



GitHub for Working Groups

WG Chairs Lunch, IETF 102
Martin Thomson



Menu

Why?

Managing Discussion

Established Practices



Why

Source control

Issue management

Transparency

Large community

Source Control

The screenshot shows a web browser displaying the GitHub repository page for `quicwg/base-drafts`. The browser's address bar shows the URL `https://github.com/quicwg/base-drafts/`. The GitHub navigation bar includes a search box, links for Pull requests, Issues, Marketplace, and Explore, and user profile icons. The repository header shows the name `quicwg / base-drafts`, along with interaction buttons for Unwatch (91), Star (264), and Fork (62). Below the header, there are tabs for Code, Issues (101), Pull requests (18), Projects (2), Wiki, and Insights. The main content area features a description: "Internet-Drafts that make up the base QUIC specification" with a link to `https://quicwg.github.io/`. Below this are tags for `quic`, `http`, `tls`, `transport`, `protocol`, `ietf`, and `standards`. A summary bar displays statistics: 2,058 commits, 22 branches, 62 releases, and 41 contributors. At the bottom, there are buttons for "Branch: master", "New pull request", "Create new file", "Upload files", "Find file", and "Clone or download". The commit history shows a recent merge by `martinthomson` and a list of files including `.circlci`, `.editorconfig`, `.gitignore`, and `.lint.py`.

← → ↻ ⓘ GitHub, Inc. (US) | <https://github.com/quicwg/base-drafts/> ⋮ ☆ ⬇️ ⚙️ ⏪ ⏩ ☰

 Search or jump to... Pull requests Issues Marketplace Explore  + 

 [quicwg / base-drafts](#)  Unwatch ▾ 91  ★ Star 264  Fork 62

 Code  Issues 101  Pull requests 18  Projects 2  Wiki  Insights

Internet-Drafts that make up the base QUIC specification <https://quicwg.github.io/>

`quic` `http` `tls` `transport` `protocol` `ietf` `standards`

 2,058 commits  22 branches  62 releases  41 contributors

Branch: master ▾

 `martinthomson` Merge pull request #1500 from `quicwg/invariants-conventions` ... Latest commit `f0217bc` 2 hours ago

 <code>.circlci</code>	Defer artifact saving	10 days ago
 <code>.editorconfig</code>	Add <code>trim_trailing_whitespace</code>	2 years ago
 <code>.gitignore</code>	Ignore upload files	9 months ago
 <code>.lint.py</code>	And this is what you get when you run things as well	a month ago

Source Control

The screenshot shows a web browser displaying the GitHub repository page for 'tswg / tls13-spec'. The browser's address bar shows the URL 'https://github.com/tswg/tls13-spec'. The GitHub navigation bar includes a search bar, 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. The repository name 'tswg / tls13-spec' is displayed, along with statistics: 117 Unwatch, 446 Unstar, and 153 Fork. Below the repository name, there are tabs for 'Code', 'Issues 0', 'Pull requests 0', 'Projects 0', 'Wiki', and 'Insights'. The main content area is titled 'TLS 1.3 Specification' and shows repository statistics: 2,174 commits, 31 branches, 30 releases, and 69 contributors. A 'Branch: master' dropdown and a 'New pull request' button are visible. Below these are buttons for 'Create new file', 'Upload files', 'Find file', and a green 'Clone or download' button. A recent commit by 'ekr' is highlighted, with the message 'Merge pull request #1192 from zq1015/patch-1' and the latest commit hash 'b7fc444' on 'Mar 26'. A list of recent commits follows, including changes to '.gitignore', '.travis.yml', 'CONTRIBUTING.md', 'Makefile', and 'README.md'.

← → ↻ ⓘ GitHub, Inc. (US) | https://github.com/tswg/tls13-spec

Search or jump to... Pull requests Issues Marketplace Explore

tswg / tls13-spec Unwatch 117 Unstar 446 Fork 153

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights

TLS 1.3 Specification

2,174 commits 31 branches 30 releases 69 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

ekr Merge pull request #1192 from zq1015/patch-1 Latest commit b7fc444 on Mar 26

.gitignore	Remove cruft	2 years ago
.travis.yml	Update distribution	2 years ago
CONTRIBUTING.md	Update CONTRIBUTING.md	2 years ago
Makefile	Fix makefile	a year ago
README.md	Fix markdown	a year ago



Issue and Change Management

Issue tracking

Change management (pull requests)

