

Printer Working Group

Plenary – December 4, 2008
Irvine, CA

Plenary Agenda



- Introductions
- Approve/Modify Agenda
- Approve Previous Plenary Minutes
- Review PWG Patent Policy
- F2F Meeting Agenda
- Future PWG F2F Meeting Schedule
- 2009 Meeting Dates/Location/Hosts
- 2008 Membership (current status)
- PWG Financial Overview
- PWG Working Group Status
 - WIMS and DMTF/CIM
 - MFD (and SM)
 - IPP (IPP v2)
 - PDM (Projector and Display Management)
 - IDS (Imaging Device Security)
- PWG Process/IP Policy Update Status
- BoF (if material provided)
- Plenary Adjourn

PWG Patent Statement



- PWG standards may include the known use of essential patents and patent applications provided the PWG Chair receives assurance from the patent holder or applicant with respect to patents whose infringement is, or in the case of patent applications, potential future infringement the applicant asserts will be, unavoidable in a compliant implementation of either mandatory or optional portions of the standard. This assurance shall be provided without coercion. This assurance shall be either:
 - a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement either mandatory or optional portions of the proposed PWG standard against any person or entity complying with the standard; or
 - b) A statement that a license for such implementation will be made available without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.
- The PWG is not in a position to give authoritative or comprehensive information about evidence, validity or scope of patents or similar rights, but it is desirable that any available information should be disclosed. Therefore, all PWG members shall, from the outset, draw PWG's attention to any relevant patents either their own or of other organizations including their Affiliates that are known to the PWG members or any of their Affiliates, although PWG is unable to verify the validity of any such information.

Inappropriate Topics for PWG WG Meetings



- Don't discuss the validity/essentiality of patents/patent claims
- Don't discuss the cost of specific patent use
- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions, or market share
- Don't discuss ongoing litigation or threatened litigation
 - ➔ Don't be silent if inappropriate topics are discussed
 - ... do formally object.

F2F Meeting Agenda



- **Wed. 12/03**

- 9:00 AM 12:00 PM IDS
- 12:00 PM 1:00 PM Lunch
- 1:00 PM 5:00 PM IDS Contd.

- **Thurs. 12/04**

- 9:00 AM 12:00 PM IPP
- 12:00 PM 1:00 PM Lunch
- 1:00 PM 3:30 PM WIMS/CIM
- 3:30 PM 5:30 PM Plenary

- **Fri. 12/05**

- 9:00 AM 12:00 AM MFD Model
- 12:00 AM 1:00 PM Lunch
- 1:00 PM ~ 4:00 PM MFD Model

Next PWG F2F Meeting Schedule



- **February 2009**

- 16-18, Waikoloa Beach Marriott Resort & Spa
69-275 Waikoloa Beach Drive

Waikoloa - Hawaii, Hawaii 96738 USA
(ISTO Planned)

There will be a daily meeting fee of ~\$75.00.

2009 PWG F2F Dates/Locations/Hosts



- **2009**
 - April 14-16 New Orleans (ISTO Planned)
 - June 16-18 Rochester NY (hosted by Xerox)
 - Aug. 18-20 Seattle (hosted by Microsoft)
 - October 13-15 Boulder CO (hosted by InfoPrint)
 - December 8-10 Austin TX (hosted by Dell)

2008 Membership

(26 member companies)



- ✓ **366 Software**
- ✓ **Apple Inc.**
- ✓ **Canon, Inc.**
- ✓ **Coretronic**
- ✓ **Dell**
- ✓ **Epson**
- ✓ **Fuji Xerox Co. Ltd.**
- ✓ **Hewlett-Packard**
- ✓ **Intermate A/S**
- ✓ **Konica Minolta**
- ✓ **Kyocera Corporation**
- ✓ **Lexmark International**

