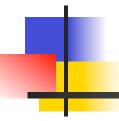
## Document Lifecycle Tutorial



IETF 77
Anaheim, California
21 March 2010





- 1. Where do RFCs come from?
- 2. Writing an Internet-Draft
  - Things to think about before writing your draft
  - Contents of an Internet-Draft
- 3. The lifecycle from Internet-Draft to RFC
- Common questions and where to find more information

### 1. Where do RFCs come from?

4 document streams as defined in RFC 4844:

- 1. IETF
  - Working Group
  - AD-sponsored (aka Individual)
- 2. IAB
- 3. IRTF
- 4. Independent Submission



- RFC 2026 defines specification maturity levels:
  - Standards track: Proposed, Draft, Standard.
  - Non-standards track: Experimental, Informational, Historic.
  - "Almost standard": Best Current Practice.
- Shown on RFC header as "Category:"
  - Except, one category "Standards Track" for PS, DS, S.
  - Often called "status".
- A published RFC can NEVER change, but its category can change (see rfc-index.txt).

### Streams in Relation to Categories

- **IETF** IETF WG to *Standards Track*: Includes WG consensus, review in the IETF, IETF Last Call, and IESG approval
- **IETF** IETF WG to *Experimental/Informational*: Includes WG consensus, review in the IETF, and IESG approval
- **IETF** AD-sponsored to *Standards Track*: Includes review in the IETF, IETF Last Call, and IESG approval
- **IETF** AD-sponsored to *Experimental/Informational*: Includes some form of review in the IETF and IESG approval
- **IAB / IRTF** Documents for which special rules exist

**Independent** RFC Editor documents to *Experimental/Informational/Historic* 

[This list is paraphrased from RFC 3932, recently obsoleted by RFC 5742.]

# AD-sponsored (Individual)

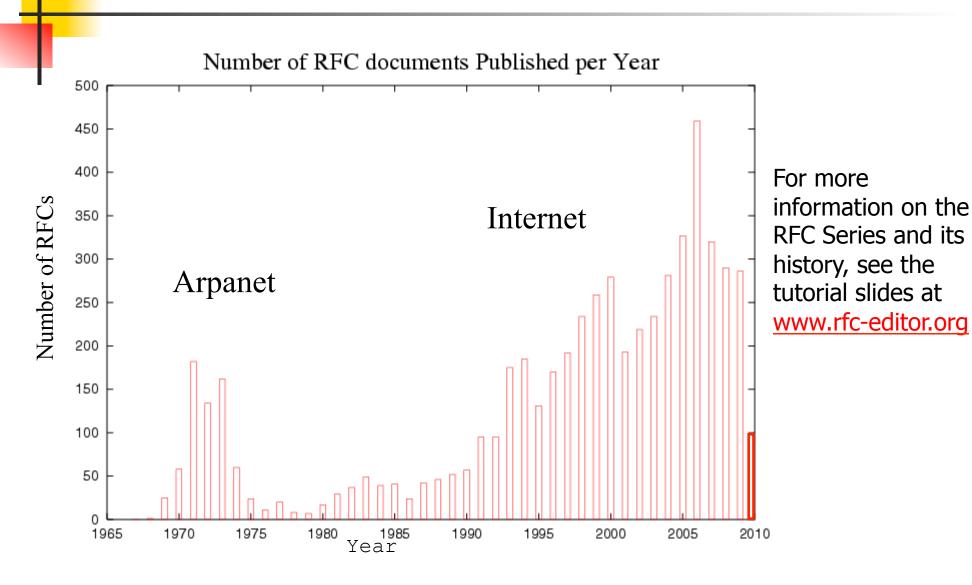
#### Independent

#### Post as an Internet-Draft.

- Contact the relevant AD.
- Standards Track, Experimental, or Informational category.

- Contact the Independent Submissions Editor (<u>rfc-ise@rfc-editor.orq</u>).
- Only Experimental or Informational category.
- ISE reviews and decides whether publication is appropriate.
- Per RFC 5742, IESG reviews for conflict with any WG, makes publish/ do-not-publish recommendation.
- ISE has final decision, with advice from Editorial Board.
- See <u>www.rfc-editor.org/indsubs.html</u> and RFC 4846.

