

Lab5 -00-broadcast实验报告

姓名	学号	邮箱	完成时间
陈嘉昀	211220137	jiayunchen@smail.nju.edu.cn	2023年11月28日

1 代码实现

broadcast_packet函数从接口iface收到一个包，随后通过遍历自己的每个接口i：

- 如果i == iface，则不做任何处理
- 其他情况下，把包转发给i

2 运行截图

在b1启动hub之前，h1, h2, h3之间不能互相ping：

```
mininet> h1 ping -c1 h2
PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data.
From 10.0.0.1 icmp_seq=1 Destination Host Unreachable

--- 10.0.0.2 ping statistics ---
1 packets transmitted, 0 received, +1 errors, 100% packet loss, time 0ms

mininet> h1 ping -c1 h3
PING 10.0.0.3 (10.0.0.3) 56(84) bytes of data.
From 10.0.0.1 icmp_seq=1 Destination Host Unreachable

--- 10.0.0.3 ping statistics ---
1 packets transmitted, 0 received, +1 errors, 100% packet loss, time 0ms

mininet> h2 ping -c1 h3
PING 10.0.0.3 (10.0.0.3) 56(84) bytes of data.
From 10.0.0.2 icmp_seq=1 Destination Host Unreachable

--- 10.0.0.3 ping statistics ---
1 packets transmitted, 0 received, +1 errors, 100% packet loss, time 0ms
```

b1 启动 hub后：h1, h2, h3之间都可以互相ping通了：

```
mininet> b1 ./hub &
DEBUG: find the following interfaces: b1-eth0 b1-eth1 b1-eth2.
mininet> h1 ping -c1 h2
PING 10.0.0.2 (10.0.0.2) 56(84) bytes of data.
64 bytes from 10.0.0.2: icmp_seq=1 ttl=64 time=0.157 ms

--- 10.0.0.2 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.157/0.157/0.157/0.000 ms
mininet> h1 ping -c1 h3
PING 10.0.0.3 (10.0.0.3) 56(84) bytes of data.
64 bytes from 10.0.0.3: icmp_seq=1 ttl=64 time=0.136 ms

--- 10.0.0.3 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.136/0.136/0.136/0.000 ms
mininet> h2 ping -c1 h3
PING 10.0.0.3 (10.0.0.3) 56(84) bytes of data.
64 bytes from 10.0.0.3: icmp_seq=1 ttl=64 time=0.145 ms

--- 10.0.0.3 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 0.145/0.145/0.145/0.000 ms
```