

Printer Working Group

Plenary, Part 1 – June 10, 2010

Webster, NY

(Hosted by Xerox Corporation)

Plenary Agenda

- Administrivia
- Open Issues
- Still need replacement for WIMS WG Secretary
- PWG Working Group Status [WG Chairs]
 - MFD (Semantic Model)
 - WIMS (DMTF CIM, PMP, Power Management)
 - IPP (JPS2 + IPP v2 + IPP Everywhere)
 - IDS (Imaging Device Security)
- PWG Liaison Status
- Next Meeting Details

Administrivia



- Welcome and Introductions
- Confirm Minutes Taker
- Approve/Modify Agenda
- Approve Previous Plenary Minutes
- Review PWG Patent Policy
- Agenda for the Week
- Future PWG Meeting Schedule
- 2010 Membership (current status)
- PWG Officers

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.

PWG Patent Statement



- 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.

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Inappropriate Topics for PWG Meetings



- Don't discuss the validity/essentiality of patents/patent claims
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 - ...do formally object.

Agenda for the Week



- Wednesday, June 9
 - 9:00 AM - 12:00 PM MFD (part 1)
 - 12:00 PM - 1:00 PM Lunch
 - 1:00 PM - 5:00 PM MFD (part 2)

Agenda for the Week



- Thursday, June 10
 - 9:00 AM - 10:45 AM WIMS
 - 10:45 AM - 10:45 AM Break
 - 11:00 AM - 12:00 PM Plenary (part 1)
 - 12:00 PM - 1:00 PM Lunch
 - 1:00 PM - 1:30 PM Plenary (part 2)
 - 1:30 PM - 2:30 PM Cloud Printing BOF
 - 2:30 PM - 2:45 PM Break
 - 2:45 PM - 3:45 PM IPP Everywhere BOF
 - 3:45 PM - 5:00 PM IPP

Agenda for the Week



- Friday, June 11
 - 9:00 AM - 12:00 PM IDS
 - 12:00 PM - 1:00 PM Lunch
 - 1:00 PM - 3:00 PM IDS

2010 PWG Meeting Schedule



- Aug 3-6 Bagsværd, Denmark (MPI Tech)
- Oct 19-21 Lexington, KY (Lexmark)
- Dec 7-9 Irvine, CA (Samsung)

2011 PWG Meetings (Tentative)



- February 1-3 Hawaii?
- April 5-7 TBD
- June 14-16 TBD
- August 2-4 TBD
- October 4-6 TBD
- December 6-8 TBD

2010 Membership



27 Members

366 Software	Hewlett Packard	Northlake
Apple	Ricoh	Oki Data
Canon	Konica Minolta	Samsung
Coretronic	Kyocera	Sharp Labs
David Whitehead	Lexmark	Technical Interface Consulting
Dell	Microsoft	Toshiba America Business Solutions
Epson	MPI Tech	Tykodi Consulting Services LLC
Fuji Xerox	MWA Intelligence	Xerox
High North	NEC Display Solutions, Ltd	Zoran

PWG Officers



- PWG Chair
 - Michael Sweet, Apple
- PWG Vice-Chair
 - Nancy Chen, Oki Data
- PWG Secretary
 - Paul Tykodi, Tykodi Consulting Services LLC

Open Issues



- PWG web site
 - Design proposal pending from Mike Sweet
- PWG 2011 meeting hosts needed
- WIMS WG secretary needed

PWG Working Group Status

PWG Plenary Status Report MFD Working Group

June, 2010

Webster, NY 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.
- Currently being addressed are an overall MFD specification, Copy Service, FaxOut Service and FaxIn Service.
 - The Print, Scan and Resource Services have been completed
- The definition of a framework for the complete model is an objective.

