Commenter:	Erik Smith (EMC)						
Sequence	**Tech/Edit**	**Page**	**Index**	**Comment**	**Proposed Solution**	**Status**	
1	E	xxi	Table	The final entry (Table H.1) in the table list contains bold formatted characters.	Remove the bold format.		
2	E	4	Figure 4	Figure 4 does not include a VA_Port reference.	Update Figure 4 to include a VA_Port		
3	E	8	3 - Definitions and conventions	There is no definition for A_Port	Add a definition for A_Port.		
4	T	13	3.5.2 Controlling FCF Set definition	The words "up to two" limit the potential number of controlling FCFs to two and I believe we want to allow n.	Strike the words "up to two" from the definition.		
5	E	23	4.2.5 FC-BB_E reference models	There is no VA_Port to VA_Port reference model.	Add a VA_Port to VA_Port reference model.		
6	T	27	4.3.4 FC-BB_E	The final sentence of this section is missing a reference to VA_Port to VA_Port virtual links.	Suggest replacing the final sentence of 4.3.4 with: "The FC-BB_E protocol provides mechanisms to create VN_Port to VF_Port virtual links, VE_Port to VE_Port virtual links, VN_Port to VN_Port virtual links and VA_Port to VA_Port virtual links."		
7	T	28	4.4.2.3 FC-BB_E	VA_Port references are missing.	Suggest replacing the first two sentences of 4.4.2.3 with: "Class 2, 3, and F Fibre Channel frames arriving from a VN_Port, a VF_Port, a VE_Port or a VA_Port shall be encapsulated in FCoE frames and transmitted to the appropriate FC-BB_E device. FCoE frames received from a remote FC-BB_E device shall be de-encapsulated and sent to the appropriate VN_Port, VF_Port, VE_Port or VA_Port."		
8	T	87	7.2	VA_Port references are missing from the second paragraph up from the bottom of the page.	Suggest rewording the second sentence of the second paragraph up from the bottom of the page to include references to VA_Ports as follows: "Fibre Channel links connect PN_Ports to PF_Ports, PE_Ports to PE_Ports and PA_Ports to PA_Ports.		
9	T	87	7.2	VA_Port references are missing from the final paragraph on the page.	Suggest rewording the third sentence of the final paragraph on page 87 as follows: "FCoE supports VE_Port to VE_Port Virtual Links, VN_Port to VF_Port Virtual Links, VN_Port to VN_Port Virtual Links and VA_Port to VA_Port Virtual Links."		
10	T	89	7.2	VN_Port causality dilemma in the second sentence of the final paragraph on page 89. The definition of a VN_Port requires a connection to an other VN_Port before the VN_Port can be instantiated? How is the first VN_Port instantiated?	Suggest rewording the second sentence of the final paragraph on page 89 as follows: "Each VN2VN ENode may instantiate one or more VN_Ports. Each of these VN_Ports may be connected to VN_Ports instantiated by other VN2VN ENodes through FCoE VN_Port to VN_Port Virtual Links."		

11	E	90	7.2	Should the two paragraphs beneath Figure 33 be reorganized into an a, b list? The third sentence of the first paragraph states: "Each VN2VN ENode may instantiate multiple VN_Ports…" The usage of the first VN_Port is described but the usage of the second VN_Port is not provided until the next paragraph.	Suggest reorganizing the two paragraphs into an a, b list.		
12	T	91	7.2	VA_Port to VA_Port network configuration example needs to be added.	Please add a VA_Port to VA_Port network configuration example.		
13	T	91	7.3	The second sentence does not include an "FCoE entity" as a required component.	Add the FCoE Entity as a required component.		
14	T	91	Figure 35	Only the Lossless Ethernet MAC, Ethernet _Port, FCoE Controller, the left most FCoE Entity (and everything above it) are required. Everything else, including the ellipsis, are optional and should be enclosed in brackets.	Adjust the brackets to enclose all optional functional components.		
15	T	91	7.3	The a, b list started at the end of the page that defines the set of functions performed by the FCoE Controller does not include any VN2VN ort PT2PT protocol requirements.	Suggest adding VN2VN and PT2PT specific functions to this list including: n) optionally initiates the FIP VN2VN protocol and instantiates VN_Port to VN_Port Virtual Links.		
16	E	92	7.3	The second sentence of the first paragraph after the a, b list is very difficult to parse.	Reword the second sentence to something like: "VN_Ports instantiated upon successful FIP FLOGI and subsequent FIP NPIV FDISC Exchanges are all associated with the same VF_Port."		
17	E	92	7.3	The first sentence of the second paragraph after the a, b list uses "in" instead of "during"	Suggest rewording the first sentence of the second paragraph after the a, b list as follows: "The FCoE_LEP is the functional entity performing the encapsulation of FC frames into FCoE frames during transmission and the decapsulation of FCoE frames into FC frames during reception."		
18	E	92	7.3	The fifth sentence of the final paragraph does not specify how the fabric assigns the VN_Port address identifier	Suggest rewording the fifth sentence of the final paragraph on page 92 with something like the following: "A VN_Port is uniquely identified by an N_Port_Name Name_Identifier and is addressed by the address identifier the Fabric assigned to it in the FIP FLOGI LS_ACC or FIP NPIV FDISC LS_ACC"		
19	T	92	7.3	The Final complete sentence on page 92 discusses how to handle buffer to buffer flow control parameters. The text states to ignore them and I believe this needs to be clarified especially for N_Port Virtualizers. N_Port Virtualizers that attach an FCoE ENode to an FC Fabric actually need to supply a BB_Credit value in the FC FDSIC sent to the FC Fabric in response to the FIP FLOGI or FIP NPIV FDISC received from the ENode. This has and will continue to cause problems to end users	We need to discuss the problem and determine if clarifying text is appropriate.		
20	E	93	Figure 36	The middle "stack" is optional and should be enclosed in brackets.	Enclose the middle stack in brackets to indicate that it's optional.		

21	T	93	7.4	The first sentence of the first paragraph states "A VN2VN ENode MAC has one or more VN_Port dedicated to.." and I believe VN_Port should have been VN2VN_Port.	Suggest rewording the first sentence of the first paragraph to something like: "A VN2VN ENode MAC has one or more VN_Ports dedicated to the instantiation of VN_Port to VF_Port Virtual Links and one or more VN2VN_Ports dedicated to the instantiation of VN_Port to VN_Port Virtual Links."		
22	E	93	7.4	The second paragraph should be reworded for ease of use.	Suggest rewording the second paragraph as follows: "As shown in the VN_Port to VN_Port reference model (see figure 32), because there is no FCF that performs N_Port_ID selection, VN2VN ENode MACs shall select N_Port_IDs for themselves"		
23	E	93	7.4	The first sentence of the third paragraph uses the term "Lossless Ethernet network", is this term synonymous with VLAN or should we somehow explicitly state they are unique per VLAN, especially in light of the work being done on VLAN Discovery with VN2VN?	Discuss comment.		
24	T	93	7.4	The first sentence of the final paragraph starts with "The FPMA used as VN_Port MAC address for a VN2VN_Port…" Should we be using the term FPMA since these MAC Addresses are not Fabric Provided?	Discuss comment..		
25	E	93	7.4	The second paragraph of clause 7.4 makes reference to the need for each VN2VN ENode MAC to assign itself an N_Port_ID selection, but makes no reference to the process that allows this to be done.	Suggest adding a reference to the Locally Unique N_Port_IDs clause 7.9.6.		
26	E	94	7.4	The first sentence of the first paragraph should start with a description of what figure 33 is.	Suggest rewording the first sentence of the first paragraph to something like: "The FCoE point-to-point reference model (see figure 34)" shows that Locally Unique N_Port_IDs shall not conflict with and shall be independent from the N_Port_IDs assigned by a Fibre Channel Fabric.		
27	T	95	7.5	In the first sentence under figure 37, it's unclear which Ethernet ports are being referred to.	Suggest rewording the first sentence under figure 37 to read: "When an FCF includes Lossless Ethernet bridging elements, an FCF-MAC address may be accessible via multiple externally facing Ethernet Ports on that FCF."		
28	T	95	7.5	What is the purpose of the third paragraph that starts with "MAC addresses used…" It seems unnecessary..	Suggest removing the third paragraph.		
29	T	95	Figure 37	There are no VA_Ports shown in the FCF functional model	VA_Ports should be added to the FCF Functional model as optional components.		
30	T	95	7.5	Missing VA_Port capable FCF MAC description.	Suggest inserting a paragraph between the existing 2nd and 3rd paragraphs that defines what a VA_Port capable FCF MAC is.		
31	T	96	7.5	Missing a section that describes the role of the FCoE Controller when controlling a VA_Port capable FCF MAC.	Suggest adding an a, b list similar to the ones provided for VF and VE_Port capable FCF-MACs on page 96.		

32	T	96	7.5	The second sentence of the second to last paragraph on the page is very difficult to parse.	We should apply the same solution here as was done for EMC-16.		
33	E	96	7.5	The first sentence of the last paragraph uses "in" instead of "during"	Suggest rewording the first sentence of the last paragraph as follows: "The FCoE_LEP is the functional entity performing the encapsulation of FC frames into FCoE frames during transmission and the decapsulation of FCoE frames into FC frames during reception."		
34	T	97	7.5	The first sentence of the final paragraph should also make reference to A_Ports and VA_Ports.	Reword the first sentence of the final paragraph as follows: "The Fibre Channel Switching Element is the functional entity performing Fibre Channel switching among E_Ports, F_Ports, A_Ports, VE_Ports, VF_Ports and VA_Ports."		
35	T	97	7.5	Missing a description of a VA_Port.	Add a paragraph that describes what a VA_Port is.		
36	T	100	7.6	A description of figure 40 is missing	Add a paragraph that describes figure 40 as was done for figures 38, 39 and 42.		
37	T	100	7.6	A description of figure 41 is missing	Add a paragraph that describes figure 41 as was done for figures 38, 39 and 42.		
38	T	101	7.6	A VA_Port to VA_Port Virtual Link example is missing	Add a VA_Port to VA_Port Virtual Link example.		
39	T	101	7.7	The second sentence of the first paragraph is out of date.	Consider rewording the second sentence of the first paragraph to read: "The FIP protocol is used to negotiate the VN_Port MAC addresses that are used between two Enodes or between an ENode and an FCF."		
40	T	101	7.7	The first sentence of the second paragraph states that "FPMAs are assigned by FCFs..." Depending on the outcome of EMC-24, if the term FPMA is still used to describe the MAC Addresses used in VN2VN environments, then the above statement is incorrect.	Depends on the outcome of EMC-24.		
41	T	101	7.7	The second sentence of the second paragraph states "A properly formed FPMA is one in which the 24 most significant bits equal the Fabric's FC-MAP value." Depending on the outcome of EMC-24 and EMC-40, the above statement may be incorrect.	Depends on the outcome of EMC-24.		
42	T	101	7.7	The final sentence of the second paragraph may need to be removed depending on the outcome of EMC-24.	Depends on the outcome of EMC-24.		
43	T	8	3 - Definitions and conventions	There is no definition for FDF-MAC	Add a definition for FDF-MAC.		
44	T	103	7.9.1	The 3rd paragraph from the bottom is missing a reference to FDF-MACs	A third sentence should be added to the 3rd paragraph from the bottom that states something like "On FDFs, the FDF-MAC address shall be used for all FIP frames."		
45	T	103	7.9.1	The 2nd paragraph from the bottom of the page is missing a description of what group addresses an FDF-MAC should listen to.	Add a text to the 2nd paragraph from the bottom of the page describing what group addresses an FDF-MAC should listen to.		

46	T	104	7.9.2.2	This clause should cover the case where the ENode is connected to an FDF and also how the FDF passes FIP frames along to the FCF. None of this has been documented yet.	Additional text needs to be added to 7.9.2.2 describing how an FDF operates in this configuration.		
47	T	104	Figure 43	Figure 43 does not have an (Informative) tag embedded in the title	Suggest adding an (Informative) tag to figure 43.		
48	T	105	7.9.2.2	The second paragraph on page 105 describes a case where the FCF may send an asynchronous unicast VLAN Notification upon a change in the VLANs that offer FC-BB_E services. However, there is no text describing what an ENode should do when it receives one of these notifications.	Suggest adding something like the following text after the last sentence in the second paragraph on page 105: "Upon reception of an asynchronous FIP VLAN Notification, the ENode MAC may enable one or more of the VLANs for subsequent operations. If an ENode MAC has a VN_Port to VF_Port Virtual Link over a VLAN and that VLAN is not listed in the FIP VLAN Notification and the FIP VLAN Notification was received from the FCF-MAC that the FIP FLOGI LS_ACC was received from, the FCoE Controller of the ENode should consider this to be an implicit Logout of that VN_Port.		
49	T	105	7.9.2.3	The fourth paragraph of 7.9.2.3 needs a modification similar to whatever was done to resolve EMC-48.	Define the action that an FCoE Controller of a VE_Port should take upon the reception of a FIP VLAN Notification that does not contain the VLAN that a VE_Port to VE_Port Virtual Link has been instantiated on.		
50	T	108	7.9.2.4	The second paragraph under Figure 44 may need a modification similar to whatever was done to resolve EMC-48 and EMC-49	See EMC-48 and EMC-49.		
51	T	108	7.9.3.2	The second paragraph of the clause is unclear and unimplementable. How does an implementation determine if a Discovery Advertisement is compatible or not? This needs to be clear because of the shall that follows..	Suggest removing the second paragraph of the clause or additional clarifying text be added.		
52	T	112	7.9.3.3	The final paragraph of this clause states "Reception of Discovery Advertisements for more that one Fabric on the same VLAN should be reported by VE_Port capable FCF-MAC..." What about the case where two fabrics are being joined for the first time? This rule would prohibit the merge of two different fabrics via FCoE.	I believe this paragraph was added in an attempt to resolve the issue identified at UNH-IOL by Bill Martin. I don't believe this text resolves that issue..		
53	T	108	7.9.3	Clause 7.9.3 makes no mention of VA_Ports and how they are involved in the FIP discovery protocol	Suggest text be added throughout the clause that describes how VA_Ports are involved in the FIP discovery protocol.		
54	T	112	7.9.4.1	The final sentence of the third paragraph of the clause only partially describes how a VN_Port MAC Address is assigned to a VN_Port.	Suggest rewording the final sentence of the third paragraph to read: "The MAC address contained in the MAC Address descriptor of the FIP FLOGI LS_ACC or FIP NPIV FDISC LS_ACC that is returned by the FCF shall be used as the VN_Port MAC address (see 7.7)."		