Reviewing tools

Both integrated with revision control

Issues

quicwg / base-drafts

Unwatch

91

★ Star

264

Fork

62

Code

Issues 101

Pull requests 18

Projects 2

Wiki

Insights

Filters

is:issue is:open label:-qpack

Labels

Milestones

New issue

Clear current search query, filters, and sorts

6 Open 30 Closed

Author

Labels

Projects

Milestones

Assignee

Sort

Initial size of dynamic table -qpack design

#1530 opened 2 hours ago by martinthomson

QPACK could use some examples -qpack editorial

#1454 opened 20 days ago by afrind

2

encoder stream can deadlock -qpack design

#1420 opened on Jun 7 by martinthomson

3

Static table negotiation -qpack design quicv2

#1343 opened on May 10 by MikeBishop

7

Referencing strategy -qpack editorial

#1129 opened on Feb 21 by martinthomson

9

Threaded Discussion

<> Code ! Issues 101 🔗 Pull requests 18 📁 Projects 2 📖 Wiki 📊 Insights

HTTP header compression: static table fit for QUIC #904

Edit New issue

🔔 Open LPardue opened this issue on Oct 31, 2017 · 64 comments



LPardue commented on Oct 31, 2017 · edited ▾ Member + 😊 ✎ 🗨

The HTTP header compression mechanism is still TBC but as I understand it, the proposals keep the same HPACK static table. This was formed from the "most frequent header fields used by popular web sites", and I wonder if that is still the case for today's web. For example, perhaps we'll see more usage of `alt-svc` in HTTP/QUIC, in order to keep the session active.

One benefit to keeping the static table would be to allow implementations to reuse of their object representation of the table, however I don't know how realistic that would be.



ianswett commented on Oct 31, 2017 Member + 😊 ...

Given it looks like the header compression will share little to no code with H2, I think this is worth considering.

Assignees ⚙

 MikeBishop

Labels ⚙

- qpack
- design

Projects ⚙

None yet

Milestone ⚙

No milestone

Notifications

Code^WChange Review

draft-ietf-quick-recovery.md Hide outdated

```
315 -NOT be treated as an acknowledgment for the Initial, but it MAY be used for
      an
316 -RTT measurement.
314 +Either packet indicates that the Initial was received but not processed.
      Either
315 +packet cannot be treated as an acknowledgment for the Initial, but they MAY
      be
```

 **MikeBishop** 14 hours ago Member

"Either ... cannot" feels awkward. Maybe "Neither packet can be...."?

draft-ietf-quick-transport.md Show outdated

 Refinements 7c68e0b

  **MikeBishop** approved these changes 4 hours ago • edited View changes

Regardless of urgency, I think this covers both cases a little better. It might still be worth mentioning that the previous flight of 0-RTT packets could still be consumed by the server, so the client needs to consider that data as having been sent (and therefore can't change it).



Transparency

Progress on issues and text is open

History of changes is maintained

Editors can get rapid feedback on changes



Large Community

Tools that are well understand

Makes contributions more accessible

Improved feedback cycle

 69 contributors

 41 contributors



Managing Discussion

Discussion has a tendency to fracture... badly

Chairs need to decide how they want to manage this



All Discussion on <wg>@ietf.org

This is the “safest” policy

Limit to editorial comments on issues and PRs

Needs constant reminders to steer discussion

Used effectively for several groups



Discussion on GitHub

More natural

Note well implications

Always take big items to the list

Take care to avoid substantive discussion on PRs

... these turn into a giant mess



Discussion Policy

Be very clear with the working group

Send email explaining expectations

Monitor discussion and steer it as needed

Use CONTRIBUTING.md



It looks like this is your first time opening an issue in this project!

Be sure to review the [contributing guidelines](#).

Sample Contribution Policy

133 lines (82 sloc) | 7.64 KB

Raw

Blame

History



Contributing to QUIC

Anyone can contribute to QUIC; you don't have to join the Working Group, because there is no "membership" -- anyone who participates in the work, as outlined below, is part of the QUIC Working Group.

Before doing so, it's a good idea to familiarize yourself with our current [issues list](#) and [charter](#). If you're new to this, you may also want to read the [Tao of the IETF](#).

Be aware that all contributions fall under the "NOTE WELL" terms outlined below.

- [Following Discussion](#)
- [Raising Issues](#)
- [Resolving Issues](#)
- [Pull Requests](#)
- [Code of Conduct](#)
- [NOTE WELL](#)

Following Discussion



Established Practices

Organizations

Ownership

Repository Management

Issues

Continuous Integration

Working Group == Organization



IETF Captive Portals Working Group

<https://datatracker.ietf.org/wg/capport/do...> captive-portals@ietf.org

Repositories 3

People 7

Teams 2

Projects 0

Settings

Search repositories...

