

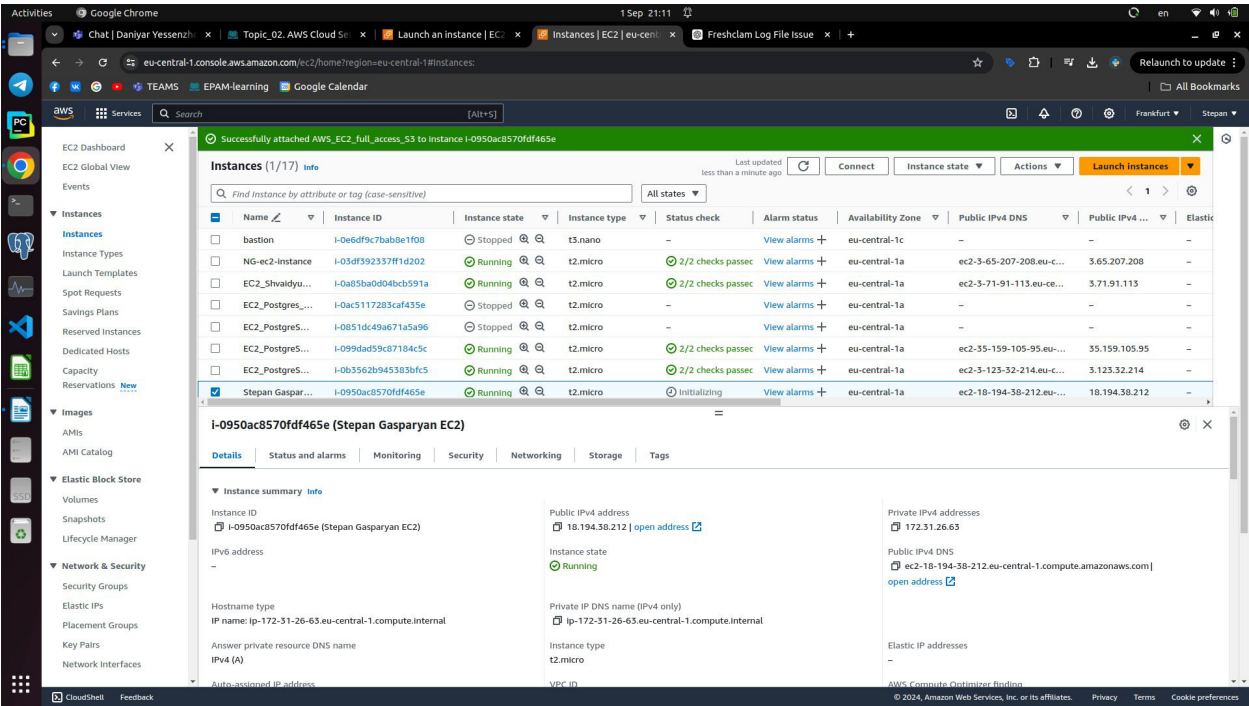


AWS Cloud Service EC2

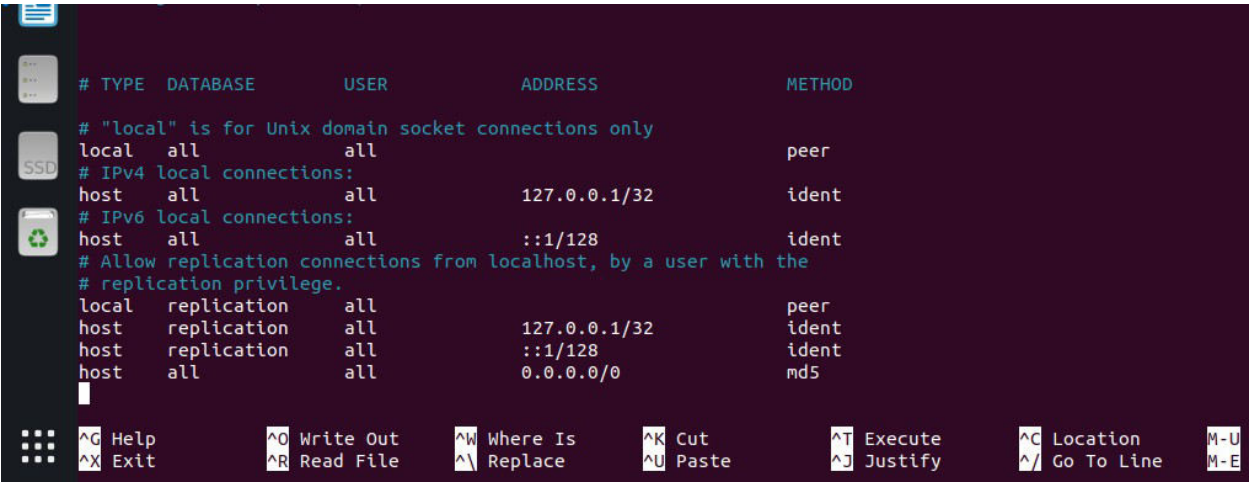
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Confidential

1-a.

