

# APPLICATION DEPLOYMENT

## BRAIN-TASK:

### SCREENSHORTS:

#### INSTANCE CREATION:

The screenshot shows the AWS EC2 Instances page with the instance summary for i-09328861a172296df. The left sidebar shows navigation options like Dashboard, EC2 Global View, Events, Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, AMIs, AMI Catalog, and Elastic Block Store. The main content area displays detailed information about the instance, including:

- Instance ID:** i-09328861a172296df
- IPv6 address:** -
- Hostname type:** IP name: ip-172-31-32-104.ec2.internal
- Answer private resource DNS name:** -
- Auto-assigned IP address:** 54.165.126.5 [Public IP]
- IAM Role:** -
- IMDSv2:** Required
- Private IPv4 address:** 54.165.126.5 | open address
- Instance state:** Running
- Private IP DNS name (IPv4 only):** ip-172-31-32-104.ec2.internal
- Instance type:** t2.micro
- VPC ID:** vpc-07178293b2fe1c645
- Subnet ID:** subnet-0a9b5c6f9f5f7daad
- Instance ARN:** arn:aws:ec2:us-east-1:047447426147:instance/i-09328861a172296df
- Private IPv4 addresses:** 172.31.32.104
- Public DNS:** ec2-54-165-126-5.compute-1.amazonaws.com | open address
- Elastic IP addresses:** -
- AWS Compute Optimizer finding:** Opt-in to AWS Compute Optimizer for recommendation s. | Learn more
- Auto Scaling Group name:** -
- Managed:** false

The screenshot shows the AWS EC2 Instances page with the Details tab selected for instance i-09328861a172296df. The left sidebar is identical to the previous screenshot. The main content area displays detailed instance configuration settings:

Details	Status and alarms	Monitoring	Security	Networking	Storage	Tags
<b>AMI ID:</b> ami-0f3f13f145e66a0a3	<b>Monitoring:</b> disabled					
<b>AMI name:</b> amzn2-ami-kernel-5.10-hvm-2.0.20250610.0-x86_64-gp2	<b>Allowed image:</b> -					
<b>Stop protection:</b> Disabled	<b>Launch time:</b> Tue Jun 24 2025 11:54:41 GMT+0530 (India Standard Time) (less than a minute)					
<b>Instance reboot migration:</b> Default (On)	<b>Instance auto-recovery:</b> Default					
<b>Stop-hibernate behavior:</b> Disabled	<b>AMI Launch index:</b> 0					
<b>State transition reason:</b> -	<b>Credit specification:</b> standard					
<b>State transition message:</b> -	<b>Usage operation:</b> RunInstances					
<b>Owner:</b> Sujishreek	<b>Enclaves Support:</b> -					
		<b>Platform details:</b> Linux/UNIX				
		<b>Termination protection:</b> Disabled				
		<b>AMI location:</b> amazon/amzn2-ami-kernel-5.10-hvm-2.0.20250610.0-x86_64-gp2				
		<b>Lifecycle:</b> normal				
		<b>Key pair assigned at launch:</b> project1				
		<b>Kernel ID:</b> -				
		<b>RAM disk ID:</b> -				
		<b>Boot mode:</b> -				

**EC2** > Instances > i-09328861a172296df

**Security**

**Security details**

IAM Role: - Owner ID: 047447426147

**Launch time:** Tue Jun 24 2025 11:54:41 GMT+0530 (India Standard Time)

**Security groups:** sg-061b02214e98882d8 (launch-wizard)

**Inbound rules:**

Name	Security group rule ID	Port range	Protocol	Source	Security group
-	sgr-098db007a589bd843	443	TCP	0.0.0.0/0	launch-wizard
-	sgr-0dbca6c91ee63f74f	80	TCP	0.0.0.0/0	launch-wizard
-	sgr-017a65e539a216c4b	22	TCP	0.0.0.0/0	launch-wizard

**Outbound rules:**

## DOCKER INSTALLATION:

```

Amazon Linux 2
AL2 End of Life is 2026-06-30.

A newer version of Amazon Linux is available!
Amazon Linux 2023, GA and supported until 2028-03-15.
https://aws.amazon.com/linux/amazon-linux-2023/

1 package(s) needed for security, out of 1 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-32-104 ~]$ sudo yum update -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-updates
Resolving Dependencies
--> Running transaction check
--> Package kernel.x86_64 0:5.10.238-231.953.amzn2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

Transaction Summary
  Package          Arch      Version           Repository      Size
  -----
  Installing:
    docker          x86_64   20.10.17-3.amzn2.0.1
    docker-common    x86_64   20.10.17-3.amzn2.0.1
    docker-selinux   noarch   20.10.17-3.amzn2.0.1
    libselinux       x86_64   2.8.1-1.amzn2.0.1

  Public IPs: 54.165.126.5  Private IPs: 172.31.32.104

```

```

Complete!
[ec2-user@ip-172-31-32-104 ~]$ sudo amazon-linux-extras install docker -y
Installing docker
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Cleaning repos: amzn2-core amzn2extra-docker amzn2extra-kernel-5.10
17 metadata files removed
6 sqlite files removed
0 metadata files removed
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core
amzn2extra-docker
amzn2extra-kernel-5.10
(1/7): amzn2-core/2/x86_64/group.gz
(2/7): amzn2-core/2/x86_64/updateinfo
(3/7): amzn2extra-docker/2/x86_64/updateinfo
(4/7): amzn2extra-kernel-5.10/2/x86_64/updateinfo
(5/7): amzn2extra-kernel/2/x86_64/primary_db
(6/7): amzn2extra-kernel-5.10/2/x86_64/primary_db
(7/7): amzn2-core/2/x86_64/primary_db
Resolving Dependencies
--> Running transaction check
--> Package docker.x86_64 0:25.0.8-1.amzn2.0.4 will be installed
--> Processing Dependency: containerd >= 1.3.2 for package: docker-25.0.8-1.amzn2.0.4.x86_64
--> Processing Dependency: libcupgroup >= 0.40.rcl-5.15 for package: docker-25.0.8-1.amzn2.0.4.x86_64
--> Processing Dependency: runc >= 1.0.0 for package: docker-25.0.8-1.amzn2.0.4.x86_64
--> Processing Dependency: pigz for package: docker-25.0.8-1.amzn2.0.4.x86_64
--> Running transaction check
  3.6 KB 00:00:00
  2.0 KB 00:00:00
  3.0 KB 00:00:00
  2.7 KB 00:00:00
  1.1 MB 00:00:00
  28 KB 00:00:00
  144 KB 00:00:00
  134 KB 00:00:00
  38 MB 00:00:00
  77 MB 00:00:01

  Public IPs: 54.165.126.5  Private IPs: 172.31.32.104

