Three standards: 802.1Qbz, 802.1ACxx, 802.11ak

Norman Finn
Rev 1

May 14, 2013

Three-step process

- Agree on an approach
  - We’re getting close
- Divide up the work
  - The subject of this deck
- Do it.
  - TBD.

Divide the work – pretty obvious

- Tagging LLC media.
  - 802.1Qbz – that's the description of adding a Q-tag.
- Bridge/AP interface
  - 802.11ak – we need to modify the AP/DS interface to the bundle-of-links model.
  - 802.1AC –
    - Change the current 802.11 support to 802.11 support via the Portal; and
    - Add a new section for 802.11 support via the AP/DS interface.
  - 802.1Qbz necessary – use the AP/DS interface
- Support of 4-address format:
  - "All-but-one" multicast Receiver Addresses: 802.11ak.
  - General 4-address considerations: 802.11ak.

Divide the work – pretty obvious

- Idea of a separate BSS for multi-VLAN 4-address possibly-a-bridge stations
  - 802.11ak – Not clear (to this author) how much the VLAN-per-BSS notion is embedded into 802.11 and how much it is simply a common practice.
- Restricting certain BSSs to multi-VLAN 4-address possibly-a-bridge stations.
  - 802.11ak – Do beacons have to be altered? Join mechanisms?

Divide the work – **Do it or not??**

- AP-AP wireless links for use by Bridge
  - 802.11ak? Later 802.11 project?
- Elaborate multicast Receiver Address scheme
  - 802.1ak? Later 802.11 project? – More detailed than “all-but-one” requires either restriction to 24 stations/BSS (unlikely) or a method for distributing address-to-vector mappings (not trivial).

Divide the work – **Who does it?**

- Heuristics for representing 802.11 “links” to SPB and xSTP.
  - WHERE? Could be 802.11ak, 802.1AC, or 802.1Qbz.
- Heuristics for reporting more complex characteristics of 802.11 “links” than just speed (= 1/cost) to IS-IS and/or other protocols.
  - WHERE? Could be 802.11ak, 802.1AC, or 802.1Qbz.

Thank you.