Internet Printing Protocol WG Minutes
January 5, 2015

Meeting was called to order at approximately 3:00pm ET January 5, 2015

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
   a. Policy accepted with Mike taking the minutes
2. Review previous minutes:
   a. http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20141208.pdf
   c. Approved as posted
3. Status of various IPP documents (Ira/Mike)
   a. IETF IPP over HTTPS Binding and 'ipps' URI Scheme (Ira)
      - http://ftp.pwg.org/pub/pwg/ipp/wd/draft-mcdonald-ipps-uri-scheme-18-20141218.pdf
      - Stable draft - updated per IESG Approval comments on 4 December 2014
      - IETF standards-track sponsored by Barry Leiba (IETF Apps AD)
      - Schedule - TBD per RFC Editor - waiting for IESG final review
   b. IETF LDAP Printer Schema (Ira)
      - http://ftp.pwg.org/pub/pwg/ipp/wd/draft-mcdonald-ldap-printer-schema-09-20140928.pdf
      - Stable draft - sent to RFC Editor Independent Stream per Barry Leiba (IETF Apps AD)
      - Sent to RFC Editor Independent Stream per Barry Leiba (IETF Apps AD)
      - Comments from Alexey Melnikov via Nevil Brownlee (RFC ISE) on 17 December 2014
      - Schedule - TBD per RFC Editor - waiting for update by Ira/Mike
   c. IPP Everywhere Printer Self-Certification (SELFCERT) (Mike)
      - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert10-20140826-rev.pdf
      - Prototype draft - waiting for prototype and beta test reports
      - Reviewed by IPP WG on 08/28

- Beta tools released on 08/28 (OS X/Linux) and 09/02 (Windows)
- Schedule - PWG Last Call Q1 2015
   d. IPP Shared Infrastructure Extensions (INFRA) (Mike)
- http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippinfra10-20141118-rev.pdf
- Stable draft - prototype report at PWG F2F in November
- IPP WG last call ended on 12/05
- Schedule - Mike to post PWG Last Call to span February 2015 F2F

4. Review of IPP Finishings/2.0 (Mike)
   a. http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfinishings20-20141219-rev.pdf
   b. Stable draft - prototype report on 06/19
   c. PWG Formal Vote ended on 12/19
   d. Schedule - review on 01/05 for publication as Candidate Standard
   e. Q: Why the reverse-DNS keywords ("com.xerox-foo") for finishing-template? Why not just "vendor-foo"?
- A: For consistency with many standards bodies. But this is just a recommendation and any keyword can be registered.
- 5.2.1, line 653: Move localization sentence to front of paragraph, and then provide recommendation on keyword values. Also talk about registering keywords
   f. 6.10:
- Last paragraph, make it clear that finishings-col-default's value is 'no-value'.
   g. Global: "reported" -> "returned"
   h. Action: Mike to update IPP Finishings 2.0 and post final candidate standard

5. Review of IPP WG Charter (Ira)
   a. http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp-charter-20150104-rev.pdf
   b. Initial draft - updates for IPP/1.1, Transform, Resources, milestones
   c. Schedule - review on 01/05
   d. Keep IETF IPP/1.1 as two RFCs: Encoding and Transport, Model and Semantics (rfc2910bis and rfc2911bis) with merged content from 3382
- Keep the single milestone for IPP11, but change description to be two documents
   e. Potential new protocol binding of IPP over CBOR?
- RFC 7049 (out of the IETF ACE WG which is doing IoT stuff)
- Related to CoAP (RFC 7252)
   f. INTEROP-4: fix spelling of implementations
   g. Add INTEROP for Scan and Transform
   h. SYSTEM-2: Q4 2015
   i. IPPSTATE-2 and MFDALERTS-2: Q2/Q3
   j. Be sure to include the closed action items below for the IPPSTATE and MFDALERTS updates

