

CSN & 802.11 BSS Bridging

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Abstract

This presentation describes the duality of BSS L2 Bridge

The “BSS Bridge” Model is a function of the protocol

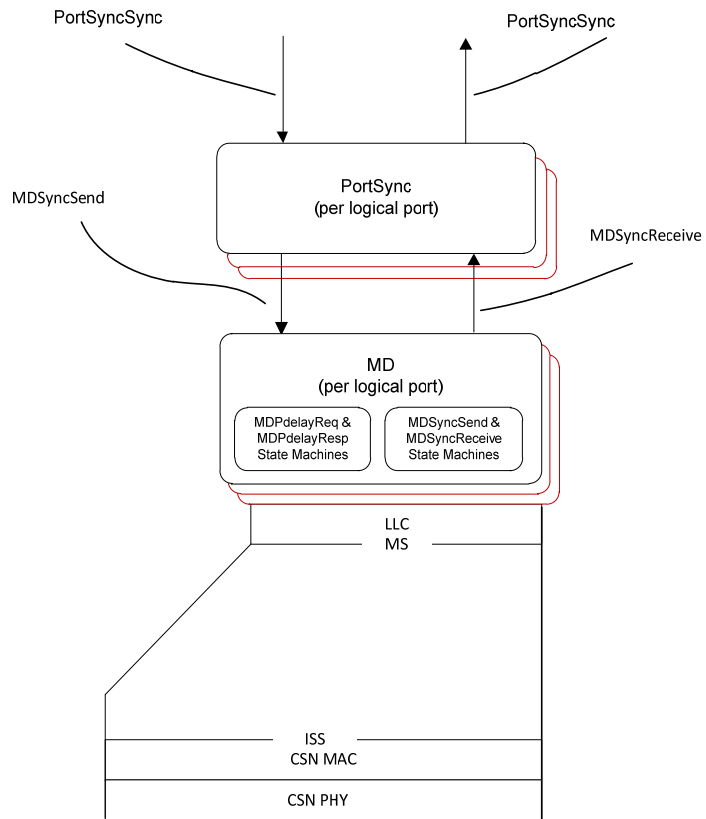
For P2P protocol the P2P model applies:

- **but should take advantage of the 802.11 Multicast capability to send MC messages**
 - Virtual MAC port for Multicast

