

Network Working Group
Internet-Draft
Intended status: Standards Track
Expires: 25 June 2026

A. Melnikov
Isode Ltd
22 December 2025

Updates to SMTP related IANA registries
draft-ietf-emailcore-iana-cleanup-01

Abstract

While EMAILCORE working group was working on update to SMTP specification, it became clear that existing entries in SMTP related registries are missing information or contain stale information and need to be updated. This document updates such entries.

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 <https://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 25 June 2026.

Copyright Notice

Copyright (c) 2025 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 (<https://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 Revised BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Revised BSD License.

Table of Contents

1. Introduction	2
2. Conventions Used in This Document	2
3. IANA Considerations	2
3.1. Updates to the "Simple Mail Transfer Protocol (SMTP) Service Extensions" registry	3
3.1.1. Updates to the "References" field	3
3.1.2. Updates to the "EHLO Parameters" field	3
3.1.3. Updates to the "Message submission Use and Values" field	3
3.1.4. Updates to the "Additional verbs", "MAIL/RCPT Parameter Values" fields	4
3.1.5. Updates to the "Length Added" field	6
4. Security Considerations	8
5. References	8
5.1. Normative References	8
5.2. Informative References	10
Appendix A. Acknowledgements	10
Author's Address	10

1. Introduction

While EMAILCORE working group was working on update to SMTP specification [I-D.ietf-emailcore-rfc5321bis], it became clear that existing entries in SMTP related registries are missing information or contain stale information and need to be updated. This document updates such entries, assuming IANA actions specified in [I-D.ietf-emailcore-rfc5321bis] were already performed.

This document doesn't do any restructuring to existing SMTP related registries.

2. Conventions Used in This Document

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. IANA Considerations

3.1. Updates to the "Simple Mail Transfer Protocol (SMTP) Service Extensions" registry

Updates to the "Simple Mail Transfer Protocol (SMTP) Service Extensions" registry are described as an ordered list of steps that should be performed sequentially. Each step is described by a subsection of this section.

3.1.1. Updates to the "References" field

IANA is requested to change values of the "References" field for "EXPN" and "HELP" extensions to [I-D.ietf-emailcore-rfc5321bis]. The "References" field values for "SEND", "SOML", "SAML" and "TURN" remain unchanged, as they were obsoleted and there are no newer reference than RFC 821.

3.1.2. Updates to the "EHLO Parameters" field

IANA is requested to update the following values in this field:

1. The value corresponding to the DELIVERBY extension should be changed to "A comma separated list of options (optional)", as per [RFC2852].
2. The value corresponding to the FUTURERELEASE extension should be changed to "max-future-release-interval and max-future-release-date-time", as per [RFC4865].
3. The value corresponding to the LIMITS extension should be changed to "List of limits", as per [RFC9422].

3.1.3. Updates to the "Message submission Use and Values" field

IANA is requested to update values of the "Message submission Use and Values" field corresponding to "HELP", "BURL", "FUTURERELEASE", "SMTPUTF8", "MT-PRIORITY", "RRVS", "REQUIRETLS" and "LIMITS" extensions to "MAY". Most of these extensions were published since RFC 6409 was published, so they are not explicitly listed in it. In regards to HELP extension, there is no particular reason to prohibit it on Submission.

The following table summarizes the changes:

EHLO Keyword	Message Submission Use and Values
HELP	MAY
BURL	MAY
FUTURERELEASE	MAY
SMTPUTF8	MAY
MT-PRIORITY	MAY
RRVS	MAY
REQUIRETLS	MAY
LIMITS	MAY

Table 1

3.1.4. Updates to the "Additional verbs", "MAIL/RCPT Parameter Values" fields

IANA is requested to update "Additional verbs" and "MAIL/RCPT Parameter Values" fields as per the table specified below. Information for relevant fields was extracted from existing RFCs describing corresponding SMTP Extensions.

