



**@ FILE NAME: M\_CTC\_ID\_036.txt**

**@ TEST SCOPE: M PLANE O-RAN FUNCTIONAL**

**@ Software Release for garuda: v5.0.2**

**Test Description : Software Download Managment when the file system shows  
PROTOCOL\_ERROR.**

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

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

Interactive SSH Authentication

Type your password:

Password:

> status

Current NETCONF session:

ID : 4

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  
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

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## Initial Get Filter

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

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```
<?xml version="1.0" ?>
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
  <software-inventory xmlns="urn:o-ran:software-management:1.0">
    <software-slot>
      <name>swSlot1</name>
      <status>VALID</status>
      <active>true</active>
      <running>true</running>
      <access>READ_WRITE</access>
      <product-code>STL O-RU</product-code>
      <vendor-code>VN</vendor-code>
      <build-id>90f0b6c</build-id>
      <build-name>Beta Release</build-name>
      <build-version>5.0.2</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>fftp://vvdn@192.168.4.15:22/home/vvdn/Documents/B1/O-RAN-WG4.CUS.0-v07.00.pdf</remote-file-path>
<password>
<password>vvdntech</password>
</password>
<server>
<keys>
<algorithm>secp256r1</algorithm>
<public-key>AAAAB3NzaC1yc2EAAAADAQABAAQAC0EVfAv8MI4ZsCWkGxxv36AwuOewJuHXxsiJDNYet2n02N9cbZgifa+Lt0ni4dG
jERFEq2YZCnaX4cuFnsLq8bUjBAuy0hyU2ACb5FohzIbZnMW4cUGkkFu453vTMA/SIZU47wK7Q5HbrTcJefuDkIUwPb+tnP7iT9T7YMx4c6
2h6I9O/wt2hq8RMAC8PT1JAeVebylIrKbcI5g3N2NI6D8OGD0Coick7iczIlor/9ylshjdgiQdi8Bxnq9NhZD0zA2WvQI9eytlvut/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:94e2342d-7f2e-458c-9d92-293dd5dc0036"><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>
```

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**Step 2 : O-RU NETCONF Server sends <notification> with PROTOCOL\_ERROR**

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```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
  <eventTime>2105-12-20T15:19:49Z</eventTime>
  <download-event xmlns="urn:o-ran:software-management:1.0">
    <file-name>FILE_NOT_PROCESSED</file-name>
    <status>PROTOCOL_ERROR</status>
    <error-message>sw download performed using sftp only</error-message>
  </download-event>
</notification>
```

## =====

**##### SYSTEM LOGS #####**

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Dec 20 15:19:46 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:46 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:46 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:46 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:47 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:47 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:47 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:47 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:47 garuda user.notice SYNCMNGR[1175]: Received message from S-Plane

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Successfully connected to 192.168.4.15:4334 over IPv4.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Session 389 (user "root", CID 1) created.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-service" of subtype "ssh-userauth".

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-auth" of subtype "password".

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: User "operator" authenticated.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-channel-open" of subtype "session".

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Received an SSH message "request-channel" of subtype "subsystem".

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Call Home client "default-client" session 4 established.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Session 390 (user "root", CID 1) created.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: There are no subscribers for "ietf-netconf-notifications" notifications.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Generated new event (netconf-session-start).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get" with ID 10 priority 0 for 1 subscribers.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get" "rpc" event with ID 10 priority 0 (remaining 1 subscribers).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 10 priority 0 (remaining 0 subscribers).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 10 priority 0 succeeded.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Session 4: thread 3 event new RPC.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get" with ID 11 priority 0 for 1 subscribers.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get" "rpc" event with ID 11 priority 0 (remaining 1 subscribers).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 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 15:19:48 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 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 7.

Dec 20 15:19:48 garuda user.notice fw\_manager[929]: RPC #7 recieved. xpath -> /o-ran-software-management:software-inventory

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Event "operational" with ID 7 succeeded.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 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 15:19:48 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 15:19:48 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 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 11 priority 0 (remaining 0 subscribers).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 11 priority 0 succeeded.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 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 15:19:48 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 15:19:48 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 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Session 4: thread 1 event new RPC.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get-config" with ID 4 priority 0 for 1 subscribers.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get-config" "rpc" event with ID 4 priority 0 (remaining 1 subscribers).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 4 priority 0 (remaining 0 subscribers).

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 4 priority 0 succeeded.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 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 15:19:48 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 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Session 4: thread 4 event new RPC.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...



Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/notifications:create-subscription" with ID 4 priority 0 for 1 subscribers.

Dec 20 15:19:48 garuda daemon.info netopeer2-server[852]: Processing "/notifications:create-subscription" "rpc" event with ID 4 priority 0 (remaining 1 subscribers).

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 4 priority 0 (remaining 0 subscribers).

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 4 priority 0 succeeded.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Session 4: thread 1 event new RPC.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/ietf-netconf:get" with ID 12 priority 0 for 1 subscribers.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Processing "/ietf-netconf:get" "rpc" event with ID 12 priority 0 (remaining 1 subscribers).

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 8.

Dec 20 15:19:49 garuda user.notice fw\_manager[929]: RPC #8 recieved. xpath -> /o-ran-software-management:software-inventory

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Event "operational" with ID 8 succeeded.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 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 15:19:49 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 15:19:49 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 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Successful processing of "rpc" event with ID 12 priority 0 (remaining 0 subscribers).

