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Registration of further IMAP/JMAP keywords and mailbox name attributes  
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## Abstract

This document defines a number of keywords and mailbox name attributes that have been in use across different server and client implementations. It defines the intended use of these keywords and mailbox name attributes. This document registers all of these with IANA to avoid name collisions.

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## Table of Contents

1. Introduction . . . . .	3
2. Requirements Language . . . . .	4
3. Flag Color Keywords . . . . .	4
3.1. Definition of the \$MailFlagBit_ Message Keywords . . . . .	4
3.2. Implementation Notes . . . . .	5
4. Other Message Keywords . . . . .	5
4.1. \$notify . . . . .	5
4.2. \$muted . . . . .	6
4.3. \$followed . . . . .	6
4.4. Memos . . . . .	7
4.4.1. \$memo . . . . .	7
4.4.2. \$hasmemo . . . . .	8
4.5. Attachment Detection . . . . .	8
4.5.1. \$hasattachment . . . . .	8
4.5.2. \$hasnoattachment . . . . .	9
4.6. \$autosent . . . . .	9
4.7. Subscription Management . . . . .	10
4.7.1. \$unsubscribed . . . . .	10
4.7.2. \$canunsubscribe . . . . .	10
4.8. \$imported . . . . .	11
4.9. \$istrusted . . . . .	11
4.10. \$maskedemail . . . . .	12
4.11. \$new . . . . .	12
5. Mailbox Name Attributes . . . . .	12
5.1. Snoozed . . . . .	12
5.2. Scheduled . . . . .	13
5.3. Memos . . . . .	13
6. IANA Considerations . . . . .	14
6.1. IMAP/JMAP Keyword Registrations . . . . .	14
6.1.1. \$notify keyword registration . . . . .	14
6.1.2. \$muted keyword registration . . . . .	14
6.1.3. \$followed keyword registration . . . . .	15
6.1.4. \$memo keyword registration . . . . .	15
6.1.5. \$hasmemo keyword registration . . . . .	16
6.1.6. \$hasattachment keyword registration . . . . .	16
6.1.7. \$hasnoattachment keyword registration . . . . .	17
6.1.8. \$autosent keyword registration . . . . .	17
6.1.9. \$unsubscribed keyword registration . . . . .	17
6.1.10. \$canunsubscribe keyword registration . . . . .	18
6.1.11. \$imported keyword registration . . . . .	18
6.1.12. \$istrusted keyword registration . . . . .	18
6.1.13. \$maskedemail keyword registration . . . . .	19
6.1.14. \$new keyword registration . . . . .	19
6.1.15. \$MailFlagBit0 keyword registration . . . . .	20
6.1.16. \$MailFlagBit1 keyword registration . . . . .	20
6.1.17. \$MailFlagBit2 keyword registration . . . . .	20

6.2. IMAP Mailbox Name Attributes Registrations . . . . .	21
6.2.1. Snoozed mailbox name attribute registration . . . . .	21
6.2.2. Scheduled mailbox name attribute registration . . . . .	21
6.2.3. Memos mailbox name attribute registration . . . . .	21
7. Security Considerations . . . . .	21
8. References . . . . .	22
8.1. Normative References . . . . .	22
Authors' Addresses . . . . .	23

## 1. Introduction

The Internet Message Access Protocol (IMAP) specification [RFC9051] defines the use of message keywords, and an "IMAP Keywords" registry is created in [RFC5788]. Similarly [RFC8457] creates an "IMAP Mailbox Name Attributes Registry".

This document defines 16 message keywords:

- \$notify
- \$muted
- \$followed
- \$memo
- \$hasmemo
- \$hasattachment
- \$hasnoattachment
- \$autosent
- \$unsubscribed
- \$canunsubscribe
- \$imported
- \$istrusted
- \$maskedemail
- \$new
- \$MailFlagBit0
- \$MailFlagBit1
- \$MailFlagBit2

And defines 3 mailbox name attributes:

- Snoozed
- Scheduled
- Memos

This document also registers these in the "IMAP Keywords" registry and "IMAP Mailbox Name Attributes" registry.

## 2. Requirements Language

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.

