWS Global View](#) [Events](#)

**Instances**

[Instances](#) [Instance Types](#) [Launch Templates](#) [Spot Requests](#) [Savings Plans](#) [Reserved Instances](#) [Dedicated Hosts](#) [Capacity Reservations](#) [Capacity Manager](#) [New](#)

**Images**

[AMIs](#) [AMI Catalog](#)

**Elastic Block Store**

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**Load Balancing**

[Load Balancers](#) [Target Groups](#) [Trust Status](#)

**Auto Scaling**

[Auto Scaling Groups](#)

[Instances \(4/4\)](#) [Info](#)

[Find Instance by attribute or tag \(case-sensitive\)](#)

All status

[Instance state = running](#) [Clear filters](#)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 IP	Elastic IP	IPv6 IPs	Monitoring	Security group name	Key name
I-06918d25a1c590d5	I-06918d25a1c590d5	Running	t3.large	3/3 checks passed	<a href="#">View alarms +</a>	ap-south-1a	ec2-65-65-71-45.ap-sout...	65.0.71.45	-	-	disabled	eks-cluster-sg-trend-ap...	-
trend-app-jen...	I-0023568abed02d2027	Running	t3.large	3/3 checks passed	<a href="#">View alarms +</a>	ap-south-1a	ec2-13-225-19-23.ap-s...	13.225.19.23	-	-	disabled	trend-app-jenkins-sg-pr...	-
I-03a1f42bc3c9153	I-03a1f42bc3c9153	Running	t3.large	3/3 checks passed	<a href="#">View alarms +</a>	ap-south-1a	-	-	-	-	disabled	eks-cluster-sg-trend-ap...	-
I-0fb6906f370808c1b	I-0fb6906f370808c1b	Running	t3.large	3/3 checks passed	<a href="#">View alarms +</a>	ap-south-1a	-	-	-	-	disabled	eks-cluster-sg-trend-ap...	-

4 instances selected

[Monitoring](#)

[CPU utilization \(%\)](#) [Investigate with AI - new](#) [Configure CloudWatch agent](#)

[Network in \(bytes\)](#) [3.7M](#)

[Network out \(bytes\)](#) [1.25M](#)

[Network packets in \(count\)](#) [Count](#)

[Metadata no token \(count\)](#) [No unit](#)

[CPU credit usage \(count\)](#) [0.150](#)

[Network packets in \(count\)](#) [Count](#)

[CPU credit balance \(count\)](#) [Count](#)

**vpc-083ba4e38e3114ac2 / trend-app-vpc-production**

<b>Details</b>	<b>Info</b>
VPC ID vpc-083ba4e38e3114ac2	State <span style="color: green;">Available</span>
DNS resolution Enabled	Tenancy default
Main network ACL ad-0645c4ec00695a4bec	Default VPC No
IPv6 CIDR (Network border group) -	Network Address Usage metrics Disabled
Block Public Access <input checked="" type="radio"/> Off	
DNS resolution set dopt-06af7f14716c540d4	
IPv4 CIDR 10.0.0.0/16	
Route 53 Resolver DNS Firewall rule groups -	
Main route table rtb-02138e19562099f77	
IPv6 pool -	
Owner ID 523997748752	

**Resource map** Info

**VPC dashboard**

**Your VPCs (1 / 5) info**

Name	VPC ID	Status	Block Public...	IPv4 CIDR	IPv6 CIDR	DHCP option set	Main route table	Main network ACL	Tenancy	Default VPC
project-vpc	vpc-083ba4e38e3114ac2	<span style="color: green;">Available</span>	<input checked="" type="radio"/> Off	10.100.0.0/16	-	dopt-06af7f14716c540d4	rtb-05fb7279e821efbe	ac-10cf73d00e642095	default	No
trend-app-vpc-production	vpc-083ba4e38e3114ac2	<span style="color: green;">Available</span>	<input checked="" type="radio"/> Off	10.0.0.0/16	-	dopt-06af7f14716c540d4	rtb-02138e19562099f77	ac-10645c4ec00695a4bec	default	No
eksctl-brain-cluster-cluster/VPC	vpc-00ff73019e29151360	<span style="color: green;">Available</span>	<input checked="" type="radio"/> Off	172.31.0.0/16	-	dopt-06af7f14716c540d4	rtb-0520264243f70e7	ac-1092abf156dc0e60	default	Yes
eksctl-mlops-cluster-cluster/VPC	vpc-00ff73a14247420c2	<span style="color: green;">Available</span>	<input checked="" type="radio"/> Off	192.168.0.0/16	-	dopt-06af7f14716c540d4	rtb-08d419e2f16d0bea	ac-105ab19b77d34101	default	No

**vpc-083ba4e38e3114ac2 / trend-app-vpc-production**

**Resource map** Info

**Clusters > trend-app-eks-by-abhi**

**trend-app-eks-by-abhi**

⚠ End of standard support for Kubernetes version 1.31 is November 26, 2025.

**Cluster info** Info

Status <span style="color: green;">Active</span>	Kubernetes version 1.31	Support period <span style="color: orange;">Standard support until November 26, 2025</span>	Provider EKS
Cluster health <span style="color: green;">0</span>	Upgrade insights <span style="color: green;">6</span>	Node health issues <span style="color: green;">0</span>	

**Overview** Resources Compute Networking Add-ons Access Observability Update history & backups Tags

**Resource types**

- Workloads**
  - PodTemplates
  - Pods
  - ReplicaSets
  - Deployments**
    - StatefulSets
    - DaemonSets
    - Jobs
    - CronJobs
    - PriorityClasses
    - HorizontalPodAutoscalers
- Cluster**
- Service and networking**
  - Config and secrets
  - Storage
  - Authentication
  - Authorization

**Workloads: Deployments (3)**

Deployment is an API object that manages a replicated application, typically by running Pods with no local state. [Learn more](#)

Name	Namespace	Type	Created	Pod count	Status
aws-load-balancer-controller	kube-system	deployments	a day ago	2	2 ready   0 failed   2 Desired
coredns	kube-system	deployments	November 15, 2025, 23:20 (UTC+05:30)	2	2 ready   0 failed   2 Desired
trend-app-deployment	trend-app	deployments	a day ago	3	3 ready   0 failed   3 Desired

[Clusters](#) > [trend-app-eks-by-abhi](#)

## trend-app-eks-by-abhi

⚠ End of standard support for Kubernetes version 1.31 is November 26, 2025.

[Delete cluster](#) [Upgrade version](#) [Monitor cluster](#)

[Upgrade](#)

**Cluster info** [Info](#)

Status <span>Active</span>	Kubernetes version <a href="#">Info</a> 1.31	Support period <span>Standard support until November 26, 2025</span>	Provider EKS
Cluster health <span>0</span>	Upgrade insights <span>6</span>	Node health issues <span>0</span>	

[Overview](#) [Resources](#) [Compute](#) [Networking](#) [Add-ons](#) [Access](#) [Observability](#) [Update history & backups](#) [Tags](#)

**Resource types** <

- Workloads
- PodTemplates
- Pods**
  - ReplicaSets
  - Deployments
  - StatefulSets
  - DaemonSets
  - Jobs
  - CronJobs
  - PriorityClasses
  - HorizontalPodAutoscalers
- Cluster
- Service and networking
- Config and secrets
- Storage
- Authentication
- Authorization

**Workloads: Pods (13)**

Name	Created	Status
<a href="#">aws-load-balancer-controller-657b9c79-7isq2</a>	1 day ago	<span>Running</span>
<a href="#">aws-load-balancer-controller-657b9c79-m5kej</a>	1 day ago	<span>Running</span>
<a href="#">aws-node-2p459</a>	November 15, 2025, 23:28 (UTC+05:30)	<span>Running</span>
<a href="#">aws-node-m2j6g</a>	November 15, 2025, 23:28 (UTC+05:30)	<span>Running</span>
<a href="#">aws-node-p4kpk</a>	November 15, 2025, 23:28 (UTC+05:30)	<span>Running</span>
<a href="#">coredns-5f7cb0478-4c45c</a>	November 15, 2025, 23:20 (UTC+05:30)	<span>Running</span>
<a href="#">coredns-5f7cb0478-wwcjk</a>	November 15, 2025, 23:20 (UTC+05:30)	<span>Running</span>
<a href="#">kube-proxy-45tig</a>	November 15, 2025, 23:28 (UTC+05:30)	<span>Running</span>
<a href="#">kube-proxy-99jik</a>	November 15, 2025, 23:28 (UTC+05:30)	<span>Running</span>
<a href="#">kube-proxy-jmmpf</a>	November 15, 2025, 23:28 (UTC+05:30)	<span>Running</span>

[Clusters](#) > [trend-app-eks-by-abhi](#)

## trend-app-eks-by-abhi

⚠ End of standard support for Kubernetes version 1.31 is November 26, 2025.

