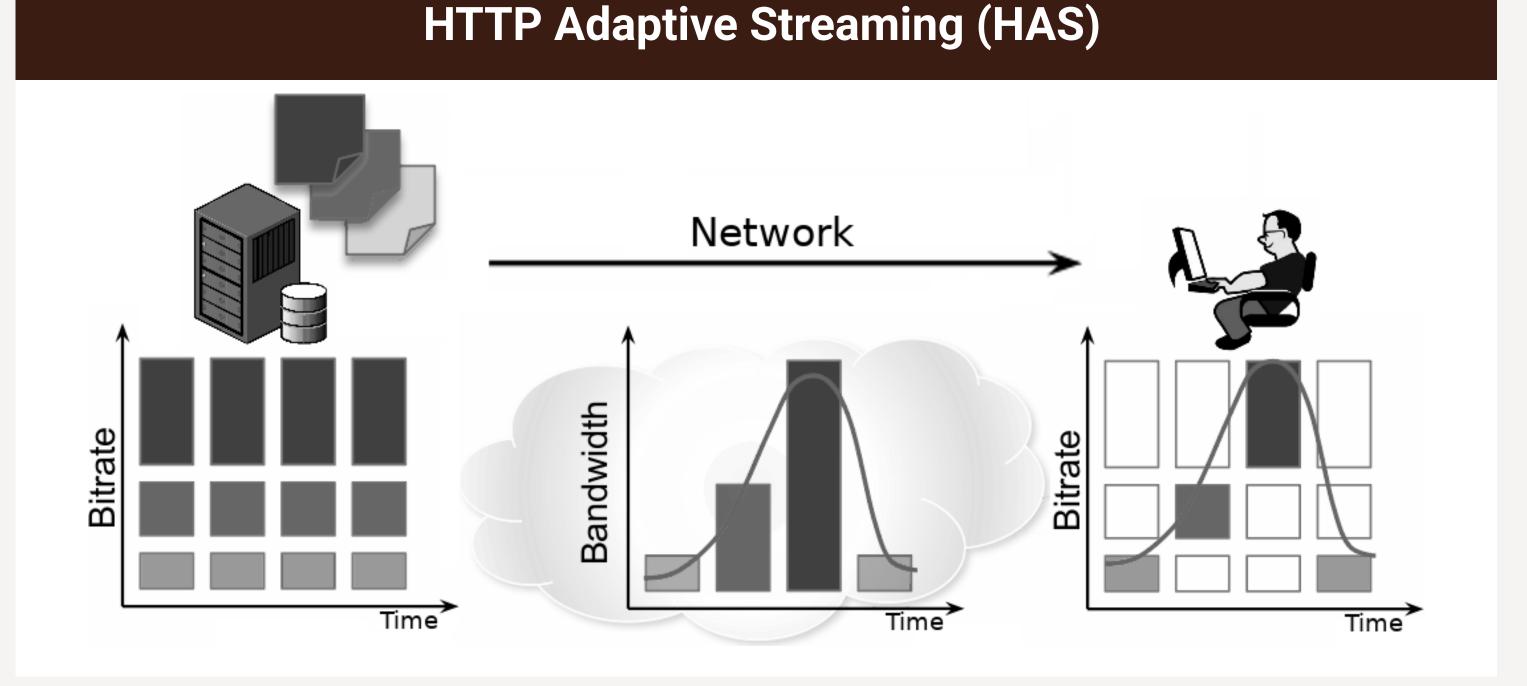
PRIVA-STREAM: Private Collaborative Streaming

