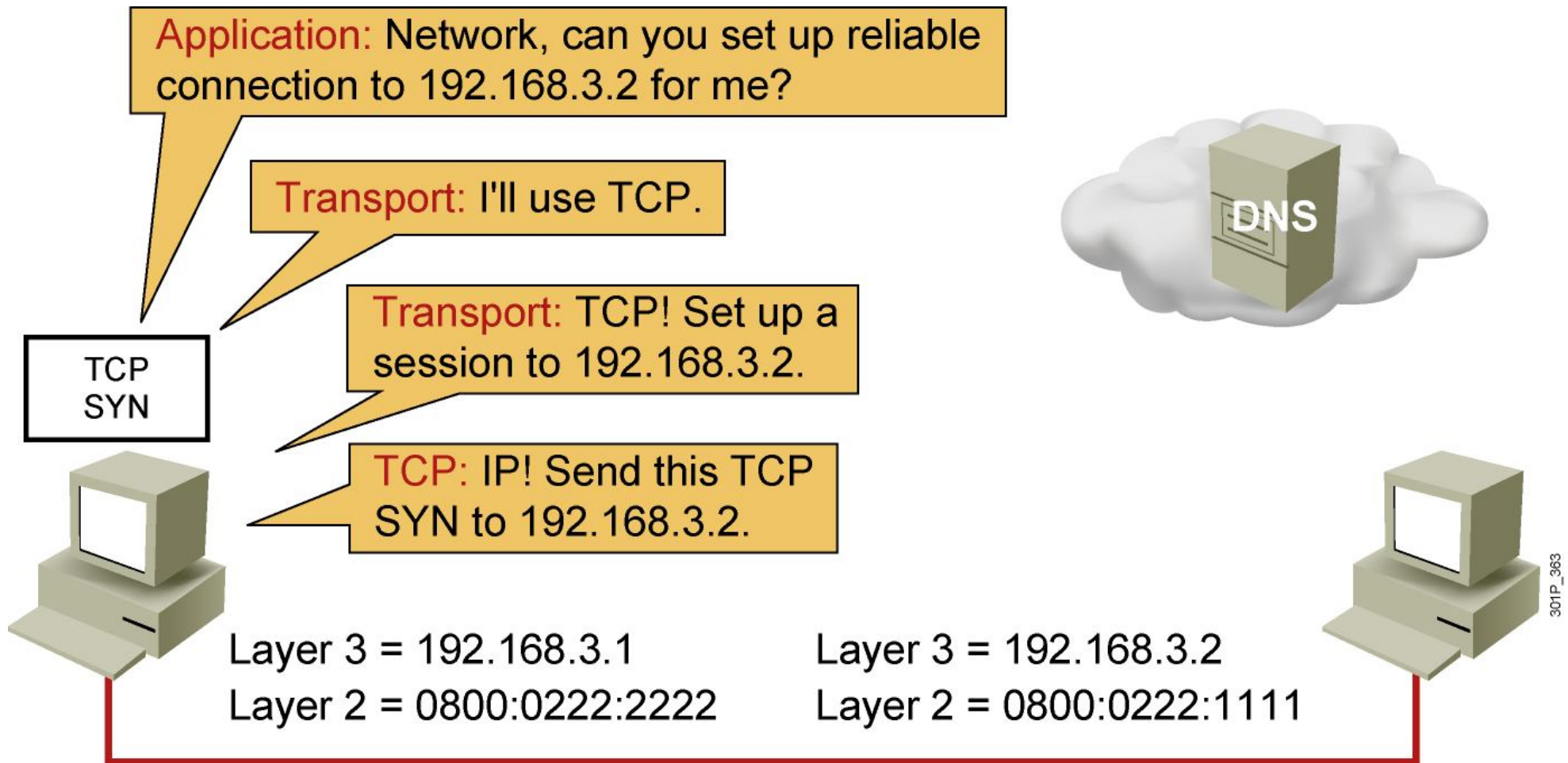


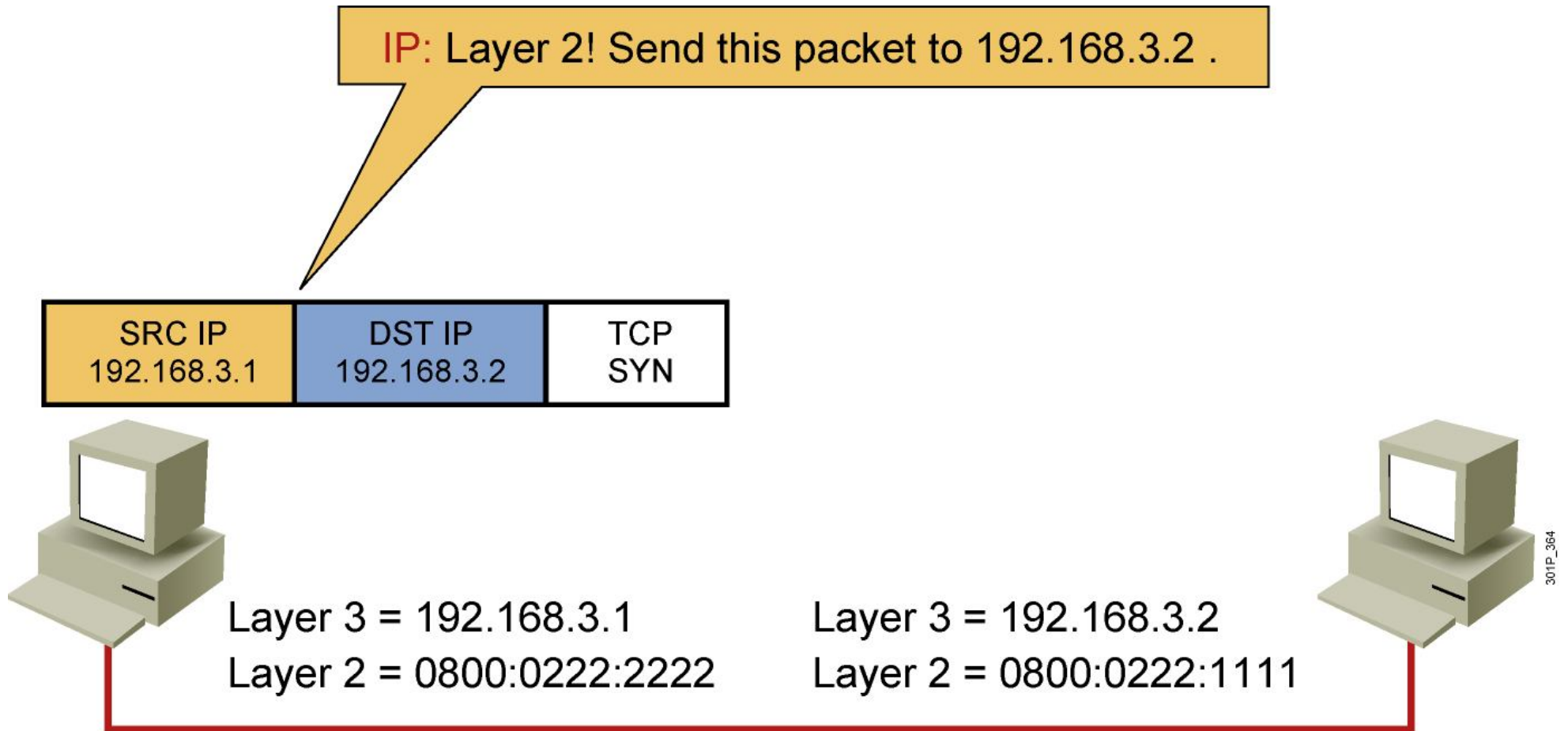
1. TCP 기반의 데이터 전송과정 (Host-to-Host Packet Delivery)
2. UDP 기반의 데이터 전송 과정 (Network to network Delivery)

1. TCP 기반의 데이터 전송과정

Host-to-Host Packet Delivery (1 of 22)



Host-to-Host Packet Delivery (2 of 22)



Host-to-Host Packet Delivery (3 of 22)

Layer 2: ARP, do you have a mapping for 192.168.3.2?

ARP: Is 192.168.3.2 in my ARP table? No, I guess Layer 2 will have to put the packet in the parking lot until I do an ARP.

SRC IP 192.168.3.1	DST IP 192.168.3.2	TCP SYN
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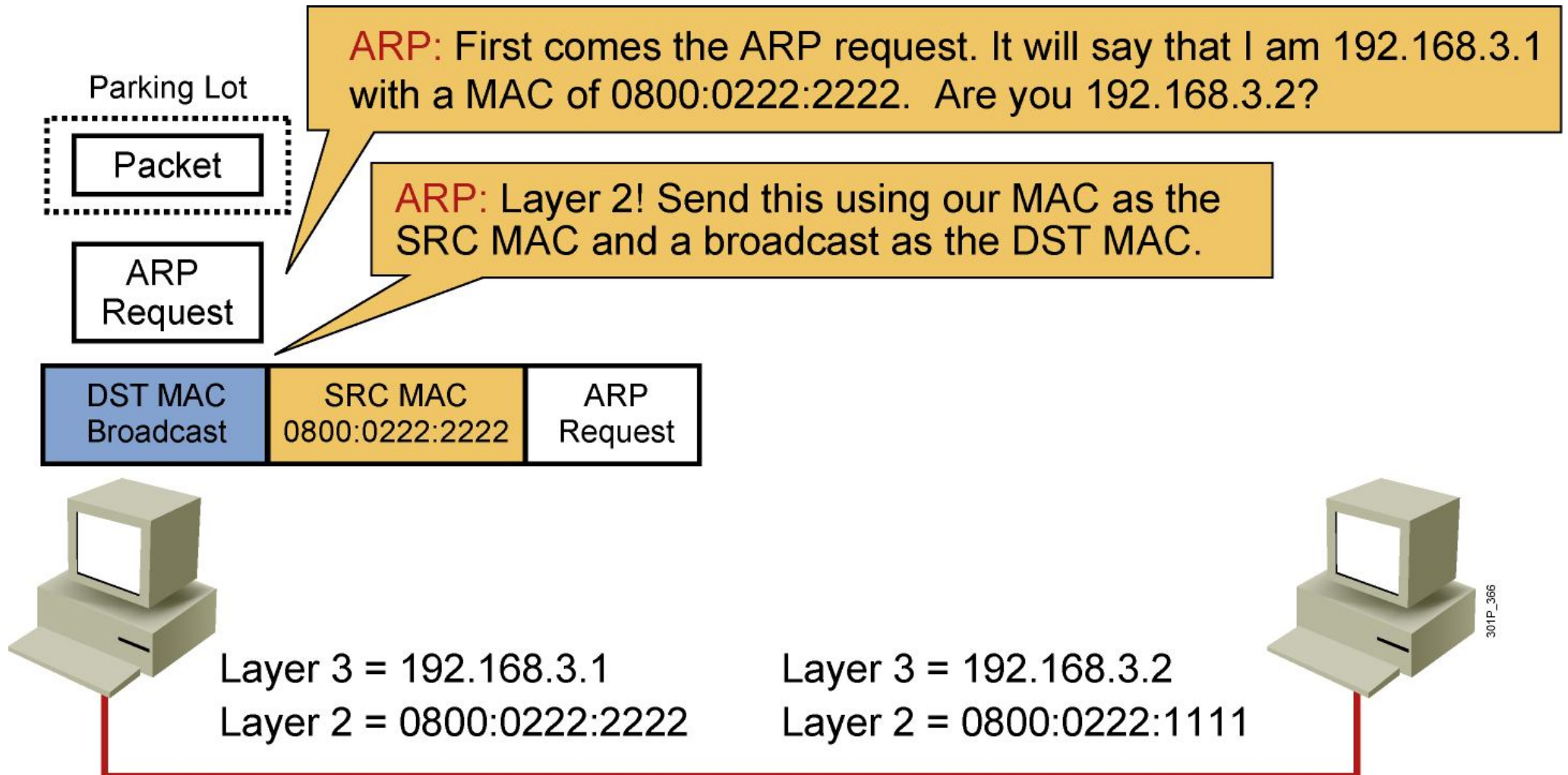
Layer 3 = 192.168.3.1
Layer 2 = 0800:0222:2222



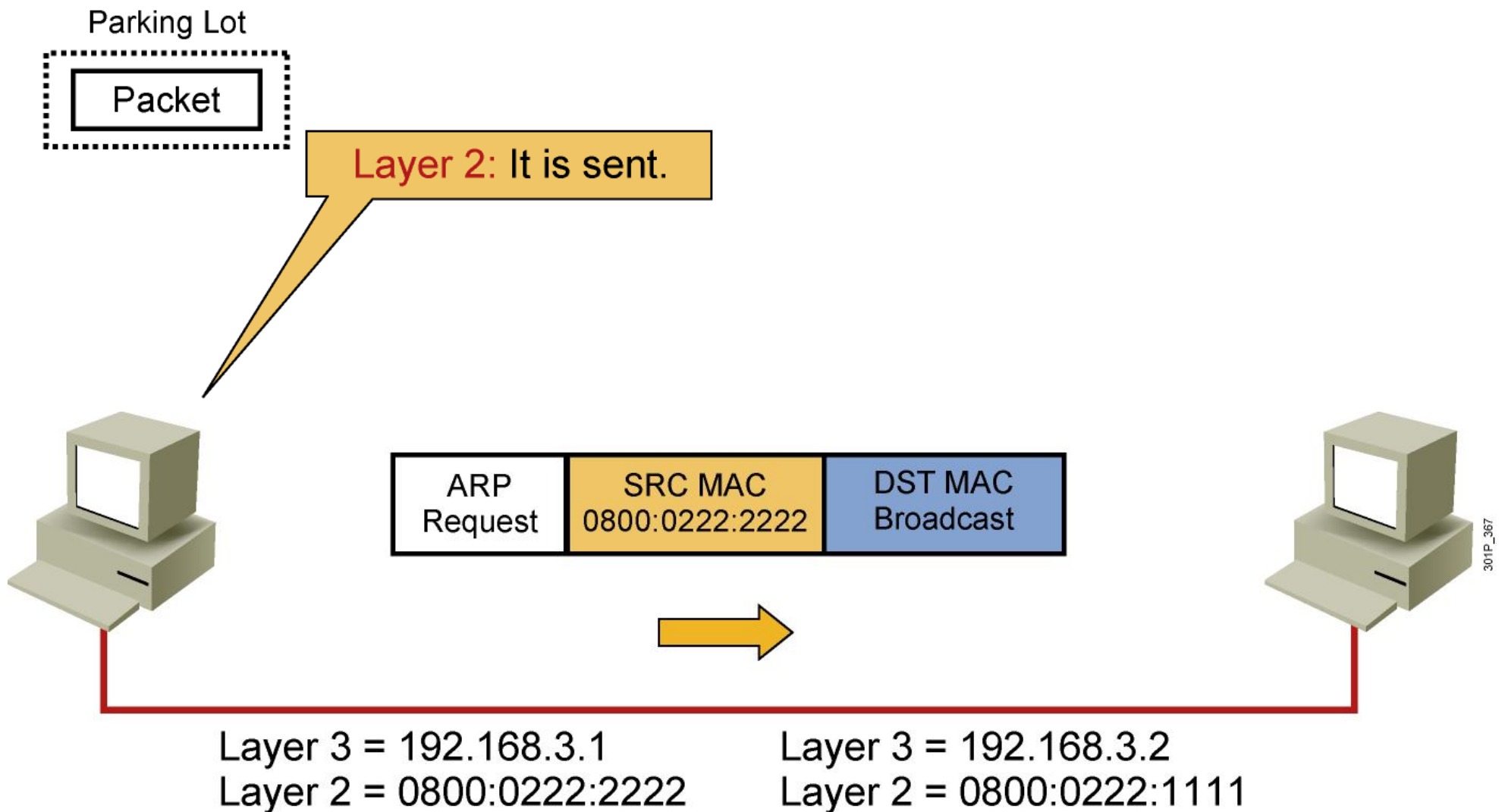
Layer 3 = 192.168.3.2
Layer 2 = 0800:0222:1111

