

Printer Working Group

Plenary, October 19, 2010 Lexington, KY (Hosted by Lexmark)

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)
- Cloud Printing Status
- 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
- 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.

PWG Patent Statement



 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.

Agenda for the Week



Monday, October 18

• 9:00 - 12:00 MFD, part 1

• 12:00 - 1:15 Lunch

• 1:15 - 5:00 MFD, part 2

Tuesday, October 19

• 9:00 - 10:45 WIMS

• 10:45 - 11:00 Break

• 11:00 - 12:15 Plenary

• 12:15 - 1:30 Lunch

• 1:30 - 2:45 Cloud Printing BOF

• 2:45 - 3:00 Break

• 3:00 - 5:00 IPP / IPP Everywhere

Agenda for the Week



Wednesday, October 20

• 9:00 - 12:00 IDS, part 1

• 12:00 - 1:15 Lunch

• 1:15 - 3:00 IDS, part 2

2010 PWG Meeting Schedule



• Dec 7-9 Irvine, CA (Samsung)

2011 PWG Meeting Schedule



February 1-3 Maui, HI

April 5-7 Cupertino, CA (hosted by Apple)

• June 7-9 Webster, NY (hosted by Xerox)

August 2-4 Vancouver, WA (hosted by HP)

October 4-6 Cupertino, CA (hosted by Ricoh)

December 6-8 Austin, TX (hosted by Dell)

2010 Membership



27 Members

Apple	Hewlett Packard	Northlake
Brother Industries	Ricoh	Oki Data
Canon	Konica Minolta	Samsung
Coretronic	Kyocera Mita	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
- WIMS WG secretary needed



PWG Working Group Status



PWG Plenary Status Report MFD Working Group

19 October 2010

Lexington, KY - 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.pwq.org/pub/pwg/candidates/cs-sm20-resource10-20090703-5108.03.pdf

Approved Documents:



MFD Requirements: Approved September 2010

- Multifunction Device Service Model Requirements
- ftp://ftp.pwg.org/pub/pwg/informational/req-mfdreq10-20100901.pdf

In Progress Documents:



MFD Model and Overall Semantics:

(Ready for WG Last Call)

MFD Model and Overall Semantics – October 10, 2010 Interim Draft cftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdoverallmod10-20101010.pdf

Copy Service: (Ready for PWG Last Call)

Copy Service: Semantic Model and Service Interface – Sept 15, 2010 Stable Draft ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdcopymodel10-20100915.pdf

FaxOut Service: (Ready for WG Last Call)

FaxOut Service:

Semantic Model and Service Interface – Sept 15, 2010 Stable Draft

ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxoutmodel10-20100915.pdf





FaxIn Service: (Work in Progress)

FaxIn Service:

Semantic Model and Service Interface – July 28 Interim Draft ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxinmodel10-20100728.pdf

System Service: (Work in Progress)

MFD System Service:

Semantic Model and Service Interface – July 23, 2010 Interim Draft http://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemservicemodel10-20100723.pdf





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)

19 October 2010

Lexington, KY - PWG F2F Meeting

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



- Imaging Power Management
 - Documents in PWG Last Call
- Power Management Model
 - ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspower10-20100926.pdf / doc
 clean copy with line numbers
 - ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspower10-20100926-rev.pdf / doc
 - redlines with line numbers
- Power Management MIB Spec
 - ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspowermib10-20100926.pdf / doc
 MS Word document
 - ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspowermib10-20100926-rev.pdf / doc - MS Word document with redlines and line numbers
- Power Management MIB (ASN.1)
 - ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspowermib10-20100926.mib
 full ASN.1 source with compliance statements, defaults, references, etc.
 - ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspowermib10-20100926-mib.pdf
 full ASN.1 source with line numbers and color highlighting

Current Activities



- Managed Print Services Association Liaison
 - Familiarize MPSA Members with PWG work
 - Develop Vendor-independent source of user information
 - Series of articles on what PWG is doing, with a survey associate with each article – Survey to address:
 - Reaction to article additional information/detail wanted
 - Problems/use cases related to article subject that may not be being addressed
 - Queries on specific issues we have (e.g., would SCCM level NAC support be helpful, assuming that we have dealt with what this is in the article)
 - Schedule and Introductory Article at
 - ftp://ftp.pwg.org/pub/pwg/general/MPSA/
 Managed_Print_Services_and_Imaging_Device_Standarddraft2
 %5B1%5D.pdf

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



- Put Imaging Power Management documents to vote
- Resurrect activity in PWG MIB Alert Set
 - effort last documented in
 - ftp://ftp.pwg.org/pub/pwg/pmp/wd/wd-mfp-alertgroups10-20070313.pdf

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



IPP Working Group Status Report

19 October 2010

Lexington, KY - PWG F2F Meeting

IPP WG Officers



- IPP WG Co-Chairs:
 - Paul Tykodi (TCS)
 - Ira McDonald (High North)
- 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/csipp20-20090731-5100.10.pdf
- IPP Printer State Extensions (PSX)
 - PWG Candidate Standard IPP Printer/Finisher alerts
 - ftp://ftp.pwg.org/pub/pwg/candidates/csippstate10-20090731-5100.9.pdf

IPP WG Current Status



- 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 Everywhere Project Charter
 - PWG SC Approved
 - ftp://ftp.pwg.org/pub/pwg/ipp/charter/ch-ippeverywherecharter-20100930.pdf

IPP WG Current Status



- IPP Job and Printer Extensions Set 2
 - PWG Formal Vote ends Saturday 30 October 2010
 - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wdippjobprinterext10-20100927.pdf
- IPP/2.0 Second Edition
 - PWG Last Call ends Saturday 30 October 2010
 - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp20-20100926.pdf

