Framework and Information model for G. 709 Optical Transport Network (OTN)

draft-ietf-ccamp-g709-framework-04

draft-ietf-ccamp-otn-g709-info-model-00
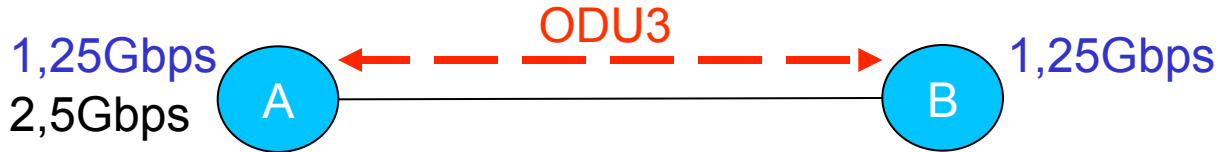
CCAMP WG, IETF 81th Quebec City

Status of the drafts

- Framework draft – Version 04 of the WG document stable

- Info model draft - Version 04 of draft-bccg-ccamp-otn-g709-info-model has become a WG from Prague meeting. Version 00 of the WG document

- Both document MIGHT need to be updated since some open points are still pending and need clarification from CCAMP :

  - TS granularity/Payload type auto-negotiation.

  - Mapping of "non OTN client" over ODU server trails.

    - Check needed on IACD format for OTN in MLN/MRN.

  - Editorial notes already present in encoding notes need to be addressed into the Framework and Info documents.

  - Ongoing discussion on open requirements (dedicated presentation following).

Trib Slot granularity/Payload type

- At interface commissioning time there is no default payload type value. The type of payload is related to TS granularity and is provided as soon as a client request is received on the server trail.

  - If both interface support at least 1,25 TS, the link will work @1,25 TS

    1,25Gbps
    2,5Gbps
    (A) ◄ - - - ODU3 - - - ► (B)
    1,25Gbps

  - If at least on of the interfaces supports only 2,5 TS, the link will work @2,5 TS

    1,25Gbps
    2,5Gbps
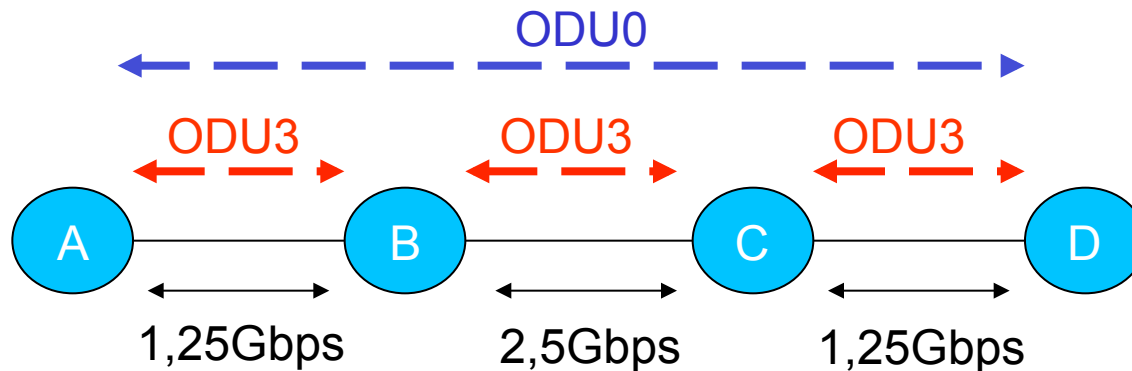   (A) ◄ - - - ODU3 - - - ► (B)
    2,5Gbps

- Impacts:

  - If no auto-negotiation is active, no LMP present, Payload type is manually configured (no check available)

  - Link end nodes must be aware of the TS for correctly extracting the payload from the frame

Trib Slot granularity/Payload type

- At interface commissioning time there is no default payload type value. The type of payload is related to TS granularity and is provided as soon as a client request is received on the server trail.

- Switching

  - In those cases where a 2,5 TS is used and a service requiring 1,25 TS is transparently switched, it is possible to set up an LSP at 1,25 TS (e.g. ODU0) over an higher order ODU (e.g. ODU3) using the 2.5 TS.

ODU0

ODU3   ODU3   ODU3

A   B   C   D

1,25Gbps   2,5Gbps   1,25Gbps

Trib Slot granularity/Payload type

- At interface commissioning time there is no default payload type value. The type of payload is related to TS granularity and is provided as soon as a client request is received on the server trail.

- Termination

  - In those case where the termination of a 1,25 TS service (e.g. ODU0) is required, an interface with auto-negotiation result equal to 1,25 TS must be preset. In figure below there are 2 interfaces between C and D. An ODU0 can be terminated on D only if the upper interface is chosen

ODU0

ODU3

ODU3

ODU3

1,25Gbps

A   B   C   D

1,25Gbps

1,25Gbps

2,5Gbps