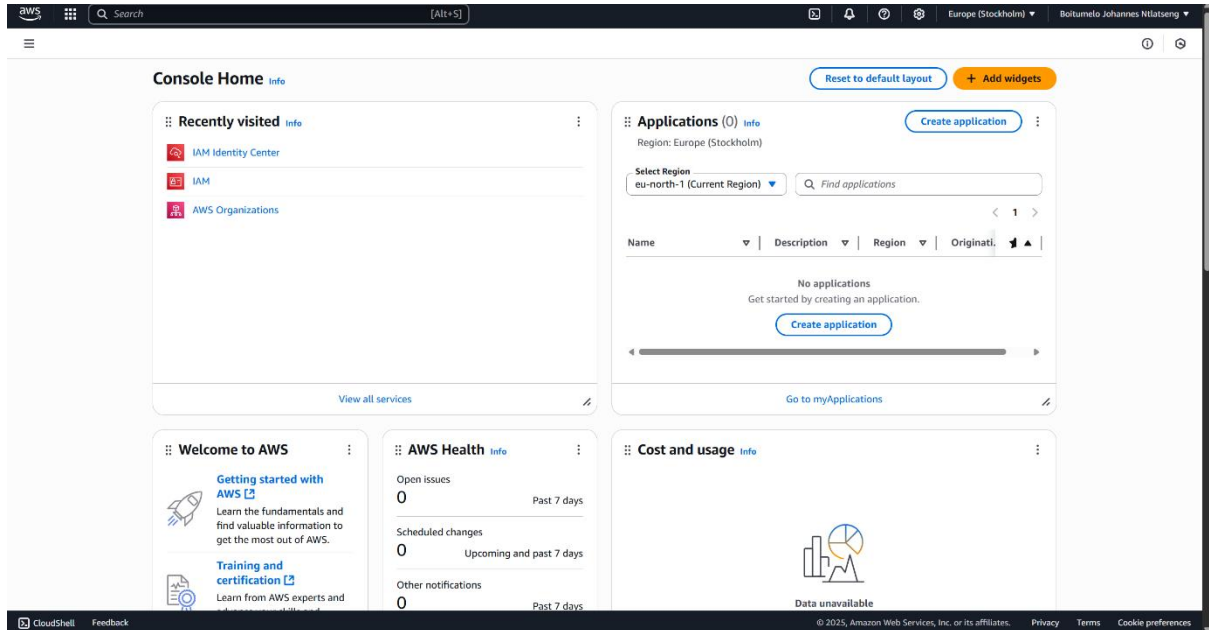
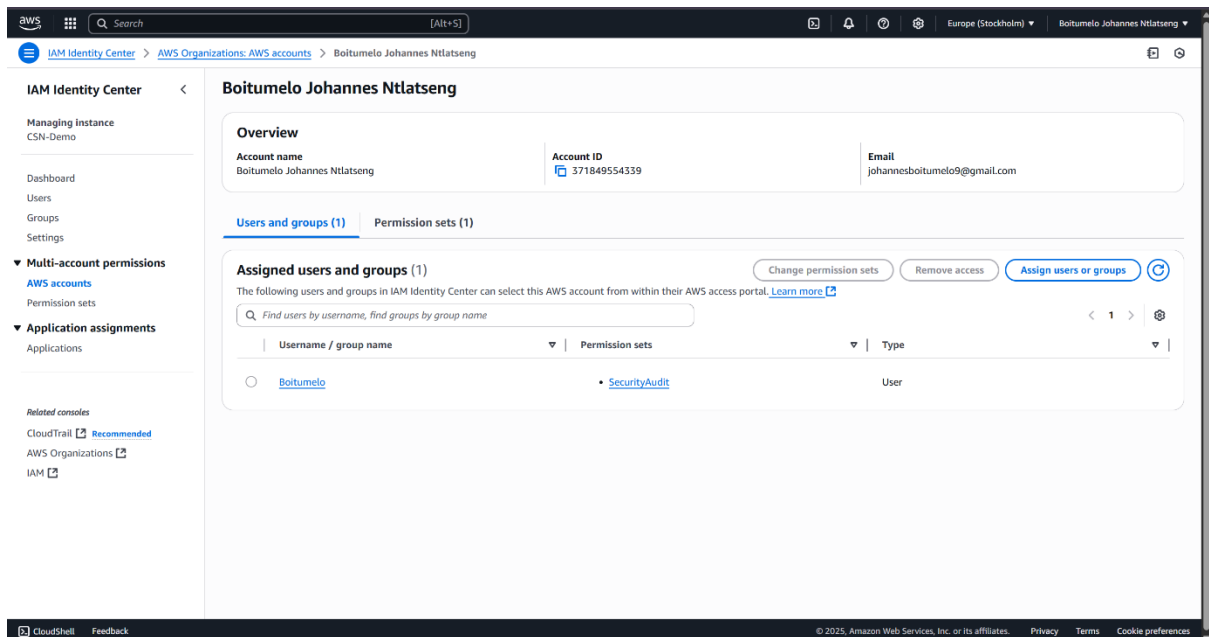


Boitumelo Johannes Ntlatseng

Week 1: Proof of my AWS free trial account.



Week 2: Creation of Identity and access management account and enforcing of roles.



Week 3: Provisioned an EC2 instance and testing if it is deploying successfully.

The screenshot displays the AWS Management Console interface. The top navigation bar shows the AWS logo, a search bar, and account information for Europe (Stockholm) with Account ID: 3718-4955-4339. The left sidebar contains navigation links for EC2, Dashboard, EC2 Global View, Events, 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, Network & Security, Security Groups, Elastic IPs, Placement Groups, and Key Pairs.

The main content area shows the 'Instances (1/1)' page. A table lists the instance 'CSN-Bootcamp-Week3' with ID 'i-04242ca7d22fc68bf', state 'Running', type 't3.micro', and status '3/3 checks passed'. Below the table, the details for instance 'i-04242ca7d22fc68bf (CSN-Bootcamp-Week3)' are shown, including IAM Role, Security groups (sg-02c8b473fcd271dd4), and Inbound rules (sgr-082bb2dca5363550e).

Overlaid on the console is a 'Remote Desktop Connection' window titled 'CSN-Bootcamp-Week3 - ec2-13-61-13-133.eu-north-1.compute.amazonaws.com - Remote Desktop Connection'. It provides connection instructions and a 'Download remote desktop file' button. The window also displays the instance ID, public DNS, and a password that has been copied.

Week 4

Created two virtual private cloud both private and public which are named as VPC-A and VPC-B. connecting both of them with peering connection.

The image displays two screenshots of the AWS Management Console, illustrating the setup of VPC peering connections and subnets.

