

# Internet Printing Protocol Workgroup Meeting Minutes June 27, 2016

Meeting was called to order at approximately 3:00pm ET on June 27, 2016.

## Attendees

Daniel Manchala (Xerox)  
Ira McDonald (High North)  
Michael Sweet (Apple)  
Bill Wagner (TIC)  
Rick Yardumian (Canon)

## Agenda Items

1. IP Policy and Minute Taker
  - IP policy accepted, Mike taking minutes
2. Previous Minutes
  - <http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20160613.pdf>
  - Approved as posted
3. Status of various IPP documents (Ira/Mike/Smith)
  - IETF IPP/1.1 Updates (Mike/Ira)
    - <http://www.ietf.org/internet-drafts/draft-sweet-rfc2910bis-08.txt>
    - <http://www.ietf.org/internet-drafts/draft-sweet-rfc2911bis-09.txt>
    - Changes for new IETF Proposed Standards
    - 2910bis and 2911bis reviewed by PWG F2F on 04/26/16
    - Mike to fix in future IETF draft double references to pwg.org
    - Ira sent to Barry Leiba on 05/25/16
    - Alexey Melnikov (IETF ART AD) as AD sponsor on 06/02/16
    - Both specs moved to IETF stream on 06/03/16
    - Barry Leiba as Document Shepherd on 06/09/16
    - Alexey Melnikov sent AD review of RFC2910bis on 06/07/16
    - Mike posted an update to 2910bis on 06/13/16
    - Both are on the IETF Telechat agenda for August 4th
    - RFC 2910bis in IETF Last Call until July 14th (RFC 2911bis pending)
    - Schedule - IETF Last Call in Q3/Q4 2016
  - IPP Finishings 2.1 (Smith)
    - <http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfinishings21-20160509-rev.pdf>
    - <http://ftp.pwg.org/pub/pwg/ipp/slides/Finishings-2.1-Orientation-and-Feed-Orientation-Extensions-2016-06-13.pdf>
    - Interim draft
    - Reviewed by IPP WG on 0613/16

- Schedule - PWG Call for Objections in Q3/Q4 2016
- IPP 3D Printing Extensions (Mike)
  - <http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp3d10-20160430-rev.pdf>
  - Prototype draft
  - Reviewed by PWG F2F on 04/27/16
  - Schedule - PWG Last Call in Q3/Q4 2016
- IPP IANA Registration Templates (Mike)
  - <http://www.pwg.org/archives/ipp/2016/018825.html>
    - Canon multiple hole punches
  - <http://www.pwg.org/archives/ipp/2016/018826.html>
    - HP media sizes
  - Reviewed and approved by IPP WG on 06/13/16
  - Mike to send updated IANA IPP registrations to Ira
  - Schedule - Next IPP registrations update
- IPP Implementor's Guide v2 (Smith/Mike)
  - <http://www.pwg.org/archives/ipp/2016/018829.html>
  - <http://www.pwg.org/archives/ipp/2016/018830.html>
  - Discussed by IPP WG on 06/13/16
  - Issue is that section 5.6.8 of PWG 5100.13 does not explicitly mention 1setOf syntax for members normally single-valued
  - Need examples of both, show equivalency of separate and combined duplex constraint examples
  - Smith to submit issue on PWG 5100.13 to clarify 1setOf usage for constraints in section 5.6.8
  - Schedule - Errata for IPP Implementor's Guide v2
- IPP Everywhere Self-Cert / Tools / Issues (Smith/Mike)
  - <http://ftp.pwg.org/pub/pwg/candidates/cs-ippeveselfcert10-20160219-5100.20.pdf>
  - <http://www.pwg.org/archives/ipp/2016/018828.html>
  - Various issues discussed by IPP WG on 05/23/16
  - Add Print Server requirements issue from Smith on 05/26/16
  - Mike to put together a list of attributes, operations, and/or values that cannot be supported by a Print Server (Issue #11)
  - Need new code signing certificate for 2016-2017
    - Action: Mike to work with ISTO to purchase a new code signing certificate
  - Schedule - Errata for IPP Everywhere Self-Cert / Tools
- 4. Review of IPP System Service (Ira/Mike)
  - <http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsystem10-20160623-rev.pdf>
  - Interim draft
  - Issue: Remove/downsize "system-totals" (dozens of attributes)
  - Issue: Design for "resource-authenticator"
  - Issue: Indices for "configured-subunits" for multiple output devices?
  - Reviewed by IPP WG on 05/09/16
  - Previously stopped at section 7.3
  - Schedule - Prototype draft in Q3/Q4 2016
  - Section 5.3:

