



@ FILE NAME: M_CTC_ID_014.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.



****** 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:192.168.208.37' 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 : 17

Host : 192.168.208.37

Port: 830 Transport: SSH

Capabilities:

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

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

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

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

 $urn: ietf: params: netconf: capability: notification: 1.0 \ urn: ietf: params: netconf: capability: interleave: 1.0 \ urn: ietf: params: netconf: param$

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

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-net conf-notifications? module = ietf-net conf-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

 $urn: ietf: params: xml: ns: yang: iana-crypt-hash? module = iana-crypt-hash\& revision = 2014-08-06 \ urn: notification_history? module = notification_his$

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>
 cproduct-code>STL=O-RUduct-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-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>EMPTY</status>
 <active>false</active>
 <running>false</running>
 <access>READ_WRITE</access>
```

cproduct-code/>



<build-id/> <build-name/> <build-version/> <files> <name>boot</name> <version/> <local-path>/media/sd-mmcblk0p1/BOOT0002.BIN</local-path> <integrity>NOK</integrity> </files> <files> <name>kernel</name> <version/> <local-path>/media/sd-mmcblk0p1/image0002.ub</local-path> <integrity>NOK</integrity> </files> <files> <name>rootfs</name> <version/> <local-path>/media/sd-mmcblk0p3/</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> cproduct-code>STL=O-RUduct-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>
Step 1 : TER NETCONF Client triggers <rpc><software-download></software-download></rpc>
> user-rpc
****** Replace with below xml *******
<software-download xmlns="urn:o-ran:software-management:1.0"></software-download>
<pre><remote-file-path>sftp://vvdn@192.168.22.208:22/home/vvdn/Downloads/Garuda_Images/giru_RevAll_5.0.4.zip</remote-file-path></pre>
<pre><password></password></pre>
<pre><password>vvdntech</password></pre>
<server></server>
<keys></keys>
<algorithm>secp256r1</algorithm>
$<\!public-key\!>\!AAAAB3NzaC1yc2EAAAADAQABAAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dagabaAABAQC0EVfAv8Ml4AABAQC0EVfAv8Ml4AABAQC0EVfAv8Ml4AABAQC0EVfAv8Ml4AABAQC0EVfAv8Ml4AABAQC0EVfAv8Ml4AABAQC0EVfAv8Ml4AAABAQC0EVfAv8Ml4AAABAQC0EVfAv8Ml4AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA$
jERFEq2YZCnaX4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU2ACb5FohzIbZnMW4cuGkhyUpAy0hyU
2h6I9O/wt2hq8RMAC8PT1JAeVebylIrKbcI5g3N2NI6D8OGD0Coick7iczIlor/9ylshjdgiQdi8Bxnq9NhzD0zA2WvQI9eytlvut/uA6KWaiwF9C+1000000000000000000000000000000000000
C7FhIf1O7jDoYXvZUlQa90c0EG4O962JB3SYxWchl4gYxmr6zAtu3TT4j
======================================
Company In the Company I was in the company of the control of the company in the
<nc:rpc-reply message-id="urn:uuid:9956e541-02d1-470f-a871-599c336b8ef4" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0"><status xmlns="urn:o-ran:software-management:1.0">STARTED</status><notification-timeout< td=""></notification-timeout<></nc:rpc-reply>
xmlns="urn:o-ran:software-management:1.0">\$1ARTED <notification-timeout xmlns="urn:o-ran:software-management:1.0">30</notification-timeout>
Annio - armo ramotivare management no 200/nonreador amedit/netipe-repty/



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>2027-04-14T05:38:51Z</eventTime>
- <download-event xmlns="urn:o-ran:software-management:1.0">
- <file-name>giru_RevAll_5.0.4.zip</file-name>
- <status>AUTHENTICATION_ERROR</status>
- <error-message>Credentials validation failed/error-message>
- </download-event>
- </notification>



Apr 14 05:38:45 garuda daemon.info netopeer2-server[859]: Trying to connect via IPv4 to 192.168.208.15:4334.

Apr 14 05:38:45 garuda daemon.info netopeer2-server[859]: getsockopt() error (Connection refused).

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Trying to connect via IPv4 to 192.168.208.15:4334.

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Successfully connected to 192.168.208.15:4334 over IPv4.

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Session 391 (user "root", CID 1) created.

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-service" of subtype "ssh-userauth".

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-auth" of subtype "password".

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: User "operator" authenticated.

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-channel-open" of subtype "session".

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Received an SSH message "request-channel" of subtype "subsystem".

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Call Home client "default-client" session 17 established.

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Session 392 (user "root", CID 1) created.

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: There are no subscribers for "ietf-netconf-notifications" notifications.

Apr 14 05:38:46 garuda daemon.info netopeer2-server[859]: Generated new event (netconf-session-start).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get" with ID 33 priority 0 for 1 subscribers.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get" "rpc" event with ID 33 priority 0 (remaining 1 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 33 priority 0 (remaining 0 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 33 priority 0 succeeded.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Session 17: thread 3 event new RPC.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get" with ID 34 priority 0 for 1 subscribers.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get" "rpc" event with ID 34 priority 0 (remaining 1 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 15.

Apr 14 05:38:47 garuda user.notice fw_manager[936]: RPC #15 recieved. xpath -> /o-ran-software-management:software-inventory

