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Updated Use of the Expires Message Header Field

Abstract

This document allows broader use of the Expires message header field
for SMTP. Senders can then indicate when a message sent becomes
valueless and can safely be deleted, while recipients would use the
information to delete these valueless messages.

Status of This Memo

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1. Introduction

The date and time of expiration can be used by the mailbox provider
or the MUA to indicate to the user that certain messages could be
deleted, in an attempt to unclutter the user's mailbox and spare
storage resources.

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.

2. Header Field example

The field definition and syntax remain the same.

```
expires = "Expires" ":" date-time
```

Example:

Expires: Wed, 1 Dec 2021 17:22:57 +0000

Senders MUST NOT include more than one Expires header in the message
they send.

If there is more than one Expires header then receivers SHOULD treat
this as if no Expires header is present.

3. Security considerations

Dates in this header can be set a long way in the past or in the
future, including outside the range of internal time representations

in some programming environments - all software which processes the
Expires header MUST be made safe against this possibility.

4. Advice to Senders

Senders SHOULD add the header field along with a relevant date and
time when they know that the content of the message has no value
after a given point of time (e.g. Commercial newsletters --
especially when including time-limited offers, Event announcements,
Social notifications, Time-limited access codes ...).

In all other cases, senders SHOULD NOT set an Expires header.

5. Advice to Receivers (Mailbox providers, Webmails and MUAs)

The expiration of a message's validity would logically lead to the
deletion of the message. However, users on most systems do not
expect their emails to disappear, and may not be aware that any
particular email has an Expires header. Therefore, no email should
be silently and automatically deleted solely based on the value of
the Expires header field.

Mailbox providers SHOULD explain to users how the information
provided in the Expires header are processed, SHOULD indicate when
viewing an expired message, and SHOULD give users control over the
actions to take for expired messages.

The information provided in the header should be used as a signal
that could be used to provide a feature or improved experience to
the end-user. For instance, systems may allow users to set up an
automatic rule to clean up expired email from specific senders or
with specific characteristics, or provide a mode to quickly view and
process all expired email.

In certain cases, email messages can be used as proof or element of
investigation. As an early deletion may compromise the intended
investigation, mailbox providers can ignore the Expires information
in such cases.

Presence of the Expires header field MUST NOT be interpreted as a
sign of legitimacy.

6. Past History of the Expires: header

[RFC4021] defines a number of header fields that can be added to
Internet messages such as those used for mapping between X.400 and
RFC822/MIME [RFC2156]. One of them is the Expires header field that
provides the date and time at which a message is considered to lose
its validity.

The same principle can be applied to the Expires header field in a
SMTP context, whether the message comes from a X.400 gateway as
initially intended in [RFC2156], or from a RFC821/SMTP MTA.

7. Acknowledgements

This document was informed by discussions with and/or contributions
from Jonathan Loriaux, Charles Sauthier and Simon Bressier.

8. IANA Considerations

IANA is requested to update an existing entry in the Permanent
Message Headers Field Names registry

Header field name: Expires

Applicable protocol: mail

Status: standard

Author/Change controller: IETF

Specification document: this document

9. Normative References

[RFC2156] Kille, S., "MIXER (Mime Internet X.400 Enhanced Relay):
           Mapping between X.400 and RFC 822/MIME", RFC 2156, DOI
           10.17487/RFC2156, January 1998, <https://www.rfc-
           editor.org/info/rfc2156>.

10. Informative 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>.

[RFC4021] Klyne, G. and J. Palme, "Registration of Mail and MIME
           Header Fields", RFC 4021, DOI 10.17487/RFC4021, March
           2005, <https://www.rfc-editor.org/info/rfc4021>.

[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>.

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