

NF_NAT for OVS

iptables target vs. OVS action

iptables:

```
iptables -i eth1 -s 1.1.1.1 -j SNAT --to-source 2.2.2.2
```

OVS:

- **Stateless:**

```
in_port=3, ip, nw_src=1.1.1.1,  
actions=mod_nw_src:2.2.2.2,output:3
```

- **Stateful:**

```
in_port=3, ip, nw_src=1.1.1.1,  
actions=snat:2.2.2.2,output:3
```

Use of nf_nat (2/2)

```
case OVS_ACTION_ATTR_NAT:
    nf_ct_get(skb, &ctinfo);
    if (!ct || nf_ct_is_untracked(ct))
        break;
    [... fill range ...]
    nf_nat_setup_info(ct, &range, NF_NAT_MANIP_SRC);
    nf_ct_nat_ext_add(ct);
    [... handle IP_CT_* ...]
    [... set pktinfo, hdr offsets ...]
    nf_nat_packet(ct, &ctinfo, hooknum, skb);
```