Internet Printing Protocol Workgroup Meeting Minutes
November 30, 2016

Meeting was called to order at approximately 1:00pm ET on November 30, 2016.

Attendees

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

Agenda Items

1. IP Policy and Minute Taker
   - IP policy accepted, Smith taking minutes
2. Review previous minutes:
   - http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20161102.pdf
   - Approved as posted
   - http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-f2f-minutes-20161114.pdf
   - Approved as posted
3. Status of various IPP documents (Ira/Mike/Smith)
   - IETF IPP/1.1 Updates (Mike/Ira)
     - https://www.rfc-editor.org/authors/rfc8010.txt
     - https://www.rfc-editor.org/authors/rfc8011.txt
     - Changes for new IETF Proposed Standards
     - Alexey Melnikov (IETF ART AD) as AD sponsor on 06/02/16
     - RFC2910bis & RFC 2911bis - IETF Approved as Proposed Standards!
     - Working w/ RFC Editor on RFC 8010 and RFC 8011
     - Mike sent updated XML drafts to RFC Editor on 11/29/16
     - Schedule - IPP/1.1 RFCs published in Q4 2016
   - IPP Finishings 2.1 (Smith)
     - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfinishings21-20161109-rev.pdf
     - Stable draft
     - Reviewed by IPP WG at Virtual F2F on 11/14/16
     - Schedule - PWG Last Call ends on 12/12/16
   - IPP 3D Printing Extensions (Mike)
     - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp3d10-20161114-rev.pdf
     - Stable draft
     - Reviewed by IPP WG at Virtual F2F on 11/14/16
     - Schedule - PWG Last Call ends on 12/12/16

4. Docker for ippsample code
   - http://www.pwg.org/pipermail/ipp/2016/019048.html
   - Works on Windows, Linux, macOS
   - Identified some IPP Everywhere conformance issues
     - Mike asked Craig to file issues on Github - some are known but others should not be occurring
   - Good for prototyping/testing and as a way of saying "this is how you do it"
5. Status of IPP System Service (Ira/Mike)
   - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsystem10-20161129-rev.pdf
   - Interim draft
   - Reviewed by IPP WG at Virtual F2F on 11/15/16
   - Schedule - Prototype draft in Q1 2017
   - Section 4.6:
     - Line 649: "Create-Job" -> "Job Creation", replace open paren before e.g. with comma
     - Line 655: Busted section reference
     - Add new paragraph talking about resource scoping (System, Printer, Job), types of resources (firmware, fonts, forms, etc.), etc. (executive summary of resources)
     - Need references for signature validation
   - Global: Update RFC2910 and RFC2911 references to RFC8010 and RFC8011
   - Section 5.2, Table 1:
     - Add REQUIRED "system-mandatory-printer-attributes" (already in section 7.2.19)
     - Update note 8 to include that attribute, too.
   - Section 6.1.5.1:
     - Line 1058: "System MUST support", "Client SHOULD supply only"
   - Section 6.1.6.1:
     - Line 1118: Eliminate extra system-uri
     - Line 1127: "attribute and the System MUST support both"
   - Global: "One or more requested per-..." -> "One or more per-..."
   - Section 6.2.5:
     - What to do about signatures, etc.?
     - Standardize on container format?
       - Seems like a bad idea to mandate a single format since so many are in use
     - System needs to be able to validate the formats it understands, Client might be supplying resource data without knowing anything about the format
     - Some formats do not provide embedded signatures
       - Could have an operation attribute ("resource-signature (1setOf octetString)") containing a known out-of-band signature of the resource data (e.g. PGP,)
     - Also what about an X.509 public certificate resource? (not transferring keys, just certificates to be used for validation)
       - Maybe, work on this more to identify use cases

- Add "resource-format-supported (1setOf mimeMediaType)" System Description attribute to list the resource formats that are supported
  - Also "resource-type-supported (1setOf type2 keyword)"
- Action: Mike to look at document template to fix level 3 headings which are not bold
- Section 7.1.9:
  - Line 1771: Need a hyphen between "Allocate" and "Printer-Resources"
- Section 7.2.19:
  - Line 2169: Drop "recommended" (the SHOULD covers that)
  - "The System MUST include..." instead of "This attribute MUST include"
- Action: Mike to supply updated resource object life cycle figure to Ira
- Section 7.7.13:
  - Add note that if the use count exceeds MAX internally, the System returns resource-use-count with a value of MAX.
- Section 14.1:
  - Add Smith for 5100.FIN

Next Steps / Open Actions

- Next IPP WG conference calls December 14, 2016 and January 11, 2017 at 1pm ET
- Action: Mike to look at document template to fix level 3 headings which are not bold
- Action: Mike to supply updated resource object life cycle figure to Ira
- Action: Mike to post PWG Last Call for IPP Finishings 2.1 (DONE)
- Action: Mike to add link to Wireshark from the IPP WG page (DONE)
- Action: Mike to post PWG Last Call for IPP 3D Printing Extensions (DONE)
- Action: Mike to send IANA IPP registry updates to Ira (PENDING)
- Action: Mike to add output-bin registration to IANA IPP registry (PENDING)
- Action: Mike to fix registration of job-constraints-supported and job-resolvers-supported to include "resolver-name (name(MAX))" member attribute (PENDING)