## 3. Flag Color Keywords

The Internet Message Access Protocol (IMAP) specification [RFC9051] defines a \Flagged system flag to mark a message for urgent/special attention. The new keywords defined in Sections 6.1.15, 6.1.16, and 6.1.17 allow such a flagged message to have that flag be of one of 7 colors.

### 3.1. Definition of the \$MailFlagBit\_ Message Keywords

The 3 flag color keywords

```
$MailFlagBit0
$MailFlagBit1
$MailFlagBit2
```

make up a bit pattern that defines the color of the flag as such:

Bit 0	Bit 1	Bit 2	Color
0	0	0	red
1	0	0	orange
0	1	0	yellow
1	1	0	green
0	0	1	blue
1	0	1	purple
0	1	1	gray

Table 1: Flag Colors

Note that the bit combination 111 (all three bits set) is not assigned a color, resulting in 7 distinct flag colors instead of 8 possible combinations.

These flags SHOULD be ignored if the \Flagged system flag is not set. If the \Flagged system flag is set, the flagged status MAY be presented to the user in the color corresponding to the combination of the 3 flag color keywords.

### 3.2. Implementation Notes

A mail client that is aware of these flag color keywords SHOULD clear all 3 flag color keywords when the user unflags the message, i.e. when clearing the \Flagged system flag, all 3 flag color keywords SHOULD also be cleared.

A mail client SHOULD NOT set any of these flags unless the \Flagged system flag is already set or is being set.

Servers MAY clear these flag color keywords when a client clears the \Flagged system flag.

While these keywords are defined in terms of colors, clients SHOULD consider providing non-visual alternatives for users who cannot perceive colors. This could include using different shapes, patterns, text labels, audio cues, or other distinguishing characteristics that convey the same semantic meaning as the color variations. The specific bit patterns can serve as identifiers for such alternative representations.

## 4. Other Message Keywords

### 4.1. \$notify

The \$notify keyword indicates that a client should present a notification for a message. This provides a mechanism for more selective notifications than the common approach of notifying for every message arriving in the inbox.

When a message with this keyword is delivered to a mailstore, supporting clients SHOULD present a notification to the user. This notification may occur alongside other message notifications according to user preferences.

This keyword enables both users (through filtering rules) and servers (through automated processing) to identify specific messages that warrant user attention, even if they might otherwise be filtered or sorted in a way that wouldn't normally trigger a notification.

Servers typically set this keyword during message delivery when a message meets certain criteria indicating importance to the user. Clients may clear the keyword when the user interacts with the message by opening it, archiving it, or performing other actions. When one client clears this keyword, other clients connected to the same account may choose to automatically dismiss their corresponding notification.

#### 4.2. \$muted

The \$muted keyword provides a way for users to indicate they are not interested in future messages in a particular conversation thread. This enables automated processing of subsequent messages in that thread to reduce their prominence.

When a new message arrives that belongs to the same thread as one marked with this keyword, supporting servers MAY automatically deprioritize the message. This could include moving it to an archive or trash folder, marking it as read, or applying other handling that reduces its prominence. The specific actions taken and whether they can be configured by the user depends on the implementation.

For thread identification purposes, messages are considered part of the same thread when they share the same thread identifier as defined in [RFC8474] Section 5.2 for IMAP or [RFC8621], Section 3 for JMAP. This definition applies to all thread-related keywords in this document.

This keyword is set or cleared by clients based on user actions to mute or unmute a thread. When unmuting a thread, clients MUST remove this keyword from all messages in the thread that have it. The \$muted keyword is mutually exclusive with the \$followed keyword. If both are present on messages in the same thread, both servers and clients MUST treat the thread as followed rather than muted.

Implementers should note the security considerations in the IANA registration: if an attacker gains access to a user's account, they could mute threads to hide important communications. However, this represents only a small increase in risk since compromised accounts allow many other similar actions.

#### 4.3. \$followed

The \$followed keyword indicates that a user is particularly interested in future messages in a specific thread. This enables special handling to ensure these messages receive appropriate attention.

When a new message arrives in a thread where this keyword is present, supporting servers MAY take actions to prioritize the message. This could include ensuring it is available in the inbox regardless of filtering rules that might otherwise affect it, automatically adding the \$notify keyword to ensure notifications, or applying other handling that increases its prominence. The specific actions taken and whether they can be configured by the user depends on the implementation.

