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Email Feedback Report Type Value: not-spam

Abstract

This document defines a new Abuse Reporting Format (ARF) feedback report type value: "not-spam". It can be used to report an email message that was mistakenly marked as spam.

Status of This Memo

This is an Internet Standards Track document.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Further information on Internet Standards is available in Section 2 of RFC 5741.

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Table of Contents

- 1. Introduction2
 - 1.1. Discussion2
- 2. Feedback Report Type: not-spam3
- 3. Example3
- 4. Security Considerations5
- 5. IANA Considerations6
- 6. Acknowledgements6
- 7. References6
 - 7.1. Normative References6
 - 7.2. Informative References6

1. Introduction

In RFC 5965 [RFC5965], an Abuse Reporting Format (ARF) is defined for reporting email abuse. Currently, two feedback report types are defined that are related to the spam problem and that can be used to report abusive or fraudulent email messages:

- o abuse: indicates unsolicited email or some other kind of email abuse.
- o fraud: indicates some kind of fraud or phishing activity.

This specification defines a new feedback report type: "not-spam". It can be used to report a message that was mistakenly marked as spam.

1.1. Discussion

In some cases, the email client receives an email message that was incorrectly tagged as spam, perhaps by the email system, or accidentally by the user. The email client accepts the end user's "not-spam" report instruction, retrieves information related to the message, and reports this email as not-spam to the email operator. When the email operator receives the report, it can determine what action is appropriate for the particular message and user. (The requirement for a not-spam report type is from the Open Mobile Alliance (OMA) Spam Report Requirement Document [OMA-SpamRep-RD].)

For example, in response to a "not-spam" report, the email system can remove the spam tag or otherwise reclassify the message, possibly preventing similar email for this user from being marked as spam in the future. The report can be used to adjust the training of an automated classifier. After processing the report, the email

operator might send a notification to the email client about the processing result (for example, by moving the message from one mailbox to another, such as from "Junk" to "Inbox").

In most cases, "not-spam" reports will probably not be taken on their own, but will be considered along with other information, analysis of the message, etc. Because different users have different needs and different views of what constitutes spam, reports from one user might or might not be applicable to others. And because users might sometimes press a "report not spam" button accidentally, immediate strong action, such as marking all similar messages as "good" based on a single report, is probably not the right approach. Recipients of "not-spam" reports need to consider what's right in their environments.

There are anti-spam systems that use (non-standard) "not spam" feedback today. All of them take the reports and mix them with other spam reports and other data, using their own algorithms, to determine appropriate action. In no case do the existing systems use a "not spam" report as an immediate, automatic override.

The feedback types "abuse" and "not-spam" can be taken as opposites. A mistaken "not-spam" report could be countermanded by a subsequent "abuse" report from the same user, and an operator could consider collected reports of "abuse" and "not-spam" in making future assessments.

2. Feedback Report Type: not-spam

This document defines a new feedback report type, "not-spam", which extends the Email Feedback Reports specification [RFC5965].

In the first MIME part of the feedback report message, the end user or the email client can add information to indicate why the message is not considered as spam -- for example, because the originator or its domain is well known.

3. Example

In the example, Joe, a pharmaceuticals sales representative, has received a message about discount pharmaceuticals. Because that is a frequent subject of spam email, the message has been marked as spam -- incorrectly, in this case. Joe has reported it as "not-spam", and this is an example of the report, shortened (the "[...etc...]" part) for presentation here.

