



@ FILE NAME: M_CTC_ID_022.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for LPRU: v1.1.0

Test Description : This scenario is MANDATORY for an O-RU supporting the Hybrid M-plane architecture model.

This test validates that the O-RU correctly implements NETCONF Access Control user privileges.

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

3.4 NETCONF Access Control

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

```
> connect --ssh --host 192.168.214.37 --port 830 --login operator
```

```
Interactive SSH Authentication
```

```
Type your password:
```

```
Password:
```

```
> status
```

```
Current NETCONF session:
```

```
ID      : 8
```

```
Host    : 192.168.214.37
```

```
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=61
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
```

```
=====
##### Initial Get 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>operator10804206543</name>
    <account-type>PASSWORD</account-type>
    <enabled>true</enabled>
  </user>
  <user>
    <name>operator27689832</name>
    <account-type>PASSWORD</account-type>
    <enabled>true</enabled>
  </user>
  <user>
    <name>operator569496134733421925922</name>
    <account-type>PASSWORD</account-type>
    <enabled>true</enabled>
  </user>
</users>
</data>
```

```
=====
> edit-config --target running --config --defop merge
=====
```

```
=====
***** Replace with below xml *****
=====
```

```
<config xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <users xmlns="urn:o-ran:user-mgmt:1.0">
    <user>
      <name>operator018</name>
      <account-type>PASSWORD</account-type>

      <password>b-BT40iNEQmMK[vRnY^g+5[b4phDg~}lPdYq]PijU]{(ZSQ1xBcGw-CFc8]^IuSVAiAgXEpm1qC[_F3tUCeR)b[!EWyCCKFmpdK
      mai4E.F-O0_hUIYtX5!LWdJdZp0</password>
      <enabled>true</enabled>
    </user>
  </users>
</config>
```

```
-----
Ok
-----
```

```
=====
***** NOTIFICATIONS *****
=====
```

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2000-11-04T00:03:45Z</eventTime>
  <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
    <changed-by>
      <username>root</username>
      <session-id>8</session-id>
    </changed-by>
    <datastore>running</datastore>
    <edit>
      <target
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0"/>o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator018']</target>
      <operation>create</operation>
    </edit>
    <edit>
      <target
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0"/>o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator018']/o-ran-userm
gmt:name</target>
      <operation>create</operation>
    </edit>
    <edit>
      <target
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0"/>o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator018']/o-ran-userm
```

```
gmt:account-type</target>
  <operation>create</operation>
</edit>
<edit>
  <target
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0">/o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator018']/o-ran-userm
gmt:password</target>
  <operation>create</operation>
</edit>
<edit>
  <target
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0">/o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator018']/o-ran-userm
gmt:enabled</target>
  <operation>create</operation>
</edit>
</netconf-config-change>
</notification>
```

```
=====
> edit-config --target running --config --defop merge
=====
```

```
=====
***** Replace with below xml *****
=====
```

```
<config xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<nacm xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-acm">
  <groups>
    <group>
      <name>swm</name>
      <user-name>operator018</user-name>
    </group>
  </groups>
</nacm>
</config>
```

```
-----
Ok
-----
```

```
=====
***** NOTIFICATIONS *****
=====
```

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2000-11-04T00:03:45Z</eventTime>
  <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
    <changed-by>
      <username>root</username>
      <session-id>8</session-id>
    </changed-by>
    <datastore>running</datastore>
    <edit>
      <target
xmlns:nacm="urn:ietf:params:xml:ns:yang:ietf-netconf-acm">/nacm:nacm/nacm:groups/nacm:group[nacm:name='swm']/nacm:user-name[.='opera
tor018']</target>
      <operation>create</operation>
    </edit>
  </netconf-config-change>
</notification>
```

```
=====
> get --filter-xpath /ietf-netconf-acm:nacm/groups
=====
```

```
<?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">
  <nacm xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-acm">
    <groups>
      <group>
        <name>sudo</name>
        <user-name>operator</user-name>
      </group>
      <group>
        <name>fm-pm</name>
        <user-name>observer</user-name>
        <user-name>operator10804206543</user-name>
      </group>
      <group>
        <name>nms</name>
        <user-name>installer</user-name>
        <user-name>operator27689832</user-name>
      </group>
      <group>
        <name>swm</name>
        <user-name>operator569496134733421925922</user-name>
        <user-name>operator018</user-name>
      </group>
    </groups>
```

</nacm>

</data>

```
=====
> 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>operator10804206543</name>
      <account-type>PASSWORD</account-type>
      <enabled>true</enabled>
    </user>
    <user>
      <name>operator27689832</name>
      <account-type>PASSWORD</account-type>
      <enabled>true</enabled>
    </user>
    <user>
      <name>operator569496134733421925922</name>
      <account-type>PASSWORD</account-type>
      <enabled>true</enabled>
    </user>
    <user>
      <name>operator018</name>
      <account-type>PASSWORD</account-type>
      <enabled>true</enabled>
    </user>
  </users>
</data>
```


=====

STEP 1 TER NETCONF client establishes a connection using a user account with swm privileges.

