

1394 PWG Minutes

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Participants: gleclair, Shimura, Brian, Jerry

Description: Edited transcript from 4:00PM to 5:45PM online chat

Created On: Monday, July 31, 2000  
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NOTE: full transcript available on PWG server as Chat Session

Agenda topics

1. Items from SF Meeting
2. Connection issues

New stuff:

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1. Scope & Purpose

No action taken as of 7/31.

Online attempt to drill down yielded following proposal:

SCOPE:

Provide a set of criteria for 1394 printing devices, including Config ROM and basic services, that will allow other devices to interoperate with them using the P1394.3 PPDT transport.

Criteria for profile compliance includes:

Config Rom

Services

Identity Indication - (i.e. this device is compliant)

Items from SF Meeting minutes also included:

- \* Minimal common data format (MDF)
- \* Transport stack compliance
- \* Minimal common status service
- \* Vendor unique pass-through services
- \* "How to define a service"

2. How to define a service

No action taken as of 7/31.

Discussion ensued about services:

Opinion: "how to define a service" depends on the characteristic of service

PPDT defines how services are advertised in Config ROM.

Does the profile plan to extend that?

Issue: What are basic mandated services for interoperability?

Two basic services: Job submission and Status

Job submission service:

- Allows a client to access the print device
- Submit a job
- Transfer the data
- REALLY simple.
- Allow for various type of data to be transferred (including minimal format)

- Device needs to advertise the supported data formats and encodings
- Mechanism for extending them
- Query basic attributes of the printer.
- Specify attributes for job submission to 'control' device

Any suggestions for common job submission definition?

- Back to idea that is must be simple
- Ideas raised
  - Create a job (with these attributes)
  - Close Job()
  - Cancel Job()
- Query device attributes

Issues:

- I. Increasing attributes and options makes interop more difficult
  - Devices may have list of certain attributes
  - Paper size in tray 'n'
- II. What is fallback when client sets attributes and device not configured correctly? - Error message after printing possibly?
- III. If Service advertises the supported data formats and encodings the same service could possibly be used on non-1394 transports.
- IV. Should we include info that while client may select an option, it may require external synchronization (i.e. human - to make sure correct paper is installed in printer device)?
- V. Should device attributes & options be discovered via configROM or via the service itself?
  - Config ROM is easy, but not portable to other physical links.
  - If device has identity tag in ROM that it is compliant, why does it need to enumerate - this indicates options which require rules of interpretation and action to ensure interoperability.
  - A thought is to deliver basic make or break information (ie I want to use this box or not) via Config ROM

Minimal Data format:

- A simple device may only support one size output
- the client may want to know the size, however, there are no options
- Who handles scaling?
- there has also been discussion in Bluetooth SIG and UPnP community
- No submission to reflector on format as yet.

Issues:

- I. What is fallback when client wants to scale and printer cannot.
  - Client must support or not present option.
- II. The idea with a minimal format was to enable the widest level of interop. If a client sees the device has really tiny area - it must make a decision that
  - a : this is not useful - advise the user
  - b: scale or transform the data to work with what's there

Action Items:

- I. Jerry to post job submission ideas to the reflector (See below)
- II. Greg to summarize chat and post to reflector

### 3. NET Connectivity Issues

- a. Shimura-san was connected from Japan
  - did not appear to have any connectivity problems throughout chat
- b. Brian was connected from home and kept getting disconnected
  - At home connected through via wireless LAN and DSL.

- c. Chuck Rice could not connect to service
- d. Jerry Thrasher finally got connected and was online for majority of session.

4. I've attached Jerry's summary below.

Here's the list we talked about in the online conference.  
This is just a starting point, it may need to grow or it may need to shrink....

Device related controls.

- 1. Re-Initialize to default state.
- 2. Go Online
- 3. Start of Job
- 4. End of Job

Job related controls. (Input/Presentation/Finishing)

- 1. Print Orientation
  - a. Portrait
  - b. Landscape
- 2. Duplexing
  - a. On
  - b. Off
  - c. Printer Setting
- 3. Duplex Binding
  - a. Short Side
  - b. Long Side
  - c. Printer Setting
- 4. Media Size  
(IEEE 1284.1, Table 23 lists 74 different sizes)  
plus "select by Media Type", "Use Printer Default"  
and "Other"
- 5. Media Type
  - a. Plain Paper
  - b. Envelope
  - c. Transparency
  - d. Coated paper
  - e. Card Stock
  - f. Label Stock
  - g. Paper Roll
  - h. Other
  - i. Printer Default
- 6. Media Source
  - a. Tray 1 thru n
  - b. Manual Paper/Envelope
  - c. Printer Default
  - d. Multi-Purpose Feeder
  - e. Select by Media Type
  - f. Printer Default

7. Resolution

- a. 300 DPI, (Good)
- b. 600 DPI, (Better)
- c. 1200 DPI, (Best)
- d. Printer Setting

8. Print Color in B/W
- a. On
  - b. Off
  - c. Printer Setting

9. Number of Copies
- a. 1 to x

10. Collate Copies
- a. On
  - b. Off
  - c. Printer Setting

11. Output Bin
- a. Bin 1 to "?"
  - b. Printer Default

12. Stapling
- a. ?