The Printer Working Group

IPP Recent Features and Enhancements - 2024

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IPP Recent Features 2022 – 2024

PWG has completed updates to many important IPP specifications in the last 3 years

- PWG 5100.1-2022: IPP Finishings 3.0
- PWG 5100.3-2023: IPP Production Printing Extensions v2.0
- PWG 5100.7-2023: IPP Job Extensions v2.1
- PWG 5100.11-2024: IPP Enterprise Printing Extensions v2.0
- PWG 5100.13-2023: IPP Driver Replacement Extensions v2.0

Updates include both new features and redesigns to features that were previously supported

- **Extended Print Quality Options (PWG 5100.13)**
  - "print-quality" now extensible beyond 'draft' / 'normal' / 'high'
  - Specialized type of Preset (group of attribute settings applied atomically)
  - Uses new "preset-category" extension to "job-presets-supported"

- **Custom Color Modes (PWG 5100.13)**
  - "print-color-mode" extended to support Printer-applied Job color transformations
  - "print-color-mode-icc-profiles" to support client-side previews

- **Job Accounting Source Host and Application Metadata Enhancements (PWG 5100.7)**
  - Enables reporting of client system and software modules upstream of job submission
  - "client-info" replaces the now-deprecated "document-format-details"

- "Overprint" printing (PWG 5100.13)
  - "media-overprint" enables intent to print beyond the edges of the physical media

- Message Catalog Extensions for Tool Tips and Help URLs (PWG 5100.13)
  - "_tooltip" and "_helpurl" suffix definitions added to create association between a label, a short help statement, and a URL for more information

- Print Processing Attribute Grouping and Identification
  - "print-processing-attributes-supported" lists attributes (standard and third party) that relate to "processing"
  - Enables a Client to present vendor-unique attributes relating to Job processing in a way that allows some Client control over context

Office Printing – New Features

- ## Custom Color Modes (PWG 5100.13)
  - ### Discussed earlier

- ## Additional Finishing Enhancements (PWG 5100.1)
  - ### Supports better client-side previews of Printer layout limits

- ## Printer Booklet layout (PWG 5100.3)
  - ### New "imposition-template" for performing booklet layout (2-up / 2-sided printing / page reordering) in the Printer

- ## Job Print Policy (PWG 5100.11)
  - ### Get-User-Printer-Attributes operation is an "authenticated Get-Printer-Attributes" providing results limited to those available for use by the Authenticated User
  - ### Provides a better user experience than Job rejection or incorrect rendering

- ## Job Storage (PWG 5100.11)
  - Job can be stored for later reprinting

- ## Proof and Suspend (PWG 5100.11)
  - First copy printed then Job suspended pending review

- ## Job Release (PWG 5100.11)
  - Extends existing "job-password" / "PIN printing" push release to support pushbutton and owner authenticated release mechanisms

Designed
For
Interoperability[1]

[1] Predecessor Features (5100.11-2010) Were Not Interoperable

Production Printing – New Features

- **Enhancements to Page Layout on Physical Media (PWG 5100.3)**
  - "image-orientation"
  - New imposition templates

- **Additional Finishing Enhancements (PWG 5100.1)**
  - Supports better client-side previews of Printer layout limits

- **Printer Booklet layout (PWG 5100.3)**
  - New "imposition-template"

- **Job scheduling enhancements (PWG 5100.3)**
  - "date-time-at-completed-estimated", "date-time-at-processing-estimated", "time-at-completed-estimated", and "time-at-processing-estimated" provide Job scheduling estimates
  - "job-complete-before" and "job-complete-before-time" allow a Client to specify when a Job needs to be finished

References

- Specifications
  - [RFC 8011: IPP/1.1 Model and Semantics](#)
  - [PWG 5100.1-2022: IPP Finishings 3.0](#)
  - [PWG 5100.3-2023: IPP Production Printing Extensions v2.0](#)
  - [PWG 5100.7-2023: IPP Job Extensions v2.1](#)
  - [PWG 5100.11-2024: IPP Enterprise Printing Extensions v2.0](#)
  - [PWG 5100.13-2023: IPP Driver Replacement Extensions v2.0](#)
  - [PWG 5100.19-2015: IPP Implementor's Guide v2.0](#)

- Previous Presentations
  - 2023 – [PWG Significant Recent Updates to IPP](#)
  - 2022 – [PWG 2022 State of the Union](#)
  - 2021 – [PWG 2021 State of the Union](#)
  - 2018 – [PWG IPP Overview and State of the Union](#)

- Specifications in development:
  - Internet Printing Protocol/2.x Fourth Edition (Stable)
  - IPP Encrypted Jobs and Documents v1.0 (Prototype)
  - IPP Everywhere™ v2.0 (Prototype)
  - IPP Everywhere™ Printer Self-Certification Manual v2.0 (Interim)
  - IPP OAuth Extensions v1.0 (Stable)
  - IPP Shared Infrastructure Extensions v1.1 (Stable)
  - IPP System Service v1.1 (Stable)
- Registrations in development:
  - IPP Firmware Upgrade Extensions v1.0 (Interim)
- Recently approved:
  - IPP Wi-Fi Configuration Extensions v1.0
  - PWG 5100.5-2024: IPP Document Object v1.2 (DOCOBJECT)
  - PWG 5100.11-2024: IPP Enterprise Printing Extensions v2.0 (EPX)
  - PWG 5101.1-2023: PWG Media Standardized Names v2.1 (MSN)
- Up-to-date pending IANA registrations online:
  - https://www.pwg.org/ipp/ipp-registrations.xml