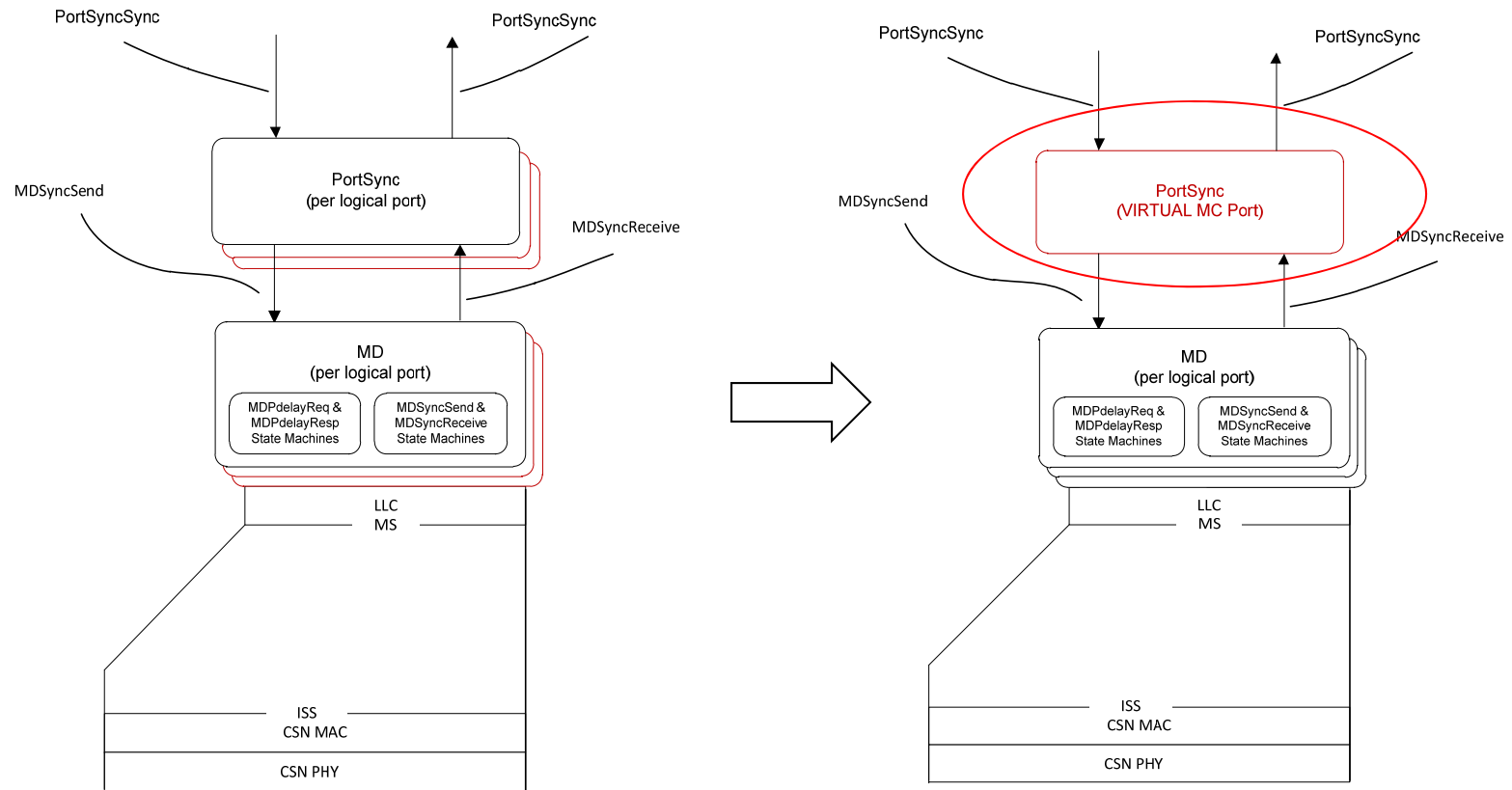
For protocol that requires AP functions, the “distributed Bridge” model applies:

- Such BW reservation, encryption, ...

