

# Introducing the Amazon Simple Email Service

Like most technical endeavors, sending email is a lot harder than it looks! The simple solutions that are entirely adequate when you have to send a couple of dozen daily emails simply don't work when you need to send out hundreds, thousands, or even millions of emails over the same time period.

To pick just one issue, let's talk about something that the email pros call **deliverability**. This is a measure of how well you are doing at actually getting email through to the intended recipients. It is affected by a number of factors and is absolutely crucial to the successful implementation of your email strategy. In order to maximize deliverability, you need to work with multiple Internet Service Providers (ISPs) to ensure that they trust your content, and you need to monitor and control the number of complaints and bounces that you generate. After spending time and money building out an internal hardware platform, negotiating expensive agreements with third-party vendors, learning the ins and outs of SMTP, and becoming familiar with (not to mention gaining control of) all of the factors that affect deliverability, you may find yourself wondering why you wanted to send email in the first place. Amazon's Chris Wheeler (Technical Program Manager for Amazon SES and an industry recognized deliverability expert), told me "You must get your house in order before sending your first piece of mail. Otherwise, your mail will end up in the spam folder, may not be delivered at all, or you may be blocked from sending any more mail."



The new [Amazon Simple Email Service](#) (SES) will make it easy for you to send email with minimal setup and maximum scalability. Amazon SES is based on the scalable technology used by Amazon sites around the world to send billions of messages a year.

You'll be able to send email without having to worry about the undifferentiated heavy lifting of infrastructure management, configuring your hosts for optimal sending, and the like. Amazon SES also provides you with access to a number of metrics that will provide you with the feedback needed to tune your email strategy to maximize deliverability.

When you first register, you'll have access to the SES "sandbox" where you can send email only to addresses that you have verified. The verification process sends a confirmation email to the address to be verified; the recipient must click on a link embedded in the email in order to verify the address. You must also verify the email address (or addresses) that will be used to send messages. At this point, with verified addresses in hand, you can send up to 200 messages per day, at a maximum rate of 1 message per second. These limits will allow you to develop and test your application. This

address verification process is intended to allow you to develop and debug your application in a controlled environment. It will also help to maintain your reputation as a sender of high quality email.

Once your application is up and running, the next step is to request production access using the [SES Production Access Request Form](#). We'll review your request and generally contact you within 24 hours. Once granted production access, you will no longer have to verify the destination addresses and you'll be able to send email to any address. SES will begin to increase your daily sending quota and your maximum send rate based on a number of factors including the amount of email that you send, the number of rejections and bounces that occur, and the number of complaints that it generates. This will occur gradually over time as your activities provide evidence that you are using SES in a responsible manner. The combination of sandbox access, production access, and the gradual increase in quotas will allow us to help ensure high deliverability for all customers of SES. This is exactly the same process that bulk senders of email, including Amazon.com, use to season their sending channels.

Newly verified production accounts can send up to 1,000 emails every 24 hours. The SES team has told me that, while it might vary over time, with responsible use this quota currently can grow to 10,000 daily messages within 3 days and up to 1,000,000 daily messages within a couple of weeks. Similarly, the maximum send rate will start out at 1 email per second, and can rise to 10 per second within 3 days, and all the way to 90 per second within a couple of weeks. These increases are based on usage, and occur automatically as you start to approach your existing limits. You can contact us if you need to send more than 1,000,000 emails per day or at a rate in excess of 90 per second and we'll do our best to accommodate you.

The [Simple Email Service](#) will provide you with performance data on your email so that you can track your status and adjust your email sending model if necessary. SES will also provide you with valuable feedback from ISPs in the form of complaints from email recipients.

You can use SES by calling the SES APIs or from the command line. You can also configure your current Mail Transfer Agent to route your email through SES using the directions contained in the SES Developer Guide.

The SES APIs are pretty simple:

- You use **VerifyEmailAddress**, **ListVerifiedEmailAddresses**, and **DeleteVerifiedEmailAddress** to manage the list of verified email addresses associated with your account.
- You use **SendEmail** to send properly formatted emails (supplying From, To, Subject and a message body) and **SendRawEmail** to manually compose and send more sophisticated emails which include additional headers or MIME data.
- You use **GetSendQuota** and **GetSendStatistics** to retrieve your sending quotas and your statistics (delivery attempts, rejects, bounces, and complaints).