

Verisend

Restoring Confidence to Email with Verifiable Sender Identities

Summary

Email is a wonderful way to communicate and a fantastic business tool that allows nearly instantaneous delivery at near zero cost.

Unfortunately, **anonymity** and **forgery** have restricted the full potential of email to be a **trusted method** deliver a wide variety of information.

Using verifiable message metadata cross referenced against a Library of Known Good Senders assists in 100% sure identification of Good Senders and of individual messages.

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The Trouble with Email

The unexpectedly large volume of email, combined with its anonymity, has created unanticipated problems for senders and recipients alike. Spammers complicate this problem immensely, forging and faking every possible sender and institution, from the President of the U.S, to the Pope to Banks, Facebook, Walmart, you name it. Even with excellent filters, recipients are **never completely sure** that their messages are legitimate.

Enough messages are forged to cause recipients to be very wary when opening, reading or clicking on links in email. The end result is that the benefits to the recipient of many of these messages is eliminated due to their ***distrust of email as a whole***.

The SMTP Mail Standard never anticipated the volume of messages and the variety of purposes for which people would use email. Let's look at a few categories:

- Business Communications, person to person
- Business Newsletters
- Calendar Invites
- Social Media Notifications (Facebook, Twitter, LinkedIn, Meetup)
- Ecommerce Confirmations (Airline tickets, Online Purchases, Amazon, etc.)
- Product Delivery Notifications
- Banking Confirmations

Current Methodologies are Inadequate

The state of the art to fix email is to build ever more complex filtering methodologies to stop spam, phishing and other social engineering attacks. The theory is that if you remove all the bad mail, all that remains is good mail.

But this theory is fatally flawed. Building ever more complex filtering methodologies to weed out the "bad" senders is unfortunately a "whack-a-mole" exercise, as the filters cannot adapt in real time to prevent zero-hour threats. So the goal of filtering out all of the bad mail to leave only the good mail is a failure, leaving the mail recipient to their own resources, fortified by a one hour security training class, to figure out what messages are good. This consumes too much effort and removes trust in the most important single application for any organization: email.

How Verisend Solves these Problems

We believe that **positive actions** to **Identity** good mail are superior to **negative actions** that attempt to identify “bad” messages for a very simple reason: Good Senders do not play games with their identity. They generally conform to standards like SPF, DMARC and DKIM. These messages can be identified in the message metadata. But unfortunately, that information is invisible to message recipients.

Until now.

Verisend Identity

Verisend reads the message metadata to determine the actual organization and sender. But the important step is how we expose that to the message recipient.

Verisend Library of Known Good Senders

Verisend uses its own Library of Known Good Senders to cross reference against the metadata from an individual message to confirm that a sender is 100% who they purport to be. Once the sender is identified in our library, Verisend displays the Sender's Brand Logo to the recipient, right in the Inbox. This allows for quick and easy visual Verification of each message and the Identity of its sender. This therefore overcomes the two largest problems with email: anonymity and forgery.

The Verisend Library is **critically important** as each message is cross-references against a curated list of good senders, to prove the Identity of the Sender to the Recipient. Simply passing an SPF or DKIM check is not enough, as anyone can register a domain and setup these TXT records. Having a Library of Known Good Senders is an essential element, confirming that the message is from a verified sender.

User Experience

Verisend provides easy, unforgeable verification of the message sender using message metadata and the extensive Verisend Library of Known Good Senders. Once the user becomes accustomed to “look for the logo” in their Inbox, they become comfortable trusting email again and they can therefore act on the message contents as they choose.

With verifiable Identity, recipients can say “I know this email is from my bank” (or other sender) with 100% confidence and therefore follow any links or instructions without hesitation. In our current email environment, this seems to be an absurd statement.

Brand Logos

Verisend displays the familiar brand logos of Verified messages to the user to confirm the message is from the purported sender. These are displayed “right in the Inbox”.



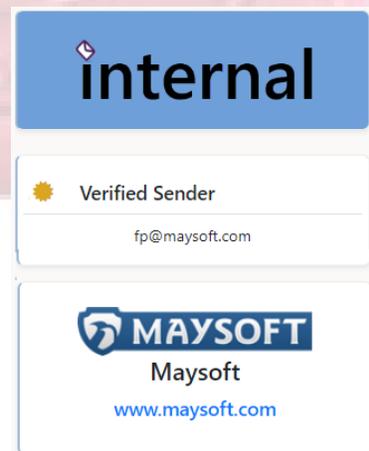
Identifying Good Internal Messages

The goal of identifying good internal mail is a critical one in restoring trust to email. Users need to do their work without fear they are unknowingly assisting a bad actor.

Unfortunately for all email users, the state of the art to identify Internal Messages is to put the following on all External messages:

CAUTION: This email originated from outside of our organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

But the goal is to identify good *internal* mail, mail that you can act on. We believe that clearly stating that a message is “Internal” is critical to restoring this trust. For added measure, we also show the company logo from our Verisend Library, letting the user know that his message is safe to act on.



Verisend Propagation

We believe the best way to restore trust to email is to make the Verisend Library available as widely as possible. To that end, we have made the Verisend Library available to software vendors, email vendors and others as a SaaS via an API. This allows any add-on, extension, or OEM to integrate Verisend easily into their offerings by availing themselves of our extensive Verisend Library of known Good Senders.

Summary

Verisend returns confidence and trust to email by **Verifying** the authenticity of a message, combined with visual **Verification** by presenting the Sender's Brand logo to the recipient in the normal process of receiving email right in the Inbox.

Verisend identity confirmation enables email to continue to expand its useful role as an immediate and asynchronous messaging platform.

