Amazon Simple Email Service FAQs

## **General**

Q: What is Amazon Simple Email Service?

Amazon Simple Email Service (Amazon SES) is a highly scalable and cost-effective platform for sending and receiving email. Amazon SES eliminates the complexity and expense of building an in-house email solution or licensing, installing, and operating a third-party email solution.

Q: Who can use Amazon SES?

Amazon SES is a great solution for anyone who needs a reliable, scalable, and inexpensive way to send or receive email. Our current users include a diverse range of organizations, such as online retailers, application developers large and small, and digital marketing organizations.

Q: Are there limits as to whom I can send emails to?

In general, you should only send email to recipients who want and expect it. AWS reserves the right to suspend any account identified as sending spam or other unwanted low-quality email, or take other action as AWS deems appropriate.

As an Amazon SES customer, you are responsible for complying with the various laws and regulations that govern the transmission of email messages. These laws and regulations vary from country to country, and can even vary between states, provinces, counties, or other administrative divisions. In order to use Amazon SES, you must agree to the terms specified in the [AWS Customer Agreement](https://aws.amazon.com/agreement/) and the [AWS Acceptable Use Policy](https://aws.amazon.com/aup/).

Q: What kinds of email can I send using Amazon SES?

Amazon SES can reliably deliver merchandising, subscription, transactional, and notification email messages.

Q: How can I get started using Amazon SES?

Complete the following steps, and you'll be on your way to sending email using Amazon SES:

1. Sign up: After signing up for AWS, you can access the Amazon SES sandbox–an environment specifically designed for developers to test and evaluate the service.
2. Verify domains or email addresses: Before you can send an email using Amazon SES, you need to verify that you own the domain or address from which you will send email. To start the verification process, visit the Amazon SES console.
3. Send a test email: You can use the Amazon SES console, SMTP interface, or API to send a test email to an email address or domain that you verified.
4. Apply to increase your sending limits: When you are ready to use Amazon SES to send production email, you can apply to increase your sending limits and move your account out of the sandbox environment. It only takes a few minutes to apply, and you will typically receive a response within 24 hours.
5. Send production email: You can use either SMTP or the Amazon SES API to queue email messages for delivery.
6. Get feedback: Amazon SES provides useful statistics about your sending activities. With a simple API query or Amazon SES console visit, you can quickly obtain vital statistics such as volume sent, bounces and complaints.

For more information about how to set up email with Amazon SES, see the [Quick Start section](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/quick-start.html) of the *Amazon SES Developer Guide*.

Q: What should I do after I'm finished testing and evaluating Amazon SES?

Once you are ready to use Amazon SES to send email, you can request an Amazon SES sending limit increase. If granted, this increase will move your account out of the sandbox environment so that you can begin sending email to your customers. You will no longer need to verify recipient email addresses or recipient domains, and you will be able to send much larger quantities of email.

To request a sending limit increase, please complete the [request form in Support Center](https://aws.amazon.com/ses/extendedaccessrequest/). We generally respond to these requests within 24 hours.

## **Pricing and Billing**

Q: How much does it cost to use Amazon SES?

With Amazon SES, you pay only for what you use. There are no minimum fees, and no upfront costs. The fees for using Amazon SES are very low. The amount you will pay depends on the number of messages you send and receive, the volume of attachments you send, and the price you pay for transferring data out of other AWS products, such as EC2, if applicable.

Please refer to [Amazon SES Pricing](https://aws.amazon.com/ses/pricing/) for more information on pricing, data transfer costs, and free usage.

Q: Is there a free usage tier for Amazon SES?

If you call Amazon SES from an application hosted in an Amazon EC2 instance or through Elastic Beanstalk, you are eligible for the Amazon SES Free Tier. In the Free Tier, there is no charge for the first 62,000 email messages you send, and the first 1,000 email messages you receive.

Q: Can I take advantage of Amazon SES free tier pricing if I'm in the Amazon SES sandbox?

Yes. However, to take full advantage of the Amazon SES free tier, you should request higher sending limits for Amazon SES.

Q: How will I be charged and billed for my use of Amazon SES?

