



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

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

**@ Software Release for MC1: v1.0.5**

**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 \*\*\*\*\***

=====

> listen --ssh --login operator

Waiting 60s for an SSH Call Home connection on port 4334...

The authenticity of the host '::ffff:192.168.4.43' cannot be established.

ssh-rsa key fingerprint is c0:7c:63:5d:4b:85:e7:27:e0:7e:f0:44:38:4e:ab:83

Interactive SSH Authentication done.

> status

Current NETCONF session:

ID : 51

Host : 192.168.4.43

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=63

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,valid

ate,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
```

=====

## =====

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

=====

Oct 29 23:14:09 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 23:14:09 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).

Oct 29 23:14:10 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 23:14:10 mcb1 daemon.info netopeer2-server[986]: Successfully connected to 192.168.4.15:4334 over IPv4.

Oct 29 23:14:10 mcb1 daemon.info netopeer2-server[986]: Session 627 (user "root", CID 1) created.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-auth" of subtype "password".

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: User "operator" authenticated.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel-open" of subtype "session".

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session 51 established.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Session 628 (user "root", CID 1) created.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-start).

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 122 priority 0 for 1 subscribers.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 122 priority 0 (remaining 1 subscribers).

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 122 priority 0 (remaining 0 subscribers).

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 122 priority 0 succeeded.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Session 51: thread 2 event new RPC.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 123 priority 0 for 1 subscribers.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 123 priority 0 (remaining 1 subscribers).

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 19.

Oct 29 23:14:11 mcb1 user.notice fw\_manager[1067]: RPC #19 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Event "operational" with ID 19 succeeded.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "VVDN=O-RU", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "STL=O-RU", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "STL=O-RU", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 123 priority 0 (remaining 0 subscribers).

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 123 priority 0 succeeded.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "VVDN=O-RU", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "STL=O-RU", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "STL=O-RU", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Session 51: thread 2 event new RPC.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get-config" with ID 23 priority 0 for 1 subscribers.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get-config" "rpc" event with ID 23 priority 0 (remaining 1 subscribers).

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 23 priority 0 (remaining 0 subscribers).

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 23 priority 0 succeeded.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: There is no leafref  
"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:11 mcb1 daemon.info netopeer2-server[986]: Session 51: thread 3 event new RPC.

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/notifications:create-subscription" with ID 13 priority 0 for 1 subscribers.

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: Processing "/notifications:create-subscription" "rpc" event with ID 13 priority 0 (remaining 1 subscribers).

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 13 priority 0 (remaining 0 subscribers).

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 13 priority 0 succeeded.

Oct 29 23:14:12 mcb1 daemon.info netopeer2-server[986]: Session 51: thread 2 event new RPC.

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 124 priority 0 for 1 subscribers.

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 124 priority 0 (remaining 1 subscribers).

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Published event "operational" "/o-ran-fm:active-alarm-list/active-alarms" with ID 11.

Oct 29 23:14:13 mcb1 user.info FAULT MANAGEMENT[1046]: ===== DATA FOR "o-ran-fm"

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

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Event "operational" with ID 11 succeeded.

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 124 priority 0 (remaining 0 subscribers).

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 124 priority 0 succeeded.

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 23:14:13 mcb1 daemon.info netopeer2-server[986]: Session 51: thread 2 event new RPC.

Oct 29 23:14:15 mcb1 user.notice SYNCMNGR[1313]: Received message from S-Plane

Oct 29 23:14:18 mcb1 daemon.info netopeer2-server[986]: Session 51: thread 2 event new RPC.

Oct 29 23:14:18 mcb1 daemon.info netopeer2-server[986]: Session 51: thread 2 event session terminated.

Oct 29 23:14:18 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:14:18 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-end).

Oct 29 23:14:18 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session terminated.

Oct 29 23:14:18 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 23:14:18 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).

Oct 29 23:14:18 mcb1 auth.info sshd[12711]: Accepted password for operator from 192.168.4.15 port 58716 ssh2

Oct 29 23:14:18 mcb1 authpriv.info sshd[12711]: 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** \*\*\*\*\*

=====

=====

\*\*\*\*\* **FAIL\_REASON** \*\*\*\*\*

=====

```
<?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>18</fault-id>
      <fault-source>Module or antenna line</fault-source>
      <affected-objects>
        <name>Sync Module</name>
      </affected-objects>
      <fault-severity>CRITICAL</fault-severity>
      <is-cleared>>false</is-cleared>
      <fault-text>Synchronization Error</fault-text>
      <event-time>2103-10-29T22:14:31Z</event-time>
    </active-alarms>
    <active-alarms>
      <fault-id>23</fault-id>
      <fault-source>Module</fault-source>
      <affected-objects>
        <name>Module</name>
      </affected-objects>
      <fault-severity>MAJOR</fault-severity>
      <is-cleared>>false</is-cleared>
      <fault-text>FPGA SW update failed</fault-text>
      <event-time>2103-10-29T22:39:11Z</event-time>
    </active-alarms>
  </active-alarm-list>
</data>
```

=====

<b>Retrieval of Active Alarm List</b>	<b>=</b>	<b>FAIL</b>
---------------------------------------	----------	-------------

=====