

Internet Printing Protocol WG Minutes

April 8, 2013

Meeting was called to order at approximately 3:00pm ET April 8, 2013.

Attendees

Nancy Chen
Smith Kennedy (HP)
Daniel Manchala (Xerox)
Tim McCann (Konica Minolta)
Ira McDonald (High North)
Glen Petrie (Epson)
Roarke Randall (Toshiba)
Michael 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. <ftp://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20130328.pdf>
 - c. Approved with minor corrections
3. Status of IPP FaxOut
 - a. <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfaxout10-20130401.pdf>
 - b. IPP WG last call ends 19 April
4. Status of IPP Self-Certification
 - a. <ftp://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ippeveselfcert10-20130402-rev.pdf>
 - b. Still working on logos, licensing, etc.
5. Review of IPP Best Practices (Smith)
 - a. <ftp://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ipp-best-practices-20130320-rev.pdf>
 - b. Section 4, Line 188: "discussed" instead of "evaluated"
 - c. Section 4.1.1:
 - Line 221: "X is a small number of seconds" or "X is a few seconds" instead of "short"
 - Line 224: "Refresh" instead of "reset"
 - Make best what is currently better, add bullet that callback updates UI list
 - Make better a version of poor with automatic refresh, discovery on separate thread that auto-updates list in main thread
 - d. Global: Check capitalization of IPv4 and IPv6
 - e. Global: "Response" instead of "Reply"
 - f. Section 4.1.2:
 - Work on wording, DNS-SD + WS-Discovery are often link-local, can be used wider. Separately talk about LDAP and SLP.
 - Point is that discovery services are not always available, DNS hostnames and IP addresses provide basic connectivity.
 - Prefer hostnames over IP addresses, particularly for IPv6 link-local since link/zone identifiers are not "portable", numeric addresses are not stable, etc.
 - g. Section 4.2:
 - Add new "good" where the client pings printer and/or tries SNMP query to verify network accessibility
 - Add new "better" where the client sends an IPP Get-Printer-Attributes query
 - Current good is best (Validate-Job) and talk about passing in things like document format, media, etc.

- h. Section 4.3:
 - "SAD" should be "BAD"
 - "Better" should be "Best", include document-format and any other attributes reported in the get-attributes-supported attribute
 - Drop "Any specified attributes?" - with no specific attributes, then get pdl/sides/etc. specific options
 - "decide on a PDL" should be a sub-bullet
 - Drop "for that particular document-format"
- i. Section 4.4:
 - Add "BAD: Do nothing or use local model-specific data"
 - New better: Just use constraints and send Create-Job/Print-Job/Print-URI request (no validate, first half of current better)
 - Current better should be best
- j. Section 4.5.1:
 - POOR -> BAD
 - BETTER -> BEST
 - New BETTER that does Create-Job and Send-Document, no Validate-Job preflighting
 - Client (capitalized) MAY receive xxx-actual Job (capitalized) attributes
 - Reference to PWG 5100.8 IPP "-actual" attributes
 - Reference to PWG 5100.13 IPP Job and Printer Extensions - Set 3 for preferred-attributes, successful-ok-ignored-or-substituted-attributes with values that were not used in the unsupported attributes group and preferred-attributes in the operation attributes group of the response
- k. Section 4.5.2:
 - Same comments as for 4.5.1
- l. Section 4.6:
 - Reword/drop lines 489-494: "When polling the Printer, the Client MUST NOT poll the Printer as quickly as possible but SHOULD exercise discretion and poll only as often as needed." or something like that
 - POOR:
 - Make "BAD"
 - "Polling for status without the actual job ID is not precise"
 - "Polling all status information uses a large number of resources"
 - New POOR:
 - Use Get-Jobs to discover job ID (using job-name or other identifying info)
 - Then use get-job-attributes
 - Polling: only ask for the attributes you need to limit bandwidth/resources
 - New BEST: BETTER + job subscriptions (so no get-job-attributes)
 - Create job subscription in create-job or separately after the fact
 - Get-Notifications allows getting events for multiple subscriptions, sequence number tells you if you missed any events
 - Can sync up with current state using Get-Job/Printer-attributes
 - Think about how to represent concurrent vs. sequences of operations
 - Can also do a single printer subscription to monitor all job progress for the printer (with the corresponding performance concerns since you only care about your jobs, not everyone's jobs)
- m. Section 4.7:
 - POOR->GOOD
 - GOOD->BEST
 - Client can't wait for response from Print-Job since Printer may be blocked by error (out of paper)
 - Client sends a 0-length chunk to stop sending the current print request (for Send-Document too)
 - Client sends Cancel-Job request via separate connection (instead of second connection)
- n. Section 4.8:
 - BAD: Do nothing
 - POOR: Use proprietary protocol
 - GOOD: Use SNMP Printer MIB (network routing issues, community names, access

- controls differences, may not be enabled)
- BETTER: Use Get-Printer-Attributes + printer-supply
- BEST: Use printer subscriptions
- o. Maybe a new 4.x section on xxx-actual attributes:
 - These are part of the "job receipt"
 - Not stable until job reaches a terminating state (canceled, aborted, completed)
 - Reference to PWG 5100.8 IPP "-actual" attributes
- a. Maybe a new 4.x section on progress reporting
 - Some attributes don't update immediately (job-impressions-completed) but on logical boundaries
- b. Ended at Section 5
- c. Merge 5.4/5.5: ipp-attribute-fidelity and job-mandatory-attributes for submission, pdl-override-supported to determine whether printer will override PDL intent using job/document template attributes, affect on -actual values, etc.
- 6. Review of IPP Paid Printing Extensions (Mike)
 - a. <ftp://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ipppaid-sweet-20130402-rev.pdf>
 - b. Did not get to this

Next Steps / Open Actions

- Next IPP conference calls are April 22 and May 6, 2013 at 3pm ET
- Continue discussing IPP Everywhere self-certification
- Continue review of IPP Paid Printing
- Continue review IPP Best Practices
- Action: Mike to add "held-for-review" status to IPP Paid Printing (DONE)
- Action: Mike to bug people about MSN2 formal vote (DONE)
- Action: Ira to capture job terminating state wording from IPP FaxOut for SM FaxIn
- Action: Mike to post prototype experience for FaxOut (DONE)
- Action: Mike to post stable draft of FaxOut (DONE)
- Action: Mike to put together outline of IPP Everywhere self-cert license agreement (DONE)
- Action: Mike to post logo message to pwg-announce to solicit feedback (DONE)
- Action: Mike to setup certification mailing list on new server
- Action: Ira to update milestones in 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)