

# MAIL SETUP DOCUMENTATION

There are several methods that can be used to set up mail delivery from our platform. This document describes & defines the requirements for each method and provides context for which approach may be most appropriate for your library.

We recognize that some libraries may have limitations in implementing some of these mail delivery methods. Because of this, we provide several options that should cover the list of requirements that need to be met by most libraries. We recommend sharing this document with your IT staff or service and discussing with them which approach is best for your library.

**Please notify Library Market of which method you intend to use at least two weeks prior to your scheduled product launch. If Library Market is not given adequate lead time for the configuration of mail delivery, you may be unable to launch on schedule.**

## Method 1: DKIM-based domain verification (preferred)

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We maintain an Amazon SES account for libraries that wish to delegate mail delivery responsibility to Library Market, but still want to use their existing domain name for mail delivery. Library Market recommends this method for all libraries with the ability to add DNS records.

There are many advantages to using this method for mail delivery:

- This method is simple to set up for libraries.
- The library does not need to worry about whether future changes to their existing mail infrastructure will affect the deliverability of mail originating from Amazon SES.
- Amazon maintains the SPF record for the library's sending identity, meaning that no adjustments need to be made to the library's existing SPF record (if any).
- All mail originating from Amazon SES will be cryptographically signed using DKIM signatures that support policies requiring strict alignment, meaning that no adjustments need to be made to the library's existing DMARC record (if any).
- Amazon will ensure that there is no negative impact to the library's reputation as a sender for any mail originating from Amazon SES. (Amazon is not responsible for impacts to the library's sender reputation for mail that does not originate from its platform, however.)
- Library Market receives bounce and complaint reports for all attempted deliveries, which gives us greater flexibility if we need to diagnose issues concerning delivery via Amazon SES.

This method requires the library to install DNS records on the domain name that they wish to use as their sending identity. The DNS records consist of three DKIM public keys which serve a dual purpose: facilitating identity verification and adding signatures to all outbound mail. Since Amazon SES employs persistent identity verification, the records need to remain installed for normal operation; however, this means that you may remove these records at any time to revoke our ability to send mail on your behalf.

If you opt to use this method, please provide us with the e-mail address that you wish to use as the outgoing address for all mail originating from our products (e.g., [noreply@yourdomainname.com](mailto:noreply@yourdomainname.com)). We will create a sending identity for you in our Amazon SES dashboard and send you the necessary DNS records for installation.

Once your sending identity has been verified, your site will be the only site which is able to use it. Each of our sites is given a unique IAM user that only has access to its associated sending identity. This ensures that none of our other customers can use your library's sending identity and vice-versa.

## Method 2: Client-provided SMTP account

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This method enables us to send mail from our platform using your existing SMTP server. Similar to the setup of staff devices in your organization, we will need the SMTP connection information and credentials that you would normally use to set up a phone, tablet, or computer for your staff.

Some requirements must be met for this method to be a viable option:

1. Your SMTP server must support ESMTP. (See [RFC 5321](#) for more information.)
2. Your SMTP server must require TLS or STARTTLS (version 1.2 or greater) for authentication, and must offer a valid certificate chain that can be verified using the certificate authorities shipped with Mozilla's browsers. Self-signed certificates are not supported.
3. Your SMTP server must support authentication via username and password, and must offer at least one of the following authentication mechanisms: **CRAM-MD5**, **LOGIN**, or **PLAIN**.
4. Your SMTP server must allow connections from any IP address since our hosting platform uses [Dynamic Outgoing IP Addresses](#). We cannot provide a known outbound IP address for SMTP.
5. **Library Market will not use an open relay to send mail for security reasons. SMTP servers configured to act as an open relay can be used to forge the sending address for any mail sent from the server.**

This method should be used if your organization wants to be responsible for the management of all mailing infrastructure. This method should not be used if you are unable to provide us with SMTP connection details (e.g., if you have a policy against allowing third-party providers to use your mailing infrastructure).

If you opt to use this method, please provide us with:

1. The SMTP server address, port, and encryption type (either TLS or STARTTLS)
2. Our SMTP username and password
3. Our outgoing e-mail address (e.g., [noreply@yourdomainname.com](mailto:noreply@yourdomainname.com))

If possible, we would also prefer an account that is intended for use by our products only.

We will test the connection details and credentials that you provide us ahead of launch to confirm that they meet our requirements and are working correctly.

**Library Market cannot provide support for client-provided SMTP servers. It's the client's full responsibility to ensure service availability and the validity of the connection details and credentials provided to us. Library Market will provide diagnostic information to resolve connection issues.**

*If you intend to use a Google account with Method 2, see Appendix A for more information.*

## Method 3: Provider-configured domain name

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If none of the other methods are suitable for your organization, Library Market can purchase a domain name on your behalf that can be used solely for outgoing mail delivery from our products. This method is identical to Method 1; the only difference is that we will fully manage the property on behalf of your organization.

If you select this method, any maintenance costs will be passed-through to your organization as part of your yearly maintenance and hosting subscription with us. The exact charges depend on the cost of the domain name chosen, but these are usually \$12-\$20/year. There will be no mailbox attached to any e-mail address on the domain since it will be used for outgoing mail only.

In an effort to maintain consistency in our implementation of this method, Library Market cannot guarantee the availability of any functionality aside from delivering mail. This includes, but is not limited to, delivery metrics, redirects, and custom DNS records for the domain. You may request a transfer of the domain name at any time if you wish to assume full control over it (e.g., to perform any desired customizations).

If you opt to use this method, please provide us with the e-mail address that you wish to use as the outgoing address for all mail originating from our products (e.g., [noreply@yourdomainname.com](mailto:noreply@yourdomainname.com)). The selected domain name must be available for us to register on your behalf.

## Appendix A: Using Method 2 with a Google account

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Google supports several authentication mechanisms via SMTP. Because of some provider-imposed authentication constraints, special care should be taken when configuring Method 2 with Google-provided mail services.

Below is a list of authentication mechanisms available when accessing a Google account via SMTP:

**1. Authentication using your Google account's username & password (not recommended)**

Google limits password-based sign-ins to Google accounts via SMTP by default. Even though this limitation can be disabled on a per-account basis, it is not recommended since Google will eventually remove this capability. Google also periodically re-enables this limitation, which makes this mechanism unreliable for production use.

**2. Authentication via App Password (recommended)**

An App Password is a random, 16-character password that permits access to your Google account by a specific application. When authenticating using this mechanism, the random App Password is supplied instead of your regular Google account password.

**3. Authentication via OAuth (unsupported)**

OAuth is an authentication standard that provides temporary access grants to third parties using an access token that expires periodically, and thus must be regenerated using a refresh token. This mechanism is not supported by Library Market.

Library Market supports the first and second authentication mechanisms. Even though the initial setup may be more complex, Library Market recommends using an App Password due to the security benefits that it provides and its greater compatibility with our products.

The below documentation describes how to set up an App Password on your Google account:

<https://support.google.com/accounts/answer/185833?hl=en>

If you wish to authenticate using your Google account's username & password, see this link:

<https://support.google.com/a/answer/6260879?hl=en>