- ✓ **Microsoft**
- ✓ **MPI Tech**
- ✓ **NEC Display Solutions**
- ✓ **Northlake Software, Inc**
- ✓ **Oki Data**
- ✓ **Ricoh**
- ✓ **Samsung Electronics**
- ✓ **Sharp Labs of America**
- ✓ **Sigma-Tel => Conexant**
- ✓ **Toshiba**
- ✓ **Xerox Corporation**
- ✓ **Zoran Imaging Division**
- ✓ **Tykodi Consulting Services LLC.**
- **Intermec**

✓ Indicates 2008 membership paid

PWG Working Group Status

PWG Plenary Status Report WIMS/CIM Working Group

December, 2008

Purpose of the effort



The WIMS working group is concerned with the management of imaging services and devices, with particular interest in the migration toward management via Web Services. The Objectives are:

- Continuing support and update of the protocols and specifications produced by the working group, as well as the MIBs previously supported by the PWG MIB Working Group.
- Prototyping updated and upgraded DMTF/CIM printing classes in anticipation of this forming the basis for imaging service and device management over the Web.
- Eventual update of existing and generation of new DMTF/CIM classes for Print Services and eventually Multifunction Devices and Services, including the establishment of the managed elements via conventional MIB structures.
- Monitoring other standards activities relating to Web-base management of Imaging Systems

Work Items for the WG



- **What We're Doing**

- Supporting the existing IETF and PWG Printer and related MIB documents, including the potential advancement, extension and expansion of these specifications.
- Advancing a basic public management elements structure for Hardcopy Services and Devices that draws upon existing structures and that utilizes a set of management elements that is consistent over the various management protocols and methods.
- Update, Create and Prototype DMTF/CIM Imaging MOFs, with the objective of ensuring Hardcopy Device and Service management via a Web Services approach that is consistent with the basic public management elements structure

- **What We're NOT Doing**

- We are not addressing the delivery of Hardcopy services.
- We are not specifically concerned with security issues related to Hardcopy Devices or Services, although management must recognize and accommodate the requirements and constraints demanded by security.
- We are not defining a management service or protocol.

Current Activities



- All current candidate MIB elements have been processed in CIM CRs and will be in CIM Schema v2.20.
- Ira is working on the update of the Print Service Schema, based on IPP 2.0 semantics and following the considerations of the IPPV2 WG
- Rick is continuing with the Proxy CIM Provider prototype implementation. Code implementing the essence of the CIM to MIB to CIM translation will be available first quarter 2009.

Assumption of PWG MIB WG



- **Why?**

- The PWG MIB WG has a continuing maintenance function for support of existing MIBs, and the PWG should ensure that this is covered.
- The transition from printers to MFDs has left a major hole in the public MIBs available for Hardcopy Devices and Services. There have been various (unsuccessful) attempts in the past to address this. This must be remedied.
- Despite WIMS interest in Web Services, SNMP will be the predominant imaging equipment management mechanism for the foreseeable future. Further, it is desirable that the basic set of management elements remain consistent regardless of the protocol or method used for management. From the viewpoint of the managed elements, the transition from SNMP to WS should be a progression rather than a disruption.
- WIMS/CIM has done MIBs as an extension of the management element definitions for Web Services.

Potential MIB Activities



- **Update and Publicize Printer MIB FAQ**
 - Current FAQ is out of date and hidden
 - Rick, in doing CIM Proxy, has see some recurrent implementation problems
 - Most of us are aware of implementation eccentricities
 - Users and Fleet Management Agencies both need to understand some of these variations, and should have some place to voice the questions that they have.
- **Printer Port Monitor MIB**
 - update spec
 - interoperability testing ?
 - advance PPM to PWG standard ?
- **MDF MIB or MIB extensions?**
 - Many attempts, of varying completeness, started in the past.
 - MFD group is addressing service semantics; need to address management elements
- **Power Management objects "Green" Issue.**
 - What elements? Existing private MIB/CIM Mapping?
 - New MIB or Augmentation/Extension of existing MIB?