55	T	112	7.9.4.1	The final sentence on the page only partially describes how the FCF shall return a properly formed FPMA.	Suggest rewording the final sentence on the page to read: "The MAC Address Descriptor contained in the FIP FLOGI LS_ACC or FIP NPIV FDISC LS_ACC that is returned by the FCF shall contain a properly formatted FPMA MAC address"		
56	T	113	7.9.4.2	The second sentence of the clause only partially describes the method that FIP ELP uses to communicate MAC addresses.	Suggest rewording the second sentence of the clause to read: "In addition to providing ELP, the FIP ELP provides a method (i.e., the MAC Address descriptor) to communicate the MAC address for the VE_Port (see 7.9.8.4.4).		
57	T	113	7.9.4.3	The second paragraph of the clause states that a FIP FLOGI from a VN2VN port not in the VN2VN Neighbor set shall be rejected with reason code… but no mention of how a VN2VN_Port is added to the neighbor set.	Suggest adding a reference to the Claiming a Locally Unique N_Port_ID clause 7.9.6.2.2		
58	T	113	7.9.5.1	VA_Port references are missing	Suggest adding text the explicitly states VA_Port to VA_Port Virtual Links		
59	E	114	7.9.5.2	Second sentence of the second paragraph has a word ordering issue.	Suggest rewording the second sentence of the second paragraph to read: "This behavior may be disabled by VF_Port capable FCF-MACs under administrative control by setting the D bit to one in the FKA_ADV_Period descriptor in Discovery Advertisements (see 7.9.7.3.13).		
60	E	114	7.9.5.2	Reference to "That FCF-MAC" in the fifth sentence of the fifth paragraph is confusing.	Suggest that the third sentence of the 5th paragraph should be reworded and the fifth sentence of the paragraph should be removed. The rewording of the third sentence could be something like: "If unsolicited multicast Discovery Advertisements are not received within 2.5 * FKA_ADV_PERIOD, all the VN_Port to VF_Port Virtual Links with that VF_Port shall be implicitly de-instantiated and the FCF-MAC associated with the VF_Port shall be removed from the FCF Login Set (see 7.9.3.2)."		
61	E	115	7.9.5.2	The wording of sentences 2 through 4 of the first paragraph after Note 29, is a bit rough.	Suggest re-writing sentences 2 - 4 of the first paragraph to read as follows: "A FIP Clear Virtual Links frame may be transmitted by a VF_Port capable FCF-MAC to an ENode MAC if one or more Virtual Link(s) have been instantiated between the VF_Port capable FCF-MAC and an ENode MAC. The FIP Clear Virtual Links frame provides a list of zero or more VN_Ports to be de-instantiated. If the FIP Clear Virtual Links frame contains one or more VN_Ports, an ENode MAC shall de-instantiate the listed VN_Ports upon reception of the Clear Virtual Links frame. IF the FIP Clear Virtual Links frame contains zero VN_Ports, the ENode MAC shall de-instantiate all VN_Ports logged in with the originating FCF-MAC upon the reception of the Clear Virtual Links frame."		

62	T	115	7.9.5.2	First sentence of third paragraph under note 29 is missing the word "in".	Suggest adding the word "in" to the first sentence of the third paragraph under note 29 as follows: "On receiving a VN_Port FIP Keep Alive frame coming from a VN_Port that is not logged in, …"		
63	T	116	7.9.5	There is no clause that describes the VA_Port to VA_Port Virtual Link Maintenance protocol	Suggest adding a clause that describes the VA_Port to VA_Port Virtual Link Maintenance protocol.		
64	E	117	7.9.6.2	The font used for the 7.9.6.2 clause title appears to be incorrect.	Suggest using a bold font.		
65	E	117	7.9.6.2.1	The word "verify" in the first sentence of the clause should be "determine".	Suggest replacing "verify" with "determine" in the first sentence of the clause.		
66	E	124	7.9.7.2	Editor's note on page 124	Remove the editor's note.		
67	T	141	7.9.8.4.2	Related to EMC-19. The sentence beginning with "A FIP FLOGI or…" describes how to handle flow control parameters and it may need to be updated based upon the discussion of EMC-19	Depends on the outcome of EMC-19.		
68	E	151	7.12.1	Wording problem with the first sentence of the second paragraph up from the bottom.	Suggest rewording the first sentence of the second paragraph up from the bottom of the page to: "From an internal point of view (i.e., inside the dotted and dashed black line in figure 45), VA_Port to VA_Port Virtual Links enable the forwarding of FCoE frames between the Controlling FCF and FDFs, as well as between the FDFs."		
69	E	152	7.12.1	Missing "a" in the sentence starting with "Figure 46..." under the second paragraph on page 152.	Suggest rewording the sentence under the second paragraph to read: "Figure 46 shows an example of a Distributed FCF including a redundant pair of Controlling FCFs."		
70	T	152	Figure 46	VA_Ports between the FDFs embedded in the controlling FCFs are missing from the diagram. This is an allowable configuration based on the first sentence on page 155.	Suggest adding VA_Ports to figure 46 that link the virtual Domains residing on the controlling FCFs.		
71	T	153	7.12.1	The first sentence on page 153 should allow for one or more Domain ID per Virtual Domain	Suggest rewording the first sentence on page 153 to read: "…typically uses three or more Domain_IDs, one for each Controlling FCF, and one or more for the Virtual Domain_IDs."		
72	T	155	7.12.2	The second paragraph on page 155 states that the FIP protocol is used to discover VA_Ports and for the instantiation of VA_Port to VA_Port Virtual Links, but this information is missing from the FIP clause 7.9.8.4.	Suggest that text is added to 7.9.8.4 that describes how the FIP protocol is used with VA_Ports.		
73	E	155	7.12.2	Same problem with the third to last paragraph as described in EMC-17	Apply the same fix to this paragraph as done to resolve EMC-17		
74	T	156	7.12.3	The fourth complete sentence of the first paragraph implies that an FDF must support VF_Ports.	Suggest rewording the fourth complete sentence of the first paragraph to something like: "An FDF supports the instantiation of VA_Ports and optionally VF_Ports over its FDF-MAC."		
75	E	157	7.12.3	Same problem with the third to last paragraph as described in EMC-17	Apply the same fix to this paragraph as done to resolve EMC-17		

76	T	158	7.12.5.1	The term "initialization exchanges" used in the second paragraph of clause 7.12.5.1 is not defined in FC-SW-6 Rev 1,1,	I suggest either adding text to FC-SW-6 defining exactly what initialization exchanges consist of, or update the reference in this clause to point to something that exists in FC-SW-6.		
77	E	159	7.12.5.2	Wording problem with the second and third sentences of the second paragraph.	Suggest rewording the second and third sentences of the second paragraph of 7.12.5.2 to read: "When set to one, this bit indicates that the originator of the FIP ELP Request or SW_ACC is a VA_Port/VE_Port capable FCF-MAC. When set to zero, this bit indicates..."		
78	E	159	7.12.5.2	Wording problem with the second and third sentences of the third paragraph.	Suggest rewording the second and third sentences of the third paragraph of 7.12.5.2 to read: "When set to one, this bit indicates that the originator of the FIP ELP Request or SW_ACC is a VA_Port capable FDF-MAC. When set to zero, this bit indicates..."		
79	E	159	7.12.5.2	Remove the Editor's note	Remove the Editor's note.		
80	E	159	7.12.5.2	Missing "have been" in the first sentence of the second to last paragraph on page 159	Suggest rewording the end of the first sentence of the second to last paragraph on page 159 to read: "…of the Distributed FCF's FDF Set and *have been* discovered by FIP discovery on the Lossless Ethernet network"		
81	T	160	7.12.5.2	In regards to item c in the list, how does an FDF determine if a discovered FDF-MAC belongs to an FDF in the Distributed FCF's FDF Set? In other words exactly which fields are checked and what should they contain?	Suggest adding a description of the process used by an FDF to determine if a discovered FDF-MAC belongs to an FDF is the Distributed FCF's FDF Set.		
82	E	160	7.12.5.3	Missing a cross reference to the VE_Port to VE_Port Virtual Link maintenance clause.	Suggest adding a cross reference to the VE_Port to VE_Port Virtual Link maintenance clause.		
83	T	163	Annex C	The VN2VN protocol requires that some changes be made to Annex C. Of particular concern is the case where two VN2VN networks are joined and the same FPMAs are in use in both VN2VN networks.	Suggest adding a description of the problem to Annex C as well as a description of a solution.		
84	T	171	Annex D	The VN2VN protocol requires that some changes be made to Annex D. Of particular concern is the case where two VN2VN networks are joined and the same FPMAs are in use in both VN2VN networks.	Suggest adding specific recommended ACL entries to Annex D that will help prevent the problem from happening.		
88	T	94	7.4	Second paragraph: Shouldn't the whole MAC address be checked? If only the low order 24 bits are checked, why have a VN2VN FC map?	make the test on the entire MAC		
89	T	96	7.5	The second to last paragraph on page 96 states that an E_Node may log in with multiple VF_Port capable FCF-MACs. The last paragraph describes an address verification "...and shall verify that the source address of the received FCoE frame is equal to the MAC address of the remote link end-point." If an E_Node can log into multiple VF_Ports, there is no such thing as THE remote link end-point"	Editor to modify this paragraph to accommodate an E_Node logging into more than one VF_Port; or remove the statement that allows more than one login.		

90	T	97	7.5	The third paragraph (starting "For a VF_Port capable FCF-MAC…" the last sentence of the paragraph states that the VN_Port shall use a FPMA MAC. If the VN_Port is a BB-5 VN_Port, then it could attempt to use a SPMA MAC			
91	T	103	7.9.1	Fourth paragraph (starts "All FIP protocols are…), last sentence. This implies that a ENODE must use all available VLANs. See also 7.9.2.2 "The ENode MAC that received a FIP VLAN Notification frame may enable one or more of these VLANs for subsequent operations."	change "shall" to "may"		
92	E	103	7.9.1	Third to last paragraph "On ENodes, the ENode MAC address shall be used for all FIP frames". Used in what manner, as both source and destination?	Modify sentence to "…shall be used as the source MAC address for all FIP frames." Similar change to last sentence of said paragraph		
93	T	103	7.9.1	Section 7.9.1 describs MAC addressing for FIP, and describes ENODES, FCFs etc, but does not describe FDFs	Add paragraph(s) as appropriate to describe FDFs		
94	T	105	7.9.2.2	Second to last paragraph. If the configuration of VLANs changes such that one or more of the VLANs that a VE_Port was using is no longer in the group, where are the actions that that VE_Port must take described?			
95	T	105	7.9.2.3	Second to last paragraph, last sentence "The unicast FIP VLAN Notification frame shall specify the revised list of VLAN IDs over which the originating VE_Port capable FCF-MAC offers FC-BB_E services and should be sent over the VLAN from which VLAN discovery requests were received." There may have never been a VLAN discovery request	Change the sentence to use one of the VLANs that a FIP ELP was sucessfully performed on		
96		105	7.9.2.4	First sentence of the section. 7.9.2.2 describes how to discover VLANs when there is a FCF present. How does that apply to VN2VN?			
97	E	106	7.9.2.4	First paragraph on page 106: All instances of "VLANs" should be just "VLAN"			
98	T	107	Figure 44	Why is there a box for fabric operation when the title of this figure is VN2VN?			
99	T	107	Figure 44	the boxes with the a,b lists should say "in each of the selected VLAN(s)…"			
100	E	108	7.9.2.4	First full paragraph "If the configuration of VLANs on a VN2VN ENode configured to provide VLANs information to the other VN2VN ENodes changes"	second occurance of "VLANs" should be singular		
101	T	108	7.9.2.4	First full paragraph: There may not have ever been a VLAN discovery request.	change the sentence to use one of the VLANs that a successful FLOGI or PLOGI has completed on		
102	E	108	7.9.2.4	Last paragraph before NOTE 19, the second "VLANs" should be singular			

104	T	108	7.9.3.2	Last paragraph on page 108: "The FCoE Controller of an ENode MAC shall select selects for login a subset of the FCF-MACs in the FCF list having the 'Available for Login…"			
105	T	108-109	7.9.3.2	Very last sentence on p 108, going onto p109 "In order to perform a FIP FLOGI with an FCF-MAC in the FCF Login Set with the 'Max FCoE Size Verified' bit set to zero…" An Enode shall not sent a FIP FLOGI if Max FCoE Size Verified is set to zero, FULL STOP. This description is not how to send a FLOGI, it is how to get the Max Size Verified bit turned on. This sentence, as writen, can be interpreted as after the Solicitation/Advertisement has completed, the ENode has completed a FLOGI, because of the way the begining of the sentence is worded.	Change the subject sentence to "In order to get the Max FCoE Size Verified bit set to one (so that a FIP FLOGI may subsequently be performed) the FCoE Controller of an ENode MAC shall transmit a unicast Discovery Solicitation (see 7.9.8.2) to that FCF-MAC address and receive a solicited unicast Discovery Advertisement in response.		
106	E	109	7.9.3.2	The last two sentences of the large paragraph in the middle of the page seems very out of place. The paragraph is describing multicast requests and the unicast replies. Then out of the blue these two sentences talk about unicast requests			
107	T	110	7.9.3.3	The second to last paragraph on page 110: "In order to perform a FIP ELP with an FCF-MAC in the FCF list with the 'Max FCoE Size Verified' bit set to zero,…" A FIP ELP may never be sent if the bit is zero, FULL STOP.	Change the sentence to "In order to get the Max FCoE Size Verified bet set to one (so that a FIP ELP may subsequently be performed) the FCoE Controller of a VE_Port capable FCF-MAC shall transmit a unicast Discovery Solicitation (see 7.9.8.2) to that FCF-MAC address and receive a solicited unicast Discovery Advertisement in response.		
108	E	112	7.9.3.3	Item "b" in the two a,b lists on page 112 are actually two items, and should be broken into b, and c			
109	E	113	7.9.4.3	First paragraph on page 113: NOTE: Here it states that the VN2VN link is instantiated at FLOGI time, but in native FC, the point to point link is not established until PLOGI, as that's where the FC_IDs are assigned for both ports. Not sure if this difference is worth debating or not	Discuss with group		
110	E	113	7.9.4.3	Second paragraph in this section: "A FIP FLOGI Request in a point-to-point topology coming from a VN2VN_Port not listed in the VN2VN Neighbor Set shall…" The term "Neighbor Set" has not yet been defined up to this point in the document.	A reference to section 7.9.6.2.2 should be added		
111	E	113	7.9.4.3	The last two paragraphs of this section should be combined into one. The way it is now, as two separate pargraphs, the first sentence of the second paragraph is awakward. The MAC address of what????			

