Session Substrate Protocol for User Datagrams (SPUD)

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Overview

Problem

Deployment of "new" (incl. existing but undeployed) transport protocols/extension limited by packet/flow modifications of middleboxes

that make implicit assumption about transport protocols or applications

- "TCP is congestion controlled"
- "UDP is attack traffic"
- "HTTP is web traffic"

Approach

New (UDP-based) transport encapsulation + in-band signaling

to declare assumptions and intentions

independent of the used transport or higher-layer protocol

Goal(s) of this BoF

- not to form a working group at this time
- discuss and narrow down on use cases
- discuss the scope of the work (and keep it small)
- determine interest and next steps for working on this problem:
 - take it to the list? WGs? RGs?

Agenda

- Chair's slide and Agenda Bashing (10min)
- B. Trammell: Introduction (15 min)
- T. Hardie: <u>draft-hardie-spud-use-cases</u> (10 min)
- J. Hildebrand: <u>draft-hildebrand-spud-prototype</u> (10 min)
- C. Huitema: <u>draft-huitema-spud-tls</u> (10 min)
- Questions and Discussion

Questions to ask

- What are the capabilities that we need and don't have today; and why do we need them?
- Are use cases well understood and relevant?
- Are there sufficient deployment incentives on endpoints? In the network?
- Should this be a UDP-based approach?
- What are the next steps?
- What other questions did we miss?