

# Internet Printing Protocol Workgroup Meeting Minutes

## August 9, 2018

Meeting was called to order at approximately 3pm ET on August 9, 2018.

### Attendees

Smith Kennedy (HP)  
Ira McDonald (High North)  
Michael Sweet (Apple)  
Bill Wagner (TIC)  
Rick Yardumian (Canon)

### Agenda Items

1. IP Policy and Minute Taker
  - [http://www.pwg.org/chair/membership\\_docs/pwg-ip-policy.pdf](http://www.pwg.org/chair/membership_docs/pwg-ip-policy.pdf)
  - IP policy accepted, Mike taking minutes
2. Review previous minutes:
  - <https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20180719.pdf>
  - Approved as posted
3. Review of IPP WG slides for PWG F2F? (Mike)
  - <https://ftp.pwg.org/pub/pwg/ipp/slides/ipp-wg-agenda-august-18d1.pdf>
  - Slide 3: Change lunch break to 11-11:30
  - Slide 4 and 19: Change lunch break to 11-11:30, move auth to afternoon
  - Slide 7: Reprint is Prototype
  - Slide 14: Resuming at 11:30am
  - Slide 15: Prototype draft, move to stable ASAP
  - Slide 19: Sept 13 meeting will talk about TLS, add Wikipedia link
  - Slide 20: Move after slide 21
  - Slide 21: Resuming at 11:30am
  - Slide 23: Delete
  - Slide 27: HTUTIPP: publish in Q4 2018
  - Slide 28: Add "other errata updates" for 5100.5, 5100.7, and RFC 3996
  - Slide 29: Add note that Sept 13 meeting will talk about TLS
4. Status of TLS/1.3 (Ira)
  - TLS/1.3 in Auth48 in RFC Editor's Queue 
  - <https://datatracker.ietf.org/doc/draft-ietf-tls-tls13/>
  - 10 years after publication of TLS/1.2 (RFC 5246)...
5. Status of Open Printing WG GSoC 2018 (Ira)
  - <https://ftp.pwg.org/pub/pwg/liaison/openprinting/presentations/TheLinuxFoundationGSoC-2018.pdf>
  - Good progress on all projects - good questions are all getting resolved
  - DONE - 14 May - GSoC coding begins

- DONE - 11-15 June - GSoc Phase 1 evaluations by Mentors and Students
  - DONE - 9-13 July - GSoc Phase 2 evaluations by Mentors and Students
  - NOW - 6-14 August - GSoc final week!
  - 14-21 August - Mentors submit final Student evaluations
  - 22 August - GSoc announces final results
6. Status of AMSC and ISO liaisons w/ PWG (Paul)
    - <https://ftp.pwg.org/pub/pwg/general/sc/pwg-sc-call-minutes-20180702.htm>
    - See PWG SC minutes from 2 July 2018
  7. Status of Safe G-Code (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-pwgsafegcode10-20180704-rev.pdf>
    - <http://www.pwg.org/archives/ipp/2018/019661.html>
    - Prototype draft - IPP WG review on 7 June 2018
    - Schedule - IPP WG Last Call Q4 2018
  8. Status of IPP 3D Printing Extensions v1.1 (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp3d11-20180704-rev.pdf>
    - <http://www.pwg.org/archives/ipp/2018/019660.html>
    - Prototype draft - IPP WG review on 7 June 2018
    - Schedule - PWG Last Call Q4 2018
  9. Status of How to Print Using the IPP (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippguide-20180430.html>
    - <https://github.com/istopwg/pwg-books>
    - IPP WG review during PWG F2F May 2018
    - Current HTML draft available in Github repository
    - Schedule - TBD
  10. Status of IPP HTTP Authentication white paper (Smith)
    - <https://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ippauth-20180510.pdf>
    - Interim draft - IPP WG review during PWG F2F May 2018
    - Schedule - TBD
  11. Status of IPP Encrypted Jobs and Documents (Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipptrustnoone10-20180328-rev.pdf>
    - <http://www.pwg.org/archives/ipp/2018/019613.html>
    - <https://lists.gnupg.org/pipermail/gnupg-users/2018-May/060315.html>
    - Interim draft - IPP WG review during PWG F2F May 2018
    - Good news - PGP-based path forward on 06/04/18!
    - Schedule - Mike to work on updated draft w/ just PGP this fall
  12. Status of IPP System Service (Ira/Mike)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippssystem10-20180701-rev.pdf>
    - <http://www.pwg.org/archives/ipp/2018/019657.html>
    - <https://github.com/istopwg/ippsample/projects/1>
    - Prototype draft - IPP WG review during PWG F2F May 2018
    - Prototyping tasks being tracked as a Github project
    - Schedule - prototype in "ippserver" - Stable draft in Q3/Q4 2018
  13. Status of IPP Reprint Password (Smith)
    - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippreprintpwd-20180620-rev.pdf>
    - <http://www.pwg.org/archives/ipp/2018/019631.html>
    - Stable draft - IPP WG review on 07/19/18
    - PWG process check - back to Prototype next

- Schedule - TBD
- 14. Status of IPP Everywhere Printer Self-Certification 1.0 Update 3?
  - <http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-f2f-minutes-20180515.pdf>
  - Goals, ipptool and ipppfind updates
  - Now have code signing certificate!
  - Schedule - Mike to release beta of update 3 for testing soon
- 15. Status of IPP Everywhere 1.1 (Mike)
  - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeve11-20180704-rev.pdf>
  - Prototype - IPP WG review during PWG F2F May 2018
  - Schedule - Q3/Q4 2018
- 16. Status of IPP Everywhere 1.1 Self-Certification Manual 1.1 (Mike)
  - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert11-20180704-rev.pdf>
  - Prototype draft - IPP WG review during PWG F2F May 2018
  - Schedule - Q3/Q4 2018
- 17. Discussion:
  - TLS/1.3 and uri-security-supported
    - Q: How does a Client learn about the highest supported version of TLS?
      - A: Client finds out this information when it does the TLS handshake, no way to know ahead of time.
    - Not just the version number, also supported cipher suites, X.509 certificate policies, etc.
    - DNS-SD values are not authoritative
    - Maybe include recommended steps for clients when connecting to printers in TLS 1.3 slide deck
  - Cloud print service implementing pull print mode (not printed until released by user at printer)
    - Q: What is the job state on the cloud service prior to being released?
      - A: pending, pending-held, processing, or processing-stopped (not a terminating state)
    - There are some existing server implementations that keep a job in a pending/pending-held state for 30-60 seconds (to allow a client to cancel the job before processing) and then move it to a terminating state (from the IPP side of things)
    - Things like page counters are supposed to be finalized when the job reaches a terminating state (i.e. not allows to update job-media-sheets-completed after the job is completed)

## Next Steps / Open Actions

- PWG virtual F2F on August 15 and 16, 2018
- Next conference calls on August 30, 2018 and September 13, 2018
- Action: Mike to post approval of Canon sizes to IPP mailing list thread (PENDING)

- Action: Mike to assemble a list of specifications that reference PWG 5100.7 (PENDING)
- Action: Smith to post diagrams showing different encrypted job topologies (PENDING)
- Action: Mike to investigate IPPS issue in Wireshark - "ipp" filter not working (PENDING)
- Action: Smith to follow-up on the 3MF liaison agreement (IN PROGRESS - Alexander Auster (Autodesk) will be taking over, Kurt Hunter has retired from Microsoft, Adrian is now shepherding things)