112	T	114	7.9.5.2	First paragraph of this section specifically states that VN_Ports perform an implicit logout when the physical link fails. Shouldn't it also say that a VF_Port shall do the same?			
113	E	114	7.9.5.2	Where is the term ENode MAC defined (ie, without association with a Vx_Port)?	Put a sentence describing where the actual address comes from (eg the proper standardeze for the burned in MAC) or a reference to some IEEE document etc		
114	E	114	7.9.5.2	Paragraph 5 on page 114, last sentence: "A subsequent FIP Fabric Login may be performed with an FCF-MAC in the current FCF Login Set as specified in see 7.9.3.2."	make the end of the sentence either "…as specified in 7.9.3.2" or "…FCF Login Set (see 7.9.3.2)"		
115	T	116	7.9.5.3	The section that describes how VE_Port capable FCF_MACs handle an updated FKA_ADV_PERIOD needs to have mores description on how to handle longer vs. shorter new values, like the description in 7.9.5.2			
116	E	117	7.9.6.2.1	First paragraph of this section: The concept of a "recorded" locally unique N_Port ID has not yet been introduced.	Put a reference to 7.9.6.4		
117	E	119	7.9.6.2.2.	In the third paragraph on the page, the definition of a Login Set is parenthetical. Shouldn't the definition be ouside parenthisis? The term "Login Set" is used in several other sections in this document.			
118	E	119	7.9.6.2.2	In the fourth paragraph "When Ready to instantiate…" What is the definition of when a VN2VN_Port is ready?	Prior to instantiating, VN_Port to VN_Port virtual links, and continuing after instantiation, a VN2VN Enode MAC shall….		
119	T	119	7.9.6.2.2	The random delay should be subtracted from BEACON_PERIOD. If added, then the VN_Port could be waiting BEACON_PERIOD + 100ms, which would be a violation of the standard			
120	T	125	7.9.7.2	The a,b,c list at the end of this section: The text above the list says that the validations "The checks for proper formating include". The ones that are missing need to be added so that it can say "The checks for proper formatting are:"			
121	T	141	7.9.8.4.2	The paragraph starting "The MAC address field in the MAC address descriptor…" It states "An ENode shall verify that a granted FPMA address is properly formed." but it never describes what to do if the verification fails.	State that the Enode shall send a LOGO if the verification fails		
122	E	141	7.9.8.4.2	The a,b,c, list in the middle of the page has duplicate b) c) d)			
123	E	141	7.9.8.4.2	The a,b,c list at the bottom of the page has an AND that should be OR.			
124	T	144	7.9.8.6.1	First paragraph of this section: the list of Vx_Ports is also optional. This texts implies that at least one Vx_Port must be provided	Make last sentence "...one Name_Identifier descriptor (see 7.9.7.3.5), optionally a list of Vx_Port Identification descriptors (see 7.9.7.3.12), and optionally a FIP Clear…"		

125	T	144	7.9.8.6.1	This section says that the MAC address in a FIP Clear Virtual Link must be set to that of an FCF. FDFs can also send them (see 7.12.3).	This section needs to be updated to reflect that there are other entities (i.e. FDFs) that can originate some of these FIP operations		
126	T	144	7.9.8.6.1	First paragraph of the section: VA_Port capable MACs can also generate Clear Virtual Link to an Enode			
127	T	144	7.9.8.6.2	This section says that the MAC address in a FIP Clear Virtual Link must be set to that of an FCF. FDFs can also send them (see 7.12.3).	This section needs to be updated to reflect that there are other entities (i.e. FDFs) that can originate some of these FIP operations		
128	T	144	7.9.8.7	First paragraph of section: FDF-MACs can also generate a FIP VLAN request	Add FDF-MAC to the list of things that can generate a FIP VLAN request		
129	T	144-145	7.9.8.7	This section needs description of VA_Port MACs			
130	T	145	7.9.8.8	Similar comment as to EMC-129			
131	T	145	7.9.8.9	Similar comment as to EMC-129			
132	T	145	7.9.8.10	Second paragraph of the section, the parenthetic FPMA doesn't belong at the end of the sentence.			
133	E	151	7.12.1	Last paragraph on page 151: All instances of N_Port should be VN_Port			
134	E	151	7.12.1	last paragraph on page 152: The term "FDF Set" has not been defined prior to the usage here.	Either define it, or put a reference to where it is defined		
135	T	152	7.12.1	First paragraph under figure 46: We can not require two VE_Ports in order to have redundancy.	Change the sentence to read "The two Controlling FCFs in a redundant Distributed FCF instantiate one or more at least two Augmented VE_Port to VE_Port Virtual Links between themselves, where the term 'augmented' indicates that Virtual Link is used also for the redundancy protocol, in addition to normal VE_Port operation (see FC-SW-6)." A note could also be added, such as "NOTE: To improve redundancy, it is suggested that two or more VE_Port to VE_Port Links be configured between the primary and secondary FCF"		
136	E	153	7.12.1	Last paragraph before Figure 47: The figure number is missing			
137	E	154	Figure 48	The multiple instances of VF_Ports, VE_Ports and VA_Ports are not in brackets, and therefore appear to be manditory	Either put the ones in the background in brackets, or since they have dotted lines around them, modify the text to say that the items in brackets or dotted lines are optional		
138	T	156	7.12.3	In the text on the top of page 156 is states that a FDF can have native A_Ports and F_Ports. That means a native device can FLOGI into an FDF. Consider what should a FDF do if it gets a clear virtual link addressed to the Native port? What if the native port aborts a FLOGI? There is no text in BB-6 that addresses these two tip of the iceberg issues.	Get rid of this can of worms and prohibit native ports on a FDF. The connectivity between the ethernet world and native world is through a FCF, not a FDF.		
139	E	156	Figure 49	Same problem as described in EMC-137	Same fix as suggested in EMC-137		

140	E	158	7.12.5.1	Second paragraph of the section: Missing parenthisis around the "see SW-6" reference			
141	?			EMC is very concerned that the distributed FCF (i.e. Section 7.12) is so dependant SW-6, and that SW-6 is still open to technical input. It is possible that changes to the current SW-6 could make the text in this version of BB-6 wrong or obsolete.	Discuss with group		
	Dell Comments on FC-BB-6 Letter Ballot (T11/12-517v0)						
	T/E	**Page**	**Section**	**Figure**	**Comments**	**Status**	
DELL_1	T	104 & 107		43 & 44	Since "default FCOE VLAN" is not defined, how does one differenciate between "Static FCOE VLAN configuraton" and "default FCOE VLAN" in the flow chart? Should standard define "default FCOE VLAN"?		
DELL_2	T	117	7.9.6.1		Is the operation of VN2VN in multipoint-mode or point-to-point configured or auto detect? Does E-Node send FIP frames on both VN2VN and PT2PT multi-cast addresses? There is a mention of "Enode enable reception of frames sent to both address", what about transmit?		
DELL_3	T	151, 152, 153		45, 46, 47	Host connection to FDF shows direct connection to FDF only. Can the host connect to FDF via Lossless Ethernet Network? Should the diagram show Lossless Ethernet network between host and FDF to complete the topology?		
DELL_4			7.12		Since BB-6(Distributed FCF, 7.12) is closely dependent on SW-6, BB-6 should closely track SW-6. We believe SW-6 should be comepleted before BB-6(Distributed FCF) is closed/finalized. If not, there is a potential for Distributed FCF to be incorrect.		
	FC-BB-6 Rev 1.2	Oracle					
	Comment Id	**Tech/Edit**	**Sec/Pg**	**Comment**	**Status**		
	O	E	p. 102, 7.8 (first sentence)	"… contain an FCoE PDU (see table 21)" should be, "see table 22"			
	O	E		Missing FIP definition in the definitions section (e.g., "FIP - FCoE Initialization Protocol) there are other similar definitions, like B_Port, VN_Port, etc.			
	O	E	p. 90, paragraph below Figure 33	"FCF A has a single physical Ethernet …" The FCF in figure 33 is not labled FCF A, it is just labled FCF.			
	O	E	p. 90, 2nd paragraph below Figure 33	"The green dotted line in figure 33 depicts a possible VN_Port to VF_Port Virtual Link." No, it depects a VN_Port to VN_Port Virtual Link.			
	O	E	p. 105, 7.9.2.4	Missing heading, “VN2VN Enode Discovery”			
Number	**Section**	**Issue**	**Type**	**Fix**	**Status**		

Intel-1	7.9.8.8	The use of A bit in FIP header to identify if source of VLAN notification is from FCF or VN2VN endpoint is not backward compatible. In a mixed switch environment, older switches that would not be FC-BB-6 compliant would not be setting this bit. In order to be backward compatible would prefer is FIP sub codes for VLAN Notification be used to identify unique source of	Technical	Define a new code 0004h/03h to represent FIP VN2VN VLAN Notification, and keep 0004h/02h to be specifically FIP FCF VLAN Notification.			
Intel-2	7.9.1	The statement is made that 'Support for multiple fabrics per VLAN is outside the scope of this standard'. We would like to see clarifying text that would define how SW could determine that this condition exists in order to manage the condition as suggested in 7.9.3.2.	Technical	Can it be defined as when an Enode receives more than one FCF generated Fabric Advertisements with FIP Fabric descriptors that do not have matching values for all of VF_ID, FC_MAP, and Fabric_Name? Or is it a subset? In essence this comment is asking for clarification in the FIP discovery section as appropriate and in section 3.5 adding a definition of what this specification considers as a Fabric.			
Intel-3	7.9.1	As part of the previous clarification as specified in Intel-2, can we also include if each VLAN used by VN2VN is considered as a Fabric, and if it can coexist with an FCF Fabric on the same VLAN given that they would each use unique FC_MAP value and so no FPMA address collision could exist.	Technical	Clarify the spec to allow VN2VN and FCF to be on the same VLAN. Current specification is vague in this respect.			

Intel-4	7.9.8.13	We would like to propose adding a bit in the FIP Claim Response message FC-4 Attributes Descriptor. As presented at December 2012 T11 meeting (see T11/12-449v0), this bit is intended as a 'hint' to receiving node on the viability of establishing a virtual link with the sending node. We are flexible where this bit is actually defined, for example T11 group may determine it better to have	Technical				
Intel-5	7.9.8.13	As part of previous proposal as specified in Intel-4 we would like to add option that this message can be re-sent later in time between the same nodes if the condition of this bit changes. Ex. Sending node later would like to indicate to the receiving node that conditions are now good for virtual link establishment, or in the opposite case no further virtual link establishment	Technical				
Intel-6	7.9.7.2	If use of 'F' bit in FIP header holds as defined for FIP VLAN Response, need to add this message type to list outlined in text describing this bit. FIP VLAN Request is indicated but not FIP VLAN Response.	Editorial	Need to add VLAN notification response in the definition of 'F' bit in section 7.9.7.2			

Intel-7	7.9.8.4.2	Page 141, fix list that indicates 'b) b), and c) c), etc.	Editorial				
Intel-8	7.9.5.4	link re-initialization after short time cable pull. The current behavior as specified in the spec relies on Beacon messages which are sent every 8 minutes. We need a mechanism at shorter granularity to tell the remote ports that there was a link disturbance happened on the local port. So that the remote ports can reinitiate the login if	Technical	Possible Solutions: Given that in VN2VN fabrics a re-connecting or re-initializing VN2VN_Port will start with LUID. Can/should we indicate that the reception of LUID discovery/Probe/Claim messages from a node that was believed to have an active virtual link could be used as trigger for implicit logout from the local VN2VN_Port?			
Intel-9	Appendix D	The spec should update the informative annex on ACLs (Appendix D) to include VN2VN edge case, specifically Network Joins when VN2VN is on the same VLAN	Technical	VN2VN FIP snooping in the switch needs to detect collisions and send CVL to end points so that end points can re-establish LUID discovery and the virtual link.			
Comments on FC-BB-6 Letter Ballot							
FC-BB-6 REV 1.2 2012-012-05							
Joseph White (Juniper Networks)							
Sequence	**Tech/Edit**	**Page**	**Index**	**Comment**	**Proposed Solution**	**Status**	
1	E	7	2.6	Need to cross check the references for IEEE			
2	E	8	3.1	Should FC-LS-2 references be changed to FC-LS-3 references in the same way that FC-SW-5 are now FC-SW-6 references?	I think we should do this update but maybe there is some specific reason it was not done.		
3	T	13	3.5.2	remove 'up to two'			
4	E	13	3.5.5	change "coupled with" to "coupled to"			
5	E	13	3.5.4	Shouldn't definition of "A Fiber Channel node (see FC-FS-3) that is able to transmit FCoE frames using one or more ENode MACs." add a statement to cover FIP Frames as well? FIP frames are explicitly defined separately from FCoE.			
6	T	29	4.4.5	Does the in-order delivery preclude exchange based load balancing at Ethernet L2? FIP frames have no ordering requirements.			

7	E	86	7.X	Where we talk about Lossless Ethernet Networks in terms of topology examples we should say something about VLANs. The examples discuss the idea of multiple connections and these connection can be on the same or different logical or virtual networks.			
8	T	87	7.2	On what boundary is sequential delivery required? Everything from one port to a different port? Within a PLOGI session? Within an exchange? does the word 'provides' really mean 'shall' or is this statement more of a guideline?	Requiring in-order deliver is fine but need to state the scope of the in-order requirement better. Preferred scope is dependent on application and use by upper level protocol. Need to state that in-order applies at the exchange or sessions level as appropriate to deployment.		
9	E	87	7.2	VA_Ports are also connected by FCoE	Add references to VA_Ports where FCoE connectivity is discussed.		
10	E	87	7.2	cross reference PFC (Qbb) here as well.			
11	T	87	7.2	Pause based link level flow control schemes are only euqivalent to credit based schemes within the distance supported by the buffering availble to the port, priority at the receiveing Ethernet port. Within this boundary the two schemes are equivalent. Beyond the boundary, the behavior of the schemes is quite different. For credit based flow control once the bandwidth delay product exceeds the credit FC throughput drops proportional to the excess distance independent of congestion. For Paused based system the excess traffic is dropped (tail-drop). This affects several statments in the spec.	This clarification can be added to the statement or as a following statement.		
12	E	90	figure 33	Given the later text on separating VN2VN from VN2VF networks using VLANs shouldn't we show the example that way instead of overlapped as in the figure?			
13	T	90	Fgure 33	Need to explicitly point out that the VN2VN fabric/SAN and the FCF fabric/SAN shown in this diagram mus be different fabrics even if they share the same Ethernet VLAN/Network.			
14	T	103	7.9.1	Paragraph below list of protocols for which FIP frames are used could be worded a bit better. The last sentence of the paragraph refers to VLANs on which FC-BB_E services are present. Note that the VLAN does not provide the services. Note that for VN2VN most people will not think about LUID being called a service. Do we consider LUID/VN2VN a service in the broader sense?			
15	T	103	7.9.1	This section needs to state that ENodes may optionally listen to the VN2VN and PT2PT group addresses. The last sentence needs to allow for these addresses as well			

