

Lesson 08 Demo 04

Creating SQS Standard Queue, Visibility Timeout, and DLQ

Objective: To create and manage an Amazon SQS Standard Queue, emphasizing the concepts of visibility timeout and Dead Letter Queue (DLQ)

Tools required: AWS Lab

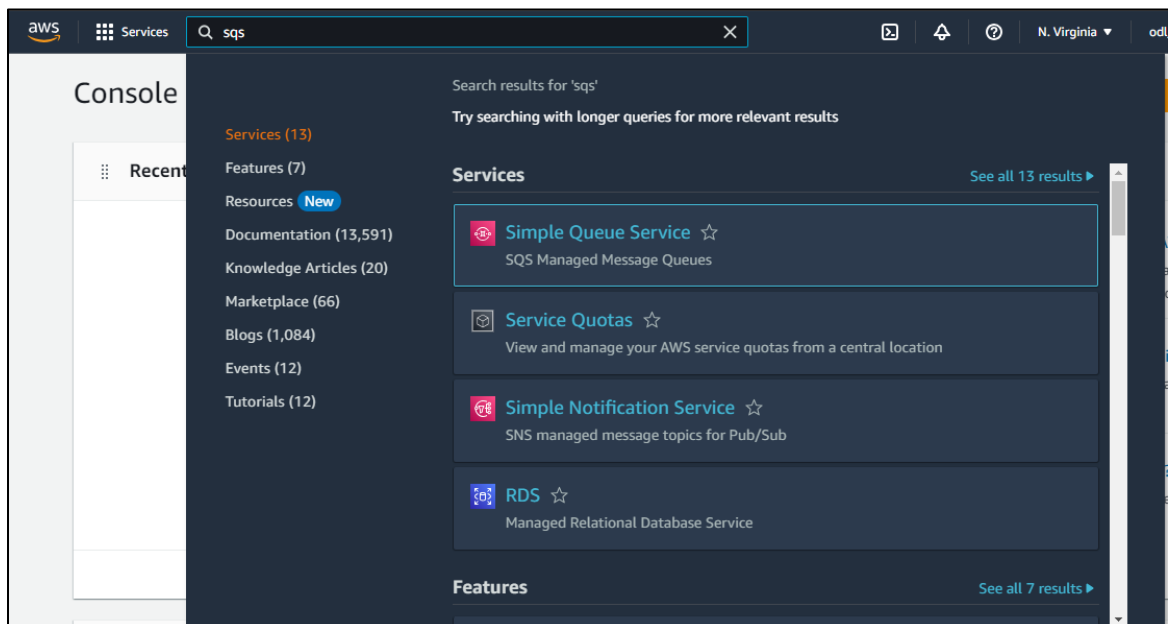
Prerequisites: None

Steps to be followed:

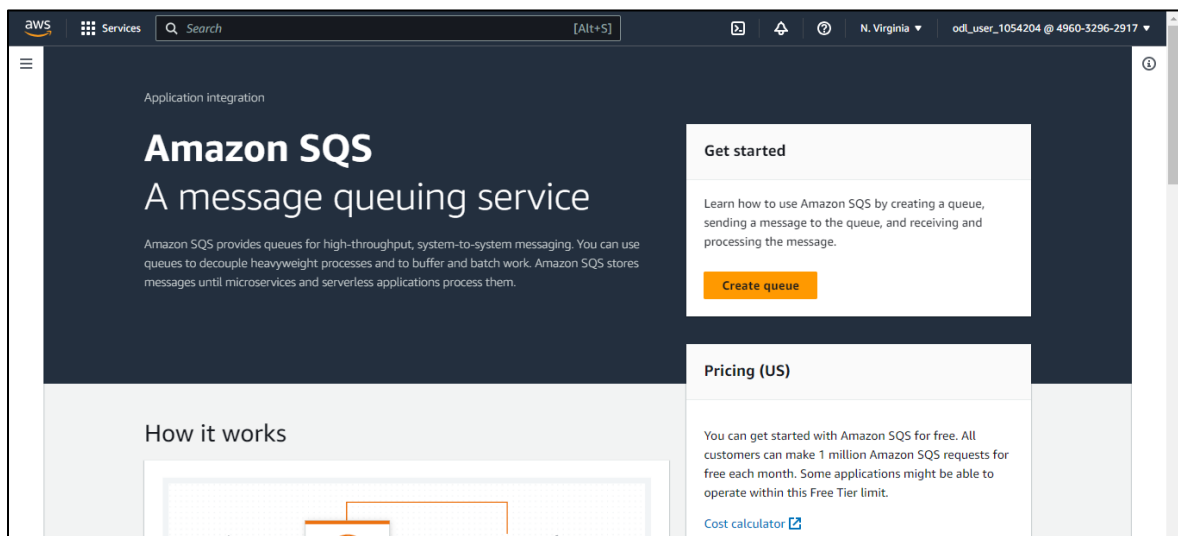
1. Create a standard SQS Queue
2. Send and receive messages
3. Create message polling
4. Edit visibility timeout
5. Create DLQ