=====

=====

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

=====

```
> connect --ssh --host 192.168.214.37 --port 830 --login operator018
```

```
Interactive SSH Authentication
```

```
Type your password:
```

```
Password:
```

```
> status
```

```
Current NETCONF session:
```

```
ID      : 9
```

```
Host    : 192.168.214.37
```

```
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=61
```

```
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 2 TER NETCONF client attempts to configure a new o-ran-sync.yang on the NETCONF server.

=====

```
=====
> edit-config --target running --config --defop replace
=====
```

```
=====
***** Replace with below xml *****
=====
```

```
<sync xmlns="urn:o-ran:sync:1.0">
<ptp-config>
<domain-number>24</domain-number>
<accepted-clock-classes>
<clock-classes>255</clock-classes>
</accepted-clock-classes>
<ptp-profile>G_8275_1</ptp-profile>
<g-8275-1-config>
<multicast-mac-address>FORWARDABLE</multicast-mac-address>
<delay-asymmetry>0</delay-asymmetry>
</g-8275-1-config>
</ptp-config>
<ptp-status>
<reporting-period>10</reporting-period>
</ptp-status>
<sync-config>
<acceptance-list-of-ssm>EEC1</acceptance-list-of-ssm>
<ssm-timeout>10</ssm-timeout>
</sync-config>
<sync-status>
<reporting-period>10</reporting-period>
</sync-status>
</sync>
```

```
=====
Step 3 NETCONF server replies rejecting the protocol operation with an 'access-denied' error.
=====
```

ERROR

