



@ 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 : 33

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

 $urn: ietf: params: netconf: capability: candidate: 1.0\ urn: ietf: params: netconf: capability: rollback-on-error: 1.0\ urn: ietf: params: netconf: params:$

 $urn: ietf: params: netconf: capability: validate: 1.1 \ urn: ietf: params: netconf: capability: startup: 1.0 \ urn: ietf: params: netconf: capability: xpath: 1.0 \ urn: ietf: params: netcon$

urn: ietf: params: netconf: capability: with-defaults: 1.0? basic-mode = explicit & also-supported = report-all, report-all-tagged, trim, explicit & also-supported = report-all-tagged, trim

 $urn: ietf: params: netconf: capability: notification: 1.0 \ urn: ietf: params: netconf: capability: interleave: 1.0 \ urn: ietf: params: netconf: capability: ne$

 $urn: ietf: params: xml: ns: yang: ietf-yang-metadata? module= ietf-yang-metadata \& revision = 2016-08-05 \\ ietf-yang-metadata = ietf-$

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 = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, with the properties of the properties = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, rollback-on-e

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-net conf-notifications? module = ietf-net conf-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 NI active-alarm-list.	TCONF Client sends the O-RU NETCONF Server a command to get the
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- Oct 29 22:53:22 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 29 22:53:22 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).
- Oct 29 22:53:23 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 29 22:53:23 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Successfully connected to 192.168.4.15:4334 over IPv4.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Session 501 (user "root", CID 1) created.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-service" of subtype "ssh-userauth".
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-auth" of subtype "password".
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: User "operator" authenticated.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel-open" of subtype "session".
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel" of subtype "subsystem".
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session 33 established.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Session 502 (user "root", CID 1) created.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-start).
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 80 priority 0 for 1 subscribers.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 80 priority 0 (remaining 1 subscribers).
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 80 priority 0 (remaining 0 subscribers).
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 80 priority 0 succeeded.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:24 mcb1 daemon.info netopeer2-server[986]: Session 33: thread 2 event new RPC.
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 81 priority 0 for 1 subscribers.
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 81 priority 0 (remaining 1 subscribers).
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:25 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 22:53:25 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 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 17.
- Oct 29 22:53:25 mcb1 user.notice fw_manager[1067]: RPC #17 recieved. xpath -> /o-ran-software-management:software-inventory
- Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Event "operational" with ID 17 succeeded.



Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:25 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 22:53:25 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 22:53:25 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 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 81 priority 0 (remaining 0 subscribers).

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 81 priority 0 succeeded.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:25 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 22:53:25 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 22:53:25 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 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Session 33: thread 3 event new RPC.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get-config" with ID 17 priority 0 for 1 subscribers.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get-config" "rpc" event with ID 17 priority 0 (remaining 1 subscribers).

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 17 priority 0 (remaining 0 subscribers).

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 17 priority 0 succeeded.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:25 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 22:53:25 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 22:53:25 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:25 mcb1 daemon.info netopeer2-server[986]: Session 33: thread 4 event new RPC.

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/notifications:create-subscription" with ID 11 priority 0 for 1 subscribers.

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Processing "/notifications:create-subscription" "rpc" event with ID 11 priority 0 (remaining 1 subscribers).

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 11 priority 0 (remaining 0 subscribers).

Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 11 priority 0 succeeded.



- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Session 33: thread 4 event new RPC.
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 82 priority 0 for 1 subscribers.
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 82 priority 0 (remaining 1 subscribers).
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Published event "operational" "/o-ran-fm:active-alarm-list/active-alarms" with ID 9.
- Oct 29 22:53:27 mcb1 user.info FAULT MANAGEMENT[1046]: ====== DATA FOR "o-ran-fm"
- "/o-ran-fm:active-alarm-list/active-alarms" REQUESTED===========================
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Event "operational" with ID 9 succeeded.
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 82 priority 0 (remaining 0 subscribers).
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 82 priority 0 succeeded.
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.
- Oct 29 22:53:27 mcb1 daemon.info netopeer2-server[986]: Session 33: thread 2 event new RPC.
- Oct 29 22:53:29 mcb1 user.notice SYNCMNGR[1313]: Received message from S-Plane
- Oct 29 22:53:33 mcb1 daemon.info netopeer2-server[986]: Session 33: thread 2 event new RPC.
- Oct 29 22:53:33 mcb1 daemon.info netopeer2-server[986]: Session 33: thread 2 event session terminated.
- Oct 29 22:53:33 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Oct 29 22:53:33 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-end).
- Oct 29 22:53:33 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session terminated.
- Oct 29 22:53:33 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 29 22:53:33 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).
- Oct 29 22:53:33 mcb1 auth.info sshd[31382]: Accepted password for operator from 192.168.4.15 port 42980 ssh2
- Oct 29 22:53:33 mcb1 authpriv.info sshd[31382]: 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 **********	
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<pre><data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0"></data></pre>	
<active-alarm-list xmlns="urn:o-ran:fm:1.0"></active-alarm-list>	
<active-alarms></active-alarms>	
<fault-id>18</fault-id>	
<fault-source>Module or antenna line</fault-source>	
<affected-objects></affected-objects>	
<name>Sync Module</name>	
<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></affected-objects>	
<name>Module</name>	
<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>	
Retrieval of Active Alarm List = FAIL	