



Chapter 6

Network Address Translation (NAT)



Network Address Translation

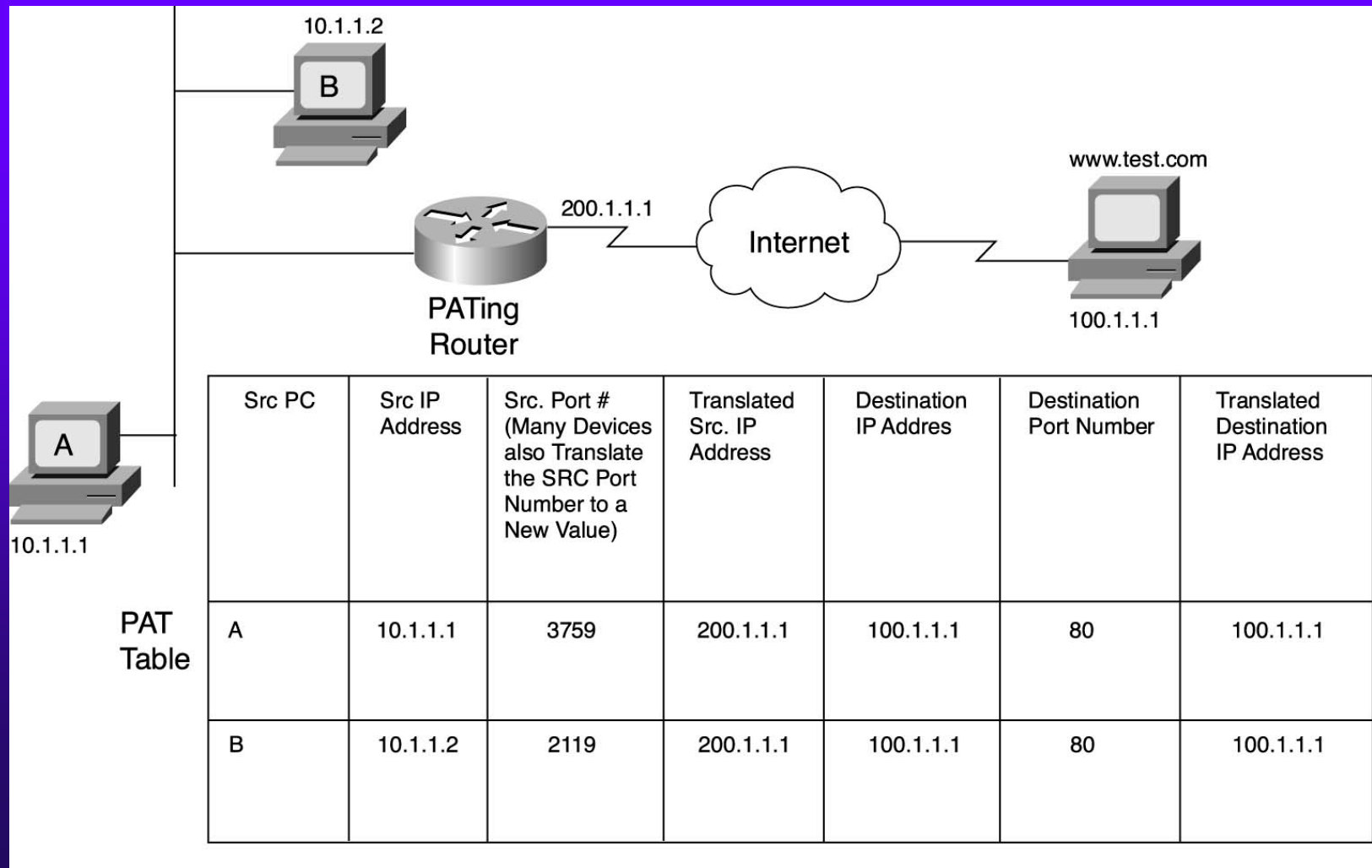
- ◆ Modification of source or destination IP address
- ◆ Needed by networks using RFC 1918 address scheme to route traffic to Internet
- ◆ Provides security by hiding a computer's real IP address



Port Address Translation (PAT)

- ◆ a.k.a Overload NAT
- ◆ reduces public IP address consumption
- ◆ Many private IP addresses are translated to one public IP address

Port Address Translation





Security Benefits of NAT and PAT

- ◆ Router cannot forward packets from Internet to an internal network unless a NAT/PAT entry has been created in the router's NAT table.
- ◆ In general, any connections not initiated from the inside are not allowed through the PAT device