Internet Printing Protocol WG Minutes
August 6, 2013

Meeting was called to order at approximately 2:30pm PT August 6, 2013.

Attendees

Nancy Chen (call in)
Daniel Dressler (call in)
Gyaneshwar Gupta (Oki Tokyo)
Justin Hutchings (Microsoft - call in)
Smith Kennedy (HP - call in)
Daniel Manchala (Xerox)
Ira McDonald (High North - call in)
Matsutoshi MURATA (Oki Data)
Joe Murdock (Sharp)
Glen Petrie (Epson - call in)
Brian Smithson (Ricoh)
David Sponable (Xerox)
Alan Sukert (Xerox - call in)
Mike Sweet (Apple - call in)
Paul Tykodi (TCS - call in)
William Wagner (TIC)
Rick Yardumian (Canon)

Agenda Items

1. IP Policy and Minute Taker
   a. Policy accepted with Mike taking the minutes
2. Slides
   a. ftp://ftp.pwg.org/pub/pwg/ipp/slides/ipp-wg-agenda-august-13.pdf
   b.
3. IPP Everywhere Self-Certification
   a. ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippselfcert10-20130731-rev.pdf
   b. New mailing list for self-certification questions: ippeveselfcert@pwg.org
   c.
4. IPP Implementors Guide 2.0
   a. ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippig20-20130722-rev.pdf
   b. Description of ipp-attribute-fidelity, job-mandatory-attributes, pdl-override-supported are correct.
      - Include in IIG2
   c. Client should assume "pdl-override-supported='attempted'" is equivalent to 'not-attempted'
      - Client SHOULD provide document data of the correct size, etc. to avoid overrides

- Server SHOULD support 'guaranteed' for at least JPEG and PWG Raster
- Can't do strong recommendations here, no good - better - best here
d. Clients SHOULD NOT unconditionally specify ipp-attribute-fidelity=true all the time
   - Side effects - scaled output, etc.
   - "job-mandatory-attributes" may not be supported, often silently ignored if not supported
      - Add ipp-features-supported keyword for this?
      - Or add job-mandatory-attributes-supported boolean attribute?
   - Q: How does 'job-mandatory-attributes' help for the attempted/not-attempted?
      - A: Printer might be able to override things like media but not finishings or sides
   - Go through existing IPP extension specs, find other cases where we don't have a corresponding -supported attribute
      - Issue errata if we are just adding a -supported boolean with PWG process (WG last call, PWG Call for Objection)
      - 5100.7: Add job-mandatory-attributes-supported boolean
   - GOOD: Use ipp-attribute-fidelity=true when the user wants specific output intent
   - BETTER: Discover whether printer supports job-mandatory-attributes (however that ends up happening) and use it if supported (just list media or other attributes that the client/user indicates are required)
   - Printers SHOULD support job-mandatory-attributes/-supported and pdl-override-supported = 'guaranteed'
e. multiple-document-handling vs. job-collate
   - Don't use job-collate
   - Use multiple-document-handling, per IPP Everywhere
f. Best practices for detecting features, attributes, values, and constraints
   - Use ipp-features-supported for high-level features
   - Use xxx-supported for individual attributes/operations
   - job-creation-attributes-supported
   - printer-settable-attributes-supported
   - operations-supported
   - job-constraints-supported/job-resolvers-supported
g. Action: Mike to add spec best-practices to WD template
   - Include XxxSupported attributes/elements
   - Include ipp-features-supported keywords for new high-level features
   - Features/elements/attributes/values must be discoverable by clients
   - "Design patterns" - naming, grouping, value types, etc.
      - When to use enums vs. keywords vs. names vs. integers/ranges

