## Internet Printing Protocol Workgroup Meeting Minutes January 4, 2016

Meeting was called to order at approximately 3:00pm ET January 4, 2016.

## **Attendees**

Smith Kennedy (HP)
Daniel Manchala (Xerox)
Ira McDonald (High North)
Mike Sweet (Apple)
Paul Tykodi (TCS)
William Wagner (TIC)

## Agenda Items

- 1. IP Policy and Minute Taker
  - IP policy accepted, Mike taking minutes
- 2. Approve IPP minutes from previous meeting
  - http://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-f2f-minutes-20151207.pdf
  - Approved as posted.
- 3. Status of various IPP documents (Ira/Mike/Smith)
  - IPP WG Charter (Mike)
    - http://ftp.pwg.org/pub/pwg/ipp/charter/ch-ipp-charter-20151225.pdf
    - Adds IPP 3D Printing Extensions as a project
    - PWG Formal Vote concluded on 12/25/15, approved
  - IPP 2.0, 2.1, 2.2 (Mike/Ira)
    - http://ftp.pwg.org/pub/pwg/standards/stdipp20-20151030-5100.12.pdf
    - PWG Standard 5100.12-2015
    - Not to be published in IEEE catalog (per PWG SC 12/17/15)
    - Schedule Smith/Mike to follow up with IEEE-ISTO folks
  - IETF IPP/1.1 Updates (Mike/Ira)
    - http://www.ietf.org/internet-drafts/draft-sweet-rfc2910bis-07.txt
    - http://www.ietf.org/internet-drafts/draft-sweet-rfc2911bis-06.txt
    - Changes for new IETF Proposed Standard
    - Barry Leiba (IETF ART AD) will be AD sponsor note on 07/12/15
    - 2911bis reviewed by IPP WG on 11/16/15
    - 2910bis reviewed by IPP WG on 12/07/15
    - Schedule IETF Last Call in Q1/Q2 2016
  - IPP Everywhere Printer Self-Certification (SELFCERT) (Mike)
    - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert10-20151110rev.pdf
    - Stable draft with new PWG process updates
    - Schedule PWG Last Call ends January 18, 2015

- Have 7 of 9 responses needed for quorum so far
- IPP Job Password Repertoire" (Smith)
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wp-job-passwordrepertoire-20160101-rev.pdf
  - http://www.pwg.org/archives/ipp/2015/018661.html
  - Reviewed by IPP WG on 12/07/15
  - Plan is to register stand-alone (without enclosing IPP spec)
  - Schedule IPP WG review and IANA registration in Q1 2016
- IPP Staple and Punch Origins/Angles/Dimensions (Smith/Ira/Mike)
  - http://www.pwg.org/archives/ipp/2015/018651.html
  - Off-list discussion on 11/06/15 to 11/09/15 started by Smith
  - Potential errata update to IPP Finishings 2.0 based on JDF attributes
  - Mike/Ira to review JDF attributes and propose IPP extensions
- 4. Review of IPP System Service (Ira/Mike)
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsystem10-20151206-rev.pdf
  - Interim draft need to add more operation and attribute details
  - Reviewed by IPP WG on 12/07/15 (only section 6.27 Startup-All-Printers)
  - Remove redundant Restart-Xxx-Printer(s) keep Shutdown & Startup
  - Schedule Prototype draft in Q1/Q2 2016
  - Get-Printers
    - Not authenticated (but may be encrypted like any other request)
    - Limit attributes to discovery attributes (e.g. LDAP schema)
    - Default is to only return printer-uri-supported, uri-authenticationsupported, uri-security-supported
  - Get-Resources
    - Not a user operation, authenticated
    - Also minimizes scans for old firmware, etc.
  - Possible definition of Get-Printer-Details/Get-Printer-User-Supported-Values operation in the future as an authenticated version of Get-Printer-Attributes that filters based on the authenticated user
  - Q: Add discussion of common message parameters? (request-id, operation-id, status-code, version)
    - A: Maybe just a pointer to 2910/2911 at the beginning of section 6, following standard encoding of requests and responses.
  - Started at section 7
  - Global: Change any "values for this attribute are" to "values for this attribute include".
  - Section 7.1.x: Remove "for the operation" from descriptions?
  - Section 7.1.3:
    - Make 1setOf, merge in 7.1.4
  - Section 7.1.4:
    - Delete, merge with 7.1.3
    - Line 1322: Clarify/reword first sentence? Delete "for the operation"?
    - Line 1325: "The values for this attribute are" change to "include"
    - Single value for Create-Printer, multiple values for Get-Printers
    - Move list of values to section 7.7 (where printer-service-type is

defined as a Printer Status attribute)

- Section 7.1.5:
  - Q: resource-categories?
    - A: No keep single-valued
- Section 7.1.6:
  - Make 1setOf mimeMediaType
  - Single value allowed for Create-Resource/Send-Resource-Data
  - Multiple values allowed for Get-Resources
- Section 7.1.9:
  - Can be sent in either Create-Resource or Send-Resource-Data request.
  - Line 1365: Forward reference should be to resource-k-octets.
- Action: Mike to fix \*-k-octets in IANA IPP registry should be Status attributes
- Q: What status code to return when a resource is too large?
  - A: client-error-request-entity-too-large
- Section 7.1.14:
  - Line 1398: Missing double quote on "printer-is-accepting-jobs"
    - Q: What about "Down" and "Testing" States from MFD Model?
      - A: Have 'shutdown' value for "printer-state-reasons" (defined in RFC 2911)
      - Define new 'testing' value to harmonize with MFD Model/ Host MIB
      - "printer-state" for both is 'stopped'.
  - 'stopped': add "that don't have the 'shutdown' or 'testing' values in their "printer-state-reasons" attributes."
  - Add 'shutdown' and 'testing' values.
  - 'all': add "regardless of their state".
- Finished at the end of 7.1.x.
- Q: Should Startup-xxx restart something that is already started?
  - A: No, RFC 3998 only allows a shutdown service to be started
- Q: Should we require a Start-Printer after Create-Printer?
  - A: No, Create-Printer starts the new service (stopped and not accepting jobs)

## **Next Steps / Open Actions**

- Next conference calls January 11, 2016 at 4pm ET (IPP 3D) and January 18, 2016 at 3pm ET
- Continue review of RFC2910bis and RFC2911bis
- Continue discussion and scoping of System Service operations and attributes
- Start review of IPP 3D Extensions as standards-track document.
- Action: Mike to fix \*-k-octets in IANA IPP registry should be Status attributes
- Action: Mike to post updated drafts of RFC2910bis and RFC2911bis (DONE)
- Action: Everyone to post their list of user operations for the system service to the IPP WG list (DONE - Only Get-Printers and Get-Printer-Attributes are user

operations)