[Delete cluster](#) [Upgrade version](#) [Monitor cluster](#)

[Upgrade](#)

**Cluster info** [Info](#)

Status <span>Active</span>	Kubernetes version <a href="#">Info</a> 1.31	Support period <span>Standard support until November 26, 2025</span>	Provider EKS
Cluster health <span>0</span>	Upgrade insights <span>6</span>	Node health issues <span>0</span>	

[Overview](#) [Resources](#) [Compute](#) [Networking](#) [Add-ons](#) [Access](#) [Observability](#) [Update history & backups](#) [Tags](#)

**Details**

API server endpoint  
<https://5692978040E7AD813F48DBAC305BCE7E.gr7.ap-south-1.eks.amazonaws.com>

Certificate authority  
 [UkkNEZ2bn1C1z2kgjHTWZBjzxxN1pruJ1Q2Qv9P0R3N1J0tUjRvRz2ubnYdZjt1uVY1C0Ez20ArRNEVpLj90jHvUkKLoF2cXBM52hvSxgYC0L50R5UEENfURjRkDQvRfL50L5OK](#)

OpenID Connect provider URL  
<https://oidc.eks.ap-south-1.amazonaws.com/id/5692978040E7AD813F48DBAC305BCE7E>

Cluster IAM role ARN  
[arn:aws:iam:323997748732:role/trend-app-eks-cluster-role-production](#) [View in IAM](#)

Platform version [Info](#)  
eks:45

**EKS Auto Mode** [Info](#)

EKS automates routine cluster tasks for compute, storage, and networking to meet application compute needs.

**EKS Auto Mode**  
Disabled

[Manage](#)

**Kubernetes version settings**

Upgrade policy [Extended support](#)

[Manage](#)

**Deletion protection - new** [Info](#)

Deletion protection

[Manage](#)

The screenshot shows the AWS Route 53 console. The left sidebar has navigation links for DNS, Search, Hosted zones, Health checks, Profiles, IP flow, Hosted zone routing, Traffic flow, Domains, Requests, and a Resolver section for VPCs, Inbound endpoints, Outbound endpoints, Rules, Query logging, and Outputs. The main content area is titled "Route 53 > Hosted zones > abhimishra-devops.com". It displays the "Hosted zone details" for "abhimishra-devops.com". The "Records (7)" tab is selected. A table lists the following records:

Record name	Type	Routing	Alias	Value/Route traffic to	TTL	Health	Evalua...	Record ID
	A	Simple	No	185.199.108.153 185.199.110.153 185.199.111.153	200	-	-	
abhimishra-devops.com	NS	Simple	No	ns-544.awsdns-04.net. ns-284.awsdns-35.com. ns-190.awsdns-22.org. ns-194.awsdns-58.co.uk	172800	-	-	
abhimishra-devops.com	SOA	Simple	No	ns-544.awsdns-04.net. awsd...	900	-	-	
log.abhimishra-devops.com	A	Simple	No	76.76.2.1	180	-	-	
mtsp.abhimishra-devops.com	CNAME	Simple	No	ktls-default-tls&mtsp...	120	-	-	
_2cfa15177f34e1744d402f714ff95c2e.mtsp.	CNAME	Simple	No	4d86d4265e0417a74695...	180	-	-	
www.abhimishra-devops.com	CNAME	Simple	No	Abhi-mishra998.github.io	200	-	-	

Buttons at the top right include Delete zone, Test record, Configure query logging, and Edit hosted zone. A "Records (7) info" link is also present.

The screenshot displays a Microsoft Visual Studio Code (VS Code) interface with the following details:

- File Explorer:** Shows the project structure under the 'Trend' folder, including files like 'START\_HERE.md', 'spec.tasks.md', 'service-agent/Trend-by-Abhi.tf', 'network-policy/Trend-by-Abhi.tf', 'mainfest', 'Trend-by-Abhi.terraformstate', 'mainfest', 'Trend-by-Abhi.terraformstate', 'mainfest', 'Trend-by-Abhi.terraformstate', 'variables.tf', 'Trend-by-Abhi.infrastruct...', 'Trend-by-Abhi', 'Trend-by-Abhi.infrastruct...', 'Trend-by-Abhi.terraformstate', 'Trend-by-Abhi.terraformstate.backup', 'variables.tf', 'versions.tf', 'k8s', 'deployment.yaml', 'hpa.yaml', and 'namespace.yaml'. It also lists 'monitoring' and 'scripts' sections.
- Terminal:** Multiple terminal panes are open, each showing a different command prompt (cmd, powershell, blackbox). The bottom status bar shows the current file path for each terminal:
  - C:\Users\USER\Downloads\trend\trend\Trend
  - C:\Users\USER\Downloads\trend\trend\Trend
  - C:\Users\USER\Downloads\trend\trend\Trend
  - C:\Users\USER\Downloads\trend\trend\Trend
  - C:\Users\USER\Downloads\trend\trend\Trend
  - C:\Users\USER\Downloads\trend\trend\Trend
- Code Editors:** Two code editors are visible, both showing Terraform configuration for Kubernetes resources. The first editor shows configuration for a cluster and subnet named 'trend-app-public-subnet-1-production'. The second editor shows configuration for another cluster and subnet named 'trend-app-private-subnet-1-production'. Both editors include sections for 'Key' and 'Value' pairs, 'Tags', and 'DescribeSubnets'.

CloudShell Feedback

Instances | EC2 | ap-south-1 AWS Lambda | Lambda Manage endpoint access #5 trend app pipeline

Sign in ...

Search

Cluster endpoint access info

Configure access to the Kubernetes API server endpoint.

Public

The cluster endpoint is accessible from outside of your VPC. Worker node traffic will leave your VPC to connect to the endpoint.

Public and private

The cluster endpoint is accessible from outside of your VPC. Worker node traffic to the endpoint will stay within your VPC.

Private

The cluster endpoint is only accessible through your VPC. Worker node traffic to the endpoint will stay within your VPC.

Advanced settings

Cancel Save changes

```

PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s> kubectl apply -f ./deployment.yaml
deployment.apps/trend-app-deployment created
PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s> kubectl get pods
NAME                      READY   STATUS    RESTARTS   AGE
trend-app-deployment-6789f74d5c-4v9vf  0/1     Running   0          5s
trend-app-deployment-6789f74d5c-vd6f4  0/1     Running   0          5s
PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s> kubectl apply -f ./hpa.yaml
horizontalpodautoscaler.autoscaling/trend-app-hpa created
PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s> kubectl apply -f ./service.yaml
service/trend-app-service created
PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s> kubectl get nodes
NAME      STATUS   ROLES      AGE   VERSION
minikube  Ready    control-plane  50d   v1.34.0
PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s> kubectl get pods --all-namespaces
NAMESPACE   NAME                      READY   STATUS    RESTARTS   AGE
default     loadgen                  0/1     Error    0          40d
default     php-apache-58f969c6f7-hpcsq  1/1     Running   2 (3h53m ago)  40d
default     testpod                 0/1     Error    0          40d
default     testpod3                0/1     Error    0          40d
default     testpod5                0/1     Error    0          40d
default     web-0                   1/1     Running   2 (3h53m ago)  40d
default     web-1                   1/1     Running   2 (3h53m ago)  40d
kube-system coredns-66bc5c9577-qk57j  1/1     Running   3 (3h53m ago)  40d
kube-system etcd-minikube            1/1     Running   8 (3h53m ago)  40d
kube-system kube-apiserver-minikube  1/1     Running   8 (3h53m ago)  40d
kube-system kube-controller-manager-minikube  1/1     Running   8 (3h53m ago)  40d
kube-system kube-proxy-246rm         1/1     Running   3 (3h53m ago)  40d
kube-system kube-scheduler-minikube  1/1     Running   8 (38d ago)   40d
kube-system metrics-server-85b7d694d7-qk5mh  1/1     Running   4 (3h53m ago)  40d
kube-system storage-provisioner      1/1     Running   14 (11m ago)  40d
trend-app   trend-app-deployment-6789f74d5c-4v9vf  1/1     Running   0          68s
trend-app   trend-app-deployment-6789f74d5c-vd6f4  1/1     Running   0          68s
PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s> kubectl get svc -n trend-app
NAME      TYPE      CLUSTER-IP      EXTERNAL-IP      PORT(S)      AGE
trend-app-service  LoadBalancer  10.108.242.25  <pending>      80:30092/TCP  79s
PS C:\Users\USER\Downloads\Trend-by-Abhi\k8s>

```

PROBLEMS 44 OUTPUT TERMINAL PORTS QUERY RESULTS GITLENS DEBUG CONSOLE

Microsoft Windows [Version 10.0.26200.7019]  
 (c) Microsoft Corporation. All rights reserved.