### **RFC Publication Rate**



#### Implementing the RFC Editor Model (RFC 5620) **Stream** IETF IAB **IRTF** Community **Producers** at Large **Stream IESG** IAB **IRSG ISE** Editorial **Approvers Nevil Brownlee Board** rfc-ise@rfc-editor.org **RSAG RFC Production Center IANA RFC Publisher TRSE Glenn Kowack** rse@rfc-editor.org

Adapted from RFC 5620, Figure 1: Ordinary RFC Series production and process





- 1. Where do RFCs come from?
- 2. Writing an Internet-Draft
  - Things to think about before writing your draft
  - Contents of an Internet-Draft
- 3. The lifecycle from Internet-Draft to RFC
- 4. Common questions and where to find more information

## Writing an Internet-Draft

- All RFCs start as an Internet-Draft.
- A well-formed RFC starts with a well-formed I-D.
  - <a href="http://www.ietf.org/ID-Checklist.html">http://www.ietf.org/ID-Checklist.html</a> (aka ID-nits)
  - http://tools.ietf.org/tools/idnits/ (online nits checker)
- Authoring tools
  - http://www.rfc-editor.org/formatting.html
  - http://tools.ietf.org/inventory/author-tools
  - More on this later.
- Submit using the I-D Submission Tool: <a href="https://datatracker.ietf.org/idst/upload.cgi">https://datatracker.ietf.org/idst/upload.cgi</a>

### Overview of This Tutorial



- 1. Where do RFCs come from?
- 2. Writing an Internet-Draft
  - Things to think about before writing your draft
  - Contents of an Internet-Draft
- 3. The lifecycle from Internet-Draft to RFC
- 4. Common questions and where to find more information

### **Change Control**

- Who should have change control over your document?
  - The IETF has change control over all IETF documents (whether WG or AD-sponsored).
    - You may remain the editor of the document, but it will be your job to reflect IETF consensus
  - If you want to (or need to) retain change control, consider an RFC Editor independent submission
    - Still subject to review, but document does not need to reflect IETF consensus
    - Example: Informational publication of a proprietary protocol -should be submitted to RFC Editor with name of company in title

### Copyrights and Patents

- Copyright issues
  - Specified in RFC 5378 / BCP 78 "Rights Contributors Provide to the IETF Trust" (which obsoletes RFCs 3978 and 4748, and updates RFC 2026). See also <a href="http://trustee.ietf.org/license-info">http://trustee.ietf.org/license-info</a>.
- Patent ("IPR") issues
  - Specified in RFC 3979 / BCP 79 "Intellectual Property Rights in IETF Technology" (updated by RFC 4879).
- Generally, you supply the correct boilerplate in the Internet-Draft, and the RFC Editor will supply the correct boilerplate in the RFC.



- Will the IETF publish standards that include patented technology?
  - Yes, but WGs may prefer non-patented technology
  - Licensing terms may affect WG acceptance and what implementations are available
- If you know of patented technology in your draft
  - Declare it immediately after publication
  - Carefully consider your patent terms

## **Text Formatting Tools**

- Author tools: www.rfc-editor.org/formatting.html
  - xml2rfc
  - nroff
  - Microsoft word template (see RFC 5385)
  - LaTeX
- RFC Editor does final RFC formatting using venerable Unix tool nroff –ms.
- See also: <a href="http://tools.ietf.org/inventory/author-tools">http://tools.ietf.org/inventory/author-tools</a>

## xml2rfc (http://xml.resource.org)

- The xml2rfc tool converts an XML source file to text, HTML, or nroff. RFC 2629 and its unofficial successor define the format.
- xml2rfc FAQ: http://xml.resource.org/xml2rfcFAQ.html
- XML templates are available from http://tools.ietf.org/tools/templates:
  - 1. For a generic I-D (e.g., draft-davies-template-bare.xml)
  - 2. For an I-D containing a MIB (e.g., mib-doc-template-xml.txt)





- 1. Where do RFCs come from?
- 2. Writing an Internet-Draft
  - Things to think about before writing your draft
  - Contents of an Internet-Draft
- 3. The lifecycle from Internet-Draft to RFC
- 4. Common questions and where to find more information

### 4. Contents of an Internet-Draft

- Header
- Title
- Abstract
- Status of This Memo [boilerplate]
- Copyright Notice [See RFC 5378 and http://trustee.ietf.org/license-info]
- Table of Contents [not required for short docs]
- Body
  - IANA Considerations (RFC 5226)
  - Security Considerations (RFC 3552)
  - Internationalization Considerations (RFC 2277)
- Authors' Addresses

