UDP-based Transport for Configured Subscriptions
draft-ietf-netconf-udp-notif-12

UDP-based protocol for YANG notifications
to collect data from networking devices

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UDP-based Transport for Configured Subscriptions

Status

• Received comments from Transport Directorate Review
  • Thanks Michael Tuxen for the review

• Minor but necessary issues addressed following the tsvdir review.

• udp-client-grouping has been externalised to draft-ietf-netconf-udp-client-server (adopted) and used in the udp-notif YANG module
UDP-based Transport for Configured Subscriptions

Minor changes

- When S flag is enabled, the Private Encoding Option SHOULD be present in the header

- Message ID is wrapped around

- The binary fields are in Network Byte Order

- Segment numbers cannot be wrapped around

- The receiver SHOULD support the reception of unordered segments

- Added recommendation of using “small” Notifications. If the Notification is large, use HTTPS-notif (Section 5.2. Message Size) [Feedback IETF 118]

- Removed generic udp-client-grouping from the draft
UDP-based Transport for Configured Subscriptions

Issues & next steps

• No remaining issues
• Waiting for draft-ietf-netconf-udp-client-server
  • Should UDP-notif be configurable to send Notifications to a Hostname?
• Seeking more feedback or WGLC depending on draft-ietf-netconf-udp-client-server
Backup

Depending on udp-client-server-grouping draft
UDP-based Transport for Configured Subscriptions
YANG module for UDP-notif configuration

module: ietf-udp-notif-transport

augment /sn:subscriptions/sn:receiver-instances
   /sn:receiver-instance/sn:transport-type:
      +--rw udp-notif-receiver
         +--rw remote-address {inet:ip-address-no-zone}
         +--rw remote-port {inet:port-number}
         +--rw dtls! {dtls13}?
            +--rw client-identity!
               | +--rw (auth-type)!
               |   +--rw (certificate) {client-ident-x509-cert}?
               |   +--rw (raw-public-key) {client-ident-raw-public-key}?
               |   +--rw (tls13-epsk) {client-ident-tls13-epsk}?
               +--rw server-authentication
                  | +--rw ca-certs! {server-auth-x509-cert}?
                  |   +--rw (local-or-truststore)
                  |   +--rw ee-certs! {server-auth-x509-cert}?
                  |   +--rw (local-or-truststore)
                  +--rw (raw-public-keys! {server-auth-raw-public-key}?
                  +--rw (local-or-truststore)
                  +--rw (tls13-epsk)?
                  +--rw (server-auth-tls13-epsk)?
                  +--rw hello-params {tlscmn:hello-params}?
                  +--rw tls-versions
                     | +--rw tls-version* identityref
                     | +--rw cipher-suites* identityref
                     | +--rw keepalives {tls-client-keepalives}?
                     +--rw peer-allowed-to-send? empty
                     +--rw test-peer-aliiveness!
                     +--rw max-wait? uint16
                     +--rw max-attempts? uint8
                     +--rw enable-segmentation? boolean {segmentation}?
                     +--rw max-segment-size? uint32 {segmentation}?

Conservative “inet:ip-address-no-zone”

Default port need to be refined if generic udp-client-grouping is used
- Ask for a default UDP-notif port to IANA?

Should the YANG continue using the current types following the feedback received from the WG OR use directly the generic grouping instead?