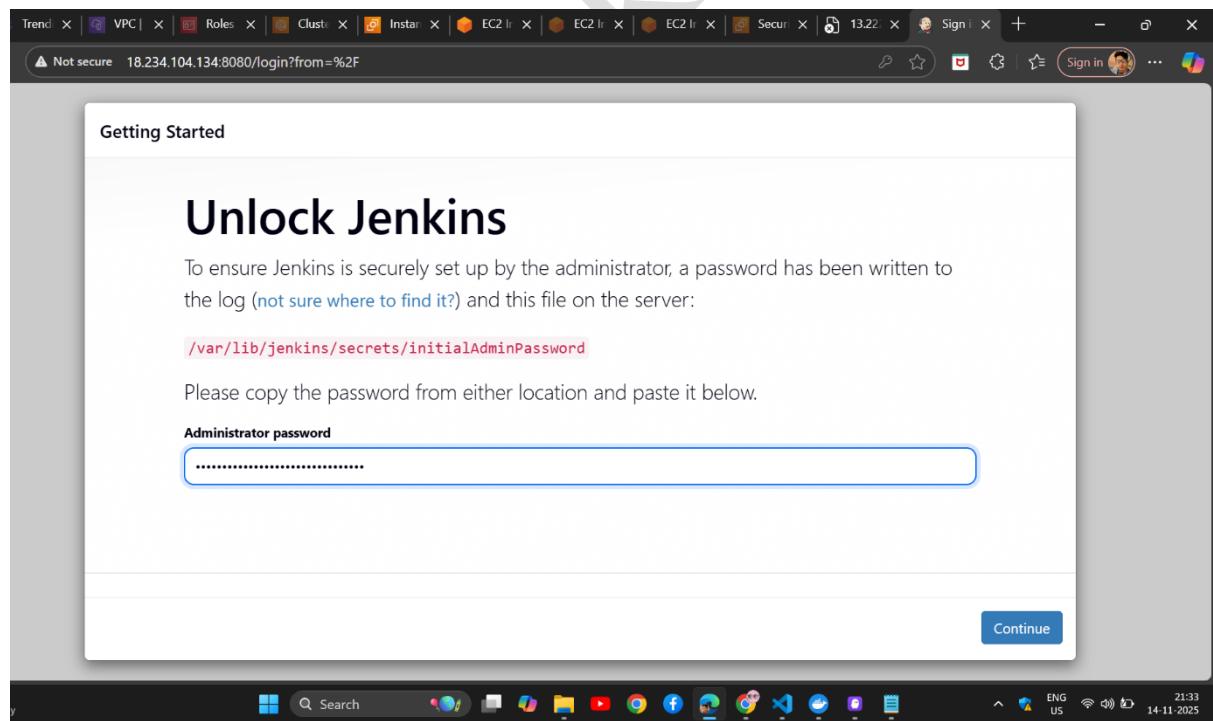
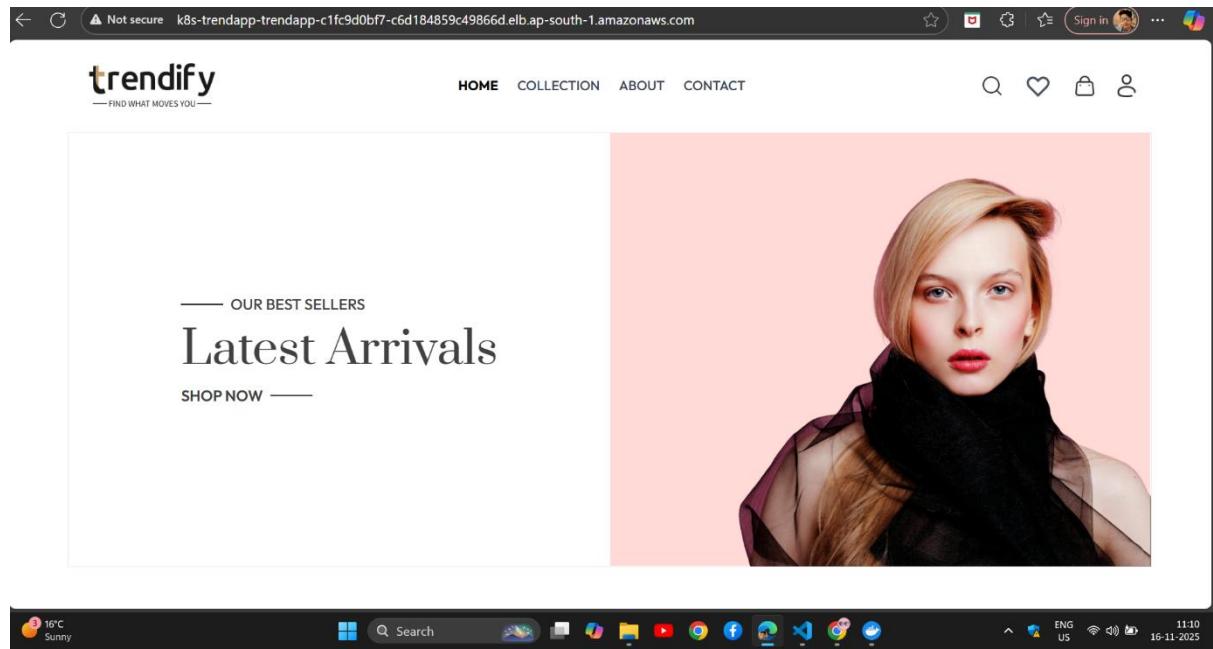
```

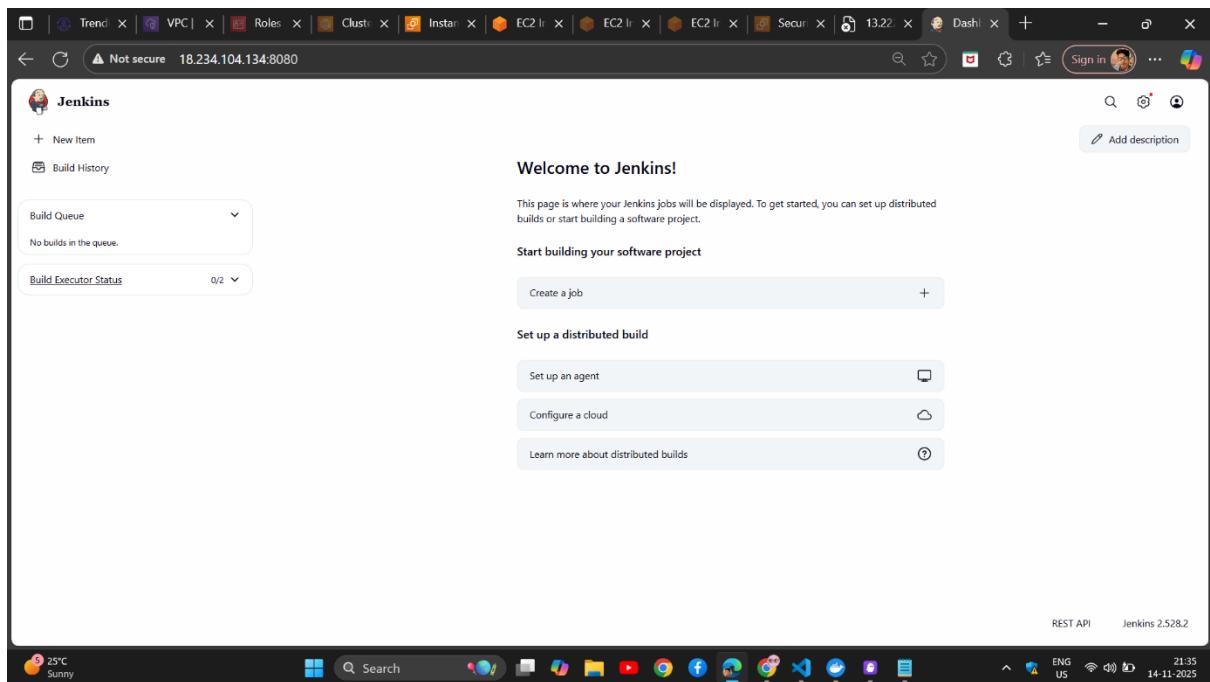
C:\Users\USER\Downloads\trend>cd Trend-by-Abhi && aws ec2 describe-vpcs --filters "Name=tag:Name,Values=trend-app-vpc-production" --query "Vpcs[0].VpcId" --output text
vpc-083ba4e38e3114ac2

C:\Users\USER\Downloads\trend>kubectl get svc -n trend-app
NAME      TYPE      CLUSTER-IP      EXTERNAL-IP      PORT(S)      AGE
trend-app-service  LoadBalancer  172.20.137.213  k8s-trendapp-trendapp-c1fc9d0bf7-c6d184859c49866d.elb.ap-south-1.amazonaws.com  80:30229/TCP  15m

C:\Users\USER\Downloads\trend>kubectl get pods -n trend-app
NAME                      READY   STATUS    RESTARTS   AGE
trend-app-deployment-6bc448c84d-6rn67  1/1     Running   0          32m
trend-app-deployment-6bc448c84d-g2j9s  1/1     Running   0          32m
trend-app-deployment-6bc448c84d-j5p9n  1/1     Running   0          32m

