



@ FILE NAME: M_CTC_ID_011.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MCB1: v1.0.7

Test Description: This scenario validates that the O-RU NETCONF Server properly executes a get command with a filter applied.



****** 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:192.168.244.37' 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 : 2

Host : 192.168.244.37

Port : 830 Transport : SSH

Capabilities:

 $urn: ietf: params: netconf: base: 1.0 \ urn: ietf: params: netconf: base: 1.1 \ urn: ietf: params: netconf: capability: writable-running: 1.0 \ urn: ietf: params: netconf: base: 1.0 \ urn: ietf: params: n$

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

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

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

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

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

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 and 2 Retrival of ru information with filter *******

get --filter-xpath /o-ran-usermgmt:users/user

```
<?xml version="1.0" ?>
```

- $<\!data\;xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"\;xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">$
- <users xmlns="urn:o-ran:user-mgmt:1.0">
- <user>
- <name>oranuser</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- <user>
- <name>operator</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- <user>
- <name>observer</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- <user>
- <name>installer</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- <user>
- <name>operator94470462419347</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- <user>
- <name>operator1069</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- <user>
- <name>operator299391533376092729390</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- <user>
- <name>operator735058550456</name>
- <account-type>PASSWORD</account-type>





- <enabled>true</enabled>
- </user>
- <user>
- <name>operator011</name>
- <account-type>PASSWORD</account-type>
- <enabled>true</enabled>
- </user>
- </users>
- </data>



Nov 4 00:13:28 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.244.35:4334.

Nov 4 00:13:28 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).

Nov 4 00:13:29 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.244.35:4334.

Nov 4 00:13:29 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.244.35:4334.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Successfully connected to 192.168.244.35:4334 over IPv4.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Session 111 (user "root", CID 1) created.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-service" of subtype "ssh-userauth".

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-auth" of subtype "password".

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: User "operator" authenticated.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel-open" of subtype "session".

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel" of subtype "subsystem".

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session 2 established.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Session 112 (user "root", CID 1) created.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-start).

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 2 priority 0 for 1 subscribers.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 2 priority 0 succeeded.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Session 2: thread 1 event new RPC.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 3 priority 0 for 1 subscribers.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 3 priority 0 (remaining 1 subscribers).

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 2.

Nov 4 00:13:30 mcb1 user.notice fw_manager[1075]: RPC #2 recieved. xpath -> /o-ran-software-management:software-inventory

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Event "operational" with ID 2 succeeded.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 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.

Nov 4 00:13:30 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.

Nov 4 00:13:30 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.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 3 priority 0 (remaining 0 subscribers).

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 3 priority 0 succeeded.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:30 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.

Nov 4 00:13:30 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.

Nov 4 00:13:30 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.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:30 mcb1 daemon.info netopeer2-server[986]: Session 2: thread 1 event new RPC.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get-config" with ID 1 priority 0 for 1 subscribers.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get-config" "rpc" event with ID 1 priority 0 (remaining 1 subscribers).

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 1 priority 0 succeeded.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov $4\,00:13:31\,$ 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.

Nov 4 00:13:31 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.

Nov 4 00:13:31 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.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:31 mcb1 daemon.info netopeer2-server[986]: Session 2: thread 2 event new RPC.

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:32 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:13:33 mcb1 user.notice SYNCMNGR[1321]: Received message from S-Plane

Nov 4 00:13:37 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:37 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:37 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:37 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.



Nov 4 00:13:37 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/notifications:create-subscription" with ID 1 priority 1 for 1 subscribers.

Nov 4 00:13:37 mcb1 daemon.info netopeer2-server[986]: Processing "ietf-netconf-monitoring" "operational" event with ID 1.

Nov 4 00:13:37 mcb1 daemon.info netopeer2-server[986]: Successful processing of "operational" event with ID 1.

Nov 4 00:13:37 mcb1 user.notice supervision[1375]: Checking to enable supervision default-timer

Nov 4 00:13:37 mcb1 user.notice supervision[1375]: Received supervision-notification #1 from"operator" user.path

->/notifications:create-subscription

Nov 4 00:13:37 mcb1 user.notice supervision[1375]: Received supervision-notification

Nov 4 00:13:37 mcb1 user.notice supervision[1375]: Default supervision timer value : 60 seconds. Default Guard timer value : 10 seconds

Nov 4 00:13:37 mcb1 user.notice supervision[1375]: Internal Supervision timer value : 60 seconds. Internal Guard timer value : 10 seconds

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 1 priority 1 succeeded.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/notifications:create-subscription" with ID 1 priority 0 for 1 subscribers.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Processing "/notifications:create-subscription" "rpc" event with ID 1 priority 0 (remaining 1 subscribers).

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 1 priority 0 succeeded.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Session 2: thread 1 event new RPC.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get-config" with ID 2 priority 0 for 1 subscribers.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get-config" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 2 priority 0 succeeded.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Session 2: thread 4 event new RPC.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Session 2: thread 1 event new RPC.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Session 2: thread 1 event session terminated.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-end).

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session terminated.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.244.35:4334.

Nov 4 00:13:38 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).

Nov 4 00:13:38 mcb1 authpriv.debug sshd[2293]: pam_unix(sshd:account): account operator has password changed in future

Nov 4 00:13:38 mcb1 auth.info sshd[2293]: Accepted password for operator from 192.168.244.35 port 39038 ssh2

Nov 4 00:13:38 mcb1 authpriv.info sshd[2293]: 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></rpc-reply>			
<data> contains details for objects as conforming to the <filter>.</filter></data>			
			======
******* Actual Result ***********			
Retrieval with filter applied		SUCCESS	
Ketrievai with inter applied	=	SUCCESS	