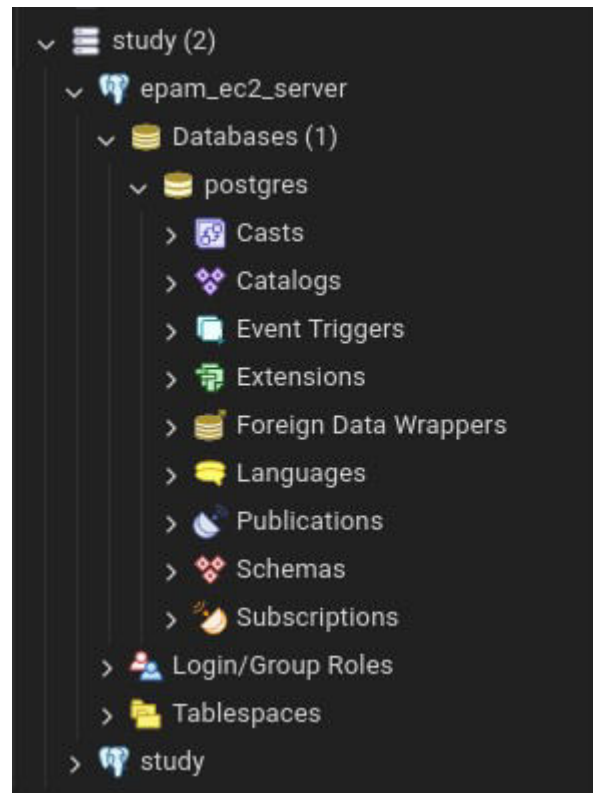


1-b.

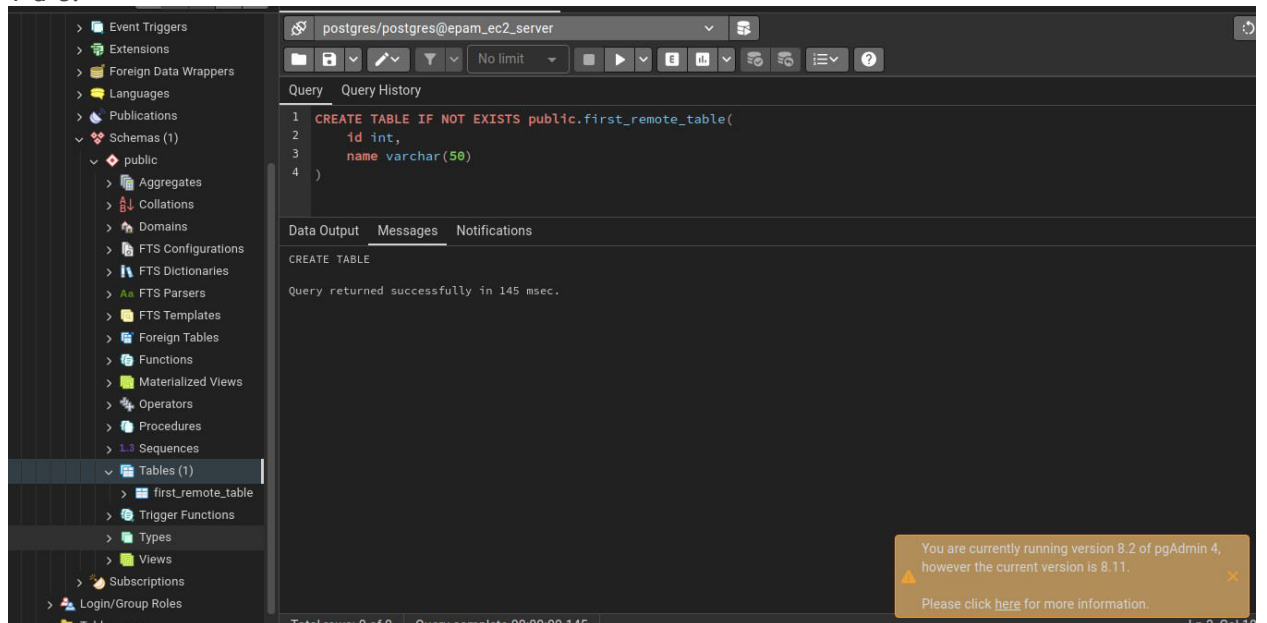


1-c.