```
type      : access-denied
tag       : protocol
severity  : error
path      : /o-ran-sync:sync/sync-config/acceptance-list-of-ssm
message   : Access to the data model "o-ran-sync" is denied because "operator018" NACM authorization failed.
```

=====

SYSTEM LOGS

=====

Nov 4 00:03:37 vvdn_lpru daemon.info netopeer2-server[858]: Trying to connect via IPv4 to 192.168.214.234:4334.

Nov 4 00:03:37 vvdn_lpru daemon.info netopeer2-server[858]: getsockopt() error (Connection refused).

Nov 4 00:03:38 vvdn_lpru daemon.info netopeer2-server[858]: Trying to connect via IPv4 to 192.168.214.234:4334.

Nov 4 00:03:38 vvdn_lpru daemon.info netopeer2-server[858]: getsockopt() error (Connection refused).

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Trying to connect via IPv4 to 192.168.214.234:4334.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Successfully connected to 192.168.214.234:4334 over IPv4.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Session 157 (user "root", CID 1) created.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-service" of subtype "ssh-userauth".

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-auth" of subtype "password".

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: User "operator" authenticated.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-channel-open" of subtype "session".

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-channel" of subtype "subsystem".

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Call Home client "default-client" session 8 established.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Session 158 (user "root", CID 1) created.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Generated new event (netconf-session-start).

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:get" with ID 14 priority 0 for 1 subscribers.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:get" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 14 priority 0 succeeded.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 2 event new RPC.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:get" with ID 15 priority 0 for 1 subscribers.

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:get" "rpc" event with ID 15 priority 0 (remaining 1 subscribers).

Nov 4 00:03:39 vvdn_lpru daemon.info netopeer2-server[858]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 6.

Nov 4 00:03:39 vvdn_lpru user.notice fw_manager[929]: RPC #6 recieved. xpath -> /o-ran-software-management:software-inventory

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Event "operational" with ID 6 succeeded.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: 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 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: 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 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: 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 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 15 priority 0 (remaining 0 subscribers).

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 15 priority 0 succeeded.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: 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 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: 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 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: 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 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 1 event new RPC.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:get-config" with ID 11 priority 0 for 1 subscribers.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:get-config" "rpc" event with ID 11 priority 0 (remaining 1 subscribers).

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 11 priority 0 (remaining 0 subscribers).

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 11 priority 0 succeeded.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port0", but it is not required.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port0", but it is not required.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:40 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 3 event new RPC.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/notifications:create-subscription" with ID 6 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/notifications:create-subscription" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 6 priority 0 succeeded.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 1 event new RPC.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:get-config" with ID 12 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:get-config" "rpc" event with ID 12 priority 0 (remaining 1 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 12 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 12 priority 0 succeeded.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 2 event new RPC.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:edit-config" with ID 5 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 5 priority 0 (remaining 1 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "change" "o-ran-usermgmt" with ID 2 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru user.notice USERMGMT[918]: operator018 added successfully !!

Nov 4 00:03:45 vvdn_lpru user.notice USERMGMT[918]: operator018 enabled !!

Nov 4 00:03:45 vvdn_lpru user.notice USERMGMT[918]: END OF CHANGES

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Event "change" with ID 2 priority 0 succeeded.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "done" "o-ran-usermgmt" with ID 2 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru user.notice USERMGMT[918]: END OF CHANGES

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/name", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/account-type", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/password", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/enabled", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "notif" "ietf-netconf-notifications" with ID 2 priority 0 for 1

subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 5 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 5 priority 0 succeeded.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 3 event new RPC.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/name", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/account-type", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/password", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "/o-ran-usermgmt:users/user[name='operator018']/enabled", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "ietf-netconf:edit-config" with ID 6 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "ietf-netconf:edit-config" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "done" "ietf-netconf-acm" with ID 4 priority 0 for 4 subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "ietf-netconf-acm" "done" event with ID 4 priority 0 (remaining 4 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "done" event with ID 4 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "notif" "ietf-netconf-notifications" with ID 3 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: There is no instance of "ietf-netconf-acm:nacm/groups/group[name='swm']/user-name[.='operator018']", but it is not required.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 6 priority 0 succeeded.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 0 event new RPC.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:get-config" with ID 13 priority 0 for 1 subscribers.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:get-config" "rpc" event with ID 13 priority 0 (remaining 1 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 13 priority 0 (remaining 0 subscribers).

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 13 priority 0 succeeded.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:45 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 2 event new RPC.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:get-config" with ID 14 priority 0 for 1 subscribers.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:get-config" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 14 priority 0 succeeded.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 3 event new RPC.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 0 event new RPC.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 8: thread 0 event session terminated.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Accepted a connection on :::830.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 179 (user "root", CID 1) created.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-service" of subtype "ssh-userauth".

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-auth" of subtype "password".

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: User "operator018" authenticated.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-channel-open" of subtype "session".

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Received an SSH message "request-channel" of subtype "subsystem".

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Generated new event (netconf-session-end).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Call Home client "default-client" session terminated.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Trying to connect via IPv4 to 192.168.214.234:4334.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: getsockopt() error (Connection refused).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 180 (user "root", CID 1) created.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Generated new event (netconf-session-start).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/notifications:create-subscription" with ID 7 priority 0 for 1

subscribers.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/notifications:create-subscription" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Successful processing of "rpc" event with ID 7 priority 0 (remaining 0 subscribers).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Event "rpc" with ID 7 priority 0 succeeded.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 9: thread 4 event new RPC.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: All data nodes and constraints resolved.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Published event "rpc" "/ietf-netconf:edit-config" with ID 7 priority 0 for 1 subscribers.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Nov 4 00:03:46 vvdn_lpru daemon.err netopeer2-server[858]: Access to the data model "o-ran-sync" is denied because "operator018" NACM authorization failed.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Failed processing of "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Nov 4 00:03:46 vvdn_lpru daemon.err netopeer2-server[858]: Access to the data model "o-ran-sync" is denied because "operator018" NACM authorization failed.

Nov 4 00:03:46 vvdn_lpru daemon.warn netopeer2-server[858]: Event "rpc" with ID 7 priority 0 failed (User callback failed).

Nov 4 00:03:46 vvdn_lpru daemon.err netopeer2-server[858]: Failed to send an RPC (User callback failed).

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 9: thread 1 event new RPC.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 9: thread 1 event reply error.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 9: thread 1 event new RPC.

Nov 4 00:03:46 vvdn_lpru daemon.info netopeer2-server[858]: Session 9: thread 1 event session terminated.

Nov 4 00:03:47 vvdn_lpru daemon.info netopeer2-server[858]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:03:47 vvdn_lpru daemon.info netopeer2-server[858]: Generated new event (netconf-session-end).

Nov 4 00:03:47 vvdn_lpru user.notice SYNCMNGR[1175]: Received message from S-Plane

Nov 4 00:03:47 vvdn_lpru authpriv.debug sshd[5144]: pam_unix(sshd:account): account operator has password changed in future

Nov 4 00:03:47 vvdn_lpru auth.info sshd[5144]: Accepted password for operator from 192.168.214.234 port 59464 ssh2

Nov 4 00:03:47 vvdn_lpru authpriv.info sshd[5144]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result : The NETCONF server replies rejecting the protocol operation with an "access-denied" error.

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***** Actual Result *****

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Access Control SWM (negative case)	=	SUCCESS
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