@ FILE NAME: M_CTC_ID_014.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MCB1:   v1.0.7

Test Description : This test validates that the O-RU can successfully perform a software download and software install procedure.

===

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

===

> listen --ssh --login operator

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

    The authenticity of the host '::ffff:192.168.4.43' 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   : 1

    Host   : 192.168.4.43

    Port   : 830

    Transport : SSH

    Capabilities:

    urn:ietf:params:netconf:base:1.0 urn:ietf:params:netconf:base:1.1 urn:ietf:params:netconf:capability:writable-running:1.0
urn:ietf:params:netconf:capability:candidate:1.0 urn:ietf:params:netconf:capability:rollback-on-error:1.0
urn:ietf:params:netconf:capability:validate:1.1 urn:ietf:params:netconf:capability:startup:1.0 urn:ietf:params:netconf:capability:xpath:1.0
urn:ietf:params:netconf:capability:with-defaults:1.0?basic-mode=explicit&also-supported=report-all,report-all-tagged,trim,explicit
urn:ietf:params:netconf:capability:notification:1.0 urn:ietf:params:netconf:capability:interleave:1.0
urn:ietf:params:xml:ns:yang:ietf-yang-metadata?module=ietf-yang-metadata&revision=2016-08-05
urn:ietf:params:xml:ns:yang:1?module=yang&revision=2017-02-20
urn:ietf:params:xml:ns:yang:ietf-inet-types?module=ietf-inet-types&revision=2013-07-15
urn:ietf:params:xml:ns:yang:ietf-yang-types?module=ietf-yang-types&revision=2013-07-15
urn:ietf:params:netconf:capability:yang-library:1.1?revision=2019-01-04&content-id=63
urn:sysrepo:plugind?module=sysrepo-plugind&revision=2020-12-10
urn:ietf:params:xml:ns:yang:ietf-netconf-acm?module=ietf-netconf-acm&revision=2018-02-14
urn:ietf:params:xml:ns:netconf:base:1.0?module=ietf-netconf&revision=2013-09-29&features=writable-running,candidate,rollback-on-error,valid
ate,startup,url,xpath urn:ietf:params:xml:ns:yang:ietf-netconf-with-defaults?module=ietf-netconf-with-defaults&revision=2011-06-01
urn:ietf:params:xml:ns:yang:ietf-netconf-notifications?module=ietf-netconf-notifications&revision=2012-02-06
urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?module=ietf-netconf-monitoring&revision=2010-10-04
urn:ietf:params:xml:ns:netconf:notification:1.0?module=notifications&revision=2008-07-14
urn:ietf:params:xml:ns:netmod:notification?module=nc-notifications&revision=2008-07-14
urn:ietf:params:xml:ns:yang:ietf-x509-cert-to-name?module=ietf-x509-cert-to-name&revision=2014-12-10
urn:ietf:params:xml:ns:yang:iana-crypt-hash?module=iana-crypt-hash&revision=2014-08-06 urn:notification_history?module=notification_history
urn:ietf:params:xml:ns:yang:iana-if-type?module=iana-if-type&revision=2017-01-19

===

> subscribe

===

Ok

==

Initial Get Filter

==

==

> **get --filter-xpath /o-ran-software-management:software-inventory**

==

```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">
 <software-inventory xmlns="urn:o-ran:software-management:1.0">
  <software-slot>
   <name>swSlot1</name>
   <status>VALID</status>
   <active>false</active>
   <running>false</running>
   <access>READ_WRITE</access>
   <product-code>VVDN=O-RU</product-code>
   <vendor-code>VN</vendor-code>
   <build-id>38578ed</build-id>
   <build-name>Beta Release</build-name>
   <build-version>1.0.5</build-version>
   <files>
    <name>boot</name>
    <version>1.0.0</version>
    <local-path>/media/sd-mmcblk0p1/BOOT0001.BIN</local-path>
    <integrity>OK</integrity>
   </files>
   <files>
    <name>kernel</name>
    <version>1.0.0</version>
    <local-path>/media/sd-mmcblk0p1/image0001.ub</local-path>
    <integrity>OK</integrity>
   </files>
   <files>
    <name>rootfs</name>
    <version>1.0.0</version>
    <local-path>/media/sd-mmcblk0p2/</local-path>
    <integrity>OK</integrity>
   </files>
  </software-slot>
  <software-slot>
   <name>swSlot2</name>
   <status>VALID</status>
   <active>true</active>
   <running>true</running>
   <access>READ_WRITE</access>
   <product-code>VVDN O-RU</product-code>
```

