TWAMP Light YANG data model

draft-mirsky-ippm-twamp-light-yang-02

Greg Mirsky
Tamas Elteto

IETF-95  April, 2016, Buenos Aires
What is addressed in -02

- YANG data model based on Appendix I of RFC 5073:
  - TWAMP-Light Session-Sender
  - TWAMP-Light Session Reflector
    - Stateless
    - Stateful
  - Clarified range to be used for UDP Port numbers, Source and Destination
SDN-based TWAMP-Light

TWAMP Light Reference Model
Session-Sender Light

- Five-tuple key for sessions
  - Destination IP address
  - Destination UDP port number
  - Source IP address
  - Source UDP port number
  - DSCP
- Authentication
- Number of packets to be sent
- Padding size
- Interval
- Operational state
- Maintenance statistics
Session-Reflector Light

- Stateless or Stateful
- DSCP Handling: Explicitly Configured or Copy from Received
- Five-tuple key for sessions
  - Destination IP address
  - Destination UDP port number
  - Source IP address
  - Source UDP port number
  - DSCP
- Authentication
- Operational state
- Maintenance statistics
  - Individual and aggregate
UDP Port numbers

- RFC 4656 notes:
  OWAMP test traffic is hard to detect because it is simply a stream of UDP packets from and to negotiated port numbers, with potentially nothing static in the packets (size is negotiated, as well).

- Hence we conclude that UDP port numbers available for use by OWAMP/TWAMP test packets come only from the Dynamic and/or Private ports range (49152-65535), not from System Ports, nor from User Ports ranges.
Next steps

• Work on open issues
  – Measurement Data Model
  – DSCP and ECN Monitoring
  – Registered UDP port number for Light Reflector

• Comments are always welcome
• Contributions and collaboration