```

```
aws | Search [Alt+S] United States (N. Virginia) ▾ Sujishreek ▾
46 collectd available [=stable]
47 aws-nitro-enclaves-cli available [=stable]
48 R4 available [=stable]
49 kernel-5.4 available [=stable]
50 selinux-ng available [=stable]
51 tomcat9 available [=stable]
52 unbound1.13 available [=stable]
53 mariadb10.5 available [=stable]
54 kernel-5.10=latest enabled [=stable]
55 redis6 available [=stable]
56 mock2 available [=stable]
57 dnsmasq2.85 available [=stable]
58 kernel-5.15 available [=stable]
59 postgresql14 available [=stable]
60 firefox available [=stable]
61 lustre available [=stable]
62 awsccli available [=stable]
63 tphp8.2 available [=stable]
64 dnsMasq available [=stable]
65 unbound1.17 available [=stable]
66 collectd-python3 available [=stable]
† Note on end-of-support. Use 'info' subcommand.
[ec2-user@ip-172-31-32-104 ~]$ sudo service docker start
Redirecting to /bin/systemctl start docker.service
[ec2-user@ip-172-31-32-104 ~]$ sudo usermod -aG docker ec2-user
[ec2-user@ip-172-31-32-104 ~]$ exit

```

i-09328861a172296df (brain-task)

PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```
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aws | Search [Alt+S] United States (N. Virginia) ▾ Sujishreek ▾
Last login: Tue Jun 24 06:28:35 2025 from ec2-18-206-107-27.compute-1.amazonaws.com
   _#_
  /###\      Amazon Linux 2
~~ \##/      AL2 End of Life is 2026-06-30.
~~ \#/      A newer version of Amazon Linux is available!
~~ V-.->   Amazon Linux 2023, GA and supported until 2028-03-15.
~~ /_/
   /m/      https://aws.amazon.com/linux/amazon-linux-2023/
[ec2-user@ip-172-31-32-104 ~]$ docker --version
Docker version 25.0.8, build 0bab007
[ec2-user@ip-172-31-32-104 ~]$ sudo yum install git -y
Loaded plugins: extras suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package git.x86_64 0:2.47.1-1.amzn2.0.3 will be installed
--> Processing Dependency: git-core = 2.47.1-1.amzn2.0.3 for package: git-2.47.1-1.amzn2.0.3.x86_64
--> Processing Dependency: git-core-doc = 2.47.1-1.amzn2.0.3 for package: git-2.47.1-1.amzn2.0.3.x86_64
--> Processing Dependency: perl-Git = 2.47.1-1.amzn2.0.3 for package: git-2.47.1-1.amzn2.0.3.x86_64
--> Processing Dependency: perl(Git) for package: git-2.47.1-1.amzn2.0.3.x86_64
--> Processing Dependency: perl(Term::ReadKey) for package: git-2.47.1-1.amzn2.0.3.x86_64
--> Running transaction check
--> Package git-core.x86_64 0:2.47.1-1.amzn2.0.3 will be installed
--> Package git-core-doc.noarch 0:2.47.1-1.amzn2.0.3 will be installed
[ec2-user@ip-172-31-32-104 ~]$ i-09328861a172296df (brain-task)
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104
```

```
Installing : git-core-2.47.1-1.amzn2.0.3.x86_64
Installing : git-core-doc-2.47.1-1.amzn2.0.3.noarch
Installing : perl-Error-0.17020-2.amzn2.noarch
Installing : perl-TermReadKey-2.30-20.amzn2.0.2.x86_64
Installing : perl-2.47.1-1.amzn2.0.3.noarch
Installing : git-2.47.1-1.amzn2.0.3.x86_64
Verifying : perl-TermReadKey-2.30-20.amzn2.0.2.x86_64
Verifying : git-core-doc-2.47.1-1.amzn2.0.3.noarch
Verifying : git-core-2.47.1-1.amzn2.0.3.x86_64
Verifying : perl-Error-0.17020-2.amzn2.noarch
Verifying : perl-Git-2.47.1-1.amzn2.0.3.noarch
Verifying : git-2.47.1-1.amzn2.0.3.x86_64
Installed:
git.x86_64 0:2.47.1-1.amzn2.0.3

Dependency Installed:
git-core.x86_64 0:2.47.1-1.amzn2.0.3           git-core-doc.noarch 0:2.47.1-1.amzn2.0.3   perl-Error.noarch 1:0.17020-2.amzn2   perl-Git.noarch 0:2.47.1-1.amzn2.0.3
perl-TermReadKey.x86_64 0:2.30-20.amzn2.0.2

Complete!
[ec2-user@ip-172-31-32-104 ~]$ git clone https://github.com/Vennilavan12/Brain-Tasks-App.git
Cloning into 'Brain-Tasks-App'...
remote: Enumerating objects: 9, done.
remote: Total 8 (delta 0), reused 0 (delta 0), pack-reused 8 (from 1)
Receiving objects: 100% (8/8), 100.04 KiB | 14.29 MiB/s, done.
[ec2-user@ip-172-31-32-104 ~]$ cd Brain-Tasks-App

```

i-09328861a172296df (brain-task)

PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

aws | Search [Alt+S] United States (N. Virginia) Sujishreek ▾