At the end of each month, you will be charged for that month's usage. Your Amazon SES billing cycle begins on the first day of each month and ends on the last day of each month. Your monthly charges will be totaled at the end of each month.

Q: How can I track my Amazon SES usage?

You can view your charges for the current billing period at any time by visiting the [Billing Management page in the AWS Console](https://console.aws.amazon.com/billing/home#/).

Q: Will I be billed for incoming spam messages?

You will be billed for all incoming messages, unless those messages are rejected during the SMTP conversation. The SMTP conversation occurs when the sender transmits the message to the receiving server.

There are two ways in which you can determine whether or not mail is accepted during the SMTP conversation. The first way is to create lists of IP addresses you want to allow (whitelists), and lists of addresses you want to block (blacklists). By explicitly blocking messages from known spammers, you cause messages from those senders to be rejected during the SMTP conversation, and are therefore not billed for the messages they send.

The second method is to set up receipt rules. Amazon SES will only accept incoming messages for which at least one receipt rule matches the recipient of the message. Amazon SES maintains its own IP address block list, and will automatically block messages from addresses on that list without your intervention. If you want to enable delivery from an address that was automatically blocked, you can add it to your list of allowed senders.

## **Limits and Restrictions**

Q: What is the Amazon SES sandbox?

The Amazon SES sandbox is an area in which new users can test the capabilities of Amazon SES. New Amazon SES users are automatically placed in the sandbox. While in the sandbox, you will only be able to send mail to verified email addresses, or to email addresses associated with the Amazon SES mailbox simulator. Additionally, while in the sandbox, you can send no more than 200 messages per 24-hour period, and no more than one message per second.

When you are ready to move out of the sandbox, you can submit an [SES Sending Limit Increase request](https://aws.amazon.com/ses/extendedaccessrequest/).

Q: Can I send emails from any source email address?

You can send email from any address or domain that you own. In order for your email to be delivered through Amazon SES, you must prove that you own the sending email address or domain. You can verify your ownership using the Amazon SES console, or through the Amazon SES API.

You can verify a total of up to 10,000 email addresses and domains, in any combination.

Q: Is there a limit on the size of emails Amazon SES will deliver?

Amazon SES will accept email messages up to 10 MB in size. This includes any images and attachments that are part of the message.

Q: Is there a limit on the number of recipients I can specify in a single email message?

You can specify a maximum of 50 recipients for every message you send using Amazon SES. The total number of email addresses in the To:, CC:, and BCC: field must not exceed 50 recipients. If you need to send an email message to more than 50 recipients, then you must send multiple messages, each addressed to 50 or fewer recipients.

Q: Are there any limits on how many emails I can send?

Every Amazon SES sender has a unique set of sending limits, which are calculated by Amazon SES on an ongoing basis:

* Sending quota—the maximum number of emails you can send in a 24-hour period.
* Maximum send rate—the maximum number of emails that Amazon SES can accept from your account per second.

Note: The rate at which Amazon SES accepts your messages might be less than the maximum send rate.

Sending limits are based on recipients rather than on messages. You can check your sending limits at any time by using the Amazon SES console.

Note that if your email is detected to be of poor or questionable quality (for example, if it has high bounce or complaint rates, or if it judged to be spam or abusive content), Amazon SES might temporarily or permanently reduce your permitted send volume, or take other action as appropriate.

Q: Why are these sending limits in place?

Using these limits to steadily ramp up your sending activity helps you improve your sender reputation, which increases the chance that emails you send will reach recipients' inboxes.

## **Security**

Q: Can Amazon access the emails that I send and receive?

We take our privacy and data protection policies very seriously. Amazon SES uses in-house anti-spam technologies to filter email messages containing poor-quality content and prevent them from being sent. Additionally, all messages that contain attachments, whether outbound or incoming, are scanned for viruses. These are automated processes with no human involvement.

Amazon SES will only access email content under very limited circumstances, such as system troubleshooting, or investigating fraudulent or abusive activity. Furthermore, other Amazon SES customers do not have access to your email content.

Q: Can I encrypt email messages that I receive?

