

iPhone Client

Broadcast

Rogue AP

rogue_assoc_wlan.pcapng

Probe Request (0x0004)

Dst	ff:ff:ff:ff:ff:ff
Src	00:56:cd:ee:f1:71
Seq	867

Probe Request – active scanning: client solicits responses from APs; directed (specific SSID) or wildcard (broadcast SSID); faster than passive scanning (beacon-only)

Probe Response (0x0005)

Dst	00:56:cd:ee:f1:71
Src	34:a8:4e:d2:bf:10
BSS	34:a8:4e:d2:bf:10
Seq	997
Capabilities Information	0x0421

Probe Response – AP replies with capabilities (SSID, rates, RSN, channel); client uses signal strength + capabilities to select best AP for association

Authentication (0x000b)

Dst	34:a8:4e:d2:bf:10
Src	00:56:cd:ee:f1:71
BSS	34:a8:4e:d2:bf:10
Seq	868
Auth	Open System (0)
Auth Seq	0x0001
Status	Successful (0x0000)

802.11 Authentication – Open System (2 frames) or SAE/WPA3 (multiple rounds); must succeed before Association

ACK (0x001d)

RA	00:56:cd:ee:f1:71
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Frame 4 | 2017-02-11T13:15:45.729588Z

Beacon frame (0x0008)

BSS	34:a8:4e:d2:bf:10
Seq	3113
Beacon Interval	0.104448 [Seconds]
DTIM count	0

Beacon – AP announces its presence at Beacon Interval (usually 100 TU = 102.4ms); carries SSID, supported rates, DTIM count, RSN info; basis for passive scanning

Authentication (0x000b)

Dst	00:56:cd:ee:f1:71
Src	34:a8:4e:d2:bf:10
BSS	34:a8:4e:d2:bf:10
Seq	3114
Auth	Open System (0)
Auth Seq	0x0002
Status	Successful (0x0000)

802.11 Authentication – Open System (2 frames) or SAE/WPA3 (multiple rounds); must succeed before Association

Association Request (0x0000)

Dst	34:a8:4e:d2:bf:10
Src	00:56:cd:ee:f1:71
BSS	34:a8:4e:d2:bf:10
Seq	869
Capabilities Information	0x0421
Listen Interval	0x0014

Association Request – client joins BSS; carries SSID, supported rates, RSN (WPA2/WPA3) capabilities; AP assigns AID in response

Association Response (0x0001)

Dst	00:56:cd:ee:f1:71
Src	34:a8:4e:d2:bf:10
BSS	34:a8:4e:d2:bf:10
Seq	3115
Status	Successful (0x0000)
AID	0x0001

Association Response – AP accepts/rejects client; Status 0=Success; assigns AID (Association ID) used for PS-Poll and TIM bitmap addressing


QoS Data (0x0028)

Dst	00:56:cd:ee:f1:71
Src	fc:99:47:be:c0:66
BSS	34:a8:4e:d2:bf:10
Seq	9
TID	0
Priority	Best Effort (Best Effort) (0)

802.11 QoS Data – TID (Traffic Identifier) maps to WMM Access Category: TID 0-2=Best Effort (AC_BE), 3=Background (AC_BK), 4-5=Video (AC_VI), 6-7=Voice (AC_VO)






Null function (No data) (0x0024)

Null Data – no payload; used for power management signaling:

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 Rogue AP

 Power	STA will stay up
 Dst	34:a8:4e:d2:bf:10
 Src	00:56:cd:ee:f1:71
 BSS	34:a8:4e:d2:bf:10
 Seq	870

PWR MGT=1 tells AP the client is going to sleep (AP buffers frames);
PWR MGT=0 means client is awake