

Problem Statement:

You work for XYZ Corporation. Your team is asked to deploy similar architecture multiple times for testing, development, and production purposes. Implement CloudFormation for the tasks assigned to you below.

Tasks To Be Performed:

1. Create a FIFO SQS queue and test by sending messages.
2. Register your mail in SES and send a test mail to yourself.

TASK 1: Create a FIFO SQS Queue & Test It

Step 1: Understand What You're Creating

A FIFO SQS queue:

- Ends with .fifo
- Needs FifoQueue: true
- Needs ContentBasedDeduplication

Create Task 1 CloudFormation Template

1. Open Notepad
2. Paste the following code
3. Save the file as
task1-sqs-fifo.yaml

Paste below code on notepad

AWSTemplateFormatVersion: '2010-09-09'

Description: Task 1 - Create FIFO SQS Queue

Resources:

MyFifoQueue:

Type: AWS::SQS::Queue

Properties:

QueueName: my-test-queue.fifo

FifoQueue: true

ContentBasedDeduplication: true

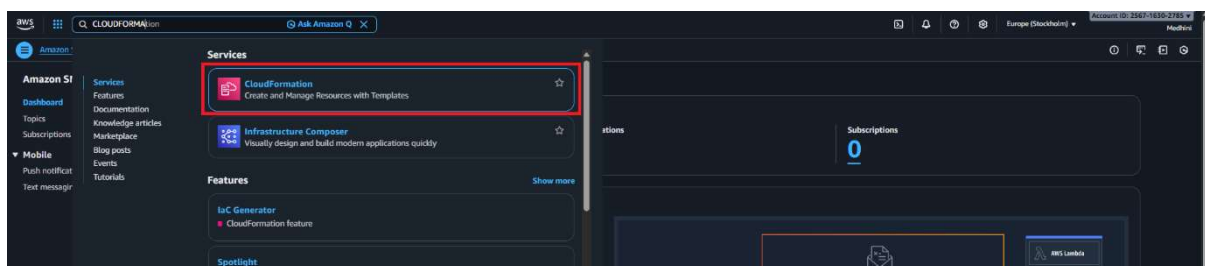
```
task1-sqs-fifo.yaml
File Edit View

AWSTemplateFormatVersion: '2010-09-09'
Description: Task 1 - Create FIFO SQS Queue

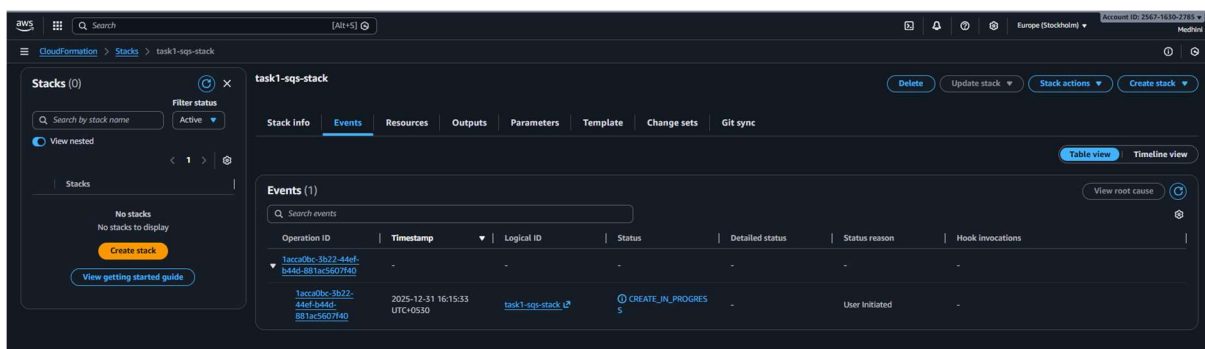
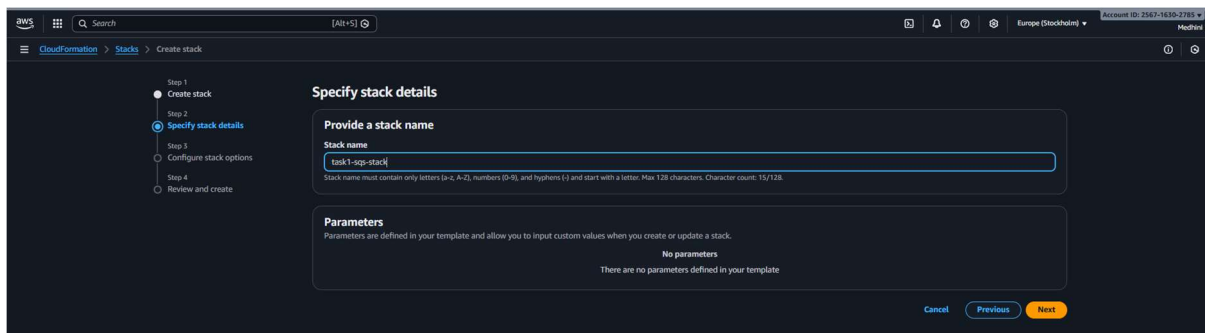
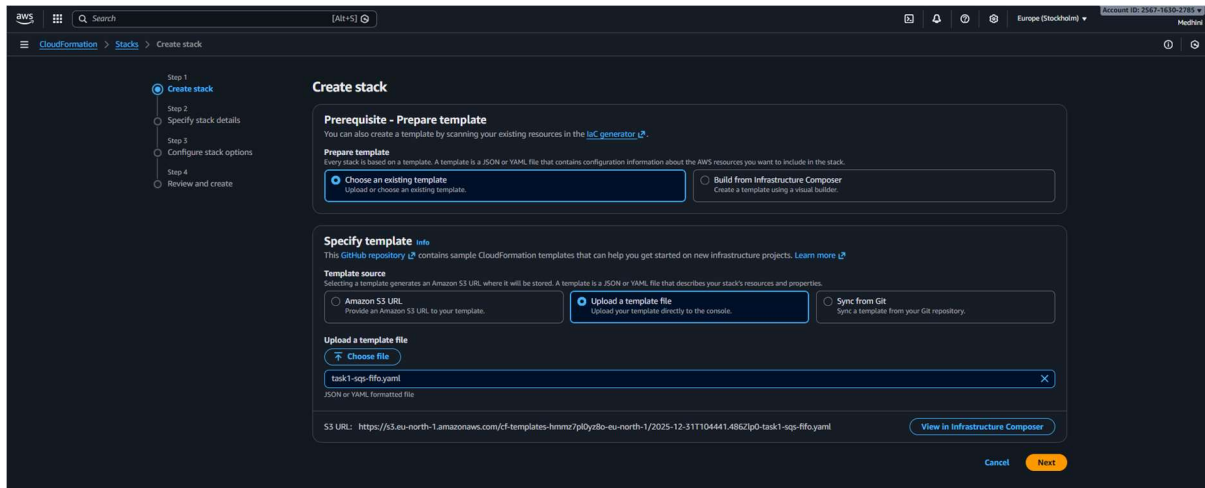
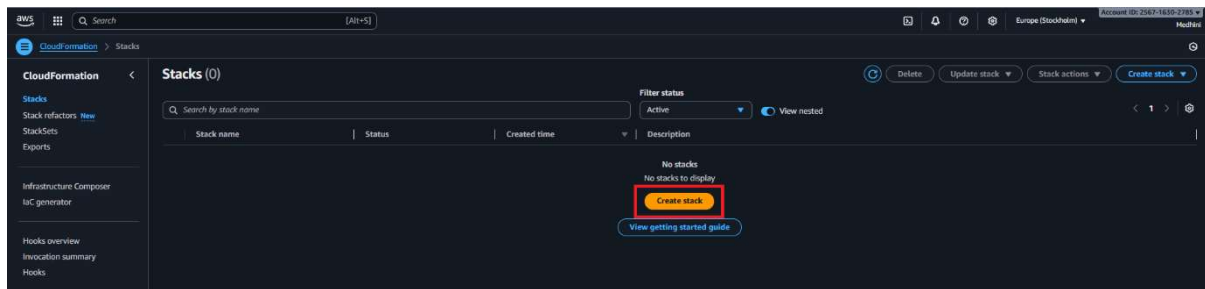
Resources:
  MyFifoQueue:
    Type: AWS::SQS::Queue
    Properties:
      QueueName: my-test-queue.fifo
      FifoQueue: true
      ContentBasedDeduplication: true
```

