RFC Production Center RFP

10 July 2015
Bidder's Conference
Seattle, Washington

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Agenda

- About the RFC Editor
- Document streams
- IANA
- Errata System
- Editing and Publication Process
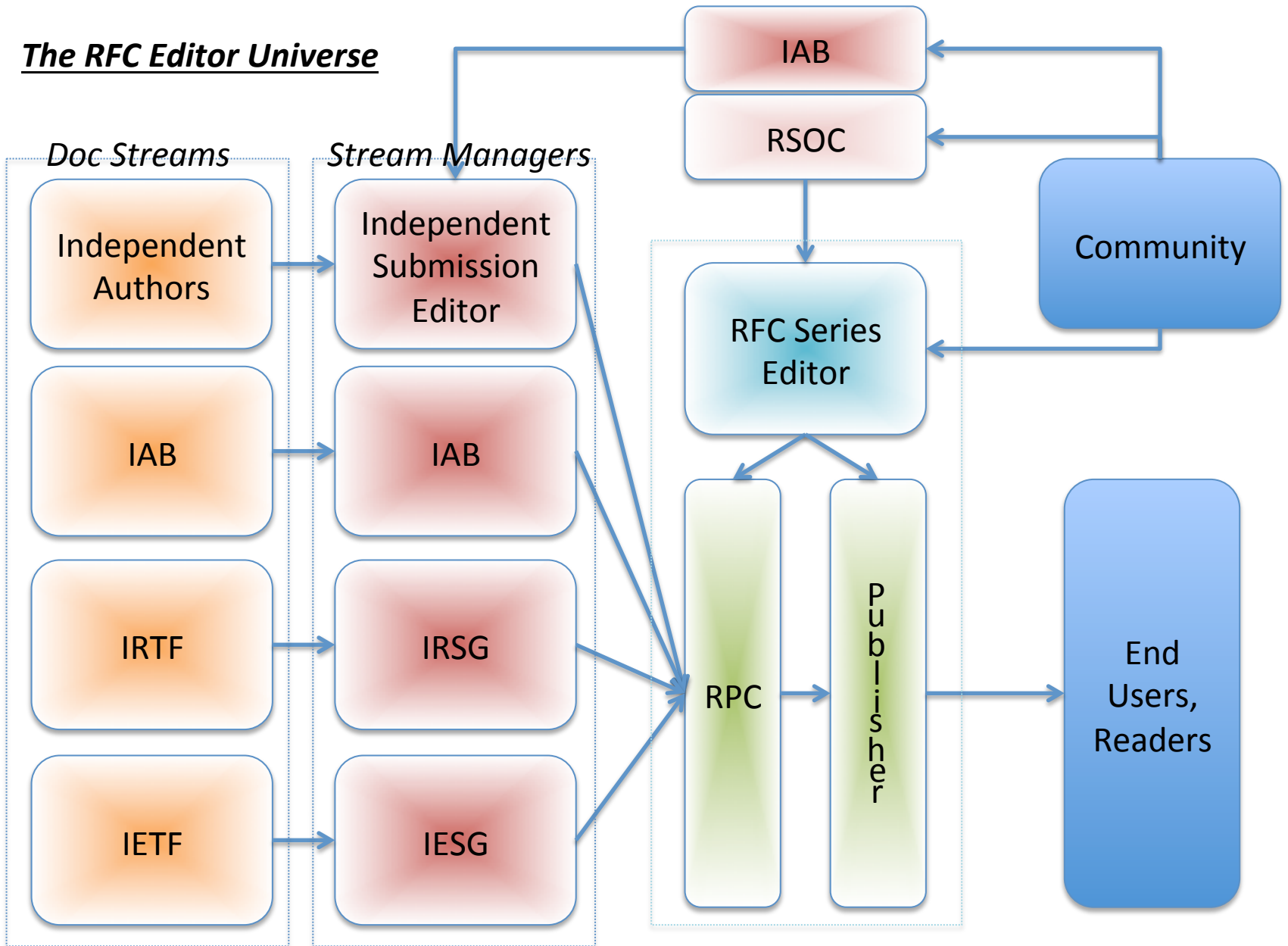- Tools
- Future plans
- Q&A

