Printer Working Group

Plenary – April 7, 2010

Camas, WA

(Hosted by Sharp)

Plenary Agenda

- Administrivia
- Open Issues
- Need replacement for WIMS WG Secretary
- ISO JTC1 SC28 – PWG Liaison
- PWG Working Group Status [WG Chairs]
  - MFD (Semantic Model)
  - WIMS (DMTF CIM, PMP, Power Management)
  - IPP (JPS2 + IPP v2)
  - IDS (Imaging Device Security)
- 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.

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, April 6
  - 9:00 AM - 12:00 PM MFD (part 1)
  - 12:00 PM - 1:15 PM Lunch
  - 1:15 PM - 5:00 PM WIMS

Agenda for the Week

- Wednesday, April 7
  - 9:00 AM - 12:00 PM MFD (part 2)
  - 12:00 PM - 1:15 PM Lunch
  - 1:15 PM - 2:00 PM Plenary
  - 2:00 PM - 2:45 PM Cloud Printing BOF
  - 2:45 PM - 3:00 PM Break
  - 3:00 PM - 5:00 PM IPP

Agenda for the Week

- Thursday, April 8
  - 9:00 AM - 12:00 PM IDS
  - 12:00 PM - 1:15 PM Lunch
  - 1:15 PM - 3:30 PM IDS

2010 PWG Meeting Schedule

- Apr 6-8   Camas, WA (Sharp)
- Jun 8-10   Rochester, NY (Xerox)
- Aug 3-5   Bagsværd, Denmark (MPI Tech)
  - Decision required - Denmark or alternate
- Oct 19-21   Lexington, KY (Lexmark)
- Dec 7-9   Cupertino, CA (Apple)
- Tentative 2011 schedule
  - Consider virtual meetings?

2010 Membership: 27 Members, 2 Unpaid (as of 3/25/2010)

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

ISO JTC1 SC28 – PWG Liaison

- Status
  - Relationship establishment letter has been sent to SC28.

Open Issues

- PWG Web Site
  - Design
  - Webmaster email address
- PWG Standard Titles
  - Include PWG in the name?

PWG Working Group Status

PWG Plenary Status Report MFD Working Group

April, 2010

Camas, WA 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 and 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:

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-mfdoverallmod10-20100203.pdf

Copy Service:

- Copy Service: Semantic Model and Service Interface – January 2, 2010 Stable Draft
- ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdcopymodel10-20100314.pdf

FaxOut Service:

- FaxOut Service:
  Semantic Model and Service Interface – January 26, 2010 Prototype Draft
- ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxoutmodel10-20100314.pdf

In Progress Documents:

System Service:

MFD System Service :
Semantic Model and Service Interface – January 5, 2010
Initial Unapproved Submission

- ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemservicemodel10-20100105.pdf

Schema Status:

- Up to date with In Progress specifications, System Service, and Power specification

Remaining Services

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

Next Steps

- Work to complete the MFD 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.**

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PWG Plenary Status Report
Workgroup for Imaging Management Solutions (WIMS/PMP)

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

**April 7, 2010
Camas, Washington**

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 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

- **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 -MPSA Liaison

- The Managed Print Services Association (MPSA) is a relatively new 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

- Because much MPS interest is related to Device and Service Management, WIMS is working with MPSA leadership to develop effective mechanisms for cross-communication.

Current Activities - CIM

➢ Printer Classes

All the pending change requests to the CIM_Printer device class and related classes have been adopted by the DMTF Schema Subcommittee and will be included in Schema v2.25. The CRs are published in the PWG FTP site.

> ftp://ftp.pwg.org/pub/pwg/wims/cim/CIM_Printer-07-final.html
>
> ftp://ftp.pwg.org/pub/pwg/wims/cim/CIM_PrintChannel-01.html
>
> ftp://ftp.pwg.org/pub/pwg/wims/cim/CIM_PrintInputTray-01.html
>
> ftp://ftp.pwg.org/pub/pwg/wims/cim/CIM_PrintInterpreter-00.html

These changes embody all intended fixes to the printer device related classes.

➢ PrintService Classes

- CIM_PrintJob, CIM_PrintService, CIM_PrintServiceCapabilities, and CIM_PrintServiceSettings mof's done
- PrintQueue, PrintSAP and other small classes still need some update.
- Diagram of the extended CIM Printing classes must be written in Visio and PDF, per DMTF process
- New CIM Change Requests (CRs) must be written

➢ Printer Proxy CIM Provider

- Rick remains interested in feedback on user's experiences with the SNMP-CIM interpreter package. Information and code is available at:
  - ❑ ftp://ftp.pwg.org/pub/pwg/wims/cim/DellPrinterProviderProxyPrototype_README.txt

Command Set Format
for IEEE 1284 Device ID

- ➢ The current stable draft is posted at:

  ftp://ftp.pwg.org/pub/pwg/pmp/wd/wd-pmp1284cmdset10-20100125.pdf

- ➢ The document has completed PWG Last Call. Last Call Comment Resolution was done at the WIMS/PMP meeting on 6 April.

- ➢ It is intended to shortly put this document up to the PWG voting membership for balloting for advancement to PWG Candidate Standard.

Current Activities – 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/

- ➢ 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.

Potential MIB Activities

- **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

- Continue with the CIM effort, eventually to include the CIM Printer Profile

- Continue the Hardcopy Imaging Device Power Management Project, including prototype implementation of the Imaging System Power MIB

- Maintain and update existing set of Printer- and MFP-related specifications

- Attempt at increased contact with user community understand needs and identify real hardcopy device management requirements and use cases.

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

➢ WIMS holds periodic phone conferences. Dates and agenda on PWG Google Calendar.

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

- Contact WIMS Chair for phone number and access code.

