



@ FILE NAME: M_CTC_ID_035.txt

@ TEST SCOPE: M PLANE O-RAN FUNCTIONAL

@ Software Release for MCEL_B40_revA: v5.0.2

Test Description: Test for failed software download due to

AUTHENTICATION_ERROR during the process.



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

> connect --ssh --host 192.168.4.65 --port 830 --login operator

Interactive SSH Authentication

Type your password:

Password:

> status

Current NETCONF session:

ID : 2

Host : 192.168.4.65

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 & also-supported = report-all, report-all-tagged, trim, explicit & also-supported = report-all, report-all-tagged, trim, explicit & also-supported = report-all-tagged, trim, explicit & also-supported =

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

urn: ietf: params: xml: ns: yang: ietf-yang-metadata? module = ietf-yang-metadata & revision = 2016-08-05 + 1000

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 = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, candidate, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, valid = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, rollback-on-error,

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 + 100

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

<?xml version="1.0" ?>

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

```
<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-RU/product-code>
 <vendor-code>VN</vendor-code>
 <build-id>90f0b6c</build-id>
 <build-name>Beta Release</build-name>
 <build-version>5.0.2</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>
```

cproduct-code/>

<access>READ_WRITE</access>



<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-RU <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>
$<\!\!remote\text{-}file\text{-}path\!\!>\!\!sftp://vvdn@192.168.4.15:22/home/vvdn/Downloads/mcel-v0.11.0-alpha.zip$
<pre><password></password></pre>
<pre><password>vvdn</password></pre>
<pre><server></server></pre>
<keys></keys>
<algorithm>secp256r1</algorithm>
<public-key>AAAAB3NzaC1yc2EAAAADAQABAAABAQC0EVfAv8Ml4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4c</public-key>
jERFEq2YZCnaX4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4
2h6I9O/wt2hq8RMAC8PT1JAeVebylIrKbcI5g3N2NI6D8OGD0Coick7iczIlor/9ylshjdgiQdi8Bxnq9NhzD0zA2WvQI9eytlvut/uA6KWaiwF9C-C7FhIf1O7jDoYXvZUlQa90c0EG4O962JB3SYxWchl4gYxmr6zAtu3TT4j
<
Software downloads
****** RPC Reply *******
<pre><nc:rpc-reply message-id="urn:uuid:26c42be2-f30d-454d-842b-cfb67f06a6ab" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0"><status< pre=""></status<></nc:rpc-reply></pre>
xmlns="urn:o-ran:software-management:1.0">STARTED <notification-timeout< td=""></notification-timeout<>
xmlns="urn:o-ran:software-management:1.0">30



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>2105-12-20T15:11:17Z</eventTime>
- <download-event xmlns="urn:o-ran:software-management:1.0">
- <file-name>mcel-v0.11.0-alpha.zip</file-name>
- <status>AUTHENTICATION_ERROR</status>
- <error-message>Credentials validation failed/error-message>
- </download-event>
- </notification>



- Dec 20 15:11:12 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:12 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:12 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:12 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Successfully connected to 192.168.4.15:4334 over IPv4.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Session 209 (user "root", CID 1) created.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-service" of subtype "ssh-userauth".
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-auth" of subtype "password".
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: User "operator" authenticated.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-channel-open" of subtype "session".
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-channel" of subtype "subsystem".
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Call Home client "default-client" session 2 established.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Session 210 (user "root", CID 1) created.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Generated new event (netconf-session-start).
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get" with ID 4 priority 0 for 1 subscribers.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get" "rpc" event with ID 4 priority 0 (remaining 1 subscribers).
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 4 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 4 priority 0 succeeded.
- $Dec\ 20\ 15:11:13\ garuda\ daemon. info\ net opeer 2-server [852]:\ Resolving\ unresolved\ data\ nodes\ and\ their\ constraints...$
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Session 2: thread 0 event new RPC.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get" with ID 5 priority 0 for 1 subscribers.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get" "rpc" event with ID 5 priority 0 (remaining 1 subscribers).
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: There is no leafref
- "/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port0", but it is not required.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: There is no leafref
- "/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port0", but it is not required.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:13 garuda daemon.info netopeer2-server[852]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 3.



Dec 20 15:11:13 garuda user.notice fw_manager[929]: RPC #3 recieved. xpath -> /o-ran-software-management:software-inventory

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Event "operational" with ID 3 succeeded.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: 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.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: There is no leafref

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

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: 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.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 5 priority 0 (remaining 0 subscribers).

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 5 priority 0 succeeded.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: 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.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: There is no leafref

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

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: 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.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Session 2: thread 3 event new RPC.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get-config" with ID 2 priority 0 for 1 subscribers.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get-config" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 2 priority 0 succeeded.