RFC Editor

- Function and structure described in various documents and web pages
  - "RFC Editor Model (Version 2)" RFC 6635
    - <http://www.rfc-editor.org/rfc/rfc6635.txt>
  - "Overview of the RFC Editor"
    - http://www.rfc-editor.org/RFCeditor.html
- Tutorial on the mechanics of document creation and development
  - http://www.rfc-editor.org/rfc-editor/tools_87.pdf

RFC Series Oversight Committee

"The RSOC will be responsible for ensuring that the RFC Series is run in a transparent and accountable manner." RFC 6635

- The RSOC is a program of the IAB
- Responsibilities include working with the RSE to develop strategic plans for the Series, review the consensus process for specific efforts, perform annual reviews for the RSE, act as the selection committee for the RSE
- See
  - RFC 6635: "RFC Editor Model (Version 2)"
  - RFC Editor Program: https://www.iab.org/activities/programs/rfc-editor-program/

The RFC Editor Universe

Doc Streams

Stream Managers

IAB

RSOC

Community

Independent Authors → Independent Submission Editor

IAB → IAB

IRTF → IRSG

IETF → IESG

RFC Series Editor

RPC → Publisher → End Users, Readers

RFC Editor: RFC Series Editor

- From RFC 6635:

  The RFC Series Editor is the individual with overall responsibility for the quality, continuity, and evolution of the RFC Series.

  The RSE is appointed by the IAB, but formally hired by the IAOC. The IAB delegates the direct oversight over the RSE to the RSOC, which it appoints.

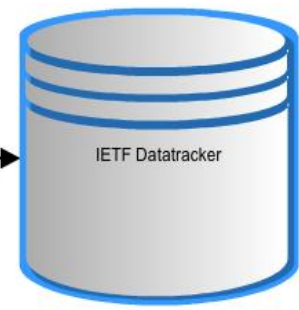- Executive oversight, project management, arbiter of style, community facilitator
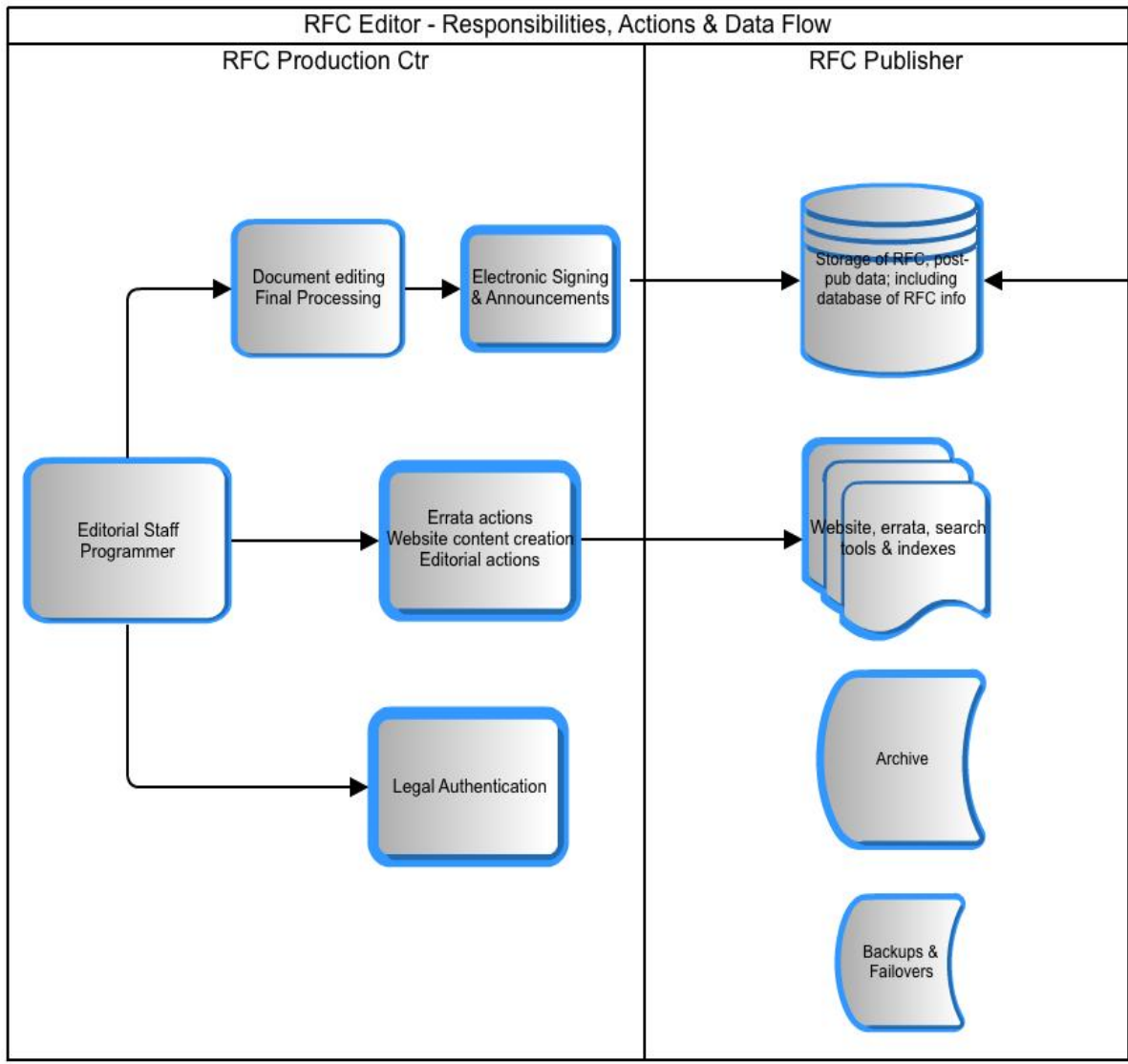
RFC Editor:
RFC Production Center