#### Internet-Draft Header

```
IETF PKIX WG
Internet Draft
Intended Status: Standards Track
Obsoletes: 3281 (once approved)
Expires: October 27, 2009

S. Farrell, Trinity College Dublin
R. Housley, Vigil Security
S. Turner, IECA
April 27, 2009
```

An Internet Attribute Certificate Profile for Authorization draft-ietf-pkix-3281update-05.txt

#### Helpful:

- Intended Status (Category)
- Updates, Obsoletes: relation to earlier RFCs (if any)

### RFC Header (as recently updated by RFC 5741)

Internet Engineering Task Force (IETF)

Request for Comments: 5755

Obsoletes: 3281

Category: Standards Track

ISSN: 2070-1721

S. Farrell

Trinity College Dublin

R. Housley

Vigil Security

S. Turner

**IECA** 

January 2010

#### Corresponding RFC search result:

Numbe	Title	Author or Ed.	Date		More Info (Obs&Upd)	Status
RFC575	5 An Internet Attribute	S. Farrell, R.	January	ASCII	Obsoletes	PROPOSED
	Certificate Profile for	Housley, S.	2010		RFC3281	STANDARD
	Authorization	Turner				

Here is post-publication metadata: Obsoleted by, Updated by, or Errata Also found in metadata pages (www.rfc-editor.org/info/rfcXXXX) and tools.ietf.org HTML versions.



- Limited to lead authors, document editors.
- There must be very good reason to list more than 5.
- Each author in the header must give approval during AUTH48 review.
- Each author in the header should provide unambiguous contact information in the Authors' Addresses section.
- Other names can be included in Contributors and/or Acknowledgments sections.

### **Titles**



- Should be thoughtfully chosen
- No un-expanded abbreviations except for very well-known ones (e.g., IP, TCP, HTTP, MIME, MPLS)
  - List available from <a href="http://www.rfc-editor.org/styleguide.html">http://www.rfc-editor.org/styleguide.html</a>
- We like short, snappy titles, but sometimes we get titles like:
  - "An alternative to XML Configuration Access Protocol (XCAP) for manipulating resource lists and authorization lists, Using HTTP extensions for Distributed Authoring and Versioning (DAV)"

#### **Abstracts**

- Carefully written for clarity (HARD to write!)
- No un-expanded abbreviations (again, except well-known)
- No citations
  - Use "RFC xxxx", not "[RFCxxxx]" or "[5]"
- Less than 20 lines! Shorter is good.
- Not a substitute for the Introduction; redundancy is OK.
- We recommend starting with "This document..."

## Body of an Internet-Draft

- First section should generally be "1. Introduction".
- Special sections that may appear:
  - Contributors, Acknowledgments
  - Internationalization Considerations
    - When needed -- see Section 6, RFC 2277/BCP 18.
- Sections that MUST appear:
  - IANA Considerations
  - Security Considerations
  - References (Normative and/or Informative)

### **IANA Considerations Section**

- What is an IANA Considerations section?
  - A guide to IANA on what actions will need to be performed
  - A confirmation if there are NO IANA actions
- Section is required in draft
  - But "No IANA Considerations" section will be removed by RFC Editor.



 Forces the authors to 'think' if anything should be requested from IANA

 A clear IANA Considerations section will allow the IANA to process the IANA Actions more quickly

Establishes documented procedures





- What actions is the document requesting of IANA
- Individual number or name registrations
- New registries (number or name spaces)
- Registration procedures for new registries
- Reference changes to existing registrations

BE CLEAR AND DESCRIPTIVE IN YOUR INSTRUCTIONS (IANA is not the expert for your name or number space)



- IANA Consideration sections are reviewed before the document is published as an RFC
  - During IETF Last Call
  - During IESG Evaluation
  - IANA will also review your section at any time by request
- If you do not have an IC section or if your IC section is not complete, your document will not move forward



#### Where to get help on writing this section

- See RFC 5226, "Guidelines for Writing an IANA Considerations Section in RFCs"
- Look at existing registries for examples
- Ask IANA
  - Available at the IANA booth at IETF meetings
  - Send an e-mail [iana@iana.org] or [michelle.cotton@icann.org]



- Security Considerations section required in every RFC.
- See RFC 3552: "Guidelines for Writing RFC Text on Security Considerations"
- Important!



- +
  - Normative vs. Informative
    - Normative refs can hold up publication.
  - Citations and references must match.
  - Handy files of RFC reference entries:
    - ftp://ftp.rfc-editor.org/in-notes/rfc-ref.txt
    - For xml2rfc: http://xml.resource.org/public/rfc/bibxml/
  - Include draft strings of any I-Ds.



