

Network Working Group
Internet-Draft
Updates: [3967](#) (if approved)
Expires: September 27, 2007

J. Klensin
S. Hartman
MIT
March 26, 2007

Handling Normative References to Standards Track Documents
draft-klensin-norm-ref-04.txt

Status of this Memo

By submitting this Internet-Draft, each author represents that any applicable patent or other IPR claims of which he or she is aware have been or will be disclosed, and any of which he or she becomes aware will be disclosed, in accordance with [Section 6 of BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

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."

The list of current Internet-Drafts can be accessed at <http://www.ietf.org/ietf/1id-abstracts.txt>.

The list of Internet-Draft Shadow Directories can be accessed at <http://www.ietf.org/shadow.html>.

This Internet-Draft will expire on September 27, 2007.

Copyright Notice

Copyright (C) The IETF Trust (2007).

Abstract

The IETF and RFC Editor have a long-standing rule that a document at a given maturity level cannot be published until all documents 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 to a way to bypass this rule with [RFC 3967](#). This document describes a simpler

procedure for downward references to Standards track and BCP documents, namely "note and move on". The procedure in [RFC 3967](#) still applies for downward references to other classes of document. In both cases, annotations should be added to such References.

Table of Contents

1.	Introduction	3
2.	Terminology	3
3.	Normative Reference Rule	3
3.1.	Source Documents Not Yet Processed by the IESG	4
3.2.	Documents Already in RFC Editor Queue	4
4.	Target Documents not on the Standards Track	5
5.	Target Documents that Can Be Referenced This Way	5
6.	Security Considerations	5
7.	IANA Considerations	5
8.	Acknowledgments	5
9.	Changes for version -02	6
10.	Normative References	6
	Authors' Addresses	6
	Intellectual Property and Copyright Statements	8

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 documents 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. 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. While downward references to, e.g., Internet Drafts, are theoretically possible, they are not contemplated here.

This document replaces the "hold on normative reference" rule with a "note downward normative reference and move on" approach for normative references to standards-track documents and BCPs.

This document also updates [RFC 3967](#) to encourage downward references approved through that procedure to be noted 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 a 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:

- o The reference text (i.e., in the "Normative References" section of the source document) is written as usual.
- o 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 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 in the document life cycle, just as with any other text in the document. There is no separate review on 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 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 documents is the best way forward, then the IESG should insure that appropriate review is conducted and if that review agrees with the authors 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, partially because it would be impossible to do so for the general case, but 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. IANA Considerations

This document requires no actions by the IANA.

8. Acknowledgments

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 draft. It was revised in response to extensive discussion in the IESG and benefited significantly by comments by Brian Carpenter.

9. Changes for version -02

The proposal has been significantly trimmed based on discussion with the IESG during and after Last Call. In particular, the provisions for downward references to approved, but unpublished, Internet-Drafts and for references to Informational documents have been removed and the proposal targeted at BCP rather than experimental status. The revised procedure applies only to published standards-track documents at a lower maturity level.

Some editorial corrections have also been made to improve clarity.

10. 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.

Authors' Addresses

John C Klensin
1770 Massachusetts Ave, #322
Cambridge, MA 02140
USA

Phone: +1 617 491 5735
Email: john-ietf@jck.com

Sam Hartman
Massachusetts Institute of Technology
77 Massachusetts Ave
Cambridge, MA 02139
USA

Email: hartmans-ietf@mit.edu

Full Copyright Statement

Copyright (C) The IETF Trust (2007).

This document is subject to the rights, licenses and restrictions contained in [BCP 78](#), and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY, THE IETF TRUST AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Intellectual Property

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in [BCP 78](#) and [BCP 79](#).

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at <http://www.ietf.org/ipr>.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at ietf-ipr@ietf.org.

Acknowledgment

Funding for the RFC Editor function is provided by the IETF Administrative Support Activity (IASA).

