

Route路由实验

修改faucet配置

1. 编辑~/workspace/dockeretc/faucet/faucet.yaml

```
dps:
  switch-1:
    dp_id: 0x1
    timeout: 3600
    arp_neighbor_timeout: 3600
    interfaces:
      1:
        native_vlan: 100
      2:
        native_vlan: 100
      3:
        native_vlan: 100
      4:
        native_vlan: 200
      5:
        native_vlan: 200
vlands:
  100:
    faucet_vips: ["10.100.0.254/24"]
  200:
    faucet_vips: ["10.200.0.254/24"]
routers:
  router-1:
    vlans: [100, 200]
```

2. 重启faucet容器

```
docker restart faucet
```

查看此时流表

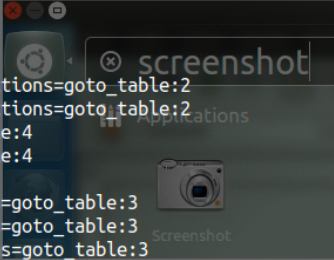
```
root@node1-debian9:~# ./dumps-flows br1
```

```

priority=9000,in_port=p1,vlan_tci=0x0000/0x1fff actions=push_vlan:0x8100,set_field:4196->vlan_vid,goto_table:1
priority=9000,in_port=p2,vlan_tci=0x0000/0x1fff actions=push_vlan:0x8100,set_field:4196->vlan_vid,goto_table:1
priority=9000,in_port=p3,vlan_tci=0x0000/0x1fff actions=push_vlan:0x8100,set_field:4196->vlan_vid,goto_table:1
priority=9000,in_port=p4,vlan_tci=0x0000/0x1fff actions=push_vlan:0x8100,set_field:4296->vlan_vid,goto_table:1
priority=9000,in_port=p5,vlan_tci=0x0000/0x1fff actions=push_vlan:0x8100,set_field:4296->vlan_vid,goto_table:1
priority=0 actions=drop
table=1, priority=20490,dl_type=0x9000 actions=drop
table=1, priority=20480,dl_src=ff:ff:ff:ff:ff:ff actions=drop
table=1, priority=20480,dl_src=0e:00:00:00:00:01 actions=drop
table=1, priority=16384,arp,dl_vlan=100 actions=goto_table:3
table=1, priority=16384,arp,dl_vlan=200 actions=goto_table:3
table=1, priority=16384,ip,dl_vlan=100,dl_dst=0e:00:00:00:00:01 actions=goto_table:2
table=1, priority=16384,ip,dl_vlan=200,dl_dst=0e:00:00:00:00:01 actions=goto_table:2
table=1, priority=4096,dl_vlan=100 actions=CONTROLLER:96,goto_table:4
table=1, priority=4096,dl_vlan=200 actions=CONTROLLER:96,goto_table:4
table=1, priority=0 actions=goto_table:4
table=2, priority=12320,ip,dl_vlan=100,nw_dst=10.100.0.254 actions=goto_table:3
table=2, priority=12320,ip,dl_vlan=200,nw_dst=10.200.0.254 actions=goto_table:3
table=2, priority=12312,ip,dl_vlan=200,nw_dst=10.100.0.0/24 actions=goto_table:3
table=2, priority=12312,ip,dl_vlan=100,nw_dst=10.100.0.0/24 actions=goto_table:3
table=2, priority=12312,ip,dl_vlan=200,nw_dst=10.200.0.0/24 actions=goto_table:3
table=2, priority=12312,ip,dl_vlan=100,nw_dst=10.200.0.0/24 actions=goto_table:3
table=2, priority=0 actions=drop
table=3, priority=12320,arp,dl_dst=ff:ff:ff:ff:ff:ff,arp_tpa=10.100.0.254 actions=CONTROLLER:64
table=3, priority=12320,arp,dl_dst=ff:ff:ff:ff:ff:ff,arp_tpa=10.200.0.254 actions=CONTROLLER:64
table=3, priority=12320,arp,dl_dst=0e:00:00:00:00:01 actions=CONTROLLER:64
table=3, priority=12317,ip,dl_dst=0e:00:00:00:00:01 actions=CONTROLLER:110
table=3, priority=12319,arp actions=goto_table:4
table=3, priority=12316,ip actions=CONTROLLER:110,goto_table:4
table=3, priority=12319,icmp,dl_dst=0e:00:00:00:00:01 actions=CONTROLLER:110
table=3, priority=12318,icmp actions=CONTROLLER:110,goto_table:4
table=3, priority=0 actions=drop
table=4, priority=0 actions=goto_table:5
table=5, priority=8240,dl_dst=01:00:0c:cc:cc:cc actions=drop
table=5, priority=8240,dl_dst=01:00:0c:cc:cc:cd actions=drop
table=5, priority=8240,dl_vlan=100,dl_dst=ff:ff:ff:ff:ff:ff actions=pop_vlan,output:p1,output:p2,output:p3
table=5, priority=8240,dl_vlan=200,dl_dst=ff:ff:ff:ff:ff:ff actions=pop_vlan,output:p4,output:p5
table=5, priority=8236,dl_dst=01:80:c2:00:00:00/ff:ff:ff:ff:ff:f0 actions=drop
table=5, priority=8216,dl_vlan=100,dl_dst=01:80:c2:00:00:00/ff:ff:ff:ff:ff:00 actions=pop_vlan,output:p1,output:p2,output:p3
table=5, priority=8216,dl_vlan=100,dl_dst=01:00:5e:00:00:00/ff:ff:ff:ff:ff:00 actions=pop_vlan,output:p1,output:p2,output:p3
table=5, priority=8216,dl_vlan=200,dl_dst=01:80:c2:00:00:00/ff:ff:ff:ff:ff:00 actions=pop_vlan,output:p4,output:p5
table=5, priority=8216,dl_vlan=200,dl_dst=01:00:5e:00:00:00/ff:ff:ff:ff:ff:00 actions=pop_vlan,output:p4,output:p5
table=5, priority=8208,dl_vlan=100,dl_dst=33:33:00:00:00:00/ff:ff:ff:ff:ff:00 actions=pop_vlan,output:p1,output:p2,output:p3
table=5, priority=8208,dl_vlan=200,dl_dst=33:33:00:00:00:00/ff:ff:ff:ff:ff:00 actions=pop_vlan,output:p4,output:p5
table=5, priority=8192,dl_vlan=100 actions=pop_vlan,output:p1,output:p2,output:p3
table=5, priority=8192,dl_vlan=200 actions=pop_vlan,output:p4,output:p5
table=5, priority=0 actions=drop