```





The screenshot shows the "New credentials" page under the "Manage Jenkins" section. The URL is [/Manage Jenkins / Credentials / System / Global credentials \(unrestr...](#). The page title is "New credentials". The "Kind" field is set to "Secret file". The "Scope" dropdown is set to "Global (Jenkins, nodes, items, all child items, etc)". The "File" field contains the path "config". The "ID" field is set to "kubeconfig-creds". The "Description" field is set to "EKS kubeconfig". A large blue "Create" button is at the bottom.

Not secure 34.232.196.99:8080/manage/credentials/store/system/domain/\_/newCredentials

Jenkins / Manage Jenkins / Credentials / System / Global credentials (unrestricted) ...

Kind: Username with password

Scope: Global (Jenkins, nodes, items, all child items, etc)

Username: Abhi-mishra998

Treat username as secret:

Password:

ID: github-creds

Description: GitHub Token

Create

12°C Sunny

Search

Cloud

File

Print

Help

ENG US

15-11-2025 09:30

Instances | Elastic Kibana | VPC | ap | eksctl-tre | Node Exporter | Jenkins | Node Exporter | Trendify | Prometheus | +

Not secure 13.235.19.23:8080/manage/credentials/

Jenkins / Manage Jenkins / Credentials

### Credentials

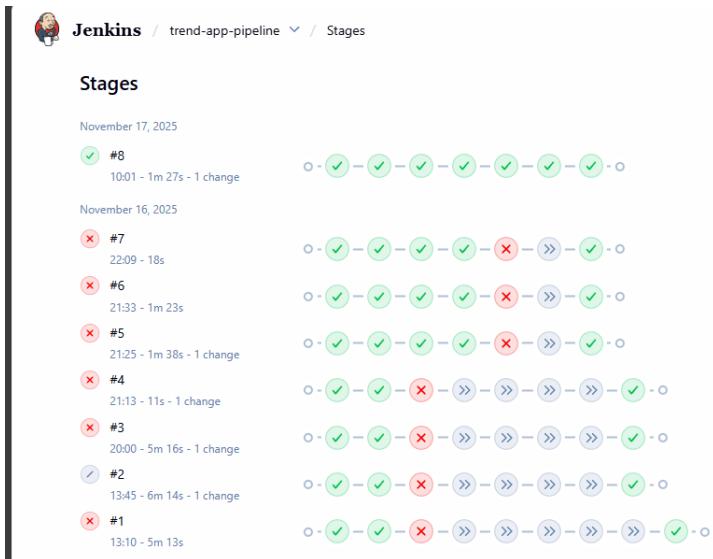
T	P	Store	Domain	ID	Name
System	System	(global)	dockerhub-creds	abhishek8056***** (dockerhub cred)	
System	System	(global)	kubeconfig-creds	config (EKS Kubeconfig)	
System	System	(global)	github-cred	Abhi-mishra998***** (git-cred for pipeline)	
System	System	(global)	github-creds	github-creds	
System	System	(global)	AWS	AKIAUW36FX6DORYGAQ7C	

### Stores scoped to Jenkins

P	Store	Domains
System	System	(global)

Icon: S M L

REST API Jenkins 2.528.2



Instances | Elastic Kibana | VPC | ap- | eksctl-test | Node Exporter | #8 - trend-app-pipeline | Node Exporter | Trendify | Prometheus | Sign in

**#8**

Manually run by abhi | Started 41 min ago | Queued 3 ms | Took 1 min 27 sec | Changes

**Graph**

```

graph LR
    Start((Start)) --> SCM[Checkout SCM]
    SCM --> Code[Checkout Code]
    Code --> Build[Build Docker Image]
    Build --> Push[Push Docker Image]
    Push --> Deploy[Deploy to Kubernetes]
    Deploy --> Verify[Verify Deployment]
    Verify --> End((End))
    
```

**Post Actions**

- Pipeline completed successfully > 53ms
- Application URL: <http://k8s-trendapp-trendapp-c1fc0d0bf7-c6d184859c49866d.elb.ap-south-1.amazonaws.com/> 11ms
- Application URL: <http://k8s-trendapp-trendapp-c1fc0d0bf7-c6d184859c49866d.elb.ap-south-1.amazonaws.com/> 15ms

Checkout SCM 0.77s  
Checkout Code 0.55s  
Build Docker Image 0.55s  
Push Docker Image 12s  
Deploy to Kubernetes 1m 5s  
Verify Deployment 4.3s  
Post Action 53ms

