Wireless Network.

EP2950

12/01/2015

***Wireless Network analysers****Report :*

*Pierre FLEITZ*

*Blanca Martinez*

*Masahiro Wakasa*

# Preparation questions :

1. We can have 4 addresses in the MAC frame, one address for the source, one for de destination, one for the transmitter and one for the receiver.
2. We can find the flag ToDS and From DS both equal to 0 in an Ad-hoc network.
3. By sending a probe request message (Active scanning) or by listening for Beacon messages (Passive scanning).

# Beacon frames :

1. The SSIDs of the two access points that are issuing most of the beacon frames in this trace are SSID = 30 and SSID = linksys12.
2. The intervals of time between the transmissions of the beacon frames lynksis\_ses\_24086 acces point are 0.1024 seconds, and same from the 30 Munroe St. Access point.
3. The source MAC Address on the beacon frame from 30 Munroe St. is 00 :16 :b6 :f7 :1d :51.
4. The destination MAC address on the beacon frame from 30 Munroe St. is broadcast so ff :ff :ff :ff :ff :ff.
5. The MAC BSS id on the beacon frame from 30 Munroe St. is 00 :16 :b6 :f7 :1d :51.
6. These rates are :   
   Supported rates : Rates 1(B) , 2(B), 5.5(B), 11.  
   Extended support rates : Rates 6(B), 9, 12(B), 18, 24(B), 36, 48, 54.

# Data Transfer :

1. The three MAC addresses are :  
   - the receiver address : 00 :16 :b6 :f7 :1d :51  
   - the source/transmitter address : 00 :13 :02 :d1 :b6 :4f  
   - the destination address : 00 :16 :b6 :f4 :eb :a8  
   The MAC address corresponding to the wireless host is the source MAC Address (00 :13 :02 :d1 :b6 :4f), to the Access point is the receiver MAC Addres (corresponding to the BSS Id) (00 :13 :02 :d1 :b6 :4f) , to the first hop is the transmitter address (00 :13 :02 :d1 :b6 :4f).  
   The IP Address of the wireless host sending this TCP segment is 192.168.1.109.  
   The destination IP Address is 128.119.245.12.  
   This IP address correspond to some other network-attached device, because we are talking about a http procedure so the destination must be another network-attached device.
2. The three MAC addresses are :  
   - the destination/receiver address : 91 :2a ::b0 :49 :b6 :4f but it’s an error   
   - the transmitter address : 00 :16 :b6 :f7 :1d :51  
   - the source address : 00 :16 :b6 :f4 :eb :a8  
   The MAC address corresponding to the host is the source MAC Address (00 :16 :b6 :f4 :eb :a8), to the Access point is transmitter MAC Addres (00 :16 :b6 :f7 :1d :51) , to the first hop is the receiver address (91 :2a ::b0 :49 :b6 :4f).  
   The IP Address of the host sending this TCP segment is 128.119.245.12.  
   The destination IP Address is 192.119.245.12.  
   This IP address correspond to some other network-attached device, because we are talking about a http procedure so the destination must be another network-attached device.