QA TEST REPORT

@ FILE NAME: M_CTC_ID_016_.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for Garuda_RevD: v5.0.0

Test Description : The minimum functions of the TER described in section 2.1 that support

validation of the M-Plane are operational, configured and connected to the O-RU

```
========================================================================
   ********** Connect to the NETCONF Server **********
========================================================================
> connect --ssh --host 192.168.4.46 --port 830 --login operator
            Interactive SSH Authentication
            Type your password:
            Password:
            > status
            Current NETCONF session:
            ID        : 67
            Host      : 192.168.4.46
            Port      : 830
            Transport  : SSH
            Capabilities:
             urn:ietf:params:netconf:base:1.0 urn:ietf:params:netconf:base:1.1 urn:ietf:params:netconf:capability:writable-running:1.0
urn:ietf:params:netconf:capability:candidate:1.0 urn:ietf:params:netconf:capability:rollback-on-error:1.0
urn:ietf:params:netconf: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,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>true</active>
   <running>true</running>
   <access>READ_WRITE</access>
   <product-code>STL O-RU</product-code>
   <vendor-code>VN</vendor-code>
   <build-id>90f0b6c</build-id>
   <build-name>Beta Release</build-name>
   <build-version>5.0.0</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>false</active>
   <running>false</running>
```

```
<access>READ_WRITE</access>
<product-code>STL O-RU</product-code>
<vendor-code>VN</vendor-code>
<build-id>90f0b6c</build-id>
<build-name>Beta Release</build-name>
<build-version>4.0.9</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>1.3.4</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-activate> Slot must have attributes active = FALSE, running = FALSE.

==

==

> user-rpc

==

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

```
<software-activate xmlns="urn:o-ran:software-management:1.0">
<slot-name>swSlot2</slot-name>
</software-activate>
```

==
Step 2 : O-RU NETCONF Server responds with <rpc-reply><software-activate><status>. The parameter "status" is set to STARTED.
==

```
<nc:rpc-reply xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="urn:uuid:64aa6e8a-6e7a-498d-ba02-03c79260b18f"><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 3 : O-RU NETCONF Server sends <notification><activation-event> with a status COMPLETED.
==

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
 <eventTime>2022-08-02T19:03:24Z</eventTime>
 <activation-event xmlns="urn:o-ran:software-management:1.0">
 <slot-name>swSlot2</slot-name>
 <status>COMPLETED</status>
 <return-code>0</return-code>
 </activation-event>
</notification>
```

===

> 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>true</running>
   <access>READ_WRITE</access>
   <product-code>STL O-RU</product-code>
   <vendor-code>VN</vendor-code>
   <build-id>90f0b6c</build-id>
   <build-name>Beta Release</build-name>
   <build-version>5.0.0</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>false</running>
   <access>READ_WRITE</access>
   <product-code>STL O-RU</product-code>
   <vendor-code>VN</vendor-code>
   <build-id>90f0b6c</build-id>
```

```xml
<build-name>Beta Release</build-name>
<build-version>4.0.9</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>1.3.4</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>
```

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

Aug 2 19:03:18 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:18 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:19 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:19 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:20 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:20 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:21 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:21 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Accepted a connection on :::830.

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Session 2125 (user "root", CID 1) created.

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-service" of subtype "ssh-userauth".

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-auth" of subtype "password".

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: User "operator" authenticated.

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel-open" of subtype "session".

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Received an SSH message "request-channel" of subtype "subsystem".

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Session 2126 (user "root", CID 1) created.

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 2 19:03:22 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-start).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/notifications:create-subscription" with ID 14 priority 0 for 1 subscribers.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Processing "/notifications:create-subscription" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 14 priority 0 succeeded.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Session 67: thread 4 event new RPC.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/log_manager", but it is not required.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:get" with ID 797 priority 0 for 1 subscribers.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:get" "rpc" event with ID 797 priority 0 (remaining 1

subscribers).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 25.

Aug 2 19:03:23 garuda user.notice fw_manager[914]: RPC #25 recieved. xpath -> /o-ran-software-management:software-inventory

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/operations_manager", but it is not required.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/sys_monitor", but it is not required.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Event "operational" with ID 25 succeeded.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 797 priority 0 (remaining 0 subscribers).

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 797 priority 0 succeeded.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Session 67: thread 0 event new RPC.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Must condition "/software-inventory/software-slot[name = current()][status = 'VALID']" not satisfied, but it is not required.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:23 garuda daemon.info netopeer2-server[846]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 26.

Aug 2 19:03:23 garuda user.notice fw_manager[914]: RPC #26 recieved. xpath -> /o-ran-software-management:software-inventory

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Event "operational" with ID 26 succeeded.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/o-ran-software-management:software-activate" with ID 1 priority 0 for 1 subscribers.

