



**@ FILE NAME: M\_CTC\_ID\_011.txt**

**@ TEST SCOPE: M PLANE O-RAN CONFORMANCE**

**@ Software Release for MC1: v1.0.5**

**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 \*\*\*\*\*

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&gt; listen --ssh --login operator

Waiting 60s for an SSH Call Home connection on port 4334...

The authenticity of the host '192.168.4.43' 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.

&gt; status

Current NETCONF session:

ID : 11

Host : 192.168.4.43

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&amp;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&amp;revision=2016-08-05

urn:ietf:params:xml:ns:yang:1?module=yang&amp;revision=2017-02-20

urn:ietf:params:xml:ns:yang:ietf-inet-types?module=ietf-inet-types&amp;revision=2013-07-15

urn:ietf:params:xml:ns:yang:ietf-yang-types?module=ietf-yang-types&amp;revision=2013-07-15

urn:ietf:params:netconf:capability:yang-library:1.1?revision=2019-01-04&amp;content-id=63

urn:sysrepo:plugind?module=sysrepo-plugind&amp;revision=2020-12-10

urn:ietf:params:xml:ns:yang:ietf-netconf-acm?module=ietf-netconf-acm&amp;revision=2018-02-14

urn:ietf:params:xml:ns:netconf:base:1.0?module=ietf-netconf&amp;revision=2013-09-29&amp;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&amp;revision=2011-06-01

urn:ietf:params:xml:ns:yang:ietf-netconf-notifications?module=ietf-netconf-notifications&amp;revision=2012-02-06

urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?module=ietf-netconf-monitoring&amp;revision=2010-10-04

urn:ietf:params:xml:ns:netconf:notification:1.0?module=notifications&amp;revision=2008-07-14

urn:ietf:params:xml:ns:netmod:notification?module=nc-notifications&amp;revision=2008-07-14

urn:ietf:params:xml:ns:yang:ietf-x509-cert-to-name?module=ietf-x509-cert-to-name&amp;revision=2014-12-10

urn:ietf:params:xml:ns:yang:iana-crypt-hash?module=iana-crypt-hash&amp;revision=2014-08-06 urn:notification\_history?module=notification\_history

urn:ietf:params:xml:ns:yang:iana-if-type?module=iana-if-type&amp;revision=2017-01-19

=====

&gt; subscribe

=====

Ok

```
=====
*****step 1 and 2 Retrival of ru information with filter *****
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=====
get --filter-xpath /o-ran-usermgmt:users/user
=====
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```
<?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 #####**

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Oct 29 22:34:12 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 22:34:12 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Successfully connected to 192.168.4.15:4334 over IPv4.

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Session 263 (user "root", CID 1) created.

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-auth" of subtype "password".

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: User "operator" authenticated.

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel-open" of subtype "session".

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session 11 established.

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Session 264 (user "root", CID 1) created.

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 22:34:13 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-start).

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 27 priority 0 for 1 subscribers.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 27 priority 0 (remaining 1 subscribers).

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 27 priority 0 (remaining 0 subscribers).

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 27 priority 0 succeeded.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Session 11: thread 2 event new RPC.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get" with ID 28 priority 0 for 1 subscribers.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get" "rpc" event with ID 28 priority 0 (remaining 1 subscribers).

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 4.

Oct 29 22:34:14 mcb1 user.notice fw\_manager[1067]: RPC #4 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Event "operational" with ID 4 succeeded.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 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.

Oct 29 22:34:14 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.

Oct 29 22:34:14 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.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 28 priority 0 (remaining 0 subscribers).

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 28 priority 0 succeeded.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 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.

Oct 29 22:34:14 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.

Oct 29 22:34:14 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.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Session 11: thread 2 event new RPC.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get-config" with ID 4 priority 0 for 1 subscribers.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get-config" "rpc" event with ID 4 priority 0 (remaining 1 subscribers).

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 4 priority 0 (remaining 0 subscribers).

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 4 priority 0 succeeded.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:14 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.

Oct 29 22:34:14 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.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:14 mcb1 daemon.info netopeer2-server[986]: Session 11: thread 1 event new RPC.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 2 priority 0 succeeded.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Session 11: thread 2 event new RPC.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Published event "rpc" "/ietf-netconf:get-config" with ID 5 priority 0 for 1 subscribers.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Processing "/ietf-netconf:get-config" "rpc" event with ID 5 priority 0 (remaining 1 subscribers).

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Successful processing of "rpc" event with ID 5 priority 0 (remaining 0 subscribers).

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Event "rpc" with ID 5 priority 0 succeeded.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Resolving unresolved data nodes and their constraints...

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: All data nodes and constraints resolved.

Oct 29 22:34:20 mcb1 daemon.info netopeer2-server[986]: Session 11: thread 2 event new RPC.

Oct 29 22:34:21 mcb1 daemon.info netopeer2-server[986]: Session 11: thread 2 event new RPC.

Oct 29 22:34:21 mcb1 daemon.info netopeer2-server[986]: Session 11: thread 2 event session terminated.

Oct 29 22:34:21 mcb1 daemon.info netopeer2-server[986]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 22:34:21 mcb1 daemon.info netopeer2-server[986]: Generated new event (netconf-session-end).

Oct 29 22:34:21 mcb1 daemon.info netopeer2-server[986]: Call Home client "default-client" session terminated.

Oct 29 22:34:21 mcb1 daemon.info netopeer2-server[986]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 29 22:34:21 mcb1 daemon.info netopeer2-server[986]: getsockopt() error (Connection refused).

Oct 29 22:34:21 mcb1 auth.info sshd[16025]: Accepted password for operator from 192.168.4.15 port 46130 ssh2

Oct 29 22:34:21 mcb1 authpriv.info sshd[16025]: 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>.**

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\*\*\*\*\* Actual Result \*\*\*\*\*

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<b>Retrieval with filter applied</b>	<b>=</b>	<b>SUCCESS</b>
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