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

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operations drafts?

- The OPS Drafts (<u>https://github.com/quicwg/ops-drafts</u>) provide advice to...
 - ...application developers and mapping designers on the use of quic (-applicability)
 - ...application and network administrators (and network management tool designers) on the implications of QUIC deployment for common management tasks (-manageability)
- Addresses the fifth focus area in the WG charter

It's time to start thinking about applicability again

- Applicability → abstract interface the protocol presents to the layers above.
 - Goal: facilitate design of (non-HTTP) application bindings to QUIC
 - Not many changes here, but little controversy so far, so little attention

we've done some thinking about managability in the meantime

- Manageability → surfaces the protocol's wire image presents to devices on the path.
 - Goal: Provide a guide to QUIC's wire image for operators/management vendors, without making them read the whole transport specification.
 - Flux in the wire image (e.g. CID, PNE) is slowing down, so it's time to start paying attention to this document again.

Changes (-manageability-01)

- Update to -13 headers
 - add coalesced packets, fix CIDs, encrypt PN
- Mention SNI for application identification
- Point to spin bit experiment for potential RTT
- Remove upstream loss measurement (because of PNE)
- After a bit more work on load balancing / CID usage, this will be mostly done.

Open Issues

- Endpoint implementation and API issues (-applicability)
 - Reducing linkability (#31)
 - CID generation (#27, #11)
 - Port number use (#26)
 - Handling ICMP (#23)
 - Error interface (#14)
 - 0-RTT errors (#13)

- Additional endpoint behaviors (-applicability)
 - cheap per-stream partial reliability? (#15)
 - CID-based mux? (#12)
 - keepalive/0RTT resumption tradeoff (#6)
- Operational guidelines for serving QUIC (-applicability?)
 - Migrating GUIC→QUIC (#25)
 - Version rollout/rollback (#28)

Moving forward on -applicability

- Editors can suggest text, but we may not be the best potential authors for some of these.
 - Issue assignments and PRs graciously accepted!
- Document organization/audience:
 - We currently address implementors, application-layer users, and deployers with -applicability: is this too much?