Top Screenshot: VPC Peering connections

The top screenshot shows the "VPC dashboard" with the "Peering connections" tab selected. A table lists the peering connections:

Name	Peering connection ID	Status	Requester VPC	Accepter VPC	Requester CIDRs
My-Peering-Connection	pcx-07de0448186489f16	Active	vpc-05fad7d3eebf5b38b / VPC-A	vpc-0a8d25920f03cf30f / VPC-B	10.10.0.0/16

Below the table, the details for the selected peering connection "pcx-07de0448186489f16 / My-Peering-Connection" are shown:

- Details**
 - Requester owner ID: 371849554339
 - Peering connection ID: pcx-07de0448186489f16
 - Status: Active
 - Accepter owner ID: 371849554339
 - Requester VPC: vpc-05fad7d3eebf5b38b / VPC-A
 - Requester CIDRs: 10.10.0.0/16
 - VPC Peering connection ARN: arn:aws:ec2:us-east-1:371849554339:vpc-peering-connection/pcx-07de0448186489f16
 - Accepter VPC: vpc-0a8d25920f03cf30f / VPC-B
 - Accepter CIDRs: (empty)

Bottom Screenshot: Subnets

The bottom screenshot shows the "Subnets" tab in the VPC dashboard. A table lists the subnets:

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR	IPv6 CIDR
-	subnet-065a767c7b8a6dea5	Available	vpc-0a5158d4ce6aae1dc	Off	172.31.32.0/20	-
-	subnet-038389647d3eb9f48	Available	vpc-0a5158d4ce6aae1dc	Off	172.31.0.0/20	-
-	subnet-06c4ca41650daec72	Available	vpc-0a5158d4ce6aae1dc	Off	172.31.80.0/20	-
-	subnet-0cc5faa6cdc3f8f58	Available	vpc-0a5158d4ce6aae1dc	Off	172.31.16.0/20	-
-	subnet-0aac96ac567570b24	Available	vpc-0a5158d4ce6aae1dc	Off	172.31.48.0/20	-
-	subnet-011c979c041b0184b	Available	vpc-0a5158d4ce6aae1dc	Off	172.31.64.0/20	-
My-Private-Subnet	subnet-0a30c38443053eb1c	Available	vpc-05fad7d3eebf5b38b VPC-A	Off	10.10.4.0/24	-
My-Public-Subnet	subnet-0a2a4d42ac23b8fb7	Available	vpc-05fad7d3eebf5b38b VPC-A	Off	10.10.1.0/24	-
My-Private-Subnet	subnet-015616ec4238af314	Available	vpc-0a8d25920f03cf30f VPC-B	Off	10.20.12.0/24	-
My-Public-Subnet	subnet-0865d59b8f10b677f	Available	vpc-0a8d25920f03cf30f VPC-B	Off	10.20.8.0/24	-

Search

[Alt+S]

United States (N. Virginia)

Account ID: 3718-4955-4339

VPC

Your VPCs

VPC dashboard

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Peering connections

Route servers

Security

Network ACLs

Security groups

PrivateLink and Lattice

Getting started

Endpoints

Endpoint services

Service networks

CloudShell

Feedback

Find VPCs by attribute or tag

Name

VPC ID

State

Block Public...

IPv4 CIDR

IPv6 CIDR

DHCP option s

-

vpc-0a5158d4ce6aae1dc

Available

Off

172.31.0.0/16

-

dopt-0e483ad

VPC-A

vpc-05fad7d3eebf5b38b

Available

Off

10.10.0.0/16

-

dopt-0e483ad

VPC-B

vpc-0a8d25920f03cf30f

Available

Off

10.20.0.0/16

-

dopt-0e483ad

Select a VPC above

Last updated 2 minutes ago

Actions

Create VPC

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United States (N. Virginia)

Account ID: 3718-4955-4339

VPC

Peering connections

VPC dashboard

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

Carrier gateways

DHCP option sets

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Network ACLs

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PrivateLink and Lattice

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CloudShell

Feedback

Find peering connections by attribute or tag

Peering connection ID : pcx-07de0448186489f16

Clear filters

Name

Peering connection ID

Status

Requester VPC

Acceptor VPC

Requester CIDRs

My-Peering-Connection

pcx-07de0448186489f16

Active

vpc-05fad7d3eebf5b38b / VPC-A

vpc-0a8d25920f03cf30f / VPC-B

10.10.0.0/16

pcx-07de0448186489f16 / My-Peering-Connection

Details

DNS

Route tables

Tags

Route tables

This VPC peering connection is referenced in a route in the following route tables.

Search

Route table ID

VPC ID

Main

Associated with

rtb-08c233078acff4ab7

vpc-0a8d25920f03cf30f / VPC-B

Yes

0 subnets

rtb-03c68b3aa4d510d2d

vpc-05fad7d3eebf5b38b / VPC-A

Yes

0 subnets

Actions

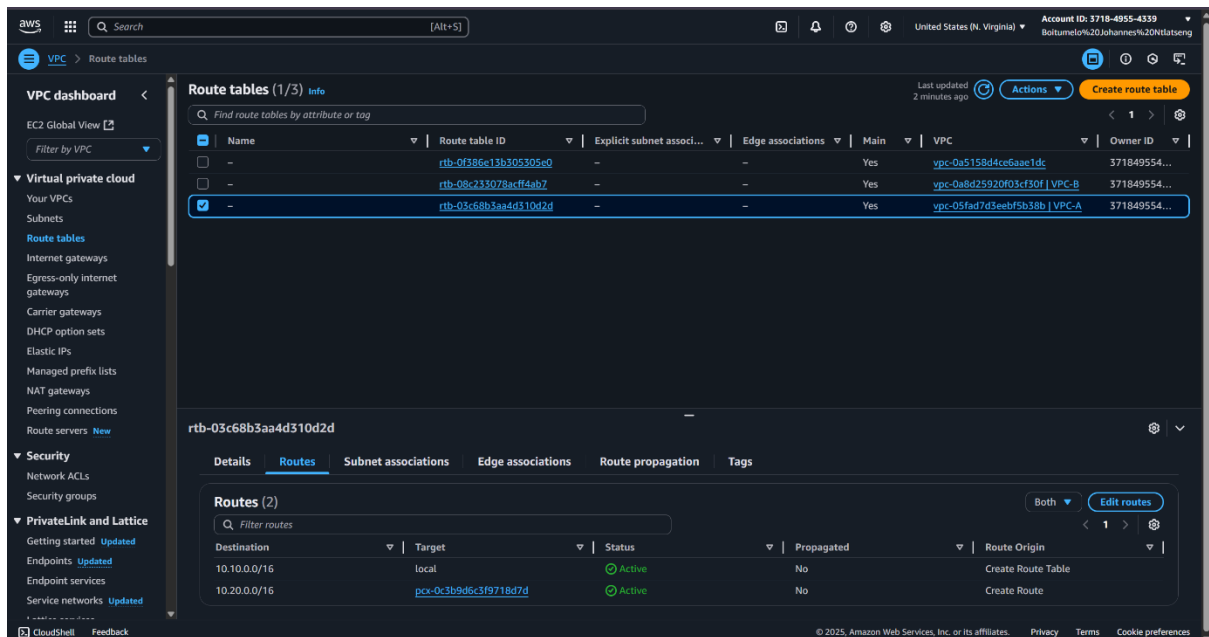
Create peering connection

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Week 5: Deployed Grafana using Amazon ECS (Elastic Container Service) with Fargate launch type. Created task definition that exposes port 3000 and run it in a public subnet.

