“Wrong Recipient” Notifications For Email Misdelivery

IETF 119, DISPATCH
What to do?

- Actual email received
- (I’m not Jeffrey.)
- Not spam
- Legit sender
- Legit purpose
- Correct ARC, DMARC, SPF, and DKIM
- Can’t unsubscribe
- Can’t reply

Your online bill is ready to be viewed

Account Management <update@email.com> Thu, Dec 28, 2023, 10:36 AM (9 days ago) 

to me

View your bill

Schedule a payment
Postal Mail Solved This 100+ Years Ago?
What if Email Had a “Wrong Recipient” Notification?

- Would need to be user-initiated via UI - “this wasn’t meant for me”
- Probably should only show this UI if confident it’s not spam.
- Mostly for B2C using noreply@ - if a human writes to you, you can just reply “you sent this to the wrong person”.
- Would benefit:
  - **Wrong Recipient**: no longer receive emails for someone else
  - **Sender**: minimize liability for transmitting PII to a third party, repair broken comms channel
  - **Correct Recipient**: might finally gets the message for them
What Could a Sender Do If Notified of a Wrong Recipient?

- Stop sending emails to the wrong recipient for that account
  - But don’t treat as “send no email” to that address; the user might have a valid account!
- Use postal mail, phone call, or text message to collect a better email address
- Try other / prior email addresses for the user account?
- Display in-app / web message for the user that they need to provide a correct email address

Note: can avoid this flow if only sending transactional emails to verified addresses!
How Might We Enable Wrong Recipient Notifications?

- HTTPS URI in “Wrong-Recipient” SMTP header field, modeled after List-Unsubscribe One-Click (RFC 2369 / RFC 8058)

- Simple POST to sender-provided URI, no cookies included

- Could offer mailto: URI option to support non-HTTP MUA / offline use

- “Undeliverable” via Return-Path probably not optimal since the email address is actually deliverable, and also is an asynchronous & user-initiated action

- RFC 8058 has seen robust adoption, let’s ride their coattails?
Proposal (draft-dweekly-wrong-recipient)

Header Field in Email:

Wrong-Recipient: <https://example.com/wrong-recipient?uid=12345&email=user@example.org&sig=a29c83d>

Resulting POST request:

POST /wrong-recipient?uid=12345&email=user@example.org&sig=a29c83d HTTP/1.1
Host: example.com
Content-Length: 20

Wrong-Recipient=true
Thanks!

https://datatracker.ietf.org/doc/draft-dweekly-wrong-recipient/

david@weekly.org