IPP Working Group Status Report

7 April 2010

Camas, WA - PWG F2F Meeting

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 call for prototype experience
  - Resubmit-Job, Cancel-Jobs, Cancel-My-Jobs, Close-Job, job save, proof print, etc.
  - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippjobprinterext10-v22-20100329-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 Second Edition
  - Draft posted
  - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp20-20100226-rev.pdf

IPP WG Current Status

- IPP Everywhere
  - Draft charter:
    ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeverywhere-charter-20100304.pdf
  - Updated overview slides:
    ftp://ftp.pwg.org/pub/pwg/ipp/slides/.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 Everywhere
  - Formal vote among membership to judge interest
  - IPP Everywhere Requirements working draft in Q3 2010
  - IPP Everywhere initial working draft in Q4 2010
  - PWG Last Call on requirements document in Q1 2011
  - IPP Everywhere prototype working draft in Q2 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

PWG Plenary Status Report
IDS Working Group

April 7, 2010
Camas WA, 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.

- Our goal is to provide the metrics and mechanisms that allow HCDs to fully participate in assessment-protected networks.

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 IETF NEA.
  - We are 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, 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-NEA: Randy Turner (Amalfi), Jerry Thrasher (Lexmark)

Current Status

- HCD Assessments Attributes document is stable.

- HCD-NAP Binding Document is stable.

- HCD-NEA Binding Document is under development.

  - Target completion date of Q3 2010.

- Investigating ways to get network management applications to support IDS attributes

  - Developing IDS Marketing Rational document

  - Microsoft System Center/Forefront products

    - No recent contact with Microsoft

    - There is an issue about how to deploy HCD NAP in practice: how can we get MS's SHV to recognize and apply HCD_ATR?

  - Symantec Endpoint Protection product line

    - Initiating contact with Symantec

Next steps

- Transform NEA Binding Specification – (Q3 2010)
  - Interaction with TCG Hardcopy Workgroup
- Seek approval/adoption with respect to assessment protocol vendors.
- Address deployment issues
  - How to securely populate and update SHVs with HCD attributes and base values from vendors?
  - Should we also consider supporting the MS SCCM SHV by defining HCD responses that do not require SHV changes?
- Address remediation issues.
  - Develop initial draft of PWG IDS remediation specification
- Other possible topics will be discussed during the IDS WG F2F meeting

PWG Plenary
TCG Activity Summary

7 April 2010
Camas, WA – PWG F2F Meeting

Ira McDonald (High North / Samsung)
Co-Chair TCG Hardcopy WG

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

- TCG Workgroups Link
  - http://www.trustedcomputinggroup.org/about_tcg/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 Media Room

- TCG Media Room Link
  - http://www.trustedcomputinggroup.org/media_room
- TCG Press Releases and Member Releases
- TCG Industry News and Articles
- TCG Events
  - http://www.trustedcomputinggroup.org/media_room/events
- TCG Media Resources
- TCG Press Kit Documents
- TCG FAQs
  - http://www.trustedcomputinggroup.org/media_room/faqs

TCG Solutions for Applications

- TCG Solutions Link
  - http://www.trustedcomputinggroup.org/solutions
- Application – Authentication
  - Email, Multi-Factor Authentication, VPN Access, Wireless Access
- Application – Data Protection
  - Self-Encrypting Drives
- Application – Network Security
  - Secure Guest Access, User Authentication, Endpoint Integrity, Clientless Endpoint Management, Coordinated Security

TCG Solutions for Industries

- TCG Solutions Link
  - http://www.trustedcomputinggroup.org/solutions
- Industry – Financial Services
  - Data Protection, Access Control, Audit and Conformance
- Industry – Government (e.g., US NIST)
  - Data Protection, Access Control, Audit and Conformance
- Industry – Health Care (e.g., US HIPAA)
  - Data Protection, Access Control, Audit and Conformance

TCG Hardcopy WG

- TCG Hardcopy WG – Public Charter Summary
  - The Hardcopy Working Group (HCWG) will define open and vendor neutral technical specifications for the components of hardcopy ecosystems that use TCG components to establish their root of trust. Included will be a minimum set of functional, interface, and privacy requirements for hardcopy components. It will further satisfy requirements of scalability, owner control, and interoperability, all qualified by HCWG defined use cases.

    Hardcopy systems encompass a complex set of components, and are not limited to traditional "direct-connected" printing peripherals. The Hardcopy Working Group will define specifications for these components within the context of the complete system.

- TCG Hardcopy WG – Current Status
  - Now gathering use cases, threat models, and requirements using terminology based on PWG Semantic Model (storage, interface, console, interpreter, marker, scanner, etc.)

TCG and Cloud Computing

- SecureCloud 2010 – 16-17 March – Barcelona
  - http://cloudsecurityalliance.org/sc2010.html
- SecureCloud 2010 – Presentations Link
  - http://cloudsecurityalliance.org/decks/sc2010.zip
- "Practical Applications of Trusted Computing in the Cloud" (included in the ZIP file above) – Jesus Molina (Fujitsu), Steve Hanna (Juniper)
  - Self-Encrypting Drive – solves drive retirement issues
  - Trusted Network Connect – solves mobile access issues
  - Metadata Access Policy – solves user privilege issues
  - TPM-Based Integrity Check – solves "lying endpoint" issues
  - Trusted Virtual Multitenancy – solves Web hosting issues

Other Questions / Comments
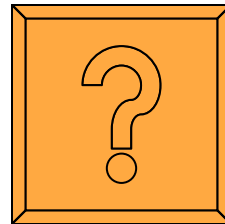
Next PWG Meeting

- June 8-10 at Rochester, NY, hosted by Xerox

- Thank you Sharp for hosting!