

Internet Printing Protocol Workgroup Meeting Minutes

October 25, 2018

Meeting was called to order at approximately 3pm ET on October 25, 2018.

Attendees

Smith Kennedy (HP)
Ira McDonald (High North)
Michael Sweet (Apple)
Bill Wagner (TIC)
Rick Yardumian (Canon)

Agenda Items

1. IP Policy and Minute Taker
 - 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-20181018.pdf>
 - Approved as posted
3. Status/Review of various IPP mailing list notes
 - <http://www.pwg.org/archives/ipp/2018/019803.html>
 - [PWG5100.12] Issue #75: Need to update/remove specifications, attributes, and operations
 - Placeholder for future update to PWG Standard IPP 2.0, 2.1, 2.2
 - We need to update all of the specification references
 - We also need to remove deprecated or obsolete attributes, values, and operations
 - Also consider removing any specifications that do not contain required items (e.g. PWG 5100.7)
 - <http://www.pwg.org/archives/ipp/2018/019804.html>
 - Extending .strings files / IPP convention to support "tool tips"?
 - Probably need to use relative URL form for help URLs (`///path/to/help`)
 - Next step: Do a Best Practice document documenting the convention.
4. Status of AMSC and ISO liaisons w/ PWG (Paul)
 - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20181008.htm>
 - See PWG SC minutes from 8 October 2018
5. Status of Safe G-Code (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-pwgsafegcode10-20180704-rev.pdf>
 - Prototype draft - PWG F2F review in August 2018
 - Schedule - IPP WG Last Call Q4 2018

6. Status of IPP 3D Printing Extensions v1.1 (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp3d11-20180704-rev.pdf>
 - Prototype draft - PWG F2F review in August 2018
 - Schedule - PWG Last Call Q4 2018
7. Status of How to Print Using the IPP (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippguide-20180918.html>
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippguide-20180918.pdf>
 - <https://github.com/istopwg/pwg-books>
 - IPP WG review in September 2018
 - Stable draft - edits pending from 09/27/18 review
 - Schedule - one more quick review and then post to PWG site
8. Status of IPP Encrypted Jobs and Documents (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipptrustnoone10-20180328-rev.pdf>
 - Interim draft - PWG F2F review in May 2018
 - Good news - PGP-based path forward on 06/04/18!
 - Schedule - Mike to work on updated draft w/ just PGP this fall
9. Status of IPP System Service (Ira/Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsystem10-20180701-rev.pdf>
 - Prototype draft - PWG F2F review in August 2018
 - Prototyping tasks being tracked as a Github project
 - Schedule - prototype in "ippserver" - Stable draft in Q3/Q4 2018
10. Status of IPP Everywhere Printer Self-Certification 1.0 Update 3
 - <http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-f2f-minutes-20180515.pdf>
 - <http://www.pwg.org/archives/ipp/2018/019806.html>
 - Goals: ipptool and ippfind updates
 - macOS, RedHat, Ubuntu, Windows versions
 - Note: All binaries are for 64-bit systems only
 - Please provide feedback before November 5, 2018
 - We plan to post update 3 before the November vF2F
 - Two issues in first 1.0u3 drop:
 - ipptest.bat did not error out for "hostname.local" (incorrect usage)
 - document-tests.bat had a problem with color.jpg (second beta posted to fix it)
11. Status of IPP Everywhere 1.1 (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeve11-20180926-rev.pdf>
 - Prototype draft - IPP WG review on 9/27/18
 - Schedule - Q3/Q4 2018
12. Status of IPP Everywhere 1.1 Self-Certification Manual 1.1 (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert11-20180704-rev.pdf>
 - Prototype draft - PWG F2F review in August 2018
 - Schedule - Q3/Q4 2018
13. Status of IPP Document Object v1.1 (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippdocobject11-20181022-rev.pdf>
 - Schedule - TBD
14. Status of IPP Job Extensions v1.1 (Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippjobext11-20181023-rev.pdf>
 - Schedule - TBD

