



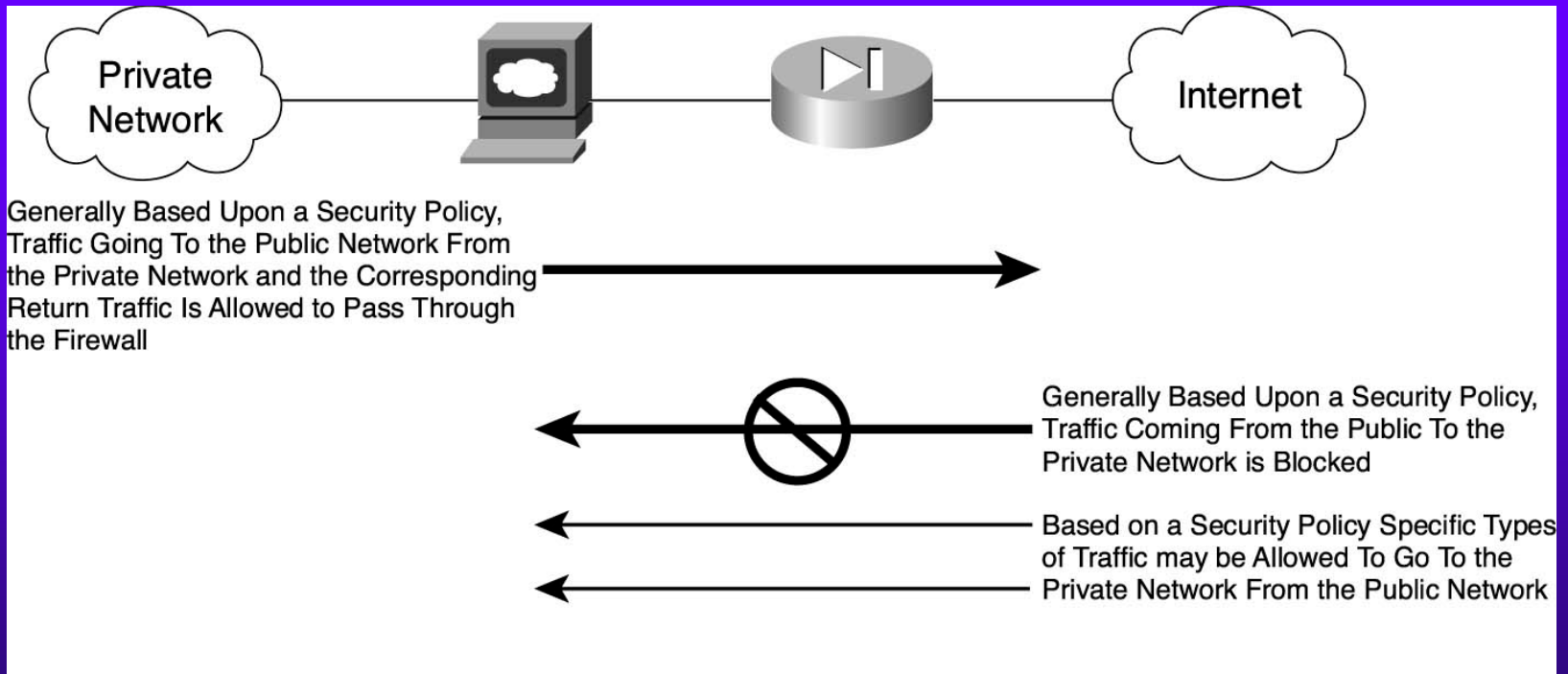
Chapter 7 Firewalls



Firewall Definition

- ◆ A network device that enforces network access control based upon a defined security policy

Basic Firewall Philosophy





Types of Firewalls

- ◆ Circuit-level firewall
 - verifies TCP 3-way handshake on behalf of inside hosts
- ◆ Proxy server firewalls
 - application aware
 - Proxies TCP connections on behalf of clients
 - not transparent to end-users
- ◆ Non-stateful packet filters
- ◆ Stateful packet filters
 - Maintains source/destination TCP/UDP port numbers, TCP sequence numbers, TCP flags, TCP session state, and UDP traffic timing based on timers
 - Application aware
- ◆ Personal firewalls