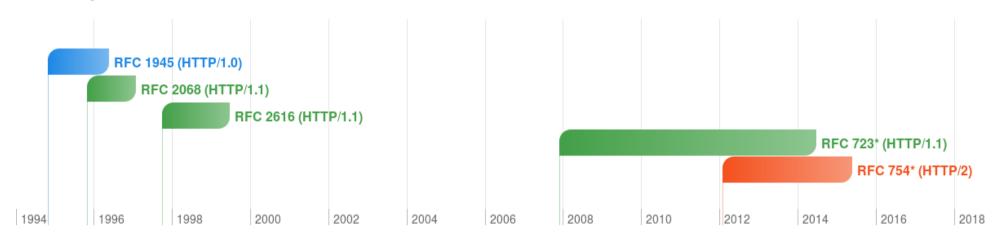


# IETF 99101 - HTTPtre

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## **History of HTTP in the IETF**



### Observations:

- It took long to restart work on HTTP/1.1 (~8 years)
- It took long to finish the last revision of HTTP/1.1 (~ 6 years)
- There are **two** current HTTP specifications (HTTP/1.1 and HTTP/2)
  - ...not to mention <u>HTTP over QUIC</u>, started in November 2016

## Why and when to update

- RFCs are immutable documents
- We collect errata and occasionally revise
  - ...but the errata are incomplete and hard to discover (RFC-Editor???)
- If we start now, we won't be ready before  $\frac{2018}{2019}$ , which would be  $\frac{45}{2019}$  years after publication of RFC 723x
- Eventually, the new RFC format will allow us to make the officially published versions more readable

#### **Current Status**

We created a (temporary) workspace to resurrect the 723x drafts with complete change history going back to RFC2616:

https://github.com/dwid-org/http11ter

With minimal edits to reflect status, we posted a set of 00 drafts:

- 1. <u>draft-fielding-httpbis-http-messaging-00</u> (HTML, <u>diffs from RFC 7230</u>)
- 2. <u>draft-fielding-httpbis-http-semantics-00</u> (HTML, <u>diffs from RFC 7231</u>)
- 3. <u>draft-fielding-httpbis-http-conditional-00</u> (HTML, <u>diffs from RFC 7232</u>)
- 4. draft-fielding-httpbis-http-range-00 (HTML, diffs from RFC 7233)
- 5. <u>draft-fielding-httpbis-http-cache-00</u> (HTML, <u>diffs from RFC 7234</u>)
- 6. <u>draft-fielding-httpbis-http-auth-00</u> (HTML, <u>diffs from RFC 7235</u>)

## Scope - the obvious

- Apply errata (see <a href="RFC 7230 errata">RFC 7230 errata</a> etc)
- Update references (not too many, it seems)
- Resolve issues reported at <a href="https://github.com/httpwg/http11bis/issues">https://github.com/httpwg/http11bis/issues</a>, currently ~3050
- Minimal changes to guide readers to HTTP/2 spec

## Scope - the less obvious

Re-organize once more?

- Split information specific exclusively to HTTP/1.1 into a separate document and relabel everything else just "HTTP"
  - ...see <u>draft-bishop-decomposing-http</u>
- Recombine some or all of RFC7231..RFC7235 into a single document

Include stuff that should have been part of HTTP in the first place?

- Status 308 (<u>RFC 7538</u>)
- Authentication-Info and Proxy-Authentication-Info (RFC 7615)
- Client-Initiated Content-Encoding (<u>RFC 7694</u>)
- …? Maybe <u>draft-ietf-httpbis-rand-access-live</u>?

...advance to full standard? (maymight conflict with other goals)

## **Today:**

- Confirm that we want to start adopt draft-fielding-httpbis-\*-00?
- Decide scope & timing
  - Relation to QUIC work (people overlap, potential effects for HTTP over QUIC)
  - Scope will affect how we do things, as potential re-organizations would need to be done very carefully
- Time permitting, talk about individual issues
- Work mode: resolving issues, communicating progress (process different from other HTTPbis work???)

## **Afterthought: annotating HTML versions of RFCs**

We **can** inline some errata information <u>already</u> (in inofficial variants, that is):

```
4. Transfer Codings

Transfer coding names are used to indicate an encoding transformation that has been, can be, or might need to be applied to a payload body in order to ensure "safe transport" through the network. This differs from a content coding in that the transfer coding is a property of the message rather than a property of the representation that is being transferred.

transfer-coding = "chunked"; Section 4.1
/ "compress"; Section 4.2.1
/ "deflate"; Section 4.2.2
/ "gzip"; Section 4.2.3
/ transfer-extension
transfer-extension = token ★( OWS ";" OWS transfer-parameter )
```

...and we could extend that to information in Github issues.