



The Printer Working Group

PWG May 2021 Face-to-Face
Plenary Session

Smith Kennedy, PWG Chair
May 4, 2021

Plenary Agenda



- Administrivia
- PWG Steering Committee Updates
- PWG Workgroup Status [WG Chairs]
- Liaison Status
- Questions / Next Meeting / Any Other Business

Administrivia



- Welcome and Introductions
- Confirm Minutes Taker
- Review PWG Antitrust Policy, PWG IP Policy and Inappropriate Topics
- Agenda



PWG Antitrust Policy

- "This meeting is being held in accordance with the PWG Antitrust Policy"
 - https://www.pwg.org/chair/membership_docs/pwg-antitrust-policy.pdf
- The IEEE-ISTO Printer Working Group ("PWG") will not become involved in the business decisions of its Members. The PWG strictly complies with applicable antitrust laws. Every PWG Member shall comply with this policy. The PWG Officers and PWG Workgroup Officers are responsible to ensure that this policy is adhered to in all PWG activities.

PWG IP Policy



- "This meeting is being held in accordance with the PWG Intellectual Property Policy"
 - https://www.pwg.org/chair/membership_docs/pwg-ip-policy.pdf
- TL;DR: Anything you say in a PWG meeting or email to a PWG address can be used in a PWG standard
 - (but please do read the IP policy above if you haven't done so)



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 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
- 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 Working Group Meetings



Do Not Discuss:

- Validity or essentiality of patents or patent claims
- Cost of specific patent use
- Licensing terms or conditions
- Product pricing, territorial restrictions, or market share
- Ongoing litigation or threatened litigation

DO raise an objection if inappropriate topics are discussed



Agenda Overview – Day 1

(All times Eastern Standard Time)

Tuesday, May 4

- 10:00 – 11:00 PWG Plenary
- 11:00 – 12:00 OpenPrinting Plenary
- 12:00 – 12:45 Lunch
- 12:45 – 1:30 OpenPrinting: GSoC, GSoD, and LFMP Project Updates
- 1:30 – 2:30 OpenPrinting: Status of Ghostscript and MuPDF
- 2:30 – 3:00 Break
- 3:00 – 4:00 OpenPrinting: Status of Chrome OS Printing



Agenda Overview – Day 2

(All times Eastern Standard Time)

Wednesday, May 5

- 10:00 – 11:00 OpenPrinting: CUPS Plenary
- 11:00 – 12:00 OpenPrinting: Printer Applications
- 12:00 – 12:45 Lunch
- 12:45 – 2:15 OpenPrinting : cups-filters, CUPS Snap, Printer Applications, Driverless Scanning
- 2:15 – 2:30 IPP WG: Status · IPP Everywhere v1.1 Status
- 2:30 – 3:00 Break
- 3:00 – 4:00 IPP WG : Evolution of IPP/2.0 and IPP Everywhere v2.0

Agenda Overview – Day 3



(All times Eastern Standard Time)

Thursday, May 6

- 10:00 – 12:00 IDS WG : Status and Discussion · PWG Hardcopy Device Security Guidelines v1.0
- 12:00 – 12:45 Lunch
- 12:45 – 1:15 IPP WG: IPP Encrypted Jobs and Documents v1.0
- 1:15 – 2:15 IPP WG: Cloud Printing and Scanning BoF
- 2:15 – 2:45 Break
- 2:45 – 4:00 IPP WG : IPP Enterprise Printing Extensions v2.0

Agenda Overview – Day 4



(All times Eastern Standard Time)

Friday, May 7

- 10:00 – 12:00 IPP WG : 3D Scanning and Production BoF
- 12:00 – 12:45 Break / Lunch
- 12:45 – 2:15 IPP WG : IPP Driverless Printing Extensions v2.0
- 2:15 – 2:45 Break
- 2:45 – 3:15 IPP WG : IPP Production Printing Extensions v2.0
- 3:15 – 3:30 IPP WG : Next Steps



The Printer Working Group

Steering Committee Updates



Officers (2019-2021 Term)

- PWG Chair: Smith Kennedy, HP Inc.
- PWG Vice-Chair: Jeremy Leber, Lexmark
- PWG Secretary: Ira McDonald, High North