<vendor-code>VN</vendor-code>
<build-id>90f0b6c</build-id>
<build-name>Beta Release</build-name>
<build-version>1.0.7</build-version>
<files>
 <name>boot</name>
 <version>1.0.0</version>
 <local-path>/media/sd-mmcblk0p1/BOOT0002.BIN</local-path>
 <integrity>OK</integrity>
</files>
<files>
 <name>kernel</name>
 <version>1.0.0</version>
 <local-path>/media/sd-mmcblk0p1/image0002.ub</local-path>
 <integrity>OK</integrity>
</files>
<files>
 <name>rootfs</name>
 <version>1.0.0</version>
 <local-path>/media/sd-mmcblk0p3/</local-path>
 <integrity>OK</integrity>
</files>
</software-slot>
<software-slot>
 <name>swRecoverySlot</name>
 <status>VALID</status>
 <active>false</active>
 <running>false</running>
 <access>READ_ONLY</access>
 <product-code>STL=O-RU</product-code>
 <vendor-code>VN</vendor-code>
 <build-id>factory_img</build-id>
 <build-name>Beta Release</build-name>
 <build-version>1.0.0</build-version>
 <files>
 <name>boot</name>
 <version>1.0.0</version>
 <local-path>/media/sd-mmcblk0p1/BOOT0003.BIN</local-path>
 <integrity>OK</integrity>
</files>
<files>
 <name>kernel</name>
 <version>1.0.0</version>
 <local-path>/media/sd-mmcblk0p1/golden.ub</local-path>
 <integrity>OK</integrity>
</files>
<files>
 <name>rootfs</name>
 <version>1.0.0</version>

```
<local-path>/media/sd-mmcblk0p1/golden.ub</local-path>
 <integrity>OK</integrity>
 </files>
 </software-slot>
 </software-inventory>
</data>
```

===

Step 1 : TER NETCONF Client triggers <rpc><software-download>

===

===

> user-rpc

===

===

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

===

```
<software-download xmlns="urn:o-ran:software-management:1.0">
<remote-file-path>/home/vvdn/binary/ORANUSER_SUDO_PERMISSION.zip</remote-file-path>
<password>
<password>vvdn</password>
</password>
<server>
<keys>
<algorithm>secp256r1</algorithm>
<public-key>AAAAB3NzaC1yc2EAAAADAQABAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJ
+Zlz3oPipBBTcUq9GqIobokfogL/SQnwqscISIV97TFvmPwN6iVNl4ogWjf+McWr7ZWjU3rrLjB1y/dIlpSQDV9g+b+IayIZN3hxH0HijKQSG/8q
45B5uFQAPEr3+s5k4DuZXP5il81iSbhzq0f7/uG/VeA2cKBrum+adqI3mvM/GCqfvoE2+S+ghK5Mtgx9gnNUQDvN8JcZRFm9C0ING66U73d+w
OgbaFF5VKT0X3iDWHj9AEW1j8sE8Q5ymtlW5gyVs/4mDZH7d1eCWiawOiiv</public-key>
</keys>
</server>
</software-download>
```

===

******* RPC Reply ********

===

```
<nc:rpc-reply xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="urn:uuid:575035ad-b419-4694-8e6c-d12c5fe3a7c6"><status
xmlns="urn:o-ran:software-management:1.0">STARTED</status><notification-timeout
xmlns="urn:o-ran:software-management:1.0">30</notification-timeout></nc:rpc-reply>
```

