



The above figure is a part of FatTree topology, Pod 0

Routing table of Router 00

```

Node: 54 Time: 12s Ipv4ListRouting table
Priority: 0 Protocol: ns3::Ipv4StaticRouting
Destination Gateway Genmask Flags Metric Ref Use Iface
127.0.0.0 0.0.0.0 255.0.0.0 U 0 - - 0
10.0.0.0 0.0.0.0 255.255.255.252 U 0 - - 1
10.0.0.4 0.0.0.0 255.255.255.252 U 0 - - 2
10.0.0.8 0.0.0.0 255.255.255.252 U 0 - - 3
10.0.3.0 0.0.0.0 255.255.255.252 U 0 - - 4
10.0.4.0 0.0.0.0 255.255.255.252 U 0 - - 5
10.0.5.0 0.0.0.0 255.255.255.252 U 0 - - 6
Priority: -10 Protocol: ns3::FatTreeIpv4RoutingProtocol
Destination Gateway Genmask Flags Metric Ref Use Iface
10.0.0.0 10.0.0.1 255.255.255.252 UG - - - 1
10.0.0.4 10.0.0.5 255.255.255.252 UG - - - 2
10.0.0.8 10.0.0.9 255.255.255.252 UG - - - 3
10.0.5.0 10.0.5.2 255.255.255.252 UG - - - 6
10.0.3.0 10.0.3.2 255.255.255.252 UG - - - 4
10.0.4.0 10.0.4.2 255.255.255.252 UG - - - 5

```

Now the packet is sent from Server 0 to a server 53 which is in pod 5 by index. The algorithm runs and I am getting the right route which is shown in the log, but right next it then returns false.

In the table above the red rectangle highlights the suffix table entries. The lookup find a closest IP matching these entries and the destination address.

Please find the NS_LOG screenshot attached.