Amazon SES integrates with AWS Key Management Service (KMS) to optionally encrypt the mail that it writes to your Amazon S3 bucket. You can either use the default Amazon SES KMS master key in your account for encryption, which does not require additional setup, or you can set up a new master KMS key that grants the Amazon SES service principal permission to generate data keys. Amazon SES uses client-side encryption to encrypt your mail prior to writing it to Amazon S3. This means that it is necessary for you to decrypt the content on your side after retrieving the mail from Amazon S3. The AWS Java SDK and AWS Ruby SDK provide a client that is able to handle the decryption for you.

## **Authentication, Validation, and Configuration**

Q: Do I need to set up reverse DNS records in order to use Amazon SES?

Amazon SES users do not need to set up reverse DNS records. Amazon Web Services manages the IP addresses used by Amazon SES, and provides reverse DNS records for these addresses.

Q: Does Amazon SES support Sender Policy Framework (SPF)?

Amazon SES supports SPF. You may or may not need to publish an SPF record, depending on the ways in which you are using Amazon SES to send email.

If you do not need to comply with Domain-based Message Authentication, Reporting and Conformance (DMARC) using SPF, you do not need to publish an SPF record to pass SPF authentication because by default, Amazon SES sends your emails from a MAIL FROM domain is owned by Amazon.

If you want to comply with DMARC using SPF, you must set up Amazon SES to use your own MAIL FROM domain and publish an SPF record.

Q: Does Amazon SES support Domain Keys Identified Mail (DKIM)?

Amazon SES supports DKIM. If you have enabled and configured Easy DKIM, Amazon SES will sign outgoing messages using DKIM on your behalf. If you prefer, you can also DKIM-sign your email yourself. To ensure maximum deliverability, there are a few DKIM headers that you should not sign. For more information, see [Manual DKIM Signing in Amazon SES](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/manual-dkim.html) in the *Amazon SES Developer Guide*.

Q: Can emails from Amazon SES comply with DMARC?

With Amazon SES, your emails can comply with DMARC through SPF, DKIM, or both.

Q: Does Amazon SES send email over an encrypted connection using Transport Layer Security (TLS)?

If the receiving mail server advertises the STARTTLS extension, Amazon SES will attempt to upgrade the connection to a TLS connection. If that fails, Amazon SES will send the email as plain text.

Q: What TLS version does Amazon SES use to send email?

Amazon SES supports TLS v1.

## **Sending Capabilities**

Q: Can I use Amazon SES to send email from my existing applications?

Amazon SES allows you to create a private SMTP relay for use with any existing SMTP client software, including software that you develop yourself, or any third-party software that supports SMTP.

For more information, see [Using the Amazon SES SMTP Interface to Send Email](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/send-email-smtp.html) in the *Amazon SES Developers Guide*.

Q: Can I use Amazon SES to send bulk email?

To send bulk email, you can call the [SendEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendEmail.html) or [SendRawEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendRawEmail.html) API operations repeatedly for each email you want to send. Software running on [Amazon EC2](https://aws.amazon.com/ec2/), [Amazon Elastic MapReduce (EMR)](https://aws.amazon.com/emr/), or your own servers can compose and deliver bulk emails using Amazon SES in whatever way best suits your needs.

If you already have your own bulk mailing software, it's easy to update it to deliver through Amazon SES, either by modifying the software to directly call Amazon SES, or by reconfiguring it to deliver email through an Amazon SES SMTP relay. For more information about the Amazon SES SMTP interface, see [Using the Amazon SES SMTP](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/send-email-smtp.html)Interface in the *Amazon SES Developer Guide*.

Q: Can Amazon SES send emails with attachments?

Amazon SES supports many popular content formats, including documents, images, audio, and video.

Note: For your own safety and that of your customers, Amazon SES scans every attachment that you send for viruses and malware.

You can an email client that supports SMTP to send email with attachments. When you configure a client to send outgoing email through Amazon SES, the client constructs the appropriate MIME parts and email headers before sending the message.

