4P-ID Ad Hoc Report

Contribution to IEEE 802.3: 4PPOE Task Force

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Summary

- One telephonic meetings held (1 Oct 2014), 2 contributions
 - Darshan: Part A: Existing compliant PD implementations, Part B: Proposal for detecting Type 1/2 capable of 4P operation: Layer 1 Method to Detect 4PPoE Capable Legacy Type 1 & 2 PD Rev 006 (update to previous presentation)
 - Dwelley: 4PID Proposal

Presentation Summary

- Darshan Rev006:
 - Examples of existing 802.3-2012 Type 1 and Type 2 PDs
 - Proposes flow chart method detecting various options, powering either 2P or 4P
- Dwelley Proposal:
 - 4PID identifies presence of a pair of valid signature resistances, and excludes known invalid arrangements
 - Specify test criteria, not test method

Progress Made

- Understanding differences between proposals:
 - What is the meaning of the "57V language"
 - Various interpretations, needs to be fixed as a separate topic
 - Whether and how to power "Option 2b PD"
 - two identical load, each requires full Type 1 or Type 2 power.
 Only one load is capable working at a time.
 - Will a 4P PSE be required by the standard to be capable of providing 2 pair-only power?
 - Grew into discussion of interoperability & backwards compatibility
 - Issue later considered a larger scope than the ad hoc's nominal charter

Next Steps

- Next Step: the presenters were to work together on a unified presentation to try to minimize differences and distinguish decisions to be made, where they were required.
 - The two presenters held calls and reportedly were making progress, and asked for more time to work issues, so the second ad hoc call was postponed.
 - Possible ad hoc meeting during the Plenary week, if time permits