Handoff Scope Discussion Points

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L1,2 – L3 Interactions?

- Roaming is influenced by many layers

- Roaming influences many layers

- Interworking between L1/2 and above is necessary for effective roaming

  However:

- 802 Typically concentrates on L1/L2

  – What modes of L3 interaction is appropriate

  – MIBs? MAC-SAP? Convergence Layers?

L1,2 – L3 Conduits?

- Upper layer such as MobileIP require triggers and information from Layers 1 and 2 to effect seamless roaming

- 802 Handoff could define a conduit for communicating roaming related information between upper layer roaming agents and 802 MACs and PHYs

- Should also define an extensible information entities that can be passed over this conduit

SSID Extensions

- ## SSID is a 5 character name for an 802.11 AP
  - Specific to 802.11
  - Not sufficient to encode useful information about the AP
    - What subnet is it in?
    - What payment services might be supported?
    - No space to include authentication information

- ## Maybe something better is needed
  - AP identifier, common across 802 APs/basestations
  - Can be authenticated
  - Large enough to be unique
  - Able to encode information to derive subnet boundaries

Roaming Decision Data

- What data is needed to make good roaming decisions?

- How can it be structured?

- Should it facilitate capability negotiation?

802.11k

- How does this relate to 802.11k RRM?

  – Covers overlapping space

  – 802.11k defines conduit for radio resource information

- Should we 'superset' 802.11k?

- Is what 11k defines necessary and sufficient for handoff?

- Should use of 11k mechanisms and information be evaluated within handoff?

Layer 2 Roaming Agents?

- If we address L1,2 – L3 signaling to support roaming, L2 handoffs becomes a special case since they are not in the signaling path
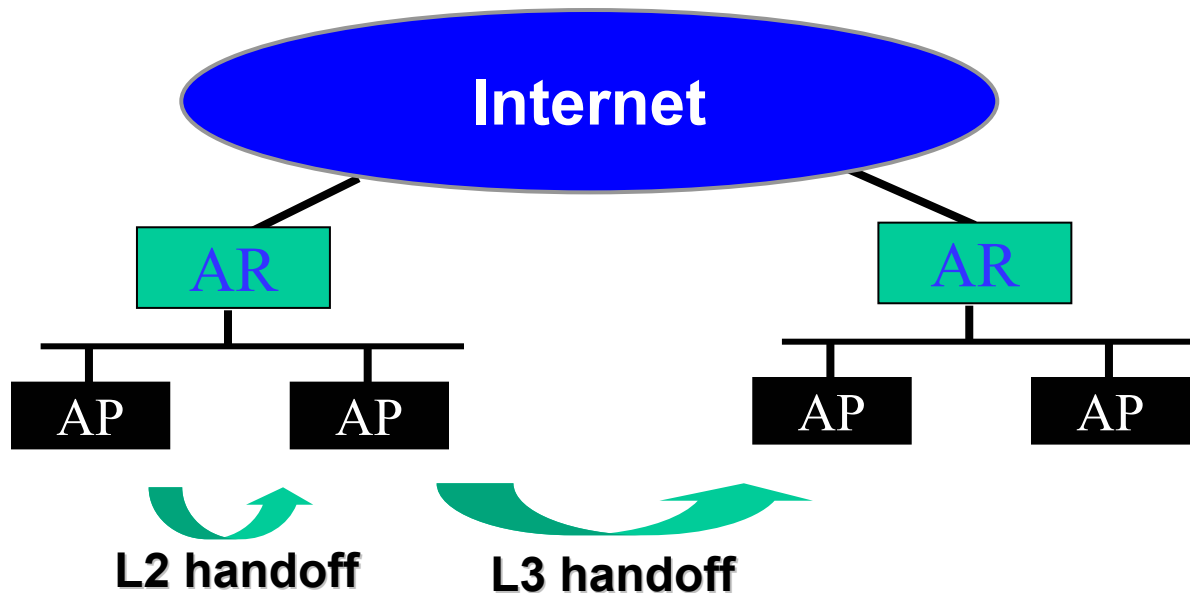
- 802 roaming agents may be required to handle this case