You can also send email with attachments programmatically. To include an attachment in your email, construct a new multipart email message. In this message, include a MIME part that contains an appropriate *Content-Type* header, along with the MIME-encoded content. Next, use the *Content-Disposition* header to specify whether the content is to be displayed inline or treated as an attachment.

Once you have constructed your message, you can send it using the *SendRawEmail*API; you can also use the [AWS Software Development Kits (SDKs)](https://aws.amazon.com/tools/#sdk) or a third-party library such as [*boto3* for Python](https://aws.amazon.com/sdk-for-python/).

Q: Can I reserve dedicated IP addresses for my Amazon SES email sending?

Yes. Dedicated IPs are available at an extra cost. To request a dedicated IP Address, open an [SES Sending Limits Increase Case](http://aws.amazon.com/ses/fullaccessrequest) in Support Center. In the ticket, specify that you want to purchase dedicated IPs in the Use Case Description field. For pricing information, see [Amazon SES Pricing](https://aws.amazon.com/ses/pricing/).

Q: Can I specify a dedicated IP address when I send certain types of email?

If you have leased several dedicated IP addresses to use with your Amazon SES account, you can use the dedicated IP pools feature to create groups (*pools*) of those IP addresses. You can then associate each pool with a configuration set; when you send emails using that configuration set, those emails will only be sent from the IP addresses in the associated pool.

To learn more, see [Creating Dedicated IP Pools](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/dedicated-ip-pools.html) in the *Amazon SES Developer Guide*.

Q: Can I test Amazon SES responses without sending email to real recipients?

The Amazon SES mailbox simulator provides an easy way to test your sending rate and generic email responses, including bounces and complaints, without sending to actual recipients. Emails to the mailbox simulator do not affect your bounce and complaint metrics, and do not count against your sending quota.

For more information about the Amazon SES mailbox simulator, see [Testing Amazon SES Email Sending](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/mailbox-simulator.html) in the *Amazon SES Developer Guide*.

Q: Can I use Amazon SES for email-to-text SMS delivery?

Many mobile phone carriers offer an SMTP-to-SMS gateway. Amazon SES users can send text-only emails to the emails addresses associated with these gateways, which will in turn be delivered to the recipients' mobile phones as SMS messages.

However, in order to successfully use an SMS gateway, you must know several pieces of information, including:

* The recipient's mobile phone number
* The recipient's mobile phone carrier
* The domain name of the carrier's SMS gateway (such as sms.carriername.com)

If SMS messages are part of your marketing or communications plan, we recommend using [Amazon Simple Notification Service (SNS)](https://aws.amazon.com/sns/). When sending SMS messages through Amazon SNS, you only need to know the recipient's mobile phone number.

Q: How do I control the character encoding of my emails with Amazon SES?

The SMTP protocol requires that all data be sent in [7-bit ASCII format](https://en.wikipedia.org/wiki/ASCII#7-bit_codes). If you want to use a different character encoding with the Amazon SES SMTP interface, you will need to apply your desired encoding to your subject and body, and then convert them to a valid 7-bit ASCII message before sending it to the SMTP endpoint.

The [SendEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendEmail.html) API accepts [UTF-8](https://en.wikipedia.org/wiki/UTF-8) subject and body inputs, transcodes them into whatever format you specify via an optional encoding parameter, and automatically converts the resulting content into 7-bit ASCII with appropriate encoded-word syntax and content-transfer-encoding headers before transmission. The [SendRawEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendRawEmail.html) API requires you to apply your desired encoding to your subject and body and then convert them to a valid 7-bit ASCII message before submitting each request.

## **Receiving Capabilities**

Q: How do I configure Amazon SES to receive email?

You must first verify your domain with Amazon SES to prove that you own it by using the procedure described in the documentation. This process is identical to the domain verification process Amazon SES uses for sending mail. If you are already using your domain to send mail with Amazon SES, you do not need to verify it again.

Once you have successfully verified your domain, the next step is to publish a [DNS mail exchanger (MX) record](https://en.wikipedia.org/wiki/MX_record) for your domain that points to the regional Amazon SES endpoint that you want to use to receive email. Publishing the MX record is not required to receive mail through Amazon SES, but you must do so if you want your incoming mail to be automatically routed to Amazon SES, rather than route it yourself.

