## IPP WG Conference Call Minutes April 18, 2011

Meeting was called to order at approximately 1:00 pm (EST) April 18, 2011.

## **Attendees**

Danny Brennan (IBM)
Nancy Chen (Oki Data)
Justin Hutchings (Microsoft)
Tim McCann (Konica Minolta)
Ira McDonald (High North/Samsung)
Andrew Mitchell (Hewlett Packard)
Ron Nevo (Samsung)
Glen Petrie (Epson)
Michael Sweet (Apple)
Jerry Thrasher (Lexmark)
Paul Tykodi (TCS)
Bill Wagner (TIS)
Rick Yardumian (Canon)
Pete Zehler (Xerox)

## **Agenda Items**

- 1. IP Policy and Minute Taker
  - a. Policy accepted with Mike taking the minutes
- 2. Approve IPP minutes from last meeting
  - a. ftp://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-f2f-minutes-20110405.pdf
  - Note: Defining a general precedent for new extension specifications register new value(s) for ippextensions-supported.
  - c. Justin: Microsoft willing to extend WS-Discovery to support IPP
    - May still have an issue with W3C and WS-Transfer?
    - No IPP XML namespace/binding yet may need some technical content to join IPP to WS-Discovery
    - Action: Justin and Pete to further investigate using WS-Discovery for IPP
  - d. Accepted as posted
- 3. JPS3 Review
  - a. ftp://ftp.pwq.org/pub/pwq/ipp/wd/wd-ippiobprinterext3v10-20110330-rev.pdf
  - b. Abstract: Expand to include intro and rationale text
  - Line 219: Don't reference IPP Everywhere spec, use the section 3 text and reference the IPP Everywhere project instead
  - d. Line 253: Expand based on use cases.
  - e. Add new section 4, "IPP Model Extensions" or something like that
    - Content to provide some background on what the extensions do
    - Model for stepping through large media-col-database values, limits, job ticket coloring of Get-Printer-Attributes, xxx-preferred for Validate-Job
    - Provide block diagrams?
    - Look at PWG 5100.3 for changes in media-col, RFC 3998, PWG 5100.8 for xxx-actual, etc. for inspiration
  - f. Line 326: Forward reference to identify-actions attribute
  - g. Section 5.1.1 first-media-key: Provide reference to model
  - h. Table 1: "display" should use "printer console" instead of "printer control panel" to be consistent
  - . Table 2: Make "bi-level" REQUIRED?
    - Still some confusion over keywords vs. vendor terminology
    - Implementation of "bi-level" will vary simple thresholding vs. complex image processing to provide edges, etc.
    - Consensus to keep it OPTIONAL, add note why (implementation-specific, hard to capture)
  - . Table 2: Make "process-monochrome" conditionally required for color printers
    - Add additional language to process color values
  - k. Issue: Include xxx-preferred job template and operation attributes that we think make sense, and

provide text explaining the expected reason for use (-preferred is not a policy attribute but is used for conflict

- I. Line 803: Backward reference wrong to Identify-Printer operation
- m. Issue: How should we express an unknown printer-geo-location?
- n. Issue: Need well-known URIs for standard colorspace profiles
- o. Issue: How do we register media-col member attributes with IANA?
- p. Issue: Need to flesh out the conformance requirements for the printer-supply attribute
- Resume at section 5.2.2 in two weeks
- 4. PWG Raster Review
  - a. Did not get to this
  - b. ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippraster10-20110327-rev.pdf
  - c. Issue: Would be nice to have total page count (if known)
    - Proposal: Add PageCount (integer, 0 to 2<sup>3</sup>1-1) to page header ("cupsInteger[0]" from CUPS Raster), which is already used by several CUPS Raster printer drivers
    - 0 means "I don't know how many pages"
    - > 0 means "this is how many pages are in the entire document"
    - Every page gets the same value
  - d. Issue: Need coordinate space of image (flip/rotate on back side)
    - Proposal: Add HorizontalTransform(integer, -1 or 1) and VerticalTransform(integer, -1 or 1) to the page header ("cupsInteger[1]" and "cupsInteger[2]" from CUPS Raster)
    - "Normal" pages have values of 1 and 1
    - "Rotated" pages have values of -1 and -1 (180 degree rotation)
    - "Flipped" pages have values of 1 and -1 (vertical flip) or -1 and 1 (horizontal flip)
  - e. Issue: Need bounding rectangle of any content to be imaged on the page (ImageBox)
    - Proposal 1: Use existing ImagingBBox (4 x integer) from page header simple bounding box in (integer) points
    - Proposal 2: Add ImageBottom (integer, 0-2^32-1), ImageLeft (integer, 0-2^32-1), ImageRight (integer, 0-2^32-1), and ImageTop (integer, 0-2^32-1) to the page header ("cupsInteger[3]" through "cupsInteger[6]" from CUPS Raster) simple bounding box in pixels/lines
  - f. Issue: Some confusion about why we need pwg-raster-resolutions-support
    - Will be adding explanatory text to the definition
    - Basically supported raster resolutions can be different than supported hardware resolutions
  - g. Issue: Some confusion about the compression algorithm
    - Will be adding examples for 1-bit grayscale and 32-bit CMYK images to clarify
    - Also have sample raster files available for download
  - h. Samples files:
    - Currently at http://ftp.easysw.com/pub/cups/examples/PWGRasterSamples.zip
    - 40MB download, 80MB worth of data
    - 150dpi files for black-1, cmyk-8, sgray-8, sgray-16, srgb-8, and srgb-16
    - Representative documents for email, line art, maps, photos, and web pages
    - Issue: Where to place sample raster files?

## **Next Steps / Open Actions**

- Next IPP WG conference call May 2, 2011 at 1pm (EST)
- Action: Justin and Pete to further investigate using WS-Discovery for IPP
- Action: Mike to post call for use cases to both ipp and cloud ML (COMPLETED)
- Action: Andrew to provide section 4.4 UPNP discovery text (ONGOING)
- Action: Mike and Paul to reach out to label/portable printer vendors to join IPP WG discussions (ONGOING
  - both to send summary to ipp list and details to SC list)