

# Configuring PBB

PBB means Provider Backbone Bridge.

## push

### Push pbb\_isid,eth\_src,eth\_dst

Outer src mac is set as 00:00:00:11:11:11, and dsc mac is set as 00:00:00:22:22:22,Vlan is set as 4094, pbb isid is set as 23.

```
root@PicOS-OVS# ovs-ofctl add-flow br0 in_port=11,dl_type=0x0800,dl_src=22:11:11:11:11:11,dl_dst=22:22:22:22:22:22,actions=push_pbb:0x88e7,set_field:23->pbb_isid,set_field:00:00:00:11:11:11->eth_src,set_field:00:00:00:22:22:22->eth_dst,push_vlan:0x8100,set_field:4094->vlan_vid,output:12
```

### Push pbb without pbb\_isid,eth\_src,eth\_dst

Outer src mac is set as 22:11:11:11:11:11, and dsc mac is set as 22:22:22:22:22:22,Vlan is set as 4094, pbb isid is set as 0.

```
root@PicOS-OVS# ovs-ofctl add-flow br0 in_port=11,dl_type=0x0800,dl_src=22:11:11:11:11:11,dl_dst=22:22:22:22:22:22,actions=push_pbb:0x88e7,push_vlan:0x8100,set_field:4094->vlan_vid,output:12
```

### Push pbb\_isid,eth\_src,eth\_dst for pbb packets

Outer src mac is set as 00:00:00:11:11:11, and dsc mac is set as 00:00:00:22:22:22,  
Vlan is set as 4094, pbb isid is set as 21. (isid of primary pbb packet should not be 21)

```
root@PicOS-OVS# ovs-ofctl add-flow br0 in_port=11,dl_type=0x88e7,actions=push_pbb:0x88e7,set_field:21->pbb_isid,set_field:00:00:00:11:11:11->eth_src,set_field:00:00:00:22:22:22->eth_dst,push_vlan:0x8100,set_field:4094->vlan_vid,output:12
```

## pop

Pop pbb packets tagged with vlan 1 (Primary pbb packets should be tagged with vlan 1) Pbb packets are popped.

```
root@PicOS-OVS# ovs-ofctl add-flow br0 in_port=11,dl_type=0x88e7,dl_src=00:00:00:11:11:11,dl_dst=00:00:00:22:22:22,actions=pop_vlan,pop_pbb:0x88e7,output:12
```

Pop pbb packets tagged with vlan 2000 (Primary pbb packets should be tagged with vlan 2000) Pbb packets are popped.

```
root@PicOS-OVS# ovs-ofctl add-flow br0 in_port=11,dl_type=0x88e7,pbb_isid=23,dl_vlan=2000,dl_src=00:00:00:11:11:11,dl_dst=00:00:00:22:22:22,actions=pop_vlan,pop_pbb:0x88e7,output:12
```

## Important Things to Know

- Push pbb should be done with push\_vlan,
- When do push pbb, primary src mac, and dst mac will be used if no config of eth\_src , eth\_dst
- Do push pbb for pbb packet, primary pbb isid should be not same as the push pb isid.
- When do pop pbb, primary packets should include vlan, and actions should include pop\_vlan.
- All switches support pbb except P3290,P3295 and P4610.