PWG 1394 Meeting Minutes – Denver Sept. 20/21

Mike Fenelon acting as Secretary

Attendance:

Akihiro Shimura

Alan Berkema

Chuck Rice

Don Wright

Fumio Nagasaka

Greg LeClair

Greg Shue

Hitoshi Sekine

Kazuo Nomura

Mike Fenelon

Osamu Hirata

Peter Johannson

Rob Zirnstein

Scott Bonar

Shigeru Ueda

Discussion of Minutes-

Minutes were accepted as written.

Review of Login Request Proposal: (Alan Berkema)

Minor editorial changes were requested and Peter will make them as the proposal is pulled into the PPDT document.

Need to define feature directory field to indicate support of RequestForLogin. Should be in the initiator Feature Directory.

Peter brought up the issue of specifying a rich feature directory for PPDT based devices. This is an action item we have let slip. Does it need to be defined?? Discussion held off until Greg L. arrives. Alan will chase this Action Item

After discussion it was decided the message label field should always be ZERO. Request Code value zero should be a NOP.

Add 0xFF response code to mean "Unrecognized Error".

After discussion the document was approved to be rolled into the PPDT document.

Review of PPDT_r06 document:

Basic editorial changes reviewed.

Much discussion was made regarding error recovery. The crux of the debate was whether we can require that data transfer be resumed at the point of interruption. The section detailing recovery based on flushing and resyncing the queues would be removed. The document will also mention that if the host does not want to pick up where it left off the only recovery mechanism is to shutdown the queues and reconnect.

Peter re-iterated that we need to figure out what our divergences from SBP-2 really are.... If we don't this will keep us from going to ballot.

Need to update the PPDT doc to tell that Residual is not valid in an unsolicited status block.

We will do some more investigation into the DeviceID field in the config rom.

Service Provider interface mapping for PPDT (Fumio Nagasaka)

Basic premise is that a framework for common API should be defined so that all platforms could create this API in their environment.

Mike Fenelon pointed out that a common API wouldn't be created on all platforms. Every device (printer, scanner, camera) will create an interface that fits within it's design/structure.

Presentation on how a BSD socket interface would be used over PPDT.

Service Discovery on PPDT (Fumio Nagasaka)

Basic premise is that the Client will have to find the Service Name before using Socket APIs, or it will have to know ahead of time what the name of the service is...

Interoperability test of PPDT (Fumio Nagasaka)

Many members questioned the feasibility of interoperability testing. Initially the basis for testing will be Host-to-Device and basic test apps will be able to be written that will allow testing of basic PPDT functionality on various hosts. However this is more like conformance testing and not interop testing.

Discussion of proposals by Nagasaka-san will continue Tuesday morning.

Meeting adjourned 4:56pm

Sept. 21 Meeting call to order 8:45am

Continued discussion of Nagaska-san proposals

PAR Status:

Greg LeClair will update the PAR based on Scope & Purpose in PPDT_r06. He will then post it to the reflector for comment and Don Wright will present at the next MSC.

Flags across the Wire (Akihiro Shimura)

Proposal is to allow for Non-Blocking API (asynchronous I/O) for client applications. Thought is that we should be able to do this in the T2I direction, but it is not possible with out a new flag/info in the I2T direction. After much discussion it was decided this is not something we need to make changes to PPDT to reflect.

Discussion of SBP Status & Non-Zero residuals:

It was brought up that we could get into trouble if we returned a non-zero residual but all the status values are ZERO (no error). The discussion centered on whether it is valid for a target to complete an I2T buffer with a non-zero residual when it wasn't really an error? In datagram mode the ORB will get completed only if all or none of the data is written. In stream mode the ORB should not be completed unless the data is all moved. The target can take as long as it wants moving the data, but it cannot complete the ORB without an error if it doesn't transfer all the data. Peter Johannson will come up with a table of the combinations of Resp, sbp_status, status & residual for the Raleigh meeting.

OUI Usage: (Greg LeClair)

Editorial changes were discussed and will be incorporated into the OUI usage document.

Discussion of remaining schedule: (Alan Berkema)

We are still on track to have the spec finished and ask for formation of the ballot pool Dec/Jan.

SBP-2/PWG-1394 Deviance Review

Peter will look into posting of unsolicited status to all logins for a particular Logical Unit. Do we have to write to all or can we deviate and only write to initiator that needs the status.

PPDT devices do not need to have a Unit Directory in the Root Directory in Config Rom.

Old Action Items:

Alan tried to register a service name with IANA and couldn't figure out exactly what we were after. He is looking for examples of what we want to attempt to register as a service.

- 1. Greg LeClair will propose a mapping from the API entries to transport operation and the API itself. (OPEN)
- 2. Alan Berkema will add details to the schedule and publish it. (ONGOING)
- 3. Greg LeClair will confirm with O/S implementers if the SBP-2 implementation will differentiate between an Abort Task and an Abort Task Set. (OPEN)
- 4. Greg LeClair will post his OUI Usage Proposal for review by the PWG members. (DONE)
- 5. The PWG members shall re-affirm the allocation and use of the PWG OUI numbers—and respond to the OUI Usage Proposal for voting at the August September meeting.. (ONGOING)

- 6. Peter Johansson and Greg LeClair will work on integrating the Configuration ROM document into the PPDT document. (DONE)
- 7. Alan Berkema will find out about the process of registering PPDT Services with IANA. (ONGOING)
- 8. The 1394 PWG members will review the PPDT draft and SBP-2 to identify points of divergence. This review is necessary before the draft goes to ballot. (ONGOING)
- 9. Alan Berkema will update his "Login Request" proposal with modifications agreed by the group and submit to reflector for final acceptance before inclusion into the PPDT. (DONE)
- 10. Mike Fenelon will find out about the Microsoft implementation for the Device ID text string and will inform the group on the details. (DONE)

======New Action Items ============

- 1. Alan Berkema Need to revisit specifying a rich Feature Directory for PPDT devices.
- 2. Mike Fenelon Pass the error recovery section by the base group. Make sure the MS host software will always have the data around to resume data transfer.
- 3. Peter Johansson/Akihiro Shimura Come up with stand-alone proposal on how to cleanup the section in PPDT doc talking about Error Recovery.
- 4. Peter Johannson Research correct reference to refer to character set for ASCII for DeviceID key
- 5. Mike Fenelon Find Plug&Play doc that defines CLASS for 1284 DeviceID. Also revisit decision to hang Device ID off the 0x14 key
- Greg LeClair Update OUI usage document with editorial changes from meeting discussion. Re-post it to the PWG1394 web site for comment and discussion in Durham
- 7. Greg LeClair/Don Wright Update the PAR and see that it is submitted to MSC at October Meeting.
- 8. Peter Johannson Come up with a table of error codes/status values for when we can have a non-zero residual value.
- 9. Peter Johannson Check into why SBP-2 requires writing unsolicited status to all initiators logged into the current Logical Unit.

Meeting adjourned at 4:00pm.