Specification: 0003
Obsoletes: 0000

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Specification Style Guide

Abstract

This document describes the fundamental and unique style conventions and editorial policies currently in use for the Specification Series. It offers guidance regarding the style and structure of a Specification.

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1. Introduction

The ultimate goal of the Specification publication process is to produce documents that are readable, clear, consistent, and reasonably uniform. The basic formatting conventions for Specification Documents were established in August 2018 [SD0000]. This document describes the fundamental and unique style conventions and editorial policies for Specification Documents. It is intended as a stable, infrequently updated reference for authors, editors, and reviewers.

The world of technical publishing has generally accepted rules for grammar, punctuation, capitalization, sentence length and complexity, parallelism, etc. These generally accepted rules are to be followed within Specification Documents.

2. Key Words

In many standards track documents several words are used to signify the requirements in the specification. These words are often capitalized. This section defines these words as they should be interpreted in Specification Documents. Authors who follow these guidelines should incorporate this phrase near the beginning of their document:

> The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in SD0003.

Note that the force of these words is modified by the requirement level of the document in which they are used.

2.1. MUST

This word, or the terms "REQUIRED" and "SHALL", mean that the definition is an absolute requirement of the specification.

2.2. MUST NOT

This phrase, or the phrase "SHALL NOT", mean that the definition is an absolute prohibition of the specification.

2.3. SHOULD

This word, or the adjective "RECOMMENDED", mean that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.

2.4. SHOULD NOT

This phrase, or the phrase "NOT RECOMMENDED" mean that there may exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.

2.5. MAY

This word, or the adjective "OPTIONAL", mean that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item. An implementation which does not include a particular option MUST be prepared to interoperate with another implementationn which does include the option, though perhaps with reduced functionality. In the same vein an implementation which does include a particular option MUST be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides).

2.6. Guidance in the use of these Imperatives

Imperatives of the type defined in this section must be used with care and sparingly. In particular, they MUST only be used where it is actually required for interoperation or to limit behavior which has potential for causing harm (e.g., limiting retransmissions). For example, they must not be used to try to impose a particular method on implementors where the method is not required for interoperability.

2.7. Security Considerations

These terms are frequently used to specify behavior with security implications. The effects on security of not implementing a MUST or SHOULD, or doing something the specification says MUST NOT or SHOULD NOT be done may be very subtle. Document authors should take the time to elaborate the security implementations of not following recommendations or requirements as most implementors will not have had the benefit of the experience and discussions that produced the specification.

3. Specification Style Conventions

This Style Guide does not use the terminology as defined in section 2.

3.1. Language

The Specification publication language is English. Spelling may be either American or British, as long as an individual document is internally consistent. Where both American and British English spelling are used within a document or cluster of documents, the text will have to be modified to be consistent with American English spelling.

3.2. Punctuation

- No overstriking (or underlining) is allowed.

- When a sentence ended by a period is immediately followed by another sentence, there must be two blank spaces after the period.

- A comma is used before the last item of a series, e.g.,

  "TCP service is reliable, ordered, and full duplex"

- When quoting literal text, punctuation is placed outside quotation marks, e.g.,

  Search for the string "Error Found".

  When quoting general text, such as general text from another Specification Document, punctuation may be included within the quotation marks.

  Quotation marks are not necessary when text is formatted as a block quotation.

3.3. DNS Names and URIs

Angle brackets are strongly recommended around URIs, e.g.,

<http://example.org/>

3.4. Capitalization

- Capitalizationn must be consistent within the document and ideally should be consistent with related Specification Documents.

- Per CMOS guidelines, the major words in document titles and section titles should be capitalized (this is sometimes called "title cases"). Typically, all words in a title will be capitalized, except for internal articles, prepositions, and conjunctions.

- Section titles that are in sentence form will follow typical sentence capitalization.

- Titles of figures may be in sentence form or use title case.

3.5. Citations

- References and citations must match. That is, there must be a reference for each citation used. and vice versa.

- Citations must be enclosed in square brackets (e.g., "[CITE1]").