Thread identification for this keyword follows the same definition as described in \$muted.

This keyword is set or cleared by clients based on user actions to follow or unfollow a thread. When unfollowing a thread, clients MUST remove this keyword from all messages in the thread that have it. The \$followed keyword is mutually exclusive with the \$muted keyword. If both are present on messages in the same thread, servers MUST treat the thread as followed rather than muted.

#### 4.4. Memos

The following keywords are used to support user-created annotations or memos attached to messages. They allow for contextual notes to be added to conversations while maintaining proper cross-referencing between messages and their annotations.

The \$memo keyword is applied to the memo message itself (the note-to-self), while the \$hasmemo keyword is applied to the original message being annotated. This creates a bidirectional relationship that allows clients to efficiently locate memos and their associated messages.

The \$memo and \$hasmemo keywords are mutually exclusive. A message SHOULD NOT have both keywords set simultaneously.

##### 4.4.1. \$memo

The \$memo keyword identifies a message as a note-to-self created by the user regarding another message in the same thread. It allows for contextual annotations to be added to conversations.

Messages with this keyword should be constructed similar to a reply to the message being annotated, with appropriate Subject and Reply-To headers set to maintain context and threading. Servers SHOULD store messages with this keyword in a mailbox with the "Memos" mailbox name attribute (see Section 6.2.3), if available.

Supporting clients SHOULD present these messages differently from regular emails. Rather than presenting them as standalone messages, they SHOULD be presented as annotations attached to the message they're commenting on. Clients MAY provide special UI affordances for editing or deleting these memos, which typically requires replacing the message since email messages are immutable.

When a client creates or removes a memo, it SHOULD also set or clear the related \$hasmemo keyword on the message being annotated to maintain proper cross-referencing.

#### 4.4.2. \$hasmemo

The \$hasmemo keyword indicates that a message has an associated memo (identified by the \$memo keyword) in the same thread. This allows clients to efficiently identify messages with annotations without having to examine all messages in a thread.

When a client creates a memo for a message, it SHOULD add this keyword to the message being annotated while adding the \$memo keyword to the memo message itself. Conversely, when a memo is deleted, the client SHOULD remove this keyword from the annotated message.

This keyword enables several optimizations for clients. It allows for efficient searching for messages with annotations, enables indicators in message lists to indicate which messages have memos, and helps clients decide whether to fetch entire conversation threads when loading a mailbox to ensure memos are properly presented.

#### 4.5. Attachment Detection

The following keywords help clients determine whether a message contains attachments without having to fetch and parse the entire message structure. This is particularly useful for displaying attachment indicators in message lists or implementing attachment-based filtering.

The \$hasattachment and \$hasnoattachment keywords are mutually exclusive. A message SHOULD NOT have both keywords set simultaneously.

##### 4.5.1. \$hasattachment

The \$hasattachment keyword indicates that a message has one or more attachments. It is set by the server during message delivery or processing after analyzing the message structure.



This keyword enables clients to indicate attachments (e.g., paperclip icons) in message lists without having to fetch the full MIME structure for each message. It also facilitates attachment-based filtering and search operations.

When using JMAP, the "hasAttachment" Email property SHOULD reflect the same information as this keyword for consistency across protocols.

#### 4.5.2. \$hasnoattachment

The \$hasnoattachment keyword explicitly indicates that a message does not have any attachments. It is set by the server during message delivery or processing after analyzing the message structure.

This keyword complements \$hasattachment by providing definitive information about messages that have been analyzed but found to contain no attachments. The absence of \$hasattachment alone is inconclusive, as it might simply mean the message hasn't been processed for attachment detection.

This explicit distinction is important for clients that need to know whether attachment detection has been performed on a message. When using JMAP, the "hasNoAttachment" Email property SHOULD reflect the same information as this keyword.

#### 4.6. \$autosent

The \$autosent keyword identifies messages that were automatically generated and sent by the system on behalf of the user, typically in response to user-defined filtering rules or settings.

This keyword is set by the server on the user's copy of vacation auto-replies, automated responses, or other system-generated messages sent on behalf of the user. It allows clients to clearly distinguish these messages from those directly composed and sent by the user.

