@ **FILE NAME:** **M_CTC_ID_023.txt**

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

@ **Software Release for Garuda_RevD:** **v5.0.2**

Test Description : This scenario is MANDATORY for an O-RU supporting the

Hierarchical M-plane architecture model.

This test validates that the O-RU can successfully start up with activated software.

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

3.3 SSH Connection Establishment

3.4 NETCONF Access Control

3.7 closing a NETCONF Session

==

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

==

==

Step 1 and 2: The TER NETCONF Client establishes connection and creates an account for new user using o-ran-user9 mgmt.yang

==

> connect --ssh --host 192.168.4.40 --port 830 --login operator

      Interactive SSH Authentication

      Type your password:

      Password:

      > status

      Current NETCONF session:

      ID   : 39

      Host   : 192.168.4.40

      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,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

==

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

==

==

******* Replace with below xml ********

==

```xml
<config xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<users xmlns="urn:o-ran:user-mgmt:1.0">
  <user>
    <name>operator624</name>
    <account-type>PASSWORD</account-type>
    <password>Iim~^}XELSBkju53}c{%ctOCge.idEf06Z</password>
    <enabled>true</enabled>
  </user>
</users>
</config>
```

==

Ok

==

==

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

==

```xml
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
 <eventTime>2022-08-19T12:35:11Z</eventTime>
 <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
 <changed-by>
  <username>root</username>
  <session-id>39</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='operator624']</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='operator624']/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='operator624']/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='operator624']/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='operator624']/o-ran-userm
gmt:enabled</target>
  <operation>create</operation>
 </edit>
 </netconf-config-change>
</notification>
```

===

Step 3 and 4: The TER NETCONF Client retrieves a list of users

===

===

> 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>operator36390421977493703226</name>
   <account-type>PASSWORD</account-type>
   <enabled>true</enabled>
  </user>
  <user>
   <name>operator05344524141167165445446</name>
   <account-type>PASSWORD</account-type>
   <enabled>true</enabled>
  </user>
  <user>
   <name>operator6163823880175</name>
   <account-type>PASSWORD</account-type>
   <enabled>true</enabled>
  </user>
  <user>
   <name>operator1063728979203892</name>
   <account-type>PASSWORD</account-type>
```

```
 <enabled>true</enabled>
 </user>
 <user>
  <name>operator624</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">
<nacm xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-acm">
 <groups>
  <group>
   <name>sudo</name>
   <user-name>operator624</user-name>
  </group>
 </groups>
</nacm>
</config>
```

===

Ok

===

===
******* NOTIFICATIONS *******
===

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
 <eventTime>2022-08-19T12:35:12Z</eventTime>
 <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
 <changed-by>
  <username>root</username>
  <session-id>39</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='sudo']/nacm:user-name[.='opera
```

tor624']</target>
  <operation>create</operation>
 </edit>
 </netconf-config-change>
</notification>

==

Step 5 and 6: NETCONF Server establishes a TCP connection and performs the Call Home procedure to the TER NETCONF Client using the same IP and VLAN.

==

> listen --ssh --login operator624

Waiting 60s for an SSH Call Home connection on port 4334...The authenticity of the host '::ffff:192.168.4.40' cannot be established.

ssh-rsa key fingerprint is 59:9e:90:48:f1:d7:6e:35:e8:d1:f6:1e:90:aa:a3:83:a0:6b:98:5a.

Are you sure you want to continue connecting (yes/no)? yes

operator624@::ffff:192.168.4.40 password:

==

Step 7: TER NETCONF Client and O-RU NETCONF Server exchange capabilities through the NETCONF <hello> messages

==

> status

Current NETCONF session:

ID   : 40

Host   : ::ffff:192.168.4.40

Port   : 48644

Transport   : SSH

Capabilities:

urn:ietf:params:netconf:base:1.0urn:ietf:params:netconf:base:1.1urn:ietf:params:netconf:capability:writable-running:1.0

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

urn:ietf:params:netconf:capability:validate:1.1urn:ietf:params:netconf:capability:startup:1.0urn: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:1.0urn: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,startup,url,xpathurn: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=2014-08-06urn:notification_history?module=notification_history

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

===

SYSTEM LOGS

===

Aug 19 12:35:07 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:07 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:07 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:07 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:08 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:08 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:08 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:08 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:09 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:09 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:09 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:09 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:10 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:10 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:10 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:10 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Accepted a connection on :::830.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Session 1733 (user "root", CID 1) created.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-service" of subtype "ssh-userauth".

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-auth" of subtype "password".

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: User "operator" authenticated.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-channel-open" of subtype "session".

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-channel" of subtype "subsystem".