IPP Everywhere Status



- Recently updated the charter to include a third document
 - Working title: IPP Job and Printer Extensions Set 3 (JPS3)
 - Will cover all of the extension attributes, values, and operations (if any)
 - Based on IPP Everywhere Requirements
- Currently scoping IPP Everywhere Requirements
- IPP Everywhere specification will reference Requirements and JPS3

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

October 20, 2010 Lexington, KY - 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.
 - 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.
- Hardcopy Devices are providing services to mobile devices running different
 operating system with different methods to consume Hardcopy service. Hardcopy
 Devices are extending their services as "cloud" resources, and consuming resources
 from the "cloud". There is no standard or recommended methodology for
 authenticating and securing the mobile and hardcopy device, their services or the
 users consuming those services.
- Hardcopy Devices are providing services to users and devices outside of the traditional concept of a local user on a physical device. There are no standards or recommendation for controlling or validating access to these services.
- 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 and hardcopy services regardless of location or consumer.

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 Microsoft Network Access Protocol and Trusted Computing Group Trusted Network Connect.
 - We are defining example "bindings" for how these metrics are used in the individual network assessment protocols and applications
- We are providing recommendations for identifying and authenticating Hard Copy and mobile devices, services and users in a global workspace.
- We are defining standard attributes and values for authorizing Hard Copy Devices, their services and users in a global workspace
- We are defining common log formats and values to facilitate automated log analysis.

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: Ira McDonald (Samsung), Jerry Thrasher (Lexmark), Brian Smithson (Ricoh)
 - HCD NAC Business Case: Joe Murdock (Sharp)
 - HCD-Remediation: Joe Murdock (Sharp)
 - HCD-NAP-SCCM: Joe Murdock (Sharp)
 - HCD-Log: Mike Sweet (Apple)
 - HCD-Authorization: Joe Murdock (Sharp)

Current Status



- HCD-Assessment-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 Q2, 2011.
- HCD-Remediation Specification is under development
- HCD-NAP-SCCM specification is on hold
- HCD-Log Specification is under development
- HCD-Authorization specification is under development
- Investigating ways to get network management applications to support IDS attributes
 - Distributing IDS Business Use Case document
 - Microsoft System Center products
 - Symantec Endpoint Protection product line
- MPSA
 - MPSA newsletter article on IDS under development

Current Activities



- HCD-TNC Binding Specification (Q4 2010)
 - Interaction with TCG Hardcopy Workgroup
- HCD-Remediation specification (Q1 2011)
- HCD-NAP-SCCM Binding (on hold)
- HCD-Log (Q2 2011)
- HCD-Authorization (Q2 2011)
- MPSA newsletter articles

Proposed Activities



- P2600/NIAP support
- Mobile and Cloud identification and authentication recommendations

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/ids/index.html
 - http://pwg-wiki.wikispaces.com/Imaging+Device+Security +WG
- To subscribe to the IDS mailing list, go to :
 - https://www.pwg.org/mailman/listinfo/ids



Cloud Printing Status

Cloud Printing



- Currently investigating use cases, requirements, and models through BOF sessions and mailing list discussions
 - BOF sessions have been attended by current Cloud Printing providers
 - We welcome participation by both members and non-members
- No charter to develop new specifications, however existing work may be influenced by our investigations
- Wiki page with link to mailing list:
 - http://pwg-wiki.wikispaces.com/Cloud+Printing



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
- Request was considered at June SC28 meeting
 - Re-balloting in progress due to clerical error, closing at end of October
- Expect formal response end of Q1 2011

MPSA



- The Managed Print Services Association (MPSA) is an independent non-profit international organization that seeks to develop Managed Print Services (MPS) within the industry through Communications, Collaboration, Education and Best Practices.
 - http://yourmpsa.org/
- The PWG has agreed to provide a series of articles on our activities and concerns for the MPSA to make available to its membership. Each article will have an associated survey to solicit information on what information is of interest to MPS members and on specific issues of importance in PWG activities.
- The first of these articles has been posted, with survey results expected by month's end.

TCG Overview



- TCG Website
 - http://www.trustedcomputinggroup.org/
- TCG Developer Resources
 - http://www.trustedcomputinggroup.org/developers
- TCG Description
 - 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
- TCG Membership Levels
 - TCG Promoter Member (\$55,000/year) voting
 - TCG Contributor Member (\$16,500/year) voting
 - TCG Adopter Member (\$8,250/year) non-voting

TCG Workgroups



- Authentication
- Hardcopy
- Infrastructure
- Mobile Phone
- PC Client
- Server Specific
- Storage
- Trusted Network Connect (TNC)
- Trusted Platform Module (TPM)
- TCG Software Stack (TSS)
- Virtualized Platform

TCG Hardcopy WG - Status



- Current focus
 - Use Cases (trusted startup, trusted services, etc.)
 - Use TCG standards (e.g., TNC, TPM, Opal secure drives)
 - Use PWG standards (e.g., PWG Scan Service w/ WS-Security)
 - Datatypes (applications, firmware, resources, logs, etc.)
 - Threats against Hardcopy Device (e.g., disclosure, modification)
 - Threats against other network devices via compromised HCD (e.g., unauthorized usage, distributed denial-of-service)
 - Defenses (e.g., strong authentication, digital signatures)
- Next steps
 - Requirements (for HCD and mobile/PC clients)
 - Use TCG standards and technologies
 - Use PWG Semantic Model terminology (e.g., storage, interface, console, interpreter, marker, scanner)







Next PWG Meeting



December 7-9 in Irvine, CA, hosted by Samsung



Thank you Lexmark for hosting!