Cluster services | Elastic Contai... | Task networking | Elastic Cont... | Task definition containers | Grafa...

us-east-1.console.aws.amazon.com/ecs/v2/task-definitions/grafana-task/1/containers

Search [Alt+S]

United States (N. Virginia) Account ID: 3718-4955-4339 Boltumelo%20Johannes%20Ntlatse

Amazon Elastic Container Service

Clusters
Namespaces
Task definitions
Account settings

Amazon ECR
Repositories

AWS Batch

Documentation
Discover products
Subscriptions

Tell us what you think

Overview info

ARN
arn:aws:ecs:us-east-1:371849554339:task-definition/grafana-task:1

Status
ACTIVE

Time created
August 18, 2025 at 19:30 (UTC+2:00)

App environment
Fargate

Task role
-

Task execution role
ecsTaskExecutionRole

Operating system/Architecture
Linux/x86_64

Network mode
awsvpc

Fault injection
Turned off

Containers JSON Task placement Volumes (0) Requires attributes Tags

Task size

Task CPU
1,024 units (1 vCPU)

Task CPU maximum allocation for containers

CPU (unit)
0 100 200 300 400 500 600 700 800 900 1000

grafana Shared task CPU

Task memory
3,072 MiB (3 GB)

Task memory maximum allocation for container memory reservation

Memory (MiB)
0 200 400 600 800 1000 1400 1800 2200 2600 3000

grafana Shared task memory

Containers info

Container name	Image	Private registry	Essential	CPU	Memory hard/soft li...	GPU
grafana	grafana/grafana...	-	Yes	0	-/-	-

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Cluster services | Elastic Contai... | Task networking | Elastic Cont... | Clusters | Elastic Container Ser... | Grafana

us-east-1.console.aws.amazon.com/ecs/v2/clusters?region=us-east-1

Search [Alt+S]

United States (N. Virginia) Account ID: 3718-4955-4339 Boltumelo%20Johannes%20Ntlatse

Amazon Elastic Container Service

Clusters
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Clusters (1) info

Search clusters

Cluster instances

Cluster

Services

Tasks

Container instances

CloudWatch monitoring

Cap...

CSN_Cluster-Week5

1

0 Pending | 1 Running

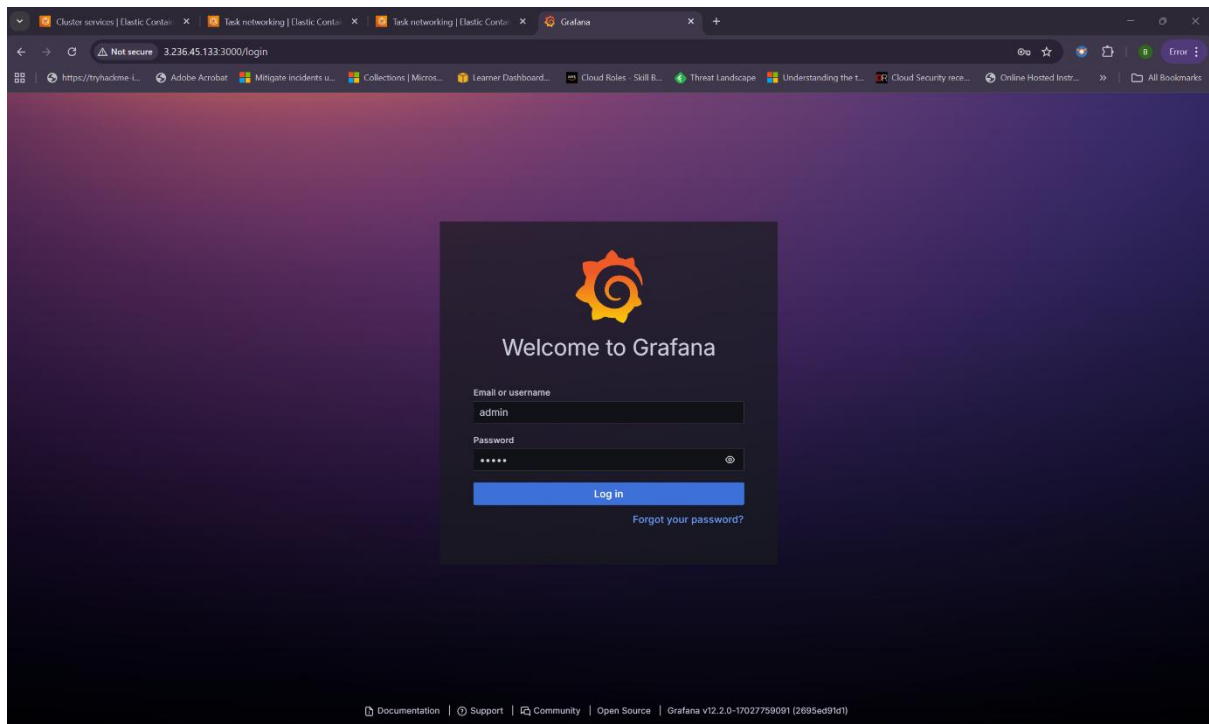
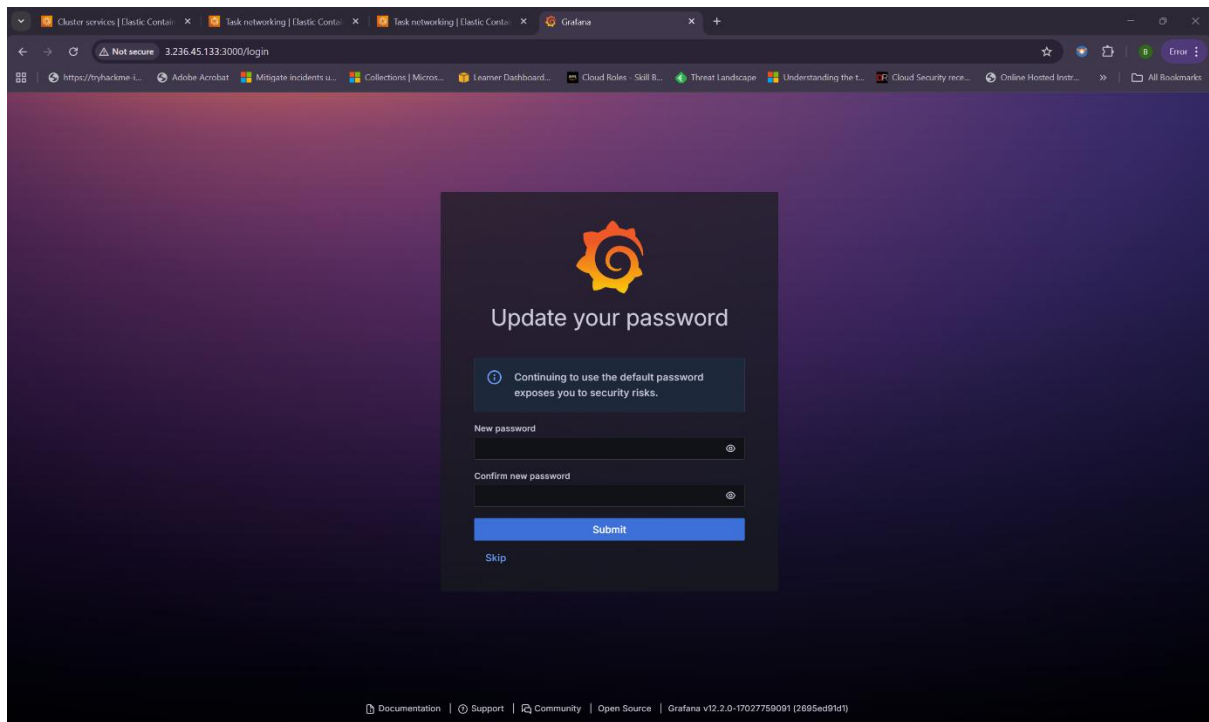
0 EC2

