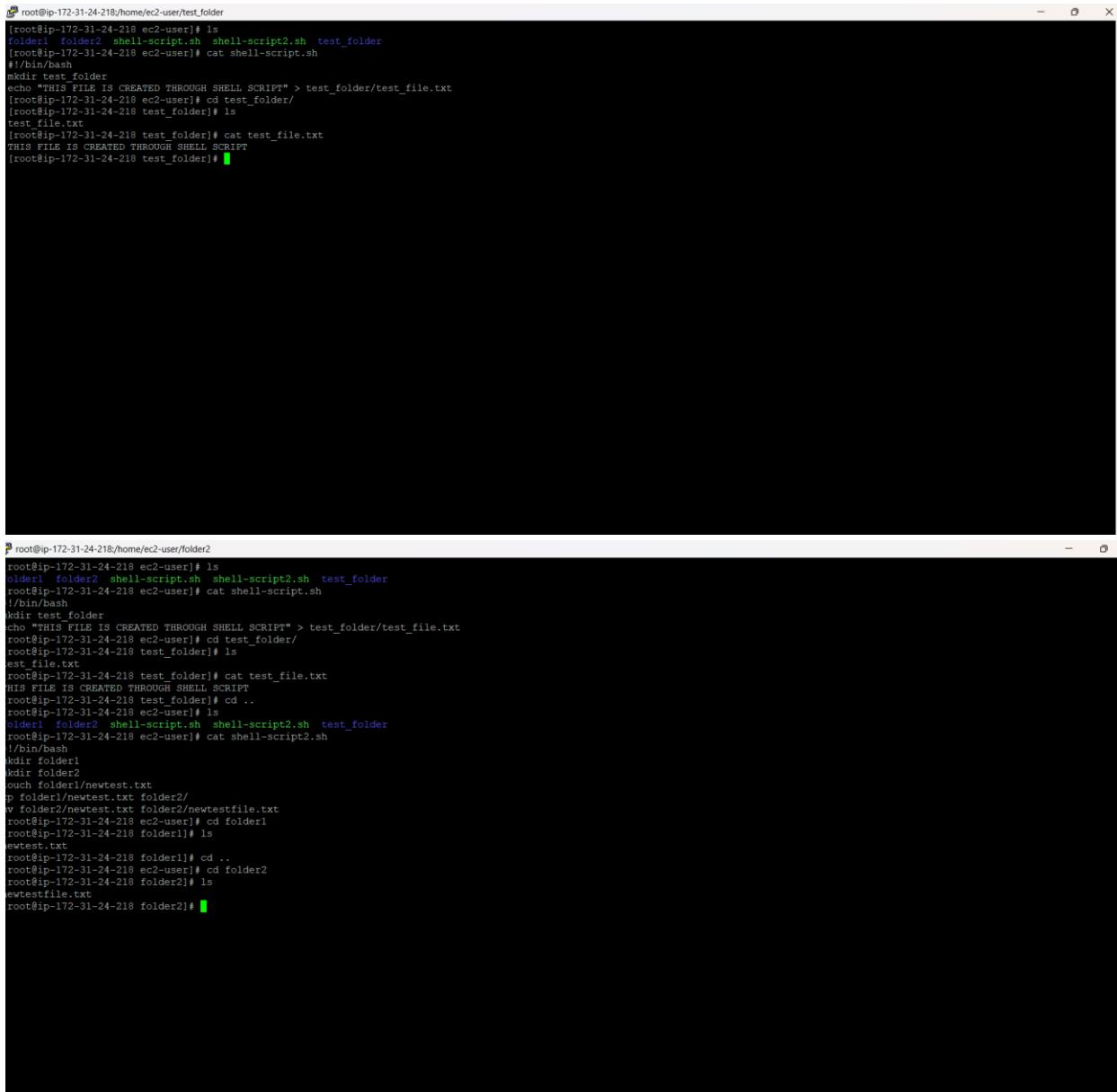


## DAY - 3



The image shows two terminal windows side-by-side, both running on a Linux system with a root shell.

**Terminal Window 1:**

```
root@ip-172-31-24-218:/home/ec2-user/test.folder#
[root@ip-172-31-24-218 ec2-user]# ls
older1  folder2  shell-script.sh  shell-script2.sh  test_folder
[root@ip-172-31-24-218 ec2-user]# cat shell-script.sh
#!/bin/bash
mkdir test_folder
echo "THIS FILE IS CREATED THROUGH SHELL SCRIPT" > test_folder/test_file.txt
[root@ip-172-31-24-218 ec2-user]# cd test_folder/
[root@ip-172-31-24-218 test_folder]# ls
test_file.txt
[root@ip-172-31-24-218 test_folder]# cat test_file.txt
THIS FILE IS CREATED THROUGH SHELL SCRIPT
[root@ip-172-31-24-218 test_folder]# 
```

**Terminal Window 2:**

```
root@ip-172-31-24-218:/home/ec2-user/folder2#
root@ip-172-31-24-218 ec2-user]# ls
older1  folder2  shell-script.sh  shell-script2.sh  test_folder
root@ip-172-31-24-218 ec2-user]# cat shell-script.sh
#!/bin/bash
mkdir test_folder
echo "THIS FILE IS CREATED THROUGH SHELL SCRIPT" > test_folder/test_file.txt
root@ip-172-31-24-218 ec2-user]# cd test_folder/
root@ip-172-31-24-218 test_folder]# ls
test_file.txt
root@ip-172-31-24-218 test_folder]# cat test_file.txt
THIS FILE IS CREATED THROUGH SHELL SCRIPT
root@ip-172-31-24-218 test_folder]# cd ..
root@ip-172-31-24-218 ec2-user]# ls
older1  folder2  shell-script.sh  shell-script2.sh  test_folder
root@ip-172-31-24-218 ec2-user]# cat shell-script2.sh
#!/bin/bash
mkdir folder1
mkdir folder2
touch folder1/newtest.txt
cp folder1/newtest.txt folder2/
mv folder2/newtest.txt folder2/newtestfile.txt
root@ip-172-31-24-218 ec2-user]# cd folder1
root@ip-172-31-24-218 folder1]# ls
newtest.txt
root@ip-172-31-24-218 folder1]# cd ..
root@ip-172-31-24-218 ec2-user]# cd folder2
root@ip-172-31-24-218 folder2]# ls
newtestfile.txt
root@ip-172-31-24-218 folder2]# 
```

Screenshot of a web browser showing the Apache Tomcat 9.0.97 homepage. The address bar shows the URL as 54.172.93.164:8080. The page title is "Apache Tomcat/9.0.97". The main content area displays a green banner with the text "If you're seeing this, you've successfully installed Tomcat. Congratulations!" followed by a cartoon cat icon and a list of recommended readings: "Security Considerations How-To", "Manager Application How-To", and "Clustering/Session Replication How-To". To the right are three buttons: "Server Status", "Manager App", and "Host Manager". Below this, there are four sections: "Developer Quick Start" (with links to "Tomcat Setup" and "First Web Application"), "Realms & AAA" (with links to "JDBC DataSources"), "Examples" (with no visible links), and "Servlet Specifications" (with links to "Tomcat Versions"). The bottom section contains three columns: "Managing Tomcat" (with links to "Release Notes", "Changelog", "Migration Guide", and "Security Notices"), "Documentation" (with links to "Tomcat 9.0 Documentation", "Tomcat 9.0 Configuration", and "Tomcat Wiki"), and "Getting Help" (with links to "FAQ and Mailing Lists" and a list of mailing lists: "tomcat-announce", "tomcat-users", "taglibs-user", and "tomcat-dev"). The status bar at the bottom shows system information including battery level (0HD6 +1.58%), network connection (ENG IN), signal strength, and the date/time (3 December 17:49).

## DAY - 4



To prove that they work, you can execute either of the following links:

- To a [JSP page](#).
- To a [servlet](#).

```
root@ip-172-31-28-215:~# home/ec2-user/crontab
root@ip-172-31-28-215 ec2-user]# ls
apache-tomcat-9.0.97 crontab script.sh
root@ip-172-31-28-215 ec2-user]# cat script.sh
#!/bin/bash

UTPUT_DIR="/home/ec2-user/crontab"
FILENAME=$(date "+%Y-%m-%d %H-%M-%S").txt
ouch "$UTPUT_DIR/$FILENAME"
root@ip-172-31-28-215 ec2-user]# cd crontab/
root@ip-172-31-28-215 crontab]# ls
024-12-02_10-20-01.txt 2024-12-02_10-40-01.txt 2024-12-02_11-00-02.txt 2024-12-02_11-20-01.txt 2024-12-02_11-40-01.txt 2024-12-03_12-20-01.txt
024-12-02_10-25-01.txt 2024-12-02_10-45-02.txt 2024-12-02_11-05-01.txt 2024-12-02_11-25-01.txt 2024-12-02_11-45-01.txt 2024-12-03_12-25-01.txt
024-12-02_10-30-02.txt 2024-12-02_10-50-01.txt 2024-12-02_11-10-01.txt 2024-12-02_11-30-01.txt 2024-12-03_12-10-01.txt 2024-12-03_12-30-02.txt
024-12-02_10-35-01.txt 2024-12-02_10-55-01.txt 2024-12-02_11-15-02.txt 2024-12-02_11-35-02.txt 2024-12-03_12-15-02.txt 2024-12-03_12-35-01.txt
root@ip-172-31-28-215 crontab]#
```

## DAY – 5

aws | Shared\_Folder | Tap Academy LMS | Home | Microsoft 365 | Console Home | Co... | YouTube | ChatGPT | Welcome to AWS D... | All Bookmarks

