



**@ FILE NAME: M\_CTC\_ID\_013.txt**

**@ TEST SCOPE: M PLANE O-RAN CONFORMANCE**

**@ Software Release for Garuda\_RevD: v5.0.2**

**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 192.168.4.40 --port 830 --login operator
```

```
Interactive SSH Authentication
```

```
Type your password:
```

```
Password:
```

```
> status
```

```
Current NETCONF session:
```

```
ID      : 12
```

```
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
```

=====

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

=====

=====

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

=====

```
<?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>2022-08-19T12:23:37Z</event-time>
    </active-alarms>
  </active-alarm-list>
</data>
```

=====

**##### SYSTEM LOGS #####**

=====

Aug 19 12:25:15 garuda user.notice SYNCMNGR[1176]: Received message from S-Plane

Aug 19 12:25:15 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:15 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:15 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:15 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:16 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:16 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:16 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:16 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:17 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:17 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:17 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:17 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:18 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:18 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:18 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:18 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Accepted a connection on :::830.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Session 1600 (user "root", CID 1) created.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-service" of subtype "ssh-userauth".

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-auth" of subtype "password".

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: User "operator" authenticated.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-channel-open" of subtype "session".

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-channel" of subtype "subsystem".

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Session 1601 (user "root", CID 1) created.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Generated new event (netconf-session-start).

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Event "rpc" with ID 2 priority 0 succeeded.

Aug 19 12:25:19 garuda daemon.info netopeer2-server[853]: Session 12: thread 3 event new RPC.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Published event "rpc" "/ietf-netconf:get" with ID 683 priority 0 for 1 subscribers.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Processing "/ietf-netconf:get" "rpc" event with ID 683 priority 0 (remaining 1 subscribers).

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Published event "operational" "/o-ran-fm:active-alarm-list/active-alarms" with ID 1.

Aug 19 12:25:20 garuda user.info FAULT MANAGEMENT[909]: ===== DATA FOR "o-ran-fm"  
"/o-ran-fm:active-alarm-list/active-alarms" REQUESTED=====

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Event "operational" with ID 1 succeeded.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Successful processing of "rpc" event with ID 683 priority 0 (remaining 0 subscribers).

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Event "rpc" with ID 683 priority 0 succeeded.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Session 12: thread 2 event new RPC.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Session 12: thread 4 event new RPC.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Session 12: thread 4 event session terminated.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Generated new event (netconf-session-end).

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:20 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:21 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:21 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:21 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:21 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:22 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:22 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:22 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:22 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:23 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:23 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:23 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:23 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:24 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:24 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:24 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:24 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:25 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:25:25 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:25:25 garuda authpriv.debug sshd[6151]: pam\_unix(sshd:account): account operator has password changed in future

Aug 19 12:25:25 garuda auth.info sshd[6151]: Accepted password for operator from 192.168.4.15 port 48860 ssh2

Aug 19 12:25:25 garuda authpriv.info sshd[6151]: 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**

=====

\*\*\*\*\* **Actual Result** \*\*\*\*\*

=====

=====

**ALARM\_17 = SUCCESS**

=====