Supporting clients MAY present these messages differently in the sent items folder, such as with a distinct indicator (e.g., icon or label) indicating their automated nature. This helps prevent user confusion when they encounter messages they don't remember writing, particularly in the case of vacation responses or other automated replies that may have been configured and then forgotten.

#### 4.7. Subscription Management

The following keywords help clients manage mailing list subscriptions. They provide mechanisms for tracking unsubscribe attempts and identifying messages with valid unsubscribe options.

##### 4.7.1. \$unsubscribed

The \$unsubscribed keyword indicates that the user has attempted to unsubscribe from the mailing list associated with a message. It provides a persistent record of unsubscription attempts across multiple clients.

This keyword is set by a client after a user attempts to unsubscribe from a mailing list, typically via a one-click List-Unsubscribe action as defined in [RFC8058]. It serves as a record that an unsubscription attempt has been made, even if confirmation of successful unsubscription hasn't been received.

Supporting clients SHOULD provide an indicator on messages with this keyword to remind the user they have previously attempted to unsubscribe from this sender or mailing list. This can be helpful when users revisit old messages and might otherwise attempt to unsubscribe again, or when they receive additional messages despite unsubscribing and need to take further action.

##### 4.7.2. \$scanunsubscribe

The \$scanunsubscribe keyword indicates that a message contains a valid, [RFC8058]-compliant List-Unsubscribe header that clients can use to provide one-click unsubscription functionality.

This keyword is set by servers during message delivery when they detect a valid List-Unsubscribe header and the message passes implementation-specific reputation checks. This pre-verification is important, as not all List-Unsubscribe headers are trustworthy, and some might lead to phishing sites or generate additional spam.

The primary benefit of this keyword is efficiency--clients can offer unsubscribe functionality in their user interface without having to fetch and validate the List-Unsubscribe header for every message. It also provides an extra layer of safety since the server has already performed reputation checks on the unsubscribe mechanism.

Supporting clients SHOULD provide an unsubscribe option for messages with this keyword, typically through a button or menu item in the message interface.

#### 4.8. \$imported

The \$imported keyword identifies messages that were imported into the mailbox from another system rather than received through normal mail delivery channels.

This keyword is set by servers during import operations from other mail systems, data migrations, or manual imports from local files. It helps distinguish messages that didn't arrive through normal mail delivery and may have different characteristics or behaviors.

Supporting clients MAY provide an indicator for imported messages, especially if they have unusual properties such as unexpectedly old dates, unusual header structures, or other anomalies that might otherwise confuse users. Some clients might also offer filtering or search capabilities specifically for imported messages.

#### 4.9. \$trusted

The \$trusted keyword indicates that a message's sender identity has been verified by the server with a high degree of confidence. It provides an indication that the message is likely authentic.

This advisory keyword is set by the server during message delivery when the authenticity of both the sender's name and email address can be verified with a high degree of confidence. This level of verification typically applies to messages sent by the mailbox provider itself to its customers, where the provider has strong evidence of the message's origin.

Supporting clients SHOULD provide a verification indicator (e.g., checkmark icon) for messages with this keyword, helping users identify legitimate communications from their service provider. This is particularly important for distinguishing authentic provider messages from phishing attempts that impersonate the provider.

Servers MUST exercise caution when applying this keyword, as it conveys trust to the user. If misapplied, it could lead users to trust fraudulent messages.

It SHOULD NOT be used for messages that have only passed standard authentication mechanisms like SPF, DKIM, or DMARC.

#### 4.10. \$maskedemail

The \$maskedemail keyword indicates that a message was received through a masked email address--an alias created specifically for communications with a particular sender to protect the user's primary email address.

This advisory keyword is set by the server during message delivery on messages that arrive via such aliases. These might be automatically generated single-use addresses, service-specific addresses, or user-created aliases for specific correspondents.

Supporting clients SHOULD provide an indicator (e.g., mask icon) for messages with this keyword. This helps users understand that the message was received through a privacy-enhancing alias rather than their primary address. Clients might also provide related functionality, such as the ability to disable the specific alias used if it starts receiving unwanted messages.