The final step is to create a receipt rule using either the Amazon SES console or API. A receipt rule tells Amazon SES what should happen to incoming email when it is received. For example, you can configure Amazon SES to deliver all incoming email to an [Amazon S3](https://aws.amazon.com/s3/) bucket.

Q: What happens when Amazon SES receives my mail?

When Amazon SES receives a message, it references your active receipt rule set to determine whether or not you have any rules that match any of the incoming message's recipients. If there aren't any matches, or if the mail was sent from an IP address on your IP address block list, Amazon rejects the mail in the SMTP conversation. Otherwise, Amazon SES accepts the mail.

After Amazon SES accepts the mail, it evaluates your active receipt rules; these rules are then applied in the order that they are defined.

The next steps are determined by the actions you defined in your receipt rules. You can set up your receipt rule to have Amazon SES deliver your messages to an [Amazon S3 bucket](https://aws.amazon.com/s3/), call your custom code via an [AWS Lambda function](https://aws.amazon.com/lambda/), or publish notifications to [Amazon SNS](https://aws.amazon.com/sns/). You can also configure Amazon SES to drop or bounce messages you do not want to receive.

Q: How do I access my mail in Amazon S3?

When you set up a receipt rule to specify that Amazon SES should write your messages to an [Amazon S3](https://aws.amazon.com/s3/) bucket, you have the option of setting up [Amazon SNS](https://aws.amazon.com/sns/) notifications as well. The notifications, which contain general information about the message and the action taken on it, will include the unique ID of the message. You can use this ID to retrieve the corresponding message from Amazon S3.

Q: How can I process emails I receive?

There are two ways to process mail that you receive. You can either write an application that listens for [Amazon SNS](https://aws.amazon.com/sns/) notifications from Amazon SES, retrieves the mail from [Amazon S3](https://aws.amazon.com/s3/), and processes it. Alternatively, you can write a custom [AWS Lambda](https://aws.amazon.com/lambda/)function.

The AWS Lambda event contains all of the metadata about the message that was received, but does not include the actual message content. If you need access to the message content from within the AWS Lambda, then you need to first write the message to Amazon S3 using an Amazon S3 action before your AWS Lambda action is evaluated. AWS Lambda actions can be executed synchronously or asynchronously, depending on whether or not the AWS Lambda function needs to return a result that influences how other actions are executed.

We recommend that you use asynchronous execution unless your specific application requires you to use synchronous execution.

Q: Can multiple different AWS accounts receive mail on the same domain?

More than one AWS account can receive mail for the same domain. For each email that arrives on the shared domain, a copy of the message is processed by each account's receipt rule set independently.

Q: Is there any size limit to the messages that I can receive through Amazon SES?

If you choose for your messages to be stored in an [Amazon S3](https://aws.amazon.com/s3/) bucket, the maximum message size (including headers) is 30 megabytes (MB).

If you choose to receive your messages through [Amazon SNS](https://aws.amazon.com/sns/) notifications, the maximum message size (including headers) is 150 kilobytes (KB).

Q: Is there a limited throughput at which I can receive messages through Amazon SES?

There are no throughput restrictions for incoming email received through Amazon SES.

Q: What can I do about incoming email that was sent over an unencrypted connection?

You can configure your Amazon SES receipt rules so that messages received from connections that don't use Transport Layer Security (TLS) are automatically rejected.

## **Deliverability**

Q: How does Amazon SES help ensure reliable email delivery?

Amazon SES uses content filtering technologies to scan outgoing email messages. These content filters help ensure that the content being sent through Amazon SES meets the standards of ISPs. In order to help you further improve the deliverability of your emails, Amazon SES provides a feedback loop that includes bounce, complaint, and delivery notifications.

Q: Does Amazon SES guarantee receipt of my emails?

Amazon SES closely monitors ISP guidelines to help ensure that legitimate, high-quality email is delivered reliably to recipient inboxes. However, neither Amazon SES nor any other email-sending service can guarantee that all emails will be received. ISPs can drop or lose email messages, recipients can accidentally provide the wrong email address, and if recipients do not wish to receive your email messages, ISPs may choose to reject or silently drop them.

