



IEEE-ISTO Printer Working Group

Benefits of CIP4 and PWG Liaison

CIP4 JDF mapping to PWG Print Job Ticket

PWG Semantic Model WG – Mapping Job Tickets

CIP4 TSC Meeting

10 December 2013

Benefits of CIP4 and PWG Liaison Context



- Convergence in Production Printing Markets
 - Marking technology evolution (e.g., high-speed inkjets)
 - Network printer evolution (e.g., 100ppm laser printers)
- History of CIP4 and PWG informal collaboration
 - Tom Hastings, Harry Lewis, Claudia Alimpich
- CIP4 JDF – Datacenter Production Printing
 - Variable data, complex intent, complex finishing
 - Cost-effective final-print and very large jobs
- PWG PJT – Workgroup Production Printing
 - Multiple documents, simple intent, simple finishing
 - Cost-effective proof-print and small/medium jobs
- Customer Satisfaction
 - Soft-proof -> Hard-proof -> Limited run -> Production run
 - High fidelity processing throughout user job lifecycle

Benefits of CIP4 and PWG Liaison Markets



- **SMB Market**
 - Cloud Print, document conversion, document storage
- **Enterprise Market**
 - Cloud Print, Managed Print Services, enhanced security
- **Mobile Device Market**
 - New services for mobile users (print-on-demand, print-to-home, fax/email, document conversion, document storage)
- **Print Kiosk Market**
 - New services for business and mobile users (print-on-demand, photo print w/ image enhancement, document conversion)

Why use PWG Semantic Model as the basis of mapping from CIP4 JDF?



- PWG SM is a core network printing industry standard
 - SM 1.0 (PWG 5105.1-2004) – print services
 - MFD Model 1.0 (PWG 5108.1-2011) – abstract MFD services
 - PWG Print Job Ticket (PWG 5108.7-2012) – processing intent
 - PWG Media Standardized Names 2.0 (PWG 5101.1-2013)
 - Referenced by IETF, IEEE, W3C, DMTF, many other standards
- PWG SM is based on IETF and PWG standards
 - IPP/1.1 (IETF RFC 2911, 2000) – network print services
 - IPP/2.0 2nd Edition (PWG 5100.12-2011) – profile of 25 specs
 - IPP Everywhere (PWG 5100.14-2013) – secure mobile print
- PWG SM is evolving to adopt new technologies
 - PWG Semantic Model 3.0 – combines all MFD services
 - PWG IPP Transaction-based Printing Ext (PWG 5100.16-2013)
 - PWG IPP Shared Infrastructure Ext – Cloud Print operations

Status of PWG Documents Related to Job Tickets



- PWG Print Job Ticket (PWG 5108.7-2012)
 - Standard IPP Print Job to PWG SM XML Schema mappings
 - Defines required set of supported job ticket elements
 - <http://ftp.pwg.org/pub/pwg/candidates/cs-sm20-pjt10-20120801-5108.07.pdf>
- PWG Media Standard Names 2.0 (PWG 5101.1-2013)
 - Standard names for media types, sizes, colors, coatings, etc.
 - Naming conventions for new standard and vendor media
 - <http://ftp.pwg.org/pub/pwg/candidates/cs-pwgmsn20-20130328-5101.1.pdf>
- Mapping Related Standards to PWG PJT (Oct 2013)
 - Mappings from CIP4 JDF, Microsoft MSPS, Adobe PPD
 - SM WG charter milestone of prototype-ready draft in Q2 2014
 - <http://ftp.pwg.org/pub/pwg/sm3/wd/wd-smpjtmap10-20131024.pdf>