**Anyone interested in serving in a PWG Officer role?
Reach out to chair@pwg.org!**

2021 Membership



28 Members

Alan Sukert	 Epson	 Konica Minolta	 Oki Electric Industry Co., Ltd	 Toshiba Business Solutions
 Apple Inc.	 FUJIFILM Business Innovation Corp.	 Kyocera	 PaperCut Software	 Tykodi Consulting Services LLC
 Brother Industries, Ltd.	 Google	 Lakeside Robotics	 Qualcomm	 Xerox
 Canon	 High North, Inc.	 Lexmark	 Ricoh	YSoft
Danny Brennan	 HP Inc.	 Meteor Network	 Synaptics	
directprint.io	 Intel	 Microsoft	Technical Interface Consulting	

All Members in Good Standing – Thank You!

Thank You For Participating!



Thanks to all of you for contributing your
time and efforts to the PWG!



Future Meeting Schedule

- 2021
 - August 17-19 – Virtual
 - November 9-11 – Virtual
- 2022
 - February 8-10 – Virtual
 - May 10-12 – Joint PWG/OpenPrinting - Lexington? Sunnyvale?
 - August 16-18 – Virtual

Contact chair@pwg.org if you are interested in hosting a PWG F2F event



IPP Everywhere™ Certified Printers

- <https://www.pwg.org/ipp/everywhere.html>
- **692** printers now certified!
 - Lexmark registered the first 92 IPP Everywhere v1.1 Certified Printers on October 21, 2020
 - <https://www.pwg.org/printers/>
 - More on the way!
- IPP Everywhere™ Self Certification 1.0 Update 5
 - Released June 2020; approved August 2020
 - **Valid for certification until June 30, 2021**
- IPP Everywhere™ Self Certification 1.1 Update 2
 - Released Oct 7, 2020; approved October 22, 2020
 - Update 3 to be released soon...
 - **Mandatory for certification starting July 1, 2021**
- IPP Everywhere v2.0 scoping and requirements in development



Recently Approved

- Best Practices
 - Job Accounting with IPP v1.0
 - <https://ftp.pwg.org/pub/pwg/informational/bp-ippaccounting10-20210205-5199.11.pdf>



Projects on GitHub

- PWG on GitHub:
 - <https://github.com/istopwg>
- IPP Sample Code
 - <https://github.com/istopwg/ippsample>
- IPP Everywhere Self Certification Tools
 - <https://github.com/istopwg/ippeveselfcert>
- IPP Registry
 - <https://github.com/istopwg/ippregistry>
- PWG Books:
 - <https://github.com/istopwg/pwg-books>



The Printer Working Group

Workgroup Status

Work In Progress



Name

▼ IPP Workgroup

- IPP Enterprise Printing Extensions v2.0
- IPP Production Printing Extensions v2.0
- IPP Driverless Printing Extensions v2.0
- IPP Encrypted Jobs and Documents v1.0
- IPP Finishings 3.0