Aug 2 19:03:24 garuda user.notice fw_manager[914]: RPC #1 recieved. xpath -> /o-ran-software-management:software-activate

Aug 2 19:03:24 garuda user.notice fw_manager[914]: Requested slot for activation - swSlot2

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/file_manager", but it is not required.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 4.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 4 priority 0 (remaining 0 subscribers).

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 1 priority 0 succeeded.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Session 67: thread 2 event new RPC.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/fault_manager", but it is not required.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 5.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 5 priority 0 (remaining 0 subscribers).

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/supervision", but it is not required.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 6.

Aug 2 19:03:24 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 6 priority 0 (remaining 0 subscribers).

Aug 2 19:03:24 garuda user.notice fw_manager[914]: RPC #27 recieved. xpath -> /o-ran-software-management:software-inventory

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/pm_manager", but it is not required.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 7.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 7 priority 0 (remaining 0 subscribers).

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: There is no leafref "/software-inventory/software-slot/name" with the value "swSlot2", but it is not required.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Processing "notif" "o-ran-software-management" event with ID 1.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/nw_manager", but it is not required.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 8.

Aug 2 19:03:25 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 8 priority 0 (remaining 0 subscribers).

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/radio_manager", but it is not required.

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 9.

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 9 priority 0 (remaining 0 subscribers).

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: There is no instance of "/stli_giru-wdm:system-apps/um_manager", but it is not required.

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 10.

Aug 2 19:03:26 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 10 priority 0 (remaining 0 subscribers).

Aug 2 19:03:27 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:27 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:28 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:28 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:29 garuda user.notice SYNCMNGR[1160]: Received message from S-Plane

Aug 2 19:03:29 garuda user.err FAULT MANAGER[860]: sendData : Source ID: 17

Aug 2 19:03:29 garuda user.err FAULT MANAGER[860]: sendData : Fault ID: 23

Aug 2 19:03:29 garuda user.err FAULT MANAGER[860]: sendData : FAULT_IS_CLEARED: TRUE

Aug 2 19:03:29 garuda user.err FAULT MANAGER[860]: sendData : FAULT_SEVERITY: 0

Aug 2 19:03:29 garuda user.err FAULT MANAGER[860]: sendData : FAULT_TIME: 2022-08-02T19:03:29Z

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: There is no instance of "/notification_history:history/module-notification[module-name='Module']/notif-error", but it is not required.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 11.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 11 priority 0 (remaining 0 subscribers).

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: There is no instance of "/notification_history:history/module-notification[module-name='Module']/alert", but it is not required.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 12.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 12 priority 0 (remaining 0 subscribers).

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Processing "notif" "o-ran-fm" event with ID 1.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: There is no instance of

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

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Processing "notif" "ietf-netconf-notifications" event with ID 13.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Successful processing of "notif" event with ID 13 priority 0 (remaining 0 subscribers).

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:29 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Published event "rpc" "/ietf-netconf:get" with ID 798 priority 0 for 1 subscribers.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Processing "/ietf-netconf:get" "rpc" event with ID 798 priority 0 (remaining 1 subscribers).

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 28.

Aug 2 19:03:30 garuda user.notice fw_manager[914]: RPC #28 recieved. xpath -> /o-ran-software-management:software-inventory

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Event "operational" with ID 28 succeeded.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Successful processing of "rpc" event with ID 798 priority 0 (remaining 0 subscribers).

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Event "rpc" with ID 798 priority 0 succeeded.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Resolving unresolved data nodes and their constraints...

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: 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.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: All data nodes and constraints resolved.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Session 67: thread 0 event new RPC.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Session 67: thread 0 event new RPC.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Session 67: thread 0 event session terminated.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: There are no subscribers for "ietf-netconf-notifications" notifications.

Aug 2 19:03:30 garuda daemon.info netopeer2-server[846]: Generated new event (netconf-session-end).

Aug 2 19:03:31 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:31 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:32 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:32 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:33 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:33 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:34 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:34 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:35 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:35 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:36 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:36 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:37 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:37 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:38 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:38 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:39 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:39 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:40 garuda daemon.info netopeer2-server[846]: Trying to connect via IPv4 to 192.168.4.15:4334.

Aug 2 19:03:40 garuda daemon.info netopeer2-server[846]: getsockopt() error (Connection refused).

Aug 2 19:03:40 garuda auth.info sshd[27745]: Accepted password for operator from 192.168.4.15 port 59904 ssh2

Aug 2 19:03:40 garuda authpriv.info sshd[27745]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result :

1. The O-RU NETCONF Server performs a software activation procedure. When the procedure is completed, the O-RU NETCONF Server sends <notification><activation-event> with a status COMPLETED and the slot-name in the activation event corresponds to the slot-name used in the software-activate RPC to the TER NETCONF Client.

2. Status of the software slot containing the software still used by device remains VALID, the parameter "active" is set to False. The parameter "running" is True.

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


============================================================================
O-RU Software Update and Install          =          SUCCESS
============================================================================
```