MPTCP – Multipath TCP

WG Meeting

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- Note taker
- Jabber
- Please say your name at the mike
- Please include “-mptcp-” in your draft names
- Blue Sheet!

Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/ (Privacy Policy)

Agenda

1. Chairs – WG Status etc
    1. RFC6824bis has completed IESG review. Now with IANA
2. Implementation news
    1. Open mike for implementation news
3. Individual drafts
    1. MPTCP Robust session establishment – Markus Amend
    2. MPTCP inactivity time option and Rate-limit option – Viet-Hoang Tran (remote)
    3. Privacy threats and possible countermeasures for Multipath-TCP – Marcelo Bagnulo
4. Potential future topics for WG
    1. Brief summary
    2. Open discussion
    3. Note: tsvarea “Where to do multipath work in the IETF?” (15:50-17:20 Thursday)

Future of WG

- The default is that the WG closes at ~ IETF-106…
  - Minor extensions & maintenance would be done in tcpm
- … but the WG can continue, if there are active items
  - Multiple people interested (to design, document and review)
  - People to implement
- As a data point, the next slides lists active individual drafts
  - In addition, there are several expired drafts that people may want to re-activate

Active individual drafts

- (*) Multipath TCP extension for Robust Session Establishment
  - Markus Amend (DT). Proposal for better efficiency. Request for implementers
- Initial-Path Selection for Connection Establishment in Multipath TCP
  - Jiao Kang (Huawei). Similar problem to previous draft
- (*) Privacy threats and possible countermeasures for Multipath-TCP (MPTCP)
  - Marcelo Bagnulo (UC3M) (Article 19, Apple). Analysis of privacy impact. Proposes countermeasures.
- TFO support for Multipath TCP
  - Sebastien Barre (UCLouvain) (Tessares, Apple). Proposes mods to MPTCP so works well with TFO
- 5G Session Continuity Support in MPTCP
  - Xavier de Foy (InterDigital) (Huawei). Identifies inefficiencies for 5G session continuity & possible solutions
- (*) Multipath TCP Inactivity Time Option
  - Viet-Hoang Tran (UCLouvain). Proposes MPTCP option for lifetime for inactive MPTCP connection
- (*) Multipath TCP Subflow Rate Limit Option
  - Viet-Hoang Tran (UCLouvain). Proposes MPTCP option to request max subflow rate
- Extended Socket APIs to control subflow priority in Multipath TCP
  - Samar Shailendra (TCS) (IIT Kharagpur). Proposes to extend socket API.
- One Way Latency Considerations for MPTCP
  - Fei Song (Beijing Jiaotong University) (Huawei). Proposes to measure one-way latency to help scheduling
- A Stochastic Optimal Scheduler for Multipath Transmission Control Protocol (MPTCP)
  - Changqiao Xu (Beijing Uni, BUPT). Proposes new scheduler
- (*) *presented today*