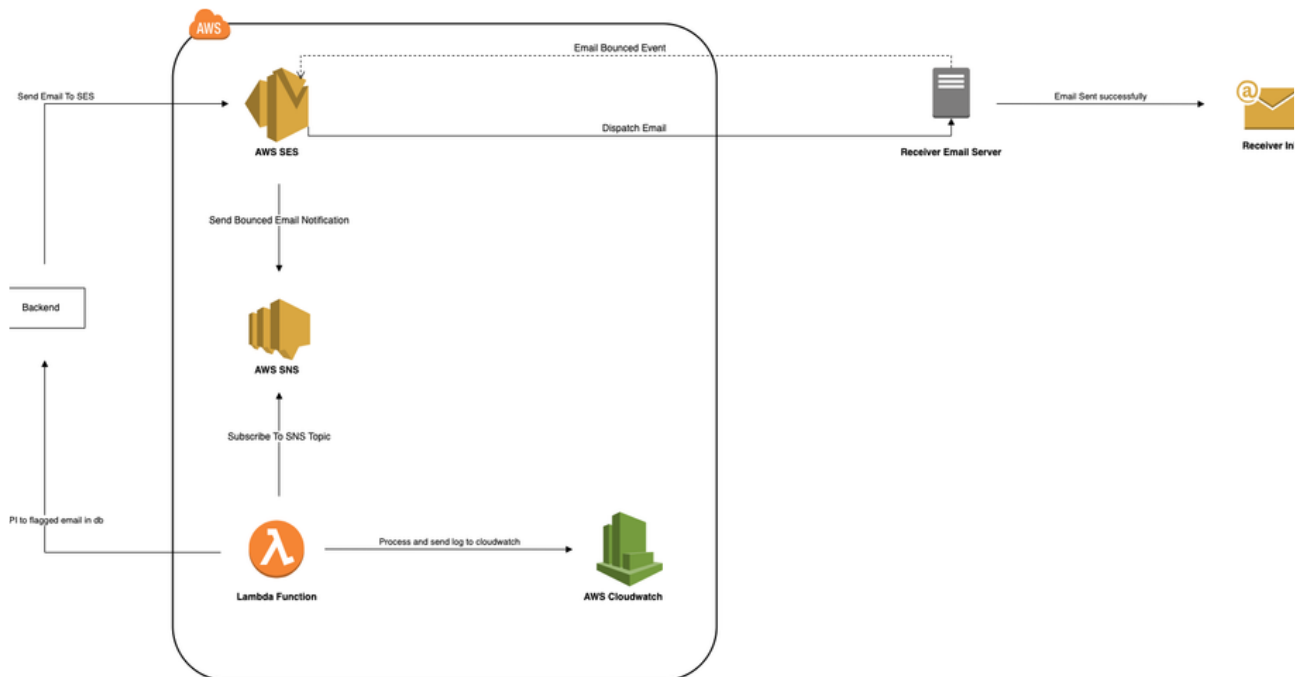


AWS SES - Bounced Emails

What was the problem?

What we have done to fix this issue?

Architecture Diagram



Configurations Steps

The AWS CloudFormation template facilitates the automatic configuration of various architecture components to capture comprehensive bounce notifications and log them in Amazon CloudWatch. However, some manual tasks are still required.

Enable Amazon Simple Notification Service (Amazon SNS) and create a topic to capture the notifications.

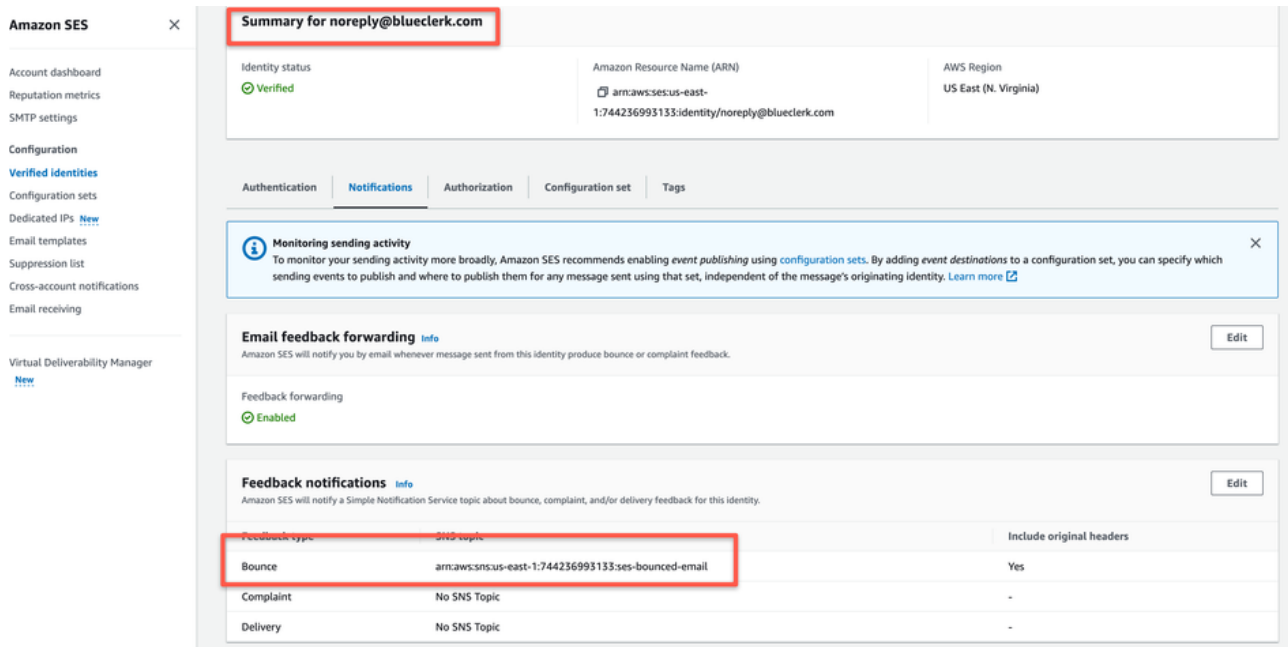
To create a new topic in AWS SNS, follow these steps:

