



@ FILE NAME: M_CTC_ID_023.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MCB1: v1.0.7

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
=====
```

```
> listen --ssh --login operator
```

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

```
The authenticity of the host '192.168.17.37' cannot be established.
```

```
ssh-rsa key fingerprint is c0:7c:63:5d:4b:85:e7:27:e0:7e:f0:44:38:4e:ab:83
```

```
Interactive SSH Authentication done.
```

```
> status
```

```
Current NETCONF session:
```

```
ID      : 9
```

```
Host     : 192.168.17.37
```

```
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
=====
```

> 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>operator011</name>
      <account-type>PASSWORD</account-type>

<password>oP+moNxK^J2mrkPFkYAi)nPO1)Xp1TP5Uzuam~YSsjA8W.%tVU6w_hcsZ{aaOk2)M.EUAZOm2QSpMJo]uBgKwS4Nc~</passwo
rd>

      <enabled>true</enabled>
    </user>
  </users>
</config>
```

=====

Ok

=====

=====

***** NOTIFICATIONS *****

=====

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2000-11-04T00:03:00Z</eventTime>
  <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
    <changed-by>
      <username>root</username>
      <session-id>9</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='operator011']</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='operator011']/o-ran-userm
gmt:name</target>
    <operation>create</operation>
  </edit>
</edit>
```

```
<target
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0">/o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator011']/o-ran-userm
gmt:account-type</target>
  <operation>create</operation>
</edit>
<edit>
  <target
xmlns:o-ran-usermgmt="urn:o-ran:user-mgmt:1.0">/o-ran-usermgmt:users/o-ran-usermgmt:user[o-ran-usermgmt:name='operator011']/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='operator011']/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 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>operator94470462419347</name>
      <account-type>PASSWORD</account-type>
      <enabled>true</enabled>
    </user>
    <user>
      <name>operator1069</name>
      <account-type>PASSWORD</account-type>
      <enabled>true</enabled>
    </user>
    <user>
      <name>operator299391533376092729390</name>
      <account-type>PASSWORD</account-type>
      <enabled>true</enabled>
    </user>
    <user>
      <name>operator735058550456</name>
      <account-type>PASSWORD</account-type>
```

```
<enabled>true</enabled>
</user>
<user>
  <name>operator011</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>operator011</user-name>
    </group>
  </groups>
</nacm>
</config>
```

