Internet Printing Protocol Meeting Minutes
January 16, 2025

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

Attendees

      Charles Armstrong (Canon)
      Benjamin Gordon (Google)
      Smith Kennedy (HP)
      Jeremy Leber (Lexmark)
      Ira McDonald (High North)
      Christopher Rizzo (Xerox)
      Michael Sweet (Lakeside Robotics)
      Anthony Suarez (Kyocera)
      Uli Wehner (Ricoh)

Agenda Items

1. PWG IP policy, minute taker, administrivia
   - Mike is taking minutes
2. Review IPP minutes from previous meetings:
   - https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20241212.pdf
   - Approved as posted
3. Mailing list notes:
   - IPP Offset Stacking
     - https://www.pwg.org/pipermail/ipp/2024/021772.html
   - Fwd: sane-airscan 0.99.31
     - https://www.pwg.org/pipermail/ipp/2024/021778.html
   - German BSI update of Status of Quantum Computer Development v2.1
     - https://www.pwg.org/pipermail/ipp/2025/021779.html
   - PWG 5100.18 compression-accepted vs document-format-accepted
     - https://www.pwg.org/pipermail/ipp/2025/021780.html
   - printer-state requirements
     - https://www.pwg.org/pipermail/ipp/2025/021791.html
4. Envelope media size discussions
   - Testing using media and media-col specifying landscape dimensions and media-source-properties to indicate the correct orientation
   - Results of media-col testing:
     - https://www.pwg.org/pipermail/ipp/2025/021795.html
   - Benjamin: Tested ChromeOS, got both sizes
   - Charles: Tested WIndows 11 with a PSA and it worked
   - Mike: My own conclusion is that this should be OK for the ISO and Japanese sizes (where the sizes are metric) vs. US sizes (which have

some odd fractions/conversions)
- Next steps:
  - Work on defining naming conventions for flap locations for MSN
  - Coordinate with client developers to get proper localized names for landscape envelopes
5. Discuss February 2025 F2F schedule
  - Topics for morning of Feb 4: IPP WG last calls of INFRA and SYSTEM
    - Action: Mike to start IPP WG Last Calls of INFRA and SYSTEM ending Feb 7th
  - Topics for morning of Feb 5:
    - 30min Envelope Media Sizes
    - 45min IPP Console Extensions
    - 45min IPP Firmware Update Extensions
  - Mike to check with Paul whether there are any 3D updates
    - If no updates we can end early...
6. Review IPP Console Extensions v1.0 (Mike)
  - https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippconsole10-20250107.pdf
  - Section 2.2:
    - Add Console definition from EPX
  - Section 3.1: "providing the URL of the Output Device's embedded web server home page."
  - Section 3.2.2: "which displays the home page of the embedded web server. The home page typically displays the current ..."
  - Uli: Does it need to be the long URL or can we just say "/"?
    - Mike: We also need the scheme, hostname, and port, so we just provide a URL to load and a given printer might be nice to allow / in addition to the "deep"
  - Benjamin: Does the home page URL match the mDNS "adminurl" value?
    - Mike: No, it got hijacked to be the printer-more-info value
    - Smith: Do we need a new TXT record key?
      - Mike: We can talk about that, but most printers are advertising their web pages via the _http._tcp service type
      - Smith: Do clients look in the TXT record or do IPP queries?
        - Mike: Yes :) Or they can also look up the parallel _http/_https services with the same name, probably worth talking about here
      - Also some concerns about the size of the TXT record - long key names...
    - Uli: Windows Protected Print mode driver information includes web page URL that doesn't work?
      - Mike: Might be coming from printer-more-info?
      - Uli: Will check, page doesn't work without login
  - Section 3.5: "embedded web server HOME PAGE"
  - Section 5.1.2.2:
    - Benjamin: Do we need to represent most complex blink patterns?
      - Mike: No, this is just the current status of the lights
  - Section 5.1.4:

- Anthony: Link local wording - copy from IPP Everywhere?
    - IPP Everywhere v1.1, section 8.4, says:
        - *Printers MUST NOT generate URI values with link-local addresses unless they are taken from the HTTP Host: field (section 5.1.1). Printers SHOULD NOT generate URI values with IP addresses obtained via Dynamic Host Configuration Protocol (DHCP) [RFC2131] or other auto-configuration protocols unless they are taken from the HTTP Host: field (section 5.1.1).*
        - *Printers SHOULD use the HTTP Host: header value when generating URIs for use in Client responses. Printers SHOULD use the "http" URI scheme when responding to requests using the "ipp" URI scheme and the "https" URI scheme when responding to requests using the "ipps" URI scheme. Printers SHOULD use the same port number for IPP and HTTP URIs.*
- Smith: Mostly an IPv6 link-local issue with the zone ID
    - Mike: Browser developers don't like it and have refused to support, IETF has come up with 3 different incompatible solutions and is now punting...
- Smith/Anthony: "ipp" SHOULD map to "http" and "ipps" MUST map to "https"
    - Start with ipps, then ipp
    - "If "ipps" then MUST use "https", if "ipp" then SHOULD use "http" but MAY use "https".
    - Mike: Will mirror this in the IPP Everywhere v2.0 as well
    - Mike: I have a couple customers that want to continue using "http" for unencrypted access because browsers deal with https and self-signed certs so poorly.
7. Review IPP Firmware Update Extensions v1.0 (Smith)
    - https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfwupdate-20241010-rev.pdf
    - DIdn't get to this.
    - Smith: Please provide any feedback, but would like to keep the scope limited and move it along

Next Steps / Open Actions

- Next conference call on January 30, 2025 at 3pm
- Talk about more "Strong Device Identity" at future (soon) concall, determine requirements/use cases
- Action: Mike to start IPP WG Last Calls of INFRA and SYSTEM ending Feb 7th
- Action: Mike to prepare a registration draft for the printer-home-page-uri and printer-console-xxx attributes (DONE)

- Action: Mike to update the IPP How-To Guide and post to IPP list for discussion (PENDING)
- Action: Mike to update IPP Everywhere 2.0 test files (PENDING - started work on it)