- Primary mission: to publish high-quality technical documents
- Secondary mission: to engage with the community to develop the tools and processes necessary to publish high-quality technical documents
  - This might include acting as software testers, tutorial developers, project staff
- Edits, supports errata system, offers content for the website, provides legal authentication when subpoenas come in involving RFCs
- See
  - http://www.rfc-editor.org/styleguide.html

RFC Editor:
Publisher

- Host for the storage, post-publication data, website, errata, search tools, archive, and backups for the RFC Editor

- Currently hosted at AMS along with the IETF Secretariat

RFC Editor - Responsibilities, Actions & Data Flow

RFC Production Ctr

RFC Publisher

Document editing
Final Processing

Electronic Signing
& Announcements

Editorial Staff
Programmer

Errata actions
Website content creation
Editorial actions

Legal Authentication

Storage of RFC, post-pub data; including database of RFC info

Website, errata, search tools & indexes

Archive

Backups & Failovers

IETF Datatracker

IETF – Internet Engineering Task Force

"The mission of the IETF is to make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet."
https://www.ietf.org

- See
  - "Getting Started in the IETF"
    https://www.ietf.org/newcomers.html
  - BCP 58: Defining the IETF

IESG: Internet Engineering Steering Group

"The Internet Engineering Steering Group (IESG) is responsible for technical management of IETF activities and the Internet standards process.... The IESG is directly responsible for the actions associated with entry into and movement along the Internet "standards track," including final approval of specifications as Internet Standards."

