



@ 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.



Interfaces Present in DU Side

eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500

ether 64:9d:99:ff:f5:12 txqueuelen 1000 (Ethernet)

RX packets 30405 bytes 6847018 (6.8 MB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 25751 bytes 2213868 (2.2 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 493357 bytes 243968200 (243.9 MB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 1113743 bytes 1255969182 (1.2 GB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

device interrupt 16 memory 0xb1400000-b1420000

eth
0.468: flags=4163
<UP,BROADCAST,RUNNING,MULTICAST> $\,$ mtu
 1500

inet 192.168.186.151 netmask 255.255.255.0 broadcast 192.168.186.255

inet6 fe80::669d:99ff:feff:f512 prefixlen 64 scopeid 0x20<link>

ether 64:9d:99:ff:f5:12 txqueuelen 1000 (Ethernet)

RX packets 29575 bytes 6362406 (6.3 MB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 25658 bytes 2083335 (2.0 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 180601 bytes 3247817314 (3.2 GB)

RX errors 0 dropped 0 overruns 0 frame 0

TX packets 180601 bytes 3247817314 (3.2 GB)

TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0



DHCP Status

DHCP Status

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 Mon 2022-11-28 12:42:50 IST; 6h ago

Docs: man:dhcpd(8) Main PID: 4908 (dhcpd) Tasks: 1 (limit: 4915)

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

user dhcpd -group dhcpd -f -4 -pf /run/dhcp-server/dhcpd.pid -cf /etc/dhcp/dhcpd.conf eth0.468

Nov 28 18:26:16 vvdn dhcpd[4908]: Wrote 0 class decls to leases file.

Nov 28 18:26:16 vvdn dhcpd[4908]: Wrote 27 leases to leases file.

Nov 28 18:26:16 vvdn dhcpd[4908]: DHCPREQUEST for 192.168.186.39 (192.168.186.151) from 98:ae:71:00:8a:c2 (mcb1) via eth0.468

Nov 28 18:26:16 vvdn dhcpd[4908]: DHCPACK on 192.168.186.39 to 98:ae:71:00:8a:c2 (mcb1) via eth0.468

Nov 28 18:52:46 vvdn dhcpd[4908]: reuse_lease: lease age 1590 (secs) under 25% threshold, reply with unaltered, existing lease for

192.168.186.39

Nov 28 18:52:46 vvdn dhcpd[4908]: DHCPDISCOVER from 98:ae:71:00:8a:c2 (mcb1) via eth0.468

Nov 28 18:52:47 vvdn dhcpd[4908]: DHCPOFFER on 192.168.186.39 to 98:ae:71:00:8a:c2 (mcb1) via eth0.468

192.168.186.39

Nov~28~18:52:47~vvdn~dhcpd [4908]:~DHCPACK~on~192.168.186.39~to~98:ae:71:00:8a:c2~(mcb1)~via~eth 0.468~descent and the contraction of the contra

Pinging

PING 192.168.186.39 (192.168.186.39) 56(84) bytes of data.

64 bytes from 192.168.186.39: icmp_seq=1 ttl=64 time=0.194 ms

64 bytes from 192.168.186.39: icmp_seq=2 ttl=64 time=0.194 ms

64 bytes from 192.168.186.39: icmp_seq=3 ttl=64 time=0.196 ms

64 bytes from 192.168.186.39: icmp_seq=4 ttl=64 time=0.178 ms

64 bytes from 192.168.186.39: $icmp_seq=5 ttl=64 time=0.203 ms$

--- 192.168.186.39 ping statistics ---

5 packets transmitted, 5 received, 0% packet loss, time 4104ms

 $rtt \ min/avg/max/mdev = 0.178/0.193/0.203/0.008 \ ms$



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

> listen --ssh --login operator

Waiting 60s for an SSH Call Home connection on port 4334...The authenticity of the host '::ffff:192.168.186.39' 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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| capabilities through NETCONF <hello> messages. ***********************************</hello> | TER NETCONF Client and O-RU NETCONF Server exchange |
|--|---|
| | ETCONF <hello> messages.</hello> |
| | |
| | ual Result ************************************ |
| | |
| Fransport and Handshake in IPv4 Environment (negative case: refuse SSH Connection) = SUCCESS | ke in IPv4 Environment (negative case: refuse SSH Connection) = |