Note that the message has been signed using DomainKeys Identified Mail (DKIM) [RFC6376] -- a good security practice as suggested in Section 8.2 of RFC 5965 [RFC5965].

```
DKIM-Signature: v=1; a=rsa-sha256; s=abuse; d=example.com;
  c=simple/simple; q=dns/txt; i=abusedesk@example.com;
  h=From:Date:Subject:To:Message-ID:MIME-Version:Content-Type;
  bh=iF4dMNYs/KepE0HuwfukJCDyjkduUzZFiaHqO9DMIPU=;
  b=e+BF8DCHFGqCp7/pExleNz7pValEoT+uWj/8H9DoZpxFIlvNnCTDul4w5v
  ze4mqJkldudVI0JspsYHTYeomhPk1CV4F95GfwpM5W+ziUov7AySTfygPW
  EerczqZwAK88//oaYCFXq3XV9T/z+z1Lp3rrirKGmCMCPPcbdSGv/Eg=
From: <abusedesk@example.com>
Date: Thu, 8 Mar 2005 17:40:36 EDT
Subject: FW: Discount on pharmaceuticals
To: <abuse@example.net>
Message-ID: <20030712040037.46341.5F8J@example.com>
MIME-Version: 1.0
```

```
Content-Type: multipart/report; report-type=feedback-report;
  boundary="part1_13d.2e68ed54_boundary"
```

```
--part1_13d.2e68ed54_boundary
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit
```

This is an email abuse report for an email message received from IP 192.0.2.1 on Thu, 8 Mar 2005 14:00:00 EDT. For more information about this format please see <http://tools.ietf.org/html/rfc5965>
Comment: I sell pharmaceuticals, so this is not spam for me.

```
--part1_13d.2e68ed54_boundary
Content-Type: message/feedback-report
```

```
Feedback-Type: not-spam
User-Agent: SomeGenerator/1.0
Version: 1
```

```
--part1_13d.2e68ed54_boundary
Content-Type: message/rfc822
Content-Disposition: inline
```

Received: from mailserver.example.net
(mailserver.example.net [192.0.2.1])
by example.com with ESMTTP id M63d4137594e46;
Thu, 08 Mar 2005 14:00:00 -0400
From: <someone@example.net>
To: <Undisclosed Recipients>
Subject: Discount on pharmaceuticals
MIME-Version: 1.0
Content-type: text/plain
Message-ID: 8787KJKJ3K4J3K4J3K4J3.mail@example.net
Date: Thu, 02 Sep 2004 12:31:03 -0500

Hi, Joe. I got a lead on a source for discounts on
pharmaceuticals, and I thought you might be interested.
[...etc...]
--part1_13d.2e68ed54_boundary--

Example 1: not-spam Report

4. Security Considerations

All of the security considerations from the Email Feedback Reports specification [RFC5965] are inherited here. In addition, the Email Feedback Reports Applicability Statement [MARF-AS] contains important information about trust relationships and other security- and integrity-related aspects of accepting abuse feedback.

In particular, not-spam reports will likely be used in an attack on a filtering system, reporting true spam as "not-spam". Even in absence of malice, some not-spam reports might be made in error, or will only apply to the user sending the report. Operators need to be careful in trusting such reports, beyond their applicability to the specific user in question.

5. IANA Considerations

IANA has registered the newly defined feedback type name: "not-spam", according to the instructions in Section 7.3 of the base specification [RFC5965].

The following has been added to the "Feedback Report Type Values" registry:

Feedback Type Name: not-spam

Description: Indicates that the entity providing the report does not consider the message to be spam. This may be used to correct a message that was incorrectly tagged or categorized as spam.

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6. Acknowledgements

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7. References

7.1. Normative References

[RFC5965] Shafranovich, Y., Levine, J., and M. Kucherawy, "An Extensible Format for Email Feedback Reports", RFC 5965, August 2010.

7.2. Informative References

[MARF-AS] Falk, J., "Creation and Use of Email Feedback Reports: An Applicability Statement for the Abuse Reporting Format (ARF)", Work in Progress, September 2011.

[OMA-SpamRep-RD]
Open Mobile Alliance, "Mobile Spam Reporting Requirements", Candidate Version 1.0 OMA-RD-SpamRep-V1_0-20101123-C, November 2010, <http://www.openmobilealliance.org/Technical/release_program/docs/SpamRep/V1_0-20101123-C/OMA-RD-SpamRep-V1_0-20101123-C.pdf>.

[RFC6376] Crocker, D., Ed., Hansen, T., Ed., and M. Kucherawy, Ed.,
"DomainKeys Identified Mail (DKIM) Signatures", RFC 6376,
September 2011.

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