Jenkins 2.528.2

```
Jenkins trend-app-pipeline v / #0 Console Output

#0 building with "Default" instance using docker driver

#1 [internal] load build definition from dockerfile
#1 transferring dockerfile: 450B done
#1 DONE 0.0s

#2 [internal] load metadata for docker.io/library/node:18-alpine
#2 DONE 0.0s

#3 [internal] load .dockerignore
#3 transferring context: 2B done
#3 DONE 0.0s

#4 [1/4] FROM docker.io/library/node:18-alpine
#4 DONE 0.0s

#5 [internal] load build context
#5 transferring context: 3.67kB done
#5 DONE 0.0s

#6 [3/4] RUN npm install -g serve
#6 CACHED

#7 [2/4] WORKDIR /app
#7 CACHED

#8 [4/4] COPY dist ./dist
#8 CACHED

#9 exporting to image
#9 exporting layers done
#9 writing image sha256:990ffaf7ffccf5d04d8850eef1f50bf9e435409792fb0bfe740f0b5af5b0c51 done
#9 DONE 0.0s
#9 DONE 0.0s
+ docker tag abhishek886/trend-app:abhishek886/trend-app:latest
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Push Docker Image)
[Pipeline] } <!-- /credentials
Masking supported pattern matches of $PASS
[Pipeline]
[Pipeline] sh
+ docker login -u abhishek886 --password=$STIN
+ echo $STIN
WARNING! Your password will be stored unencrypted in /var/lib/jenkins/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

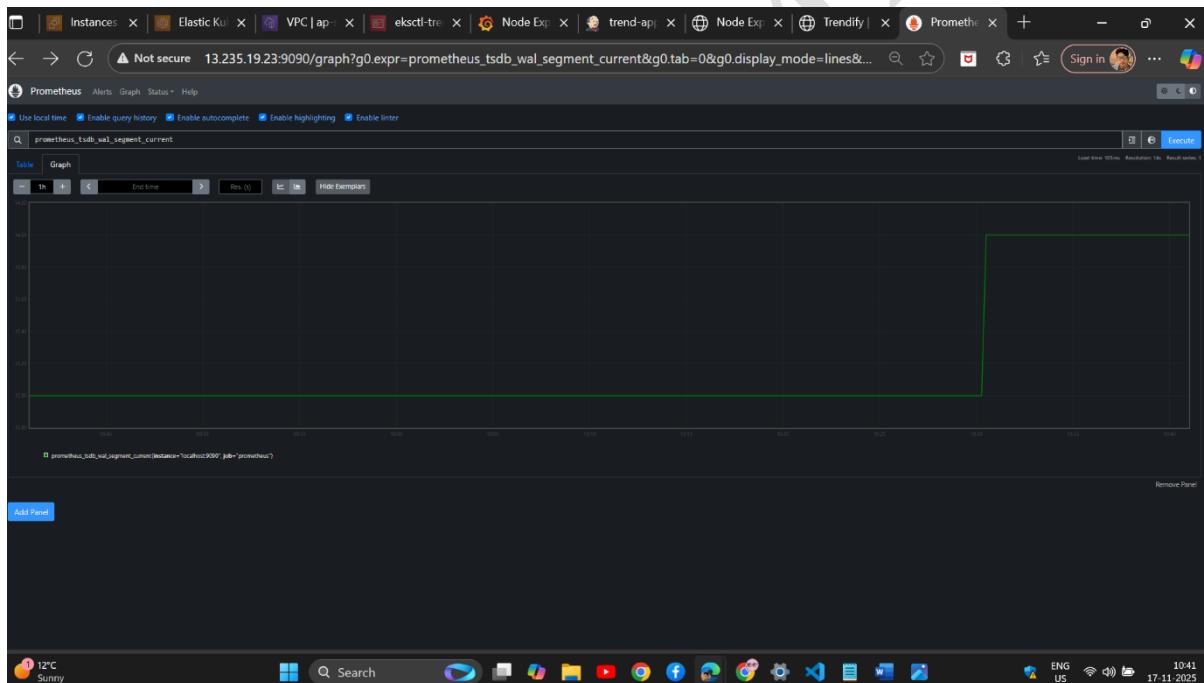
12°C Sunny
1041 ENG
US
17-11-2025
```

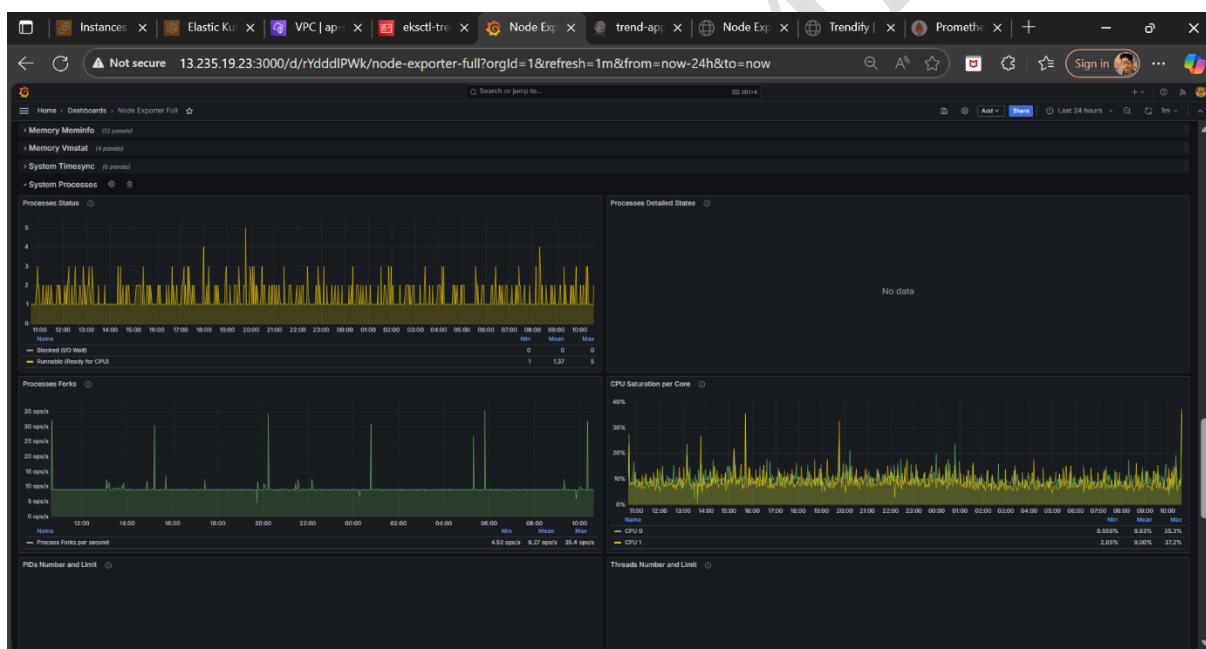
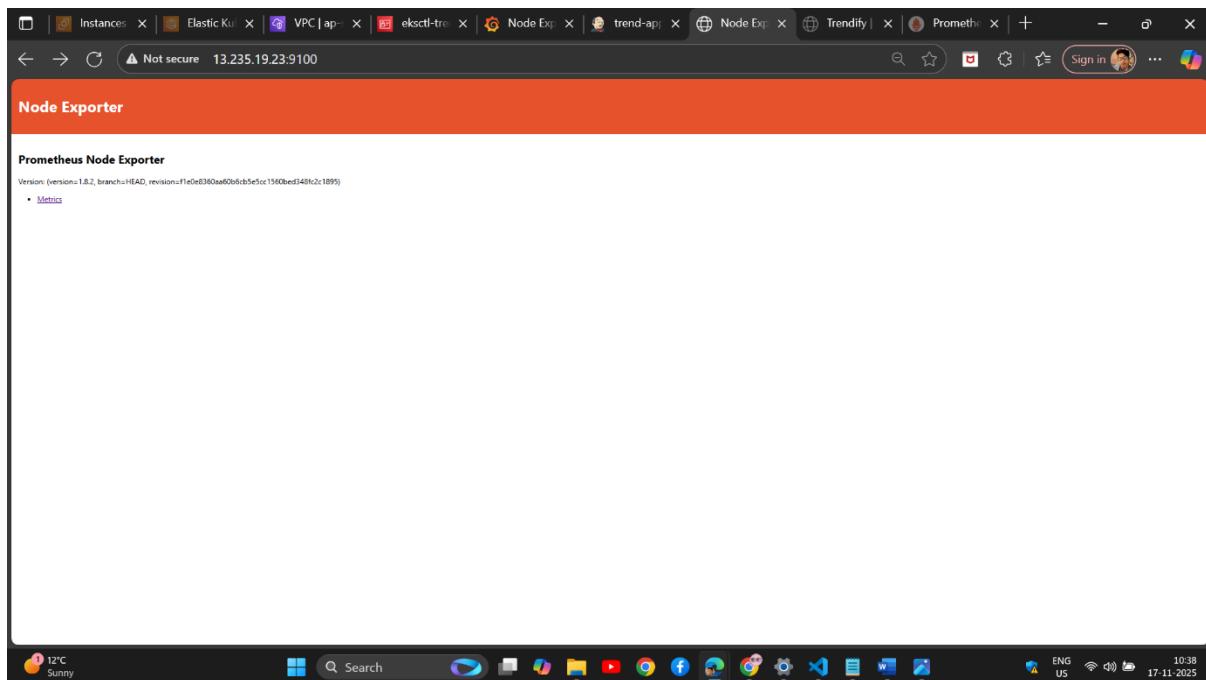
Jenkins trend-app-pipeline # Jenkins Console Output

