

YANG Groupings for QUIC clients and QUIC servers

draft-andersson-netconf-quic-client-server-00

IETF 120 NETCONF WG 2025-07-25

Per Andersson <per.ietf@ionio.se>

Intro

- Defining reusable YANG groupings for the QUIC protocol
- Reusing tls-client-server and udp-client-server
- Nothing more yet

Solution overview

- Use TLS and UDP groupings
- Require TLS 1.3
 - if-feature “tlscmn:tls13 not tlscmn:tls12”

YANG models

name: ietf-quic-client

namespace: urn:ietf:params:xml:ns:yang:ietf-quic-client

prefix: quicc

name: ietf-quic-server

namespace: urn:ietf:params:xml:ns:yang:ietf-quic-server

prefix: quics

ietf-quic-client

```
grouping quic-client-grouping:
```

```
+---u tlsc:tls-client-grouping
```

```
|      {tlscmn:tls13 and not tlscmn:tls12}?
```

```
+---u udpc:udp-client-grouping
```

ietf-quic-server

```
grouping quic-server-grouping:  
  +---u tlss:tls-server-grouping  
  |      {tlscmn:tls13 and not tlscmn:tls12}?  
  +---u udps:udp-server-grouping
```

Comparison

http-client-server

grouping http-server-stack-grouping:

+-- (transport)

+--:(quic) {quic-supported}?

+-- quic

+-- udp-server-parameters

| +---u udps:udp-server-grouping

+-- tls-server-parameters

| +---u tlss:tls-server-grouping

+-- http-server-parameters

+---u http-server-grouping

quic-client-server

grouping quic-server-grouping:

+---u tlss:tls-server-grouping

| {tlscmn:tls13 and not tlscmn:tls12}?

+---u udps:udp-server-grouping

NETCONF over QUIC

- Update netconf-client-server?
 - Stop to update...
- Augment netconf-client-server
 - No need to stop!

Open questions

- What other parameters are valuable to add?
- What is the correct level of configuration options exposure?

Next steps

- Work on questions raised in review
- More feedback from the WG
- Valuable to update other documents?
- Adopt document

Thank you!

Questions?

Suggested changes

- Consider updating draft-ietf-netconf-udp-client-server
 - Reusable UDP+(D)TLS groupings
 - Define dtls1.2/1.3/quic features
- Arrange the DTLS container in draft-ietf-netconf-udp-notif
 - Use groupings in draft-ietf-netconf-udp-client-server