

Transport Services WG (TAPS)

IETF-91 – Honolulu

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Agenda

0. Agenda bashing
1. Charter Overview (Falk) – 10 min
2. Terminology Review (Kühlewind) – 30 min
3. Discussion of `draft-fairhurst-taps-
transports-00` (Kühlewind) – 20 min
4. Hum: Adopt `draft-fairhurst-taps-
transports-00` as wg document? – 10 min

TAPS in a Nutshell

(See charter for more info)

PROBLEM

- Using IETF Transport Layer improvements has been challenging for application programmers
 - E.g., ECN, SCTP, DCCP, Lebat, UDP-Lite
- Stacks often ship only with TCP & UDP
- Firewalls & other middleboxes may block
- Making fallback work can be hard

TAPS Approach

- Describe an (abstract) interface for applications to make use of Transport Services
 - Examples:
 - Reliable delivery
 - Ordered delivery of data
 - Content privacy to in-path devices
 - Minimal latency
- Apps ask for what they want
- The network stack probes for what can be provided

Deliverables

1. Define a set of Transport Services, minimally existing IETF protocols and congestion control mechanisms used between two endpoints.
2. Specify the subset of those Transport Services that end systems supporting TAPS will provide, and give guidance on choosing among available mechanisms and protocols.
3. Specify experimental support mechanisms, explain how to select and engage an appropriate protocol and how to discover which protocols are available.

Out of Scope

- Signaling-based Quality-of-Service (QoS) mechanisms
- Definition of new encapsulations and tunneling mechanisms
- Extension, modification, or creation of transport protocols
- Language-specific APIs
- Detailed analysis of the security aspects of transport protocols

Milestones

- **Jun 2015** – Document defining a set of services provided by IETF transport protocols and congestion control mechanisms (Informational)
- **Dec 2015** - Document to the IESG recommending a minimal set of Transport Services that end systems should support (Informational)
- **Mar 2016** – Document specifying one or more methods to provide applications with the Transport Services identified by the WG (Experimental)
- **Mar 2016** - Recharter or conclude.