

@ FILE NAME: M\_CTC\_ID\_022\_.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for Garuda RevD: v5.0.0

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

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## \*\*\*\*\*\*\* Connect to the NETCONF Server \*\*\*\*\*\*\*\*

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> connect --ssh --host 192.168.4.46 --port 830 --login operator

Interactive SSH Authentication

Type your password:

Password:

> status

Current NETCONF session:

ID : 34

Host : 192.168.4.46

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

 $urn: ietf: params: netconf: capability: candidate: 1.0\ urn: ietf: params: netconf: capability: rollback-on-error: 1.0\ urn: ietf: params: netconf: para$ 

 $urn: ietf: params: netconf: capability: validate: 1.1 \ urn: ietf: params: netconf: capability: startup: 1.0 \ urn: ietf: params: netconf: capability: xpath: 1.0 \ urn: ietf: params: netcon$ 

urn: ietf: params: netconf: capability: with-defaults: 1.0? basic-mode = explicit & also-supported = report-all, report-all-tagged, trim, explicit & also-supported = report-all-tagged, trim

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, validate, rollback-on-error, rollback-on

 $ate, startup, url, xpath\ urn: ietf: params: xml: ns: yang: ietf-netconf-with-defaults? module = ietf-netconf-with-defaults \& revision = 2011-06-01. The parameters of the p$ 

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

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#### >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>operator5310619424927220</name> <account-type>PASSWORD</account-type> <enabled>true</enabled> </user> <user> <name>operator42009256600399182198</name> <account-type>PASSWORD</account-type> <enabled>true</enabled> </user> <user> <name>operator900036241939705</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>operator71319136</name>
             <account-type>PASSWORD</account-type>
             <\!password\!>\!\$C+zr[1T\_k+]Xz.BXjvKaZf^Pf\}nTUJF\}1ClrerB+hL\{Lf6U6\%J\}fV<\!/password\!>\!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>2022-08-02T18:51:08Z</eventTime>
<netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
 <changed-by>
 <username>root</username>
 <session-id>34</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='operator71319136']</targ
 <operation>create</operation>
 </edit>
 <edit>
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0">/o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator71319136']/o-ran
-usermgmt:name</target>
 <operation>create</operation>
 </edit>
```

<edit></edit>
<target< th=""></target<>
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0">/o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator71319136']/o-ran-usermgmt:users/o-ran-usermgmt:users/o-ran-usermgmt:users/o-ran-usermgmt:users/o-ran-usermgmt:name='operator71319136']/o-ran-usermgmt:users/o-ran-us
-usermgmt:account-type
<pre><operation>create</operation></pre>
<edit></edit>
<target< th=""></target<>
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0">/o-ran-usermgmt:users/o-ran-usermgmt:users[o-ran-usermgmt:name='operator71319136']/o-ran-usermgmt:users/o-ran-usermgmt:users/o-ran-usermgmt:users/o-ran-usermgmt:users/o-ran-usermgmt:name='operator71319136']/o-ran-usermgmt:users/o-ran-u
-usermgmt:password
<pre><operation>create</operation></pre>
<edit></edit>
<target< th=""></target<>
xmlns: o-ran-usermgmt: "urn: o-ran: user-mgmt: 1.0" > / o-ran-usermgmt: users / o-ran-usermgmt: user [o-ran-usermgmt: name='operator71319136'] / o-ran-usermgmt: users / o-r
-usermgmt:enabled
<pre><operation>create</operation></pre>
> edit-configtarget runningconfigdefop merge
****** Replace with below xml ******
<config xmlns="urn:ietf:params:xml:ns:netconf:base:1.0"></config>
<nacm xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-acm"></nacm>
<groups></groups>
<group></group>
<name>swm</name>
<user-name>operator71319136</user-name>
Ok