```
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ ls dist
assets index.html vite.svg
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano Dockerfile
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ docker build -t brain-tasks-app .
[+] Building 8.6s (9/9) FINISHED
   -- [internal] load build definition from Dockerfile
--> transferring dockerfile: 172B
   -- [internal] load metadata for docker.io/library/node:18-alpine
   -- [internal] load .dockerignore
   --> transferring context: 2B
[+] FROM docker.io/library/node:18-alpine@sha256:8de421d663b4c28fd3ebc498332f249011d118945588d0a35cb9bc4b8ca09d9e
--> resolve docker.io/library/node:18-alpine@sha256:8de421d663b4c28fd3ebc498332f249011d118945588d0a35cb9bc4b8ca09d9e
--> sha256:8de421d663b4c28fd3ebc498332f249011d118945588d0a35cb9bc4b8ca09d9e 7.67kB / 7.67kB
--> sha256:923b04d7c782f04f615cf785488fed45b6569f87c73ff666ad53a7554f0006 1.72kB / 1.72kB
--> sha256:ee77c6cd7c1886ecc802ad6c6cda53a5e5c1ea27d1fb9e62b2f03d47710e39b8d0 6.18kB / 6.18kB
--> sha256:f18232174bc91741fdf3da9e4d85011092101a032a3a3a3b879e39e69cc2dc5c70 1.64MB / 3.64MB
--> sha256:dd71dd8a34b5cc03d1162902ebe8934cb2309aa049a0eabce4feau1c12b5a3d0e 40.01MB / 40.01MB
--> sha256:le5a409cc5e5c5-082e6c540a0ed4ch491c96e0a1837f430kd477c0d6702d6e3 1.26MB / 1.26MB
--> extracting sha256:dd71dd8a34b5cc03d1162902ebe8934cb2309aa049a0eabce4feau1c12b5a3d0e
--> extracting sha256:f18232174bc91741fdf3da9e4d85011092101a032a3a3a3b879e39e69cc2dc5c70
--> extracting sha256:ee77c6cd7c1886ecc802ad6c6cda53a5e5c1ea27d1fb9e62b2f03d47710e39b8d0
--> extracting sha256:25ff2d8a364190e765c174d80409d5eb1b62ccfaab220b9ea70b80df5a2e054d 446kB / 446kB
--> extracting sha256:dd71dd8a34b5cc03d1162902ebe8934cb2309aa049a0eabce4feau1c12b5a3d0e
--> extracting sha256:le5a409cc5e5c5-082e6c540a0ed4ch491c96e0a1837f430kd477c0d6702d6e3
--> extracting sha256:125ff2da083641908fe5c3a74d80409d6b1b62ccfaab220b9ea70b80df5a2e0549
--> [internal] load build context
--> transferring context: 317.9kB
--> (2/4) RUN npm install -g serve
--> (3/4) WORKDIR /app
--> (4/4) COPY dist ./dist
--> exporting to image
--> exporting layers
--> writing image sha256:c7be8c4f04eff1638a0144c3771bb0b590fa0d738459d8c038d8d2bd24581a3e
--> naming to docker.io/library/brain-tasks-app
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ docker run -d -p 3000:3000 brain-tasks-app
11a2386b25aac9340e1f088247972d3cca2c40e2957acd62334c4e951bc5
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$
```

i-09328861a172296df (brain-task)  
 Public IPs: 54.165.126.5 Private IPs: 172.31.32.104

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Brain Task Not secure 54.165.126.5:3000

The screenshot shows the 'Brain Tasks' application running on port 3000. The interface includes a header with the title 'Brain Tasks' and a subtitle 'Organize your thoughts, simplify your life'. A search bar at the top says 'Search tasks...'. Below it, there are tabs for 'All Tasks', 'Pending', 'Completed', and 'Priority'. Three tasks are listed:

- Title 13**: Description 13, completed 13, due 21 January 1970.
- Title 14**: Description 14, completed 14, due 21 January 1970.
- Title 16**: Description 16, completed 16, due 21 January 1970.

A new task card is visible at the bottom left, labeled 'Hi' with a 'Pending' status, due 12 June 2025. A green button in the top right corner says '+ Create Task'.

## PUSHED TO AWS ECR:

```

AWS Access Key ID [None]: aws sts get-caller-identity
AWS Secret Access Key [None]:
Default region name [None]: ^C
[ec2-user@ip-172-31-32-104 ~]$ aws sts get-caller-identity
{
    "Account": "047447426147",
    "UserId": "AROAQWDWIRXPZJDPBB:1-09328861a172296df",
    "Arn": "arn:aws:sts::047447426147:assumed-role/EC2IAmRole/i-09328861a172296df"
}
[ec2-user@ip-172-31-32-104 ~]$ aws ecr create-repository --repository-name brain-tasks-app --region us-east-1
{
    "repository": {
        "repositoryUri": "047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app",
        "imageScanningConfiguration": {
            "scanOnPush": false
        },
        "encryptionConfiguration": {
            "encryptionType": "AES256"
        },
        "registryId": "047447426147",
        "imageTagMutability": "MUTABLE",
        "repositoryArn": "arn:aws:ecr:us-east-1:047447426147:repository/brain-tasks-app",
        "repositoryName": "brain-tasks-app",
        "createdAt": 1750751282.925
    }
}
[ec2-user@ip-172-31-32-104 ~]$ aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 047447426147.dkr.ecr.us-east-1.amazonaws.co
i-09328861a172296df (brain-task)
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```

```

"repositoryArn": "arn:aws:ecr:us-east-1:047447426147:repository/brain-tasks-app",
"repositoryName": "brain-tasks-app",
"createdAt": 1750751282.925
}
[ec2-user@ip-172-31-32-104 ~]$ aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 047447426147.dkr.ecr.us-east-1.amazonaws.co
m
WARNING! Your password will be stored unencrypted in /home/ec2-user/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
[ec2-user@ip-172-31-32-104 ~]$ docker push 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
The push refers to repository [047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app]
An image does not exist locally with the tag: 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app
[ec2-user@ip-172-31-32-104 ~]$ docker tag brain-tasks-app:latest 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
[ec2-user@ip-172-31-32-104 ~]$ docker push 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
The push refers to repository [047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app]
0c857666fa Pushed
24fe9c971db1 Pushed
0324409a196f Pushed
0234409a196f Pushed
13b43b0cb1bc Pushed
0b1f26057bd0 Pushed
08000c18a116d Pushed
latest: digest: sha256:8afc272d1148625ea6967b91a17441d266140622ad0a1017c438882a4dd27380 size: 1786
[ec2-user@ip-172-31-32-104 ~]$ 

```

i-09328861a172296df (brain-task)

PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```

$ bash: /usr/bin/aws: No such file or directory
[ec2-user@ip-172-31-32-104 ~]$ sudo ./aws/install
Found preexisting AWS CLI installation: /usr/local/aws-cli/v2/current. Please rerun install script with --update flag.
[ec2-user@ip-172-31-32-104 ~]$ sudo ./aws/install
Found preexisting AWS CLI installation: /usr/local/aws-cli/v2/current. Please rerun install script with --update flag.
[ec2-user@ip-172-31-32-104 ~]$ sudo ./aws/install --update
Found same AWS CLI version: /usr/local/aws-cli/v2/2.27.41. Skipping install.
[ec2-user@ip-172-31-32-104 ~]$ sudo rm -rf /usr/bin/aws
[ec2-user@ip-172-31-32-104 ~]$ sudo ln -s /usr/local/aws-cli/v2/current/bin/aws /usr/bin/aws
[ec2-user@ip-172-31-32-104 ~]$ aws --version
aws-cli/2.27.41 Python/3.13.4 Linux/5.10.237-230.949.amzn2.x86_64 exe/x86_64.amzn.2
[ec2-user@ip-172-31-32-104 ~]$ aws update-kubeconfig --region us-east-1 --name brain-tasks-cluster
Updated context arn:aws:eks:us-east-1:047447426147:cluster/brain-tasks-cluster in /home/ec2-user/.kube/config
[ec2-user@ip-172-31-32-104 ~]$ kubectl get nodes
NAME           STATUS   ROLES      AGE   VERSION
ip-192-168-21-158.ec2.internal   Ready    <none>   55m   v1.32.3-eks-473151a
ip-192-168-40-129.ec2.internal   Ready    <none>   55m   v1.32.3-eks-473151a
[ec2-user@ip-172-31-32-104 ~]$ aws ecr create-repository --repository-name brain-tasks-app --region us-east-1
An error occurred (RepositoryAlreadyExistsException) when calling the CreateRepository operation: The repository with name 'brain-tasks-app' already exists in the registry with id '047447426147'
[ec2-user@ip-172-31-32-104 ~]$ aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin <your-aws-account-id>.dkr.ecr.us-east-1.amazonaws.com
-bash: your-aws-account-id: No such file or directory
Exception ignored on flushing sys.stdout:
broken pipe: [Errno 32] Broken pipe
[ec2-user@ip-172-31-32-104 ~]$ aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 047447426147.dkr.ecr.us-east-1.amazonaws.co
i-09328861a172296df (brain-task)
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```

```

aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 047447426147.dkr.ecr.us-east-1.amazonaws.com
WARNING! Your password will be stored unencrypted in /home/ec2-user/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
[ec2-user@ip-172-31-32-104 ~]$ docker tag brain-tasks-app:latest 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
[ec2-user@ip-172-31-32-104 ~]$ docker push 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
The push refers to repository [047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app]
eecs5766d1aa: Layer already exists
241e9c871db1: Layer already exists
d3ff9fd1d901: Layer already exists
82140d9a70a7: Layer already exists
f3b40b0c0db1c: Layer already exists
0bf126057bd0: Layer already exists
08000c18d16d: Layer already exists
latest: digest: sha256:8af2c72d1148625ea6967b91a17441d266140622ad0a1017c438882a4dd27380 size: 1786
[ec2-user@ip-172-31-32-104 ~]$ nano brain-tasks-deployment.yaml
[ec2-user@ip-172-31-32-104 ~]$ nano brain-tasks-service.yaml
[ec2-user@ip-172-31-32-104 ~]$ kubectl apply -f brain-tasks-deployment.yaml
deployment.apps/brain-tasks-app created
[ec2-user@ip-172-31-32-104 ~]$ kubectl apply -f brain-tasks-service.yaml
service/brain-tasks-service created
[ec2-user@ip-172-31-32-104 ~]$ kubectl get all
NAME                      READY   STATUS    RESTARTS   AGE
pod/brain-tasks-app-57464b5f6d-r2448  1/1     Running   0          27s

i-09328861a172296df (brain-task)
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```

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## DEPLOYED ON AWS EKS VIA CODEBUILD:

```

pod/brain-tasks-app-57464b5f6d-r78tr  1/1     Running   0          27s
NAME                      TYPE        CLUSTER-IP      EXTERNAL-IP
service/brain-tasks-service LoadBalancer  10.100.164.55  a836ee0556d77418ebddf2ff150c7f0f-9708126.us-east-1.elb.amazonaws.com
service/kubernetes           ClusterIP   10.100.0.1    <none>
PORT(S)          AGE
80:32641/TCP   9s
443/TCP         68m

NAME             READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/brain-tasks-app  2/2     2           2           27s
NAME              DESIRED  CURRENT  READY   AGE
replicaset.apps/brain-tasks-app-57464b5f6d  2        2        2       27s
[ec2-user@ip-172-31-32-104 ~]$ kubectl get service brain-tasks-service
NAME              TYPE        CLUSTER-IP      EXTERNAL-IP
brain-tasks-service LoadBalancer  10.100.164.55  a836ee0556d77418ebddf2ff150c7f0f-9708126.us-east-1.elb.amazonaws.com
PORT(S)          AGE
80:32641/TCP   85s
[ec2-user@ip-172-31-32-104 ~]$ ls
aws               Brain-Tasks-App
awscli2.zip      brain-tasks-deployment.yaml --name --nodes --nodes-min --region
awscli2.zip      brain-tasks-deployment.yaml --managed --nodegroup-name --nodes-max --node-type
[ec2-user@ip-172-31-32-104 ~]$ cd Brain-Tasks-App
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ ls
dist  dockerfile
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano Dockerfile
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ docker build -t brain-tasks-app:latest .
[+] Building 1.8s (7/7) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 345B
=> [internal] load metadata for docker.io/library/nginx:alpine
=> [internal] load .dockerrcignore
docker:default
  0.0s
  0.0s
  0.38
  0.0s
i-09328861a172296df (brain-task)
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```

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```

--> pushing to docker.io/library/Brain-Tasks-App:latest
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ docker tag brain-tasks-app:latest 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ docker push 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
The push refers to repository [047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app]
509c37b54554: Pushed
0dd853d50b128: Pushed
947e805a54ac7: Pushed
811a4dbb4a5: Pushed
b8d741d22634: Pushed
e244aaa659f61: Pushed
c56f134d3805: Pushed
d71eaee0084c1: Pushed
08000c18d16d: Layer already exists
latest: digest: sha256:59fb6121015fb2c506b4a5c79cf4c84ff7318e772b7d900a1207734b6151b86a size: 2199
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl delete deployment brain-tasks-deployment
Error from server: (NotFound) deployments.apps "brain-tasks-deployment" not found
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl get deployments
NAME          READY   UP-TO-DATE   AVAILABLE   AGE
brain-tasks-app  2/2     2           2           21m
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl delete deployment brain-tasks-app
deployment.apps "brain-tasks-app" deleted
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano Dockerfile
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano deployment.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano deployment.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ cd /
[ec2-user@ip-172-31-32-104 ~]$ nano deployment.yaml
[ec2-user@ip-172-31-32-104 ~]$ nano deployment.yaml

i-09328861a172296df (brain-task)
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```

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i-09328861a172296df (brain-task)

Public IPs: 54.165.126.5 Private IPs: 172.31.32.104

i-09328861a172296df (brain-task)

Public IPs: 54.165.126.5 Private IPs: 172.31.32.104

The screenshot shows a web browser window with the following details:

- Header:** CloudShell Feedback, © 2025, Amazon Web Services, Inc. or its affiliates., Privacy, Terms, Cookie preferences.
- Address Bar:** Not secure a836ee8556d77418ebdd12ff150c7f0f-9708126.us-east-1.elb.amazonaws.com
- Bookmarks Bar:** For quick access, place your bookmarks here on the bookmarks bar. Import bookmarks now...
- Toolbar:** Includes icons for back, forward, search, and refresh, along with a 'All Bookmarks' button.
- Page Content:**
  - # Brain Tasks
  - Organize your thoughts, simplify your life
  - A green button labeled '+ Create Task'.
  - A search bar with placeholder text 'Search tasks...'.
    - Filter buttons: All Tasks (selected), Pending, Completed, Priority.
  - Task cards:
    - Title 13**: Description 13, completed 13, due 21 January 1970.
    - Title 14**: Description 14, completed 14, due 21 January 1970.
    - Title 16**: Description 16, completed 16, due 21 January 1970.
    - Hi**: Description Hi, pending, due 12 June 2025.

