@ FILE NAME: **M_CTC_ID_022.txt**

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

@ **Software Release for MCB1:   v1.0.1**

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 192.168.170.37 --port 830 --login operator

    Interactive SSH Authentication

    Type your password:

    Password:

    > status

    Current NETCONF session:

    ID   : 13

    Host   : 192.168.170.37

    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

==
######### **Initial Get Filter** #########
==

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

```xml
<?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>
```

```
 <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>
 </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>operator7596639986022389968</name>
        <account-type>PASSWORD</account-type>
        <password>v+Dq5KtKuj(^!x</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>2103-10-29T23:24:46Z</eventTime>
 <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
 <changed-by>
 <username>root</username>
 <session-id>13</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='operator75966399860223
89968']</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='operator75966399860223
89968']/o-ran-usermgmt: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='operator75966399860223
89968']/o-ran-usermgmt: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='operator75966399860223
89968']/o-ran-usermgmt: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='operator75966399860223
89968']/o-ran-usermgmt: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>operator7596639986022389968</user-name>
  </group>
 </groups>
</nacm>
</config>
```

Ok

===

****** NOTIFICATIONS ******

===

```xml
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
 <eventTime>2103-10-29T23:24:47Z</eventTime>
 <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
  <changed-by>
   <username>root</username>
   <session-id>13</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[.='operator7596639986022389968']</target>
   <operation>create</operation>
  </edit>
 </netconf-config-change>
</notification>
```

===

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

===

```xml
<?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>
   </group>
   <group>
    <name>nms</name>
    <user-name>installer</user-name>
   </group>
   <group>
    <name>swm</name>
    <user-name>operator86938204120707827368</user-name>
    <user-name>operator7596639986022389968</user-name>
   </group>
  </groups>
 </nacm>
</data>
```

