# The Printer Working Group

# PWG February 2022 Face-to-Face Plenary

Jeremy Leber, PWG Chair
Smith Kennedy, PWG Vice Chair
February 8, 2022

# 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

**<u>DO raise an objection</u>** if inappropriate topics are discussed

(All times Eastern Standard Time)

## **Tuesday, February 8**

| 10:00 – 10:45 | PWG Plenary |
|---|---|
| 10:45 – 11:00 | IPP WG : Status |
| 11:00 – 12:00 | IPP WG : Prototype Ready: IPP Finishings v3.0, IPP Encrypted Jobs and Documents v1.0, IPP Production Printing Extensions v2.0, IPP Enterprise Printing Extensions v2.0, |
| 12:00 – 12:45 | Break / Lunch |
| 12:45 – 2:00 | IPP WG : Evolution of IPP/2.0 and IPP Everywhere v2.0 |

(All times Eastern Standard Time)

## **Wednesday, February 9**

| | |
|---|---|
| 10:00 – 12:00 | IDS WG : Status and Discussion · PWG Hardcopy Device Security Guidelines v1.0 |
| 12:00 – 12:45 | Break / Lunch |
| 12:45 –  1:45 | IPP WG : 3D Printing Liaison: Status and Guidance |
|  1:45 –  2:00 | IPP WG : Next Steps |

# The Printer Working Group

Steering Committee Updates

# Officers (2021-2023 Term)

- PWG Chair: Jeremy Leber, Lexmark

- PWG Vice Chair: Smith Kennedy, HP Inc.

- PWG Secretary: Ira McDonald, High North

## 29 Members

| | | | | |
|---|---|---|---|---|
| Alan Sukert | EPSON — Epson | KONICA MINOLTA — Konica Minolta | OKI PRINTING SOLUTIONS — Oki Electric Industry Co., Ltd | Technical Interface Consulting |
| Apple Inc. | FUJIFILM — FUJIFILM Business Innovation Corp. | KYOCERA — Kyocera | PaperCut — PaperCut Software | TOSHIBA Leading Innovation — Toshiba Business Solutions |
| brother at your side — Brother Industries, Ltd. | Google — Google | Lakeside Robotics — Lakeside Robotics | Qualcomm — Qualcomm | TCS Tykodi Consulting Services LLC. — Tykodi Consulting Services LLC |
| Canon — Canon | High North Inc — High North, Inc. | Lexmark — Lexmark | RICOH — Ricoh | xerox — Xerox |
| Danny Brennan | hp — HP Inc. | meteor network — Meteor Network | SNBC — SNBC | YSoft |
| directprint.io | (intel) — Intel | Microsoft — Microsoft | Synaptics — Synaptics | |

**Welcome New Member: SNBC!**

14

# Thank You For Participating!

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

# Future Meeting Schedule

## 2022

- May 10-13 – Joint PWG/OpenPrinting – Virtual? Lexington? Sunnyvale?

- August 16-18 – Virtual

- November 15-17 – Virtual

- ## 2023

  - February 7-9 – 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

- **768** printers now certified!
  - https://www.pwg.org/printers/
  - More on the way!

- IPP Everywhere™ Self Certification 1.1 Update 3
  - → Released May 17, 2021; approved June 16, 2021
  - → **Mandatory for certification starting July 1, 2021**
    - →**IPP Everywhere v1.0 Certifications no longer accepted**

- IPP Everywhere™ Self Certification 1.1 Update 4
  - In development; beta not yet available