Memory usage: 161 MB [Alt+S]

```
oot@ip-172-31-5-212 ec2-user]# ls
oot@ip-172-31-5-212 ec2-user]# aws ec2 run-instances --image-id ami-0453ec754f44f9a4a --count 1 --instance-type t2.micro --key-name newkey --security-group-ids sg-079c6540f8b4990 --subnet-id subnet-0e694a62a7ebc6112
able to locate credentials. You can configure credentials by running "aws configure".
oot@ip-172-31-5-212 ec2-user]# aws configure
S Access Key ID [None]: AKIAW5WU9BWZBVKFRGC
S Secret Access Key [None]: amuHQzjVlkv6CaHQsQh7VJw0CHk+0CKvip0ZEaSv
fault region name [None]: us-east-1
fault output format [None]: text
oot@ip-172-31-5-212 ec2-user]# aws ec2 run-instances --image-id ami-0453ec754f44f9a4a --count 1 --instance-type t2.micro --key-name newkey --security-group-ids sg-079c6540f8b4990 --subnet-id subnet-0e694a62a7ebc6112
6114128307 r-0ff4a2b9c33f8f5a0
INSTANCES          0           x86_64 uefi-preferred 3a0c24c7-d151-423b-98c6-0bb38102895a    legacy-bios   False   True    xen    ami-0453ec754f44f9a4a i-0a1c7b45a871a
lb     t2.micro      newkey 2024-12-03T12:41:53+00:00 ip-172-31-14-237.ec2.internal 172.31.14.237 /dev/xvda   ebs   True    subnet-
694a62a7ebc6112   hvm   vpc-039d1e8535cee8eaf
PACITYRESERVATIONSPECIFICATION open
UPTIONS           1           1
CLAVEOPTIONS False
INTENANCEOPTIONS default
TADATAOPTIONS enabled disabled 2 required      disabled      pending
NITORING disabled
TWORKINTERFACES
    interface      02:db:47:28:65:lb    eni-0288ba952bcf7b18d 476114128307 ip-172-31-14-237.ec2.internal 172.31.14.237 True
    in-use subnet-0e694a62a7ebc6112 vpc-039d1e8535cee8eaf
TACHMENT 2024-12-03T12:41:53+00:00 eni-attach-05807086c7c49e68e True 0 0 attaching
OUPS sg-077d9c6540f8b4990 launch-wizard-2
IVATEIPADDRESSES True ip-172-31-14-237.ec2.internal 172.31.14.237
ACEMENT us-east-1c default
IVATEDNSNAMEOPTIONS False False ip-name
CURITYGROUPS sg-077d9c6540f8b4990 launch-wizard-2
ATE 0 pending
ATEREASON pending pending
oot@ip-172-31-5-212 ec2-user]#
```

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ZIM - PAK ENG 18:12

## DAY - 6

Screenshot 1: Amazon S3 Objects

The screenshot shows the Amazon S3 console for the bucket 'mydemobucket0'. The left sidebar includes sections for Buckets, Storage Lens, and IAM Access Analyzer. The main content area displays a list of objects with columns for Name, Type, Last modified, Size, and Storage class. The objects listed are:

Name	Type	Last modified	Size	Storage class
GIT.txt	txt	December 2, 2024, 19:31:33 (UTC+05:30)	2.4 KB	Standard
hi	-	December 2, 2024, 17:26:02 (UTC+05:30)	108.0 B	Standard
IAM.txt	txt	December 2, 2024, 19:35:47 (UTC+05:30)	3.5 KB	Standard
linux.docx	docx	December 2, 2024, 17:27:29 (UTC+05:30)	36.5 KB	Standard
Screenshot 2024-12-03	png	December 3, 2024, 10:36:59 (UTC+05:30)	223.1 KB	Standard

Screenshot 2: Amazon S3 Lifecycle Rules

The screenshot shows the Amazon S3 console for the bucket 'mydemobucket0' under the 'Management' tab. The left sidebar includes sections for Buckets, Storage Lens, and IAM Access Analyzer. The main content area displays a list of lifecycle rules with columns for Lifecycle rule name, Status, Scope, Current version ..., Noncurrent versi..., Expired object d..., and Incomplete mul... The rule listed is:

Lifecycle rule name	Status	Scope	Current version ...	Noncurrent versi...	Expired object d...	Incomplete mul...
my-life-cycle	Enabled	Entire bucket	Transition to Standard	Transition to Standard	-	-

Screenshot 3: Amazon S3 Replication Rules

The screenshot shows the Amazon S3 console for the bucket 'mydemobucket0' under the 'Management' tab. The left sidebar includes sections for Buckets, Storage Lens, and IAM Access Analyzer. The main content area displays a list of replication rules with columns for Replication rule name, Status, Destination bucket, Destination Region, Priority, Scope, Storage class, Replica owner, Replication Time Control, and KMS-encrypt objects. The rule listed is:

Replication rule name	Status	Destination bucket	Destination Region	Priority	Scope	Storage class	Replica owner	Replication Time Control	KMS-encrypt objects
demo-replica	Enabled	s3://my-replication-bucket12	US East (Ohio) us-east-2	0	Entire bucket	Same as source	Same as source	Disabled	Do not replicate

The screenshot shows the AWS S3 Lifecycle Configuration page for the 'my-life-cycle' bucket. The configuration includes the following rules:

- Day 0:** Objects uploaded.
- Day 30:** Objects move to Standard-IA.
- Day 60:** Objects move to Intelligent-Tiering.
- Day 90:** Objects move to One Zone-IA.
- Day 120:** Objects move to Glacier Deep Archive.
- Day 150:** Objects expire.

**Noncurrent versions actions:**

- Day 0:** Objects become noncurrent.
- Day 30:** Newest noncurrent versions are retained; all other noncurrent versions move to Standard-IA.
- Day 60:** Newest noncurrent versions are retained; all other noncurrent versions move to Intelligent-Tiering.
- Day 90:** Newest noncurrent versions are retained; all other noncurrent versions move to One Zone-IA.
- Day 120:** Newest noncurrent versions are retained; all other noncurrent versions move to Glacier Deep Archive.
- Day 150:** Newest noncurrent versions are retained; all other noncurrent versions are permanently deleted.

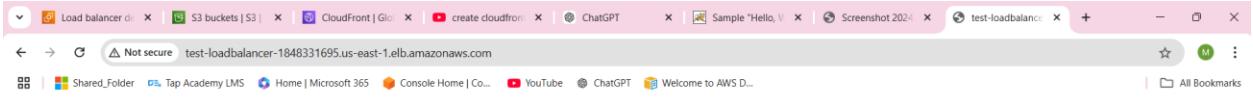
**Delete expired object delete markers or incomplete multipart uploads:**

- Expired object delete markers:** None listed.
- Incomplete multipart uploads:** None listed.

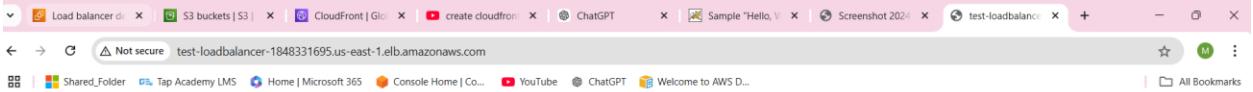
**Screenshot of the AWS S3 Bucket Objects page for my-public-bucket0.**

The bucket contains one object: 'Screenshot 2024-12-03+102718.png' (224.6 KB, Standard storage class). The object was last modified on December 3, 2024, at 10:25:48 UTC+05:30.

## DAY - 7



**TEST Content Is Working**



**Load balancer is working**

Instance details | EC2 | us-east-1 | s3-bucket | IAM | Global | s3-policy-to-list-buckets | IAM

us-east-1.console.aws.amazon.com/iam/home?region=us-east-1#/policies/details/arm%3aws%3iam%3A%3A476114128307%3Apolicy%2Fs3-policy-to-list-buckets?section=permissions

Shared\_Folder Tap Academy LMS Home | Microsoft 365 Console Home | Co... YouTube ChatGPT Welcome to AWS D...

All Bookmarks Global MadhanPodali @ 4761-1412-8307

**s3-policy-to-list-buckets**

**Policy details**

Type Customer managed	Creation time December 02, 2024, 20:29 (UTC+05:30)	Edited time December 02, 2024, 20:29 (UTC+05:30)	ARN arn:aws:iam:476114128307:policy/s3-policy-to-list-buckets
--------------------------	---	---	--

**Permissions** Entities attached Tags Policy versions Last Accessed

**Permissions defined in this policy**

Permissions defined in this policy document specify which actions are allowed or denied. To define permissions for an IAM identity (user, user group, or role), attach a policy to it.

**List (3 of 13)**

Action	Resource	Request condition
ListAllMyBuckets	All resources	None
ListBucket	All resources	None
ListBucketVersions	All resources	None

Show remaining 157 actions

**s3-bucket**

Allows EC2 instances to call AWS services on your behalf.

**Summary**

Creation date December 02, 2024, 20:31 (UTC+05:30)	ARN arn:aws:iam:476114128307:role/s3-bucket	Instance profile ARN arn:aws:iam:476114128307:instance-profile/s3-bucket
Last activity 57 minutes ago	Maximum session duration 1 hour	

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

**Permissions policies (1)**

You can attach up to 10 managed policies.

Filter by Type All types

Policy name	Type	Attached entities
s3-policy-to-list-buckets	Customer managed	1

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```

configservice | opsworks-cm
history | cli-dev
help

root@ip-172-31-23-15 ec2-user]# aws configure
AWS Access Key ID [*****y5ET]: AKIAW5WU5BWZ4HVEY5ET
AWS Secret Access Key [*****VpY2]: 201qIwEMXCMERRzqjYKjKz6L4APzCodNrxxVpY2
Default region name [us-east-1]:
Default output format [text]:
root@ip-172-31-23-15 ec2-user]# aws s3 ls
An error occurred (InvalidAccessKeyId) when calling the ListBuckets operation: The AWS Access Key Id you provided does not exist in our records.
root@ip-172-31-23-15 ec2-user]# ^C
root@ip-172-31-23-15 ec2-user]# aws configure
AWS Access Key ID [*****y5ET]: AKIAW5WU5BWZ4HVEY5ET
AWS Secret Access Key [*****VpY2]: amJHQzJvkv6CaHqsQh7VJW0cHk+0CKvip02EaSv
Default region name [us-east-1]:
Default output format [text]:
root@ip-172-31-23-15 ec2-user]# aws s3 ls
024-12-03 10:34:29 hi-bucket1
024-12-03 05:03:09 my-public-bucket01
024-12-03 13:57:52 my-replication-bucket12
024-12-03 11:51:49 mydemobucket0
root@ip-172-31-23-15 ec2-user]#

```

**i-0ae6600c400ddfd35 (IAM-instance)**

PublicIPs: 54.196.236.244 PrivateIPs: 172.31.23.15

**i-0ae6600c400ddfd35 (IAM-instance)**

Dashboard    EC2 Global View    Events

**Instances**

- Instances
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity Reservations

**Images**

- AMIs
- AMI Catalog

**Elastic Block Store**

- Volumes
- Snapshots
- Lifecycle Manager

Answer private resource DNS name	Instance type	Elastic IP addresses
IPv4 (A) Auto-assigned IP address 54.196.236.244 [Public IP]	t2.micro VPC ID vpc-039d1e8535ceefaf Subnet ID subnet-0413263f07d11a7b1 Instance ARN arn:aws:ec2:us-east-1:476114128307:instance/i-0ae6600c400ddfd35	— AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations.   Learn more Auto Scaling Group name — Managed false
<b>Security</b>	Details    Status and alarms    Monitoring    Security    Networking    Storage    Tags	Owner ID 476114128307
<b>Security details</b>	IAM Role s3-bucket	Launch time Tue Dec 03 2024 17:38:47 GMT+0530 (India Standard Time)
<b>Security groups</b>	so_01433247a418b5636 (launch-wizard-12)	

## DAY - 8

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-0ae6600c400ddfd358osUser=ec2-user&sshPort=22&addressFamily=ipv4#

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-0ae6600c400ddfd358osUser=ec2-user&sshPort=22&addressFamily=ipv4#

