



# 1394PWG Meeting Minutes

13 April 1999

Bourbon Orleans Hotel  
New Orleans, LA

## Attendance:

**Chair:** Greg LeClair Epson (Absent)  
Secretary 1: Larry Stein Warp Nine Engineering (Acting Chair)  
Secretary 2: Lee Farrell Canon  
Editor: Alan Berkema HP – Roseville (Absent)

Brian Batchelder HP - Vancouver  
Greg Shue HP – Rancho Bernardo  
Laurie Lasslo HP – Rancho Bernardo  
Scott Bonar HP - Boise  
Jerry Thrasher Lexmark  
Akihiro Shimura Canon  
Osamu Hirata Canon  
Takashi Isoda Canon  
Shigeru Ueda Canon  
Fumio Nagasaka Epson  
Charlotte Ersmarker Axis Communications  
Mike Molodvan Genoa Technology  
Yuji Sasaki JCI

## Agenda:

- 1- Introductions
- 2- Agenda Overview
- 3- Old Business
  - Review previous meeting minutes
  - Review and update open action items
  - Issue list on web site
- 4- New Business
  - Discussion on open issues
    - Disconnect presentation  
Isoda-san
    - Disconnect – Target ORB
    - T2I Data Transfer  
Shimura-san
    - Socket API issues (Brian)
    - Other?
- 5- Meeting Close

Meeting was called to order at 8:45AM.

## 1- Introductions and Business

Greg LeClair was absent today due to illness. Larry Stein was acting chair.  
Review of meeting minutes. The meeting fees were paid through the Warp Nine web site. This worked well and may be used again. The meeting fees were \$38.00 per person per day.

## 2- Agenda review

Miami meeting minutes accepted without change

## 3- Open Issues and Action Items

**It was requested that we maintain a separate document on the web site that lists the closed and open issues. This will be up to Greg LeClair.**

- a) Half closed – Need proposal in order to work on this.  
[Tabled at January 1999 meeting.](#)
- b) Abort Task set  
[\(closed\)](#)
- c) Target Reset  
[Greg Shue- still open](#)
- d) Open Profile Issues
  - Data packets vs. data string communication model (Winsock)
  - Service discovery – Transport client command set information (?) (Toronto)  
[Peter has provided a document IDT\\_R01.pdf](#)
  - Zero max T2I data size (closed since we removed the max T2I)  
[Closed](#)
- e) Tag bit (Winsock) –  
[Peter has provided a document IDT\\_R01.pdf](#)
- f) Matched Request/Reply ORBs (San Diego)  
[Closed. Use unsolicited status.](#)
- g) Commands vs. Actions (San Diego) Peter will provide more on this.  
[Peter has provided a document IDT\\_R01.pdf](#)
- h) Disconnect (Maui).  
[Closed](#)
- i) Kill Queue –  
[Closed. Became Abort Connection](#)
- j) T2I Communications.  
[Closed. Needs to be rolled into the profile.](#)
- k) Bridges – Is there anything we need to do about this? SBP2 will require changes to work with bridges. There is nothing that can be done at this point by this committee. Must wait for ANSI to initiate the bridge project through T10.  
[Closed – Out of scope for version 1.0 of the standard.](#)
- l) Result Codes. Brian suggested a new code “Invalid Service”  
[Closed. Included by “Unspecified Error” status.](#)
- m) Keywords –  
[Closed](#)

### Review of Model and Command Set (pwgpr49.pdf)

- Modify drawing on page 5 showing queue to task relationship.
- **Action Item: Should the target be responsible for checking the direction bit in ORBs that have a defined direction (I2T T2I mixed)?**
- **Action Item: How long is “reasonable” for an ORB in the command queue to be completed? A target should complete queue 0 tasks “quickly.” Do we need to define what “quickly” means? Peter made a suggestion that we should define a timeout like the Management**

ORB timeout timer. This timer is in 500ms increments with a max of 125 seconds.

**Continue with Sequence Number discussion:**

Action Item: Peter will prepare a document that incorporates Shimura-sans' history concept with Peter's signature proposal.

Not available at this time.

**Profile Document (Alan Berkema)**

Need to review chapter 8 drawings for the target and initiator and then merge this with the IDT\_Rx and PWGPR49 documents.

Action Item: Alan and Peter will integrate these drawings and provide an update by the next meeting.

Not available at this time.

**Review of IDT (Image Data Transfer) Document**

Reviewed document IDT\_r01.pdf and determined areas that needed clarification.

Action Item: Mike Fenelon will provide an example diagram for the use of the End\_of\_Message bit.

Not available at this time.

Action Item: Reset Connection. Greg Shue will take a stab at defining the scope of this control function.

Not available at this time.

Discussion on the T2I and I2T data size vs. buffer size. What the operation should be for datagram and stream operations. T bit and what "residual" data size will be indicated.

Action Item: Peter will take the concepts from this discussion and incorporate them into the document.

Not available at this time.

**Disconnect API - (Continued from day 1)**

V. Abort a blocked queue

Action Item: Need an implementation note that explains how to use the Notify Bit in both initiators and targets.

Brian will make a motion at the next meeting that will change the spec to require that the Notify Bit be always set to '1'. This is the two week notification.

(Discussion at this meeting)

**4- Disconnect – Isoda-san**

Presented a proposal for "Supplementary Control Function for Reliable Disconnect Across Bus Reset".

This pdf file is available on the [www.pwg.org](http://www.pwg.org) web site.

Follow on to the discussion on Sequence Numbers and Signature fields from last meeting. This proposal provides a new control function, "Disconnect Confirmation".

**Open issues:**

- 1- What to do if ACKs or NACKs get lost? Are there general and specific things that need to be addressed.
- 2- Specifically what to do if the ACK is lost on the final ORB? (Disconnect)

**5- Disconnect – Target ORB – Nagasaka-san**

"Bus Reset and Reconnection"

Proposal for a Disconnect command. Add a Tagged ORB parameter. This would be a different way of detecting the last ORB than the signature approach. The Tagged ORB is a pointer. This can be simplified by changing the pointer to a signature.

**Questions:**

- 1- How is this different from the "Final Bit"?
- 2- What does this solve that the Final bit does not?

## **6- Buffer Size for T2I Data Transfer – Shimura-san**

Discussion on Blocking/non-Blocking data streams.

- 1- Socket in Blocking Mode (Initiator)
  - What does the initiator expect?
  - How does the target behave?
- 2- Socket in non-Blocking mode (Initiator)
  - What does the initiator expect?
  - How does the target behave?

### **Issue:**

Action Item – Brian

Provide a mapping for all the entry points for all the PWG modes.

## **7- Proposed Sample API for the 1394PWG Transport Protocol –Batchelder-san**

This is a sample that will be included in the documentation. This standard will not DEFINE an API.

Based on Winsock API. For general info on Winsock go to [www.winsock.com](http://www.winsock.com).

## **8- Other Issues:**

A- We appear to have two parallel specifications being worked on, one by Alan and one by Peter. What is going to happen to both these documents? Do they need to be merged?

B- If we address all the open issues and action items listed in these minutes, are we done?

C- We need to set some milestones and a schedule to get this groups charter to completion?

D- Review and discuss the initial 1394PWG Charter (3/3/97). Should this be discussed at the general PWG meeting?

E- We need some way to TEST the profile. Do MFP devices work in this environment? Interoperability testing.

Meeting adjourned.