- Chosen by a Nominations Committee (the NomCom)
- Each area has at least two Area Directors; each AD is on an alternating two-year cycle
- The RFC Editor is responsible for the RFC format; the IESG is responsible for the I-D format
- See
  - RFC 5742: IESG Procedures for Handling of Independent and IRTF Stream Submissions

IRTF – Internet Research Task Force

"The Internet Research Task Force ([IRTF](#)) promotes research of importance to the evolution of the Internet by creating focused, long-term [Research Groups](#) working on topics related to Internet protocols, applications, architecture and technology." https://irtf.org

- Focus on long-term research
- Overall process for document review is similar to that of the IETF
- See RFC 5743: Definition of an Internet Research Task Force (IRTF) Document Stream

IRSG – Internet Research Steering Group

- Consists of the IRTF Chair, the various Research Group chairs, and Members-at-Large
- Reviews and approves documents published in accordance with RFC 5743

IAB – Internet Architecture Board

- A committee of the IETF; responsibilities include IESG and IRTF Chair confirmation, general architectural oversight, process oversight and appeal, **RFC Series oversight**, and more

- See
  - RFC 2850: Charter of the Internet Architecture Board (IAB)
  - RFC 4845: Process for Publication of IAB RFCs

IANA

"The Internet Assigned Numbers Authority (IANA) is responsible for the global coordination of the DNS Root, IP addressing, and other Internet protocol resources."
https://www.iana.org

- The RPC works closely with IANA to make sure that any requests for protocol assignments made through RFCs are properly handled

Independent Submissions stream

*The **independent submission** stream allows RFC publication for some documents that are outside the official IETF/IAB/IRTF process but are relevant to the Internet community and achieve reasonable levels of technical and editorial quality.*

- As with IETF, IRTF, and IAB documents, all Independent Submissions must start the path to publication as Internet Drafts
- See
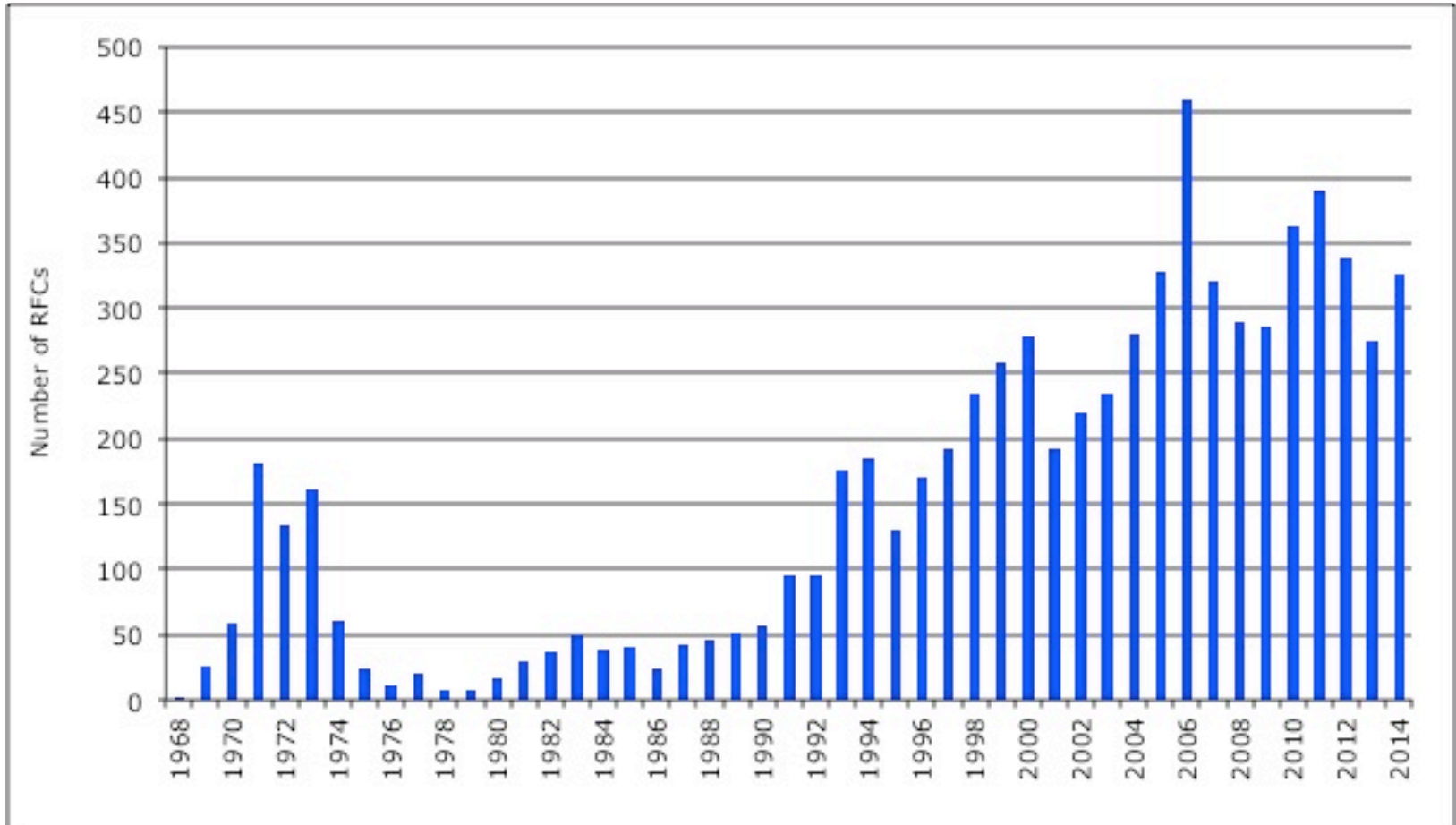 - RFC 4846: Independent Submissions to the RFC Editor
  - http://www.rfc-editor.org/indsubs.html

