



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

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

💡 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

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

Frame 6 | 2017-02-04T15:07:59.073797Z

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

💡 802.11 QoS Data – TID (Traffic Identifier) maps to WMM Access



Dst	84:b2:61:24:a2:00
Src	fc:99:47:be:c0:66
BSS	84:b2:61:24:a2:00
Seq	356
TID	0
Priority	Best Effort (Best Effort) (0)

Category: TID 0-2=Best Effort (AC_BE), 3=Background (AC_BK), 4-5=Video (AC_VI), 6-7=Voice (AC_VO)

Probe Response (0x0005)

Dst	60:f1:89:1f:cb:86
Src	84:b2:61:24:a2:00
BSS	84:b2:61:24:a2:00
Seq	1915
Capabilities Information	0x1421

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