#### 4.11. \$new

The \$new keyword indicates that a message should be emphasized or made more prominent to the user due to a recent system action, even if the message itself is not new.

This advisory keyword is typically set by servers when a previously snoozed message "awakens" and returns to the inbox after its snooze period has elapsed. It signals to clients that although this message might have an older date, it should be treated as effectively new in terms of user attention.

Supporting clients SHOULD present these messages with special treatment to draw user attention, such as emphasizing, bolding, or placing them at the top of the message list, even if strict date sorting would place them elsewhere.

Clients SHOULD clear this keyword when the user interacts with the message, such as by opening, replying to, or otherwise acknowledging it. This prevents the message from remaining emphasized indefinitely after the user has accessed it.

### 5. Mailbox Name Attributes

#### 5.1. Snoozed

The Snoozed mailbox name attribute identifies a mailbox that is used to store messages that have been temporarily removed from the user's attention and scheduled to reappear at a later time.

When a user chooses to "snooze" a message, the supporting server SHOULD move the message to a mailbox with this attribute. At the specified "awaken" time, the server will automatically move the message back to its original location (typically the inbox) and may mark it with the \$new keyword to ensure it receives proper attention.

This attribute standardizes the location of snoozed messages across clients, allowing them to identify and manage snoozed messages consistently. However, this attribute merely identifies the storage location for snoozed messages and does not itself define the snoozing mechanism or interface.

Supporting clients MAY present the contents of this mailbox differently from regular mailboxes, such as organizing messages by their scheduled "awaken" time rather than received date, or providing specialized interfaces for adjusting the snooze duration.

## 5.2. Scheduled

The Scheduled mailbox name attribute identifies a mailbox that contains messages that have been composed but are scheduled to be sent at a future time rather than immediately.

When a user composes a message and chooses to send it at a later date or time, the supporting server SHOULD store the message in a mailbox with this attribute until the scheduled sending time. Once that time is reached, the server will send the message and typically move it to the \Sent mailbox or delete it according to server policy.

This attribute standardizes the location of scheduled messages across clients, enabling users to review, edit, or cancel scheduled messages before they are sent, regardless of which client was used to schedule them.

Supporting clients SHOULD present the contents of this mailbox in a way that highlights the scheduled sending time and SHOULD allow users to modify or cancel scheduled messages before they are sent.

## 5.3. Memos

The Memos mailbox name attribute identifies a mailbox designated for storing messages that have the \$memo keyword. These messages are user-created notes or annotations related to other messages.

When a user creates a memo (a note-to-self regarding another message), clients SHOULD store these messages in a mailbox with this attribute. This separation allows clients to handle memos differently from regular messages, presenting them as annotations rather than standalone communications.

Storing memos in a designated mailbox helps prevent them from cluttering the user's inbox or other message folders, while still maintaining them as proper email messages for compatibility and synchronization purposes.

Supporting clients SHOULD NOT present the contents of this mailbox as regular messages in their interface, but instead SHOULD present them contextually alongside the messages they annotate when those messages are accessed.

## 6. IANA Considerations

The following 16 IMAP/JMAP keywords are registered in the \_IMAP and JMAP Keywords\_ registry, as established in [RFC5788].

### 6.1. IMAP/JMAP Keyword Registrations

#### 6.1.1. \$notify keyword registration

IMAP/JMAP keyword name: \$notify  
Purpose: Indicate to the client that a notification should be presented for this message.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: This keyword can cause an automatic action.  
When/by whom the keyword is set/cleared: This keyword is set by the server on delivery when a message meets certain criteria. It may be cleared by a client when the user interacts with the message.  
Related keywords: None  
Related IMAP capabilities: None  
Security considerations: None  
Published specification: This document  
Intended usage: COMMON  
Scope: BOTH  
Owner/Change controller: IESG

#### 6.1.2. \$muted keyword registration

IMAP/JMAP keyword name: \$muted  
Purpose: Indicate to the server that the user is not interested in future replies to a particular thread.  
Private or Shared on a server: SHARED

Is it an advisory keyword or may it cause an automatic action: This keyword can cause an automatic action.

When/by whom the keyword is set/cleared: This keyword is set and cleared by the client.

