



@ FILE NAME: Firmware_Upgrade.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for LPRU: v5.0.4

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:192.168.4.56' 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 : 3

Host : 192.168.4.56

Port : 830

Transport : SSH

Capabilities:

urn:ietf:params:netconf:base:1.0 urn:ietf:params:netconf:base:1.1 urn:ietf:params:netconf:capability:writable-running:1.0
urn:ietf:params:netconf:capability:candidate:1.0 urn:ietf:params:netconf:capability:rollback-on-error:1.0
urn:ietf:params:netconf:capability:validate:1.1 urn:ietf:params:netconf:capability:startup:1.0 urn:ietf:params:netconf:capability:xpath:1.0
urn:ietf:params:netconf:capability:with-defaults:1.0?basic-mode=explicit&also-supported=report-all,report-all-tagged,trim,explicit
urn:ietf:params:netconf:capability:notification:1.0 urn:ietf:params:netconf:capability:interleave:1.0
urn:ietf:params:xml:ns:yang:ietf-yang-metadata?module=ietf-yang-metadata&revision=2016-08-05
urn:ietf:params:xml:ns:yang:1?module=yang&revision=2017-02-20
urn:ietf:params:xml:ns:yang:ietf-inet-types?module=ietf-inet-types&revision=2013-07-15
urn:ietf:params:xml:ns:yang:ietf-yang-types?module=ietf-yang-types&revision=2013-07-15
urn:ietf:params:netconf:capability:yang-library:1.1?revision=2019-01-04&content-id=61
urn:sysrepo:plugind?module=sysrepo-plugind&revision=2020-12-10
urn:ietf:params:xml:ns:yang:ietf-netconf-acm?module=ietf-netconf-acm&revision=2018-02-14
urn:ietf:params:xml:ns:netconf:base:1.0?module=ietf-netconf&revision=2013-09-29&features=writable-running,candidate,rollback-on-error,validate,startup,url,xpath urn:ietf:params:xml:ns:yang:ietf-netconf-with-defaults?module=ietf-netconf-with-defaults&revision=2011-06-01
urn:ietf:params:xml:ns:yang:ietf-netconf-notifications?module=ietf-netconf-notifications&revision=2012-02-06
urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?module=ietf-netconf-monitoring&revision=2010-10-04
urn:ietf:params:xml:ns:netconf:notification:1.0?module=notifications&revision=2008-07-14
urn:ietf:params:xml:ns:netmod:notification?module=nc-notifications&revision=2008-07-14
urn:ietf:params:xml:ns:yang:ietf-x509-cert-to-name?module=ietf-x509-cert-to-name&revision=2014-12-10
urn:ietf:params:xml:ns:yang:iana-crypt-hash?module=iana-crypt-hash&revision=2014-08-06 urn:notification_history?module=notification_history
urn:ietf:params:xml:ns:yang:iana-if-type?module=iana-if-type&revision=2017-01-19

=====

> subscribe

=====

Ok

Initial Get Filter

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

```
<?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>5.0.4</build-version>
      <files>
        <name>boot</name>
        <version>1.0.0</version>
        <local-path>/media/sd-mmcb1k0p1/BOOT0001.BIN</local-path>
        <integrity>OK</integrity>
      </files>
      <files>
        <name>kernel</name>
        <version>1.0.0</version>
        <local-path>/media/sd-mmcb1k0p1/image0001.ub</local-path>
        <integrity>OK</integrity>
      </files>
      <files>
        <name>rootfs</name>
        <version>1.0.0</version>
        <local-path>/media/sd-mmcb1k0p2/</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>VVDN O-RU</product-code>
```

```
<vendor-code>VN</vendor-code>
<build-id>90f0b6c</build-id>
<build-name>Beta Release</build-name>
<build-version>1.0.14</build-version>
<files>
  <name>boot</name>
  <version>1.0.0</version>
  <local-path>/media/sd-mmcb1k0p1/BOOT0002.BIN</local-path>
  <integrity>OK</integrity>
</files>
<files>
  <name>kernel</name>
  <version>1.0.0</version>
  <local-path>/media/sd-mmcb1k0p1/image0002.ub</local-path>
  <integrity>OK</integrity>
</files>
<files>
  <name>rootfs</name>
  <version>1.0.0</version>
  <local-path>/media/sd-mmcb1k0p3/</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>VVDN=O-RU</product-code>
  <vendor-code>VN</vendor-code>
  <build-id>factory_img</build-id>
  <build-name>Beta Release</build-name>
  <build-version>1.0.7</build-version>
  <files>
    <name>boot</name>
    <version>1.0.0</version>
    <local-path>/media/sd-mmcb1k0p1/BOOT0003.BIN</local-path>
    <integrity>OK</integrity>
  </files>
  <files>
    <name>kernel</name>
    <version>1.0.0</version>
    <local-path>/media/sd-mmcb1k0p1/golden.ub</local-path>
    <integrity>OK</integrity>
  </files>
  <files>
    <name>rootfs</name>
    <version>1.0.0</version>
```

```
<local-path>/media/sd-mmcbk0p1/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>sftp://vvdn@192.168.4.15:22/home/vvdn/Videos/ORAN-Automation/CI_CD/LOGS/LPRU/Firmware_Upgrade_12_40_23_2_2_2023.pdf</remote-file-path>
<password>
<password>vvdntech</password>
</password>
<server>
<keys>
<algorithm>secp256r1</algorithm>
<public-key>AAAAB3NzaC1yc2EAAAADAQABAAQAC0EVfAv8MI4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dGjERFEq2YZCnaX4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkiUwPb+tnP7iT9T7YMx4c62h6I9O/wt2hq8RMAC8PT1JAeVebylIrKbcI5g3N2NI6D8OGD0Coick7iczIlor/9ylshjdgIQdi8Bxnq9NhZD0zA2WvQI9eytlvut/uA6KWaiwF9C+OC7FhIf1O7jDoYXvZUIQa90c0EG4O962JB3SYxWchl4gYxmr6zAtu3TT4j</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:9df72899-9cb6-49db-990c-2a331c3d47f8"><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>2103-04-12T16:40:07Z</eventTime>
  <download-event xmlns="urn:o-ran:software-management:1.0">
    <file-name>Firmware_Upgrade_12_40_23_2_2_2023.pdf</file-name>
    <status>COMPLETED</status>
  </download-event>
</notification>
```

