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Stream: Internet Engineering Task Force (IETF)  
RFC: [9122](#)  
Category: Standards Track  
Published: June 2023  
ISSN: 2070-1721  
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# RFC 9122

## IANA Registry for Sieve Actions

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### Abstract

The Sieve Email Filtering Language (RFC 5228) is a popular email filtering language used upon final mail delivery. This document creates a registry for Sieve actions to help developers and Sieve extension writers track interactions between different extensions.

### Status of This Memo

This is an Internet Standards Track document.

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Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at <https://www.rfc-editor.org/info/rfc9122>.

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## 1. Introduction

The Sieve Email Filtering Language [\[RFC5228\]](#) is a popular email filtering language used upon final mail delivery. The popularity of Sieve resulted in a myriad of Sieve extensions that can interact with each other in wonderful and complex ways. Currently, there is no easy way to find out all actions defined by Sieve extensions published in RFCs, which makes it quite difficult for Sieve extension writers and Sieve implementation developers to foresee interactions between Sieve actions.

This document creates a registry for Sieve [\[RFC5228\]](#) actions in order to help developers and Sieve extension writers track interactions between different extensions.

## 2. IANA Considerations

### 2.1. Sieve Actions Registration Template and Procedure

IANA has created the "Sieve Actions" registry (see [Section 2.9](#) of [\[RFC5228\]](#) for details on Sieve actions). Registration of actions specified in both RFCs and vendor-specific documentation is allowed and encouraged. The registration template contains the following:

Name: Name of the action  
Description: Short description

References: One or more documents describing the action and any significant updates to its definition (this field is required for actions described in RFCs and is optional otherwise)

Capabilities: Name of one or more Sieve capabilities associated with the Sieve action being registered

Action Interactions: Interactions with other Sieve actions (as described in [Section 2.10.1](#) of [\[RFC5228\]](#)), if any

Cancels Implicit Keep? Flag specifying whether the action cancels the implicit keep (see [Section 2.10.2](#) of [\[RFC5228\]](#))

Can Use With IMAP Events? Whether or not this action can be used with IMAP events in Sieve [\[RFC6785\]](#)

Comments: Optional comment or comments

The registration procedure is Expert Review [\[RFC8126\]](#). The designated expert only checks that the name of the action being registered matches documentation, the description field is accurate, the correct documents are referenced, and the list of relevant documents is as complete as possible. The designated expert can't reject a registration because of a personal dislike for the document defining an action and should always err on the side of approving the registration, even if documentation is not complete.

The same registration procedure is used to add a new reference or to change the description field of an existing registration.

## 2.2. Initial Sieve Action Registry

The following registrations are used to initialize the "Sieve Actions" registry. Note that when the relevant "Action Interactions" entry is marked "N/A", it means that there is no restriction on use of the corresponding action with any other action; however, implementors still need to read the one or more corresponding specifications to determine if there are any surprising behaviors. Also note that the "Comments" field of the IANA registration template is omitted from these registrations, as none of them currently have any comments.

Name: addheader

Description: Add a header field to the existing message header

References: [\[RFC5293\]](#)

Capabilities: "editheader"

Action Interactions: All subsequent tests and actions apply to the altered message

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: addflag

Description: Add IMAP flags to a list of IMAP flags that would be set on the message if it gets delivered to a mailbox

References: [\[RFC5232\]](#) [\[RFC5229\]](#)

Capabilities: "imap4flags", "variables"

Action Interactions: N/A

Cancels Implicit Keep? No  
Can Use with IMAP Events? Yes

Name: convert

Description: Convert body parts from one MIME type to another

References: [\[RFC6558\]](#)

Capabilities: "convert"

Action Interactions: All subsequent tests and actions apply to the altered message

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: deleteheader

Description: Remove a header field from the existing message header

References: [\[RFC5293\]](#)

Capabilities: "editheader"

Action Interactions: All subsequent tests and actions apply to the altered message

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: discard

Description: Silently throw away the message

References: [\[RFC5228\]](#)

Capabilities: N/A

Action Interactions: N/A

Cancels Implicit Keep? Yes

Can Use with IMAP Events? Yes

Name: enclose

Description: Enclose a message as an attachment to a new message

References: [\[RFC5703\]](#)

Capabilities: "enclose"

