Usage Scenario

1. Get the standard spec Implement, using libVig 3. ???

4. VERIFIED



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Specification Example

```
from state import flow_emap, int_devices
    EXP_TIME = 10 * 1000
    EXT_DEVICE = 1
    if a_packet_received:
        flow_emap.expire_all(now - EXP_TIME)
    h3 = pop_header(tcpudp, on_mismatch=([],[]))
    h2 = pop_header(ipv4, on_mismatch=([],[]))
    h1 = pop_header(ether, on_mismatch=([],[]))
11
    if received_on_port == EXT_DEVICE:
        internal_flow = FlowIdc(h3.dst_port, h3.src_port, h2.daddr, h2.saddr, h2.npid)
13
        if flow_emap.has(internal_flow):
14
            fl_id = flow_emap.get(internal_flow)
15
            flow_emap.refresh_idx(fl_id, now)
16
            out_port = vector_get(int_devices, fl_id)
17
            return ([out_port],[ether(h1, saddr=..., daddr=...), ipv4(h2, cksum=...), tcpudp(h3)])
18
19
        else:
             return ([],[])
20
    else:
21
        internal_flow = FlowIdc(h3.src_port, h3.dst_port, h2.saddr, h2.daddr, h2.npid)
22
        if flow_emap.has(internal_flow):
23
            fl_id = flow_emap.get(internal_flow)
24
            flow_emap.refresh_idx(fl_id, now)
26
        else:
            if not flow_emap.full():
27
28
                fl_id = the_index_allocated
                flow_emap.add(internal_flow, fl_id, now)
29
                vector_set(int_devices, fl_id, received_on_port)
30
        return ([EXT_DEVICE],[ether(h1, saddr=..., daddr=...), ipv4(h2, cksum=...), tcpudp(h3)])
31
```