=====

> user-rpc

=====

=====

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

=====

```
<software-install xmlns="urn:o-ran:software-management:1.0">
  <slot-name>swSlot2</slot-name>
  <file-names>/home/vvvn/Videos/ORAN-Automation/CI_CD/LOGS/LPRU/Firmware_Upgrade_12_40_23_2_2_2023.pdf</file-names>
</software-install>
```

=====

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

=====

```
<nc:rpc-reply xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0" message-id="urn:uuid:934c5a32-a2de-4bff-9159-62e943022195"><status
xmlns="urn:o-ran:software-management:1.0">STARTED</status></nc:rpc-reply>
```

=====

Step 4 and 5 : O-RU NETCONF Server sends <notification><install-event> with status COMPLETED to TER NETCONF Client

=====

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2103-04-12T16:40:08Z</eventTime>
  <install-event xmlns="urn:o-ran:software-management:1.0">
    <slot-name>swSlot2</slot-name>
    <status>FILE_ERROR</status>
    <error-message>unzip failed</error-message>
  </install-event>
</notification>
```

=====

SYSTEM LOGS

```
=====
Apr 12 16:39:58 garuda daemon.info netopeer2-server[860]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 12 16:39:58 garuda daemon.info netopeer2-server[860]: getsockopt() error (Connection refused).
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: Trying to connect via IPv4 to 192.168.4.15:4334.
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: Successfully connected to 192.168.4.15:4334 over IPv4.
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: Session 89 (user "root", CID 1) created.
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: Received an SSH message "request-service" of subtype "ssh-userauth".
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: Received an SSH message "request-auth" of subtype "password".
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: User "operator" authenticated.
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: Received an SSH message "request-channel-open" of subtype "session".
Apr 12 16:39:59 garuda daemon.info netopeer2-server[860]: Received an SSH message "request-channel" of subtype "subsystem".
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Call Home client "default-client" session 3 established.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Session 90 (user "root", CID 1) created.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: There are no subscribers for "ietf-netconf-notifications" notifications.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Generated new event (netconf-session-start).
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Published event "rpc" "/ietf-netconf:get" with ID 5 priority 0 for 1 subscribers.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Processing "/ietf-netconf:get" "rpc" event with ID 5 priority 0 (remaining 1 subscribers).
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Successful processing of "rpc" event with ID 5 priority 0 (remaining 0 subscribers).
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Event "rpc" with ID 5 priority 0 succeeded.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Session 3: thread 3 event new RPC.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Published event "rpc" "/ietf-netconf:get" with ID 6 priority 0 for 1 subscribers.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Processing "/ietf-netconf:get" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 6.
Apr 12 16:40:00 garuda user.notice fw_manager[930]: RPC #6 recieved. xpath -> /o-ran-software-management:software-inventory
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Event "operational" with ID 6 succeeded.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: 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.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: 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.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: 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.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Event "rpc" with ID 6 priority 0 succeeded.
Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...
```


Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Session 3: thread 2 event new RPC.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Published event "rpc" "/ietf-netconf:get-config" with ID 2 priority 0 for 1 subscribers.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Processing "/ietf-netconf:get-config" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Event "rpc" with ID 2 priority 0 succeeded.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Session 3: thread 3 event new RPC.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Apr 12 16:40:00 garuda daemon.info netopeer2-server[860]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Event "rpc" with ID 2 priority 0 succeeded.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Session 3: thread 3 event new RPC.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Published event "rpc" "/ietf-netconf:get" with ID 7 priority 0 for 1 subscribers.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Processing "/ietf-netconf:get" "rpc" event with ID 7 priority 0 (remaining 1 subscribers).

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 7.

Apr 12 16:40:01 garuda user.notice fw_manager[930]: RPC #7 recieved. xpath -> /o-ran-software-management:software-inventory

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Event "operational" with ID 7 succeeded.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Successful processing of "rpc" event with ID 7 priority 0 (remaining 0 subscribers).

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Event "rpc" with ID 7 priority 0 succeeded.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Session 3: thread 4 event new RPC.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Published event "rpc" "/o-ran-software-management:software-download" with ID 2
priority 0 for 1 subscribers.

Apr 12 16:40:01 garuda user.notice fw_manager[930]: RPC #2 recieved. xpath -> /o-ran-software-management:software-download

