



Printer Working Group Plenary Meeting Minutes

Maui, HI
21 January 2003

Submitted by Bill Wagner, NetSilicon, PWG Secretary

1 Time and Place

Chairman Harry Lewis convened the PWG Plenary meeting at 8:35 AM Hawaii/Aleutian Time Zone on 21 January at the Sheraton Maui, Maui, HI. It was one of a set of PWG group meetings held the week of January 20 to January 24, including:

- Monday, January 20 - XHTML-P / IFX
- Tuesday, January 21 - Plenary, Character BOF, Device Mgt BOF
- Wednesday, January 22 - UPnP (requires UPnP membership)
- Thursday, January 23 - Semantic Model
- Friday, January 24 - Print Services Interface

The Plenary meeting and its associated BOFs concluded at 5PM.

2 Agenda & Schedule

Harry presented the agenda for the basic plenary meeting:

- Self-Introduction of Attendees
- Discussion of 2003 Schedule
- Discussion of next meetings details
- Membership Details including renewal information
- Project Details
- Reports from the constituent working groups
- Review of PWG Process
- Status of IETF Standards
- Update on Related Standardization Activities
- PWG Project Synergy
- PWG Document Repository and “Live” access

The basic Plenary was to be followed by discussion of the Character Repertoire and Web Based Monitoring and Management initiatives, and by a discussion of PSI/IFX synergy.

Basic plenary meeting	8:30 to 11:00
Character Repertoire BOF.	11:00 to 12:30
Lunch	12:30 to 2:00
Web Based Monitoring and Management (Device) BOF.	2:00 to 4:00
Specific discussion of PSI/IFX Synergy	4:00 to 5:00

3 Meeting Attendees

Attendee	Company	Email Address
Berkema, Alan	HP	alan-berkema@hp.com
Bigelow, Jim	HP	jim-bigelow@hp.com
Bradshaw, Elliott	Oak Technologies	ElliottBradshaw@oaktech.com
Christensen, Jeff	Novell	jrchristensen@novell.com
Farrell, Lee	Canon	Lfarrell@cis.canon.com
Green, Brett	HP	Brett-Green@hp.com
Hall, David	HP	dhall@hp.com
Han, Sang Yong	Samsung Electronics	Syh9875@samsung.co.kr
Ishida, Hitoshi	Epson	Ishida.hitoshi@exc.epson.co.jp
Kim, Kee Taek	Samsung Electronics	Kt_kim@samsung.com
Kojima, Hisao	Komatsu	Hisao-kojima@komatsu.co.jp
Lewis, Harry	IBM	harryl@us.ibm.com
Markle, Cathy	HP	Cathy.Markle@hp.com
Pulera, John	Minolta	jpulera@minolta-mil.com
Regnier, Alain	Ricoh	alain@tpo.ussj.ricoh.com
Rowley, Stuart	Kyocera	stuart.Rowley@ktd.kyocera.com
Seeler, Rick	Adobe	rseeler@adobe.com
Sekine, Hitoshi	Ricoh	Hitoshi@ussj.ricoh.com
Songer, Gail	Peerless	gsonger@peerless.com
Taylor, Bob	HP	bobt@hp.com
Thrasher, Jerry	Lexmark	thrasher@lexmark.com
Tronson, Ted	Novell	ttronson@novell.com
Uchino, Atsushi	Epson	uchino@eitc.epson.com
Wagner, William	NetSilicon	wwagner@netsilicon.com
Wright, Don	Lexmark	don@lexmark.com
Yang, Yiruo	Epson	yyang@eitc.epson.com
Zehler, Peter	Xerox	pzehler@crt.xerox.com

4 Future Meetings

4.1 2003 Schedule

The previously proposed schedule for 2003 was *reaffirmed*, despite some objections. Three inter operation events were additionally identified: PSI InterOp, XHTML InterOp, IFX InterOp. There was some discussion on interop for XHTML-Print – how to do a “Bakeoff”. It is understood that a test suite is needed for W3C compliance. However, it was concluded that the interoperations of a printer language might not need a physical get-together of the testing partners.

2003 PWG Schedule

Week of	Location
January 20	Maui, Hawaii
March 31	Washington, D.C.
July 14	Vancouver, B.C.
Summer	PSI InterOp, XHTML InterOp, IFX InterOp
October 6	N.Y.C.
December 1	Provo, Utah

4.2 Next Face-to-Face Meeting

The next Plenary and set of face-to-face meetings are scheduled for:

*Monday March 31- Friday April 4, 2003
 Wyndham Washington D.C.
 1400 M Street NW, Washington DC 20005
 Phone: 202-429-1700
 Fax: 202-728-0530
<http://www.wyndham.com>*

An announcement has been sent out on the PWG Announce distribution list and posted on the web. Please reserve sleeping rooms before 10 March.

