

YANG Groupings for UDP Clients and UDP Servers

draft-ietf-netconf-udp-client-server-06

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

A. Huang Feng, INSA-Lyon
P. Francois, INSA-Lyon
K. Watsen, Watsen Networks

March 18th 2025

YANG Groupings for UDP Clients and UDP Servers

Groupings (*No changes since -05*)

Client

```
module: ietf-udp-client
```

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

Server

```
module: ietf-udp-server
```

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

To be used

- configuring a UDP client and UDP server
- standalone or with other protocols

Note:

- we removed “-grouping” and “-supported” suffixes (as requested by the WG)

YANG Groupings for UDP Clients and UDP Servers

Status

- WGLC ended 20th February (closed already)
- Thanks to Thomas, Benoit, Med, Andy, Mahesh and Rob for the review and comments during the WGLC
- Changes:
 - Editorial changes (+ add consistency with RFC 9643 [TCP groupings])
 - Server grouping: explicit that the remote-address and local-address must be part of the same address family
 - New section with “Adherence to NMDA”
 - Security Considerations updated with latest I-D.ietf-netmod-rfc8407bis template
- Ready for next steps (but got a last-minute discussion :))

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One last discussion with Rob

- With the current implementation, the server cannot have a 'local-address' bound to multiple 'local-port's
 - Reason: only local-address is present on the 'local-bind' list
 - Note this is implemented similarly in TCP server grouping
- Question to the WG:
 - Is this a valid use case?

Current iteration

```
module: ietf-udp-server

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

Discussed on the ML

```
module: ietf-udp-server

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

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One last discussion with Rob

- A way to fix this is changing local-port to a 'leaf-list' instead of a 'leaf'

Positives

- A server can be bound to a same IP address and more than one 'local-port'

Drawbacks

- Not consistent anymore with TCP server grouping

Current iteration

```
module: ietf-udp-server

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

Proposal

```
module: ietf-udp-server

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

BACKUP

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: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¶
```

NEW

```
module: ietf-udp-client
```

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

```
module: ietf-udp-server
```

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