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Updates to SMTP related IANA registries
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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.

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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	3
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".

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 1

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
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	88	https://datatracker.ietf.org/doc/html/rfc1845#section-2
DELIVERBY	17	https://datatracker.ietf.org/doc/html/rfc2852#section-2
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
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

Table 2

TBD: Calculate "Length Added" when not specified in existing RFCs.
 Also possibly merge this with the previous table?

IANA is further requested to update "Message Submission Use and Values" fields as per the table specified below. 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.

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 3

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

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Appendix A. Acknowledgements

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Tero Kivinen provided initial version of the table with Length Added values for various SMTP extensions.

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