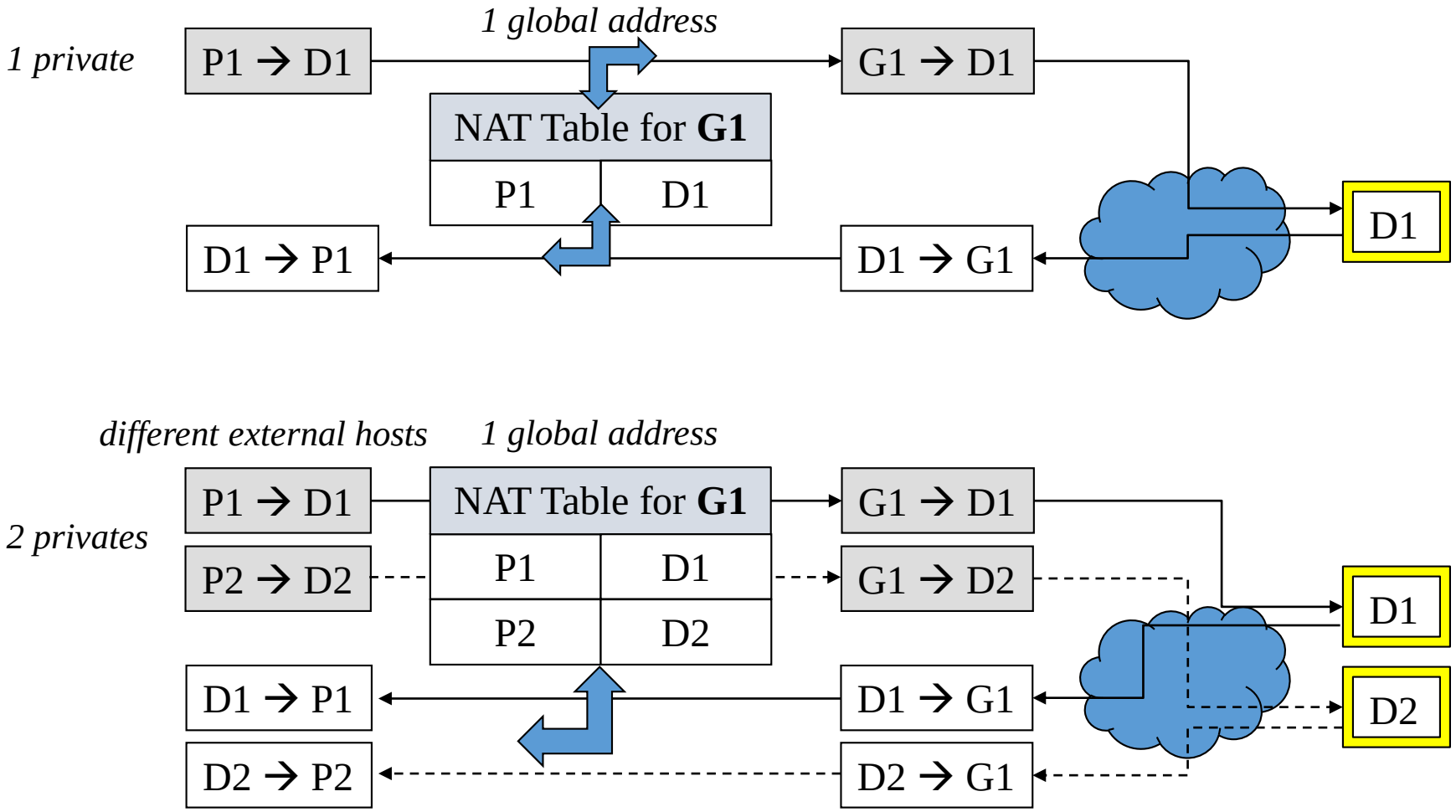
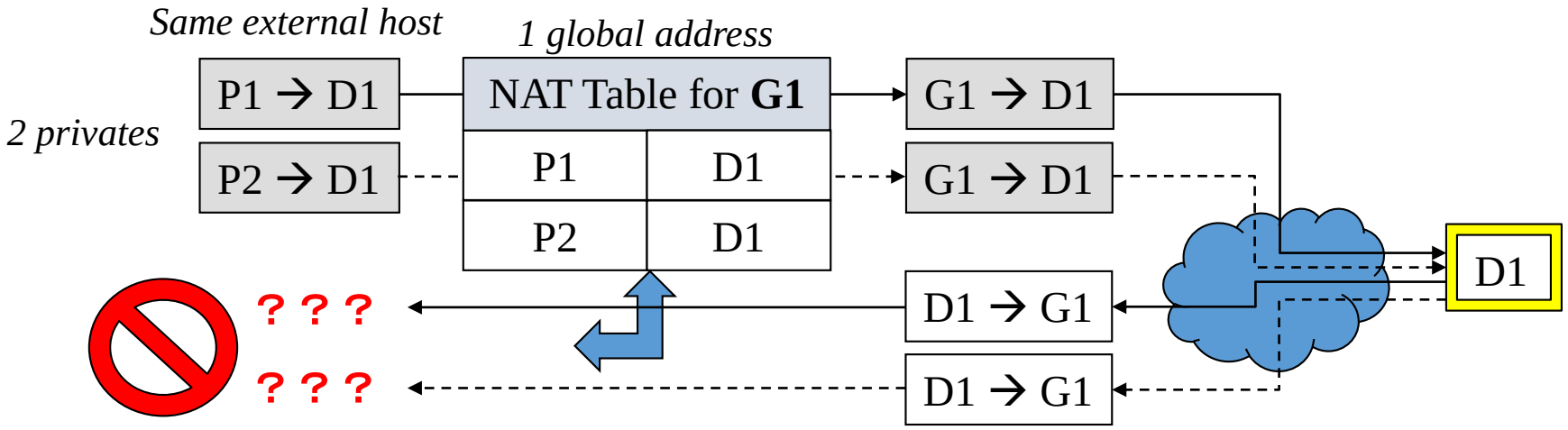