301P_365

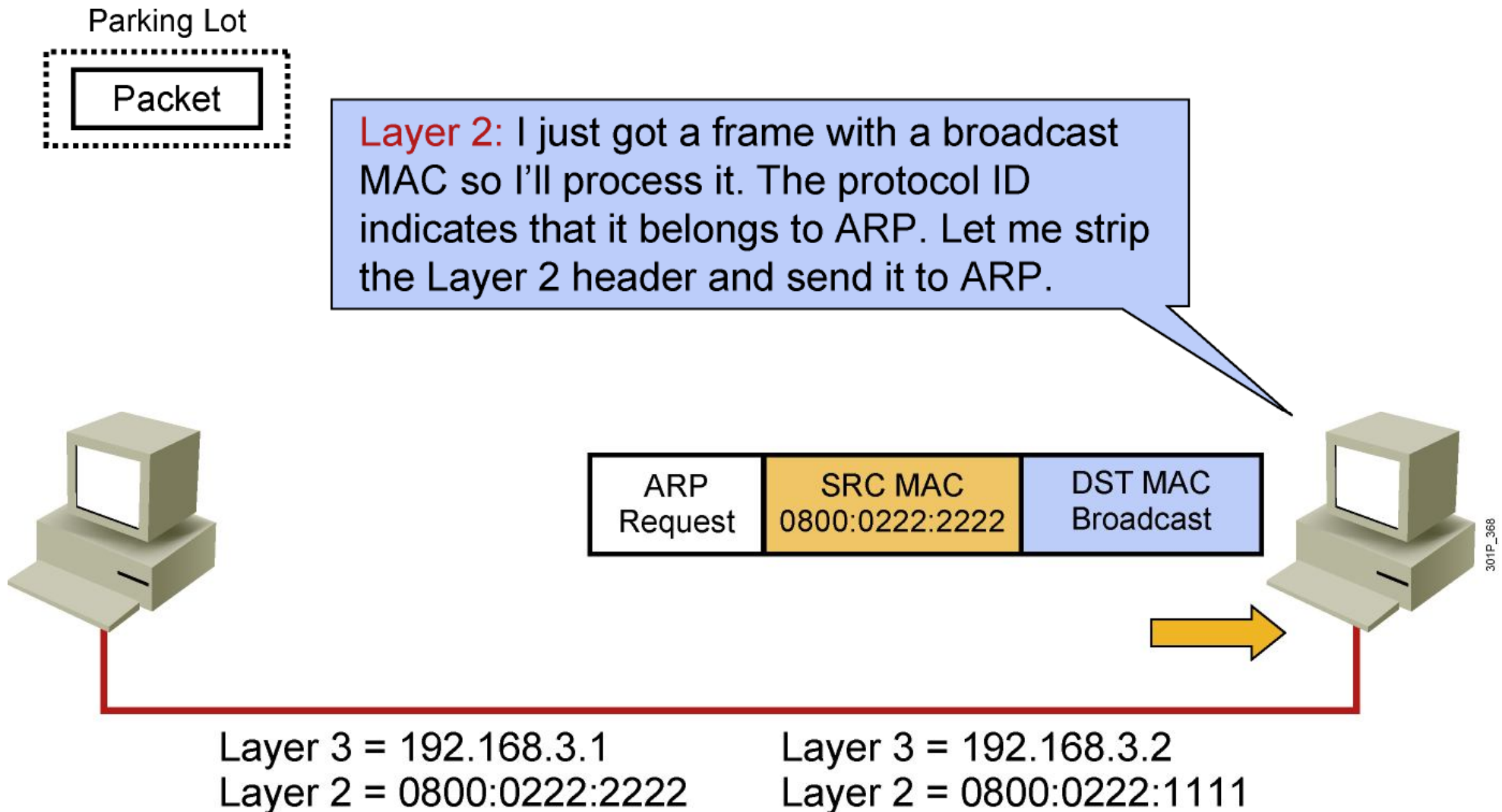
Host-to-Host Packet Delivery (4 of 22)



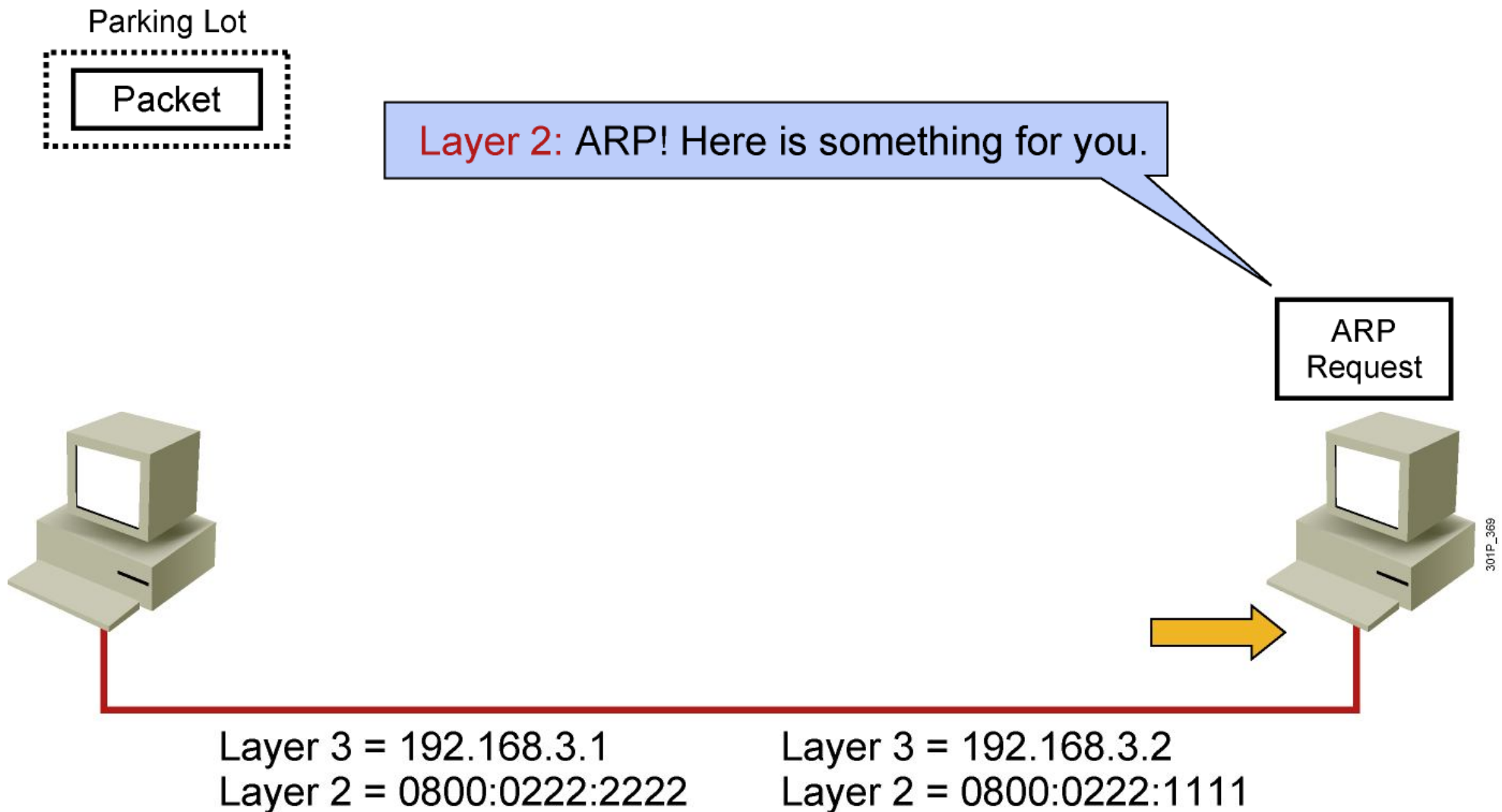
Host-to-Host Packet Delivery (5 of 22)



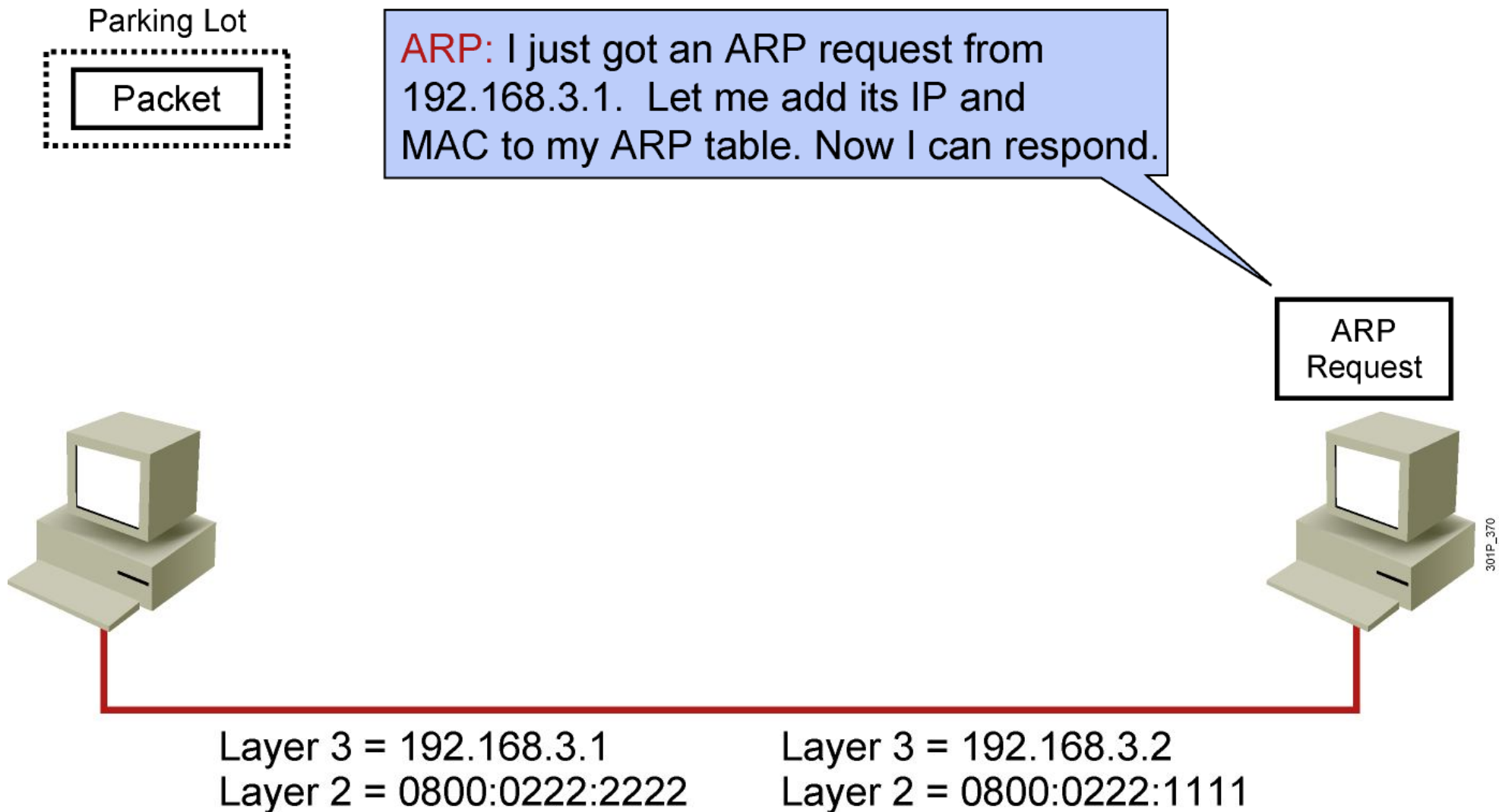
Host-to-Host Packet Delivery (6 of 22)



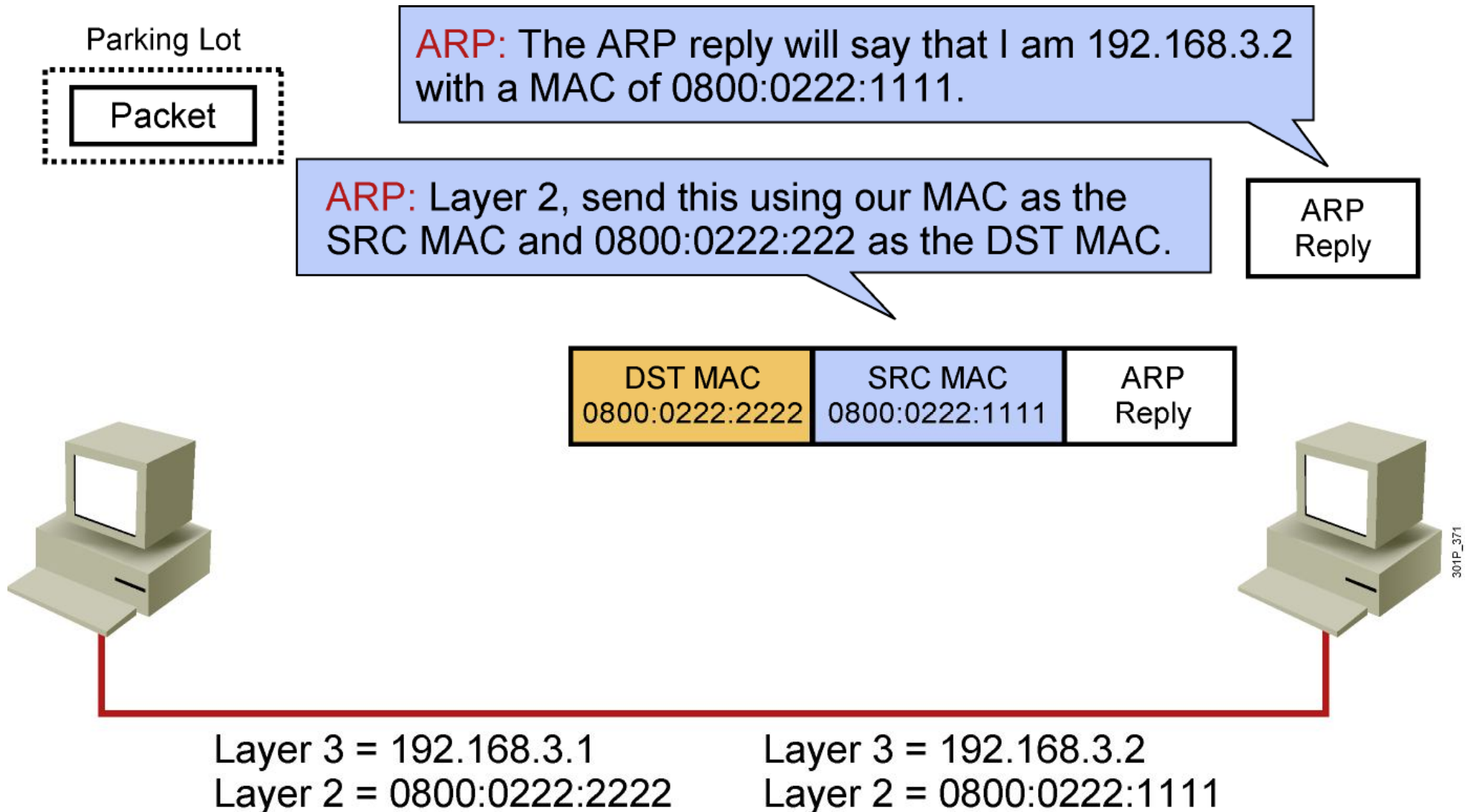
Host-to-Host Packet Delivery (7 of 22)



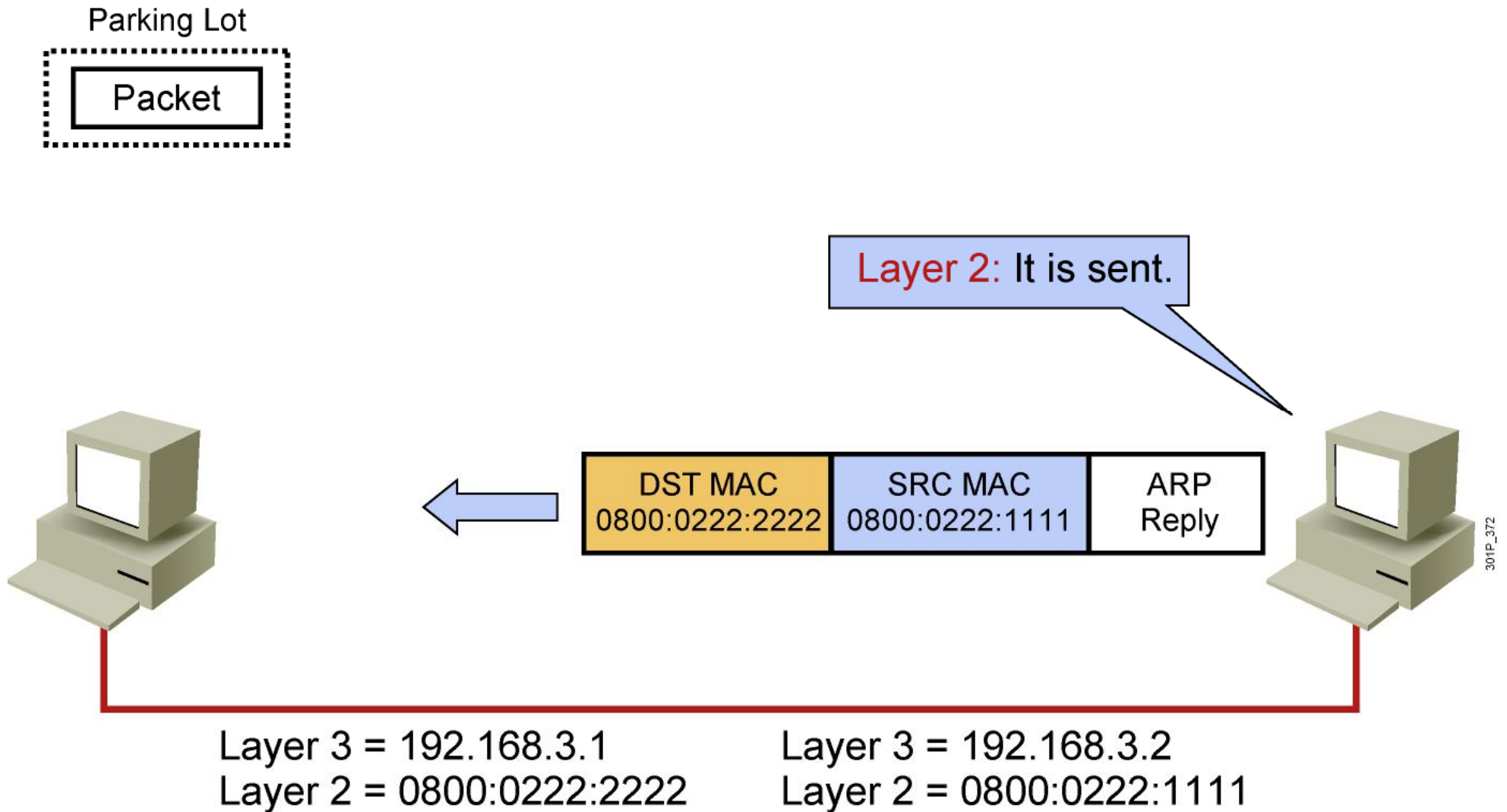
Host-to-Host Packet Delivery (8 of 22)



