Cloud Formation Assignment4 - SQS-And-SES

SQS-Assignment

Application integration

Amazon SQS
A message queuing service

Amazon SQS provides queues for high-throughput, system-to-system messaging. You can use queues to decouple heavyweight processes and to buffer and batch work. Amazon SQS stores messages until microservices and serverless applications process them.

Get started

Learn how to use Amazon SQS by creating a queue, sending a message to the queue, and receiving and processing the message.

Create queue

Pricing (US)

You can get started with Amazon SQS for free. All customers can make 1 million Amazon SQS requests for free each month. Some applications might be able to operate within this Free Tier limit.

Cost calculator ↗

How it works
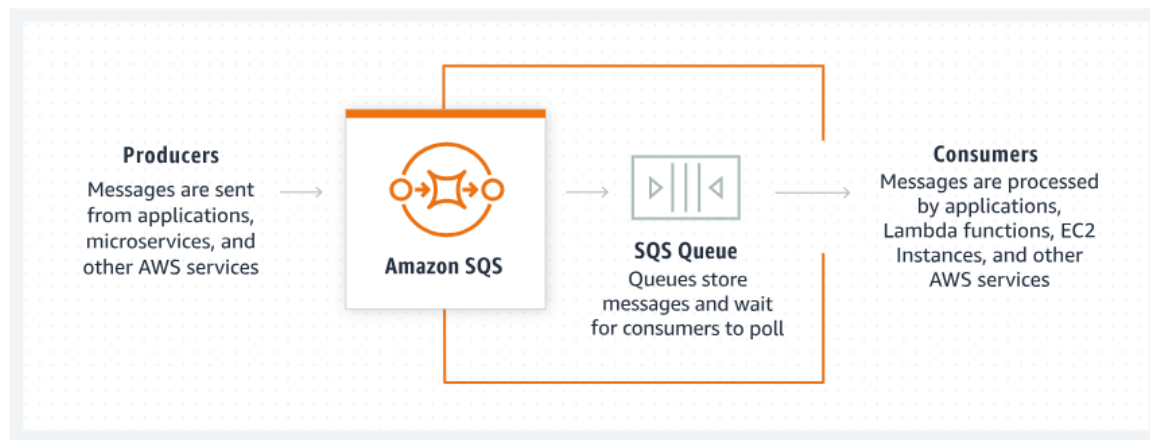

Producers
Messages are sent from applications, microservices, and other AWS services

Amazon SQS

SQS Queue
Queues store messages and wait for consumers to poll

Consumers
Messages are processed by applications, Lambda functions, EC2 Instances, and other AWS services

Amazon SQS allows producers to send messages to a queue. Messages are then stored in an SQS Queue. When consumers are ready to process new messages they poll them from the queue. Applications, microservices, and multiple AWS services can take the role of producers or consumers.

Documentation

Developer guide ↗

API reference ↗

FAQs ↗

Support forums ↗

Create queue

Details

Type

Choose the queue type for your application or cloud infrastructure.

⚪ **Standard** Info
At-least-once delivery, message ordering isn't preserved

- At-least once delivery
- Best-effort ordering

🔘 **FIFO** Info
First-in-first-out delivery, message ordering is preserved

- First-in-first-out delivery
- Exactly-once processing

ⓘ You can't change the queue type after you create a queue.

Name

```
sqsassignment.fifo
```

A queue name is case-sensitive and can have up to 80 characters. You can use alphanumeric characters, hyphens (-), and underscores (_).

Configuration Info

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

Visibility timeout | Info

```
15
```
| 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

```
0
```
| 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

```
20
```
Seconds

Should be between 0 and 20 seconds.

FIFO queue settings

🔵 Content-based deduplication

When content-based deduplication is enabled, the message deduplication ID is optional.

🔵 High throughput FIFO queue (recommended) Info

Configure your FIFO queue for maximum throughput.

