

Internet Printing Protocol WG Minutes

May 16, 2013

Meeting was called to order at approximately 9:00am PT May 16, 2013 and 9:00am PT May 17, 2013.

Attendees

Danny Brennan
Russell Brudnicki (Kyocera)
Nancy Chen (call-in)
Till Kamppeter (Canonical - call-in)
Smith Kennedy (HP)
Jeremy Leber (Lexmark)
Hin-Tak Leung
Kelly Lucas (Google)
Daniel Manchala (Xerox)
Andrey Markalkin (Samsung)
Ira McDonald (High North)
Naruhiko Ogasawara (Mirait Information)
Glen Petrie (Epson)
Roarke Randall (Toshiba - call-in)
Michael Sweet (Apple)
Randy Turner (Amalfi)
Paul Tykodi (TCS - call-in)
William Wagner (TIC)
Lida Wang (Kyocera)
Rick Yardumian (Canon)

Agenda Items

1. IP Policy and Minute Taker
 - a. Policy accepted with Mike taking the minutes
2. IPP WG slides
 - a. <ftp://ftp.pwg.org/pub/pwg/ipp/slides/ipp-wg-agenda-may-13.pdf>
 - b.
3. IPP Shared Infrastructure Extensions (IPPSIX)
 - a. <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsix10-20130328.pdf>
 - b. Page 1:
 - Fix links
 - Look for alternative to Infrastructure or short definition of Infrastructure in abstract?
 - Reiterate Shared, add lead-in sentence defining Shared Infrastructure
 - "IPP Printers" not just "Printers"

- c. Section 3.2.x: Lost Connection exception
- d. Make separate Exceptions section in 3.x?
- e. Add informative references to RFC 2903+2904
- f. Section 1:
 - Add roaming example
 - Add release printing example
 - Start with 2911, introduce terminology - Logical Printer
 - Rehash 2911 IPP Printer definition and architecture, maybe include 2911 diagram and say we're extending it *here*
 - "When the Printer is unable to initiate communications with the Output Device..."
 - "a gateway might use ..." (drop Printer)
- g. Section 2.2:
 - Infrastructure Printer is associated with a Proxy, not the Output Device
 - Manager: change to Proxy, on behalf of one or more Output Devices
- h. Section 2.3:
 - AAA Framework: Third A is "accounting" not "access control", add reference to RFC 2903+2904
 - Network Accessible: "directly with another over an Internet Protocol network"
- i. Section 3.1:
 - Fix "standard method of without"
- j. Section 3.2.5:
 - Reword without public/private key terminology, "Jane wants to print a document security without disclosing to the infrastructure printer", etc.
 - What does Jane want to do, not how she does it...
- k. Section 3.2.x:
 - Add remote monitoring/accounting use case for managed printing (need paper counts)
 - Add output device selection using UUID or geo-location
- l. Section 3.3:
 - Add "Definition of secure printing mechanisms WRT 3.2.5"
- m. Section 3.4:
 - Reword #5 (define a section, etc..)
- n. Section 4:
 - Fix first paragraph style
 - Delete extra copy of figure 1
 - "Figure 1 A, B, and C graphically shows how the model can be applied."
 - Line 446: Output Devices' (plural)
 - Line 440-443: "to a traditional IPP Printer object, with the addition that a Client may query the status and capabilities of an individual Output Device".
 - Add figure showing 2911 model vs. proxy-only, reference in the

- o. proxy paragraph
- o. Figure 1:
 - "Hosted" -> "Separate"
 - Move after text
 - Update "Output Device may also be part of AAA Framework and Corporate Network"
 - "IPP (IPPSIX)" for Manager -> Infrastructure Printer arrows
 - For Cloud (third) diagram, shrink AAA Framework box to cut through cloud so it is obvious that it is just the AAA for those three parties
 - "Public Cloud"
 - Add A, B, C in the banners
- p. Page 16/Line 438: Fix AAA expansion (accounting, not access control)
- q. Figure 2:
 - Show job-fetchable event notification from IP to Manager/proxy
 - "Wait for Next Job" at bottom Get-Notifications
- r. Section 4.1:
 - Instead of "two copies", "one copy for itself and a copy for every output device associated with the IP"
 - IP provides composite state/etc. to Client composed of the IP and output device attributes and values.
 - Get-Output-Device-Attributes: Administrative
 - Get-Printer-Attributes: Add output-device/-uuid as filter/target
 - "Clients that want to query the Output Device, e.g., to collect accounting metrics, determine geo-location, etc..."
 - Make it explicit which Printer is Infrastructure and which is composite
- s. Stopped before Table 1 in Section 4.1
- 4. IPP Self-Certification
 - a. <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippselfcert10-20130501-rev.pdf>
 - b. Machine-readable format: plist
 - c. Q: What about test tools?
 - A: will provide an archive in the same directory containing all of the tools (minus any OS dependencies such as WS-Discovery test tool, etc.)
 - Also have page/file with links to specs, maybe an archive of all the dependent specs
 - d. Q: What about re-certification against new versions?
 - A: Registration of results will include version and which options are supported
 - e. Q: Who will be responsible for maintaining the registration page?
 - A: PWG webmaster? New official PWG position (after secretary)
 - f. Q: What about certifying against an older version of the manual?
 - A: Allow a grace period (6 months?) to use older versions
 - g. Q: What about conformance levels?
 - A: One level, tests adapt to what is reported by the printer. Vendor only reports features that are supported via IPP