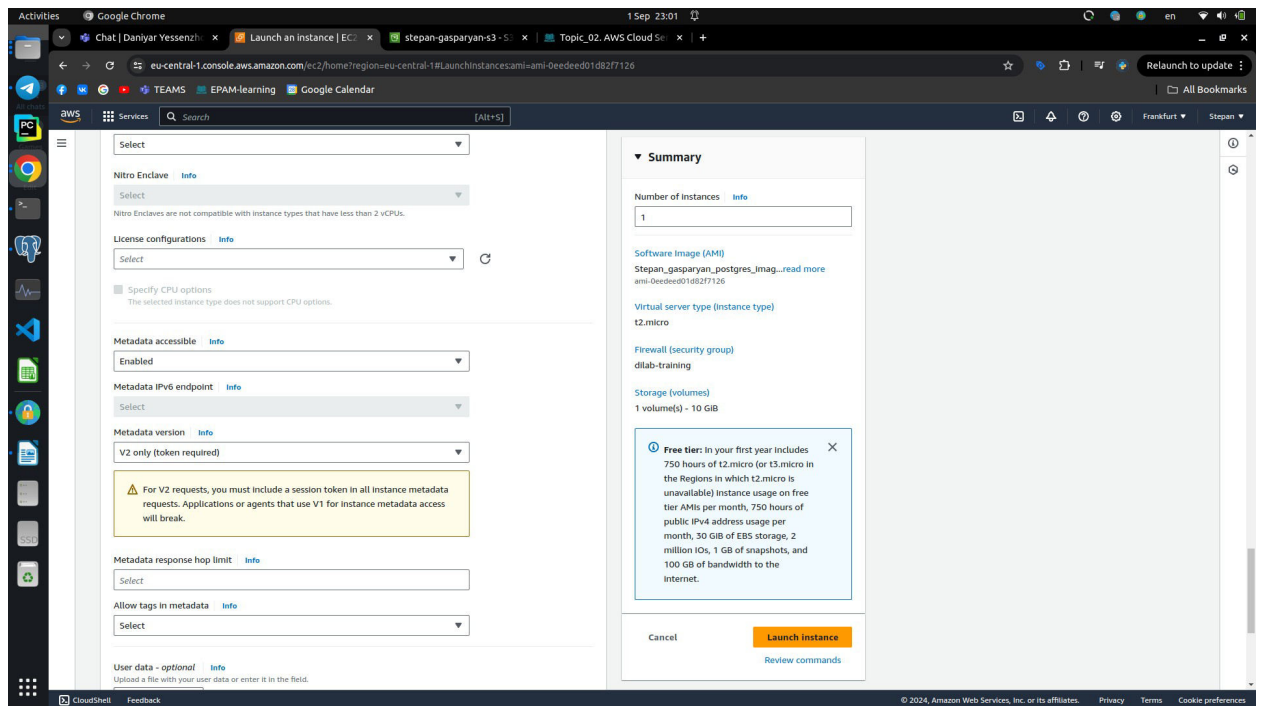
- .
- .



1-d-e.

