Internet Printing Protocol Meeting Minutes
November 16, 2023

Meeting was called to order at 10am ET.

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)
Michael Ziller (Microsoft)

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. Status
   - https://ftp.pwg.org/pub/pwg/ipp/slides/ipp-wg-agenda-november-23.pdf
   - Slide 9: Add links to cups-local and cups-sharing projects
3. IPP Enterprise Printing Extensions v2.0 (EPX)
   - https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippepx20-20231017-rev.pdf
   - Fix copyright in footers
   - Section 2.1:
     - "that ARE planned to be removed"
     - "that HAVE been removed"
   - Section 3.2.x:
     - Be consistent with lowercase job and printer throughout.
   - Smith will put out a new draft for the PWG Last Call in January 2024 (Jan 2 to Feb 2)
4. IPP OAuth Extensions v1.0 (OAUTH)
   - https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippoauth10-20230814-rev.pdf
   - Q: How will libcups open OAuth browser window?
     - A: It will actually be cups-local, which is a user session service that can interact with the user for this and showing alerts, etc.
   - Q: Should we update IPP Authentication Methods best-practice?

- A: Yes, once this is published the update can just point to it for OAuth
- For local network printing:
    - Q: Are there any existing standard to provide attestation/X.509 trust?
        - Ira: Yes, TCG is working on attestation stuff to be compatible with IETF EAP and RATS, can do a preso at a future meeting
        - Mike: Attestation is important but not limited to OAuth, do it someplace else
        - Mike: ACME-IoT, other enterprise security solutions (Windows Active Directory, etc.) provide a way to obtain locally-trusted X.509 root certificates for locally-signed X.509 certificates
        - Ira: While RATS doesn't offer a transport protocol, we could come up with something over IPP?
        - Action: Ira to prepare slides to show options for doing remote attestation for IPP
    - Ira: IETF LAMPS WG is working on X.509 certificates/requests/etc.
    - Ira: Historically attestation had just been "did the device boot OK", now focus is on run-time integrity (important for longer-running devices)
    - Mike: Might be a good addition to the new charter
        - Action: Ira to post an initial draft of a new IPP WG charter
5. 3D Printing Discussions
    - Industry seems to be coming around to our view of 3D printing
        - Microsoft looking at using IPP for 3D printing
        - Challenges in getting people to adopt standards
            - Hobbyists like using "expert" tools
            - Industrial users are used to using vendor tools
            - Existing software has been used to prototype the printer side of things (ipp3dprinter + ipptransform3d with CuraEngine), still need to prototype client side
            - How to get industry past the current state?
    - Drupa:
        - Q: Develop 3D printing use cases and slides?
            - A: Maybe
            - Action: Paul to review existing 3D use cases and identify any gaps
    - TCT 3Sixty:
        - IP & Security: Also TRUSTNOONE
        - Q: Do this? If so, which ones?
            - Mike: Why not all 3? We have existing content for all of them...
    - ACI:
        - Q: Develop use cases and slides for PWG Safe G-Code?
            - Paul: Would like some WG time to review

- A: Worth reviewing in WG
  - Also webinar to show how to use the sample code, etc.?
- NIST:
  - Q: Develop Common Criteria use cases?
    - A: Worth reviewing with IDS and IPP WGs
- ICAM:
  - Q: Develop use cases?
    - A: Worth reviewing in WG

Next Steps / Open Actions

- Next conference calls on December 7, 2023 and January 4, 2024 at 3pm
- Action: Ira to prepare slides to show options for doing remote attestation for IPP
- Action: Ira to post an initial draft of a new IPP WG charter
- Action: Paul to review existing 3D use cases and identify any gaps
- Action: Smith to provide EPX prototype status slides for Mike (DONE)
- Action: Mike to start IPP WG Last Call of EPX ending November 10, 2023 at 10pm (DONE)
- Action: Mike to post registration updates for marker printer-state-reasons values to IANA IPP Registry and IANA Printer MIB (PENDING)
- 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)