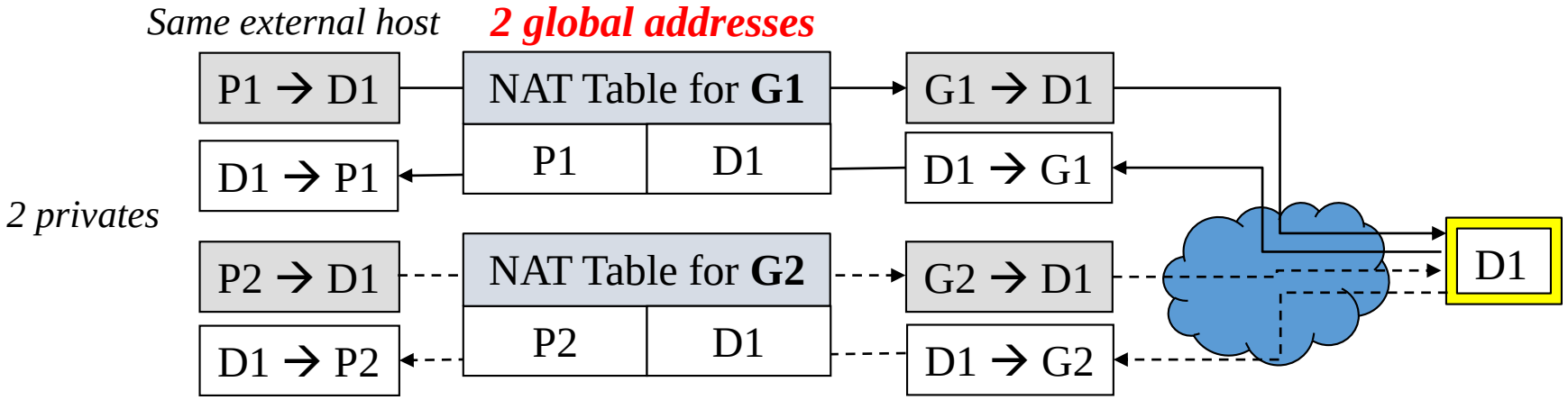
NAT Table with only IP addresses (1)