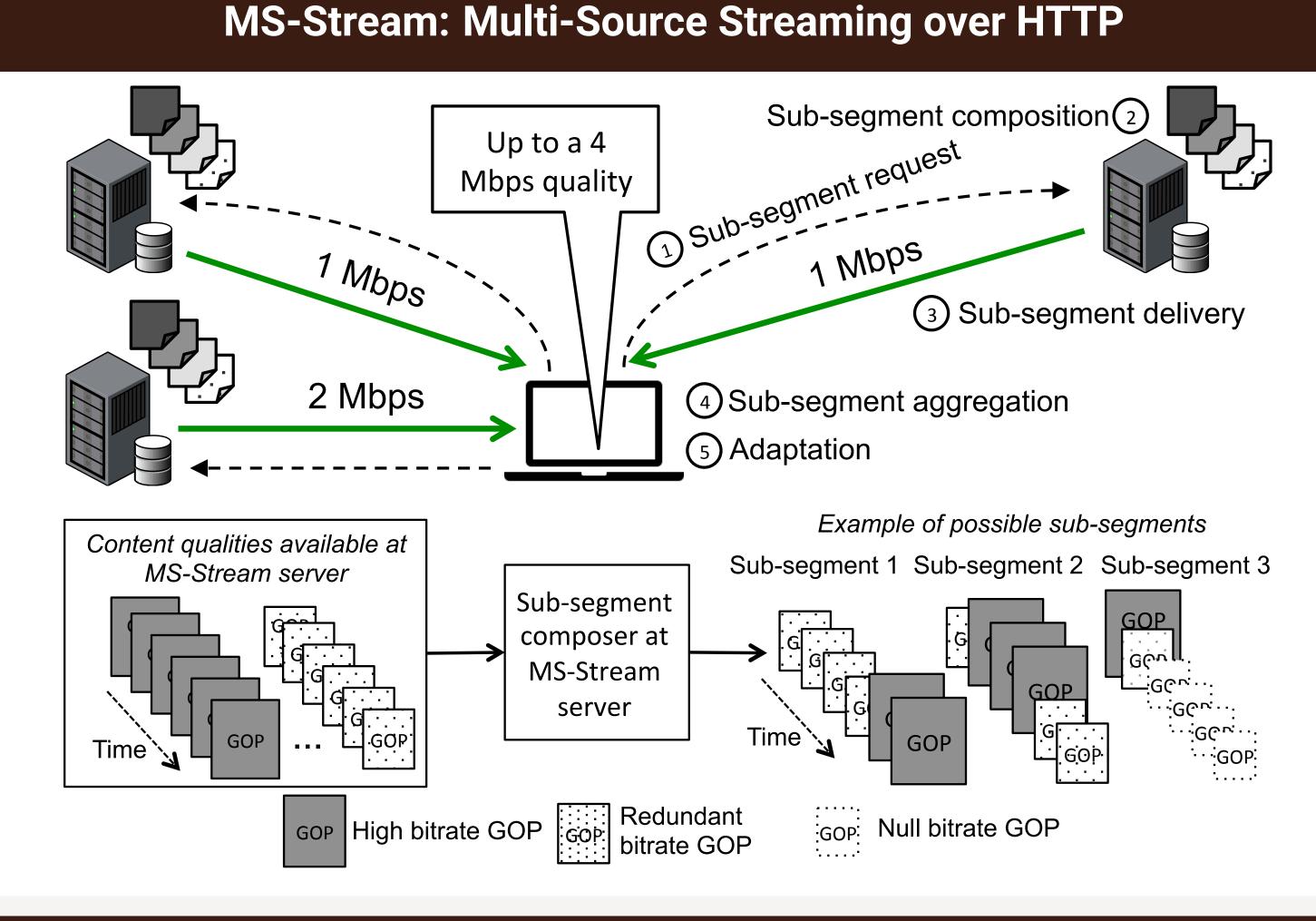
Simon Da Silva - Daniel Negru, Laurent Reveillere PROGRESS - Univ. Bordeaux, LaBRI, France

