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K. Murchison
Carnegie Mellon University

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Sieve Email Filtering: Subaddress Extension

Status of This Memo

Abstract

On email systems that allow for 'subaddressing' or 'detailed addressing' (e.g., "ken+sieve@example.org"), it is sometimes desirable to make comparisons against these sub-parts of addresses. This document defines an extension to the Sieve Email Filtering Language that allows users to compare against the user and detail sub-parts of an address.

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1. Introduction

Subaddressing is the practice of augmenting the local-part of an [RFC2822] address with some 'detail' information in order to give some extra meaning to that address. One common way of encoding 'detail' information into the local-part is to add a 'separator character sequence', such as "+", to form a boundary between the 'user' (original local-part) and 'detail' sub-parts of the address, much like the "@" character forms the boundary between the local-part and domain.

Typical uses of subaddressing might be:

- A message addressed to "ken+sieve@example.org" is delivered into a mailbox called "sieve" belonging to the user "ken".
- A message addressed to "5551212#123@example.com" is delivered to the voice mailbox number "123" at phone number "5551212".

This document describes an extension to the Sieve language defined by [RFC5228] for comparing against the 'user' and 'detail' sub-parts of an address.

2. Conventions Used in This Document

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 [RFC2119].

3. Capability Identifier

The capability string associated with the extension defined in this document is "subaddress".

4. Subaddress Comparisons

Test commands that act exclusively on addresses may take the optional tagged arguments ":user" and ":detail" to specify what sub-part of the local-part of the address will be acted upon.

> NOTE: In most cases, the envelope "to" address is the preferred address to examine for subaddress information when the desire is to sort messages based on how they were addressed so as to get to a specific recipient. The envelope address is, after all, the reason a given message is being processed by a given sieve script for a given user. This is particularly true when mailing lists,

aliases, and 'virtual domains' are involved since the envelope may be the only source of detail information for the specific recipient.

NOTE: Because the encoding of detailed addresses are site and/or implementation specific, using the subaddress extension on foreign addresses (such as the envelope "from" address or originator header fields) may lead to inconsistent or incorrect results.

The ":user" argument specifies the user sub-part of the local-part of an address. If the address is not encoded to contain a detail sub-part, then ":user" specifies the entire left side of the address (equivalent to ":localpart").

The ":detail" argument specifies the detail sub-part of the local-part of an address. If the address is not encoded to contain a detail sub-part, then the address fails to match any of the specified keys. If a zero-length string is encoded as the detail sub-part, then ":detail" resolves to the empty value ("").

NOTE: If the encoding method used for detailed addresses utilizes a separator character sequence, and the separator character sequence occurs more than once in the local-part, then the logic used to split the address is implementation-defined and is usually dependent on the format used by the encompassing mail system.

Implementations MUST make sure that the encoding method used for detailed addresses matches that which is used and/or allowed by the encompassing mail system, otherwise unexpected results might occur. Note that the mechanisms used to define and/or query the encoding method used by the mail system are outside the scope of this document.

The ":user" and ":detail" address parts are subject to the same rules and restrictions as the standard address parts defined in [RFC5228], Section 2.7.4.

For convenience, the "ADDRESS-PART" syntax element defined in [RFC5228], Section 2.7.4, is augmented here as follows:

```
ADDRESS-PART  =/  ":user" / ":detail"
```

A diagram showing the ADDRESS-PARTs of an email address where the detail information follows a separator character sequence of "+" is shown below:

```
         :user "+" :detail  "@" :domain
        \-----------------/
            :local-part
```

A diagram showing the ADDRESS-PARTs of a email address where the detail information precedes a separator character sequence of "--" is shown below:

```
         :detail "--" :user  "@" :domain
        \------------------/
            :local-part
```

Example (where the detail information follows "+"):

```
   require ["envelope", "subaddress", "fileinto"];

   # In this example the same user account receives mail for both
   # "ken@example.com" and "postmaster@example.com"

   # File all messages to postmaster into a single mailbox,
   # ignoring the :detail part.
   if envelope :user "to" "postmaster" {
       fileinto "inbox.postmaster";
       stop;
   }

   # File mailing list messages (subscribed as "ken+mta-filters").
   if envelope :detail "to" "mta-filters" {
       fileinto "inbox.ietf-mta-filters";
   }

   # Redirect all mail sent to "ken+foo".
   if envelope :detail "to" "foo" {
       redirect "ken@example.net";
   }
```

5. IANA Considerations

The following template specifies the IANA registration of the subaddress Sieve extension specified in this document. This registration replaces that from RFC 3598:

To: iana@iana.org
Subject: Registration of new Sieve extension

Capability name: subaddress
Description: Adds the ':user' and ':detail' address parts for use with the address and envelope tests
RFC number: RFC 5233
Contact address: The Sieve discussion list <ietf-mta-filters@imc.org>

This information has been added to the list of Sieve extensions given on http://www.iana.org/assignments/sieve-extensions.

6. Security Considerations

Security considerations are discussed in [RFC5228]. It is believed that this extension does not introduce any additional security concerns.

7. Normative References

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.

[RFC2822] Resnick, P., "Internet Message Format", RFC 2822, April 2001.

[RFC5228] Guenther, P., Ed., and T. Showalter, Ed., "Sieve: An Email Filtering Language", RFC 5228, January 2008.

Appendix A. Acknowledgments

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Appendix B. Changes since RFC 3598

- Discussion of how the user and detail information is encoded now uses generic language.
- Added note detailing that this extension is most useful when used on the envelope "to" address.
- Added note detailing that this extension isn't very useful on foreign addresses (envelope "from" or originator header fields).
- Fixed envelope test example to only use "to" address.
- Replaced ":user" example with one that doesn't produce unexpected behavior.
- Refer to the zero-length string ("") as "empty" instead of "null" (per RFC 5228).
- Use only RFC 2606 domains in examples.
- Miscellaneous editorial changes.

Author's Address

Kenneth Murchison
Carnegie Mellon University
5000 Forbes Avenue
Cyert Hall 285
Pittsburgh, PA 15213
USA

Phone: +1 412 268 2638
EMail: murch@andrew.cmu.edu

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