ITU-T G.hn support in 802.1Qat

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Kevin Stanton, Intel Corporation IEEE 802.1 plenary, March 2010, Orlando FL

Overview

- The ITU-T G.hn home networking standard defines a protocol to reserve bandwidth
- 802.1Qat defines a Stream Reservation Protocol
  - End-to-end reservations
- Interoperability of SRP across various media requires mapping down from 802.1Qat and/or up from the media standard
- 190 words are proposed as follows:

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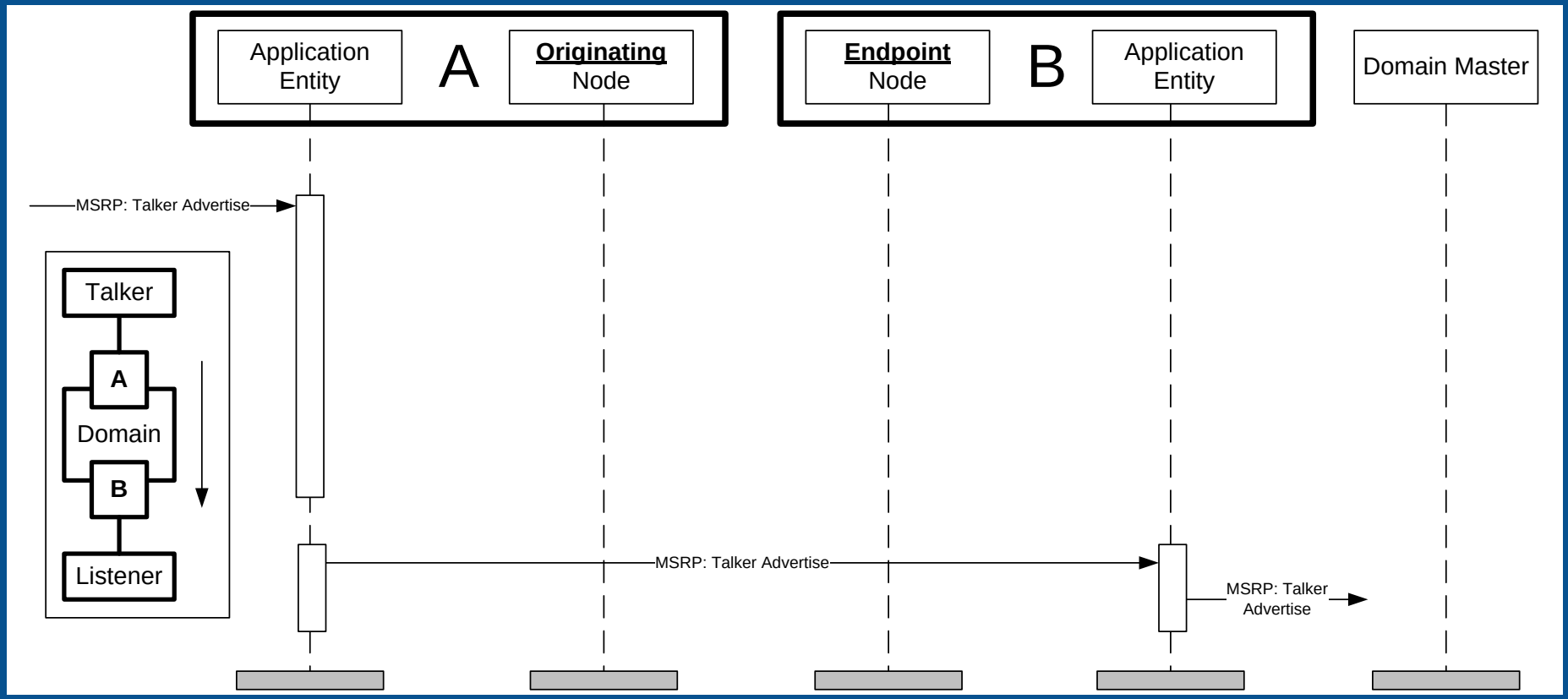
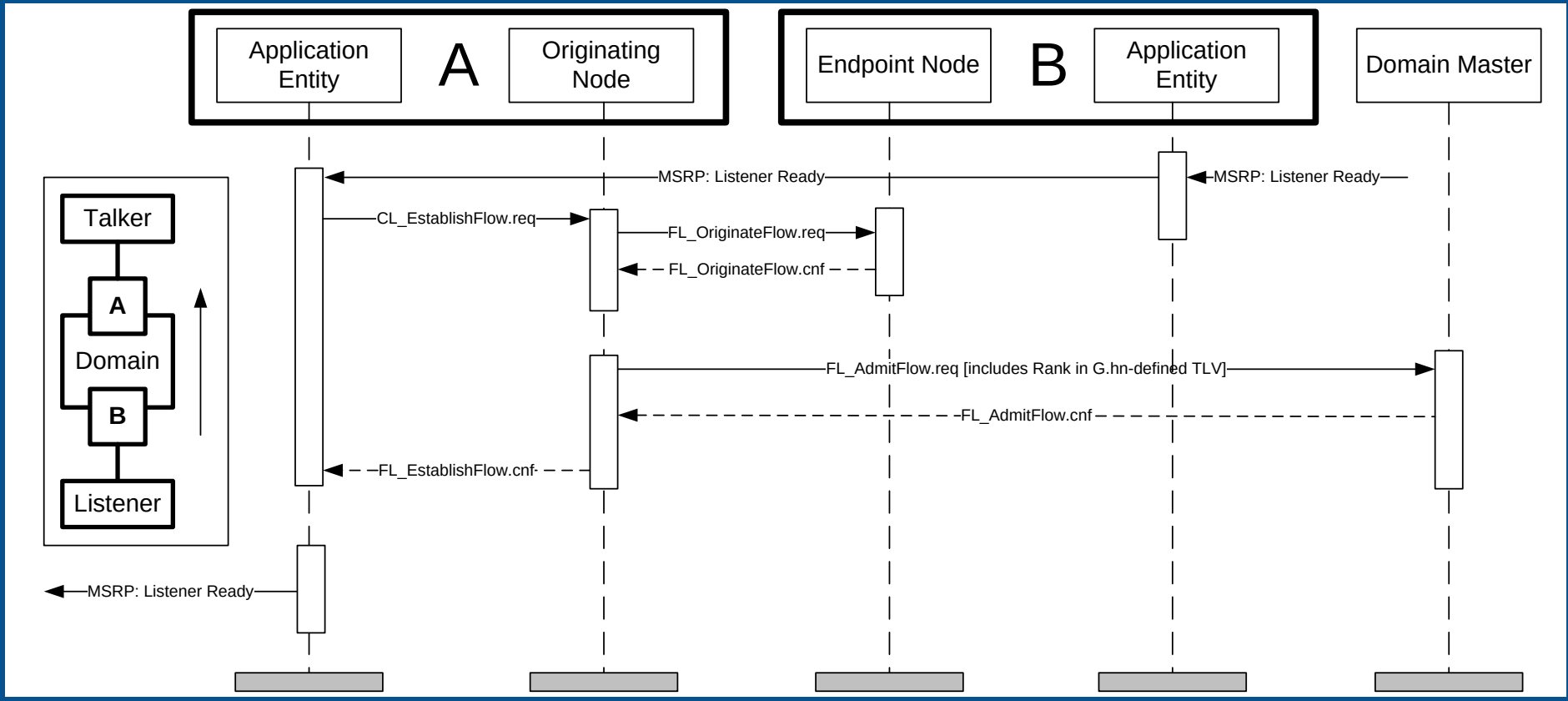
- **Q.4 MSRP behavior on ITU-T G.hn networks:**
  An ITU-T G.hn (G.hn) network is coordinated, shared, and operates over a variety of physical media including coax cables and home AC power lines. The G.hn-specific behavior of MSRP is defined here.
  - **Q.4.1 MSRPDU handling by bridges containing G.hn port(s)**
    A bridge that implements G.hn on any port exhibits the same behavior for that G.hn port as it does for a non-CSN port with the following exception: The Rank field of every TalkerAdvertise or TalkerFailed declarations received on a G.hn port shall be passed to the Domain Master using the VENDOR_SPECIFIC field of the CL_EstablishFlow.req primitive as defined in G.hn.
  - **Q.4.2 The centralized MSRP function**
    G.hn networks implement a Designated MSRP Node (DMN) as follows: When the node containing the Domain Master (also called the NC in this clause) receives a FL_AdmitFlow.req primitive with a Rank equal to that of an Emergency stream, it shall modify or terminate non-emergency reservations as necessary to ensure resources are made available for the emergency stream.
  - **Q.4.3.2 MSRP TSpec to G.hn TSPEC mapping**
    Mapping of the TSPEC of MSRP to that of G.hn unspecified in this standard.

Downstream behavior



Upstream behavior



Backup

Minimal G.hn statement in 802.1Qat

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