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The Supersedes or Replaces Header in E-mail

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Abstract

This memo introduces one new e-mail header, Supersedes. This document may, if accepted by the IESG, become a proposed standard, at some time in the future.

Differences from [draft-ietf-mailext-new-fields-14.txt](#)

Most of these changes are to agree with a similar specification by Charles Lindsey on the Supersedes and Replaces headers in Usenet News, which is being developed as part of the IETF USEFOR working group, and by other suggestions made in the USEFOR mailing list.

Parameters "noshow", "show" and "repost" have been added to the "Supersedes" header, in accordance with discussions in the usefor mailing list.

A parameter "version=<decimal-version-number>" might also be considered, but has not been added.

The discussion in chapter 1.2.1 Who may supersede a message/article? has been extended to more fully explain the reasons for the recommended practices for implementing hard supersedes.

A discussion note has been added to chapter 1.2.4 When to use soft and hard supersedes to explain why the author of a message may want hard superseding of a message in certain cases.

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[1.](#) **Supersedes**

[1.1](#) **Syntax**

Supersedes-field	= "Supersedes:" CFWS identifier *(identifier) optional-parameter-list [CFWS] CRLF
optional-parameter-list	= *(";" LWSP parameter)
parameter	= parameter-name ["=" parameter-value]
parameter-name	= "noshow" / "show" / "repost" private-parameter / future-parameter

Note: There is no comma between multiple values, and that each Message-ID value is to be surrounded by angle brackets.

Warning: Some software may not work correctly with comments in header fields, especially comments in other places than at the beginning and end of the field value.

Warning: This header MUST be spelled "Supersedes" and not "Supercedes".

1.2 Semantics

The Supersedes header identifies previous correspondence, which this message supersedes. Different messaging agents such as user agents, mailing list expanders and mailing list archives. A user agent is expected to handle this field in much the same way as the In-Reply-To and References header.

Note: The Message-ID of a superseding message MUST be different from the Message-ID of the superseded message. The Message-ID of the superseded message is used as value in the "Supersedes:" header, not in the Message-ID of the superseding message.

Parameters:

- | | |
|--------|---|
| noshow | In the opinion of the sender, this message makes such a minor change to the superseded version, that a recipient, who has already seen the previous version, will probably not want to see the new version, unless the user explicitly asks for it. |
| show | In the opinion of the sender, this message makes such a large change to the superseded version, that a recipient, who has already seen the previous version, will probably want to see the new version, too. |
| repost | This document is a document which is repeatedly, at regular or irregular intervals, reposted, such as FAQs or mailing list monthly information. |

None of these parameters have values. The "noshow" and the "show" parameters are mutually exclusive, but both of them can occur together with the "repost" parameter.

1.2.1 Who may supersede a message/article?

Agents receiving superseding messages MAY ignore, or issue a warning, for the Supersedes header, if the author of the message is not approved. Approved authors of superseding messages MAY be:

- (1) The author of the message being superseded.
- (2) For moderated mailing lists, the moderator. Note that a moderator may only supersede messages/articles in groups, for which the moderator is responsible, and such a moderator SHOULD not send superseding messages/articles to other groups.

Discussion: There are two kinds of moderated lists, pre-moderated and post-moderated. In pre-moderated lists, the moderator approves all contributions before they are sent out to list members.

In post-moderated lists, contributions are sent out immediately, but the moderator can supersede inappropriate contributions afterwards. The advantage with pre-moderated lists is that no inappropriate contributions will ever be sent out. The advantage with post-moderated list is faster turnaround time in discussion threads.

- (3) Other users given the authority to supersede messages. Such authority is often local to one particular server only.

Discussion: A server administrator may be legally required to supersede illegal messages, if these are available for download by people who have not yet received them.

An agent MAY ignore or issue a warning for Supersedes headers if the Superseding message does not have a verifyable digital signature of its author or another agent who the agent owner thinks should be allowed to supersede this message. Digital signatures are separately standardized (like SMIME [9] and PGP [10] or other standards for digital signatures) and their format and semantics are not specified in this standard.