```

ubuntu自带的截图工具为screenshot,可以在Dash home中搜索找到(如下图):



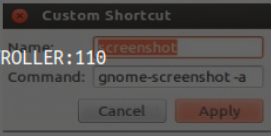
要先打开Screenshot,然后再截图确实有点麻烦了,这里可以

print screen

截取当前窗口快捷键: alt+print screen (如果遇到无法截图的情况直接用自定义

设置步骤如下:

Settings---->keyboard---->shortcuts---->custom shortcuts---->点击屏幕



系统默认快捷键为shift+printscreen,当然,你也可以改为任何你想要的快捷键。打开Ubuntu

可以发现增加了arp协议相关内容如：

```

+ table=1, priority=16384,arp,dl_vlan=100 actions=goto_table:3
+ table=1, priority=16384,arp,dl_vlan=200 actions=goto_table:3
+ table=3, priority=12320,arp,dl_dst=ff:ff:ff:ff:ff:ff,arp_tpa=10.100.0.254
actions=CONTROLLER:64
+ table=3, priority=12320,arp,dl_dst=ff:ff:ff:ff:ff:ff,arp_tpa=10.200.0.254
actions=CONTROLLER:64
+ table=3, priority=12320,arp,dl_dst=0e:00:00:00:00:01
actions=CONTROLLER:64
+ table=3, priority=12319,arp actions=goto_table:4

```

此外增加了ip协议相关内容

```

+ table=1, priority=16384,ip,dl_vlan=100,dl_dst=0e:00:00:00:00:01
actions=goto_table:2
+ table=1, priority=16384,ip,dl_vlan=200,dl_dst=0e:00:00:00:00:01
actions=goto_table:2
+ table=2, priority=12320,ip,dl_vlan=100,nw_dst=10.100.0.254
actions=goto_table:3
+ table=2, priority=12320,ip,dl_vlan=200,nw_dst=10.200.0.254

```

```
actions=goto_table:3
+ table=2, priority=12312,ip,d1_vlan=200,nw_dst=10.100.0.0/24
actions=goto_table:3
+ table=2, priority=12312,ip,d1_vlan=100,nw_dst=10.100.0.0/24
actions=goto_table:3
+ table=2, priority=12312,ip,d1_vlan=200,nw_dst=10.200.0.0/24
actions=goto_table:3
+ table=2, priority=12312,ip,d1_vlan=100,nw_dst=10.200.0.0/24
actions=goto_table:3
+ table=3, priority=12317,ip,d1_dst=0e:00:00:00:00:01
actions=CONTROLLER:110
+ table=3, priority=12316,ip actions=CONTROLLER:110,goto_table:4
```

还有icmp协议相关内容

```
+ table=3, priority=12319,icmp,d1_dst=0e:00:00:00:00:01
actions=CONTROLLER:110
+ table=3, priority=12318,icmp actions=CONTROLLER:110,goto_table:4
```