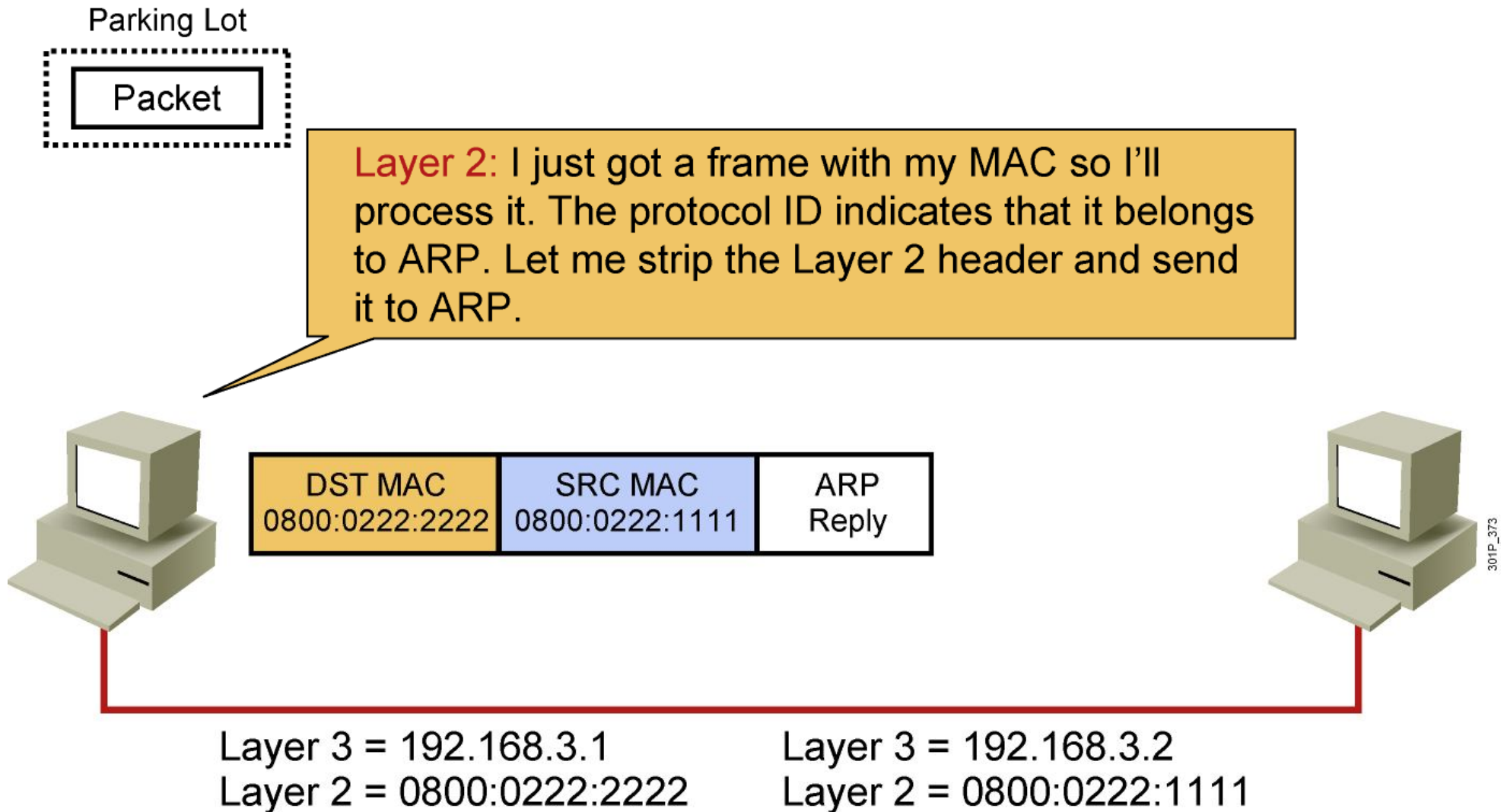
Host-to-Host Packet Delivery (9 of 22)



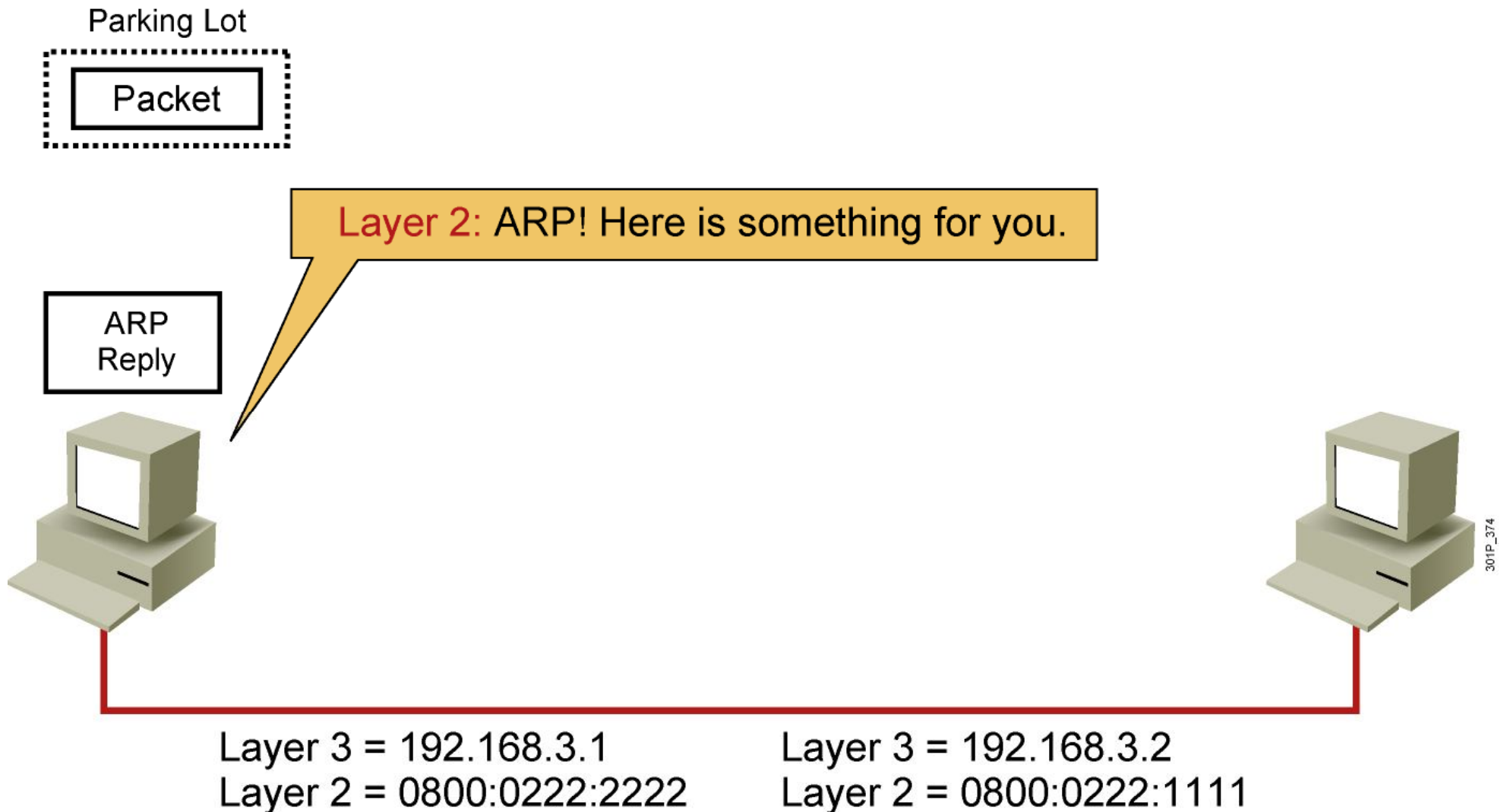
Host-to-Host Packet Delivery (10 of 22)



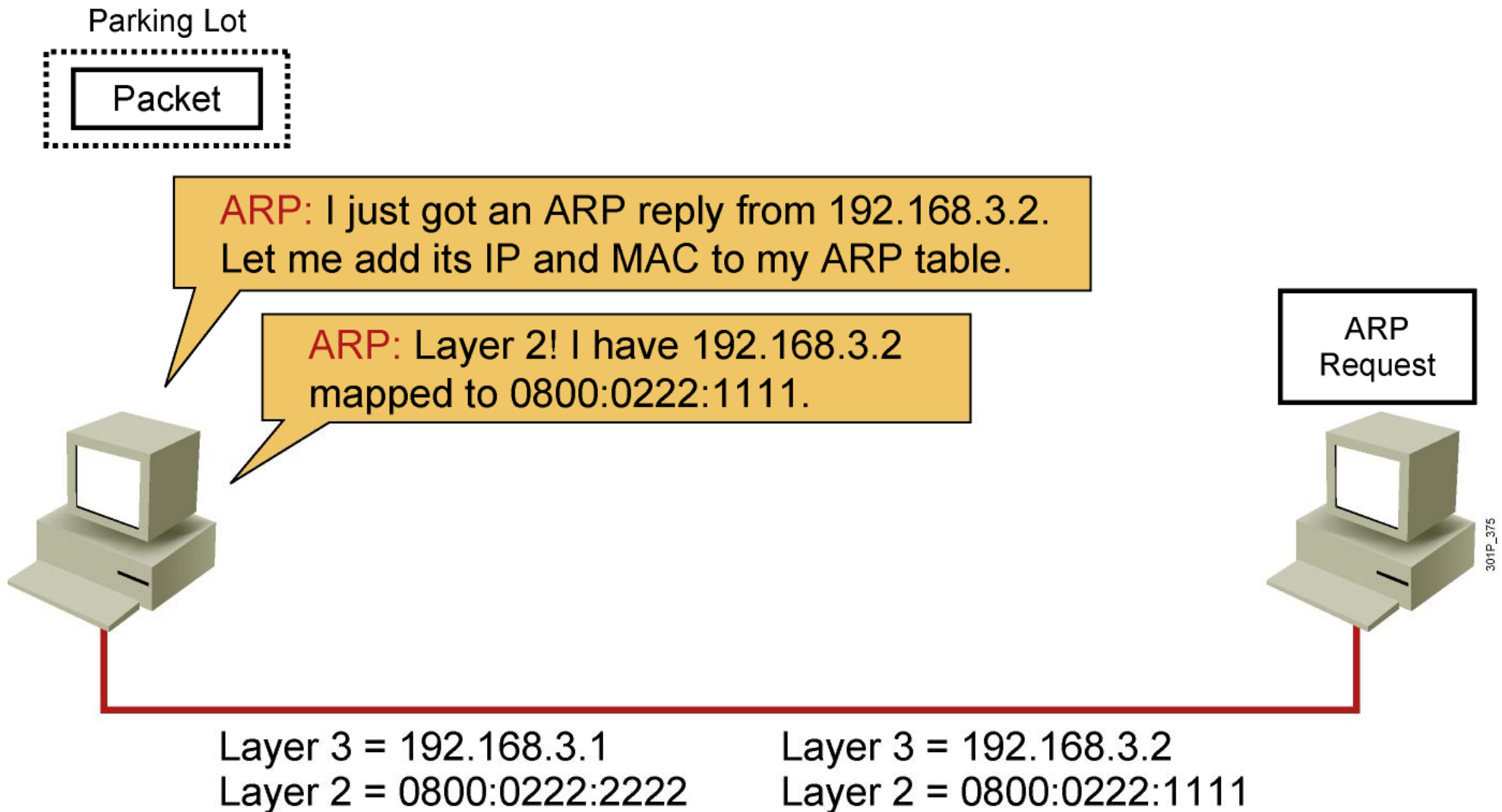
Host-to-Host Packet Delivery (11 of 22)



Host-to-Host Packet Delivery (12 of 22)

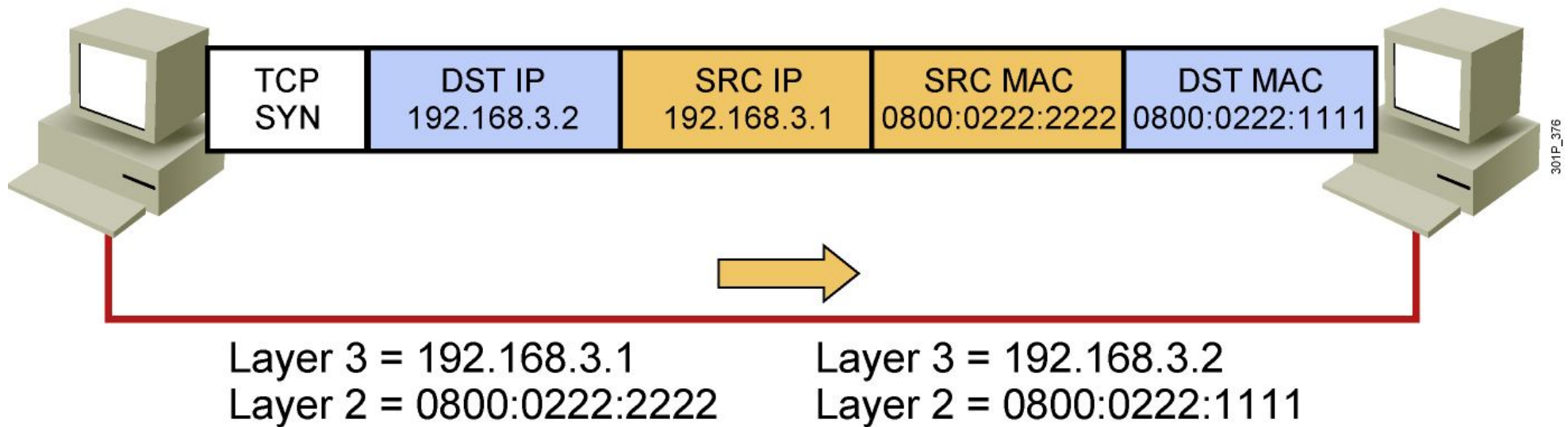


Host-to-Host Packet Delivery (13 of 22)



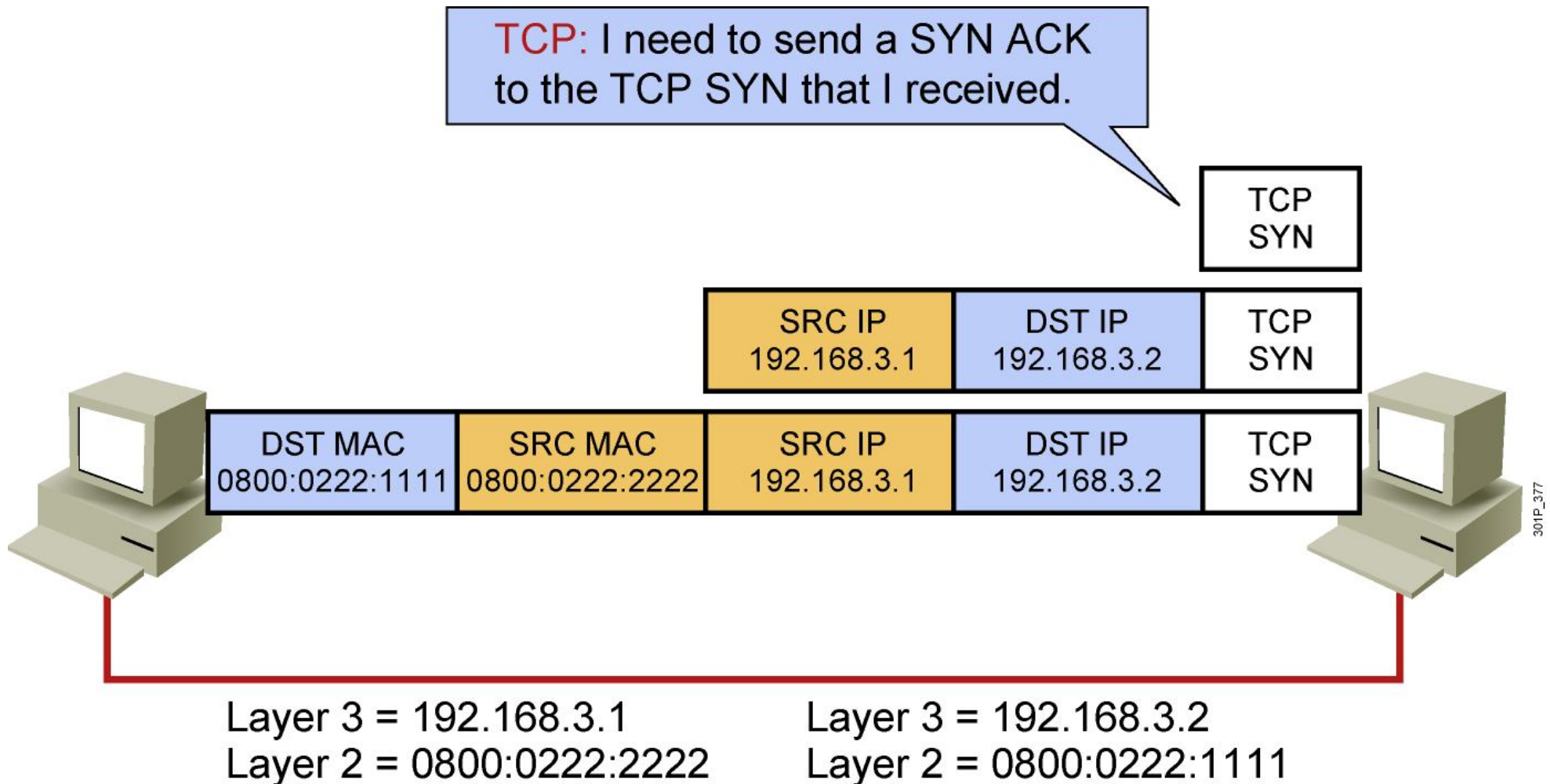
Host-to-Host Packet Delivery (14 of 22)

Layer 2: I can send out that pending packet.

