

# Internet Printing Protocol Meeting Minutes

## August 29, 2024

Meeting was called to order at 3:00pm ET.

### Attendees

Charles Armstrong (Canon)  
Smith Kennedy (HP)  
Jeremy Leber (Lexmark)  
Ira McDonald (High North)  
Anthony Suarez (Kyocera)  
Mike Sweet (Lakeside Robotics)  
Uli Wehner (Ricoh)

### Agenda Items

1. PWG IP policy, minute taker, administrivia
2. Review IPP minutes from previous meetings:
  - <https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20240801.pdf>
    - Approved as posted
  - <https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-f2f-minutes-20240806.pdf>
    - Approved as posted
  - Mike: Working on modernizing/normalizing test files for IPP/2.x
    - Smith: I can help
      - Mike: For the 5100.13 and later specs, sure
    - Smith: What about validation of PNG and .strings file content?
      - Mike: Some stuff has been added to ipptool for that, will contact Smith offline to make sure everything is covered
    - Action: Mike to work with Smith to ensure PNG and .strings file tests are possible with new ipptool
  - Mike: Also looking at a way to annotate test files to "document" the parameters that are needed/supported by a test file so that we can display these in the IPP Everywhere tool
3. Pending IPP WG documents:
  - IPP/2.x Fourth Edition (BASE)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippbase23-20240807-rev.pdf>
    - Table 2: Make Close-Job conditionally required and add a note (required if Create-Job is supported)
      - Action: Mike to file errata for 5100.7 to make Close-Job CONDITIONALLY REQUIRED
    - Table 4:
      - Add finishings, finishings-col as C. REQUIRED
      - Add media-col as RECOMMENDED/REQUIRED (check

- original IPP/2.x for conformance of IPP/2.0)
  - Table 5:
    - Add finishings attributes as C. REQUIRED
    - Add media-col-xxx as RECOMMENDED/REQUIRED
    - Fix "pages-per-minutes-color" should be "pages-per-minute-color"
    - Add "printer-name", make sure printer-name content is in a sub-section
    - Remove printer-alert-xxx (Printer Status)
  - Not ready for IPP WG last call
    - Mike will post an updated draft with a call for additional review - PWG 5100.12 covers all IPP extensions from 5100.1 through 5100.11 and 5101.1, look for conformance changes, missing attributes/values, etc.
  - IPP Wi-Fi Configuration Extensions v1.0 (WIFI)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippwifi10-20240807-rev.pdf>
    - Ready for IPP WG last call
    - Action: Mike to start IPP WG last call of WIFI, ending September 12th
- 4. Smith: Conformance issue that cam up with an older HP printer
  - Wrote a tool in Ruby to generate iptool tests from the IANA IPP registry
  - Smith had shared with Mike, who noted that the current IPP registry maintenance tools are in C
  - Mike: Technically possible to adapt current ipregistry code to spit out simple iptool test files, would be harder to cover semantics/special cases
    - Smith: Thinking more for simple syntax checks than exhaustive value/semantic tests.
  - Action: Smith to file enhancement request against the ipregistry project for iptool test generator
- 5. Review IPP Firmware Update Extensions v1.0 (FWUPDATE)
  - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfwupdate-20240826.pdf>
  - Swap New Attributes and New Operations sections (operations first)
  - Section 1:
    - Add "registration" after IPP Firmware Update Extensions v1.0
  - Section 2.x:
    - Add terminology for Firmware from PWG 5110.1 (HCD Attributes), substituting Printer for Output Device
    - Note for IPP System Service v1.1
      - Add Firmware as defined term from PWG 5110.1
  - Section 3.1:
    - Add "registration" after IPP Firmware Update Extensions v1.0
    - Clean up list of things being added, use boilerplate for IANA registry stuff
  - Section 3.2.1: "Client Discovers Available Firmware Update"
  - Section 3.2.2: "Client Schedules Firmware Update"
  - Section 3.2.3 should be under 3.3 (side effect of doing an update)
  - Section 3.3.x: "Successful/Unsuccessful Firmware Update"

- Section 3.4: "in order to receive AND/OR INSTALL a firmware update"
- Section 4:
  - Reword introduction, autonomous updates description, etc.
  - Figures 1 and 2: Manufacturer/Site Firmware Repository
  - Figure 1 method is out of scope for this registration, but the issue is that there is no standard for getting firmware updates for a given printer
  - Add a section on querying update availability/status
  - Figure 1: Client-managed updates
  - Figure 2: Autonomous updates
  - Figure 3: Trigger/Schedule firmware update from client
  - Figure 4: Query firmware update status/availability
- Global: Firmware defined term.
- Firmware update operation should have an operation attribute modeled on job-hold-until
- Stopped before section 5

## Next Steps / Open Actions

- Next conference calls on September 12 and 26, 2024 at 3pm
- Start WG last calls of IPP WIFI and BASE (at next concall after new stable drafts are posted)
- Talk about more "Strong Device Identity" at future (soon) concall, determine requirements/use cases
- Action: Mike to work with Smith to ensure PNG and .strings file tests are possible with new ipptool
- Action: Mike to file errata for 5100.7 to make Close-Job CONDITIONALLY REQUIRED
- Action: Mike to start IPP WG last call of WIFI, ending September 12th
- Action: Smith to file enhancement request against the ippregistry project for ipptool test generator
- Action: Mike to update the IPP How-To Guide and post to IPP list for discussion (PENDING)
- Action: Paul to review existing 3D use cases and identify any gaps (PENDING)
- Action: Mike to update IPP Everywhere 2.0 test files (PENDING - started work on it)