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Principles of the Request for Comments Series

Abstract

This document discusses the underlying principles of the Internet technical community's Request for Comments document Series.

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Copyright Notice

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1. Introduction

This document was written as background material for ongoing discussions about the role of the Request for Comments (RFC) Series Editor (the RSE). This version is purely personal opinion, but with some community comments incorporated. The author welcomes further comments, best sent to the mailing list rfc-interest@rfc-editor.org if they concern the RFC Series in general, or to the mailing list rfced-future@iab.org if they concern the role of the RSE specifically.

The RFC Series has a 50 year history, too long to summarise here, so the reader is assumed to be familiar with [RFC8700]. However, the Series does not appear to have a documented set of principles or a full charter. This will make the obvious first task of the future RSE -- developing a strategy for the Series -- hard, if not impossible. The goal of this document is to outline what those principles might be, for community debate. Once the principles are clear, the next step could be to draft a full charter based on them, also for community debate. Alternatively, the principles could be incorporated in a revision of [RFC8729].

This document does not aim to provide a problem statement or gap analysis, and technical matters such as RFC formatting are

completely out of scope. Matters concerning the IETF standards process, and how it uses the Series, are also out of scope. Some problems in the standards process are problems in how the IETF uses the RFC Series, not problems in the Series itself. (Interested readers can find comments on that topic in [I-D.carpenter-request-for-comments].)

The document starts with a review of existing background material that touches on principles of the Series, and then offers a set of proposed principles for debate.

2. Background

The RFC Editor web site states the following:

> The RFC series contains technical and organizational documents about the Internet, including the specifications and policy documents produced by four streams: the Internet Engineering Task Force (IETF), the Internet Research Task Force (IRTF), the Internet Architecture Board (IAB), and Independent Submissions.

This says little about underlying principles. Instead, consider the original guidance from the author of the first RFC:

I present here some of the tentative agreements reached and some of the open questions encountered. Very little of what is here is firm and reactions are expected.

[RFC0001], Steve Crocker, 7 April 1969.

More recently, Steve wrote this in [RFC8700]:

> The basic ground rules were that anyone could say anything and that nothing was official. And to emphasize the point, I used Bill Duvall's suggestion and labeled the notes "Request for Comments".

Partly as a result of this starting point, the tradition has always been that RFCs may be used rather freely, including reproduction in their entirety and translation into other languages. In more recent years, the IETF has asserted change control over its own documents, even when published as RFCs, by virtue of the IETF Trust's legal conditions. This raises the issue of who owns the copyright. Some RFCs are considered to have been placed in the public domain as a result of being part of government funded projects. Copyright in some others presumably belongs to their authors, or to those authors' employers. To the extent legally possible, the copyright in the RFC Series currently belongs to the IETF Trust in addition to the authors.

For completeness, note that each RFC stream has its own policy on copyright and change control issues, not discussed in detail here.

In any case, the question of copyright is not the same as asking who "owns" the RFC Series in an overall ethical and societal sense. It is easy to establish who does *not* own the Series:

1. The IETF does not own it, because the Series preceded the IETF by 17 years.

2. Therefore the IESG does not own it.

3. As noted, the IETF Trust only has limited intellectual property rights in some (but not all) RFCs.

4. At some point in history, both ARPA (who funded the ARPAnet) and USC/ISI (who provided RFC editing under contract) could have made a claim. But that faded when a paid RFC Editor was directly contracted by ISOC.

5. ISOC could perhaps make a claim, having funded the Series for many years now. ISOC has a broad purpose which certainly empowers it to support the RFC Series, but that does not imply control or ownership.

6. The IETF LLC, technically a subsidiary of ISOC, therefore does not own the Series either, although it does channel the contracts and money formerly handled directly by ISOC.

7. Finally, the Internet Architecture Board could make a claim based on its charter [RFC2850], which states that:

   > The RFC series constitutes the archival publication channel for Internet Standards and for other contributions by the Internet research and engineering community. RFCs are available free of charge to anyone via the Internet. The IAB must approve the appointment of an organization to act as RFC Editor and the general policy followed by the RFC Editor.
   >
   > This text makes it clear that the RFC Series is much broader in scope than the IETF, and limits the IAB's authority to matters of general policy.

A reasonable conclusion from the above is that none of the I* organisations (IETF Trust, IETF LLC, IETF, IESG, IAB or ISOC) can claim exclusivity of ownership or control over the RFC Series.

Despite the limited authority granted by its own charter, the IAB has published various RFCs about the Series as a whole. I quote here from two in particular.

Firstly, [RFC8729] states as follows:

> The RFC Series is the archival series dedicated to documenting Internet technical specifications, including general contributions from the Internet research and engineering community as well as standards documents.
>
> RFCs are available free of charge to anyone via the Internet.
>
> ...
>
> The RFC Editor is an expert technical editor and series editor, acting to support the mission of the RFC Series. As such, the RFC Editor is the implementer handling the editorial management of the RFC Series, in accordance with the defined processes. In addition, the RFC Editor is expected to be the expert and prime mover in discussions about policies for editing, publishing, and archiving RFCs.
>
> ...
>
> The IAB monitors the effectiveness of the policies in force and their implementation to ensure that the RFC Editor activity meets the editorial management and document publication needs as referenced in this document. In the event of serious non-conformance, the IAB, either on its own initiative or at the request of the IETF Administration LLC Board, may require the IETF Executive Director to vary or terminate and renegotiate the arrangements for the RFC Editor activity.