- A citation/reference tag must not contain spaces.

  Example: "[SD0003]" rather than "[SD 0003]"

  However, the proper textual naming of a Specification contains a space.

  Example: "See SD 0003 for more information."

- Cross-references within the body of the document and to other documents must use section numbers rather than page numbers, as pagination may change per format and device.

3.6. Abbreviation Rules

Abbreviations should be expanded in document titles and upon first use in the document. The full expansion of the text should be followed by the abbreviation itself in parenthesis. The exception is an abbreviation that is so common that the readership of Specification Documents can be expected to recognize it immediately; examples include (but are not limited to) TCP, IP, SNMP, and HTTP. Some cases are marginal, and the author should make the final judgement, weighing obscurity agains complexity.

4. Structure of a Specification Document

A published Specification Document will largely contain the elements in the following list. Some of these sections are required, as noted. Sections are allowed to contain nothing but subsections. The rules for each of these elements are described in more details below.

```
First-page header                          [Required]
Title                                      [Required]
Abstract                                   [Required]
Copyright Notice                           [Required]
Table of Contents                          [Required]
Body of the Document                       [Required]
  1. Introduction                          [Required]
  2. Requirements Language
  3. ...
     MAIN BODY OF THE TEXT
  6. ...
  7. Internationalization Considerations
  8. Security Considerations               [Required]
  9. References
  9.1. Normative References
  9.2. Informative References
Acknowledgements
Contributors
Author Information                    [Required]
```

Within the body of the document, the order shown above is strongly recommended. Exceptions may be questioned. Outside the body of the document, the order above is required. The section numbers above are for illustrative purposes; they are not intended to correspond to required numbering in a Specification Document.

4.1. First-Page header

Headers will follow the format described in "RFC Streams, Headers, and Boilerplates" [RFC5741] and it’s successors. In addition, the following conventions will apply.

4.1.1. Author/Editor

The determination of who should be listed as an author or editor on a Specification Document is made by the stream.

The author’s name (initial followed by family name) appears on the first line of the heading. Some variation, such as additional initials or capitalization of family name, is acceptable. Once the author has selected how their name should appear, they should use that display consistently in all of their documents.

The total number of authors or editors on the first page is generally limited to five individuals and their affiliations. If there is a request for more than five authors, the stream-approving body needs to considor if one or two editors should have primary responsibility for this document, with the other individuals listed in the Contributors or Acknowledgements section. There must be a direct correlation of authors and editors in the document header and the Authors’ Information section. These are the individuals that must sign off on the document and respond to inquiries.

4.1.2. Organization

The author’s organization is indicated on the line following the author’s name.

For multiple authors, each author name appears on its own line, followed by that author’s organization. When more than one author is affiliated with the same organization, the organization can be "factored out", appearing only once following the corresponding Author lines. However, such factoring is inappropriate when it would force an unacceptable reordering of author names.

If an author can not or will not provide an affiliation for any reason, "Independent", "Individual Contributor", "Retired", or some other term that appropriately describes the author’s affiliation may be used. Alternatively, a blank line may be included in the document header where no affiliation is provided.

4.1.3. Updates and Obsoletes

When a Specification Document obsoletes or updates a previously published Specification Document or Specification Documents, this information is included in the document header. For example:

"Updates: nnnn" or "Updates: nnnn, ..., nnnn"

"Obsoletes: nnnn" or "Obsoletes: nnnn, ..., nnnn"

If the document updates or obsoletes more than one document, numbers will be listed in ascending order.

4.2. Full Title

The title must be centered below the rest of the heading, preceded by two blank lines and followed by one blank line.

Choosing a good title for a Specification Document can be a challenge. A good title should fairly represent the scope and purpose of the document without being either too general or too specific and lengthy.

Abbreviations in a title must generally be expanded when first encountered (See section 3.6 for additional guidance on abbreviations).

