

Internet Printing Protocol Workgroup Meeting Minutes

May 3-4, 2017

Meeting was called to order at approximately 12:30pm MT on May 3 and 4, 2017.

Attendees

Gupta Gyaneshwar (Oki Data)
Till Kampeter (Canonical/LinuxFoundation)
Smith Kennedy (HP)
Jeremy Leber (Lexmark)
Ira McDonald (High North)
Mike Sweet (Apple)
Paul Tykodi (TCS)
Michael Vrhel (Artifex)
Bill Wagner (TIC)
Rick Yardumian (Canon)

Agenda Items

1. IP Policy and Minute Taker
 - IP policy accepted, Mike taking minutes
2. Slides/Status
 - <http://ftp.pwg.org/pub/pwg/ipp/slides/ipp-wg-agenda-may-17.pdf>
 - Slide 4: "Current approved charter"
 - Self-cert:
 - Issue #17: Incorrect overrides-supported tests causing failed self-cert
 - Add a 1.0 Update 2 milestone to address this issue
 - Do this before a 1.1 errata
 - HP issue (not yet reported on Github) with media-needed test
 - Have a possible patch to address some timing issue
 - Might also be an operator issue - more descriptive label ("and wait until the printer knows the media is empty") or something to that effect.
 - Action: Mike to merge fixes for Issue #17 and create a 1.0 update 2 milestone in ippeveselfcert project
3. Charter Update (Ira):
 - <http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp-charter-20170501-rev.pdf>
 - Line 84: "update existing machine-generated ..." (add "existing" to make it clear we are not creating new ones)
 - Line 94: "management" (singular)
 - IPP Everywhere interop - if we can get one more vendor to submit their self-cert results, we can advance IPP Everywhere to full PWG Standard
 - Next steps:

- Post stable draft with changes
 - Q: Which process: SC approval, PWG Call for Objections, or PWG Formal Approval?
 - No new work items, just the ongoing maintenance of Print3D schema (machine-generated)
 - Ira, Smith, Paul, Bill, Mike: Fine with Call for Objections
4. IPP System Service (Ira/Mike):
- <http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippssystem10-20170314-rev.pdf>
 - Section 6.1.1:
 - Line 952: "Group 3: Printer Attributes" (singular)
 - Section 6.1.2:
 - Q: Can a printer reject a resource?
 - A: Yes, for a resource-type that isn't supported (e.g. a font resource for a scan service)
 - Line 957: Document that "printer-resource-ids" in the response lists all of the resources that have been allocated to the printer (not just the resource-ids in the request).
 - Section 6.1.3.2:
 - Line 1096: Document that "printer-resource-ids" in the response lists all of the resources that remain allocated to the printer.
 - Section 6.4.5 (Pause-All-Printers)
 - Reword system-state logic like was done for Resume-All-Printers (section 6.4.9)
 - Section 6.4.6 (Pause-All-Printers-After-Current-Job):
 - Q: Do we really need this?
 - Mike: Pause semantics are too ambiguous, serves a useful purpose for general maintenance where you want things to finish up
 - A: Yes
 - Section 6.4.7 (Register-Output-Device)
 - Action: Mike to provide Register-Output-Device text to Ira
 - Global:
 - Update all operations that are documented to affect the system state, return system-state and system-state-reasons
 - May need to add System Attributes group at end (groups are normally returned in ascending numeric order), "Group N+1: System Attributes"
 - Action: Mike to check on group ordering restrictions in CUPS
 - Section 6.4.10:
 - Needs to be written.
 - Next steps:
 - Add remainder of operation definitions, conformance requirements, and updates to semantics/values as needed
 - Mike to work on IANA registration templates
 - Next draft probably interim, following draft prototype status
5. IPP Get-User-Printer-Attributes White Paper (Smith):
- <http://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-userop-20170404.pdf>

