Baseline for Classification

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Recap of Progress & State To-Date

- Identified 2 problems, proposed unified solution
  - L2 capable PSE end-points using L2 at minimal cost
  - L1 capable PSE mid-spans requiring L1 solution
- Have made progress on L2
- Would like to
  - Maintain a unified solution for both problems
  - Keep moving the Task Force forward
  - Avoid splitting out the mid-span solution
  - Keep it simple
- How do we achieve this?

Simple Classification Baseline

PSE

- AT L2: Detects and classifies class 4. Communicates with PD in L2. Mutual ID achieved.
- AT L1: Detects and classifies class 4. Repeats classification (“dumb ping-pong”). Mutual ID achieved.
- AT PSEs shall choose the classification extension used.
- Legacy PSEs: Unchanged

PD

- AT PD: Use class 4 for all 802.3at PDs. After 1st classification, either
  - L2 communication which identifies 802.3at endspan
  - Second classification (“dumb ping-pong”). Identifies 802.3at midspan
  - Power-on after one classification cycle. Identifies legacy PSE
- Legacy PDs: Unchanged

Power Limits after classifying a Class 4 PD

- AT L2 PSEs enforce legacy limit until L2 is up
- AT L1 PSEs enforce maximum power limit per 802.3at objective
- AT PDs operate under class 0 limits until either L2 is up or second class and power-on
- Legacy PDs and PSEs Unchanged

Motion

- Move that:

The IEEE 802.3at Task Force adopts diab_schindler_1106_1.pdf as the baseline for 802.3at classification as modified.

- M: W. Diab
- S: F. Schindler
- All Y: 37 N: 0 A: 3
- .3 Y: 31 N: 0 A: 2

Tech >= 75%