EHLO Keyword	Additional verbs	MAIL/RCPT Parameter Values
SEND	SEND	none
SOML	SOML	none
SAML	SAML	none
EXPN	EXPN	none
HELP	HELP	none
TURN	TURN	none
8BITMIME	none	BODY parameter to MAIL command

SIZE	none	SIZE parameter to MAIL command
CHUNKING	BDAT	none
BINARYMIME	none	BODY parameter to MAIL command (an extra choice was added)
CHECKPOINT	none	TRANSID parameter to the MAIL command
DELIVERBY	none	BY parameter to MAIL command
PIPELINING	none	none
DSN	none	NOTIFY and ORCPT parameters to RCPT command. RET and ENVID parameters to MAIL command
ETRN	ETRN	none
ENHANCEDSTATUSCODES	none	none
STARTTLS	STARTTLS	none
NO-SOLICITING	none	SOLICIT parameter to MAIL command
MTRK	none	MTRK parameters to MAIL command. Also see DSN extension parameters
SUBMITTER	none	SUBMITTER parameters to MAIL command
ATRN	ATRN	none
AUTH	AUTH	AUTH parameter to MAIL command
BURL	BURL	none
FUTURERELEASE	none	HOLDFOR and HOLDUNTIL parameters to MAIL

		command.
UTF8SMTP	none	One optional parameter, ALT-ADDRESS, is added to the MAIL and RCPT commands
CONPERM	none	CONPERM parameter to MAIL command
CONNNEG	none	CONNNEG parameter to RCPT command
SMTPUTF8	none	SMTPUTF8 parameter to the MAIL command
MT-PRIORITY	none	MT-PRIORITY parameter to MAIL command
RRVS	none	RRVS parameter to RCPT command
REQUIRETLS	none	REQUIRETLS parameter to MAIL command
LIMITS	none	none

Table 2

3.1.5. Updates to the "Length Added" field

IANA is further requested to update "Length Added" fields as per the table specified below. Information for this field was either extracted or calculated from information in existing RFCs describing corresponding SMTP Extensions.

EHLO Keyword	Length Added	Comment
8BITMIME	14	https://datatracker.ietf.org/doc/html/rfc6152#section-2
SIZE	26	https://datatracker.ietf.org/doc/html/rfc1870#section-3
CHUNKING	0	https://datatracker.ietf.org/doc/html/rfc3030#section-2

BINARYMIME	16	https://datatracker.ietf.org/doc/html/rfc3030#section-3
CHECKPOINT	89	https://datatracker.ietf.org/doc/html/rfc1845#section-2
DELIVERBY	17	https://datatracker.ietf.org/doc/html/rfc2852#section-2
DSN	530	https://datatracker.ietf.org/doc/html/rfc3461#section-5.4
NO-SOLICITING	1009	https://datatracker.ietf.org/doc/html/rfc3865#section-2.3
SUBMITTER	331	https://datatracker.ietf.org/doc/html/rfc4405#section-4
MTRK	40	https://datatracker.ietf.org/doc/html/rfc3885#section-2
AUTH	500	https://datatracker.ietf.org/doc/html/rfc4954#section-3
FUTURERELEASE	34	https://datatracker.ietf.org/doc/html/rfc4865#section-3
UTF8SMTP	460	https://datatracker.ietf.org/doc/html/rfc5336#section-3.1
CONPERM	8	https://datatracker.ietf.org/doc/html/rfc4141#section-4.2
CONNeg	7	https://datatracker.ietf.org/doc/html/rfc4141#section-5.2
SMTPUTF8	10	https://datatracker.ietf.org/doc/html/rfc6531#section-3.1
MT-PRIORITY	15	https://datatracker.ietf.org/doc/html/rfc6710#section-3
RRVS	33	https://datatracker.ietf.org/doc/html/rfc7293#section-3.1
REQUIRETLS	11	https://www.rfc-editor.org/rfc/rfc8689.html#name-iana-considerations

LIMITS	0	https://datatracker.ietf.org/doc/html/rfc9422#section-3
--------	---	---

Table 3

TBD: Calculate "Length Added" when not specified in existing RFCs.

4. Security Considerations

This document only specifies IANA related actions, thus it doesn't directly affect security on SMTP or its extensions. However better documentation of SMTP extensions in IANA registries can, hopefully, lead to better and more secure implementations.

