TAPS WG
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Features of the User Datagram Protocol (UDP) and Lightweight UDP (UDP- Lite) Transport Protocols

draft-fairhurst-taps-transports-usage-udp-01

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Draft overview

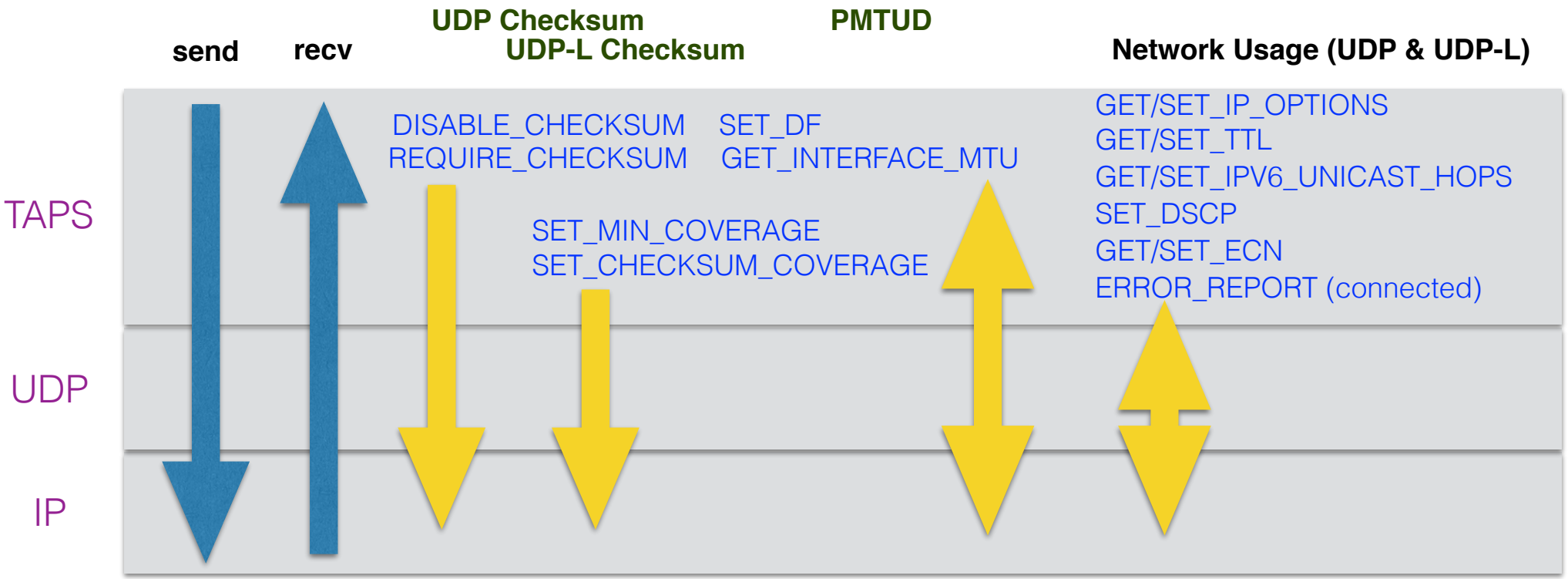
Describes how UDP & UDP-Lite expose services to an application.

How an application can configure and use features of a transport service.

Three stage “TAPS” process to reduce the documented UDP API into a set of primitives (draft-ietf-taps-transports-usage).

The primitives can be used to compare UDP/UDP-L (and it's transport features) with other Transports.

Describes how UDP & UDP-Lite ***expose services*** to an application.



UDP API Primitives

It's UDP: There are connected and unconnected models!!

Establishment:

connect

accept

Data:

send (connected or unconnected)

recv (connected or unconnected)

Maintenance:

set options

UDP Options

UDP Checksum methods

DISABLE_CHECKSUM, REQUIRE_CHECKSUM

UDP-L Checksum methods

SET_CHECKSUM_COVERAGE; SET_MIN_COVERAGE

Path MTU Discovery (UDP & UDP-L)

GET_INTERFACE_MTU; SET_DF

Network Usage (UDP & UDP-L)

SET/GET_IP_OPTIONS; SET/GET_TTL; SET/GET_IPV6_UNICAST_HOPS; SET_DSCP; SET/GET_ECN; ERROR_REPORT

Multicast UDP

See Appendix B

Some basic differences

(e.g., IPv6_MULTICAST_IP;

IP_MULTICAST_TTL/IPV6_MULTICAST_HOPS)

Group Membership Control

IPV6_MULTICAST_JOIN_GRP

IPV6_MULTICAST_ADD_MEMBERSHIP

IPV6_MULTICAST_LEAVE_GRP

IPV6_MULTICAST_DROP_MEMBERSHIP

… etc

Changes in rev -01

Added:

REQUIRE_CHECKSUM

Normative ref to: draft-ietf-tsvwg-rfc5405bis

Next Steps

Is this what is needed by the TAPS WG?

Please read and send comments to authors/TAPS list.

Is anyone interested in reviewing the multicast API?