A Case for Public Management Information Structures



The current situation:

- There appears to be little support to develop or update public MIBs because:
 - There is little customer demand.
 - There is little demand from OS and Management App Developers
 - There is the perception that keeping MIBs proprietary in conjunction with proprietary management applications:
 - ❖ Represents a significant value add for the manufacturer
 - ❖ Allows the manufacturer to “lock-in” a customer by ensuring continuous contact and making change to a different supplier difficult
 - ❖ Encourages a customer to use that manufacturer’s product exclusively

A Case for Public Management Information Structures



The coming environment:

"...[customers] expect as much as a 45% reduction in their IT organization...and those are personnel cuts. ... Consumerization of IT is driving a lot of conversation. ... [a management platform for cloud services is] something [Microsoft] is working on but it's not something that I can talk about in detail. "

Brad Anderson, general manager of Microsoft's management and solutions division

A Case for Public Management Information Structures



Possible implications of this environment:

- Much management will be handled by:
 - Relatively untrained personnel using OS or third party network and device management apps.
 - Remote management agencies.
- Both on-premise and “cloud” management will not want separate management apps for different devices, let alone for similar devices from different manufacturers.
- Therefore devices will need to support either industry-developed, de-facto or imposed standards.

A Case for Public Management Information Structures



- Industry-Developed Public standards.
 - Require participation and compromise in development.
 - Are open to review, verification of clarity and implementability
- De-facto standards.
 - Typically reflect the approach of one manufacturer
 - May not be fully applicable or adequate for another's products
 - May not be publicly available
 - Give a significant development time edge to the originator
- Imposed standards
 - Usually do not reasonably address the needs of the industry

Next Steps



- Prototyping of the SNMP to CIM Provider continues.
- Proceed with the CIM effort to Print Service.
- Results of discussion at the WIMS WG F2F
- MIB Efforts

More Info/How to participate



- **We welcome more participation from member companies**
 - ❖ Element Selection
 - ❖ MOF Evaluation/Proofing
 - ❖ Change Request Generation
- **The group maintains a Web Page and separate WIKI pages for WIMS and for CIM update**
 - <http://www.pwg.org/wims/index.html>
 - <http://pwg-wiki.wikispaces.com/WIMS>
 - <http://pwg-wiki.wikispaces.com/WIMS-CIM>
- **Subscribe to the WIMS mailing list by sending an e-mail to majordomo@pwg.org with a blank subject line and a message:**
 - subscribe WIMS
- **WIMS holds periodic phone conferences, with dates, call numbers and agenda on PWG Google Calendar.**
<http://www.google.com/calendar/embed?src=istopwg%40gmail.com>

PWG F2F Mtg, Plenary Session, Dec. 2008

WIMS-CIM WG

Status

Rick Landau
Dell, CTO Office
2008/12/04 v0.0

Current State



- Printer device model in CIM schema is complete
 - Published in CIM Schema v2.19 as of 2008/08
- Counters
 - All four Counter classes published in CIM schema v2.20 as of 2008/11

Recent Activity



- Prototype progress
 - Simulation aids
 - Read MIB dumps from real or edited files
 - Compare edited results with baseline, highlight differences
 - Looking for further contributions
 - Instantiation of all substantive (=non-association) classes
 - Get instance, Enumerate all instances
 - Most properties filled in
 - Need to work on Locale and array properties
 - Need to work on Printer and PrintAlertRecord classes
 - Begun work on association classes
 - Tricky bit: instantiating only the right instances

PWG Plenary Status Report MFD Working Group

December, 2008
Irvine, CA PWG F2F Meeting

Purpose of the effort



The MFD working group is concerned with the modeling of imaging services and subunits that comprise a network connected Multifunction Device. The Objectives are:

- Drive to a standard semantic definition for an MFD's Subunits, Services, Jobs and Documents.
 - Agreement on the semantics of their attributes, operations and parameters.
- The Services currently being addressed are the Resource Service and the FaxOut Service.
 - The Print Service has already been addressed
 - The Scan Service is in PWG wide Last Call
- The definition of a framework for the complete model is an objective.

