

Trystan Nguyen

CSE 150/L

Lab 3:

Pingall command

```
mininet> pingall
*** Ping: testing ping reachability
h1 -> X X X
h2 -> X X X
h3 -> X X X
h4 -> X X X
*** Results: 100% dropped (0/12 received)
```

Pingall -> dpctl dump-flows command

```
mininet> dpctl dump-flows
*** s1 -----
NXST_FLOW reply (xid=0x4):
  cookie=0x0, duration=2.685s, table=0, n_packets=1, n_bytes=42, idle_timeout=10,
  hard_timeout=30, idle_age=2, priority=65535,arp,in_port=2,vlan_tci=0x0000,dl_sr
c=00:00:00:00:00:02,dl_dst=00:00:00:00:00:01,arp_spa=10.0.1.20,arp_tpa=10.0.1.10
,arp_op=2 actions=FL00D
  cookie=0x0, duration=2.686s, table=0, n_packets=1, n_bytes=42, idle_timeout=10,
  hard_timeout=30, idle_age=2, priority=65535,arp,in_port=1,vlan_tci=0x0000,dl_sr
c=00:00:00:00:00:01,dl_dst=00:00:00:00:00:02,arp_spa=10.0.1.10,arp_tpa=10.0.1.20
,arp_op=1 actions=FL00D
  cookie=0x0, duration=7.703s, table=0, n_packets=1, n_bytes=98, idle_timeout=10,
  hard_timeout=30, idle_age=7, priority=65535,icmp,in_port=1,vlan_tci=0x0000,dl_s
rc=00:00:00:00:00:01,dl_dst=00:00:00:00:00:02,nw_src=10.0.1.10,nw_dst=10.0.1.20,
nw_tos=0,icmp_type=8,icmp_code=0 actions=drop
mininet> 
```

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iperf + dpctl dump-flows command

```
mininet@mininet-vm: ~  
File Edit Tabs Help  
*** Unknown command: iperl h1 h2  
mininet> iperf h1 h2  
*** Iperf: testing TCP bandwidth between h1 and h2  
*** Results: ['20.5 Gbits/sec', '20.5 Gbits/sec']  
mininet> dpctl dump-flows  
*** s1 -----  
NXST_FLOW reply (xid=0x4):  
  cookie=0x0, duration=7.128s, table=0, n_packets=519194, n_bytes=12839773844, idle_timeout=10, hard_timeout=30, idle_age=2, priority=65535, tcp, in_port=1, vlan_tci=0x0000, dl_src=00:00:00:00:00:01, dl_dst=00:00:00:00:00:02, nw_src=10.0.1.10, nw_dst=10.0.1.20, nw_tos=0, tp_src=42442, tp_dst=5001 actions=FL00D  
  cookie=0x0, duration=7.152s, table=0, n_packets=3, n_bytes=206, idle_timeout=10, hard_timeout=30, idle_age=7, priority=65535, tcp, in_port=2, vlan_tci=0x0000, dl_src=00:00:00:00:00:02, dl_dst=00:00:00:00:00:01, nw_src=10.0.1.20, nw_dst=10.0.1.10, nw_tos=0, tp_src=5001, tp_dst=42441 actions=FL00D  
  cookie=0x0, duration=7.126s, table=0, n_packets=100547, n_bytes=6636482, idle_timeout=10, hard_timeout=30, idle_age=2, priority=65535, tcp, in_port=2, vlan_tci=0x0000, dl_src=00:00:00:00:00:02, dl_dst=00:00:00:00:00:01, nw_src=10.0.1.20, nw_dst=10.0.1.10, nw_tos=0, tp_src=5001, tp_dst=42442 actions=FL00D  
  cookie=0x0, duration=7.154s, table=0, n_packets=4, n_bytes=272, idle_timeout=10, hard_timeout=30, idle_age=7, priority=65535, tcp, in_port=1, vlan_tci=0x0000, dl_src=00:00:00:00:00:01, dl_dst=00:00:00:00:00:02, nw_src=10.0.1.10, nw_dst=10.0.1.20, nw_tos=16, tp_src=42441, tp_dst=5001 actions=FL00D  
mininet> 
```