Step 1: Create a Standard SQS Queue

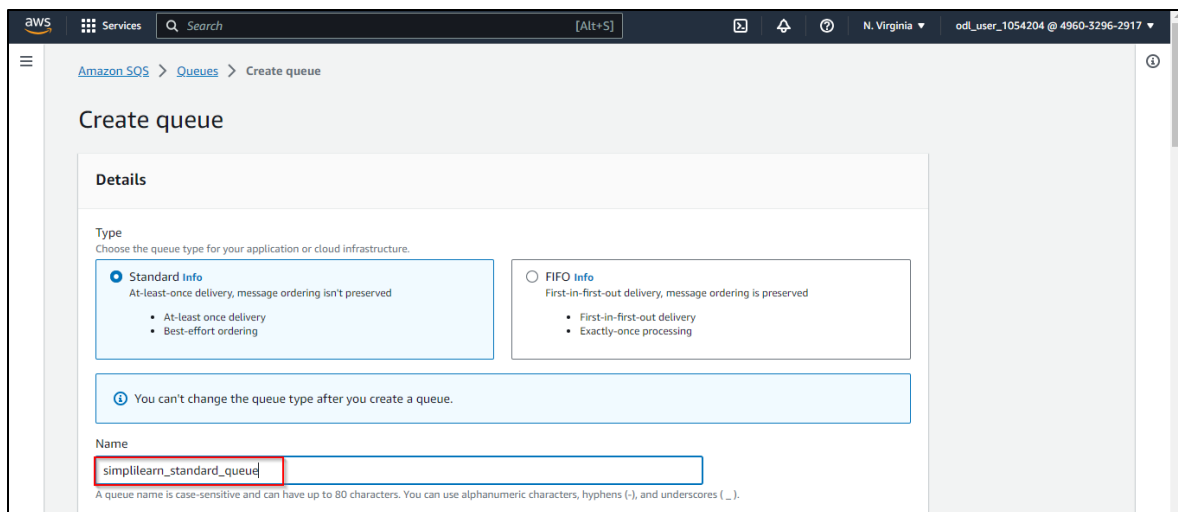
1.1 On the AWS portal, search for and select **SQS**



1.2 Click on the **Create queue** button



1.3 Name the queue **simplilearn_standard_queue**



1.4 In the Configuration section, set the **Delivery delay** to **4 Seconds** and the **Receive message wait time** to **5 Seconds**

Configuration Info

Set the maximum message size, visibility to other consumers, and message retention.

Visibility timeout Info

Seconds ▼

Should be between 0 seconds and 12 hours.

Message retention period Info

Days ▼

Should be between 1 minute and 14 days.

Delivery delay Info

Seconds ▼

Should be between 0 seconds and 15 minutes.

Maximum message size Info

KB

Should be between 1 KB and 256 KB.

Receive message wait time Info

Seconds

Should be between 0 and 20 seconds.

1.5 Keep the default values, and click on the **Create queue** button

Set this queue to receive undeliverable messages.

☒ Disabled
 ☐ Enabled

Tags - Optional Info

A tag is a label assigned to an AWS resource. Use tags to search and filter your resources or track your AWS costs.

Key

Value - optional

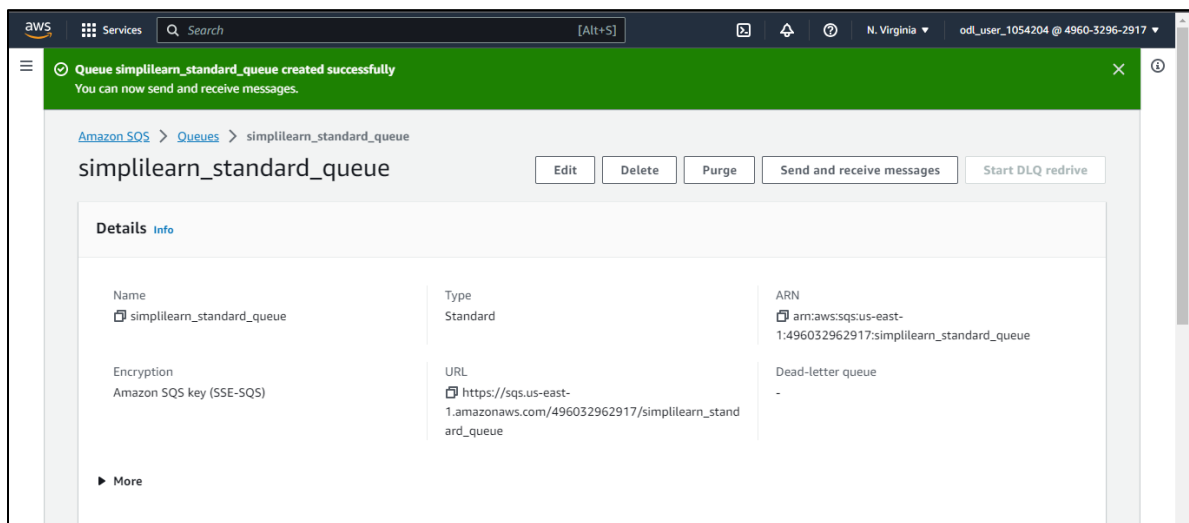
Remove

Add new tag

You can add 49 more tags.

Cancel

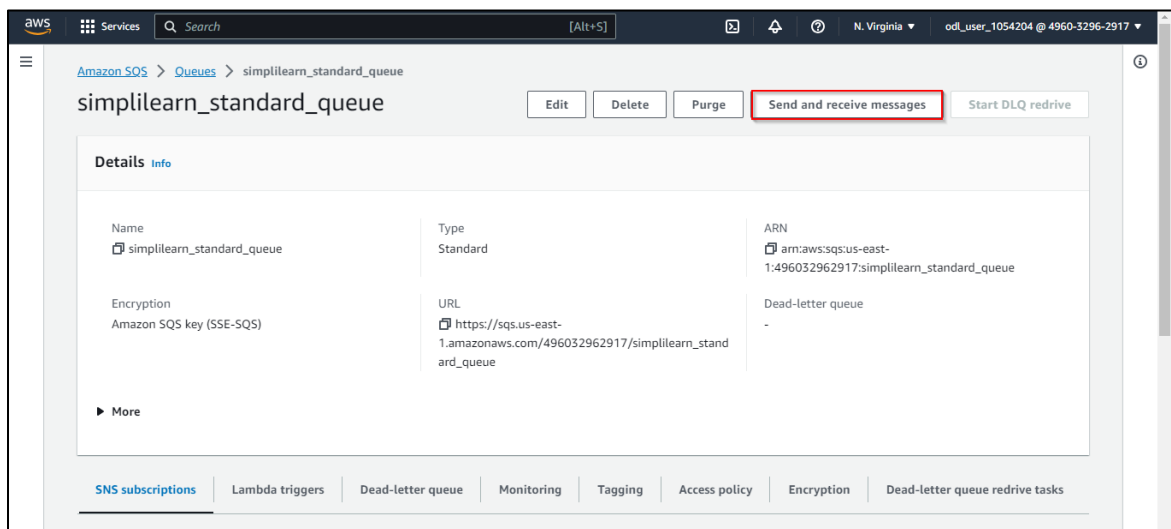
Create queue



The queue has been created successfully.