Step 2: Create Stack in AWS Console

- Go to **AWS Console**
- Search **CloudFormation**
- Click **Create stack**
- Choose **Upload a template file**
- Upload **task1-sqs-fifo.yaml**
- Click **Next**
- Stack name: **task1-sqs-stack**
- Click **Next - Next**
- Check Acknowledge
- Click **Create stack**



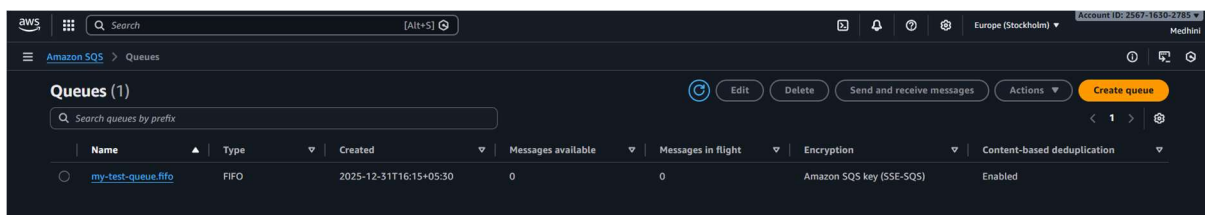
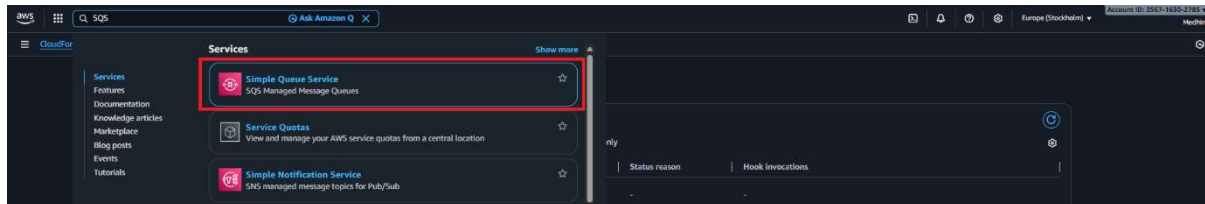
Assignment – 3 – CloudFormation - SES AND SQS



Assignment – 3 – CloudFormation - SES AND SQS

Step 4: Verify FIFO Queue

- Go to SQS
- Click Queues
- You should see **my-test-queue.fifo**

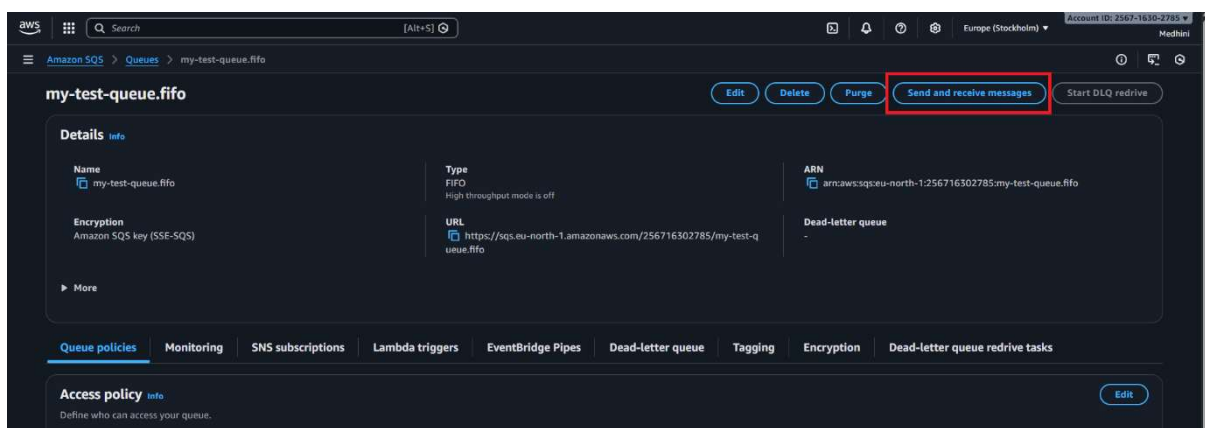
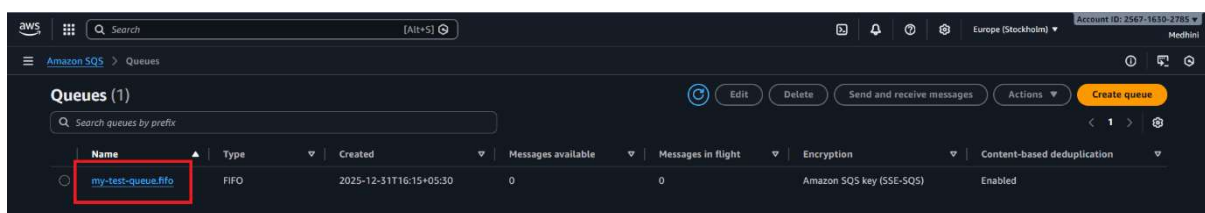