- Editorial guidelines
- Formal languages and MIBs

#### **Primary Sources:**

Internet-Draft Guidelines:

http://www.ietf.org/id-info/guidelines.html

2. RFC Style Guide:

http://www.rfc-editor.org/styleguide.html



- Primary goal: clear, unambiguous technical prose.
- Think about internally consistent usage:
  - Use the same terminology and notation throughout.
    - If you choose "4-bit", don't switch to "four-bit".
  - Expand each abbreviation at first use.
  - See the abbreviations and terms lists available from http://www.rfc-editor.org/styleguide.html

### **Grammar Tips**

- Avoid passive voice (backwards sentences).
  - "In this section, the network interface is described."
     vs. "This section describes the network interface."
- Some Protocol Engineers over-capitalize Nouns.
- "which" vs. "that"

#### For example:

(non-restrictive which: all RST attacks rely on brute-force)

• It should be noted that RST attacks, which rely on brute-force, are relatively easy to detect at the TCP layer.

(restrictive that: only \*some\* RST attacks rely on brute-force)

• It should be noted that RST attacks that rely on brute-force are relatively easy to detect at the TCP layer.



#### **Punctuation Conventions**

- A comma before the last item of a series:
  - "TCP service is reliable, ordered, and full-duplex"
  - Avoids ambiguities, clearly shows parallelism.
- Punctuation outside quote marks: "This is a sentence"{.|?|!}
  - To avoid computer language ambiguities.



- Formal languages and pseudo-code can be useful as an aid in explanations, although English remains the primary method of describing protocols.
- Pseudo-code judged on the basis of clarity. See IESG's guidance: <a href="http://www.ietf.org/IESG/STATEMENTS/pseudo-code-in-specs.txt">http://www.ietf.org/IESG/STATEMENTS/pseudo-code-in-specs.txt</a>
- Formal Languages (e.g., ABNF, XML, MIBs)
  - Requires a normative reference to language specification
  - RFC Editor will run verifier
  - See list of verification tools: <a href="http://tools.ietf.org/inventory/verif-tools">http://tools.ietf.org/inventory/verif-tools</a>

### MIB RFCs: A Special Case

- MIB references
  - O&M Web Site at www.ops.ietf.org/
  - MIB doctors at <u>www.ops.ietf.org/mib-doctors.html</u>
  - MIB Review: See RFC 4181, BCP 111: "Guidelines for Authors and Reviewers of MIB Documents"
- Tools
  - http://www.ops.ietf.org/mib-review-tools.html
  - smilint at <u>www.ibr.cs.tu-bs.de/projects/libsmi/</u>
  - SMICng at <u>www.snmpinfo.com/</u>
- MIB boilerplate
  - The Internet-Standard Management Framework: <u>www.ops.ietf.org/mib-boilerplate.html</u>
  - Security Considerations: <a href="www.ops.ietf.org/mib-security.html">www.ops.ietf.org/mib-security.html</a>

#### **Hints to Authors**

- Read your I-D carefully before submission, as you would read the final document in AUTH48!
- If your I-D is in the queue, and you see typos or have a new email address, send us an email.
- Craft title, abstract, and introduction carefully.
- Avoid gratuitous use of RFC 2119 requirement words (MUST, etc.)
- Don't use numeric citations (unless you submit an XML file).
- Remember that your document should be understandable by people who are not deep experts in the subject matter.





- 1. Where do RFCs come from?
- 2. Writing an Internet-Draft
  - Things to think about before writing your draft
  - Contents of an Internet-Draft
- 3. The lifecycle from Internet-Draft to RFC
- 4. Common questions and where to find more information

WG documents go through the WG process...

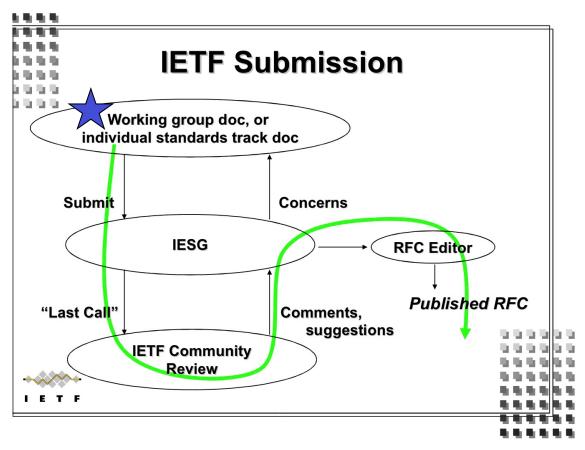


Diagram taken from Scott Bradner's Newcomer's Tutorial

#### Steps in the WG process

- Initial Submission
- Author Refinement
- WG Acceptance
- Editor Selection
- WG Refinement
- WG Last Call
- WG Request to Publish



