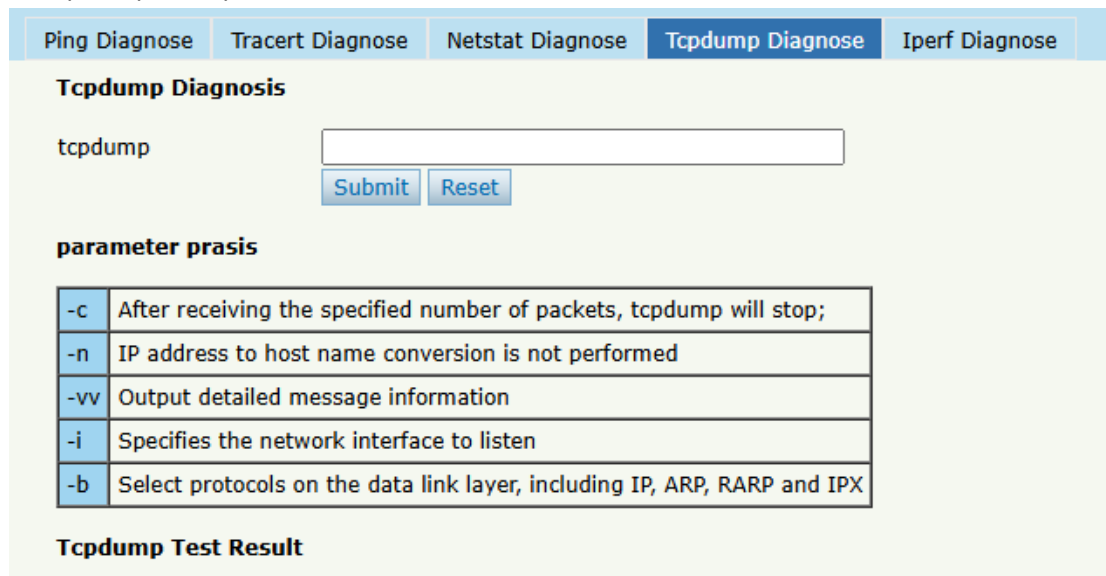


1. Tcpdump Example:



Tcpdump Diagnosis

tcpdump

parameter prasis

| | |
|-----|--|
| -c | After receiving the specified number of packets, tcpdump will stop; |
| -n | IP address to host name conversion is not performed |
| -vv | Output detailed message information |
| -i | Specifies the network interface to listen |
| -b | Select protocols on the data link layer, including IP, ARP, RARP and IPX |

Tcpdump Test Result

You need to use “-c” to set the number of received packets so that the program knows when to stop capturing packets, otherwise the program will not stop, causing freezes. Also, when a command is used which is not valid the program will freeze.

“-i” can select the capture interface, default is the AUX port (eth0), if you want to capture the interface VLAN, you can input like this (as example VLAN 100 need input ethv0.100):

`-i ethv0.100 -c 20`

“-b” can screening protocol, such as arp/ip/tcp/udp, such as this

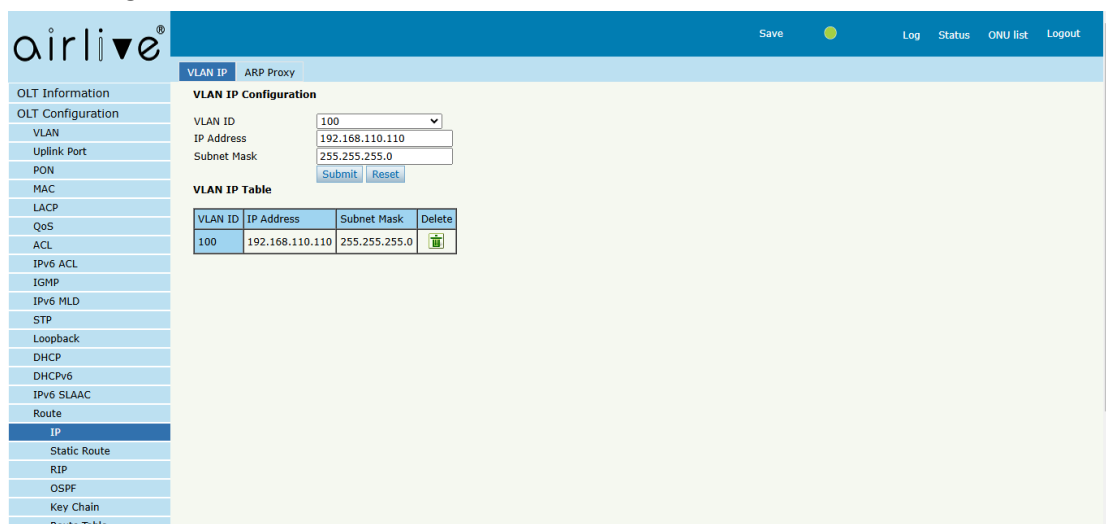
`-i ethv0.100 -c 20 -b ip`

And you can use command `-i any -c 20 -vv` to capture all the uplink port.

Tcpdump does not support the capture of a single Uplink/PON port and can only capture the AUX port/VLAN port or any (all port).

When there is no result shown it could be that you need to set the VLAN IP first, after that you can use the Tcpdump function. Because if only create VLAN but not set the VLAN IP, the interfaces are not created. Any IP is ok, but do not use the same as the AUX IP network segment.