Current document Status:



Scan Service

- Requirement and Use Cases complete.
- Scan Service Semantic Model and Service Interface remain in PWG wide Last Call pending 30% participation

Resource Service

- Resource Service Semantic Model and Service Interface almost ready for MFD wide Last Call

Current Document Status:



FaxOut Service

- Initial FaxOut Service Semantic Model and Service Interface has been created and submitted

Current Schema Status:

- Schema and WSDL files have been updated to match the abstract model.

Current Status: Remaining Services



- Services planned to be addressed after the current Services are complete. (Subject to change based on group consensus)
 - Copy Service
 - FaxIn Service
 - EmailIn Service
 - EmailOut Service
 - Transform Service

Next Steps



- Complete PWG Last Call of Scan Service Semantic Model and Service Interface specification.
- Begin PWG Formal Vote of Scan Service Semantic Model and Service Interface specification.
- Begin Last Call of the Resource Service Semantic Model and Service Interface Document.
- Work to complete the FaxOut Service Semantic Model and Service Interface Document.

More Info/How to participate



- **We welcome more participation from member companies**
- **The group maintains a Web Page for MFD That includes links to the latest documents, schema and a browsable version of the schema**
<http://www.pwg.org/mfd/index.html>
- **Subscribe to the MFD mailing list by sending an e-mail to majordomo@pwg.org with a blank subject line and a message body:**

subscribe MFD

More Info/How to participate



- **Subscribe to the MFD mailing list by sending an e-mail to majordomo@pwg.org with a blank subject line and a message:**

subscribe MFD

- **MFD holds periodic phone conferences, with dates, call numbers and agenda announced on the mail list and available on the PWG Google Calendar.**

<http://www.google.com/calendar/embed?src=istopwg%40gmail.com>

PWG Plenary Status Report IPPs2 Working Group

December 4, 2008
Irvine, CA - PWG F2F Meeting

Scope and Objectives



- There are currently multiple extensions to IPP/1.1
 - 7 approved IETF Proposed Standards
 - 6 approved PWG Candidate Standards
- Many IPP implementers are unaware of these extensions
- A new IPP/2.0 (including 2.1, 2.2) standard will bring attention to these extensions and encourage their adoption
- No new extensions will be developed in the IPP/2.0 project

IPP WG Officers



- IPP WG Chairs:
Paul Tykodi (TCS)
Shah Bhatti (Samsung)
- IPP WG Secretary:
Craig Whittle (Sharp)
- IPP WG Document Editors:
Mike Sweet (Apple)
Ira McDonald (High North)

New IPP Versions



- IPP/2.0
 - Simple Workgroup Printer
- IPP/2.1
 - Enterprise Printer Environment
- IPP/2.2
 - Production Printer Environment

Current Status



- IPP/2.0
 - Working Draft nearly complete – Interim Status
 - Required Operations and Attributes list is stable
 - Current Version is November 18, 2008
- IPP Printer State Reasons Extensions (PSX)
 - Needs to be prototyped
 - Working Draft complete – Prototype Status
 - Current version is November 7, 2006

Next Steps



- IPP/2.0
 - Complete editorial changes to Working Draft
 - Change status to Prototype
 - Prototype reports from implementers
 - Change status to Stable and PWG Last Call
- IPP Printer State Reasons Extensions (PSX)
 - Needs to be prototyped
 - Prototype reports from implementers
 - Change status to Stable and PWG Last Call

More Info/How to participate



- **We welcome participation from all interested parties**
- **The group maintains a Web Page for IPP**
<http://www.pwg.org/ipp/index.html>
- **Subscribe to the IPP mailing list by sending an e-mail to majordomo@pwg.org with a blank subject line and a message:**
subscribe IPP
- **IPP holds bi-weekly phone conferences announced on the IPP mailing list**

