

# Internet Printing Protocol Workgroup Meeting Minutes

## May 23, 2019

Meeting was called to order at approximately 3pm ET on May 23, 2019.

### Attendees

Cihan Colakoglu (Kyocera)  
Kris Iverson (Microsoft)  
Smith Kennedy (HP)  
Ira McDonald (High North)  
Michael Sweet (Apple)  
Bill Wagner (TIC)  
Uli Wehner (Ricoh)  
Rick Yardumian (Canon)

### Agenda Items

1. IP Policy and Minute Taker
  - [http://www.pwg.org/chair/membership\\_docs/pwg-ip-policy.pdf](http://www.pwg.org/chair/membership_docs/pwg-ip-policy.pdf)
  - IP policy accepted, Mike taking minutes
2. Approve IPP minutes from previous meetings
  - <https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20190509.pdf>
  - Approved as posted.
3. Status/Review of various IPP mailing list notes
  - <https://www.pwg.org/pipermail/ipp/2019/020085.html>
    - RFC: Deprecate pages-per-subset attribute
    - Consensus is to deprecate
    - Nobody has found an implementation in the wild
  - <https://www.pwg.org/pipermail/ipp/2019/020083.html>
    - RFC: Obsolete page-order-received attribute
    - Consensus is to obsolete
    - Nobody has found an implementation in the wild
  - <https://www.pwg.org/archives/ipp/2019/020107.html>
    - RFC: "oauth-authorization-scope (1setOf name(MAX))" Printer Description attribute
    - Q: How does this work with Get-User-Printer-Attributes
      - A: Complicated, OAuth provides access authorization but does not necessarily provide identity information that could be used to lookup policy - might need to default to a generic/guest policy
    - Just do as a mailing list registration
      - Mike will post a summary of discussions to the registration
4. Status of AMSC and ISO liaisons w/ PWG (Paul)

- <https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-f2f-minutes-20190417.pdf>
  - See IPP minutes from PWG F2F on 04/17/19 and 04/18/19
5. Status of PWG and IPP WG Formal Approvals and Last Calls (All)
- IPP Authentication Methods (Smith)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippauth-20190515.pdf>
    - Stable draft - for a Best Practice
    - PWG Last Call (second) started 11 April 2019 ended 11 May 2019
    - Quorum achieved - 9 responses - 1 comment - quorum is 8
    - Needs new "oauth-authorization-scope" attribute and other minor edits
      - Treat as last call comments
      - Do a second LCRC draft for review
    - SC approved PWG Last Call process on 20 May 2019
    - Schedule - ready for PWG Formal Vote in Q2 2019 after LCRC review
  - IPP Document Object v1.1 (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippdocobject11-20190418.pdf>
    - Stable draft - Errata update for a Candidate Standard
    - PWG Call for Objections started 21 April 2019 ended 21 May 2019
    - No objections - SC approved PWG CFO process on 20 May 2019
    - Schedule - ready for publication
    - Action: Mike to publish IPP Document Object v1.1
  - PWG Safe G-Code Subset v1.0 (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-pwgsafegcode10-20190318.pdf>
    - Stable draft - for a Best Practice
    - "safe-gcode-supported" to "pwg-safe-gcode-supported" (for consistency)
    - PWG Formal Approval extended 5 May 2019 ends 4 June 2019
    - Quorum achieved - 7 YES - 0 NO - 0 comments - quorum is 6
    - Schedule - publication in Q2 2019
    - Q: OK to update IPP 3D references?
      - A: Yes
  - IPP System Service (Ira/Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippssystem10-20190515-rev.pdf>
    - <https://www.pwg.org/archives/ipp/2019/020081.html>
    - Stable draft - for a Candidate Standard
    - IPP WG Last Call ends 31 May 2019 w/ one comment so far
      - <https://www.pwg.org/pipermail/ipp/2019/020110.html>
    - Schedule - PWG Last Call in Q2 2019
6. Quick Review of IPP Job Extensions v2.0 (Mike)
- <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippjobext20-20190510-rev.pdf>
  - Stable draft - for a Candidate Standard
  - IPP WG Last Call ended 5 May 2019 w/ no comments
  - "media-col" and related attributes copied from PPX

