

Internet Printing Protocol Meeting Minutes

January 4, 2024

Meeting was called to order at 3pm ET.

Attendees

Smith Kennedy (HP)
Ira McDonald (High North)
Chris Rizzo (Xerox)
Anthony Suarez (Kyocera)
Michael Sweet (Lakeside Robotics)
Uli Wehner (Ricoh)
Steven Young (Canon)

Agenda Items

1. Antitrust and IP policies, minute taker
 - https://www.pwg.org/chair/membership_docs/pwg-ip-policy.pdf
 - https://www.pwg.org/chair/membership_docs/pwg-antitrust-policy.pdf
 - Antitrust and IP policies accepted, Mike taking minutes
2. IPP minutes from previous meetings
 - <https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20231207.pdf>
 - Approved as posted
3. Status/Review of various IPP mailing list notes
 - <https://www.pwg.org/archives/ipp/2023/021493.html>
 - A new, modern, and secure print experience from Windows (Mike)
 - Initial effort is focused on Mopria support
 - Mike: Have provided feedback to MS on their IPP Class Driver, have been responsive with fixes and improvements, probably worthwhile to provide more feedback to MS on necessary "driver replacement" extensions/IPP functionality to add to class driver
 - Smith: Have had some historical issues getting MS reps onto the IPP lists, but now they should be seeing all of the traffic...
 - Smith: Would be useful to look at feature parity comparisons between platforms to identify the things we need to propose to Mopria/MS
 - Ira: Lots of IPP features (beyond Mopria) are widely available/ tested for other standards (IPP Everywhere, AirPrint, etc.)
 - Ira: People are complaining about dropping driver support, but we are doing the same for CUPS/OpenPrinting
 - Mike: Till has a printer application that runs all the old drivers in a container/VM, that will work on Windows/WSL and the Windows

- IPP Class Driver
 - Mike: Printer applications are not a long-term solution but we just need them to "cushion" the transition
- 4. Status of AMSC and ISO liaisons w/ PWG (Paul)
 - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20231127.htm>
 - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20231211.htm>
 - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20231218.htm>
 - See PWG Steering Committee minutes from 11/27/23, 12/11/23, 12/18/23
- 5. Status of PWG and IPP WG Formal Approvals and Last Calls (All)
 - IPP Enterprise Printing Extensions v2.0 - status (Smith)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippepx20-20240102.pdf>
 - <https://www.pwg.org/archives/ipp/2024/021496.html>
 - PWG Last Call started 01/02/24 ends 02/02/24
 - Schedule - PWG Formal Vote in Q1 2024
- 6. IPP Charter Update - review (Ira/Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp-charter-20231205-rev.pdf>
 - Partial update in Interim draft on 12/05/23
 - Update needed for Current projects (per Smith's/Mike's posts this week)
 - TBD - Potential (new) Projects, Out-of-scope, Objectives, Milestones
 - Schedule - PWG Call for Objections in Q1 2024
 - Provide additional feedback on the mailing list and then Ira will prepare an update for the F2F
 - Potentially start a CfO after the Feb 2024 F2F
- 7. IPP Remote Attestation - defer
 - IPP WG brief discussion on 12/07/24
 - Overview slides on IETF RATS et al - not posted yet (Ira)
 - Value propositions for Enterprise and Home environments
 - Schedule - TBD
- 8. IPP Wi-Fi Configuration Extensions v1.0 - review (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippwifi10-20240102.pdf>
 - <https://www.pwg.org/archives/ipp/2024/021495.html>
 - Initial draft posted on 01/02/24
 - Registration for the Wi-Fi configuration attributes and values
 - Schedule - IPP WG approval in Q1 2024
 - Chris: What about configuration over Ethernet?
 - Mike: This would work over Ethernet, just with authentication; the specific use case here is to enable onboarding over USB without a password (the first time)
 - Smith: Not something we'd support on enterprise products, but definitely for home
 - Chris: Is there a way to report optional adapters?
 - Mike: No, if it is present/installed, this gets reported/supported as documented
 - Smith: Additional use case? Could contribute something to let the Client know there are additional options available?
 - Mike: But would Clients support it? Never had a standard place to point Clients to optional add-ons