PWG Plenary Status PDM Working Group

December, 2008

PWG Plenary Status Imaging Device Security (IDS) Working Group

Irvine, CA - PWG F2F Meeting

December 4, 2008

Ron Nevo(Sharp), Dave Whitehead, (Lexmark)

Purpose of the effort



- The industry is moving beyond basic authentication for access to corporate networks to a fairly detailed assessment of the device that is connecting before being allowed to access the network.
 - Examples of what's being measured for PC Clients:
 - OS Type, Version, Patch Level
 - Anti-virus Type, Version, Definition Level, Is Active
- Hardcopy Devices attach to networks, but there's no standard set of metrics that is used to assess an HCD.
- Our Goal is to provide these metrics!!!

Work Items for the WG



- What We're Doing
 - Defining a standard set of metrics that might be measured or assessed in Hardcopy Devices to gauge if they should be given access to a network.
 - Target for now are NAP and NEA.
 - Defining example "bindings" for how these metrics are used in the individual network assessment protocols.
- What We're NOT Doing
 - We are NOT defining any new assessment protocols or assessment extensions to existing authentication protocols.
 - We are NOT endorsing any of the competing network assessment protocols (TNC, NAC, NAP), but plan to enable Hardcopy Devices to participate in any/all of them.

Current Status



- IDS WG Chairs:
 - Ron Nevo(Sharp), Dave Whitehead, (Lexmark)
- IDS WG Secretary:
 - Lee Farrell (Canon)
- IDS WG Document Editors:
 - Jerry Thrasher (Lexmark), Brian Smithson (Ricoh)

Current Status



- HCD Assessments Attributes documents was developed
- HCD-NAP Binding Document is in the last stage
 - Approaching WG Last Call with PWG Last Call after Feb. meeting; complete in 1Q 2009.
- HCD-NEA Binding Document:
 - Q1/Q2-2009- Start and finish Writing the NEA Binding document
- Q1-Q2-Discussions with Microsoft and Cisco will continue to finalize and endorse the IDS Binding documents.

Other Information



- Time Slot for conference calls
 - In general every other Thursday 1:00-2:00 PM Eastern time
- Mailing list: ids@pwg.org
- IDS drafts will be at:
<ftp://ftp.pwg.org/pub/pwg/IDS/Drafts/>

Printer Working Group

Draft IP Policy Summary of Issues and
Resolutions/Changes

PWG Process/IP Policy Update Status



- The following issues/questions were raised during the review, and were presented at the October F2F meeting.
 - One minor inconsistency with the boilerplate language in the IP Policy document and the text. Boilerplate indicates that the IP Policy document may change without notice.
 - Question/Issue about the “Reasonable and Good Faith Inquiry” definition and how it relates to the actual operation of the IP Policy.
 - Questions about the process to be used for the Call for Intellectual Property.
 - Question about the PWG officers and what power they held in relation to the “acceptance” of a Letter of Assurance.
 - Questions about the breadth of what’s considered a contribution in the Confidentiality section.

Issue/Question Responses



- Issue/Question 1
 - One minor inconsistency with the boilerplate language in the IP Policy document and the text. Boilerplate indicates that the IP Policy document may change without notice...
- Response/Change
 - The text in the boilerplate that indicates that the document may change without notice was removed from both the Draft IP Policy document as well as the Draft Process document.

Issue/Question Responses (contd.)



- Issue/Question 2
 - Question/Issue about the “Reasonable and Good Faith Inquiry” definition and how it relates to the actual operation of the IP Policy.
- Response/Change
 - **This issue resulted in a change in the Draft IP Policy text.** The issues raised revolved around the phrase “but is not limited to” that is used three times in the definition from the IEEE’s IP Policy text. There were legal views from some members that this left the suggested/expected actions to be taken open ended. An additional concern was raised about the text for LOA Submitters that were NOT participants in the PWG effort. There was a view that in very large companies, this recommendation may not be achievable.

Issue/Question Responses (contd.)



