@ FILE NAME: M_CTC_ID_011.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MCB1:   v1.0.4

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:192.168.4.37' 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   : 192.168.4.37

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,validate,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>
 </users>
</data>
```

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

Oct 29 23:54:41 mcb1 daemon.info netopeer2-server[988]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 23:54:41 mcb1 daemon.info netopeer2-server[988]: getsockopt() error (Connection refused).

Oct 29 23:54:42 mcb1 daemon.info netopeer2-server[988]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 23:54:42 mcb1 daemon.info netopeer2-server[988]: getsockopt() error (Connection refused).

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Successfully connected to 192.168.4.15:4334 over IPv4.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Session 109 (user "root", CID 1) created.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Received an SSH message "request-auth" of subtype "password".

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: User "operator" authenticated.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Received an SSH message "request-channel-open" of subtype "session".

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Call Home client "default-client" session 2 established.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Session 110 (user "root", CID 1) created.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Generated new event (netconf-session-start).

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Published event "rpc" "/ietf-netconf:get" with ID 4 priority 0 for 1 subscribers.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Processing "/ietf-netconf:get" "rpc" event with ID 4 priority 0 (remaining 1 subscribers).

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Successful processing of "rpc" event with ID 4 priority 0 (remaining 0 subscribers).

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Event "rpc" with ID 4 priority 0 succeeded.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:43 mcb1 daemon.info netopeer2-server[988]: Session 2: thread 3 event new RPC.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Published event "rpc" "/ietf-netconf:get" with ID 5 priority 0 for 1 subscribers.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Processing "/ietf-netconf:get" "rpc" event with ID 5 priority 0 (remaining 1 subscribers).

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 3.

Oct 29 23:54:44 mcb1 user.notice fw_manager[1061]: RPC #3 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Event "operational" with ID 3 succeeded.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: 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 23:54:44 mcb1 daemon.info netopeer2-server[988]: 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 23:54:44 mcb1 daemon.info netopeer2-server[988]: 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 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Successful processing of "rpc" event with ID 5 priority 0 (remaining 0 subscribers).

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Event "rpc" with ID 5 priority 0 succeeded.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: 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 23:54:44 mcb1 daemon.info netopeer2-server[988]: 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 23:54:44 mcb1 daemon.info netopeer2-server[988]: 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 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Session 2: thread 2 event new RPC.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Published event "rpc" "/ietf-netconf:get-config" with ID 2 priority 0 for 1 subscribers.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Processing "/ietf-netconf:get-config" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Event "rpc" with ID 2 priority 0 succeeded.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:44 mcb1 daemon.info netopeer2-server[988]: Session 2: thread 4 event new RPC.

Oct 29 23:54:48 mcb1 user.notice SYNCMNGR[1308]: Received message from S-Plane

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Event "rpc" with ID 2 priority 0 succeeded.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Session 2: thread 4 event new RPC.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Published event "rpc" "/ietf-netconf:get-config" with ID 3 priority 0 for 1 subscribers.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Processing "/ietf-netconf:get-config" "rpc" event with ID 3 priority 0 (remaining 1 subscribers).

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Successful processing of "rpc" event with ID 3 priority 0 (remaining 0 subscribers).

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Event "rpc" with ID 3 priority 0 succeeded.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Resolving unresolved data nodes and their constraints...

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: All data nodes and constraints resolved.

Oct 29 23:54:50 mcb1 daemon.info netopeer2-server[988]: Session 2: thread 3 event new RPC.

Oct 29 23:54:51 mcb1 daemon.info netopeer2-server[988]: Session 2: thread 3 event new RPC.

Oct 29 23:54:51 mcb1 daemon.info netopeer2-server[988]: Session 2: thread 3 event session terminated.

Oct 29 23:54:51 mcb1 daemon.info netopeer2-server[988]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:54:51 mcb1 daemon.info netopeer2-server[988]: Generated new event (netconf-session-end).

Oct 29 23:54:51 mcb1 daemon.info netopeer2-server[988]: Call Home client "default-client" session terminated.

Oct 29 23:54:51 mcb1 daemon.info netopeer2-server[988]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 23:54:51 mcb1 daemon.info netopeer2-server[988]: getsockopt() error (Connection refused).

Oct 29 23:54:51 mcb1 auth.info sshd[4061]: Accepted password for operator from 192.168.4.15 port 52282 ssh2

Oct 29 23:54:51 mcb1 authpriv.info sshd[4061]: 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

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