Step 5: Send a Test Message (VERY IMPORTANT)

- Open the queue
- Click Send and receive messages
- Message body:

Hello from FIFO queue

Click on queue



Assignment – 3 – CloudFormation - SES AND SQS

The screenshot shows the 'Send message' form in the AWS Management Console. The form is titled 'Send message' with an 'info' link. It contains three input fields: 'Message body' with the value 'Hello from FIFO queue', 'Message group ID' with the value 'group1', and 'Message deduplication ID - optional'. Below these fields are 'Clear content' and 'Send message' buttons. The 'Send message' button is highlighted with a red box.

The screenshot shows the same 'Send message' form, but now a green confirmation banner at the top states: 'Your message has been sent and is ready to be received.' with a 'View sent message details' link and a close button. The 'Send message' button remains highlighted with a red box.

The screenshot shows the 'Receive messages' section of the AWS Management Console. It includes a 'Poll for messages' button and a table of received messages. The table has columns for 'ID', 'Sent', 'Size', and 'Receive count'. One message is listed with ID 'bcedf38e-0d58-4e12-a18c-17da42c1453d', sent at '2025-12-51T16:21+05:30', size of '22 bytes', and a receive count of '1'. The 'Receive messages' section is highlighted with a red box.

Message received - Task 1 COMPLETE

TASK 2: Register Email in SES & Send Test Mail

Step 1: Understand SES Sandbox (Important)

By default:

- You can send emails ONLY to verified email addresses
- So we will verify your own email

Step 2: Create Task 2 CloudFormation Template

1. Open **Notepad**
2. Paste this
3. Replace your-email@example.com with **your real email**
4. Save as **task2-ses.yaml**

AWSTemplateFormatVersion: '2010-09-09'

Description: Task 2 - Verify SES Email Identity

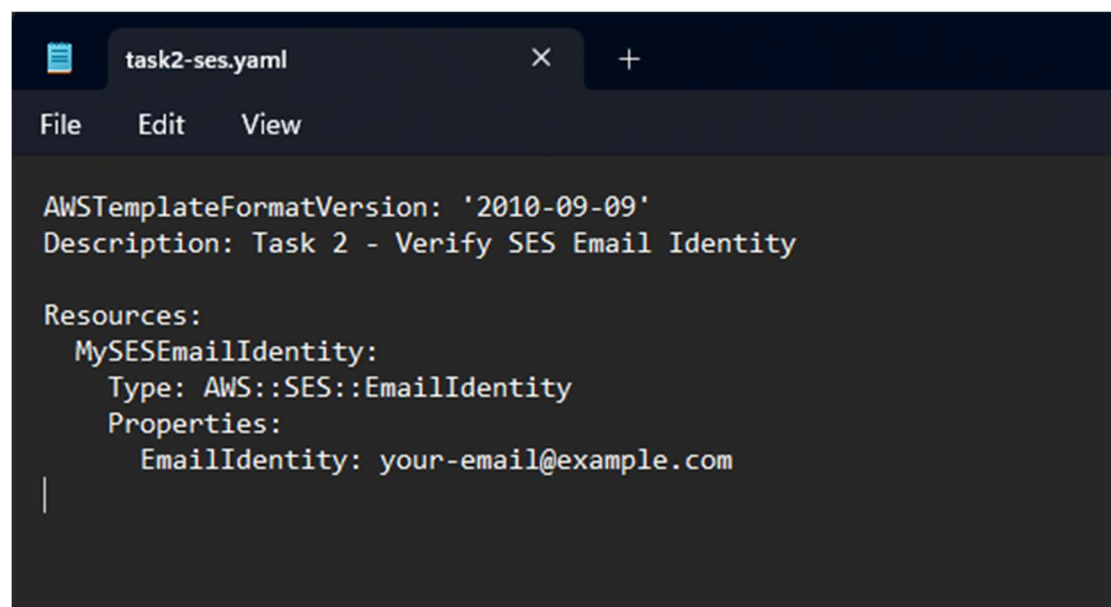
Resources:

MySESEmailIdentity:

Type: AWS::SES::EmailIdentity

Properties:

EmailIdentity: your-email@example.com

A screenshot of a Notepad application window titled 'task2-ses.yaml'. The window has a dark theme and shows the following CloudFormation template content:

```
AWSTemplateFormatVersion: '2010-09-09'
Description: Task 2 - Verify SES Email Identity

Resources:
  MySESEmailIdentity:
    Type: AWS::SES::EmailIdentity
    Properties:
      EmailIdentity: your-email@example.com
```

Assignment – 3 – CloudFormation - SES AND SQS

Step 3: Create SES Stack

- Go to **CloudFormation**
- Click **Create stack**
- Upload **task2-ses.yaml**
- Stack name:
task2-ses-stack
- Click **Next - Next**
- Click **Create stack**

The screenshot shows the 'Create stack' wizard in the AWS CloudFormation console. The left sidebar indicates the current step is 'Create stack'. The main panel is titled 'Create stack' and contains the following sections:

- Prerequisite - Prepare template:** A note stating 'You can also create a template by scanning your existing resources in the [IaC generator](#).' Below this, the 'Prepare template' section explains that every stack is based on a template (JSON or YAML). Two options are available: 'Choose an existing template' (selected) and 'Build from Infrastructure Composer'.
- Specify template info:** A note about the GitHub repository. The 'Template source' section explains that selecting a template generates an Amazon S3 URL. Three options are available: 'Amazon S3 URL', 'Upload a template file' (selected), and 'Sync from Git'.
- Upload a template file:** A 'Choose file' button is shown. Below it, the filename 'task2-ses.yaml' is entered. A note states 'JSON or YAML formatted file'. An 'S3 URL' is generated: 'https://s3.eu-north-1.amazonaws.com/cf-templates-hmmz7pl0yz8o-eu-north-1/2025-12-31T105750.517Zuo1-task2-ses.yaml'. A 'View in Infrastructure Composer' button is also present.

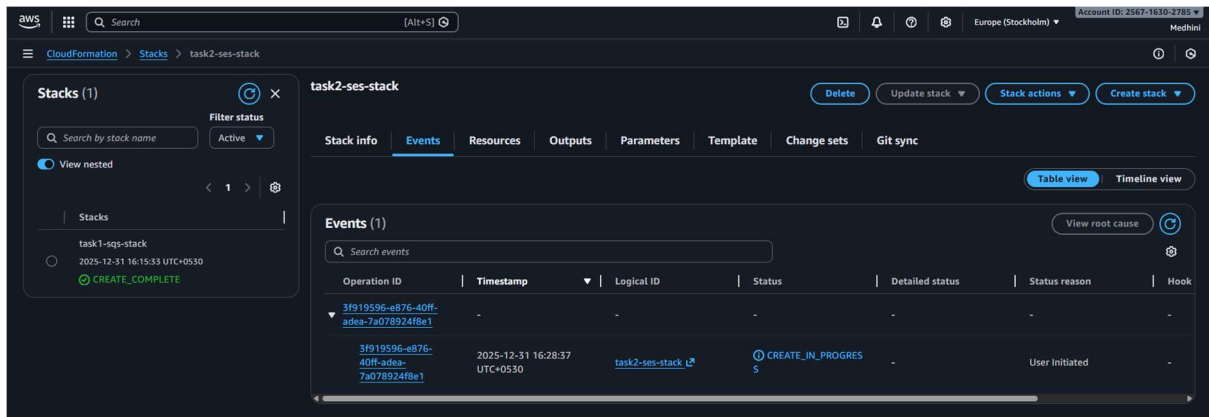
At the bottom right, there are 'Cancel' and 'Next' buttons.

The screenshot shows the 'Specify stack details' step of the 'Create stack' wizard. The left sidebar indicates the current step is 'Specify stack details'. The main panel is titled 'Specify stack details' and contains the following sections:

- Provide a stack name:** A text input field labeled 'Stack name' contains the text 'task2-ses-stack'. A note below the field states: 'Stack name must contain only letters (a-z, A-Z), numbers (0-9), and hyphens (-) and start with a letter. Max 128 characters. Character count: 15/128.'
- Parameters:** A section titled 'Parameters' explains that parameters are defined in the template to allow for custom values. It states 'No parameters' and 'There are no parameters defined in your template'.

