Presentation from bridging adhoc for joint meeting with 801.17

Summary from Bridging Adhoc Meeting 11/13/01

Bridging Adhoc Attendees

- Albert Herrera, Spencer Dawkins, Jim Kao, Mike Takefman, Marc Holness, Anoop Ghanwani, John Coulter, Raj Sharma, Peter Jones, Vinay Bannai, CP. Fu, Henry Hsiaw, F Kanehara, and R Castellano

Adhoc Scope of Work

- Form an ad-hoc to prepare a presentation for the WG and have it approved by the WG for discussion with 802.1 on the following topics:

1. simple compliance with 802.1d

2. spatial re-use with 802.1d

3. encapsulation bridging with 802.1d

4. customer separation IDs

5. assignment of type values

6. MTU considerations for using Ethernet PHY in RPR

Objectives for Meeting with 802.1

- Discuss with 802.1WG the various ideas and/or proposals discussed within 802.17WG that pertain to the topics of bridging, Customer Separation Ids, and type definition.

- Feedback from 802.1 regarding scope and compliance
  - Assessment from 802.1 whether they see any issues with proposals being made by 802.17 as they relate to 802 architecture, and 802.1 bridging architecture. Discuss with 802.1 the scope of work and division of responsibility for these various ideas. Discuss how 802.1 and 802.17 proceeds for the areas which are believed to have significant overlap or belong to 802.1?

Topics /1

1. ## Customer Separation ID
   – Presentation to 802.1 on 802.17 needs/requirements for CID.
   – Scope/Interest questions: Does 802.1 consider customer separation ID within 802.1 scope or within the scope of 802.17? Have other groups expressed an interest or need in CID? Would 802.1 endorse 802.17 to define and propose CID solution to 802.1.
   – Does 802.1 see any issues with the different possible CID semantics under consideration by 802.17 : Globally unique within the bridged LAN/MAN network, or locally unique within each individual LAN/MAN segment of the bridged network. Feedback from 802.1 on 802.17 CID size requirements? (What are 802.17 requirements? millions or billions Harry?) Notion of CID being separate from 802.1q VIDs from an administration perspective.

Topics /2

2. Transparent Bridging Compatibility

   – Presentation 802.1 on how 802.17 intends to meet transparent bridging compatibility. Slides including : bridge reference model, compatibility req's, MAC ref model, ISS mapping, support for STP, packet walk-through

3. Transparent Bridging with Spatial Reuse / Ring bandwidth Enhancements

   – Presentation to 802.1 on 802.17 spatial reuse requirement, and TB methods under consideration for achieving spatial reuse.

     a. MAC specific destination/source ID stripping (explicit reference)
     b. Filtering database in transit path for destination stripping
     c. Full encapsulation header with explicit 48bit station MAC addresses w/ explicit type

Topics /3

4. Encapsulation Bridging for MAC address scaleability in service provider networks
   - Define 802.17 applications/needs for encapsulation bridging (slides from MH presentation). Feedback from 802.1 regarding encap_bridging consistency with 802 and 802.1 architecture. Is this within the scope of 802.1 and something they want to address in future and/or something that can be defined by 802.17 with 802.1 review? Have other 802 groups shown any interest in encap_bridging or solving overall bridge filtering database scaleability issues?

5. Assignment of type values
   - Need for Frame type definitions have been proposed for 802.17 for : control messaging, header extensions for data packets (CID, protected headers, etc.), new data formats (TDM or other data payload types).
   - Is 802.17 free to define their own frame type values/semantics or must they conform to existing frame type usage defined by IEEE (for example 0x800 for IP)?
   - Who would administer 802.17 type values and what is the registration process?

6. **Ethernet PHY**

   - 802.17 standard plans to support Ethernet PHYs in some applications to carry 802.17 frames which may result in frames sizes larger than 1522 bytes. Should we discuss this topic with 802.1???

Thank You !!!