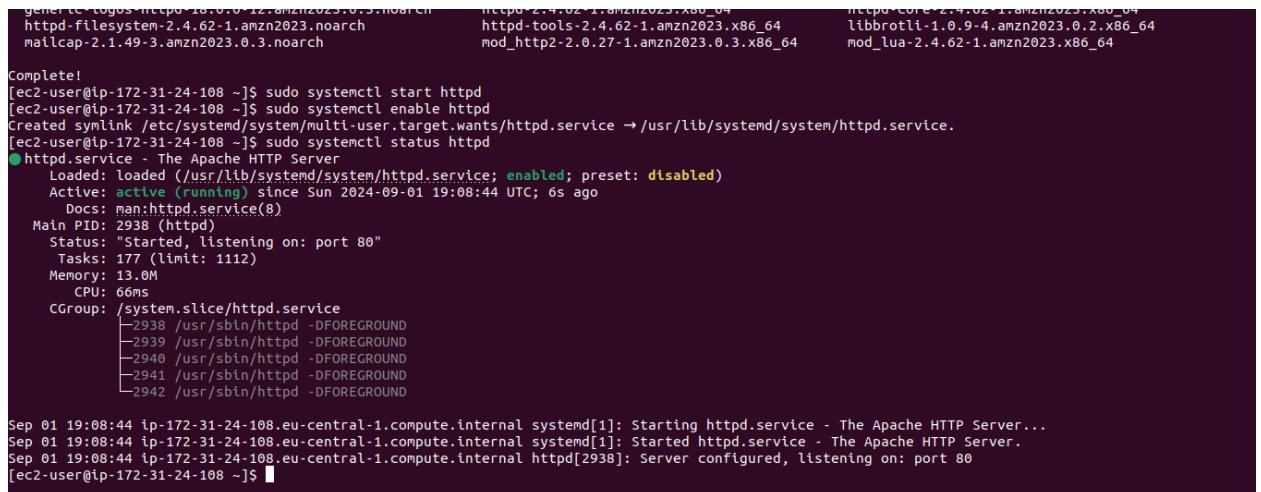


4. AMI advanced settings

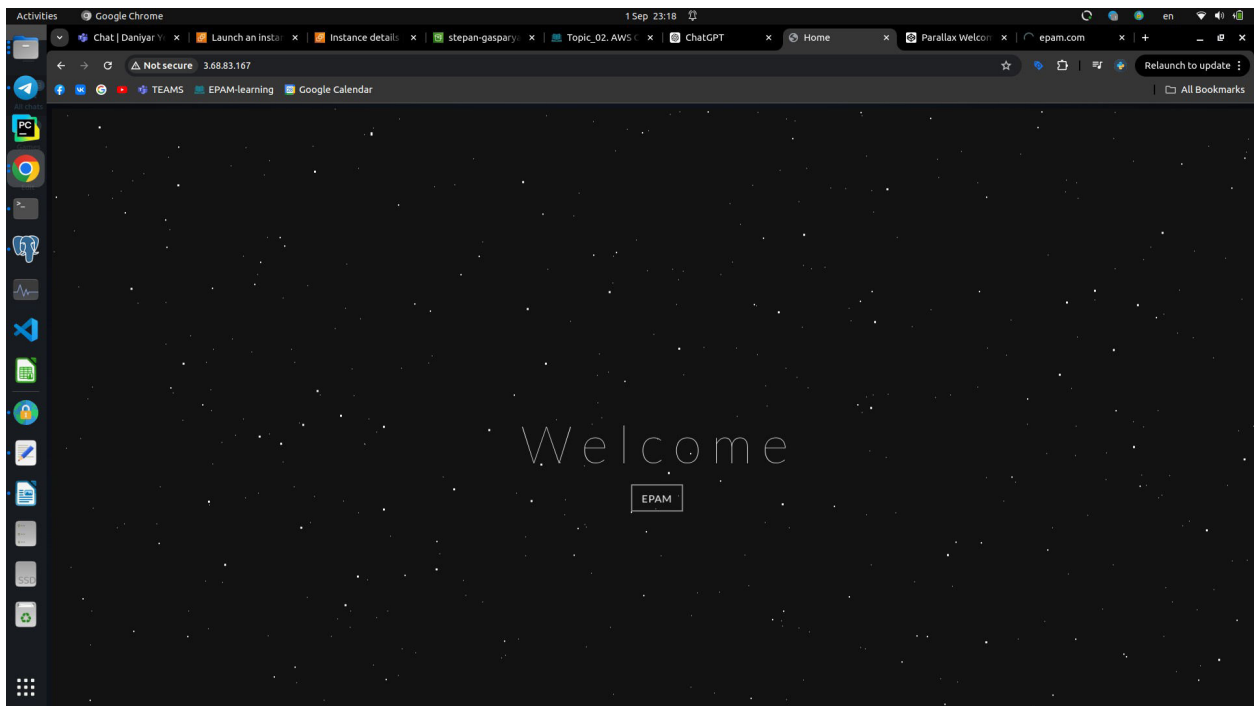


5. Creating web page but not the first :)

