

Network Working Group
Internet-Draft
Updates: [3348](#), 3501, 6154
(if approved)
Intended status: Standards Track
Expires: July 21, 2013

B. Leiba
Huawei Technologies
E. Iceman
Google, Inc.
January 17, 2013

**IMAP LIST Special-Use Attribute: \Important
draft-iceman-imap-specialuse-important-01**

Abstract

[RFC 6154](#) created an IMAP Special-Use LIST extension and defined an initial set of attributes. This document defines a new attribute, "\Important", and establishes a new IANA registry for IMAP folder attributes, updating RFCs 3348, 3501, and 6154.

Status of this Memo

This Internet-Draft is submitted in full conformance with the provisions of [BCP 78](#) and [BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <http://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on July 21, 2013.

Copyright Notice

Copyright (c) 2013 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to [BCP 78](#) and the IETF Trust's Legal Provisions Relating to IETF Documents (<http://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as

described in the Simplified BSD License.

Table of Contents

- 1. Introduction 3
- 1.1. Conventions used in this document 3

- 2. Definition of the 'Important' Attribute 3
- 2.1. Formal Syntax 3
- 2.2. Example 4

- 3. Security Considerations 4

- 4. IANA Considerations 4
- 4.1. Creation of the IMAP LIST Special-Use Attributes Registry . . 4
- 4.2. Initial entries for the registry 5
- 4.3. Instructions to the Designated Expert 6

- 5. Changes During Document Development 7

- 6. References 7
- 6.1. Normative References 7
- 6.2. Informative References 7

- Authors' Addresses 7

1. Introduction

[RFC6154] defines an extension to the Internet Message Access Protocol (IMAP) LIST command [RFC3501] for special-use mailboxes. The extension allows servers to provide extra information (attributes) about the purpose of a mailbox and defines an initial set of special-use attributes. There are now three RFCs that define mailbox attributes, and no registry for those attributes.

This document defines a new special-use attribute, "\Important", to designate a mailbox that will hold messages that are considered important for the user, by some externally defined criteria. This document also creates a registry for IMAP mailbox attributes and registers both the new attribute and those defined earlier, updating [RFC3348], [RFC3501], and [RFC6154].

1.1. Conventions used in this document

In examples, "C:" indicates lines sent by a client that is connected to a server. "S:" indicates lines sent by the server to the client.

2. Definition of the 'Important' Attribute

The "\Important" mailbox attribute is a signal that the mailbox contains messages that are likely important to the user. For example, the system might automatically put messages there based on available signals (such as who the message is from, who else the message is addressed to, evaluation of the subject or content). Or it might be a way for users to train the system as to what messages are important (the system can learn patterns from the messages the user copies to that mailbox).

[[anchor4: Possible change here: Cyrus has suggested (1) removal of the last sentence above, about learning, and (2) definition of an \$Important message keyword, and reference to \Important as a virtual mailbox to collect all such messages (as \Flagged does).]]

This is distinct from the "\Flagged" attribute in that evaluation of importance here is based on heuristics, whereas "\Flagged" is typically based on the setting of the IMAP flag of the same name.

2.1. Formal Syntax

The following syntax specification updates the one in [RFC6154], Section 6, using Augmented Backus-Naur Form (ABNF) as described in [RFC5234].


```
use-attr      =/ "\Important"
```

2.2. Example

In the following example, the mailbox called "Important Messages" is the one designated with the "\Important" attribute.

```
C: t1 list "" "Imp*"
S: * LIST (\HasNoChildren \Important) "/" "Important Messages"
S: * LIST (\HasNoChildren) "/" "Imported Wine"
S: t1 OK Success
```

3. Security Considerations

The security considerations in [\[RFC6154\], Section 7](#), apply equally to this extension. In particular, "Conveying special-use information to a client exposes a small bit of extra information that could be of value to an attacker." Moreover, identifying a place where "important" messages are kept could give an attacker a strategic starting point. If the algorithm by which messages are determined to be important is well known, still more information is exposed -- perhaps, for example, there is an implication that the senders of these messages are particularly significant to the mailbox owner, and perhaps that is information that should not be made public.