- Format guidelines
  - Tables of elements/groups
  - Figures
  - Lists of enums vs. keywords vs. requirements
- h. Section 5.1:
  - Add example: media vs. media-default, default media might be different at print time than submission time
  - Separate example for IPP Printer: media-actual = media from client or media-default from printer
- i. Q: Format with Client and Printer recommendations together, or separate into client and printer?
  - A: Prefer together since it provides context/rationale
  - Maybe add subsections for client and printer recommendations?
  - 5.x: rationale/context, 5.x.1 client recommendations, 5.x.2 printer recommendations
- j. Section 5.4:
  - Hard to recommend finishings-col over finishings right now because finishings-col is not fully-specified
  - 5100.1 update will add finishing-template-supported and other member attributes to prefer finishings-col
- k. Section 5.5:
  - Also job-creation-attributes-supported
- l. Stopped at section 5.5
5. Semantic Model/Schema Tool
  - a. SM WG needs to decide on a tool.
  - b. Mike will figure out how to purchase a copy of the tool for the editor(s)
6. Semantic Model/IPP Hardcopy Document Discussions
  - a. Don't redefine Hardcopy Document
    - But there are Scanned Documents
  - b. Rename operation to Add<service>DocumentImages
    - InputElements provide source of scanned images
    - New InputElements group in the request is as specified in the CopyInput DocumentProcessing group.
    - InputElements then also becomes an optional part of the DocumentProcessing group of each Document object
  - c. What format do document images use?
    - This is implementation-defined. In fact, document images do not need to exist as file and could be streamed from the scanner, much like documents submitted using Send<service>Document can be streamed.
7. IPP FaxOut Service
  - a. ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfaxout10-20130730-rev.pdf
  - b. ftp://ftp.pwg.org/pub/pwg/ipp/wd/lcrc-ippfaxout10.txt
  - c. Adopt new Add-Document-Images operation name
    - Expand input-attributes to include all SM CopyInput elements
    - Pull
  - d. Make Add-Document-Images RECOMMENDED

  e. Add input-attributes-actual Job and Document Description attributes

  f. DM3:
    - Remove date-time

  g. Section 7.1.3: Job Terminating State
    - Make sure this is consistent with existing RFCs/PWG standards
    - Mike did not see any discussion of this in SM FaxOut, RFC 2911, or MFD Model

  h. DM6/LW3: Make RECOMMENDED

  i. ipp-attribute-fidelity vs. capabilities of receiver
    - "completed-with-warnings" if receiver doesn't support color, etc.

  j. SK6: Drop pages-per-minute/-color

  k. SK10: Add logo-uri-formats-supported attribute with image/jpeg as minimum format
    - Also in logo-uri member attribute description mention what happens if the printer cannot access or process it

  l. Continue discussions of terminating state on mailing list

  n. After making changes, do a second WG last call

8. IPP Shared Infrastructure Extensions (IPPSIX)

  a. ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsix10-20130730-rev.pdf

  b. Notes from Cloud session:
    - Review cloud service operations to make sure that Table 4 Infrastructure Printer operations match (MAY for service operations, MUST NOT for device operations)

  c. Did not get to this

9. IPP Multifunction Approach

  a. Leave IPP Everywhere along

  b. Do individual service binding specs a la IPP FaxOut

  c. Eventually do an IPP Multifunction spec that points to the service specs a la IPP Everywhere

  d. What about read-only vs. read-write attributes?
    - Need to show this in IANA the registry
    - Do a short spec reclassifying read-only attributes as Job Status, Document Status, and Printer Status attributes

  e. Specs to do:
    - IPP Scan
    - IPP FaxIn
    - IPP EmailIn/EmailOut
    - IPP Transform? (but not if a private service?)
    - IPP Copy? (tentatively no)
    - IPP Finishings 2.0
    - IPP Health Assessment Attributes Extension (or part of System Control)
    - IPP System Control
    - IPP Status Group Definitions
    - IPP Resource

  f. Errata to do:
    - PWG 5100.3 (drop finishings-col/-default-supported and related

attributes)
- PWG 5100.7 (add job-mandatory-attributes-supported boolean)

Next Steps / Open Actions

- Next IPP conference call is August 19, 2013 at 3pm ET
- Action: Mike to add spec best-practices to WD template
- Action: Mike to post last call review draft of IPP FaxOut (DONE)
- Action: Mike to post initial draft of IPP Finishings Extensions (update of 5100.1) (PENDING)
- Action: Paul to post summary of finishing-template investigation to IPP WG list (PENDING)
- Action: Mike to issue PWG Last Call of IPP Transaction-Based Printing Extensions (DONE)
- Action: Mike to add finishing-template-supported (1setOf name(MAX)) Printer attribute to IANA registry (PENDING)
- 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 (DONE - ippeveselfcert@pwg.org)
- 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: Paul to reach out to label/portable printer vendors to join IPP WG discussions (ONGOING - Paul to send out list before July 22)