Apache installed

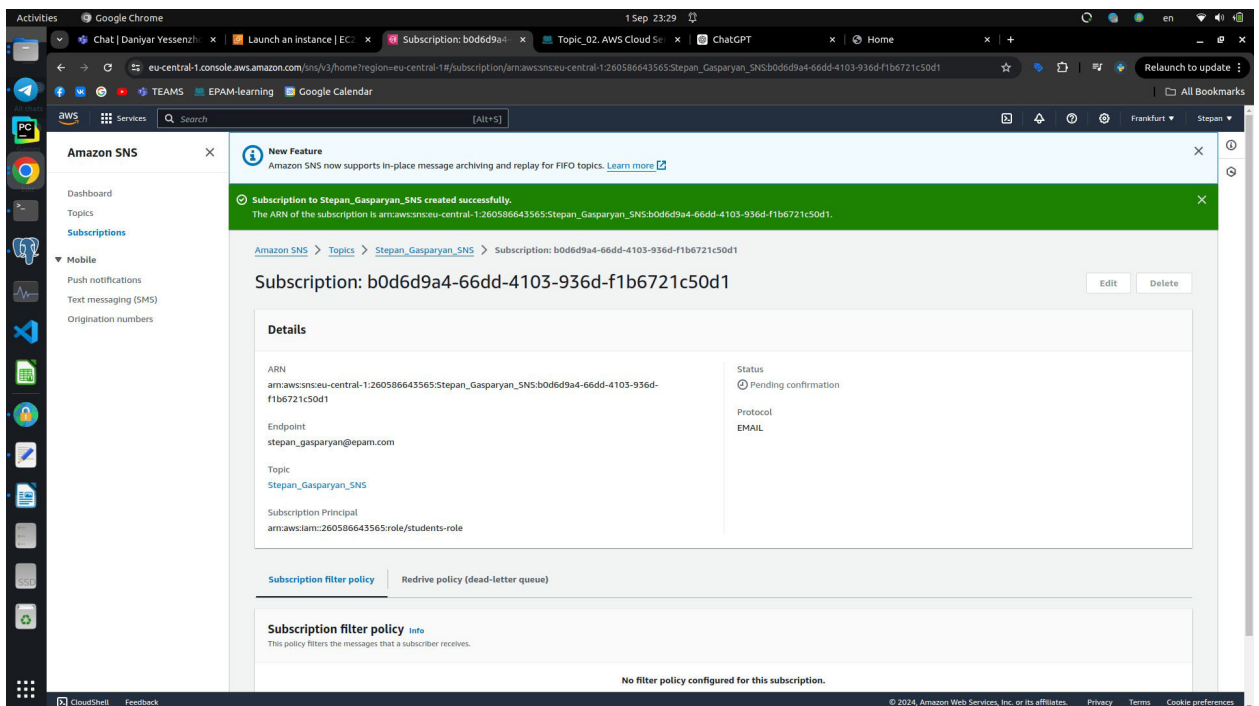


Web page ready

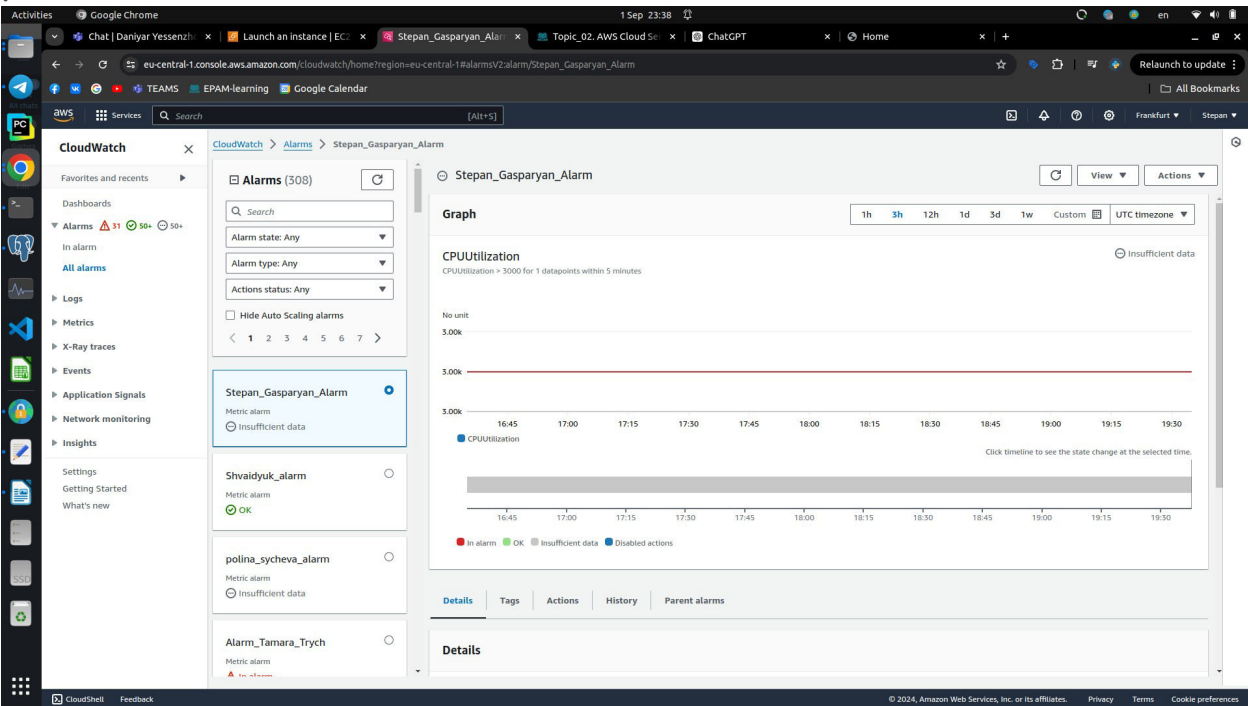
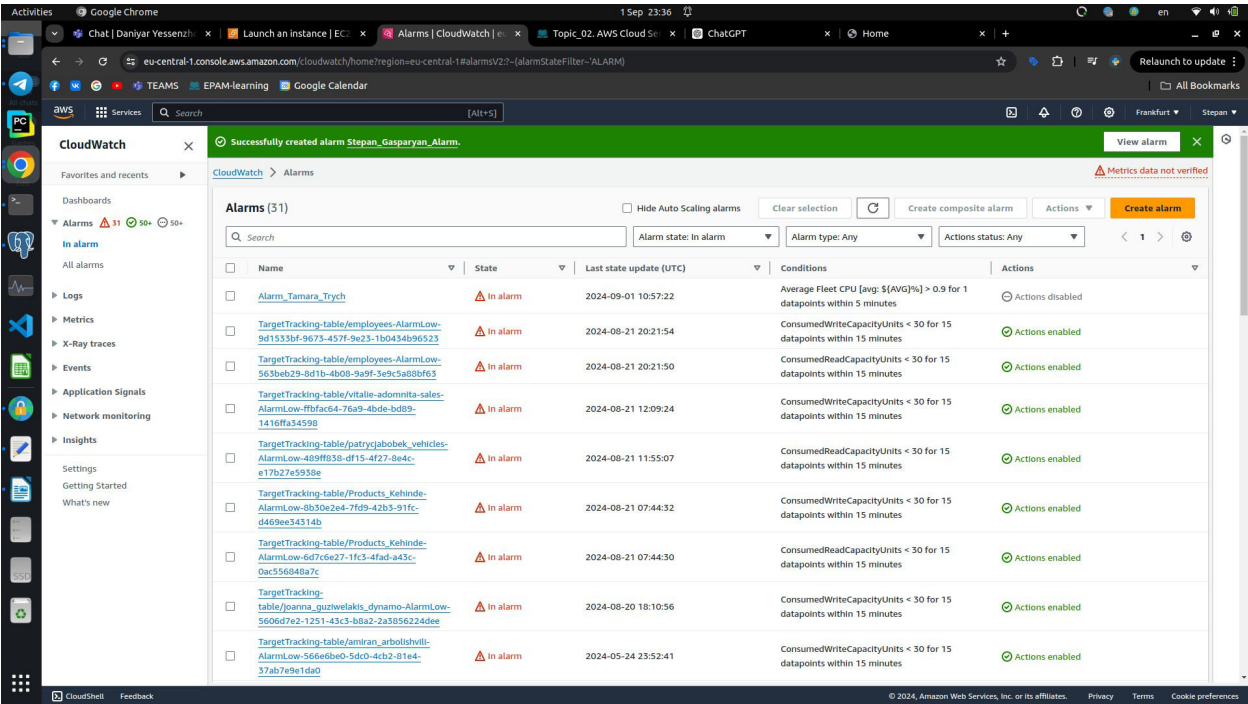