Related keywords: Mutually exclusive with \$followed. If both are specified on a thread, servers MUST behave as though only \$followed were set.

Related IMAP capabilities: None

Security considerations: Muting a thread can mean a user won't be notified of a reply. If someone compromises a user's account, they may mute threads where they don't want the user to be notified of the reply, for example when sending phishing to the user's contacts. There are many other ways an attacker with access to the user's mailbox can also achieve this however, so this is not greatly increasing the attack surface.

Published specification: This document

Intended usage: COMMON

Scope: BOTH

Owner/Change controller: IESG

#### 6.1.3. \$followed keyword registration

IMAP/JMAP keyword name: \$followed

Purpose: Indicate to the server that the user is particularly interested in future replies to a particular thread.

Private or Shared on a server: SHARED

Is it an advisory keyword or may it cause an automatic action: This keyword can cause automatic action.

When/by whom the keyword is set/cleared: This keyword is set and cleared by the client.

Related keywords: Mutually exclusive with \$muted. If both are specified on a thread, servers MUST behave as though only \$followed were set.

Related IMAP capabilities: None

Security considerations: None

Published specification: This document

Intended usage: COMMON

Scope: BOTH

Owner/Change controller: IESG

#### 6.1.4. \$memo keyword registration

IMAP/JMAP keyword name: \$memo

Purpose: Indicate to the client that a message is a note-to-self from the user regarding another message in the same thread.

Private or Shared on a server: SHARED

Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.

When/by whom the keyword is set/cleared: This keyword is set and cleared by the client based on user interaction.

Related keywords: The \$memo and \$hasmemo keywords are mutually exclusive.

Related IMAP capabilities: None

Security considerations: None

Published specification: This document

Intended usage: COMMON

Scope: BOTH

Owner/Change controller: IESG

#### 6.1.5. \$hasmemo keyword registration

IMAP/JMAP keyword name: \$hasmemo

Purpose: Indicate to the client that a message has an associated memo with the \$memo keyword.

Private or Shared on a server: SHARED

Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.

When/by whom the keyword is set/cleared: This keyword is set and cleared by the client based on user interaction.

Related keywords: The \$memo and \$hasmemo keywords are mutually exclusive.

Related IMAP capabilities: None

Security considerations: None

Published specification: This document

Intended usage: COMMON

Scope: BOTH

Owner/Change controller: IESG

#### 6.1.6. \$hasattachment keyword registration

IMAP/JMAP keyword name: \$hasattachment

Purpose: Indicate to the client that a message has an attachment.

Private or Shared on a server: SHARED

Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.

When/by whom the keyword is set/cleared: This keyword is set by the server on delivery.

Related keywords: \$hasnoattachment

Related IMAP capabilities: None

Security considerations: None

Published specification: This document

Intended usage: COMMON

Scope: BOTH

Owner/Change controller: IESG



#### 6.1.7. \$hasnoattachment keyword registration

IMAP/JMAP keyword name: \$hasnoattachment  
Purpose: Indicate to the client that a message does not have an attachment.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.  
When/by whom the keyword is set/cleared: This keyword is set by the server on delivery.  
Related keywords: None  
Related IMAP capabilities: None  
Security considerations: None  
Published specification: This document  
Intended usage: COMMON  
Scope: BOTH  
Owner/Change controller: IESG

#### 6.1.8. \$autosent keyword registration

IMAP/JMAP keyword name: \$autosent  
Purpose: Indicate to the client that a message was sent automatically as a response due to a user rule or setting.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.  
When/by whom the keyword is set/cleared: This keyword is set by the server on delivery.  
Related keywords: None  
Related IMAP capabilities: None  
Security considerations: None  
Published specification: This document  
Intended usage: COMMON  
Scope: BOTH  
Owner/Change controller: IESG

#### 6.1.9. \$unsubscribed keyword registration

IMAP/JMAP keyword name: \$unsubscribed  
Purpose: Indicate to the client that it has unsubscribed from the thread this message is on.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.  
When/by whom the keyword is set/cleared: This keyword is set and cleared by the client based on user interaction.  
Related keywords: None  
Related IMAP capabilities: None

Security considerations:   None  
Published specification:   This document  
Intended usage:   COMMON  
Scope:   BOTH  
Owner/Change controller:   IESG

