



@ FILE NAME: M\_CTC\_ID\_026.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MCB1: v1.0.1

Test Description: This scenario is MANDATORY.

This test validates eAxC configuration and validation. The test scenario is intentionally limited in scope to be applicable to any O-RU hardware design.

This scenario corresponds to the following chapters in [3]:

**Chapter 6 Configuration Management** 

**Chapter 12.2 User plane message routing** 



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## \*\*\*\*\*\* Connect to the NETCONF Server \*\*\*\*\*\*\*

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> connect --ssh --host 192.168.22.37 --port 830 --login operator

Interactive SSH Authentication

Type your password:

Password:

> status

Current NETCONF session:

ID : 6

Host : 192.168.22.37

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 & 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: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 = 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 = ietf-netconf & revision

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

Error occured in line number 134



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## 

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.22.79:4334.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Successfully connected to 192.168.22.79:4334 over IPv4.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Session 210 (user "root", CID 1) created.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-auth" of subtype "password".

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: User "operator" authenticated.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel-open" of subtype "session".

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Call Home client "default-client" session 6 established.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Session 211 (user "root", CID 1) created.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-start).

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get" with ID 11 priority 0 for 1 subscribers.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get" "rpc" event with ID 11 priority 0 (remaining 1 subscribers).

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 11 priority 0 (remaining 0 subscribers).

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 11 priority 0 succeeded.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 4 event new RPC.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get" with ID 12 priority 0 for 1 subscribers.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get" "rpc" event with ID 12 priority 0 (remaining 1 subscribers).

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 6.

 $Oct\ 29\ 23:19:56\ mcb1\ user.notice\ fw\_manager [1065]: RPC\ \#6\ recieved.\ xpath\ ->/o-ran-software-management: software-inventory$ 

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Event "operational" with ID 6 succeeded.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 12 priority 0 (remaining 0 subscribers).

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 12 priority 0 succeeded.



Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 1 event new RPC.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 11 priority 0 for 1 subscribers.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 11 priority 0 (remaining 1 subscribers).

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 11 priority 0 (remaining 0 subscribers).

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 11 priority 0 succeeded.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: 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 23:19:56 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:56 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 0 event new RPC.

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 12 priority 0 for 1 subscribers.

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 12 priority 0 (remaining 1 subscribers).

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 12 priority 0 (remaining 0 subscribers).

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 12 priority 0 succeeded.

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: 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 23:19:57 mcb1 daemon.info netopeer2-server[980]: 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 23:19:57 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:19:57 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 0 event new RPC.

Oct 29 23:20:00 mcb1 user.notice SYNCMNGR[1311]: Received message from S-Plane

Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...



- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/notifications:create-subscription" with ID 6 priority 0 for 1 subscribers.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Processing "/notifications:create-subscription" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 6 priority 0 succeeded.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 0 event new RPC.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:edit-config" with ID 6 priority 0 for 1 subscribers.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:02 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:in
- Oct 29 23:20:02 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:in
- Oct 29 23:20:02 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:in
- Oct 29 23:20:02 mcb1 daemon.err netopeer2-server[980]: Validation failed.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Failed processing of "rpc" event with ID 6 priority 0 (remaining 1 subscribers).
- Oct 29 23:20:02 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:interfaces:interfaces:interfaces:name = current()/../interface-name]/o-ran-interfaces:vlan-id" of value "448" points to a non-existing leaf.
- Oct 29 23:20:02 mcb1 daemon.warn netopeer2-server[980]: Event "rpc" with ID 6 priority 0 failed (Validation failed).
- Oct 29 23:20:02 mcb1 daemon.err netopeer2-server[980]: Failed to send an RPC (User callback failed).
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 4 event new RPC.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 4 event reply error.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 4 event new RPC.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Session 6: thread 4 event session terminated.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-end).
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Call Home client "default-client" session terminated.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.22.79:4334.
- Oct 29 23:20:02 mcb1 daemon.info netopeer2-server[980]: getsockopt() error (Connection refused).
- Oct 29 23:20:02 mcb1 auth.info sshd[13895]: Accepted password for operator from 192.168.22.79 port 38852 ssh2
- Oct 29 23:20:02 mcb1 authpriv.info sshd[13895]: pam\_unix(sshd:session): session opened for user operator by (uid=0)



Expected Result: The O-RU NETCONF Sever responds with a <rpc-reply> message indicating successful completion of requested procedure.

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**************************************
ERROR
error-type: application
error-tag: operation-failed
error-severity : error
path: o-ran-mplane-int: mplane-info/m-plane-interfaces/m-plane-sub-interfaces [interface-name='eth 1.448'] [sub-interface='448']/sub-interface [interface-name='eth 1.448'] [sub-interface='eth 1.448'] [sub-in
Description': Leafref "/ietf-interfaces: interfaces:
current()//interface-name]/o-ran-interfaces:vlan-id" of value "448" points to a non-existing leaf.
O-RU configurability test (positive case) = FAIL
O-RU configurability test (positive case) = FAIL