- Issue/Question 2
- Resulting change to the Draft PWG IP Policy. (note: this is the only text in the PWG's IP Policy that is different from the IEEE's policy. [This definition is also present in the introductory text of the LOA form](#))
 - *OLD TEXT*
 - *"Reasonable and Good Faith Inquiry"* includes, but is not limited to, a Submitter using reasonable efforts to identify and contact those individuals who are from, employed by, or otherwise represent the Submitter and who are known to the Submitter to be current or past participants in the development process of the PWG Standard identified in a Letter of Assurance, including, but not limited to, participation in a Formal Approval Vote or a Working Group. If the Submitter did not or does not have any participants, then a Reasonable and Good Faith Inquiry may include, but is not limited to, the Submitter using reasonable efforts to contact individuals who are from, employed by, or represent the Submitter and who the Submitter believes are most likely to have knowledge about the technology covered by the PWG Standard.
 - *NEW TEXT*
 - *"Reasonable and Good Faith Inquiry"* includes a Submitter using reasonable efforts to identify and contact those individuals who are from, employed by, or otherwise represent the Submitter and who are known to the Submitter to be current or past participants in the development process of the PWG Standard identified in a Letter of Assurance, including participation in a Formal Approval Vote or a Working Group. If the Submitter did not or does not have any participants, then the Submitter is encouraged but not required to contact individuals who are from, employed by, or represent the Submitter and who the Submitter believes are most likely to have knowledge about the technology covered by the PWG Standard.

Issue/Question Responses (contd.)



- Issue/Question 3
 - Questions about the process to be used for the Call for Intellectual Property.
- Response/Change
 - The questions raised revolved around providing a clearer explanation of exactly when a request for a Letter of Assurance would be made, and if a general call for IP (resulting in all participants being asked for an LOA) was part of the PWG's process.
 - The PWG's current process does not contain a general or blanket call for IP.

Issue/Question Responses (contd.)



- Issue/Question 3
- Resulting change to the Draft PWG Process Document
- In Section 2.4 (PWG Meetings) new sections and text were added:

2.4.1 Intellectual Property Procedures

This section describes the application of the PWG's IP Policy as it relates to meetings of the PWG.

2.4.1.1 Meeting Procedures

Each PWG working group meeting SHALL begin with a reminder that the meeting is subject to the agreed PWG IP Policy. The minutes of the meeting SHALL record that the reminder was provided and there was no objection. This requirement applies to all technical face to face and conference call meetings.

The PWG does not, as a matter of course, request letters of assurance from all members, participants or attendees.

- In **Section 8** (between 8 (Approval) and 8.1 (Last Call)) the following text was added.

In no part of the Approval process does the PWG solicit letters of assurance from all members, participants or attendees.

Issue/Question Responses (contd.)



- Issue/Question 4
 - Question about the PWG officers and what power they held in relation to the “acceptance” of a Letter of Assurance.
- Response
 - The PWG officer’s only power in relation to the acceptance of an LOA is to make sure it is correctly filled out and is indeed on the correct form. The officers make no judgment as to the validity of the content or applicability of the claim.
 - This did not result in a change to either document.

Issue/Question Responses (contd.)



- Issue/Question 5
 - Questions about the breadth of what's considered a contribution in the Confidentiality section.
- Response
 - The process with which a PWG standard is developed involves many types of contributions other than formal proposals that are drafted and presented in working groups. These include verbal ("I think this text should read..."), and suggestions/contributions made via email. It's these types of input that are covered by the confidentiality policy.
 - This did not result in a change to either document.

Next Steps



- New membership agreements that acknowledge/accept the new Process Document and IP Policy have been sent with the membership renewal invoices. (Started December 1, 2008)
- The PWG web site has been updated to refer to the new documents for new members. (The “How to Join” section)
- New policies go into effect on January 1, 2009. (either via completed membership documents or via the note-well)

Questions/Discussion?



Thanks to Samsung for Hosting!

Plenary Adjourned!