

# Printer Working Group

Plenary – August 19, 2009  
Redmond, WA

# Plenary Agenda

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- Introductions
- Approve/Modify Agenda
- Approve Previous Plenary Minutes
- Review PWG Patent Policy
- F2F Meeting Agenda
- Future PWG F2F Meeting Schedule
  - October F2F Hosts
- 2009/10 Meeting Dates/Location/Hosts
- 2009 Membership (current status)
- PWG Financial Overview
- PWG Working Group Status
  - WIMS and DMTF/CIM
  - MFD (and SM)
  - IPP (IPP v2)
  - IDS (Imaging Device Security)
  - PDM
- PWG Officers (September 2009 Elections)
- Plenary Adjourn

# PWG Patent Statement

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- 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

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- 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



- **Mon. 08/17**
  - 1:00 PM                      5:00 PM                      IDS
- **Tues. 08/18**
  - 8:30 AM                      11:30 AM                      IDS
  - 11:30 AM                      12:30 PM                      Lunch
  - 12:30 PM                      2:30 PM                      IDS
  - 2:30 PM                      5:00 PM                      IPP
- **Wed. 08/19**
  - 8:30 AM                      12:00 PM                      WIMS/CIM
  - 12:00 PM                      1:00 PM                      Lunch
  - 1:00 PM                      2:00 PM                      Plenary
  - 2:00 PM                      5:00 PM                      MFD
- **Thurs. 08/20**
  - 8:30 AM                      12:00 PM                      MFD
  - 12:00 PM                      1:00 PM                      Lunch
  - 1:00 PM                      ~3:00 PM                      MFD

# Next PWG F2F Meeting

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- **October**
  - 12-15, TBD (Originally in Boulder at InfoPrint)

## Remaining 2009/2010 PWG F2F dates/locations/hosts

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- **2009**
  - December 8-10 Austin TX (hosted by Dell)
  
- **2010**
  - Feb. 2-4 (host TBD)
  - Apr. 6-8 (host TBD)
  - June 8-10 (tentatively hosted by Xerox, Rochester NY)
  - Aug. 10-12 (MPI Tech, Denmark has offered to host)
  - Oct. 5-7 (tentatively hosted by Lexmark, needs to move out at least one week)
  - Dec. 7-9 (host TBD)

## 2009 Membership, 23 members (as of 8/01/2009)



- ✓ 366 Software ❖
- ✓ Apple Inc. ❖
- ✓ Canon, Inc. ❖
- ✓ Coretronic
- ✓ Dell ❖
- × Epson
- ✓ Fuji Xerox Co. Ltd. ❖
- ✓ Hewlett-Packard ❖
- × Intermate A/S (Kodak)
- ✓ InfoPrint Solutions ❖
- × Konica Minolta
- ✓ Kyocera Corporation ❖
- ✓ Lexmark International ❖
- ✓ Microsoft ❖
- ✓ MPI Tech ❖

- ✓ MWA Intelligence Inc. ❖
- ✓ 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. ❖
- ✓ Technical Interface Consulting ❖

- ✓ Indicates 2009 membership paid
- ❖ Indicates Membership Agreement Signed



# PWG Working Group Status



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# PWG Plenary Status Report

## Workgroup for Imaging Management Solutions

**Printer Working Group  
Face-to-Face Meeting  
August 19, 2009  
Microsoft - Redmond, WA**

# Purpose of the effort

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- **The WIMS 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 update and extension of the 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

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- **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 - CIM

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## ➤ Printer Proxy CIM Provider

- Rick Landau (Dell) has posted the code and documentation package on:
  - [ftp://ftp.pwg.org/pub/pwg/wims/cim/DellPrinterProviderProxyPrototype\\_README.txt](ftp://ftp.pwg.org/pub/pwg/wims/cim/DellPrinterProviderProxyPrototype_README.txt)
  - [ftp://ftp.pwg.org/pub/pwg/wims/cim/DellPrinterProviderProxyPrototype\\_v10.zip](ftp://ftp.pwg.org/pub/pwg/wims/cim/DellPrinterProviderProxyPrototype_v10.zip)
- There has been a full presentation of the Proxy Provider functionality and code package at the WIMS August 2009 Face-to-Face meeting.
- Rick is interested in feedback on user's experiences with the package
  - problems in running the package or bugs in the code
  - Incompatibilities with some MIB implementations
  - difficulty following the code or making customizations.

## ➤ Other CIM Activity

- CIM Print Services: effort had been waiting on the IPP group's IPP2.0 specification and, with the approval of this document, activity should resume
- Update of CIM Printer: Some cleanup issues remain. Rick and Ira will address.