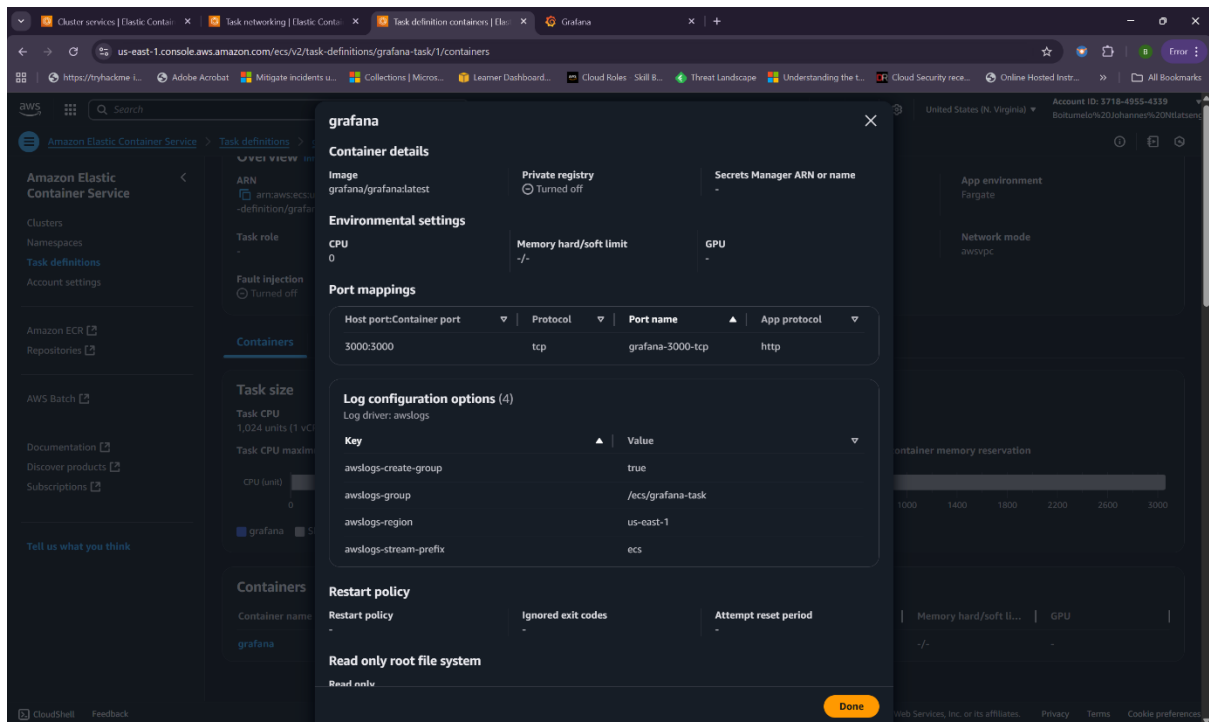
Default

No d

CloudShell Feedback

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Week 6: Deployed Metabase on Amazon ECS using Fargate launch type and connected it to a PostgreSQL database hosted on Amazon Relational Database Service. ECS and RDS are in the same VPC, the RDS allows inbound traffic on port 5432 from the ECS task.

Amazon Elastic Container Service

Clusters

Namespaces

Task definitions

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Amazon ECR

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AWS Batch

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Tell us what you think

csn-mt-cn

Last updated August 20, 2025 at 04:29 (UTC+2:00)

Update cluster

Delete cluster

Launch

Cluster overview

ARNarn:aws:ecs:us-east-1:371849554339:cluster/csn-mt-cn

StatusActive

CloudWatch monitoringDefault

Registered container instances-

Services

Draining-

Active1

Pending-

Running1

Services (1)

Filter services by value

Filter launch typeAny launch type

Filter scheduling strategyAny scheduling strategy

Manage tags

Update

Delete service

Create

Service name

ARN

Status

Schedu...

Launch...

Task de...

Deployments and tasks

Last dep

csn-mt-td-service-lecr7i0k

arn:aws:ecs:us-east-1:371849554339:task-definition/csn-mt-td:2

Active

REPLICA

FARGATE

csn-mt-td:2

1/1 Tasks running

Completed

CloudShellFeedback

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Amazon Elastic Container Service

Task definitions

Namespaces

Task definitions

Account settings

Amazon ECR

Repositories

AWS Batch

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Tell us what you think

csn-mt-td:2

Deploy

Actions

Create new revision

Overview

ARNarn:aws:ecs:us-east-1:371849554339:task-definition/csn-mt-td:2

StatusACTIVE

Time createdAugust 20, 2025 at 04:10 (UTC+2:00)

App environmentFargate

Task roleecsTaskExecutionRole

Task execution roleecsTaskExecutionRole

Operating system/ArchitectureLinux/X86_64

Network modeawsvpc

Fault injection

Turned off

Containers

JSON

Task placement

Volumes (0)

Requires attributes

Tags

Task size

Task CPU1,024 units (1 vCPU)

Task CPU maximum allocation for containers

Task memory3,072 MiB (3 GB)