A second document clarifies that RFC Series Editor has considerable independence (in addition to the obvious independence of the Independent Series Editor). To quote from [RFC8728]:

The RFC Editor function is responsible for
the packaging and distribution of the documents. As such, documents from these streams are edited and processed by the Production Center and published by the Publisher. The RFC Series Editor will exercise strategic leadership and management over the activities of the RFC Publisher and the RFC Production Center (both of which can be seen as back-office functions) and will be the entity that:

* Represents the RFC Series and the RFC Editor function within the IETF and externally.

* Leads the community in the design of improvements to the RFC Series.

* Is responsible for planning and seeing to the execution of improvements in the RFC Editor production and access processes.

* Is responsible for the content of the rfc-editor.org web site, which is operated and maintained by the RFC Publisher.

* Is responsible for developing consensus versions of vision and policy documents. These documents will be reviewed by the RFC Series Oversight Committee (Section 3.1) and subject to its approval before final publication.

3. Proposed Principles

This section, in particular, needs community review. Some of it is adapted from existing documents.

3.1. The RFC Series as a Whole

1. The RFC Series is the archival series that documents Internet technical specifications, descriptions, and commentaries, including general contributions from the Internet research and engineering community, as well as standards documents. It also includes some organisational documents from the same community.

   *"Archival" means that the documents must be available for the indefinite future in a form that is trusted by all parties. In particular there must be no doubt as to the precise original text and diagrams, regardless of the format in which the documents are stored or displayed. Errors or omissions detected after publication, and subsequent modifications or extensions of the document content, do not change the archived document itself.

2. All RFCs are available free of charge to anyone via the Internet. They may be freely translated in their entirety into any language.

3. Request for Comments means Request for Comments.

   *There is an inherent modesty in calling our documents "requests for comments". We get things wrong, we want comments, we want errata, we want operational feedback, and we want to go round that loop again. This property is a useful counter-balance to any occurrence of groupthink in the community.

4. RFCs come from various streams, i.e. originating organisations.

   *Each stream has its own policy on change control, copyright, and patents, with the IETF Trust generally acting as a repository for intellectual property rights that are not retained by the authors.

   *Each stream has full control of the technical content of its documents.

   *The RFC Editor team has control of editorial matters, subject to review by the relevant stream and the document authors. In particular, a badly written document may be returned to its stream for improvements if an abnormal amount of copy-editing is required.

   *If an individual member of the RFC Editor team has personal comments on the technical content of a draft RFC, they must be handled in person, using the appropriate mechanism of the stream concerned, not as an RFC Editor matter.

   *If the RFC Editor team believes that a draft RFC contains a serious technical flaw, which the stream declines to change, the RFC Editor cannot block the document indefinitely. Note that there is more discussion of such disagreements in Section 4.3 of [RFC8728].

   *New streams may in principle be created, subject to community agreement and guidelines to be defined.

   *Defunct streams may be closed, subject to community agreement.

5. The RFC Series is community property and must operate on behalf of the community as a whole.

   *The exact definition of the relevant community is open for debate. One definition is: the IETF, the IRTF, the IAB and the many other people who have contributed to, or made use of, the RFC Series over the last fifty years. In particular, many users of the RFC series, ranging for example from

junior hardware or software engineers to senior executives overseeing procurement decisions, will never participate directly in the IETF or IRTF.

6. Major decisions about the future of the RFC Series should be taken by a rough consensus of this very broad community.

   *How to reach out to this community and judge its consensus is an open question. The mechanism needs to be open to all interested parties, but with a well-defined process and checks and balances. Although the community is broader than the IETF, the IETF Working Group rough consensus process may be the best model.

3.2. The RFC Series Editor

1. The RFC Series Editor is an independent professional editor, serving a much wider community than just the IETF. Given the economic and social importance of the Internet, this is a serious responsibility. Similar roles might be executive leadership positions at a technical or academic publisher.

   Five responsibilities adapted from [RFC8728] apply:

   *Represents the RFC Series and the RFC Editor function within the IETF, IRTF and externally.

   *Leads the community in the design of improvements to the RFC Series.

   *Is responsible for developing vision and policy documents, and establishing community consensus for them.

   *Is responsible for planning and overseeing the execution of improvements in the RFC Editor production and access processes, in collaboration with IETF LLC as appropriate.

   *Is responsible for the content of the RFC Editor web site, which is operated and maintained by the RFC Publisher.

2. The RFC Series Editor, while paid to serve the community, is a member of the same professional peer group as IAB members, IESG members, IETF and IRTF group chairs, and other experienced members of the technical community, each with their own distinct professional skills.

3. The position of RFC Series Editor answers to the community as a whole.

    *The grant of authority in the IAB charter should be reviewed in this light.

4. Conclusion

In summary, the RFC Series exists for the Internet community as a whole, must retain its independence, openness and autonomy, and must continue to be managed by a senior professional editor.

5. Security Considerations

Security issues are discussed in all recent RFCs. This uniformity illustrates the coherence of the RFC Series and the way it has been used to ensure a degree of order in the chaotic world of Internet design, implementation and deployment.

An assumption in our community is that all actors act in good faith, subject of course to normal human failures. As far as possible, the RFC Editor regime needs to be immune to malicious acts of any kind. For that reason, it is important that appropriate organisational checks and balances are in place.

6. IANA Considerations

This document makes no request of the IANA.

7. Acknowledgements

Important comments were received from Carsten Bormann, Nevil Brownlee, Adrian Farrel, Stephen Farrell, Joel Halpern, John Klensin, Mark Nottingham, Tommy Pauly, Eric Rescorla, Adam Roach, Mike StJohns, Martin Thomson, and others.

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Appendix A. Change log [RFC Editor: Please remove]

draft-carpenter-rfc-principles-01, 2020-05-18:

- Numerous updates following initial community comments.

draft-carpenter-rfc-principles-00, 2020-05-09:

- Initial version (some content based on draft-carpenter-request-for-comments-01).

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