> ⓘ High throughput for FIFO queues supports a higher number of transactions per second, per API.

Deduplication scope | Info

Specify the scope of deduplication for a FIFO queue.

⚪ Queue
Deduplicate all messages in a queue.

⚫ Message group
Deduplicate all messages that belong to the same message group.

FIFO throughput limit | Info

Specify how to apply the throughput limit on FIFO queue.

⚪ Per queue
Apply the throughput limit at the queue level.

⚫ Per message group ID
Apply the throughput limit at the message group level.

Encryption Info

Amazon SQS provides in-transit encryption by default. To add at-rest encryption to your queue, enable server-side encryption.

Server-side encryption

🔘 Disabled

⚪ Enabled

Access policy Info

Define who can access your queue.

Choose method

● Basic
Use simple criteria to define a basic access policy.

○ Advanced
Use a JSON object to define an advanced access policy.

Define who can send messages to the queue

● Only the queue owner
Only the owner of the queue can send messages to the queue.

○ Only the specified AWS accounts, IAM users and roles
Only the specified AWS account IDs, IAM users and roles can send messages to the queue.

Define who can receive messages from the queue

● Only the queue owner
Only the owner of the queue can receive messages from the queue.

○ Only the specified AWS accounts, IAM users and roles
Only the specified AWS account IDs, IAM users and roles can receive messages from the queue.

JSON (read-only)

```
{
  "Version": "2012-10-17",
  "Id": "__default_policy_ID",
  "Statement": [
    {
      "Sid": "__owner_statement",
      "Effect": "Allow",
      "Principal": {
        "AWS": "866650389532"
      },
      "Action": [
        "SQS:*"
      ],
      "Resource": "arn:aws:sqs:us-east-1:866650389532:sqsassignment.fifo"
    }
```

Redrive allow policy - *Optional* Info

Identify which source queues can use this queue as the dead-letter queue.

Select which source queues can use this queue as the dead-letter queue.

- ● Disabled
- ○ Enabled

Dead-letter queue - *Optional* Info

Send undeliverable messages to a dead-letter queue.

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*	
🔍 Enter key	🔍 Enter value	Remove

Add new tag

You can add 49 more tags.

Cancel   **Create queue**

sqsassignment.fifo

Edit   Delete   Purge   Send and receive messages   Start DLQ redrive

Details Info

Name	Type	ARN
🗐 sqsassignment.fifo	**FIFO** High throughput mode is on	🗐 arn:aws:sqs:us-east-1:866650389532:sqsassignment.fifo
Encryption	URL	Dead-letter queue
Disabled	🗐 https://sqs.us-east-1.amazonaws.com/866650389532/sqsassignment.fifo	-

▶ More

| **SNS subscriptions** | Lambda triggers | EventBridge Pipes | Dead-letter queue | Monitoring | Tagging | Access policy | Encryption | Dead-letter queue redrive tasks |

Subscription region

| us-east-1 ▼ |

SNS subscriptions (0) Info

🗘   View in SNS ↗   Delete   **Subscribe to Amazon SNS topic**

🔍 Search subscriptions

< 1 >   ⚙

Subscription ARN ▲	**Topic ARN** ▽

No Amazon SNS subscriptions

To allow your queue to receive messages, subscribe it to an Amazon SNS topic.

Subscribe to Amazon SNS topic

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.

```
Hi
This is test message
```

Message group ID
The tag that specifies that a message belongs to a specific message group.

```
1
```

Message deduplication ID - *Optional*
The token used for deduplication of messages within the deduplication interval.

```
Enter message deduplication id
```

▼ **Message attributes** - *Optional* Info

| Owner | String ▼ | Custom type | Swapnil |
| Price | Number ▼ | Custom type | 500 | Remove |

Add new attribute

Send and receive messages

Send messages to and receive messages from a queue.

Send message Info

Clear content | Send message

✓ Your message has been sent and is ready to be received.