===
Step 2 : O-RU NETCONF Server sends <notification><download-event> with status COMPLETED to TER NETCONF Client
===

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
 <eventTime>2000-11-04T00:58:44Z</eventTime>
 <download-event xmlns="urn:o-ran:software-management:1.0">
  <file-name>FILE_NOT_PROCESSED</file-name>
  <status>PROTOCOL_ERROR</status>
  <error-message>sw download performed using sftp only</error-message>
 </download-event>
</notification>
```

==
    ############# SYSTEM LOGS #############
==

Nov 4 00:58:40 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Nov 4 00:58:40 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).

Nov 4 00:58:41 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Nov 4 00:58:41 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Successfully connected to 192.168.4.15:4334 over IPv4.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Session 100 (user "root", CID 1) created.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-service" of subtype "ssh-userauth".

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-auth" of subtype "password".

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: User "operator" authenticated.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel-open" of subtype "session".

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel" of subtype "subsystem".

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session 1 established.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Session 101 (user "root", CID 1) created.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-start).

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 1 priority 0 for 1 subscribers.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 1 priority 0 (remaining 1 subscribers).

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 1 priority 0 succeeded.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 2 event new RPC.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 2 priority 0 for 1 subscribers.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/ietf-keystore:keystore/ietf-keystore:asymmetric-keys/ietf-keystore:asymmetric-key/ietf-keystore:name" with the value "genkey", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/ietf-keystore:keystore/ietf-keystore:asymmetric-keys/ietf-keystore:asymmetric-key/ietf-keystore:name" with the value "genkey", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 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 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/ietf-interfaces:interfaces/ietf-interfaces:interface/ietf-interfaces:name" with the value "eth1.100", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/ietf-interfaces:interfaces/ietf-interfaces:interface[ietf-interfaces:name = current()/../../interface-name]/o-ran-interfaces:vlan-id" with the value "100", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/o-ran-processing-element:processing-elements/o-ran-processing-element:ru-elements/o-ran-processing-element:name" with the value "element1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-tx-endpoints/name" with the value "slltx-endpoint0", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-tx-endpoints/name" with the value "slltx-endpoint1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-tx-endpoints/name" with the value "slltx-endpoint2", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-tx-endpoints/name" with the value "slltx-endpoint3", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-rx-endpoints/name" with the value "sllrx-endpoint0", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-rx-endpoints/name" with the value "sllrx-endpoint1", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-rx-endpoints/name" with

the value "sllrx-endpoint2", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: There is no leafref "/user-plane-configuration/static-low-level-rx-endpoints/name" with the value "sllrx-endpoint3", but it is not required.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:42 mcb1 daemon.info netopeer2-server[985]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 1.

Nov 4 00:58:42 mcb1 user.notice fw_manager[1065]: RPC #1 recieved. xpath -> /o-ran-software-management:software-inventory

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Event "operational" with ID 1 succeeded.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 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 00:58:43 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 00:58:43 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 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 2 priority 0 succeeded.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 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 00:58:43 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 00:58:43 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 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 0 event new RPC.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get-config" with ID 1 priority 0 for 1 subscribers.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get-config" "rpc" event with ID 1 priority 0 (remaining 1 subscribers).

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 1 priority 0 succeeded.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 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 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 4 event new RPC.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/notifications:create-subscription" with ID 1 priority 1 for 1 subscribers.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Processing "ietf-netconf-monitoring" "operational" event with ID 1.

Nov 4 00:58:43 mcb1 daemon.info netopeer2-server[985]: Successful processing of "operational" event with ID 1.

Nov 4 00:58:43 mcb1 user.notice supervision[1365]: Checking to enable supervision default-timer