▼ • PWG Design Principles

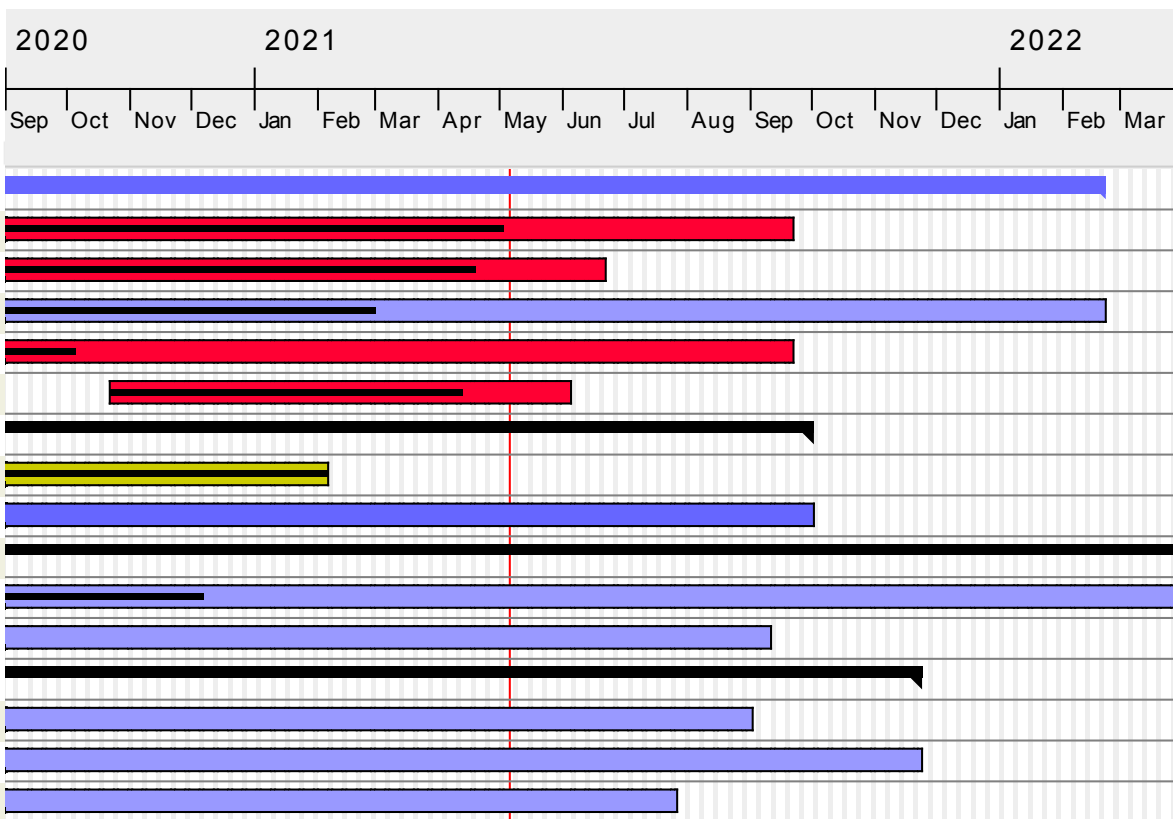
- Job Accounting with IPP v1.0
- INFRA Cloud Proxy Registration v1.0

▼ • IDS Workgroup

- HCD cPP v1.0
- PWG HCD Security Guidelines v1.0

▼ • PWG SC

- PWG Process
- New Website
- PWG Design Principles



Planned

Interim

Prototype

Prototyped

Stable



The Printer Working Group

IDS Workgroup Status

Alan Sukert



IDS WG: Officers

- IDS WG Chair:
 - Alan Sukert
- IDS WG Vice-Chair
 - TBD
- IDS WG Secretary:
 - Alan Sukert
- IDS WG Document Editors:
 - Ira – HCD Security Guidelines



IDS: Current Status

- IDS Charter updated to reflect development of HCD Security Guidelines by Ira
- Focus now is on Common Criteria HCD Protection Profiles (PPs), HCD Security Guidelines and Hardcopy Device security standards
 - IDS Charter updated to focus the IDS WG on outreach with standards bodies involved in HCD security issues.
 - Contributing to the development of Hardcopy Device collaborative PP (cPP) / Supporting Document (SD)
 - Looking at initiating interface with other standards efforts related to hardcopy devices
 - IDS Meetings
 - Since last IDS F2F on Feb 10th, IDS Meetings held on Feb 18th, Mar 4th & 18th and Apr 1st, 15th and 29th
 - Next IDS Meeting tentatively scheduled for May 27th



IDS: Current Status

- IDS focus is now on Common Criteria HCD Protection Profiles and other HCD-related Security Standards
 - HCD international Technical Committee (iTC) Meetings:
 - HCD iTC holds weekly HCD iTC Meetings; goal is to develop, review and publish an HCD cPP/SD v1.0 by 1Q 2022
 - Will discuss the results of the weekly HCD iTC Meetings held since last IDS F2F in Feb 2021 and the current HCD cPP/SD v1.0 status at the IDS F2F Session on Thursday May 6th
- Developing HCD Security Guidelines to provide guidance on current HCD security technology and security issues
 - Will review the latest status at the IDS F2F session
- IDS Session will also review current status of HCD-related standards efforts of the Trusted Computing Group (TCG), Internet Engineering Task Force (IETF) and Linux Foundation



IDS WG: More Information

- We welcome participation from all interested parties
- IDS Working Group web page
 - <https://www.pwg.org/ids/>
- Subscribe to the IDS mailing list
 - <https://www.pwg.org/mailman/listinfo/ids>
- IDS WG holds bi-weekly meetings via WebEx announced on the IDS mailing list
 - Next meeting is scheduled for Thursday, May 27, 2021 at 3pm ET