View details | ✕

Message body
Enter the message to send to the queue.

```
Hi
This is test message
```

Message group ID
The tag that specifies that a message belongs to a specific message group.

```
1
```

Message deduplication ID - *Optional*
The token used for deduplication of messages within the deduplication interval.

```
Enter message deduplication id
```

▼ **Message attributes -** *Optional* Info

| Owner | String ▼ | Custom type | Swapnil |
| Price | Number ▼ | Custom type | 500 | Remove |

Add new attribute

Receive messages Info

Edit poll settings | Stop polling | Poll for messages

Messages available	Polling duration	Maximum message count	Polling progress
1	30	10	67%
			0.1 receives/second

Messages (1)

View details | Delete

Search messages

< 1 >

☐	ID ▽	Sent ▲	Size ▽	Receive count ▽
☐	9f4d6317-f451-4f0a-9aaa-be1eda8f30e6	2024-05-07T20:01+05:30	55 bytes	2

Message: 9f4d6317-f451-4f0a-9aaa-be1eda8f30e6 ✕

Body | Attributes | Details

Hi
This is test message

Done

Receive messages Info

Edit poll settings | Stop polling | Poll for messages

✓ **1 message deleted successfully.** ✕

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

Messages (0)

View details | Delete

Search messages

< 1 >

☐	ID ▽	Sent ▲	Size ▽	Receive count ▽

No messages. To view messages in the queue, poll for messages.

Poll for messages

SES-Assignment

Customer engagement

Amazon SES
Highly-scalable inbound and outbound email service

Amazon Simple Email Service (SES) is a cloud-based email service that provides cost-effective, flexible and scalable way for businesses of all sizes to keep in contact with their customers through email.

Start using Amazon Simple Email Service

Get started with SES by verifying an email address and sending domain so that you can start sending email through SES.

Get started

Pricing

With Amazon SES, you only pay for what you use. There are no contract negotiations, no minimum usage requirements and no hidden charges.

Pricing ☒

Getting started ☒

What is Amazon SES ☒

Getting started with SES ☒

Verifying identities in Amazon SES ☒
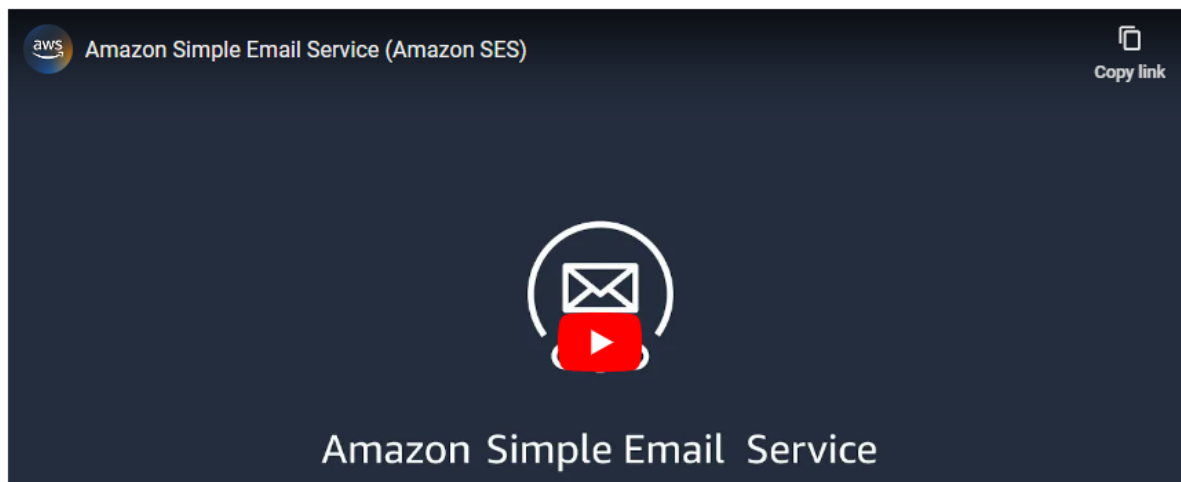
How it works

aws Amazon Simple Email Service (Amazon SES)