Document Queue

Nov – Mar 16, 2015	Subs	Pubs
IETF	113	65
IETF non-wg	12	7
IAB	2	0
IRTF	2	2
Independent	4	5
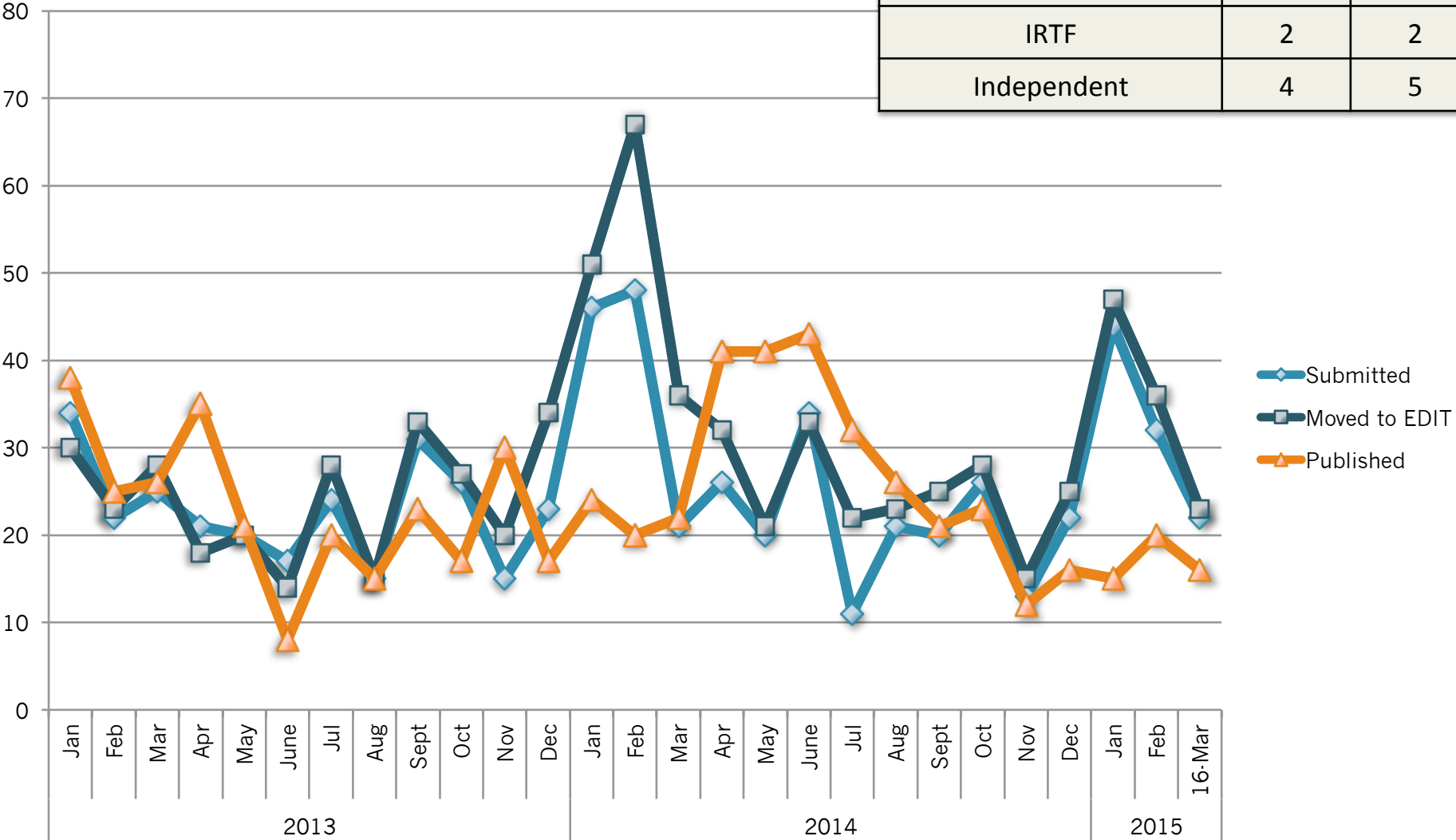
RFCs Published per Year