At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons.

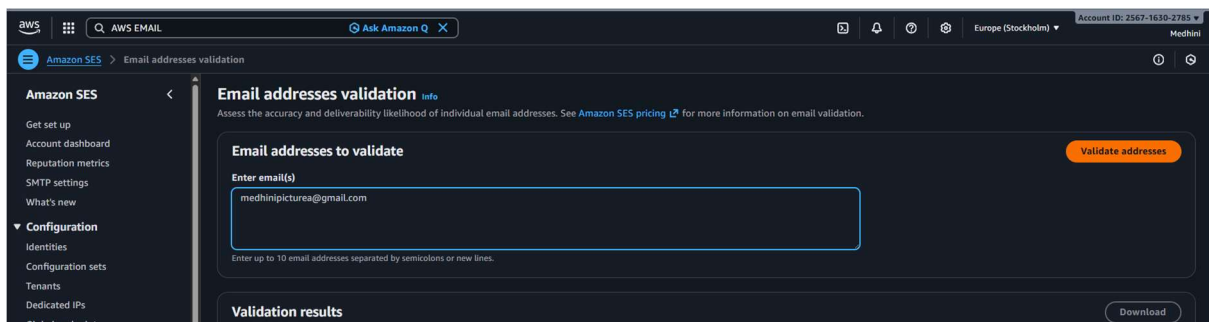
Assignment – 3 – CloudFormation - SES AND SQS



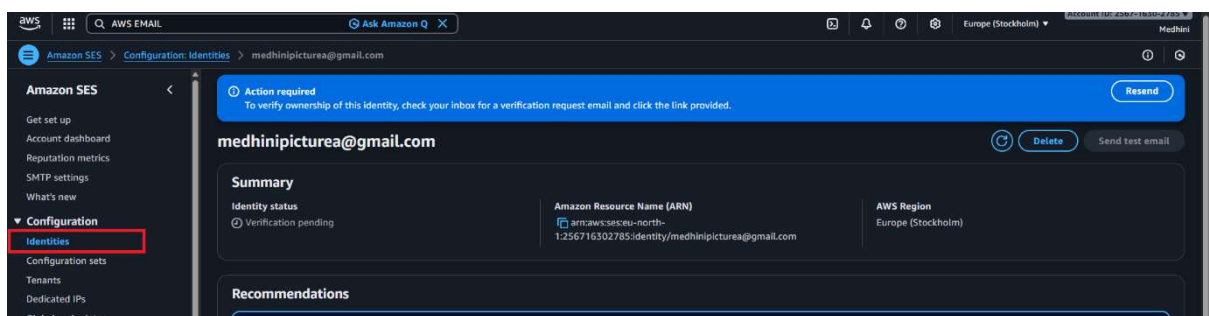
Verify Email (VERY IMPORTANT)

1. Check your **email inbox**
2. You will get an email from **AWS SES**
3. Click **Verify email address**

Now SES is allowed to send mail to you




Verify email address



Assignment – 3 – CloudFormation - SES AND SQS

Go to email

Amazon Web Services – Email Address Verification Request in region Europe (Stockholm) Inbox x

 **Amazon Web Services** <no-reply-aws@amazon.com>
to me ▾

Dear Amazon Web Services Customer,

We have received a request to authorize this email address for use with Amazon SES and Amazon Pinpoint in region Europe (Stockholm). If you requested this verification, please go to the following URL address:

https://email-verification.eu-north-1.amazonaws.com/?Context=256716302785&X-Amz-Date=20251231T113425Z&Identity.IdentityName=medhinipicturea%40gmail.com&X-Amz-Algorithm=AWS4-HMAC-SignedHeaders=host&X-Amz-Credential=AKIA4Y3674RZBFCNGZUE%2F20251231%2F%2Fses%2Faws4_request&Operation=ConfirmVerification&Namespace=Bacon&X-Amz-Signature=bjd8e1cf94462c30