The Printer Working Group

IPP Workgroup Status

Paul Tykodi (TCS), Ira McDonald (High North)

Internet Printing Protocol Workgroup



- The Internet Printing Protocol (IPP) workgroup is chartered with the development of IPP and the maintenance of various SNMP MIBs
 - <https://www.pwg.org/ipp/>
- IPP WG holds bi-weekly phone conferences announced on the IPP mailing list
 - Next conference calls scheduled for Thursday, May 20, 2021 and June 3, 2021 at 3pm ET
- IPP WG Co-Chairs:
 - Paul Tykodi (TCS)
 - Ira McDonald (High North)
- IPP WG Secretary:
 - Michael Sweet (Lakeside Robotics)

Internet Printing Protocol Workgroup



- Documents in development:
 - IPP/2.0 Fourth Edition, IPP Driverless Printing Extensions v2.0, IPP Encrypted Jobs and Documents v1.0, IPP Enterprise Printing Extensions v2.0, IPP Finishings v3.0, IPP Production Printing Extensions v2.0
- Recently published:
 - PWG 5199.11-2021: Job Accounting with IPP v1.0
- Up-to-date pending IANA registrations online:
 - <https://www.pwg.org/ipp/ipp-registrations.xml>
- IPP Everywhere Printer Self-Certifications:
 - <https://www.pwg.org/printers>
 - <https://github.com/istopwg/ippeveselfcert>
- IPP Sample Code:
 - <https://github.com/istopwg/ippsample>



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The Printer Working Group

Liaison Status



Covered in OpenPrinting Plenary and other sessions later today and tomorrow.



- Mopria liaison to PWG : Michael Rhines (Qualcomm)
- New 2-year liaison agreement signed April 3, 2020
- PWG Chair presented at the November 2020 Mopria Member Meeting
- Continuing email discussions concerning "client-info" as a proposed successor to "document-format-details"



DRUPA Virtual Presentation - 2021

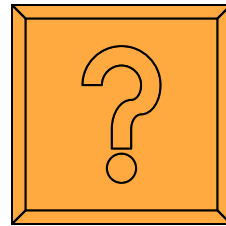
- **Virtual DRUPA Presentations** – April 20th to 23rd 2021
 - Description of PWG Presentation - <https://events.drupa.de/en/event/id-3d-printing-within-an-industry-4-0-context>
 - Presentation focused on the role of standards within the Additive Manufacturing ecosystem over the next 5 to 10 years
 - **Presentation sponsored by VDMA** (*Verband Deutscher Maschinen- und Anlagenbau*) " The Mechanical Engineering Industry Association has its headquarters in Frankfurt am Main, Germany, and represents around 3,200 members, making it the largest industry association in Europe." - per vdma.org web site
 - AM working group within VDMA is sponsoring a machine communication standardization effort focused on:
OPC Foundation – Unified Architecture
<https://opcfoundation.org/about/opc-technologies/opc-ua/>
 - VDMA AM Project Description: - <https://am.vdma.org/viewer/-/v2article/render/60005595>



3D / Additive Manufacturing Liaisons

- America Makes & ANSI Additive Manufacturing Standardization Collaborative (AMSC) -
 - <https://www.ansi.org/standards-coordination/collaboratives-activities/additive-manufacturing-collaborative>. The IEEE-ISTO Printer Working Group is participating in the AMSC initiative.
- ASTM Committee F42 on Additive Manufacturing Technologies -
 - <https://www.astm.org/COMMITTEE/F42.htm>
- INCITS Digital Manufacturing Technical Committee -
 - <https://www.incits.org/committees/digitalmanufacturing>
- 3MF Consortium -
 - <https://www.3mf.io>

Other Questions / Comments



Next PWG Face-to-Face Meeting



August 17-19 : Virtual

Monitor pwg-announce@pwg.org or the [PWG meeting page](#) for more info.



The Printer Working Group

Backup



Process Updates

- Process v4.0 in development
 - New draft posted
 - Discussions ongoing
- PWG Policy
 - PWG IPP Registry Policy : 2020-05-18
 - PWG Namespace Policy : 2020-07-20
 - PWG Press Release Review Policy: 2020-09-08
 - PWG Roles and Responsibilities Policy : 2020-09-24
 - PWG Antitrust Policy : 2021-02-01
 - PWG Officer Elections : Draft in review
 - PWG Network Infrastructure : Draft in review