Foundation of Computer Networks - Wireshark Project
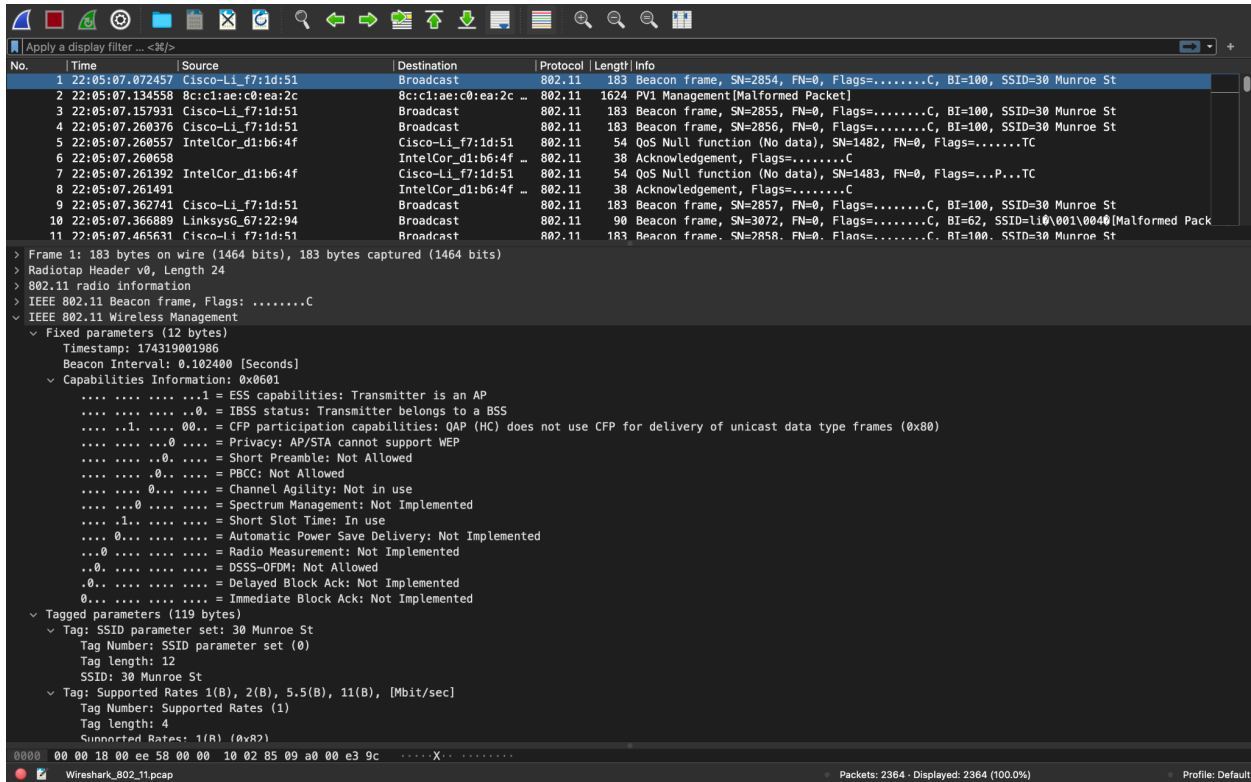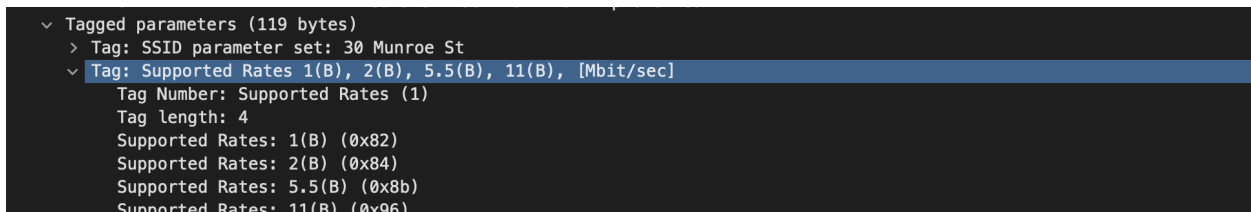## Bhavin Oza (bo2115)

1). 30 Munroe St and linksys12

2). 1024 seconds

3). Source MAC: 00:16:b6:f7:1d:51

4). Destination MAC: ff:ff:ff:ff:ff:ff

5). MAC BSSID Address: 00:16:b6:f7:1d:51

6). Support rates → 1,2,5.5,11.0

Extended support rates → 6.0,9.0, 12.0, 18.0, 24.0, 36.0, 48.0 and 54.0 mbps

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    ˅ Tag: Extended Supported Rates 6(B), 9, 12(B), 18, 24(B), 36, 48, 54, [Mbit/sec]
        Tag Number: Extended Supported Rates (50)
        Tag length: 8
        Extended Supported Rates: 6(B) (0x8c)
        Extended Supported Rates: 9 (0x12)
        Extended Supported Rates: 12(B) (0x98)
        Extended Supported Rates: 18 (0x24)
        Extended Supported Rates: 24(B) (0xb0)
        Extended Supported Rates: 36 (0x48)
        Extended Supported Rates: 48 (0x60)
        Extended Supported Rates: 54 (0x6c)
```

7). MAC address for sender host: 00:13:02:d1:b6:4f
The MAC address for the destination, that is the first hop router to which the host is connected:
00:16:b6:f4:eb:a8
MAC address for the BSS: 00:16:b6:f7:1d:51
IP address of the sender host: 192.168.1.109
Destination address: 128.199.245.12
Destination MAC address of the frame containing the SYN, different from the destination IP
address of the IP packet contained within this frame.

8). TCP SYNACK → t = 24.827751 (received)
Sender's MAC address (with TCP SYNACK segment) → 00:16:b6:f4:eb:a8 → 1st Hop router.
Destination's MAC address → 91:2a:b0:49:b6:4f (host)
MAC BSS : 00:16:b6:f7:1d:51
Server sending TCP SYNACK → 128.199.245.12
9). t = 49.583615, DHCP releases a message to the DHCP server in the network that the host is
leaving.
t = 49.609617, host sends a DEAUTHENTICATION frame.
A DISASSOCIATION request is expected.

10). first AUTHENTICATION is at time t = 49.638857

11). host will request an association to be open using Open system authentication algorithm.

12). No

13). At t = 63.168087, AUTHENTICATION frame sent from 00:13:02:d1:b6:4f to
00:16:b7:f7:1d:51
At t = 63.169071, AUTHENTICATION sent in the reverse direction from BSS to the wireless
host.

14). At t = 63.169910, AUTHENTICATION REQUEST frame sent from 00:13:02:d1:b6:4f to
00:16:b7:f7:1d:51
At t = 63.192101, ASSOCIATE RESPONSE sent in the reverse direction from BSS to wireless
host.

15). For ASSOCIATION REQUEST frames, the supported rates advertised are 1, 2, 5.5, 11, 6, 9, 12, 18, 24, 32, 48 and 54 Mbps.
The rates in ASSOCIATE RESPONSE would be the same.

16). At t = 2.297613, PROBE REQUEST is sent from 00:12:f0:1f:57:13 to ff:ff:ff:ff:ff:ff and BSSID of ff:ff:ff:ff:ff:ff.
At t = 2.300697, PROBE RESPONSE is sent from 00:16:b6:f7:1d:51, destination and BSSID of 00:16:b6:f7:1d:51
In active scanning, a PROBE REQUEST request is used by a host to find an access point.
A PROBE RESPONSE response is sent by the access point to the host.