Approved Documents:

Print Service: *Approved January 2004*

- PWG5105.1
PWG Semantic Model Specification Version 1.00
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm10-20040120-5105.1.pdf>

Scan Service: *Approved April 2009*

- PWG5108.02-2009:
Network Scan Service Semantic Model and Service Interface Version 1.0
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-scan10-20090410-5108.02.pdf>

Resource Service: *Approved July 2009*

- PWG5108.03-2009
Network Resource Service Semantic Model and Service Interface Version 1.0
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-resource10-20090703-5108.03.pdf>

In Progress Documents:

MFD Model and Overall Semantics:

MFD Model and Overall Semantics – February 3, 2010 Interim Draft

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdoverallmod10-20100329.pdf>

MFD Requirements:

Multifunction Device Service Model Requirements– June 1, 2010 Stable Draft

<ftp://ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdreq10-20100601.pdf>

Copy Service:

Copy Service: Semantic Model and Service Interface – June 1, 2010 Stable Draft

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdcopymodel10-20100601.pdf>

In Progress Documents:

FaxOut Service:

FaxOut Service:

Semantic Model and Service Interface – June 1, 2010 Stable Draft

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxoutmodel10-20100601.pdf>

FaxIn Service:

FaxIn Service:

Semantic Model and Service Interface – Date TBD Interim Draft

[URL TBD](#)

System Service:

MFD System Service :

Semantic Model and Service Interface – June 1, 2010 Interim Draft

[URL ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemservicemodel10-20100601.pdf](ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemservicemodel10-20100601.pdf)

In Progress Documents:

Schema Status:

- Up to date with In Progress specifications, System Service, System Health(IDS), and Power specification

Remaining Services



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

Next Steps



- Work to complete the MFD Overall specification.
 - Delay PWG wide Last Call and Formal Vote until a few (i.e. Copy, FaxOut, FaxIn) that are normatively dependant on this specification reach Last Call status
- We need people to step up as editors of remaining service specifications. The MFD specification reduces the amount of work to produce a service specification. The current Copy specification and FaxOut specification can be used as templates.

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>

More Info/How to participate



- **Information on subscribing to the MFD mailing list is available at**
<<https://www.pwg.org/mailman/listinfo>>
- **MFD holds periodic phone conferences, with dates, call numbers and agenda announced on the MFD mail list.**

PWG Plenary Status Report

Workgroup for Imaging Management Solutions (WIMS/PMP)

**Printer Working Group/WIMS
Face-to-Face Meeting**

**June 10, 2010
Webster, New York**

Purpose of the effort



- **The WIMS/PMP working group is concerned with:**
 - Supporting the remote management of Hardcopy Imaging devices by the definition of new and the recasting of previously-defined imaging device and service management elements for mapping into standard management semantics and protocols, including but not limited to SNMP, CIM, and Web Services Management
 - Continuing support of DMTF/CIM classes concerned with Imaging Devices and Services.
 - Continuing support and update of the printer-related PWG and IETF published MIB documents
 - Continuing support and update of the specifications produced by the former PWG MIB Working Group (PMP) as well as by the PWG WIMS Working Group.

Work Items for the WG



• **What We're Doing**

- Supporting the existing IETF and PWG Printer and related MIB documents, including the 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



- Command Set Format for IEEE 1284 Device ID
- Update of IANA Printer MIB
- DMTF/CIM for Imaging Devices
- Imaging Power Management
- Managed Print Services Association Liaison

Command Set Format for IEEE 1284 Device ID



- PWG Ballot for advancing

PWG Command Set Format for IEEE 1284 Device ID Version 1.0

to PWG Candidate Standard

Ten Official Votes, one non-official

10 yes,

0 no,

1 Abstain

- Request Steering Committee to approve vote and instruct Secretary to prepare the document and issue as PWG Candidate Standard.
- Thanks to Ira as editor, to Dell for prototype confirmation, and to members for reviewing and voting in this document.