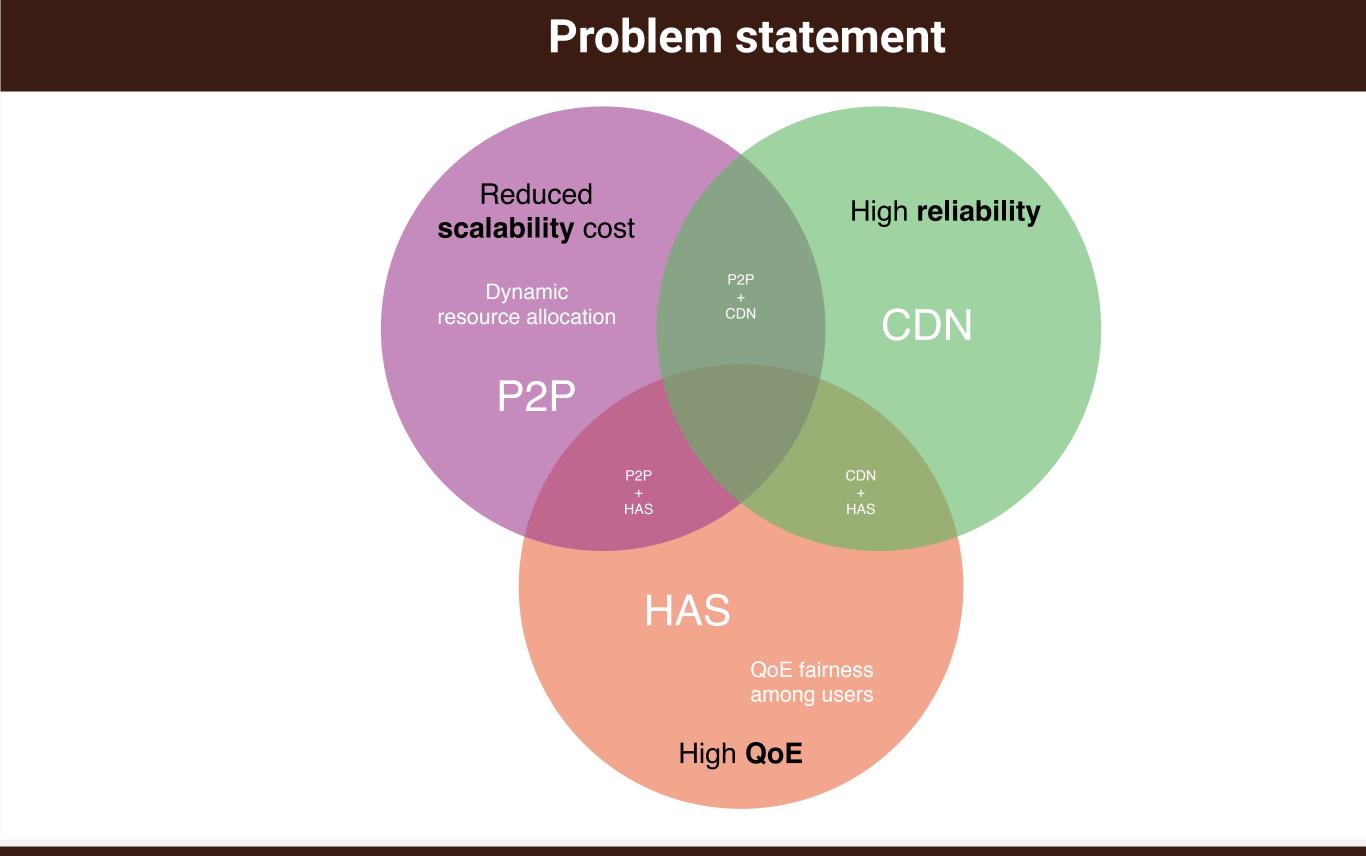


24% CAGR 2016-2021 Sexabytes per month 150 100 2016 2017 2018 2019 2020 2021 Sexaborated Consumption Gaming (1%, 4%) File Sharing (8%, 3%) Web/Data (18%, 11%) File Sharing (8%, 3%) Web/Data (18%, 11%) File Sharing (8%, 3%) Internet Video (51%, 67.4%)