Step 2: Send and receive messages

2.1 Navigate to the queue dashboard, and click on the **Send and receive messages** option



2.2 In the **Send message** section, specify the following values:

- Message body: **welcome to the Simplilearn**
- Delivery delay: **0**
- Click on the **Send message** button

Send and receive messages

Send messages to and receive messages from a queue.

Send message [Info](#) [Clear content](#) [Send message](#)

Message body
Enter the message to send to the queue.

welcome to the Simplilearn

Delivery delay [Info](#)
0 Seconds
Should be between 0 seconds and 15 minutes.

► Message attributes - Optional [Info](#)

Send message [Info](#) [Clear content](#) [Send message](#)

✓ Your message has been sent and is ready to be received. [View details](#) ✕

Message body

Step 3: Create message polling

3.1 Scroll down and click on the **Poll for messages** button

Receive messages [Info](#) [Edit poll settings](#) [Stop polling](#) [Poll for messages](#)

Messages available	Polling duration	Maximum message count	Polling progress
1	30	10	0 receives/second 0%

Messages (0) [View details](#) [Delete](#)

Search messages


ID	Sent	Size	Receive count
No messages. To view messages in the queue, poll for messages.			

[Poll for messages](#)

3.2 In the **Messages** section, click on the **Message ID** and navigate to the **Body** tab to view it

Receive messages
Info

Edit poll settings
Stop polling
Poll for messages

Messages available	Polling duration	Maximum message count	Polling progress
0	30	10	 0 receives/second

Messages (1)
View details
Delete

<input type="checkbox"/>	ID	Sent	Size	Receive count
<input type="checkbox"/>	0fc05dca-d48e-4801-bf8a-00798ee972d1	2023-08-30T12:21+05:30	26 bytes	2

Message: 0fc05dca-d48e-4801-bf8a-00798ee972d1
X

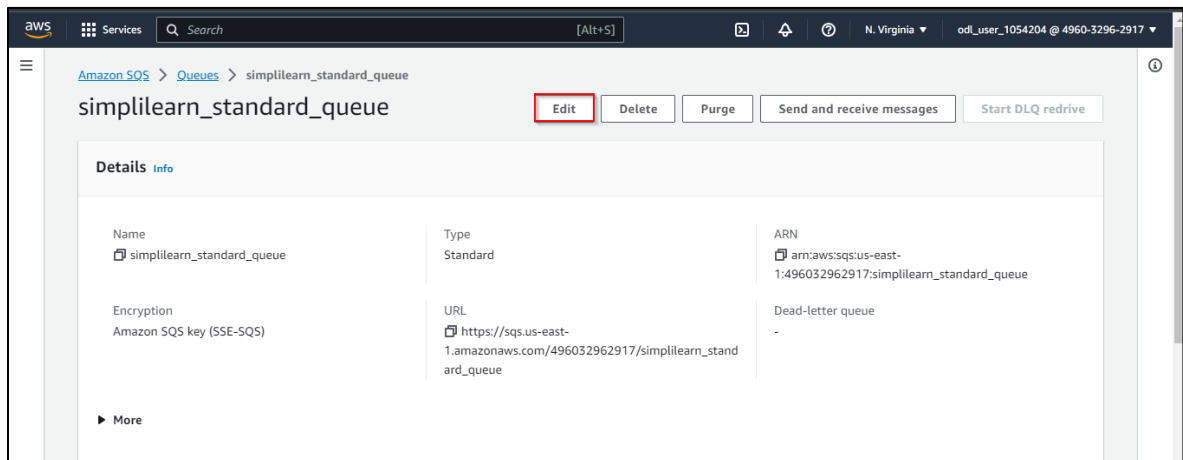
Body
Attributes
Details

welcome to the Simplilearn

Done

Step 4: Edit visibility timeout

4.1 Select `simplilearn_standard_queue` and click **Edit**



4.2 Set the **Visibility timeout** to **10 Seconds** and click on the **Save** button

Configuration [Info](#)

Set the maximum message size, visibility to other consumers, and message retention.

Visibility timeout [Info](#)

10

Seconds

Should be between 0 seconds and 12 hours.

Message retention period [Info](#)

4

Days

Should be between 1 minute and 14 days.

Delivery delay [Info](#)

4

Seconds

Should be between 0 seconds and 15 minutes.

Maximum message size [Info](#)

256

KB

Should be between 1 KB and 256 KB.

Receive message wait time [Info](#)

5

Seconds

Should be between 0 and 20 seconds.

Tags - Optional [Info](#)

A tag is a label assigned to an AWS resource. Use tags to search and filter your resources or track your AWS costs.

No tags associated with this queue.

