



@ FILE NAME: M_CTC_ID_027.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MCB1: v1.0.1

Test Description: This scenario is MANDATORY.

The test scenario is intentionally limited to scope that shall be testable without a need to modify test scenario

according O-RU's hardware design.

This test verifies that the O-RU NETCONF Server supports configurability with validation.

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

6 Configuration Management

12.2 User plane message routing



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

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

Interactive SSH Authentication

Type your password:

Password:

> status

Current NETCONF session:

ID : 7

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

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

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

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

urn: ietf: params: xml: ns: yang: ietf-yang-metadata? module = ietf-yang-metadata & revision = 2016-08-05 + 1000

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 + 100

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 91



- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/fw_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/nw_manager
- Oct 29 23:20:09 mcb1 user.notice wd manager [1443]: Value is 1 for Xpath /vvdn mcel-wdm:system-apps/operations_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/pm_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/um_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/sys_monitor
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/fault_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/file_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/supervision
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/sync_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/ald_controller
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/log_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/radio_manager
- Oct 29 23:20:09 mcb1 user.notice wd_manager[1443]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/cli_manager
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.22.79:4334.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Successfully connected to 192.168.22.79:4334 over IPv4.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Session 220 (user "root", CID 1) created.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-service" of subtype "ssh-userauth".
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-auth" of subtype "password".
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: User "operator" authenticated.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel-open" of subtype "session".
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel" of subtype "subsystem".
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Call Home client "default-client" session 7 established.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Session 221 (user "root", CID 1) created.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-start).
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get" with ID 13 priority 0 for 1 subscribers.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get" "rpc" event with ID 13 priority 0 (remaining 1 subscribers).
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 13 priority 0 (remaining 0 subscribers).
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 13 priority 0 succeeded.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:09 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 3 event new RPC.
- Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...
- Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.
- Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get" with ID 14 priority 0 for 1 subscribers.
- Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).



Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 7.

Oct 29 23:20:10 mcb1 user.notice fw_manager[1065]: RPC #7 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Event "operational" with ID 7 succeeded.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 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 23:20:10 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 23:20:10 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 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 14 priority 0 succeeded.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 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 23:20:10 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 23:20:10 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 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 3 event new RPC.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 13 priority 0 for 1 subscribers.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 13 priority 0 (remaining 1 subscribers).

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 13 priority 0 (remaining 0 subscribers).

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 13 priority 0 succeeded.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 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 23:20:10 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 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 2 event new RPC.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 14 priority 0 for 1 subscribers.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 14 priority 0 (remaining 1



subscribers).

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 14 priority 0 succeeded.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:10 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 23:20:10 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 23:20:10 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:10 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 2 event new RPC.

Oct 29 23:20:14 mcb1 user.notice SYNCMNGR[1311]: Received message from S-Plane

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/notifications:create-subscription" with ID 7 priority 0 for 1 subscribers.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Processing "/notifications:create-subscription" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 7 priority 0 (remaining 0 subscribers).

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 7 priority 0 succeeded.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 2 event new RPC.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:edit-config" with ID 7 priority 0 for 1 subscribers.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:20:16 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:interfaces:interfaces:name = current()/../interface-name]/o-ran-interfaces:vlan-id" of value "448" points to a non-existing leaf. (/o-ran-mplane-int:mplane

Oct 29 23:20:16 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:interfaces:interfaces:interfaces:interfaces:name = current()/../interface-name]/o-ran-interfaces:vlan-id" of value "448" points to a non-existing leaf. (/o-ran-mplane-int:mplane

Oct 29 23:20:16 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:interfaces:interfaces:interfaces:interfaces:name = current()/../interface-name]/o-ran-interfaces:vlan-id" of value "448" points to a non-existing leaf.

Oct 29 23:20:16 mcb1 daemon.err netopeer2-server[980]: Validation failed.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Failed processing of "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Oct 29 23:20:16 mcb1 daemon.err netopeer2-server[980]: Leafref "/ietf-interfaces:interfaces/ietf-interfaces:interfaces:interfaces:interfaces:interfaces:name = current()/../interface-name]/o-ran-interfaces:vlan-id" of value "448" points to a non-existing leaf.

Oct 29 23:20:16 mcb1 daemon.warn netopeer2-server[980]: Event "rpc" with ID 7 priority 0 failed (Validation failed).

Oct 29 23:20:16 mcb1 daemon.err netopeer2-server[980]: Failed to send an RPC (User callback failed).

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 1 event new RPC.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 1 event reply error.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 1 event new RPC.



Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Session 7: thread 1 event session terminated.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-end).

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Call Home client "default-client" session terminated.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.22.79:4334.

Oct 29 23:20:16 mcb1 daemon.info netopeer2-server[980]: getsockopt() error (Connection refused).

Oct 29 23:20:16 mcb1 auth.info sshd[14292]: Accepted password for operator from 192.168.22.79 port 45154 ssh2

Oct 29 23:20:16 mcb1 authpriv.info sshd[14292]: pam_unix(sshd:session): session opened for user operator by (uid=0)



Expected Result: The O-RU NETCONF Sever responds with the <rpc-reply> message indicating rejection of the requested procedure

******** Actual Result ************************************	
=======================================	:======================================
============== ***********	** FAIL_REASON **************
======== ERROR	:======================================
error-type: application	
error-tag : operation-faile	d
error-severity : error	

path: o-ran-mplane-int:mplane-info/m-plane-interfaces/m-plane-sub-interfaces[interface-name='eth1.448'] [sub-interface='448']/sub-interfaces/m-plane-interfaces/m-p

Description': Leafref "/ietf-interfaces:interfaces/ietf-interfaces:interface[ietf-interfaces:name = current()/../interface-name]/o-ran-interfaces:vlan-id" of value "448" points to a non-existing leaf.

O-RU Configurability Test (negative case) = FAI