<http://3.68.83.167/> is the link but unfortunately it will not work as we need to stop instance

6. Creating SNS



Cloud Watch Alarm created



7. CloudFormation script

Stacks (100+)

Filter by stack name

Filter status

Active

View nested

< 1 ... >

Stacks

2024-09-02 20:52:39 UTC+0400

CREATE_IN_PROGRESS

StackKuanyshTokayev

2024-09-02 20:52:02 UTC+0400

CREATE_COMPLETE

rodin-stack

2024-09-02 18:16:55 UTC+0400

CREATE_COMPLETE

JB-stack-with-template

2024-09-02 17:28:30 UTC+0400

CREATE_COMPLETE

Shvaldyuk-stack

2024-09-02 15:46:00 UTC+0400

CREATE_COMPLETE

EC2StackBaymetov

2024-09-02 15:21:50 UTC+0400

CREATE_COMPLETE

EC2-Instance-cloudformation-Aidar-Ibraev

2024-09-02 15:21:50 UTC+0400

CREATE_COMPLETE

[Alt+S]

AWSTemplateFormatVersion: '2010-09-09'

Description: Create ec2 instance with script (Stepan Gasparyan)

Resources:

MyEC2Instance:

Type: 'AWS::EC2::Instance'

DeletionPolicy: Retain

Properties:

InstanceType: t2.micro

ImageId: ami-0eedeed01d82f7126

KeyName: Stepan_gasparyan_ec2_key

SecurityGroupIds:

- sg-0fbf42a5fb4bc1004

BlockDeviceMappings:

- DeviceName: /dev/xvda

Ebs:

VolumeSize: 10

VolumeType: gp3

- DeviceName: /dev/sdb

Ebs:

VolumeSize: 10

VolumeType: gp3

IamInstanceProfile: AWS_EC2_full_access_S3

Tags:

- Key: Name

Value: Stepan_Gasparyan_EC2(CloudFormation)

- Key: owner

Value: student

Activities

Google Chrome

2 Sep 00:05

Teams and Channels

CloudFormation - Stack

AMI Catalog | EC2 | eu-central-1

Topic_02_AWS Cloud S...

ChatGPT

Metric alarm Insufficient...

