



@ FILE NAME: M_CTC_ID_014.txt

@ TEST SCOPE: M PLANE O-RAN CONFORMANCE

@ Software Release for MC1: v1.0.0

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:192.168.4.39' 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 : 2

Host : 192.168.4.39

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

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

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

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

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

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

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=63

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, 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, with the properties of the properties = ietf-netconf & revision = 2013-09-29 & features = writable-running, rollback-on-error, rollback-on-e

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_history

urn: ietf: params: xml: ns: yang: iana-if-type? module = iana-if-type & revision = 2017-01-19

> subscribe

Ok



Initial Get Filter

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

```
<?xml version="1.0" ?>
<data xmlns="urn:ietf:params:xml:ns:netconf:base:1.0" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0">
<software-inventory xmlns="urn:o-ran:software-management:1.0">
<software-slot>
 <name>swSlot1</name>
 <status>VALID</status>
 <active>true</active>
 <running>true</running>
 <access>READ_WRITE</access>
 cproduct-code>STL=O-RU
 <vendor-code>VN</vendor-code>
 <build-id>factory_img</build-id>
 <build-name>Beta Release</build-name>
 <build-version>1.0.0</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>VALID</status>
 <active>false</active>
 <running>false</running>
```

<access>READ_WRITE</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>1.0.0</build-version> <files> <name>boot</name> <version>1.0.0</version> <local-path>/media/sd-mmcblk0p1/BOOT0002.BIN</local-path> <integrity>OK</integrity> </files> <files> <name>kernel</name> <version>1.0.0</version> <local-path>/media/sd-mmcblk0p1/image0002.ub</local-path> <integrity>OK</integrity> </files> <files> <name>rootfs</name> <version>1.0.0</version> <local-path>/media/sd-mmcblk0p3/</local-path> <integrity>OK</integrity> </files> </software-slot> <software-slot> <name>swRecoverySlot</name> <status>VALID</status> <active>false</active> <running>false</running> <access>READ_ONLY</access> cproduct-code>STL=O-RU <vendor-code>VN</vendor-code> <build-id>factory_img</build-id> <build-name>Beta Release</build-name> <build-version>1.0.0</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>
$<\!\!remote-file-path\!\!>\!\!/home/vvdn/Software_release/B1/RADI_BN28v1.0.5.zip<\!/remote-file-path\!\!>\!\!$
<pre><password></password></pre>
<pre><password>vvdn</password></pre>
<server></server>
<keys></keys>
<algorithm>secp256r1</algorithm>
$<\!public-key\!>\!AAAAB3NzaC1yc2EAAAADAQABAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAAAABAQDuVt6Rlu+fBupZHnws6xDNkK7k2lmQrjtYrJG6M+yQnpKQL/yqRcnLkSdQYJWJAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA$
$+ Zlz \\ 3o Pip BBTc Uq 9Gq Iobok fog L/SQn wqsc ISIV 97TFvmPwN \\ 6iVNl 4 og Wjf + McWr \\ 7ZWj U \\ 3rr LjB \\ 1y/d Ilp SQDV \\ 9g + b + Iay IZN \\ 3hx H \\ 0Hij KQSG/8qDV \\ 10g + b + Iay IZN \\ 2hx H \\ 10g + b + Iay IZN \\ 2hx H \\ 2hx $
45B5uFQAPEr3 + s5k4DuZXP5il81iSbhzq0f7/uG/VeA2cKBrum + adqI3mvM/GCqfvoE2 + S + ghK5Mtgx9gnNUQDvN8JcZRFm9C0ING66U73d + which is the contraction of the contraction o
OgbaFF5VKT0X3iDWHj9AEW1j8sE8Q5ymtlW5gyVs/4mDZH7d1eCWiawOiiv
******** RPC Reply ********
<pre><nc:rpc-reply message-id="urn:uuid:a6f1cdcc-1524-4ed5-894b-bea4d98d0e1c" xmlns:nc="urn:ietf:params:xml:ns:netconf:base:1.0"><status xmlns="urn:o-ran:software-management:1.0">STARTED</status><notification-timeout< pre=""></notification-timeout<></nc:rpc-reply></pre>

xmlns="urn:o-ran:software-management:1.0">30</notification-timeout></nc:rpc-reply>