OLT Configuration >> Route >> IP >> VLAN IP, select VLAN ID and enter an IP.



airlive Save Log Status ONU list Logout

VLAN IP ARP Proxy

VLAN IP Configuration

VLAN ID: 100

IP Address: 192.168.110.110

Subnet Mask: 255.255.255.0

VLAN IP Table

| VLAN ID | IP Address | Subnet Mask | Delete |
|---------|-----------------|---------------|---------------------------------------|
| 100 | 192.168.110.110 | 255.255.255.0 | <input type="button" value="Delete"/> |

OLT Information

OLT Configuration

VLAN

Uplink Port

PON

MAC

LACP

QoS

ACL

IPv6 ACL

IGMP

IPv6 MLD

STP

Loopback

DHCP

DHCPv6

IPv6 SLAAC

Route

IP

Static Route

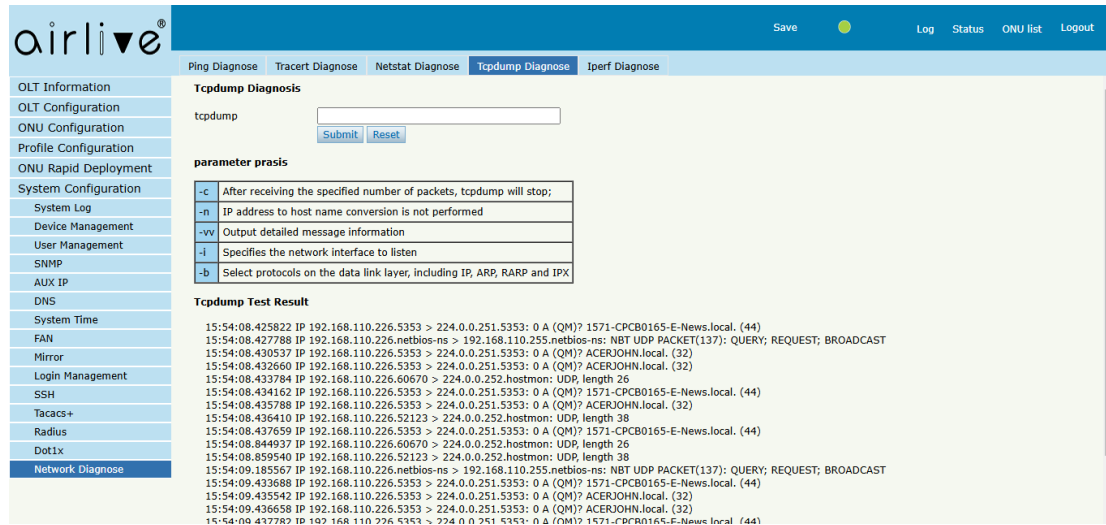
RIP

OSPF

Key Chain

Route Table

When a command like “-i ethv0.100 -c 20” is now entered in Tcpcmdump the results will be shown similar to the below image.



The screenshot shows the 'airlive' web interface. The left sidebar contains a navigation menu with categories like OLT Information, ONU Configuration, Profile Configuration, System Configuration, and Network Diagnose. The main content area is titled 'Tcpcmdump Diagnosis' and features a text input field with the command 'tcpdump'. Below the input field are 'Submit' and 'Reset' buttons. A section titled 'parameter prasis' contains a table of command-line options for tcpdump:

| parameter | prasis |
|-----------|--|
| -c | After receiving the specified number of packets, tcpdump will stop; |
| -n | IP address to host name conversion is not performed |
| -vv | Output detailed message information |
| -i | Specifies the network interface to listen |
| -b | Select protocols on the data link layer, including IP, ARP, RARP and IPX |

Below the table is the 'Tcpcmdump Test Result' section, which displays a list of network traffic logs. The logs show timestamps, IP addresses, and protocol details, such as:

```

15:54:08.425822 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? 1571-CPCB0165-E-News.local. (44)
15:54:08.427788 IP 192.168.110.226.netbios-ns > 192.168.110.255.netbios-ns: NBT UDP PACKET(137): QUERY; REQUEST; BROADCAST
15:54:08.430537 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? ACERJOHN.local. (32)
15:54:08.432660 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? ACERJOHN.local. (32)
15:54:08.433784 IP 192.168.110.226.60670 > 224.0.0.252.hostmon: UDP, length 26
15:54:08.434162 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? 1571-CPCB0165-E-News.local. (44)
15:54:08.435788 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? ACERJOHN.local. (32)
15:54:08.436410 IP 192.168.110.226.52123 > 224.0.0.252.hostmon: UDP, length 38
15:54:08.437659 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? 1571-CPCB0165-E-News.local. (44)
15:54:08.844937 IP 192.168.110.226.60670 > 224.0.0.252.hostmon: UDP, length 26
15:54:08.859540 IP 192.168.110.226.52123 > 224.0.0.252.hostmon: UDP, length 38
15:54:08.185567 IP 192.168.110.226.netbios-ns > 192.168.110.255.netbios-ns: NBT UDP PACKET(137): QUERY; REQUEST; BROADCAST
15:54:09.433688 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? 1571-CPCB0165-E-News.local. (44)
15:54:09.435542 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? ACERJOHN.local. (32)
15:54:09.436658 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? ACERJOHN.local. (32)
15:54:09.437782 IP 192.168.110.226.5353 > 224.0.0.251.5353: 0 A (QM)? 1571-CPCB0165-E-News.local. (44)

```