802.17b Requirements & Features

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Why Have Requirements?

- Selecting requirements / features allows:
  - Determine where consensus has been achieved and where it needs to be achieved
  - Marketing types to determine if the standard addresses the market need
  - The WG to limit the scope of the project
    - An important aid to the rapid completion of the standard
  - A check for whether the standard is complete
- Requirements also allow new-comers to get a good sense of what the project is trying to achieve

Are Requirements Handcuffs?

- Adding/removing text from the standard should be gauged in the context the requirements
- In the end, WG ballot and the CRGs are the ultimate determination of whether a feature is in or out
  - Requirements provide focus and some project memory
  - Over the course of the project, new information can cause the group to revisit a requirement/feature

How to Proceed?

- Ideally the WG should reach closure on requirements/features this meeting
  - Its always possible for a requirement to be added (or deleted) later
- Open discussion to add items to the requirements list
  - Straw polls on each item to get a sense of consensus and enable disagreeing parties to discuss offline
  - Final voting to be held Wednesday or Thursday

Presentation of a Requirement/Feature

- Text of the requirement
  - Make sure that language is clear and the intent comes through
- Can the feature be optionally implemented?
- Reason for the requirement
  - What does it achieve?
  - What does it limit?
  - How does it help make the standard a success?

Requirement #1

- 802.17b shall define a sublayer optional to the 802.17 base MAC providing spatial reuse for non local unicast traffic between clients (bridges or hosts) of 802.17b MACs.
- This is the base feature of the standard.

Requirement #2

- All operations shall be in line with the currently defined standard for 802.1D/Q.
  - Any required operations of the 802.17b standard should be defined such that they can be implemented easily in bridge hardware. The intent is to ensure that the SAS DB is substantially similar to the 802.1 FDB, so that they are easily merged.
- Required

Requirement #3

- The 802.17b standard shall be defined such that it does not obsolete compliant 802.17-2004 MAC implementations.
- Required
- Any investment in 802 MAC technology should be available to by 802.17b. The market for 802.17 is so new, that any such change might seriously endanger adoption of 802.17.

Req #4

- The 802.17b standard shall be defined such that it causes minimal functional / document changes to the existing normative clauses of the 802.17 standard
- Required
- This is not an open project for people to tinker with the 802.17 standard. Errors in the standard should be fixed using the maintenance process. Other feature additions to the standard should follow the proper process for new projects.

Req #5

- The 802.17b standard shall be defined such that it allows operation of both split line-card interfaces and single linecard interfaces
- Required
- High availability operations would split the RPR interface over 2 cards to allow for in system replacement of faulty components. .17 supports this feature, so there should be no loss of it