Nov 4 00:58:43 mcb1 user.notice supervision[1365]: Received supervision-notification #1 from"operator" user.path ->/notifications:create-subscription

Nov 4 00:58:43 mcb1 user.notice supervision[1365]: Received supervision-notification

Nov 4 00:58:43 mcb1 user.notice supervision[1365]: Default supervision timer value : 60 seconds. Default Guard timer value : 10 seconds

Nov 4 00:58:43 mcb1 user.notice supervision[1365]: Internal Supervision timer value : 60 seconds.   Internal Guard timer value : 10 seconds

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:43 mcb1 user.warn pm_manager[1377]: Failed to open /media/sd-mmcblk0p4/O-RAN/log/timezone. Using default value...

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 1 priority 1 succeeded.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/notifications:create-subscription" with ID 1 priority 0 for 1 subscribers.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Processing "/notifications:create-subscription" "rpc" event with ID 1 priority 0 (remaining 1 subscribers).

Nov 4 00:58:44 mcb1 user.notice SYNCMNGR[1311]: Received message from S-Plane

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 1 priority 0 succeeded.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 0 event new RPC.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 3 priority 0 for 1 subscribers.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 3 priority 0 (remaining 1 subscribers).

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 2.

Nov 4 00:58:44 mcb1 user.notice fw_manager[1065]: RPC #2 recieved. xpath -> /o-ran-software-management:software-inventory

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Event "operational" with ID 2 succeeded.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 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 00:58:44 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 00:58:44 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 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 3 priority 0 (remaining 0 subscribers).

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 3 priority 0 succeeded.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 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 00:58:44 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 00:58:44 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 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 0 event new RPC.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/o-ran-software-management:software-download" with ID 1 priority 0 for 1 subscribers.

Nov 4 00:58:44 mcb1 user.notice fw_manager[1065]: RPC #1 recieved. xpath -> /o-ran-software-management:software-download

Nov 4 00:58:44 mcb1 user.err fw_manager[1065]: swDownload failed :Reason: sw download performed using sftp only

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 1 priority 0 succeeded.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "o-ran-software-management" event with ID 1.

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:58:44 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 1 event new RPC.

Nov 4 00:58:46 mcb1 user.info FAULT MANAGER[999]: sendData : Source ID: 21

Nov 4 00:58:46 mcb1 user.info FAULT MANAGER[999]: sendData : Fault ID: 23

Nov 4 00:58:46 mcb1 user.info FAULT MANAGER[999]: sendData : FAULT_IS_CLEARED: False

Nov 4 00:58:46 mcb1 user.info FAULT MANAGER[999]: sendData : FAULT_SEVERITY: 2

Nov 4 00:58:46 mcb1 user.info FAULT MANAGER[999]: sendData : FAULT_TIME: 2000-11-04T00:58:46Z

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: There is no instance of

"/notification_history:history/module-notification[module-name='Module']/notif-error", but it is not required.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: There is no instance of

"/notification_history:history/module-notification[module-name='Module']/alert", but it is not required.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "o-ran-fm" event with ID 1.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: There is no instance of

"/notification_history:history/module-notification[module-name='Module']/epochtime", but it is not required.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Nov 4 00:58:46 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Nov 4 00:58:50 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 0 event new RPC.

Nov 4 00:58:50 mcb1 daemon.info netopeer2-server[985]: Session 1: thread 0 event session terminated.

Nov 4 00:58:50 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.

Nov 4 00:58:50 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-end).

Nov 4 00:58:50 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session terminated.

Nov 4 00:58:50 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Nov 4 00:58:50 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).

Nov 4 00:58:50 mcb1 authpriv.debug sshd[2537]: pam_unix(sshd:account): account operator has password changed in future

Nov 4 00:58:50 mcb1 auth.info sshd[2537]: Accepted password for operator from 192.168.4.15 port 55970 ssh2

Nov 4 00:58:50 mcb1 authpriv.info sshd[2537]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result : The O-RU NETCONF Server sends

<notification><install-event><status> to the TER NETCONF Client. Field <status>

contains the value COMPLETED to indicate the successful installation of software to the

desired slot.

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


========================================================================
***************** FAIL_REASON *******************
========================================================================
PROTOCOL_ERROR
========================================================================
```
O-RU Software Update and Install   =   FAIL
```
========================================================================
```