Additions to IANA Printer MIB PrtInterpreterLangFamilyTC



- **langJDF(68)**, CIP4 Job Definition Format - http://www.cip4.org/documents/jdf_specifications/JDF1.4a.pdf
- **langJMF(69)**, CIP4 Job Messaging Format -- http://www.cip4.org/documents/jdf_specifications/JDF1.4a.pdf
- **langPPML(70)**, PODI Personalized Print Markup Language -- <http://ppml.podi.org/ppml-docs/ppml-specifications.php>
- **langXHTMLPrint(71)** W3C XHTML-Print -- <http://www.w3.org/TR/xhtml-print/>
- **langPDFis(72)**, PWG PDF Image-Streamable (PWG 5102.3) - <ftp://pwg.org/pub/pwg/candidates/cs-ifxpdfis10-20040315-5102.3.pdf>
- **langPDF13(73)**, Adobe Portable Document Format v1.3 - <http://www.adobe.com/devnet/pdf/pdfs/PDFReference13.pdf>
- **langPDF14(74)**, Adobe Portable Document Format v1.4 - <http://www.adobe.com/devnet/pdf/pdfs/PDFReference.pdf>
- **langPDF15(75)**, Adobe Portable Document Format v1.5- http://www.adobe.com/devnet/pdf/pdfs/PDFReference15_v5.pdf
- **langPDF16(76)**, Adobe Portable Document Format v1.6 - <http://www.adobe.com/devnet/pdf/pdfs/PDFReference16.pdf>
- **langPDF17(77)**, Adobe Portable Document Format v1.7 - http://www.adobe.com/devnet/acrobat/pdfs/pdf_reference_1-7.pdf
- **langPS2(78)**, Adobe PostScript Second Edition - <http://partners.adobe.com/public/developer/en/ps/psrefman.pdf>
- **langPS3(79)**, Adobe PostScript Third Edition - <http://www.adobe.com/products/postscript/pdfs/PLRM.pdf>
- **langPCL3(80)**, HP Printer Command Language 3 - No technical reference manual online
- **langPCL3GUI(81)**, HP Printer Command Language 3 GUI - No technical reference manual online
- **langPCL5e(82)**, HP Printer Command Language 5 Enhanced - <http://h20000.www2.hp.com/bc/docs/support/SupportManual/bpl13210/bpl13210.pdf>
- **langPCL5c(83)** HP Printer Command Language 5 Color - <http://h20000.www2.hp.com/bc/docs/support/SupportManual/bpl13212/bpl13212.pdf>

DMTF/CIM



- No additional activity since the last PWG Plenary

Imaging Power Management



- The Power Management Imaging Systems Documents include:
 - Power Management Model for Imaging Systems 1.0
 - Imaging System Power MIB v1.0
 - PWG-IMAGING-SYSTEM-POWER-MIB

- See the most recent versions of these “wd-wimspower10” documents at:
<ftp://ftp.pwg.org/pub/pwg/wims/wd/>

- Some embellishment of / additions to these documents may be warranted on basis of MSPA Focus Group input.
- These documents are reviewed and awaiting MIB prototype implementation. Prototype is not anticipate until sometime after mid-year 2010.
- After prototype and adjustment of the documents to address issues that arise during prototype, specification documents well be up for PWG last call and Ballot.

Current Activities -MPSA Liaison



- The Managed Print Services Association (MPSA) is a organization of Imaging Service end users, device manufacturers, resellers, consultants, imaging service providers and supporting management, maintenance and monitoring software companies
- MPSA Goals include developing and setting compatible hardware and software standards for MPS industry
- The organization agrees that, in pursuit of it's goals, it is desirable to work with more technically oriented groups such as the PWG
- With the support of Jim Fitzpatrick, MPSA President, in May WIMS conducted a Focus group with seven MPSA member volunteers on the Imaging Power Management Scenarios. The results of this were useful both in providing user input on the scenarios and in better understanding the format, limitations and advantages of these focus groups.

Potential WIMS Activities



- Printer Port Monitor MIB?
 - update spec
 - interoperability testing ?
 - advance PPM to PWG standard ?
- MFD MIB or MIB extensions?
 - Many attempts, of varying completeness, started in the past, especially MFD Alerts.
 - MFD group is addressing service semantics; need to address management elements
- CIM Activities?
 - CIM Printer Profile
 - MFD Elements

Next Steps



- Continue the Hardcopy Imaging Device Power Management Project, including prototype implementation of the Imaging System Power MIB
- However:
 - WIMS has been without Vice Chair or Secretary for several years. There appear to be no volunteers.
 - Participation in bi-weekly conference calls has been meager, to the point of occasionally cancelling the call for insufficient participants.
 - Member interest in device/service management standards is waning.

