

Printer Working Group Plenary Session

December 8, 2010

Irvine, CA

(Hosted by Samsung)

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



- Tuesday, December 7
 - 9:00 - 12:00 MFD, part 1
 - 12:00 - 1:00 Lunch
 - 1:00 - 3:15 WIMS
 - 3:15 - 3:30 Break
 - 3:30 - 5:00 MFD, part 2
- Wednesday, December 8
 - 9:00 - 12:00 Cloud Printing BOF
 - 12:00 - 1:00 Lunch
 - 1:00 - 2:00 Plenary
 - 2:00 - 2:15 Break
 - 2:15 - 5:00 IPP / IPP Everywhere

Agenda for the Week



- Thursday, December 9
 - 9:00 - 10:45 MFD, part 3
 - 10:45 - 11:00 Break
 - 11:00 - 12:00 IDS, part 1
 - 12:00 - 1:00 Lunch
 - 1:00 - 5:00 IDS, part 2

2011 PWG Meeting Schedule



- February 1-3 Maui, HI (*PLEASE REGISTER ASAP*)
- April 5-7 Cupertino, CA (hosted by Apple)
- May 24-26 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

MFD Working Group Status

December 8, 2010

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.
 - 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>

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 – November 17, 2010 Interim Draft

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdoverallmod10-20101117.pdf>

Copy Service: (Ready for PWG Last Call)

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

<ftp://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>

In Progress Documents:

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

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemservicemodel10-20100723.pdf>

In Progress Documents:

Schema Status:

- Up to date with In Progress specifications, System Service, System Health(IDS), and Power specification
- Named version ready for publishing containing only the semantic elements from completed and approved specifications
 - Named version will be modified until Overall Specification is complete.
 - Namespace and content will be locked down at that point

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.
- Upon approval of MFD Overall the Copy Service and FaxOut service specifications will enter Last Call
- Work on FaxIn and System Service specifications will then become the focus of the group
- 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.

IPP Working Group Status

December 8, 2010

Irvine, CA

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 Status



- PWG Formal Vote for JPS2 concluded
 - 10 yes, 0 no, 0 abstain
 - 1 member had comments (conformance text)
- PWG Last Call for IPP/2.0 SE concluded
 - 15 review acknowledgments
 - 5 members had editorial comments (formatting and conformance text)

IPP WG Next Steps

- IPP Version 2.0 Second Edition
 - PWG Formal Vote to begin soon
- IPP 2.0/2.1/2.2 Interoperability Testing
 - Interoperability event in Q2/Q3 2011
- IPP Everywhere
 - Initial draft requirements in Q1 2011
 - Initial draft specifications in Q1 2011
 - PWG Last Call of Requirements in Q2 2011
 - Prototype draft specifications in Q3 2011
 - Interoperability event in Q4 2011

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
 - Next conference call is January 10, 2011 at 4pm (EST)

IDS Working Group Status

December 8, 2010

Irvine, CA

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 and consuming services outside of the traditional concept of a local user on a physical device. There are currently 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)
 - IDS-Identification-Authentication-Authorization (IAA): 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 Q3, 2011.
- HCD-Remediation Specification is under development
 - Target completion date of Q3, 2011.
- HCD-NAP-SCCM specification is on hold
- HCD-Log Specification is under development
 - Target completion date of Q3, 2011.
- IDS-IAA specification is under development
 - Target completion date of Q3, 2011.
- MPSA Article and survey on IDS/NAC published in November MPSA newsletter

Current Activities

- HCD-TNC Binding Specification – (Q3 2011)
 - Interaction with TCG Hardcopy Workgroup
- HCD-Remediation specification (Q3 2011)
- HCD-NAP-SCCM Binding (on hold)
- HCD-Log (Q3 2011)
- IDS-Identification-Authentication-Authorization (Q3 2011)
- IEEE 2600.1 supporting documents (for US NIAP)

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>

Workgroup for Imaging Management Solutions (WIMS/PMP) Status

December 8, 2010

Irvine, CA

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 – PWG Imaging Power



- Last Call Review –
- The three documents have completed PWG Last Call and all Last Call comments have been resolved. Pending PWG Steering Committee approval, clean drafts will be generated and a Formal Approval notice will be sent out to initiate a balloting period concluding January end.