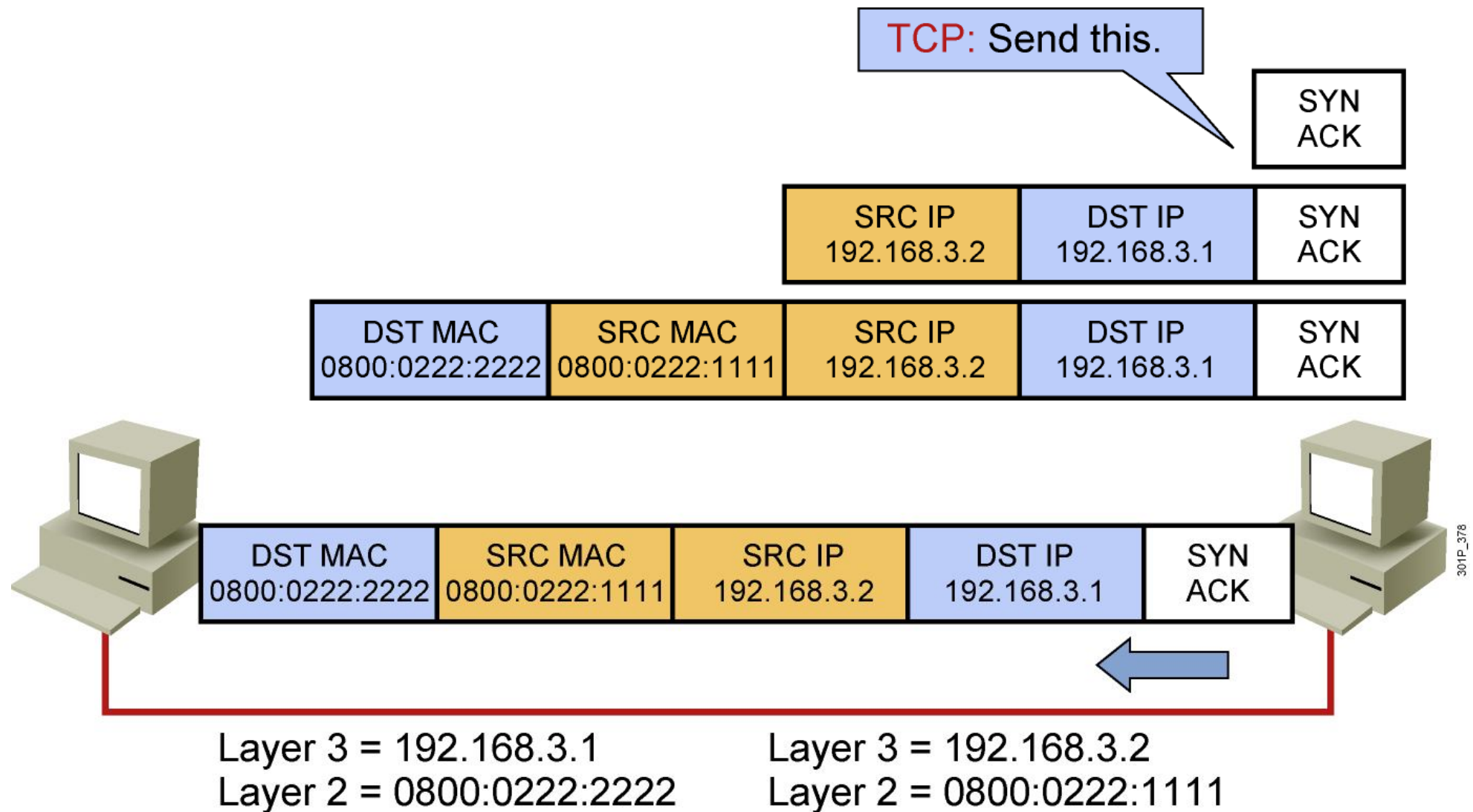


301P_376

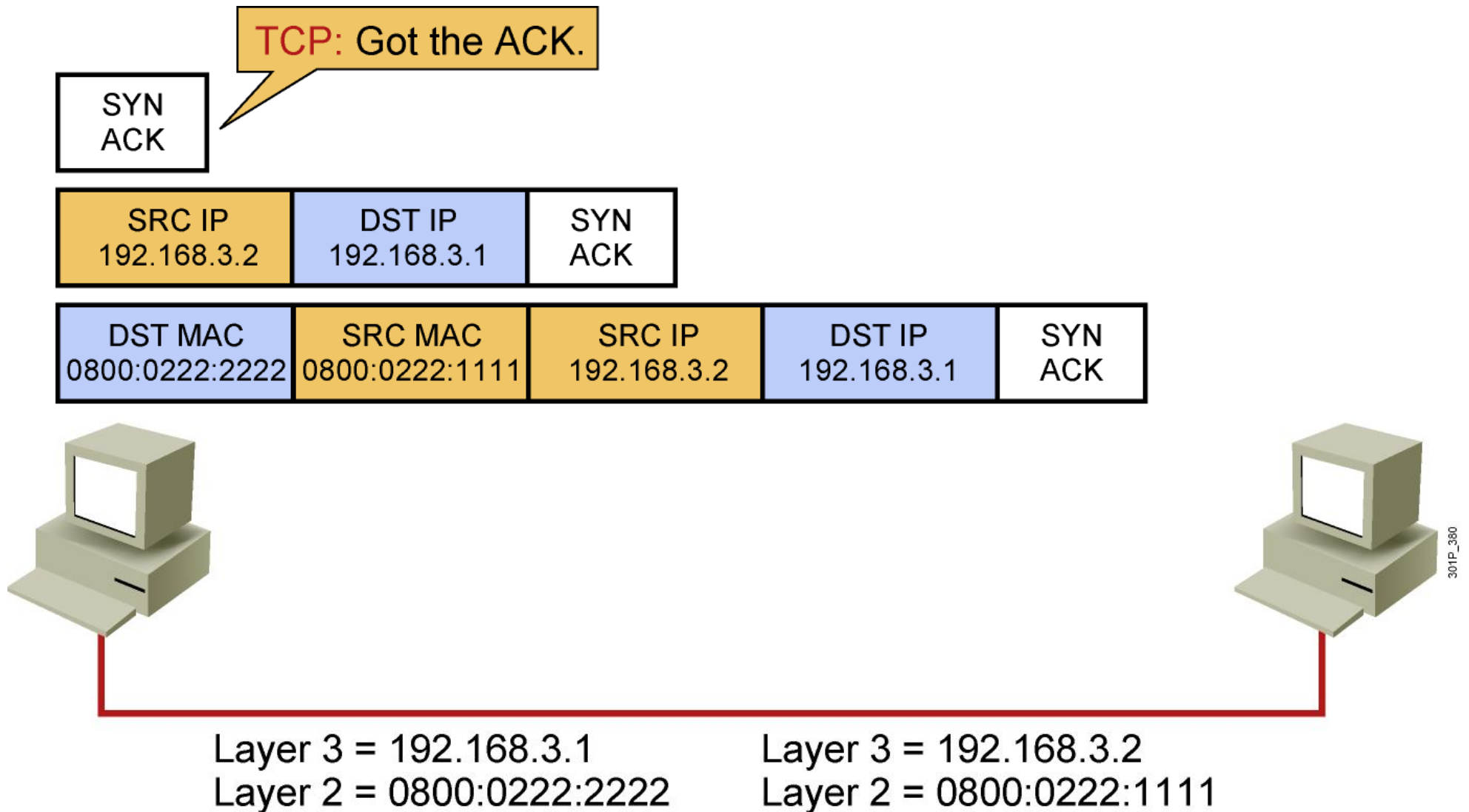
Host-to-Host Packet Delivery (15 of 22)



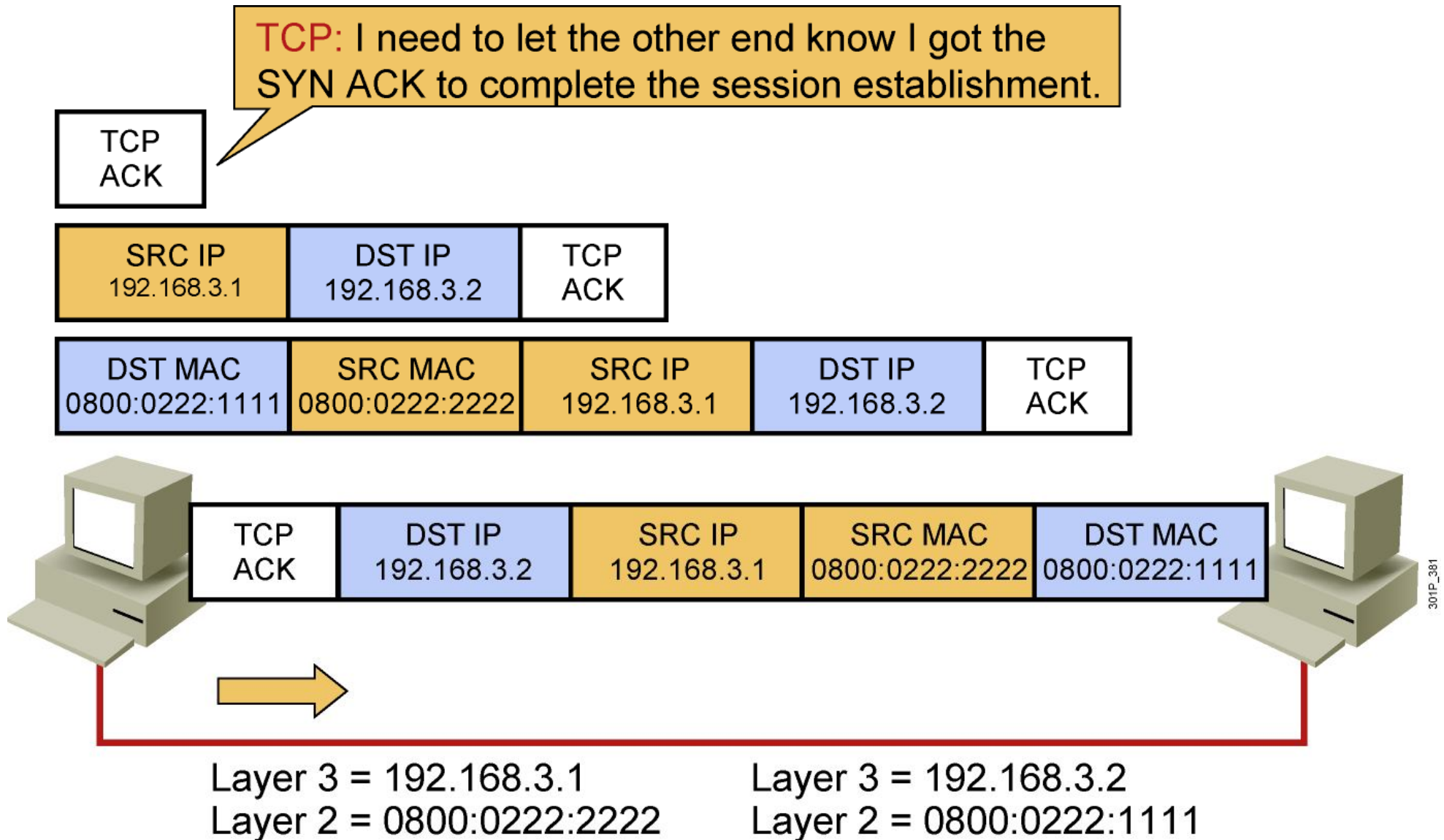
Host-to-Host Packet Delivery (16 of 22)



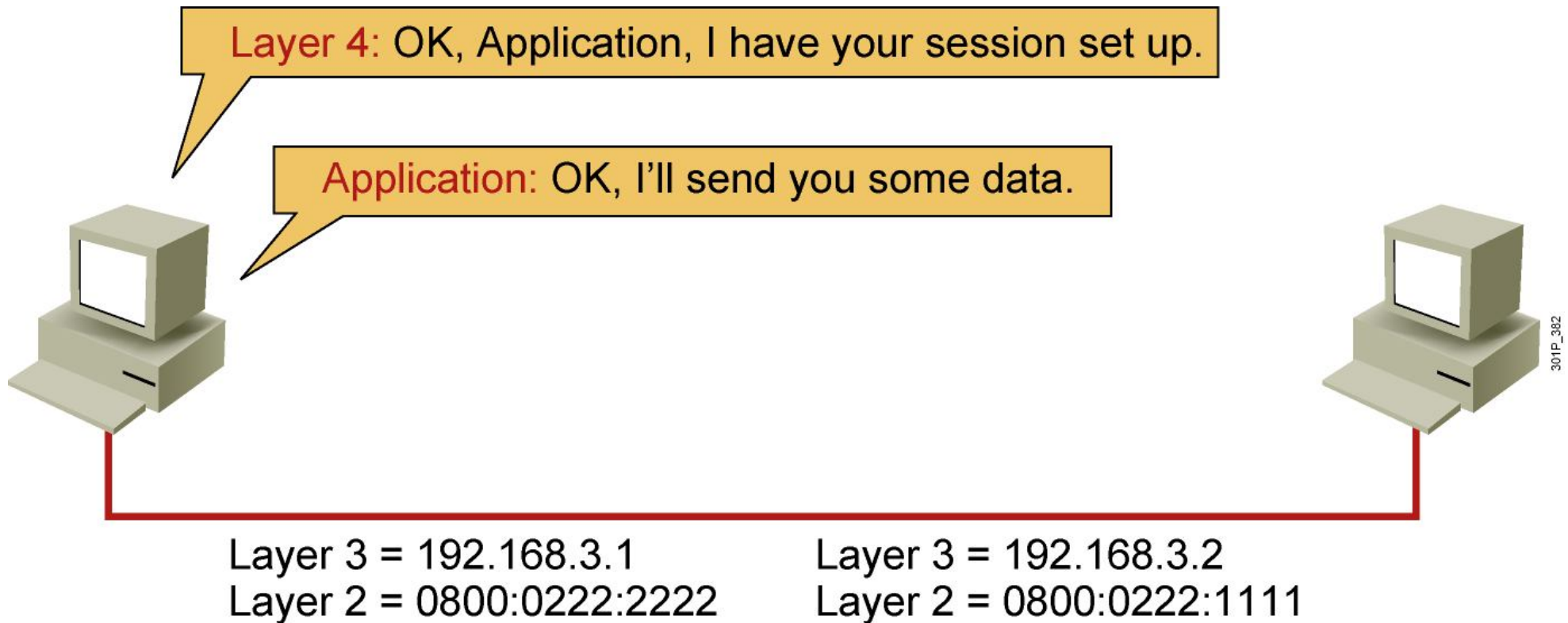
Host-to-Host Packet Delivery (17 of 22)



