

The Internet Standards Process

For the SPEECHSC Work Group

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Internet Documents

- Internet-Drafts
 - Working documents (works in progress)
 - No status of any kind, not archived, deleted after 6 months
 - Announced and disseminated by IETF Secretariat
- RFCs
 - Archival document series of the IETF
 - Not all RFCs are standards-track
 - Edited, announced, and disseminated by RFC Editor

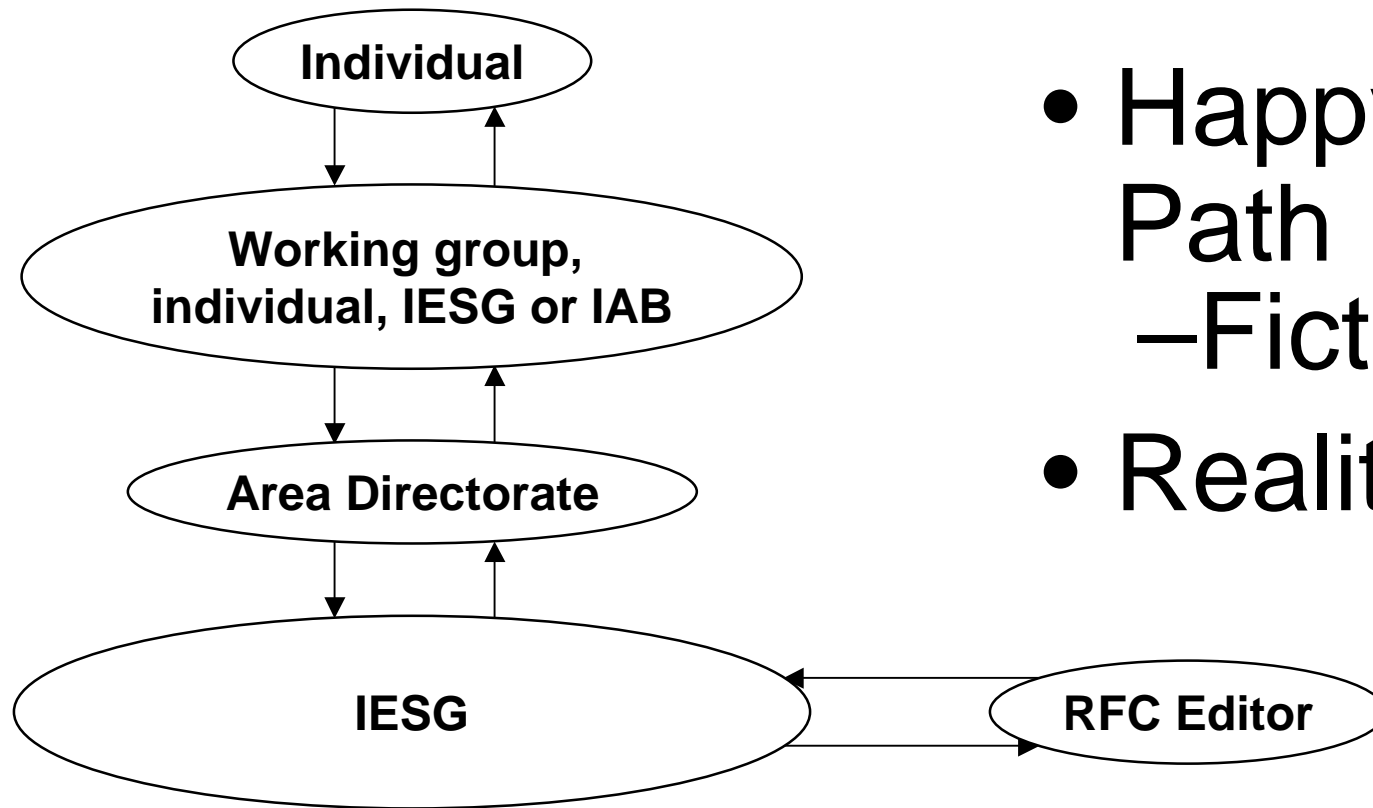
Internet Drafts

- Anyone Can Submit an Internet-Draft
As an Individual Submission
 - No One Can Stop You
 - No One May Care
- Work Group Submission
 - Requires WG Chair Approval

Individual Draft Life Cycle

- Submit Draft as an Individual Draft
- If Group Consensus, Take On As Work Group Item
- If Not In Charter, Requires Rechartering (AD Approval)
- Documents May Progress as Individual Drafts

Standards Track Submissions



- Happy Path
–Fiction
- Reality

Where is my Internet Draft?

- Draft Tracker
 - <https://datatracker.ietf.org/public/pidtracker.cgi>
- RFC Editor Queue
 - <http://www.rfc-editor.org/queue.html>

Standard Levels

- Proposed Standard
 - Complete, credible specification
 - Demonstrated utility
 - At least 6 months, no longer than 2 years, then either elevated, deprecated, or recycled
- Draft Standard
 - Multiple, independent, interoperable implementations
 - Limited operational experience - works well
 - At least 4 months, no longer than 2 years, then either elevated, deprecated, recycled, or back to Proposed

General Formatting Guide (1/2)

- 7-bit, Printable ASCII Text
 - Printable ASCII + CR, LF, FF
 - Microsoft em-Dash, Smart Quotes, etc. Bad Form!
 - No Underlining, Overstrike, Bold, etc.
 - **Turn Off AutoCorrect**
- Page Size
 - 72 characters per line
 - 58 lines per page
 - Form Feed at end of every page

