



@ FILE NAME: M_CTC_ID_009.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for Garuda_RevD: v5.0.2

Test Description : This test validates that the O-RU manages the connection supervision process correctly.

***** **Connect to the NETCONF Server** *****

> connect --ssh --host 192.168.4.40 --port 830 --login operator

Interactive SSH Authentication

Type your password:

Password:

> status

Current NETCONF session:

ID : 4

Host : 192.168.4.40

Port : 830

Transport : SSH

Capabilities:

urn:ietf:params:netconf:base:1.0 urn:ietf:params:netconf:base:1.1 urn:ietf:params:netconf:capability:writable-running:1.0
urn:ietf:params:netconf:capability:candidate:1.0 urn:ietf:params:netconf:capability:rollback-on-error:1.0
urn:ietf:params:netconf:capability:validate:1.1 urn:ietf:params:netconf:capability:startup:1.0 urn:ietf:params:netconf:capability:xpath:1.0
urn:ietf:params:netconf:capability:with-defaults:1.0?basic-mode=explicit&also-supported=report-all,report-all-tagged,trim,explicit
urn:ietf:params:netconf:capability:notification:1.0 urn:ietf:params:netconf:capability:interleave:1.0
urn:ietf:params:xml:ns:yang:ietf-yang-metadata?module=ietf-yang-metadata&revision=2016-08-05
urn:ietf:params:xml:ns:yang:1?module=yang&revision=2017-02-20
urn:ietf:params:xml:ns:yang:ietf-inet-types?module=ietf-inet-types&revision=2013-07-15
urn:ietf:params:xml:ns:yang:ietf-yang-types?module=ietf-yang-types&revision=2013-07-15
urn:ietf:params:netconf:capability:yang-library:1.1?revision=2019-01-04&content-id=61
urn:sysrepo:plugind?module=sysrepo-plugind&revision=2020-12-10
urn:ietf:params:xml:ns:yang:ietf-netconf-acm?module=ietf-netconf-acm&revision=2018-02-14
urn:ietf:params:xml:ns:netconf:base:1.0?module=ietf-netconf&revision=2013-09-29&features=writable-running,candidate,rollback-on-error,validate,startup,url,xpath urn:ietf:params:xml:ns:yang:ietf-netconf-with-defaults?module=ietf-netconf-with-defaults&revision=2011-06-01
urn:ietf:params:xml:ns:yang:ietf-netconf-notifications?module=ietf-netconf-notifications&revision=2012-02-06
urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?module=ietf-netconf-monitoring&revision=2010-10-04
urn:ietf:params:xml:ns:netconf:notification:1.0?module=notifications&revision=2008-07-14
urn:ietf:params:xml:ns:netmod:notification?module=nc-notifications&revision=2008-07-14
urn:ietf:params:xml:ns:yang:ietf-x509-cert-to-name?module=ietf-x509-cert-to-name&revision=2014-12-10
urn:ietf:params:xml:ns:yang:iana-crypt-hash?module=iana-crypt-hash&revision=2014-08-06 urn:notification_history?module=notification_history
urn:ietf:params:xml:ns:yang:iana-if-type?module=iana-if-type&revision=2017-01-19

```
=====
> subscribe
=====
```

Ok

```
=====
TER NETCONF Client responds with <rpc supervision-watchdog-reset></rpc> to the O-RU NETCONF Server
=====
```

```
=====
> user-rpc
=====
```

```
=====
***** Replace with below xml *****
=====
```

```
<supervision-watchdog-reset xmlns="urn:o-ran:supervision:1.0">
  <supervision-notification-interval>10</supervision-notification-interval>
  <guard-timer-overhead>1</guard-timer-overhead>
</supervision-watchdog-reset>
```

```
=====
O-RU NETCONF Server sends a reply to the TER NETCONF Client
<rpc-reply><next-update-at>date-time</next-update-at></rpc-reply>
=====
```

```
<nc:rpc-reply xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0"
message-id="urn:uuid:fcc89952-b868-4422-8f67-b3bb305f7b0f"><next-update-at
xmlns="urn:o-ran:supervision:1.0">2027-04-14T04:06:40Z</next-update-at></nc:rpc-reply>
```

SYSTEM LOGS

Apr 14 04:06:21 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:21 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:21 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
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Apr 14 04:06:25 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
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Apr 14 04:06:26 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:26 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:26 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:26 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:27 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:27 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:27 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:27 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:28 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:28 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:28 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:28 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:29 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:29 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:29 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 14 04:06:29 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Accepted a connection on :::830.
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Session 97 (user "root", CID 1) created.
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-service" of subtype "ssh-userauth".
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-auth" of subtype "password".
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: User "operator" authenticated.
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-channel-open" of subtype "session".
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-channel" of subtype "subsystem".
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Session 98 (user "root", CID 1) created.
Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: There are no subscribers for "ietf-netconf-notifications" notifications.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Generated new event (netconf-session-start).

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/notifications:create-subscription" with ID 1 priority 0 for 1 subscribers.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Processing "/notifications:create-subscription" "rpc" event with ID 1 priority 0 (remaining 1 subscribers).

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 1 priority 0 (remaining 0 subscribers).

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 1 priority 0 succeeded.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Session 4: thread 1 event new RPC.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/o-ran-supervision:supervision-watchdog-reset" with ID 1 priority 0 for 1 subscribers.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Processing "ietf-netconf-monitoring" "operational" event with ID 1.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Successful processing of "operational" event with ID 1.

Apr 14 04:06:30 garuda user.notice supervision[1227]: RPC #1 recieved from "operator" user. xpath -> /o-ran-supervision:supervision-watchdog-reset

Apr 14 04:06:30 garuda user.info supervision[1227]: "watchdog-reset" received from user 'operator'. Expecting next one at 2027-04-14T04:06:40Z

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 1 priority 0 succeeded.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Session 4: thread 1 event new RPC.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Session 4: thread 1 event new RPC.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Session 4: thread 1 event session terminated.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: There are no subscribers for "ietf-netconf-notifications" notifications.

Apr 14 04:06:30 garuda daemon.info netopeer2-server[852]: Generated new event (netconf-session-end).

Apr 14 04:06:31 garuda auth.info sshd[2656]: Accepted password for operator from 192.168.4.15 port 49816 ssh2

Apr 14 04:06:31 garuda authpriv.info sshd[2656]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result : The TER NETCONF Client does not issue <rpc supervision-watchdog-reset></rpc> to the O-RU NETCONF Server and causes the watchdog timer to expire on the O-RU.

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***** **Actual Result** *****

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M-Plane Connection Supervision (negative case) = SUCCESS

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