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 12 priority 0 succeeded.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 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 15:19:49 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 15:19:49 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 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Session 4: thread 1 event new RPC.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Published event "rpc" "/o-ran-software-management:software-download" with ID 4 priority 0 for 1 subscribers.

Dec 20 15:19:49 garuda user.notice fw\_manager[929]: RPC #4 recieved. xpath -> /o-ran-software-management:software-download

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Event "rpc" with ID 4 priority 0 succeeded.

Dec 20 15:19:49 garuda user.err fw\_manager[929]: swDownload failed :Reason: sw download performed using sftp only

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Session 4: thread 4 event new RPC.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Processing "notif" "o-ran-software-management" event with ID 1.

Dec 20 15:19:49 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Dec 20 15:19:50 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:50 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:51 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:51 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:52 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:52 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:52 garuda daemon.info dhclient: DHCPREQUEST for 192.168.4.65 on eth0 to 192.168.4.15 port 67

Dec 20 15:19:52 garuda daemon.info dhclient: DHCPACK of 192.168.4.65 from 192.168.4.15

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).

Dec 20 15:19:53 garuda user.info nw\_manager[881]: IFMNGR: EVENT change CHANGES: for module name: ietf-interfaces

Dec 20 15:19:53 garuda user.info nw\_manager[881]: IFMNGR: EVENT done CHANGES: for module name: ietf-interfaces

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: There is no instance of  
"/ietf-interfaces:interfaces/interface[name='eth0']/ietf-ip:ipv4/address[ip='192.168.4.65']", but it is not required.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: There is no instance of  
"/ietf-interfaces:interfaces/interface[name='eth0']/ietf-ip:ipv4/address[ip='192.168.4.65']/ip", but it is not required.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: There is no instance of  
"/ietf-interfaces:interfaces/interface[name='eth0']/ietf-ip:ipv4/address[ip='192.168.4.65']/netmask", but it is not required.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 1.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Dec 20 15:19:53 garuda user.info nw\_manager[881]: IFMNGR: EVENT change CHANGES: for module name: ietf-interfaces

Dec 20 15:19:53 garuda user.info nw\_manager[881]: Interface : eth0 Netmask : 255.255.255.0

Dec 20 15:19:53 garuda user.info nw\_manager[881]: IFMNGR: EVENT done CHANGES: for module name: ietf-interfaces

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: Resolving unresolved data nodes and their constraints...

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: There is no instance of  
"/ietf-interfaces:interfaces/interface[name='eth0']/ietf-ip:ipv4/address[ip='192.168.4.65']", but it is not required.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: There is no instance of  
"/ietf-interfaces:interfaces/interface[name='eth0']/ietf-ip:ipv4/address[ip='192.168.4.65']/ip", but it is not required.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: There is no instance of  
"/ietf-interfaces:interfaces/interface[name='eth0']/ietf-ip:ipv4/address[ip='192.168.4.65']/netmask", but it is not required.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: All data nodes and constraints resolved.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: Processing "notif" "ietf-netconf-notifications" event with ID 2.

Dec 20 15:19:53 garuda daemon.info netopeer2-server[852]: Successful processing of "notif" event with ID 2 priority 0 (remaining 0 subscribers).

Dec 20 15:19:53 garuda daemon.info dhclient[1314]: eth0 : IP=192.168.4.65/255.255.255.0 router=192.168.4.15 domain="vvdntech.com"  
dns="192.168.4.15" lease=60

Dec 20 15:19:53 garuda daemon.info dhclient: bound to 192.168.4.65 -- renewal in 30 seconds.

Dec 20 15:19:53 garuda user.err FAULT MANAGER[867]: sendData : Source ID: 17

Dec 20 15:19:53 garuda user.err FAULT MANAGER[867]: sendData : Fault ID: 23

Dec 20 15:19:53 garuda user.err FAULT MANAGER[867]: sendData : FAULT\_IS\_CLEARED: FALSE

Dec 20 15:19:53 garuda user.err FAULT MANAGER[867]: sendData : FAULT\_SEVERITY: 2

Dec 20 15:19:53 garuda user.err FAULT MANAGER[867]: sendData : FAULT\_TIME: 2105-12-20T15:19:53Z  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: Session 4: thread 3 event new RPC.  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: Session 4: thread 3 event session terminated.  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: There are no subscribers for "ietf-netconf-notifications" notifications.  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: Generated new event (netconf-session-end).  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: Call Home client "default-client" session terminated.  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: Trying to connect via IPv4 to 192.168.4.15:4334.  
Dec 20 15:19:54 garuda daemon.info netopeer2-server[852]: getsockopt() error (Connection refused).  
Dec 20 15:19:54 garuda auth.info sshd[14565]: Accepted password for operator from 192.168.4.15 port 55008 ssh2  
Dec 20 15:19:54 garuda authpriv.info sshd[14565]: pam\_unix(sshd:session): session opened for user operator by (uid=0)

**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:**
  - sFTP protocol error**
- 3. When the O-RU initiates the software download failed the O-RU shall send NETCONF download-event notification with one of the following statuses:**
  - PROTOCOL\_ERROR**

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\*\*\*\*\* Actual Result \*\*\*\*\*

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<b>O-RU Software Install PROTOCOL_ERROR</b>	<b>=</b>	<b>SUCCESS</b>
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