It is often helpful to follow the expansion with the parenthesized abbreviation, as in the following example:

Encoding Rules for the
Common Routing Encapsulation Extension Protocol (CREEP)

4.3. Abstract Section

Every Specification Document must have an Abstract that provides a concise and comprehensive overview of the purpose and contents of the entire document, to give a technically knowledgeable reader a general overview of the function of the document.

Composing a useful Abstract generally requires thought and care. Usually, an Abstract should begin with a phrase like "This memo ..." or "This document ...". A satisfactory Abstract can often be constructed in part from material within the Introduction section, but an effective Abstract may be shorter, less detailed, and perhaps broader in scope than the Introduction. Simply copying and pasting the first few paragraphs of the Introduction is allowed, but it may result in an Abstract that is both incomplete and redundant. Note also that an Abstract is not a subsitute for an Introduction; the Specification Document should be self-contained as if there were no Abstract.

Similarly, the Abstract should be complete in itself. It will appear is isolation in publication announcements. Therefore, the Abstract must not contain citations.

4.4. Table of Contents Section

A Table of Contents (TOC) is required in all Specification Documents. It must be positioned after the Copyright Notice and before the Introduction.

4.5. Body of the Document

Following the TOC is the body of the document.

Each Specification Document must include an Introduction section that (among other things) explains the motivation for the Specification and (if appropriate) describes the applicability of the document, e.g., whether it specifies a protocol, provides a discussion of some problem, is simply of interest to the Internet community, or provides a status report on some activity. The body of the document and the Abstract must be self-contained and separable. This may result in some duplication of text between the Abstract and the Introduction; this is acceptable.

4.5.1. Introduction Section

The Introduction section should always be the first section following the TOC. While "Introduction" is recommended, authors may choose alternate titles such as "Overview" or "Background". These alternates are acceptable.

4.5.2. Requirements Language Section

Some document use certain capitalized words ("MUST", "SHOULD", etc.) to specify precise requirement levels for technical features. Section 2 of this document defines a default interpretation of these capitalized words in Specification Documents. If this interpretation is used, this document must be citet and included as a normative reference. Otherwise, the correct interpretation must be specified in the document.

This section must appear as a part of the body of the memo (as defined by this document). It must appear as part of, or subsequent to, the Introduction section.

These words are considered part of the technical content of the document and are intended to provide guidance to implementers about specific technical features, generally governed by considerations of interopretability.

4.5.3. Internationalization Considerations Section

All documents that deal with internationalization issues should have a section describing those issues.

4.5.4. Security Considerations Section

All Specification Documents must contain a section that discusses the security considerations relevant to the specification.

4.5.5. References Section

The reference list is solely for recording reference entries. Introductory text is not allowed.

The Specification Style allows the use of any of a variety of reference styles, as long as they are used consistently within a document. However, where necessary, some reference styles have been described for use within the Series. See the examples in this document.

Reference lists must indicate whether each reference is normative or informative, where normative references are essential to implementing or understanding content of the Specification Document and informative references provide additional information. When both normative and informative references exist, the references section should be split into two subsection:

s. References

s.1. Normative References

xxx
...
xxx

s.2. Informative References

xxx
...
xxx

References will generally appear in alphanumeric order by citation tag. Where there are only normative or informative references, no subsection is required; the top-level section should say "Normative References" or "Informative References".

4.5.5.1. URIs in Specification Documents

The use of URIs in references is acceptable, as long as the URI is the most stable (i.e., unlikely to change and expected to be continuously available) and direct reference possible. The URI will be verified as valid during the Specification Document editorial process.

If a dates URI (one that includes a timestamp for the page) is available for a referenced web page, its use is required.

Note that URIs may not be the sole information provided for a reference entry.

4.5.5.2. Referencing Specification Documents

The following format is required for referencing Specification Documents. Note the ordering for multiple authors: the format of the name of the last author listed is different than that of all previous authors in the list.