- h. Q: What about web site, will customers be able to look up printers by features, vendor, etc?
 - A: Yes, will make it searchable/filterable, mobile enabled
- i. Q: What about updates to the IPP Everywhere spec?
 - A: Yes, major update of self-certification spec
- j. Q: What about review/approval of tools?
 - A: Include beta testing in the last call results
 - Beta/release candidate tools are included in last call prep
- k. Q: Is this really a best practices document? Seems like we need prototyping
 - A: Change from Best Practice to Standards Track
 - New document series: 5111.x

5. IPP Best Practices

- a. <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippbestp10-20130513-rev.pdf>
- b. Title: IPP/2.0 Implementers Guide (title page and second page)
- c. Abstract: Updates and extends RFC 3196 for IPP/2.0
- d. This is a PWG working draft (not a best practice)
- e. [wd-ippig20-yyyymmdd.docx/pdf](#)
- f. Add normative reference to RFC 3196
- g. Break up into Client and Server sections
- h. Server:
 - printer-icons and other URIs need to point to locations that are accessible, even if the embedded web server is disabled
- i. Include use of italics for editorialisms in introduction (why they are in italics)
- j. Section 5.1:
 - Clients should not supply application/octet-stream (holdover from "IPP as an alternative to port 9100"
 - "correct value of document-attribute value"
 - Printer sets document-format-actual to report detected MIME media type
- k. Section 5.2 rationale:
 - media-col provides finer control over media
 - media-col.media-size avoids floating point math issues of converting to/from PWG size name, media-size is integers
 - Printer: needs to allow for some slop in media-size - off-by-one should not cause a media matching error
- l. Section 5.3:
 - finishings-col is not a best practice
 - Only when mapping from JDF or other rich job ticket formats
 - Need to standardize finishing-template values
 - Action: Mike and Ira to propose finishing-template solution
 - Possibly just add "l type2 keyword" to definition to allow for keywords based on enum registry for finishings
 - Action: Mike to add finishing-template-supported (1setOf name(MAX)) Printer attribute to registry
- m. Section 5.x: Add multiple-document-handling and job-collate

- Discuss use of multiple-document-handling for collation instead of job-collate because job-collate does not address number-up, finishings, sides, etc.
- n. Section 5.x: Add explicit orientation-requested
 - Use portrait or landscape as appropriate
 - Client provides all pages in the correct orientation for the media
- o. Go through all IPP Everywhere attributes and note any issues
- p. Section 5.4:
 - Discuss on mailing list/concall
- q. Section 5.x: General
 - Note that -default values may not be bound to a job until print time, so there may be different defaults at time of print vs. time of submission/creation
 - xxx-actual reports the default values assigned
 - For printers, best practice is to bind defaults to xxx-actual attributes in the job at time of creation
- r. Section 6.1:
 - Mention 417 Expectation Failed, re-send without Expect header
 - Section: return status code 100 if the client can continue as-is
- s. Section 6.x: Add subsections for each field that is discussed in IPP/2.0 and IPP Everywhere
- t. Security Considerations
 - Reference existing specs
 - Maybe use subsections for Client vs. Printer
 - E.g. support TLS and cert validation
- u. Add I18N considerations section
 - Maybe use subsections for Client vs. Printer
 - Clients use and printers supply localization catalogs

Next Steps / Open Actions

- Next IPP conference calls are June 10 and June 24, 2013 at 3pm ET
- Continue discussing IPP Everywhere self-certification
- Continue reviewing IPP Best Practices
- Action: Mike to change IPP Manager to IPP Proxy in IPPSIX
- Action: Mike and Ira to propose finishing-template solution
- Action: Mike to add finishing-template-supported (1setOf name(MAX)) Printer attribute to registry
- Action: Mike to send IPPS rationale text and IPPS DNS-SD registration to Ira (PARTIAL)
- Action: Mike to post IPP WG last call of Paid Printing (DONE)
- Action: Ira to capture job terminating state wording from IPP FaxOut for SM FaxIn (PENDING)
- Action: Mike to setup certification mailing list on new server (PENDING)
- Action: Ira to update milestones and add new documents to IPP WG charter (PENDING)

- Action: Ira/Bill to submit technical errata to RFC 3805 to replace CR with CR + LF to be consistent with 5198 and others (PENDING)
- Action: Ira and Mike to review 5100.x specs to remove action items, fix boilerplate copyright text in early specs, fix header/footer/document titles as needed, and fix normative references to drafts, etc. (ONGOING)
- Action: Ira and Mike to work with IANA to update registry to include a "set allowed" column for attributes and improve the plain text formatting (ONGOING)
- Action: Mike and Paul to reach out to label/portable printer vendors to join IPP WG discussions (ONGOING - Paul to send out before next concall)