Action Interactions: All subsequent tests and actions except "redirect" apply to the altered message

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: ereject

Description: Refuse delivery of the message

References: [\[RFC5429\]](#)

Capabilities: "ereject"

Action Interactions: This action is incompatible with the "vacation" action. Typically is not permitted with actions that cause mail delivery, such as "keep", "fileinto", and "redirect"

Cancels Implicit Keep? Yes

Can Use with IMAP Events? No

Name: extracttext

Description: Store text of a MIME part into a variable

References: [\[RFC5703\]](#) [\[RFC5229\]](#)

Capabilities: "extracttext", "variables"

Action Interactions: N/A

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: fileinto

Description: Deliver the message into the specified mailbox

References: [\[RFC5228\]](#) [\[RFC3894\]](#) [\[RFC5232\]](#) [\[RFC5490\]](#) [\[RFC9042\]](#) [\[RFC8579\]](#)

Capabilities: "fileinto", "copy", "imap4flags", "mailbox", "mailboxid", "special-use"

Action Interactions: Use of :copy suppresses cancellation of implicit keep

Cancels Implicit Keep? Yes

Can Use with IMAP Events? Yes

Name: keep

Description: File the message into the user's main mailbox

References: [\[RFC5228\]](#) [\[RFC5232\]](#)

Capabilities: "imap4flags"

Action Interactions: N/A

Cancels Implicit Keep? Yes

Can Use with IMAP Events? Yes

Name: notify

Description: Send a notification to a user

References: [\[RFC5435\]](#) [\[RFC8580\]](#)

Capabilities: "enotify", "fcc"

Action Interactions: N/A

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: redirect

Description: Send (forward) the message to another user

References: [\[RFC5228\]](#) [\[RFC3894\]](#) [\[RFC6009\]](#) [\[RFC6134\]](#)

Capabilities: "copy", "redirect-dsn", "redirect-deliverby", "extlists"

Action Interactions: Use of :copy suppresses cancellation of implicit keep

Cancels Implicit Keep? Yes

Can Use with IMAP Events? Yes

Name: reject

Description: Refuse delivery of the message

References: [\[RFC5429\]](#)

Capabilities: "reject"

Action Interactions: This action is incompatible with the "vacation" action. Typically is not permitted with actions that cause mail delivery, such as "keep", "fileinto", and "redirect"

Cancels Implicit Keep? Yes

Can Use with IMAP Events? No

Name: removeflag

Description: Remove IMAP flags from a list of IMAP flags that would be set on the message if it gets delivered to a mailbox

References: [\[RFC5232\]](#) [\[RFC5229\]](#)

Capabilities: "imap4flags", "variables"

Action Interactions: N/A

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: replace

Description: Replace a MIME part

References: [\[RFC5703\]](#)

Capabilities: "replace"

Action Interactions: All subsequent tests and actions except "redirect" apply to the altered message

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: set

Description: Store a value in a variable

References: [\[RFC5229\]](#)

Capabilities: "variables"

Action Interactions: N/A

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: setflag

Description: Set IMAP system flags or keywords that would be set on the message if it gets delivered to a mailbox

References: [\[RFC5232\]](#) [\[RFC5229\]](#)

Capabilities: "imap4flags", "variables"

Action Interactions: N/A

Cancels Implicit Keep? No

Can Use with IMAP Events? Yes

Name: vacation

Description: Implement a vacation autoresponder

References: [RFC5230] [RFC6131] [RFC8580]

Capabilities: "vacation", "vacation-seconds", "fcc"

Action Interactions: This action is incompatible with "reject" and "ereject" actions

Cancels Implicit Keep? No

Can Use with IMAP Events? No

### 3. Security Considerations

The sole purpose of this document is to create the "Sieve Actions" registry; therefore, it doesn't create new security considerations for Sieve implementations.

The new registry should help Sieve extension writers and Sieve implementors track interactions between different Sieve actions; therefore, it might improve the quality of specifications and implementations, including security aspects.

For security considerations related to particular actions, see the one or more RFCs referenced for the action in question in the "Sieve Actions" registry ([Section 2.2](#)).

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## Appendix A. Acknowledgements

Thank you to Barry Leiba, Donald Eastlake, Yoshiro Yoneya, and Murray Kucherawy for reviews and feedback on this document.

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