NAME

ovs−l3ping − check network deployment for L3 tunneling problems

SYNOPSIS

ovs−l3ping −s *TunnelRemoteIP,InnerIP[/mask]* **−t** *tunnelmode*
ovs−l3ping −s *TunnelRemoteIP,InnerIP[/mask][:ControlPort]* **−t** *tunnelmode*

ovs−l3ping −c *TunnelRemoteIP,InnerIP[/mask],RemoteInnerIP* **−t** *tunnelmode*
ovs−l3ping −c *TunnelRemoteIP,InnerIP[/mask][:ControlPort[:DataPort]],RemoteInnerIP[:ControlPort[:DataPort]]* [**−b** *targetbandwidth*] [**−i** *testinterval*] **−t** *tunnelmode*

Common options:
[**−h** | **−−help**] [**−V** | **−−version**]

DESCRIPTION

The **ovs−l3ping** program may be used to check for problems that could be caused by invalid routing policy, misconfigured firewall in the tunnel path or a bad NIC driver. On one of the nodes, run **ovs−l3ping** in server mode and on the other node run it in client mode. The client and server will establish L3 tunnel, over which client will give further testing instructions. The **ovs−l3ping** client will perform UDP and TCP tests. This tool is different from **ovs−test** that it encapsulates XML/RPC control connection over the tunnel, so there is no need to open special holes in firewall.

UDP tests can report packet loss and achieved bandwidth for various datagram sizes. By default target bandwidth for UDP tests is 1Mbit/s.

TCP tests report only achieved bandwidth, because kernel TCP stack takes care of flow control and packet loss.

Client Mode

An **ovs−l3ping** client will create a L3 tunnel and connect over it to the **ovs−l3ping** server to schedule the tests. *TunnelRemoteIP* is the peer's IP address, where tunnel will be terminated. *InnerIP* is the address that will be temporarily assigned during testing. All test traffic originating from this IP address to the *RemoteInnerIP* will be tunneled. It is possible to override default *ControlPort* and *DataPort*, if there is any other application that already listens on those two ports.

Server Mode

To conduct tests, **ovs−l3ping** server must be running. It is required that both client and server *InnerIP* addresses are in the same subnet. It is possible to specify *InnerIP* with netmask in CIDR format.

OPTIONS

One of **−s** or **−c** is required. The **−t** option is also required.

−s *TunnelRemoteIP,InnerIP[/mask][:ControlPort]*
−−server *TunnelRemoteIP,InnerIP[/mask][:ControlPort]*
Run in server mode and create L3 tunnel with the client that will be accepting tunnel at *TunnelRemoteIP* address. The socket on *InnerIP[:ControlPort]* will be used to receive further instructions from the client.

−c *TunnelRemoteIP,InnerIP[/mask][:ControlPort[:DataPort]],RemoteInnerIP[:ControlPort[:DataPort]]*
−−client *TunnelRemoteIP,InnerIP[/mask][:ControlPort[:DataPort]],RemoteInnerIP[:ControlPort[:DataPort]]*
Run in client mode and create L3 tunnel with the server on *TunnelRemoteIP*. The client will use *InnerIP* to generate test traffic with the server's *RemoteInnerIP*.

−b *targetbandwidth*
−−bandwidth *targetbandwidth*
Target bandwidth for UDP tests. The *targetbandwidth* must be given in bits per second. It is possible to use postfix M or K to alter the target bandwidth magnitude.

−i *testinterval*
−−interval *testinterval*
How long each test should run. By default 5 seconds.

−t *tunnelmode*
−−tunnel−mode *tunnelmode*
Specify the tunnel type. This option must match on server and client.

−h
−−help Prints a brief help message to the console.

−V
−−version
Prints version information to the console.

EXAMPLES

On host 192.168.122.220 start **ovs−l3ping** in server mode. This command will create a temporary GRE tunnel with the host 192.168.122.236 and assign 10.1.1.1/28 as the inner IP address, where client will have to connect:

ovs−l3ping -s 192.168.122.236,10.1.1.1/28 -t gre

On host 192.168.122.236 start **ovs−l3ping** in client mode. This command will use 10.1.1.2/28 as the local inner IP address and will connect over the L3 tunnel to the server's inner IP address at 10.1.1.1.

ovs−l3ping -c 192.168.122.220,10.1.1.2/28,10.1.1.1 -t gre

SEE ALSO

ovs−vswitchd(8), **ovs−ofctl**(8), **ovs−vsctl**(8), **ovs−vlan−test**(8), **ovs−test**(8), **ethtool**(8), **uname**(1)