- Change "power-monitor-col" to "power-state-monitor-col"
- Future discussion: merge power-general into power-state-monitor-col?
- Section 5.6:
  - Add note for resource-owner-col - not part of SM, so these are <none> with a note
  - XxxStringVersion and XxxVersion for SM versions, note can talk about Firmware, Fonts, etc.
  - Move versions and owner-col to Resource Status attributes (5.7)
- Section 5.7:
  - Useful to keep time-at-xxx for implementations since it simplifies time calculations
  - date-time-at-installed and time-at-installed?
    - created (font, firmware, app update, etc) vs. installed (install firmware/application)
  - Add resource-state-reasons keyword for 'installed'
  - Fix table - "<none>" for SM should have "<none>" for reference
- Section 5.x:
  - Add Printer Status Attributes section for printer-config-changes and printer-service-type
- Global: Writeable -> Writable
- Section 7.2.8.2:
  - Replace "AcmeCrackedCrock" with "ExamplePowerEvent" or something
- Section 7.2.9.2:
  - Add reference to 7.2.7.7 (like in the previous section)
- Section 7.2.x:
  - Add examples of each collection to make it clear what and how they are used
  - Add descriptions to each state keyword value ('hibernate', etc.), order from least to most power?
- Add a new Section 7.2.1 Power States
  - Talk about the stable states in detail, which can then be referenced in the calendar, timeout, etc. attribute sections.
- Q: Do we want an operation to set the current power state?
  - A: Probably not, but worth a footnote for Shutdown-System, Restart-System, etc. and when talking about power states
  - Restart-System power state sequence would be similar to NMI reset sequence
  - Preserve abstraction and do not define process
- Section 7.2.24.x: Reference RFC 3380's printer-xri-supported member attributes instead of 2911.
- Section 7.3.1.x: Move under power-monitor-col
- Global: Make all power-state attributes type1 keyword
  - IANA registration will contain the allowed -vendorN extension points, but we cannot allow other extensions anyways so the attributes need to be type1.

- Section 7.3.2.4:
  - Lines 1742 and 1743: Remove line numbers (959 and 960)
  - For example, "System is shutting down from user request (1W)" when transitioning to 'off-soft' state, etc.
  - Reference system logging for system state changes
    - Also for resource state changes in notifications (firmware installed, etc.)
    - Sequence of power states only reflected in power-log-col
- Section 7.3.3.x:
  - Remove usage note from 7.3.3.1
  - Measurement values are volatile and change regularly at implementation-defined intervals
  - Monthly total is 0 at beginning of the month
  - Wack peak-watts and previous-month-kwh
  - Improve definition of current-watts: instantaneous power consumption
- Global: Search for \*NAME\* and replace with boldface NAME.
- Global: Specifies -> reports or identifies for status attributes (sections 7.3.2.x and 7.3.3.x in particular)
- Stopped at 7.3.4 (power-state-capabilities-col)

## Next Steps / Open Actions

- Next IPP conference calls July 11, 2016 at 3pm ET and July 18, 2016 at 4pm ET (3D)
- Action: Mike to work with ISTO to purchase a new code signing certificate
- Action: Mike to send updated IANA IPP registrations to Ira (PENDING)
- Action: Smith to submit issue on PWG 5100.13 to clarify 1setOf usage for constraints in section 5.6.8 (PENDING)
- Action: Mike to put together a list of attributes, operations, and/or values that cannot be supported by an IPP Everywhere print server (ONGOING - Issue #11)
- Action: Smith to send IPP Everywhere self-cert reminder to pwg-announce list (PENDING)