

List Hygiene and Bounce Handling Processes

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Objectives

- These recommendations are intended to enable email senders and receivers to:
 - Operate more efficiently
 - Improve deliverability
 - Improve user experience
- The recommendations place obligations on both senders and receivers
 - Each sender should adopt the recommendations, regardless of whether adopted by a particular receiver
 - Vice versa
- The recommendations are a result of conversations between a working group of industry participants

Definitions: List Hygiene

List hygiene is used in this context to describe how a sequence of delivery failures to a single address results in the address being removed from the delivery list.

Definitions: Delivery Rejection

- **Delivery rejection** refers to a returned or bounced email
 - The more specific an ISP is with error messages, the better senders will be able to manage list hygiene
- Delivery rejection vs. delivery failure events
 - Subset or equivalent
 - Depends on the working definition used by sender and receiver
 - Some failures may reasonably thought to be transient
 - Mailbox full
 - Temporary SMTP failures
 - Other failures assumed to be persistent (likely to recur over multiple delivery attempts)
- An agreement upon an explicit definition of delivery rejection represents a further opportunity for the working group to develop industry norms.

Recommendations

1. List Hygiene Policy
2. Reply Coding Standards
3. Receiving Systems Policies

Recommendation #1: List Hygiene Policy

Senders should mark an address as “dead”:

- Sender should remove address from the delivery list
- Sender should not attempt to deliver to the address until they have reason to believe the delivery rejection would not occur

IF:

A. 3 consecutive delivery rejections have occurred;

AND

B. The time between the most recent consecutive delivery rejection and the initial consecutive delivery rejection is greater than fifteen days.

Also, a sender should have the capability to manage delivery rejections differently between ISPs.

Recommendation #2: Reply Coding Standards

Receiving systems should comply with RFC and DSN codes:

- RFC 821 – Reply Codes
- RFC 1894 – Delivery Status Notifications

ISPs should use RFC 550 5.7.1 “Go Away” to indicate that the ISP is intentionally rejecting the delivery of an email that is thought to be in violation of the industry-recommended list hygiene policies.

Recommendation #3: Receiving Systems Policies

Receiving systems should publish their policies and standards regarding requirements for delivering incoming email

- in an easy to find section of their public website
- and apply the policies consistently across legitimate senders.

Recommendation #4: Senders and Receivers Cooperation

- Senders and receivers should participate in an inter-industry communications facilitation program
 - e.g. ISIPP's Email Deliverability Database (EDDB)
- This cooperation can help ensure that senders and receivers can communicate effectively and in a timely manner when an email delivery problem occurs

Discussion Points

- ISP use of standards
 - ISPs should formulate and practice consistent, standardized use of reply codes and delivery status notifications
 - Use standard codes to indicate delivery rejection
 - Indicate cause or intent of delivery rejection
- ISP “go away” reply to message
 - Email bounced with a RFC 550 5.7.1 code should be immediately “sidelined” and not mailed to, provided the ISP provides a notification of the issue and how many addresses are impacted

Discussion Points, continued

- Coding for Delivery Rejection: bounced messages should be classified as delivery failures if any of the following conditions are met:
 - SendMail 553 SMTP response code
 - 501 generic SMTP error code (for malformed SMTP requests) from IronPorts
 - Bounced message contains a Delivery Status Notification definitively indicating delivery failure
 - Subject of the reply contains:
 - “Returned Mail”
 - “Mail Delivery Failed”

Discussion Points, continued

- Is it practical or desirable to recommend that senders remove (or recommend their clients remove) “dead” addresses from:
 - All mailing lists; or
 - The list requiring hygiene in accordance with “list hygiene policy” (recommendation #1)?
- The working group agreed that the list hygiene policy should apply on a list-by-list basis as opposed to more globally across lists or sending parties.