Type: All

Language: All

Customize pinned repositories

New

wg-materials

Working groups materials

Updated 7 hours ago



Top languages

● Makefile ● HTML

architecture

Captive Portal Architecture

● HTML ★ 3 🔗 1 Updated 2 days ago



People

7 >





Ownership and Permissions

Chairs (or responsible AD) own the organization

Chairs (and responsible AD) have admin privileges

Each separate work item has a repository

Editors are added to teams

Teams are given commit access to their repository



Repositories

Editors are responsible for maintaining the repository

Chairs should not commit changes, merge PRs, etc...

One draft per repository is easier to manage

...unless drafts are closely related (use judgment)



Use Markdown

It is easier to use

...especially for IETF newcomers

You get more and better contributions

Both variants are good: [kramdown-rfc2629](#) and [mmark](#)

+14 -12 

Issue Management

Labels can be very useful

A **design** or **editorial** distinction can help

For multiple docs, labels can help with sorting

Issues can be assigned; review can be requested for PRs

Milestones and the project board might help

Reviewers



 janaiyengar



 gloinul



Assignees



 ianswett

Continuous Integration

jariarkko / draft-iab-internet-consolidation

Watch 3 Star 1 Fork 1

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights

Draft about consolidation of Internet services and the impacts it may have on architectures etc.

13 commits 1 branch 0 releases 3 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

Commit	Author	Message	Short name	Time
Latest commit	0d5f08f			3 days ago
		Added automatic make		4 days ago
		Initial commit		2 months ago
				3 days ago

draft-iab-internet-consolidation

Continuous Integration

395 lines (311 sloc) | 15.2 KB

Raw Blame History

```
1 <?xml version="1.0" encoding="US-ASCII"?>
2 <!DOCTYPE rfc SYSTEM "rfc2629.dtd" [
3
4 <!ENTITY RFC1958 SYSTEM "http://xml.resource.org/public/rfc/bibxml/reference.RFC.1958.xml">
5 ]>
6
7 <?xml-stylesheet type='text/xsl' href='rfc2629.xslt' ?>
8 <?rfc strict="yes" ?>
9 <?rfc toc="yes"?>
10 <?rfc tocdepth="4"?>
11 <?rfc symrefs="yes"?>
12 <?rfc sortrefs="yes" ?>
13 <?rfc compact="yes" ?>
14 <?rfc subcompact="no" ?>
15 <rfc category="info" docName="draft-arkko-iab-internet-consolidation-00" ipr="trust200902">
16
17 <front>
18
19 <title abbrev="Consolidation">Considerations on Internet Consolidation and the Internet Architecture</title>
20
21 <author fullname="Jari Arkko" initials="J."
22 <organization>Ericsson</organization>
23
24
```

...but reading
this is awful



Continuous Integration

CI systems are designed to check your code

Tools exist to both check that the draft is valid

... and maintain a readable copy of the latest



Example README.md

📖 README.md

QUIC Protocol

This is the working area for the IETF QUIC Working Group documents for the QUIC protocol suite.

Core Transport Protocol

- [Editor's copy](#)
- [Working Group Draft](#)
- [Compare Working Group Draft and Editor's copy](#)

