

A) Organization Issues:

Attendees:

Don Wright
Jerry Thrasher
Yorihiko Sakai
Fumihiko Funazaki
Tatsuya Matsumoto
Atsushi Uchino
Theresa Rhoades
Yoshinori Muraiami
Jeff Rackowitz
Toru Ueda
Osamu Hirata
Lee Farrell
Nobuhiko Shinoda
Kazuhiro Hirata
Hitoshi Sekine
Greg Shue
Alan Berkema
Greg LeClair

Next meeting: September 15th & 16th.

see www.pwg.org/chair for the latest info and to ping if you will attend

Don talked about the remaining 1997 and the new 1998 meeting schedule.

E-mail Don with major conflicts concerning the 1998 meeting schedule.

Greg L. talked about what happened at the July31, August 1 TA quarterly meeting. On device discovery there was general agreement that folks do not want to see changes to IEEE 1212 intent.

DSI working group charter will be discussed on the reflector. The difference between the DSI and the PWG & PWG-C charter is still not obvious. Is there clear delineation between what the three working groups are attempting to accomplish?

Sharp, Fuji Film, Cannon and Sony have each had independent FCP based proposals, at the DSI they announced that they will work on a new unified proposal together. The proposed completion date for the unified proposal is October 1997.

PWG proposed to draft and own the 1394 Printer Unit Architecture (PUA) document.

B) Function Discovery Protocol:

As a 1212 Function Discovery Task Group the 1394 PWG will generate draft language that will be propose to the 1212 working group.

Do we need to add something to 1212 to make 1394 printing work or is it adequate the way it is?

The MSC asked us to go back and look at 1212 and see if what we want to do fits within the existing 1212 definitions. Legacy devices use a textual string, which include MFR & Model Number.

Goal: Want to discover the device class before we need to load a protocol driver stack to talk to it.

What is the content of what is required for discovery?

- 1) Device Class (Device ID as defined in 1284-1994 specification. section 7.6)
- 2) Manufacturer

- 3) Model Number
- 4) Description vendor dependant string
- 5) Command Set?
- 6) Protocols?
Showing PHY Function
PHY / Transport / Command / Function
1394 / DPP / Print
1394 / SBP-2 / 1284.4 / PCL
1394 / SBP-2 / ATAPI / HDD
- 7) CID (Compatible Device ID)? ["DPP" "JetSend"]

Can everything we want to discover be described as a textual ASCII string.
Main benefit of textual ASCII string is that it does not require administration by a central authority.

```
Device ID
key : value, {,value}
examples below -
Manufacturer: ACME;
Command Set: PCL, MPL;
etc.
```

Certain level of consensus for using a Root directory level register to point to a directory which describes device function. Not sure if this is a new 1212 key type, key value or an existing one. Directory will ultimately reference a text string which may require few 1212 changes. Perhaps the new text keys should be standardized

Need volunteers to get together to hammer out the function discovery protocol into a proposal for review at the September meeting. Feeling that discussion in large group may not get us to a conclusion very quickly. Action item and volunteers noted below.

E)
Shinoda-san presented an update of the PWG-C and reaffirmed the intent of the 4 PWG-C that have FCP proposals into a unified proposal.

Funazaki-san presented the Fuji film proposal.

Ueda-san presented the Sharp proposal. He also gave a demonstration which showed 2 PCS connected by 1394. A digital still camera was connected to one of the PCS through Irda. A photo printer was connected to the other PC through Irda. A photo was sent to the PC and then to the printer. The photo was also sent from one PC to the other on 1394.

Sakai-san presented the Sony FCP proposal.

I could not capture all of the details of these presentations. Please visit the PWG-C web for additional information.

C)
Lee Farrell presented on FCP and the Requirements For Printing from Nashua. Lee's information will also be posted to PWG-C web site.

Alan Berkema presented on SBP-2 and the Requirements For Printing from Nashua. Alan's presentation will be posted on the PWG web site. The main issue raised was SBP-2's support for True bi-directional communication.

F)
IP over 1394

(-) Plug & Play

- (-) IP Address Administratin
- (+/-) Implementation Cost
- (+/-) product cost

FCP - Defined Command/Response Window in 1394 Space

- (-) Fixed Entry Point for multi-logins
- (-) No Flow Control
- (+) Thin Implementation
- (-) Access Control Missing
- (-) Needs Transport

SBP-2

- (-) Unidirectional (Not true bi-directional)
- (-) Complicated Implemenation
- (+) Flow Control Implicit
- (+) Efficient DMA transfers - Given that initiator knows the amount of data to move and it is large amount

D)

Actions:

- 2) 6/24/97 - 1394 PWG "P1394.x Printing Protocol" Requirements document.
Owner: Brian Batchelder
- 3) 6/24/97 - Transport research on SBP-2 Printer Command Descriptor Blocks.
Owner: Alan Berkema
Status: In progress
- 4) 6/24/97 - Research SBP-2 Implementations, does it meet the PWG requirements
Owner: Alan Berkema
Status: Done
- 5) 6/24/97 - Transport research on SBP-2 Printer Command Descriptor Blocks with respect to Canon proposal.
Owner: Shigeru Ueda
- 6) 6/24/97 - Discovery PAR
Owner: Greg Leclair
Status: Done
- 7) 6/24/97 Common Image Data Format
Owner: Atsushi Nakamura, Lee Farrell
Status:??
- 8) 6/24/97 Research FCP Implementations, does it meet the PWG requirements
Owner: Atsushi Nakamura, Lee Farrell
Status: Done
- 9) 8/4/97 - Function Discovery Proposal (PWG-C & PWG Unified draft)
Draft that is suitable for editorial inclusion in IEEE 1212 draft.
Also identify clauses in 1212 that need to be modified.
 - glossary
 - existing changes
 - new sections
 - List of 1394 specific issues
 - List of unit architecture issuesOwner: Ats Nakamura
Greg Leclair
Greg Shue
Kazuhiro Hirata
Brian Batcheledr?
Due Date: 8/15/97 or 8/16/97
Status: New
- 10) 8/5/97 - Modified SBP-2 lite proposal native 1394 space

Owner: Greg LeClair
Alan Berkema
Due Date: 8/15/97 or 8/16/97
Status: New

11) 8/5/97 - Begin Increased Participation in IP1394 to insure that it will work well for printing. Invite Myron Hattig to September Atlanta meeting.
Owner: Alan Berkema
Status: New

|-----
| New Initiative called
| "Information Based Indicia"
| Want to get rid of postage meters, and basically use e-stamps.
|
| - USPS program
|
| - office printers print postage
| on envelopes
| on labels
|
| - for more info:
| FAX 202-268-5612
| request full suite of IBJP specs & to be added to IBJP mailing list
|
| - meeting with USPS for printer companies
| Sept. 25th Thursday
| Washington DC
| 2 reps from each printer company
- contact Don Wright don@lexmark.com