6. Review of IPP Implementor's Guide v2.0 (IG) (Smith)
   a. http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ig-20141113-rev.pdf
   b. Prototype draft - prototype report on 12/08
   c. FILENAME is wrong - should be "wd-ippig20-yyyymmdd..."
   d. Reviewed by IPP WG on 12/08 - stopped before section 9

- e. Section 9.x:
  - Use Server when talking about HTTP issues, Printer when talking about IPP issues
- f. Section 9.1, 9.2:
  - Maybe add pointers to major sections that address security issues/ fields/attributes/etc.
- g. Section 9.1.1:
  - Put examples in list (a, b, c)
  - "SHOULD send the HTTP/1.1 Expect:" for first sentence, reword rest accordingly
  - a. First HTTP request (singular) for a connection
  - b. First IPP request for a connection
  - c. Any request that contains potentially sensitive data
  - "connection" instead of "session" (without quotes)
- h. Section 9.1.2:
  - Actually reference RFC 2817 and 2818 for HTTP Upgrade and HTTPS, respectively
  - "Clients and Servers MAY be implemented ..."
  - "Clients and Servers SHOULD support TLS encryption via HTTP Upgrade [RFC2817] and/or HTTPS [RFC2818]."
- i. Section 9.1.3:
  - Title: Using the IPP Validate-Job Operation
  - Drop first sentence
  - Line 2024: "SHOULD use the Validate-Job IPP operation to test whether ..."
- j. Section 9.1.4:
  - Title: Preferring the "ipps" URI Scheme
  - Drop colon when talking about URI scheme (scheme doesn't contain the colon)
  - Line 2028: "favor" -> "prefer" or "use"
  - Drop everything after the first sentence.
- k. Section 9.1.5:
  - Drop
  - Smith will possibly post a white paper on document encryption and exposing encryption of document data at rest...
- l. Section 9.2.1:
  - a Printer MUST support the expect header (required for HTTP/1.1), reference RFC 7230
- m. Section 9.2.2:
  - Line 2044: "Client" instead of "client"
- n. Section 9.2.3:
  - RFC-IPPS instead of RFC-TBD
  - Drop second sentence and second paragraph.
  - Have clients that probe an IP address try IPPS first, then do IPP if IPPS fails.
- o. Section 9.2.4:
  - Drop it

       p.   Add new section 9.2.4:
- Title: DNS Rebinding Attacks
- Reference IPP Everywhere spec
- Printers SHOULD validate the HTTP Host header to protect against DNS rebinding attacks

       q.   Stopped at section 10
       r.   Next draft status should be STABLE - we have prototype experience and we are content-complete.
       s.   Start WG last call as soon as stable draft posted
       t.   Schedule - PWG Last Call to span Feb 2015 F2F

8. Review of IPP System Control Service (Mike/Ira)
   a. http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsystem10-20141102-rev.pdf
   b. Interim draft - resume review at section 4
   c. Need to add Resource ops, Register/Deregister, Get-Printer-Attributes
   d. Reviewed at PWG F2F in November - stopped at end of section 3.5
   e. Schedule - Prototype draft in Q2 2015
   f. Did not get to this

Next Steps / Open Actions

- Next IPP conference calls January 19 and (joint) 26, 2015 at 3pm ET
- To WG Last Call of IPP Implementor's Guide 2.0 (IG)
- Review IPP System Service
- Action: Mike to post PWG Last Call of IPP INFRA to span February 2015 F2F (PENDING)
- Action: Mike to send Ira description and examples of Register-System operation (PENDING)
- Action: Mike to post updated registration process per Oct 20 concall (ONGOING - try for next IPP concall)
- Action: Ira to add comments to Printer MIB TC in 5107.3 for fax-modem-protocol-error and xxx-recoverable-storage-error - suffix dropped from IPP keyword with corresponding suffix (-error, -report, -warning) added depending on the printer state. (CLOSED - in updated charter)
- Action: Ira to submit Printer MIB registration for new xxx-missing PrtAlertCodeTC values in 5107.3 (CLOSED - in updated charter)