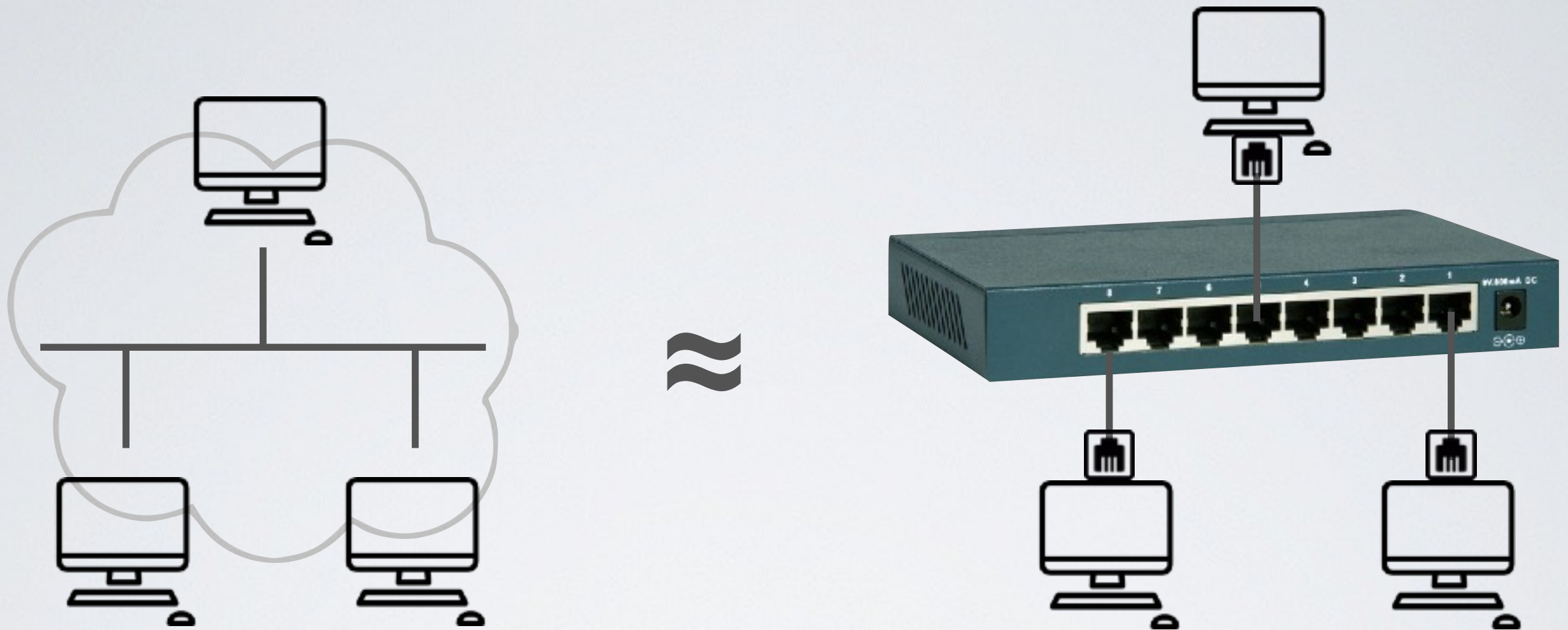# Preventing packet sniffing over Ethernet

Hub : broadcast all messages on all ports

Switch : (smart HUB) forward messages on specific port based on their MAC addresses

➡ isolate Ethernet traffics (no straightforward packet sniffing)

Packet sniffing over a wireless network

➡ Encrypt message before sending them over the air

Wireless Security	WEP	WPA	WPA2	
			Personal	Enterprise
Authentication	Shared Key	Shared Key	Shared Key	RADIUS Server
Cryptography	RC4	TKIP and RC4	CCMP and AES	
Security	Broken	Broken	External attackers only	Good