

Use Case Proposals for IEEE802.3cc

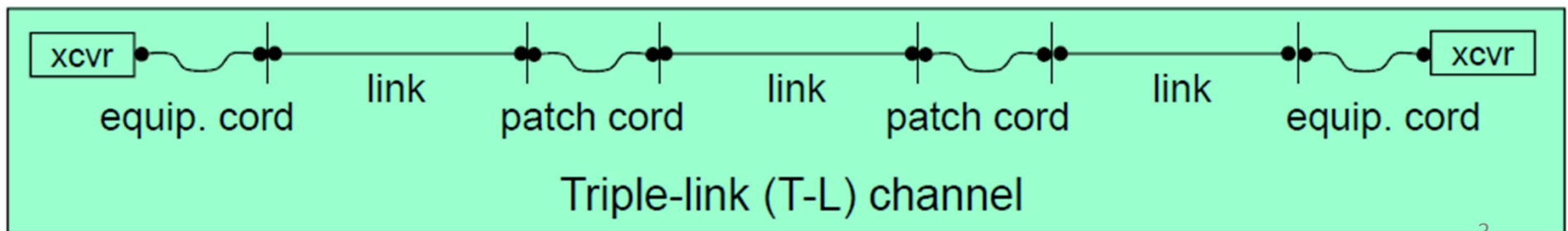
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Overview

- Comment submitted regarding need for MPI penalty to be considered in link budget
- Need to agree use case
 - number of connections and,
 - where loss is located in link
- Presentation provides some models and proposals for further discussion

25GBASE-LR

- Propose using triple link model for 10km case
 - Established in IEEE802.3bs and IEEE802.3cd
 - kolesar_3bs_01_0514
 - 6.3dB loss budget
 - Tx Reflectance = -12dB, Rx Reflectance = -26dB
 - 6 connectors with -35dB ORL (LC connectors)
 - MPI calculated with loss just before Rx