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Session 1734 (user "root", CID 1) created.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Generated new event (netconf-session-start).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Published event "rpc" "/notifications:create-subscription" with ID 8 priority 0 for 1 subscribers.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Processing "/notifications:create-subscription" "rpc" event with ID 8 priority 0 (remaining 1 subscribers).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Successful processing of "rpc" event with ID 8 priority 0 (remaining 0 subscribers).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Event "rpc" with ID 8 priority 0 succeeded.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Session 39: thread 3 event new RPC.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Published event "rpc" "/ietf-netconf:edit-config" with ID 8 priority 0 for 1 subscribers.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 8 priority 0 (remaining 1 subscribers).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Published event "change" "o-ran-usermgmt" with ID 3 priority 0 for 1 subscribers.

Aug 19 12:35:11 garuda user.notice USERMGMT[919]: operator624 added successfully !!

Aug 19 12:35:11 garuda user.notice USERMGMT[919]: operator624 enabled !!

Aug 19 12:35:11 garuda user.notice USERMGMT[919]: END OF CHANGES

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Event "change" with ID 3 priority 0 succeeded.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Published event "done" "o-ran-usermgmt" with ID 3 priority 0 for 1 subscribers.

Aug 19 12:35:11 garuda user.notice USERMGMT[919]: END OF CHANGES

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/name", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/account-type", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/password", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/enabled", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Published event "notif" "ietf-netconf-notifications" with ID 2 priority 0 for 1 subscribers.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Successful processing of "rpc" event with ID 8 priority 0 (remaining 0 subscribers).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Event "rpc" with ID 8 priority 0 succeeded.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/name", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/account-type", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/password", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: There is no instance of "/o-ran-usermgmt:users/user[name='operator624']/enabled", but it is not required.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Aug 19 12:35:11 garuda daemon.info netopeer2-server[853]: Session 39: thread 1 event new RPC.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Published event "rpc" "/ietf-netconf:get-config" with ID 18 priority 0 for 1 subscribers.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Processing "/ietf-netconf:get-config" "rpc" event with ID 18 priority 0 (remaining 1 subscribers).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Successful processing of "rpc" event with ID 18 priority 0 (remaining 0 subscribers).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Event "rpc" with ID 18 priority 0 succeeded.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Session 39: thread 2 event new RPC.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Published event "rpc" "/ietf-netconf:edit-config" with ID 9 priority 0 for 1 subscribers.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 9 priority 0 (remaining 1 subscribers).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Published event "done" "ietf-netconf-acm" with ID 5 priority 0 for 4 subscribers.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Processing "ietf-netconf-acm" "done" event with ID 5 priority 0 (remaining 4 subscribers).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Successful processing of "done" event with ID 5 priority 0 (remaining 0 subscribers).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Published event "notif" "ietf-netconf-notifications" with ID 3 priority 0 for 1 subscribers.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Resolving unresolved data nodes and their constraints...

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: There is no instance of "/ietf-netconf-acm:nacm/groups/group[name='sudo']/user-name[.='operator624']", but it is not required.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: All data nodes and constraints resolved.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Successful processing of "rpc" event with ID 9 priority 0 (remaining 0 subscribers).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Event "rpc" with ID 9 priority 0 succeeded.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Session 39: thread 3 event new RPC.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Session 39: thread 1 event new RPC.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Session 39: thread 1 event session terminated.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Generated new event (netconf-session-end).

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:12 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:13 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:13 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:13 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:13 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:14 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:14 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:14 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:14 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:15 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:15 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:15 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:15 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:16 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:16 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:16 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:16 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:17 garuda user.notice SYNCMNGR[1176]: Received message from S-Plane

Aug 19 12:35:17 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:17 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:17 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:17 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:18 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:18 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:18 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:18 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:19 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:19 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:19 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:19 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:20 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:20 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:20 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:20 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:21 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:21 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:21 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:21 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: getsockopt() error (Connection refused).

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Successfully connected to 192.168.4.15:4334 over IPv4.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Session 1749 (user "root", CID 1) created.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-service" of subtype "ssh-userauth".

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-auth" of subtype "password".

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: User "operator624" authenticated.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-channel-open" of subtype "session".

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Received an SSH message "request-channel" of subtype "subsystem".

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Call Home client "default-client" session 40 established.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Session 1750 (user "root", CID 1) created.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 19 12:35:22 garuda daemon.info netopeer2-server[853]: Generated new event (netconf-session-start).

Aug 19 12:35:23 garuda authpriv.debug sshd[13946]: pam_unix(sshd:account): account operator has password changed in future

Aug 19 12:35:23 garuda auth.info sshd[13946]: Accepted password for operator from 192.168.4.15 port 33092 ssh2

Aug 19 12:35:23 garuda authpriv.info sshd[13946]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result : The TER NETCONF Client establishes a Call Home & SSH session

towards the NETCONF Server with new user created above.

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


==========================================================================
Sudo on Hierarchical M-plane architecture (positive case)       =       SUCCESS


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