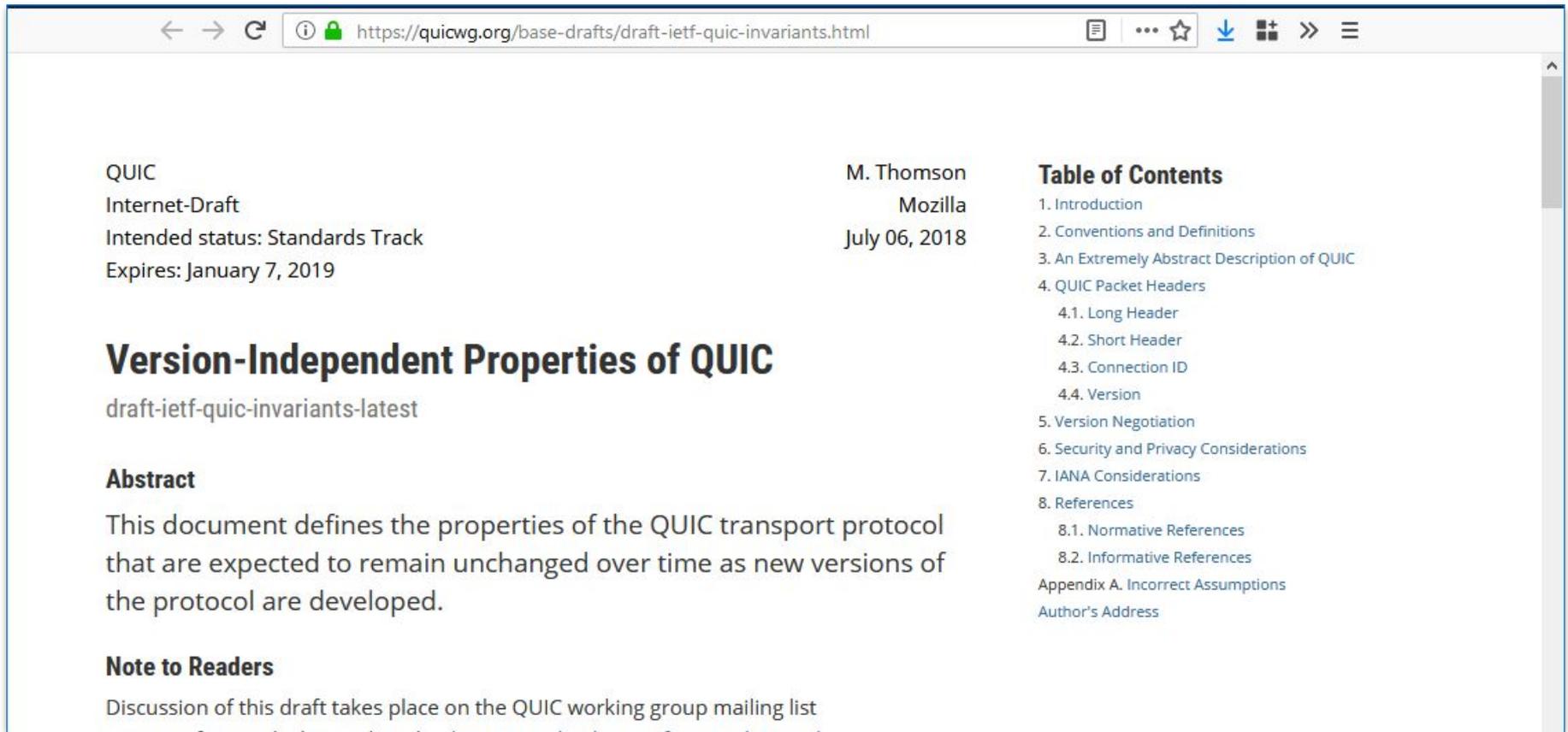
Loss Detection & Congestion Control

- [Editor's copy](#)
- [Working Group Draft](#)
- [Compare Working Group Draft and Editor's copy](#)

TLS Mapping



The Latest Copy



← → ↻ ⓘ 🔒 https://quicwg.org/base-drafts/draft-ietf-quic-invariants.html

QUIC
Internet-Draft
Intended status: Standards Track
Expires: January 7, 2019

M. Thomson
Mozilla
July 06, 2018

Table of Contents

- 1. Introduction
- 2. Conventions and Definitions
- 3. An Extremely Abstract Description of QUIC
- 4. QUIC Packet Headers
 - 4.1. Long Header
 - 4.2. Short Header
 - 4.3. Connection ID
 - 4.4. Version
- 5. Version Negotiation
- 6. Security and Privacy Considerations
- 7. IANA Considerations
- 8. References
 - 8.1. Normative References
 - 8.2. Informative References
- Appendix A. Incorrect Assumptions
- Author's Address