Copy link

Amazon Simple Email Service

More resources ☒

Get set up New

Account dashboard

Reputation metrics

SMTP settings

▼ Configuration

Identities

Configuration sets

Dedicated IPs

Email templates

Suppression list

Cross-account notifications

Email receiving

Virtual Deliverability Manager

ⓘ Gmail and Yahoo are introducing new sending requirements in February 2024, which may change your email delivery rates. Click here ⧉ to learn more. ✕

Amazon SES › Configuration: Identities

Identities

The **Identities** pane lists your domains, subdomains, and email address identities. All identities must be verified before you use them to send email in Amazon SES. Learn more ⧉. The **Recommendations** pane lists high-impact email authentication issues found for the identities you select and check for recommendations. Learn more ⧉

Identities (0) Info

| Check for recommendations | Send test email | Delete | Create identity |

🔍 Search all identities

‹ 1 › ⚙

☐	Identity ▽	Identity type ▽	Identity status ▽

No identities

No identities to display.

Create identity

Recommendations (0) Info

To see high-impact recommendations, select up to 10 identities in the list above and choose **Check for recommendations**. If you implement a provided solution, refresh the table by selecting Check for recommendations to ensure it's no longer listed. If you enable Virtual Deliverability Manager, this table will refresh automatically for all your identities.

🔍 Search recommendations

⚙

Impact	Identity name ▽	Age ▽	Recommendation/Description ▽	Last checked ▼	Resolve issue ▽

No recommendations found

Select up to 10 verified domain identities and click **Check for recommendations** on the Identities table above.

Enable Virtual Deliverability Manager to generate recommendations automatically

Create identity

An *identity* is a domain, subdomain, or email address you use to send email through Amazon SES. Identity verification at the domain level extends to all email addresses under one verified domain identity.

Identity details Info

Identity type

○ **Domain**
To verify ownership of a domain, you must have access to its DNS settings to add the necessary records.

◉ **Email address**
To verify ownership of an email address, you must have access to its inbox to open the verification email.

ⓘ Sending email from an email address identity without having the domain identity verified will result in your message being quarantined or rejected depending on the domain's DMARC policy. Learn more about DMARC and how to look up a domain's DMARC policy. ⧉

Email address

swapnilhedau26@gmail.com

Email address can contain up to 320 characters, including plus signs (+), equals signs (=) and underscores (_).

☐ **Assign a default configuration set**
Enabling this option ensures that the assigned configuration set is applied to messages sent from this identity by default whenever a configuration set isn't specified at the time of sending.

Tags - *optional* Info

You can add one or more tags to help manage and organize your resources, including identities.

No tags associated with the resource.

Add new tag

You can add 50 more tags.

Cancel   **Create identity**

ⓘ **Action required**   Resend
To verify ownership of this identity, check your inbox for a verification request email and click the link provided.

Get set up New
Account dashboard
Reputation metrics
SMTP settings

▼ **Configuration**

Identities
Configuration sets
Dedicated IPs
Email templates
Suppression list
Cross-account notifications
Email receiving

Virtual Deliverability Manager

Amazon SES ❯ Configuration: Identities ❯ swapnilhedau26@gmail.com

swapnilhedau26@gmail.com   Delete   Send test email

Summary for swapnilhedau26@gmail.com

Identity status   Amazon Resource Name (ARN)   AWS Region

🕐 Verification pending   ⧉ arn:aws:ses:us-east-1:866650389532:identity/swapnilhedau26@gmail.com   US East (N. Virginia)

Recommendations for swapnilhedau26@gmail.com

ⓘ Recommendations are available only for verified domain identities.