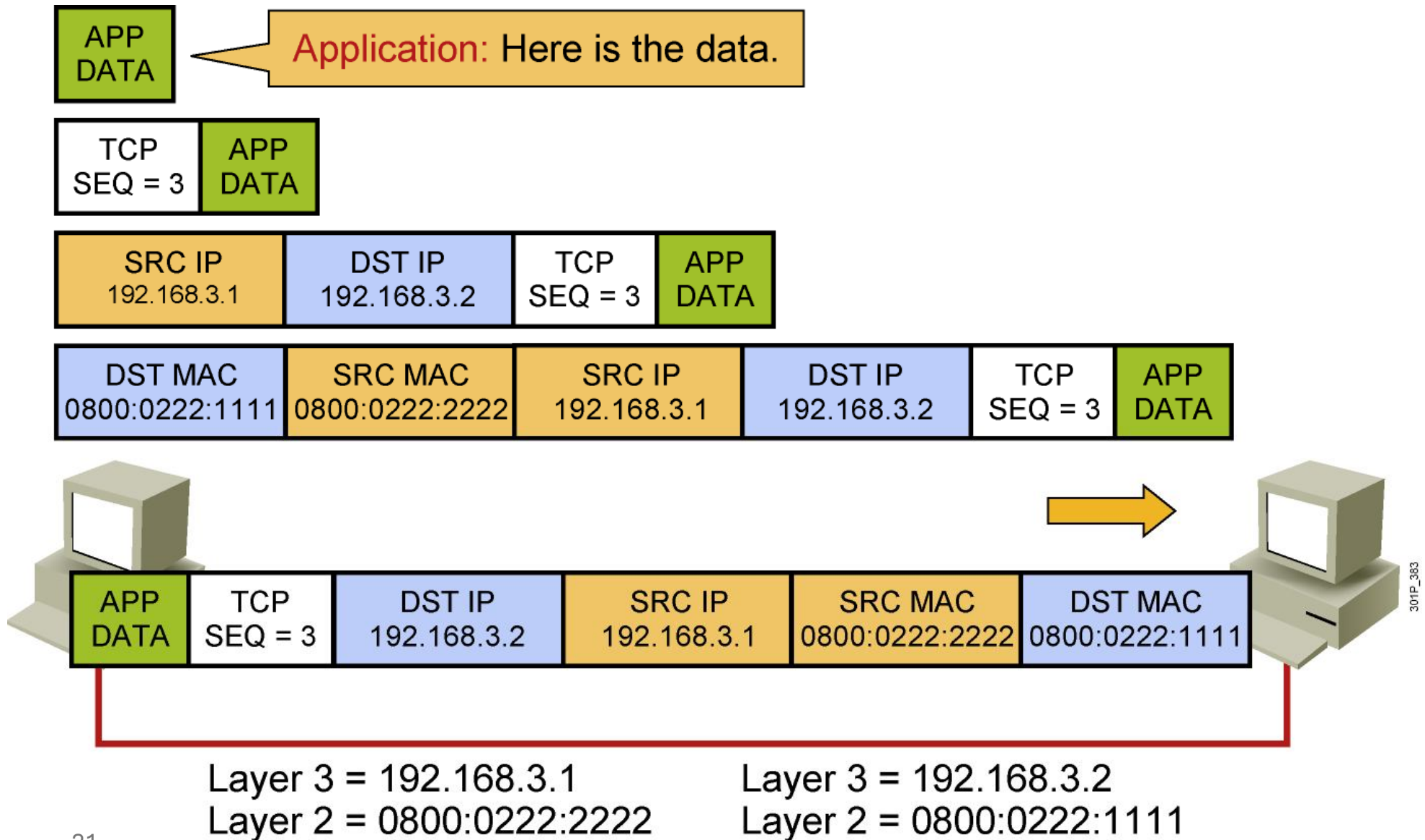
Host-to-Host Packet Delivery (18 of 22)



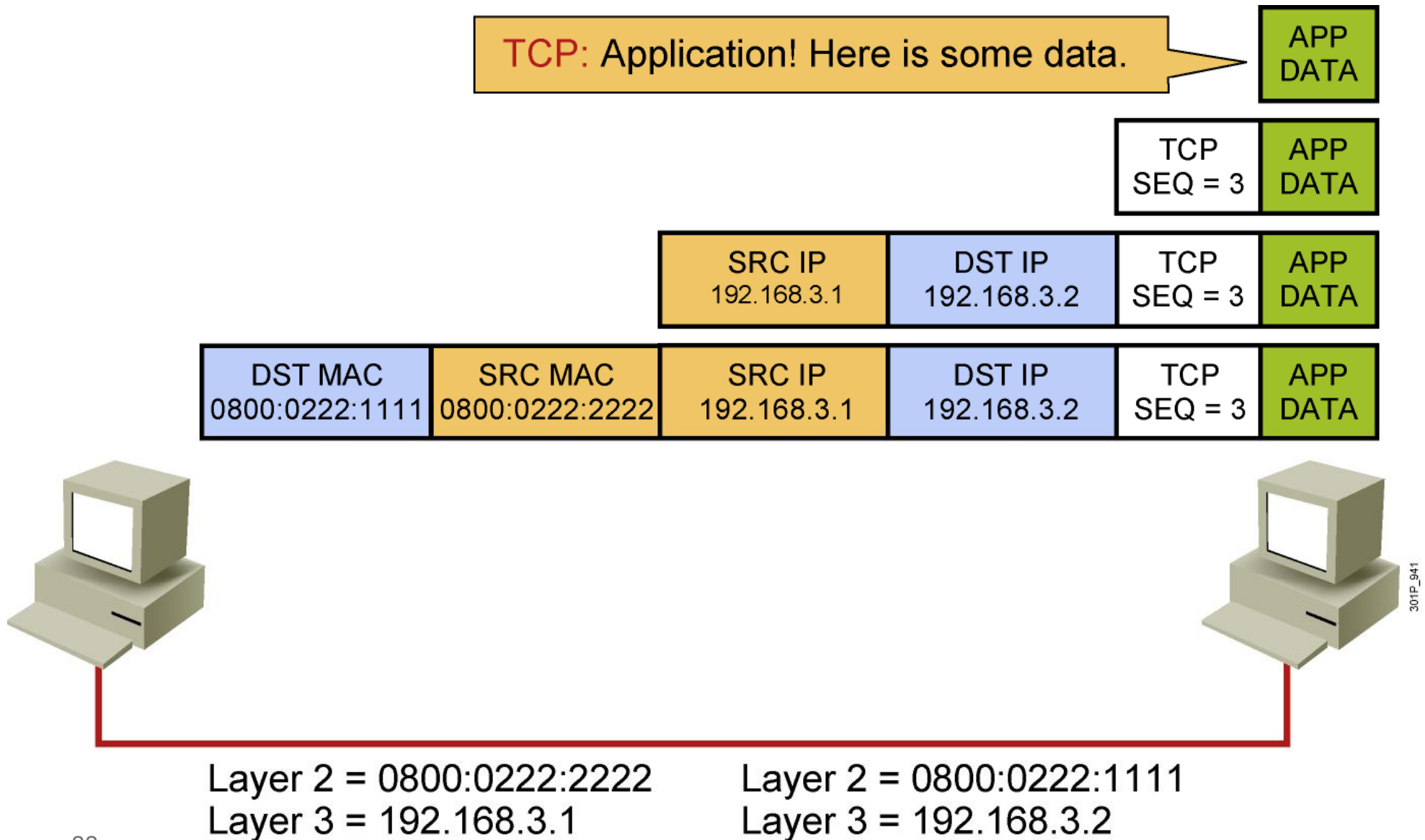
Host-to-Host Packet Delivery (19 of 22)



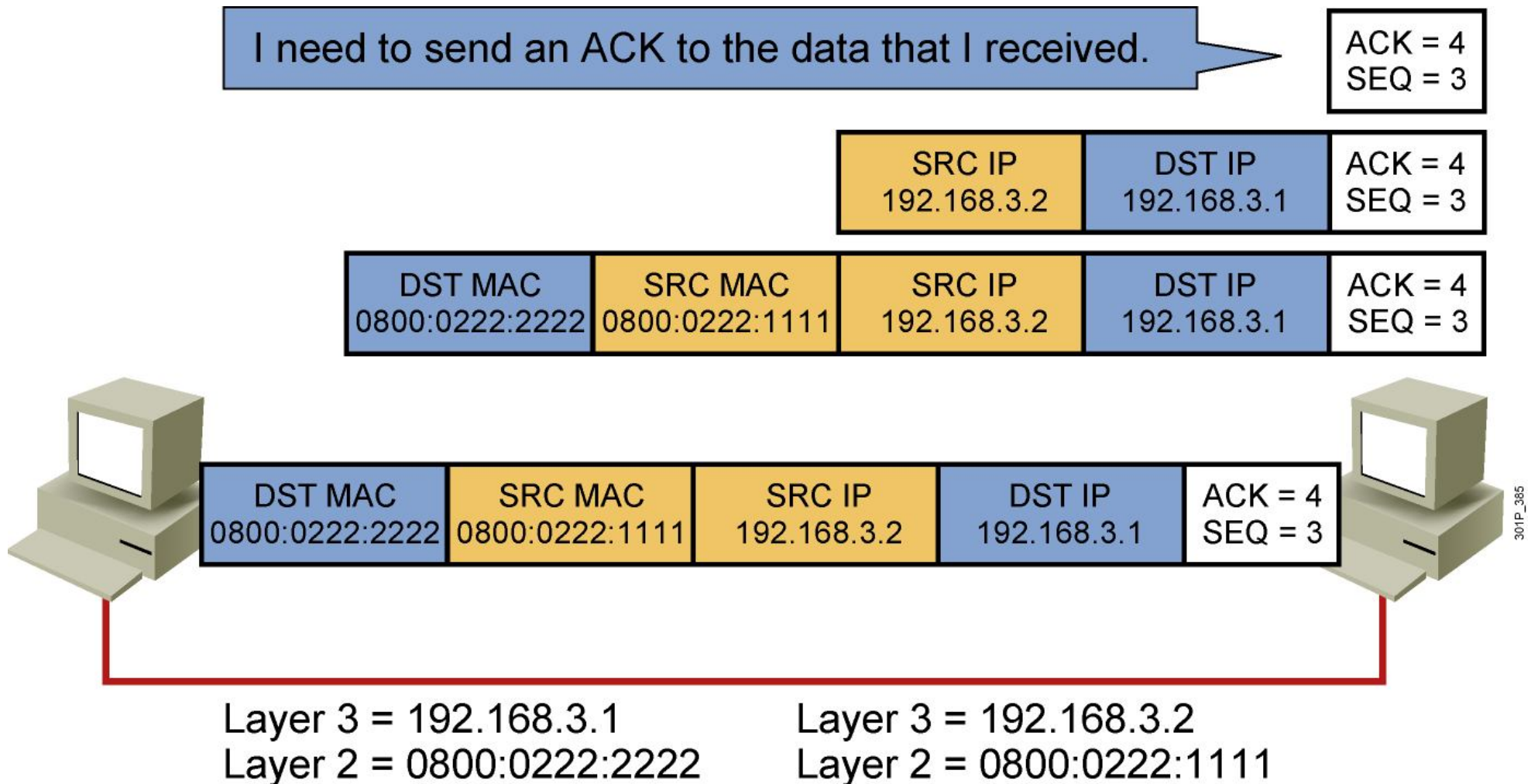
Host-to-Host Packet Delivery (20 of 22)



Host-to-Host Packet Delivery (21 of 22)

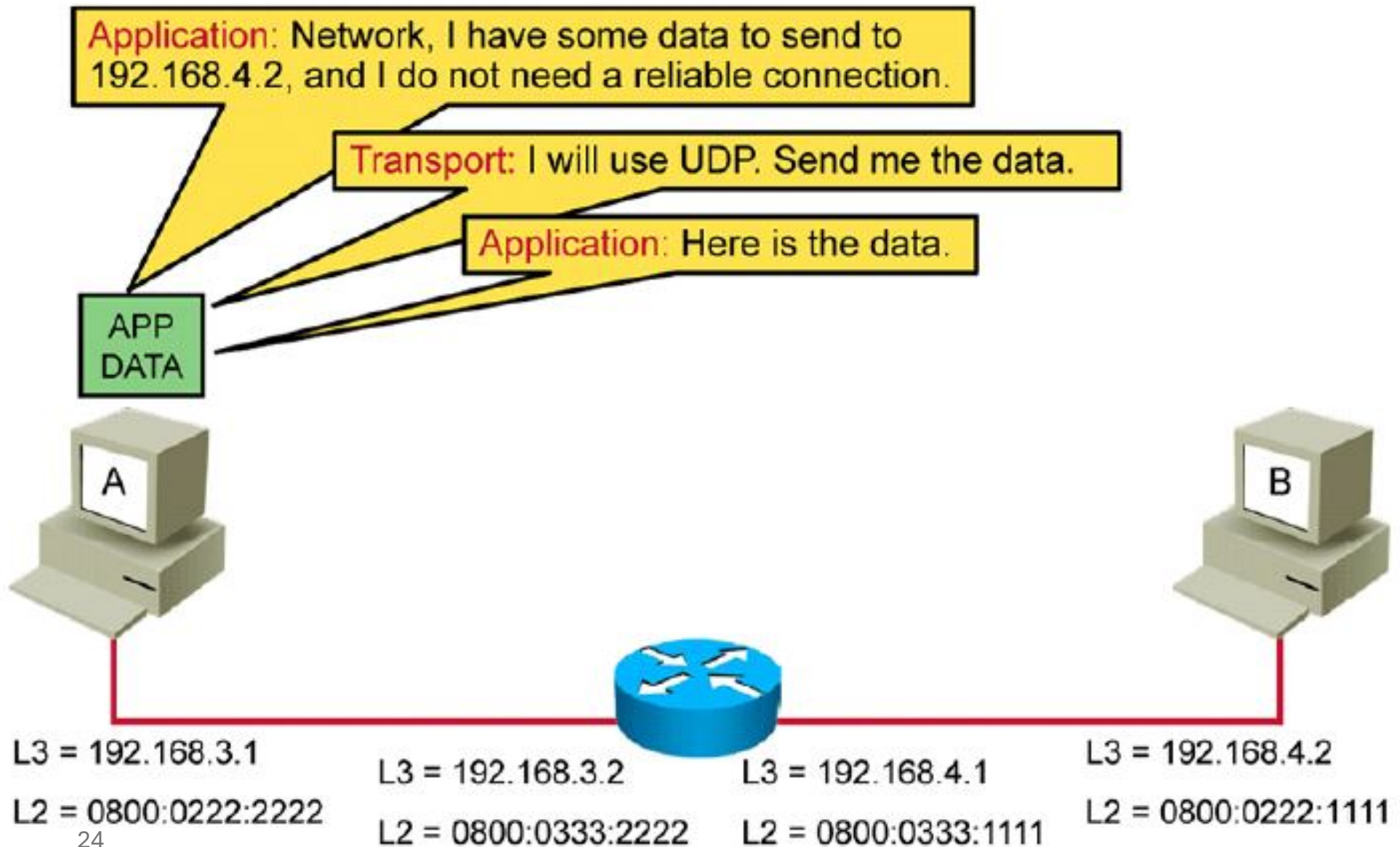


Host-to-Host Packet Delivery (22 of 22)

