



# 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, common intent, common 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
  - Expanded services for business users (Cloud Print, document conversion, document storage)
- Enterprise Market
  - Expanded services for business users (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 2<sup>nd</sup> 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>