

**Initialize Headers**  
Set input port,  
Ethernet source,  
destination, and type;  
set all others to zero

Eth type =  
0x8100?

Set VLAN ID and  
PCP. Use  
encapsulated Eth  
type for next Eth  
type check

Eth type =  
0x0800?

Set IP source,  
destination,  
protocol, and  
ToS fields

Not IP  
Fragment?

IP Proto =  
6 or 7?

Use UDP/TCP  
source and  
destination for  
L4 fields

IP Proto =  
1?

Use ICMP  
type and code  
for L4 fields

**Packet Lookup**  
Use assigned  
header fields

decision

yes

no