Community

- Authors are volunteers
- Stream managers are volunteers
- Project team members are volunteers
- Many of the tools developers are volunteers

Errata System

- Errata system started in 2000
- As of March 2015, 3926 errata from 1448 distinct RFCs
- RPC has started helping deal with purely editorial errata
  - Technical errata must be reviewed by the authors, if possible, and the Area Directors responsible for the document
  - Line between purely editorial versus technical can be blurry
- Errata are important because **RFCs do not change once published**

Editing and Publishing

- Editing an RFC is a very cooperative effort
  - RPC, Area Directors, Document Shepherds, Working Group chairs, other Stream Managers (IRTF Chair, IAB Chair, ISE), and the Authors may all be involved
    - managing a complex communication process for every document published is just one of the key tasks in getting an RFC ready for publication
- While all documents undergo community review (our form of Peer Review), documents may still enter the queue with varying levels of quality
  - ESL authors and documents that are part of large clusters can be complicated
- Drafts must be submitted as plain text, with XML as an optional format to include; soon drafts may also be submitted with just the XML or the plain-text (one or the other is required)
- Regardless of quality of writing, the key requirement for the RPC in editing a draft is to not change the intended meaning of the text
  - though sometimes finding that meaning requires additional interaction with the authors

Process

- Several stages; some count towards the RPC processing times, some do not
  - MISSREF
  - IANA
  - EDIT**
  - AUTH
  - REF
  - RFC-EDITOR**
  - AUTH48
  - AUTH48-DONE
  - Publication

Publication Process

STATES:
AUTH = holding for author action
AUTH48 = "authors 48 hours" final review
EDIT = approved by IESG, awaiting processing
IANA = RFC-Editor/IANA registration coordination
IESG = holding for IESG action
ISR = Independent Submission Review
ISR-AUTH = revisions based on ISR feedback
REF = holding for normative reference
RFC-EDITOR = pending RFC Editor review

Aaron Falk November 1, 2006, v.15

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EDIT

- I-D has been approved and has entered the RFC Editor queue
- Initial copyediting pass
- List of questions for authors
- Create or update the .nroff file (for now)
- Review formal language components (ABNF, MIB, YANG, XML)

RFC-EDITOR

- Final checks and actions before author review, including:
  - Assign RFC number
  - Review edited document
  - Review references
  - Check for proper boilerplate and copyright
  - Check for technical requirements language

AUTH48

- Theoretically, a 48-hour review period between the RPC and the author(s) to go through any final questions or issues with the draft
  - 48 hours may be 48 days in some of the more difficult cases
- Significant back-and-forth here between authors and editors, with Area Directors
  - This may be more complicated with the upcoming changes in the RFC format

