



Simple Email Service (SES)

Businesses since the dawn of the internet age have become increasingly reliant on emails for outreach to customers and other stakeholders. Now this has led to a great deal of services that manage the formatting, sending and monitoring of emails often called **Email Communication APIs** and broadly categorized under the more broader term of **CPaaS (Communication Platforms as a Service)**.

Simple Email Service or just SES for short, is one such Email Communication API made available and managed by AWS. SES allows us to send, process and receive emails just like most other communication APIs but its ability to take advantage of AWS vast hardware infrastructure and easy integration with other AWS services has led to multiple unique use cases and standout features, some of which are listed below:

- **Event-Driven Email Sending:** SES can be integrated with Amazon EventBridge to trigger emails based on events in your application. This is useful for automating responses to specific actions like order status changes, user sign-ups, or system alerts. For example, when a user's subscription is about to expire, SES can send an automated reminder email driven by a scheduled event or condition.
- **Transactional Email Optimization:** SES enables us to personalize transactional emails (like order confirmations or password resets) at scale by integrating with Lambda and other AWS services for dynamic content generation. For example, SES can be combined with Lambda to customize an email with personalized data such as user-specific discounts or usage reports.

- **Personalized Bulk Emails:** SES can send bulk emails while personalizing each email's content. This is especially useful when sending tailored marketing campaigns where each recipient receives customized content. For example, using configuration sets, we can track individual user interactions (opens, clicks) in a bulk email campaign and take specific actions for users who haven't engaged, such as follow-up reminders.
- **Email Receiving and Processing:** Once again, SES is not just for sending emails—it can also receive and process incoming emails. We can also configure SES to automatically trigger workflows in response to received emails, such as forwarding, archiving, or triggering Lambda functions. For example, if we are running a customer support service, SES can route incoming customer inquiries to specific teams based on say, specific keywords in the email content or automatically trigger follow-up workflows.

These capabilities make the service something beyond just simple email delivery and make SES a highly adaptable tool for any business that need to manage email communications effectively especially if its already familiar with leveraging the other AWS services.



Infographic on Amazon SES; Source: AWS