- Section 4:
 - Talk about attributes only being supported if the Wi-Fi adapter is installed (i.e. no attributes if there isn't a Wi-Fi adapter installed)
 - Section 5.1.2:
 - Smith: Wi-Fi SSID is really an octet string, usually ASCII but there is a flag for UTF-8, name isn't semantically correct
 - Mike: This has been shipping for 7 years, can't change now...
 - Smith: Apparently Asian customers often use JIS or other "native" encodings
 - Mike: Can add a note about what can go wrong if the SSID isn't ASCII or UTF-8
 - Chris: Can we add a reference to the 802.11 spec here as well?
 - Mike: Yes
 - Smith: Do we want to add a printer-wifi-ssid-octets (or something) to specify a "raw" SSID?
 - Mike will contact Apple to find out if the current syntax has caused problems in Asian markets?
 - Mike: Also talk about transcoding/normalization (with pointer to I18N Considerations)
 - Section 5.2.1:
 - See about updating '6' to indicate that the SSID is good but the password is not (or some other connection error)
 - Smith: Does '8' mean just associated or associated and have an address/mDNS hostname?
 - Mike will reach out to Apple for clarifications
 - Smith: What about an additional status attribute with interface details?
 - MAC address, IPv4 and IPv6 addresses
 - Mike: Makes more sense to do this for all network interfaces by exposing the MIB through IPP? But not for this registration
 - Ira: <https://datatracker.ietf.org/doc/rfc2863/>
 - Smith: We can take that discussion onto the IPP list
 - Chris: Do we need to specify a version of WPA to connect?
 - Smith: Typically not, Printer can figure this out when it connects/associates
9. IPP Shared Infrastructure Extensions v1.1 (INFRA) - review (Mike)
- <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippinfra11-20240102-rev.pdf>
 - <https://www.pwg.org/archives/ipp/2023/021494.html>
 - Initial draft posted on 01/02/24
 - Release Printing with INFRA updates
 - Schedule - Prototype draft in Q1 2024
 - Only had time to skim the changes
 - Figure 5:
 - Mike to add job-state='pending-held' after submission, move over Infrastructure Printer line
 - Ira: "printer-mode-xxx" is pretty non-specific, which might be good for this?
 - Smith: Do we have a way to indicate whether an Infrastructure Printer is

doing fan-out?

- Mike: Nothing in-band, should discuss it and decide whether we have something in-band or just mentioned in the model section (I.P.'s can be fan-out or one-to-one)

1. IPP Document Object v1.2 (DOCOBJECT) - status (Mike)

- <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippdocobject12-20240103-rev.pdf>
- Initial draft posted on 01/03/24
- Simple errata update of the 2019 version
- Update references
- Remove obsolete attributes, values, and operations
- Add the generic document event notification keywords from INFRA
- Schedule - Prototype draft in Q1 2024
- Did not get to this.

Next Steps / Open Actions

- Next conference calls on January 18 and February 1, 2024 at 3pm
- Action: Mike to start IPP WG Last Call of EPX ending November 10, 2023 at 10pm (DONE)
- Action: Ira to prepare slides to show options for doing remote attestation for IPP (PENDING)
- Action: Paul to review existing 3D use cases and identify any gaps (PENDING)
- Action: Mike to post registration updates for marker printer-state-reasons to IANA IPP Registry and IANA Printer MIB (PENDING - IPP updates done, Printer MIB updates still to do)
- Action; Mike to address 5100.3 and 5100.16 editorial errata (PENDING - 5100.3 is done, 5100.16 still to do)
- Action: Mike to update IPP Everywhere 2.0 test files (PENDING)