The week’s proposed schedule is below. Changes may be made so please check PWG web site. The schedule has been updated as of Feb 4 and reflects coordinated meetings with the Free Software Group

Day		Activity
Monday, 31 March	All day	uPnP Imaging Group
Tuesday, 1 April	AM	WBMM (Web Based Monitoring and Management)
	PM	Character Repertoire
	All day	FSG Meetings
Wednesday, 2 April	AM	Plenary
	PM	IFX
	Eve	Extended Plenary PWG + FSG
Thursday	AM-PM	Semantic Model
	Eve	UPDF
Friday	All day	PSI

If there are requirements for telephone hookups for conference calls, breakout rooms, etc. please inform the PWG chairman of these requirements early.

5 General PWG Business

5.1 Membership Renewal

The annual PWG Membership fees are due. Statements have been sent out over EMAIL and hardcopies were distributed to attendees. The organization would appreciate participates efforts to expedite timely payment.

5.2 Review of Membership

The Chairman reported that membership changes over the past year have included.

1. Name Change:
 - Silex was JCI
2. Dropped Out:
 - Xeikon
3. Potential New Members:
 - Komatsu
 - Samsung

The representative from Adobe indicated that Adobe had also joined, but since Adobe had been a long-time member, it may have been a re-instatement of a lapsed membership.

6 Working Groups Status Reports

The activities in the PWG constituent working groups were briefly reviewed.

IPP-FAX Status - Gail Songer
XHTML-Print - Don Wright
PWG Semantic model – Peter Zehler
PSI - Alan Berkema
Character Repertoire - Elliott Bradshaw

PWG chairman Harry Lewis provided summary statements for UPDF and IPP as well as IETF related activities including the printer MIB.

6.1 IPPFAX

Gail indicated that substantial work had been done on the IFX document with the intent of advancing it to proposed standard. Responses to the last call were being addressed and the updated document would probably be resubmitted for last call. Since all effort has been focused on the IFX document, the IPP FAX spec is now out of sync and will be brought up to track the new IFX approach.

6.2 Semantic Model

Peter presented a quick status summary. The new “XXX-actual” section appears to be stable. There is a question of whether IPP Fax needs to add elements to model. Schema still needs tweaking for use with PSI and uPnP. Teleconferences will continue discussion of issues.

The SM group, along with the PSI group, is very concerned with PWG document numbering and advance process, particularly as applied to XML-related documents, which are “live” documents. Considerations on how the semantic model will be updated are the next subject up for discussion.

Indeed, this was also touched on later in the Plenary.

6.3 XHTML-Print

Don reported that open issues raised are being addressed. A new draft will be put up soon to allow a 10-day last call prior to taking the document to the Proposed Standard state. The document will be offered for consideration at W3C plenary in Boston during the first week of March, when the W3C HTML and CSS groups will be meeting. The objective is to hand the document over to W3C. The PWG XHTML_PRINT WG will determine what additional PWG activities are necessary depending upon the W3C reaction. If W3C is not interested in accepting the document, PWG efforts toward standardization will continue. However, the expectation is that the W3C will publish the XHTML-PRINT document as recommendation, after requesting some changes. It is not anticipated that there will be the need for drastic changes.

6.4 PSI

Alan Berkima reported that the PSI 1.0 activity is finishing up, following the same schedule as semantic modal. The document is at Rev. 0.95 and is ready for a page-turner review (to be done at the Maui meetings) The WG will try to resolve all remaining issues in next few weeks. The group intends to then go to proposed draft. InterOp with first PSI 1.0 is envisioned for the summer. Observed problems would be collected to be addressed in PSI 1.1, with possible functional evolution and ongoing work of the committee.

The PSI group also expressed concern with the PSG standards development process document, specifically citing that the terminology for the standards levels were not understood by management and did not communicate the same measure of completion as other approaches (hence their use of the 0.95 rev term).

6.5 Character Repertoire

Although the working group is preliminary, Elliot reported that he and friends have done some groundwork. The objective at this point is to develop an Informative Implementer’s Guide. The intent is to converge on a document and go to last call in a few months. The WG may proceed further to develop normative documents dealing with naming etc, to merge with other PWG activities. There will also be a Small document on maintenance

6.6 Other Projects and Summary

Chairman Lewis touched on the other PWG activities for groups not at the meeting.