[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git remote set-url origin https://github.com/Sujishreek/Brain-Tasks-App.git  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git add .  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git commit -m "Updated project with deployment files"  
[master 591b8ac] Updated project with deployment files  
Committer: EC2 Default User <ec2-user@ip-172-31-32-104.ec2.internal>  
Your name and email address were configured automatically based  
on your username and hostname. Please check that they are accurate.  
You can suppress this message by setting them explicitly. Run the  
following command and follow the instructions in your editor to edit  
your configuration file:  
git config --global --edit  
After doing this, you may fix the identity used for this commit with:  
git commit --amend --reset-author  
2 files changed, 17 insertions(+)  
create mode 100644 Dockerfile  
create mode 100644 deployment.yaml  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git push -u origin main  
Username for 'https://github.com': Sujishreek  
Password for 'https://Sujishreek@github.com':  
remote: Support for password authentication was removed on August 13, 2021.  
remote: Please see https://docs.github.com/get-started/getting-started-with-git/about-remote-repositories#cloning-with-https-urls for information on currently recommended modes of authentication.  
fatal: Authentication failed for 'https://github.com/Sujishreek/Brain-Tasks-App.git/'

i-09328861a172296df (brain-task)  
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

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[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ fatal: Authentication failed for 'https://github.com/Sujishreek/Brain-Tasks-App.git/'  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git push https://Sujishreek:ghp\_MSdh7Szokk0QtzBDldYlg44QDV7omL1ppofk@github.com/Sujishreek/Brain-Tasks-App.git main  
remote: Repository not found.  
fatal: repository 'https://github.com/Sujishreek/Brain-Tasks-App.git/' not found  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git push https://Sujishreek:ghp\_MSdh7Szokk0QtzBDldYlg44QDV7omL1ppofk@github.com/Sujishreek/Brain-Tasks-App.git main  
Enumerating objects: 5, done.  
Counting objects: 100% (5/5), done.  
Compressing objects: 100% (4/4), done.  
Writing objects: 100% (4/4), 592 bytes | 592.00 KiB/s, done.  
total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)  
To https://github.com/Sujishreek/Brain-Tasks-App.git  
 b7d121f..691b8ac main -> main  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git remote set-url origin https://github.com/Sujishreek/Brain-Tasks-App.git  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git push https://Sujishreek:ghp\_MSdh7Szokk0QtzBDldYlg44QDV7omL1ppofk@github.com/Sujishreek/Brain-Tasks-App.git main  
Everything up-to-date  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ nano buildspec.yml  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git add buildspec.yml  
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]\$ git commit -m "Add buildspec.yml for CodeBuild"  
[master 594e1a3] Add buildspec.yml for CodeBuild  
Committer: EC2 Default User <ec2-user@ip-172-31-32-104.ec2.internal>  
Your name and email address were configured automatically based  
on your username and hostname. Please check that they are accurate.  
You can suppress this message by setting them explicitly. Run the  
following command and follow the instructions in your editor to edit  
your configuration file:  
git config --global --edit  
i-09328861a172296df (brain-task)  
PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

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IAM > Roles > codebuild-brain-task-build-service-role

### Identity and Access Management (IAM)

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**codebuild-brain-task-build-service-role** Info

**Summary**

**Creation date**  
June 24, 2025, 18:16 (UTC+0:30)

**Last activity**  
3 minutes ago

**ARN**  
arn:aws:iam:047447426147:role/service-role/codebuild-brain-task-build-service-role

**Maximum session duration**  
1 hour

**Permissions** **Trust relationships** **Tags** **Last Accessed** **Revoke sessions**

**Permissions policies (5)** Info

You can attach up to 10 managed policies.

Policy name	Type	Attached entities
allowssmfordockerhub	SSM	1
allowssmforawsbatch	SSM	1
allowssmforawscodebuild	SSM	1
allowssmforawscodecommit	SSM	1
allowssmforawscodepipeline	SSM	1

**Filter by Type**  
All types

**Attached entities**

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Screenshot of the AWS IAM Policy Management interface showing the updated policy "allowssmfordockerhub".

**Policy name:** allowssmfordockerhub

**Type:** Customer inline

**Attached entities:** 0

**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](#)

Screenshot of the AWS IAM Policy Editor interface for the "allowssmfordockerhub" policy.

**Step 1: Modify permissions in allowssmfordockerhub**

**Step 2: Review and save**

**Policy editor**

```

1 {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Effect": "Allow",
6       "Action": [
7         "ssm:GetParameters",
8         "ssm:GetParameters"
9       ],
10      "Resource": [
11        "arn:aws:ssm:us-east-1::parameter/dockerhub/username",
12        "arn:aws:ssm:us-east-1::parameter/dockerhub/password"
13      ]
14    }
15  ]
16 }

```

**Edit statement** **Remove**

**Add actions**

Choose a service

Included Systems Manager

Available

- AI Operations
- AMP
- API Gateway
- API Gateway V2
- ARC Zonal Shift

Screenshot of the AWS CodeBuild logs interface.

**Developer Tools** **CodeBuild**

**Source** CodeCommit

**Artifacts** CodeArtifact

**Build** CodeBuild

Getting started

Build projects

**Build project**

Settings

Build history

Report groups

Report history

Compute fleets [New](#)

Account metrics

Related integrations

Jenkins [New](#)

GitHub Actions [New](#)

GitLab runners [New](#)