General Formatting Guide

(2/2)

- Ragged Right
- No Hyphenation for Line Breaks
- No Footnotes
- Two Spaces Between Sentences
- Standard Headers and Footers

Templates

- Microsoft Word Template
 - RFC 3285: Using Microsoft Word to create Internet Drafts and RFCs
 - <ftp://ftp.ietf.org/internet-drafts/2-Word.template.rtf>
 - <ftp://ftp.ietf.org/internet-drafts/crlf.exe>
 - http://flyingfox.snowshore.com/id/Internet_Draft_Template.dot
- **nroff, LaTeX, XML Options, too**

Intellectual Property Rights (IPR)

- **READ RFC 2026**
- OK If Encumbered, But With Many Hoops
 - Ask Chairs Before Submitting!
 - Need to File IPR Statement With IETF Executive Director

RFC Editorial Policies

- References to RFC 2119
 - MUST, MAY, etc.
 - Normative Reference to RFC 2119
- Abbreviations
 - Spell Out, Except for Most Obvious Ones
 - TCP, UDP, IP, DNS, HTTP, URL, IETF, OSI
 - First Time In Text
 - Introduction
 - Title

Draft Sections

- Internet Draft Boilerplate
- List of Author(s) or Editor
- Abstract
- Table of Contents [if >15 pages]
- Introduction
- *Body Text*
- IANA Considerations [if any]
- Security Considerations
- Normative References
- Informative References
- Contributors [if any]
- Acknowledgements [if any]
- Author's Address
- IPR Notices
- Copyright Notice
- ISOC Acknowledgement

Mandatory Statements (Boilerplate)

- Rights Grant, One Of:
 - Full Compliance With S. 10 of RFC 2026
 - Standards Track Publications
 - No Derivative Works
 - Republishing Other Standards
 - No Rights Other Than I-D Publication
 - No Plan to Publish
- Internet-Draft Disclaimer

Authors

- Should Be **One** Author
 - Principal Author of Individual Draft
 - Editor of Work Group Draft
 - NO MORE THAN 5 ALLOWED
- Authorship Has Implications
 - E.g., Authors' 48-Hour Period
- Significant Contributors Go In Contributors' Section

Abstract

- Concise, Yet Comprehensive
- Typically 5-10 Lines
- <3 or >20 Lines Generally Unacceptable
- This Is The Advertisement for Draft
 - Interesting Enough for People Outside Work Group to Want to Read Draft
- Expand Abbreviations
- Self-Contained; No References

Table of Contents

- Required if RFC > 30 Pages
- Recommended if RFC > 15 Pages
- Reasonable Granularity
 - Lots of Entries Pointing to Same Page Bad

Content Guidelines

- All User-Visible Text Fields Must Be International-Safe (RFC 2277)
- All MIBs, ABNF, Pseudo-Code Must Be Correct
- Internet Addresses Should be FQDN's and Not Numbers
 - example.net, example.org, example.com (RFC 2606)
 - 192.0.2.0/24 (RFC 3330)
 - **DO NOT USE REAL ADDRESSES**

Protocol Guidelines

- IPv6 Is Here; Nothing Should Be IPv4-Only
- Congestion Safe (RFC 2914)
- Checksums
 - Explicitly Specify Fields
 - Don't Forget Checksum Itself

IANA Considerations (RFC 2434)

- Create or Modify Namespace
 - For Authoritative Namespace Mapping
 - Administered Namespace
- Specify Guidelines
 - Expert Review
 - RFC
 - FCFS
- Specify Initial Values

Security Considerations

- **Meaningful Exploration of Security Issues**
 - Risks
 - Solutions
 - Workarounds
- **Resources**
 - RFC 2401 – Security Architecture
 - RFC 2316 – Security Background
 - draft-iab-secmech-01– Guidelines

References

- No URL's, Unless **Only** Reference (e.g., W3C)
 - Add As Much Information As Possible to Aid Finding Document
 - Reference ID, Title, Author, Date, etc.
- Two Types, Each in Own Section
 - Normative (Part of Specification)
 - Informative (History, Background)

Reference Style

- RFC Style
 - Endnote in Square Brackets
 - Reference Style
 - Van Dyke, J., Burger, E., Spitzer, A., O'Connor, W., "Basic Network Media Services with SIP", draft-burger-sipping-netann-02.txt, June 2002, work in progress
 - Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997
 - Floyd, S., Daigle, L., "IAB Architectural and Policy Considerations for Open Pluggable Edge Services", RFC3238, January 2002

Useful Reading Material

- RFC 2026 – the process
- RFC 2223bis (draft-rfc-editor-rfc2223bis) – the document format
- Guidelines to Authors of Internet-Drafts
- RFC 2360 – doing it right
- RFC 1958 – what's known to be good and bad
- RFC 2360 – MUST Reading for Success

Useful URLs

- IETF Home Page www.ietf.org
- The Tao of the IETF
www.ietf.org/tao.html
- Novice's Guide www.imc.org/novice-ietf.html
- Internet-Draft Nits www.ietf.org/ID-nits.html

Parting Thoughts

- Don't Despair!
- Time From –00 To RFC: 23 Months
- Time On RFC Editor Queue
 - Median 9 Weeks
 - Long-Tail Distribution: Up To 2 Years
- You **Do** Get **Your** Name In Lights, If You Persevere