RPC Workshop on Using GitHub during AUTH48

IETF 117
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Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/(Privacy Policy)

Agenda

- Note Well
- Agenda bashing
- Experiments since IETF 114
- Goal
- What the LLC wants
- What authors want
- What the RPC wants
- Let's talk

GitHub Experiments since IETF 114

- The documents:
  - RFC 9345 draft-ietf-tls-subcerts – Published
  - RFC 9380 draft-irtf-cfrg-hash-to-curve – AUTH48
  - RFC 9366 draft-ietf-sipcore-multiple reasons - Published
  - RFC NNNN draft-ietf-acme-subdomains – RFC-EDITOR
- Variances from experiment design:
  - Markdown rather than RFCXML
  - RFC 9380 also long (175 pgs) and part of a cluster

https://www.rfc-editor.org/rpc/wiki/doku.php?id=github_auth48_experiments

## Goal:

Find a way forward where everyone is happy

What the LLC wants

- Happy community
- Cheaper, faster, better RPC
  - Custom, controlled environment to maximize output of the RPC staff
  - Minimal number of processes and environments that staff need to learn
  - Ensure high quality standards are maintained
  - Focus of all process changes is to make things better

What authors want

- A better process than email AUTH48 (RPC also wants this)
- To use GitHub
- To maintain a living repo for their document
  - Have all AUTH48 changes so the repo can be used after publication:
    - For tracking issues and questions
    - For the basis of a bis document

Better Process

GitHub

Living Repos

Not to scale
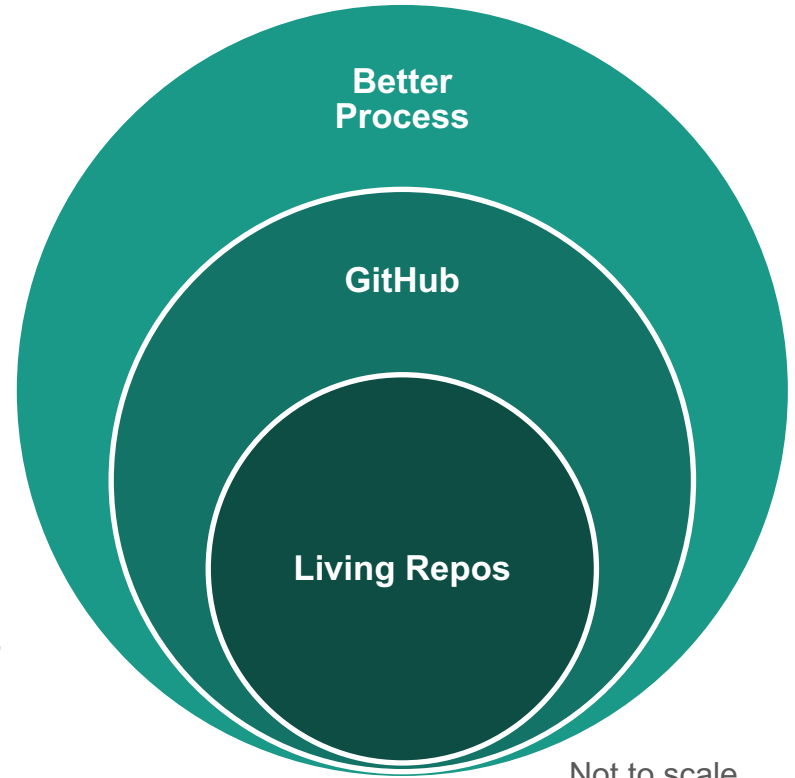
What authors want, cont.

- All edits captured in PRs
- PRs categorized by edit type
- Authors want to approve every PR individually

➡ In email AUTH48, all changes are available for review in a provided diff file. Authors are asked to review multiple edits in one diff file.

RPC requirements

- Consistent repo structures and processes
  - Need to use RPC-specific branch management for internal review, multi-editor edits, etc.
  - Use of specific labels to identify the next process step and action holder
    - https://github.com/rfc-editor/AUTH48-repo-template

RPC concerns with shifting processes

- The following can create extra work:
    - Increased volume of input from more people than just authors (if working in a WG repo)
    - Atomization of PRs
    - Multi-author approvals for each PR
    - Blocking of edits by rejecting PRs

RPC requirements

- Full audit trail
    - Need a permanent, correct, legally sound audit trail to address legal claims.
    - RPC is regularly asked to assert document validity
    - Would expect to archive repo copy to ensure this.

➡️

   Email audit trail is excellent for this.

RPC requirements

- Prevent changes from AUTH48 non-participants to reduce risk
  - Highly problematic if any changes are suggested or made by non-AUTH48 participants
  - Includes text changes, label changes, audit trail changes

Summary of wants

LLC
- Happy community
- Cheaper, faster, better RPC

Authors
- Better process than email
- Use GitHub
- Living repos
- Fine-grained control over edit approval

RPC
- Better process than email
- Consistency
- Traceability

Let's talk

Brainstorming solutions

- Creating an automated build process via GitHub actions to provide outputs and full diff files
- Creating the ability for authors to give final approval for entire document, not just individual PRs
  - Currently still using email approval
  - Capture GitHub approvals in the RPC database
- Stream manager dashboard integration for notifications and approvals

Questions

- How to create the ability for authors to backport AUTH48 changes to their own repos?
- Does the backporting of changes to the author's repo have to happen in real time?
- Would most repo owners use a feature like this, or do some prefer to archive their repo when the document is published?

Wrap up

Thank you!