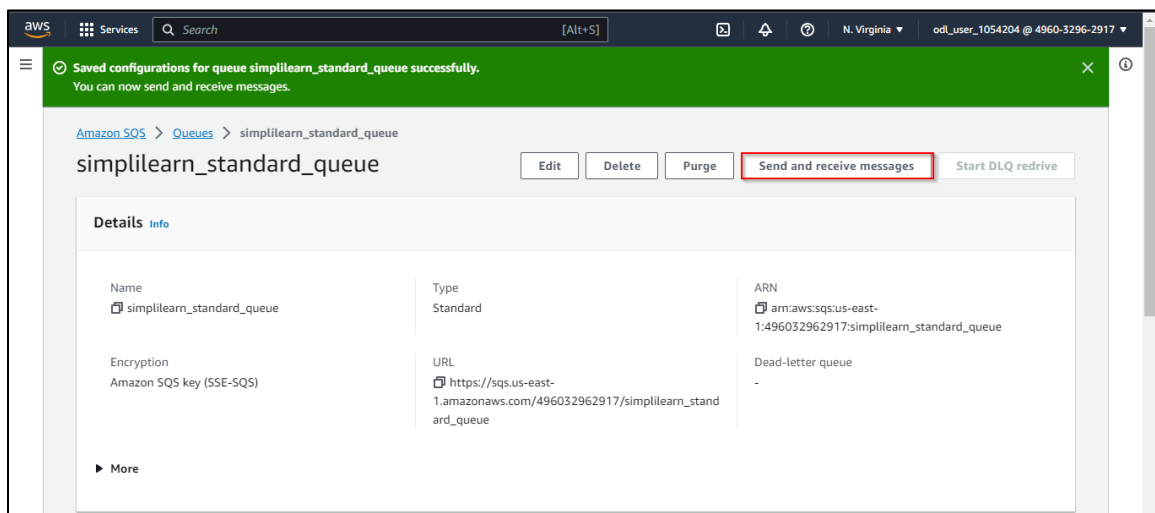
Add new tag

You can add 50 more tags.

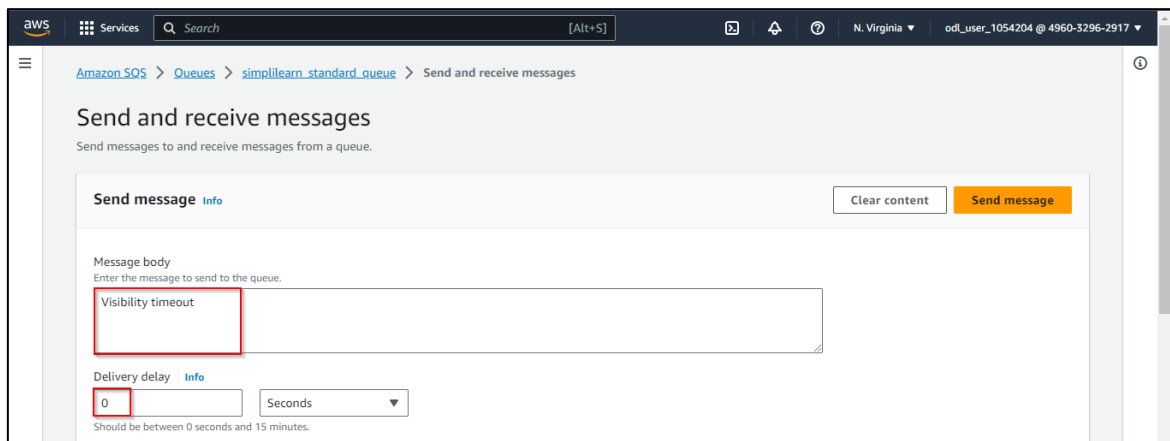
Cancel

Save

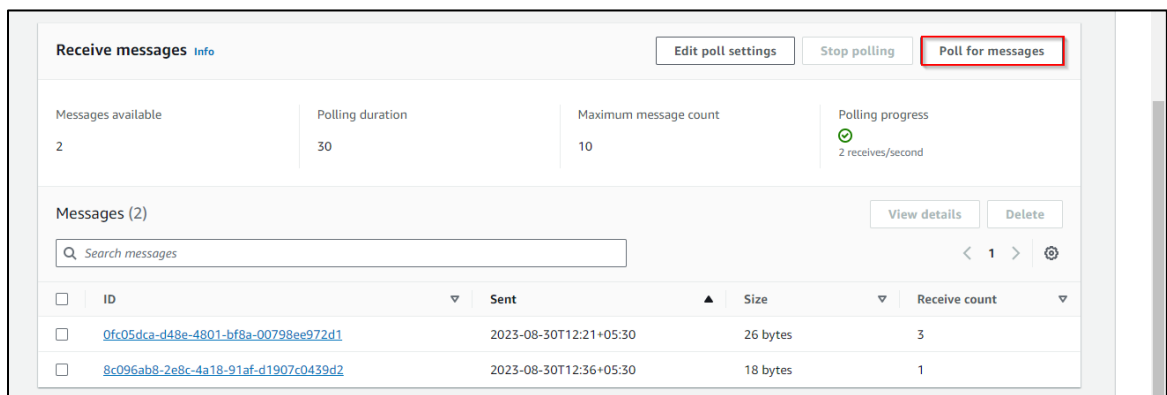
4.3 Click on the **Send and receive messages** option



4.2 In the **Message body** section, enter the **Visibility timeout**, set the **Delivery delay** to **0 Seconds**, and click on the **Send message** button

