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Handling Normative References to Standards-Track Documents

Status of This Memo

This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

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Abstract

The Internet Engineering Task Force (IETF) and Request for Comments (RFC) Editor have a long-standing rule that a document at a given maturity level cannot be published until all of the documents that it references as normative are at that maturity level or higher. This rule has sometimes resulted in very long publication delays for documents and some claims that it was a major obstruction to advancing documents in maturity level. The IETF agreed on a way to bypass this rule with RFC 3967. This document describes a simpler procedure for downward references to Standards-Track and Best Current Practice (BCP) documents, namely "note and move on". The procedure in RFC 3967 still applies for downward references to other classes of documents. In both cases, annotations should be added to such References.

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1. Introduction

The IETF and RFC Editor have a long-standing rule (see, e.g., RFC 2026, Section 4.2.4 [RFC2026] and the extended discussion in RFC 3967 [RFC3967]) that a document at a given maturity level cannot be published until all of the documents to which it makes a normative reference are at that maturity level or higher. This rule has sometimes resulted in very long publication delays for documents and some claims that it was a major obstruction to advancing documents in maturity level. Recognizing the problems that this rule sometimes caused, RFC 3967 established an exception procedure for normative downward references under some specific circumstances. Perhaps because of its fairly stringent requirements, RFC 3967 has not proven adequate either to clear the backlog of documents awaiting upgraded documents or to prevent additional documents from joining that queue.

This document replaces the long-standing rule for downward references to Standards-Track documents (including BCPs) that are already published. For normative references to Standards-Track and BCP documents, that rule was to hold the newer, referencing, document until the referenced ones could be brought to the appropriate maturity level. It is now possible, following procedures described below, to simply note the downward normative reference and move on.

This document also updates RFC 3967. When downward references from a source document are approved under the procedure specified in that specification, we recommend that the references in the approved (source) document be annotated in the same way as references approved under this rule.

2. Terminology

A reference involves two documents, the one in which the reference is embedded and the document referenced. Where needed for clarity, these documents are referred to as the "source document" and "target document", respectively.

The term "Standards-Track document", as used in this specification, is assumed to include BCPs but not Informational or Experimental documents of any variety or origin.

3. Normative Reference Rule

This document specifies an alternative to holding source documents until all target documents referenced normatively are upgraded or by applying the procedure of RFC 3967.

3.1. Source Documents Not Yet Processed by the IESG

An author or editor who requires a normative downward reference to a Standards-Track RFC uses the following very simple procedure:

- The reference text (i.e., in the "Normative References" section of the source document) is written as usual.
- A note is included in the reference text that indicates that the reference is to a target document of a lower maturity level, that some caution should be used since it may be less stable than the document from which it is being referenced, and, optionally, explaining why the downward reference is appropriate.

The Internet Engineering Steering Group (IESG) may, at its discretion, specify the exact text to be used, establish procedures regarding the text to use, or give guidance on this text. When establishing procedures, the IESG should seek appropriate community review.

These annotations are part of the source document. If members of the community consider either the downward reference or the annotation text to be inappropriate, those issues can be raised at any time during the document life cycle, just as with any other text in the document. There is no separate review of these references.

With appropriate community review, the IESG may establish procedures for when normative downward references should delay a document and when downward references should be noted. Absent specific guidance, authors and reviewers should use their best judgment. It is assumed that, in a significant majority of cases, noting a downward reference is preferable to delaying publication.

At the option of the author, similar notes may be attached to non-normative references.

3.2. Documents Already in the RFC Editor Queue

The IESG may, at its discretion, specify a procedure to be applied to source documents that are already in the RFC Editor queue, awaiting target referenced documents. The IESG should encourage authors with documents in the RFC Editor queue awaiting downward references to Standards-Track RFCs to evaluate whether this new rule is appropriate for their documents. If authors believe that adding an annotation and releasing the document is the best way forward, then the IESG should ensure that appropriate review is conducted and, if that review agrees with that of the authors' evaluation, allow the annotations to be added. The IESG will announce its decision via the normal Protocol-Action or Document-Action mechanisms.

4. Target Documents Not on the Standards Track

In the case of a normative reference to a document not on the standards track that is approved under the procedures defined in RFC 3967, the annotation described in Section 3.1 or the retrospective annotation described in Section 3.2, SHOULD be added to the reference unless the IESG, after consideration of Last Call input, concludes it is inappropriate.

5. Target Documents that Can Be Referenced This Way

The "downward reference by annotation" model specified here is applicable only to published Standards-Track RFCs at lower maturity levels.

Obviously, such downward references are part of the relevant source document at IETF Last Call and subject to comments from the community.

Advancing documents, when appropriate, is still considered preferable to the use of either this procedure or the one specified in RFC 3967. This specification does not impose a specific test or requirement to determine appropriateness. This is partially because it would be impossible to do so for the general case, but more so because the intention is to permit the IESG and the community to balance the importance of getting a source document published against the time and difficulty associated with upgrading a target document. That requirement is intended to be less stringent than the one of RFC 3967.

6. Security Considerations

This document specifies an IETF procedure. It is not believed to raise any security issues although, in principle, relaxing the normative downward reference rules for references associated with security mechanisms could make a specification less stable and hence less secure.

7. Acknowledgements

This proposal was suggested by a comment by Spencer Dawkins and many complaints about the negative impact of the current rules. The author is unsure about the validity of some of those complaints; the proposal is, in part, a way to test the validity question. Spencer also provided helpful comments on a preliminary version. It was revised in response to extensive discussion in the IESG and benefited significantly by comments from Brian Carpenter.

8. Normative References

[RFC2026] Bradner, S., "The Internet Standards Process -- Revision 3", BCP 9, RFC 2026, October 1996.

[RFC3967] Bush, R. and T. Narten, "Clarifying when Standards Track Documents may Refer Normatively to Documents at a Lower Level", BCP 97, RFC 3967, December 2004.

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