**Showing the last 162 lines of the build log. [View entire log](#)**

No previous logs

```

1 [Container] 2025/06/25 01:47:46.963480 Running on CodeBuild On-demand
2 [Container] 2025/06/25 01:47:46.963490 Waiting for agent ping
3 [Container] 2025/06/25 01:47:47.365516 Waiting for DOWNLOAD_SOURCE
4 [Container] 2025/06/25 01:47:50.064150 Phase is DOWNLOAD_SOURCE
5 [Container] 2025/06/25 01:47:50.066347 CODEBUILD SRC DIR:/codebuild/output/src2519913108/src/github.com/Sujishreek/Brain-Tasks-App
6 [Container] 2025/06/25 01:47:50.066874 YAML location is /codebuild/output/src2519913108/src/github.com/Sujishreek/Brain-Tasks-App/buildspec.yml
7 [Container] 2025/06/25 01:47:50.069943 Setting HTTP client timeout to higher timeout for Github and GitHub Enterprise sources
8 [Container] 2025/06/25 01:47:50.070041 Processing environment variables
9 [Container] 2025/06/25 01:47:50.520183 No runtime version selected in buildspec.
10 [Container] 2025/06/25 01:47:50.540368 Moving to directory /codebuild/output/src2519913108/src/github.com/Sujishreek/Brain-Tasks-App
11 [Container] 2025/06/25 01:47:50.540399 Cache is not defined in the buildspec
12 [Container] 2025/06/25 01:47:50.756095 Skip cache due to: no paths specified to be cached
13 [Container] 2025/06/25 01:47:50.756340 Registering with agent
14 [Container] 2025/06/25 01:47:50.926616 Phase Found in YAML: 3
15 [Container] 2025/06/25 01:47:50.926634 PRE_BUILD 6 commands
16 [Container] 2025/06/25 01:47:50.926638 BUILD: 3 commands
17 [Container] 2025/06/25 01:47:50.926641 POST_BUILD: 2 commands
18 [Container] 2025/06/25 01:47:50.926889 Phase complete: DOWNLOAD_SOURCE State: SUCCEEDED
19 [Container] 2025/06/25 01:47:50.927020 Phase context status code: Message:
20 [Container] 2025/06/25 01:47:51.115213 Entering phase INSTALL
21 [Container] 2025/06/25 01:47:51.314839 Phase complete: INSTALL State: SUCCEEDED
22 [Container] 2025/06/25 01:47:51.314861 Phase context status code: Message:
23 [Container] 2025/06/25 01:47:51.354172 Entering phase PRE_BUILD
24 [Container] 2025/06/25 01:47:51.537391 Running command aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 047447426147.dkr.ecr.us-east-1.amazonaws.com
25 Logging in to Amazon ECR...
26
27 [Container] 2025/06/25 01:47:51.5342812 Running command aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 047447426147.dkr.ecr.us-east-1.amazonaws.com
28 WARNING! Your password will be stored unencrypted in /root/.docker/config.json.

```

AWS Services Search [Alt+S]

**Developer Tools**

**CodeBuild**

- Source • CodeCommit
- Artifacts • CodeArtifact
- Build • CodeBuild
  - Getting started
  - Build projects
    - Build project**
    - Settings
    - Build history
    - Report groups
    - Report history
    - Compute fleets **New**
    - Account metrics
  - Related integrations
    - Jenkins
    - GitHub Actions **New**
    - GitLab runners **New**

```

34 [Container] 2025/06/25 01:48:02.587284 Running command echo Logging in to Docker Hub to avoid rate limit...
35 Logging in to Docker Hub to avoid rate limit...
36
37 [Container] 2025/06/25 01:48:02.592965 Running command DOCKERHUB_USERNAME=$(aws ssm get-parameter --name /dockerhub/username --region us-east-1 --query "Parameter.Value" --output text)
38
39 [Container] 2025/06/25 01:48:03.357884 Running command DOCKERHUB_PASSWORD=$(aws ssm get-parameter --name /dockerhub/password --with-decryption --region us-east-1 --query "Parameter.Value" --output text)
40
41 [Container] 2025/06/25 01:48:04.022681 Running command echo "$DOCKERHUB_PASSWORD" | docker login -u "$DOCKERHUB_USERNAME" --password-stdin
42 WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
43 Configure a credential helper to remove this warning. See
44 https://docs.docker.com/engine/reference/commandline/login/#credential-stores
45
46 Login Succeeded
47
48 [Container] 2025/06/25 01:48:04.087193 Phase complete: PRE_BUILD State: SUCCEEDED
49 [Container] 2025/06/25 01:48:04.087205 Phase context status code: Message:
50 [Container] 2025/06/25 01:48:04.125090 Entering phase BUILD
51 [Container] 2025/06/25 01:48:04.126600 Running command echo Building Docker image...
52 Building Docker image...
53
54 [Container] 2025/06/25 01:48:04.131646 Running command docker build -t brain-tasks-app:latest .
55 #0 building with "default" instance using docker driver
56
57 #1 [internal] load build definition from Dockerfile
58 #1 transferring dockerfile: 173B done
59 #1 DONE 0.0s
60
61 #2 [auth] library/node:pull token for registry-1.docker.io
62 #2 DONE 0.0s
63
64 #3 [internal] load metadata for docker.io/library/node:18-alpine
65 #3 DONE 0.3s
66
67 #4 [internal] load .dockignore
68 #4 transferring context: 2B done

```

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AWS Services Search [Alt+S]

**Developer Tools**

**CodeBuild**

- Source • CodeCommit
- Artifacts • CodeArtifact
- Build • CodeBuild
  - Getting started
  - Build projects
    - Build project**
    - Settings
    - Build history
    - Report groups
    - Report history
    - Compute fleets **New**
    - Account metrics
  - Related integrations
    - Jenkins
    - GitHub Actions **New**
    - GitLab runners **New**

```

116 #10 exporting layers
117 #10 exporting layers 0.2s done
118 #10 writing image sha256:099dfc969b6e5d6df2432174b6c848e93f4dd4b00d6154a6d9bd412eac8489 done
119 #10 naming to docker.io/library/brain-tasks-app:latest done
120 #10 DONE 0.2s
121
122 [Container] 2025/06/25 01:48:10.915051 Running command docker tag brain-tasks-app:latest 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
123
124 [Container] 2025/06/25 01:48:10.937215 Phase complete: BUILD STATE: SUCCEEDED
125 [Container] 2025/06/25 01:48:10.937231 Phase context status code: Message:
126 [Container] 2025/06/25 01:48:10.971425 Entering phase POST_BUILD
127 [Container] 2025/06/25 01:48:10.972392 Running command echo Pushing the Docker image to ECR...
128 Pushing the Docker image to ECR...
129
130 [Container] 2025/06/25 01:48:10.979851 Running command docker push 047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app:latest
131 The push refers to repository [047447426147.dkr.ecr.us-east-1.amazonaws.com/brain-tasks-app]
132 236919449c36: Preparing
133 98daaaab1b09: Preparing
134 6b5fbe378154: Preparing
135 82140d9a70e7: Preparing
136 f3b40b0cdcb1: Preparing
137 0b1f26057bd0: Preparing
138 08000c18d16d: Preparing
139 0b1f26057bd0: Waiting
140 08000c18d16d: Waiting
141 836019440c36: Layer already exists
142 3b40b0cdcb1: Layer already exists
143 08000c18d16d: Layer already exists
144 0b1f26057bd0: Layer already exists
145 98daaaab1b09: Pushed
146 236919449c36: Pushed
147 6b5fbe378154: Pushed
148 latest: digest: sha256:02bfff9954b1a907bc600b5ce3648842af912036cff7017003500fc8a9cd8be28 size: 1786
149
150 [Container] 2025/06/25 01:48:12.911431 Phase complete: POST_BUILD State: SUCCEEDED
151 [Container] 2025/06/25 01:48:12.911456 Phase context status code: Message:

```

```

[ec2-user@ip-172-31-32-104 ~]$ kubectl get nodes
NAME           STATUS   ROLES   AGE    VERSION
ip-192-168-23-181.ec2.internal   Ready    <none>   8h    v1.32.3-eks-473151a
ip-192-168-40-129.ec2.internal   Ready    <none>   15h   v1.32.3-eks-473151a
[ec2-user@ip-172-31-32-104 ~]$ kubectl apply -f deployment.yml
error: the path "deployment.yaml" does not exist
[ec2-user@ip-172-31-32-104 ~]$ ls
aws             Brain-Tasks-App
awscli2.zip     brain-tasks-service-service.yaml --managed --nodegroup-name --nodes-max --node-type
aws             brain-tasks-deployment.yaml buildspec.yml --name --nodes --nodes-min --region
[ec2-user@ip-172-31-32-104 ~]$ cd Brain-Tasks-App
[ec2-user@ip-172-31-32-104 ~]$ kubectl apply -f deployment.yaml
error: error validating "deployment.yaml": error validating data: [apiVersion not set, kind not set]; if you choose to ignore these errors, turn validation off with --validate=false
[ec2-user@ip-172-31-32-104 ~]$ kubectl get svc
NAME            TYPE        CLUSTER-IP   EXTERNAL-IP   PORT(S)        AGE
brain-tasks-service   LoadBalancer  10.100.164.55  a83gee8556d77418ebddf2ff150c7f0f-9708126.us-east-1.elb.amazonaws.com  3000:32641/TCP  14h
kubernetes       ClusterIP  10.100.0.1   <none>        443/TCP       15h
[ec2-user@ip-172-31-32-104 ~]$ kubectl get svc

```

i-09328861a172296df (brain-task)

Public IPs: 54.165.126.5 Private IPs: 172.31.32.104

```
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ git pull origin main --rebase
error: cannot pull with rebase: Your index contains uncommitted changes.
error: Please commit or stash them.
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ git add .
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ git commit -m "local changes before pull"
[main 56aa6f3] local changes before pull
Committer: EC2 Default User <ec2-user@ip-172-31-32-104.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

  git config --global --edit

After doing this, you may fix the identity used for this commit with:

  git commit --amend --reset-author

3 files changed, 45 insertions(+), 6 deletions(-)
create mode 100644 appspec.yml
create mode 100644 service.yml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ git pull origin main --rebase
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)

i-09328861a172296df (brain-task)
```

PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ curl -O https://raw.githubusercontent.com/aws-samples/amazon-cloudwatch-container-insights/latest/k8s-deployment-manifest-templates/fluent-bit/fluent-bit.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano fluent-bit.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl apply -f fluent-bit.yaml
error: validating "fluent-bit.yaml": error validating data: [apiVersion not set, kind not set]; if you choose to ignore these errors, turn validation off with --validate=false
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ curl -O https://raw.githubusercontent.com/aws-samples/amazon-cloudwatch-container-insights/main/k8s-deployment-manifest-templates/fluent-bit/fluent-bit.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano fluent-bit.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl apply -f fluent-bit.yaml
namespace/amazon-cloudwatch created
serviceaccount/fluent-bit created
clusterrole/rbac.authorization.k8s.io/fluent-bit created
clusterrolebinding/rbac.authorization.k8s.io/fluent-bit created
dashaset.apps/fluent-bit created
configmap/fluent-bit-config created
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl get pods -n amazon-cloudwatch
NAME          READY   STATUS    RESTARTS   AGE
i-09328861a172296df (brain-task)
```

PublicIPs: 54.165.126.5 PrivateIPs: 172.31.32.104

```

aws | Search [Alt+S] United States (N. Virginia) Sujishreek
      Load Upload Total Spent Left Speed
100 14 100 14 0 0 176 0 --:-- --:--:--:--:--:-- 177
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl apply -f fluent-bit.yaml
error: error validating "fluent-bit.yaml": error validating data: [apiVersion not set, kind not set]; if you choose to ignore these errors, turn validation off with --validate=false
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano fluent-bit.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ curl -o https://raw.githubusercontent.com/aws-samples/amazon-cloudwatch-container-insights/main/k8s-deployment-manifest-templates/fluent-bit/fluent-bit.yaml
% Total % Received % Xferd Average Speed Time Time Current
          Load Upload Total Spent Left Speed
100 14 100 14 0 0 199 0 --:-- --:--:--:--:--:-- 200
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl apply -f fluent-bit.yaml
error: error validating "fluent-bit.yaml": error validating data: [apiVersion not set, kind not set]; if you choose to ignore these errors, turn validation off with --validate=false
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ nano fluent-bit.yaml
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl apply -f fluent-bit.yaml
namespace/amazon-cloudwatch created
serviceaccount/fluent-bit created
clusterrole/rbac.authorization.k8s.io/fluent-bit created
clusterrolebinding/rbac.authorization.k8s.io/fluent-bit created
daemonset.apps/fluent-bit created
configmap/fluent-bit-config created
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl get pods -n amazon-cloudwatch
NAME           READY   STATUS    RESTARTS   AGE
fluent-bit-9mcjc 1/1     Running   0          10s
fluent-bit-kvd9r 1/1     Running   0          10s
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ 

```

**Log groups (1)**

By default, we only load up to 10000 log groups.

Log group	Log class	Anomaly d...	Data pr...	Sensitiv...	Retention	Metric fi...
/aws/codebuild/brain-task-build	Standard	Configure	-	-	Never expire	-

**Log events**

You can use the filter bar below to search for and match terms, phrases, or values in your log events. [Learn more about filter patterns](#)

Display	Actions	Start tailing	Create metric filter
Filter events - press enter to search	Clear 1m 30m 1h 12h Custom UTC timezone		

**Message**