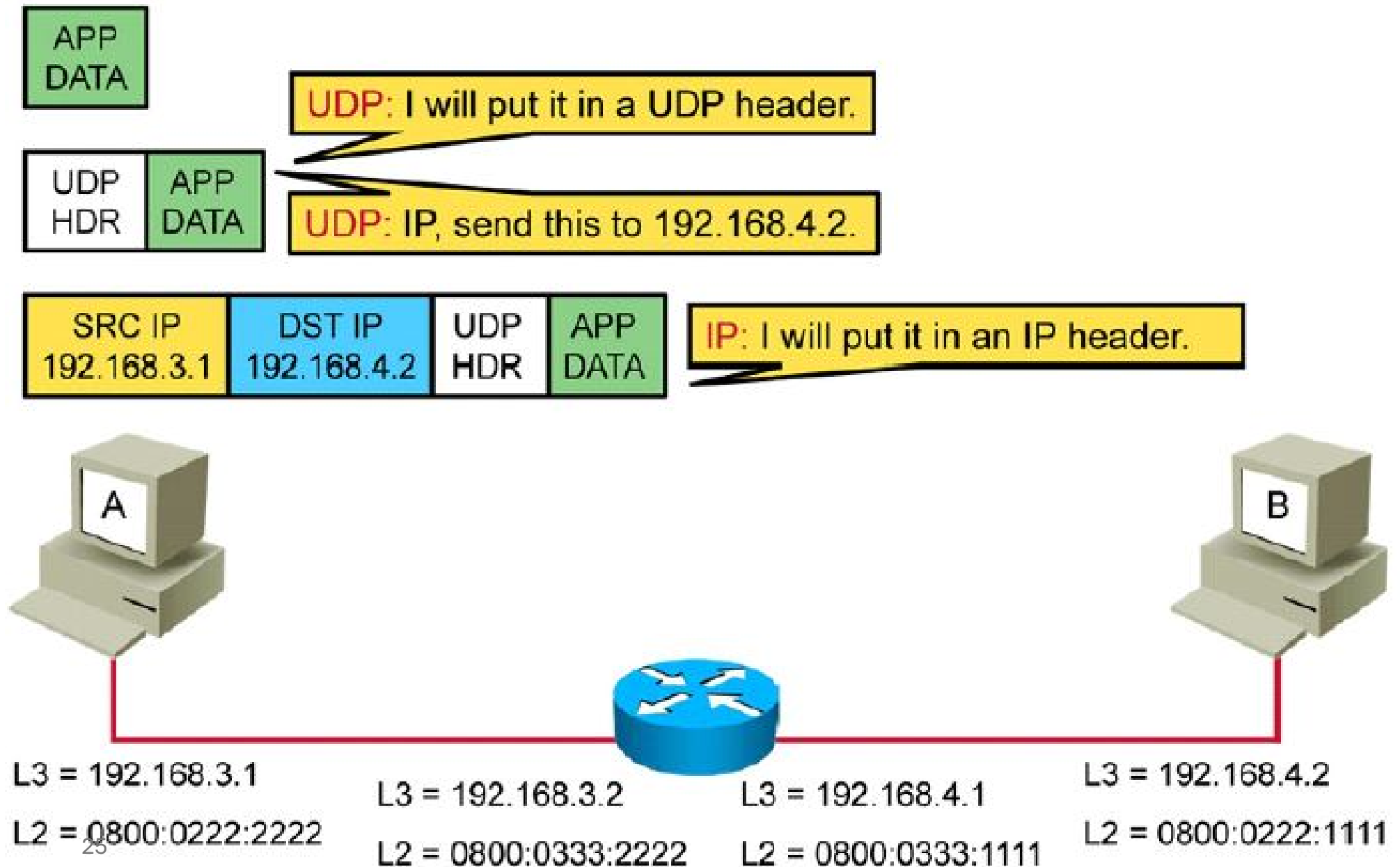


2. UDP 기반의 데이터 전송 과정

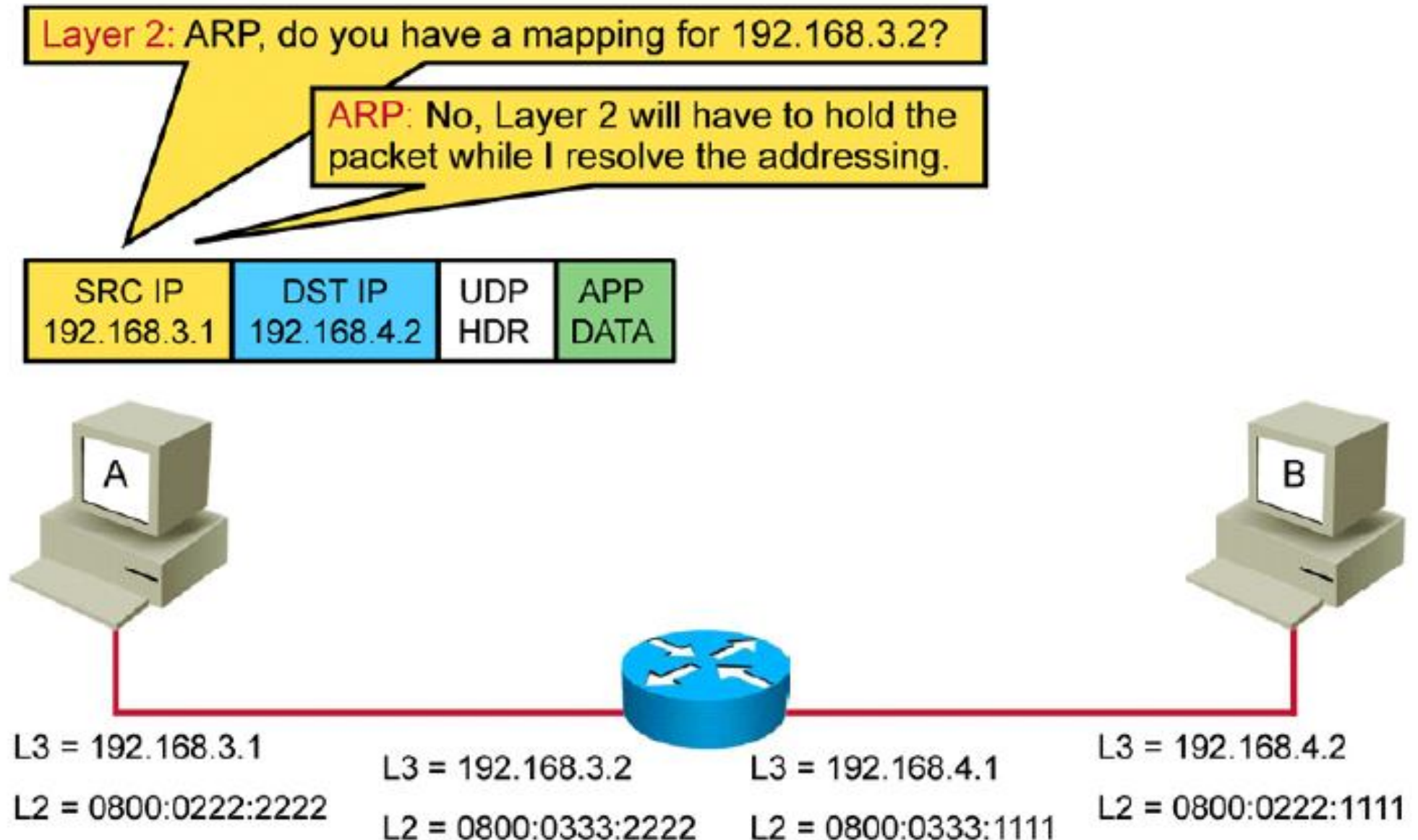
Network to network Delivery (1 of 17)



Network to network Delivery (2 of 17)



Network to network Delivery (3 of 17)



Network to network Delivery (4 of 17)

Layer 2: ARP, do you have a mapping for 192.168.3.2?

ARP: No, Layer 2 will have to hold the packet while I resolve the addressing.

SRC IP	DST IP	UDP	APP
192.168.3.1	192.168.4.2	HDR	DATA

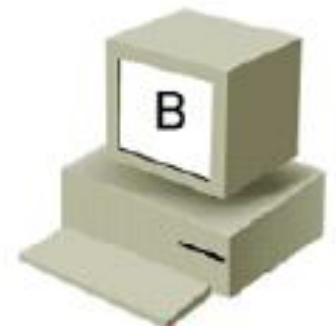


L3 = 192.168.3.1
L2 = 0800:0222:2222



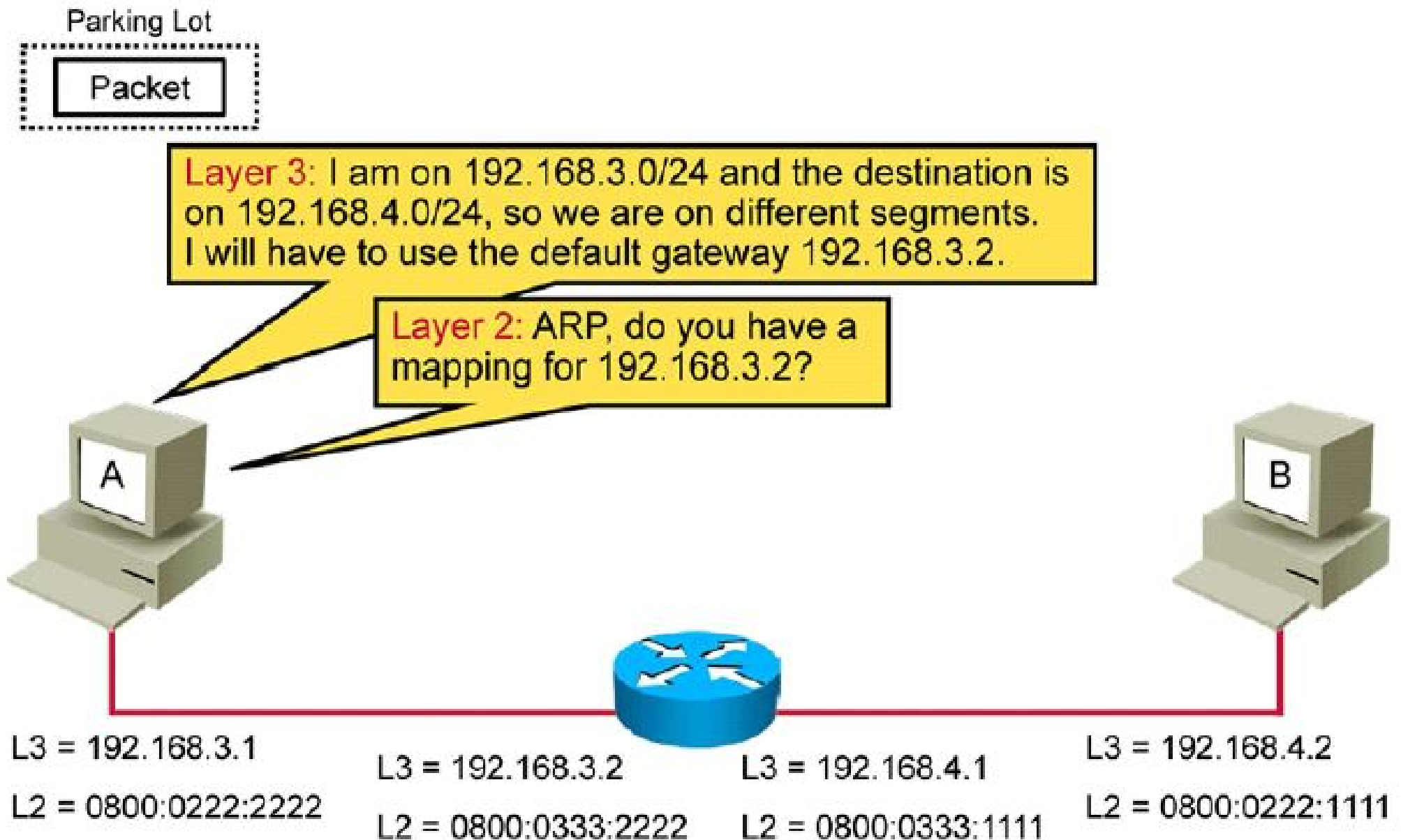
L3 = 192.168.3.2
L2 = 0800:0333:2222

L3 = 192.168.4.1
L2 = 0800:0333:1111

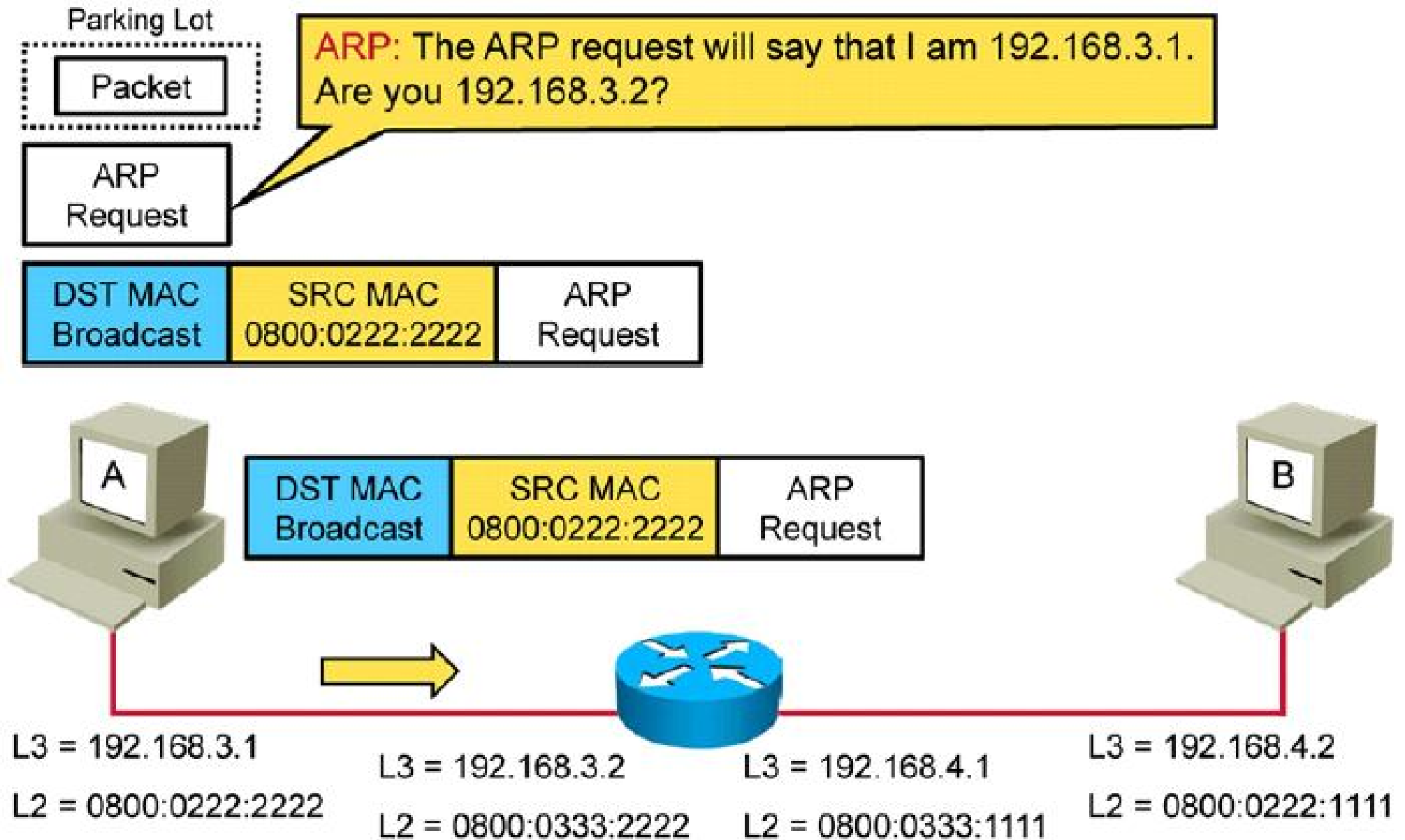


L3 = 192.168.4.2
L2 = 0800:0222:1111

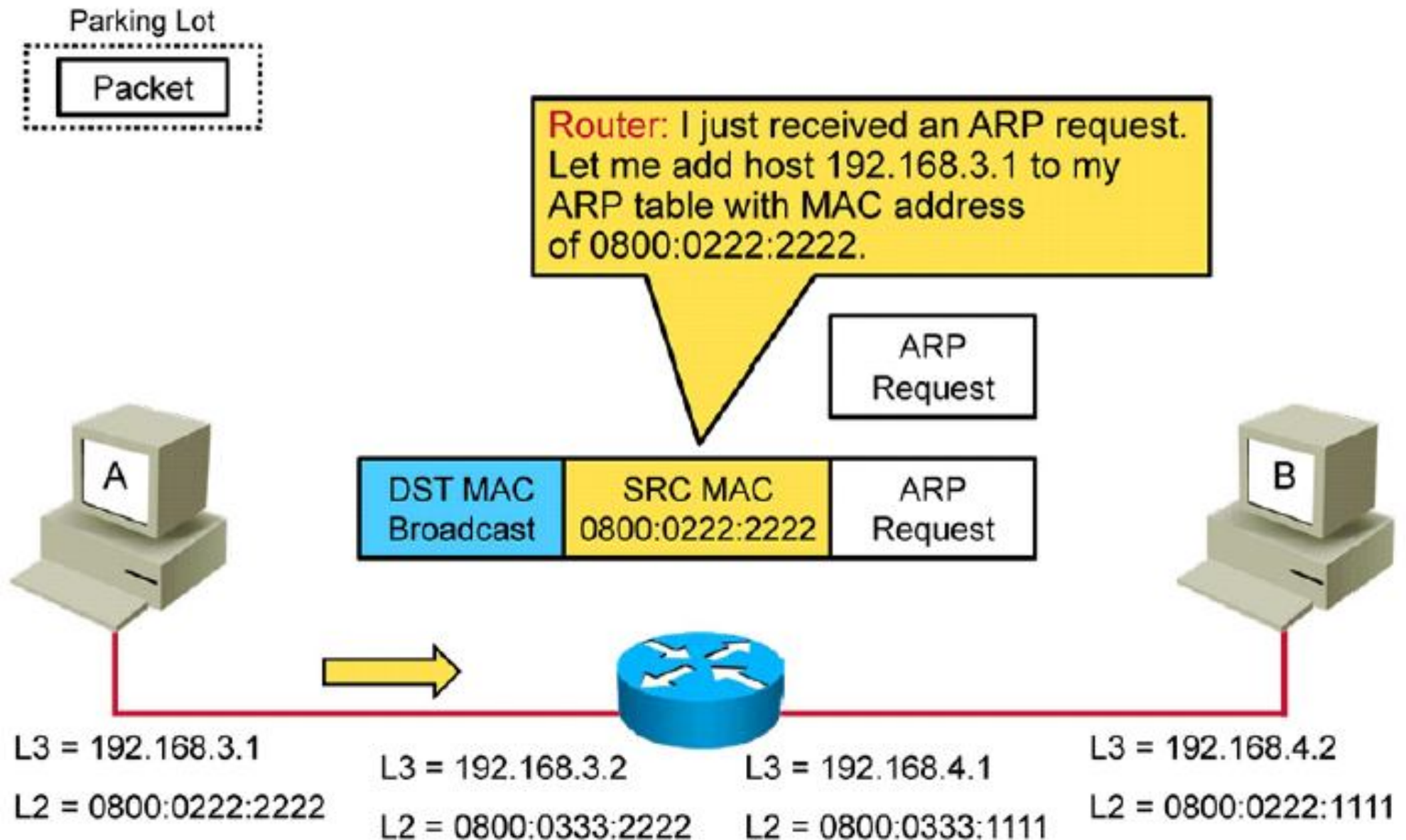
Network to network Delivery (5 of 17)