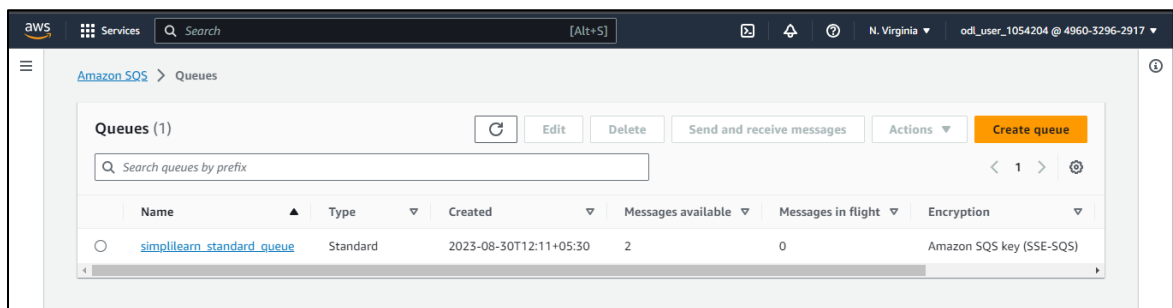


4.3 Click on the **Poll for messages** option

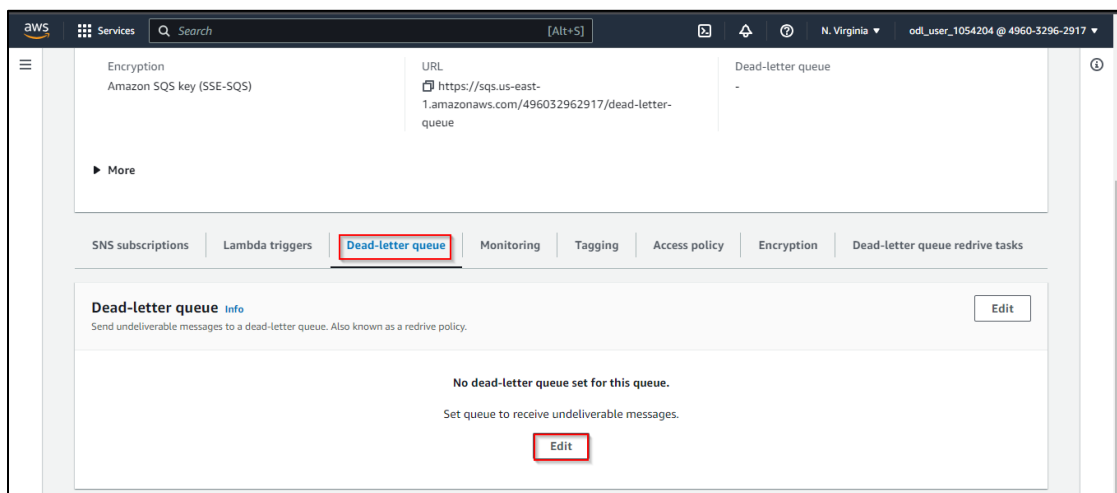


Step 5: Create DLQ

5.1 Create another queue named **dead-letter-queue**, following the steps from 1.1 to 1.5



5.2 Navigate to the **Dead_letter queue** and click on the **Edit** button



5.3 In the **Dead-letter queue** section, enable it, choose queue as **ARN**, enter the **ARN** of the dead-letter queue, and set **Maximum receives** to **1**

Dead-letter queue - Optional [Info](#)
Send undeliverable messages to a dead-letter queue.

Set this queue to receive undeliverable messages.

☐ Disabled
☒ Enabled

Choose queue

arn:aws:sqs:us-east-1:496032962917:simplilearn_standard_queue

Maximum receives

1

Should be between 1 and 1000

Tags - Optional [Info](#)
A tag is a label assigned to an AWS resource. Use tags to search and filter your resources or track your AWS costs.

No tags associated with this queue.

[Add new tag](#)

You can add 50 more tags.

Cancel [Save](#)

5.4 Select the **Simplilearn_Standard_queue** option and click on the **Send and receive messages** button

aws Services Search [Alt+S] N. Virginia odl_user_1054204 @ 4960-3296-2917

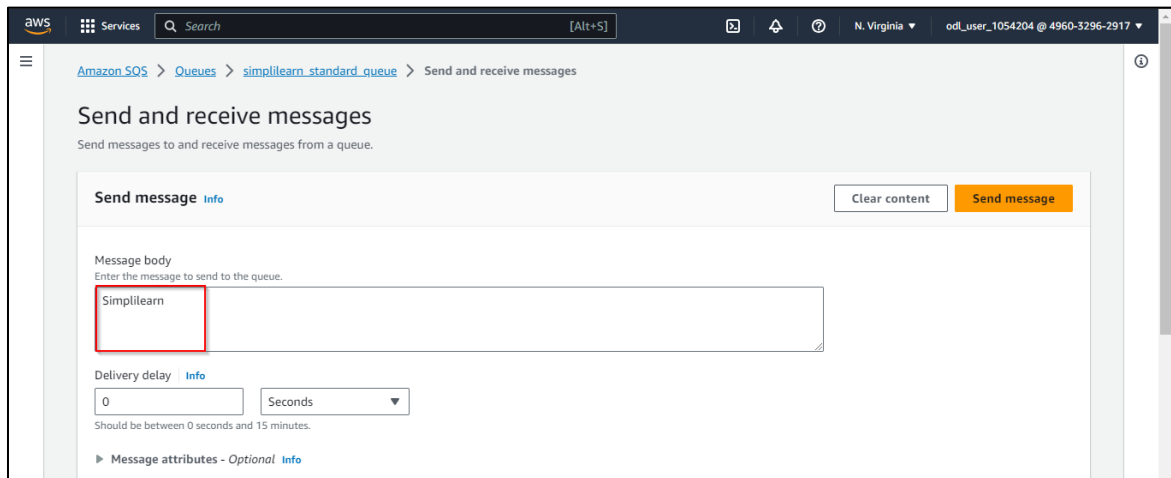
Amazon SQS > Queues

Queues (2) [Refresh](#) [Edit](#) [Delete](#) [Send and receive messages](#) [Actions](#) [Create queue](#)

