

1 Distributed FCF Subclause Restructuring

Add section 4.2.5.4

4.2.5.4 FC-BB_E VA_Port to VA_Port reference model

Figure 1 shows the VA_Port to VA_Port reference model. FCoE frames originated by a VA_Port are transported over the Lossless Ethernet network to the VA_Port that the VA_Port is logically connected to.

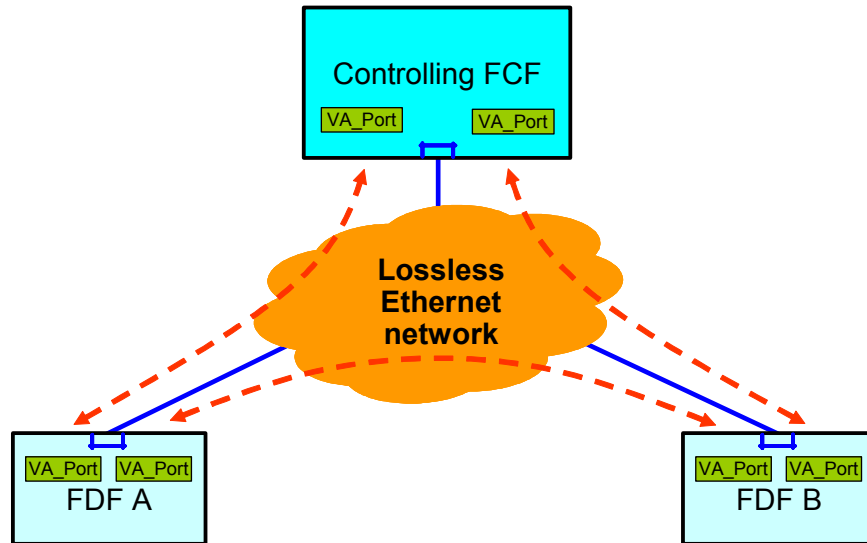


Figure 1 – FC-BB_E VA_Port to VA_Port reference model

Add the following text at the end of 7.2:

Figure 2 shows an example of FCoE VA_Port to VA_Port network configuration.

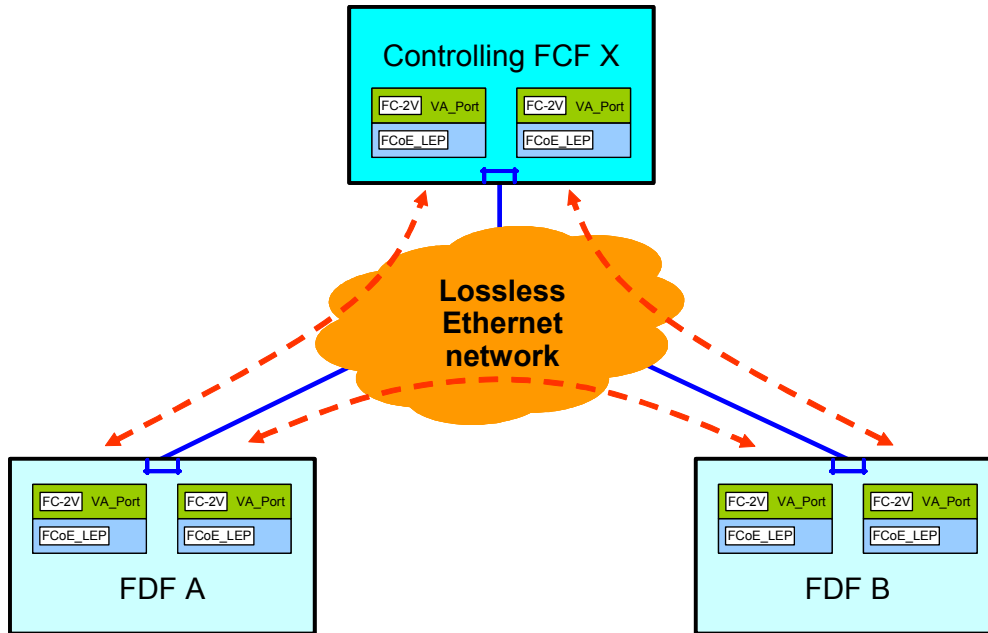


Figure 2 – FCoE VA_Port to VA_Port network configuration example

Each of the two FDFs A and B depicted in figure 2 has a single physical Ethernet connection to the Lossless Ethernet network. The Controlling FCF X has a single physical Ethernet connection to the Lossless Ethernet network. Each FDF and Controlling FCF may instantiate multiple VA_Ports, connected to other VA_Ports through FCoE Virtual Links. The dotted lines in figure 31 depict possible VA_Port to VA_Port Virtual Links. In this case, a Lossless Ethernet network is reduced by FCoE to a set of point-to-point VA_Port to VA_Port Virtual Links where the VA_Port to VA_Port Fibre Channel protocols are able to operate.