- Schedule - PWG Last Call in Q2 2019
- Section 1:
  - Line 301: "incorporates portions of the ORIGINAL IPP Production ..."
- Section 5.3.1:
  - Table 2: Upgrade all MAY's to SHOULD's
- Section 5.3.1.x: Anything OPTIONAL is now RECOMMENDED
- Section 5.4.1:
  - RECOMMENDED
- Section 5.4.2:
  - RECOMMENDED
  - Fix section reference to 5.4.1
- Section 5.5.6, 5.5.7, 5.5.8, and 5.5.9:
  - Add CONDITIONALLY REQUIRED
- Sections 5.5.27 and 5.5.28:
  - Fix broken reference
  - CONDITIONALLY REQUIRED
- Section 5.5.x: (media-xxx-supported)
  - CONDITIONALLY REQUIRED
- Section 15.1:
  - Make sure to say RECOMMENDED for any of the new recommended attributes
- Action: Mike to update IPP Job Extensions v2.0 and start PWG Last Call
- 7. Quick Review of Canon and HP IPP Extensions (Rick/Smith)
  - <https://ftp.pwg.org/pub/pwg/ipp/slides/New-IPP-Attributes-Proposal-from-Canon-and-HP-version-2-20190522.pdf>
  - <https://www.pwg.org/archives/ipp/2019/020108.html>
  - Second draft of slides
  - Overbleed:
    - Canon originally proposed large, medium, small
    - media-overbleed - use absolute measurement units
    - media-overbleed-supported - might be rangeOfInteger?
    - media-overbleed-type - scaled/not-scaled/unscaled (printers can replicate border pixels or use content outside the image box instead of scaling)
  - Unidirectional:
    - Continue discussing print quality extensions for explicit control, "high" enum implicitly selects
  - Eliminate Upper and Lower Margins and Banner Printing
    - minimize-whitespace? How does that work?
    - If you print a single job with multiple pages or multiple jobs with one or more pages, the pages should be joined if the media margins are 0
      - Sometimes cutters will introduce margins due to physical limitations
  - For banner printing this is a matter of cropping content on the input pages
    - Something for production printing?

- banner-print-pages? Too many things can go wrong, probably need coordinates specifying the content box
- Image Composite Print
  - Maybe for production or enterprise
  - General watermarking is too common and implemented by clients
  - Other kinds of stamping/watermarking/insertion/overlay/underlay
- Special Print Mode
  - Barcodes are an issue from the source - fuzzy images instead of bi-level B&W images
  - But maybe we can provide print quality hints to provide an override to get the intended rendering of barcode images
- Schedule TBD
- 8. Quick Review of HP Print Quality Customization (Smith)
  - <https://ftp.pwg.org/pub/pwg/ipp/wd/white-hp-ipp-custompqi-20190423-rev.pdf>
  - Interim draft - White paper
  - Did not get to this
  - Schedule - TBD
- 9. Status of various IPP documents (All)
  - IPP Production Printing Ext v2.0 (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippxxx20-20190514-rev.pdf>
    - Errata update of PWG 5100.3-2001
    - Interim draft - IPP WG review on 9 May 2019
    - Non-production attributes moved to IPP Job Extensions v2.0
    - Schedule - PWG Last Call in Q2/Q3 2019
  - IPP Message Catalog Help Extensions (HELPME) (Smith)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippstooltip-20190419.pdf>
    - Initial draft - for a Best Practice
    - IPP WG review on 04/25/19
    - Schedule - PWG Last Call in Q2/Q3 2019
  - IPP Job Accounting v1.0 (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippaccounting10-20190418.pdf>
    - Initial draft - for a Best Practice
    - Schedule - TBD
  - IPP Everywhere 1.1 (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeve11-20190128-rev.pdf>
    - Stable draft - for a Candidate Standard
    - Defer IPP WG Last Call until IPP Everywhere Self-Cert v1.1 is ready
    - Schedule - Stable working drafts/beta tools in Q2 2019
  - IPP Everywhere Self-Certification Manual v1.1 (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert11-20180704-rev.pdf>
    - Prototype draft - for a Candidate Standard
    - Update and start IPP WG Last Call together w/ IPP Everywhere v1.1

- Schedule - Stable working drafts/beta tools in Q2 2019
  - IPP Enterprise Printing Extensions v2.0 (EPX) (Smith)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippepe-20190327.pdf>
    - Initial draft - PWG F2F review in April 2019
    - Update per PWG F2F in April 2019
    - Schedule - Prototype draft Q3 2019
  - IPP Encrypted Jobs and Documents (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipptrustnoone10-20190418-rev.pdf>
    - Interim draft - PWG F2F review in April 2019
    - Updated to change from Registration to Specification
    - Schedule - Prototype draft Q3 2019
10. Open Printing update (Ira)
- OP monthly calls (04/02/19) and (05/07/19)
  - OP website renovation major progress using Jekyll - finish in June 2019
  - GSoC 2019 Accepted student proposals announced (05/06/19)
  - All five OP projects received GSoC 2019 slots and have assigned students

## Next Steps / Open Actions

- Next conference calls on June 6 and 20, 2019 at 3pm ET
- Review Print Quality extensions, and Job Accounting at next call (in that order)
- Action: Mike to publish IPP Document Object v1.1
- Action: Mike to update IPP Job Extensions v2.0 and start PWG Last Call
- Action: Mike to post deprecation template for pages-per-subset attribute to IPP list (DONE)
- Action: Mike to post obsolescence template for page-order-received attribute to IPP list (DONE)