Enable Virtual Deliverability Manager to generate recommendations automatically

Authentication	Notifications	Authorization	Configuration set	Tags

DomainKeys Identified Mail (DKIM) Info

DKIM-signed messages help receiving mail servers validate that a message was not forged or altered in transit.

ⓘ DKIM authentication can only be set at the domain level. Once set, if you send mail from an email address that uses a DKIM-verified domain, Amazon SES automatically authenticates it with the inherited DKIM properties from the domain. You have the option to override these properties and send email without DKIM authentication, and you can choose to reenable it later. Read about inherited DKIM signing and how to override it ↗.

Primary

Promotions 10 new
Quora, Standard Chartered Ban...

Social

☐ ☆	**Amazon Web Services**	**Amazon Web Services – Email Address Verification Request in region US East (N. Virginia)** - Dear Amazon Web Services Customer, We have received a request to authorize this email a...	9:02 PM
☐ ☆	**Quora Digest**	**Will the BJP lose much badly in the 2024 election like Congress lost in the 2014 elec...?** - Irrespective of the result of the 2024 election, one can safely say that BJP would not meet th...	3:52 PM
☐ ☆	Google	Security alert - A new sign-in on Windows swapnilhedau26@gmail.com We noticed a new sign-in to your Google Account on a Windows device. If this was you, you don't need to do anythin...	7:43 AM
☐ ☆	Google Podcasts	Google Podcasts is going away - Learn more about how you can easily migrate your podcast subscriptions from Google Podcasts	1:35 AM
☐ ☆	MITSDE 2	Top Reasons to Join MITSDE - Dear Learners, Greetings from MIT School of Distance Education, Pune. Thank you for showing interest in up skilling with MITSDE – AICTE (an institute approv...	May 6
☐ ☆	Quora Digest	I joined TCS by February 2022 but still didn't get a project. What will happen? Will ...? - I don't know will TCS fire you or not but surely it will impact your growth in long term. Initial days it feel...	May 6
☐ ☆	MITSDE 2	Embark on a Journey towards Professional Success with MITSDE - Dear Learners, Greetings from MIT School of Distance Education, Pune. Thank you for showing interest in up skilling with ...	May 5

Amazon Web Services – Email Address Verification Request in region US East (N. Virginia) Inbox ×

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

9:02 PM (1 minute ago) ☆ ☺ ↩ ⋮

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 US East (N. Virginia). If you requested this verification, please go to the following URL to confirm that you are authorized to use this email address:

https://email-verification.us-east-1.amazonaws.com/?Context=866650389532&X-Amz-Date=20240507T153241Z&Identity.IdentityName=swapnilhedau26%40gmail.com&X-Amz-Algorithm=AWS4-HMAC-SHA256&Identity.IdentityType=EmailAddress&X-Amz-SignedHeaders=host&X-Amz-Credential=AKIAVM67ZIEFRDECB3HF%2F20240507%2Fus-east-1%2Fses%2Faws4_request&Operation=ConfirmVerification&Namespace=Bacon&X-Amz-Signature=0b8d507afbf6ec7a8064dd375b230f897f21265bc0a779d3c9a757e4ebf7207e

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 someone setting up email-sending capabilities on your 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 Developer Guide at http://docs.aws.amazon.com/pinpoint/latest/userguide/welcome.html.

Sincerely,

The Amazon Web Services Team.

↩ Reply   → Forward   ☺

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Congratulations!

You have successfully verified an email address. You can now start sending email from this address.

For new Amazon SES users — If you have not yet applied for a sending limit increase, then you are still in the sandbox environment, and you can only send email to addresses that have been verified. To verify a new email address or domain, see the **Identity Management** section of the Amazon SES console.

For new Amazon Pinpoint users — If you have not yet applied for a sending limit increase, then you are still in the sandbox environment, and you can only send email to addresses that have been verified. To verify a new email address or domain, see the **Settings > Channels** page on the Amazon Pinpoint console.

If you have already been approved for a sending limit increase, then you can start sending email to non-verified addresses.

