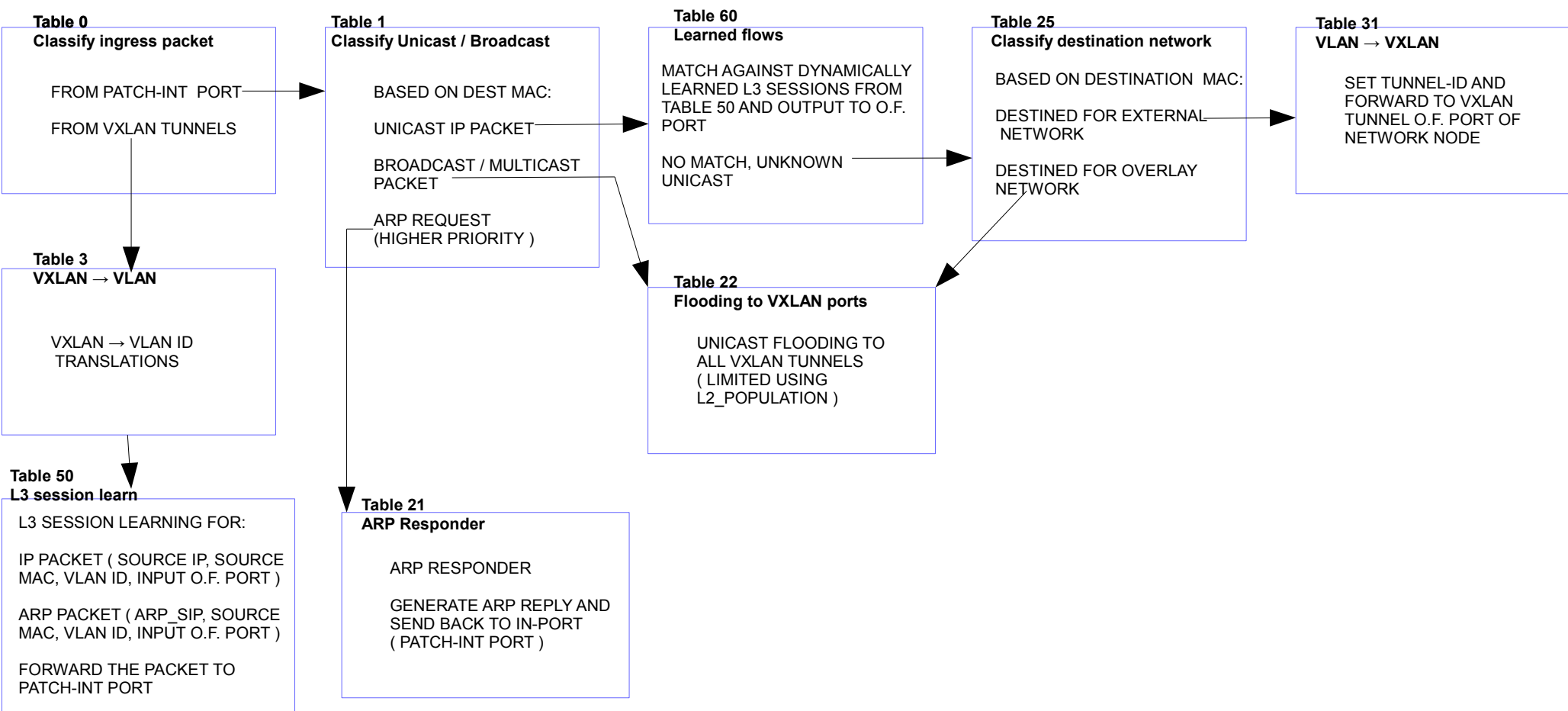
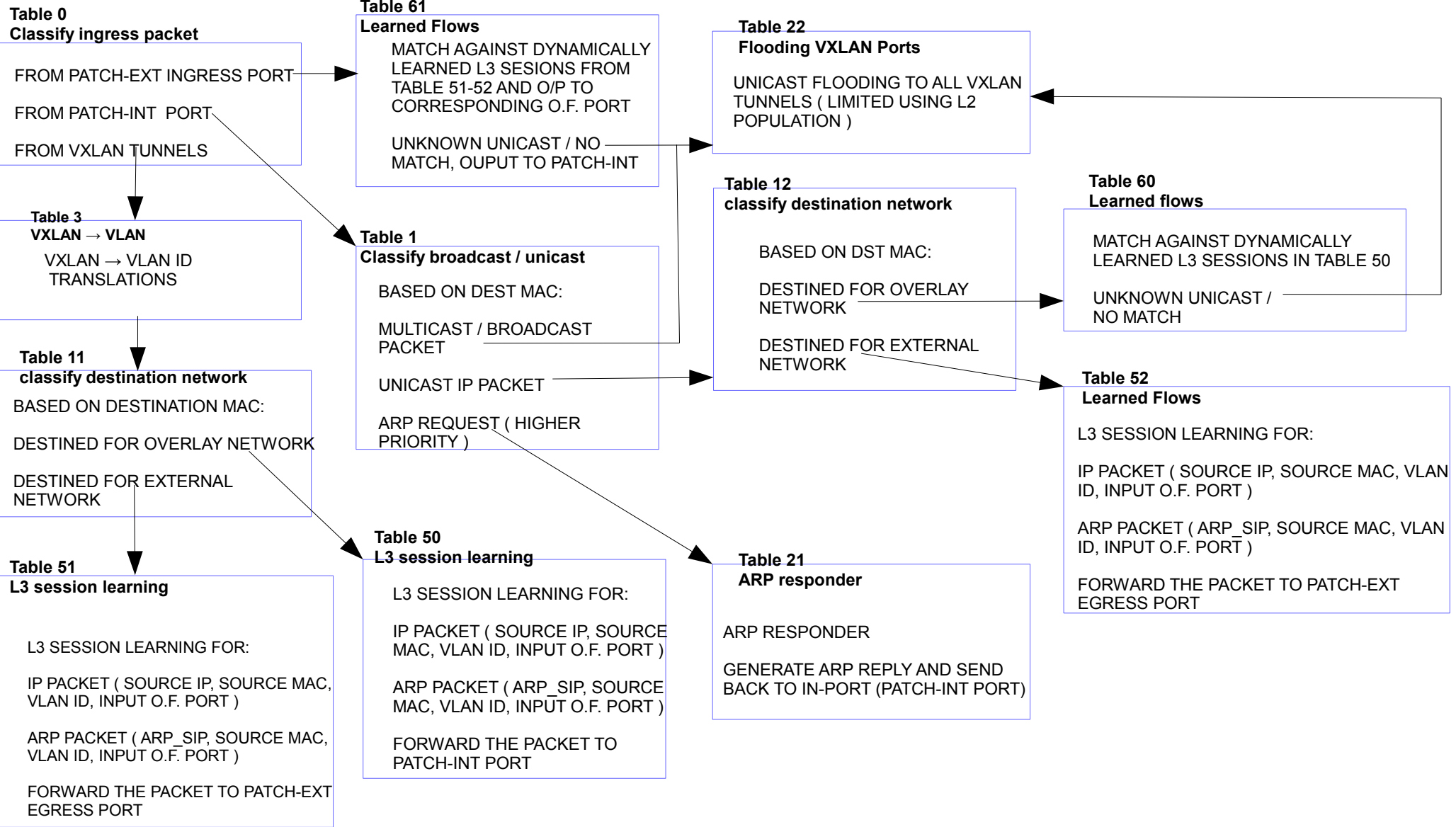


