



# Virtual Links

Proposal for addition to FC-BB-5

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# The Issue

- The term Virtual Link is used to describe the logical link formed between the FCoE LEPs:

**3.5.20 Virtual Link:** The logical link connecting two FCoE\_LEPs (see 7.5)  
(from 09-021v0)

- The identity of a virtual link is defined as follows

7.2: An FCoE Virtual Link is identified by the pair of MAC addresses of the two link end-points. FCoE supports VN\_Port to VF\_Port Virtual Links and VE\_Port to VE\_Port Virtual Links. (from 09-021v0)

- For VN\_Port to VF\_Port Virtual Links, Virtual Link Maintenance Protocol (7.7.4) requires LKAs to be sent using the E\_Node MAC address every FKA\_ADV\_PERIOD to provide maintenance of the Virtual Link
- The protocol also requires to be sent on behalf of each VN\_Port using the VN\_Port's MAC address every 90 seconds. This LKA FIP message also contains a VN\_Port identification descriptor. This 3-tuple consisting of the VN\_Port identifier, VN\_Port MAC address and FCF LEP MAC address can also be referred to as a Virtual Link, but does not fit the definition. It would be useful to have a term to refer to this logical link.

# Proposed Definitions

- **Virtual Link**  
The logical link connecting two FCoE\_Entities (see 7.5)
- **Ethernet Virtual Link**  
The logical link connecting two FCoE\_Link End Points that is identified by the MAC addresses of the two Link End Points
- **FC Virtual Link**  
A Virtual Link that connects a VN\_Port to a VF\_Port and is identified by the FC\_ID and MAC address of the VN\_Port and the MAC address of the Link End Point of the VF\_Port.

Note to editor: To implement, just add the word Ethernet before current occurrences of Virtual Link and introduce the new FC Virtual Link where applicable.