```

[Container] 2025/06/25 01:47:50.756095 Skip cache due to: no paths specified to be cached
[Container] 2025/06/25 01:47:50.756340 Registering with agent
[Container] 2025/06/25 01:47:50.926616 Phases found in YAML: 3
[Container] 2025/06/25 01:47:50.926634 PRE_BUILD: 6 commands
[Container] 2025/06/25 01:47:50.926638 BUILD: 3 commands
[Container] 2025/06/25 01:47:50.926641 POST_BUILD: 2 commands
[Container] 2025/06/25 01:47:50.926883 Phase complete: DOWNLOAD_SOURCE State: SUCCEEDED
[Container] 2025/06/25 01:47:50.926908 Phase context status code: Message:
[Container] 2025/06/25 01:47:51.135213 Entering phase INSTALL
[Container] 2025/06/25 01:47:51.314839 Phase complete: INSTALL State: SUCCEEDED
[Container] 2025/06/25 01:47:51.314861 Phase context status code: Message:

```

This screenshot shows the AWS CodePipeline configuration interface. On the left, a sidebar lists steps: Step 4 (Add build stage), Step 5 (Add test stage), Step 6 (Add deploy stage), and Step 7 (Review). The main area shows a GitHub step configuration. A message box says "You have successfully configured the action with the provider." Below it, a warning message states: "The GitHub (via OAuth app) action is not recommended. The selected action uses OAuth apps to access your GitHub repository. This is no longer the recommended method. Instead, choose the GitHub (via GitHub App) action to access your repository by creating a connection. Connections use GitHub Apps to manage authentication and can be shared with other resources. [Learn more](#)". The "Repository" field contains "Sujishreek/Brain-Tasks-App" and the "Branch" field contains "main". A checked checkbox says "Enable automatic retry on stage failure". The bottom right corner shows copyright information: "© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences".

## CONFIGURE CODE PIPELINE:

This screenshot shows the AWS CodePipeline pipeline view for the "brain-task" pipeline. It displays two stages: "Source" and "Build". The "Source" stage is triggered by "GitHub (via OAuth app)" and has a status of "All actions succeeded". The "Build" stage is triggered by "AWS CodeBuild" and also has a status of "All actions succeeded". The pipeline is currently in a "Success" state. The top navigation bar includes links for "Developer Tools > CodePipeline > Pipelines > brain-task". Action buttons include "Edit", "Stop execution", "Create trigger", "Clone pipeline", and "Release change". The bottom right corner shows copyright information: "© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences".

This screenshot shows the AWS CodeBuild console for a specific build. The left sidebar lists "Developer Tools", "CodeBuild", "Source", "Artifacts", "Build", "Build project", "Build history", "Report groups", "Report history", "Compute fleets", "Account metrics", "Related integrations", "Jenkins", "GitHub Actions", and "GitLab runners". The main area displays a detailed log of a build process. The log starts with template metadata and labels, then moves through container deployment commands like "Running command echo Deploying to EKS...", "Running command aws eks --region us-east-1 update-kubeconfig --name brain-tasks-cluster", and "Running command kubectl apply -f brain-tasks-deployment.yaml". It continues with deployment steps like "deployment.apps/brain-tasks-app unchanged", "Running command kubectl apply -f brain-tasks-service.yaml", and "service/brain-tasks-service configured". The log concludes with phase completion messages like "Phase complete: POST\_BUILD State: SUCCEEDED" and "Phase context status code: Message: Phase complete: UPLOAD\_ARTIFACTS State: SUCCEEDED". The bottom right corner shows copyright information: "© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences".

```

[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ git pull origin main --rebase
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
UpToDate objects: 100% (3/3), 1.58 KB | 1.58 MiB/s, done.
From https://github.com/Sujishreek/Brain-Tasks-App
 * branch      main      -> FETCH_HEAD
 * branch      699757a...3e16998  main      -> origin/main
Successfully rebased and updated refs/heads/main.
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ git push origin main
Username for 'https://github.com': Sujishreek
Password for 'https://Sujishreek@github.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 1.28 KiB | 1.28 MiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Sujishreek/Brain-Tasks-App.git
   3e16998..439fe97  main -> main
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl apply -f brain-tasks-deployment.yaml
deployment.apps/brain-tasks-app configured
[ec2-user@ip-172-31-32-104 Brain-Tasks-App]$ kubectl get svc
NAME          TYPE        CLUSTER-IP      EXTERNAL-IP
brain-tasks-service   LoadBalancer   10.100.164.55   a83gee8556d77418ebddf2ff150c7f0f-9708126.us-east-1.elb.amazonaws.com
kubernetes     ClusterIP    10.100.0.1     <none>
PORT(S)        AGE
3000:32641/TCP   16h
443/TCP        17h

```

i-09328861a172296df (brain-task)  
Public IPs: 54.165.126.5 Private IPs: 172.31.32.104

## CLOUDWATCH LOGS – MONITORING:

**Log groups (1)**

By default, we only load up to 10000 log groups.

Log group	Log class	Anomaly d...	Data pr...	Sensitiv...	Retention	Metric fi...
/aws/codebuild/brain-task-build	Standard	Configure	-	-	Never expire	-

**Log streams (33)**

Log stream	Last event time
e84e5e38-24bd-4b43-9ac6-dfb61c1a672	2025-06-25 04:14:31 (UTC)
2e8aa211-3588-4f6e-9133-f01c7e7741be	2025-06-25 04:12:33 (UTC)
1e939866-cedb-4a64-ad58-9ca8cd57470c	2025-06-25 03:50:47 (UTC)
699e02aa-f1a4-4e00-b708-87ab922af51	2025-06-25 03:39:57 (UTC)
eda68884-4e7f-4ece-9a48-801efdf157a3	2025-06-25 03:38:37 (UTC)
0758ce39-4f75-4075-b27a-5d5c5f8445c2	2025-06-25 03:30:08 (UTC)
86a282da-86a2-4b55-9cae-5b27a31c49ca	2025-06-25 03:21:08 (UTC)

The screenshot shows the AWS CloudWatch Log Events interface. The left sidebar navigation includes CloudWatch, Favorites and recents, Dashboards, AI Operations, Alarms, Logs (selected), Log groups, Metrics, Application Signals (APM), Network Monitoring, and Insights. The main content area displays log events for a specific log group under the path /aws/codebuild/brain-task-build. The log entries are as follows:

```
[Container] 2025/06/25 03:39:57.190550 Expanding base directory path: .
[Container] 2025/06/25 03:39:57.194576 Assembling file list
[Container] 2025/06/25 03:39:57.194596 Expanding .
[Container] 2025/06/25 03:39:57.197904 Expanding file paths for base directory .
[Container] 2025/06/25 03:39:57.197918 Assembling file list
[Container] 2025/06/25 03:39:57.197921 Expanding */
[Container] 2025/06/25 03:39:57.201365 No matching auto-discover report paths found
[Container] 2025/06/25 03:39:57.201390 Report auto-discover file discovery took 0.010894 seconds
[Container] 2025/06/25 03:39:57.201401 Phase complete: UPLOAD_ARTIFACTS State: SUCCEEDED
[Container] 2025/06/25 03:39:57.201410 Phase context status code: Message:

```

At the bottom right of the log viewer is a yellow "Back to top" button.

DEPLOYED SITE URL:

<http://54.165.126.5:3000/>

<http://a836ee8556d77418ebddf2ff150c7f0f-9708126.us-east-1.elb.amazonaws.com/>