The Phantom Compromise

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Two Camps

- ## Software phantom
  - Low cost
  - Can be made to work today with TXI
  - May have problem with TKP in the future
- ## Hardware phantom
  - Higher cost
  - Known to work today with TXI
  - Can work with future TKP schemes

Why not have both schemes?

- Registration Request Frame contains S_PD. This indicates the type of phantom the station supports
  - X'0001' indicates *classic* hardware phantom
  - X'0002' indicates software phantom (new)
- NIC tries X'0001' first, the C-Port may reject the frame with Access Denied if it does not support hardware phantom

NIC behaviour

- NIC tries X'0001' first, the C-Port may reject the frame with Access Denied if it does not support hardware phantom.

- NIC then tires X'0002'. The C-Port, having rejected the hardware phantom, will accept the software phantom.

C-Port behaviour

Remember: Repeat Path

- 100Mbit/s TXI only C-Port, no phantom

  – Low cost

  – Rejects hardware phantom, accepts software phantom.

  – Not future proof.

- 100Mbit/s TXI only C-Port, with phantom

  – Higher cost

  – Accepts hardware phantom or software phantom.

  – Future proof.

- 4/16/100Mbit/s C-Port

  – Requires phantom

  – Accepts hardware phantom or software phantom.

Why?

- Gives one camp the ability to produce lowest cost port, at the cost of no future proofing.
- Gives the other camp the ability to future proof their product, at the cost of cost!

Addendum to the "No Phantom" proposal.

- The modification to registration request S_PD is required for the software phantom solution.