- Power Management Model
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/lcrc-wimspower10-20101115.pdf>
- Power Management MIB – Spec
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/lcrc-wimspowermib10-20101115.pdf>
- Power Management MIB – (ASN.1)
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/lcrc-wimspowermib10-20101115-mib.pdf>

Current Activities - Managed Print Services Association



- 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
 - Power Management article posted for December
 - Access, Authentication and Authorization/ Logging article to be generated for January

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
 - Suggestion to transfer MFD Printer MIB Alerts extensions to IPP group for inclusion in JPS3
- Proposed printer MIB integration document?
- CIM Activities?
 - CIM Printer Profile
 - MFD Elements

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>

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
 - Due to a clerical error, had to re-ballot (by mail), but got insufficient responses
 - Will be brought up again at the January SC28 meeting

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 October general PWG article and November NAC article have been posted and survey results received.
- A presentation on the October survey results is posted at:

<ftp://ftp.pwg.org/pub/pwg/general/MPSA/PWG%20October%20Survey%20Results.pdf>

- The December article on Power Management has been posted.
- Work on the January article on Access, Authentication and Authorization, and Logging has been started.

MPSA Survey Results



- The October survey addressed the following areas:
 - Interest in and desired level of the PWG articles.
 - 100 % responded that the articles would be useful in their MPS business
 - 80%+ wanted a significant level of detail about issues and solutions rather than superficial coverage
 - User interest in “remote” printing.
 - About 50% see increased demand for remote printing, both to a local printer and to the main office.
 - Interest in and impact upon MPS of network security.
 - Over 80% see security issues of significant importance to current MPS, with this importance increasing.

MPSA Survey Results



- Knowledge of and importance of “standards” based solutions in selecting new hardcopy products.
 - More than 80% of the respondents indicated standard solutions to interface issues such as MIBS and protocols were preferable to proprietary solutions, even if the proprietary solutions may be better.
- Although 100% of the respondents wanted know what standards might be applicable to their requirements and the provisions of these standards, significantly less than half of the respondents:
 - Were aware of the standards they needed implemented in new hardcopy devices.
 - Felt that vendors identified the standards a product was compliant with in their advertizing.
 - Thought that vendor representatives were knowledgeable of applicable standards, and the extent to which their products implemented these standards.

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



- Trusted Multi-Tenant Infrastructure (TMI) – NEW
- 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 Trusted Multi-Tenant Infrastructure WG – NEW



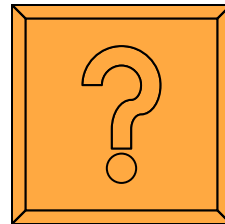
- Cloud Security – Trusted Multi-Tenant Infrastructure WG – chartered in 2010 to develop standards framework for implementing:
 - Shared infrastructures
 - Multi-provider infrastructures
 - Reference models and implementation guidance
 - Identify and address gaps in existing standards
- Objectives of Trusted Multi-Tenant Infrastructure WG
 - Enable consumers to assess the trustworthiness of provider systems
 - Enable real-time assessment of compliance as part of the provisioning process
 - Support real-time monitoring of compliance to agreed policy
 - Provide a reference implementation guidance framework of standards

TCG Hardcopy WG - Status



- Current work
 - Use Cases (trusted startup, trusted services, etc.)
 - Threats (disclosure, modification, etc.)
 - Requirements (secure data-at-rest, etc.)
- Next work
 - TCG Hardcopy Device Security
 - Use TCG standards (e.g., TNC, TPM, Opal secure drives)
 - Use PWG standards (e.g., PWG Scan Service w/ WS-Security)
 - Use IEEE 2600 HCD environments and security terminology
- Future work
 - TCG Hardcopy Device Authentication Framework ?
 - Extend PWG IDS Authentication Framework (w/ TCG technologies)
 - TCG Hardcopy Device Logging Framework ?
 - Extend PWG IDS Logging Framework (w/ TCG technologies)

Other Questions / Comments



Next PWG Meeting



- February 1-3 in Wailea-Makena, HI (Maui), CA
 - ISTO Planned - registration **REQUIRED** before January 1st!

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- Thank you Samsung for hosting!