Q: How long does it take for emails sent using Amazon SES to arrive in recipients' inboxes?

Amazon SES attempts to deliver emails to the Internet within a few seconds of each request. However, due to a number of factors and the inherent uncertainties of the Internet, we cannot predict with certainty when your email will arrive nor the exact route the message will take to get to its destination.

For example, an ISP might be unable to deliver the email to the recipient because of a temporary condition such as "mailbox full." In these cases, Amazon attempts to redeliver the message. If the error is permanent, such as "mailbox does not exist," Amazon SES does not retry the delivery attempt and you will receive a hard bounce notification. You can set up delivery notifications to alert you when Amazon SES successfully delivers one of your emails to a recipient's mail server.

## **Bounces and Complaints**

Q. What actions should I take if I receive a bounce or a complaint?

You will need to analyze each bounce and complaint email or Amazon SNS JSON object that you receive to determine the cause. Bounces are usually caused by attempting to send to a nonexistent recipient; complaints arise when the recipient indicates that they do not want to receive your message.

In either case, we recommend that you stop sending to these email addresses.

Q: How does Amazon SES send bounce, complaint, and delivery notifications to me?

Amazon SES forwards bounce and complaint notifications to you by email or sends them to an Amazon SNS topic, depending on your configuration. Delivery notifications, which are triggered when Amazon SES successfully delivers one of your emails to a recipient’s mail server, are sent to you only through Amazon SNS.

Q. Where does Amazon SES send my bounce, complaint, and delivery notifications?

Delivery notifications are available through [Amazon SNS](https://aws.amazon.com/sns/). Bounces and complaints can be sent to you by email, through Amazon SNS, or both. If you choose to receive bounce and complaint notifications by email, Amazon SES will send you your bounce and complaint notifications based on the following logic:

* If you used the SMTP interface to send the message, then notifications go to the address specified in SMTP's required MAIL FROM command, which overrides any Return-Path header specified in the SMTP DATA.
* If you used the [SendEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendEmail.html) API operation to send the message, then:
  + If you specified SendEmail's optional ReturnPath parameter, then notifications go to the specified address.
  + Otherwise, notifications go to the address specified in SendEmail's required Source parameter, which populates the From: header of the message.
* If you used the [SendRawEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendRawEmail.html) API operation to send the message, then:
  + If you specified SendRawEmail's optional Source parameter, then notifications go to that address, overriding any Return-Path header specified in the raw message.
  + Otherwise, if the Return-Path header was specified in the raw message, then notifications go to that address.
* Otherwise, notifications go to the address in the From: header of the raw message.

Q. Is there an additional cost to use Amazon SNS to receive bounce, complaint, and delivery notifications?

You will incur normal [Amazon SNS](https://aws.amazon.com/sns/) expenses if you use it for bounce, complaint, and/or delivery notifications. For more information about the costs associated with using Amazon SNS, see [Amazon SNS Pricing](https://aws.amazon.com/sns/pricing/).

Q. When can I expect to be notified of bounces, complaints, and deliveries?

After an ISP sends a bounce or complaint to Amazon SES, we will usually pass it to you within a few seconds via [Amazon SNS](https://aws.amazon.com/sns/) or email. However, we may not receive the bounce or complaint notification from the recipient's ISP for a period of time ranging from seconds to weeks or longer, depending on how quickly the ISP notifies us.

Delivery notifications are published as soon as Amazon SES delivers an email to a recipient's mail server. In most cases, email sent through Amazon SES is delivered within seconds, but occasionally it might take longer.

Q: How can I monitor the bounce and complaint rates for the email I send using Amazon SES?

Amazon SES provides three main ways to monitor your bounces, complaints, deliveries, sent emails, and rejected emails.

The first method is to use the Amazon SES console, Amazon SES API, or [Amazon CloudWatch](https://aws.amazon.com/cloudwatch/) to access basic email sending metrics across your entire AWS account.

The second method is to set up Amazon SES to send you detailed feedback notifications through email or through [Amazon SNS](https://aws.amazon.com/sns/).