15. Review of IPP HTTP Authentication best practices (Smith)
- <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippauth-20180913-rev.pdf>
 - <http://www.pwg.org/archives/ipp/2018/019766.html>
 - Interim draft - PWG F2F review in August 2018
 - IPP WG consensus to publish as PWG Best Practice
 - Cover page: still "working draft" at top right.
 - Section 1: Provide a run-down of auth methods that are discussed, say that SAML uses OAuth2
 - Section 4.x (OAuth)
 - Add discussion of SAML being used by many OAuth Authorization Servers
 - Section 5.1.1:
 - Line 265: "Since some tasks" (drop initial IPP)
 - Lines 266-266: "... in later IPP operations for the duration of each task." or something like that
 - Section 5.2.1:
 - The Printer does not provide an IPP response to authentication failures (which happen at the TLS or HTTP level)
 - Add separate 5.2.x section for Authorization Failure, which means that the printer can return an IPP response message with an appropriate status.
 - Line 283: "fails, THEN the Printer ..." (add "then")
 - Probably also a separate client section for authorization vs. authentication failures
 - Section 5.2.4:
 - Line 290: Reword "or fail the user" - "or cause the operation to fail."
 - Lines 289-290: Make a comma-separated list instead of and/or, and/or, etc.
 - Lines 293-204: Drop last sentence in second paragraph.
 - Section 5.2.5:
 - Add discussion of SAML (which isn't an HTTP authentication scheme but is often used as part of an OAuth workflow)
 - Section 7.2:
 - Add at beginning: "The Client SHOULD use the most secure authentication method available for a Printer."
 - Item 6: "A Client using OAuth 2 SHOULD conform to the recommendations in ... [RFC7636] and ... [RFC8252]" (no sub-items)
 - Lines 360-361: Drop last sentence in item 7
 - Section 7.3:
 - Use "The following are the security considerations for an IPP Printer"
 - Each bullet "An IPP Printer SHOULD ..."
 - Item 3: Make a single item "A Printer MUST support user-provisioned X.509 certificates that persist across power cycles and are not automatically renewed or replaced."
 - Maybe add an item references CA Forum recommendations with

note about self-signed being used for printers and other IoT devices.

- Item 4, sub-items 5-7 should be a reference to the CA Forum recommendations
 - <https://cabforum.org/baseline-requirements-documents/>
 - Maybe <https://cabforum.org/extended-validation/#EV-SSL-Certificate-Guidelines>
 - Item 5: "the Printer MUST ..."
 - Add OAuth stuff from section 7.2.
 - Schedule - TBD
17. Status/Review of JPS2 v2 (Smith)
- <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippjobprinterext2v20-20180904.docx>
 - <http://www.pwg.org/archives/ipp/2018/019764.html>
 - Initial draft - fixed issues Mike pointed out - for IPP WG review
 - Will incorporate Reprint Password in major JPS2 revision
 - Did not get to this
 - Schedule - TBD
18. Status/Review of PWG Printer MIB and IPP MFD Alerts 1.1 (Ira)
- <http://ftp.pwg.org/pub/pwg/ipp/wd/wd-pmpmfdalerts10-20180813-rev.pdf>
 - Interim draft - for IPP WG review
 - Did not get to this
 - Schedule - Prototype draft Q4 2018

Next Steps / Open Actions

- Next conference call on November 8, 2018 at 3pm ET
- Action: Mike to file issue against PWG 5100.12 to update for new PWG specs, remove obsolete stuff (DONE)
- Action: Paul/Smith to determine whether ISTO needs to do anything to participate in ISO SG12 (IN PROGRESS)
- Action: Mike to investigate IPPS issue in Wireshark - "ipp" filter not working (PENDING)
- Action: Smith to follow-up on the 3MF liaison agreement (IN PROGRESS - on agenda for Belfast 3MF meeting, working on joint press release)