

MPTCP FreeBSD Update

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Background

- Implementation goals
 - Platform for FreeBSD-based MPTCP research
- Project
 - Started in mid-2012, supported by Cisco
 - Resumed work mid-2014, supported by The FreeBSD Foundation, Cisco
- Releases
 - Initial patch released in March 2013; last release (v0.4) in July of 2014
 - Currently preparing v0.5 patch for release

Current (v0.5) Patch

- Mostly re-implemented
 - Improved stability, easier to maintain/add functionality
 - Should result in shorter intervals between patches
- Multiple concurrent subflows
- Basic packet scheduling, path management
- Data-level retransmission

Upcoming releases

- Modular packet scheduling, CC (including support for coupled CC)
- Improved protocol completeness (fallback, fast close, remove addr, ...)
- Further design improvements

Questions?

- More Info
 - Project website: <http://caia.swin.edu.au/newtcp/mptcp>
 - Contact: njwilliams@swin.edu.au
 - Recent BSDCan talk on implementation:
 - Video: https://youtu.be/P3vB_FWtyIs
- Project supported by