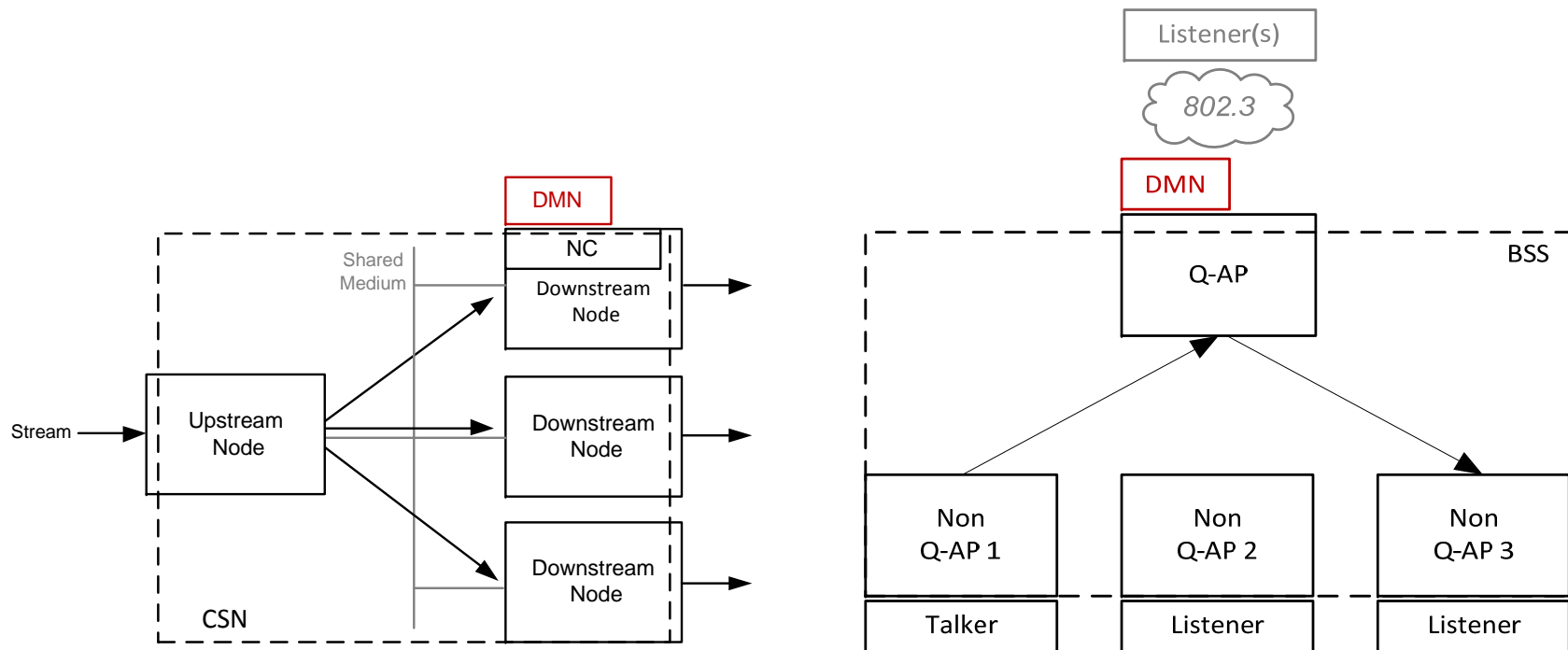
Example -802.1AS Timing Protocol



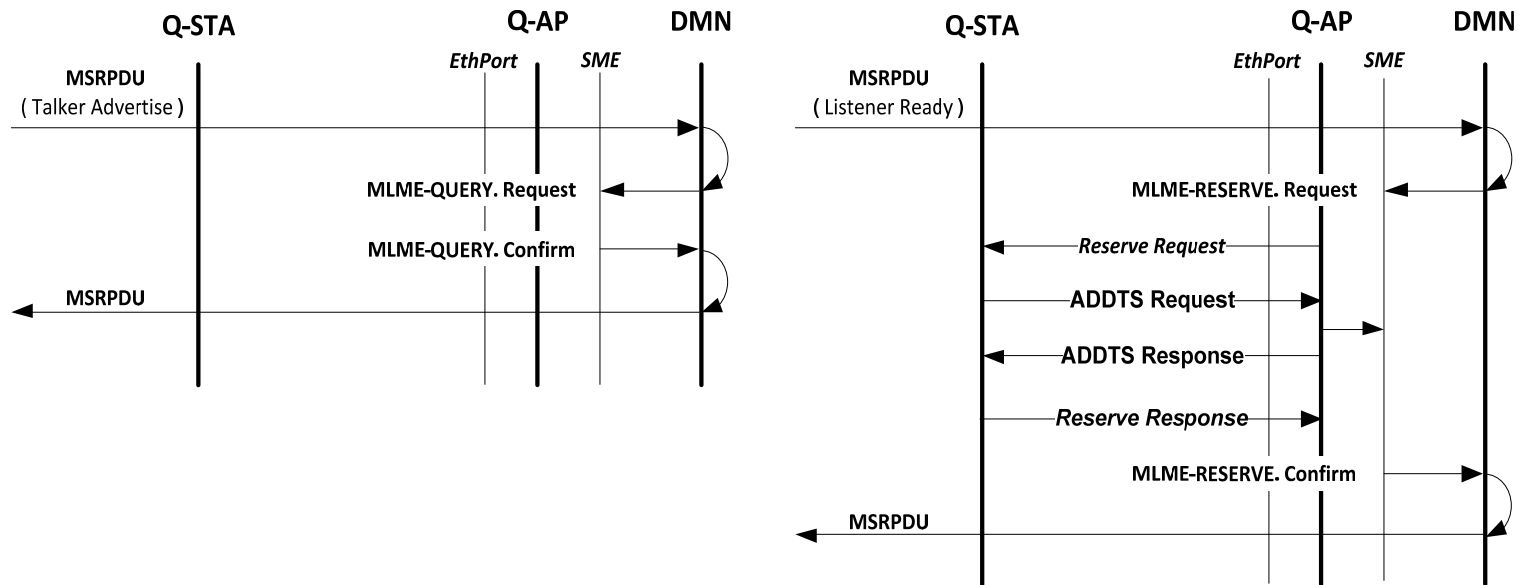
Proposal - 802.1AS Timing Protocol



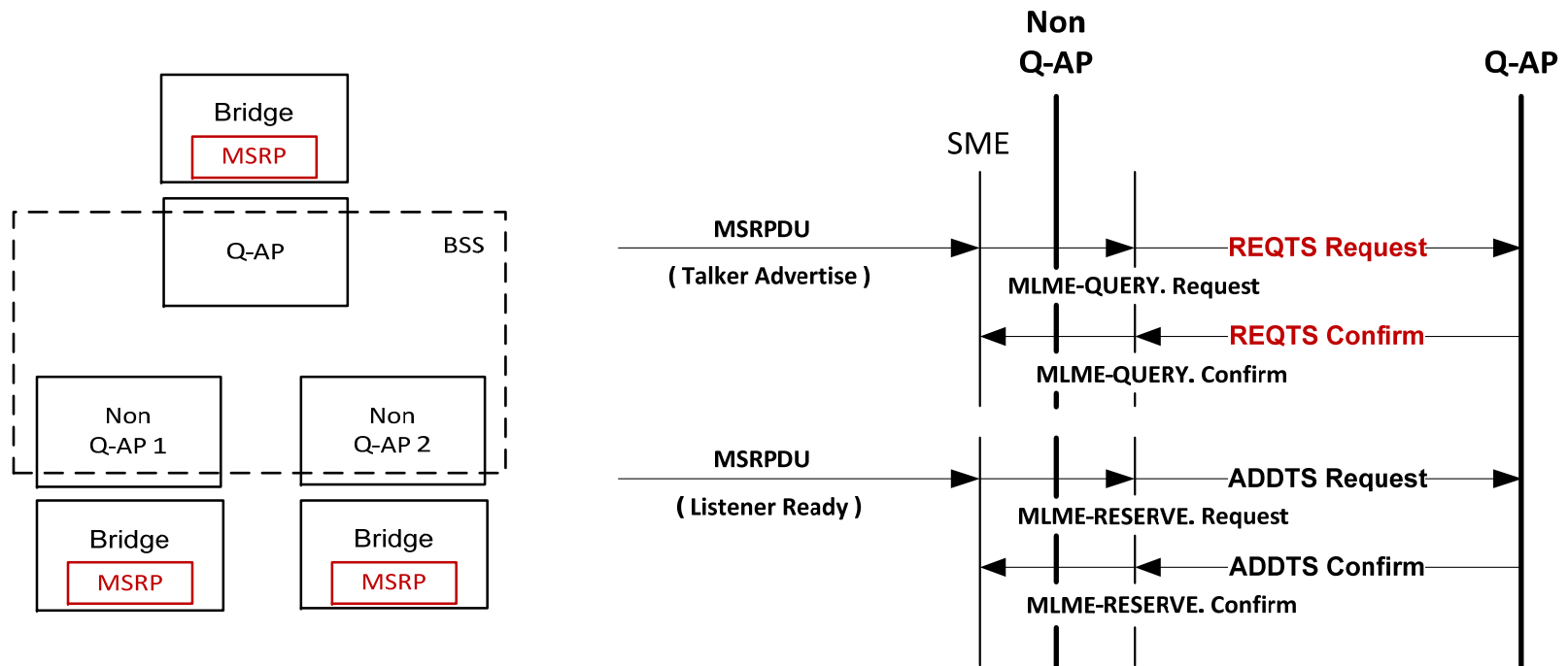
Example –MSRP BW Reservation Protocol



Example –MSRP BW Reservation Protocol



Proposal - MSRP BW Reservation Protocol



Wireless Link Metrics Challenge

Define Link Metrics and Computation that:

- **are meaningful to the “wired bridge” protocols**
 - “Link speed”: meaningful ? A wireless link “link speed” is a function of the bit rate, error rate and clear channel assessment ?
 - Link Delay ?
 - Link Quality ?
 - Variance ? Size of the measurement window ?
 - Hysteresis thresholds ?
- **are coherent across multi-vendor implementations**
 - Standardized computation

References

[1] IEEE 802.1AS, Annex E

<http://standards.ieee.org/getieee802/download/802.1AS-2011.pdf>

[2] IEEE 802.1Q-2011, Annex C

<http://standards.ieee.org/getieee802/download/802.1Q-2011.pdf>