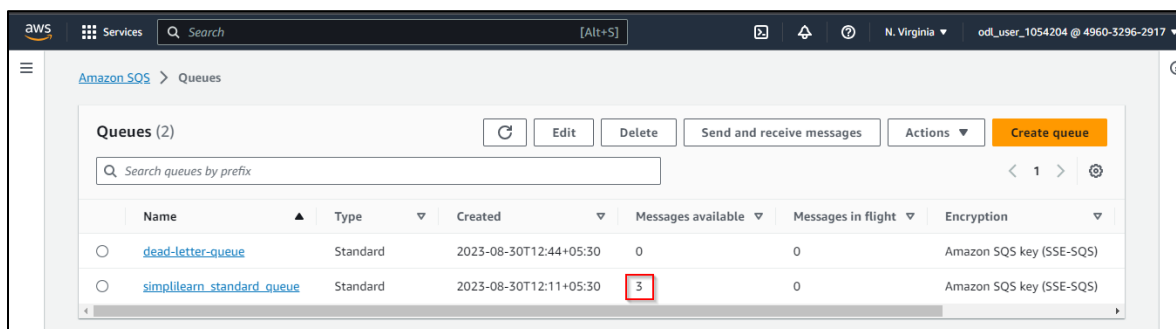
Search queues by prefix

	Name	Type	Created	Messages available	Messages in flight	Encryption
<input type="radio"/>	dead-letter-queue	Standard	2023-08-30T12:44+05:30	0	0	Amazon SQS key (SSE-SQS)
<input checked="" type="radio"/>	simplilearn_standard_queue	Standard	2023-08-30T12:11+05:30	2	0	Amazon SQS key (SSE-SQS)

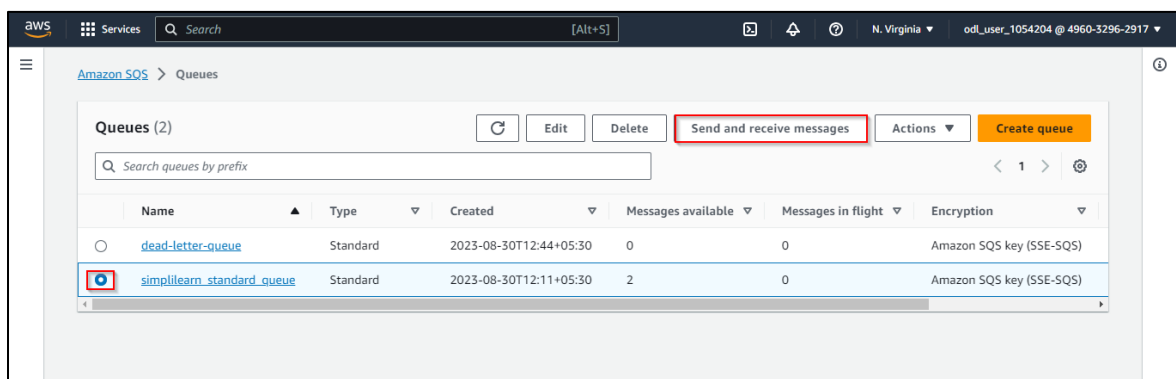
5.5 In the **Message body**, enter **Simplilearn** and click on the **Send message** button



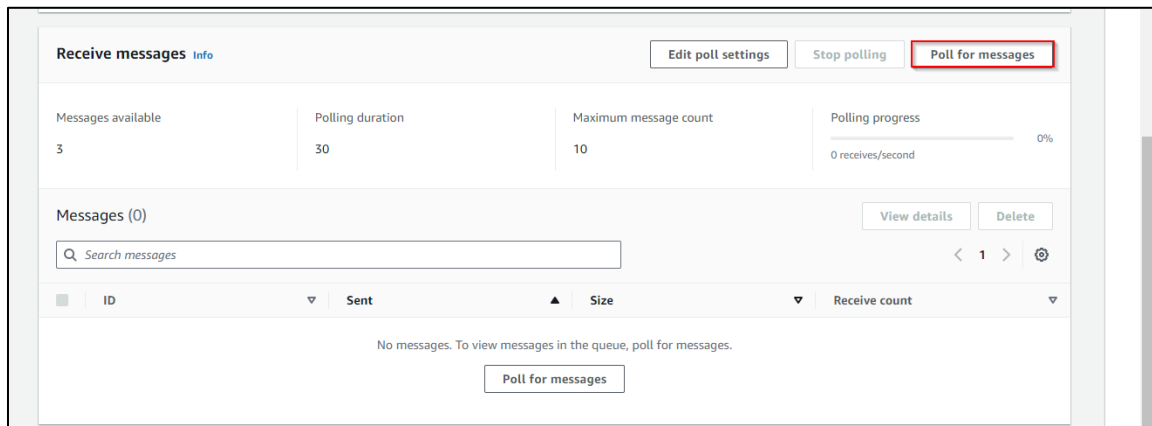
5.6 Navigate back to the **Queues** page, where the message count is **3**



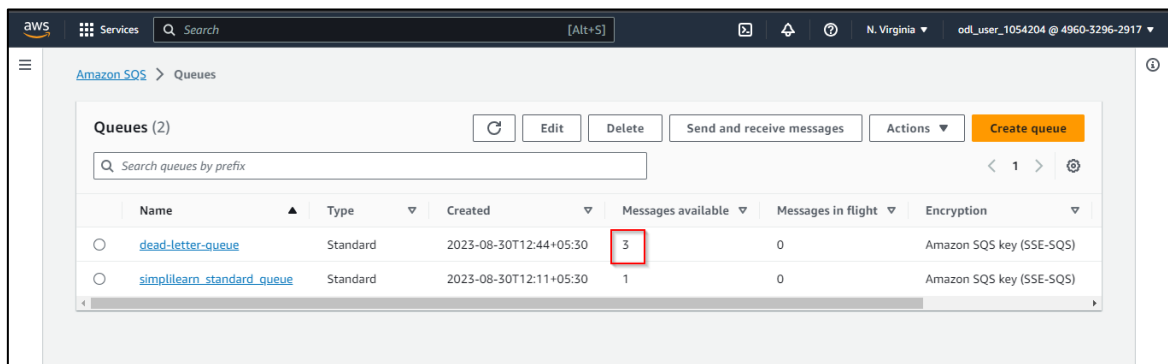
5.7 Select the **Simplilearn_Standard_queue** option and click on the **Send and receive messages** button



