Exploring bridge_uwgb_open_wlan.pcapng

📱 Client A	📢 Broadcast	📡 Cisco AP 1

📁 **bridge_uwgb_open_wlan.pcapng**

🔍 Probe Request (0x0004)

📱 Dst	ff:ff:ff:ff:ff:ff
📱 Src	54:ee:75:49:f1:3e
🔢 Seq	139

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

🔍 Probe Request (0x0004)

📱 Dst	ff:ff:ff:ff:ff:ff
📱 Src	54:ee:75:49:f1:3e
🔢 Seq	140

💡 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	54:ee:75:49:f1:3e
📱 Src	84:b2:61:24:a2:00
📡 BSS	84:b2:61:24:a2:00
🔢 Seq	2386
Capabilities Information	0x1421

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

📋 Probe Response (0x0005)

📱 Dst	54:ee:75:49:f1:3e
📱 Src	84:b2:61:24:a2:00
📡 BSS	84:b2:61:24:a2:00
🔢 Seq	2387
Capabilities Information	0x1421

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

📡 Beacon frame (0x0008)

📡 BSS	84:b2:61:24:a2:00
🔢 Seq	3477
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	84:b2:61:24:a2:00
📱 Src	54:ee:75:49:f1:3e
📡 BSS	84:b2:61:24:a2:00
🔢 Seq	161
🔐 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	54:ee:75:49:f1:3e

Frame 8 | 2017-02-04T15:26:16.860218Z

🔐 Authentication (0x000b)

📱 Dst	54:ee:75:49:f1:3e
📱 Src	84:b2:61:24:a2:00
📡 BSS	84:b2:61:24:a2:00
🔢 Seq	3479
🔐 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

🔐 Authentication (0x000b)

📱 Dst	84:b2:61:24:a2:00
📱 Src	54:ee:75:49:f1:3e
📡 BSS	84:b2:61:24:a2:00
🔢 Seq	161
🔐 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

📡 Association Request (0x0000)

📱 Dst	84:b2:61:24:a2:00
📱 Src	54:ee:75:49:f1:3e
📡 BSS	84:b2:61:24:a2:00

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

📱 Client A | 📢 Broadcast | 📡 Cisco AP 1

🔢 Seq	162
Capabilities Information	0x0421
Listen Interval	0x00c8

✅ Association Response (0x0001)

📱 Dst	54:ee:75:49:f1:3e
📱 Src	84:b2:61:24:a2:00
📡 BSS	84:b2:61:24:a2:00
🔢 Seq	3480
📋 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