Relaunch to update

eu-central-1.console.aws.amazon.com/cloudformation/home?region=eu-central-1#/stacks/events?stackId=arn%3Aaws%3Acloudformation%3Aeu-central-1%3Aaz00586643505%3Astack%2FStepan-Gasparyan-Stack

Stacks (100+)

Filter by stack name

Filter status

Active

View nested

< 1 ... >

Stacks

Stepan-Gasparyan-stack

2024-09-02 00:05:10 UTC+0400

CREATE_IN_PROGRESS

Shvaldyuk-EC2-stack

2024-09-01 20:30:19 UTC+0400

IMPORT_COMPLETE

polina-sycheva-stack

2024-09-01 20:01:41 UTC+0400

CREATE_COMPLETE

stack-lu-zhang

2024-08-16 19:25:23 UTC+0400

IMPORT_COMPLETE

EC2InstanceAntonBannikov

2024-08-16 12:10:54 UTC+0400

CREATE_COMPLETE

OlgaNikitochkinaStack

2024-08-16 03:21:57 UTC+0400

UPDATE_COMPLETE

Stepan-Gasparyan-stack

Delete

Update

Stack actions

Create stack

Stack info

Events

Resources

Outputs

Parameters

Template

Change sets

Git sync - new

Events (1)

Detect root cause

Search events

Timestamp

Logical ID

Status

Detailed status

Status reason

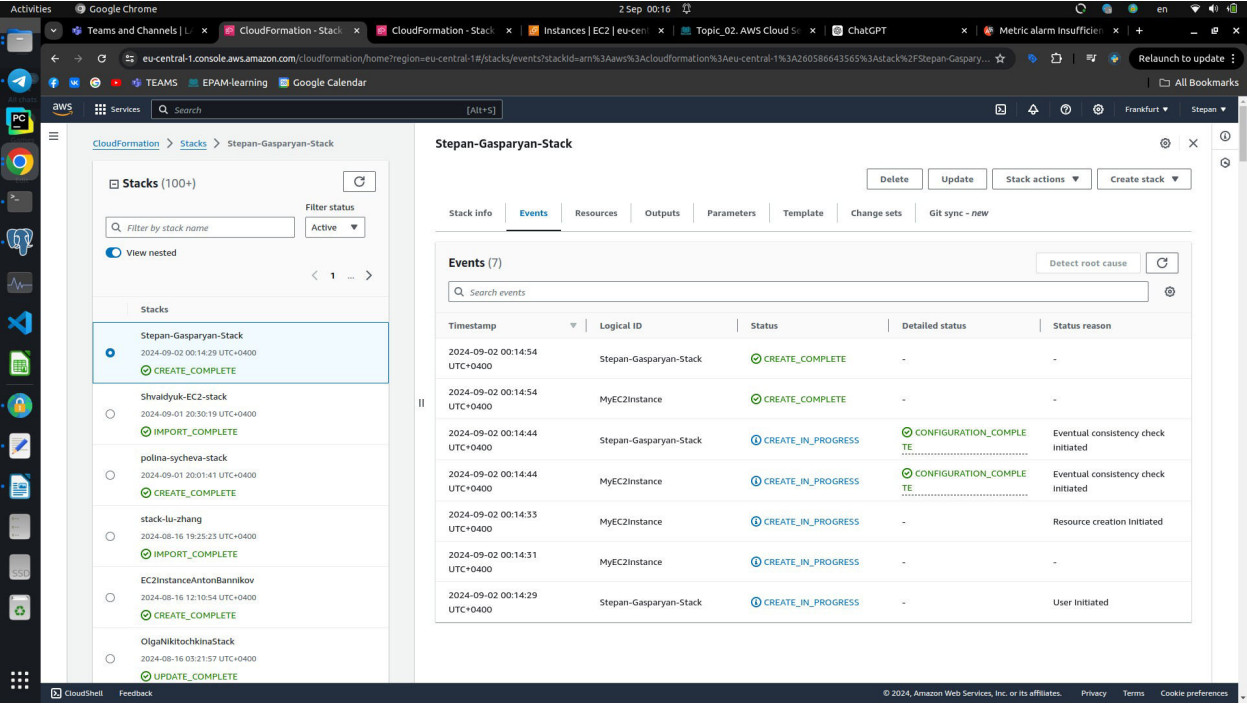
2024-09-02 00:05:10 UTC+0400

Stepan-Gasparyan-stack

CREATE_IN_PROGRESS

-

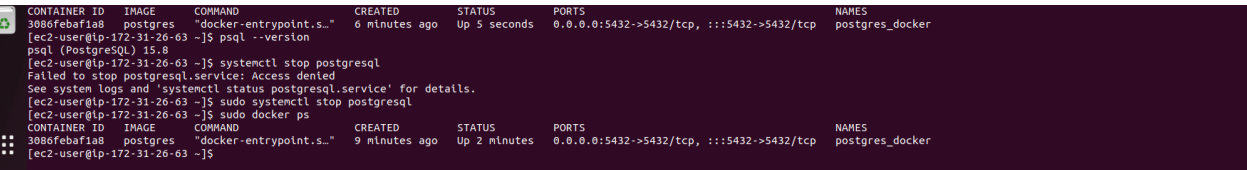
User Initiated



It created instance by script.