16	E	104	figure 43 and section 7.9.2 in general	Consider using figure 44 from page 107 as the only diagram for secion 7.9.2 as it is a superset of figure 43. The description can then discuss where each area of the Figure 44 diagram applies to th various parts of the protocol.			
17	E	105	7.9.2.4	section has no title			
18	T	132	7.9.7.3.15 & table 45 fields description	Need to state that the VLAN has either FCoE services or VN2VN discoverable ENodes or both.			
19	T	133	7.9.7.3.17	N_Port_ID Claim Notification needs to indicate whether the responding endpoint wants the destination of the claim to attempt to establish a virtual link with him. The intent of such an indication is to provide control over the establishment of virtual links such that unnecessary links are not attempted. This indication should be backward compatible to the extent possible.	text needs to updated to explain additional use of the indication		
20	T	137	table 52	FIP VLAN Notification Originator entry for this row only has FCF listed.	Change the Originator entry for this row to include VN2VN		
21	T	145	7.9.8.8	Use of the F bit in the response does not match the description and restrictions for the F bit as described on page 124.			
22	T	146	7.9.8.13	N_Port_ID Claim Notification needs to indicate whether the responding endpoint wants the destination of the claim to attempt to establish a virtual link with him. The intent of such an indication is to provide control over the establishment of virtual links such that unnecessary links are not attempted. This indication should be backward compatible to the extent possible.	A good place for such an indication is in the FIP FC-4 Attributes descriptor as a new field (1 bt) taken from the reserved field in word zero.		
23	E	147	table 54	This table should have the VN2VN timers and constants or the title of the table should be changed to reflect the subset of values listed here.			
24	E	149	7.11	Section number is repeated from page 148			
25	T	151	7.12	In the distributed FCF overview, add a statement to the effect that multiple virtual domains are allowed by the protocol notwithstanding that all diagrams are drawn with only one virtual domain. Each additional virtual domain requires an additional RDI using an additional switch name			

26	E	151	7.12.1	For forwarding the distributed switching protocols across an FDF (ie from one VA_Port to another VA_Port) in a cascaded FDF topology as shown in figure 47 name based forwarding is used. This should be explicitly pointed out as it is different from the way FCoE/FIP frames are forwarded	This in the nature of a clarification to help understanding and could be accomplished by way of example.		
27	T	154	figure 48	The diagram shows a second set of optional VF, VE, and VA ports on an second optional bridge. The bracketing as drawn shows implies that at least one VA, one VE, and one VN port would be required but this is not quite correct in that the ports types can be included in any combination. VF and VN ports on the principal domain switching element are not specifically required but both could be present.	Fix the picutre to precisely show what is and is not required and in what combinations. Should be able to read the diagram and clearly understand which combinations of ports is required and allowed. I think this can be clarified some.		
28	T	160	7.12.6	the term 'directly reachable' is not very precise becase the transport layer is not specified.	Since directly means over/across the same Ethernet L2 broadcast domain then could say layer 2 Ethernet connected/reachable or a similar statement.		
	Comments on FC-BB-6 Letter Ballot						
Commenter:	Cisco						
Sequence	Tech/Edit	Page	Index	Comment	Proposed Solution		
Cisco-01	E	xxi		strange bold in table H.1	fix it		
Cisco-02	T	1	table 1	More annexes are applicable to FC-BB_E	fix it		
Cisco-03	T	11	3	The definition of VE_Port should be harmonized with the one in FC-SW-5/6	fix it		
Cisco-04	E	14	3.5.36	It should be VN_Port/FCoE_LEP	fix it		
Cisco-05	E	17	3.7.5	Add VA_Port	fix it		
Cisco-06	T	31	5	Make the VE_Port definition consistent with FC-SW-5/6	fix it		
Cisco-07	E	90	figure 33	"FCoE" in the caption is not bold	fix it		
Cisco-08	E	multiple	multiple	Check the usage of the term "FPMA" in the context of VN2VN	"MAC address" could be a more proper term.		
Cisco-09	E	104	figure 43	bitmap figure	the approved version was vectorial		
Cisco-10	E	107	figure 44	bitmap figure	the approved version was vectorial		
Cisco-11	T	108	7.9.3.2	12-019v1 was approved for incorporation in FC-BB-6 at the April 2012 FC-BB-6 meeting, however it has not been incorporated	Incorporate 12-019v1		
Cisco-12	E	115	7.9.5.2	"CVL" is used only here	Replace it with "FIP Clear Virtual Links frame"		
Cisco-13	E	117	7.9.6.2	Not in bold	fix it		
Cisco-14	E	124	7.9.7.2	Remove the editor note. Of course, if discovery solicitations and advertisements are ignored, then the involved entities are not discovered and no Virtual Links are established, which is the proper behavior.	fix it		
Cisco-15	E	131	7.9.7.3.14	Specify that the Vendor ID is the T10 Vendor ID	fix it		
Cisco-16	E	132	7.9.7.3.16	Specify that the Vendor ID is the T10 Vendor ID	fix it		
Cisco-17	E	137	Table 52	FIP VLAN Requests and FIP VLAN Notifications can be used also by VN2VN Enodes	fix it		

Cisco-18	E	141	7.9.8.4.2	items b), c), and d) of the lettered list are double lettered	fix it		
Cisco-19	E	159	7.12.5.2	Remove the editor note. Of course, if the ELP Request and/or SW_ACC is ignored, then no Virtual Links are established, which is the proper behavior.	fix it		
Cisco-20	E	160	7.12.5.3	Add a reference "(see 7.9.5.3)" at the end of the sentence.	fix it		
Cisco-21	E	206	Table H.1	Replace the first "FIP" instance with "FCoE" in the second row	fix it		
Comments from Brocade.fdf							
State	Company	Comment Nu	Page	Subtype	Subject	Author	Comment
O	BRCD	#BRCD-1	6	Text	Sticky Note	David Peterson	In Rectangle (over,down) 1.04,1.02 to 1.29,1.27 Delete blank pages.
O	BRCD	#BRCD-2	10	Highlight	Highlight	David Peterson	In Rectangle (over,down) 0.95,0.78 to 7.22,1.14 Fix hyphenation globally.
O	BRCD	#BRCD-3	13	Text	Sticky Note	David Peterson	In Rectangle (over,down) 0.91,0.94 to 1.16,1.19 Remove all bold text in the TOC.
O	BRCD	#BRCD-4	15	Text	Sticky Note	David Peterson	In Rectangle (over,down) 2.09,0.64 to 2.34,0.89 Fix long sentence wrapping per ISO/IEC directives.
O	BRCD	#BRCD-5	21	Highlight	Highlight	David Peterson	In Rectangle (over,down) 3.40,1.95 to 7.55,2.15 Remove bold.
O	BRCD	#BRCD-6	25	Highlight	Highlight	jcrandal	In Rectangle (over,down) 3.42,5.80 to 5.75,6.00 Functional models in 7.3, 7.4, and 7.5 use Lossless Ethernet MAC and Ethernet_POrt instead of IEEE 802.3//802.1 Lossless Ethernet.
O	BRCD	#BRCD-7	25	Highlight	Highlight	jcrandal	In Rectangle (over,down) 5.09,9.30 to 5.80,9.50 Diagram has FC_BB_E (which is not defined anywhere), not FC-BB_E.
O	BRCD	#BRCD-8	26	Text	Sticky Note	David Peterson	In Rectangle (over,down) 0.86,4.37 to 1.11,4.62 Insert space between lines.
O	BRCD	#BRCD-9	26	Text	Sticky Note	David Peterson	In Rectangle (over,down) 0.96,7.02 to 1.21,7.27 Insert space between lines.
O	BRCD	#BRCD-10	27	Text	Sticky Note	David Peterson	In Rectangle (over,down) 6.27,2.86 to 6.52,3.11 Add references to FC-SW-6 and FC-LS-3, and remove FC-SW-5 and FC-LS-2.
O	BRCD	#BRCD-11	27	Highlight	Highlight	jcrandal	In Rectangle (over,down) 4.83,0.78 to 5.51,0.98 FC-SW-6
O	BRCD	#BRCD-12	27	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.56,6.97 to 2.31,7.16 Obsoleted by RFC 5905 Errata
O	BRCD	#BRCD-13	29	Text	Sticky Note	David Peterson	In Rectangle (over,down) 3.03,1.16 to 3.28,1.41 Convert all definitions to ISO/IEC style.
O	BRCD	#BRCD-14	29	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.61,1.13 to 3.06,1.34 The term VX_Port Identification is used but never defined. Should also define VX_Port.
O	BRCD	#BRCD-15	32	Highlight	Highlight	jcrandal	In Rectangle (over,down) 2.36,1.97 to 3.08,2.16 This is not an FCoE Virtual Link. Should there be a generic term for virutal link defined to differentiate the one defined for FCoE.

O	BRCD	#BRCD-16	34	Highlight	Highlight	dap	In Rectangle (over,down) 1.22,6.63 to 2.26,6.83 Change to deinstantiating - global
O	BRCD	#BRCD-17	34	Highlight	Highlight	jcrandal	In Rectangle (over,down) 4.03,1.63 to 5.08,1.83 Grammar. Should be of up to two.
O	BRCD	#BRCD-18	34	Highlight	Highlight	jcrandal	In Rectangle (over,down) 0.95,2.13 to 7.22,2.50 One or more FDF(s) ...
O	BRCD	#BRCD-19	34	Highlight	Highlight	dap	In Rectangle (over,down) 0.95,1.63 to 7.22,2.00 The Switch_Names the Controlling FCFs that are part of a Distributed Switch.
O	BRCD	#BRCD-20	35	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.81,9.63 to 2.71,9.84 Should tjis be FCoE Virtual Link as 7.6 describes. Also virtual link is used in the context of FCIP also (3.2.18).
O	BRCD	#BRCD-21	36	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.87,2.30 to 2.82,2.50 Lower case (globally).
O	BRCD	#BRCD-22	36	Highlight	Highlight	David Peterson	In Rectangle (over,down) 0.95,0.95 to 7.21,1.31 This text still bothers me as I don't see how a VN_Port is dynamically instantiated after a FLOGI. I think the VN_Port has to be instantiated just to be able to transmit a FLOGI and it is the FCoE_LEP and associated virtual link that is dynamically instantiated. Same for VF_Port and VE_Port definitions.
O	BRCD	#BRCD-23	36	Text	Sticky Note	David Peterson	In Rectangle (over,down) 0.55,1.81 to 0.80,2.06 Add definition for VN2VN_Port.
O	BRCD	#BRCD-24	36	Highlight	Highlight	jcrandal	In Rectangle (over,down) 0.95,1.46 to 1.47,1.67 Should also have definitions for VN2VN ENode and VN2VN_Port
O	BRCD	#BRCD-25	40	Highlight	Highlight	jcrandal	In Rectangle (over,down) 0.95,7.97 to 7.21,8.33 Missing figure 9 and 10 and probably the accompanying text
O	BRCD	#BRCD-26	41	Text	Sticky Note	David Peterson	In Rectangle (over,down) 6.90,2.76 to 7.15,3.01 A_Port or VA_Port ?
O	BRCD	#BRCD-27	44	Text	Sticky Note	David Peterson	In Rectangle (over,down) 3.27,0.89 to 3.52,1.14 Provide VA_Port to VA_Port reference model.
O	BRCD	#BRCD-28	46	Text	Sticky Note	jcrandal	In Rectangle (over,down) 4.25,6.95 to 4.52,7.20 Missing note about independent communicating pair.
O	BRCD	#BRCD-29	48	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 2.25,7.21 to 2.40,7.34 VA_Port to VA_Port virtual links,
O	BRCD	#BRCD-30	48	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.08,9.14 to 1.52,9.31 Review all notes per ISO/IEC guidelines (e.g., no normative requirements).
O	BRCD	#BRCD-31	48	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.63,6.97 to 6.46,7.16 virtual links - caps or not?
O	BRCD	#BRCD-32	48	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.51,7.13 to 2.29,7.33 Shouldn't this be capitalized
O	BRCD	#BRCD-33	48	Highlight	Highlight	jcrandal	In Rectangle (over,down) 5.63,6.97 to 6.46,7.16 Shouldn't this be capitalized

O	BRCD	#BRCD-34	48	Highlight	Highlight	jcrandal	In Rectangle (over,down) 3.82,7.13 to 4.61,7.33 Shouldn't this be capitalized
O	BRCD	#BRCD-35	49	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 3.19,7.71 to 3.34,7.83 VA_Port,
O	BRCD	#BRCD-36	49	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 6.08,7.04 to 6.23,7.16 a VA_Port,
O	BRCD	#BRCD-37	49	Text	Sticky Note	David Peterson	In Rectangle (over,down) 1.09,7.13 to 1.34,7.38 Having trouble parsing these paragraphs...?
O	BRCD	#BRCD-38	50	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.35,0.78 to 1.61,0.98 Delete extra space.
O	BRCD	#BRCD-39	50	Highlight	Highlight	hjohnson	In Rectangle (over,down) 0.95,4.97 to 7.22,5.83 Replace with description of Lossless Ethernet characteristics. Example text: "Lossless Ethernet is implemented through the use of, but not limited to, the following Ethernet extensions: - The PAUSE mechanism defined in IEEE 802.3-2008. - The Priority-based Flow Control (PFC) mechanism defined in IEEE 802.1Qbb; where, FCOE frames shall use a lossless priority (see IEEE 802.1Qbb). - The Precision Time Protocol (PTP) mechanism defined in IEEE 1588-2008; where, PTP is limited to determine link latency."
O	BRCD	#BRCD-40	82	Text	Sticky Note	David Peterson	In Rectangle (over,down) 3.76,3.18 to 4.01,3.43 Add line below item j).
O	BRCD	#BRCD-41	86	Highlight	Highlight	David Peterson	In Rectangle (over,down) 4.18,7.37 to 4.31,7.55 Delete
O	BRCD	#BRCD-42	89	Highlight	Highlight	David Peterson	In Rectangle (over,down) 6.67,1.80 to 7.10,2.00 Review all instances of when versus if.
O	BRCD	#BRCD-43	108	Text	Sticky Note	David Peterson	In Rectangle (over,down) 7.09,7.76 to 7.34,8.01 No text per a Distributed FCF provided.
O	BRCD	#BRCD-44	108	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 4.60,8.38 to 4.75,8.50 VA_Port to VA_Port Virtual Links,