- IPP Everywhere v2.0 scoping and requirements in development
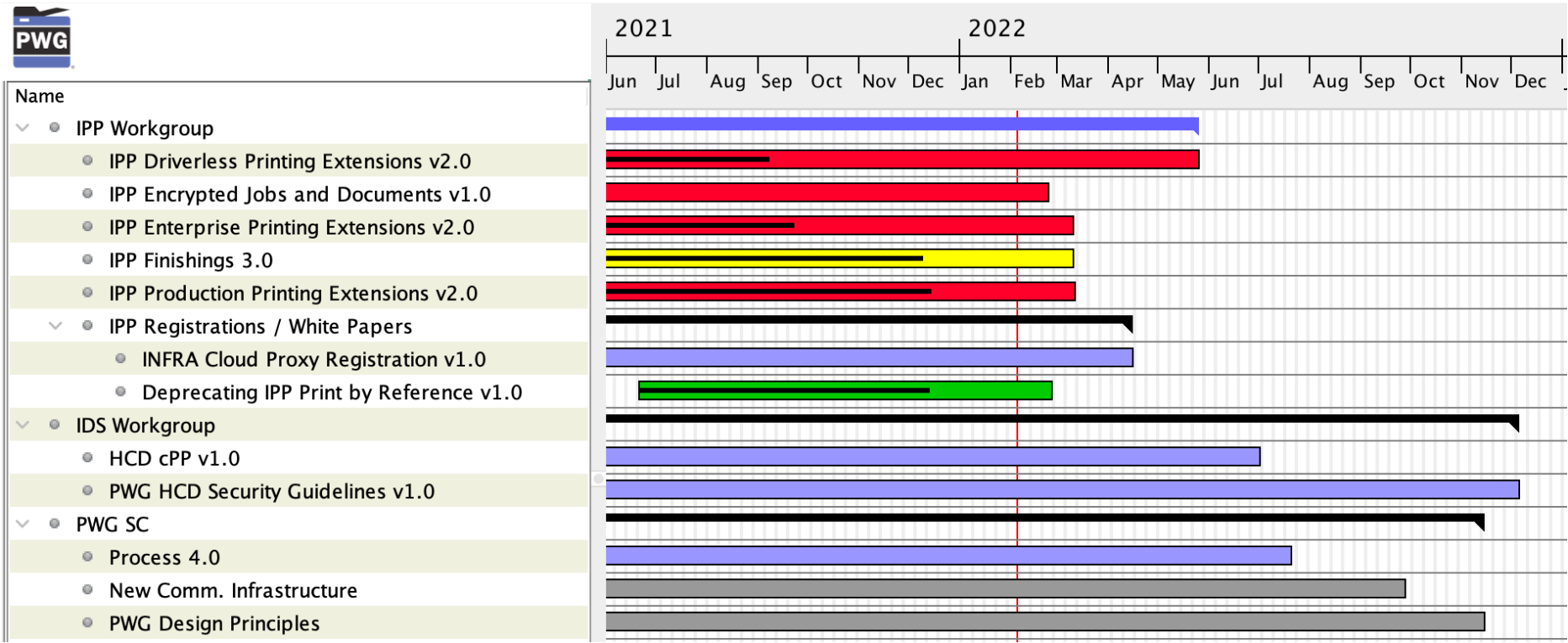
# Projects on GitHub

- 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 | 2021 | | | | | | | 2022 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |

**Planned** **Interim** **Prototype** **Stable** **Approved**

# IDS Workgroup Status

Alan Sukert

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

- 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.
    - Monitoring development of Hardcopy Device collaborative PP (cPP) / Supporting Document (SD)
    - Looking at initiating interface with other standards efforts related to hardcopy devices
  - IDS WG Meetings
    - Since last IDS F2F on Nov 2nd, IDS WG Meetings held on 12/16/21, 1/20/22 & 2/3/22
    - Next IDS WG Meeting scheduled for 2/17/22

# 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 2Q 2022
    - Will discuss the results of the weekly HCD iTC Meetings held since last IDS F2F in Nov 2021 and the current HCD cPP/SD v1.0 status at the IDS F2F Session on Wednesday February 9th

- 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) and Internet Engineering Task Force (IETF)

# 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, February 17, 2022 at 3pm ET

# IPP Workgroup Status

Paul Tykodi (TCS), Ira McDonald (High North), Michael Sweet (Lakeside Robotics)

# IPP WG: Charter

- Current charter:
  - https://ftp.pwg.org/pub/pwg/ipp/charter/ch-ipp-charter-20210409.pdf
- The Internet Printing Protocol (IPP) workgroup is chartered with the maintenance of IPP and the IETF IPP registry, and support for new clients, network architectures (Cloud, SDN), MFD/Imaging service bindings, and emerging technologies such as 3D Printing
- In addition, we maintain the IETF Finisher MIB, Job MIB, and Printer MIB registries, the PWG MIBs, the PWG Semantic Model schema, and handle synchronization with changes in IPP