5. References

5.1. Normative References

[I-D.ietf-emailcore-rfc5321bis]

Klensin, J. C., "Simple Mail Transfer Protocol", Work in Progress, Internet-Draft, draft-ietf-emailcore-rfc5321bis-44, 31 July 2025, <<https://datatracker.ietf.org/doc/html/draft-ietf-emailcore-rfc5321bis-44>>.

[RFC1845] Crocker, D., Freed, N., and A. Cargille, "SMTP Service Extension for Checkpoint/Restart", RFC 1845, DOI 10.17487/RFC1845, September 1995, <<https://www.rfc-editor.org/info/rfc1845>>.

[RFC1870] Klensin, J., Freed, N., and K. Moore, "SMTP Service Extension for Message Size Declaration", STD 10, RFC 1870, DOI 10.17487/RFC1870, November 1995, <<https://www.rfc-editor.org/info/rfc1870>>.

[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>>.

[RFC2852] Newman, D., "Deliver By SMTP Service Extension", RFC 2852, DOI 10.17487/RFC2852, June 2000, <<https://www.rfc-editor.org/info/rfc2852>>.

- [RFC3030] Vaudreuil, G., "SMTP Service Extensions for Transmission of Large and Binary MIME Messages", RFC 3030, DOI 10.17487/RFC3030, December 2000, <<https://www.rfc-editor.org/info/rfc3030>>.
- [RFC3885] Allman, E. and T. Hansen, "SMTP Service Extension for Message Tracking", RFC 3885, DOI 10.17487/RFC3885, September 2004, <<https://www.rfc-editor.org/info/rfc3885>>.
- [RFC4865] White, G. and G. Vaudreuil, "SMTP Submission Service Extension for Future Message Release", RFC 4865, DOI 10.17487/RFC4865, May 2007, <<https://www.rfc-editor.org/info/rfc4865>>.
- [RFC5336] Yao, J., Ed. and W. Mao, Ed., "SMTP Extension for Internationalized Email Addresses", RFC 5336, DOI 10.17487/RFC5336, September 2008, <<https://www.rfc-editor.org/info/rfc5336>>.
- [RFC6409] Gellens, R. and J. Klensin, "Message Submission for Mail", STD 72, RFC 6409, DOI 10.17487/RFC6409, November 2011, <<https://www.rfc-editor.org/info/rfc6409>>.
- [RFC6531] Yao, J. and W. Mao, "SMTP Extension for Internationalized Email", RFC 6531, DOI 10.17487/RFC6531, February 2012, <<https://www.rfc-editor.org/info/rfc6531>>.
- [RFC6710] Melnikov, A. and K. Carlberg, "Simple Mail Transfer Protocol Extension for Message Transfer Priorities", RFC 6710, DOI 10.17487/RFC6710, August 2012, <<https://www.rfc-editor.org/info/rfc6710>>.
- [RFC7293] Mills, W. and M. Kucherawy, "The Require-Recipient-Valid-Since Header Field and SMTP Service Extension", RFC 7293, DOI 10.17487/RFC7293, July 2014, <<https://www.rfc-editor.org/info/rfc7293>>.
- [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>>.
- [RFC8689] Fenton, J., "SMTP Require TLS Option", RFC 8689, DOI 10.17487/RFC8689, November 2019, <<https://www.rfc-editor.org/info/rfc8689>>.
- [RFC9422] Freed, N. and J. Klensin, "The LIMITS SMTP Service Extension", RFC 9422, DOI 10.17487/RFC9422, February 2024, <<https://www.rfc-editor.org/info/rfc9422>>.

5.2. Informative References

[RFC5321] Klensin, J., "Simple Mail Transfer Protocol", RFC 5321, DOI 10.17487/RFC5321, October 2008, <<https://www.rfc-editor.org/info/rfc5321>>.

Appendix A. Acknowledgements

Thank you to Ken Murchison, John Klensin and Tero Kivinen for suggestions, comments and corrections on this document.

Tero Kivinen provided initial version of the table with Length Added values for various SMTP extensions. Ken Murchison verified Length Added values included in the draft and noticed that some values reported in published RFCs are incorrect.

Author's Address

Alexey Melnikov
Isode Ltd
14 Castle Mews
Hampton
TW12 2NP
United Kingdom
Email: alexey.melnikov@isode.com