What's New in HTTP/2.0

AN UPDATE FOR THOSE THAT ARE INTERESTED, BUT NOT INVESTED IN THE WORK

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We're Moving Quickly

- Draft -04 was the first draft that we agreed to implement
  - That was in July, before IETF88
- Draft -06 was fairly widely implemented by October
- Draft -07 represents 95% of what will be included in draft -08
  - Changes from discussions here
  - Plan is to implement -08

Since -04

- A lot of minor rearrangements to the framing structure
  - Header continuations allow for large header blocks
  - Frame lengths fixed to 16K
- Stream states are much more clearly understood
- Flow control at both connection and stream level defined
- Error handling improved
  - Distinction between HTTP layer and framing layer errors strictly defined
- Settings negotiation improved

Since -04

- Mapping from HTTP concepts onto HTTP/2.0 greatly clarified
  - How frames form requests and responses
  - Server push usage clarified greatly
  - 1xx responses not supported
- Header compression simplified, then simplified some more
- Added support for CONNECT
- Lots of corner cases flushed out and squashed

What Remains

- Header compression is where most issues are
  - Most of these are minor
  - Focus on interoperability testing continues
- The process for initiating a connection is under investigation
  - https: resources are no issue
  - We need a way to deal with clear-text and TLS-protected interaction for http:
  - Discussion continues around Alt-Svc, Alternate-Protocol and Upgrade options
- Prioritization is weak
  - Known issue at intermediaries
  - Proposal forthcoming
- Extensibility options (or lack thereof) need to be defined