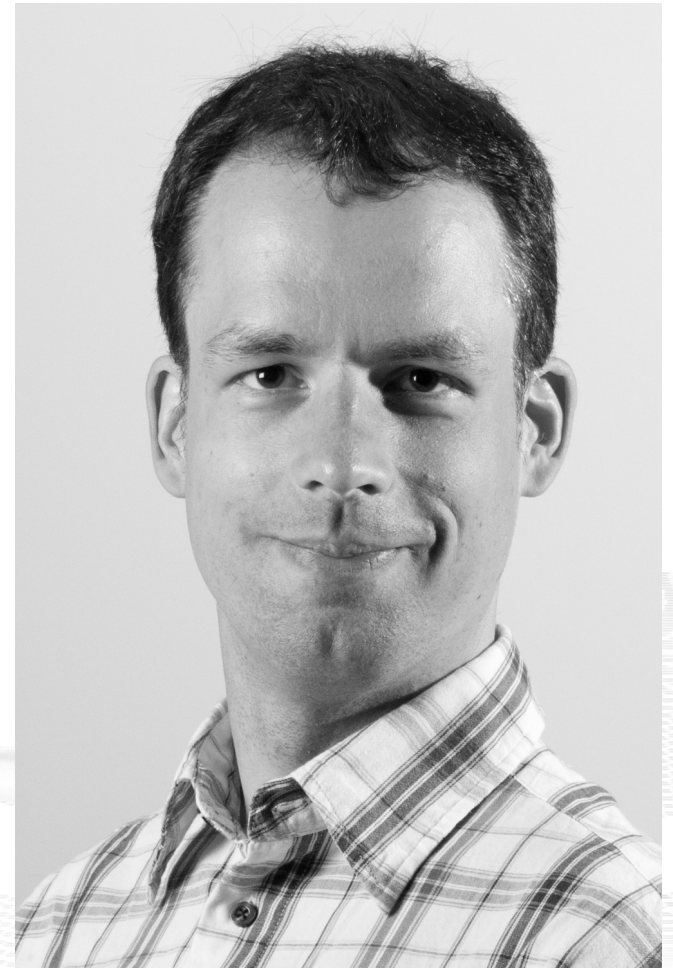**Presentation at the 89th IETF Meeting**

The Status of MPTCP Deployment and Evaluation in the NorNet Testbed

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- The NorNet Testbed

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Motivation

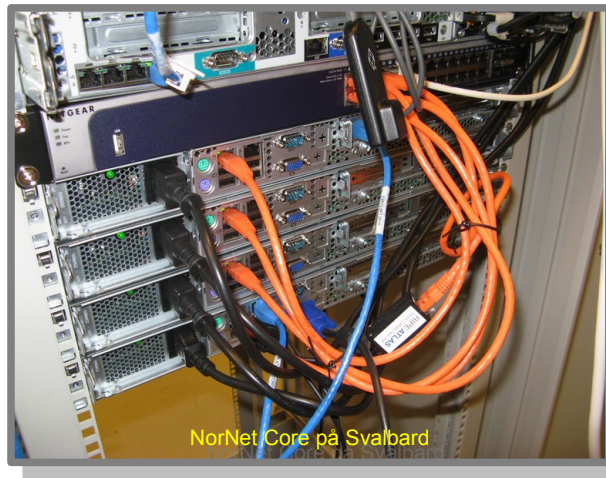**MPTCP needs testing in realistic setups!**

- **Wired networks**

    – Data centres, fibre, DSL, ...

- **Wireless networks**

    – 2G, 3G (UMTS, CDMA), 4G (LTE), WLAN, …

- We have an <u>open</u> testbed platform for both: NorNet!

    – Similar to PlanetLab/OneLab, G-Lab, etc.

NORNET

https://www.nntb.no

The NorNet Testbed

NorNet Core på Svalbard

NorNet Edge på Kringsjå, Oslo

- Wired sites

    – 11 in Norway + 1 DE, 1 SE, 1 CN

    – Up to 3 ISPs (IPv4 + IPv6 if available)

    – Usually 4 servers per site

    – VMs: Fedora Linux 18, LXC

    – **Linux kernel MPTCP v. 0.88 in test**

    – Custom VMs possible (e.g. FreeBSD)

- Wireless nodes

    – Ca. 400, distributed all over Norway

    – Custom-made ARM embedded system

    – Debian Linux

    – **Linux kernel MPTCP v. 0.88**

    – Up to 4x UMTS, 1x CDMA

    – 1x wired, 1x WLAN

Ongoing MPTCP Research in NorNet

- MPTCP performance in **heterogeneous networks**

  – Evaluation of the current state of the art for MPTCP
  (i.e. Linux MPTCP v. 0.88)

  – Combination of multiple 3G paths

  – Some 2G/3G/4G paths

  – Combination with WLAN paths

- Performance improvements under development – more details soon!

Interested in using NorNet? Talk to us!

"NorNet wants to be a building block of the railroad to heaven" ...

… and not be another unused testbed that paves the road to hell!

See https://www.nntb.no for details!