



@ FILE NAME: M_CTC_ID_015.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for Garuda: v4.2.0

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

This scenario corresponds the following chapters in [3]:

5. Software Management.

=====

******* 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 '192.168.208.37' cannot be established.

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

Interactive SSH Authentication done.

> status

Current NETCONF session:

ID : 16

Host : 192.168.208.37

Port : 830

Transport : SSH

Capabilities:

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

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

urn:ietf:params:netconf:capability:validate:1.1 urn:ietf:params:netconf:capability:startup:1.0 urn:ietf:params:netconf:capability:xpath:1.0

urn:ietf:params:netconf:capability:with-defaults:1.0?basic-mode=explicit&also-supported=report-all,report-all-tagged,trim,explicit

urn:ietf:params:netconf:capability:notification:1.0 urn:ietf:params:netconf:capability:interleave:1.0

urn:ietf:params:xml:ns:yang:ietf-yang-metadata?module=ietf-yang-metadata&revision=2016-08-05

urn:ietf:params:xml:ns:yang:1?module=yang&revision=2017-02-20

urn:ietf:params:xml:ns:yang:ietf-inet-types?module=ietf-inet-types&revision=2013-07-15

urn:ietf:params:xml:ns:yang:ietf-yang-types?module=ietf-yang-types&revision=2013-07-15

urn:ietf:params:netconf:capability:yang-library:1.1?revision=2019-01-04&content-id=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 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>factory_img</build-id>
      <build-name>Beta Release</build-name>
      <build-version>4.2.0</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>EMPTY</status>
      <active>false</active>
      <running>false</running>
      <access>READ_WRITE</access>
      <product-code/>
```