1. Go to the Topics page and click on the "Create topic" button.
2. On the **Create topic** page, fill out the following details in the "Details" section:
 - a. Enter a name for the topic that describes its purpose or content. (**ses-bounced-email**)
 - b. Leave the remaining options at their default settings.
 - c. Enter a display name for the topic, which can be more user-friendly and descriptive than the name.
 - d. Click the **Create topic** button to create the new topic.
3. Once the topic is created, copy the topic ARN (Amazon Resource Name) to your clipboard. The ARN uniquely identifies the topic and is needed to subscribe to it or publish messages to it.

Integrate SNS topic with SES domain

Set up notifications at the domain or email address level to capture the notifications you want to log into CloudWatch.

- Select the **Verified Identity domain** name for which you want to set up bounce notifications
- Click on the **Notifications** tab and select the Feedback Notifications section.
- Click the edit button to navigate to the next page.
- Choose the SNS Topic ARN that you created in the prior step from the dropdown menu and update the Bounce Notifications topic.
- Click **Save** Changes to complete the setup process.



Amazon SES × **Summary for noreply@blueclerk.com**

Identity status: **Verified** | Amazon Resource Name (ARN): **arn:aws:ses:us-east-1:744236993133:identity/noreply@blueclerk.com** | AWS Region: **US East (N. Virginia)**

Authentication | **Notifications** | Authorization | Configuration set | Tags

Monitoring sending activity ⓘ
To monitor your sending activity more broadly, Amazon SES recommends enabling event publishing using [configuration sets](#). By adding event destinations to a configuration set, you can specify which sending events to publish and where to publish them for any message sent using that set, independent of the message's originating identity. [Learn more](#)

Email feedback forwarding ⓘ [Edit](#)
Amazon SES will notify you by email whenever message sent from this identity produce bounce or complaint feedback.

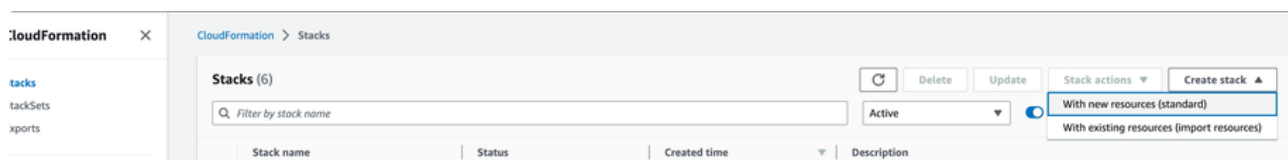
Feedback forwarding: **Enabled**

Feedback notifications ⓘ [Edit](#)
Amazon SES will notify a Simple Notification Service topic about bounce, complaint, and/or delivery feedback for this identity.

Feedback type	SNS topic	Include original headers
Bounce	arn:aws:sns:us-east-1:744236993133:ses-bounced-email	Yes
Complaint	No SNS Topic	-
Delivery	No SNS Topic	-

Steps to run the CloudFormation template:

- Navigate to the CloudFormation Console and select Create Stack.



CloudFormation × **CloudFormation > Stacks**

Stacks (6) [Refresh](#) [Delete](#) [Update](#) [Stack actions](#) [Create stack](#)

Filter by stack name:

Active ☒ [With new resources \(standard\)](#) [With existing resources \(import resources\)](#)

Stack name	Status	Created time	Description
------------	--------	--------------	-------------

- Select the Upload template file radio button and upload the provided YML file located at the bottom.
- Proceed to the next screen by clicking Next on the Create Stack page.

CloudFormation > Stacks > Create stack

Step 1: Create stack

Create stack

Prerequisite - Prepare template

Prepare template
Every stack is based on a template. A template is a JSON or YAML file that contains configuration information about the AWS resources you want to include in the stack.

☒ Template is ready
 ☐ Use a sample template
 ☐ Create template in Designer

Specify template

A template is a JSON or YAML file that describes your stack's resources and properties.

Template source
Selecting a template generates an Amazon S3 URL where it will be stored.

☐ Amazon S3 URL
 ☒ Upload a template file

Upload a template file

No file chosen
JSON or YAML formatted file

S3 URL: Will be generated when template file is uploaded

- Provide a Stack Name, such as "ses-bounce-logging".
- Enter the `ExternalApiLink` endpoint to flag invalid emails.
- Select "**Bounce**" as the Event Type.
- Enter the Amazon Resource Name (ARN) of the Amazon SNS topic created in the prior step in the `SNSTopicName` parameters field.
- Proceed to the next screen by clicking Next.
- On the Configure stack options screen, click Next.
- Select "I acknowledge that AWS CloudFormation might create IAM resources" and click Create Stack to complete the setup process.

After the CloudFormation template has finished running, verify that the resources in the CloudFormation stack have been created. Click on each resource to ensure they have been created successfully.

Sandbox Testing