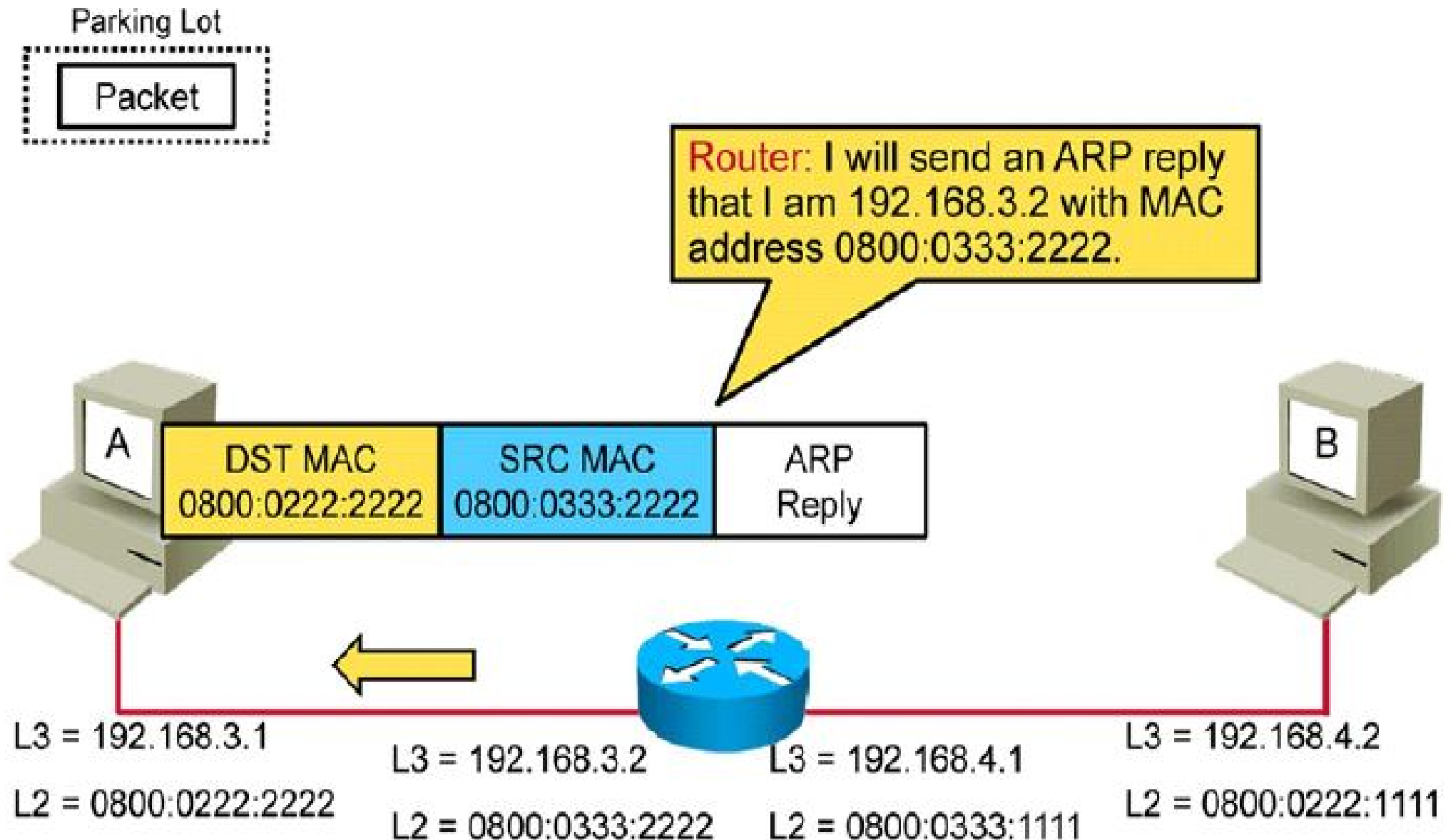
Network to network Delivery (6 of 17)



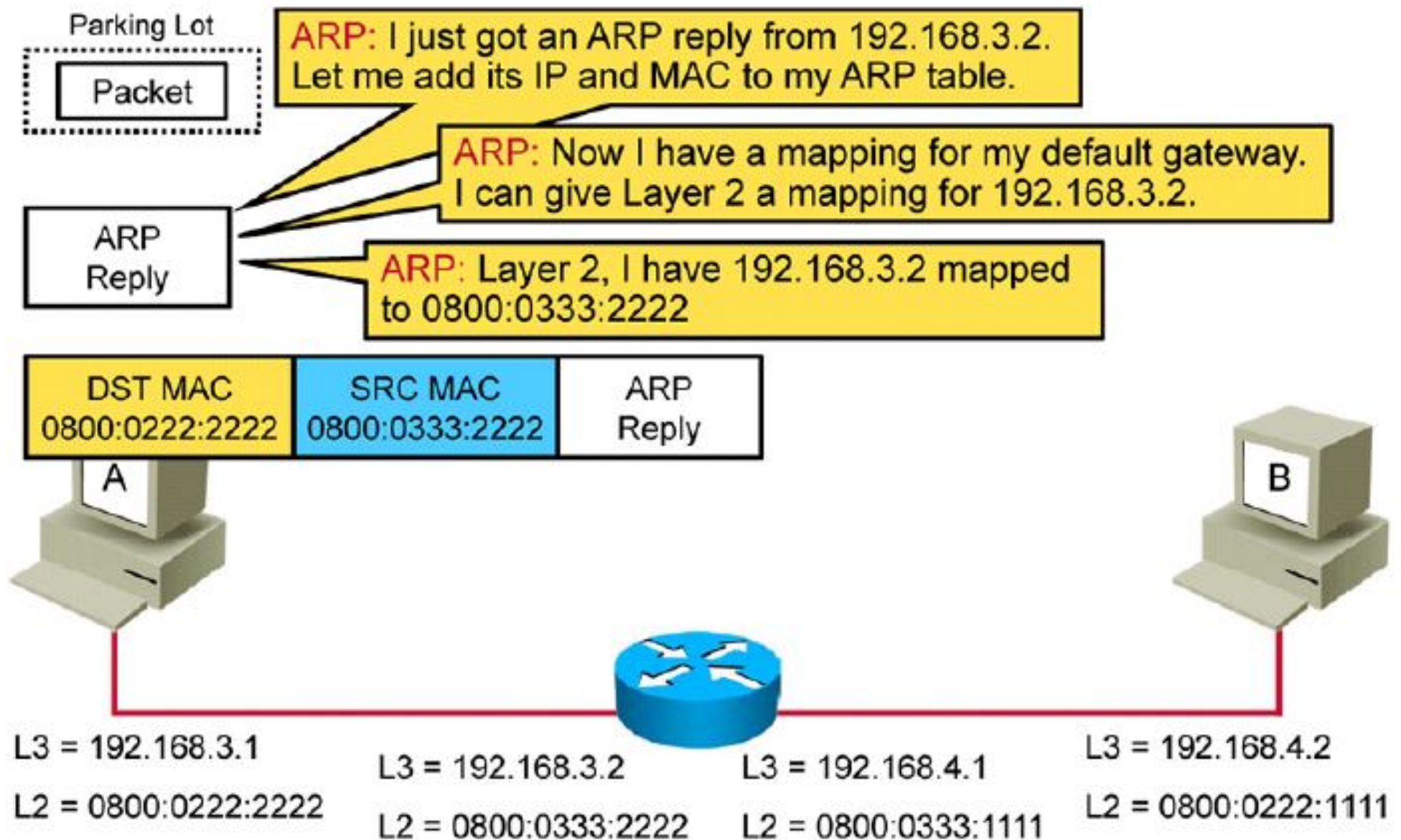
Network to network Delivery (7 of 17)



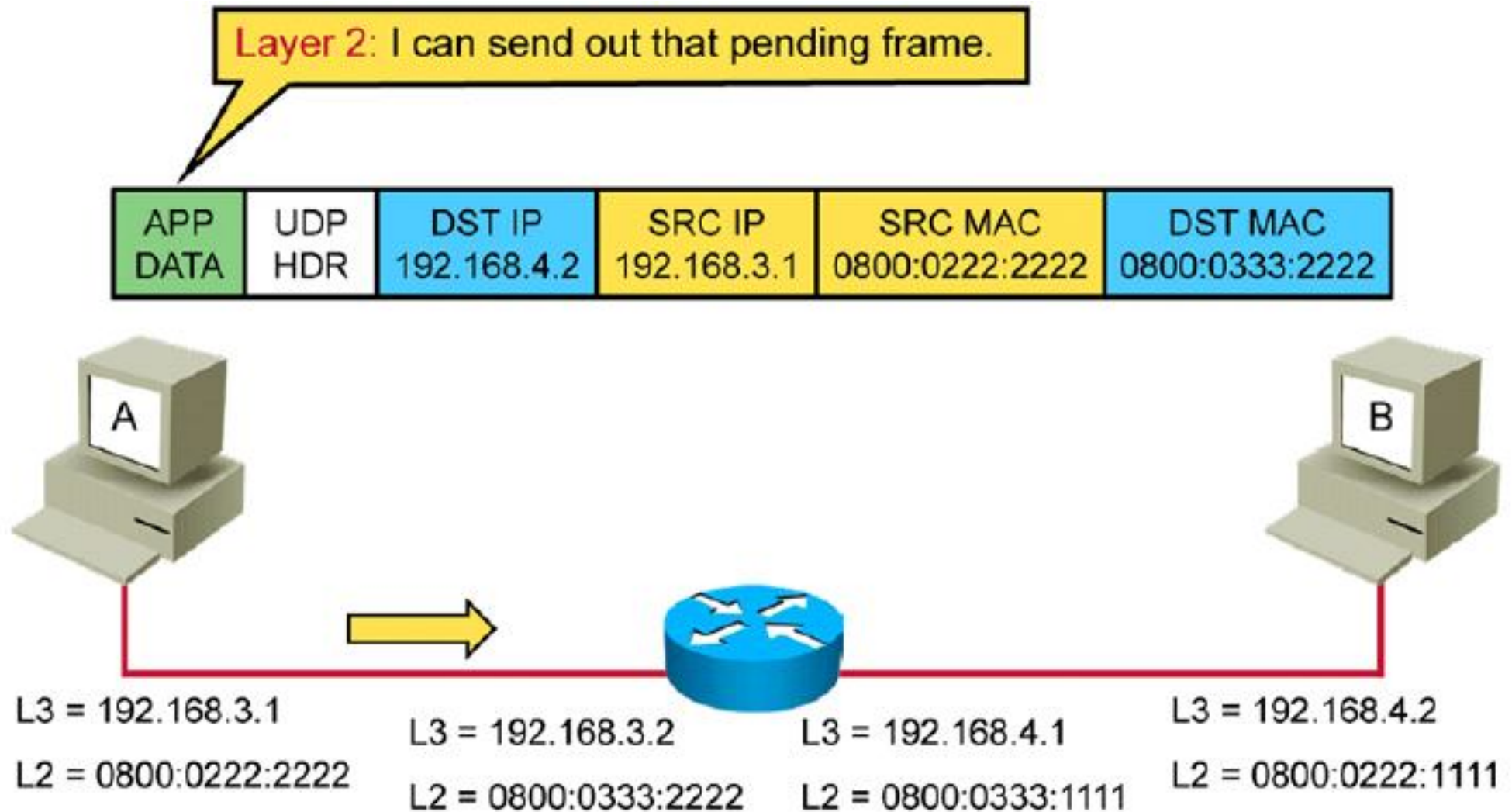
Network to network Delivery (8 of 17)



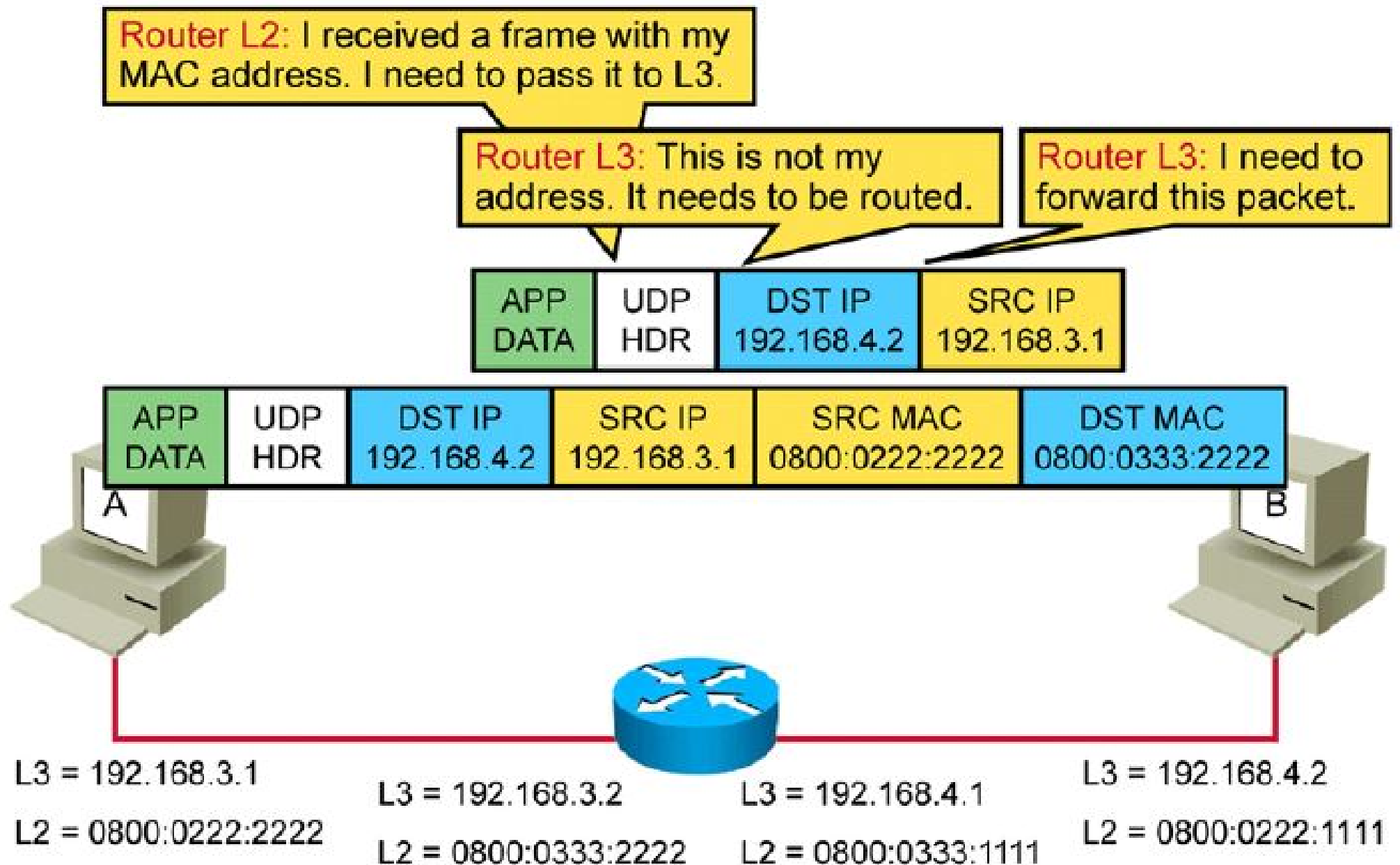
Network to network Delivery (9 of 17)



Network to network Delivery (10 of 17)



Network to network Delivery (11 of 17)

