

Wireless Networks

Édouard Lumet - IR2020

Wi-Fi

Two architectures : WLAN with an Access Point VS Ad-hoc as P2P

Channel Access problem in wired net is due to transmission delay, a collision can occur even if transmission is not exactly synchronized. Max RTT defines the min listening time = two times propagation delay. It's CSMA/CD.

Pathloss is the signal power decreasing with the distance.

Hidden terminal problem kill CSMA/CD in wireless net. => CSMA/CA

Ask for sending then wait for the clear-to-send. It partially solves the hidden terminal problem. => RTS/CTS

Exposed terminal problem