UPFD	seeking to co-ordinate with PSI and Semantic model.
Printer MIB v2	Latest information is that the Printer MIB is last call.
IPP related	little change from Tom Hastings report discussed at November PWG - see ftp://ftp.pwg.org/pub/pwg/ipp/document-status/status-of-ipp-docs-021101.pdf

As a summary wrap-up:

Projects near completion:

-IFX	Still finalizing IP issues Possible Interop summer 2003
-XHTML-P, CSS-P	No meeting at PWG D.C. Deferring further development pending W3C Possible Interop summer 2003

Projects at midlife

-Semantic (Print) Model	these two following same schedule
-Print Services Interface	

Start Up Projects

- Character Repertoire
- Web Based Device Management

Projects In Maintenance Mode

- IPP
- Printer/Finisher MIB

Various possible symbiotic interactions between the projects were pointed out.

1. IFX has deployment viability issues because of the firewalls that might be addressed by PSI: Can we define PSI “profile” using PDF/is and PSI “pull” print? This is discussed after the BOFs.
2. Semantic Model and PSI Strongly leveraged
3. UPFD and PSI Potentially merging
4. SM, PSI and uPnP use of common model

7 Process and Documentation Issues

The Semantic Model activity is creating XSD documents, which may be considered “live code”, referenced by products in development. Two issues have arisen in this regard.

7.1 Access to the Schema Files

The SM schema refer to PWG URIs. There were some access issues recently that affected access and thereby certain development activities.

1. Should PWG ensure up time?
2. Can the site handle the potential traffic?
3. Should the PWG consider a commercial service?

Don Wright observed that the PWG website, currently hosted by Lexmark, benefits from the extensive server and power backup at Lexmark, and that to obtain even equal capability commercially would be very expensive. Further, the recent access difficulties were due to carrier problems, not server problems.

It was questioned by some SM and PSI participants whether the published schemas should have path to PWG. It was observed that the PWG is concerned with the development of these documents, but should not be regarded as a formal resource. It was concluded that, within the products, developers should locally replicate the schemas on the PWG site and replace PWG path references.

The PWG needs an informative document describing policy for use of schema on the PWG web site. Peter Zehler will add this information to semantic model document and modify schema the appropriately.

7.2 Versioning Naming Scheme

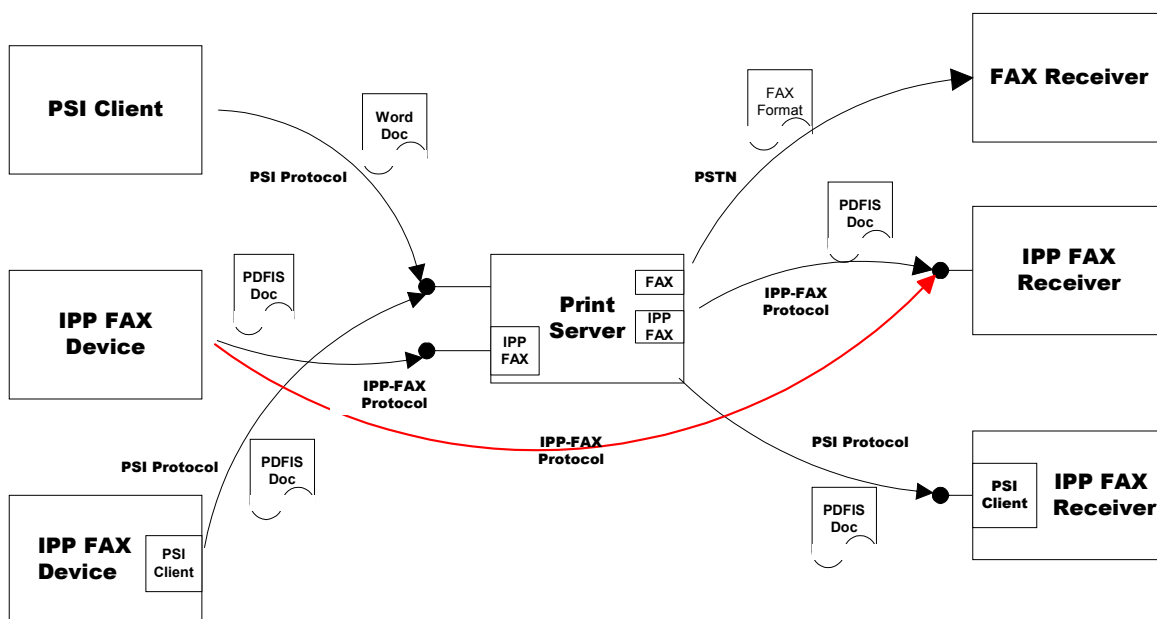
There appeared some confusion with regard to the PWG document progression method, and with the versioning method. Indeed, the versioning of working documents does not appear to be addressed. However, particularly for schemas, proper versioning identification is critical. This had been the subject of some PSI and SM conference calls, and Tom Hastings had documented a proposal from those groups. However, there were other constraints on the naming and versioning of formal documents, some of which are imposed by the IEEE/ISTO of which the PWG is a member.

