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A. Melnikov, Ed.
Isode Ltd
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Implementing Draft & Release and Draft & Review in Internet Mail
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Abstract

This document describes how draft messages intended for Draft & Release and Draft & Review environments can be represented in Internet Email.

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Internet-Draft

Draft & Release email messages

February 2021

Table of Contents

1.	Introduction	2
2.	Conventions Used in This Document	2
2.1.	Terminology	2
3.	Structure of a draft message	3
4.	Structure of a confirmation message	3
5.	Structure of a rejection message	4
6.	Message-Draft header field	4
7.	Registration of new IMAP Keywords	4
8.	Example	5
9.	IANA Considerations	5
9.1.	The Message-Draft Header Field registration	5
9.2.	\$DraftReviewed IMAP keyword registration	6
9.3.	\$DraftAuthorized IMAP keyword registration	7
9.4.	\$DraftRejected IMAP keyword registration	9
10.	Security Considerations	10
11.	Normative References	10
Appendix A.	Acknowledgements	12
	Author's Address	12

[1.](#) Introduction

In some environments email messages can't be released to the MTS (Mail Transfer System) and, thus delivered to recipients, unless they are authorized by one or more authorizing users (e.g. Releasing Officers or Release Authorities). This document describes how such Draft messages can be represented as Internet Email [[RFC5322](#)] MIME objects [[RFC2045](#)].

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

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [[RFC2119](#)].

The formal syntax uses the Augmented Backus-Naur Form (ABNF) [[RFC5234](#)] notation including the core rules defined in [Appendix B of RFC 5234](#) [[RFC5234](#)]. Terms not defined in this document are taken from [[RFC5322](#)].

[2.1.](#) Terminology

Drafter: Any email user that composes a message (Draft Message) needing authorisation before it is released to its intended recipients.

Authorizing User (also known as Releaser or Authorizer): The mailbox of a user or a group of users that must inspect and authorise the release of Draft Message before it can be sent. An organization may require more than one Authorizing User to authorize release of a Draft Message.

[3.](#) Structure of a draft message

Message encapsulating a draft message to be released or reviewed (a.k.a. "outer message") is constructed as follows:

1. The media type of the outer message is "multipart/mixed".
2. The outer message contains the Message-Draft header field [Section 6](#). The initial message for release/review would contain "For Release", "For Confirmed Release" or "For Review" in this header field. [[CREF1: Is "For Confirmed Release" needed? Use MDN request instead?]]
3. (REQUIRED) The first body part of the outer message contains a human-readable message. The purpose of this message is to convey information about the inner draft message from the drafter to authorizing user. This body part can use any IANA-registered MIME media type, charset, or language. But this body part is typically "text/plain" or "text/html". Where a description of the error is desired in several languages or several media, a "multipart/alternative" or "multipart/multilingual" [\[RFC8255\]](#) construct can be used.
4. (REQUIRED) The second body part is "message/rfc822" or "message/global" [\[RFC6532\]](#). It wraps the draft message to be released. The draft message can contain MMHS-Authorizing-Users header field [\[RFC7912\]](#).
5. (OPTIONAL) The third and subsequent body parts contain comments from reviewers and/or authorizing users. These body parts are

typically "text/plain", "text/html", "message/rfc822" or "message/global", but can be other types (e.g. "multipart/related").

[4.](#) Structure of a confirmation message

The message confirming that the original draft message was released, reviewed or rejected is sent from the reviewer/releaser to the drafter. It is formatted as an Message Disposition Notification (MDN) [[RFC8098](#)].

Melnikov

Expires August 21, 2021

[Page 3]

Internet-Draft

Draft & Release email messages

February 2021

[5.](#) Structure of a rejection message

The rejection message provides details on why the original draft message was rejected by the reviewer/releaser. It is sent from reviewer/releaser to the drafter. It has the same structure as a regular draft message (see [Section 3](#)), but the first body part contains explanation of why the draft message was rejected.