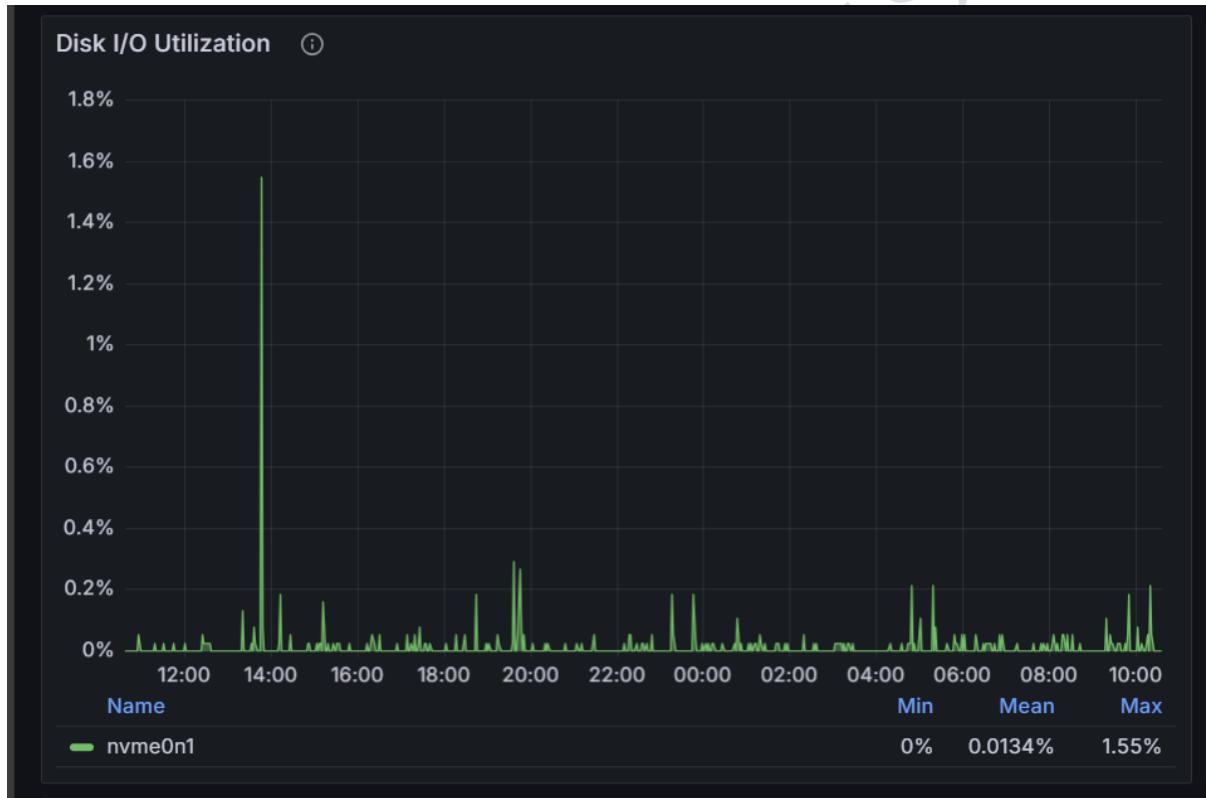
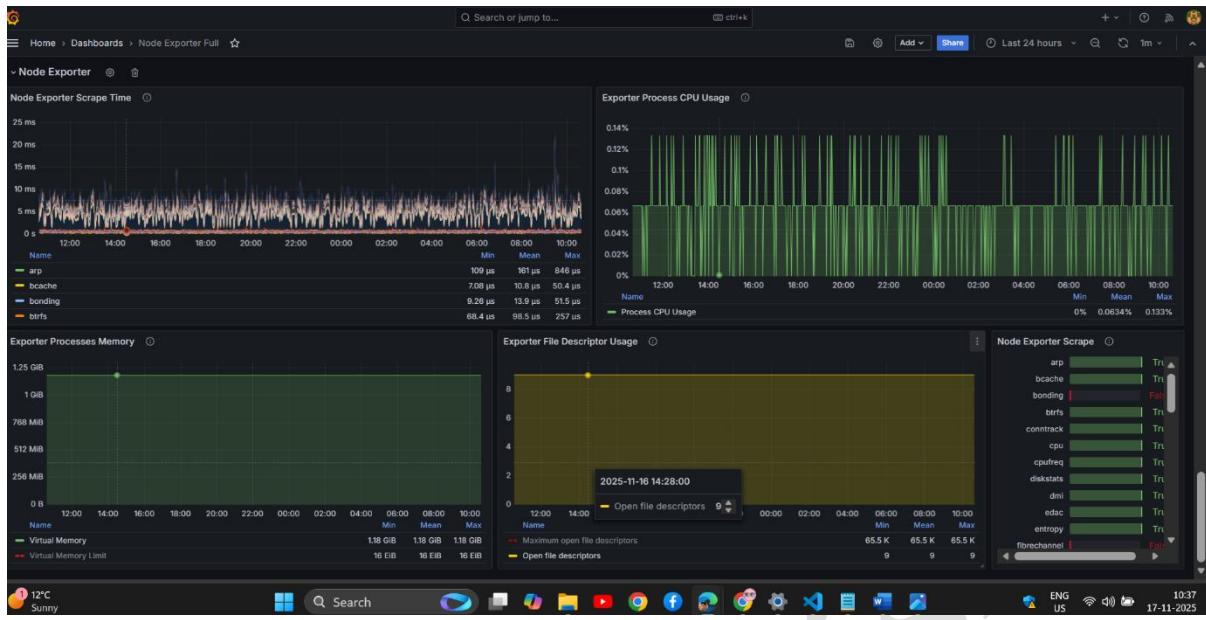
Status Changes Console Output Edit Build Information Timings Git Build Data Pipeline Overview Thread Dump Pause/Resume Reply Pipeline Steps Workspaces Previous Build

