

little things that I would like to change
in HTTP/2.0 that I don't feel I have the
authority to change without working
group feedback

(or at least ensured that a wider audience don't have
objections)

LTTIWLTCIHTIDFIHTATCWWGF

Stream identifiers

- The framing layer specifies a 32-bit hole
- Most frames use this for a stream identifier, but not all
 - SETTINGS uses it for a settings count, which can be inferred from size
 - GOAWAY uses it for the highest valued stream ID that the sender is prepared to process
 - PING uses it for a correlator
- Proposal:
 - **Make the frame header always contain a stream identifier**
 - Stream ID 0 is for frames that aren't stream-related
 - SETTINGS loses its count, PING can use frame payload for correlation
 - GOAWAY needs an extra 4 bytes

Error codes

- RST_STREAM and GOAWAY have different error code spaces
- Values differ:
 - INTERNAL_ERROR is 2 on GOAWAY and 6 on RST_STREAM
- Proposal: **combine the two error spaces**

IANA Policies ([#33](#))

- **Frame type: IETF Review**
 - Reasoning: limited space available, interaction with frame flags
- **Error codes: Expert Review**
& Settings: Expert Review
 - Expert template provides a slot for description (which could be a reference)
 - Expert is advised to attempt to discourage duplication
 - Reasoning: lots of space here

Framing layer common flags

- Flags are currently interpreted on a per-frame-type basis
- The FINAL flag is on most frames
- ...but interpretation has to be frame-type-specific
- Proposal:
 - **Define common flags for all frames**
 - Leave reserved flags that don't have an assigned semantic for any frame types in a quantum state (could be frame-type-specific or common) ?
 - Above depends on frame-type registration policy, see previous slides

Connection-based authentication

([#49](#))

- Current text is vague and defines two optional mechanisms
 - A new realm parameter
 - Limiting concurrency
- Neither option seems workable
- Proposal: **remove connection-based authentication text**
 - Restore if the WG can achieve consensus
 - Track status with an issue

:version

- The ‘:version’ synthetic field includes the protocol version
- This is redundant, confusing and unactionable
- Proposal: **remove ‘:version’ entirely**

100–continue ([#18](#))

- SPDY didn't define what to do with Expect: 100–continue
- Proposal: **just send a HEADERS frame**
 - ...with 'status' of 100
 - Use the normal mechanisms for expectations (417)

Multiple RST_STREAM

- Current text allows multiple RST_STREAM messages
- Advises not sending duplicates (i.e., same error code)
- Proposal: **just send one**
 - Suppress others
 - Keep it simple

SETTINGS_CURRENT_CWND

- The TCP CWND is a persisted only setting
- For fast startup of the TCP CWD
- Proposal: **remove it**

Data Compression ([#46](#))

- There is a bit for this in the data frame
- AND Content-Encoding
- Proposal: **remove the bit**