===

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

===

```xml
<?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>
   <enabled>true</enabled>
  </user>
  <user>
   <name>operator17619020756748090</name>
```

```xml
    <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>
  </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 192.168.170.37 --port 830 --login operator7596639986022389968

      Interactive SSH Authentication

      Type your password:

      Password:

      > status

      Current NETCONF session:

      ID   : 14

      Host   : 192.168.170.37

      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 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>
<synce-config>
<acceptance-list-of-ssm>EEC1</acceptance-list-of-ssm>
<ssm-timeout>10</ssm-timeout>
</synce-config>
<synce-status>
<reporting-period>10</reporting-period>
</synce-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/synce-config/acceptance-list-of-ssm
message	:	Access to the data model "o-ran-sync" is denied because "operator7596639986022389968" NACM authorization failed.

===

############### SYSTEM LOGS ##############

===

Oct 29 23:24:38 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.170.85:4334.

Oct 29 23:24:38 mcb1 daemon.info netopeer2-server[980]: getsockopt() error (Connection refused).

Oct 29 23:24:39 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.170.85:4334.

Oct 29 23:24:39 mcb1 daemon.info netopeer2-server[980]: getsockopt() error (Connection refused).

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.170.85:4334.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Successfully connected to 192.168.170.85:4334 over IPv4.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Session 180 (user "root", CID 1) created.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-auth" of subtype "password".

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: User "operator" authenticated.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel-open" of subtype "session".

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Call Home client "default-client" session 13 established.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Session 181 (user "root", CID 1) created.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-start).

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get" with ID 19 priority 0 for 1 subscribers.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get" "rpc" event with ID 19 priority 0 (remaining 1 subscribers).

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 19 priority 0 (remaining 0 subscribers).

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 19 priority 0 succeeded.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:40 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 1 event new RPC.

Oct 29 23:24:40 mcb1 user.notice SYNCMNGR[1310]: Received message from S-Plane

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get" with ID 20 priority 0 for 1 subscribers.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get" "rpc" event with ID 20 priority 0 (remaining 1 subscribers).

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 8.

Oct 29 23:24:41 mcb1 user.notice fw_manager[1064]: RPC #8 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Event "operational" with ID 8 succeeded.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 20 priority 0 (remaining 0 subscribers).

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 20 priority 0 succeeded.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 1 event new RPC.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 14 priority 0 for 1 subscribers.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 14 priority 0 succeeded.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: 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 23:24:41 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:41 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 4 event new RPC.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/notifications:create-subscription" with ID 6 priority 0 for 1 subscribers.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Processing "/notifications:create-subscription" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 6 priority 0 succeeded.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 1 event new RPC.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 15 priority 0 for 1 subscribers.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 15 priority 0 (remaining 1 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 15 priority 0 (remaining 0 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 15 priority 0 succeeded.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 2 event new RPC.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:edit-config" with ID 6 priority 0 for 1 subscribers.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Published event "change" "o-ran-usermgmt" with ID 2 priority 0 for 1 subscribers.

Oct 29 23:24:46 mcb1 user.notice USERMGMT[1052]: operator7596639986022389968 added successfully !!

Oct 29 23:24:46 mcb1 user.notice USERMGMT[1052]: operator7596639986022389968 enabled !!

Oct 29 23:24:46 mcb1 user.notice USERMGMT[1052]: END OF CHANGES

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Event "change" with ID 2 priority 0 succeeded.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Published event "done" "o-ran-usermgmt" with ID 2 priority 0 for 1 subscribers.

Oct 29 23:24:46 mcb1 user.notice USERMGMT[1052]: END OF CHANGES

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']/name", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']/account-type", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']/password", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']/enabled", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Published event "notif" "ietf-netconf-notifications" with ID 2 priority 0 for 1 subscribers.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']/name", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of "/o-ran-usermgmt:users/user[name='operator7596639986022389968']/account-type", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of

"/o-ran-usermgmt:users/user[name='operator7596639986022389968']/password", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: There is no instance of

"/o-ran-usermgmt:users/user[name='operator7596639986022389968']/enabled", but it is not required.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 6 priority 0 succeeded.

Oct 29 23:24:46 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 4 event new RPC.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:edit-config" with ID 7 priority 0 for 1 subscribers.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Published event "done" "ietf-netconf-acm" with ID 4 priority 0 for 4 subscribers.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Processing "ietf-netconf-acm" "done" event with ID 4 priority 0 (remaining 4 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Successful processing of "done" event with ID 4 priority 0 (remaining 0 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Published event "notif" "ietf-netconf-notifications" with ID 3 priority 0 for 1 subscribers.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: There is no instance of

"/ietf-netconf-acm:nacm/groups/group[name='swm']/user-name[.='operator7596639986022389968']", but it is not required.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 7 priority 0 (remaining 0 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 7 priority 0 succeeded.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 1 event new RPC.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 16 priority 0 for 1 subscribers.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 16 priority 0 (remaining 1 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 16 priority 0 (remaining 0 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 16 priority 0 succeeded.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 2 event new RPC.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:get-config" with ID 17 priority 0 for 1 subscribers.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:get-config" "rpc" event with ID 17 priority 0 (remaining 1 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 17 priority 0 (remaining 0 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 17 priority 0 succeeded.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 1 event new RPC.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 2 event new RPC.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 13: thread 2 event session terminated.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-end).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Call Home client "default-client" session terminated.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Trying to connect via IPv4 to 192.168.170.85:4334.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: getsockopt() error (Connection refused).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Accepted a connection on :::830.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 202 (user "root", CID 1) created.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-auth" of subtype "password".

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: User "operator7596639986022389968" authenticated.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel-open" of subtype "session".

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 203 (user "root", CID 1) created.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-start).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/notifications:create-subscription" with ID 7 priority 0 for 1 subscribers.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Processing "/notifications:create-subscription" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Successful processing of "rpc" event with ID 7 priority 0 (remaining 0 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Event "rpc" with ID 7 priority 0 succeeded.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 14: thread 0 event new RPC.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Resolving unresolved data nodes and their constraints...

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: All data nodes and constraints resolved.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Published event "rpc" "/ietf-netconf:edit-config" with ID 8 priority 0 for 1 subscribers.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 8 priority 0 (remaining 1 subscribers).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Oct 29 23:24:47 mcb1 daemon.err netopeer2-server[980]: Access to the data model "o-ran-sync" is denied because "operator7596639986022389968" NACM authorization failed.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Failed processing of "rpc" event with ID 8 priority 0 (remaining 1 subscribers).

Oct 29 23:24:47 mcb1 daemon.err netopeer2-server[980]: Access to the data model "o-ran-sync" is denied because "operator7596639986022389968" NACM authorization failed.

Oct 29 23:24:47 mcb1 daemon.warn netopeer2-server[980]: Event "rpc" with ID 8 priority 0 failed (User callback failed).

Oct 29 23:24:47 mcb1 daemon.err netopeer2-server[980]: Failed to send an RPC (User callback failed).

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 14: thread 1 event new RPC.

Oct 29 23:24:47 mcb1 daemon.info netopeer2-server[980]: Session 14: thread 1 event reply error.

Oct 29 23:24:48 mcb1 daemon.info netopeer2-server[980]: Session 14: thread 1 event new RPC.

Oct 29 23:24:48 mcb1 daemon.info netopeer2-server[980]: Session 14: thread 1 event session terminated.

Oct 29 23:24:48 mcb1 daemon.info netopeer2-server[980]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 29 23:24:48 mcb1 daemon.info netopeer2-server[980]: Generated new event (netconf-session-end).

Oct 29 23:24:48 mcb1 auth.info sshd[17508]: Accepted password for operator from 192.168.170.85 port 57008 ssh2

Oct 29 23:24:48 mcb1 authpriv.info sshd[17508]: 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.

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


==================================================================================
Access Control SWM (negative case)                =            SUCCESS

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