```
ast login: Tue Dec 3 18:07:15 2024 from 18.206.107.28
ec2-user@ip-172-31-15-136 ~$ sudo su
root@ip-172-31-15-136 ec2-user# cd ..
root@ip-172-31-15-136 home# cd ..
root@ip-172-31-15-136 /# ls
in dev home lib64 media opt root sbin sys usr
oot etc lib local mnt proc run srv var
root@ip-172-31-15-136 /# cd mnt
root@ip-172-31-15-136 mnt# ls
efs
root@ip-172-31-15-136 mnt# cd efs
root@ip-172-31-15-136 efs# ls
bc.txt xyz.txt
root@ip-172-31-15-136 efs# ls
bc.txt xyz.txt
root@ip-172-31-15-136 efs# ls
bc.txt xyz.txt
root@ip-172-31-15-136 efs# ls
bc.txt test.txt xyz.txt
root@ip-172-31-15-136 efs# 
```

i-0ced6e571c6393a29 (EFS)

PublicIPs: 44.204.105.127 PrivateIPs: 172.31.15.136

```
ast login: Tue Dec 3 18:06:55 2024 from 18.206.107.27
ec2-user@ip-172-31-13-199 ~$ sudo su
root@ip-172-31-13-199 ec2-user# cd ..
root@ip-172-31-13-199 home# cd ..
root@ip-172-31-13-199 /# ls
in dev home lib64 media opt root sbin sys usr
oot etc lib local mnt proc run srv var
root@ip-172-31-13-199 /# cd mnt
root@ip-172-31-13-199 mnt# ls
efs
root@ip-172-31-13-199 efs# ls
bc.txt xyz.txt
root@ip-172-31-13-199 efs# touch xyz.txt
root@ip-172-31-13-199 efs# touch.txt
ash: touch.txt: command not found
root@ip-172-31-13-199 efs# touch test.txt
root@ip-172-31-13-199 efs# 
```

i-00c17c94ab90a9834 (EFS)

PublicIPs: 34.206.53.69 PrivateIPs: 172.31.13.199

```
[root@ip-172-31-23-15 ec2-user]# lsblk
NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
xvda 202:0 0 10G 0 disk
└─xvda1 202:1 0 10G 0 part /
└─xvda127 259:0 0 1M 0 part
└─xvda128 259:1 0 10M 0 part /boot/efi
xvdk 202:160 0 5G 0 disk /home/ec2-user/ytvolume
[root@ip-172-31-23-15 ec2-user]# df -Th
Filesystem Type Size Used Avail Use% Mounted on
devtmpfs devtmpfs 4.0M 0 4.0M 0% /dev
tmpfs tmpfs 475M 0 475M 0% /dev/shm
tmpfs tmpfs 190M 452K 190M 1% /run
/dev/xvda1 xfs 10G 1.6G 8.4G 16% /
tmpfs tmpfs 475M 0 475M 0% /tmp
tmpfs tmpfs 95M 0 95M 0% /run/user/1000
/dev/xvda128 vfat 10M 1.3M 8.7M 13% /boot/efi
/dev/xvdk xfs 5.0G 68M 4.9G 2% /home/ec2-user/ytvolume
[root@ip-172-31-23-15 ec2-user]# 
```

Amazon Linux 2023

<https://aws.amazon.com/linux/amazon-linux-2023>

```

[ec2-user@ip-172-31-15-136 ~]$ sudo su
[root@ip-172-31-15-136 ec2-user]# cd ..
[root@ip-172-31-15-136 home]# ls
[root@ip-172-31-15-136 ~]# ls
bin boot dev etc home lib lib64 local media mnt opt proc root run s
bin srv sys usr var
[root@ip-172-31-15-136 ~]# cd mnt
[root@ip-172-31-15-136 mnt]# cs efs
ash: cs: command not found
[root@ip-172-31-15-136 mnt]# cd efs
[root@ip-172-31-15-136 efs]# touch abc.txt
[root@ip-172-31-15-136 efs]# ls
abc.txt xyz.txt
[root@ip-172-31-15-136 efs]#

```

i-0ced6e571c6393a29 (EFS)

PublicIPs: 3.239.18.58 PrivateIPs: 172.31.15.136

i-00c17c94ab90a9834 (EFS)

PublicIPs: 34.206.53.69 PrivateIPs: 172.31.13.199

Elastic File System

File systems

Access points

AWS Backup

AWS DataSync

AWS Transfer

Documentation

Amazon EFS > File systems > fs-090a112beef62b837

efs-demo (fs-090a112beef62b837)

General

Amazon resource name (ARN)

arn:aws:elasticfilesystem:us-east-1:476114128307:file-system/fs-090a112beef62b837

Performance mode

General Purpose

Throughput mode

Bursting

Lifecycle management

Transition into Infrequent Access (IA): 30 day(s) since last access

Transition into Archive: None

Transition into Standard: None

Availability zone

Regional

Automatic backups

Disabled

Encrypted

30fc509-9e22-497d-a0f6-7f4a8ef8f883 (aws/elasticfilesystem)

File system state

Available

DNS name

fs-090a112beef62b837.efs.us-east-1.amazonaws.com

Replication overwrite protection

Enabled

The screenshot shows two browser windows side-by-side. The left window is titled 'EC2' and displays the AWS EC2 Instances page. It lists a single instance: 'i-0ced6e571c6393a29'. The instance is shown as 'Stopped'. The right window is titled 'EC2 Instance Connect | us-east...' and shows a terminal session connected to the same instance. The terminal output shows the user navigating through the file system and creating a file named 'xyz.txt'.

**EC2 Instances**

- Dashboard
- EC2 Global View
- Events
- Instances**
  - Instances
  - Instance Types
  - Launch Templates
  - Spot Requests
  - Savings Plans
  - Reserved Instances
  - Dedicated Hosts
  - Capacity Reservations
- Images**
  - AMIs
  - AMI Catalog
- Elastic Block Store**
  - Volumes
  - Snapshots

**i-0ced6e571c6393a29**

Updated less than a minute ago

**Instance ID**: i-0ced6e571c6393a29

**Public IPv4 address**: -

**Private IPv4 addresses**: 172.31.15.136

**IPv6 address**: -

**Instance state**: Stopped

**Public IPv4 DNS**: -

**Hostname type**: IP name: ip-172-31-15-136.ec2.internal

**Private IP DNS name (IPv4 only)**: -

**Actions**

Connect Instance state Actions

**EC2 Instance Connect | us-east-**

```
~ \###\ 
~ \###| 
~ \$| V-~--> https://aws.amazon.com/linux/amazon-linux-2023
~ / 
~ .-./ 
~/m/ 
[ec2-user@ip-172-31-13-199 ~]$ sudo su
[root@ip-172-31-13-199 ec2-user]# ls
[root@ip-172-31-13-199 ec2-user]# cd ..
[root@ip-172-31-13-199 home]# ls
[root@ip-172-31-13-199 home]# cd ..
[root@ip-172-31-13-199 ec2-user]# ls
[root@ip-172-31-13-199 ~]$ 
[root@ip-172-31-13-199 ~]$ cd ..
[root@ip-172-31-13-199 ~]$ ls
bin boot dev etc home lib lib64 local media mnt opt proc root run s
bin srv sys usr var
[root@ip-172-31-13-199 ~]$ cd mnt
[root@ip-172-31-13-199 mnt]$ ls
efs
[root@ip-172-31-13-199 mnt]$ cd efs
[root@ip-172-31-13-199 efs]$ ls
[root@ip-172-31-13-199 efs]$ 
abc.txt
[root@ip-172-31-13-199 efs]$ touch xyz.txt
[root@ip-172-31-13-199 efs]$ 
```

**i-00c17c94ab90a9834 (EFS)**

PublicIPs: 34.206.53.69 PrivateIPs: 172.31.13.199

DAY -9

**Instance details | EC2 | us-east-2** ChatGPT

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#InstanceDetails:instanceId=i-0ccad44b24dc72a7b

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aws EC2 Instances i-0ccad44b24dc72a7b [Alt+S]

**Instance summary for i-0ccad44b24dc72a7b (ami-ins)** Info

Updated less than a minute ago

Instance ID	i-0ccad44b24dc72a7b	Public IPv4 address	172.31.117   open address
IPv6 address	-	Instance state	Running
Hostname type	IP name: ip-172-31-15-3.us-east-2.compute.internal	Private IP DNS name (IPv4 only)	ip-172-31-15-3.us-east-2.compute.internal
Answer private resource DNS name	IPv4 (A)	Instance type	t2.micro
Auto-assigned IP address	3.133.131.117 [Public IP]	VPC ID	vpc-0f003d14cad020b9
IAM Role	-	Subnet ID	subnet-051ebc0a5804f8ec4
IMDSv2	Required	Instance ARN	arn:aws:ec2:us-east-2:476114128307:instance/i-0ccad44b24dc72a7b
Operator	-		

**Image details | EC2 | us-east-1** ChatGPT

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ImageDetails:imageId=ami-0a7999d1e43ea8a11

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aws EC2 AMIs ami-0a7999d1e43ea8a11 [Alt+S]

**Image summary for ami-0a7999d1e43ea8a11**

AMI ID	ami-0a7999d1e43ea8a11	Image type	Machine	Platform details	Linux/UNIX	Root device type	EBS
AMI name	ebs-ami	Owner account ID	476114128307	Architecture	x86_64	Usage operation	RunInstances
Root device name	/dev/xvda	Status	Available	Source	476114128307/ebs-ami	Virtualization type	hvm
Boot mode	uefi-preferred	State reason	-	Creation date	2024-12-04T10:06:34.000Z	Kernel ID	-
Description	-	Product codes	-	RAM disk ID	-	Deprecation time	-
Last launched time	-	Block devices	/dev/xvda: snap-0aa12a6fc9d3429db:5: true: gp3 /dev/sdb: snap-0f59b9c9e2c344ff3:7: true: gp3	Deregistration protection	Disabled	Allowed image	-
Source AMI ID	ami-0453ec754f44f9a4a	Source AMI Region	us-east-1				

**Permissions** Storage Tags

Image share permission: Private

This image is only shared with account IDs, organizations, or OUs that you have specified.

Restrictions for sharing images publicly are managed using Block public access for AMIs setting under Data protection and security.

Image details | EC2 | us-east-2 | ChatGPT

us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#imageDetails:imageId=ami-0b863995c492335d4

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aws Search [Alt+S]

EC2 > AMIs > ami-0b863995c492335d4

**Image summary for ami-0b863995c492335d4**

AMI ID		Image type		Platform details	
ami-0b863995c492335d4	machine	Linux/UNIX	EBS	Architecture	x86_64
AMI name	Owner account ID	Source	Usage operation	Virtualization type	Kernel ID
ebs-ami	476114128307	476114128307/ebs-ami	RunInstances	hvm	-
Root device name	Status	Creation date	Deregistration protection	Deprecation time	
/dev/xvda	Pending	2024-12-04T10:09:57.000Z	Disabled	-	-
Boot mode	State reason	RAM disk ID	Allowed image		
uefi-preferred	-	-	-		
Description	Product codes				
[Copied ami-0a7999d1e43ea8a11 from us-east-1] ebs-ami	-				
Last launched time	Block devices				
-	/dev/xvda=15:true:gp3 /dev/sdb=7:true:gp3				
Source AMI ID	Source AMI Region				
ami-0a7999d1e43ea8a11	us-east-1				

**Permissions** **Storage** **Tags**

**Image share permission**  
Private  
This image is only shared with account IDs, organizations, or OUs that you have specified.

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Instance details | EC2 | us-east-2 | EC2 Instance Connect | us-east-2

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-01c28713fb89e0680sUser=ec2-user&sshPort=22&addressFamily=ipv4#/

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cloudShell Feedback

