Internet Printing Protocol Workgroup Meeting Minutes
January 11, 2016

Meeting was called to order at approximately 4:00pm ET January 11, 2016.

Attendees

Smith Kennedy (HP)
Daniel Manchala (Xerox)
Ira McDonald (High North)
Mike Sweet (Apple)
Paul Tykodi (TCS)
Rick Yardumian (Canon)

Agenda Items

1. IP Policy and Minute Taker
   - IP policy accepted, Mike taking minutes
2. Approve IPP minutes from previous meeting
   - http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20160104.pdf
   - Delay approval until next week (maybe approve on alternate weeks?)
3. Review of IPP 3D Printing (Mike)
   - http://ftp.pwg.org/pub/pwg/BOFs/3d-printing/3d-bof-november-2015.pdf (slides)
   - http://ftp.pwg.org//pub/pwg/BOFs/3d-printing/wd-apple-ipp3d-20151116.pdf (spec)
   - Note that the link on the cover page of this draft is incorrect
   - The next draft will be in the regular IPP WG working drafts directory
   - Update to working draft template, add conformance, IANA, etc. sections, break out the references (normative vs. informative)
   - Fix URLs on cover page.
   - Q: Do we want to talk about PDF 2.0?
       - A: Maybe, need more info
       - Paul talking with PDF/E, will try to get them to attend a future call, email
       - Action: Paul to contact PDF/E member(s) on PDF 3D standardization and questions
   - Section 1:
       - Add forward reference to informative appendix on other file formats
   - Add informative appendix on file formats
       - AMF - not open
       - STL - no materials, many issues
   - Table 1: Think about showing the differences between IPP/2.0 print service and 3D print service

- Add columns for conformance - IPP/2.0 and Print 3D
- Add note for obsoleting of Print-Job and Print-URI
- Or reference IPP Everywhere and list differences?
  - Table 2: Replace with pointer to IPP INFRA
  - Table 3:
    - Add footnote/preface about how this is a subset of IPP Everywhere with new attributes for 3D
    - Make this a list of new attributes, preface that explains which attributes are not used (media*, printer-resolution*, etc.)
  - Section 4.x: Focus on how 3D uses 95% of 2D print architecture, here are the differences.
  - Abstract: "builds on IPP Everywhere for 3D Printing"
  - Table 4:
    - Re-order so all of the existing subunits are at the top and the new ones at the bottom with section references.
  - "material-diameter" is missing a section heading (between 5.1.1.3 and 5.1.1.4)
  - Section 5.1.1.3:
    - Add reference to PWG 5101.1 after "PWG Media Color"
  - Q: Subunit status attributes: octetStrings or collections?
    - Existing Printer MIB attributes use octetStrings
    - Using collections would be more IPP-centric
    - A: Use collections
  - Add informative appendix documenting "implementation choices":
    - material-rate-units limited because they are a) not needed and b) can cause interoperability issues (although not as bad as enum values are in the printer MIB)
    - Rationale for Celsius: more common, avoid unnecessary conversions (for safety)
  - Stopped at section 6

Next Steps / Open Actions

- Next conference January 18, 2016 at 3pm ET and January 25, 2016 at 4pm ET (3D)
- Continue review of RFC2910bis and RFC2911bis
- Review job-password-repertoire white paper
- Continue discussion and scoping of System Service operations and attributes
- Continue review of IPP 3D Extensions as standards-track document.
- Action: Paul to contact PDF/E member(s) on PDF 3D standardization and questions
- Action: Mike to fix *-k-octets in IANA IPP registry - should be Status attributes (PENDING)