NAT Table with only IP addresses (2)

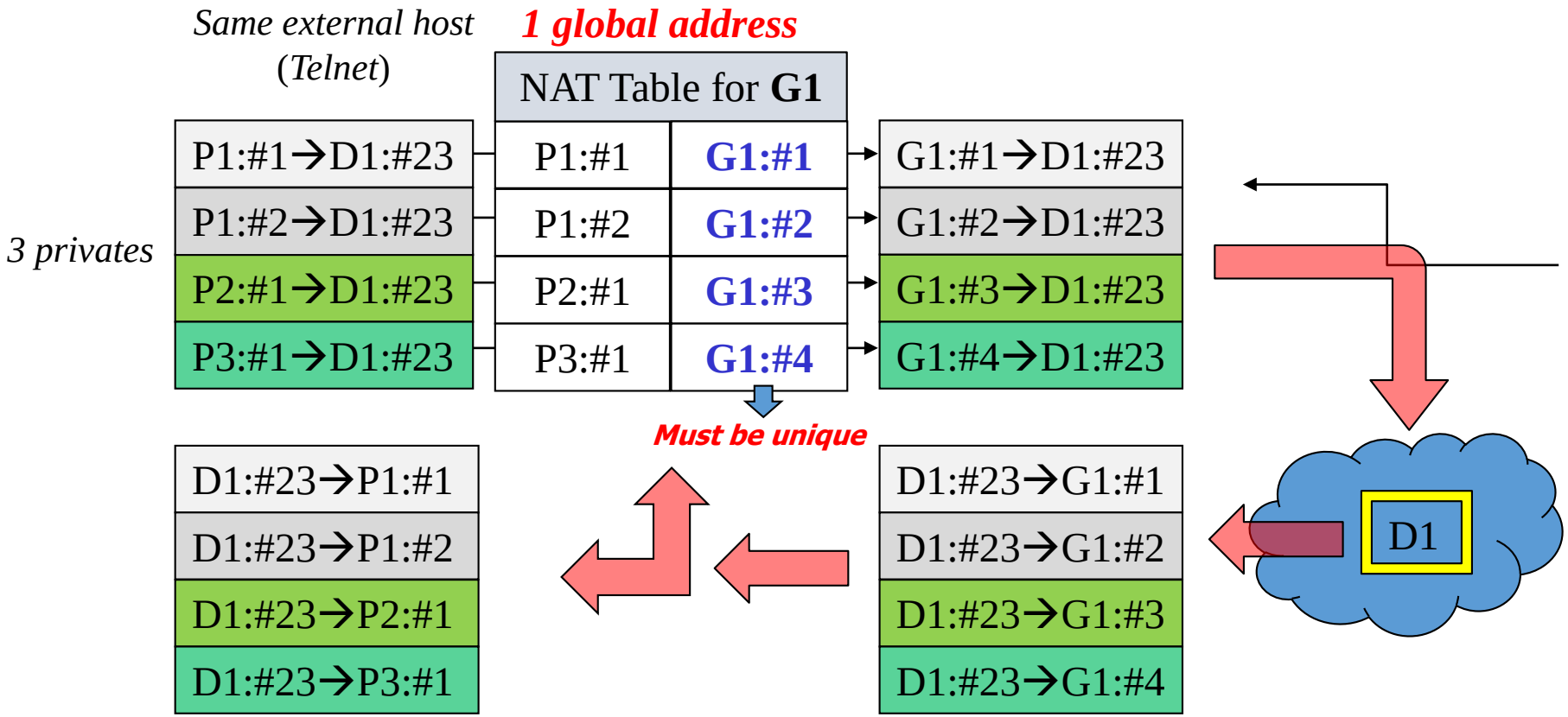




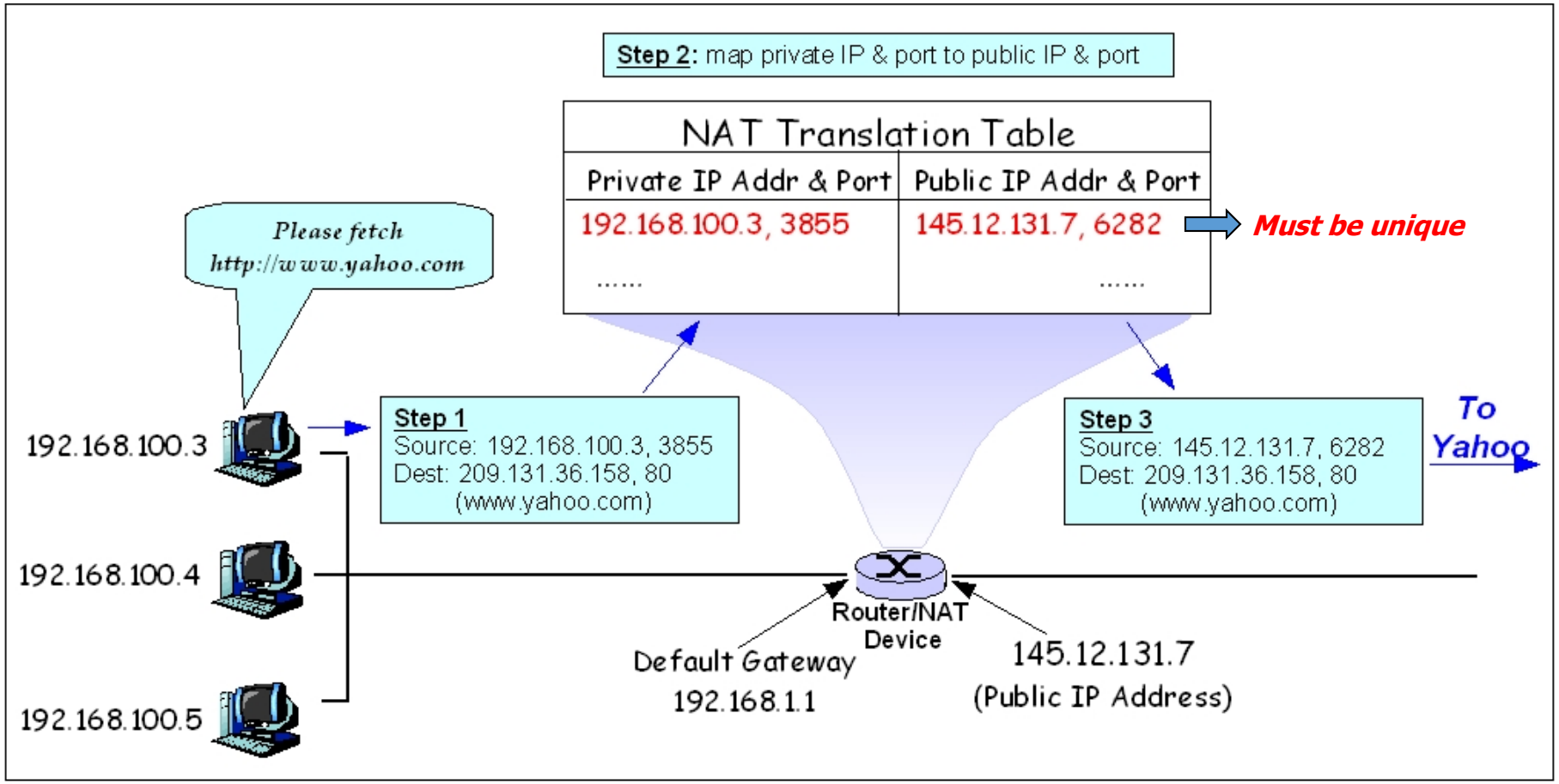
NAT Table with only IP addresses (3)

- If using only one global address
  - Only one private-network host to access the same external host
- If using a pool of global addresses (e.g. 4 addr)
  - No more than 4 connections can be made to the same destination
  - No private-network host can access two external server programs (e.g. HTTP and TELNET) at the same external host at the same time **???**
  - Two private-network hosts cannot access the same external server program at the same time (by using the same global address)

