Hacking the MPTCP socket API

draft-hesmans-mptcp-socket-00
MultiPath TCP

WiFi

4G LTE
MultiPath TCP

Application

connect  read  select  getpid

MPTCP

TCP  TCP  TCP
Concept

Louvain-La-Neuve

Seoul
Topics

- Integrating the API with iPerf3
- Bindings the API towards
  - C#
  - Java
  - Python
  - Ruby
- Tuning these applications for MPTCP:
  - OpenSSH
  - Curl
  - lighttpd (server initiating the subflows)
- LD_PRELOAD library
- Documentation (manpage)
The LD_PRELOAD Library

Application

connect  read

Library

add_subflow  read

API

select  getpid

MPTCP

TCP  TCP  TCP
Takeaways

- The iPerf extension will allow easier benchmarks
- The socket API is asynchronous
  
  => you don’t receive any notification/callbacks/error codes

- Inferring new endpoints (for new subflows) is hard