[6.](#) Message-Draft header field

Message-Draft header field specifies what should be done with a draft message or what was action was performed on it.

This message header can appear at most once in the header.

```
Message-Draft = "Message-Draft:"  
                [FWS] Message-Draft-Type [FWS] CRLF
```

```
Message-Draft-Type = "For Release" /  
                    "For Confirmed Release" /  
                    "For Review" /  
                    "Authorized" /  
                    "Reviewed" /  
                    "Rejected"
```

[7.](#) Registration of new IMAP Keywords

This document defines several new IMAP keywords [[RFC3501](#)] that can be

used to override values stored in the Message-Draft header field. (I.e. if one of these mutually exclusive keywords is found, they take precedence over the value specified in the Message-Draft header field.) This allow client developers to implement easier Draft & Release workflow without requiring to re-upload the modified message with IMAP APPEND command.

All of the following IMAP keywords are mutually exclusive:

\$DraftAuthorized corresponds to the "Authorized" value of the Message-Draft header field;

\$DraftReviewed corresponds to the "Reviewed" value of the Message-Draft header field;

\$DraftRejected corresponds to the "Rejected" value of the Message-Draft header field.

[8.](#) Example

```
Date: Thu, 23 Oct 2014 10:07:18 -0400
From: TwHarrierTest <harriertest@example.com>
Message-Draft: For Confirmed Release
Message-Id: <634f2005-0bf1-4e07-a789-e78433a985f7@imap.example.com>
Mmhs-Primary-Precedence: 2
Subject: Cease Fire
To: <alexey.melnikov@example.com>
X-Mailer: Harrier
MIME-Version: 1.0
Content-Type: multipart/mixed; boundary=.562b3944-4b07-437f-be7d-1338f523a3a4
```

This is a multipart message in MIME format.

```
--.562b3944-4b07-437f-be7d-1338f523a3a4
content-type: text/plain; charset=utf-8
```

Alexey please release this.

```
--.562b3944-4b07-437f-be7d-1338f523a3a4
Content-Disposition: attachment
```

Content-Type: message/rfc822

Content-type: text/plain; charset=utf-8; delp=yes; format=flowed
From: TwHarrierTest <harriertest@example.com>
message-draft: For Confirmed Release
message-id: <0a2d822c-0b14-4d02-9215-45292676137f@imap.example.com>
MIME-Version: 1.0
mmhs-copy-precedence: 5
mmhs-primary-precedence: 5
Subject: Cease Fire
To: <commander@example.com>
X-Mailer: Harrier

Text of cease fire message
--.562b3944-4b07-437f-be7d-1338f523a3a4--

[9.](#) IANA Considerations

[9.1.](#) The Message-Draft Header Field registration

IANA is requested to add the Message-Draft header field to the IANA "Permanent Message Header Field Names" registry, per the procedure found in [[RFC3864](#)]. That entry is to be updated to reference this document. The following is the registration template:

Header field name: Message-Draft

Melnikov

Expires August 21, 2021

[Page 5]

Internet-Draft

Draft & Release email messages

February 2021

Applicable protocol: mail ([[RFC5322](#)])

Status: Standard

Author/Change controller: IETF

Specification document(s): [this RFC]

Related information: none

[9.2.](#) \$DraftReviewed IMAP keyword registration

Subject: Registration of IMAP keyword \$DraftReviewed

IMAP keyword name: \$DraftReviewed

Purpose (description): The \$DraftReviewed IMAP keyword designates the message requiring review as approved (processed).

Private or Shared on a server: SHARED

Is it an advisory keyword or may it cause an automatic action:
When this keyword is set, it means that the message is already reviewed and doesn't need any action. Lack of all of \$DraftReviewed, \$DraftAuthorized and \$DraftRejected can cause the client to popup a dialog or show some other UI for authorizing release of a message.

When/by whom the keyword is set/cleared: This keyword is set by an email client when the message is reviewed.