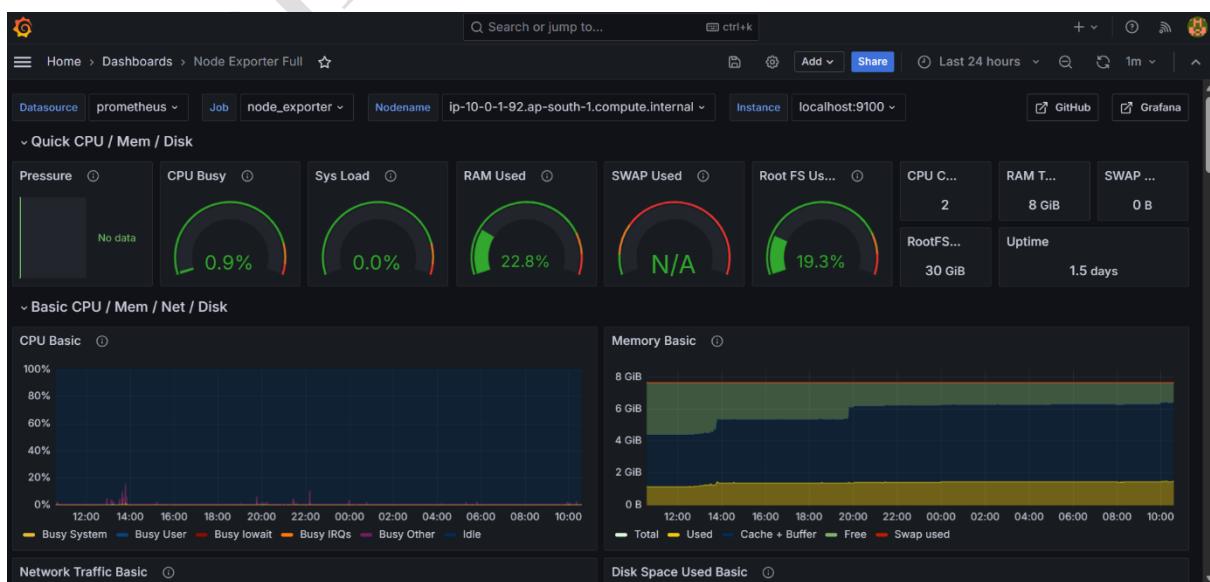
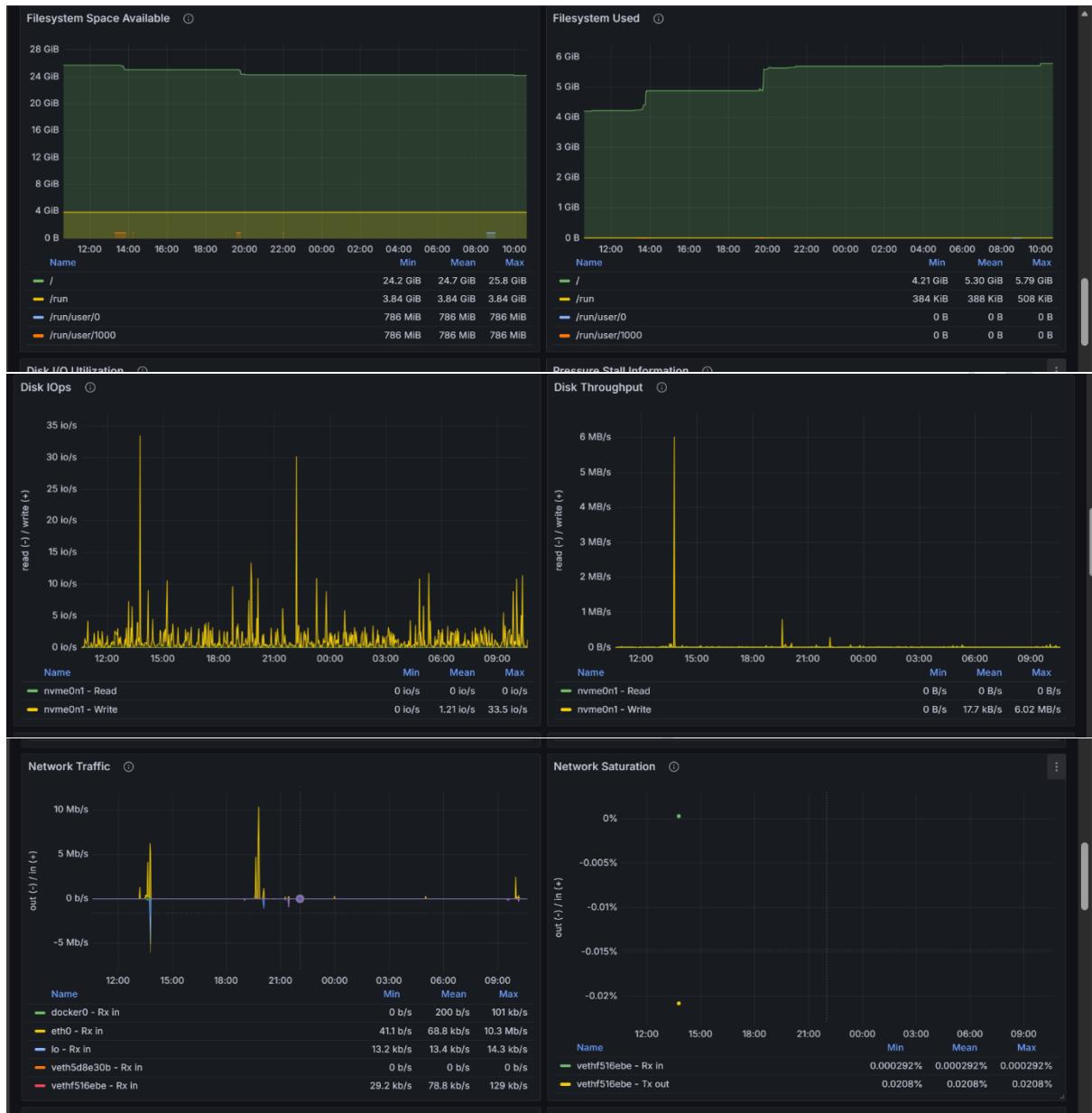
## Console Output

```
Started by user shiki
Obtained Jenkinsfile from git https://github.com/48hl-misra98/trend.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/trend-app-pipeline
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] }
[Pipeline] }
The recommended git tool is: git
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/trend-app-pipeline/.git * timeout=10
Fetching changes from the remote git repository
> git config remote.origin.url https://github.com/48hl-misra98/trend.git * timeout=10
> git config remote.origin.fetch +refs/heads/*:refs/remotes/origin/*
> git fetch --tags --force --progress https://github.com/48hl-misra98/trend.git +refs/heads/*:refs/remotes/origin/*
> git --version * timeout=10
> git -version * timeout=10
> git -version * git version 2.47.3
> git fetch +refs/remotes/origin/*:refs/remotes/origin/*
> git config core.sparsecheckout * timeout=10
Checking out revision 1a8c959e280d0500b23e44053d09f6a932af1 (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 1a8c959e280d0500b23e44053d09f6a932af1 # timeout=10
Commit message: "update the Jenkinsfile"
> git rev-list --no-walk 2e250800b932a7ab0d4e980d9793580e0e93 * timeout=10
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] withEnv
[Pipeline] }
[Pipeline] stage
[Pipeline] { (Checkout code)
[Pipeline] }
[Pipeline] }
The recommended git tool is: git
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/trend-app-pipeline/.git * timeout=10
Fetching changes from the remote git repository
> git config remote.origin.url https://github.com/48hl-misra98/trend.git * timeout=10
> git config remote.origin.fetch +refs/heads/*:refs/remotes/origin/*
> git fetch --tags --force --progress https://github.com/48hl-misra98/trend.git * timeout=10
> git --version * timeout=10
> git -version * git version 2.47.3
> git fetch +refs/remotes/origin/*:refs/remotes/origin/*
> git config core.sparsecheckout # timeout=10
Checking out revision 1a8c959e280d0500b23e44053d09f6a932af1 (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
```









```
root@prometheus ~$ ./prometheus#  
root@prometheus ~$ ./prometheus#  
root@prometheus ~$ nohup ./prometheus > prometheus.log 2>&1 &  
root@prometheus ~$
```

```
[ec2-user@ip-10-0-1-92 ~]$ nslookup 5692978040E7ADB13F48DBAC305BCE7E.gr7.ap-south-1.eks.amazonaws.com  
Server: 10.0.0.2  
Address: 10.0.0.2#53  
  
Non-authoritative answer:  
Name: 5692978040E7ADB13F48DBAC305BCE7E.gr7.ap-south-1.eks.amazonaws.com  
Address: 10.0.20.150  
Name: 5692978040E7ADB13F48DBAC305BCE7E.gr7.ap-south-1.eks.amazonaws.com  
Address: 10.0.1.48  
  
[ec2-user@ip-10-0-1-92 ~]$ curl -I https://5692978040E7ADB13F48DBAC305BCE7E.gr7.ap-south-1.eks.amazonaws.com  
curl: (60) SSL certificate problem: unable to get local issuer certificate  
More details here: https://curl.se/docs/sslcerts.html  
  
curl failed to verify the legitimacy of the server and therefore could not  
establish a secure connection to it. To learn more about this situation and  
how to fix it, please visit the web page mentioned above.  
[ec2-user@ip-10-0-1-92 ~]$
```

```
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam list-policies --query "Policies[?PolicyName=='AWSLoadBalancerControllerIAMPolicy'].Arn" --output text  
arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy  
  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi>  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi>  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi>  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam list-entities-for-policy `  
-> --policy-arn arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy`  
-> --query "PolicyRoles[].RoleName"  
-> --output text  
->  
eksctl-mlops-cluster-nodegroup-ng--NodeInstanceRole-ZCaP4U5BBqDj eksctl-mlops-cluster-addon-iamserviceaccount--Role1-bitFMZdBV0sp  
  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi>  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam detach-role-policy `  
-> --role-name eksctl-mlops-cluster-nodegroup-ng--NodeInstanceRole-ZCaP4U5BBqDj`  
-> --policy-arn arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy  
->  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam detach-role-policy `  
-> --role-name eksctl-mlops-cluster-addon-iamserviceaccount--Role1-bitFMZdBV0sp`  
-> --policy-arn arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy  
->  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam list-entities-for-policy `  
-> --policy-arn arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy`  
-> --query "PolicyRoles"  
->  
[]  
  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam delete-policy `  
-> --policy-arn arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy  
->  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam list-entities-for-policy `  
-> --policy-arn arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy`  
-> --query "PolicyRoles[].RoleName"  
-> --output text  
->  
  
An error occurred (NoSuchEntity) when calling the ListEntitiesForPolicy operation: Policy arn:aws:iam::323997748732:policy/AWSLoadBalancerControllerIAMPolicy does not attachable.  
$ C:\Users\USER\Downloads\trend\Trend-by-Abhi> aws iam create-policy `  
-> --policy-name AWSLoadBalancerControllerIAMPolicy`  
-> --policy-document file://iam_policy.json  
->  
{"Policy": {  
    "PolicyName": "AWSLoadBalancerControllerIAMPolicy",  
    "PolicyDocument": "..."}
```