- Initial Submission
  - Original idea or issue is submitted to the WG
    - May be done via mailing list or at a meeting
    - Should become an Internet-Draft (or part of one)
  - Chairs will reject submissions that don't fit within the WG charter, in chair judgment
    - May refer submission to more appropriate groups or areas
  - Chairs should reject submissions that aren't relevant or don't meet minimal quality requirements
    - There is no admission control on IETF Internet-Drafts
  - Rejections can be appealed



- Author Refinement
  - Idea is more fully documented or refined based on feedback
    - May be done by the person who originally submitted the idea/issue, or by others
    - May be done by individual, ad hoc group or more formal design team
  - Change control lies with author(s) during this phase



- WG Acceptance
  - For a document to become a WG work item, it must:
    - Fit within the WG charter (in the opinion of the chairs)
    - Have significant support from the working group, including:
      - People with expertise in all applicable areas who are willing to invest time to review the document, provide feedback, etc.
      - Current or probable implementers, if applicable
    - Be accepted as a work item by a rough consensus of the WG
      - Should reflect WG belief that the document is taking the correct approach and would be a good starting place for a WG product
    - Have corresponding goals/milestones in the charter
      - Goals/milestones approved by the Area Directors
      - Adopting a specific draft is not approved by Area Directors



- Editor Selection
  - Editor(s) will be selected by the WG chairs
    - Usually one or more of the original authors but not always
    - Must be willing to set aside personal technical agendas and change the document based solely on WG consensus
    - Must have the time and interest to drive the work to completion in a timely manner
  - Make this decision explicitly, not by default!
    - Some people are concept people, some are detail people
    - Some people start strong, some people finish strong
    - Some people have changes in life circumstances



- WG Refinement
  - Document updated based on WG consensus
    - All technical issues and proposed changes MUST be openly discussed on the list and/or in meetings
    - All changes must be proposed to the mailing list
      - Complex changes should be proposed in separate IDs
    - The WG has change control during this phase
      - Changes are only made based on WG consensus
      - During this phase, silence will often indicate consent



#### Steps in the WG process

- WG Last Call
  - Generally the final check that the WG has rough consensus to advance the document to the IESG
    - The WG believes that this document is technically sound
    - The WG believes that this document is useful
    - The WG believes that this document is ready to go to the IESG
  - A disturbingly large number of people wait until WGLC to read drafts!



#### WG Last Call

- The document must be reviewed and actively supported by a significant number of people, including experts in all applicable areas
  - ... or it should not be sent to the IESG
- Silence does NOT indicate consent during this phase
- Why would we want to waste IESG time on a document that we can't be bothered to review ourselves?



- Standards-track documents reflect IETF views
  - Not just a working group's view
- Standards-track protocols run on the Internet
- Avoid the group-think trap
  - Ask "who else should be reading this draft?"
  - Your ADs are good sources of potential reviewers
- Don't wait until the last minute to share
  - Prevent the "last-minute surprise"
- Some "last-minute surprise" examples
  - Discovering that no one plans to implement the new spec
  - Discovering that the security mechanism does not meet current requirements
  - Learning that work overlaps or conflicts with work in other WGs

When ready, documents are submitted to the IESG for approval...

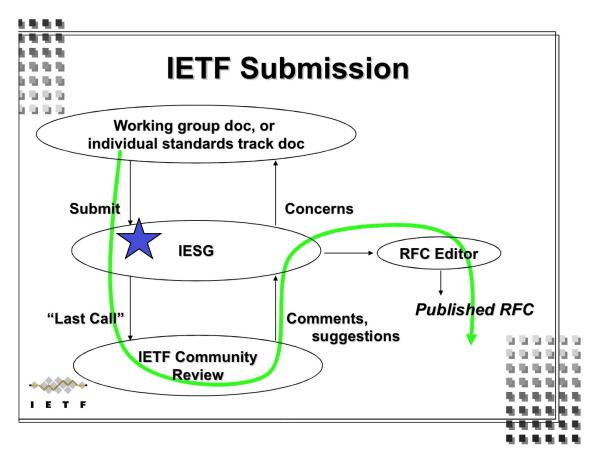


Diagram taken from Scott Bradner's Newcomer's Tutorial

#### **Document Shepherding**

- Must be one Shepherd for every draft to be published
  - Usually a WG chair for a WG document
- Provide the PROTO write up as the request to your AD for publication
  - RFC 4858: Document Shepherding from Working Group Last Call to Publication
- During AD evaluation, manage discussion between editors, WG, and AD
- During IETF Last Call, follow up on feedback and comments
- During IETF Last Call, follow up on all IESG feedback
- Follow up on all IANA and RFC Editor requests