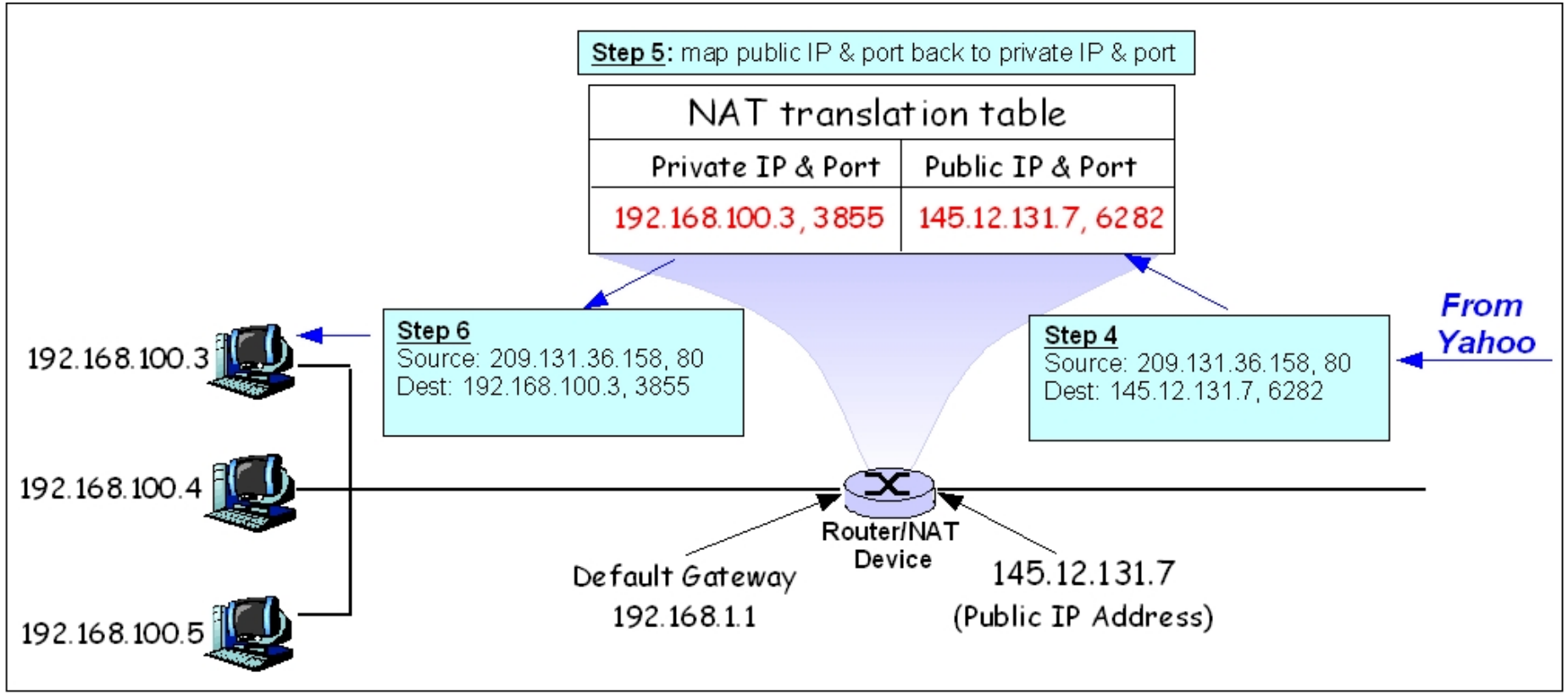
NAT Table with IP address & Port # (1)



NAT Table with IP address & Port # (2)



NAT Table with IP address & Port # (3)



NAT Table with IP address & Port # (4)

- NAT Table in the textbook
  - This may not be the best way to understand NAT

Server

Private Address	*Private Port*	*External Address*	*External Port*	*Transport Protocol*
172.18.3.1	1400	25.8.3.2	80	TCP
172.18.3.2	1401	25.8.3.2	80	TCP
…	…	…	…	…

Must be unique

Otherwise reassign a new private port and cache the mapping (the new port --> the old port)