 $Dec\ 20\ 15:11:14\ garuda\ daemon. info\ net opeer 2-server [852]:\ Resolving\ unresolved\ data\ nodes\ and\ their\ constraints...$

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

 $Dec\ 20\ 15:11:14\ garuda\ daemon.info\ netopeer 2-server [852]:\ There\ is\ no\ leafref$

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

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: There is no leafref

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

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Session 2: thread 2 event new RPC.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.



Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 2 priority 0 succeeded.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Session 2: thread 2 event new RPC.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get" with ID 6 priority 0 for 1 subscribers.

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Dec 20 15:11:14 garuda daemon.info netopeer2-server[852]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 4.

Dec 20 15:11:14 garuda user.notice fw_manager[929]: RPC #4 recieved. xpath -> /o-ran-software-management:software-inventory

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Event "operational" with ID 4 succeeded.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: 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.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: There is no leafref

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

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: 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.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 6 priority 0 succeeded.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

 $Dec\ 20\ 15:11:15\ garuda\ daemon. info\ net opeer 2-server [852]:\ Resolving\ unresolved\ data\ nodes\ and\ their\ constraints...$

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: 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.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: There is no leafref

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

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: 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.

 $Dec\ 20\ 15:11:15\ garuda\ daemon. info\ net opeer 2-server [852]:\ All\ data\ nodes\ and\ constraints\ resolved.$

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Session 2: thread 0 event new RPC.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/o-ran-software-management:software-download" with ID 2 priority 0 for 1 subscribers.

Dec 20 15:11:15 garuda user.notice fw_manager[929]: RPC #2 recieved. xpath -> /o-ran-software-management:software-download

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 2 priority 0 succeeded.

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.



- Dec 20 15:11:15 garuda daemon.info netopeer2-server[852]: Session 2: thread 4 event new RPC.
- Dec 20 15:11:16 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:16 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:17 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:17 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:17 garuda user.err fw_manager[929]: swDownload failed :Reason: Credentials validation failed
- Dec 20 15:11:17 garuda daemon.info netopeer2-server[852]: Processing "notif" "o-ran-software-management" event with ID 1.
- Dec 20 15:11:17 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:18 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:18 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:19 garuda user.err FAULT MANAGER[867]: sendData: Source ID: 17
- Dec 20 15:11:19 garuda user.err FAULT MANAGER[867]: sendData: Fault ID: 23
- Dec 20 15:11:19 garuda user.err FAULT MANAGER[867]: sendData: FAULT_IS_CLEARED: FALSE
- Dec 20 15:11:19 garuda user.err FAULT MANAGER[867]: sendData: FAULT_SEVERITY: 2
- Dec 20 15:11:19 garuda user.err FAULT MANAGER[867]: sendData: FAULT_TIME: 2105-12-20T15:11:19Z
- Dec 20 15:11:19 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:19 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:20 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:20 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/fw_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- $Dec\ 20\ 15:11:21\ garuda\ daemon. info\ net opeer 2-server [852]:\ Processing\ "notif"\ "ietf-net conf-notifications"\ event\ with\ ID\ 1.$
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/nw_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 2.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/operations_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 3.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 3 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/pm_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 4.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 4 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/um_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.



- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 5.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 5 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/sys_monitor", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 6.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 6 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/fault_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 7.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 7 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/file_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 8.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 8 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/supervision", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 9.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 9 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/sync_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 10.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 10 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/log_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 11.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 11 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/radio_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 12.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 12 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/pm_manager", but it is not required.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 13.



- Dec 20 15:11:21 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 13 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Session 2: thread 4 event new RPC.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Session 2: thread 4 event session terminated.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: There is no instance of "/stli_giru-wdm:system-apps/nw_manager", but it is not required.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 14.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 14 priority 0 (remaining 0 subscribers).
- Dec 20 15:11:22 garuda daemon.err netopeer2-server[852]: Session 2: invalid session to write to.
- Dec 20 15:11:22 garuda daemon.err netopeer2-server[852]: Session 2: failed to write notification (error).
- Dec 20 15:11:22 garuda daemon.err netopeer2-server[852]: Sending a notification to session 2 failed.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Generated new event (netconf-session-end).
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Call Home client "default-client" session terminated.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Dec 20 15:11:22 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).
- Dec 20 15:11:22 garuda auth.info sshd[7174]: Accepted password for operator from 192.168.4.15 port 40312 ssh2
- Dec 20 15:11:22 garuda authpriv.info sshd[7174]: pam_unix(sshd:session): session opened for user operator by (uid=0)

SUCCESS



Expected Result: 1. O-RU replies with proper status about operations requested.
2. The O-RU shall send an immediate rpc-reply message with one of following statuses:
- FAILED
3. When the O-RU initiates the software download the O-RU shall send NETCONF
download-event notification with one of the following statuses:
- AUTHENTICATION_ERROR
******* Actual Result ************************************

O-RU Software Download AUTHENTICATION_ERROR