## OVS Integration Bridge on Compute / Network Node



## OVS Tunnel Bridge on Compute Node



## OVS Tunnel Bridge on Network Node

**Table 0**

**classify ingress packet**

FROM PATCH-TUNBR INGRESS,  
LOAD PATCH-TUNBR EGRESS O.F.  
PORT IN NXM\_NX\_REG0[]

FROM UP-LINK / EXTERNAL  
NETWORK

ELSE NORMAL ACTION

**Table 50**

**L4 session learning / translations for  
DNAT packet from underlay**

ARP REQUEST

IF DST\_IP IS DNAT IP THEN DO L2/L3  
TRANSLATIONS AND FORWARD TO PATCH-  
TUNBR EGRESS O.F. PORT

IF DST\_IP IS SNAT IP

ELSE NORMAL ACTION

**Table 40**

**Learned Flows**

MATCH AGAINST DYNAMICALLY LEARNED  
SESSION FROM TABLE 30 AND FORWARD TO  
PATCH-TUNBR EGRESS O.F. PORT

**Table 30**

**SNAT / DNAT**

NAT FOR TCP PACKETS WITHOUT PORT-FORWARDING:

L2 / L3 TRANSLATIONS ( REMOVE VLAN TAG,  
CHANGE SOURCE IP AND SOURCE MAC ) FOR DNAT  
WITH NO LEARNING

L2 / L3 TRANSLATIONS ( REMOVE VLAN TAG,  
CHANGE SOURCE IP AND SOURCE MAC )  
FOR SNAT AND SESSION  
LEARNING ( SOURCE IP, DESTINATION IP,  
DESTINATION TCP PORT ) IN TABLE 40

**Table 21**

**ARP Responder**

ARP RESPONDER

GENERATE ARP REPLY FOR SNAT / DNAT  
PORTS AND SEND BACK TO IN-PORT  
( UP-LINK )

ELSE NORMAL ACTION

**Table 13**

**Routing amongst virtual router  
having gateway on common network**

IF DESTINATION IP IS SNAT IP ASSOCIATED  
WITH SOURCE EXTERNAL NETWORK, \_\_\_\_\_  
CHANGE DEST. MAC

IF DESTINATION IP IS DNAT IP  
ASSOCIATED WITH SOURCE EXTERNAL  
NETWORK, CHANGE DEST. MAC

ELSE FORWARD TO UNDERLAY  
NETWORK

**Table 20**

**Change destination MAC**

CHANGE DEST MAC BASED  
ON DEST IP ( EXTERNAL  
NETWORK ) AND OUTPUT TO  
UP-LINK O.F. PORT

OVS External Bridge on Network  
Node