#### 6.1.10.   \$scanunsubscribe keyword registration

IMAP/JMAP keyword name:   \$scanunsubscribe  
Purpose:   Indicate to the client that this message has an [RFC8058]-  
         compliant List-Unsubscribe header.  
Private or Shared on a server:   SHARED  
Is it an advisory keyword or may it cause an automatic action:   This  
         keyword is advisory.  
When/by whom the keyword is set/cleared:   This keyword is set by the  
         server on delivery.  
Related keywords:   None  
Related IMAP capabilities:   None  
Security considerations:   None  
Published specification:   This document  
Intended usage:   COMMON  
Scope:   BOTH  
Owner/Change controller:   IESG

#### 6.1.11.   \$imported keyword registration

IMAP/JMAP keyword name:   \$imported  
Purpose:   Indicate to the client that this message was imported from  
         another mailbox.  
Private or Shared on a server:   SHARED  
Is it an advisory keyword or may it cause an automatic action:   This  
         keyword is advisory.  
When/by whom the keyword is set/cleared:   This keyword is set by the  
         server on delivery.  
Related keywords:   None  
Related IMAP capabilities:   None  
Security considerations:   None  
Published specification:   This document  
Intended usage:   COMMON  
Scope:   BOTH  
Owner/Change controller:   IESG

#### 6.1.12.   \$istrusted keyword registration

IMAP/JMAP keyword name:   \$istrusted  
Purpose:   Indicate to the client that the authenticity of the from  
         name and email address have been verified by the server.  
Private or Shared on a server:   SHARED

Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.  
When/by whom the keyword is set/cleared: This keyword is set by the server on delivery.  
Related keywords: None  
Related IMAP capabilities: None  
Security considerations: Servers should make sure this keyword is only set for messages that really are trusted.  
Published specification: This document  
Intended usage: COMMON  
Scope: BOTH  
Owner/Change controller: IESG

#### 6.1.13. \$maskedemail keyword registration

IMAP/JMAP keyword name: \$maskedemail  
Purpose: Indicate to the client that the message was received via an alias created for an individual sender.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.  
When/by whom the keyword is set/cleared: This keyword is set by the server on delivery.  
Related keywords: None  
Related IMAP capabilities: None  
Security considerations: None  
Published specification: This document  
Intended usage: LIMITED  
Scope: BOTH  
Owner/Change controller: IESG

#### 6.1.14. \$new keyword registration

IMAP/JMAP keyword name: \$new  
Purpose: Indicate to the client that a message should be made more prominent to the user due to a recent action.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: This keyword is advisory.  
When/by whom the keyword is set/cleared: This keyword is set by the server based on a timer. Clients can clear the keyword based on user interaction.  
Related keywords: None  
Related IMAP capabilities: None  
Security considerations: None  
Published specification: This document  
Intended usage: LIMITED  
Scope: BOTH

Owner/Change controller: IESG

#### 6.1.15. \$MailFlagBit0 keyword registration

IMAP/JMAP keyword name: \$MailFlagBit0  
Purpose: Bit 0 part of a 3-bit bitmask that defines the color of the flag when the message has the system flag \Flagged set. See Section 3 for details.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: No  
When/by whom the keyword is set/cleared: This keyword is set by a client as the result of a user action to "flag" a message for urgent/special attention.  
Related keywords: \$MailFlagBit1, \$MailFlagBit2  
Related IMAP capabilities: None  
Security considerations: None  
Published specification: This document  
Intended usage: COMMON  
Owner/Change controller: IESG

#### 6.1.16. \$MailFlagBit1 keyword registration

IMAP/JMAP keyword name: \$MailFlagBit1  
Purpose: Bit 1 part of a 3-bit bitmask that defines the color of the flag when the message has the system flag \Flagged set. See Section 3 for details.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: No  
When/by whom the keyword is set/cleared: This keyword is set by a client as the result of a user action to "flag" a message for urgent/special attention.  
Related keywords: \$MailFlagBit0, \$MailFlagBit2  
Related IMAP capabilities: None  
Security considerations: None  
Published specification: This document  
Intended usage: COMMON  
Owner/Change controller: IESG

#### 6.1.17. \$MailFlagBit2 keyword registration

IMAP/JMAP keyword name: \$MailFlagBit2  
Purpose: Bit 2 part of a 3-bit bitmask that defines the color of the flag when the message has the system flag \Flagged set. See Section 3 for details.  
Private or Shared on a server: SHARED  
Is it an advisory keyword or may it cause an automatic action: No  
When/by whom the keyword is set/cleared: This keyword is set by a

client as the result of a user action to "flag" a message for urgent/special attention.

