Not All RFCs are Standards

Status of this Memo

This memo provides information for the Internet community. This memo does not specify an Internet standard of any kind. Distribution of this memo is unlimited.

Abstract

This document discusses the relationship of the Request for Comments (RFCs) notes to Internet Standards.

Not All RFCs Are Standards

The "Request for Comments" (RFC) document series is the official publication channel for Internet standards documents and other publications of the IESG, IAB, and Internet community. From time to time, and about every six months in the last few years, someone questions the rationality of publishing both Internet standards and informational documents as RFCs. The argument is generally that this introduces some confusion between "real standards" and "mere publications".

It is a regrettably well spread misconception that publication as an RFC provides some level of recognition. It does not, or at least not any more than the publication in a regular journal. In fact, each RFC has a status, relative to its relation with the Internet standardization process: Informational, Experimental, or Standards Track (Proposed Standard, Draft Standard, Internet Standard), or Historic. This status is reproduced on the first page of the RFC itself, and is also documented in the periodic "Internet Official Protocols Standards" RFC (STD 1). But this status is sometimes omitted from quotes and references, which may feed the confusion.

There are two important sources of information on the status of the Internet standards: they are summarized periodically in an RFC entitled "Internet Official Protocol Standards" and they are documented in the "STD" subseries. When a specification has been
adopted as an Internet Standard, it is given the additional label "STD xxxx", but it keeps its RFC number and its place in the RFC series.

It is important to note that the relationship of STD numbers to RFC numbers is not one to one. STD numbers identify protocols, RFC numbers identify documents. Sometimes more than one document is used to specify a Standard protocol.

In order to further increase the publicity of the standardization status, the IAB proposes the following actions:

- Use the STD number, rather than just the RFC numbers, in the cross references between standard tracks documents,
- Utilize the "web" hypertext technology to publicize the state of the standardization process.

More precisely, we propose to add to the current RFC repository an "html" version of the "STD-1" document, i.e., the list of Internet standards. We are considering the extension of this document to also describes actions in progress, i.e., standards track work at the "proposed" or "draft" stage.

A Single Archive

The IAB believes that the community benefitted significantly from having a single archival document series. Documents are easy to find and to retrieve, and file servers are easy to organize. This has been very important over the long term. Experience of the past shows that subseries, or series of limited scope, tend to vanish from the network. And, there is no evidence that alternate document schemes would result in less confusion.

Moreover, we believe that the presence of additional documents does not actually hurt the standardization process. The solution which we propose is to better publicize the "standard" status of certain documents, which is made relatively easy by the advent of networked hypertext technologies.

Rather Document Than Ignore

The RFC series includes some documents which are informational by nature and other documents which describe experiences. A problem of perception occurs when such a document "looks like" an official protocol specification. Misguided vendors may claim conformance to it, and misguided clients may actually believe that they are buying an Internet standard.
The IAB believes that the proper help to misguided vendors and clients is to provide them guidance. There is actually very little evidence of vendors purposely attempting to present informational or experimental RFCs as "Internet standards". If such attempts occurred, proper response would indeed be required.

The IAB believes that the community is best served by openly developed specifications. The Internet standardization process provides guarantees of openness and thorough review, and the normal way to develop the specification of an Internet protocol is indeed through the IETF.

The community is also well served by having access to specifications of which have been developed outside the IETF standards process, either because the protocols are experimental in nature, were developed privately, or failed to achieve the acquire the degree of consensus required for elevation to the standards track.

The IAB believes that publication is better than ignorance. If a particular specification ends up being used in products that are deployed over the Internet, we are better off if the specification is easy to retrieve as an RFC than if it is hidden in some private repository.
Security Considerations

Security issues are not discussed in this memo.

Authors’ Addresses

Christian Huitema
INRIA, Sophia-Antipolis
2004 Route des Lucioles
BP 109
F-06561 Valbonne Cedex
France

Phone: +33 93 65 77 15
EMail: Christian.Huitema@MIRSA.INRIA.FR

Jon Postel
USC/Information Sciences Institute
4676 Admiralty Way
Marina del Rey, CA 90292

Phone: 1-310-822-1511
EMail: Postel@ISI.EDU

Steve Crocker
CyberCash, Inc.
2086 Hunters Crest Way
Vienna, VA 22181

Phone: 1- 703-620-1222
EMail: crocker@cybercash.com