

## WHAT PACKETS?

802.11 → FRAME FORMAT

80 bits    010101...

16 bits    0000 1100 1011 1101

INFO about the packet

PLCP HDR } 1Mbit/sec

#bytes

rate information

kind of CRC

→ **FRAME TRANSMISSION**

MAC  
 2 bytes : FRAME CONTROL  
 2 bytes : DURATION/ID  
 ADDRESS  
 3 \* 6 bytes : address 1, address 2, address 3  
 2 bytes : seq control  
 6 bytes : address 4  
 0 - 2312 : FRAME BODY (PAYLOAD)  
 4 bytes : CRC

### FRAME CONTROL

00 → Management packet  
(beacon, association (request/answer) ...)

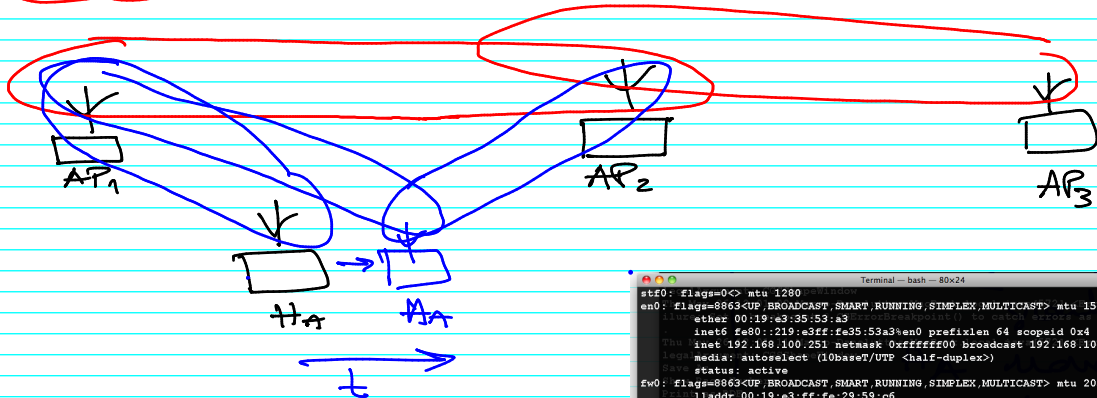
01 → control (RTS, CTS, ...)

10 → data

11 → RESERVED

ADDR[4] = source,  
dest,  
BS,

# MOBILITY



```

Terminal - bash - 50x24
stf0: flags=0<> mtu 1280
en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    ether 00:19:e3:35:53:a3
    inet6 fe80::219:e3ff:fe35:53a3%en0 prefixlen 64 scopeid 0xd
    inet 192.168.100.251 netmask 0xfffff00 broadcast 192.168.100.255
    lo0: media: autoselect (10base7/UTP <half-duplex>)
    status: active
fw0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 2030
    lladdr: 00:19:e3:ff:fe:29:59:c6
    media: autoselect <full-duplex>
    status: inactive
en1: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    ether 00:19:e3:d4:d5:0e
    media: <unknown subtype> (<unknown type>)
    status: inactive
vboxnet0: flags=8842<BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    ether 00:00:00:00:00:00
  
```

to  $H_A \rightarrow AP_1$   
 access request  
 ←  $\langle H_A, AP_1 \rangle$   
 grant

$H_A$  moves  
 goes to border covered by  $AP_1$  &  $AP_2$   
 "synchronous" { disassociation from  $AP_1$   
 association to  $AP_2$

## POWER MANAGEMENT

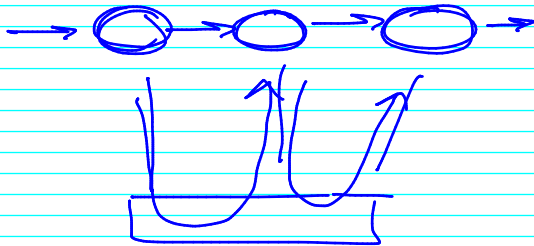
### LESSONS (W.R.T. SPN)

(L1) smaller bandwidth } for communications  
Bigger setup times

choose wired each time you can choose it!

(L2) due to inefficiencies (w.r.t. wired networks)

↳ even more important to operate the PROPER  
COMMUNICATION PATTERNS



L3 particular situations

(do) require wireless

→ possibly require  
non standard settings

} emergency  
Management

L3.1 particular situations where  
it is better to use wireless } meeting