As noted in [RFC 6154](#), it is wise to protect the IMAP channel from passive eavesdropping, and to defend against unauthorized discernment of the identity of a user's "\Important" mailbox.

4. IANA Considerations

[[RFC Editor: Please replace "THIS RFC" throughout this section with the identification given to this document, and remove this paragraph.]]

4.1. Creation of the IMAP LIST Special-Use Attributes Registry

IANA is asked to create a new registry in the group "Internet Message Access Protocol (IMAP) 4 Registries". The new registry will be called "IMAP Mailbox Name Attributes", and will have two references: [RFC 3501, Section 7.2.2](#), and THIS RFC, [Section 4](#).

The registry entries will contain three fields:

1. Attribute Name
2. Description
3. Reference

IANA will keep this list in alphabetical order by Attribute Name, which is registered without the initial backslash ("\").

New registrations will be accepted through the Expert Review policy [RFC5226] (and see [Section 4.3](#)). New registrations are requested through the IANA Considerations section in an RFC, or, for requests that do not come from an RFC, by sending email to IANA asking for a new IMAP Mailbox Name Attribute and giving the requested values for each of the three fields.

4.2. Initial entries for the registry

The registry will initially contain these entries:

Attribute Name	Description	Reference
All	All messages	[RFC6154]
Archive	Archived messages	[RFC6154]
Drafts	Messages that are working drafts	[RFC6154]
Flagged	Messages with the \Flagged flag	[RFC6154]
HasChildren	Has accessible child mailboxes	[RFC3348]
HasNoChildren	Has no accessible child mailboxes	[RFC3348]
Important	Messages deemed important to user	THIS RFC
Junk	Messages identified as Spam/Junk	[RFC6154]
Marked	Server has marked the mailbox as "interesting"	[RFC3501]
NoInferiors	No hierarchy under this name	[RFC3501]
Noselect	The mailbox is not selectable	[RFC3501]
Sent	Sent mail	[RFC6154]
Trash	Messages the user has discarded	[RFC6154]
Unmarked	No new messages since last select	[RFC3501]

4.3. Instructions to the Designated Expert

The expert reviewer, who will be designated by the IESG, is expected to provide only a general review of the requested registration, checking that the reference and description are adequate for understanding the intent of the registered attribute. Efforts should also be made to generalize the intent of an attribute so that multiple implementations with the same requirements may reuse existing attributes. Except for this check, this is intended to be very close to a first come first served policy, and the expert should not block serious registration requests with a reasonable reference. The reference may be to any form of documentation, including a web page, but consideration should be given to providing one that is expected to be long-lived and stable.

5. Changes During Document Development

[[anchor11: RFC Editor: Please remove this section prior to publication.]]

Changes in -01

- o Expanded the new registry to all mailbox name attributes, and added the attributes from 3501 and 3348 (suggested by Alexey). This also adds those two documents to the "updates" list.
- o Recorded Cyrus's suggestion to define \$Important.

6. References

6.1. Normative References

- [RFC3501] Crispin, M., "INTERNET MESSAGE ACCESS PROTOCOL - VERSION 4rev1", [RFC 3501](#), March 2003.
- [RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", [BCP 26](#), [RFC 5226](#), May 2008.
- [RFC5234] Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, [RFC 5234](#), January 2008.
- [RFC6154] Leiba, B. and J. Nicolson, "IMAP LIST Extension for Special-Use Mailboxes", [RFC 6154](#), March 2011.

6.2. Informative References

- [RFC3348] Gahrns, M. and R. Cheng, "The Internet Message Action Protocol (IMAP4) Child Mailbox Extension", [RFC 3348](#), July 2002.

Authors' Addresses

Barry Leiba
Huawei Technologies

Phone: +1 646 827 0648
Email: barryleiba@computer.org
URI: <http://internetmessagingtechnology.org/>

Eric Icedman
Google, Inc.

Email: iceman@google.com