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Event "rpc" with ID 2 priority 0 succeeded.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:01 garuda daemon.info netopeer2-server[860]: Session 3: thread 0 event new RPC.

Apr 12 16:40:07 garuda user.notice fw_manager[930]: Function isDownloadCompleted setting error code 0

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/fw_manager", but it is not
required.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/nw_manager", but it is not
required.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/operations_manager", but it is
not required.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 3.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/pm_manager", but it is not
required.

Page 10

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 12.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 12 priority 0 (remaining 0 subscribers).

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "o-ran-software-management" event with ID 1.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/radio_manager", but it is not required.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 13.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 13 priority 0 (remaining 0 subscribers).

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Must condition "/software-inventory/software-slot[name = current()][active = 'false' and running = 'false']" not satisfied, but it is not required.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 8.

Apr 12 16:40:07 garuda user.notice fw_manager[930]: RPC #8 recieved. xpath -> /o-ran-software-management:software-inventory

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/um_manager", but it is not required.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 14.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 14 priority 0 (remaining 0 subscribers).

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/log_manager", but it is not required.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 15.

Apr 12 16:40:07 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 15 priority 0 (remaining 0 subscribers).

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Event "operational" with ID 8 succeeded.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: 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.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Published event "rpc" "/o-ran-software-management:software-install" with ID 2 priority 0 for 1 subscribers.

Apr 12 16:40:08 garuda user.notice fw_manager[930]: RPC #2 recieved. xpath -> /o-ran-software-management:software-install

Apr 12 16:40:08 garuda user.notice fw_manager[930]: swSlot2 selected

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Event "rpc" with ID 2 priority 0 succeeded.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Session 3: thread 0 event new RPC.

Apr 12 16:40:08 garuda user.err fw_manager[930]: swInstall : Unzip failed with code 256

Apr 12 16:40:08 garuda user.err fw_manager[930]: swInstall failed :Reason: unzip failed

Apr 12 16:40:08 garuda user.notice fw_manager[930]: RPC #9 recieved. xpath -> /o-ran-software-management:software-inventory

Apr 12 16:40:08 garuda user.notice SYNCMNGR[1176]: Received message from S-Plane

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: There is no leafref "/software-inventory/software-slot/name" with the value "swSlot2", but it is not required.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Processing "notif" "o-ran-software-management" event with ID 2.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/fw_manager", but it is not required.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 16.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 16 priority 0 (remaining 0 subscribers).

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/sync_manager", but it is not required.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 17.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 17 priority 0 (remaining 0 subscribers).

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/file_manager", but it is not required.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 18.

Apr 12 16:40:08 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 18 priority 0 (remaining 0 subscribers).

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/operations_manager", but it is not required.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 19.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 19 priority 0 (remaining 0 subscribers).

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/supervision", but it is not required.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 20.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 20 priority 0 (remaining 0 subscribers).

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Resolving unresolved data nodes and their constraints...

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: There is no instance of "/stli_giru-wdm:system-apps/sys_monitor", but it is not required.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: All data nodes and constraints resolved.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Processing "notif" "ietf-netconf-notifications" event with ID 21.

Apr 12 16:40:09 garuda daemon.info netopeer2-server[860]: Successful processing of "notif" event with ID 21 priority 0 (remaining 0 subscribers).

Apr 12 16:40:09 garuda auth.info sshd[9610]: Accepted password for operator from 192.168.4.15 port 42858 ssh2

Apr 12 16:40:09 garuda authpriv.info sshd[9610]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result : 1. The status of the software slot used for software activation remains

VALID (it is unchanged) and the parameter "active" remains "True". The parameter "running" is set to True.

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

=====

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

=====

=====

***** FAIL_REASON *****

=====

FILE_ERROR

=====

Supplemental Reset after Software Activation = FAIL

=====