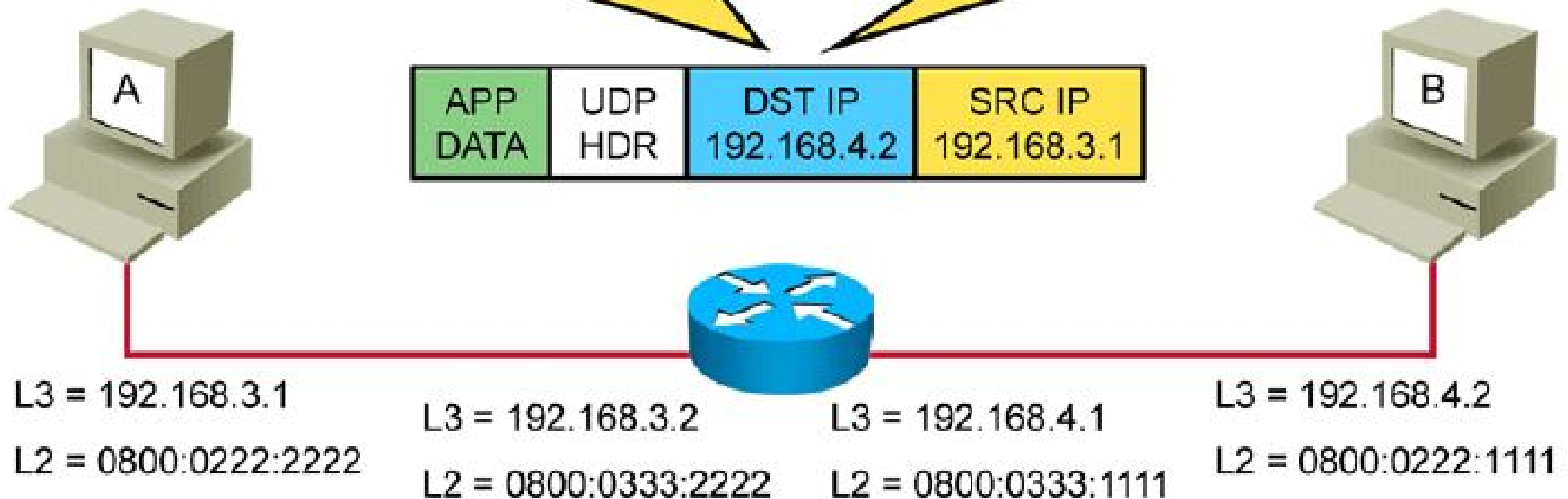


Network to network Delivery (12 of 17)

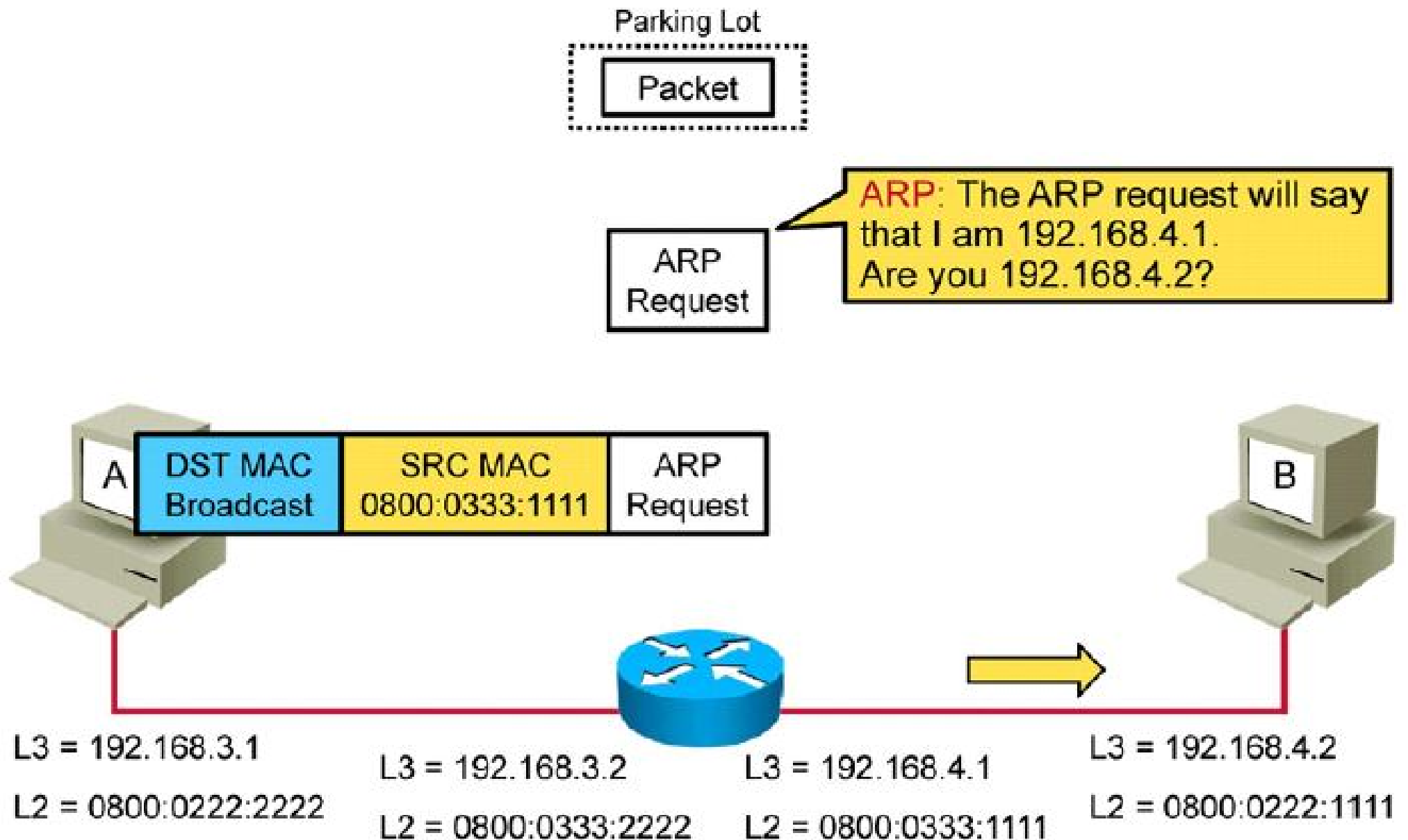
Destination	Next Hop	Interface
192.168.3.0/24	Connected	Gi 0/0
192.168.4.0/24	Connected	Gi 0/1

Router L3: I have an interface on the 192.168.4.0/24 segment. I can forward this packet directly to host.

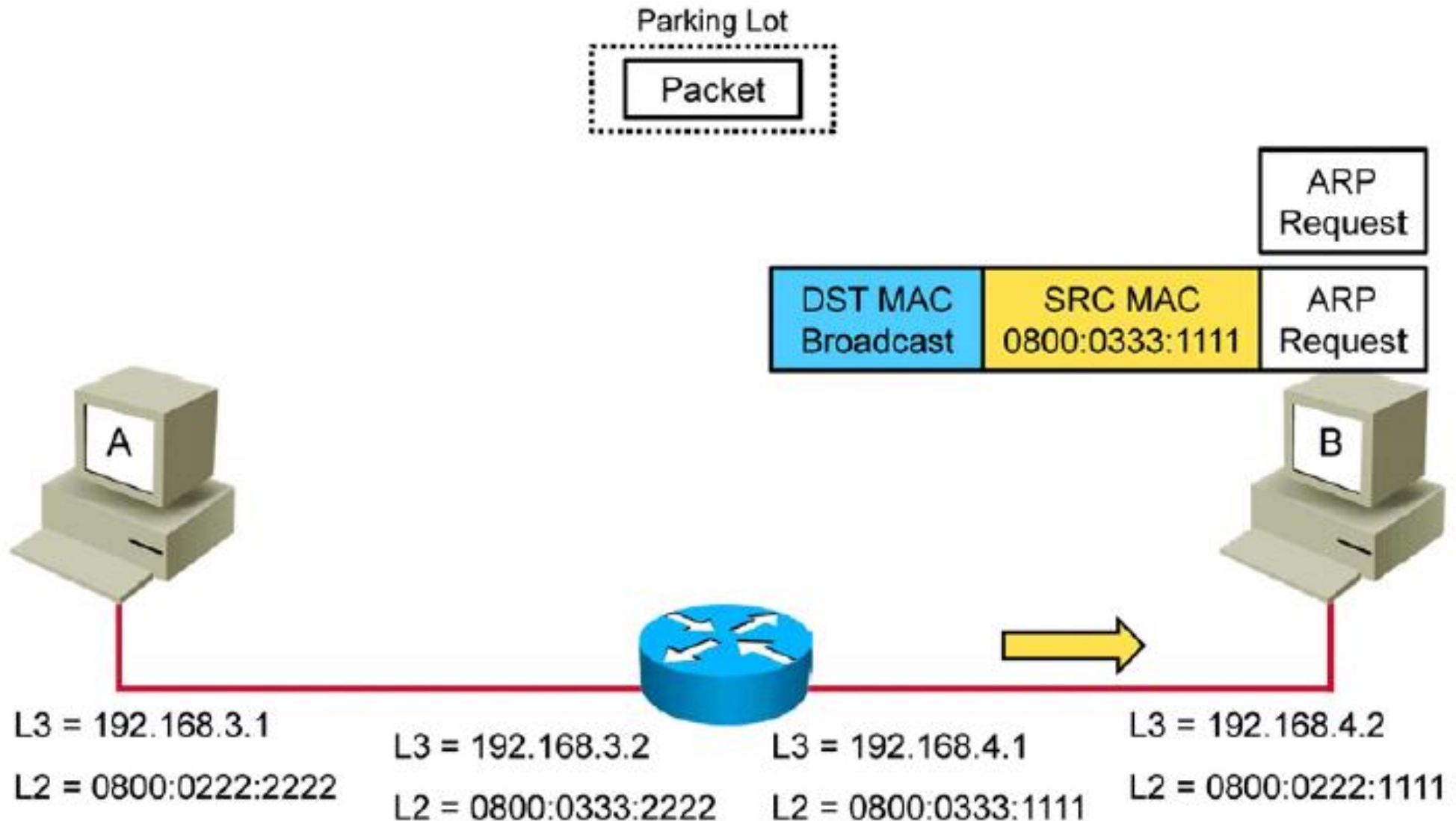
Router L3: L2, send this packet.



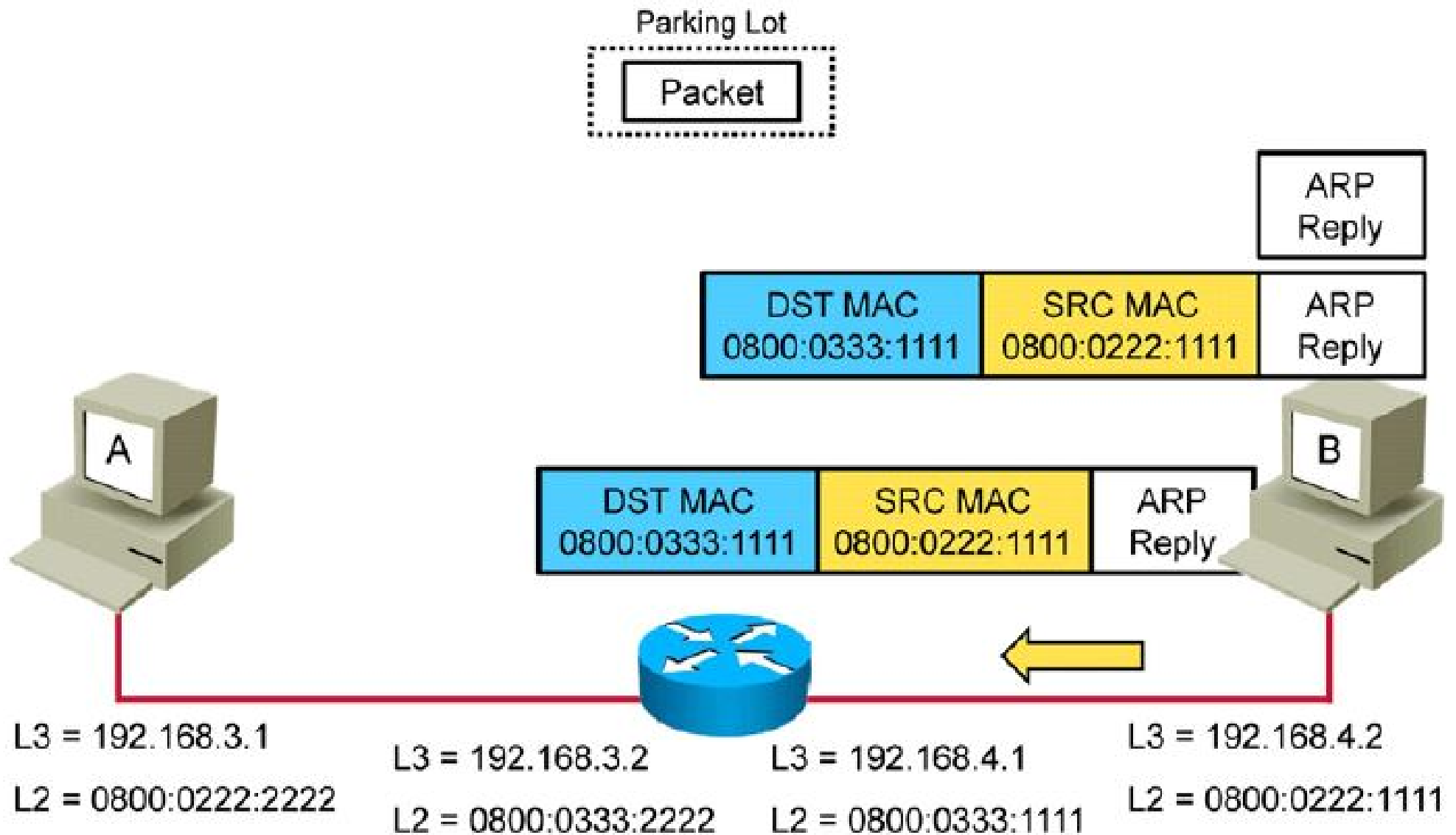
Network to network Delivery (13 of 17)



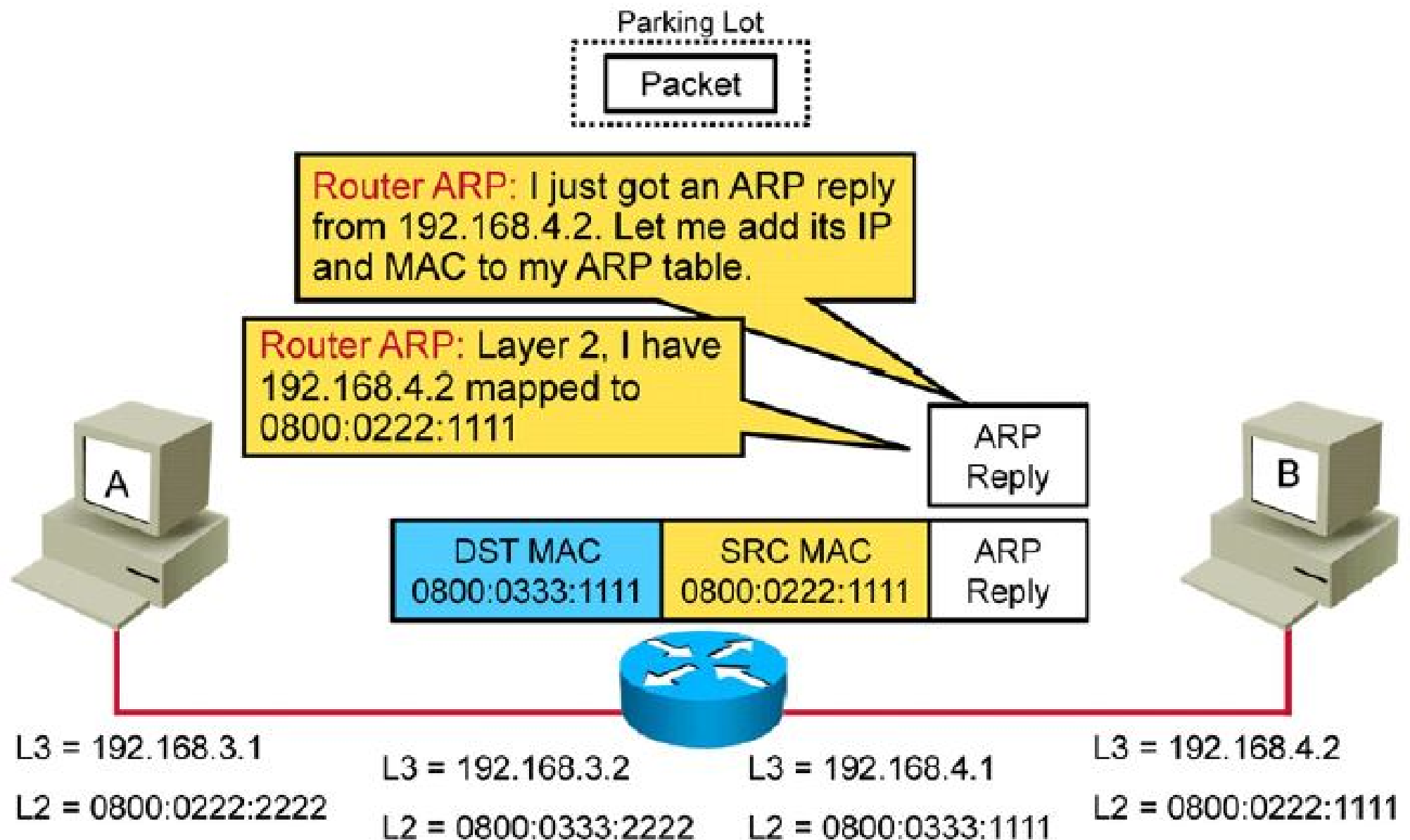
Network to network Delivery (14 of 17)



Network to network Delivery (15 of 17)



Network to network Delivery (16 of 17)



Network to network Delivery (17 of 17)