# Current Activities - PMP

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- Additions and modifications to Printer-related IETF MIBS are done via the IANA versions of the MIBs accessible at the IANA Maintained MIBs group at <http://www.iana.org/protocols/>

Current Requests/Suggestions for additional enums:

- Harry Lewis (Infoprint) has requested that **plasticMultiRing** be added to the FinBindingTypeTC in the Finisher MIB (<http://www.iana.org/assignments/ianafinisher-mib>)
- It has been observed that Microsoft **langXPS** should be added to the PrtInterpreterLangFamilyTC in the Printer MIB (<http://www.iana.org/assignments/ianaprinter-mib>)

# Current Activities - PMP

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- The IEEE1284 Device Id is a standard element for identifying printing devices, not just in IEEE1284 but in other interfaces and protocols including USB and, via the Port Monitor MIB, Ethernet.
- The IEEE 1284 spec identified three necessary keys, MANUFACTURER, COMMAND SET, and MODEL.
- Identifying the Command Set is important in understanding how to communicate with the printer. However, there is inconsistency in how information is presented in this field, making automatic identification difficult.
- At the request of the PWG, Ira McDonald has proposed a normative appendix to the PWG Printer Port Monitor MIB, standardizing the content of "COMMAND SET" (CMD).
  - <ftp://ftp.pwg.org/pub/pwg/pmp/white/tb-ppm-1284-cmd-20090803.htm>
- WIMS is considering the content and application of this proposal.

# Current Activities – Imaging Power Management

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- Imaging Power Management was identified as the most important management specification effort at a recent PWG meeting.
- A public survey also showed interest in this area.
- The PWG Steering Committee approved adding a Power Management Project to the WIMS activities.
- Ira McDonald has generated a draft specification of the Imaging Power Elements
  - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspower10-20090726.pdf>
- WIMS is soliciting comments, additions, suggestions and general participation of all interested parties in the development of this specification
- A MIB binding of these abstract elements is also being generated, with a CIM implementation for Web Services use to follow.



# Potential MIB Activities

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- **Printer Port Monitor MIB**
  - update spec
  - interoperability testing ?
  - advance PPM to PWG standard ?
- **Identify Printer MIB Problems**
  - MIB will be basis for future WS management. Therefore, MIB problems will delay development and/or restrict effectiveness of WS Imaging Management utilities.
  - Users and Fleet Management Agencies both need to understand some of MIB implementation variations, and should have some place to voice the questions.
- **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

# Next Steps

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- Continue with the CIM effort, eventually to include the CIM Printer Profile
- Develop Abstract Spec for Hardcopy Imaging Device Power Management elements
- Develop Hardcopy Imaging Device Power Management MIB
- Maintain and update existing set of Printer- and MFP-related specifications
- Attempt at increased contact with user community understand needs and identify real use cases.

# More Info/How to participate

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- We welcome more participation from member companies and input from 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>
- WIMS holds periodic phone conferences. Dates, call numbers and agenda on PWG Google Calendar.  
<http://www.google.com/calendar/embed?src=istopwg%40gmail.com>

# PWG Plenary Status Report MFD Working Group

August, 2009

Redmond, WA PWG F2F Meeting

# Purpose of the effort

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**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 and the FaxOut Service.
  - The Print, Scan and Resource Services have been completed
- The definition of a framework for the complete model is an objective.

# Approved Documents:

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## 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:

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### MFD Model and Overall Semantics:

- MFD Model and Overall Semantics  
June 20, 2009 Interim Draft
- <ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdoverallmod10-20090620.pdf>

### FaxOut Service:

- FaxOut Service:  
Semantic Model and Service Interface - June 17, 2009 Interim Draft
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-scan10-20090410-5108.02.pdf>

### Copy Service:

- Straw man proposal being generated

# Schema Status:

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- Model root is now System. This improves alignment with DMTF CIM
- System Description and Status are no longer based on Imaging class. They do reuse existing Status and Description elements
- Service Configurations no provide explicit limited view of the subunits applicable to that service.
- A straw man proposal of a WSDL and Schema is available for the Copy Service



# Remaining Services

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

# Next Steps

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- Work to complete the MFD specification.
  - Delay PWG wide Last Call and Formal Vote until at least one service normatively dependant on this specification reaches Last Call status
- Resume FaxOut work using normative dependencies on MFD specification
- Begin high level discussions of a Copy Service and get a straw man proposal drafted as a starting point for a working draft

## More Info/How to participate

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- **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**  
<http://www.pwg.org/mailhelp.html>

## More Info/How to participate

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- **Subscribe to the MFD mailing list by sending an e-mail to [majordomo@pwg.org](mailto: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 IPP Working Group

19 August 2009

Redmond, WA - PWG F2F Meeting

# IPP WG Officers

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- IPP WG Chair:  
Paul Tykodi (TCS)
- IPP WG Secretary:  
Craig Whittle (Sharp)
- IPP WG Document Editors:  
Tom Hastings (formerly Xerox) – IPP PP Set 2  
Ira McDonald (High North) – IPP/2.0 and PSX  
Mike Sweet (Apple) – IPP/2.0