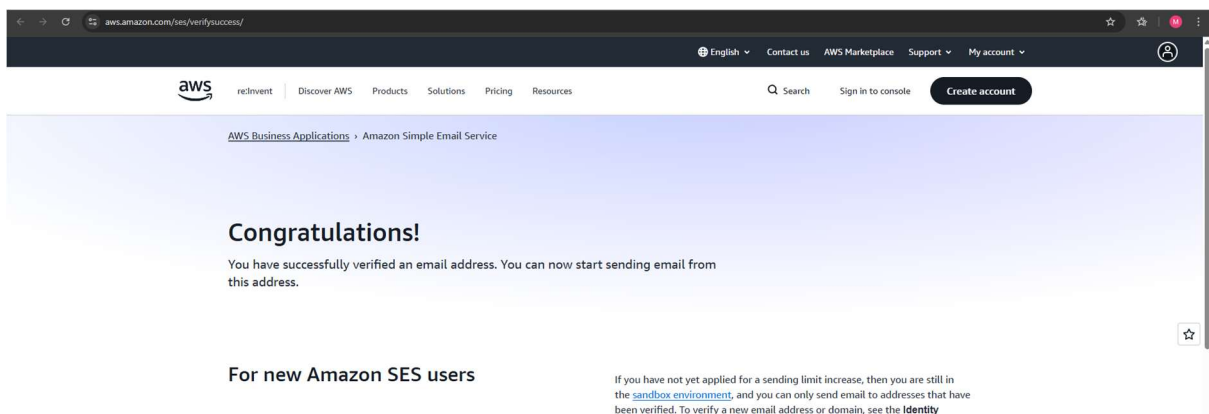
Your request will not be processed unless you confirm the address using this URL. This link expires 24 hours after your original verification request.

If you did NOT request to verify this email address, do not click on the link. Please note that many times, the situation isn't a phishing attempt, but either a misunderstanding of how to use our service, or a phishing attempt on behalf as part of a legitimate service, but without having fully communicated the procedure first.

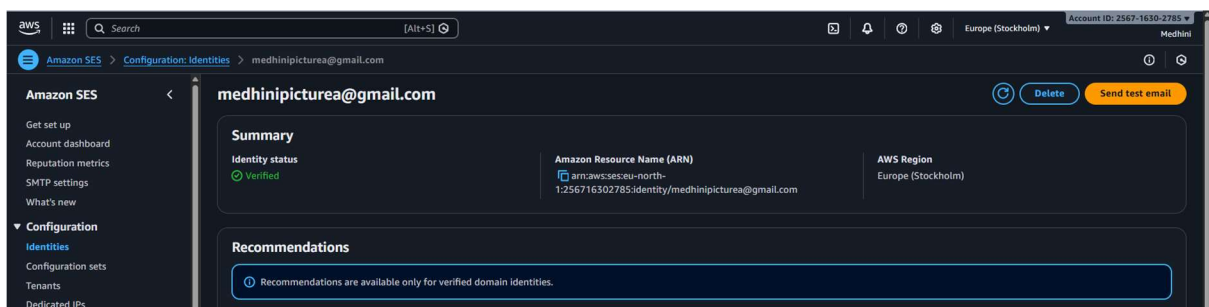
To learn more about sending email from Amazon Web Services, please refer to the Amazon SES Developer Guide at <http://docs.aws.amazon.com/ses/latest/DeveloperGuide/Welcome.html> and Amazon Pinpoint at <http://docs.aws.amazon.com/pinpoint/latest/userguide/welcome.html>.

Sincerely,

The Amazon Web Services Team.



Send Test email



Assignment – 3 – CloudFormation - SES AND SQS

The screenshot shows the AWS Management Console interface for sending a test email. The breadcrumb navigation at the top indicates the path: Amazon SES > Configuration: Identities > medhinipicturea@gmail.com > Send test email. The 'Message details' section is active, showing the 'Email format' as 'Formatted'. Below this, the 'From-address' is 'medhinipicturea@gmail.com'. The 'Scenario' is set to 'Successful delivery' with the email address 'success@simulator.amazonses.com'. The 'Subject' is 'SES Test' and the 'Body' is 'Hello from Amazon SES'. The 'Configuration set' is set to 'Choose a configuration set'. At the bottom right, there are 'Cancel' and 'Send test email' buttons.

Important note

- The simulator address **will NOT send an email to your inbox**
- This still **counts as a successful test**
- AWS instructors & assignments **accept this**

“Verified an email identity in Amazon SES and successfully sent a test email using the SES mailbox simulator.”