File Edit Selection View ... ← → Q trend

PROBLEMS 153 OUTPUT TERMINAL PORTS QUERY RESULTS GITLENS DEBUG CONSOLE

cmd powershell

**OPEN EDITORS**

- X START\_HERE.md Trend-by-Abhi 9+
- main.tf Trend-by-Abhi\infrastructure... M
- variables.tf Trend-by-Abhi\infrastruc... M
- main.tf Trend-by-Abhi\infrastructure... M
- variables.tf Trend-by-Abhi\infrastruc... M

**TREND**

- ▼ Trend-by-Abhi
- ▼ infrastructure
  - terraform.state.backup
  - variables.tf
  - versions.tf
- ▼ k8s
  - deployment.yaml
  - hpa.yaml
  - namespace.yaml
  - network-policy.yaml
  - resource-quota.yaml
  - service-account.yaml
  - service.yaml
- > monitoring
- > scripts
  - .env.example
  - .gitignore
  - config.yamlExample
  - Dockerfile
  - Jenkinsfile
  - kubeconfig-jenkins

**OUTLINE**

Not secure 98.90.109.222:3000/?orgId=1&from=now-6h&to=now&timezone=browser

Grafana

Home

Basic

The steps below will guide you through setting up your Grafana installation.

TUTORIAL DATA SOURCE AND DASHBOARDS

Grafana fundamentals

Set up and understand Grafana if you have no prior experience. This tutorial guides you through the entire process and covers the "Data source" and "Dashboards" steps to the right.

DATA SOURCES Add your first data source

DASHBOARDS Create your first dashboard

Learn how in the docs

Learn how in the docs

Dashboards

Starred dashboards

Recently viewed dashboards

Latest from the blog

A NEW DASHBOARD

https://grafana.com/blog/2025/11/14/a-star-wars-dashboard-deep-dive-how-to-build-your-next-visualization-in-less-than-12-parsec...?utm\_source=grafana\_news&utm\_medium=rss

```
ubuntu@ip-10-0-0-6:~$ sudo systemctl daemon-reload
ubuntu@ip-10-0-0-6:~$ sudo systemctl enable grafana-server
ubuntu@ip-10-0-0-6:~$ sudo systemctl enable grafana-server
Synchronizing state of grafana-server.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable grafana-server
Created symlink /etc/systemd/system/multi-user.target.wants/grafana-server.service → /usr/lib/systemd/system/grafana-server.service.
ubuntu@ip-10-0-0-6:~$ sudo systemctl start grafana-server
* grafana-server.service - Grafana server instance
   Loaded: loaded (/usr/lib/systemd/system/grafana-server.service; enabled; preset: enabled)
   Active: active (running) since Sat 2025-11-15 13:43:01 UTC; 26s ago
     Docs: http://docs.grafana.org
 Main PID: 14 (limits: 191G)
    Memory: 145.8M (peak: 146.4M)
       CPU: 4.839s
      CGroup: /system.slice/grafana-server.service
           └─3311 /usr/share/grafana/bin/grafana server --config=/etc/grafana/grafana.ini --pidfile=/run/grafana/grafana-server.pid --packaging=deb cfg=default.paths.logs=/var/log/grafana cfg=default.paths.logs=/var/log/grafana cfg=default.paths.logs=/var/log/grafana

Nov 15 13:43:08 ip-10-0-0-6 grafana[3311]: logger=plugin.backgroundinstaller t=2025-11-15T13:43:08.585181692 level=info msg="Installing plugin" pluginId=grafana-exploretraces-app version="0.0.2"
Nov 15 13:43:08 ip-10-0-0-6 grafana[3311]: logger=plugin.installer.t=2025-11-15T13:43:08.7156598482 level=info msg="Installing plugin" pluginId=grafana-exploretraces-app version="0.0.2"
Nov 15 13:43:08 ip-10-0-0-6 grafana[3311]: logger=plugins.registration.t=2025-11-15T13:43:08.850699833 level=info msg="Plugin registered" pluginId=grafana-exploretraces-app
Nov 15 13:43:08 ip-10-0-0-6 grafana[3311]: logger=plugin.backgroundinstaller.t=2025-11-15T13:43:08.850700001 level=info msg="Installing plugin" pluginId=grafana-metricdrilldown-app version="0.0.2"
Nov 15 13:43:08 ip-10-0-0-6 grafana[3311]: logger=plugin.installer.t=2025-11-15T13:43:08.850700001 level=info msg="Installing plugin" pluginId=grafana-metricdrilldown-app version="0.0.2"
Nov 15 13:43:09 ip-10-0-0-6 grafana[3311]: logger=installer.fs.t=2025-11-15T13:43:09.1604752382 level=info msg="Downloaded and extracted grafana-metricdrilldown-app v1.0.22 zip successfully to /var/lib/grafana"
Nov 15 13:43:09 ip-10-0-0-6 grafana[3311]: logger=plugins.registration.t=2025-11-15T13:43:09.2083712023 level=info msg="Plugin registered" pluginId=grafana-metricdrilldown-app
Nov 15 13:43:09 ip-10-0-0-6 grafana[3311]: logger=plugin.backgroundinstaller.t=2025-11-15T13:43:09.2084360993 level=info msg="Plugin successfully installed" pluginId=grafana-metricdrilldown-app version="0.0.2"
```

Nothing to do.  
Complete!  
[ec2-user@ip-10-0-1-234 ~]\$ sudo systemctl enable jenkins  
sudo systemctl start jenkins  
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.  
● jenkins.service - Jenkins Continuous Integration Server  
 Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: disabled)  
 Active: active (running) since Fri 2025-11-14 16:01:33 UTC; 157ms ago  
 Main PID: 26247 (java)  
 Tasks: 1 (limit: 4560)  
 Memory: 675.0M  
 CPU: 23.454s  
 CGroup: /system.slice/jenkins.service  
 └─26247 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

Nov 14 16:01:28 ip-10-0-1-234.ec2.internal jenkins[26247]: [IP:] ddb6bde7461d46ebeb5421bceeee7d54  
Nov 14 16:01:28 ip-10-0-1-234.ec2.internal jenkins[26247]: [IP:]  
Nov 14 16:01:28 ip-10-0-1-234.ec2.internal jenkins[26247]: [IP:] This may also be found at: /var/lib/Jenkins/secrets/initialAdminPassword  
Nov 14 16:01:28 ip-10-0-1-234.ec2.internal jenkins[26247]: [IP:]  
Nov 14 16:01:33 ip-10-0-1-234.ec2.internal jenkins[26247]: 2025-11-14 16:01:33.596+0000 [id:32] INFO jenkins.InitReactorRunner@1#onAttained: Completed initialization  
Nov 14 16:01:33 ip-10-0-1-234.ec2.internal jenkins[26247]: 2025-11-14 16:01:33.623+0000 [id:23] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running  
Nov 14 16:01:33 ip-10-0-1-234.ec2.internal jenkins[26247]: Started jenkins.service - Jenkins Continuous Integration Server.  
[ec2-user@ip-10-0-1-234 ~]\$

CloudShell Feedback © 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 21:32 ENG WiFi 14-11-2025

File Edit Selection View ... ← → 🔍 trend

EXPLORER PROBLEMS OUTPUT TERMINAL PORTS QUERY RESULTS GITLENS DEBUG CONSOLE

OPEN EDITORS

▼ TREND  
  └ Trend-by-Abhi M

  └ Trend

    └ infrastructure

      └ terraform

        └ providers

        └ modules

          └ eks

            └ main.tf

            └ outputs.tf

            └ variables.tf

  > iam

  └ jenkins

  └ security-groups

    └ main.tf

    └ outputs.tf

    └ variables.tf

> vpc

  └ terraform.lock.hcl

  └ \_terraform.state.lock.info

    └ main.tf

    └ outputs.tf

    └ provider.tf

    └ terraform.state

    └ terraform.state.backup

    └ variables.tf

    └ version.tf

  > kds

  └ monitoring

    └ .env.example

    └ .gitignore

    └ Dockerfile

    └ iam\_policy.json

    └ Jenkinsfile

    └ LICENSE

    └ README.md

  > OUTLINE

  └ TIMELINE

  └ APPLICATION BUILDFR

cmd cmd cmd