- Section 3.1.1:
 - Q: Is there any reason why the Client couldn't start with Get-User-Printer-Attributes and fall back to Get-Printer-Attributes if the new operation isn't supported?
 - A: No, but doing Get-Printer-Attributes first allows the Client to determine whether the Printer supports the new attribute first
- Global: Make use cases less verbose?
- Section 3.1.2:
 - Legitimate use case, but ultimately the same Client-Printer IPP relationship (same as 3.1.1)
 - Need to decide how to show this?
- Section 3.1.3:
 - Mike: this is more of a Client OS security/access restriction and not something that can be performed by the printer - no way to authenticate the application, or even if such policies are effective (i.e. can't print a photo from "Photos", but insert the same photo in Powerpoint and you are good to go)
 - Smith: Can we require additional info?
 - Mike: We could have a "printer-mandatory-user-attributes" attribute listing additional attributes that need to be supplied in the operation, but how useful would that be?
 - Flag this as a possible use case to drop...
- Guiding principle: this needs to work with Clients that don't support the new operation, enforcement happens in printer
- Section 3.1.4:
 - Q: Why bother talking to the printer at all if there is a separate policy server?
 - A: Still need to find out the information from the printer about where to look
 - Q: What about security issues?
 - A: Need to be addressed
 - Also complicates client implementations, still needs to work without "smart" clients that know how to be redirected (safely)
 - Added complexity with low value...
 - Ira: Don't like it at all, doesn't scale, security issues, leaks policy info, facilitates attacks
- Section 3.1.5:
 - Doesn't show what happens for Validate-Job or Create-Job
 - Example: print-color-mode='color' when no color printing supported
 - Validate-Job: client-error-attributes-or-values-not-supported with print-color-mode in unsupported group
 - Create-Job with ipp-attribute-fidelity='true': client-error-attributes-or-values-not-supported with print-color-mode in unsupported group
 - Create-Job without ipp-attribute-fidelity: successful-ok-ignored-or-substituted-attributes with print-color-

- mode='monochrome' in unsupported group
 - Rework as "guests print in B&W only" or something to that effect
 - Section 3.1.6:
 - Not a valid use case since Get-Printer-Attributes returns a subset of Get-User-Printer-Attributes?
 - Rework into something meaningful
 - Section 6: Remove
- 6. HTTP Authentication Methods and IPP (Smith)
 - <http://ftp.pwg.org/pub/pwg/ipp/whitepaper/ipp-authentication.pdf>
 - Smith will also post the PlantUML sources
 - Global: Challenge sequence needs to be expanded at least once to account for 100-continue or 401 responses coming at any time while client is sending request...
 - OAuth2 example needs some work - still uses 401 response and relies on Client knowing which OAuth server to obtain a bearer token from...
- 7. IPP Presets White Paper (Smith):
 - <http://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ipp-preset-20170418.pdf>
 - Deferred until next IPP conference call
- 8. PWG 3D Print Job Ticket and Associated Capabilities (Mike):
 - <http://ftp.pwg.org/pub/pwg/ipp/wd/wd-smpjt3d10-20170420-rev.pdf>
 - <https://istopwg.github.io/ippregistry/smpjt3d10-current/Print3DService.html>
 - Bill: Update ISO 10646 reference
 - Smith: Update 3MF reference to point to landing page, v1.1
- 9. AMSC update (Paul)
 - Meeting in July to cover "medium gaps" and determine points of collaboration
 - Important to establish liaisons with other standards bodies to have access to documents - working with Jane, Karen McCabe, and Don Wright to get connected through ANSI
 - RAPID trade show presentation next week (Paul)
 - <http://ftp.pwg.org/pub/pwg/liaison/ansi/pwg-rapid-may-2017.pdf>
 - Slide 2: "as an IETF WG"
 - Slide 5: "does support any file format a printer supports"
 - Slide 7: drop "for machine interfaces"
 - Slide 8: Some discussion about using "printer" vs. "device", keep "printer"
 - Slide 10: Participation is free

Next Steps / Open Actions

- Next IPP WG conference calls on Thursday, May 11 and May 25, 2017 from 3:00-4:30pm ET
- Action: Mike to merge fixes for Issue #17 and create a 1.0 update 2 milestone in ippeveselfcert project
- Action: Mike to provide Register-Output-Device text to Ira
- Action: Mike to check on group ordering restrictions in CUPS

- Action: Mike to experiment to see what is required to start up the audio connected to the screen-sharing webex session, report to chairs (PENDING)
- Action: Mike to post deprecation template for 'jog-offset' finishings/finishing-template values, with reasons (PENDING)
- Action: Mike to document ippserver setup on Raspberry Pi for 3D (PENDING)
- Action: Mike to develop iptool tests for IPP 3D (PENDING)
- Action: Mike to look at document template to fix level 3 headings which are not bold (ONGOING - template was correct, Mike will look at the System Service document instead)