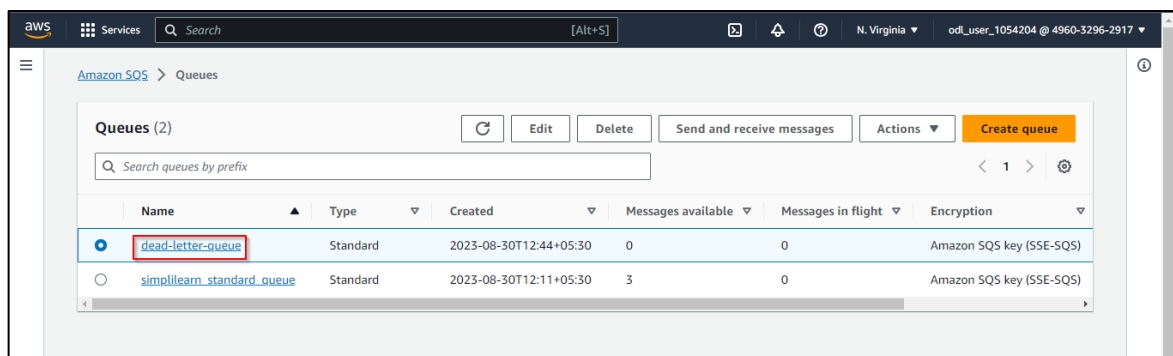
5.8 Click **Poll for messages** to view the message



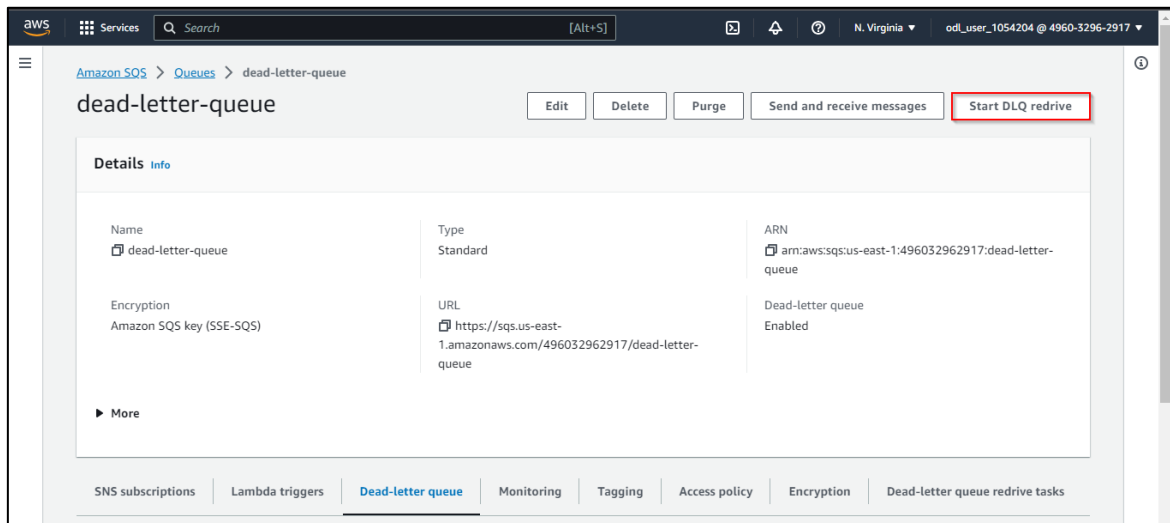
5.9 Return to the **Queues** page and refresh it multiple times to observe messages being moved to the **dead-letter-queue**



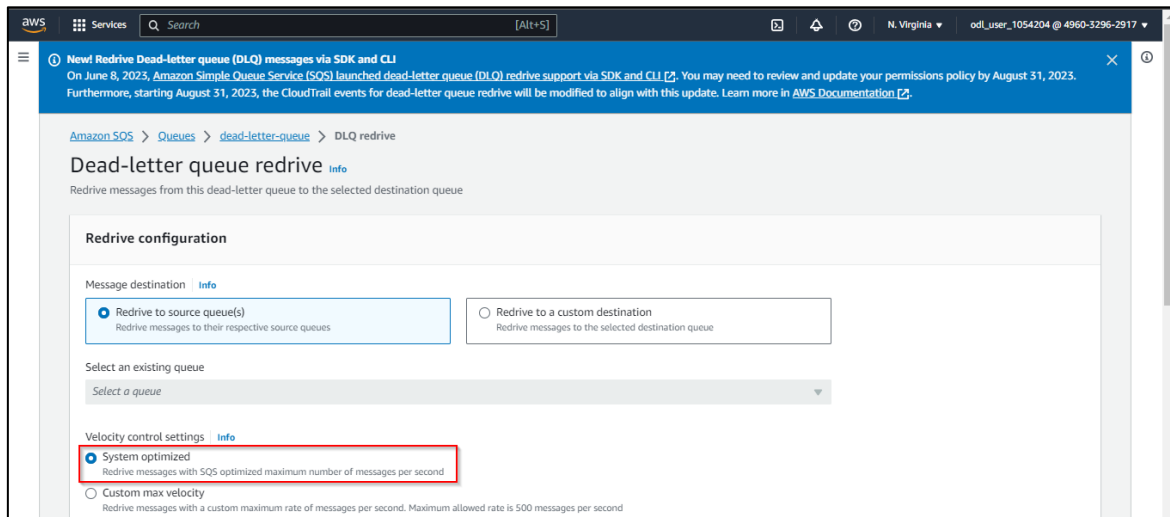
5.10 Click on the **dead-letter-queue** option