O	BRCD	#BRCD-45	108	Highlight	Highlight	hjohnson	In Rectangle (over,down) 0.95,5.63 to 7.21,6.33 Replace with description of proper implementation with a list of required characteristics. Example text: "...a proper implementation of appropriate Ethernet extension allows a full duplex Ethernet link to provide a lossless behavior equivalent to the one provided by the buffer-to-buffer credit mechanism (see FC-FS-3) provided the following extensions are utilized: - The PAUSE mechanism defined in IEEE 802.3-2008. - The Priority-based Flow Control (PFC) mechanism defined in IEEE 802.1Qbb; where,FCOE frames shall use a lossless priority (see IEEE 802.1Qbb). - The Precision Time Protocol (PTP) mechanism defined in IEEE 1588-2008; where, PTP is limited to determine link latency."
O	BRCD	#BRCD-46	109	Highlight	Highlight	David Peterson	In Rectangle (over,down) 4.76,4.97 to 5.08,5.16 have
O	BRCD	#BRCD-47	109	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.58,5.13 to 5.90,5.33 have
O	BRCD	#BRCD-48	109	Text	Sticky Note	David Peterson	In Rectangle (over,down) 0.97,1.83 to 1.22,2.08 Add outer line border to all figures.
O	BRCD	#BRCD-49	110	Highlight	Highlight	David Peterson	In Rectangle (over,down) 4.43,0.78 to 4.75,0.98 have
O	BRCD	#BRCD-50	110	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.73,7.80 to 6.06,8.00 have
O	BRCD	#BRCD-51	110	Highlight	Highlight	jcrandal	In Rectangle (over,down) 2.62,8.30 to 3.43,8.50 dashed lines
O	BRCD	#BRCD-52	111	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.51,4.97 to 5.84,5.16 have
O	BRCD	#BRCD-53	111	Highlight	Highlight	David Peterson	In Rectangle (over,down) 3.25,6.63 to 3.53,6.83 VN
O	BRCD	#BRCD-54	111	Highlight	Highlight	David Peterson	In Rectangle (over,down) 3.33,4.63 to 3.78,4.83 Should be bold font.
O	BRCD	#BRCD-55	111	Highlight	Highlight	jcrandal	In Rectangle (over,down) 4.08,5.13 to 4.58,5.33 There is no FCF A in the diagram. Only FCF.
O	BRCD	#BRCD-56	111	Highlight	Highlight	jcrandal	In Rectangle (over,down) 7.06,5.47 to 7.55,5.66 dashed
O	BRCD	#BRCD-57	112	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.18,0.78 to 5.51,0.98 have
O	BRCD	#BRCD-58	113	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.28,5.30 to 1.49,5.50 upon
O	BRCD	#BRCD-59	113	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.72,5.30 to 5.92,5.50 upon
O	BRCD	#BRCD-60	113	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 5.58,7.38 to 5.73,7.50 (see 7.7)

O	BRCD	#BRCD-61	114	Highlight	Highlight	David Peterson	In Rectangle (over,down) 0.95,6.63 to 7.21,7.00 A VN2VN ENode MAC has one or more VN_Port(s), called VN2VN_Port(s), dedicated to the instantiation of VN_Port to VN_Port Virtual Links.
O	BRCD	#BRCD-62	114	Highlight	Highlight	David Peterson	In Rectangle (over,down) 4.47,7.63 to 5.29,7.83 address identifiers Use address identifier, not N_Port_ID, globally.
O	BRCD	#BRCD-63	114	Highlight	Highlight	David Peterson	In Rectangle (over,down) 3.58,9.13 to 4.72,9.33 VN2VN-FC-MAP (see table 54). Add VN2VN-FC-MAP to table 54.
O	BRCD	#BRCD-64	114	StrikeOut	Cross-Out	David Peterson	In Rectangle (over,down) 0.94,9.13 to 7.22,9.50 StrikeOut: The constant VN2VN-FC-MAP has the value 0EFD00h.
O	BRCD	#BRCD-65	114	Highlight	Highlight	David Peterson	In Rectangle (over,down) 3.42,9.63 to 4.48,9.83 There are no other instances of Fabric FC-MAP.
O	BRCD	#BRCD-66	115	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.28,0.78 to 7.55,1.14 Don't see how figure 33 shows that Locally Unique N_Port_IDs shall not conflict with and shall be independent from the N_Port_IDs assigned by a Fibre Channel Fabric.
O	BRCD	#BRCD-67	115	Highlight	Highlight	David Peterson	In Rectangle (over,down) 2.01,1.11 to 6.72,1.31 Locally Unique N_Port_IDs shall be in the range 000001h to 00FFFEh, inclusive.
O	BRCD	#BRCD-68	115	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.20,2.97 to 5.52,3.16 either
O	BRCD	#BRCD-69	116	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.08,6.64 to 7.21,6.97 The Lossless Ethernet bridging element does not belong in the model. No issue with stating "Each FCF-MAC may be coupled with a Lossless Ethernet bridging element (see IEEE 802....
O	BRCD	#BRCD-70	116	Highlight	Highlight	David Peterson	In Rectangle (over,down) 0.95,7.13 to 1.41,7.33 Review all instances of "when" and change to "if" if appropriate.
O	BRCD	#BRCD-71	116	Highlight	Highlight	David Peterson	In Rectangle (over,down) 0.95,8.80 to 7.22,9.16 This sentence states the obvious and provide little value.
O	BRCD	#BRCD-72	116	Highlight	Highlight	jcrandal	In Rectangle (over,down) 0.95,7.13 to 1.41,7.33 Should be If
O	BRCD	#BRCD-73	117	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.65,2.30 to 2.22,2.50 transmits
O	BRCD	#BRCD-74	117	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.65,5.63 to 2.22,5.83 initiates
O	BRCD	#BRCD-75	117	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.65,5.63 to 2.22,5.83 transmits

O	BRCD	#BRCD-76	117	Highlight	Highlight	David Peterson	In Rectangle (over,down) 2.79,8.63 to 3.76,8.83 decapsulation or de-encapsulation Pick one and be consistent.
O	BRCD	#BRCD-77	117	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.28,8.63 to 1.49,8.83 upon
O	BRCD	#BRCD-78	117	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.72,8.63 to 5.92,8.83 in
O	BRCD	#BRCD-79	117	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.72,8.63 to 5.92,8.83 upon
O	BRCD	#BRCD-80	118	Highlight	Highlight	David Peterson	In Rectangle (over,down) 3.71,6.96 to 4.09,7.13 Where/when does the VF_Port/FCoE_LEP verify the D_ID is correct?
O	BRCD	#BRCD-81	118	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 3.22,7.54 to 3.37,7.67 VA_Ports,
O	BRCD	#BRCD-82	119	StrikeOut	Cross-Out	David Peterson	In Rectangle (over,down) 7.05,6.46 to 7.23,6.67 StrikeOut: s
O	BRCD	#BRCD-83	120	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 3.57,4.71 to 3.71,4.83 i.e.,
O	BRCD	#BRCD-84	120	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 3.57,5.38 to 3.71,5.50 i.e.,
O	BRCD	#BRCD-85	120	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 4.49,6.04 to 4.64,6.16 i.e.,
O	BRCD	#BRCD-86	120	StrikeOut	Cross-Out	David Peterson	In Rectangle (over,down) 3.00,6.63 to 3.18,6.83 StrikeOut: s
O	BRCD	#BRCD-87	121	Text	Sticky Note	David Peterson	In Rectangle (over,down) 1.76,3.85 to 2.01,4.10 Acronymm VL is not defined.
O	BRCD	#BRCD-88	121	Highlight	Highlight	David Peterson	In Rectangle (over,down) 5.30,4.88 to 6.68,5.09 lower case
O	BRCD	#BRCD-89	122	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 3.83,5.71 to 3.98,5.84 i.e.,
O	BRCD	#BRCD-90	122	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 4.21,5.71 to 4.37,5.84 s
O	BRCD	#BRCD-91	122	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 4.20,6.38 to 4.35,6.50 i.e.,
O	BRCD	#BRCD-92	122	Highlight	Highlight	David Peterson	In Rectangle (over,down) 1.66,8.47 to 2.17,8.66 shall
O	BRCD	#BRCD-93	122	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 4.43,8.54 to 4.58,8.66 inclusive
O	BRCD	#BRCD-94	122	Highlight	Highlight	David Peterson	In Rectangle (over,down) 0.95,8.80 to 5.09,9.00 Stating ENodes shall use FPMAs as VN_Port MAC addresses again is redundant (i.e., see first sentence in subclause).
O	BRCD	#BRCD-95	123	Highlight	Highlight	David Peterson	In Rectangle (over,down) 4.63,0.78 to 4.88,0.98 22
O	BRCD	#BRCD-96	123	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 1.78,5.21 to 1.92,5.33 set

O	BRCD	#BRCD-97	125	Highlight	Highlight	David Peterson	In Rectangle (over,down) 3.82,2.13 to 4.73,2.33 the VLANs that provide FC-BB_E services
O	BRCD	#BRCD-98	125	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 5.10,8.88 to 5.26,9.01 example
O	BRCD	#BRCD-99	125	Highlight	Highlight	dap	In Rectangle (over,down) 2.25,9.47 to 2.59,9.66 manner
O	BRCD	#BRCD-100	125	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.73,0.78 to 3.75,0.98 The diagram refers informatively to static VLAN configurations and default FCoE VLANs. Should the overview include this?
O	BRCD	#BRCD-101	126	Caret	Inserted Text	dap	In Rectangle (over,down) 1.57,6.71 to 1.72,6.83 then that Ä Also do a global review
O	BRCD	#BRCD-102	126	Caret	Inserted Text	dap	In Rectangle (over,down) 1.55,1.55 to 1.70,1.67 then that ...
O	BRCD	#BRCD-103	126	Highlight	Highlight	dap	In Rectangle (over,down) 1.45,5.63 to 1.80,5.83 manner
O	BRCD	#BRCD-104	126	Highlight	Highlight	jcrandal	In Rectangle (over,down) 2.47,2.47 to 3.05,2.66 instantiate additional?
O	BRCD	#BRCD-105	126	Highlight	Highlight	jcrandal	In Rectangle (over,down) 2.64,3.46 to 2.93,3.63 What is "this"? Replace with ENode/FCF VLAN discovery?
O	BRCD	#BRCD-106	126	Highlight	Highlight	jcrandal	In Rectangle (over,down) 2.64,8.62 to 2.93,8.80 What is "this"? Replace with FCF/FCF VLAN Discovery
O	BRCD	#BRCD-107	126	Highlight	Highlight	jcrandal	In Rectangle (over,down) 4.54,3.30 to 6.98,3.48 Not sure what this is trying to say. Are we not simply saying that to discover the Enode/FCF VLANs, discovery may take up to this much time?
O	BRCD	#BRCD-108	126	Highlight	Highlight	jcrandal	In Rectangle (over,down) 4.54,8.47 to 6.98,8.65 Not sure what this is trying to say. Are we not simply saying that to discover the FCF/FCF VLANs, discovery may take up to this much time?
O	BRCD	#BRCD-109	126	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.57,1.47 to 1.91,1.66 then the
O	BRCD	#BRCD-110	126	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.59,6.63 to 1.93,6.83 then the
O	BRCD	#BRCD-111	127	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 7.37,0.77 to 7.55,0.98 StrikeOut: Empty Comment
O	BRCD	#BRCD-112	127	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 3.97,1.27 to 4.15,1.48 StrikeOut: Empty Comment
O	BRCD	#BRCD-113	127	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 6.24,1.94 to 6.42,2.15 StrikeOut: Empty Comment
O	BRCD	#BRCD-114	127	Highlight	Highlight	dap	In Rectangle (over,down) 1.28,1.78 to 1.63,1.98 An

O	BRCD	#BRCD-115	127	Caret	Inserted Text	dap	In Rectangle (over,down) 3.17,1.77 to 3.36,1.98 s
O	BRCD	#BRCD-116	127	Highlight	Highlight	dap	In Rectangle (over,down) 7.10,1.78 to 7.55,1.98 the specified
O	BRCD	#BRCD-117	127	Highlight	Highlight	jcrandal	In Rectangle (over,down) 3.24,1.11 to 3.72,1.31 Comment on 7.9.6 states that the definition is occuring after the use of All-VN2VN-ENode-MACs. Otherwise some reference to the section 7.9.6 which defines All_VN2VN-ENode-MACS should be here.
O	BRCD	#BRCD-118	127	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.58,1.78 to 2.47,1.98 Should be VN2VN ENode MAC.
O	BRCD	#BRCD-119	127	Highlight	Highlight	jcrandal	In Rectangle (over,down) 1.28,1.28 to 4.14,1.48 What happens when a VN2VN ENode is not configured to provide VLANs?
O	BRCD	#BRCD-120	128	Highlight	Highlight	dap	In Rectangle (over,down) 3.74,9.30 to 3.91,9.50 Empty Comment
O	BRCD	#BRCD-121	129	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 6.22,1.29 to 6.40,1.50 StrikeOut: Empty Comment
O	BRCD	#BRCD-122	129	Caret	Inserted Text	dap	In Rectangle (over,down) 3.32,1.55 to 3.47,1.67 then
O	BRCD	#BRCD-123	129	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 3.53,2.63 to 3.71,2.83 StrikeOut: Empty Comment
O	BRCD	#BRCD-124	129	Highlight	Highlight	dap	In Rectangle (over,down) 5.50,0.78 to 5.85,0.98 manner
O	BRCD	#BRCD-125	129	Highlight	Highlight	jcrandal	In Rectangle (over,down) 5.55,6.47 to 6.23,6.66 FC-SW-6
O	BRCD	#BRCD-126	129	Highlight	Highlight	jcrandal	In Rectangle (over,down) 2.98,3.62 to 3.26,3.80 VN2VN ENode Discovery
O	BRCD	#BRCD-127	129	Highlight	Highlight	jcrandal	In Rectangle (over,down) 4.87,3.47 to 7.32,3.65 Not sure what this is trying to say. Are we not simply saying that to discover the VN2VN Enode VLANs, discovery may take up to this much time?
O	BRCD	#BRCD-128	129	Highlight	Highlight	jcrandal	In Rectangle (over,down) 3.34,1.47 to 4.68,1.66 then the VN2VN ENode whose configuration of VLANs changed
O	BRCD	#BRCD-129	131	Highlight	Highlight	dap	In Rectangle (over,down) 2.25,3.13 to 2.59,3.33 manner
O	BRCD	#BRCD-130	131	Highlight	Highlight	dap	In Rectangle (over,down) 1.79,3.80 to 2.13,4.00 manner
O	BRCD	#BRCD-131	133	Highlight	Highlight	dap	In Rectangle (over,down) 1.79,5.63 to 2.13,5.83 manner
O	BRCD	#BRCD-132	133	Highlight	Highlight	dap	In Rectangle (over,down) 5.60,7.80 to 5.74,8.00 Empty Comment
O	BRCD	#BRCD-133	133	Highlight	Highlight	dap	In Rectangle (over,down) 5.60,7.80 to 5.74,8.00 Delete extra space.

