

Deployment and future of MPTCP

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MPTCP deployment

- Several deployments of MPTCP
 - Apple's Siri , GigaPath in Korea , several startups
- Mostly very smooth deployment
 - No middlebox issues
 - Roughly 94% success-rate for MPTCP
- Deployment simplified thanks to a closed environment and small to medium-sized scale

MPTCP API

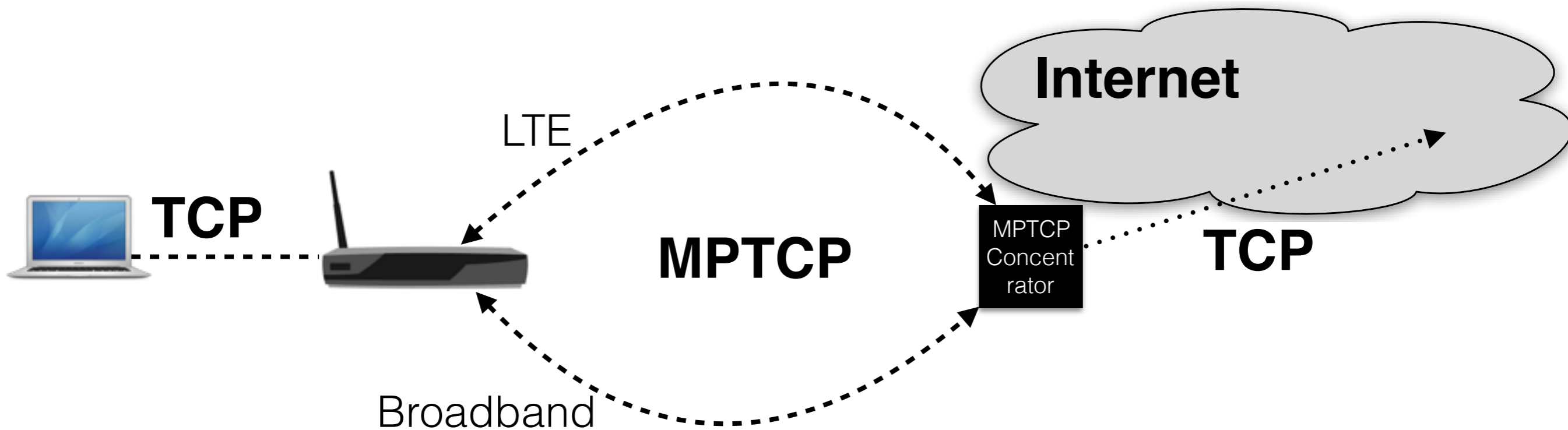
- MPTCP-spec leaves a lot of room for implementation-choices
 - When to create new subflows ?
 - How to schedule the data ?
 - ...
- Need for a powerful API that allows Apps to steer these decisions, while staying within the boundaries of the system's policies
- MPTCP is not a drop-in replacement for TCP

Large-scale deployment

- Deployment in large-scale server farms
 - Challenges due to layer-4 load balancers
 - Different TCP-subflows need to be steered to the same frontend server
 - Need for either:
 - New load balancer design that takes MPTCP into account
 - Major changes to the infrastructure to accommodate MPTCP
- draft-duchene-mptcp-add-addr*
draft-olteanu-mptcp-loadbalance
draft-paasch-mptcp-loadbalancer

Proxy-extensions for MPTCP

- Emerging use-cases to deploy MPTCP-proxies (Tessares/Proximus, Nokia/Orange, ...)
- Need to make MPTCP proxy-friendly



draft-boucadair-mptcp-plain-mode
draft-peirens-mptcp-transparent