Thank you for using Amazon Web Services!

Go to the Amazon SES detail page.

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Get Your AWS Certification

Grow in-demand skills, validate your expertise, and advance your career. Learn about AWS Certification and the resources to help you succeed »

swapnilhedau26@gmail.com

Delete   **Send test email**

Summary for swapnilhedau26@gmail.com

Identity status

⊘ Verified

Amazon Resource Name (ARN)

⧉ arn:aws:ses:us-east-1:866650389532:identity/swapnilhedau26@gmail.com

AWS Region

US East (N. Virginia)

Recommendations for swapnilhedau26@gmail.com

> ⓘ Recommendations are available only for verified domain identities.

Enable Virtual Deliverability Manager to generate recommendations automatically

Authentication	Notifications	Authorization	Configuration set	Tags

DomainKeys Identified Mail (DKIM) Info

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> ⓘ DKIM authentication can only be set at the domain level. Once set, if you send mail from an email address that uses a DKIM-verified domain, Amazon SES automatically authenticates it with the inherited DKIM properties from the domain. You have the option to override these properties and send email without DKIM authentication, and you can choose to reenable it later. Read about inherited DKIM signing and how to override it 🗗.

Custom MAIL FROM domain Info

Edit

Messages sent through Amazon SES will be marked as originating from your domain instead of a subdomain of amazon.com

Send test email Info

The Amazon SES mailbox simulator lets you test how your application handles different email sending scenarios. Emails that you send to the mailbox simulator do not count towards your sending quota or your bounce and complaint rates. Learn more ↗

Message details

Email format

⦿ **Formatted**
Choose this option if you want to construct a simple test message using the form provided. SES takes the information entered in the form and parses it into email format for you.

◯ **Raw**
Choose this option if you want to send a more complex test message, such as one that uses HTML or includes attachments. This option requires you to format the entire message yourself.

From-address

swapnilhedau26@gmail.com

Scenario | Info

Choose the email sending scenario that you want to simulate. Each scenario corresponds to a different recipient email address managed by the mailbox simulator. To specify a custom recipient, select Custom.

Custom
Use a recipient address of your own ▼

Custom recipient

While your account is in the Amazon SES sandbox, you can only send test emails to other verified identities. If you've verified an identity at the domain level, you can send a test email to any email address under that verified domain.

swapnilhedau26@gamil.com

Scenario | Info

Choose the email sending scenario that you want to simulate. Each scenario corresponds to a different recipient email address managed by the mailbox simulator. To specify a custom recipient, select Custom.

Custom
Use a recipient address of your own ▼

Custom recipient

While your account is in the Amazon SES sandbox, you can only send test emails to other verified identities. If you've verified an identity at the domain level, you can send a test email to any email address under that verified domain.

swapnilhedau26@gamil.com

Subject

Test Mail

Body - optional

Hello,
This is the Test E-Mail

Configuration set - optional | Info

Choose a configuration set ▼

▶ Additional configurations - optional

Cancel   **Send test email**

swapnilhedau26@gmail.com

Delete   **Send test email**

Summary for swapnilhedau26@gmail.com

Identity status

⊘ Verified

Amazon Resource Name (ARN)

⧉ arn:aws:ses:us-east-1:866650389532:identity/swapnilhedau26@gmail.com

AWS Region

US East (N. Virginia)

Recommendations for swapnilhedau26@gmail.com

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Test Mail Inbox ×

swapnilhedau26@gmail.com via amazonses.com

9:11PM (0 minutes ago)
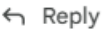
to me

Be careful with this message

This may be a spoofed message. The message claims to have been sent from your account, but Gmail couldn't verify the actual source. Avoid clicking links or replying with sensitive information, unless you are sure you actually sent this message. (No need to reset your password, the real sender does not actually have access to your account!)

Report spam   Looks safe

Hello, This is the Test E-Mail

Reply   Forward