Content Delivery Networks (CDN) Content Delivery Network



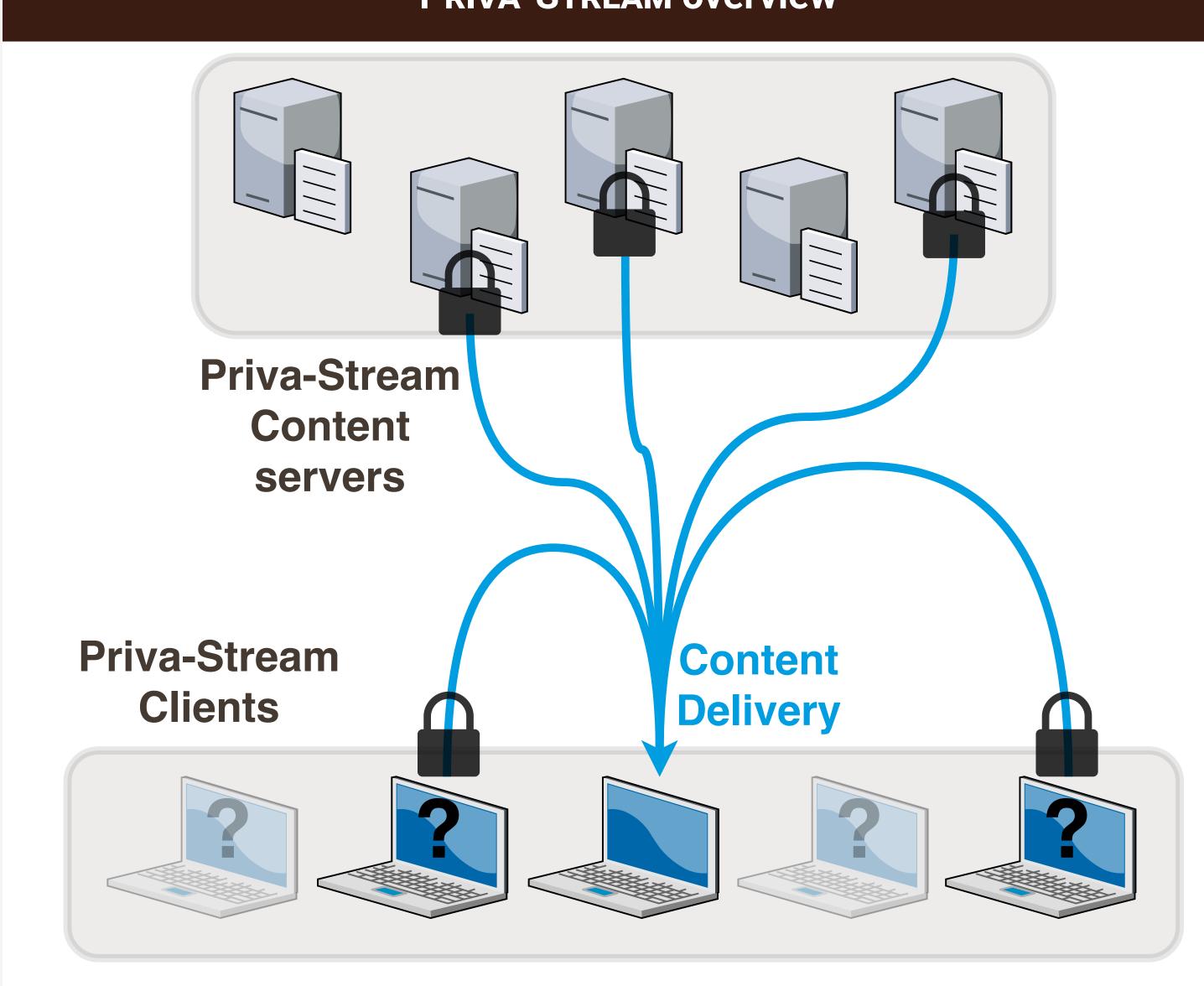




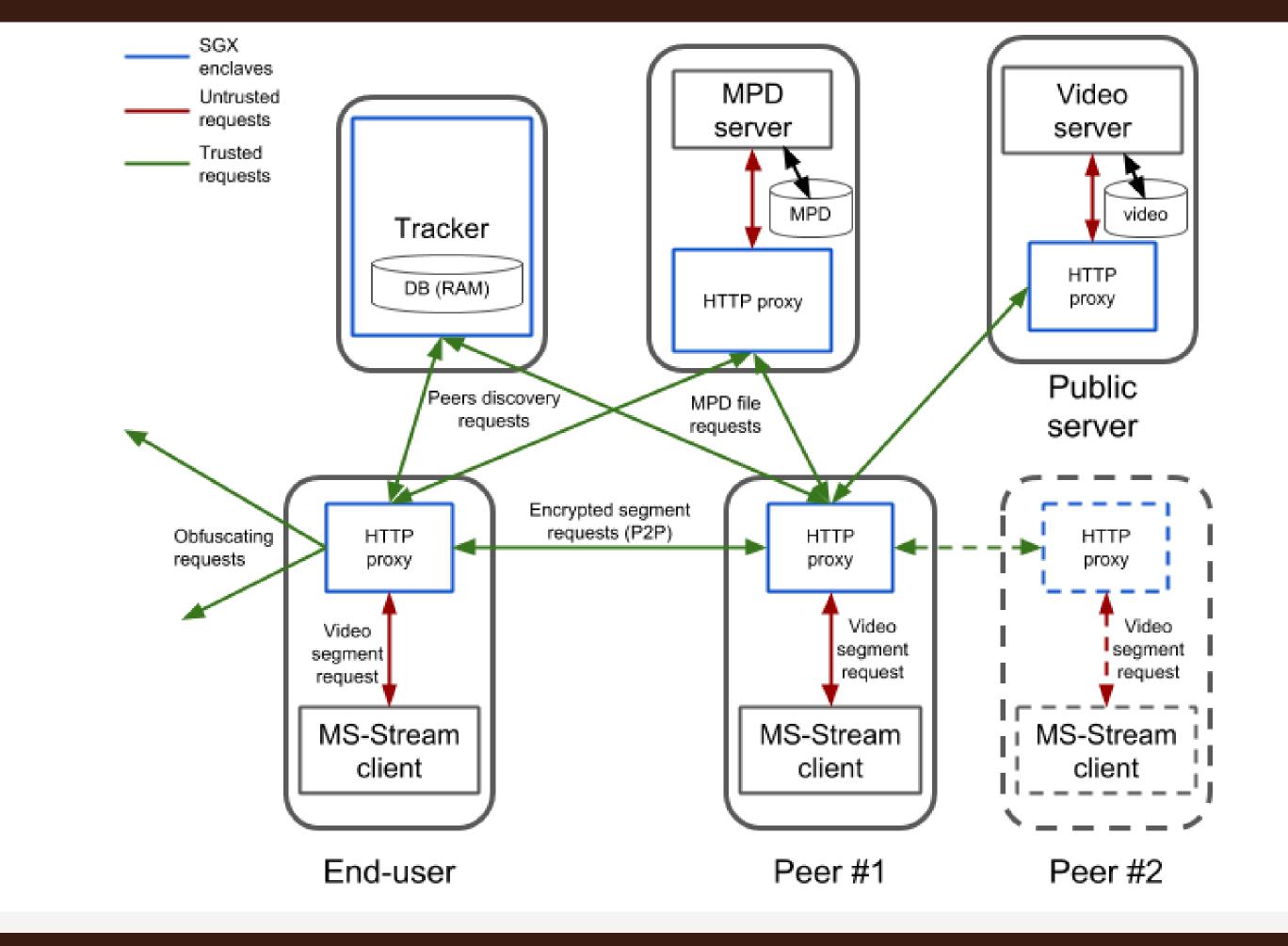
PRIVA-STREAM idea

- Reliability, QoE and scalability
 MS-Stream: Multiple-Source adaptive streaming over HTTP
- Incentive to contribute Rewarding: contributing users get a higher quality
- End-users privacy
 TEE (SGX): encryption, NAT and anonymity

