Optimizing Email Delivery: Exploring the Power of Email SMTP Relay

WHITE PAPER

UDPaaS
Powered by eTRANSERVICES

Table of Contents

Introduction

The Universal Design Platform as a Service (UDPaaS) application is a highly versatile cloud-based business automation platform that can be accessed from any device via a web browser. Our human-centered design platform supports users' communication via emails that can be sent in bulk to the target audiences, routed automatically based on configured workflows, as well as individually crafted ad hoc emails.

To send out emails to the users using all scenarios mentioned above, UDPaaS uses Simple Mail Transfer Protocol (SMTP) email relay service. SMTP relay is a server that acts as an intermediary between an email client and an email server. When an email is sent, the sending email client connects to the SMTP relay, which then forwards the email to the recipient's email server.

Any UDPaaS based solution can be configured to either send emails by default or be configured to use any third-party SMTP email relay service. While UDPaaS default email relay is a solution that can be utilized by organizations that do not require extensive mass communication with external users, a dedicated SMTP email relay, such as Amazon Simple Email Service (SES), is a solution more suitable for organizations that are routinely engaged in sending bulk emails to larger pools of external users. The choice of SMTP email relay matters as email delivery can be flagged as initiated from a SPAM account, and, consequently, critical UDPaaS notifications can be blocked from being sent to the UDPaaS users.

The benefit of purchasing a dedicated SMTP email relay service not only helps improve email delivery for UDPaaS due to Amazon's expertise in cloud infrastructure and email services but also allows for a cost-effective and secure email solution.

In this paper, we describe the pros and cons of each email relay setting that can be configured in UDPaaS based on the organization's needs.

Problem Statement

The UDPaaS system uses emails to deliver various notifications and reminders, such as submission deadlines for different funding opportunities to the users of a grant management solution or notifying applicants of new hiring opportunities in an applicant tracking solution. Email delivery can be disrupted at critical times due to SPAM alerts triggered by Internet Service Providers (ISPs) when using the default UDPaaS email configuration.

The volume of email and the sending patterns of the sender can cause automated algorithms to identify the email address used by the UDPaaS email SMTP relay service as a SPAM account. The email address is then blocked from sending emails until manually unblocked and the sender's email reputation has recovered. This process can take several hours, and in that time, outgoing emails from UDPaaS to registered users are blocked, causing missed deadlines at critical points in the application process.

Current workarounds involve sending bulk emails in smaller numbers with waiting times before sending them again to avoid SPAM alerts. This is not ideal when UDPaaS with the default email configuration must send out email notifications near a critical deadline to hundreds of applicants. Also, during these lengthy workarounds, resources are being used to manually monitor the UDPaaS sending email address in case the email address is blocked as a SPAM account.

Non-Dedicated Email Relay Service

The UDPaaS application provides several features that support communication via email to registered users. These features range from sending emails in bulk to target audiences, automated emails based on a workflow, and individually crafted ad hoc emails. Configuration options are also available for personalizing email content and email delivery. The platform makes the best effort to send email as configured, but there are limits and best practices that must be observed to maximize the successful delivery of email. These limits and best practices are ever-changing, as are the industry standards they are designed to follow.

UDPaaS can be configured to send email via SMTP relay through a corporate mail exchange system, but email delivery is subject to sending limits and shared corporate email resources. The volume of email and the sending patterns of the sender can cause automated algorithms to identify the email address used by the UDPaaS email SMTP relay service as a SPAM account by external Internet Providers (IPs). The email address is then blocked from sending emails until manually unblocked and the sender's email reputation has recovered. This process can take several hours, and in that time, outgoing emails from UDPaaS to registered users are blocked, causing missed deadlines at critical points in the application process.

The flagging of the UDPaaS sender email address as SPAM can be inconsistent by external ISPs despite increasing sending limits from the corporate mail exchange system. Current workarounds to avoid mass emails being blocked is to intentionally send batches of emails across a longer duration. However, this method slows down the notification process causing major inconvenience for UDPaaS administrative staff.

Solution
Dedicated Email Relay Service

Amazon SES is an alternate solution that can be used to improve the email delivery for UDPaaS using SMTP relays compared to the default UDPaaS email configuration or internal corporate SMTP relays. Amazon SES is a dedicated email relay service suited to relaying emails from an application like UDPaaS compared to other email-focused services.

Amazon SES is a highly scalable and cost-effective email service that helps businesses send and receive bulk email. Amazon SES offers a variety of benefits, including:

- ✅ **High deliverability**: *SES uses a variety of techniques to ensure that emails are delivered to the inbox, including reputation management, spam filtering, and DKIM signing.*

- ✅ **Scalability:** *SES is a highly scalable service that can ensure that organizational emails are delivered even when there is a large volume of traffic, making it ideal for businesses of all sizes.*

- ✅ **Cost-effectiveness:** *SES is a cost-effective way to send email, with pay-as-you-go pricing.*

- ✅ **Security:** *SES uses a variety of security features to protect your emails, including encryption and spam filtering. It is also FEDRAMP-certified, ensuring it meets rigorous security standards for use in government agencies and regulated industries.*

Conclusion

The UDPaaS system relies on email notifications to inform users about important updates and deadlines, but the default email configuration can often trigger SPAM alerts when sending mass emails, thus disrupting email delivery. When using a non-dedicated email relay service, sending emails in smaller batches over an extended period will help alleviate the blockages, however, it might slow down the notification process and can be inconvenient or even unacceptable when having to adhere to tight deadlines. The dedicated email relay service, like Amazon SES, on the other hand, is designed to effectively support email traffic regardless of the volume in addition to providing other benefits to a business.

In the end, businesses must make a decision based on the organizational objectives, needs, and resources available at the time. Knowing the pros and cons of each alternative helps to determine the best path forward to support the business in fulfilling its mission. A dedicated email SMTP relay achieves this with its high deliverability, scalability, cost-effectiveness, and security.

References

Metz, M. (2004). The SES. Amazon. https://aws.amazon.com/ses/

Lengauer, D. (2019). Compliance. Amazon. https://aws.amazon.com/compliance/services-in-scope/FedRAMP/

Contact Us

Have questions or want to learn more about UDPaaS & how it can help your organization?

🌐 Visit https://udpaas.com/

📞 Call us at (571) 405-5560

✉️ Email us at sales@udpaas.com

Contracting Vehicles

GSA 8(a) STARS III GWAC | FAA eFAST | GSA MAS | NAVY SeaPort-NxG | NIWC IDIQ 8(a)