YANG Groupings for UDP Clients and UDP Servers

draft-ietf-netconf-udp-client-server-03/04

Two YANG 1.1 modules
to support the configuration of UDP clients and UDP servers

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YANG Groupings for UDP Clients and UDP Servers

Changes on -03 and -04

OLD

```
module: ietf-udp-client

  grouping udp-client-grouping:
    +-- remote-address    inet:ip-address-no-zone
    +-- remote-port?      inet:port-number
```

```
module: ietf-udp-server

  grouping udp-server-grouping:
    +-- local-address    inet:ip-address-no-zone
    +-- local-port?      inet:port-number
```

NEW

```
module: ietf-udp-client

  grouping udp-client-grouping:
    +-- remote-address    inet:host
    +-- remote-port?      inet:port-number
    +-- local-address?    inet:ip-address {local-binding-supported}?
    +-- local-port?       inet:port-number {local-binding-supported}?
```

```
module: ietf-udp-server

  grouping udp-server-grouping:
    +-- local-bind* [local-address]
       +-- local-address    inet:ip-address
       +-- local-port?      inet:port-number
```

YANG Groupings for UDP Clients and UDP Servers

Changes and Next steps

Changes in -03/-04

- UDP groupings mimick the tcp client-server groupings defined in draft-ietf-netconf-tcp-client-server according to the WG feedback from IETF 119.
- Added examples how the groupings can be applied.
- Removed Default port “0” to allow more flexibility as requested from Med.
  - Many thanks for the review!
- All comments are addressed

Next Steps

➢ **Requesting working group last call.**

UDP-based Transport for Configured Subscriptions

draft-ietf-netconf-udp-notif-13

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

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UDP-based Transport for Configured Subscriptions

Changes in -13/-14 and next steps

- ietf-udp-notif-transport.yang is using now the generic UDP client groupings from draft-ietf-netconf-udp-client-server.
  - A node is now capable of sending UDP-notif notifications to a `inet:host` rather than only to `inet:ip-address-no-zone` and is able to set its local address.
- Since draft-ietf-netconf-udp-client-server specifies the Layer 4 port as default, Section 8.4 has been added to request IANA for a default port. → **Rollbacked to mandatory port as requested by Med**
  - Thanks Med for the feedback!
- No pending items. All working group comments are addressed.

Next Steps

➢ **Requesting working group last call.**

UDP-based Transport for Configured Subscriptions

YANG module for UDP-notif configuration

```
module: ietf-udp-notif-transport

  augment /sn:subscriptions/snr:receiver-instances
            /snr:receiver-instance/snr:transport-type:
    +--:(udp-notif)
       +--rw udp-notif-receiver
          +--rw remote-address          inet:host
          +--rw remote-port             inet:port-number
          +--rw local-address?          inet:ip-address
          |       {local-binding-supported}?
          +--rw local-port?             inet:port-number
          |       {local-binding-supported}?
          +--rw dtls! {dtls13}?
          |  +--rw client-identity!
          |  |  +--rw (auth-type)
          |  |     +--:(certificate) {client-ident-x509-cert}?
          |  |     |     ...
          |  |     +--:(raw-public-key)
          |  |     |        {client-ident-raw-public-key}?
          |  |     |     ...
          |  |     +--:(tls13-epsk) {client-ident-tls13-epsk}?
          |  |           ...
          |  +--rw server-authentication
          |  |  +--rw ca-certs! {server-auth-x509-cert}?
          |  |  |  +--rw (inline-or-truststore)
          |  |  |        ...
          |  |  +--rw ee-certs! {server-auth-x509-cert}?
          |  |  |  +--rw (inline-or-truststore)
          |  |  |        ...
          |  |  +--rw raw-public-keys! {server-auth-raw-public-key}?
          |  |  |  +--rw (inline-or-truststore)
          |  |  |        ...
          |  |  +--rw tls13-epsks?       empty
          |  |          {server-auth-tls13-epsk}?
          |  +--rw hello-params {tlscmn:hello-params}?
          |  |  +--rw tls-versions
          |  |  |  +--rw min?   identityref
          |  |  |  +--rw max?   identityref
          |  |  +--rw cipher-suites
          |  |     +--rw cipher-suite*
          |  |             tlscsa:tls-cipher-suite-algorithm
          |  +--rw keepalives {tls-client-keepalives}?
          |     +--rw peer-allowed-to-send?   empty
          |     +--rw test-peer-aliveness!
          |        +--rw max-wait?       uint16
          |        +--rw max-attempts?   uint8
          +--rw enable-segmentation?   boolean {segmentation}?
          +--rw max-segment-size?      uint32 {segmentation}?
```

Subscription to Distributed Notifications

draft-ietf-netconf-distributed-notif-09

Extends YANG notification subscription to allow metrics being published directly from processors on line cards

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Subscription to Distributed Notifications

Changes and Next steps

Changes in -09

- Updated implementation status section.
- Same as for subscription state change, push-update and push-change-update are now augmented with message-publisher-id as well.
- Message-publisher-id augmentation is therefore removed in draft-tgraf-netconf-notif-sequencing-06.
  - Leads to one document describing the augments for message-publisher-id.
- No pending items. All working group comments are addressed.

Next Steps

➢ **Requesting working group last call.**

Subscription to Distributed Notifications

YANG module

```
module: ietf-distributed-notif

  augment /sn:subscriptions/sn:subscription:
    +--ro message-publisher-ids*   uint32
  augment /sn:subscription-started:
    +--ro message-publisher-ids*   uint32
  augment /sn:subscription-modified:
    +--ro message-publisher-ids*   uint32
  augment /sn:establish-subscription/sn:output:
    +--ro message-publisher-ids*   uint32
  augment /yp:push-update:
    +--ro message-publisher-id?   uint32
  augment /yp:push-change-update:
    +--ro message-publisher-id?   uint32
```