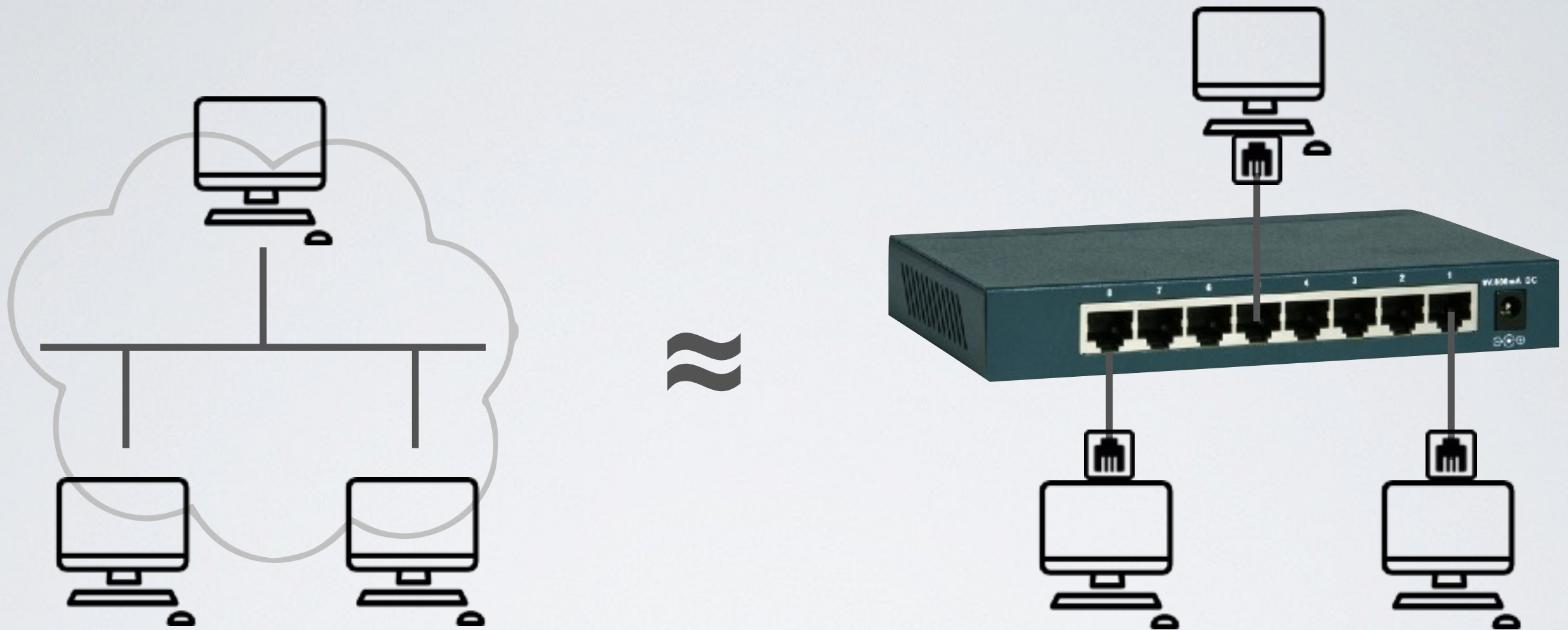


Preventing packet sniffing over Ethernet



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

⦿ WEP is obsolete

Wireless Security	WPA	WPA2		WPA3	
		Personal	Enterprise	Personal	Enterprise
Authentication	Shared Key	Shared Key	RADIUS Server	Shared Key	RADIUS Server
Cryptography	TKIP and RC4	CCMP and AES		128-bit CCMP and AES	192-bit CCMP and AES
Security	Broken	External attackers only	Good	Better, Simultaneous Authentication of Equals	
Year	2003	2004		2018	