Task memory maximum allocation for container memory reservation

Container: metabase

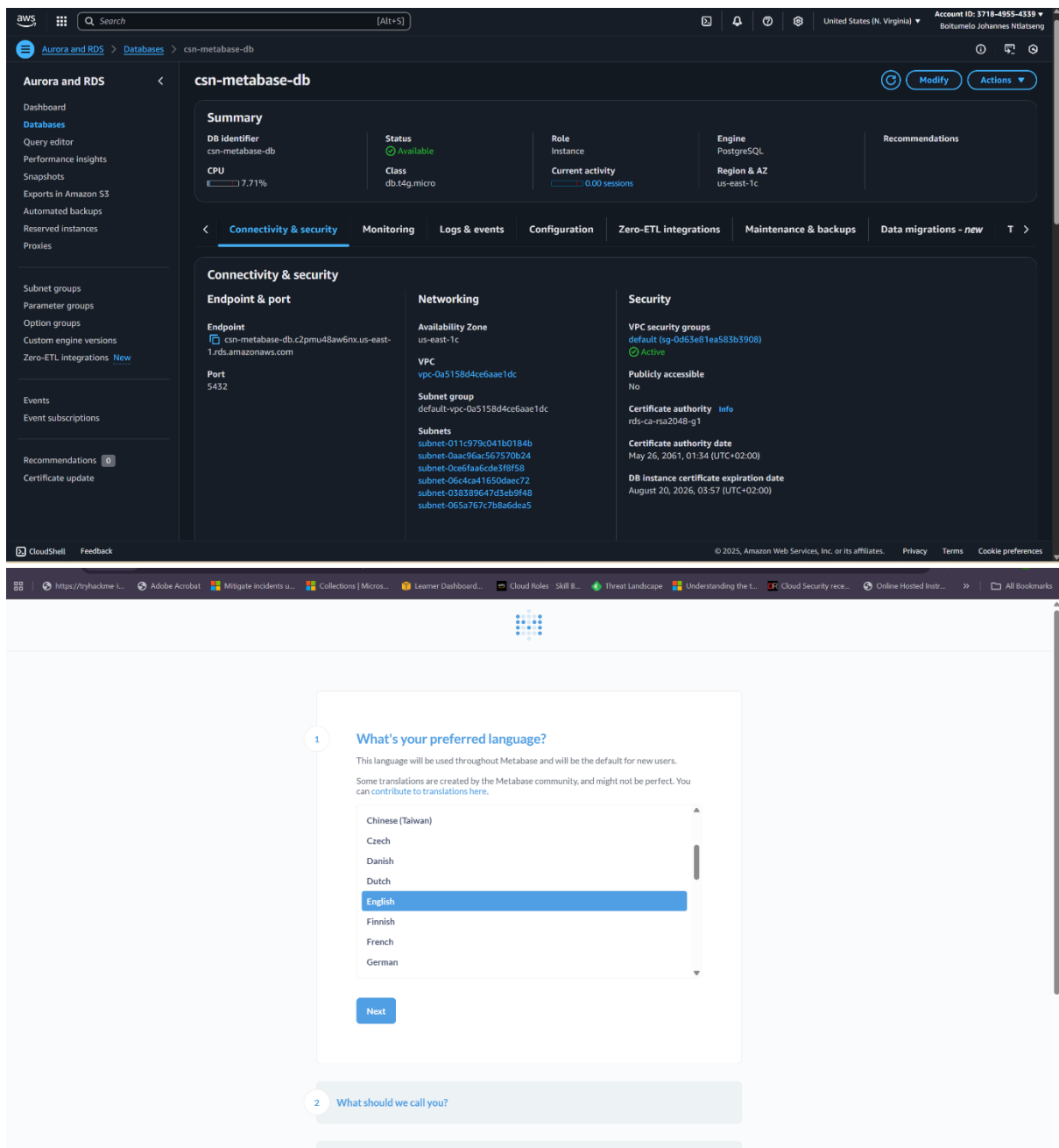
Image

Private registry

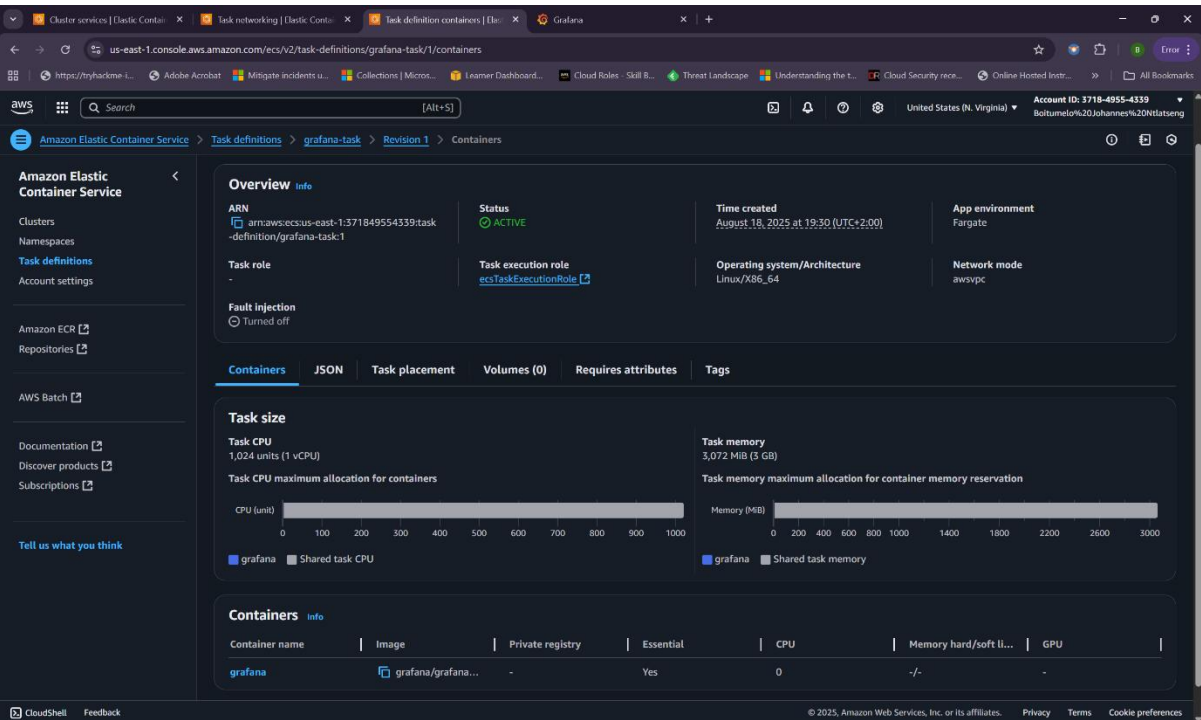
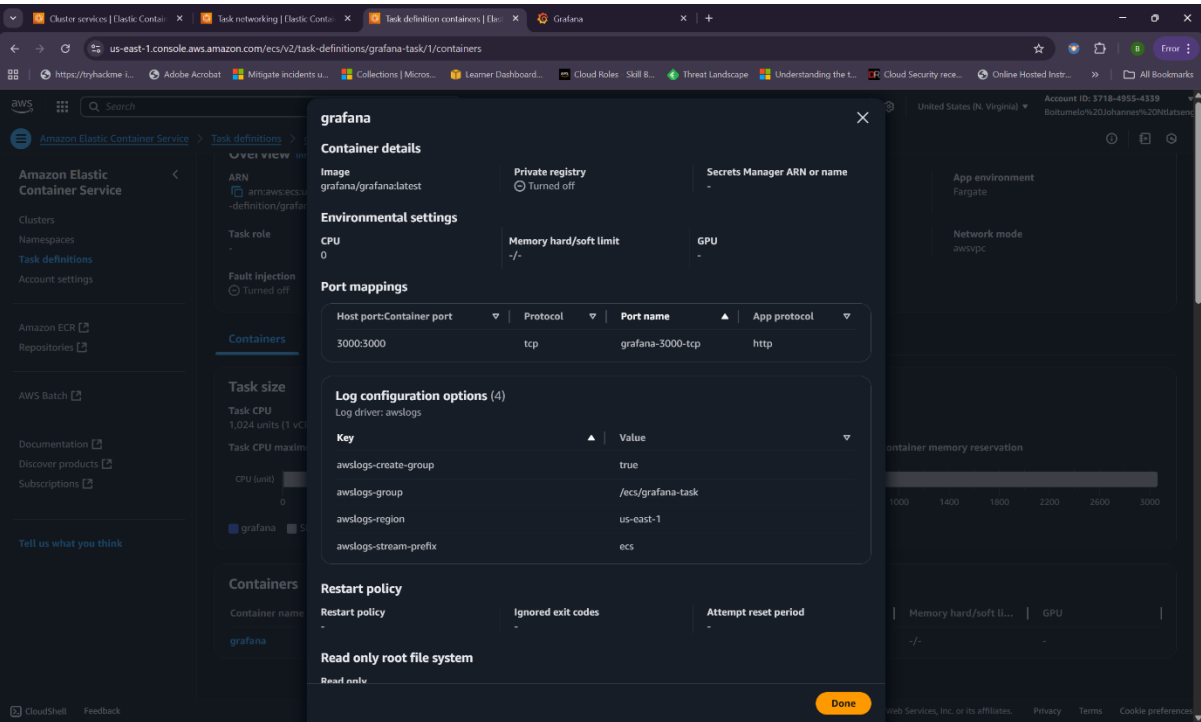
Secrets Manager ARN or name

