



@ FILE NAME: M_CTC_ID_015.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.

This scenario corresponds the following chapters in [3]:

5. Software Management.

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

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> listen --ssh --login operator

Waiting 60s for an SSH Call Home connection on port 4334...

The authenticity of the host '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 : 6

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: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=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

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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SYSTEM LOGS

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Oct 28 10:04:04 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 28 10:04:04 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).

Oct 28 10:04:05 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 28 10:04:05 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Successfully connected to 192.168.4.15:4334 over IPv4.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Session 154 (user "root", CID 1) created.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-service" of subtype "ssh-userauth".

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-auth" of subtype "password".

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: User "operator" authenticated.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel-open" of subtype "session".

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Received an SSH message "request-channel" of subtype "subsystem".

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session 6 established.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Session 155 (user "root", CID 1) created.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-start).

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 17 priority 0 for 1 subscribers.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 17 priority 0 (remaining 1 subscribers).

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 17 priority 0 (remaining 0 subscribers).

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 17 priority 0 succeeded.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:06 mcb1 daemon.info netopeer2-server[985]: Session 6: thread 4 event new RPC.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 18 priority 0 for 1 subscribers.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 18 priority 0 (remaining 1 subscribers).

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 14.

Oct 28 10:04:07 mcb1 user.notice fw_manager[1066]: RPC #14 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Event "operational" with ID 14 succeeded.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 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 10:04:07 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 10:04:07 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 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 18 priority 0 (remaining 0 subscribers).

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 18 priority 0 succeeded.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 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 10:04:07 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 10:04:07 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 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Session 6: thread 4 event new RPC.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get-config" with ID 6 priority 0 for 1 subscribers.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get-config" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 6 priority 0 succeeded.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 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 10:04:07 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 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Session 6: thread 1 event new RPC.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/notifications:create-subscription" with ID 6 priority 0 for 1 subscribers.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Processing "/notifications:create-subscription" "rpc" event with ID 6 priority 0 (remaining 1 subscribers).

Oct 28 10:04:07 mcb1 user.notice SYNCMNGR[1312]: Received message from S-Plane

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 6 priority 0 (remaining 0 subscribers).

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 6 priority 0 succeeded.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Session 6: thread 1 event new RPC.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Published event "rpc" "/ietf-netconf:get" with ID 19 priority 0 for 1 subscribers.

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Processing "/ietf-netconf:get" "rpc" event with ID 19 priority 0 (remaining 1 subscribers).

Oct 28 10:04:07 mcb1 daemon.info netopeer2-server[985]: Published event "operational" "/o-ran-software-management:software-inventory" with ID 15.

Oct 28 10:04:07 mcb1 user.notice fw_manager[1066]: RPC #15 recieved. xpath -> /o-ran-software-management:software-inventory

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: Event "operational" with ID 15 succeeded.

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:08 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 10:04:08 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 10:04:08 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 10:04:08 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: Successful processing of "rpc" event with ID 19 priority 0 (remaining 0 subscribers).

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: Event "rpc" with ID 19 priority 0 succeeded.

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: Resolving unresolved data nodes and their constraints...

Oct 28 10:04:08 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 10:04:08 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 10:04:08 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 10:04:08 mcb1 daemon.info netopeer2-server[985]: All data nodes and constraints resolved.

Oct 28 10:04:08 mcb1 daemon.info netopeer2-server[985]: Session 6: thread 0 event new RPC.

Oct 28 10:04:13 mcb1 daemon.info netopeer2-server[985]: Session 6: thread 0 event new RPC.

Oct 28 10:04:13 mcb1 daemon.info netopeer2-server[985]: Session 6: thread 0 event session terminated.

Oct 28 10:04:13 mcb1 daemon.info netopeer2-server[985]: There are no subscribers for "ietf-netconf-notifications" notifications.

Oct 28 10:04:13 mcb1 daemon.info netopeer2-server[985]: Generated new event (netconf-session-end).

Oct 28 10:04:13 mcb1 daemon.info netopeer2-server[985]: Call Home client "default-client" session terminated.

Oct 28 10:04:13 mcb1 daemon.info netopeer2-server[985]: Trying to connect via IPv4 to 192.168.4.15:4334.

Oct 28 10:04:13 mcb1 daemon.info netopeer2-server[985]: getsockopt() error (Connection refused).

Oct 28 10:04:13 mcb1 auth.info sshd[9950]: Accepted password for operator from 192.168.4.15 port 34854 ssh2

Oct 28 10:04:13 mcb1 authpriv.info sshd[9950]: pam_unix(sshd:session): session opened for user operator by (uid=0)

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

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

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***** FAIL_REASON *****

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Slots Active and Running Status are different...

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O-RU Software Update (negative case) = FAIL

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