The third method is to use Amazon SES event publishing. With event publishing, you categorize your emails and collect event data for each category of emails separately using either [Amazon CloudWatch](https://aws.amazon.com/cloudwatch/) or [Amazon Kinesis Firehose](https://aws.amazon.com/kinesis/firehose/). You can set up Amazon Kinesis Firehose to send the event records to [Amazon Redshift](https://aws.amazon.com/redshift/), [Amazon S3](https://aws.amazon.com/s3/), or [Amazon Elasticsearch Service](https://aws.amazon.com/elasticsearch-service/). If you use Amazon Elasticsearch Service, you can visualize your event data using [Kibana](https://aws.amazon.com/elasticsearch-service/kibana/).

For more information about monitoring methods, see [Monitoring Your Amazon SES Sending Activity](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/monitor-sending-activity.html) in the *Amazon SES Developer Guide*.

Q: Will I be affected by any bounces or complaints that are caused by other Amazon SES users?

Typically, when other Amazon SES users send messages that result in bounces or complaints, your ability to send email will remain unchanged.

One exception to this rule occurs when a recipient email address generates a hard bounce. When a recipient's email address generates a hard bounce, that address is added to a global suppression list. If you try to send an email to an address that is on the global suppression list, the call to Amazon SES succeeds, but Amazon SES treats the email as a hard bounce instead of attempting to send it.

Emails sent to addresses on the global suppression list do count towards your sending quota and your bounce rate. An email address can remain on the suppression list for up to 14 days.

For more information about the global suppression list, see [Amazon SES and Deliverability](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/deliverability-and-ses.html#suppression-list) in the *Amazon SES Developer Guide*.

Q: A recipient address was added to the global suppression list, but I am certain it is a valid address. Can I remove that address from the suppression list?

You can submit a suppression list removal request using the Amazon SES console. For more information, see [Removing an Email Address from the Amazon SES Suppression List](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/remove-from-suppression-list.html) in the *Amazon SES Developer Guide*.

Q: What happens if I try to send a malformed email message or send an email that is disallowed for any other reason?

If Amazon SES is unable to deliver your message, it will return an error message with information about what caused the delivery to fail. In rare cases, Amazon SES may not detect the problem with your email until after accepting your request. In such cases, your email will be returned to you as a bounce with a corresponding error code and reason.

## **Spam and Viruses**

Q: How does Amazon SES ensure that incoming mail is free of spam and viruses?

Amazon SES uses a number of spam and virus protection measures. It uses block lists to prevent mail from known spammers from entering the system in the first place. It also performs virus scans on every incoming email that contains an attachment.

Amazon SES makes its spam detection verdicts available to you, enabling you to decide if you trust each message. In addition to the spam and virus verdicts, Amazon SES provides the DKIM and SPF check results.

Q: What prevents Amazon SES users from sending spam?

Amazon SES uses in-house content filtering technologies to scan email content for spam and malware.

In exceptional cases, accounts identified as sending spam or other low-quality email may be suspended, or AWS may take such other action as it deems appropriate. When malware is detected, Amazon SES prevents these emails from being sent.

## **Amazon SES and Other AWS Services**

Q: How does Amazon SES integrate with Amazon WorkMail?

[Amazon WorkMail](https://aws.amazon.com/workmail/) uses Amazon SES to send and receive mail. When you set up Amazon WorkMail, Amazon WorkMail creates two items within your Amazon SES configuration settings: a sending authorization policy that allows Amazon WorkMail to send mail through your domain, and a receipt rule with a WorkMail action that delivers your domain's incoming mail to Amazon WorkMail. If you remove either of these items, Amazon WorkMail will not function properly.

Q: Does Amazon SES put any restrictions on AWS Lambda functions in addition to the restrictions imposed by AWS Lambda?

There is a 30-second timeout on *RequestResponse*invocations.

Q: I am sending email using my own mail servers hosted on Amazon EC2. Do I have to start using Amazon SES instead?

Amazon SES does not affect any [Amazon EC2](https://aws.amazon.com/ec2/)-based solution that you may currently have. You can continue to use your existing solution, or use Amazon SES, or do both at the same time.