O	BRCD	#BRCD-134	134	Highlight	Highlight	dap	In Rectangle (over,down) 3.92,0.78 to 4.80,0.98 instantiation
O	BRCD	#BRCD-135	134	Highlight	Highlight	dap	In Rectangle (over,down) 6.60,4.80 to 7.21,5.00 address
O	BRCD	#BRCD-136	134	Highlight	Highlight	dap	In Rectangle (over,down) 6.43,5.30 to 6.81,5.50 The
O	BRCD	#BRCD-137	134	Highlight	Highlight	dap	In Rectangle (over,down) 0.95,6.47 to 2.42,6.66 provide a reference
O	BRCD	#BRCD-138	136	Highlight	Highlight	dap	In Rectangle (over,down) 3.66,2.13 to 4.48,2.33 instantiation
O	BRCD	#BRCD-139	137	Highlight	Highlight	dap	In Rectangle (over,down) 4.09,5.97 to 4.93,6.16 instantiation
O	BRCD	#BRCD-140	138	Highlight	Highlight	dap	In Rectangle (over,down) 0.95,6.63 to 2.76,6.83 Change to bold font.
O	BRCD	#BRCD-141	138	Highlight	Highlight	jcrandal	In Rectangle (over,down) 0.95,2.46 to 3.27,2.67 This section to occur before 7.9.2.4 because that uses ALL-VN2VN-ENode-MACS.
O	BRCD	#BRCD-142	139	Highlight	Highlight	dap	In Rectangle (over,down) 1.28,5.63 to 1.63,5.83 manner
O	BRCD	#BRCD-143	139	Highlight	Highlight	dap	In Rectangle (over,down) 2.72,9.30 to 2.91,9.50 An
O	BRCD	#BRCD-144	140	Caret	Inserted Text	dap	In Rectangle (over,down) 3.04,7.88 to 3.19,8.00 ,
O	BRCD	#BRCD-145	140	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 3.39,7.96 to 3.54,8.17 StrikeOut: Empty Comment
O	BRCD	#BRCD-146	142	Highlight	Highlight	dap	In Rectangle (over,down) 5.90,4.13 to 6.25,4.33 manner
O	BRCD	#BRCD-147	145	Highlight	Highlight	dap	In Rectangle (over,down) 2.34,7.97 to 7.42,8.16 Resolved editor's note.
O	BRCD	#BRCD-148	146	Highlight	Highlight	dap	In Rectangle (over,down) 6.83,3.80 to 7.18,4.00 manner
O	BRCD	#BRCD-149	150	Highlight	Highlight	dap	In Rectangle (over,down) 5.74,3.30 to 5.99,3.50 a
O	BRCD	#BRCD-150	150	Highlight	Highlight	dap	In Rectangle (over,down) 5.94,6.97 to 6.20,7.16 a
O	BRCD	#BRCD-151	150	Caret	Inserted Text	dap	In Rectangle (over,down) 4.08,7.05 to 4.23,7.17 ,
O	BRCD	#BRCD-152	150	Caret	Inserted Text	dap	In Rectangle (over,down) 3.81,3.38 to 3.96,3.50 ,
O	BRCD	#BRCD-153	151	Caret	Inserted Text	dap	In Rectangle (over,down) 3.88,0.57 to 4.01,0.68 Empty Comment
O	BRCD	#BRCD-154	151	Caret	Inserted Text	dap	In Rectangle (over,down) 3.48,1.55 to 3.63,1.67 ,
O	BRCD	#BRCD-155	151	Caret	Inserted Text	dap	In Rectangle (over,down) 3.73,5.04 to 3.88,5.16 ,
O	BRCD	#BRCD-156	153	Caret	Inserted Text	dap	In Rectangle (over,down) 5.20,0.86 to 5.35,0.98 .
O	BRCD	#BRCD-157	155	Text	Sticky Note	dap	In Rectangle (over,down) 5.51,2.44 to 5.76,2.69 Increase column size.

O	BRCD	#BRCD-158	161	Highlight	Highlight	dap	In Rectangle (over,down) 3.70,3.13 to 5.24,3.34 Review use of capitolization globallyi.e., do not use caps if not needed.
O	BRCD	#BRCD-159	161	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 5.52,3.79 to 5.70,4.00 StrikeOut: Empty Comment
O	BRCD	#BRCD-160	161	Caret	Inserted Text	dap	In Rectangle (over,down) 5.57,3.88 to 5.72,4.00 Empty Comment
O	BRCD	#BRCD-161	161	Caret	Inserted Text	dap	In Rectangle (over,down) 6.72,9.04 to 6.87,9.17 ,
O	BRCD	#BRCD-162	161	Highlight	Highlight	dap	In Rectangle (over,down) 1.92,8.97 to 2.17,9.16 a
O	BRCD	#BRCD-163	162	Highlight	Highlight	dap	In Rectangle (over,down) 1.61,0.95 to 1.87,1.14 a
O	BRCD	#BRCD-164	162	Caret	Inserted Text	dap	In Rectangle (over,down) 6.83,1.03 to 6.98,1.15 ,
O	BRCD	#BRCD-165	162	Highlight	Highlight	dap	In Rectangle (over,down) 1.59,1.80 to 1.84,2.00 a
O	BRCD	#BRCD-166	162	Caret	Inserted Text	dap	In Rectangle (over,down) 6.39,1.88 to 6.53,2.00 ,
O	BRCD	#BRCD-167	162	Highlight	Highlight	dap	In Rectangle (over,down) 0.95,3.30 to 7.21,3.66 Specify the behavior if the FPMA is not properly formed.
O	BRCD	#BRCD-168	162	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 1.31,4.96 to 1.61,5.17 StrikeOut: Empty Comment
O	BRCD	#BRCD-169	162	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 1.31,5.29 to 1.59,5.50 StrikeOut: Empty Comment
O	BRCD	#BRCD-170	162	StrikeOut	Cross-Out	dap	In Rectangle (over,down) 1.31,5.63 to 1.58,5.83 StrikeOut: Empty Comment
O	BRCD	#BRCD-171	163	Caret	Inserted Text	dap	In Rectangle (over,down) 4.88,6.88 to 5.03,7.00 ,
O	BRCD	#BRCD-172	163	Caret	Inserted Text	dap	In Rectangle (over,down) 4.89,7.38 to 5.04,7.50 ,
O	BRCD	#BRCD-173	163	Caret	Inserted Text	dap	In Rectangle (over,down) 4.87,7.88 to 5.02,8.00 ,
O	BRCD	#BRCD-174	164	Caret	Inserted Text	dap	In Rectangle (over,down) 6.11,3.88 to 6.26,4.00 ,
O	BRCD	#BRCD-175	164	Caret	Inserted Text	dap	In Rectangle (over,down) 4.09,4.38 to 4.24,4.50 ,
O	BRCD	#BRCD-176	164	Caret	Inserted Text	dap	In Rectangle (over,down) 4.07,4.88 to 4.22,5.00 ,
O	BRCD	#BRCD-177	165	Highlight	Highlight	dap	In Rectangle (over,down) 1.28,9.13 to 4.94,9.33 What other name would it be set to?
O	BRCD	#BRCD-178	166	Highlight	Highlight	dap	In Rectangle (over,down) 0.95,0.78 to 7.22,1.14 What other name would it be set to?
O	BRCD	#BRCD-179	166	Caret	Inserted Text	dap	In Rectangle (over,down) 2.56,8.71 to 2.71,8.83 ,

O	BRCD	#BRCD-180	166	Caret	Inserted Text	dap	In Rectangle (over,down) 2.56,5.88 to 2.71,6.00 ,
O	BRCD	#BRCD-181	167	Caret	Inserted Text	dap	In Rectangle (over,down) 5.05,1.03 to 5.20,1.15 i.e.,
O	BRCD	#BRCD-182	167	Caret	Inserted Text	dap	In Rectangle (over,down) 4.22,3.71 to 4.37,3.83 i.e.,
O	BRCD	#BRCD-183	167	Caret	Inserted Text	dap	In Rectangle (over,down) 5.05,7.38 to 5.20,7.50 i.e.,
O	BRCD	#BRCD-184	168	Caret	Inserted Text	dap	In Rectangle (over,down) 4.71,2.54 to 4.86,2.66 i.e.,
O	BRCD	#BRCD-185	168	Caret	Inserted Text	dap	In Rectangle (over,down) 2.56,1.38 to 2.71,1.50 ,
O	BRCD	#BRCD-186	169	Highlight	Highlight	dap	In Rectangle (over,down) 1.28,6.80 to 1.79,7.00 Should be shall.
O	BRCD	#BRCD-187	172	Text	Sticky Note	dap	In Rectangle (over,down) 2.61,0.71 to 2.86,0.96 The Distributed FCF model currently does not support more than two Controlling FCFs. Implement changes per 13-017.
O	BRCD	#BRCD-188	172	Text	Sticky Note	dap	In Rectangle (over,down) 3.09,0.71 to 3.34,0.96 The Distributed FCF text in FC-BB-6 is dependent on finalized FC-SW-6 Distributed Switch text. As such this draft standard must not be forwarded to public review until FC-SW-6 letter ballot comment resolution is complete.
O	BRCD	#BRCD-189	173	Highlight	Highlight	hjohnson	In Rectangle (over,down) 1.28,0.95 to 7.55,1.48 I don't think we resolved the relationship between Switch_Name and virtual domain. The implication in this statement is that a Controlling FCF can use one Switch_Name for more than one Domain_ID; however, I thought it was determined that a one to one relationship between Switch_Name and Domain_ID was necessary.
O	BRCD	#BRCD-190	173	Highlight	Highlight	hjohnson	In Rectangle (over,down) 1.28,7.97 to 7.55,8.33 The statement that at least two Augmented VE_Port to VE_Port virtual links is ambiguous and should be removed. A single VE_Port to VE_Port Virtual Link is all that is needed to support the redundancy protocol. Furthermore, the model supports multiple VE_Ports over a single physical Lossless Ethernet connection. Both the diagram and the text imply, but do not designate, that the two Augmented links are two physically separate links.
O	BRCD	#BRCD-191	181	Caret	Inserted Text	David Peterson	In Rectangle (over,down) 3.53,4.38 to 3.68,4.50 the
O	BRCD	#BRCD-192	181	Caret	Inserted Text	dap	In Rectangle (over,down) 5.45,4.38 to 5.60,4.50 the
Comments on IBM.fdf							
State	Company	Comment Nu	Page	Subtype	Subject	Author	Comment

				Highlight	Comment on Text		In Rectangle (over,down) 1.87,8.95 to 4.11,9.14 IBM-R1:E:: Change bar indicated here, but no change bars indicated in section 4.4.1.
O	IBM	#IBM-1	13			rhathorn	What was the change?
				Highlight	Highlight		In Rectangle (over,down) 2.44,7.97 to 3.58,8.16 IBM-P1:E:: a port capable
O	IBM	#IBM-2	29			rhathorn	
				Highlight	Highlight		In Rectangle (over,down) 4.35,8.47 to 5.45,8.66 IBM-P2:E:: reference? definition? (for Transport Trail)
O	IBM	#IBM-3	29			rhathorn	
				Highlight	Highlight		In Rectangle (over,down) 1.53,0.77 to 3.69,1.00 IBM-S1:E:: Update definitions to conform to style guide requirements for ISO certificaiton
O	IBM	#IBM-4	29			rhathorn	
				Text	Sticky Note		In Rectangle (over,down) 7.11,6.32 to 7.39,6.57 IBM-P3:T:: and VA_Ports and VN2VN_Ports
O	IBM	#IBM-5	34			patty driever	Also add to FCoE Entity
				Highlight	Comment on Text		In Rectangle (over,down) 4.02,9.30 to 5.67,9.50 IBM-P4:E:: Should FCDF also be defined or a reference to SW-6 added?
O	IBM	#IBM-6	34			rhathorn	
				Text	Sticky Note		In Rectangle (over,down) 4.05,3.64 to 4.33,3.89 IBM-p5:E:: The term "LCF" is not previously defined.
O	IBM	#IBM-7	35			patty driever	Define or add (see FC-FS-3)
				Text	Sticky Note		In Rectangle (over,down) 0.86,1.99 to 1.14,2.24 IBM-37:E::Add the following definitions: N_Port_ID P2P Claim Notification: a FIP N_Port_ID Claim Notification with the Rec/P2P bit set to 1 N_Port_ID P2P Claim Response: a FIP N_Port_ID Claim with the Rec/P2P bit
O	IBM	#IBM-8	36			rhathorn	set to 1
				Text	Sticky Note		In Rectangle (over,down) 6.95,6.39 to 7.23,6.64 and FDFs? or "including distributed
O	IBM	#IBM-9	40			patty driever	FCFs"?
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,6.97 to 7.22,7.33 IBM-R3:T:: This statement needs to include VA_Port
O	IBM	#IBM-10	48			rhathorn	to VA_Port virtual links.
				Highlight	Comment on Text		In Rectangle (over,down) 4.77,6.97 to 7.01,7.16 IBM-R2:T:: VA_Port should be included in this list, and perhaps a reference to
O	IBM	#IBM-11	49			rhathorn	FC-SW-6
				Highlight	Comment on Text		In Rectangle (over,down) 2.03,7.63 to 4.03,7.83 IBM-R2:E:: See IBM-R2
O	IBM	#IBM-12	49			rhathorn	
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,7.97 to 7.21,8.33 IBM-H1:T:: What is the scope of this requirement? A strict interpretation would require that all frames between a given pair of

O	IBM	#IBM-13	50			rhathorn	endpoints arrive in the same order that they were sent. That would also preclude the use of exchange based hashing on aggregated ethernet links which, in turn, disallows the use of a significant load balancing mechanism.
O	IBM	#IBM-14	51	Highlight	Highlight	rhathorn	In Rectangle (over,down) 2.87,2.00 to 4.20,2.20 IBM-p6:E:: "A proper implementation of Ethernet extensions...." - words in bold need to be added (consistent with wording in 4.3.4)
O	IBM	#IBM-15	111	Text	Sticky Note	rhathorn	In Rectangle (over,down) 2.10,1.91 to 2.38,2.16 IBM-R14:E:: These are VN2VN_Ports
O	IBM	#IBM-16	112	Text	Sticky Note	rhathorn	In Rectangle (over,down) 0.63,2.91 to 0.91,3.16 IBM-R46:T:: Replace this statement (modified from it's original text): Although it will function with only two VN2VN ENode MACs visible to each other over a Lossless Ethernet network, the point-to-point protocol is intended for the case of two VN2VN ENode MACs connected through a single cable so that certain assumptions can be made for faster initialization (e.g. elimination of Probe Requests and associated delays).
O	IBM	#IBM-17	113	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 5.74,8.80 to 7.26,9.00 IBM-R10:T:: Refer to FC-LS-3 and FC-FS-4 as there are behaviors there that are prefered fro FCoE VN_Ports (e.g. phy type identification in RNID)
O	IBM	#IBM-18	114	Text	Sticky Note	rhathorn	In Rectangle (over,down) 0.46,4.22 to 0.74,4.47 IBM-R11:T:: The 2 stacks on the left should be shown as optional with brackets. A VN2VN Enode does not have to also provide FC_BB_E Fabric connectivity.
O	IBM	#IBM-19	114	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 3.78,6.80 to 5.22,7.00 IBM-R12:T:: This sentence only applies to multi-point mode. Change to: When operating in a multi-point mode, the FCoE Controller ...
O	IBM	#IBM-20	115	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 1.28,0.78 to 2.43,0.98 IBM-R13:E:: Figure 33 does not show anything about N_Port IDs. Say: Figure 33 shows a mixed FCoE network consisting of both VN_Port to VF_Port virtual links and VN_Port to VN_Port virtual links. In such a configuration, Locally Unique N_Port_IDs ...
				Text	Sticky Note		In Rectangle (over,down) 0.66,2.86 to 0.94,3.11 IBM-R15:T:: At the end of 7.4 VN2VN ENode

							functional model, add the section that summarizes the responsibilities of the FCoE Controller as is provided in the other functional models. e.g.; For a VN2VN ENode's MAC, the FCoE Controller: a) makes up a LUID b) Probes (if multi-point) c) Claims d) Beacons e) instantiates VN_Port to VN_Port virtual links f) deinstantiates (implicit and explicit using LOGO) g) monitors the status of VN_Port to VN_Port virtual links
O	IBM	#IBM-21	115			rhathorn	.....
				Text	Sticky Note		In Rectangle (over,down) 0.58,8.58 to 0.85,8.83 IBM-R16:E:: The distributed switch content should be integrated with the similar concepts in this document. e.g. The cFCF and FDF
O	IBM	#IBM-22	118			rhathorn	functional models should be here.
				Text	Sticky Note		In Rectangle (over,down) 0.58,5.65 to 0.85,5.90 IBM-R16:E:: The distributed switch content should be integrated with the similar concepts in this document. e.g. The VA_Port to VA_Port virtual
O	IBM	#IBM-23	122			rhathorn	links should be here. (from 7.12.4)
				Highlight	Comment on Text		In Rectangle (over,down) 1.28,5.96 to 3.01,6.17 IBM-R18:T:: Need to add in text for VN2VN_Port MAC addresses or insert a 7.8 section. They use FPMAs. They are not used with FCFs. They don't come from FCFs
O	IBM	#IBM-24	122			rhathorn	They use a different FC-MAP.
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,8.80 to 5.05,9.00 IBM-R17:E:: This is redundant to the first sentence in this section.
O	IBM	#IBM-25	122			rhathorn	Strike it.
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,8.80 to 7.22,9.16 IBM-R19:T:: There is no protocol use defined for this address. Remove this and the address from table 54 If left in, for whatever reason, the
O	IBM	#IBM-26	124			rhathorn	next sentence contradicts this one.
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,9.30 to 7.22,9.66 IBM-20:T:: This and the previous sentence need to be updated to include VN2VN MAC addresses All-VN2VN-ENode-MACs and
O	IBM	#IBM-27	124			rhathorn	All-P2P-ENode-MACs
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,8.96 to 1.48,9.17