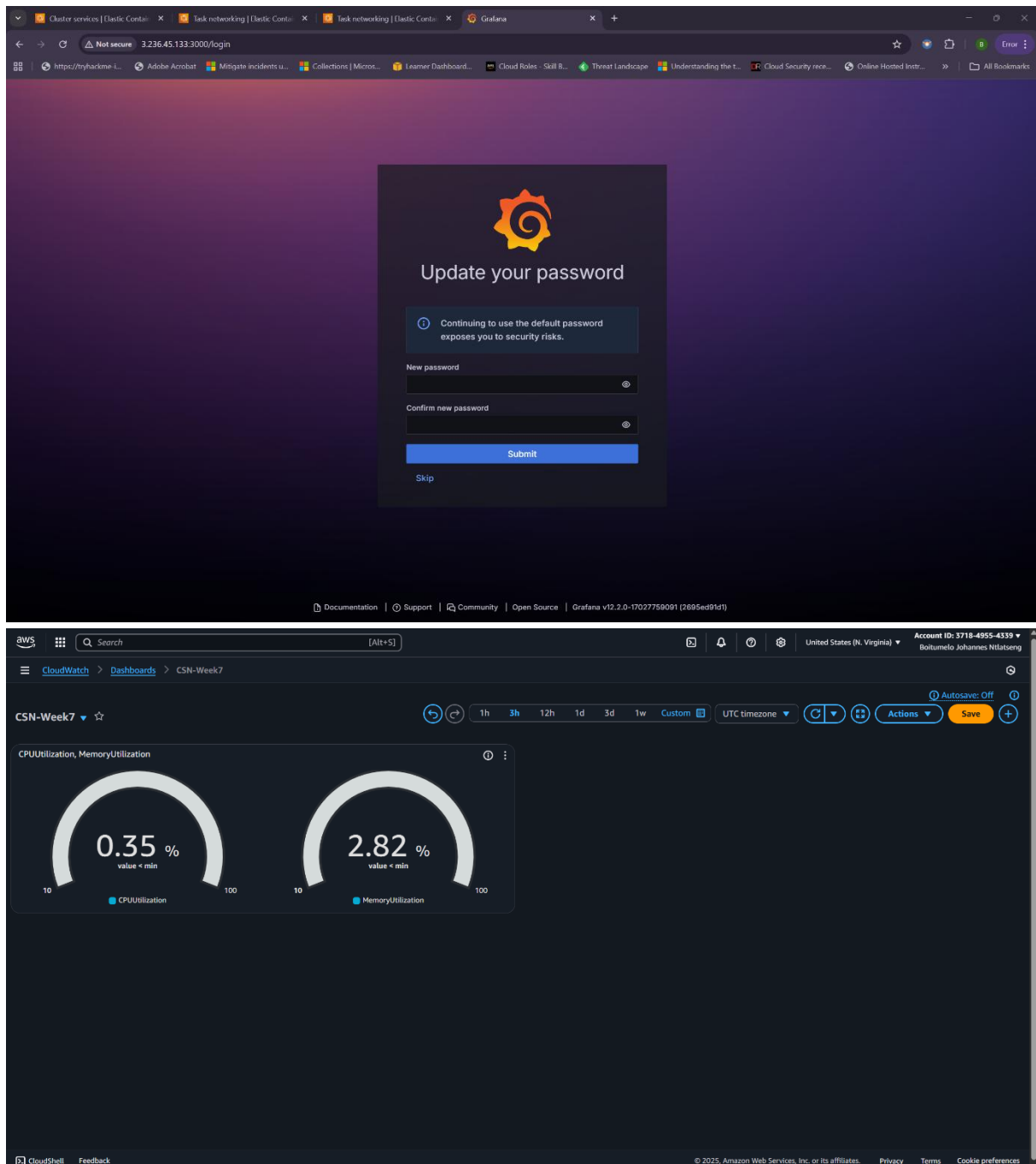
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Week 7: Created CloudWatch dashboard with widgets for CPUUtilization and MemoryUtilization to monitor the ECS task in real time.





Week 8: Deployed static website using Amazon S3 and CloudFront to make my website secure. Configured the bucket for public access by adding appropriate bucket policy.

Browser tabs and address bar showing the CloudFront URL: `d2r3yp7c6oy87m.cloudfront.net`. The tabs include:

- https://tryhackme L...
- Adobe Acrobat
- Mitigate incidents u...
- Collections | Micros...
- Learner Dashboard...
- Cloud Roles - Skill B...
- Threat Landscape
- Understanding the...
- Cloud Security rec...
- Online Hosted Instr...
- All Bookmarks

Email: boitumelo@example.com | Phone: +27 123 456 7890 | LinkedIn: [linkedin.com/in/boitumelo](https://www.linkedin.com/in/boitumelo)

