

Sieve Email Filtering -- Subaddress Extension

Status of this Memo

This document specifies an Internet standards track protocol for the Internet community, and requests discussion and suggestions for improvements. Please refer to the current edition of the "Internet Official Protocol Standards" (STD 1) for the standardization state and status of this protocol. Distribution of this memo is unlimited.

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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 mail filtering language that allows users to compare against the user and detail parts of an address.

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1. Introduction

Subaddressing is the practice of appending some "detail" information to the local-part of an [IMAIL] address to indicate that the message should be delivered to the mailbox specified by the "detail" information. The "detail" information is prefixed with a special "separator character" (typically "+") which forms the boundary between the "user" (original local-part) and the "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.org" is delivered to the voice mailbox number "123" at phone number "5551212".

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

Conventions for notations are as in [SIEVE] section 1.1, including use of [KEYWORDS].

2. Capability Identifier

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

3. Subaddress Comparisons

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.

The `:"user"` argument specifies that sub-part of the local-part which lies to the left of the separator character (e.g., "ken" in "ken+sieve@example.org"). If no separator character exists, then `:"user"` specifies the entire left-side of the address (equivalent to `:"localpart"`).

The `:"detail"` argument specifies that sub-part of the local-part which lies to the right of the separator character (e.g., "sieve" in "ken+sieve@example.org"). If no separator character exists, the test evaluates to false. If nothing lies to the right of the separator character, then `:"detail"` `:"is"` the null key (`""`). Otherwise, the `:"detail"` sub-part contains the null key.

Implementations MUST make sure that the separator character matches that which is used and/or allowed by the encompassing mail system, otherwise unexpected results might occur. Implementations SHOULD allow the separator character to be configurable so that they may be used with a variety of mail systems. Note that the mechanisms used to define and/or query the separator character 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 [SIEVE]. For convenience, the "ADDRESS-PART" syntax element defined in [SIEVE] is augmented here as follows:

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

A diagram showing the ADDRESS-PARTs of a email address utilizing a separator character of '+' is shown below:

```

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

Example:

```
require "subaddress";

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

# If a message is not to me (ignoring +detail), junk it.
if not allof (address :user ["to", "cc", "bcc"] "ken",
             address :domain ["to", "cc", "bcc"] "example.org") {
  discard;
```

```
}  
  
# Redirect all mail sent to +foo.  
if envelope :detail ["to", "cc", "bcc"] "foo" {  
    redirect "ken@example.edu";  
}
```

4. Security Considerations

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

5. IANA Considerations

The following template specifies the IANA registration of the Sieve extension specified in this document:

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

```
Capability name: subaddress  
Capability keyword: subaddress  
Capability arguments: N/A  
Standards Track/RFC 3598  
Person and email address to contact for further information:
```

```
Kenneth Murchison  
ken@oceana.com
```

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

6. Normative References

- [IMAIL] Resnick, P., Ed., "Internet Message Format", RFC 2822, April 2001.
- [KEYWORDS] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.
- [SIEVE] Showalter, T., "Sieve: A Mail Filtering Language", RFC 3028, January 2001.

7. Acknowledgments

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