# IPP WG: Officers

- **IPP WG Co-Chairs:**
  - Paul Tykodi (TCS)
  - Ira McDonald (High North)
- **IPP WG Secretary:**
  - Michael Sweet (Lakeside Robotics)
- **IPP WG Document Editors:**
  - Michael Sweet (Lakeside Robotics) – Internet Printing Protocol/2.x Fourth Edition, IPP Encrypted Jobs and Documents v1.0, IPP Everywhere v2.0, IPP Production Printing Extensions v2.0
  - Smith Kennedy (HP Inc.) – IPP Driverless Printing Extensions v2.0, IPP Encrypted Jobs and Documents v1.0, IPP Enterprise Printing Extensions v2.0, IPP Finishings v3.0

- PWG Specifications in development:
    - Internet Printing Protocol/2.x Fourth Edition          - Interim
    - IPP Driverless Printing Extensions v2.0          - Prototype
    - IPP Encrypted Jobs and Documents v1.0          - Prototype
    - IPP Enterprise Printing Extensions v2.0          - Prototype
    - IPP Everywhere™ v2.0          - Interim
    - IPP Finishings v3.0          - Prototype
    - IPP Production Printing Extensions v2.0          - Prototype

- Recently published:
    - Deprecating IPP Print by Reference v1.0
    - PWG 5199.11-2021: Job Accounting with IPP v1.0

- IPP Everywhere™ printers:
    - ~~752~~ **768** printers currently listed from HP and Lexmark

# The Printer Working Group

Liaison Status – February 2022

# Linux Foundation OpenPrinting

- **OpenPrintingGoogle Summer of Code 2022**
  - **https://developers.google.com/open-source/gsoc/timeline**
  - **Aveek/Till are coordinators for all Linux Foundation projects**
- **OpenPrinting CUPS (Zdenek Dohnal, RedHat)**
  - **https://openprinting.github.io/cups-2.4.1/**
  - **Current stable release is OP CUPS v2.4.1 on 27 January 2022.**
- **OpenPrinting CUPS Filters (Till)**
  - **https://github.com/OpenPrinting/cups-filters/releases/tag/1.28.11**
  - **Current release is OP CUPS Filters v1.28.11 on 15 January 2022.**
- **OpenPrinting PAPPL (Printer Application) (Mike)**
  - **https://github.com/michaelrsweet/pappl/releases/tag/v1.1b2**
  - **Current release is PAPPL v1.1b3 on 4 November 2021.**
- **OpenPrinting LPrint Label Printer Application (Mike)**
  - **https://github.com/michaelrsweet/lprint/releases/tag/v1.1.0**
  - **Current release is LPrint v1.1.0 on  23 December 2021**
- **OpenPrinting PDFio Library (Mike)**
  - **https://github.com/michaelrsweet/pdfio/releases/tag/v1.0.0**
  - **Current release is  PDFio  v1.0.0 on 23 December 2021**
- **OpenPrinting PostScript, Ghostscript, Gutenprint, HPLIP Printer Apps (Till)**
  - **https://github.com/OpenPrinting/ps-printer-app**
  - **https://github.com/OpenPrinting/ghostscript-printer-app**
  - **https://github.com/OpenPrinting/gutenprint-printer-app**
  - **https://github.com/OpenPrinting/hplip-printer-app**
- **OpenPrinting CUPS Legacy Driver Retro-Fitting Printer Applications (Till)**
  - **https://github.com/OpenPrinting/pappl-retrofit**

# Mopria Alliance

- Mopria Alliance liaison to PWG: Michael Rhines (Qualcomm)

- New 2-year liaison agreement signed April 3, 2020
  - Renewal in-progress

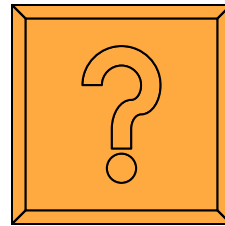- No significant areas of active collaboration between the two groups currently but many opportunities exist

# 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

# Next PWG Face-to-Face Meeting

May 10-13 – Virtual?  Lexington?  Sunnyvale?

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