Q: Do I need to sign up for Amazon EC2 or any other AWS services to use Amazon SES?

Amazon SES users do not need to sign up for any other AWS services. Any application with Internet access can use Amazon SES to deliver email, whether that application runs in your own data center, within [Amazon EC2](https://aws.amazon.com/ec2/), or as a client software solution.

Q: How is Amazon SES different from Amazon SNS?

Amazon SES is for applications that need to send communications via email. Amazon SES supports custom email header fields, and many MIME types.

By contrast, [Amazon Simple Notification Service](https://aws.amazon.com/sns/) (Amazon SNS) is for messaging-oriented applications, with multiple subscribers requesting and receiving "push" notifications of time-critical messages via a choice of transport protocols, including HTTP, Amazon SQS, and email. The body of an Amazon SNS notification is limited to 8192 characters of UTF-8 strings, and is not intended to support multimedia content.

## **SMTP Interface**

Q: Does Amazon SES provide an SMTP endpoint?

Amazon SES provides an SMTP interface for seamless integration with applications that can send email via SMTP. You can connect directly to this SMTP interface from your applications, or configure your existing email server to use this interface as an SMTP relay.

In order to connect to the Amazon SES SMTP interface, you must create SMTP credentials. For more information about creating SMTP credentials, see [Obtaining Your Amazon SES SMTP Credentials](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/smtp-credentials.html) in the *Amazon SES Developer Guide*.

Q: How can I use the Amazon SES SMTP interface?

To use the Amazon SES SMTP interface, all you need are your SMTP username and password, the SMTP endpoint name, and the port number. Using this information, you can connect to the Amazon SES SMTP interface in the same manner as any other SMTP relay.

For example, you can integrate your existing packaged software so that it sends email through Amazon SES. You can add email sending capability to your applications, using a programming language that supports SMTP. You can integrate Amazon SES sending with popular mail transfer agents (MTAs) such as Sendmail, Postfix, and Exim. You can even connect to the SMTP interface from the command line, and send SMTP commands directly.

For more information about the SMTP interface, see [Using the Amazon SES SMTP Interface to Send Email](http://docs.aws.amazon.com/ses/latest/DeveloperGuide/send-email-smtp.html) in the *Amazon SES Developer Guide*.

## **APIs and SDKs**

Q: How do I make requests to Amazon SES?

Amazon SES accepts Query requests over HTTPS. These requests use verbs such as GET or POST, and a parameter named Action to indicate the action being performed. For security reasons, Amazon SES does not support HTTP requests; you must use HTTPS instead.

Q: What are the available API operations for sending email?

In addition to SMTP sending support, Amazon SES provides the following APIs: [SendEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendEmail.html) and [SendRawEmail](http://docs.aws.amazon.com/ses/latest/APIReference/API_SendRawEmail.html). These two APIs provide different levels of control over the composition of the actual email message. Both APIs provide the same level of email sending reliability and performance:

The SendEmail API requires the user to provide only a source address, destination address, message subject, and message body. Upon calling this API, Amazon SES will automatically construct and send a properly formatted multi-part MIME email message optimized for display by email client software.

The SendRawEmail API provides the advanced user with flexibility to format and send their own raw email message by specifying headers, MIME parts, and content types.

Q: Do the AWS Software Development Kits contain support for Amazon SES?

Yes. You can use the [AWS Software Development Kits (SDKs)](https://aws.amazon.com/tools/#sdk) for [Android](https://aws.amazon.com/sdkforandroid/), [iOS](https://aws.amazon.com/sdkforios/), [Java](https://aws.amazon.com/sdkforjava/), [.NET](https://aws.amazon.com/sdkfornet/), [Node.js](https://aws.amazon.com/sdkfornodejs/), [Python](http://aws.amazon.com/sdk-for-python/), [PHP](https://aws.amazon.com/sdk-for-php/), and [Ruby](https://aws.amazon.com/sdkforruby/) to access the Amazon SES API. These SDKs make it easy to email-enable your applications to send email, allowing them to send email with using a simple API call.