# IPP WG Current Status

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- IPP/2.0 First Edition
  - PWG Candidate Standard – IPP versions 2.0 and 2.1
  - PWG Formal Vote ended 31 July 2009
  - 8 Yes, 0 No, 2 Abstain (quorum was 6 votes)
  - <ftp://ftp.pwg.org/pub/pwg/candidates/cs-ipp20-20090731-5100.10.pdf>
- IPP Printer State Extensions (PSX)
  - PWG Candidate Standard – IPP Printer/Finisher MIB alerts
  - PWG Formal Vote ended 31 July 2009
  - 8 Yes, 0 No, 2 Abstain (quorum was 6 votes)
  - <ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippstate10-20090731-5100.9.pdf>
- IPP Production Printing Attributes Set 2
  - Prototype Draft – extend PP Set 1 for IPP/2.2
  - Current draft dated 3 August 2009
  - Job save, Job recipient name/number, Job hold until date, etc.
  - <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippprodprintext10-20090803.pdf>
- IPPv2 Updated Charter w/ PPSet2
  - <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippv2-charter-20090813.pdf>

# IPP WG Next Steps

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- IPP/2.0 First Edition
  - Interoperability testing in Q1/Q2 2010
- IPP Printer State Reasons Extensions (PSX)
  - Interoperability event in Q1/Q2 2010
- IPP Production Printing Set 2
  - Revise Prototype Draft per review on 18 August at F2F
- IPP/2.0 Second Edition
  - Initial draft by Q1 2010 – IPP version 2.2 (production)
  - Includes \*all\* IETF and PWG IPP extension specs
  - Clarify First Edition based on interoperability testing



# IPP WG Info / Participation

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- We welcome participation from all interested parties
- IPP Working Group web page  
<http://www.pwg.org/ipp/index.html>
- 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

Aug 19, 2009

Seattle area, WA PWG F2F Meeting

Ron Nevo(Sharp)

# Purpose of the effort

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- 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!!!

# Purpose of the effort

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- The IDS working group is chartered to enable Hardcopy Device support in the Network Assessment Protocols that measure and assess the health of client computers and other devices that are attached to enterprise class networks.
- The group will define a set of common assessment attributes for Hardcopy Devices and will liaison with the specific Network Assessment Protocol efforts to include Hardcopy Device support in these protocols where necessary. In the future, the IDS WG charter may be revised to allow the working group to deal with other types of Imaging Devices (Network Projectors, Displays, etc.) in the Network Assessment Protocols or other security related work items.

# Work Items for the WG

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- 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.

# Administration

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

# Current Status

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- HCD Assessments Attributes document was developed and it is in stable condition now.
- HCD-NAP Binding Document under development.
  - Complete in Q2 2009.
- HCD-NEA Binding Document just starting.
  - Target completion date of Q3 2009.
- Current Discussions with assessment protocol designers (Microsoft/NEA) to finalize and endorse the IDS Binding documents.

# Next Steps

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- Address final comments on attributes specification.
- Review and implement action items from the F2F Meeting with Microsoft NAP group - in Redmond 8/17/2009
- Finish NAP binding specification – (Q2 2009)
- Begin NEA binding specification
- Seek approval/adoption w.r.t. assessment protocol vendors.
- Possible interop (?)
- Address remediation issues.



# Other Information

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- Conference Calls
  - In general, every other Thursday 1:00-2:00 PM Eastern time.
  - Check Google calendar (link at [www.pwg.org](http://www.pwg.org))
- Mailing list: [ids@pwg.org](mailto:ids@pwg.org)
- IDS documents on ftp site
  - [ftp.pwg.org/pub/pwg/ids](ftp://ftp.pwg.org/pub/pwg/ids)
  - Current:
    - Attributes document: /wd/wd-idsattributes10-20090623.pdf
    - NAP binding : /wd/wd-ids-napsoh10-20090806.pdf
    - NEA binding : TBD

# PDM WG Status

Rick Landau, Dell  
Projector & Display Management  
WG

August 2009

# PDM WG Status

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- WG is dormant, several members have gone silent
- Several pieces of work remain to be done
  - Minor ones
    - Fix the root OID of the published MIB: currently enterprises.pwg.1..., update to enterprises.pwg.2...
    - Fix a few typos and vague wording in property descriptions
    - Add a few missing properties
      - Will be careful not to disturb existing OID assignments
  - Major ones
    - Define traps
    - Define set of alert conditions
- Will complete minor ones, no assistance needed
- No further work anticipated

## PWG Officers for the next 2 year term

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- Current terms for the Chair, Vice-Chair and Secretary expire in September 2009.
- The PWG needs candidates for these offices.
- Call for candidates for these offices.

Questions/Discussion?



Thanks to Microsoft for Hosting!

Plenary Adjourned!