API Architectures for Path-Awareness

TAPS Architecture and API

Tommy Pauly PANRG IETF 101, March 2018, London Applications should expect multiple paths

Applications and protocols should handle path changes gracefully

APIs should not constrain future multi-path protocols

New drafts in TAPS Working Group

- 1. Architecture, to explain the approach and basic concepts (*draft-pauly-taps-arch-00*)
- 2. **API**, to explain in detail how applications use a TAPS system (*draft-trammell-taps-interface-00*)
- 3. **Implementation**, to explain in detail how to implement a TAPS system (*draft-brunstrom-taps-impl-00*)

Promoting Path Awareness

Path Selection Properties tell the TAPS system which paths to allow and prefer; also communicates policy for handling multi-path

Candidate Gathering and Racing selects and attempts multiple paths during connection establishment

Data transfer uses **Messages** which can help schedule data across paths

Path Properties Changed is an event to let an application know when properties of the connection have been updated

Next Steps

Please read the drafts and join us in the TAPS Working Group!

Are there concepts that need to be exposed to make applications functionally more path-aware?

Are there concepts that need to be constrained to make sure we don't limit future path-aware use cases?

TAPS API - PANRG - T. Pauly, Apple - IETF 101