							IBM-R21:E::
O	IBM	#IBM-28	126			rhathorn	Missing title
				Highlight	Comment on Text		In Rectangle (over,down) 4.55,0.78 to 5.33,0.98
							IBM:R23:E::
O	IBM	#IBM-29	128			rhathorn	may determine
				Highlight	Comment on Text		In Rectangle (over,down) 2.77,4.63 to 3.35,4.83
							IBM:22:T::
O	IBM	#IBM-30	129			rhathorn	one or more
				Highlight	Comment on Text		In Rectangle (over,down) 1.28,1.47 to 7.55,2.00
							IBM-R24:T::
							What if the vlan on which the virtual
							link is established is removed from the
							configuration? CVL? (Same question
O	IBM	#IBM-31	129			rhathorn	applies to fabric case).
				Highlight	Highlight		In Rectangle (over,down) 1.65,1.63 to 7.55,2.00
							IBM-H2:T::
							Can we relax this restriction for
							adverts/solicitations between the cFCF
							and FDF so we can allow the FC-MAP to
O	IBM	#IBM-32	133			rhathorn	be distributed to the FDFs?
				Highlight	Comment on Text		In Rectangle (over,down) 6.69,4.47 to 6.84,4.66
							IBM-R25:E::
O	IBM	#IBM-33	134			rhathorn	add (see 7.9.6)
				Text	Sticky Note		In Rectangle (over,down) 6.22,4.33 to 6.50,4.58
							IBM-P7:E::
O	IBM	#IBM-34	136			patty driever	...not logged in...
				Highlight	Comment on Text		In Rectangle (over,down) 5.85,0.95 to 6.15,1.14
							IBM-R26:E::
							change per to from
O	IBM	#IBM-35	138			rhathorn	(there is only one)
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,6.63 to 2.76,6.83
							IBM:R-27:E::
O	IBM	#IBM-36	138			rhathorn	Make bold.
				Highlight	Comment on Text		In Rectangle (over,down) 2.01,4.63 to 5.51,4.83
							IBM-47:T::
							ALL_ENODE_MACS must also be enabled to
							detect the presence of an FCF
							(advertisements). This at least needs
							to be stated as an option.
							(see 7.9..3.1 - "At any time, upon
							receiving a N_Port_ID Probe Request, a
							N_Port_ID Claim Notification, a
							N_Port_ID Beacon, or a FIP
							Advertisement, a VN2VN ENode MAC
							operating in point-to-point mode shall
O	IBM	#IBM-37	138			rhathorn	cease the point-to-point operations."
				Highlight	Comment on Text		In Rectangle (over,down) 1.28,5.97 to 7.55,6.33
							IBM-R48:T::
							Clarify that this means that the more
							than one Claim Responses are from
							different VN2VN_Ports in response to a
O	IBM	#IBM-38	141			rhathorn	single claim request.
				Highlight	Highlight		In Rectangle (over,down) 1.28,6.97 to 7.55,7.66
							IBM-R49:T::
							Note regarding QLogic comment from
							12-129v1 that was dropped.
							Should there be interlock with other
							VN2VN before FLOGI (i.e received
O	IBM	#IBM-39	141			rhathorn	BEACON) ?

O	IBM	#IBM-40	142	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 0.95,4.63 to 4.69,4.84 IBM-R28:E:: Move this to 7.10 Timers and Constants.
O	IBM	#IBM-41	143	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 4.77,5.63 to 7.50,6.03 IBM-R29:E:: One and two character bit names are lame. Make this a FIP Flags field and define in text in a more traditional way with full length bit names and bit numbers. The description of the bits below is in a random order and inconsistent with other bit definitions in this document. State the bit name in bold and state word and bit numbers in definition. (case in point, there are two "D" bits in this spec. I dare you to search for the uses of "D")
O	IBM	#IBM-42	145	Text	Sticky Note	patty driever	In Rectangle (over,down) 6.54,8.80 to 6.82,9.05 IBM-p8:T:: So what if these bits are set on other FIP ops? Per pg. 17, "receipt of reserved code values in defined fields shall be reported as an error." This is a value in a defined field that in invalid in the context of 'all other FIP operations"
O	IBM	#IBM-43	146	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 0.95,1.63 to 7.22,2.00 IBM-R30:E:: Describe this bit more fully, including when it is the REC(orded) bit (in Probes) and when it is a P2P bit (in Claims, Claim Response, and Beacon). Reserved otherwise?
O	IBM	#IBM-44	146	Highlight	Highlight	rhathorn	In Rectangle (over,down) 1.09,5.47 to 4.33,5.66 IBM-p9:T:: For item 'e' below in at least one case use of an invalid value for MAC addresses is not reported in a vendor specific way...in a FLOGI invalid MAC) values are reported via LS_RJT per page 142 section 7.9.8.4.2
O	IBM	#IBM-45	150	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 0.95,6.63 to 7.22,7.33 IBM-R4:E:: All occurrences of "FLOGI" in this paragraph should be FDISC instead.
O	IBM	#IBM-46	152	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 0.95,8.80 to 3.70,9.00 IBM-R5:T:: This definition should be more descriptive. Is this an OUI value? What makes it unique?
O	IBM	#IBM-47	155	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 2.38,1.25 to 6.49,1.46 IBM-R6:T:: Add FIP Keep Alive received when not logged in. (Need both VN_Port and E_Node flavors as done for timeouts above?)
O	IBM	#IBM-48	155	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 3.08,3.75 to 3.41,3.95 IBM-R7:T:: Add code for Implicit Logout (the case we added in Virtual Link Maintenance)

				Highlight	Comment on Text		In Rectangle (over,down) 4.71,3.68 to 5.31,3.90 IBM-R31:E:: Add or FCF and put the footnote on FCF. It is allowed, therefore it should be
O	IBM	#IBM-49	157			rhathorn	here.
				Highlight	Comment on Text		In Rectangle (over,down) 4.71,4.05 to 5.30,4.64 IBM-R32:E:: This should be FCF or ENode (not just VN2VN ENode) because it is allowed for a ENode to receive FIP LOGO. Put the footnote on the ENode.
O	IBM	#IBM-50	157			rhathorn	Same with next row.
				Text	Sticky Note		In Rectangle (over,down) 0.20,5.34 to 0.48,5.59 We've never fully worked out the recovery scenarios regarding exposures of not fully cleaning up prior operations before new ones are
O	IBM	#IBM-51	162			patty driever	initiated if no ABTS is used
				Highlight	Comment on Text		In Rectangle (over,down) 1.32,4.97 to 1.54,5.16 IBM-R33:E::
O	IBM	#IBM-52	162			rhathorn	Remove extra b), c), d)
				Highlight	Comment on Text		In Rectangle (over,down) 4.62,7.80 to 7.18,8.00 IBM-34:T:T change to MAC Address field of the MAC address
O	IBM	#IBM-53	162			rhathorn	descriptor not set to zero.
				Text	Sticky Note		In Rectangle (over,down) 0.41,9.16 to 0.69,9.41 We've never fully worked out the recovery scenarios regarding exposures of not fully cleaning up prior operations before new ones are
O	IBM	#IBM-54	163			patty driever	initiated if no ABTS is used
				Highlight	Comment on Text		In Rectangle (over,down) 1.28,9.30 to 7.55,9.66 IBM-R35:T:: This wording needs the same treatment as was given for FLOGI (although the arguments for the S_ID = 0 on FLOGI
O	IBM	#IBM-55	163			rhathorn	don't apply here or in FDISC)
				Highlight	Comment on Text		In Rectangle (over,down) 1.28,3.47 to 7.55,3.83 IBM-R8:T:: State the behavior for receiving a CVL with an empty list. After this sentence, add the following: The FCoE Controller of a receiving ENode MAC shall de-instantiate all existing virtual links with the originating FCF-MAC when no Vx_Port Identification descriptors are
O	IBM	#IBM-56	165			rhathorn	specified.
				Highlight	Comment on Text		In Rectangle (over,down) 1.28,6.47 to 7.55,6.83 IBM-R9:T:: Need to add the case for de-instantiate of a VA_Port to VA_Port virtual link. (i.e. using FFFFFAh and A_Port_Name). Suggest duplication of these 2 paragraphs and changing the terms
O	IBM	#IBM-57	165			rhathorn	appropriately.
				Highlight	Comment on Text		In Rectangle (over,down) 2.83,6.80 to 4.43,7.00

O	IBM	#IBM-58	166			rhathorn	IBM-R36:E:: originating ENode (as was done in 7.9.8.7). Also fix in sections 7.9.8.11, 7.9.8.12, 7.9.8.13.
O	IBM	#IBM-59	168	Highlight	Highlight	rhathorn	In Rectangle (over,down) 1.04,7.02 to 6.64,7.38 See prior comment. There is no protocol associated with this address, certainly not in 7.9.1 - remove.
O	IBM	#IBM-60	174	Text	Sticky Note	patty driever	In Rectangle (over,down) 1.15,2.70 to 1.42,2.95 IBM-P10:E:: Figure 47
O	IBM	#IBM-61	174	Highlight	Highlight	rhathorn	In Rectangle (over,down) 0.95,0.95 to 7.21,1.31 IBM-P1:E:: at least one switch name
O	IBM	#IBM-62	174	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 3.59,1.11 to 4.60,1.31 IBM-38:T:: Add a statement that says that the primary and secondary controlling switches shall use the same switch name(s) that is associated with the Virtual Domain ID(s) used for the distributed switch.
O	IBM	#IBM-63	175	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 4.56,1.11 to 5.05,1.31 IBM-R39:T:: Should the configuration also include the switch name used for the virtual domain?
O	IBM	#IBM-64	176	Highlight	Comment on Text	rhathorn	In Rectangle (over,down) 0.95,5.30 to 7.22,7.00 IBM:40:E:: This text is repeated 4 times in this document, in each of the functional models. Define the FCoE_LEP behavior in one place and refer to it.
O	IBM	#IBM-65	177	Highlight	Highlight	rhathorn	In Rectangle (over,down) 1.42,8.63 to 6.54,8.83 IBM-H3:T:: FDF VA_Port Capable MACs do not participate in VLAN discovery, per discussion initiated by 12-199.
O	IBM	#IBM-66	179	Highlight	Highlight	rhathorn	In Rectangle (over,down) 3.75,9.30 to 4.69,9.50 IBM-H1:T::FC-LS-2, version 2.21, table 33 documents an RSCN event qualifier value to change the fabric name. How does this interact with the BB-5 and BB-6 discovery advertisements? Consider BB-5 with a VF-Port capable MAC sending discovery advertisements to All-ENode-MACs. If the fabric name is changed via this RSCN, at what point does the advertised fabric name get updated? This change was introduced by http://www.t11.org/ftp/t11/pub/fc/ls-2/10-030v1.pdf.
				Highlight	Highlight		In Rectangle (over,down) 1.07,3.80 to 7.09,4.16 IBM-P2:T:: If (as in later paragraphs) ELPs received with other invalid bit combos results in a REJ with Reason Code=Protocol Error and Reason Code Explanation='Invalid Request', why is this case unique and ignored? 'Ignored'

O	IBM	#IBM-67	180			rhathorn	leads to unnecessary timeouts.
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,5.80 to 7.19,6.00
							IBM-R42:E::
							Normal ELP rules in SW-6 do not say
							anything about establishment of virtual
							links. I think this statement is
							redundant to the paragraph above this
							one.
O	IBM	#IBM-68	180			rhathorn	Strike this sentence and move the paragraph above this one to here.
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,7.13 to 7.21,7.50
							IBM-R43:T::
							We need a better statement of when
							"operational". We can't rely on a
							particular numbered state in a separate
							standard that has not yet been
							ratified. Suggest changing this to
							something more general such as when the
							the controling switch has the
							distributed switch configuration, has
							obtained the Virtual Domain ID and the
O	IBM	#IBM-69	180			rhathorn	primary/secondary are in sync....
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,8.80 to 3.47,9.00
							IBM-R44:T::
							How does a VA_Port Capable FDF-MAC know
							that the other MAC is VA?_Port/VE_Port
							capable? Because it is a controlling
							switch.
							So, instead of beating around the
							bush, just state that:
							....with a FCF MAC belonging to a
O	IBM	#IBM-70	180			rhathorn	controlling switch.
				Highlight	Comment on Text		In Rectangle (over,down) 1.28,4.63 to 7.55,5.16
							IBM-R45:T::
							This only applies after the cFCF set is
							received in DFMD. Up until then it has
							to accept any ELPs from controling
O	IBM	#IBM-71	181			rhathorn	switches that could be it's primary.
				Highlight	Comment on Text		In Rectangle (over,down) 1.42,5.96 to 4.00,6.17
							IBM-R50:E::
							Annex D was added as a separate annex
							to cover the VN2VN configurations.
							That annex does not contain all the
							background and ACL nomenclature that
							exists above in C.1-C.2, and therefore,
							does not stand on its own. Either
							a) words need to be added to this C.3
							that indicate this section applies to
							fabric configurations and does not
							apply to
							VN2VN configurations with a reference
							to Annex D; or
							b) The Annexes should be combined and
							properly structured with Fabric and
							VN2VN topology sections.
							My preference is for option b). There
							should only be one annex to describe
O	IBM	#IBM-72	186			rhathorn	ACLs.