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Event "operational" with ID 15 succeeded.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 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 05:38:47 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 05:38:47 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 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.



Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 34 priority 0 (remaining 0 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 34 priority 0 succeeded.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 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 05:38:47 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 05:38:47 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 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Session 17: thread 3 event new RPC.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get-config" with ID 24 priority 0 for 1 subscribers.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get-config" "rpc" event with ID 24 priority 0 (remaining 1 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 24 priority 0 (remaining 0 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 24 priority 0 succeeded.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 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 05:38:47 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 05:38:47 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 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Session 17: thread 0 event new RPC.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/notifications:create-subscription" with ID 14 priority 0 for 1 subscribers.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Processing "/notifications:create-subscription" "rpc" event with ID 14 priority 0 (remaining 1 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 14 priority 0 (remaining 0 subscribers).

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 14 priority 0 succeeded.

Apr 14 05:38:47 garuda daemon.info netopeer2-server[859]: Session 17: thread 3 event new RPC.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.



Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/ietf-netconf:get" with ID 35 priority 0 for 1 subscribers.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Processing "/ietf-netconf:get" "rpc" event with ID 35 priority 0 (remaining 1 subscribers).

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 16.

Apr 14 05:38:48 garuda user.notice fw_manager[936]: RPC #16 recieved. xpath -> /o-ran-software-management:software-inventory

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Event "operational" with ID 16 succeeded.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:48 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 05:38:48 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 05:38:48 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 05:38:48 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Successful processing of "rpc" event with ID 35 priority 0 (remaining 0 subscribers).

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 35 priority 0 succeeded.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:48 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 05:38:48 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 05:38:48 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 05:38:48 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Session 17: thread 3 event new RPC.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: All data nodes and constraints resolved.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Published event "rpc" "/o-ran-software-management:software-download" with ID 2 priority 0 for 1 subscribers.

Apr 14 05:38:48 garuda user.notice fw_manager[936]: RPC #2 recieved. xpath -> /o-ran-software-management:software-download

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Event "rpc" with ID 2 priority 0 succeeded.

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Resolving unresolved data nodes and their constraints...

 $Apr\ 14\ 05:38:48\ garuda\ daemon. info\ net opeer 2-server [859]:\ All\ data\ nodes\ and\ constraints\ resolved.$

Apr 14 05:38:48 garuda daemon.info netopeer2-server[859]: Session 17: thread 0 event new RPC.

Apr 14 05:38:51 garuda user.err fw_manager[936]: swDownload failed :Reason: Credentials validation failed

Apr 14 05:38:51 garuda daemon.info netopeer2-server[859]: Processing "notif" "o-ran-software-management" event with ID 1.

Apr 14 05:38:51 garuda daemon.info netopeer2-server[859]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Apr 14 05:38:52 garuda user.err FAULT MANAGER[874]: sendData: Source ID: 17

Apr 14 05:38:52 garuda user.err FAULT MANAGER[874]: sendData: Fault ID: 23

 $Apr\ 14\ 05:38:52\ garuda\ user.err\ FAULT\ MANAGER[874]: sendData: FAULT_IS_CLEARED:\ FALSE$

Apr 14 05:38:52 garuda user.err FAULT MANAGER[874]: sendData: FAULT_SEVERITY: 2

Apr 14 05:38:52 garuda user.err FAULT MANAGER[874]: sendData: FAULT_TIME: 2027-04-14T05:38:52Z

Apr 14 05:38:56 garuda daemon.info netopeer2-server[859]: Session 17: thread 2 event new RPC.

Apr 14 05:38:56 garuda daemon.info netopeer2-server[859]: Session 17: thread 2 event session terminated.





Apr 14 05:38:56 garuda daemon.info netopeer2-server[859]: There are no subscribers for "ietf-netconf-notifications" notifications.

Apr 14 05:38:56 garuda daemon.info netopeer2-server[859]: Generated new event (netconf-session-end).

Apr 14 05:38:56 garuda daemon.info netopeer2-server[859]: Call Home client "default-client" session terminated.

Apr 14 05:38:56 garuda daemon.info netopeer2-server[859]: Trying to connect via IPv4 to 192.168.208.15:4334.

Apr 14 05:38:56 garuda daemon.info netopeer2-server[859]: getsockopt() error (Connection refused).

Apr 14 05:38:56 garuda auth.info sshd[12412]: Accepted password for operator from 192.168.208.15 port 56258 ssh2

Apr 14 05:38:56 garuda authpriv.info sshd[12412]: pam_unix(sshd:session): session opened for user operator by (uid=0)



Expected Result : The O-RU NETCONF Server sends <notification><install-event><status> to the TER NETCONF Client. Field <status> contains the value COMPLETED to indicate the successful installation of software to the desired slot. ******** Actual Result ********** ______ AUTHENTICATION_ERROR ______ O-RU Software Update and Install