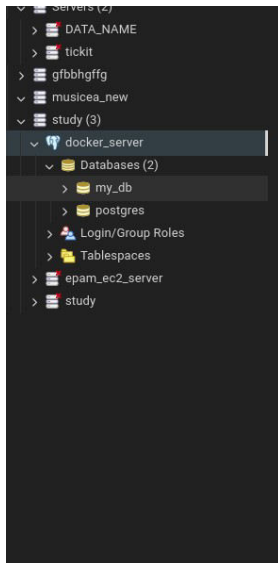
<input type="checkbox"/>	szymonch-aws...	i-061a126b25ddac814			t2.micro		2/2 checks passed	View alarms	+	eu-central-1a	ec2-3-79-185-28.eu-ce...	3.79.185.28	-
<input type="checkbox"/>	suhayl_qodiro...	i-0caf6b8c2a4060c6			t2.micro		2/2 checks passed	View alarms	+	eu-central-1a	ec2-3-67-11-134.eu-ce...	3.67.11.134	-
<input checked="" type="checkbox"/>	Stepan Gaspa...	i-04306e090abbb3bd8			t2.micro		Initializing	View alarms	+	eu-central-1a	ec2-3-124-1-63.eu-cent...	3.124.1.63	-
Unselect instance: Stepan_Gasparyan_EC2(CloudFormation)													
<input type="checkbox"/>	Stepan Gaspa...	i-09d9e49d5a0d3c7az			t2.micro		2/2 checks passed	View alarms	+	eu-central-1a	-	-	-
<input type="checkbox"/>	NG-ec2-Instance	i-03df392337f1d202			t2.micro		2/2 checks passed	View alarms	+	eu-central-1a	ec2-3-65-207-208.eu-c...	3.65.207.208	-

8-Installing docker



installed postgres in the docker container and allowed public access.

Connected to db`



.

8-b. Bash script to run sql command.

```
GNU nano 5.8
#!/bin/bash

CONTAINER_NAME="postgres_docker"
DB_USER="postgres"
DB_NAME="postgres"
SQL_QUERY="SELECT current_date"

docker exec -i $CONTAINER_NAME psql -U $DB_USER -d $DB_NAME -c "$SQL_QUERY"
```

.

Tested manually , it works .

```
[ec2-user@ip-172-31-26-63 ~]$ ./query.sh
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker
er.sock: connect: permission denied
[ec2-user@ip-172-31-26-63 ~]$ sudo ./query.sh
current_date
-----
2024-09-02
(1 row)

[ec2-user@ip-172-31-26-63 ~]$
```

Cron scheduled to execute query.sh every minute

```
[ec2-user@ip-172-31-26-63 ~]$ sudo systemctl start crond # For Amazon Linux, CentOS, etc.
[ec2-user@ip-172-31-26-63 ~]$ sudo systemctl enable crond
[ec2-user@ip-172-31-26-63 ~]$ crontab -l
no crontab for ec2-user
[ec2-user@ip-172-31-26-63 ~]$ crontab -e
no crontab for ec2-user - using an empty one
crontab: no changes made to crontab
[ec2-user@ip-172-31-26-63 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-26-63 ~]$ ls
dim_customers_scd.csv  query.sh
[ec2-user@ip-172-31-26-63 ~]$ ^C
[ec2-user@ip-172-31-26-63 ~]$ crontab -e
no crontab for ec2-user - using an empty one
crontab: installing new crontab
[ec2-user@ip-172-31-26-63 ~]$ crontab -e
crontab: no changes made to crontab
[ec2-user@ip-172-31-26-63 ~]$ tail -f /path/to/logfile.log
tail: cannot open '/path/to/logfile.log' for reading: No such file or directory
tail: no files remaining
[ec2-user@ip-172-31-26-63 ~]$ touch logfile.log
[ec2-user@ip-172-31-26-63 ~]$ tail -f /path/to/logfile.log
tail: cannot open '/path/to/logfile.log' for reading: No such file or directory
tail: no files remaining
[ec2-user@ip-172-31-26-63 ~]$ tail -f logfile.log
current_date
-----
2024-09-02
(1 row)

^C
[ec2-user@ip-172-31-26-63 ~]$ ^C
[ec2-user@ip-172-31-26-63 ~]$ tail -f logfile.log
current_date
-----
2024-09-02
(1 row)

^[[A^C
[ec2-user@ip-172-31-26-63 ~]$ tail -f logfile.log
current_date
-----
2024-09-02
(1 row)

current_date
-----
2024-09-02
(1 row)
```