Bismillah selesai semester ini

Command

1. Run mn
   1. Simple Topology
      1. sudo mn --controller=remote,ip=127.0.0.1 --mac -i 10.1.1.0/24 --switch=ovsk,protocols=OpenFlow13 --topo=single,4
2. Mininet Command
   1. help
   2. dump
   3. net
   4. links
   5. pingall
3. Run ryu-manager
   1. ryu-manager ryu.app.simple\_switch\_13
4. Run iperf
   1. Server
      1. iperf -s
   2. Client
      1. iperf -c 10.1.1.4 -i 10 -t 30
      2. iperf -c 10.1.1.4 -i 10 -b 10m -t 30
      3. iperf -c 10.1.1.4 -i 10 -P 10 -t 30
      4. -c means client mode.
      5. -i means reporting interval
      6. -t means test duration in seconds
      7. -b means bandwidth 10m means 10Mbps
      8. -P means parallel connections
5. OpenFLow
   1. sudo ovs-ofctl del-flows s1
   2. sudo ovs-ofctl -O OpenFlow13 dump-flows s1
   3. sudo ovs-ofctl add-flow s1 in\_port=2,action=output:1
   4. sudo ovs-ofctl add-flow s1 dl\_src=00:00:00:00:00:01,actions=output:2
   5. sudo ovs-ofctl add-flow s1 priority=500,dl\_type=0x800,nw\_src=10.0.0.0/24,nw\_dst=10.0.0.0/24,actions=normal
   6. sudo ovs-ofctl add-flow s1 arp,nw\_dst=10.0.0.1,actions=output:1
   7. sudo ovs-ofctl add-flow s1 arp,nw\_dst=10.0.0.2,actions=output:2
   8. sudo ovs-ofctl add-flow s1 arp,actions=normal
   9. sudo ovs-ofctl add-flow s1 priority=500,dl\_type=0x800,nw\_proto=6,tp\_dst=80,actions=output:1
   10. sudo ovs-ofctl add-flow s1 priority=800,ip,nw\_src=10.0.0.1,actions=normal
6. tcpdump
   1. pada h1 : tcpdump -ne -i h1-eth0

Percobaan

1. Coba Ryu mn simple iperf
   1. Topologi simple 1 switch dengan 4 host pada VM
   2. Run iperf
      1. Pada h1
         1. Iperf3 -s
      2. Iperf3 -c 10.0.0.1 -i 10 -t 30
         1. Transfer 27.2 GB
         2. Bitrate 23.3 Gbps
         3. Bitrate = Bandwith = throughput