Step 2: O-RU NETCONF Server sends <notification><download-event> with status COMPLETED to TER NETCONF Client

```
<?xml version="1.0" ?>
<notification xmlns="urn:ietf:params:xml:ns:netconf:notification:1.0">
<eventTime>2103-10-28T10:02:02Z</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>



- Oct 28 10:01:58 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 28 10:01:58 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).
- Oct 28 10:01:59 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 28 10:01:59 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Successfully connected to 192.168.4.15:4334 over IPv4.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Session 105 (user "root", CID 1) created.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-service" of subtype "ssh-userauth".
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-auth" of subtype "password".
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: User "operator" authenticated.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel-open" of subtype "session".
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel" of subtype "subsystem".
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session 2 established.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Session 106 (user "root", CID 1) created.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-start).
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 4 priority 0 for 1 subscribers.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 4 priority 0 (remaining 1 subscribers).
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 4 priority 0 (remaining 0 subscribers).
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 4 priority 0 succeeded.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 4 event new RPC.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 5 priority 0 for 1 subscribers.
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 5 priority 0 (remaining 1 subscribers).
- Oct 28 10:02:00 mcb1 daemon.info netopeer2-server[985]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 3.
- Oct 28 10:02:00 mcb1 user.notice fw_manager[1066]: RPC #3 recieved. xpath -> /o-ran-software-management:software-inventory
- Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Event "operational" with ID 3 succeeded.
- Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...
- Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.
- Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.
- Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 5 priority 0 (remaining 0 subscribers).

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 5 priority 0 succeeded.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 0 event new RPC.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get-config" with ID 2 priority 0 for 1 subscribers.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get-config" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 2 priority 0 succeeded.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: There is no leafref

"/ietf-hardware:hardware/ietf-hardware:component/ietf-hardware:name" with the value "ru-port1", but it is not required.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 4 event new RPC.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/notifications:create-subscription" with ID 2 priority 0 for 1 subscribers.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Processing "/notifications:create-subscription" "rpc" event with ID 2 priority 0 (remaining 1 subscribers).

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 2 priority 0 (remaining 0 subscribers).

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 2 priority 0 succeeded.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 4 event new RPC.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 6 priority 0 for 1 subscribers.



Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 4.

Oct 28 10:02:01 mcb1 user.notice fw_manager[1066]: RPC #4 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 28 10:02:01 mcb1 user.notice SYNCMNGR[1312]: Received message from S-Plane

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Event "operational" with ID 4 succeeded.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 6 priority 0 succeeded.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: 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.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: There is no leafref

 $"/ietf-hardware:hardware/ietf-hardware:component/o-ran-hardware:product-code"\ with\ the\ value\ "STL=O-RU",\ but\ it\ is\ not\ required.$

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:01 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 1 event new RPC.

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/o-ran-software-management:software-download" with ID 2 priority 0 for 1 subscribers.

Oct 28 10:02:02 mcb1 user.notice fw_manager[1066]: RPC #2 recieved. xpath -> /o-ran-software-management:software-download

Oct 28 10:02:02 mcb1 user.err fw_manager[1066]: swDownload failed :Reason: sw download performed using sftp only

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 2 priority 0 succeeded.

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Processing "notif" "o-ran-software-management" event with ID 1.

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Successful processing of "notif" event with ID 1 priority 0 (remaining 0 subscribers).

Oct 28 10:02:02 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 3 event new RPC.

Oct 28 10:02:04 mcb1 user.info FAULT MANAGER[1000]: sendData: Source ID: 21

Oct 28 10:02:04 mcb1 user.info FAULT MANAGER[1000]: sendData: Fault ID: 23

Oct 28 10:02:04 mcb1 user.info FAULT MANAGER[1000]: sendData : FAULT_IS_CLEARED: False

Oct 28 10:02:04 mcb1 user.info FAULT MANAGER[1000]: sendData: FAULT_SEVERITY: 2

Oct 28 10:02:04 mcb1 user.info FAULT MANAGER[1000]: sendData: FAULT_TIME: 2103-10-28T10:02:04Z

Oct 28 10:02:07 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 3 event new RPC.

Oct 28 10:02:07 mcb1 daemon.info netopeer2-server[985]: Session 2: thread 3 event session terminated.



- Oct 28 10:02:07 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.
- Oct 28 10:02:07 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-end).
- Oct 28 10:02:07 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session terminated.
- Oct 28 10:02:07 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.
- Oct 28 10:02:07 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).
- Oct 28 10:02:07 mcb1 auth.info sshd[5802]: Accepted password for operator from 192.168.4.15 port 48178 ssh2
- Oct 28 10:02:07 mcb1 authpriv.info sshd[5802]: 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 ********** ______ PROTOCOL_ERROR ______

O-RU Software Update and Install