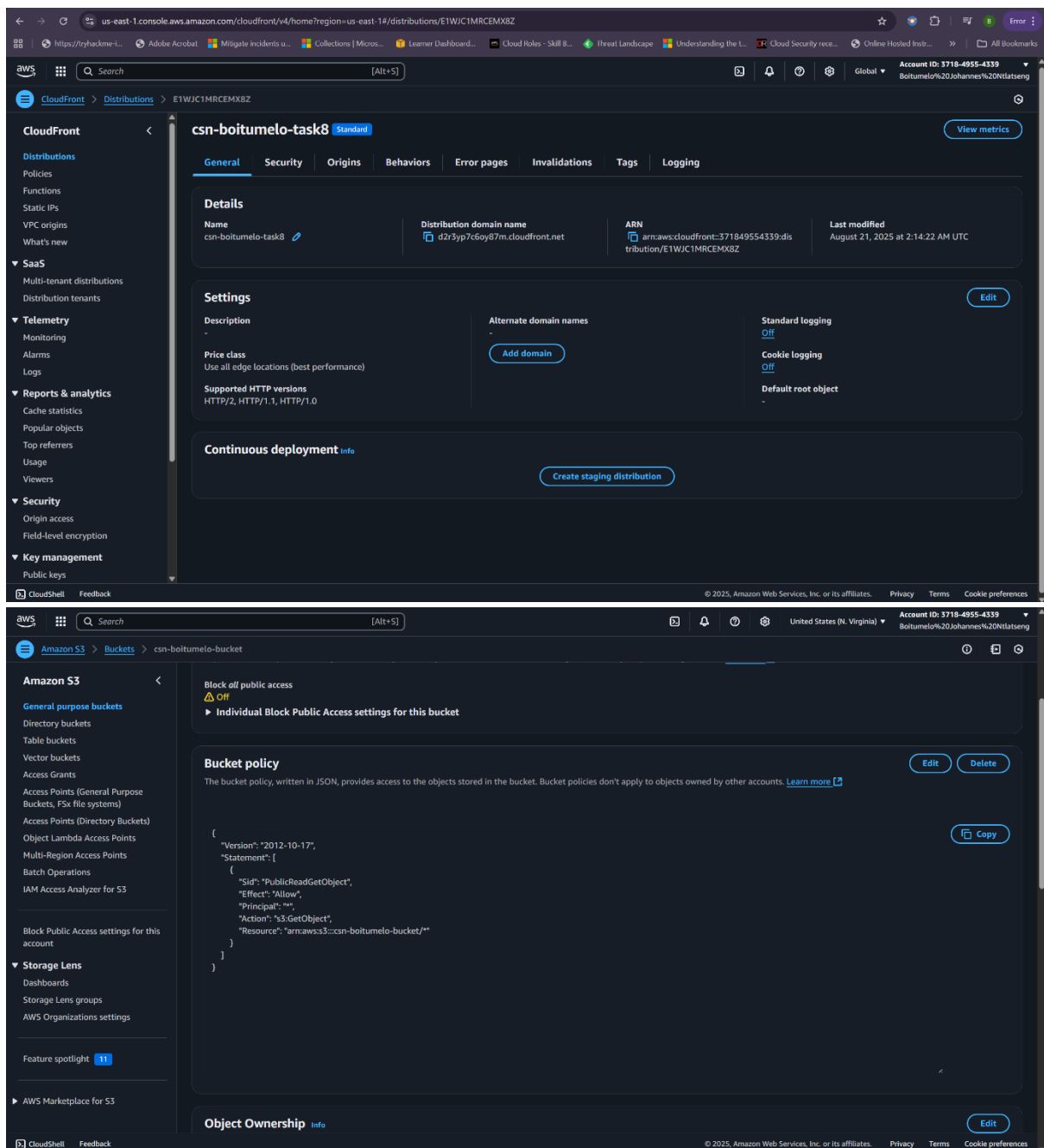
Detail-oriented IT professional with experience in cloud computing, network infrastructure, and cybersecurity. Skilled in Azure, Windows Server, networking protocols, and hands-on IT support.

- Cloud: Azure, AWS basics
- Networking: Cisco, VLAN, BGP, OSPF, EIGRP, SD-WAN
- Operating Systems: Windows Server 2022, Ubuntu
- Security: Cybersecurity fundamentals, incident response
- Tools: Hyper-V, VirtualBox, AnyDesk, UltraVNC
- Web/Programming: HTML, CSS, C#, .NET

Junior Field Engineer - SITA (OR Tambo International Airport)

2024 - Present

- Prepared desktops for Azure Cloud integration.



Week 9: I registered a domain and connected it to AWS Route 53 by updating the nameservers with those from my hosted zone. Created CloudFront distribution that serves my S3 static website. Requested free SSL certificate using Amazon Certificate Manager.

Search

[AWS Certificate Manager](#) >
 [Certificates](#) >
 06b47e32-8cc0-4e74-940a-64cbcd8a289c

[Alt+5]

United States (N. Virginia)

Account ID: 3718-4955-4339
boitumelo%20Johannes%20Veltens@ng

AWS Certificate Manager (ACM)

- List certificates
- Request certificate
- Import certificate
- AWS Private CA

06b47e32-8cc0-4e74-940a-64cbcd8a289c Delete

Certificate status

Identifier 06b47e32-8cc0-4e74-940a-64cbcd8a289c ARN arn:aws:acm-us-east-1:371849554339:certificate/06b47e32-8cc0-4e74-940a-64cbcd8a289c Type Amazon Issued	Status Issued
--	--

Domains (1) Create records in Route 53 Export to CSV

< | >

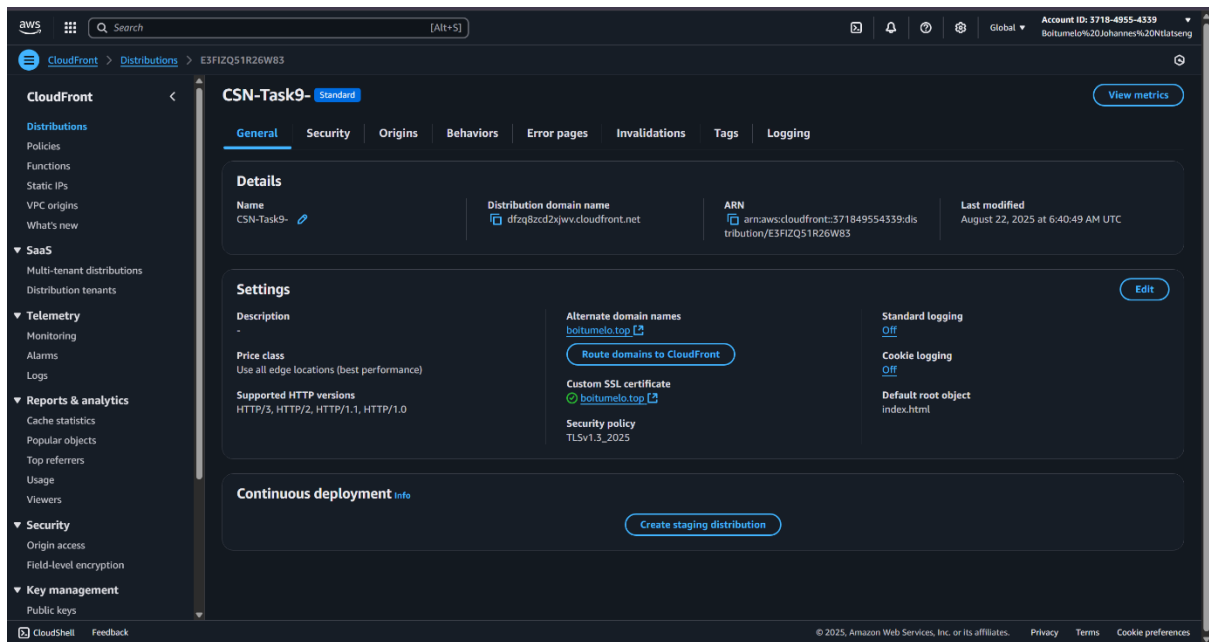
Domain	Status	Renewal status	Type	CNAME name	CNAME value
boitumelo.top	Success	-	CNAME	b1327032337a702419e0a7b025c6f27e.boitumelo.top.	_t1fdb3f9; validation

Details

In use Yes	Serial number 05:fbaeca7c1b45e6bb12f92089eb38b47	Requested at August 22, 2025, 08:27:06 (UTC+02:00)	Renewal eligibility Eligible
Domain name boitumelo.top	Public key info RSA 2048	Issued at August 22, 2025, 08:27:34 (UTC+02:00)	Export option Disabled
Number of additional names 0	Signature algorithm SHA-256 with RSA	Not before August 22, 2025, 02:00:00 (UTC+02:00)	

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Week 10: Created an S3 bucket that automatically trigger a lambda function whenever a new file is uploaded to the bucket.

