

Internet Printing Protocol Meeting Minutes

March 2, 2023

Meeting was called to order at 3pm EST on March 2, 2023.

Attendees

Benjamin Gordon (Google)
Smith Kennedy (HP)
Jeremy Leber (Lexmark)
Ira McDonald (High North)
Piotr Pawliczek (Google)
Anthony Suarez (Kyocera)
Michael Sweet (Lakeside Robotics)
Bill Wagner (TIC)
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-20230216.pdf>
 - Approved as posted
3. Status/Review of various IPP mailing list notes
 - <https://pwg.org/pipermail/ipp/2023/021374.html>
 - RFC: Update printer-state-reasons wording for EPX
 - Consensus: proposed wording is good
 - Ira: "any SUPPORTED sub-unit status or condition" (add "supported")
1. Status of AMSC and ISO liaisons w/ PWG (Paul)
 - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20221212.htm>
 - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20230109.htm>
 - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20230123.htm>
 - See PWG Steering Committee minutes from 12/12/22, 01/09/23, 01/23/23
2. IPP Driver Replacement Extensions v2.0 - status (Smith/Mike)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippnodriver20-20230116.pdf>
 - Stable draft - for a Candidate Standard
 - PWG Formal Approval started on February 1, 2023 and ended on March 1, 2023
 - Quorum required 7 responses (29 voting members x 25%)

- Quorum achieved (7 responses) on February 27, 2023
- 3. IPP Enterprise Printing Extensions v2.0 - status (Smith)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippepx20-20230208-rev.pdf>
 - Prototype draft - for a Candidate Standard
 - IPP WG review completed on February 16, 2023
 - Schedule: Stable draft in Q1/Q2 2023
- 4. OAuth2 - discussion (Benjamin, Piotr, Mike, Smith)
 - HP: Resource URI - X.509 Validation - JWE Discussions
 - <https://ftp.pwg.org/pub/pwg/ipp/slides/OAuth-2.0-Trust-Relationships-and-Use-Case-Diagrams-2023-02-20.pdf>
 - Q: How to know what to send?
 - Mike: Token exchange specifies using resource URI - question is really *which* printer-uri to use? The first one, the first with "oauth"? The one that is specified by End User (for hard-coded/URI printing)
 - Piotr: JWE solution would be vulnerable to spoofing attacks
 - Mike: Client needs to provide a secret to prove that the Printer has the private key, otherwise a malicious service could query the JWE and impersonate the original printer (or even just appear as another authorized printer to collect access tokens)
 - Mike: No protocol/interface for a Printer to get a resource token from the AUTHZ
 - Piotr: What would a Printer send to the AUTHZ for such a request, the printer URI?
 - Smith: Even with subjectAlternateName in X.509 certificate, depends on DNS not getting broken
 - Mike: If DNS breaks, everything here breaks
 - Similar to how we solved TRUSTNOONE - separate operations to submit encrypted job and get encrypted attributes
 - Slide 4:
 - Client Trusts Printer: TLS Certificate Validation + printer-uri for OAuth
 - Smith: Many enterprise printers still using self-signed certs and default hostnames
 - Mike: Many printers will sit behind a server, so just the server needs the CA-signed cert
 - Uli: Printer manufacturers should be able to make it easier to change the usage of self-signed certs
 - Mike: Really hoping IoT-ACME will get adopted to solve the cert issue
 - Printer Trusts Client: Client provides valid (device) access token
 - Client Trusts AUTHZ & Printer Know Each Other: Token exchange and/or RAR
 - "issued by a trusted CA"
 - <https://datatracker.ietf.org/doc/draft-ietf-oauth-step-up-authn-challenge/>

- OAuth 2.0 Step-up Authentication Challenge Protocol
- In IETF Last Call
- Ira: Has some comments to resolve already
- Ira: Is this worth mentioning?
 - Mike: Need to verify whether it requires special handling
- Defer further discussion, investigate offline
- <https://datatracker.ietf.org/doc/rfc9068/>
 - JSON Web Token (JWT) Profile for OAuth 2.0 Access Tokens
 - Add this to references in IPPAUTH

Next Steps / Open Actions

- Next conference calls on March 30 and April 13, 2023 at 3pm
 - Mike can't make it to March 16 meeting, canceling the March 16 meeting
 - Note: IETF 116 is the week of March 27th, Ira might not be there...
- Action: Mike to post announcement for JOBEXT (DONE)
- Action: Mike to provide updated description of new EPX printer-state-reasons keywords (DONE)
- Action: Mike to add Piotr to list of ippsample developers for access to wiki (PENDING - waiting on Piotr to send his Github username)
- Action: Smith to create IPP Everywhere 2.0 slides showing changes (PENDING)
- Action: Mike to update IPP Everywhere 2.0 test files (PENDING)