UDP-based Transport for Configured Subscriptions

draft-unya-netconf-udp-notif-00

G. Zheng, Huawei
T. Zhou, Huawei
T. Graf, Swisscom
P. Francois, INSA-Lyon
P. Lucente, NTT
Agenda

• Motivation
• Solution overview
• Status
• What's next?
Motivation

Objective

• Publication of massive amounts of networking device data
• High volume, fine granularity
• Enabling line cards to directly send out data, need for low performance impact

Applicability

• Controlled environments
• Reasonable amount of loss is acceptable → metrics for accounting

UDP based transport proposed
Solution overview

Configured subscriptions
• Can be used in conjunction with "Subscription to Distributed Notifications"
  draft-unyte-netconf-distributed-notif-00
• Dynamic subscriptions taken out from earlier versions

UDP Transport
• Header with options
• Fragmentation option defined for verbose PDU encodings
• GPB, CBOR, XML and JSON encodings considered
Status

Security considerations
- Controlled environments...
- DTLS taken out from this draft, maybe to be revived in a separate draft

Congestion control
- Congestion can be detected at the collector with "message-id". Same as for IPFIX
- OPS's job to provision network path and check on it

Implementation by Huawei tested within Swisscom labs
What's next?

WG DOC?

• A lot of adaptation were done based on input from chairs and the working group feedback of IETF 103-105 (thanks !) to aim for simplicity and clarity.
• We think we got to the point where WG Doc call makes sense

Thanks !