



**@ FILE NAME: M\_CTC\_ID\_002.txt**

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

**@ Software Release for MCB1: v1.0.1**

**This scenario validates that the O-RU properly executes the session establishment procedure with VLANs and a DHCPv4 server. This test is applicable to IPv4 environments. Two negative flows are included in this test:**

**The TER NETCONF Client does not trigger a SSH session establishment in reaction to Call Home initiated by THE O-RU NETCONF Server.**

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**Interfaces Present in DU Side**

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eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    ether 64:9d:99:ff:f5:12 txqueuelen 1000 (Ethernet)
    RX packets 12304 bytes 3770240 (3.7 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 10413 bytes 1058816 (1.0 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

eth1: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether 64:9d:99:ff:f5:13 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

eth2: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.25.96.163 netmask 255.255.254.0 broadcast 172.25.97.255
    inet6 fe80::a7de:bea9:9091:a5f0 prefixlen 64 scopeid 0x20<link>
    ether b4:2e:99:60:73:8c txqueuelen 1000 (Ethernet)
    RX packets 450132 bytes 122055493 (122.0 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 442925 bytes 284269559 (284.2 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    device interrupt 16 memory 0xb1400000-b1420000

eth0.453: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.170.85 netmask 255.255.255.0 broadcast 192.168.170.255
    inet6 fe80::669d:99ff:feff:f512 prefixlen 64 scopeid 0x20<link>
    ether 64:9d:99:ff:f5:12 txqueuelen 1000 (Ethernet)
    RX packets 11510 bytes 3536157 (3.5 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 10348 bytes 1020680 (1.0 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 10851 bytes 1360856 (1.3 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 10851 bytes 1360856 (1.3 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
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**DHCP Status**

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**DHCP Status**

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isc-dhcp-server.service - ISC DHCP IPv4 server

Loaded: loaded (/lib/systemd/system/isc-dhcp-server.service; enabled; vendor preset: enabled)

Active: active (running) since Fri 2022-11-25 11:05:26 IST; 1h 33min ago

Docs: man:dhcpd(8)

Main PID: 5457 (dhcpd)

Tasks: 1 (limit: 4915)

CGroup: /system.slice/isc-dhcp-server.service

dhcpd -user dhcpd -group dhcpd -f -4 -pf /run/dhcp-server/dhcpd.pid -cf /etc/dhcp/dhcpd.conf eth0.453

Nov 25 12:02:02 vvdn dhcpd[5457]: DHCPREQUEST for 192.168.170.37 from 98:ae:71:00:8a:c2 (mcb1) via eth0.453

Nov 25 12:02:02 vvdn dhcpd[5457]: DHCPACK on 192.168.170.37 to 98:ae:71:00:8a:c2 (mcb1) via eth0.453

Nov 25 12:02:03 vvdn dhcpd[5457]: Abandoning IP address 192.168.170.37: declined.

Nov 25 12:02:03 vvdn dhcpd[5457]: DHCPDECLINE of 192.168.170.37 from 98:ae:71:00:8a:c2 (mcb1) via eth0.453: abandoned

Nov 25 12:36:37 vvdn dhcpd[5457]: DHCPDISCOVER from 98:ae:71:00:8a:c2 via eth0.453

Nov 25 12:36:38 vvdn dhcpd[5457]: DHCPPOFFER on 192.168.170.38 to 98:ae:71:00:8a:c2 (mcb1) via eth0.453

Nov 25 12:36:38 vvdn dhcpd[5457]: Wrote 0 class decls to leases file.

Nov 25 12:36:38 vvdn dhcpd[5457]: Wrote 26 leases to leases file.

Nov 25 12:36:38 vvdn dhcpd[5457]: DHCPREQUEST for 192.168.170.38 (192.168.170.85) from 98:ae:71:00:8a:c2 (mcb1) via eth0.453

Nov 25 12:36:38 vvdn dhcpd[5457]: DHCPACK on 192.168.170.38 to 98:ae:71:00:8a:c2 (mcb1) via eth0.453

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**##### Pinging #####**

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PING 192.168.170.38 (192.168.170.38) 56(84) bytes of data.

64 bytes from 192.168.170.38: icmp\_seq=1 ttl=64 time=0.206 ms

64 bytes from 192.168.170.38: icmp\_seq=2 ttl=64 time=0.209 ms

64 bytes from 192.168.170.38: icmp\_seq=3 ttl=64 time=0.210 ms

64 bytes from 192.168.170.38: icmp\_seq=4 ttl=64 time=0.201 ms

64 bytes from 192.168.170.38: icmp\_seq=5 ttl=64 time=0.192 ms

--- 192.168.170.38 ping statistics ---

5 packets transmitted, 5 received, 0% packet loss, time 4084ms

rtt min/avg/max/mdev = 0.192/0.203/0.210/0.016 ms

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**The O-RU NETCONF Serve establishes TCP connection and performs a Call Home procedure towards the NETCONF Client and not establishes a SSH.**

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**'str' object has no attribute 'close\_session'**

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Error occured in line number 191

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##### SYSTEM LOGS #####
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Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/fw_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/nw_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/operations_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/pm_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/um_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/sys_monitor
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/fault_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/file_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/supervision
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/sync_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/ald_controller
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/log_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/radio_manager
Oct 29 23:05:05 mcb1 user.notice wd_manager[1440]: Value is 1 for Xpath /vvdn_mcel-wdm:system-apps/cli_manager
Oct 29 23:05:18 mcb1 user.notice SYNCMNDR[1308]: Received message from S-Plane
Oct 29 23:05:20 mcb1 auth.info sshd[3447]: Accepted password for operator from 192.168.170.85 port 42246 ssh2
Oct 29 23:05:20 mcb1 authpriv.info sshd[3447]: pam_unix(sshd:session): session opened for user operator by (uid=0)
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**Expected Result : The TER NETCONF Client and O-RU NETCONF Server exchange capabilities through NETCONF <hello> messages.**

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

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\*\*\*\*\* **FAIL\_REASON** \*\*\*\*\*

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'str' object has no attribute 'close\_session'

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**Transport and Handshake in IPv4 Environment (negative case: refuse SSH Connection) =**  
**FAIL**

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