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A Reputation Vocabulary for Email Properties
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Abstract

This document defines a vocabulary for describing email identities (typically authors or signers) with the application/reputon media type.

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[1.](#) Introduction

This memo defines a "vocabulary" for describing reputation of a property of an email message that is not an identity. A "vocabulary" in this context is defined in [RFCxxxx] and is used to describe assertions a reputation service provider can make about properties of an email message as well as meta-data that can be included in such a reply beyond the base set specified there.

A separate document in this series declares a vocabulary for use in relating reputation information about an identity found in an email message.

[2.](#) Document Series

This memo represents the media type registration, part of a series of documents that define the overall service and introduce the initial exemplary applications. The series is as follows:

1. RFCxxxx: A Model for Reputation Interchange
2. RFCxxxx+1: A Media Type for Reputation Information
3. RFCxxxx+2: Using UDP for Reputation Interchange
4. RFCxxxx+3: Using the DNS for Reputation Interchange
5. RFCxxxx+4: Using HTTP/XML for Reputation Interchange
6. RFCxxxx+5: A Reputation Vocabulary for Email Identity Reputation
7. RFCxxxx+6: A Reputation Vocabulary for Email Property Reputation (this memo)

[3.](#) Terminology and Definitions

This section defines terms used in the rest of the document.

[3.1.](#) Keywords

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [[KEYWORDS](#)].

[3.2.](#) Email Definitions

Commonly used definitions describing entities in the email architecture are defined and discussed in [[EMAIL-ARCH](#)].

[3.3.](#) Other Definitions

Other terms of importance in this memo are defined in RFCxxxx, the base memo in this document series.

[4.](#) Discussion

The expression of reputation about an email property requires extensions of the base set defined in [RFCxxxx]. This memo defines and registers some common assertions about an entity found in a piece of [[MAIL](#)].

Unless otherwise noted, the property extracted from the message **MUST** be preserved precisely, with no characters omitted even if they are considered syntax errors within context.

[4.1.](#) Assertions

The "email" reputation application recognizes the following assertions:

CONTAINS-MALWARE: The subject property is associated with messages that contain malware

IS-PHISH: The subject property is associated with fraudulent email with a goal of identity theft

IS-SPAM: The subject property is associated with unwanted bulk email

[4.2.](#) Vocabulary Extensions

The "email-content" reputation application recognizes the following extensions to the vocabulary defined in [RFCxxxx]:

SOURCE: A token indicating the source of the property; that is, where the subject property was found in the message. This MUST be one of:

[RFC5321](#).MAILFROM: The [RFC5321](#).MailFrom value of the envelope of a message of the message (see [\[SMTP\]](#))

[RFC5322](#).FROM: The [RFC5322](#).From field of the message (see [\[MAIL\]](#)). Any folding whitespace MUST be rewritten to a single linear space character (ASCII 32).

[RFC5322](#).MESSAGE-ID: The [RFC5322](#).Message-Id field of the message (see [\[MAIL\]](#))

[RFC5322](#).SUBJECT: The [RFC5322](#).Subject field of the message (see [\[MAIL\]](#)). Any folding whitespace MUST be rewritten to a single linear space character (ASCII 32).

UNSPECIFIED: Any arbitrary string from anywhere in the message.

URI: A complete URI found in the message, such as the content of a "src" tag in an "img" element, or an "href" tag in an "a" element. (See [\[URI\]](#) and [\[HTML\]](#)).

URI-HOST: The "host" portion of a URI found in the message. Note that this can be a DNS domain name or an IP address, each in any of various encodings. (See [\[URI\]](#) and [\[HTML\]](#)).

[5.](#) IANA Considerations

This memo presents one action for IANA, namely the registration of the reputation application "email-content".

[5.1.](#) Registration of 'email-content' Reputation Application

This section registers the "email-content" reputation application, as defined in [RFCxxxx+1]. The registration parameters are as follows:

- o Application name: email-content
- o Short description: Evaluates any of various properties of an email message that are not identities
- o Defining document: [this memo]
- o Status: current

[6.](#) Security Considerations

This memo describes security considerations introduced by the media type defined here.

[6.1.](#) General

This memo is part of a series introducing a reputation query and response system (see [Section 2](#)). The Security Considerations sections of the other memos should also be consulted.

[7.](#) Informative References

[EMAIL-ARCH]

Crocker, D., "Internet Mail Architecture", [RFC 5598](#), July 2009.

[HTML]

Raggett, D., Le Hors, A., and I. Jacobs, "HTML 4.01 Specification", December 1999,

<<http://www.w3.org/TR/html401/>>.

[KEYWORDS]

Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997.

[MAIL]

Resnick, P., Ed., "Internet Message Format", [RFC 5322](#), October 2008.

[SMTP]

Klensin, J., "Simple Mail Transfer Protocol", [RFC 5321](#), October 2008.

[URI]

Berners-Lee, T., Fielding, R., and L. Masinter, "Uniform Resource Identifier (URI): Generic Syntax", [RFC 3986](#), January 2005.

[Appendix A](#). Public Discussion

Public discussion of this suite of memos takes place on the domainrep@ietf.org mailing list. See <https://www.ietf.org/mailman/listinfo/domainrep>.

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