# **Satellite / Terrestrial Multipath Communication**

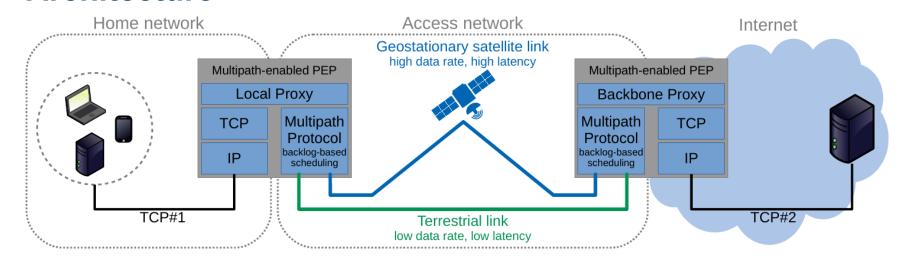




# Motivation

- compensate high latency of geostationary satellite links
- vice versa: boost data rate of slow terrestrial links
- especially for (rural) areas with poor Internet connectivity

#### Architecture



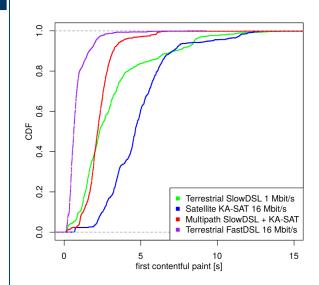
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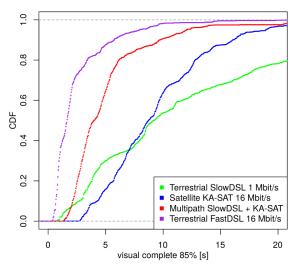


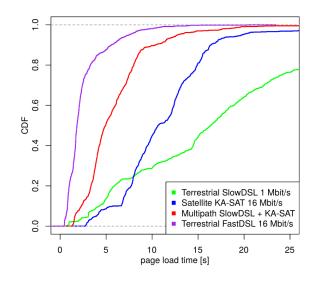
#### Performance results

Linux-based prototype implementation (preliminary!)
 Browsertime v10.1.0









# **Satellite / Terrestrial Multipath Communication**





- MPQUIC → end-to-end multipath
  - implementation and performance tests work in progress
- Variety of Internet access links a motivation for multipath?
  - DOCSIS, DSL, cellular, satellite (LEO, MEO, GEO), ...

#### More information

[1] Deutschmann J., Hielscher KS.J., German R. (2020)

An ns-3 Model for Multipath Communication with Terrestrial and Satellite Links https://doi.org/10.1007/978-3-030-43024-5\_5 https://www7content.cs.fau.de/~deutschmann/2020 MMB SatTerMultipath paper.pdf

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