Related keywords: \$MailFlagBit0, \$MailFlagBit1

Related IMAP capabilities: None

Security considerations: None

Published specification: This document

Intended usage: COMMON

Owner/Change controller: IESG

## 6.2. IMAP Mailbox Name Attributes Registrations

The following 3 IMAP/JMAP mailbox name attributes are registered in the IMAP/JMAP Mailbox Name Attributes Registry, as established in [RFC8457].

Note that none of the attributes in this section have an implied backslash. This sets them apart from those specified in Section 2 of [RFC6154].

### 6.2.1. Snoozed mailbox name attribute registration

Attribute Name: Snoozed

Description: Identifies the mailbox where temporarily snoozed messages are stored.

Reference: This document.

Usage Notes:

### 6.2.2. Scheduled mailbox name attribute registration

Attribute Name: Scheduled

Description: Identifies the mailbox where messages scheduled to be sent at a later time are stored.

Reference: This document.

Usage Notes:

### 6.2.3. Memos mailbox name attribute registration

Attribute Name: Memos

Description: Identifies the mailbox where user-created memo messages are stored.

Reference: This document.

Usage Notes:

## 7. Security Considerations

The security considerations for the \$istrusted and \$muted keywords are described in Section 6.1.12, Section 4.9, and Section 6.1.2 respectively.

The use and interpretation of the keywords and mailbox name attributes defined in this document depend on the client's and user's ability to trust the IMAP server. Clients should be aware that a compromised or malicious server could set these keywords incorrectly or manipulate them to mislead users. For additional security considerations related to IMAP, refer to [RFC9051].

Besides that this document should not affect the security of the Internet.

## 8. References

### 8.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997, <<https://www.rfc-editor.org/info/rfc2119>>.
- [RFC5788] Melnikov, A. and D. Cridland, "IMAP4 Keyword Registry", RFC 5788, DOI 10.17487/RFC5788, March 2010, <<https://www.rfc-editor.org/info/rfc5788>>.
- [RFC6154] Leiba, B. and J. Nicolson, "IMAP LIST Extension for Special-Use Mailboxes", RFC 6154, DOI 10.17487/RFC6154, March 2011, <<https://www.rfc-editor.org/info/rfc6154>>.
- [RFC8058] Levine, J. and T. Herkula, "Signaling One-Click Functionality for List Email Headers", RFC 8058, DOI 10.17487/RFC8058, January 2017, <<https://www.rfc-editor.org/info/rfc8058>>.
- [RFC8174] Leiba, B., "Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words", BCP 14, RFC 8174, DOI 10.17487/RFC8174, May 2017, <<https://www.rfc-editor.org/info/rfc8174>>.
- [RFC8457] Leiba, B., Ed., "IMAP "\$Important" Keyword and "\Important" Special-Use Attribute", RFC 8457, DOI 10.17487/RFC8457, September 2018, <<https://www.rfc-editor.org/info/rfc8457>>.
- [RFC8474] Gondwana, B., Ed., "IMAP Extension for Object Identifiers", RFC 8474, DOI 10.17487/RFC8474, September 2018, <<https://www.rfc-editor.org/info/rfc8474>>.
- [RFC8621] Jenkins, N. and C. Newman, "The JSON Meta Application Protocol (JMAP) for Mail", RFC 8621, DOI 10.17487/RFC8621, August 2019, <<https://www.rfc-editor.org/info/rfc8621>>.

[RFC9051]   Melnikov, A., Ed. and B. Leiba, Ed., "Internet Message  
Access Protocol (IMAP) - Version 4rev2", RFC 9051,  
DOI 10.17487/RFC9051, August 2021,  
<<https://www.rfc-editor.org/info/rfc9051>>.

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