```
***** NOTIFICATIONS ******
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
<eventTime>2022-08-02T18:51:08Z</eventTime>
<netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
 <changed-by>
 <username>root</username>
 <session-id>34</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
tor71319136']</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>operator5310619424927220</user-name>
 </group>
 <group>
  <name>nms</name>
  <user-name>installer</user-name>
  <user-name>operator42009256600399182198</user-name>
 </group>
 <group>
  <name>swm</name>
  <user-name>operator900036241939705</user-name>
```

<user-name>operator71319136</user-name>

# **QA TEST REPORT**

# M PLANE CONFORMANCE

</group>
</groups>
</nacm>
</data>

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### > 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>operator5310619424927220</name>
 <account-type>PASSWORD</account-type>
 <enabled>true</enabled>
</user>
<user>
 <name>operator42009256600399182198</name>
 <account-type>PASSWORD</account-type>
 <enabled>true</enabled>
</user>
<user>
 <name>operator900036241939705</name>
 <account-type>PASSWORD</account-type>
 <enabled>true</enabled>
</user>
<user>
 <name>operator71319136</name>
 <account-type>PASSWORD</account-type>
 <enabled>true</enabled>
```

</user>

# **QA TEST REPORT**

# M PLANE CONFORMANCE

</users>

</data>

STEP 1 TER NETCONF client establishes a connect	tion using a user account with swm privileges
******* Connect to the NETCONF Server ***	 ******
> connectsshhost 192.168.4.46port 830login operator713	19136
Interactive SSH Authentication	
Type your password:	
Password:	
Step 2 TER NETCONF client attempts to configure	a new o-ran-sync.vang on the NETCONF ser
=======================================	=======================================
======================================	=======================================
======================================	
****** Replace with below xml *******	
<pre><sync xmlns="urn:o-ran:sync:1.0"></sync></pre>	
<pre><ptp-config></ptp-config></pre>	
<domain-number>24</domain-number>	
<accepted-clock-classes></accepted-clock-classes>	
<clock-classes>255</clock-classes>	
<pre><ptp-profile>G_8275_1</ptp-profile></pre>	
<g-8275-1-config></g-8275-1-config>	
<pre><multicast-mac-address>FORWARDABLE</multicast-mac-address></pre>	
<delay-asymmetry>0</delay-asymmetry>	
:/ptp-config>	
<pre>cptp-status&gt;</pre>	
<pre><reporting-period>10</reporting-period></pre>	
<pre>c/ptp-status&gt;</pre>	
<synce-config></synce-config>	
<acceptance-list-of-ssm>EEC1</acceptance-list-of-ssm>	
<ssm-timeout>10</ssm-timeout>	
<synce-status></synce-status>	
<reporting-period>10</reporting-period>	

</synce-status>

</sync>

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

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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 "operator71319136" NACM authorization failed.

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- Aug 2 18:51:03 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:03 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:04 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:04 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:05 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:05 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:06 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:06 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:07 garuda user.notice SYNCMNGR[1160]: Received message from S-Plane
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Accepted a connection on :::830.
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Session 1830 (user "root", CID 1) created.
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-service" of subtype "ssh-userauth".
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-auth" of subtype "password".
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: User "operator" authenticated.
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel-open" of subtype "session".
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel" of subtype "subsystem".
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Session 1831 (user "root", CID 1) created.
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Aug 2 18:51:07 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-start).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/notifications:create-subscription" with ID 7 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "/notifications:create-subscription" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 7 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 7 priority 0 succeeded.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Session 34: thread 1 event new RPC.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:get-config" with ID 14 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:get-config" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 14 priority 0 succeeded.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Session 34: thread 1 event new RPC.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:edit-config" with ID 5 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 5 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "change" "o-ran-usermgmt" with ID 2 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda user.notice USERMGMT[903]: operator71319136 added successfully !!
- Aug 2 18:51:08 garuda user.notice USERMGMT[903]: operator71319136 enabled !!
- Aug 2 18:51:08 garuda user.notice USERMGMT[903]: END OF CHANGES
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Event "change" with ID 2 priority 0 succeeded.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "done" "o-ran-usermgmt" with ID 2 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda user.notice USERMGMT[903]: END OF CHANGES
- $Aug\ 2\ 18:51:08\ garuda\ daemon. info\ net opeer 2-server [846]:\ Resolving\ unresolved\ data\ nodes\ and\ their\ constraints...$
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of "/o-ran-usermgmt:users/user[name='operator71319136']", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/name", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/account-type", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/password", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/enabled", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- $Aug\ 2\ 18:51:08\ garuda\ daemon. info\ net opeer 2-server [846]:\ Processing\ "notif"\ "ietf-net conf-notifications"\ event\ with\ ID\ 1.$
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "notif" "ietf-netconf-notifications" with ID 2 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 5 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 5 priority 0 succeeded.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of "/o-ran-usermgmt:users/user[name='operator71319136']", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/name", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/account-type", but it is not required.

- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/password", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/o-ran-usermgmt:users/user[name='operator71319136']/enabled", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 2.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Session 34: thread 1 event new RPC.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:edit-config" with ID 6 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "done" "ietf-netconf-acm" with ID 4 priority 0 for 4 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "ietf-netconf-acm" "done" event with ID 4 priority 0 (remaining 4 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "done" event with ID 4 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "notif" "ietf-netconf-notifications" with ID 3 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: There is no instance of
- "/ietf-netconf-acm:nacm/groups/groups/groups/name='swm']/user-name[.='operator71319136']", but it is not required.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 3.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 6 priority 0 succeeded.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Session 34: thread 4 event new RPC.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:get-config" with ID 15 priority 0 for 1 subscribers.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:get-config" "rpc" event with ID 15 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 15 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 15 priority 0 succeeded.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:08 garuda daemon.info netopeer2-server[846]: Session 34: thread 1 event new RPC.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:get-config" with ID 16 priority 0 for 1 subscribers.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:get-config" "rpc" event with ID 16 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 16 priority 0 (remaining 0 subscribers).
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 16 priority 0 succeeded.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 34: thread 1 event new RPC.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 34: thread 1 event new RPC.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 34: thread 1 event session terminated.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Accepted a connection on :::830.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 1848 (user "root", CID 1) created.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-service" of subtype "ssh-userauth".
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-auth" of subtype "password".
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: User "operator71319136" authenticated.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel-open" of subtype "session".
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel" of subtype "subsystem".
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-end).
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 1849 (user "root", CID 1) created.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-start).
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:edit-config" with ID 7 priority 0 for 1 subscribers.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.
- Aug 2 18:51:09 garuda daemon.err netopeer2-server[846]: Access to the data model "o-ran-sync" is denied because "operator71319136" NACM authorization failed
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Failed processing of "rpc" event with ID 7 priority 0 (remaining 1 subscribers).
- Aug 2 18:51:09 garuda daemon.err netopeer2-server[846]: Access to the data model "o-ran-sync" is denied because "operator71319136" NACM authorization failed.
- Aug 2 18:51:09 garuda daemon.warn netopeer2-server[846]: Event "rpc" with ID 7 priority 0 failed (User callback failed).
- Aug 2 18:51:09 garuda daemon.err netopeer2-server[846]: Failed to send an RPC (User callback failed).
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 35: thread 3 event new RPC.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 35: thread 3 event reply error.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 35: thread 3 event new RPC.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Session 35: thread 3 event session terminated.

- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Aug 2 18:51:09 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-end).
- Aug 2 18:51:10 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:10 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:11 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:11 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:12 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:12 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:13 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:13 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:14 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Aug 2 18:51:14 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).
- Aug 2 18:51:14 garuda auth.info sshd[13855]: Accepted password for operator from 192.168.4.15 port 59784 ssh2
- Aug 2 18:51:15 garuda authpriv.info sshd[13855]: 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			