## MPTCP – Multipath TCP

WG Meeting 18<sup>th</sup> & 20<sup>th</sup> July 2016 Berlin, Germany

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- Note taker
- Jabber
  - start your jabber comments with "[mike]" if you want them spoken at the mike
- Please say your name at the mike

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# IETF-96

- 1. Hackathon any interest?
  - 1. Saturday July 16, 2016 and Sunday July 17, 2016
- 2. Applied Networking Research Workshop 2016, Saturday July 16, 2016
  - 1. An enhanced socket API for Multipath TCP. Full Paper; Benjamin Hesmans (UCL) and Olivier Bonaventure (UCL).
  - 2. Towards a Multipath TCP Aware Load Balancer. Short Paper ; Simon Liénardy (Université de Liège) and Benoit Donnet (Université de Liège).
  - 3. <u>https://irtf.org/anrw/2016/</u>
- 3. We have two WG sessions
  - 1. Monday 1540-1740 Charter items
    - 1. Implementation news
    - 2. Bumping the version number
    - 3. Progressing /finalising rfc6824bis
      - 1. Alan Ford draft-ietf-mptcp-rfc6824bis
      - 2. Fabien Duchene draft-duchene-mptcp-add-addr
  - 2. Wednesday 1400-1530 -
    - 1. Continuing Monday's discussion
    - 2. non-Charter items
    - 3. (if time) possible re-chartering

#### Implementation news

### Bumping the version number - Introduction

- ? Should rfc6824-bis have:
  - the same version number as rfc6824
  - or a new version number (& deprecate rfc6824)
- History:
  - We had an earlier discussion & decided to bump the version number <a href="http://www.ietf.org/mail-archive/web/multipathtcp/current/msg02572.html">http://www.ietf.org/mail-archive/web/multipathtcp/current/msg02572.html</a>
  - Further recent discussion at the interim etc <u>https://</u> <u>www.ietf.org/proceedings/interim-2016-mptcp-01/minutes/minutes-interim-2016-mptc</u> <u>p-01</u>
  - (today) Is there clear consensus to change our decision? (if not, we keep with it)
- Pros
  - We can make MP-CAPABLE reliable
  - Simple to add other new features that seem desirable (support for stateless server, load balancer; save option space in SYN)
- Cons
  - Have to migrate between MPTCP versions
  - New features less important
- Data points
  - Data on importance of making signalling reliable (Christoph Paasch)
  - Are people with deployments worried about the migration issue?

#### **RFC6824bis - Introduction**

- Suggested aim is to do (first?) WG last call as soon as possible
- We will need implementation(s) before we forward to IESG
- Alan Ford draft-ietf-mptcp-rfc6824bis
- Fabien Duchene draft-duchene-mptcp-add-addr

### **Possible re-chartering - Introduction**

- Charter item: MPTCP-enabled middleboxes (Informational)
- Finally, the working group will explore whether an MPTCP-aware middlebox would be useful, where at least one end host is MPTCP-enabled. ... The working group will detail what real problems an MPTCP-enabled middlebox might solve, how it would impact the Multipath TCP architecture (RFC6182), what proxy approach might be justified as compared against alternative solutions to the problems, and the likely feasibility of solving the technical and security issues.
- Limited work /individual drafts towards this
- Real-world MPTCP deployments have proxies at both ends (eg CPE & aggregation node are both MPTP-enabled)
- Should we delete the Charter item, or change it?
- Other additional work items?