```

>Last login: Tue Dec  3 06:28:51 2024 from 18.206.107.27
[ec2-user@ip-172-31-26-171 ~]$ sudo su
[root@ip-172-31-26-171 ec2-user]# lsbk
NAME   MAJ:MIN RM  SIZE RO TYPE MOUNTPOINTS
xvda    202:0    0  15G  0 disk
└─xvda1  202:1    0  15G  0 part /
└─xvda127 259:0    0  1B  0 part
└─xvda128 259:1    0 10B  0 part /boot/efi
xvdk    202:160   0  7G  0 disk /home/ec2-user/ytvolume
[root@ip-172-31-26-171 ec2-user]# df -Th
Filesystem  Type  Size  Used Avail Mounted on
/dev/xvda1  xfs   15G  14G  11B  /
tmpfs       tmpfs  475M  0  475M  /dev/shm
tmpfs       tmpfs  190M  456K 190M  1% /run
/dev/xvda1  xfs   15G  1.7G  14G  11B  /
tmpfs       tmpfs  475M  0  475M  /tmp
/dev/xvdk   ext4  6.8G  24K  6.5G  1% /home/ec2-user/ytvolume
/dev/xvda128 vfat  10M  1.3M  8.7M  13% /boot/efi
tmpfs       tmpfs  95M  0  95M  /run/user/1000
[root@ip-172-31-26-171 ec2-user]# ls
ytvolume
[root@ip-172-31-26-171 ec2-user]# mount /dev/xvdk ytvolume
mount: /home/ec2-user/ytvolume: /dev/xvdk already mounted on /home/ec2-user/ytvolume.
[root@ip-172-31-26-171 ec2-user]# df -Th
Filesystem  Type  Size  Used Avail Mounted on
/dev/xvda1  xfs   15G  4.2M  14G  11B  /
tmpfs       tmpfs  475M  0  475M  /dev/shm
tmpfs       tmpfs  190M  452K 190M  1% /run
/dev/xvda1  xfs   15G  1.7G  14G  11B  /
tmpfs       tmpfs  475M  0  475M  /tmp
/dev/xvdk   ext4  6.8G  24K  6.5G  1% /home/ec2-user/ytvolume
/dev/xvda128 vfat  10M  1.3M  8.7M  13% /boot/efi
tmpfs       tmpfs  95M  0  95M  /run/user/1000
[root@ip-172-31-26-171 ec2-user]# 

```

cloudShell Feedback

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Volume details | EC2 | us-east-1 | Volume details | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#VolumeDetails?volumeId=vol-0a9561157bd15d22e

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aws Search [Alt+S]

EC2 > Volumes > vol-0a9561157bd15d22e

Dashboard EC2 Global View Events Instances Instances Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Security Groups Elastic IPs CloudShell Feedback

**vol-0a9561157bd15d22e (snap-vol)**

Type gp3 Size 7 GiB IOPS 3000 Throughput 125 Volume status Okay

AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. | Learn more

Fast snapshot restored No Availability Zone us-east-1a Created Tue Dec 03 2024 10:43:41 GMT+0530 (India Standard Time)

Attached resources i-01c8715f8c89ee06 (ebs-lambda); /dev/sdk (attached)

Outposts ARN - Managed false Operator -

Source Snapshot ID snap-06f3d2c402fcda9b5

Encryption Encryption Not encrypted KMS key ID - KMS key alias - KMS key ARN -

Status checks Monitoring Tags

Volume status Okay Availability Zone

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Volume details | EC2 | us-east-1 | Snapshot details | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | +

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#SnapshotDetails?snapshotId=snap-06f3d2c402fcda9b5

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aws Search [Alt+S]

EC2 > Snapshots > snap-06f3d2c402fcda9b5

Dashboard EC2 Global View Events Instances Instances Types Launch Templates Spot Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Images AMIs AMI Catalog Elastic Block Store Volumes Snapshots Lifecycle Manager Network & Security Security Groups Elastic IPs CloudShell Feedback

**snap-06f3d2c402fcda9b5 (snap)**

Snapshot ID snap-06f3d2c402fcda9b5 (snap) Progress Available (100%) Snapshot status Completed

Started Tue Dec 03 2024 10:42:15 GMT+0530 (India Standard Time) Product codes -

Source volume Volume ID vol-0ceb7a5c088889af8 Volume size 5 GiB

Encryption Encryption Not encrypted KMS key ID - KMS key alias - KMS key ARN -

Snapshot settings Storage tier Tags

Snapshot Lock - new Lock mode Not locked

Share permissions Snapshot share permissions Private Modify permissions

The snapshot is shared only with AWS accounts that you specified.

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## DAY - 10

The screenshot shows the AWS CloudFront console interface. The left sidebar contains navigation links for Monitoring, Logs, Reports & analytics (Cache statistics, Popular objects, Top referrers, Usage, Viewers), Security (Origin access, Field-level encryption), Key management (Public keys, Key groups), and Savings Bundle (Overview, Inventory, Purchase). The main content area is titled 'Origin access' and shows 'Control settings' and 'Identities (legacy)' tabs. Under 'Identities (legacy)', it displays 'Origin access identities (1)'. A table lists one identity: ID E2EX2L6BB69WRM, Name cloud, and Amazon S3 canonical user ID 33a826de0df802098937a4be484108eb14559cd6578ed9063d9ee61b8c168c64b... . There are 'Edit' and 'Delete' buttons, and a 'Create origin access identity' button.

Screenshot of the AWS CloudFront console showing two distributions (E2RL9O94DEFKFD and E2ZPX496H2LKRE) and the Network tab of the developer tools showing a request for a screenshot.

**Distributions (2)**

ID	Description	Type	Domain name	Alternate name	Origins	Status	Last modified
E2RL9O94DEFKFD	-	Production	d18y4hz9ry...	-	hi-bucket1.s3.us-e...	Enabled	December 3, 2024
E2ZPX496H2LKRE	-	Production	d3d00ubj4jx...	-	hi-bucket1.s3.us-e...	Enabled	December 3, 2024

**Network**

Request details:

- Name: Screenshot%202024-12-03%20102446.png
- Server: AmazonS3
- Vary: accept-encoding
- Via: 1.1 13cab593168032f9a55d93c52991ddc.cloudfront.net (CloudFront)
- X-Amz-Cf-Id: npqhl9fyAomanbQO\_9EuN\_uMm\_bs2w9f
- X-Amz-Cf-Pop: CUUIJw\_Qz=MAA50-C2
- X-Cache: Miss from cloudfront

Request Headers:

- authority: d18y4hz9rybep.cloudfront.net
- :method: GET
- :path: /Screenshot%202024-12-03%20102446.png
- :scheme: https
- Accept: text/html,application/xhtml+xml,application/xml;q=0.9

## DAY - 11

The screenshot shows two separate browser windows for the Amazon EventBridge Scheduler, both titled "Instances | EC2 | us-east-1".

**Screenshot 1: start-instance**

**Schedule detail:**

- Schedule name:** start-instance
- Status:** Enabled
- Schedule ARN:** arn:aws:scheduler:us-east-1:476114128307:schedule/default/start-instance
- Schedule group name:** default
- Action after completion:** NONE

**Schedule start time:** -

**Schedule end time:** -

**Execution time zone:** Asia/Calcutta

**Flexible time window:** -

**Created date:** Dec 03, 2024, 16:46:02 (UTC+05:30)

**Last modified date:** Dec 03, 2024, 21:49:35 (UTC+05:30)

**Schedule tab details:** Cron expression: `48 * * * ?` Minutes Hours Day of month Month Day of week Year

**Schedule history:**

- Tue, 03 Dec 2024 23:48:00 (UTC+05:30)
- Tue, 03 Dec 2024 23:48:00 (UTC+05:30)
- Wed, 04 Dec 2024 00:48:00 (UTC+05:30)
- Wed, 04 Dec 2024 01:48:00 (UTC+05:30)

**Screenshot 2: stop-instance**

**Schedule detail:**

- Schedule name:** stop-instance
- Status:** Enabled
- Schedule ARN:** arn:aws:scheduler:us-east-1:476114128307:schedule/default/stop-instance
- Schedule group name:** default
- Action after completion:** NONE

**Schedule start time:** -

**Schedule end time:** -

**Execution time zone:** Asia/Calcutta

**Flexible time window:** -

**Created date:** Dec 03, 2024, 16:44:25 (UTC+05:30)

**Last modified date:** Dec 03, 2024, 21:48:32 (UTC+05:30)

**Schedule tab details:** Cron expression: `46 * * * ?` Minutes Hours Day of month Month Day of week Year

**Schedule history:**

- Tue, 03 Dec 2024 22:46:00 (UTC+05:30)
- Tue, 03 Dec 2024 23:46:00 (UTC+05:30)
- Wed, 04 Dec 2024 00:46:00 (UTC+05:30)
- Wed, 04 Dec 2024 01:46:00 (UTC+05:30)

To-start | Functions | Lambda Instances | EC2 | us-east-1

us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/To-start?tab=code

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**Lambda > Functions > To-start**

**Function overview**

**To-start**

Description Last modified 5 hours ago Function ARN arn:aws:lambda:us-east-1:476114128307:function:To-start Function URL

**Code source**

You are using the old console editor.