CloudWatch Log groups > /aws/lambda/s3UploadFunction > 2025/08/23/[LATEST]2c1573302549495d8fedac4d6d3df4c

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](#)

Filter events - press enter to search

Clear 1m 30m 1h 12h Custom UTC timezone Display

Timestamp	Message
2025-08-23T15:10:11.741Z	[ERROR] KeyError: "SENDER_EMAIL" Traceback (most recent call last): File "/var/task/lambda_function.py", line 53, in lambda_handler raise e File "/...
2025-08-23T15:10:11.761Z	END RequestId: b4569c23-4ced-42f4-832c-c0b0d576109
2025-08-23T15:10:11.761Z	REPORT RequestId: b4569c23-4ced-42f4-832c-c0b0d576109 Duration: 24.93 ms Billed Duration: 25 ms Memory Size: 128 MB Max Memory Used: 84 MB
2025-08-23T15:11:40.359Z	START RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e Version: \$LATEST
2025-08-23T15:11:40.368Z	[INFO] 2025-08-23T15:11:40.359Z 76e64138-8ba6-4284-becc-3f03a028e37e File uploaded: Diploma.pdf in bucket: csnoitumelotask10
2025-08-23T15:11:40.368Z	[ERROR] 2025-08-23T15:11:40.368Z 76e64138-8ba6-4284-becc-3f03a028e37e Error processing S3 event: "SENDER_EMAIL"
2025-08-23T15:11:40.368Z	[ERROR] KeyError: "SENDER_EMAIL" Traceback (most recent call last): File "/var/task/lambda_function.py", line 53, in lambda_handler raise e File "/...
2025-08-23T15:11:40.400Z	END RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e
2025-08-23T15:11:40.400Z	REPORT RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e Duration: 40.62 ms Billed Duration: 41 ms Memory Size: 128 MB Max Memory Used: 84 MB
2025-08-23T15:12:46.519Z	START RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e Version: \$LATEST
2025-08-23T15:12:46.519Z	[INFO] 2025-08-23T15:12:46.519Z 76e64138-8ba6-4284-becc-3f03a028e37e File uploaded: Diploma.pdf in bucket: csnoitumelotask10
2025-08-23T15:12:46.519Z	[ERROR] 2025-08-23T15:12:46.519Z 76e64138-8ba6-4284-becc-3f03a028e37e Error processing S3 event: "SENDER_EMAIL"
2025-08-23T15:12:46.519Z	[ERROR] KeyError: "SENDER_EMAIL" Traceback (most recent call last): File "/var/task/lambda_function.py", line 53, in lambda_handler raise e File "/...
2025-08-23T15:12:46.580Z	END RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e
2025-08-23T15:12:46.580Z	REPORT RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e Duration: 59.79 ms Billed Duration: 60 ms Memory Size: 128 MB Max Memory Used: 84 MB
2025-08-23T15:14:53.717Z	START RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e Version: \$LATEST
2025-08-23T15:14:53.717Z	[INFO] 2025-08-23T15:14:53.717Z 76e64138-8ba6-4284-becc-3f03a028e37e File uploaded: Diploma.pdf in bucket: csnoitumelotask10
2025-08-23T15:14:53.717Z	[ERROR] 2025-08-23T15:14:53.717Z 76e64138-8ba6-4284-becc-3f03a028e37e Error processing S3 event: "SENDER_EMAIL"
2025-08-23T15:14:53.717Z	[ERROR] KeyError: "SENDER_EMAIL" Traceback (most recent call last): File "/var/task/lambda_function.py", line 53, in lambda_handler raise e File "/...
2025-08-23T15:14:53.758Z	END RequestId: 76e64138-8ba6-4284-becc-3f03a028e37e

Back to top

Lambda > Functions > s3UploadFunction

Code source Info

Open in Visual Studio Code Upload from

EXTENSOR

- ✓ s3UploadFunction
 - lambda_function.py

DEPLOY

Deploy (Ctrl+Shift+U) Test (Ctrl+Shift+I)

TEST EVENTS (NONE SELECTED)

Create new test event

ENVIRONMENT VARIABLES

```
1 # Set up logging
2 logger = logging.getLogger()
3 logger.setLevel(logging.INFO)
4
5 # Initialize the SES client
6 ses_client = boto3.client("ses")
7
8 def lambda_handler(event, context):
9     try:
10         # Extract bucket and object info from event
11         bucket_name = event["Records"][0]["s3"]["bucket"]["name"]
12         file_name = event["Records"][0]["s3"]["object"]["key"]
13
14         # Log to CloudWatch
15         logger.info(f"File uploaded: {file_name} in bucket: {bucket_name}")
16
17         # Get sender and recipient from environment variables
18         sender_email = os.environ["SENDER_EMAIL"]
19         recipient_email = os.environ["RECIPIENT_EMAIL"]
20
21         # Email subject and body
22         subject = "New File Uploaded to S3"
23         body = f"A new file has been uploaded.\n\nBucket: {bucket_name}\nFile: {file_name}"
24
25         # Send email with SES
26         response = ses_client.send_email(
27             Source=sender_email,
28             Destination={
29                 'ToAddresses': [recipient_email],
30             },
31             Message={
32                 'Subject': subject,
33                 'Body': {'Text': body},
34             },
35         )
```

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

Successfully updated the function **s3UploadFunction**.

Function overview

Diagram **Template**

s3UploadFunction

Layers (0)

S3

+ Add trigger

+ Add destination

Description

Last modified
7 minutes ago

Function ARN
arn:aws:lambda:us-east-1:371849554339:function:s3UploadFunction

Function URL [Info](#)

Export to Infrastructure Composer **Download**

Code **Test** **Monitor** **Configuration** **Aliases** **Versions**

General configuration

Triggers

Permissions

Destinations

Function URL

Environment variables

Tags

Triggers (1) [Info](#) [Fix errors](#) [Edit](#) [Delete](#) [Add trigger](#)

☐ Trigger

☐ **S3: csnboltumelotask10**
arn:aws:s3::csnboltumelotask10
[Details](#)

CloudShell **Feedback**

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Compose

Inbox 10,309

Starred

Snoozed

Sent

Drafts 30

Less

Important

Chats

Scheduled

All Mail

Spam 43

Bin

Categories

Social 3,705

Updates 13,761

Forums

Promotions 5,582

Manage subscriptions

Manage labels

Create new label

Labels

Upgrade

New File Uploaded to S3 [Spam x](#)

johannesboitumelo9@gmail.com [via amazonaws.com](#)

17:29 (6 minutes ago) ☆ ⌵ ⌵ ⌵

Why is this message in spam? This message is similar to messages that were identified as spam in the past.

[Report as not spam](#)

A new file has been uploaded.

Bucket: csnboltumelotask10
File: CV_Boitumelo.pdf

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