



@ FILE NAME: M_CTC_ID_013_.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for Garuda_RevD: v5.0.0

Test Description : The minimum functions of the TER described in section 2.1 that support validation of the M-Plane are operational, configured and connected to the O-RU

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

```
> connect --ssh --host 192.168.4.46 --port 830 --login operator
```

Interactive SSH Authentication

Type your password:

Password:

> status

Current NETCONF session:

ID : 12

Host : 192.168.4.46

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

=====

Step 1 The TER NETCONF Client sends the O-RU NETCONF Server a command to get the active-alarm-list.

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=====

> get --filter-xpath /o-ran-fm:active-alarm-list/active-alarms

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```
<?xml version="1.0" ?>
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
  <active-alarm-list xmlns="urn:o-ran:fm:1.0">
    <active-alarms>
      <fault-id>17</fault-id>
      <fault-source>Module</fault-source>
      <affected-objects>
        <name>Sync Module</name>
      </affected-objects>
      <fault-severity>MAJOR</fault-severity>
      <is-cleared>>false</is-cleared>
      <fault-text>No external sync source</fault-text>
      <event-time>2022-08-02T18:41:05Z</event-time>
    </active-alarms>
  </active-alarm-list>
</data>
```

SYSTEM LOGS

```
Aug 2 18:42:43 garuda daemon.info netopeer2-server[846]: Session 11: thread 2 event new RPC.
Aug 2 18:42:43 garuda daemon.info netopeer2-server[846]: Session 11: thread 2 event session terminated.
Aug 2 18:42:43 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.
Aug 2 18:42:43 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-end).
Aug 2 18:42:43 garuda user.notice SYNCMNGR[1160]: Received message from S-Plane
Aug 2 18:42:43 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
Aug 2 18:42:43 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
Aug 2 18:42:44 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
Aug 2 18:42:44 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
Aug 2 18:42:45 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
Aug 2 18:42:45 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
Aug 2 18:42:46 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
Aug 2 18:42:46 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
Aug 2 18:42:47 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
Aug 2 18:42:47 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Accepted a connection on :::830.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Session 1731 (user "root", CID 1) created.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-service" of subtype "ssh-userauth".
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-auth" of subtype "password".
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: User "operator" authenticated.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel-open" of subtype "session".
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel" of subtype "subsystem".
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Session 1732 (user "root", CID 1) created.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-start).
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 2 priority 0 succeeded.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Session 12: thread 1 event new RPC.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:get" with ID 761 priority 0 for 1 subscribers.
Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:get" "rpc" event with ID 761 priority 0 (remaining 1 subscribers).
```

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Published event "operational" "/o-ran-fm:active-alarm-list/active-alarms" with ID 1.

Aug 2 18:42:48 garuda user.info FAULT MANAGEMENT[893]: ===== DATA FOR "o-ran-fm"

"/o-ran-fm:active-alarm-list/active-alarms" REQUESTED=====

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Event "operational" with ID 1 succeeded.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 761 priority 0 (remaining 0 subscribers).

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 761 priority 0 succeeded.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Session 12: thread 0 event new RPC.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Session 12: thread 2 event new RPC.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Session 12: thread 2 event session terminated.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 2 18:42:48 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-end).

Aug 2 18:42:49 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 18:42:49 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 18:42:50 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 18:42:50 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 18:42:51 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 18:42:51 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 18:42:52 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 18:42:52 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 18:42:53 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 18:42:53 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 18:42:53 garuda auth.info sshd[7330]: Accepted password for operator from 192.168.4.15 port 59674 ssh2

Aug 2 18:42:53 garuda authpriv.info sshd[7330]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result : The O-RU NETCONF Server responds with <rpc-reply><data> where <data> contains at least the same alarm as reported in measurement atleast alarm 17: No external sync source

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

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ALARM_17 = SUCCESS

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