```

1 import boto3
2
3 def lambda_handler(event, context):
4     ec2_client = boto3.client('ec2', region_name='us-east-1') # Specify your AWS region
5     instance_id = "i-0c1c20731facc9e69" # Replace with the EC2 instance ID you want to start
6     try:
7         response = ec2_client.start_instances(InstanceIds=[instance_id])
8         print(f'Starting instance {instance_id}, current state: {response["StartingInstances"][0]["CurrentState"]["Name"]}')
9         return {
10             "statusCode": 200,
11             "body": f'Instance {instance_id} start initiated.'
12         }
13     except Exception as e:
14         print(f'Error starting instance {instance_id}: {e}')
15         return {
16             "statusCode": 500,
17             "body": f'Error: {e}'
18         }

```

**IAM | Global**

us-east-1.console.aws.amazon.com/iam/home?region=us-east-1#/roles/details/To-start-role-qo15nqmk?section=permissions

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**IAM > Roles > To-start-role-qo15nqmk**

**Identity and Access Management (IAM)**

Dashboard

**Access management**

- User groups
- Users
- Roles**
- Policies
- Identity providers
- Account settings
- Root access management

**Access reports**

- Access Analyzer
- External access
- Unused access
- Analyzer settings

**To-start-role-qo15nqmk**

**Summary**

Creation date December 03, 2024, 16:39 (UTC+05:30)

Last activity 4 hours ago

ARN arn:aws:iam:476114128307:role/service-role/To-start-role-qo15nqmk

Maximum session duration 1 hour

**Permissions**

Permissions policies (2) You can attach up to 10 managed policies.

Policy name	Type	Attached entities
AWSLambdaBasicExecutionRole-bdf57e03...	Customer managed	1
To-start-instance	Customer inline	0

**To-stop | Functions | Lambda**

**Instances | EC2 | us-east-1**

**aws** **Search [Alt+S]**

**Function overview**

**To-stop**

**Description**

Last modified 5 hours ago

Function ARN arn:aws:lambda:us-east-1:476114128307:function:To-stop

Function URL [Info](#)

**Tutorials**

Learn how to implement common use cases in AWS Lambda.

Create a simple web app

In this tutorial you will learn how to:

- Build a simple web app, consisting of a Lambda function with a function URL that outputs a webpage
- Invoke your function through its function URL

[Learn more](#) [Start tutorial](#)

**Code source**

You are using the old console editor.

**Test**

**Environment**

```

1 import botocore
2
3 def lambda_handler(event, context):
4     # Set the region name (e.g., "us-east-1") - Specify the region
5     region_name = "us-east-1"
6     instance_id = "i-01c2813f8c80e000" # Replace with your EC2 instance ID
7
8     ec2 = boto3.client("ec2", region_name=region_name)
9
10    response = ec2.stop_instances(InstanceIds=[instance_id])
11    print(f"Stopping instance {instance_id}. Current state: {response['StoppingInstances'][0]['CurrentState']['Name']}")
12    return {
13        "statusCode": 200,
14        "body": f"Instance {instance_id} stop initiated."
15    }
16
17 except Exception as e:
18     print(f"Error stopping instance {instance_id}: {e}")
19     return {
20         "statusCode": 500,
21         "body": f"Error: {e}"
22    }

```

**CloudShell** **Feedback**

**To-stop | Functions | Lambda**

**To-stop-role-3ywpzqd2 | IAM**

**Instances | EC2 | us-east-1**

**aws** **Search [Alt+S]**

**IAM** > **Roles** > **To-stop-role-3ywpzqd2**

**To-stop-role-3ywpzqd2**

**Identity and Access Management (IAM)**

**Summary**

Creation date December 03, 2024, 16:34 (UTC+05:30)

Last activity 5 hours ago

**ARN** arn:aws:iam::476114128307:role/service-role/To-stop-role-3ywpzqd2

Maximum session duration 1 hour

**Permissions**

**Permissions policies (2)**

You can attach up to 10 managed policies.

Filter by Type All types

Policy name	Type	Attached entities
AWSLambdaBasicExecutionRole-172b426f...	Customer managed	1
To-stop-instance	Customer inline	0

## DAY - 12

**Lambda Function Overview:**

**Code source (Info):**

```

    You are using the old console editor.

    Environment: lambda_function
    Execution results: Test Event Name: test-ent
    Response: {"statusCode": 200, "body": "AMI creation process initiated successfully."}

    Function Log:
    START RequestId: 2693c4d8-e4e5-42fc-874f-6ee6982f1a86 Version: $LATEST
    END RequestId: 2693c4d8-e4e5-42fc-874f-6ee6982f1a86
    REPORT RequestId: 2693c4d8-e4e5-42fc-874f-6ee6982f1a86 Duration: 873.09 ms Billed Duration: 874 ms Memory Size: 128 MB Max Memory Used: 88 MB
  
```

**Amazon EventBridge Schedule:**

Schedule detail	Schedule ARN	Schedule start time	Flexible time window
Schedule name: ami-event	arn:aws:scheduler:us-east-1:476114128307:schedule/default/ami-event	-	-
Description: -	Action after completion: NONE	Schedule end time: -	Created date: Dec 04, 2024, 16:06:15 (UTC+05:30)
Schedule group name: default	Execution time zone: Asia/Calcutta	Last modified date: Dec 04, 2024, 16:06:15 (UTC+05:30)	-

**Schedule:**

Cron expression: `7 * * * ?`

Minutes Hours Day of month Month Day of week Year

Copy cron expression

Next 10 trigger dates: Wed, 04 Dec 2024 16:07:00 (UTC+05:30)

The screenshot shows the AWS Lambda console interface. A new function named 'HelloWorld' is being created. The 'Code' tab is active, displaying a file-based configuration with a Python script named 'lambda\_function.py'. The script contains a single print statement: 'print("Hello World!")'. The 'Handler' dropdown is set to 'lambda\_function.lambda\_handler'. The 'Runtime' is chosen as 'Python 3.10'. The 'Memory size' is set to 128 MB, and the 'Timeout' is 3 seconds. The 'Environment variables' section is empty. The 'Logs' tab is visible at the bottom.

Screenshot of the AWS Lambda console showing two function configurations: 'invalidation' and 'instance-change'.

### invalidation Function

**Code source:** You are using the old console editor.

**Test:**

```

START RequestId: c897f1f9-5d5f-4d43-8219-2e17a13e1fa2 Version: $LATEST
Event received: {"key1": "value1", "key2": "value2", "key3": "value3"}
Invocation ID: c897f1f9-5d5f-4d43-8219-2e17a13e1fa2
Fetching distribution details...
Invalidation response: {"RequestID": "816fbf44-5a48-4061-82c8-e66788110106", "HTTPStatusCode": 201, "HTTPHeaders": {"x-amzn-requestid": "816fbf44-5a48-4061-82c8-e66788110106"}, "Body": "Successfully created invalidation."}
END RequestId: c897f1f9-5d5f-4d43-8219-2e17a13e1fa2
REPORT RequestId: c897f1f9-5d5f-4d43-8219-2e17a13e1fa2 Duration: 486.69 ms Billed Duration: 487 ms Memory Size: 128 MB Max Memory Used: 78 MB
Request ID: c897f1f9-5d5f-4d43-8219-2e17a13e1fa2
  
```

**Description:** Last modified 13 minutes ago.

**Function ARN:** arn:aws:lambda:us-east-1:1476114128307:function:invalidation

**Function URL:** [Info]

### instance-change Function

**Code source:** You are using the old console editor.

**Test:**

```

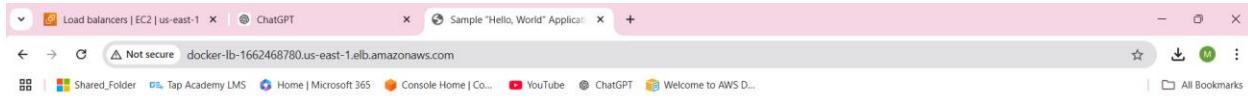
START RequestId: 8ff400f1-80d1-4fc2-9f98-08155808980f Version: $LATEST
Stopping instance i-0f7216ed6e9e7728...
Instance stopped...
Changing Instance type From t2.micro to t2.medium...
Starting instance i-0f7216ed6e9e7728...
Starting instance i-0f7216ed6e9e7728...
END RequestId: 8ff400f1-80d1-4fc2-9f98-08155808980f Duration: 40014.79 ms Billed Duration: 40015 ms Memory Size: 128 MB Max Memory Used: 88 MB Init Duration: 390.84 ms
  
```

**Description:** Last modified 13 minutes ago.

**Function ARN:** arn:aws:lambda:us-east-1:1476114128307:function:instance-change

**Function URL:** [Info]

## DAY - 13



**Sample "Hello, World" Application**

This is the home page for a sample application used to illustrate the source directory organization of a web application utilizing the principles outlined in the Application Developer's Guide.

To prove that they work, you can execute either of the following links:

- To a [JSP page](#).
- To a [servlet](#).

