802.11F Inter-AP Protocol

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802.11F: What is it?

- Communication between 802.11 APs on the “distribution system” (back side)
- Exchange of information about a mobile station between APs
- Maintenance of bridge forwarding tables
- Securing the communications between the APs
802.11F: Triggers

- 802.11F notices only two events, triggered by a station’s mobility through the WLAN
  - Association
  - Reassociation

- All stations are not well-behaved
  - Some never reassociate, only associate, making context exchange very difficult
802.11F: Association Trigger

- Announce where the station is associated
  - Send IAPP Add-notify packet
- Get bridges pointed in the right direction
  - Send 802.2 XID frame with SA equal to mobile station’s MAC address
- Resolve potential race condition
802.11F: Reassociation Trigger

• Communicate with the “old AP”
  – Inform it of the station’s move by sending IAPP MOVE-notify packet to old AP
  – Optionally exchange context information between new and old APs
    • MOVE-notify packet to old AP
    • MOVE-response packet to new AP

• Get bridges pointed in the right direction
  – Send 802.2 XID frame

• Resolve potential race condition
802.11F: Security

- IAPP may be used with or without security
- Using the security described in the recommended practice requires RADIUS
- A security association is established only between APs that must communicate (only when a mobile station moves between them)
- Security associations may be cached and long-lived
  - Not necessary to set up an association every time a station moves between the same to APs