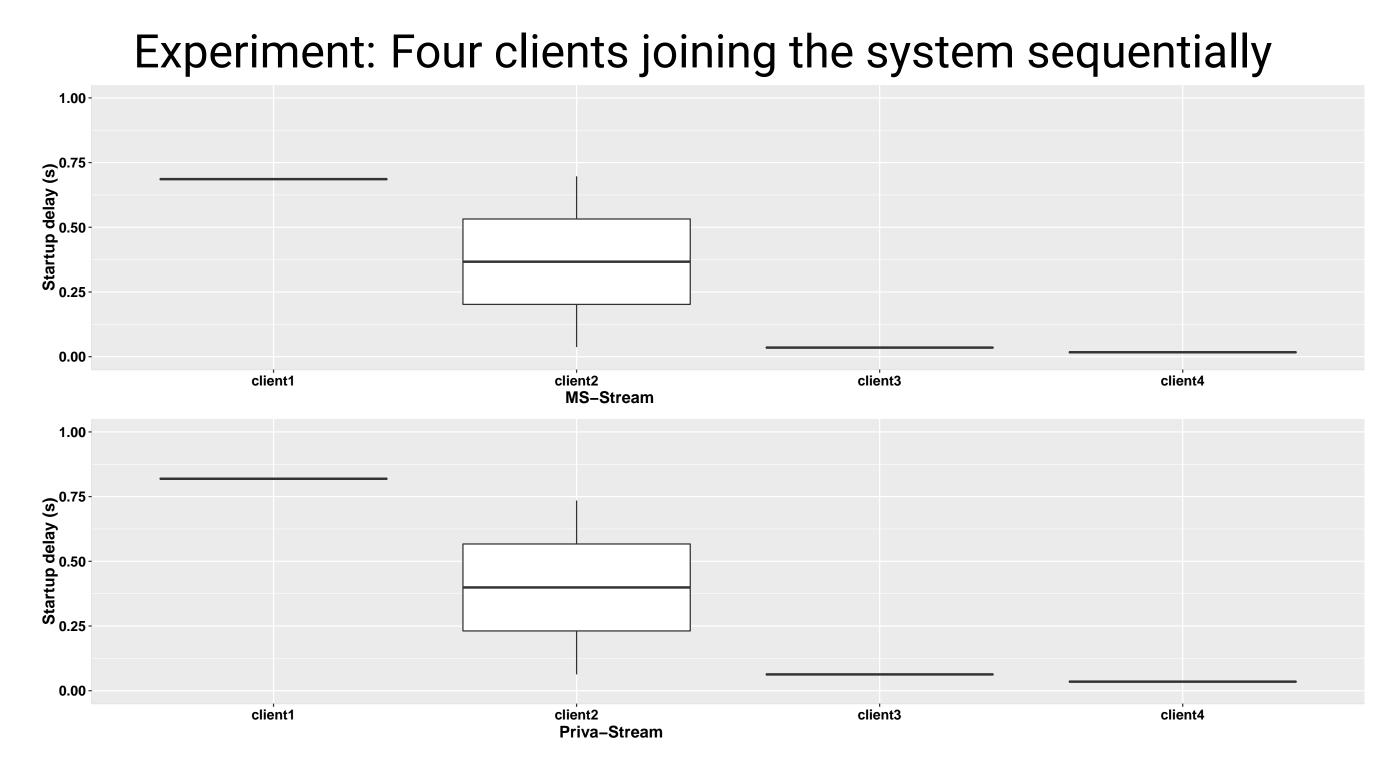
PRIVA-STREAM overview



PRIVA-STREAM technical description



PRIVA-STREAM early results



Startup delay (s) - MS-Stream (top) vs PRIVA-STREAM (bottom)

https://2025.compas-conference.fr/

Thursday April 4, 2019