```
<build-id/>
<build-name/>
<build-version/>
<files>
  <name>boot</name>
  <version/>
  <local-path>/media/sd-mmcb1k0p1/BOOT0002.BIN</local-path>
  <integrity>NOK</integrity>
</files>
<files>
  <name>kernel</name>
  <version/>
  <local-path>/media/sd-mmcb1k0p1/image0002.ub</local-path>
  <integrity>NOK</integrity>
</files>
<files>
  <name>rootfs</name>
  <version/>
  <local-path>/media/sd-mmcb1k0p3/</local-path>
  <integrity>NOK</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-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-mmcb1k0p1/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@192.168.22.208:22/home/vvdn/Downloads/Garuda_Images/</remote-file-path>
<password>
<password>vvdntech</password>
</password>
<server>
<keys>
<algorithm>secp256r1</algorithm>
<public-key>AAAAB3NzaC1yc2EAAAADAQABAAQAC0EVfAv8MI4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dG
jERFEq2YZCnaX4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4c6
2h6I9O/wt2hq8RMAC8PT1JAeVebylIrKbcI5g3N2NI6D8OGD0Coick7iczIlor/9ylshjdgIQdi8Bxnq9NhxD0zA2WvQI9eytlvut/uA6KWaiwF9C+O
C7FhIf1O7jDoYXvZUIQa90c0EG4O962JB3SYxWchl4gYxmr6zAtu3TT4j</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:a41d470a-c5a8-4991-8e1f-587286db726c"><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>2027-04-14T05:38:17Z</eventTime>
  <download-event xmlns="urn:o-ran:software-management:1.0">
    <file-name>Garuda_Images</file-name>
    <status>AUTHENTICATION_ERROR</status>
    <error-message>Credentials validation failed</error-message>
  </download-event>
</notification>
```

=====

SYSTEM LOGS

=====

Apr 14 05:38:11 garuda daemon.info netopeer2-server[859]: Trying to connect via IPv4 to 192.168.208.15:4334.

Apr 14 05:38:11 garuda daemon.info netopeer2-server[859]: getsockopt() error (Connection refused).

Apr 14 05:38:12 garuda daemon.info netopeer2-server[859]: Trying to connect via IPv4 to 192.168.208.15:4334.

Apr 14 05:38:12 garuda daemon.info netopeer2-server[859]: getsockopt() error (Connection refused).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Trying to connect via IPv4 to 192.168.208.15:4334.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Successfully connected to 192.168.208.15:4334 over IPv4.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Session 351 (user "root", CID 1) created.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-service" of subtype "ssh-userauth".

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-auth" of subtype "password".

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: User "operator" authenticated.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-channel-open" of subtype "session".

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-channel" of subtype "subsystem".

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Call Home client "default-client" session 16 established.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Session 352 (user "root", CID 1) created.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: There are no subscribers for "ietf-netconf-notifications" notifications.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Generated new event (netconf-session-start).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get" with ID 30 priority 0 for 1 subscribers.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get" "rpc" event with ID 30 priority 0 (remaining 1 subscribers).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 30 priority 0 (remaining 0 subscribers).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 30 priority 0 succeeded.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Session 16: thread 2 event new RPC.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get" with ID 31 priority 0 for 1 subscribers.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get" "rpc" event with ID 31 priority 0 (remaining 1 subscribers).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 13.

Apr 14 05:38:13 garuda user.notice fw_manager[936]: RPC #13 recieved. xpath -> /o-ran-software-management:software-inventory

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Event "operational" with ID 13 succeeded.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: 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 14 05:38:13 garuda daemon.info netopeer2-server[859]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "", but it is not required.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: 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 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 31 priority 0 (remaining 0 subscribers).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 31 priority 0 succeeded.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: 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 14 05:38:13 garuda daemon.info netopeer2-server[859]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "", but it is not required.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: 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 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Session 16: thread 2 event new RPC.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get-config" with ID 23 priority 0 for 1 subscribers.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get-config" "rpc" event with ID 23 priority 0 (remaining 1 subscribers).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 23 priority 0 (remaining 0 subscribers).

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 23 priority 0 succeeded.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port0", but it is not required.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port0", but it is not required.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port0", but it is not required.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Session 16: thread 4 event new RPC.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/notifications:create-subscription" with ID 13 priority 0 for 1 subscribers.

Apr 14 05:38:13 garuda daemon.info netopeer2-server[859]: Processing "/notifications:create-subscription" "rpc" event with ID 13 priority 0 (remaining 1 subscribers).

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 13 priority 0 (remaining 0 subscribers).

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 13 priority 0 succeeded.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Session 16: thread 2 event new RPC.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get" with ID 32 priority 0 for 1 subscribers.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get" "rpc" event with ID 32 priority 0 (remaining 1 subscribers).

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 14.

Apr 14 05:38:14 garuda user.notice fw_manager[936]: RPC #14 recieved. xpath -> /o-ran-software-management:software-inventory

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Event "operational" with ID 14 succeeded.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: 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 14 05:38:14 garuda daemon.info netopeer2-server[859]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "", but it is not required.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: 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 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 32 priority 0 (remaining 0 subscribers).

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 32 priority 0 succeeded.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: 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 14 05:38:14 garuda daemon.info netopeer2-server[859]: There is no leafref
"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code" with the value "", but it is not required.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: 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 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Session 16: thread 2 event new RPC.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/o-ran-software-management:software-download" with ID 1 priority 0 for 1 subscribers.

Apr 14 05:38:14 garuda user.notice fw_manager[936]: RPC #1 recieved. xpath -> /o-ran-software-management:software-download