Therefore, after the next phone conference, WIMS will go into a "sleep" state to be awakened only by specific, pertinent events. The WIMS and PMP mail lists will be monitored.

More Info/How to participate



- We welcome participation from PWG member companies and input from the user community
- 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>
- To subscribe to the WIMS mailing list, go to :
<https://www.pwg.org/mailman/listinfo/wims>

PWG Plenary Status Report IPP Working Group

10 June 2010

Webster, NY - PWG F2F Meeting

IPP WG Officers



- IPP WG Chair:
 - Paul Tykodi (TCS)
- IPP WG Secretary:
 - Michael Sweet (Apple)
- IPP WG Document Editors:
 - Tom Hastings (retired Xerox) – IPP JPS2
 - Ira McDonald (High North) – IPP Version 2.0
 - Michael Sweet (Apple) – IPP Version 2.0

IPP WG Current Status



- IPP Version 2.0 First Edition
 - PWG Candidate Standard – defines IPP/2.0 and IPP/2.1
 - <ftp://ftp.pwg.org/pub/pwg/candidates/cs-ipp20-20090731-5100.10.pdf>
- IPP Printer State Extensions (PSX)
 - PWG Candidate Standard – IPP Printer/Finisher alerts
 - <ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippstate10-20090731-5100.9.pdf>

IPP WG Current Status



- IPP Job and Printer Operations Set2 (JPS2)
 - WG last call
 - Resubmit-Job, Cancel-Jobs, Cancel-My-Jobs, Close-Job, job save, proof print, etc.
 - <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippjobprinterext10-v28-20100606-rev.pdf>
- IPP Version 2.0 Project Charter
 - PWG SC Approved – adds IPP Job and Printer Operations Set2
 - <ftp://ftp.pwg.org/pub/pwg/ipp/charter/ch-ippv2-20090819.pdf>
- IPP/2.0 SE
 - Draft posted
 - <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp20-20100527-rev.pdf>

IPP WG Next Steps



- IPP Job and Printer Operations Set2 (JPS2)
 - Get prototype experience
 - PWG Last Call in Q2 2010 (w/IPP Version 2.0 2nd Ed)
- IPP Version 2.0 Second Edition
 - Review and update drafts
 - PWG Last Call in Q2 2010 (w/JPS2)
- IPP 2.0/2.1/2.2 Interoperability Testing
 - Interoperability event in Q2/Q3 2010

IPP WG Info / Participation



- We welcome participation from all interested parties
- IPP Working Group web page
 - <http://www.pwg.org/ipp/index.html>
- IPP Working Group wiki
 - <http://pwg-wiki.wikispaces.com/IPP>
- Subscribe to the IPP mailing list
 - <http://www.pwg.org/mailhelp.html>
- IPP WG holds bi-weekly phone conferences announced on the IPP mailing list

PWG Plenary Status Report IDS Working Group

June 10, 2010

Webster, NY, PWG F2F Meeting

Joe Murdock (Sharp)

Brian Smithson (Ricoh)

Purpose of the effort



- The industry is moving beyond basic authentication for access to corporate networks to a more detailed assessment of the “health” of devices before allowing them 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.
 - As a result, HCDs are treated as an exception and are allowed to attach to the network based solely on a MAC address.
- Hardcopy Devices are currently allowed unfettered access to and storage of secure and controlled documents. There is no standard for controlling document access and defining usage behavior for protecting secure documents.
- Our goal is to provide the metrics and mechanisms that allow HCDs to fully participate in assessment-protected networks and provide secure, controlled access to documents.

Work Items for the WG



- What We're Doing

- We are defining a standard set of metrics that can be measured or assessed in Hardcopy Devices to gauge if they should be granted access to a network.
- Current targets are MS NAP and TCG TNC.
- We are defining example "bindings" for how these metrics are used in the individual network assessment protocols.
- We are defining standard attributes and values for authorizing Hard Copy Devices, their services and users to a secure network
- We are defining standard attributes and values for specifying user and Hard Copy Device access to and operations on documents.

