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
   b. 
3. IPP Shared Infrastructure Extensions (IPPSIX)
   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. 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
   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
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-yyyyymmdd.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)