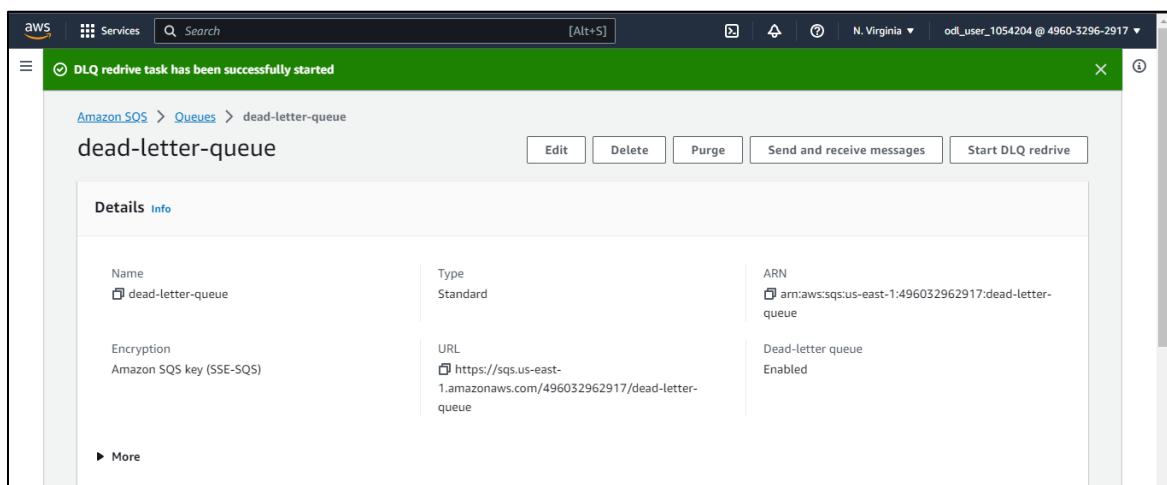
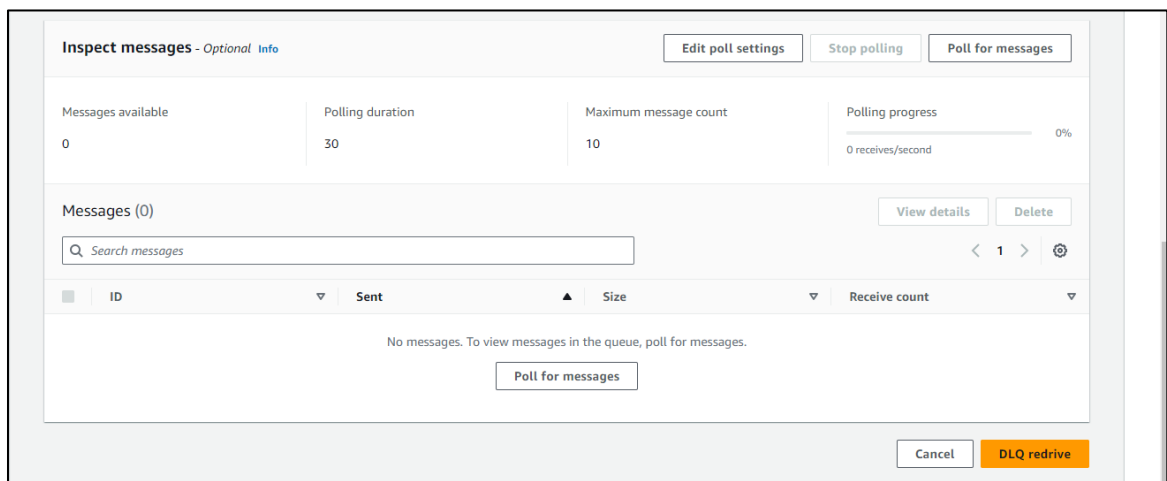
5.11 Click on the **Start DLQ redrive** button



5.12 In the **Velocity control settings**, select the **System optimized** option

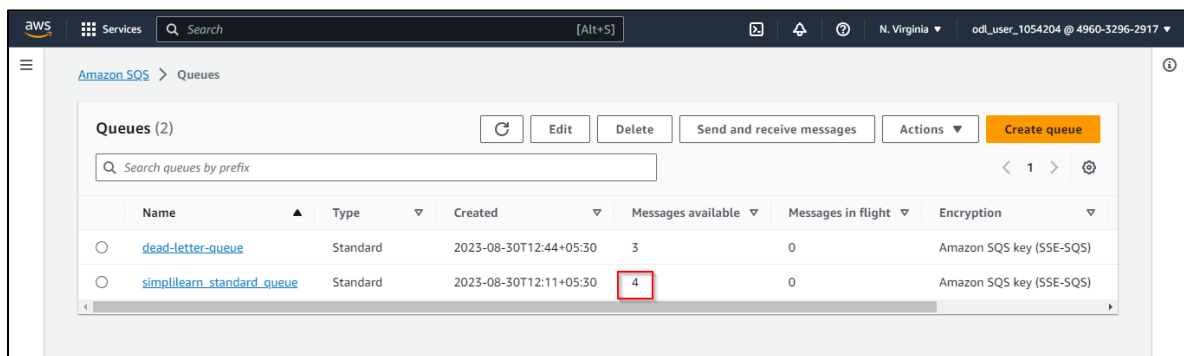


5.13 Click on the **DLQ redrive** button



The DLQ redrive has been successfully created.

5.14 Return to the **Queues** page. The message will be sent to **Simplilearn_Standard_queue**.



By following these steps, you have successfully demonstrated the process of working with an Amazon SQS Standard Queue, adjusting visibility timeout, and setting up a Dead Letter Queue for message handling.