

FC-BB-2 Ad Hoc Meeting Minutes 0207

1. Introductions

Steve Wilson opened the meeting at 08:05 PDT on Wednesday, February 7th, 2001, at Huntington Beach, CA.

2. Approval of the 02/07/01 BB-2 Meeting agenda: Agenda 01-048v0 was approved.

2.1 Previous Ad-hoc minutes were approved.

3. Review of old BB-2 action items:

ACTION ITEM #3: Elizabeth Rodriguez to post the FC over IP draft to the T11 website before the next meeting. Carryover.

ACTION ITEM #4: Steve Wilson to request some management companies to discuss discovery techniques. Carryover

ACTION ITEM #6: Osamu Ishida to make an ordered set proposal in February. Done today.

ACTION ITEM #7: Bill Collette or CNT to bring in management proposal. Carryover to April

4. Old Business: None

5. Scheduled New Business:

5.1 Work Items – Elizabeth Rodriguez updated the group on FC over IP draft:

iFCP and FCIP will not be merged into one document.

There was a joint meeting at the time of the T10 meeting in Orlando. There was a decision on SOF/EOF encodings. The same encodings as used in FC-BB will be used in FCIP.

David Black presented on QoS. Authentication will be mandatory with leanings towards TLS for security. The other authentication being considered is IPsec. A clarification needs to be documented to indicate that E_Ports are supported in this document.

The question of duelling timeouts between TCP and FC needs to be resolved. Timestamp algorithms may be used. How do you make an FCIP tunnel handle R_A_TOV. That is: will the data be discarded before an ACK is received from a data transmission when R_A_TOV is discarded. A comprehensive understanding of all timeout values is needed.

Murali suggested that we need to nail down the model that will be used in BB-2. E_ports will definitely need to be supported in the BB-2.

A conference call will be held on February 15th at 2:00 Central or 3 hours to discuss the BB-2 model. The phone number will be 630-979-0100 and the ID will be 284004.

Action Item #8: All to review BB model and to bring in any alterations to that model.

5.2 Work Items – Charles Monia presented 01-057v0:

This discussed iFCP which is a TCP/IP protocol for transporting encapsulated FC-4 frame images between gateways.

The iSNS Protocol processed FC Name Service Requests. It has a repository for generic internet storage name server protocols such as iFCP, iSCSI and FCIP. iFCP uses the OSPF routing protocol and uses the IP based General services. Management is SNMP and it supports Class 2 and 3 FC traffic.

iFCP has multiple iFCP connections through one IP link. iFCP also locally (restricted to Gateway Regions) assigns N_Port addressing to each gateway.

Biggest advantage is that iFCP is transparent and Gateway operation is simpler. A disadvantage is that each Gateway used 65 K of Node Ids so it is inefficient if the GR (Gateway Region) N_Port count is low. Nishan's products assign addresses to the devices in each GR. An interesting aspect is that the iSNS spans multiple fabrics.

Action Item #9: Charles Monia to investigate if iSNS supports Domain Address assignment and extensions to iSNS that don't have an IP presence.

Each gateway must maintain and update address translation tables. Each gateway has an FCP portal to the IP side and an F/FL_Port to the FC side. Each address has an N_Port ID and an FCP Portal Address. The FCP Portal Address is usually through DNS or other IP address assignment scheme. The FCP Portal Address makes each GR unique. You can replace the F/FL_Port with an E_Port.

iFCP generates their own CRC because the Destination ID is converted to a iFCP mapping that corrupts the original CRC. A gateway assigns unique gateway-local keys to each known N_Port. Omniloop is a logical loop that can attach to an FC Switch.

5.3 FC_BBW_GbE – Norm Harris presented 01-047v0.

SANcastle would like to use Gigabit Ethernet as a long distance transport for FC. They are proposing a flow control known as WSR or Window controlled Selective Retransmission. WSR is a TCP like flow control for reliable transport. This would be an alternate to TCP so that retransmission can be handled.

WSR uses A_ACK which is an Accumulative acknowledgement that acknowledges several packets. S_ACK is a Selective ACK and an optional acknowledgement. Their time-outs assume high throughput and assured maximum delays which is one differentiator from FCIP. Fragmentation is not allowed in transport. Packet reordering is at each point to point BBW connection.

WSR was not intended to be proposed to the IETF.

5.4 Link Signalling Sublayer – Osamu Ishida presented 01-056v0.

The WAN structures were reviewed first. The effective data rate for 10 Gig can be 9.29, 9.69, 10.3 or 10.5 Gbps. Primitive Signals will be sent every 125uS and is in Clause 20 of 10GFC.

6. Unscheduled new business: None

7. Review of BB-2 Action items and Status.

7.1 Status:

The goal of BB-2 is to have this standard sent out to letter ballot by October 2001. Steve will plan on letting certain issues die from lack of interest if no one supports them. FC-BB will focus on the FCIP work and add other topics of interest when proposals are brought forward. Management and Routing are topics that we would like to see proposals for.

7.2 Action Items

ACTION ITEM #3: Elizabeth Rodriguez to post the FC over IP draft to the T11 website before the next meeting.

ACTION ITEM #4: Steve Wilson to request some management companies to discuss discovery techniques.

ACTION ITEM #6: Osamu Ishida to make an ordered set proposal in February.

ACTION ITEM #7: Bill Collette to bring in management proposal.

Action Item #8: All to review BB model and to bring in any alterations to that model for the conference call on Feb. 15th.

Action Item #9: Charles Monia to investigate if iSNS supports Domain Address assignment and extensions to iSNS that don't have an IP presence.

8. Meeting Schedule:

8.1 Future Meetings: 3 hrs at next T11 meeting.

A conference call will be held on February 15th at 2:00 Central or 3 hours to discuss the BB-2 model. The phone number will be 630-979-0100 and the ID will be 284004.

9. BB-2 WG Meeting adjourned at 6:00 pm EDT.

10. Attendees:

Attendee	Company	E-mail	
Steve Wilson	Brocade	Swilson@brocade.com	
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Elizabeth Rodriguez	Lucent		
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These minutes submitted by Scott Kipp. Any discussion items or important points that have been accidentally omitted or incorrectly reported should be appended to the fc reflector (i.e. used by T11.3 TG for business and technical discussion).