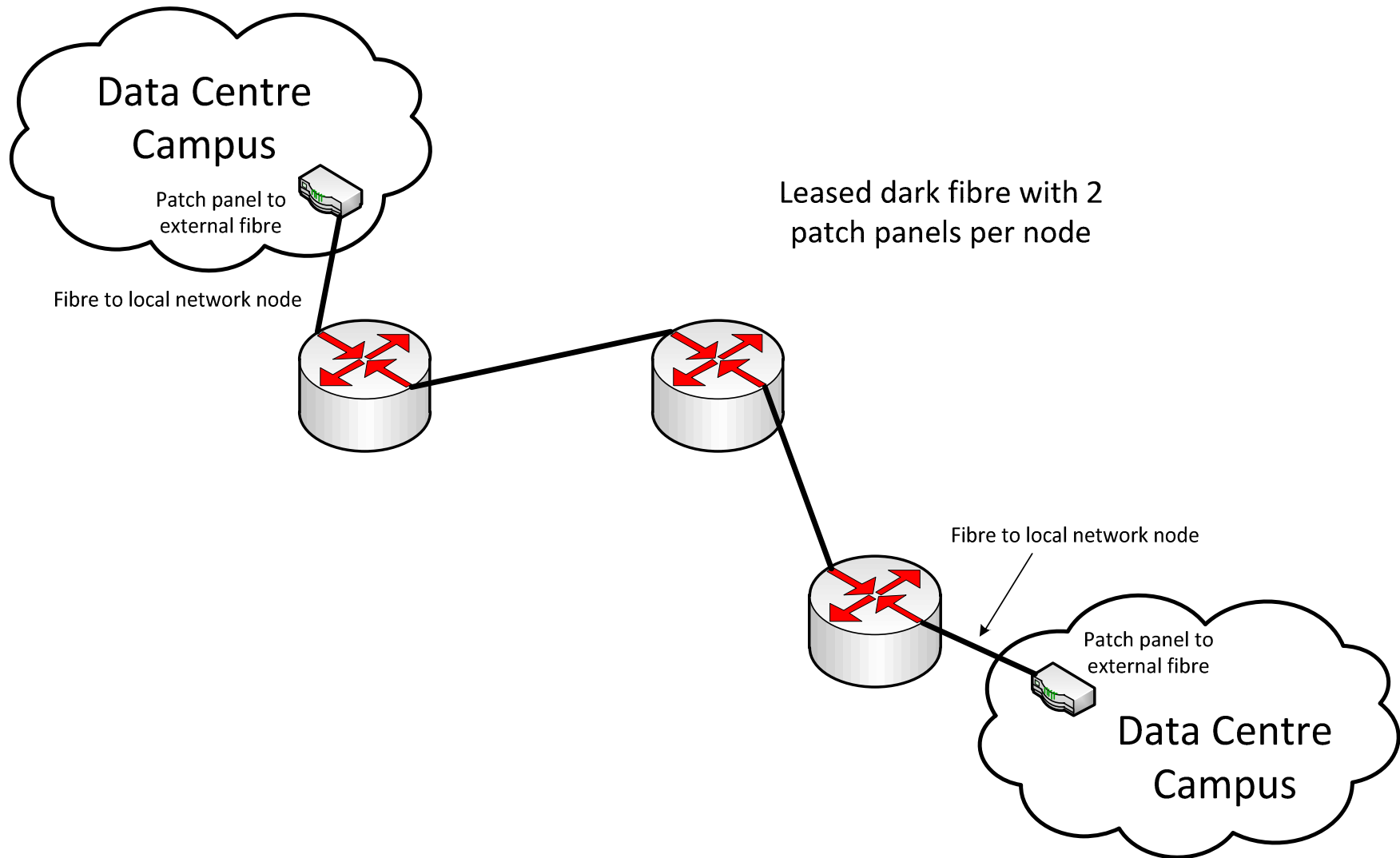
25GBASE-LR

- Current maximum discrete reflectance in link budget is -26dB
- Also true for 100GBASE-LR4
- Do we need to consider this or assume that connectors deployed over the last 5 years are generally <-35dB reflectance?
- Cannot use MPI values used in 802.3Bs and 802.3cd as these are for PAM4

25GBASE-ER

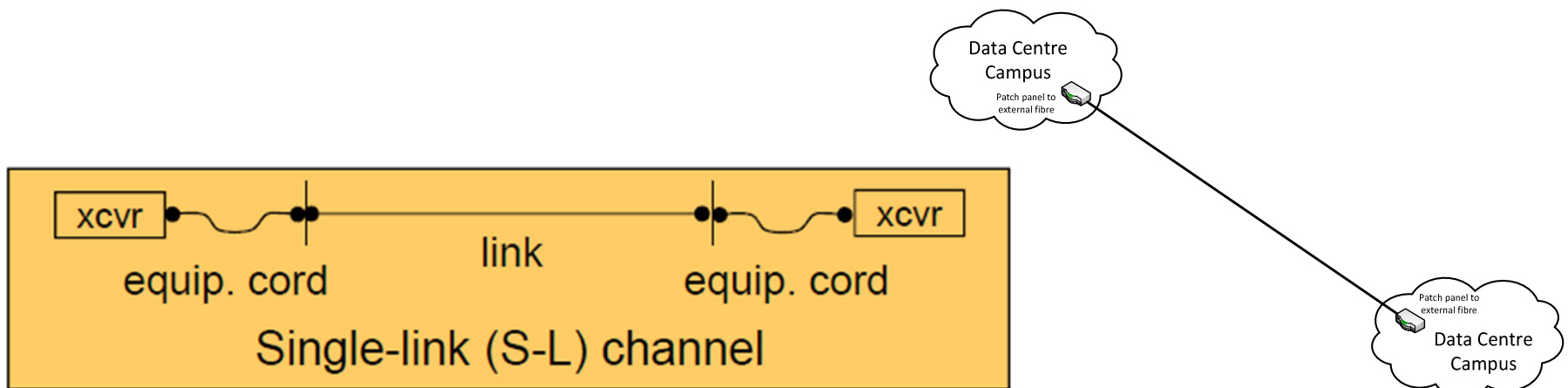
- Use case not established for this link length
- Typically application is between campuses
- Key question:
 - Is it a direct fibre connection between campuses or does it run via switch nodes?
 - Are there any patch panels mid-span in the fibre?

Leased fibre scenario (dark fibre)



Data Centre at the node scenario

- Can be considered extended length single link model
- Could be triple link if passing through intermediate node
 - Assuming 2 patch panels per node



Next steps

- Build consensus on LR use case
- Build consensus on ER use case
- Run MPI calculations