



**@ 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 253 bytes 38369 (38.3 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 369 bytes 38750 (38.7 KB)
    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 56458 bytes 26890709 (26.8 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 291819 bytes 411359935 (411.3 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    device interrupt 16 memory 0xb1400000-b1420000

eth0.485: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.128.72 netmask 255.255.255.0 broadcast 192.168.128.255
    inet6 fe80::669d:99ff:feff:f512 prefixlen 64 scopeid 0x20<link>
    ether 64:9d:99:ff:f5:12 txqueuelen 1000 (Ethernet)
    RX packets 66 bytes 6197 (6.1 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 169 bytes 16212 (16.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

eth0.490: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.49.88 netmask 255.255.255.0 broadcast 192.168.49.255
    inet6 fe80::669d:99ff:feff:f512 prefixlen 64 scopeid 0x20<link>
    ether 64:9d:99:ff:f5:12 txqueuelen 1000 (Ethernet)
    RX packets 141 bytes 22481 (22.4 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 200 bytes 21722 (21.7 KB)
    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 20596 bytes 384725049 (384.7 MB)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 20596 bytes 384725049 (384.7 MB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

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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 Tue 2022-11-29 10:11:27 IST; 1min 16s ago

Docs: man:dhcpd(8)

Main PID: 8639 (dhcpd)

Tasks: 1 (limit: 4915)

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

hcpd -user dhcpd -group dhcpd -f -4 -pf /run/dhcp-server/dhcpd.pid -cf /etc/dhcp/dhcpd.conf eth0.490

Nov 29 10:11:27 vvdn sh[8639]: Listening on LPF/eth0.490/64:9d:99:ff:f5:12/192.168.49.0/24

Nov 29 10:11:27 vvdn sh[8639]: Sending on LPF/eth0.490/64:9d:99:ff:f5:12/192.168.49.0/24

Nov 29 10:11:27 vvdn sh[8639]: Sending on Socket/fallback/fallback-net

Nov 29 10:11:27 vvdn dhcpd[8639]: Sending on LPF/eth0.490/64:9d:99:ff:f5:12/192.168.49.0/24

Nov 29 10:11:27 vvdn dhcpd[8639]: Sending on Socket/fallback/fallback-net

Nov 29 10:11:27 vvdn dhcpd[8639]: Server starting service.

Nov 29 10:11:45 vvdn dhcpd[8639]: DHCPDISCOVER from 98:ae:71:00:8a:c2 via eth0.490

Nov 29 10:11:46 vvdn dhcpd[8639]: DHCPOFFER on 192.168.49.37 to 98:ae:71:00:8a:c2 (mcb1) via eth0.490

Nov 29 10:11:46 vvdn dhcpd[8639]: DHCPREQUEST for 192.168.49.37 (192.168.49.88) from 98:ae:71:00:8a:c2 (mcb1) via eth0.490

Nov 29 10:11:46 vvdn dhcpd[8639]: DHCPACK on 192.168.49.37 to 98:ae:71:00:8a:c2 (mcb1) via eth0.490

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

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PING 192.168.49.37 (192.168.49.37) 56(84) bytes of data.

64 bytes from 192.168.49.37: icmp\_seq=1 ttl=64 time=0.164 ms

64 bytes from 192.168.49.37: icmp\_seq=2 ttl=64 time=0.216 ms

64 bytes from 192.168.49.37: icmp\_seq=3 ttl=64 time=0.219 ms

64 bytes from 192.168.49.37: icmp\_seq=4 ttl=64 time=0.207 ms

64 bytes from 192.168.49.37: icmp\_seq=5 ttl=64 time=0.213 ms

--- 192.168.49.37 ping statistics ---

5 packets transmitted, 5 received, 0% packet loss, time 4100ms

rtt min/avg/max/mdev = 0.164/0.203/0.219/0.027 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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> listen --ssh --login operator

Waiting 60s for an SSH Call Home connection on port 4334...The authenticity of the host '::ffff:192.168.49.37' cannot be established.

ssh-rsa key fingerprint is 59:9e:90:48:f1:d7:6e:35:e8:d1:f6:1e:90:aa:a3:83:a0:6b:98:5a.

Are you sure you want to continue connecting (yes/no)? no

nc ERROR: Checking the host key failed.

cmd\_listen: Receiving SSH Call Home on port 4334 as user "operator" failed.

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

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

**SUCCESS**

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