Move the current 7.12.4 at the end of the current 7.6.

Move the current 7.12.2 to become the new 7.6.

Move the current 7.12.3 to become the new 7.7.

*Move the current 7.12.5.1 after the current 7.9.3.3, changing its title to “**FDF/Controlling FCF discovery**”, and applying the following changes to the text:*

~~An FDF is part of a Distributed FCF internal topology if the initialization exchanges with the Primary controlling FCF are completed. See FC-SW-6.~~

If an FDF is not part of ~~the a~~-Distributed FCF internal topology (see FC-SW-6):

- a) all VA_Port capable FDF-MACs on that FDF shall transmit Discovery Advertisements with the Fabric_Name field of the Fabric Descriptor set to zero; and
- b) all VF_Port capable FDF-MACs on that FDF shall not transmit Discovery Advertisements.

If an FDF is part of ~~the a~~-Distributed FCF internal topology (see FC-SW-6), all VA_Port capable and VF_Port capable FDF-MACs on that FDF shall ~~transmit Discovery Advertisements having the Distributed FCF's Fabric_Name in the Fabric_Name field of the Fabric Descriptor. have the Fabric_Name received from the Primary Controlling FCF in the Fabric_Name field of the Fabric Descriptor in all transmitted Discovery Advertisements.~~ transmit Discovery Advertisements having the Distributed FCF's Fabric_Name in the Fabric_Name field of the Fabric Descriptor.

Move the current 7.12.5.2 after the current 7.9.4.3, changing its title to “**VA_Port to VA_Port Virtual Links**”, and applying the following changes to the text:

In paragraph 6, remove the sentence:

~~VE_Port to VE_Port Virtual Links with VA_Port/VE_Port capable FCF-MACs belonging to the other Controlling FCF of the Primary/Secondary pair defining the Distributed FCF are used for the Redundancy protocol of the Distributed FCF (see FC-SW-6).~~

In paragraph 8, change the first sentence as follows:

~~When operational (i.e., when the Controlling FCF is in state P2 or S2 of the Controlling Switch Redundancy Protocol, see FC-SW-6),~~ A VA_Port/VE_Port capable FCF-MAC shall instantiate VA_Port to VA_Port Virtual Links with VA_Port capable FDF-MACs belonging to FDFs that are part of the Distributed FCF’s FDF Set and discovered by FIP discovery on the Lossless Ethernet network **only after its Controlling FCF established its role (see FC-SW-6).**

Change paragraph 10 as follows:

A VA_Port capable FDF-MAC shall initiate a FIP ELP Exchange with a discovered VA_Port capable FDF-MAC only **when its FDF is part of the Distributed FCF internal topology (see FC-SW-6) and the discovered FDF-MAC belongs to an FDF in the Distributed FCF’s FDF Set. if:**

- ~~a) it has already at least a VA_Port to VA_Port Virtual Link with the Primary Controlling FCF or another FDF;~~
- ~~b) it has received from the Primary Controlling FCF the Distributed FCF’s FDF Set through the DFMD-SW_ILS (see FC-SW-6); and~~
- ~~c) the discovered FDF-MAC belongs to an FDF in the Distributed FCF’s FDF Set.~~

Move the current 7.12.5.3 after the current 7.9.5.4, changing its title to “**VA_Port to VA_Port Virtual Link maintenance protocol**”.

Remove 7.12.1.

Make the text in 7.12.6 the only text of 7.12.

Remove definition 3.5.2 (Controlling FCF Set).

Change definition 3.5.1 to be:

Controlling FCF: A Controlling Switch (see FC-SW-6) that supports Lossless Ethernet MACs (see 7.12.2). ~~An FCF that is able to control a set of FDFs in order to create a Distributed FCF.~~

Change definition 3.5.17 to be:

FDF (FCoE Data-Plane Forwarder): An FCDF (see FC-SW-6) that supports Lossless Ethernet MACs (see 7.12.3). ~~A simplified FCoE switching entity that forwards FC frames among VA_Ports and VF_Ports through a FCDF Switching Element (see 7.12.3).~~

Put proper definition in FC-SW-6 for:

- when an FCDF is part of the Distributed Switch internal topology*
- when a Controlling Switch establishes its role*