# Internet Printing Protocol WG Minutes December 8, 2014

Meeting was called to order at approximately 3:00pm ET December 8, 2014

### **Attendees**

Smith Kennedy (HP)
Ira McDonald (High North)
Mike Sweet (Apple)
Paul Tykodi (TCS)
Bill Wagner (TIC)
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-20141117.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-16-20141111.pdf
    - Stable draft updated per Tom Petch, Graham Klyne, and Barry Leiba
    - IESG Approved on 4 December 2014 (minor editorial revisions pending)
    - Schedule TBD per RFC Editor
  - 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)
    - Schedule TBD per RFC Editor
  - c. IPP Everywhere Printer Self-Certification (SELFCERT) (Mike)
    - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert10-20140826rev.pdf
    - Prototype draft waiting for prototype and beta test reports
    - Reviewed by IPP WG on 08/25
    - 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 on 11/4
  - IPP WG last call ended on 12/05 with no comments
  - Schedule PWG Last Call Q4 2014
  - Action: Mike to post PWG Last Call of IPP INFRA to span February 2015 F2F
  - Action: Mike to send Ira description and examples of Register-System operation
- e. IPP Finishings 2.0 (FIN) (Mike)
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfinishings20-20141117rev.pdf
  - Stable draft prototype report on 6/19
  - PWG Formal Vote (started 11/17, ends 12/19)
- 4. 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. Prototoype draft prototype report on 12/8
  - c. Reviewed at PWG F2F in August
  - d. Filename should be "wd-ippig20-yyyymmdd.ext"
  - e. Conformance terminology:
    - Only use SHOULD or SHOULD NOT for recommendations
    - Do not use MUST or MUST NOT those are for the base specs
    - Make sure that Client and Printer conformance is separate
  - f. Resumed at section 8.2
  - g. Add section 4.12 on error handling:
    - Say something about error reporting: An action taken by a Client that includes informing the User and/or logging the condition, e.g., PWG Common Log Format [PWG5110.3].
    - Add SHOULD use PWG Common Log Format for Client and Server
    - Add normative reference to PWG 5110.3
  - h. Section 8.2:
    - Reword last sentence: Allows the server to tell the client it needs to upgrade or authenticate prior to processing the request.
  - i. Section 8.2.1:
    - Line 1955: "at least 1 second" instead of "up to 1 second"
    - Line 1957: Drop section reference in RFC 7230
    - Bullet 1: make as a separate paragraph, move last sentence of previous paragraph to restart the list
    - Line 1959: "no further response delays are incurred" instead of "no further 1-second delays"; "record" instead of "remember"
    - Line 1966-1969: Don't bother talking about downgrades. "If the request type is HEAD or GET, redirect the request to the new URI or address the redirection in an implementation-defined way, e.g., request confirmation from the User, validate the redirected URI scheme and origin server, etc.
    - Line 1969-1970: If an HTTP 400 Bad Request status code is

- received, the Client should record the lack of Expect header support, reconnect to the server, ...
- "fail" -> "give up"?
- Maybe also provide a back reference to new section 4.12 on error handling
- Reference section 6.3 of RFC 7230 on connection persistence up front rather than talking explicitly about reconnecting
- Reference section 5.1.1 of RFC 7231 on Expect header
- Break out bullet 4 as an implementation note (non-conforming behavior), maybe include bullet pointing to the note because it is different from the other status codes.
- Sort status codes in numerical order
- Keep reference to RFC 2817, just drop "as described in"
- Lines 1983-1984: SHOULD treat this as a fatal error. (drop parenthetical statement)

## j. Section 8.2.2:

- The HTTP server accepts and processes the Expect header as defined in section 5.1.1 of /title/ [RFC7231].

#### k. Section 8.3:

 "An HTTP Server validates the Host request header in order to protect against DNS rebinding attacks. Section ?? of IPP Everywhere [PWG5100.14] places additional requirements on the Host header."

#### I. Section 8.4:

- RFC 7232 talks about If-Modified-Since and Last-Modified drop old section references.
- RFC 7231 talks about status codes
- MUST -> SHOULD

#### m. Section 8.5:

- MUST -> SHOULD
- RFC 7234 instead of 7230, drop section reference
- Last sentence: change to section reference to IPP Everywhere (which defines conformance requirements - see section 8.3 for example text)
- n. Global: Change "return" to "send" (as the server/printer) or "receive" (as the client)
- o. Global: Drop section references in RFC 723x
- p. Stopped before section 9
- q. Post updated prototype draft (one more prototype draft until we finish reviewing)
- 1. 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
  - e. Schedule Prototype draft in Q2 2015
  - f. Did not get to this.

# **Next Steps / Open Actions**

- Next IPP conference call January 5 and January 19, 2015 at 3pm ET
- Review IPP Implementor's Guide 2.0
- Review IPP System Service
- Action: Mike to post PWG Last Call of IPP INFRA to span February 2015 F2F
- Action: Mike to send Ira description and examples of Register-System operation
- Action: Mike to post updated stable draft of INFRA and start WG Last Call ending Dec 5th (DONE)
- Action: Mike to post updated stable draft of FIN and start PWG Formal Vote ending Dec 19th (DONE)
- 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-protocolerror and xxx-recoverable-storage-error - suffix dropped from IPP keyword with corresponding suffix (-error, -report, -warning) added depending on the printer state. (PENDING - for update with the 5107.3 errata)
- Action: Ira to submit Printer MIB registration for new xxx-missing PrtAlertCodeTC values in 5107.3 (PENDING for update with the 5107.3 errata)