```
[root@ip-172-31-87-37 ec2-user]# cat Dockerfile
# Use the official Tomcat image as the base image
FROM tomcat:9.0-jdk11

# Remove the default webapps in Tomcat
RUN rm -rf /usr/local/tomcat/webapps/*

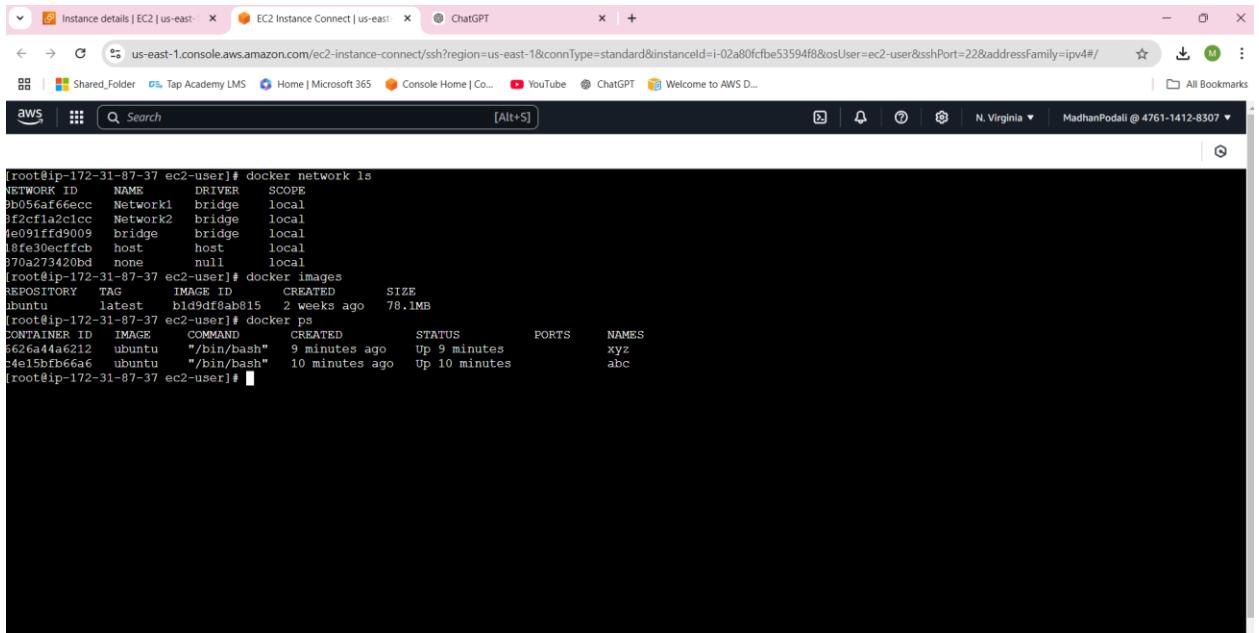
# Copy the sample WAR file to the webapps directory
COPY sample.war /usr/local/tomcat/webapps ROOT.war

# Expose port 8080
EXPOSE 8080

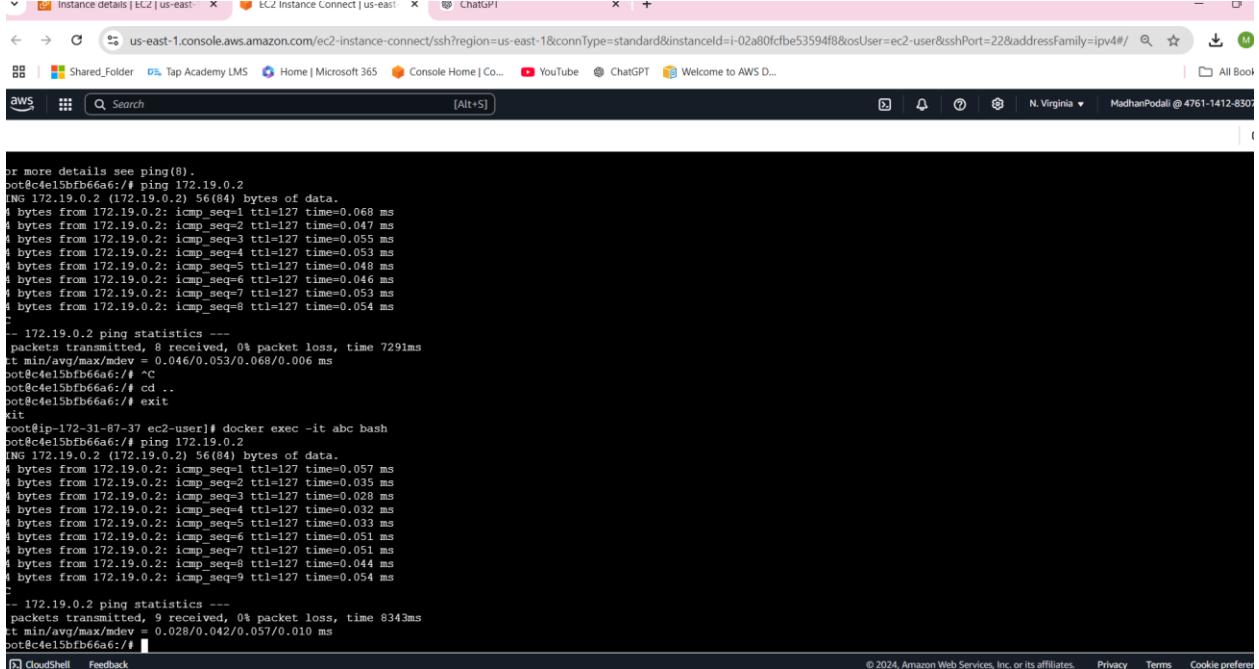
# Start Tomcat server
CMD ["catalina.sh", "run"]

[root@ip-172-31-87-37 ec2-user]# docker images
REPOSITORY      TAG      IMAGE ID      CREATED      SIZE
sample-war-app  latest   6b7042de50d7  33 minutes ago  422MB
nginx           latest   66f8bdd3810c  7 days ago   192MB
[root@ip-172-31-87-37 ec2-user]# docker ps
CONTAINER ID  IMAGE      COMMAND      CREATED      STATUS      PORTS      NAMES
f69ddac47052  sample-war-app  "catalina.sh run"  33 minutes ago  Up 33 minutes  0.0.0.0:8080->8080/tcp, :::8080->8080/tcp  abc
[root@ip-172-31-87-37 ec2-user]#
```

## DAY - 15



```
[root@ip-172-31-87-37 ec2-user]# docker network ls
NETWORK ID      NAME      DRIVER      SCOPE
5b05caf66ecc  Network1   bridge      local
f2cf1a2c1ec   Network2   bridge      local
fe091ff9009   bridge      bridge      local
18fe30cffcb   host       host       local
370a273420bd  none       null       local
[root@ip-172-31-87-37 ec2-user]# docker images
REPOSITORY      TAG      IMAGE ID      CREATED      SIZE
ubuntu          latest   b1d9dfbab815  2 weeks ago  78.1MB
[root@ip-172-31-87-37 ec2-user]# docker ps
CONTAINER ID      IMAGE      COMMAND      CREATED      STATUS      PORTS      NAMES
5626a44a6212  ubuntu      "/bin/bash"  9 minutes ago  Up 9 minutes  xyz
c4e15bf66a6   ubuntu      "/bin/bash"  10 minutes ago  Up 10 minutes  abc
[root@ip-172-31-87-37 ec2-user]# 
```