For one author or editor:

```
[SDXXXX] Last name, First initial., Ed. (if applicable),
         "Specification Title", Sub-series number (if applicable),
         Specification number, Date of publication,
         <https://finwo.nl/specification/#.pdf>
```

Example:

```
[SD0003] Bron, R.,
         "Specification Style Guide"
         SD 0003, June 2020
         <https://finwo.nl/specifications/0003.pdf>
```

For two authors or editors:

```
[SDXXXX] Last name, First initial., Ed. (if applicable)
         and First initial. Last name, Ed. (if applicable),
         "Specification Title", Sub-series number (if applicable)
         Specification number, Date of publication
         <https://finwo.nl/specification/#.pdf>
```

For three or more authors or editors:

```
[SDXXXX] Last name, First initial., Ed. (if applicable),
         Last name, First initial., Ed. (if applicable),
         and First initial. Last name, Ed. (if applicable),
         "Specification Title", Sub-series number (if applicable)
         Specification number, Date of publication
         <https://finwo.nl/specification/#.pdf>
```

4.5.5.3. Referencing Other Standards Development Organizations (SDOs)

The following format is suggested when referencing a document or standard from another SDO in which authors are listed:

[SYMBOLIC-TAG]
Last name, First initial. and First initial. Last name, "Document Title", Document reference number, Date of publication, <URI if available>.

[W3C.REC-xml11]
Bray, T., Paoli, J., Sperberg-McQueen, C., Maler, E., Yergeau, F., and J. Cowan, "Extensible Markup Language (XML) 1.1 (Second Edition)", W3C Recommendation REC-xml11-20060816, August 2006, <http://www.w3.org/TR/2006/REC-xml11-20060816>.

Note that the order of authors in the list is the same as order shown on the actual document and that the common, abbreviated form of SDO is used.

Alternatively, when no list of authors is available, the following format is recommended:

[SYMBOLIC-TAG] Organization, "Document Title", Document reference number, Date of publication, <URI if available>.

Example:

[IEEE802.1Q] IEEE, "Local and Metropolitan Area Networks -- Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks", IEEE Std 802.1Q-2011, August 2011, <http://standards.ieee.org/findstds/standard/802.1Q-2011.html>.

4.6. Acknowledgements Section

THis optional section may be used instead of, or in addition to, a Contributors section. It is often used by authors to publicly thank those who have probided feedback regarding a document and to note any documents from which text was borrowed.

4.7. Contributors Section

This optional section acknowledges those who have made significant contributions to the document.

In a similar fashion to the Author Information section, the determination of who should be listed as a contributor is made by the stream.

The Contributors section may include brief statements about the nature of particular contributions ("Sam contributed Section 3"), and it may also include affiliations of listed contributors. At the descretionnn of the author(s), contact addresses may also be included in the Contributors section, for those contributors whose knowledge makes them useful for future contacts for information about the Specification Document. The format of any contact information should be similar to the format of information in the Author Information section.

4.8. Author Information Section

This required section gives contact information for the author(s) listed in the first-page header.

Contact information must include a long-lived email address and optionally may include a postal address, telephone number, and/or Public PGP key. If the postal address is included, it should include the country name, using the English short name listed by the ISO 3166 Maintenance Agency [ISO_OBP]. The purpose of this section is to (1) unambiguously define author identity (e.g., the John Smith who works for FooBar Systems) and (2) provide contact information for future readers who have questions and comments.

The practive of munged email addresses (i.e., altering an email address to make it less readable to bots and web crawlers to avoid spam) is not appropriate in an archival document series. Author contact information is provided so that the readers can easily contact the author with questions and/or comments. Address munging is not allowed in Specification Documents.

5. Security Considerations

This document has no security considerations.

6. Informative References

[SD0000] Bron, R., "Specification Format", SD 0000, August 2018 <https://finwo.nl/specification/0000.pdf>

[RFC5741] Daigle, L., Ed., Kolkman, O., Ed., and IAB, "RFC Streams, Headers, and Boilerplates", RFC 5741, December 2009, <http://www.rfc-editor.org/info/rfc5741>.

[ISO_OBP] ISO, "Online Browsing Platform (OBP)", <https://www.iso.org/obp/ui/>.

Acknowledgements

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