- What We're NOT Doing

- We are NOT defining any new assessment protocols, nor assessment extensions to existing authentication protocols.
- We are NOT endorsing any of the competing network assessment protocols (TNC, NAC, NAP, NEA). Our goal is to enable Hardcopy Devices to participate in any/all of them.

Administration



- IDS WG Chairs
 - Joe Murdock (Sharp)
 - Brian Smithson (Ricoh)
- IDS WG Secretary:
 - Brian Smithson (Ricoh)
- IDS WG Document Editors:
 - HCD-ATR: Jerry Thrasher (Lexmark)
 - HCD-NAP: Joe Murdock (Sharp), Brian Smithson (Ricoh)
 - HCD-TNC: Randy Turner (Amalfi), Jerry Thrasher (Lexmark)
 - HCD NAC Business Case: Joe Murdock (Sharp)
 - HCD-Remediation: Joe Murdock (Sharp)

Current Status



- HCD Assessments Attributes document is stable.
 - XML Schema is under review
- HCD-NAP Binding Document is stable.
- HCD-TNC Binding Document is under development.
 - Target completion date of Q4 2010.
- HCD-Remediation Specification is under development
- SCCM mapping of IDS Attributes
 - Convert mapping proposal to a full fledged binding specification
- Investigating ways to get network management applications to support IDS attributes
 - Distributing IDS Business Use Case document
 - Microsoft System Center products
 - Forefront applications are being phased out in favor of SCCM
 - Symantec Endpoint Protection product line
 - Initiating contact with Symantec
- MPSA
 - Future focus group/survey with MPSA members for IDS use cases

Current Activities



- TNC Binding Specification – (Q4 2010)
 - Interaction with TCG Hardcopy Workgroup
- PWG IDS remediation specification (Q4 2010)
- Investigating Device and Document authorization attributes and parameters (TBD)
- Initiating investigation into defining standardize device log format for supporting security analysis (TBD)
- Seek adoption and support of IDS attributes by assessment protocol vendors

Printer Working Group

Plenary, Part 2 – June 10, 2010

Webster, NY

(Hosted by Xerox Corporation)

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Liaison Status

AFP Consortium



- The AFP Consortium develops the Advanced Function Presentation architecture used primarily with mainframe computing:
 - <http://www.afpcinc.org/>
- Still in the very early stages, but want to align the AFP and PWG models

ISO JTC1 SC28



- ISO JTC1 SC28 is the ISO's office equipment working group:
 - <http://isotc.iso.org/livelink/livelink/open/jtc1sc28>
- Formal request for liaison sent earlier this year
- Agenda item at Tuesday's SC28 meeting
 - Pete Zehler to report on status

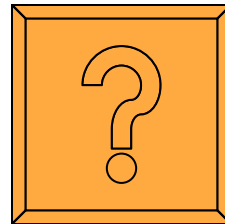
MPSA



- The Managed Print Services Association (MPSA) is an independent non-profit international organization that seeks to develop Managed Print Services (MPS) within our industry through Communications, Collaboration, Education and Best Practices, which results in our members achieving success and profitable business growth:
 - <http://yourmpsa.org/>
- So far we have done a focus group with MPSA members for PWG WIMS power management
 - The PWG IDS work group also plans to interface with MPSA

- The Trusted Computing Group (TCG) is a not-for-profit organization formed to develop, define and promote open, vendor-neutral, industry standards for trusted computing building blocks and software interfaces across multiple platforms:
 - <http://www.trustedcomputinggroup.org/>
- The TCG Hardcopy WG is currently defining the data types, threats, and potential defenses specific to printers and multi-function devices
- Future work includes definition of use cases and requirements based on TCG and PWG technologies/terminology

Other Questions / Comments



Next PWG Meeting



- August 3-6 in Bagsværd, Denmark, hosted by MPI Tech

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- Thank you Xerox for hosting!