```
or more details see ping(8).
pot@e4e15bf66a6:~# ping 172.19.0.2
PING 172.19.0.2 (172.19.0.2) 56(84) bytes of data.
4 bytes from 172.19.0.2: icmp_seq=1 ttl=127 time=0.068 ms
4 bytes from 172.19.0.2: icmp_seq=2 ttl=127 time=0.047 ms
4 bytes from 172.19.0.2: icmp_seq=3 ttl=127 time=0.055 ms
4 bytes from 172.19.0.2: icmp_seq=4 ttl=127 time=0.053 ms
bytes from 172.19.0.2: icmp_seq=5 ttl=127 time=0.048 ms
bytes from 172.19.0.2: icmp_seq=6 ttl=127 time=0.046 ms
bytes from 172.19.0.2: icmp_seq=7 ttl=127 time=0.053 ms
bytes from 172.19.0.2: icmp_seq=8 ttl=127 time=0.054 ms
-- 172.19.0.2 ping statistics --
packets transmitted, 8 received, 0% packet loss, time 7291ms
rtt min/avg/max/mdev = 0.046/0.053/0.068/0.006 ms
pot@e4e15bf66a6:~# ^C
pot@e4e15bf66a6:~# cd ..
pot@e4e15bf66a6:~# exit
xit
root@ip-172-31-87-37 ec2-user]# docker exec -it abc bash
pot@e4e15bf66a6:~# ping 172.19.0.2
PING 172.19.0.2 (172.19.0.2) 56(84) bytes of data.
4 bytes from 172.19.0.2: icmp_seq=1 ttl=127 time=0.057 ms
4 bytes from 172.19.0.2: icmp_seq=2 ttl=127 time=0.035 ms
4 bytes from 172.19.0.2: icmp_seq=3 ttl=127 time=0.028 ms
4 bytes from 172.19.0.2: icmp_seq=4 ttl=127 time=0.032 ms
4 bytes from 172.19.0.2: icmp_seq=5 ttl=127 time=0.033 ms
4 bytes from 172.19.0.2: icmp_seq=6 ttl=127 time=0.051 ms
4 bytes from 172.19.0.2: icmp_seq=7 ttl=127 time=0.051 ms
4 bytes from 172.19.0.2: icmp_seq=8 ttl=127 time=0.044 ms
4 bytes from 172.19.0.2: icmp_seq=9 ttl=127 time=0.054 ms
-- 172.19.0.2 ping statistics --
packets transmitted, 9 received, 0% packet loss, time 8343ms
rtt min/avg/max/mdev = 0.028/0.042/0.057/0.010 ms
pot@e4e15bf66a6:~# 
```

## DAY - 16

**Outlook Mail**

Subscription: 12ce30... | ChatGPT | Home | Microsoft 365 | Mail - Madhan Podali | Subscription confirm | + | - | X

outlook.office.com/mail/inbox/id/AAQkADc2ZjZkYmY5LWNkMTktNGRiNy1iTgwLWM2YzcxNDg0MTYzNgAQAE4XKnrvX%2F1ErnYZyxVHFls%3D

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All Bookmarks | DevOps Trainees Daily Cat... Tomorrow 10:30 AM Micros...

**RDS Notification Message**

AWS Notifications <no-reply@sns.amazonaws.com> To: Madhan Podali

CAUTION: This email originated from outside of Xyram. Do not click links or open attachments unless you recognize the sender and know the content is safe.

This is a message to notify that RDS will attempt to send you event notifications of type db-proxy to the topic arn:aws:sns:us-east-1:476114128307:RDS.

--

If you wish to stop receiving notifications from this topic, please click or visit the link below to unsubscribe:  
<https://sns.us-east-1.amazonaws.com/unsubscribe.html?SubscriptionArn=arn:aws:sns:us-east-1:476114128307:RDS-12ce3822-25c6-4a1f-a6cc-ac17b29a5098&Endpoint=madhan.pi@xyramsoft.com>

Please do not reply directly to this email. If you have any questions or comments regarding this email, please contact us at <https://aws.amazon.com/support>

**Reply** | **Forward**

**RDS - Database**

Console Home | RDS - us-east-1 | Create topic | Topics | Simple N... | +

us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#databaseId=database:is-cluster=false

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All Bookmarks | N. Virginia | MadhanPodali @ 4761-1412-8307

**Amazon RDS**

- Dashboard
- Databases**
  - Query Editor
  - Performance insights
  - Snapshots
  - Exports in Amazon S3
  - Automated backups
  - Reserved instances
  - Proxies
- Subnet groups
- Parameter groups
- Option groups
- Custom engine versions
- Zero-ETL integrations [New](#)
- Events
- Event subscriptions
- Recommendations [0](#)
- Certificate update

**database**

**Summary**

DB identifier	Status	Role	Engine
database	Available	Instance	MySQL Community
CPU	Class	Current activity	Region & AZ
12.67%	db.t4g.micro	0 Connections	us-east-1a

**Connectivity & security**

**Endpoint & port**

Endpoint: database.7f4400svmx.us-east-1.rds.amazonaws.com  
Port: 3306

**Networking**

Availability Zone: us-east-1a  
VPC: vpc-039d1e8535cee8ef  
Subnet group: default-vpc-039d1e8535cee8ef  
Subnets: subnet-0e694a62a7ebc6112, subnet-08f0d4d8e08780fb8, subnet-00d994e008890066, subnet-0413263f07d111a7b1, subnet-0ac4ca3692e24c9ca, subnet-0e8380cf5c16c1cfa

**Security**

VPC security groups: default (sg-0cceedad7c2b1d4e61)  
Publicly accessible: Yes  
Certificate authority: rds-ca-rsa2048-q1  
Certificate authority date: May 26, 2061, 05:04 (UTC+05:30)  
DB instance certificate expiration date: December 04, 2025, 14:26 (UTC+05:30)

Modify | Actions

Instance details | EC2 | RDS | us-east-1 | Subscription: 12ce3822-25c6-4a1f-a6cc-ac17b29a5099 | VPC | us-east-1 | ChatGPT | Mail - Madhan Podali | vpc-lb-1080720458 | + | - | X

us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#event-list:

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All Bookmarks N. Virginia MadhanPodali @ 4761-1412-8307

aws Search [Alt+5]

RDS > Events

Amazon RDS

- Dashboard
- Databases
- Query Editor
- Performance insights
- Snapshots
- Exports in Amazon S3
- Automated backups
- Reserved Instances
- Proxies

- Subnet groups
- Parameter groups
- Option groups
- Custom engine versions
- Zero-ETL integrations New

Events

Event subscriptions

Recommendations 0

Certificate update

Events (11)

Filter by event

Source	Type	Time	Message
database	Instances	December 04, 2024, 15:06 (UTC+05:30)	DB instance deleted
database	Instances	December 04, 2024, 14:59 (UTC+05:30)	DB instance shutdown
database	Instances	December 04, 2024, 14:52 (UTC+05:30)	DB instance started
database	Instances	December 04, 2024, 14:51 (UTC+05:30)	Recovery of the DB instance is complete.
database	Instances	December 04, 2024, 14:51 (UTC+05:30)	DB instance restarted
database	Instances	December 04, 2024, 14:51 (UTC+05:30)	DB instance restarted
database	Instances	December 04, 2024, 14:49 (UTC+05:30)	Recovery of the DB instance has started. Recovery time will vary with the amount of data to be recovered.
database	Instances	December 04, 2024, 14:48 (UTC+05:30)	Recovery of the DB instance has started. Recovery time will vary with the amount of data to be recovered.
database	Instances	December 04, 2024, 14:45 (UTC+05:30)	DB instance stopped
database	Instances	December 04, 2024, 14:27 (UTC+05:30)	DB instance created
database	Instances	December 04, 2024, 14:27 (UTC+05:30)	DB instance restarted

Instance details | EC2 | RDS | us-east-1 | Subscription: 12ce3822-25c6-4a1f-a6cc-ac17b29a5099 | VPC | us-east-1 | ChatGPT | Mail - Madhan Podali | vpc-lb-1080720458 | + | - | X

us-east-1.console.aws.amazon.com/sns/v3/home?region=us-east-1#subscription/am:aws:sns:us-east-1:476114128307:RDS:12ce3822-25c6-4a1f-a6cc-ac17b29a5099

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All Bookmarks N. Virginia MadhanPodali @ 4761-1412-8307

aws Search [Alt+5]

Amazon SNS > Topics > RDS > Subscription: 12ce3822-25c6-4a1f-a6cc-ac17b29a5099

Amazon SNS

- Dashboard
- Topics
- Subscriptions
- Mobile
  - Push notifications
  - Text messaging (SMS)

Subscription: 12ce3822-25c6-4a1f-a6cc-ac17b29a5099

Edit Delete

Details

ARN am:aws:sns:us-east-1:476114128307:RDS:12ce3822-25c6-4a1f-a6cc-ac17b29a5099

Endpoint madhan.p@kyramsoft.com

Topic RDS

Subscription Principal arn:aws:iam::476114128307:user/MadhanPodali

Status Pending confirmation

Protocol EMAIL

Subscription filter policy Redrive policy (dead-letter queue)

Subscription filter policy Info

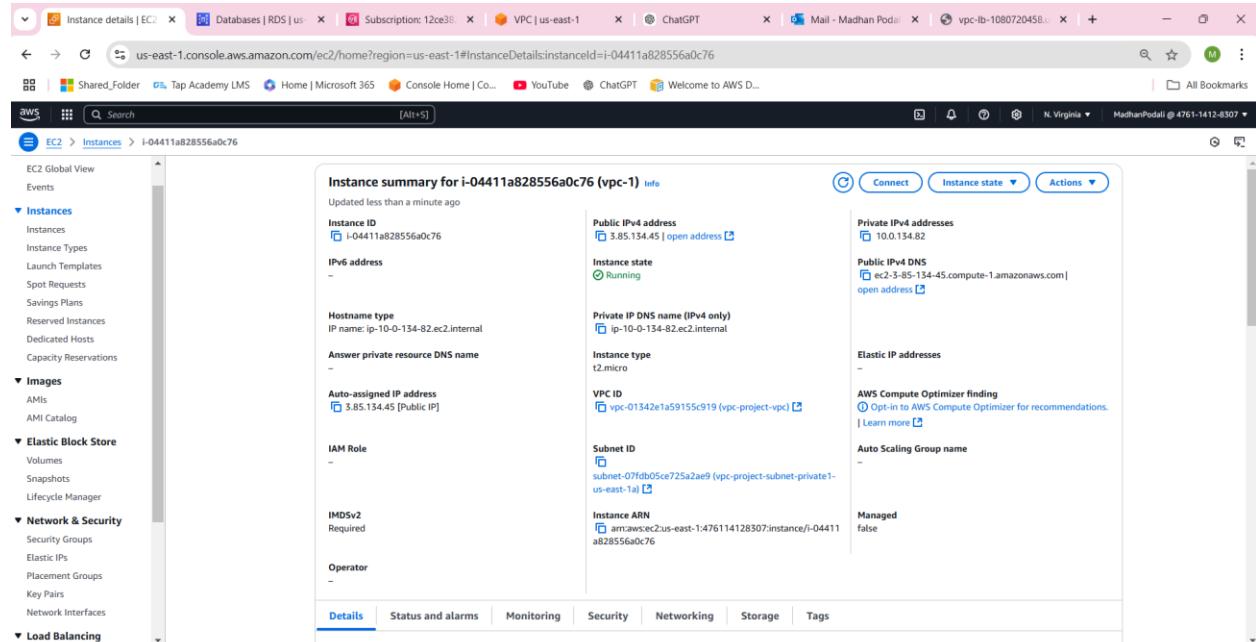
This policy filters the messages that a subscriber receives.

No filter policy configured for this subscription.

To apply a filter policy, edit this subscription.

Edit

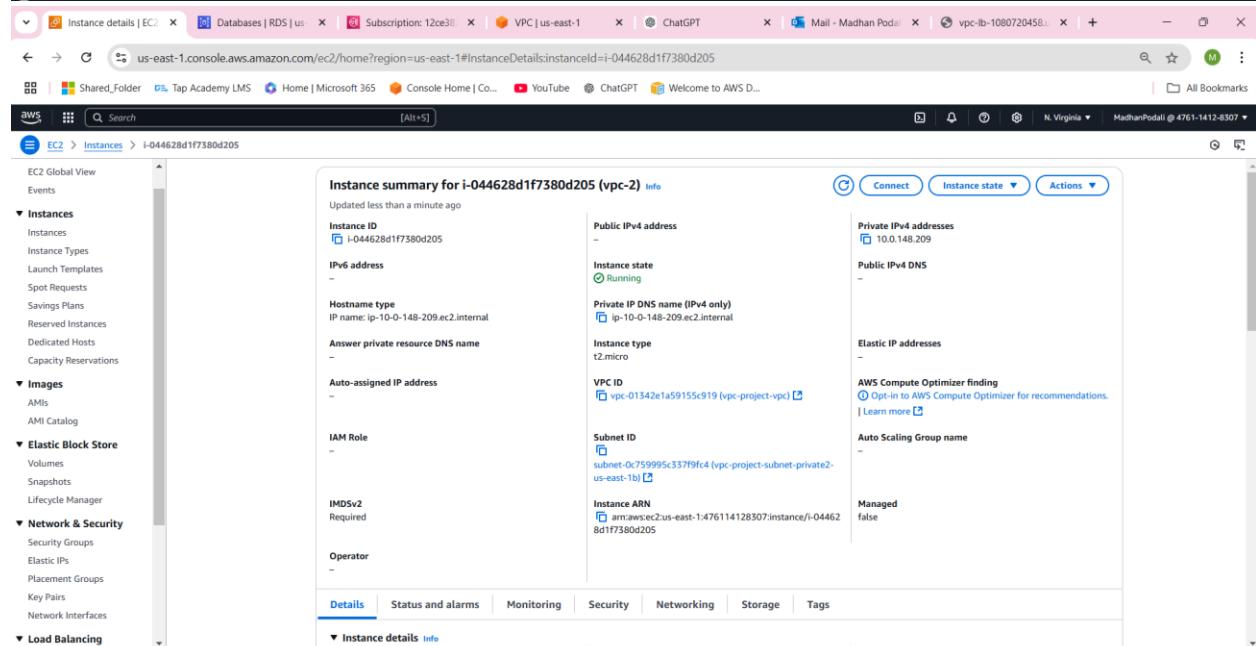
## DAY -19



The screenshot shows the AWS EC2 Instance Details page for instance i-04411a828556a0c76. The instance is running in a VPC and has a public IP of 3.85.134.45 and a private IP of 10.0.134.82. It is associated with a t2.micro instance type and is part of a subnet in the us-east-1 region.

Attribute	Value
Instance ID	i-04411a828556a0c76
Public IPv4 address	3.85.134.45 [open address]
Private IPv4 address	10.0.134.82
Instance state	Running
Public IPv4 DNS	ec2-3-85-134-45.compute-1.amazonaws.com [open address]
Hostname type	IP name: ip-10-0-134-82.ec2.internal
Private IP DNS name (IPv4 only)	ip-10-0-134-82.ec2.internal
Answer private resource DNS name	-
Auto-assigned IP address	3.85.134.45 [Public IP]
VPC ID	vpc-01342e1a59155c919 (vpc-project-vpc)
Instance type	t2.micro
Subnet ID	subnet-07fdb05ce725a2ae9 (vpc-project-subnet-private-us-east-1a)
Instance ARN	arn:aws:ec2:us-east-1:1476114128307:instance/i-04411a828556a0c76
IAM Role	-
IMDSv2	Required
Operator	-
Elastic IP addresses	-
AWS Compute Optimizer finding	Opt-in to AWS Compute Optimizer for recommendations. [Learn more]
Auto Scaling Group name	-
Managed	false

**Details** | Status and alarms | Monitoring | Security | Networking | Storage | Tags

The screenshot shows the AWS EC2 Instance Details page for instance i-044628d1f7380d205. This instance is also running in a VPC and has a public IP of 10.0.148.209 and a private IP of 10.0.148.209. It is associated with a t2.micro instance type and is part of a subnet in the us-east-1 region.

Attribute	Value
Instance ID	i-044628d1f7380d205
Public IPv4 address	-
Private IPv4 addresses	10.0.148.209
Instance state	Running
Public IPv4 DNS	-
Hostname type	IP name: ip-10-0-148-209.ec2.internal
Private IP DNS name (IPv4 only)	ip-10-0-148-209.ec2.internal
Answer private resource DNS name	-
Auto-assigned IP address	-
VPC ID	vpc-01342e1a59155c919 (vpc-project-vpc)
Instance type	t2.micro
Subnet ID	subnet-0c7599fc337f9f4 (vpc-project-subnet-private-us-east-1b)
Instance ARN	arn:aws:ec2:us-east-1:1476114128307:instance/i-044628d1f7380d205
IAM Role	-
IMDSv2	Required
Operator	-
Elastic IP addresses	-
AWS Compute Optimizer finding	Opt-in to AWS Compute Optimizer for recommendations. [Learn more]
Auto Scaling Group name	-
Managed	false

**Details** | Status and alarms | Monitoring | Security | Networking | Storage | Tags

**VPC Details**

**Resource map**

**Subnets (4)**

- vpc-project-subnet-public1-us-east-1a
- vpc-project-subnet-private1-us-east-1a
- vpc-project-subnet-public2-us-east-1b
- vpc-project-subnet-private2-us-east-1b

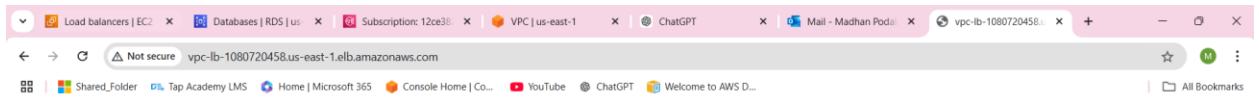
**Route tables (4)**

- vpc-project-rtb-public
- vpc-project-rtb-private1-us-east-1a
- vpc-project-rtb-private2-us-east-1b
- vpc-project-rtb-private2-us-east-1b

**Network connections (2)**

- vpc-project-igw
- vpc-project-nat-public1-us-east-1a

**TEST Content is Working Properly**



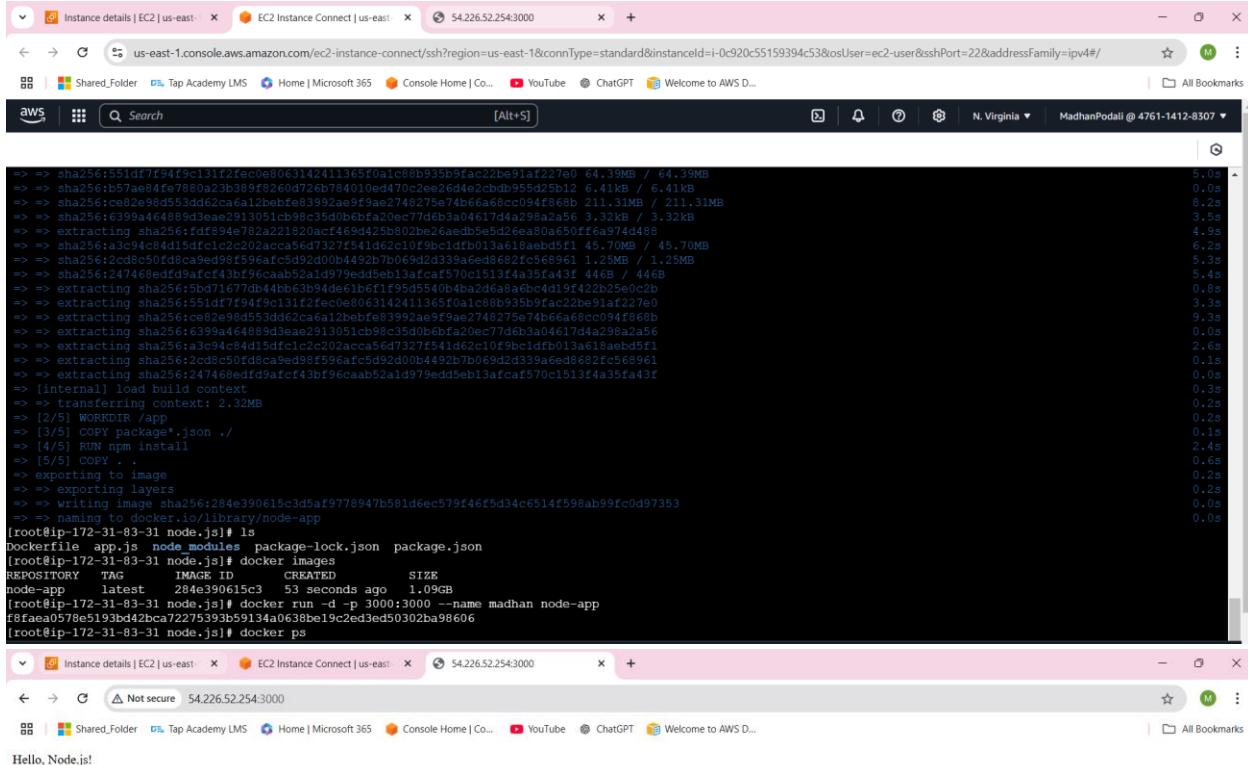
This task is performed through Load Balancer

DAY -21

Whitelabel Error Page

This application has no explicit mapping for /error, so you are seeing this as a fallback.

## Node.js Application



The screenshot shows two browser windows and a terminal window.

**Top Browser Window:** Shows the AWS Lambda function deployment logs. The logs detail the build process, including extracting layers, transferring context, and building the Docker image. The log output is as follows:

```
=> sha256:551df7f54f9c131f2fec0e8063142411365f0a1c88b935b9fac22be51af227e0 64.39MB / 64.39MB
=> sha256:b57ae84fe7880a23b389f8260d726b784010ed470ceee26d4e2cbdb555d25b12 6.41KB / 6.41KB
=> sha256:ce82e8d8553dd62ca6a12befef83992ae9f9ae62748279e74b6646cc094f868b 211.31MB / 211.31MB
=> sha256:63994a64899d3ea291301cb98c35d0b66fa21ec7 / dbb3a4617044298a2a56 3.32KB / 3.32KB
=> extracting sha256:fd89846782a21820acf4693425b8f2be26aeb5e5d26ea80a5ff6a974d468
=> sha256:1a3c94c84d15dc1c2c202aca56d7327f541d462c10f9b1d1fb013a618aehdf5f1 45.70MB / 45.70MB
=> sha256:20d8c50fd5ca9ed98f596ac5d92d00b4492b7b059d2d339aee0d862fc568961 1.25MB / 1.25MB
=> sha256:1247468ed1d9aef43bf96caab52a1d979ed3ebe13a9cf570c1513f4a35fa43f 446B / 446B
=> extracting sha256:5b071677db4abb63b94de1b61f195d55404ba2d6a86bc0d197422b25e0c2b
=> extracting sha256:2cd8c50fd8ca9ed98f596ac5d92d00b4492b7b069d2d339aee0d862fc568961
=> extracting sha256:247468edfd9aef43bf96caab52a1d979ed5e86b13acfcaf570c1513f4a35fa43f
=> (internal) load build context
=> transferring context: 2.32MB
[2/5] WORKDIR /app
[3/5] COPY package*.json .
[4/5] RUN npm install
[5/5] COPY .
=> exporting to image
=> exporting layers
=> writing image sha256:284e390615c3d5af9778947b581d6ec579f46f5d34c6514f598ab99fc0d97353
=> naming to docker.io/library/node-app
[root@ip-172-31-83-31 node.js]# ls
Dockerfile app.js node_modules package-lock.json package.json
[root@ip-172-31-83-31 node.js]# docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
node-app latest 284e390615c3 53 seconds ago 1.09GB
[root@ip-172-31-83-31 node.js]# docker run -d -p 3000:3000 --name madhan node-app
f8faea0578e5193bd42bca72275393b59134a0638be19c2ed3ed50302ba98606
[root@ip-172-31-83-31 node.js]# docker ps
```

**Bottom Browser Window:** Shows the AWS Lambda function deployment logs. The logs show the function has been deployed successfully.

```
Instance details | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | 54.226.52.254:3000
```

**Terminal Window:** Shows the Node.js application running on port 3000. The output is "Hello, Node.js!"

```
Not secure 54.226.52.254:3000
```

```
Hello, Node.js!
```