REF, IANA, AUTH

- Document in a holding state pending, respectively:

  - normative references that are in queue,

  - IANA actions

  - actions from the authors (e.g., an issue came up in the editing process that introduced a technical question that needed to be sent back to the work group for consensus)

MISSREF and AUTH48-DONE (Document Clusters)

- Document clusters are sets of documents tied together by normative references
- If the reference is normative rather than just informative, but the normatively referenced document is not in queue, the doc is moved to MISSREF until the normative reference enters EDIT
  - Documents can be in MISSREF for months or even years
- As documents in a cluster get through AUTH48, they are moved to AUTH48-DONE so they can all be published simultaneously

Publication Process

- After AUTH48 has been completed, document goes through final publication stages and is posted into the archive, made available on the RFC Editor website, and mirrored on the datatracker.ietf.org and tools.ietf.org sites

RFC Authentication and Subpoenas

- Read the declaration; mark up changes as needed
- Ensure the titles of the listed RFCs match what is on the RFCs themselves
- Compare the publication date of each RFC listed in the declaration with these dates:
  - database (can look at search engine results)
  - the RFC itself
  - the write date listed in ftp://ftp:rfc-editor.org
  - check the dates of the announcement messages by checking the following:
    - rfc-ed mailbox (dates back to 1996)
    - rfc-dist archives (dates back to May 2002)
    - IETF announce archives (dates back to Mar 1998)
- Notarize documentation as needed
- If a DVD is required, make 2 copies
- Archive a hard copy of the response and DVD (if applicable)
- Send original response and DVD to address provided by counsel
- Send IETF Administrative Director an invoice based on info available at http://iaoc.ietf.org/fees-policy-06-09-2012.html + include any additional fees incurred to respond to the subpoena (e.g., scanning, copies, transit).

Tools

- Open source tools required for document processing
  - Authors need to be able to run the tools themselves during the draft development process to see how it might turn out after editing
- Internal checklist(s) and procedures manual(s) may be on more proprietary platforms

Future Plans

- Several big projects are either underway or will start soon
  - Changing the canonical format for the series
  - Updating the website to a more modern structure, look and feel
  - Automating the creation of SLA reports
  - Partnering with libraries to formally archive the series and associated material

RFC Format Project

- RFCs have been published as plain-text, ASCII only documents for much (though not all) of their history

- In May 2013, the RSE announced that the format would change
  - the canonical format we are exploring for RFCs is XML
  - four publication formats will be created from that XML: HTML, EPUB, text and PDF
  - non-ASCII characters would be allowed in a controlled fashion
  http://www.rfc-editor.org/pipermail/rfc-interest/2013-May/005584.html

Format Project and the RPC

- Moving from a plain-text only output to XML + multiple output formats changes the publication process for the RPC
  - transition period will exist where old XML and new XML will be accepted
  - significant QA expected as formatters, XML validators, and document converters are brought into use

Format Project – FAQ

- Nearly a dozen documents exist that describe the requirements for each output, the XML vocabulary, test cases, CSS requirements, and the SVG profile

- See
  - http://www.rfc-editor.org/rse/FormatFAQ.html
    - Geared towards authors, but useful for anyone who needs to know more about the effort

RFC Editor Website

- Project in progress to move website to a WordPress platform

- Significant effort required to integrate old scripts into a smoother look and feel

- Expected to roll out in September, 2015, and will be an ongoing area for improvement

RFC Publication Stats & Metrics

- A wealth of reports and statistics are available online: http://www.rfc-editor.org/reports/index.html

- Many of those reports are, in whole or in part, created manually

- Plans exist to automate as much of this as is practicable

Archiving

- See "Digital Preservation Consideration for RFCs" <draft-flanagan-rfc-preservation>
- Goal is to partner with libraries and other institutions that will properly archive the digital material associated with the Series
- Impacts the RPC in that different partners may require different metadata to be added to the documents

Q&A

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