Applicability and Manageability of the QUIC Transport Protocol

draft-kuehlewind-quic-applicability-00
draft-kuehlewind-quic-manageability-00

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Since interim

- Both drafts replace draft-kuehlewind-quic-appman
- Different audience and different set of contributors
Applicability - Content

- The Necessity of Fallback
- Zero RTT: Here There Be Dragons
- Stream versus Flow Multiplexing
- Prioritization
- Graceful connection closure [empty]
- Information exposure and the Connection ID
- Use of Versions and Cryptographic Handshake
Applicability - Scope

• Scope is broader than just http/2
  • Guidance based on experience with http/2 mapping that can be useful for future mappings (e.g. on connection closure)
  • Assumptions made on protocol design that are also relevant to future versions

• Guidance on transport interface
  • Draft names possibilities for useful interfacing
  • Or do we need to define an abstract API somewhere?
Manageability - Content

• Features of the QUIC Wire Image
  • QUIC Packet Header Structure [not up-to-date]
  • Integrity Protection of the Wire Image
  • Connection ID and Rebinding
  • Packet Numbers
  • Greasing [empty]

• Specific Network Management Tasks
  • Stateful Treatment of QUIC Traffic
  • Measurement of QUIC Traffic
  • DDoS Detection and Mitigation [new]
  • QoS support and ECMP [new]
  • Load balancing [empty]
Manageability - Scope

- Guidance for network operators and middlebox vendors
  - closely following the current version of the protocol spec
  - Editor notes that go beyond this will be removed with the next version and added as issues in GitHub (if appropriate)
  - Issue’s with the current protocol design should be discussed based on the protocol drafts and not in this document!