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 1 priority 0 succeeded.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:14 garuda daemon.info netopeer2-server[859]: Session 16: thread 4 event new RPC.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/fw_manager", but it is not required.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/nw_manager", but it is not

[illegible]

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 10.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 10 priority 0 (remaining 0 subscribers).

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/log_manager", but it is not required.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 11.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 11 priority 0 (remaining 0 subscribers).

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/radio_manager", but it is not required.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 12.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 12 priority 0 (remaining 0 subscribers).

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/fw_manager", but it is not required.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 13.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 13 priority 0 (remaining 0 subscribers).

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/sync_manager", but it is not required.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 14.

Apr 14 05:38:15 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 14 priority 0 (remaining 0 subscribers).

Apr 14 05:38:16 garuda user.notice SYNCMNGR[1182]: Received message from S-Plane

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/fault_manager", but it is not required.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 15.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 15 priority 0 (remaining 0 subscribers).

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/operations_manager", but it is not required.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 16.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 16 priority 0 (remaining 0 subscribers).

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/log_manager", but it is not required.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 17.

Apr 14 05:38:16 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 17 priority 0 (remaining 0 subscribers).

Apr 14 05:38:17 garuda user.err fw_manager[936]: swDownload failed :Reason: Credentials validation failed

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Processing "notif" "o-ran-software-management" event with ID 1.

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/pm_manager", but it is not required.

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 18.

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 18 priority 0 (remaining 0 subscribers).

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/file_manager", but it is not required.

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 19.

Apr 14 05:38:17 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 19 priority 0 (remaining 0 subscribers).

Apr 14 05:38:18 garuda user.err FAULT MANAGER[874]: sendData : Source ID: 17

Apr 14 05:38:18 garuda user.err FAULT MANAGER[874]: sendData : Fault ID: 23

Apr 14 05:38:18 garuda user.err FAULT MANAGER[874]: sendData : FAULT_IS_CLEARED: FALSE

Apr 14 05:38:18 garuda user.err FAULT MANAGER[874]: sendData : FAULT_SEVERITY: 2

Apr 14 05:38:18 garuda user.err FAULT MANAGER[874]: sendData : FAULT_TIME: 2027-04-14T05:38:18Z

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: There is no instance of
"/notification_history:history/module-notification[module-name='Initialization Fault']", but it is not required.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: There is no instance of
"/notification_history:history/module-notification[module-name='Initialization Fault']/module-name", but it is not required.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 20.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 20 priority 0 (remaining 0 subscribers).

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: There is no instance of
"/notification_history:history/module-notification[module-name='Initialization Fault']/notif-error", but it is not required.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 21.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 21 priority 0 (remaining 0 subscribers).

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: There is no instance of
"/notification_history:history/module-notification[module-name='Initialization Fault']/alert", but it is not required.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 22.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 22 priority 0 (remaining 0 subscribers).

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Processing "notif" "o-ran-fm" event with ID 1.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: There is no instance of
"/notification_history:history/module-notification[module-name='Initialization Fault']/epochtime", but it is not required.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 23.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 23 priority 0 (remaining 0 subscribers).

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/supervision", but it is not required.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 24.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 24 priority 0 (remaining 0 subscribers).

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/nw_manager", but it is not required.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 25.

Apr 14 05:38:18 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 25 priority 0 (remaining 0 subscribers).

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/radio_manager", but it is not required.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 26.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 26 priority 0 (remaining 0 subscribers).

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/sys_monitor", but it is not required.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 27.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 27 priority 0 (remaining 0 subscribers).

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: There is no instance of "/stli_giru-wdm:system-apps/um_manager", but it is not required.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Processing "notif" "ietf-netconf-notifications" event with ID 28.

Apr 14 05:38:19 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 28 priority 0 (remaining 0 subscribers).

Apr 14 05:38:22 garuda daemon.info netopeer2-server[859]: Session 16: thread 4 event new RPC.

Apr 14 05:38:22 garuda daemon.info netopeer2-server[859]: Session 16: thread 4 event session terminated.

Apr 14 05:38:22 garuda daemon.info netopeer2-server[859]: There are no subscribers for "ietf-netconf-notifications" notifications.

Apr 14 05:38:22 garuda daemon.info netopeer2-server[859]: Generated new event (netconf-session-end).

Apr 14 05:38:22 garuda daemon.info netopeer2-server[859]: Call Home client "default-client" session terminated.

Apr 14 05:38:22 garuda daemon.info netopeer2-server[859]: Trying to connect via IPv4 to 192.168.208.15:4334.

Apr 14 05:38:22 garuda daemon.info netopeer2-server[859]: getsockopt() error (Connection refused).

Apr 14 05:38:22 garuda auth.info sshd[11565]: Accepted password for operator from 192.168.208.15 port 57256 ssh2

Apr 14 05:38:22 garuda authpriv.info sshd[11565]: pam_unix(sshd:session): session opened for user operator by (uid=0)

Expected Result : The O-RU NETCONF Server determines that the software file is invalid and sends <notification><install event><status> to the TER NETCONF Client. The Field <status> is correctly updated with one of the following status: FILE_ERROR or INTEGRITY_ERROR.

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

=====

=====

***** FAIL_REASON *****

=====

AUTHENTICATION_ERROR

=====

O-RU Software Update (negative case) = FAIL

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