The conclusion of a not particularly linear discussion was to have this as a topic during the next SM conference calls, but to include the PWG as a whole, and to continue discussion on the email list. Presumably, this would allow for clear proposals to be made at the next plenary session.

8 Potential IFX/PSI Relationship

During the IPP-FAX working group meeting, Stuart Rowley had brought up the recurring question as to whether IPP FAX is deployable, considering that each site would need to provide special firewall handling, at least for incoming messages. It was observed that the PSI approach could be used to overcome this problem, and that the PSI change whereby device identification is by URL, target devices could register themselves with a print server client in a IPP FAX device.

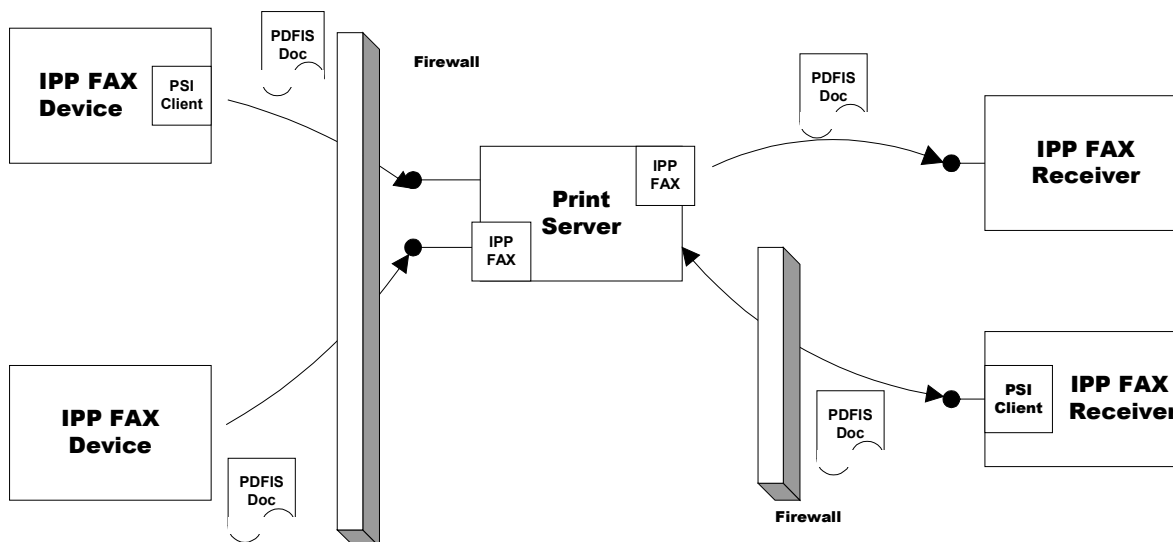
In an afternoon session after the CR and WBMM BOF's, this concept was investigated further. David Hall, editor for the PSI group outlined various configurations whereby PSI could be used in conjunction with IPP FAX. The following is a simplification of the diagram developed.



The coordination requires either that IPP fax needs to include a PSI interface or that the PSI Server needs to include IPP fax interfaces.

1. The PSI server could include translation to any type of interface, so that a PSI client could communicate with either a PSTN FAX or an IPP Fax.
2. By incorporating an IPPFAX incoming interface, the PSI Server could also accept input from a standard IPPFAX device, and send it out to any sort of received supported. The IPPFAX device would still be able to communicate directly to an IPPFAX received, if the path existed.
3. By incorporating a PSI client interface within the IPP FAX device, the device could communicate directly to the PSI Server, and the server in turn to the end receiver

These configurations could be considered specifically in the case of firewalls:



The IPP FAX device could communicate a PDF/IS encoded document to a PSI server outside of the firewall using either a PSI interface or an IPP interface. From there, the server could relay the document using the IPP FAX protocol; or the server could respond to a PSI poll by an IPP FAX receiver within a firewall.

Because the firewalls, by various means, usually allow an internal device access to the internet, this latter configuration would address the firewall issue.

These approaches all employ an intermediate PSI server, which was contrary to end-to-end objective. However, the use of PSI does not preclude the use of IPP FAX end-to end where the path can be established.

In discussion, some points were made:

- Attributes are queriable from source or destination
- The use of TLS authentication to identify source would now identify the server rather than the initiating client.
- Perhaps there is a need to define public key in the semantic model, or other attributes
- Some need to allow a PSI client to specify IPP FAX.

It was understood that there was a need to review compatibility and to determine what additions to the semantic model may be necessary for the inclusion of IPP FAX.

There was agreement that the PSI and IFX principals would check on ability of PSI to handle characteristics defined for IPP FAX interface. The objective was to have this in time for Friday PSI meeting

The plenary adjourned at 5:00 PM.