

EXTRA  
Internet-Draft  
Updates: [7162](#) (if approved)  
Intended status: Standards Track  
Expires: February 12, 2019

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FastMail  
August 11, 2018

Sieve Email Filtering: delivery by mailboxid  
draft-gondwana-sieve-mailboxid-00

## Abstract

The OBJECTID capability of the IMAP protocol (I-D.ietf-extra-imap-objectid) allows clients to identify mailboxes by a unique identifier which survives rename. In contrast, the Sieve mail filtering language ([RFC 5228](#)) currently has no such capability. This memo defines a Sieve extension that fills this gap: it adds a method for specifying the unique identifier of a mailbox as a target for fileinto rules, and a method for testing the existence of a mailbox by its unique identifier.

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## [1.](#) Introduction

Sieve rules are sometimes created using graphical interfaces which allow users to select the mailbox to be used as a target for a rule. If that mailbox is renamed, the client may also update its internal representation of the rule and update the sieve script to match, however this is a multi-step process and subject to partial failures. Also, if the folder is renamed by a different mechanism (e.g. another IMAP client) the rules will get out of sync.

By extending "fileinto" to reference an immutable mailboxid, sieve rules can continue to target the same mailbox, regardless of how it gets renamed.

## [2.](#) Conventions Used In This Document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [BCP 14](#) [[RFC2119](#)] [[RFC8174](#)] when, and only when, they appear in all capitals, as shown here.

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### [3.](#) Capability argument

The server must advertise the capability "mailboxid", and scripts which use the following extensions must explicitly request the capability "mailboxid".

Example:

```
require "mailboxid";
```

### [4.](#) Argument ":mailboxid" to Command "fileinto"

Normally, the positional mailbox argument to a fileinto action delivers the message in a mailbox with the matching [\[RFC3501\]](#) name.

This document adds a new tagged argument ":mailboxid". If the ":mailboxid" argument is provided, the positional mailbox argument refers to an [\[I-D.ietf-extra-imap-objectid\]](#) mailboxid rather than an [\[RFC3501\]](#) name.

If there is no mailbox with the specified ":mailboxid" then the action is the same as if there was no named mailbox, and implementations are free to make the same choices given in [\[RFC5228\] Section 4.1](#) when the specified mailbox doesn't exist.

The tagged argument ":mailboxid" to fileinto consumes zero additional tokens.

Example:

```
require "fileinto";
require "mailboxid";

if header :contains ["from"] "coyote" {
    fileinto :mailboxid "F6352ae03-b7f5-463c-896f-d8b48ee3";
}
```

## 5. Test ":mailboxidexists"

This test behaves identically to the "mailboxexists" test defined in [\[RFC5490\]](#) but operates on mailboxids rather than mailbox names.

Usage: "mailboxidexists <mailboxids: string-list>"

The "mailboxidexists" test is true if all mailboxes listed in the "mailboxids" argument exist in the mailstore, and each allows the user in whose context the Sieve script runs to "deliver" messages

into it. When the mailstore is an IMAP server, "delivery" of messages is possible if:

a) the READ-WRITE response code is present for the mailbox (see [Section 7.1 of \[RFC3501\]](#)), if IMAP Access Control List (ACL) [\[RFC4314\]](#) is not supported by the server, or

b) the user has 'p' or 'i' rights for the mailbox (see [Section 5.2 of \[RFC4314\]](#)).

Note that a successful "mailboxidexists" test for a mailbox doesn't necessarily mean that a "fileinto :mailboxid" action on this mailbox would succeed. For example, the "fileinto" action might put user over quota. The "mailboxidexists" only verifies existence of the mailbox and whether the user in whose context the Sieve script runs has permissions to execute "fileinto" on it.

Example:

```
require "fileinto";
require "mailboxid";

if header :contains ["from"] "coyote" {
    if mailboxidexists "F6352ae03-b7f5-463c-896f-d8b48ee3" {
        fileinto :mailboxid "F6352ae03-b7f5-463c-896f-d8b48ee3";
    } else {
        fileinto "INBOX.harassment";
    }
}
```

## [6.](#) Formal Syntax

```
test /= ":mailboxexists" string-list

tag /= ":mailboxid"
```

## [7.](#) Security considerations

This document does not add any security considerations beyond those in [[RFC5228](#)], [[RFC5490](#)] and [[I-D.ietf-extra-imap-objectid](#)]. Implementers are referred to the security considerations sections of those documents.

## [8.](#) IANA considerations

IANA are requested to add a capability to the sieve-extensions registry:

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To: [iana@iana.org](mailto:iana@iana.org)  
Subject: Registration of new Sieve extension

Capability name: mailboxid  
Description: adds test for checking for mailbox existence by objectid and a new optional argument to fileinto to select the destination mailbox using objectid.

RFC number: this RFC

Contact address: The EXTRA discussion list <[extra@ietf.org](mailto:extra@ietf.org)>

## [9.](#) Acknowledgements

This document borrows heavily from [[RFC5490](#)] for the matching mailboxexists test, and from [[I-D.ietf-extra-sieve-special-use](#)] for an example of modifying the fileinto command.

## [10.](#) TODO

Is there a more explicit way to update the grammar? It seems less fully specified than IMAP.

## [11.](#) References

### 11.1. Normative References

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