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A. Melnikov, Ed. Isode Ltd June 17, 2015

Implementing Draft & Release and Draft & Review in Internet Mail draft-melnikov-email-draft-and-release-01

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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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 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 5. 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". Where a description of the error is desired in several languages or several media, a "multipart/ alternative" construct can be used.
- 4. (REQUIRED) The second body part is "message/rfc822" or "message/ global". It wraps the draft message to be released. The draft message can contain MMHS-Authorizing-Users header field [I-D.melnikov-mmhs-authorizing-users].
- 5. (OPTIONAL) The third and subsequent body parts contain comments from reviewers and/or authorizing users. These body parts are typically "text/plain" or "text/html".

4. Structure of a confirmation message

- 1. The media type of the message confirming that the origina draft message was released, reviewed or rejected can be or any media type.
- 2. The message includes the Message-Draft header field <u>Section 5</u> containing one of "Authorized", "Reviewed" or "Rejected".
- 3. The message should contain "In-Reply-To:" header field with the Message-ID of the original draft message.

5. Message-Draft header field

Message-Draft specifies what should be done with a draft message or what was already done with 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"
```

6. Registration of new IMAP Keywords

This document defines several new IMAP keywords 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:

\$DraftForRelease corresponds to the "For Release" value of the Message-Draft header field;

\$DraftForConfirmedRelease corresponds to the "For Confirmed Release" value of the Message-Draft header field;

\$DraftForReview corresponds to the "For Review" value of the Message-Draft header field;

\$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.

7. 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; delsp=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 msg
--.562b3944-4b07-437f-be7d-1338f523a3a4--

8. IANA Considerations

TBD. Need to register IMAP keywords with IANA.

8.1. 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

Applicable protocol: mail ([RFC5322])

Status: Standard

Author/Change controller: IETF

Specification document(s): [this RFC]

Related information: none

Security Considerations

TBD.

10. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", <u>BCP 14</u>, <u>RFC 2119</u>, March 1997.
- [RFC2045] Freed, N. and N. Borenstein, "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", RFC 2045, November 1996.
- [RFC3501] Crispin, M., "INTERNET MESSAGE ACCESS PROTOCOL VERSION 4rev1", RFC 3501, March 2003.
- [RFC3864] Klyne, G., Nottingham, M., and J. Mogul, "Registration Procedures for Message Header Fields", <u>BCP 90</u>, <u>RFC 3864</u>, September 2004.
- [RFC5322] Resnick, P., Ed., "Internet Message Format", <u>RFC 5322</u>, October 2008.
- [RFC5234] Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008.

<u>Appendix A</u>. 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