

4PID Ad hoc Report

IEEE 802.3: 4PPOE Task Force

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Ad Hoc Report

- Meeting held 24 Feb 2015, 17 attendees
- 2 Presentations (one in reserve)
 - [4PID Ad Hoc – Review](#) (G. Zimmerman)
 - Link is to version updated with meeting notes
 - 4PID and Detection (D. Dwelley)
- Vigorous and useful discussion on where we are, what we agree on, and what we don't (see posted [minutes](#))

Discussion Summary - Agreements

- Agreement: Connection Check (CC) is part of or prestep for 4PID, and DA has the ball on that for a next turn of text.
 - Output of CC is ['are the two pair sets connected'] - 'Possible Option 1' or 'Possible Option 2'
 - Determining invalidity is a separate step.
 - CC is a test in our toolbox, useful for multiple things: used for 4PID, to interpret results of class, and possibly DC disconnect or other functions.
- Agreement – 4PID can be expressed logically as:
 $(\text{valid_detect_A}) * (\text{valid_detect_B}) * (\text{CC} = \text{Option 1}) +$
 $(\text{valid_detect_A}) * (\text{valid_detect_B}) * (\text{CC} = \text{Option 2}) * [x?]$

Discussion Summary - Disagreements

- Disagreement is on what condition “x” is:
 - View 1: $x = \text{TRUE}$ (unconditional) [with secondary test optional]
 - View 2: $x = (\text{when one pair set is powered}) * (\text{unpowered pair set} = \text{valid_sig})$
 - Always FALSE if unpowered pair set is required to have invalid signature
 - Agreed – fully at compliant option 2 PDs will give $x = \text{FALSE}$.
 - Asserted: Test has value because it enables 4P powering of pre-standard (not full at) 4P capable PDs are enabled by unpowered pair set = valid_sig.
 - Alternative: use enforcement of classification power levels to exclude fully at compliant option 2 PDs that View 2 would give $x = \text{FALSE}$.
- Next Step: Proponents to work offline to resolve/narrow disagreement.