@ FILE NAME: M_CTC_ID_011.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MCB1:   v1.0.1

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 ***********

==

> connect --ssh --host 192.168.156.37 --port 830 --login operator

      Interactive SSH Authentication

      Type your password:

      Password:

      > status

      Current NETCONF session:

      ID   : 7

      Host   : 192.168.156.37

      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

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 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>garuda</name>
   <account-type>PASSWORD</account-type>
   <enabled>true</enabled>
  </user>
  <user>
   <name>operator11302326379</name>
   <account-type>PASSWORD</account-type>
   <enabled>true</enabled>
  </user>
  <user>
   <name>operator44567591</name>
   <account-type>PASSWORD</account-type>
   <enabled>true</enabled>
  </user>
  <user>
   <name>operator8075861281902</name>
   <account-type>PASSWORD</account-type>
```

```xml
  <enabled>true</enabled>
 </user>
 <user>
  <name>operator17619020756748090</name>
  <account-type>PASSWORD</account-type>
  <enabled>true</enabled>
 </user>
 <user>
  <name>operator86938204120707827368</name>
  <account-type>PASSWORD</account-type>
  <enabled>true</enabled>
 </user>
 <user>
  <name>operator7596639986022389968</name>
  <account-type>PASSWORD</account-type>
  <enabled>true</enabled>
 </user>
 <user>
  <name>operator0126795795152205</name>
  <account-type>PASSWORD</account-type>
  <enabled>true</enabled>
 </user>
 <user>
  <name>operator119986</name>
  <account-type>PASSWORD</account-type>
  <enabled>true</enabled>
 </user>
 <user>
  <name>stl</name>
  <account-type>PASSWORD</account-type>
  <enabled>true</enabled>
 </user>
 </users>
</data>
```

```
================================================================================
 ############ SYSTEM LOGS #############
================================================================================
```

Oct 30 00:00:07 mcb1 daemon.info netopeer2-server[981]: Trying to connect via IPv4 to 192.168.156.187:4334.

Oct 30 00:00:07 mcb1 daemon.info netopeer2-server[981]: getsockopt() error (Connection refused).

Oct 30 00:00:08 mcb1 daemon.info netopeer2-server[981]: Trying to connect via IPv4 to 192.168.156.187:4334.

Oct 30 00:00:08 mcb1 daemon.info netopeer2-server[981]: getsockopt() error (Connection refused).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Trying to connect via IPv4 to 192.168.156.187:4334.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Successfully connected to 192.168.156.187:4334 over IPv4.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Session 161 (user "root", CID 1) created.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Received an SSH message "request-auth" of subtype "password".

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: User "operator" authenticated.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Received an SSH message "request-channel-open" of subtype "session".

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Call Home client "default-client" session 7 established.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Session 162 (user "root", CID 1) created.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Generated new event (netconf-session-start).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Published event "rpc" "/ietf-netconf:get" with ID 10 priority 0 for 1 subscribers.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Processing "/ietf-netconf:get" "rpc" event with ID 10 priority 0 (remaining 1 subscribers).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Successful processing of "rpc" event with ID 10 priority 0 (remaining 0 subscribers).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Event "rpc" with ID 10 priority 0 succeeded.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Session 7: thread 3 event new RPC.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Published event "rpc" "/ietf-netconf:get" with ID 11 priority 0 for 1 subscribers.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Processing "/ietf-netconf:get" "rpc" event with ID 11 priority 0 (remaining 1 subscribers).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 8.

Oct 30 00:00:09 mcb1 user.notice fw_manager[1064]: RPC #8 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Event "operational" with ID 8 succeeded.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: 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 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: 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 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: 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 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Successful processing of "rpc" event with ID 11 priority 0 (remaining 0 subscribers).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Event "rpc" with ID 11 priority 0 succeeded.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: 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 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: 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 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: 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 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Session 7: thread 4 event new RPC.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Published event "rpc" "/ietf-netconf:get-config" with ID 3 priority 0 for 1 subscribers.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Processing "/ietf-netconf:get-config" "rpc" event with ID 3 priority 0 (remaining 1 subscribers).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Successful processing of "rpc" event with ID 3 priority 0 (remaining 0 subscribers).

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Event "rpc" with ID 3 priority 0 succeeded.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:09 mcb1 daemon.info netopeer2-server[981]: Session 7: thread 0 event new RPC.

Oct 30 00:00:11 mcb1 user.notice SYNCMNGR[1310]: Received message from S-Plane

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/fw_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/nw_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/operations_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/pm_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/um_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/sys_monitor

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/fault_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/file_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/supervision

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/sync_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/ald_controller

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/log_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/radio_manager

Oct 30 00:00:13 mcb1 user.notice wd_manager[1442]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/cli_manager

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: There is no instance of "/vvdn_mcel-wdm:system-apps/pm_manager", but it is not required.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Event "rpc" with ID 2 priority 0 succeeded.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Session 7: thread 4 event new RPC.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: There is no instance of "/vvdn_mcel-wdm:system-apps/supervision", but it is not required.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Published event "rpc" "/ietf-netconf:get-config" with ID 4 priority 0 for 1 subscribers.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Processing "/ietf-netconf:get-config" "rpc" event with ID 4 priority 0 (remaining 1 subscribers).

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Successful processing of "rpc" event with ID 4 priority 0 (remaining 0 subscribers).

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Event "rpc" with ID 4 priority 0 succeeded.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Session 7: thread 0 event new RPC.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Resolving unresolved data nodes and their constraints...

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: There is no instance of "/vvdn_mcel-wdm:system-apps/ald_controller", but it is not required.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: All data nodes and constraints resolved.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Session 7: thread 2 event new RPC.

Oct 30 00:00:15 mcb1 daemon.info netopeer2-server[981]: Session 7: thread 2 event session terminated.

Oct 30 00:00:16 mcb1 daemon.info netopeer2-server[981]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 30 00:00:16 mcb1 daemon.info netopeer2-server[981]: Generated new event (netconf-session-end).

Oct 30 00:00:16 mcb1 daemon.info netopeer2-server[981]: Call Home client "default-client" session terminated.

Oct 30 00:00:16 mcb1 daemon.info netopeer2-server[981]: Trying to connect via IPv4 to 192.168.156.187:4334.

Oct 30 00:00:16 mcb1 daemon.info netopeer2-server[981]: getsockopt() error (Connection refused).

Oct 30 00:00:16 mcb1 auth.info sshd[11411]: Accepted password for operator from 192.168.156.187 port 55024 ssh2

Oct 30 00:00:16 mcb1 authpriv.info sshd[11411]: 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 details for objects as conforming to the <filter>.

```
===========================================================================
  **************** Actual Result ******************
===========================================================================


============================================================================
```
Retrieval with filter applied   =   SUCCESS

```
============================================================================
```