1.2.2 Semantic variant 1: Soft supersedes

- (a) With soft supersedes this header does not imply any mandatory deletion of the previous correspondence in mailboxes and user agent databases. The user is still able to view old versions of superseded messages.
- (b) Agents which provide user commands for getting from a reply to the replied-to message (or for getting from a replied-to message to its replies), MAY provide similar commands for getting from a superseding message to the superseded message (or for getting from a superseded message to its superseding version).

(c) Agents MAY normally show the recipient both the previous and the superseding message. If, however, both the previous and the superseding message have arrived, both having the same author, but the user has not yet seen either of them, a user agent MAY show only the superseding message, but also show a mark to inform the recipient that this message supersedes a previous message.

1.2.3 Semantic variant 2: Hard supersedes

With hard supersedes, the arrival of a superseding message or article will cause the deletion of the superseded message. The new message will however still have a new Message-ID and will not take over the Message-ID of the superseded message/article.

1.2.4 When to use soft and hard supersedes

Hard and soft supersedes are differentiated by the receiving client, not the sender. There is no format difference in the header between hard and soft supersedes.

Mail stores under the control of an individual user (for example, POP or IMAP mail boxes) SHOULD implement soft supersedes but MAY implement hard supersedes, possibly only as an (off by default) option. (Please read the security considerations if you plan to implement this). Multi-user message archives and servers MAY implement HARD supersedes.

Discussion: A person, who has by mistake written an illegal message, may be legally required to hard supersede the illegal message, in places where it is available for download by people who have not yet received it.

Note: In Usenet News, servers commonly implement hard supersedes.

If the handler of a message/article storage has a mechanism for automatic purging of old messages, the fact that there is a superseding message may be a component in the decision of when to purge the previous version.

1.2.5 Multiple field values

When this is written (1999) some Usenet News softwares cannot handle Supersedes with more than one previous articles listed as parameters. This can be expected to change, but until then, a gateway from e-mail to news MAY because of this delete all but the first parameter of this attribute when conveying messages from e-mail to news.

2. Security considerations

If a server or receiving user agent suppresses showing of superseded messages, the "Supersedes:" feature might be used maliciously to suppress messages written by other people. To reduce the risk for this, it is RECOMMENDED that user agents give a warning to the recipient when a superseding message has a different "From:" name than the superseded message.

A moderately clever forger can of course circumvent this by sending messages with falsified "From:" field and even falsified SMTP senders. User agents supporting S/MIME [[9](#)] or PGP [[10](#)] or other standards for digital signature can require and check digital signatures to reduce also this risk (see [section 1.2.1](#) above).

Even more reduction of security problems can be achieved if user agents handle "Supersedes:" exactly in the same way as "In-Reply-To:" and "References:", i.e. show both versions of the message, and only use the "Supersedes:" header as information to readers of messages of the relation between different messages.

Another possible risk with "Supersedes:" is that it allows people to "change their minds", possibly changing the meaning of replies to them. Example: A message with the text "Do you like your mother" gets the reply "Yes, very much", and then the original message might be changed to "Do you like Hitler", changing the meaning of the reply. Note, however, that the "In-Reply-To" or "References" headers in the reply refers to the Message-ID of the original message, not of the superseding message. Thus, a user agent can avoid this problem by designing the user interface so that replies are not shown as referring to the superseding message, when they use the Message-ID of the superseded message.

Also, since "Supersedes:" in e-mail is meant to not actually cause deletion of the superseded message, recipients can look up the superseded message to see if the author has changed his mind. In general, it is not illegal or unethical to change your mind, rather, it shows your openness to new ideas and willingness to listen to the arguments of other people.

The fact that some implementations of Supersedes cause deletion of the Superseded message (hard supersedes, [section 1.2.3](#) above), **but others do not (soft supersedes, [section 1.2.2](#) above)**, may cause security problems. To reduce this problem, a server should clarify its policy on this to its users and follow the recommendations in [section 1.2.4](#) above.

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