Related keywords: \$DraftRejected

Melnikov

Expires August 21, 2021

[Page 6]

Internet-Draft

Draft & Release email messages

February 2021

Related IMAP capabilities: None

Security considerations:

Published specification (recommended): `[[This-RFC]]`

Person & email address to contact for further information:
Alexey Melnikov <alexey.melnikov@isode.com>

Intended usage: `COMMON`

Owner/Change controller: `IESG`

Note:

`$DraftAuthorized`, `$DraftReviewed` and `$DraftRejected` are mutually exclusive. If more than one of them is set for a message, the mail client **MUST** treat this as if neither of them is set and **SHOULD** remove both of them from the IMAP server.

[9.3.](#) `$DraftAuthorized` IMAP keyword registration

Subject: Registration of IMAP keyword `$DraftAuthorized`

IMAP keyword name: `$DraftAuthorized`

Purpose (description): The `$DraftAuthorized` IMAP keyword designates the message requiring authorization for release as authorized (processed).

Melnikov

Expires August 21, 2021

[Page 7]

Internet-Draft

Draft & Release email messages

February 2021

Private or Shared on a server: `SHARED`

Is it an advisory keyword or may it cause an automatic action:

When this keyword is set, it means that the message is already authorized and doesn't need any action. Lack of all of \$DraftReviewed, \$DraftAuthorized and \$DraftRejected can cause the client to popup a dialog or show some other UI for authorizing release of a message.

When/by whom the keyword is set/cleared: This keyword is set by an email client when the message is authorized.

Related keywords: \$DraftRejected

Related IMAP capabilities: None

Security considerations:

Published specification (recommended): [[This-RFC]]

Person & email address to contact for further information:
Alexey Melnikov <alexey.melnikov@isode.com>

Intended usage: COMMON

Owner/Change controller: IESG

Note:

\$DraftAuthorized, \$DraftReviewed and \$DraftRejected are mutually exclusive. If more than one of them is set for a message, the mail client MUST treat this as if neither of them is set and SHOULD remove both of them from the IMAP server.

[9.4.](#) \$DraftRejected IMAP keyword registration

Subject: Registration of IMAP keyword \$DraftRejected

IMAP keyword name: \$DraftRejected

Purpose (description): The \$DraftRejected IMAP keyword designates the message requiring review or authorization for release as rejected by releaser/reviewer (processed).

Private or Shared on a server: SHARED

Is it an advisory keyword or may it cause an automatic action:
When this keyword is set, it means that the message is already rejected and doesn't need any action. Lack of all of \$DraftReviewed, \$DraftAuthorized and \$DraftRejected can cause the client to popup a dialog or show some other UI for authorizing release of a message.

When/by whom the keyword is set/cleared: This keyword is set by an email client when the message is rejected by authorizer.

Related keywords: \$DraftAuthorized,

\$DraftReviewed

Melnikov

Expires August 21, 2021

[Page 9]

Internet-Draft

Draft & Release email messages

February 2021

Related IMAP capabilities: None

Security considerations:

Published specification (recommended): [[This-RFC]]

Person & email address to contact for further information:
Alexey Melnikov <alexey.melnikov@isode.com>

Intended usage: COMMON

Owner/Change controller: IESG

Note:

\$DraftAuthorized, \$DraftReviewed and \$DraftRejected are mutually exclusive. If more than one of them is set for a message, the mail client MUST treat this as if neither of them is set and SHOULD remove both of them from the IMAP server.

[10.](#) Security Considerations

TBD.

[11.](#) Normative References

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Melnikov

Expires August 21, 2021

[Page 10]

Internet-Draft

Draft & Release email messages

February 2021

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Melnikov

Expires August 21, 2021

[Page 11]

Internet-Draft

Draft & Release email messages

February 2021

[Appendix A](#). Acknowledgements

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Author's Address

Alexey Melnikov (editor)
Isode Ltd
14 Castle Mews
Hampton, Middlesex TW12 2NP
UK

EMail: Alexey.Melnikov@isode.com

Melnikov

Expires August 21, 2021

[Page 12]