- Document shepherd sends a Publication Request to the IESG, including a PROTO write-up
- After Publication Request, status of the document can be found in the Internet-Draft Tracker
  - https://datatracker.ietf.org/doc/
- Before moving to next steps, your AD must approve the document
  - May include review by area directorate(s) or other experts
  - Sometimes the AD asks for a revision to clear his/her own objections before advancing

AD sends standards track or individual documents for full IETF Review...

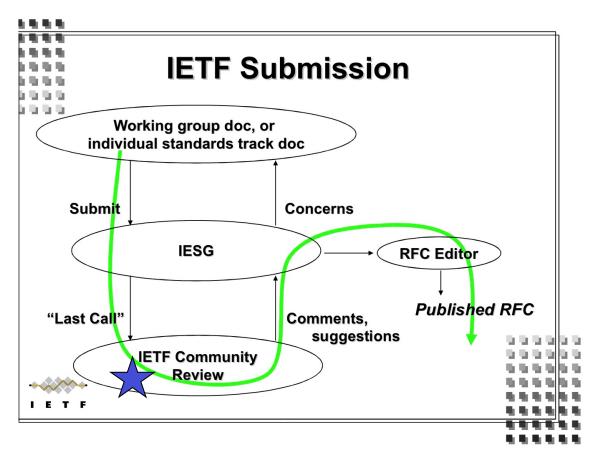


Diagram taken from Scott Bradner's Newcomer's Tutorial

#### **IETF Last Call**

- After the AD approves the document, he/she may send the document for a final IETF review called "IETF Last Call" (IETF LC)
- Length of the IETF LC depends on document type and history
  - All Standards Track and BCP documents go to IETF LC
    - AD-sponsored individual submissions have a 4-week IETF LC
    - WG documents have a 2-week IETF LC
  - AD may choose to send informational or experimental documents for an IETF LC
    - Key architecture or framework documents
- During IETF LC, individuals, cross-area review teams and directorates will review the document
  - All comments must be addressed before the document advances

Document is reviewed and approved by the full IESG...

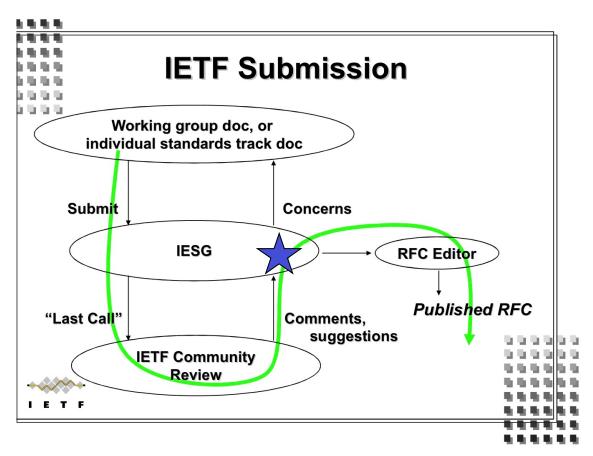


Diagram taken from Scott Bradner's Newcomer's Tutorial

#### IESG review, later steps

#### Directorate Reviews

- Many ADs/Areas have directorates that they use to review documents before approval
  - MIB Doctors, Security Directorate, Gen ART, etc.
- If these reviews were not completed during IETF LC, they may be done now