Version-Independent Properties of QUIC

draft-ietf-quic-invariants-latest

Abstract

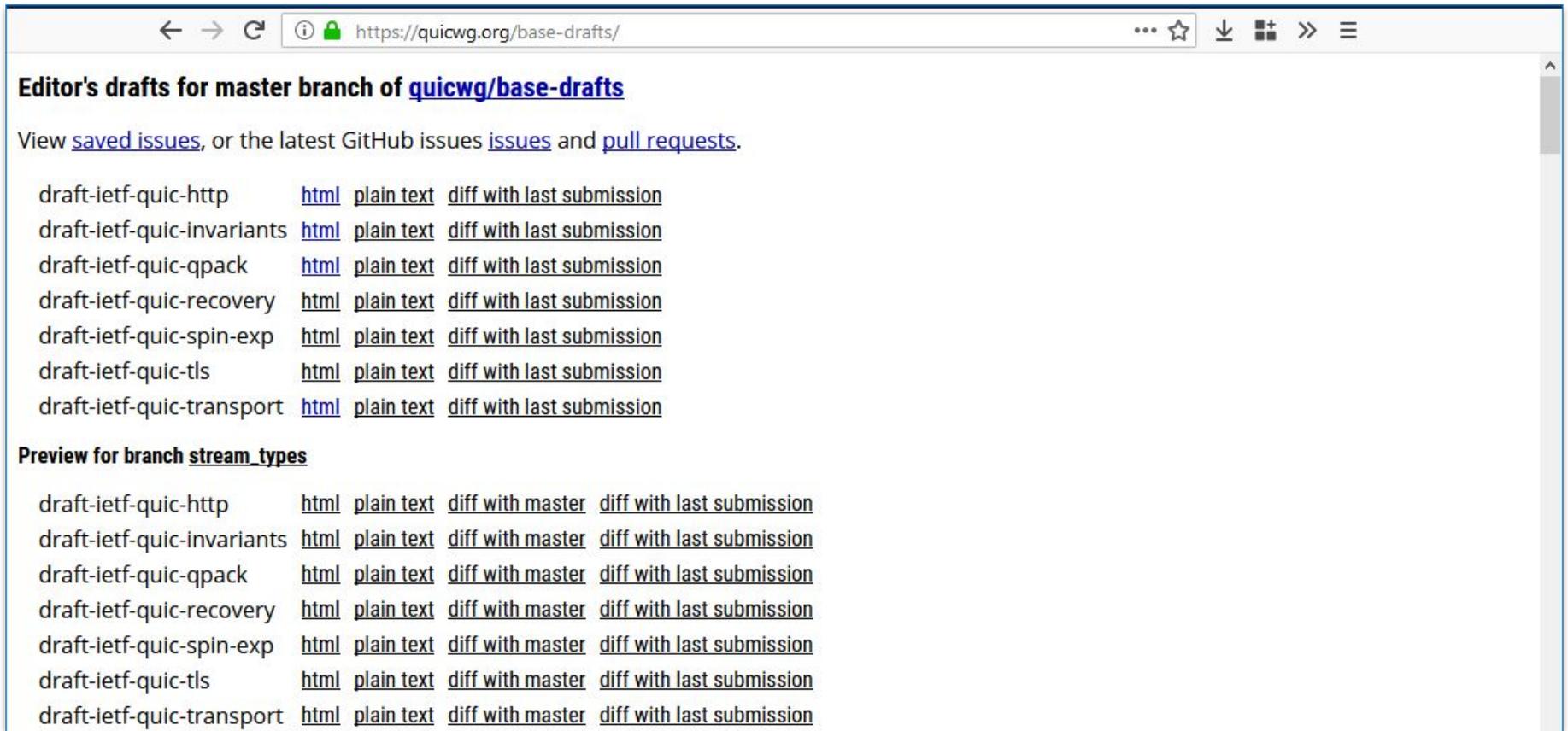
This document defines the properties of the QUIC transport protocol that are expected to remain unchanged over time as new versions of the protocol are developed.

Note to Readers

Discussion of this draft takes place on the QUIC working group mailing list



Previews of Branches



← → ↻ ⓘ <https://quicwg.org/base-drafts/> ⋮ ☆ ⬇️ ⏏️ ⏩ ☰

Editor's drafts for master branch of [quicwg/base-drafts](#)

View [saved issues](#), or the latest GitHub issues [issues](#) and [pull requests](#).

draft-ietf-quic-http	html	plain text	diff with last submission
draft-ietf-quic-invariants	html	plain text	diff with last submission
draft-ietf-quic-qpack	html	plain text	diff with last submission
draft-ietf-quic-recovery	html	plain text	diff with last submission
draft-ietf-quic-spin-exp	html	plain text	diff with last submission
draft-ietf-quic-tls	html	plain text	diff with last submission
draft-ietf-quic-transport	html	plain text	diff with last submission

Preview for branch [stream_types](#)

draft-ietf-quic-http	html	plain text	diff with master	diff with last submission
draft-ietf-quic-invariants	html	plain text	diff with master	diff with last submission
draft-ietf-quic-qpack	html	plain text	diff with master	diff with last submission
draft-ietf-quic-recovery	html	plain text	diff with master	diff with last submission
draft-ietf-quic-spin-exp	html	plain text	diff with master	diff with last submission
draft-ietf-quic-tls	html	plain text	diff with master	diff with last submission
draft-ietf-quic-transport	html	plain text	diff with master	diff with last submission



Toolchain

<https://github.com/martinthomson/i-d-template>

Build changes

CI integration for validating changes and previews

Automated submission to datatracker

Also produces diffs and manages back for issue status



Contributing

Time permitting, we will “fix” an issue in a draft



More Information

<https://unicorn-wg.github.io/github-bcp/>

Or discuss: wgchairs@ietf.org