draft-ietf-quic-applicability-10 draft-ietf-quic-manageability-10

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tl;dr

- \o/ WGLC gets people to (re-)read documents!
 - o Thanks to everyone who reviewed before (and after) WGLC
- Applicability good to go modulo changes to be discussed/made soon.
- Manageability might need another WGLC after all changes merged.

- Very few open issues need input.
- A couple of things need text.
- We'll talk about these now.

Updates in revision -10

Applicability draft

- A whole bunch or editorial changes and clarifications (Big thanks for all the reviews!)
- Add a sentence on taps #259 to address part of #203
- Ordered and reliable will be assumed #228 fixes #215
- Stream ID interactions #270 fixes #263

Manageability draft

- A whole bunch or editorial changes and clarifications (Big thanks for all the reviews!)
- Make it clear that the spin bit generates samples #226 fixes #180
- Update MTU to Min QUIC packet size in manageability #262 fixes #177
- New section on ICMP handling #249:

"Networks are recommended to forward these ICMP messages and retain as much of the original packet as possible without exceeding the minimum MTU for the IP version when generating ICMP messages as recommended in RFC1812 and RFC4443."

Applicability: Open issues with proposed PRs

- PRs creating new (short) sections:
 - <u>Text on datagrams</u> #273 addresses <u>#269</u>
 - This PR discusses an extension. So far the ops draft did not consider extensions.But datagram support is an important feature for applications.
 - This PR already received good feedback. Should be ready to merge!
 - Recommendation on ACKing #233 addresses #234
 - Adds a new section to recommend reducing the ACK rate on constraint links
 - Already received good feedback and is probably ready to merge.
- Open issue
 - App: What does "prime a CC" mean? #197
 - O "Probing packets can be used to perform address validation, measure path characteristics as input for the switching decision, or prime the congestion controller in preparation for switching to the new path."
 - Change wording or remove entirely?

Manageability: PRs w/ new/different recommendations

- <u>UDP Timeout text</u> #222 addresses <u>#183</u>, maybe also <u>#184</u>
 - Previous text was: "For network devices that are QUIC-aware, it is recommended to also use longer timeouts for QUIC traffic, as QUIC is connection-oriented."
 - PR now says: "RFC4787 requires a timeout that is not less than 2 minutes for most UDP traffic. [...] For these reasons, retaining the RFC4787 limits is useful, even where devices are able to distinguish QUIC traffic from other UDP payloads."
 - o Is 4787 the right recommendation?
- Add proposed section on guiding Path MTU #212 addresses #210 and maybe #287
 - O Proposed recommendation: "Networks with configurations that would lead to fragmentation of large packets should rather drop large QUIC packet than fragmenting them."
 - This PR received a lot of review and wordsmithing already and might be ready to merge
- Rewrite NAT section to minimum text #272 fixes #206, #241, #242
 - Intended to be editorial, but huge. Need to triple-check before merging.

Manageability: Minor issues -> Keep or remove?

Remove line about use of 0xff #279

- While this is not an official convention anymore, it's currently used & might still be good info.
- "Upon time of publishing of this document, QUIC versions that start with 0xff implement IETF drafts." -> Keep or remove?

Section 9 algorithm #244

- This was added based on input by David Schinazi based on their recommendations.
- Request in this issue is to remove text in appendix but it might still be helpful for currently deployed versions -> Keep or remove?

No need to repeat connection ID requirements #243

This text repeats requirements from the transport spec unnecessarily:

"Server-generated connection IDs should seek to obscure any encoding, of routing identities or any other information. Exposing the server mapping would allow linkage of multiple IP addresses to the same host if the server also supports migration. Furthermore, this opens an attack vector on specific servers or pools."

-> Keep or remove?

Manageability: Open Issues -> Author needed!

Endpoint cooperation for DoS mitigation #240

It is entirely reasonable for DoS classification to be done with full knowledge of valid connection IDs or at least valid connection ID lengths. If you allow for cooperation, the text might then explain how this might allow established flows to be separated from spoofed flows and new connection attempts.

Author needed!

Sect 2.7: Telling middleboxes to ignore version? #178

- "In addition, due to the speed of evolution of the protocol, devices that attempt to distinguish QUIC traffic from non- QUIC traffic for purposes of network admission control should admit all QUIC traffic regardless of version."
- Request: Please can we adjust this as a motivation for allowing easy upgrade, rather than boldly saying "should admit".
- What the right recommendation we want to give? Do we need a separate section to discuss this more? Author needed?

Next steps

- 1. Merge PRs
- 2. Create/wait for missing PRs or close issues with no action
- 3. Publish!