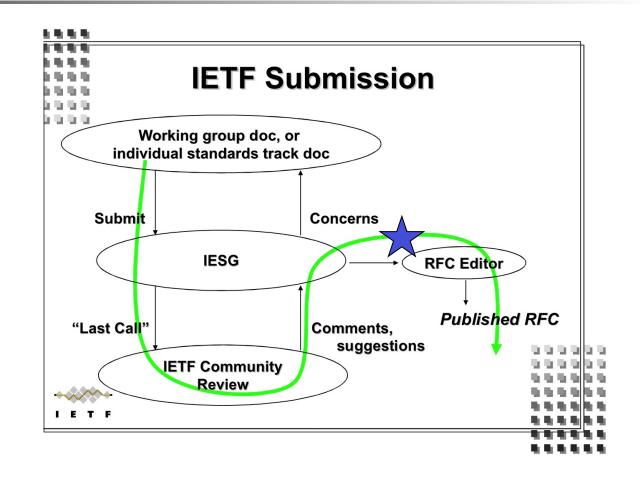
#### Official IANA Review

 Looks at IANA Considerations to figure out the namespaces that will need to be IANA managed and/or additional entries in existing namespaces

#### IESG cross-discipline review

- Takes IETF Last Call comments into account
- Can decide to pass document on for publication
- Makes final decision on document track/status
- Can send document back to WG with comments and "DISCUSS" issues that must be resolved before the document proceeds to RFC
  - http://www.ietf.org/u/ietfchair/discuss-criteria.html
- If you negotiate significant changes with the IESG, please show them to your WG before RFC publication!

After your document has been approved by the IESG...



#### **RFC Editor Publication Process**

- > IESG approval -> your document is added to the queue
- Step 1: Send your source file.
  - questions from the RFC Editor
- Step 2: Answer questions.
  - > AUTH48 notification with a pointer to the edited version
- Step 3: Review your document carefully and send changes / approvals for publication.
- Step 4: See your document progress.
- Step 5: Publication!

# Step 1: Send your source file.



From: rfc-editor@rfc-editor.org

Subject: [RFC State] <draft-ietf-wg-topic-05> has been added to

RFC Editor database.

- Your document has been added to the queue (www.rfc-editor.org/queue2.html).
- Please send us your nroff or xml source file.
  - Let us know if there are any changes between the version you send and the IESG-approved version.
- If you don't have one, don't worry, we will use the Internet-Draft text to create an nroff file.

#### Step 2: Answer questions.



From: rfc-editor@rfc-editor.org or \*@amsl.com

Subject: draft-ietf-wg-topic-05

- Please reply to questions about your draft.
   Typically, these questions are about
  - missing citations
    - Ex: [RFC4301] appears as a normative reference, where would you like to cite it in the text?
  - inconsistent terminology
    - Ex: Which form of the term should be used throughout?
       RESTART Flag / Re-Start flag / Restart Flag
  - unclear sentences

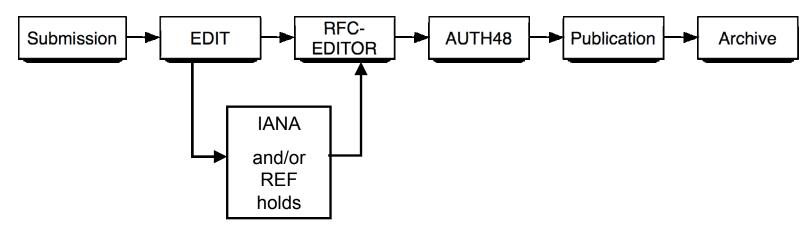
#### Step 3: See your document progress.



From: rfc-editor@rfc-editor.org

Subject: [RFC State] <draft-ietf-wg-topic-05> has changed state

#### **Basic Process**



Also, you can check <a href="http://www.rfc-editor.org/queue2.html">http://www.rfc-editor.org/queue2.html</a>



#### Normative References

- Set of RFCs linked by normative refs must be published simultaneously: Shown as "clusters".
- Two hold points:
  - MISSREF state: a doc with norm. ref to a doc not yet received by RFC Editor.
  - REF state: a doc that is edited but waiting for dependent docs to be edited.

#### IANA

- Acts on IANA Considerations section (as discussed earlier).
- Creates new registries and assigns numbers.