```
=====
Ok
=====
```

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

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2000-11-04T00:03:01Z</eventTime>
  <netconf-config-change xmlns="urn:ietf:params:xml:ns:yang:ietf-netconf-notifications">
    <changed-by>
      <username>root</username>
      <session-id>9</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
```

```
tor011']</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 operator011

Waiting 60s for an SSH Call Home connection on port 4334...The authenticity of the host '::ffff:192.168.17.37' cannot be established.
ssh-rsa key fingerprint is c0:7c:63:5d:4b:85:e7:27:e0:7e:f0:44:38:4e:ab:83.

operator011@::ffff:192.168.17.37 password:

=====

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

=====

> status

Current NETCONF session:

ID : 10

Host : ::ffff:192.168.17.37

Port : 45770

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=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,validation,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

=====

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.17.155:4334.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Successfully connected to 192.168.17.155:4334 over IPv4.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Session 208 (user "root", CID 1) created.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-service" of subtype "ssh-userauth".

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-auth" of subtype "password".

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: User "operator" authenticated.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel-open" of subtype "session".

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel" of subtype "subsystem".

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session 9 established.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Session 209 (user "root", CID 1) created.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-start).

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 14 priority 0 for 1 subscribers.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 14 priority 0 succeeded.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 3 event new RPC.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 15 priority 0 for 1 subscribers.

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 15 priority 0 (remaining 1 subscribers).

Nov 4 00:02:53 mcb1 daemon.info netopeer2-server[985]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 6.

Nov 4 00:02:53 mcb1 user.notice fw_manager[1075]: RPC #6 recieved. xpath -> /o-ran-software-management:software-inventory

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Event "operational" with ID 6 succeeded.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "VVDN=O-RU", but it is not required.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "VVDN O-RU", but it is not required.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: 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.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 15 priority 0 (remaining 0 subscribers).

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 15 priority 0 succeeded.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "VVDN=O-RU", but it is not required.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "VVDN O-RU", but it is not required.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: 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.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 0 event new RPC.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get-config" with ID 13 priority 0 for 1 subscribers.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get-config" "rpc" event with ID 13 priority 0 (remaining 1 subscribers).

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 13 priority 0 (remaining 0 subscribers).

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 13 priority 0 succeeded.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:54 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 2 event new RPC.

Nov 4 00:02:59 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:59 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:59 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:02:59 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:02:59 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/notifications:create-subscription" with ID 7 priority 1 for 1 subscribers.

Nov 4 00:02:59 mcb1 daemon.info netopeer2-server[985]: Processing "ietf-netconf-monitoring" "operational" event with ID 7.

Nov 4 00:02:59 mcb1 daemon.info netopeer2-server[985]: Successful processing of "operational" event with ID 7.

Nov 4 00:02:59 mcb1 user.notice supervision[1375]: Checking to enable supervision default-timer

Nov 4 00:02:59 mcb1 user.notice supervision[1375]: Received supervision-notification #7 from "operator" user.path
->/notifications:create-subscription

Nov 4 00:02:59 mcb1 user.notice supervision[1375]: Received supervision-notification

Nov 4 00:02:59 mcb1 user.notice supervision[1375]: Default supervision timer value : 60 seconds. Default Guard timer value : 10 seconds

Nov 4 00:02:59 mcb1 user.notice supervision[1375]: Internal Supervision timer value : 60 seconds. Internal Guard timer value : 10 seconds

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 7 priority 1 succeeded.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/notifications:create-subscription" with ID 7 priority 0 for 1 subscribers.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Processing "/notifications:create-subscription" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 7 priority 0 (remaining 0 subscribers).

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 7 priority 0 succeeded.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 0 event new RPC.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:edit-config" with ID 8 priority 0 for 1 subscribers.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 8 priority 0 (remaining 1 subscribers).

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Published event "change" "o-ran-usermgmt" with ID 3 priority 0 for 1 subscribers.

Nov 4 00:03:00 mcb1 user.notice USERMGMT[1064]: operator011 added successfully !!

Nov 4 00:03:00 mcb1 user.notice USERMGMT[1064]: operator011 enabled !!

Nov 4 00:03:00 mcb1 user.notice USERMGMT[1064]: END OF CHANGES

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Event "change" with ID 3 priority 0 succeeded.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Published event "done" "o-ran-usermgmt" with ID 3 priority 0 for 1 subscribers.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']/name", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of
"/o-ran-usermgmt:users/user[name='operator011']/account-type", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']/password", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']/enabled", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:03:00 mcb1 user.notice USERMGMT[1064]: END OF CHANGES

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Published event "notif" "ietf-netconf-notifications" with ID 2 priority 0 for 1 subscribers.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']/name", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of
"/o-ran-usermgmt:users/user[name='operator011']/account-type", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 8 priority 0 (remaining 0 subscribers).

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']/password", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/o-ran-usermgmt:users/user[name='operator011']/enabled", but it is not required.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 8 priority 0 succeeded.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Nov 4 00:03:00 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 0 event new RPC.

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:00 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:01 mcb1 user.warn pm_manager[1387]: Failed to open /media/sd-mmcb1k0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get-config" with ID 14 priority 0 for 1 subscribers.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get-config" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 14 priority 0 succeeded.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 0 event new RPC.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:edit-config" with ID 9 priority 0 for 1 subscribers.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:edit-config" "rpc" event with ID 9 priority 0 (remaining 1 subscribers).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: edit-config error-option "stop-on-error" not supported, rollback-on-error will be performed.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Published event "done" "ietf-netconf-acm" with ID 5 priority 0 for 4 subscribers.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Processing "ietf-netconf-acm" "done" event with ID 5 priority 0 (remaining 4 subscribers).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "done" event with ID 5 priority 0 (remaining 0 subscribers).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Published event "notif" "ietf-netconf-notifications" with ID 3 priority 0 for 1 subscribers.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: There is no instance of "/ietf-netconf-acm:nacm/groups/group[name='sudo']/user-name[.='operator011']", but it is not required.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 9 priority 0 (remaining 0 subscribers).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 9 priority 0 succeeded.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 0 event new RPC.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 4 event new RPC.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Session 9: thread 4 event session terminated.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-end).

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session terminated.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.17.155:4334.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Successfully connected to 192.168.17.155:4334 over IPv4.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Session 231 (user "root", CID 1) created.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-service" of subtype "ssh-userauth".

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-auth" of subtype "password".

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: User "operator011" authenticated.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel-open" of subtype "session".

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel" of subtype "subsystem".

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session 10 established.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Session 232 (user "root", CID 1) created.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:03:01 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-start).

Nov 4 00:03:01 mcb1 authpriv.debug sshd[3187]: pam_unix(sshd:account): account operator has password changed in future

Nov 4 00:03:01 mcb1 authpriv.info sshd[3187]: Accepted password for operator from 192.168.17.155 port 41374 ssh2

Nov 4 00:03:01 mcb1 authpriv.info sshd[3187]: 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.

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

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

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