				Text	Sticky Note		In Rectangle (over,down) 0.99,5.17 to 1.27,5.42 IBM-R51:T:: Insert: For each successful FIP Fabric LOGO or Clear Virtual Links associated with this VN_Port MAC address, the above ACE
O	IBM	#IBM-73	188			rhathorn	should be removed.
				Highlight	Comment on Text		In Rectangle (over,down) 1.99,4.47 to 3.86,4.66 IBM-R52:T::
O	IBM	#IBM-74	191			rhathorn	or a FIB Fabric LOGO LS_ACC
				Highlight	Comment on Text		In Rectangle (over,down) 2.52,1.63 to 7.08,1.83 IBM-R53:E:: I am pretty sure that rogue hosts cannot advertise themselves as FCFs in Fibre Channel. Please be specific in
O	IBM	#IBM-75	191			rhathorn	what this means.
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,5.63 to 7.22,6.83 IBM-R54:E:: Make one paragraph, or split last sentence into its own paragraph, since
O	IBM	#IBM-76	192			rhathorn	it applies to the whole thing.
				Highlight	Comment on Text		In Rectangle (over,down) 3.23,7.47 to 4.89,7.66 IBM-R55:T:: Need to include another ACE for All-PT2PT-ENode-MACs to cover the point to point case. Or; alternatively enable one or the other based on P2P bit in the claim.
O	IBM	#IBM-77	192			rhathorn	Fix here and in next ACL
				Highlight	Comment on Text		In Rectangle (over,down) 1.42,3.13 to 3.52,3.50 IBM-R56:T:: Is FIP allowed or denied by default? Should have a Type = FIP_TYPE, denyat the end to block probes, claims and FLOGIs during the join. Also add to next section so they continue to be not allowed while probes
O	IBM	#IBM-78	193			rhathorn	are flowing.
				StrikeOut	Cross-Out		In Rectangle (over,down) 5.64,5.79 to 6.57,6.00 StrikeOut: IBM-R56:E:: redundant. milliseconds already in the definition of BEACON_PERIOD
O	IBM	#IBM-79	193			rhathorn	Fix all occurrences.
				Highlight	Comment on Text		In Rectangle (over,down) 1.42,6.80 to 4.95,7.33 IBM-R57:T:: Add Type=FIP_TYPE, permit at the end to allow Probes, Claims,
O	IBM	#IBM-80	193			rhathorn	FLOGI, etc.
				Highlight	Comment on Text		In Rectangle (over,down) 1.27,6.30 to 6.40,6.55 IBM-R58:E:: Is this part of the example or part of the documentation? Needs either code
O	IBM	#IBM-81	221			rhathorn	comment /* */ or document font.
				Highlight	Comment on Text		In Rectangle (over,down) 1.41,1.64 to 7.55,2.12 IBM-59:E:: Remove this. Provides no relevant

O	IBM	#IBM-82	221			rhathorn	information
				Highlight	Comment on Text		In Rectangle (over,down) 1.60,7.13 to 4.98,7.55 IBM-R60:T:: These are uninitialized variables. Show
O	IBM	#IBM-83	221			rhathorn	initialization placeholders
				Highlight	Comment on Text		In Rectangle (over,down) 0.95,2.97 to 7.22,3.33 IBM-R61:E::
O	IBM	#IBM-84	222			rhathorn	Help!
				Highlight	Comment on Text		In Rectangle (over,down) 2.70,0.77 to 6.85,1.00 IBM-R61:E:: This is all nice, but are we going to
O	IBM	#IBM-85	227			rhathorn	make any recommendation?
				Highlight	Comment on Text		In Rectangle (over,down) 4.19,3.24 to 4.50,3.44 IBM-R62:T::
O	IBM	#IBM-86	227			rhathorn	FCoE
				Highlight	Highlight		In Rectangle (over,down) 5.83,7.98 to 6.80,8.17
O	QLC	#QLC-1	1			craigc	952-687-2431
				Highlight	Highlight		In Rectangle (over,down) 6.66,8.13 to 7.26,8.33
O	QLC	#QLC-2	3			craigc	various
				Highlight	Highlight		In Rectangle (over,down) 6.93,1.30 to 7.55,1.50
O	QLC	#QLC-3	9			craigc	various
				Highlight	Highlight		In Rectangle (over,down) 5.05,1.97 to 5.50,2.16
O	QLC	#QLC-4	9			craigc	2012
				Highlight	Highlight		In Rectangle (over,down) 1.22,9.13 to 5.54,9.33
O	QLC	#QLC-5	26			craigc	FC-SP-2
				Highlight	Highlight		In Rectangle (over,down) 1.56,2.80 to 6.23,3.00
O	QLC	#QLC-6	27			craigc	FC-FS-4, FC-SW-6, FC-LS-3
				Text	Sticky Note		In Rectangle (over,down) 5.29,1.22 to 5.54,1.47
O	QLC	#QLC-7	27			craigc	FC-FS-3 as approved reference
				Highlight	Highlight		In Rectangle (over,down) 1.23,3.63 to 4.45,3.83
O	QLC	#QLC-8	28			craigc	802.1Q-2011
				Highlight	Highlight		In Rectangle (over,down) 4.48,4.13 to 5.41,4.33
O	QLC	#QLC-9	30			craigc	What is a "FC-4 channel"?
				Highlight	Highlight		In Rectangle (over,down) 1.83,1.13 to 2.87,1.33
O	QLC	#QLC-10	45			craigc	What is this "i.e." trying to say?
				Highlight	Highlight		In Rectangle (over,down) 0.95,1.80 to 7.22,2.16 What is "best practice"? Need a
O	QLC	#QLC-11	50			craigc	reference, or change this to a note.
				Highlight	Highlight		In Rectangle (over,down) 4.08,5.13 to 4.58,5.33
O	QLC	#QLC-12	111			craigc	There is no "FCF A" in Figure 33.
				Highlight	Highlight		In Rectangle (over,down) 0.95,3.63 to 7.22,4.00 I don't see any "bracketed"
O	QLC	#QLC-13	112			craigc	components.
				Text	Sticky Note		In Rectangle (over,down) 5.07,3.01 to 5.32,3.26 This item should be written take into account VN2VN connections. There are
O	QLC	#QLC-14	113			craigc	no VF_Ports to monitor in that case.
				Highlight	Highlight		In Rectangle (over,down) 3.56,7.30 to 6.91,7.50
O	QLC	#QLC-15	113			craigc	Even in the case of VN2VN topology?
				Highlight	Highlight		In Rectangle (over,down) 1.28,8.63 to 7.55,9.00
O	QLC	#QLC-16	113			craigc	What about VN2VN?
				Highlight	Highlight		In Rectangle (over,down) 5.85,8.97 to 7.27,9.16
O	QLC	#QLC-17	113			craigc	What about VN2VN?

O	QLC	#QLC-18	114	Highlight	Highlight	craigc	In Rectangle (over,down) 0.95,6.80 to 7.22,7.33 This seem unclearƒ Is the FIP FLOGI used during point-to-multi-point operation? Or, just during point-to-point operation? Also, need a statement someplace that the point-to-point operation proceeds as the point-to-point opertion if FC-LS-3.
O	QLC	#QLC-19	115	Text	Sticky Note	aspalding	In Rectangle (over,down) 3.00,3.11 to 3.25,3.36 Add text equivalent to the paragraph in 7.5 regarding FCoE_LEP (last paragraph on page 96). Especially the sentence: When decapsulating FC frames from FCoE frames, the FCoE_LEP shall verify that the destination address of the received FCoE frame is equal to the MAC address of the local link end-point and shall verify that the source address of the received FCoE frame is equal to the MAC address of the remote link end-...point. If
O	QLC	#QLC-20	115	Text	Sticky Note	aspalding	In Rectangle (over,down) 3.53,3.14 to 3.78,3.39 If either check fails the FCoE frame shall be discarded.
O	QLC	#QLC-21	122	Highlight	Highlight	craigc	In Rectangle (over,down) 0.95,5.30 to 7.22,5.66 What happens in the case of point-to-multipoint? Are FLOGI's sent? If not, then we need to state that. IF so, then 7.9.4.3 (or some other clase), needs to state rules for point-to-multipoint FLOGIs.
O	QLC	#QLC-22	124	Text	Sticky Note	aspalding	In Rectangle (over,down) 6.81,8.22 to 7.06,8.47 N_Port_ID Beacons also use VN_Port MAC address rather than E_Node MAC Address. As this is an FIP overview section VN2VN ENodes should be included in this description.
O	QLC	#QLC-23	126	Highlight	Highlight	craigc	In Rectangle (over,down) 0.95,8.96 to 1.48,9.17 No title?
O	QLC	#QLC-24	126	Text	Sticky Note	aspalding	In Rectangle (over,down) 1.52,8.91 to 1.77,9.16 Heading missing.
O	QLC	#QLC-25	127	Text	Sticky Note	aspalding	In Rectangle (over,down) 1.07,3.20 to 1.32,3.45 No mechanism to discover VLAN for P2P mode. P2P may traverse a lossless ethernet network. All-PT2PT_ENode_MACs allowed here? PT2PT mode is part of an VN2VN Enode.
O	QLC	#QLC-26	129	Highlight	Highlight	craigc	In Rectangle (over,down) 1.41,3.47 to 7.54,3.80 Why isn't this normative?

O	QLC	#QLC-27	129	Highlight	Highlight	craigc	In Rectangle (over,down) 5.29,6.47 to 6.23,6.66 reference FC-SW-6
O	QLC	#QLC-28	134	Text	Sticky Note	craigc	In Rectangle (over,down) 4.04,4.05 to 4.29,4.30 This clause seems to describe point-to-point FLOGI behavior only. What happens in point-to-multipoint? Does an ENode in a point-to-multipoint topology FLOGI to all other peer VN2VN Enodes? If so, we need to state that here.
O	QLC	#QLC-29	134	Highlight	Highlight	craigc	In Rectangle (over,down) 4.40,4.30 to 6.64,4.50 I think the term "point-to-point" is being overused here. This could be read to mean the point-to-point topology as described in FC-LS-2, or the point-to-point topology as described in FC-BB-6. Both create completed diffferent meanins for this clause. We need to clarify the language used here. One interpretation of this sentence is that this cluase only really applies to FC-BB-6 point-to-point toplogy, not point-to-multipoint. Thus only FC-BB-6 point-to-point topology uses FIP FLOGI. I'm not sureif this is the right interpretation.
O	QLC	#QLC-30	134	Text	Sticky Note	aspalding	In Rectangle (over,down) 6.24,6.83 to 6.49,7.08 Add Fabric as there is no FIP LOGO request defined in specification - only FIP Fabric LOGO. Subtle difference here from FCoE LOGO. FIP LOGO de-instantiates the link FCoE LOGO does not, correct?
O	QLC	#QLC-31	134	Text	Sticky Note	aspalding	In Rectangle (over,down) 2.78,7.87 to 3.03,8.12 Fabric
O	QLC	#QLC-32	134	Text	Sticky Note	aspalding	In Rectangle (over,down) 3.83,8.99 to 4.08,9.24 Add VN_Port to VN_Port Virtual Links (see figures 32 and 34).
O	QLC	#QLC-33	136	Highlight	Highlight	aspalding	In Rectangle (over,down) 0.95,6.47 to 7.22,7.00 Craig we may object to this statement.
O	QLC	#QLC-34	138	Highlight	Highlight	craigc	In Rectangle (over,down) 1.40,2.46 to 3.27,2.67 A glossary entry for this term would be useful.
O	QLC	#QLC-35	138	Text	Sticky Note	aspalding	In Rectangle (over,down) 2.30,6.34 to 2.55,6.59 Disagree with statement that no requirement to enable All-ENode-MACs for VN2VN. At least for P2P mode. See last paragraph of 7.9.6.3.1 implication that FIP Advertisement detection is performed.

O	QLC	#QLC-36	142	Text	Sticky Note	aspalding	In Rectangle (over,down) 3.40,1.94 to 3.65,2.19 Disagree with CDS that FIP Advertisement = All-ENode-MACs. Optimization don't need to parse frame just MAC address. Also more generic.
O	QLC	#QLC-37	146	Highlight	Highlight	craigc	In Rectangle (over,down) 0.95,1.63 to 1.95,1.83 Not consistent with other bit listings in this cluase. For consistency add "(RP)" Bit 3 of word 1 (RP)
O	QLC	#QLC-38	146	Caret	Inserted Text	aspalding	In Rectangle (over,down) 3.15,1.88 to 3.30,2.00 10?
O	QLC	#QLC-39	146	Text	Sticky Note	aspalding	In Rectangle (over,down) 3.54,1.82 to 3.79,2.07 Should list the FIP operations that this bit applies to to be consistent with other bit definitions! N_Port_ID Probe Request, N_Port_ID Claim Notification, N_Port_ID Claim Response, N_Port_ID Beacon. The REC/P2P bit is reserved for all other operations.
O	QLC	#QLC-40	161	Highlight	Highlight	aspalding	In Rectangle (over,down) 1.90,3.46 to 5.99,3.67 There is no description of VN2VN in this section. Most of the text is ENode to FCF specific. This comment is from 12-129v2
O	QLC	#QLC-41	166	Text	Sticky Note	aspalding	In Rectangle (over,down) 5.05,8.77 to 5.30,9.02 Why zero and not just reserved?
O	QLC	#QLC-42	167	Highlight	Highlight	craigc	In Rectangle (over,down) 1.28,5.13 to 3.45,5.33 This should be a glossary term as well.
O	QLC	#QLC-43	167	Highlight	Highlight	craigc	In Rectangle (over,down) 5.41,8.97 to 7.51,9.16 This should be a glossary entry.
O	QLC	#QLC-44	167	StrikeOut	Cross-Out	aspalding	In Rectangle (over,down) 6.02,8.79 to 6.82,9.00 StrikeOut: Empty Comment
O	QLC	#QLC-45	167	Caret	Inserted Text	aspalding	In Rectangle (over,down) 6.74,8.87 to 6.88,8.99 Response
O	QLC	#QLC-46	168	Highlight	Highlight	craigc	In Rectangle (over,down) 4.90,3.30 to 6.46,3.50 This should be a glossary entry.
O	QLC	#QLC-47	180	Highlight	Highlight	craigc	In Rectangle (over,down) 1.07,3.80 to 7.09,4.16 Remove editor's note.
O	QLC	#QLC-48	221	Text	Sticky Note	aspalding	In Rectangle (over,down) 7.66,0.95 to 7.91,1.20 Can a note be added to indicate that the algorithms are in the public domain and may be used without infringing any patents. [Or some equivalent text]