#### Step 4: Review your document carefully.



From: rfc-editor@rfc-editor.org

Subject: AUTH48 [SG]: RFC 4999 < draft-ietf-wg-topic-05>

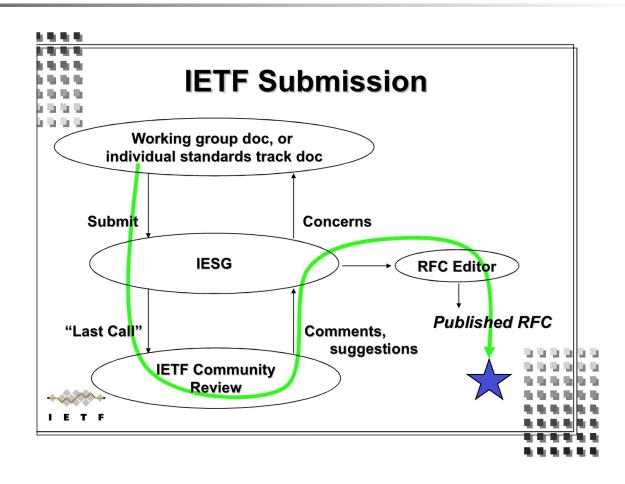
- This is your chance to review the edited version.
- We send pointers to the txt and diff files
  - and the XML file (when AUTH48 in XML)
- Submit changes by sending OLD/NEW text or indicating global changes.
  - Insert directly into the XML file (when AUTH48 in XML)
- Each author listed on the first page must send their approval before the document is published.





- Last-minute editorial changes allowed, but should not be substantive or too extensive.
  - Else, we request approval from the Area Director.
- This process can involve a fair amount of work & time
  - AT LFAST 48 hours!
  - Each listed author approves the document before publication.
     Approvals are tracked on AUTH48 page (link from the queue page).
  - Authors should take it seriously review the entire document, not just the diffs.
  - Your last chance to avoid enrollment in the Errata Hall of Infamy!

Congratulations! Your document is now an RFC...



#### Step 5: Publication!

• Announcement sent to lists:

ietf-announce@ietf.org and rfc-dist@rfc-editor.org

Canonical URI:

http://www.rfc-editor.org/rfc/rfcXXXX.txt

Also available here:

ftp://ftp.rfc-editor.org/in-notes/rfcXXXX.txt

- Mirrored at IETF site and other sites.
- NROFF and XML source files archived for later revisions.



#### www.rfc-editor.org/errata.php

- A list of technical and editorial errors that have been reported to the RFC Editor.
- Errata status indicates whether it is Reported (not yet reviewed), Verified, or Rejected. New status is "Hold for Document Update".
- The RFC Editor search engine results contain hyperlinks to errata, when present.
- How to report errata
  - Use the online form available from the errata page.

#### Overview of This Tutorial



- 1. Where do RFCs come from?
- 2. Writing an Internet-Draft
  - Things to think about before writing your draft
  - Contents of an Internet-Draft
- 3. The lifecycle from Internet-Draft to RFC
- Common questions and where to find more information

#### Q: Why hasn't my draft been published as an RFC?

- A: You can check the state of your document on www.rfc-editor.org/queue2.html
  - "IANA" indicates waiting on IANA considerations
  - "REF" indicates there are normative references.
     These lead to clusters of documents: click the cluster number on the queue page to see details.
  - "AUTH48" indicates each author must send final approval of the document. Follow the link for the detailed status.

# Q: What if one of the authors cannot be located during AUTH48?

A: You have several options:

 An AD can approve the document in place of the unavailable author. See

http://www.ietf.org/iesg/statement/auth48.html

 The author can be moved to a Contributors or Acknowledgments section.

# Q: What about April 1st RFCs?

- April 1st RFCs: Jon Postel's playful side
  - A little humorous self-parody is a good thing...
  - Most, but not all, April 1st RFCs are satirical documents.
    - We expect you can tell the difference ;-)
- April 1 submissions are reviewed for cleverness, humor, and topical relation to IETF themes.
  - Avian Carriers is famous (RFC 1149)
  - Evil Bit is a favorite (RFC 3514)
- Send submissions to the RFC Editor.



#### http://www.ietf.org

- Working Group charters, mailing lists
- Meeting agendas and proceedings
- I-D Submission and I-D Tracker
- IESG actions

# http://tools.ietf.org

 Tools for preparing drafts, viewing drafts, communicating, following IETF meetings



### http://www.rfc-editor.org

- Search engines for RFCs, Internet-Drafts
- RFC publication queue
- Master index of RFCs
  - ftp://ftp.rfc-editor.org/in-notes/rfc-index.txt, .xml
- "Official Internet Protocols Standards" list
- Policy changes, news, FAQ, and more
- Errata look-up and reporting

### Thank you

- Questions? Comments?
- Ask us now!
- IETF 77: Stop by the RFC Editor or IANA Desks.
- RFC Editor Interest List: <a href="mailto:rfc-editor.org">rfc-editor.org</a>
- Contact us later:
  - Alice Hagens, RFC Editor, <a href="mailto:rfc-editor.org">rfc-editor.org</a>
  - Margaret Wasserman, <a href="mm">mrw@lilacglade.org</a>