



# The Printer Working Group

## Semantic Model Working Group

Wednesday, Feb 4, 2015

El Segundo, CA

Daniel Manchala (Xerox)



# SM Meeting Agenda

## Session (9:00 AM-12:00 PM PT)

- Intro Agenda: IP Policy, status of current specifications (9:00 – 9:15)
- JDFMAP (09:15 – 10:30)
- Break (10:30 – 10:45)
- 3D Printing BOF (10:45 – 11:55)



# Purpose of the effort

The Semantic Model working group is concerned with the modeling of imaging services and subunits that comprise a network connected Imaging System. The Objectives are:

- The definition of a framework for the complete Imaging Semantic Model.
- Drive to a standard semantic definition for an Imaging System's Subunits, Services, Jobs and Documents.
- Agreement on the semantics of their attributes, operations and parameters.



# Semantic Model Meeting Logistics

- The documents and schema used are available from the SM page <http://www.pwg.org/sm3>
- The phone bridge and WebEx will be the same as used throughout the meeting
- **Officers**
  - Daniel Manchala (Xerox) – Chair
  - Paul Tykodi (TCS) – Vice Chair
  - Secretary (need to fill this position)
- **Document Editors**
  - Michael Sweet - PPDMAP
  - Nancy Chen – CWMP Printer Data Model
  - Daniel Manchala (Xerox) – SM3, SM3 Schema
  - Ira McDonald (High North) – JDFMAP, CWMP Printer Data Model
  - Paul Tykodi (TCS) – SM3
  - Bill Wagner (TIC) – SM3
  - Rick Yardumian (Canon) – JDFMAP
  - Jeremy Leber (Lexmark) – SM3



# Active Documents

- **Mapping Related Standards**

- CIP4 JDF to PWG PJT mapping (JDFMAP)
  - Completed most of the elements in the table (except for JDF binding objects to PJT Binding collection)
- Adobe PPD to PWG PJT mapping (PPDMAP)
  - Issue stable draft and advance to PWG last call.

- **Semantic Model 3.0**

- Imaging System (with Services and Subunits)
  - Add Transform Spec and Use-cases
  - Subscriptions and Notifications (to Schema and Spec)
- Jobs and Documents



- **CIP 4 JDF to PWG PJT mapping**
- **Meetings from July 2014 through April 2015 (Mondays 7:30 – 8:30 AM PT)**
  - Attended by (Rainer Prosi, Ira McDonald, Paul Tykodi, Rick Yardumian, Daniel Manchala)
- **Next meeting 9 & 16 February, 2015**
- **Document under review**
  - <ftp://ftp.pwg.org/pub/pwg/sm3/wd/wd-smjdfmap10-20150119-rev.docx>
- **Important Changes**
  - All top level MediaType are placed under MediaCol.
  - Complex mapping sections are mostly complete.
  - JDF to PJT Job State Mapping is done.



# Schema Status

- **Named version (v1.185) published for Print Job Ticket and Associated Capabilities**
- **Latest (v2.904) Up to date with In Progress specifications**
  - Cloud Print extensions (WIP – WSDL operations needs update)



# SM 3.0 Schema

- **Changes to make it to work on systems with proxy connection**
  - Make sure all references to other XSD files are local (schemaLocation)
  - We don't use DTDs (comment them)
  - http.xsd refers wsdl.xsd (missing)
- **Newly added / modified xsd files**
  - PwgSecurityOpMsg.xsd
  - PwgWellKnownValues.xsd
  - Security.xsd
  - ServicesOperations.xsd
  - PwgSystemControl.wsdl
- **Version 2.904 is the latest version on web site.**
  - It is error free
  - It has a few warnings in dcterms.xsd





# On-hold and Potential Documents

- **On-hold Documents**

- CWMP Printer Data Model

- **Potential Documents**

- Subject to volunteers to be Editors
- Mapping of MSPS to PWG PJT (MSPSMAP)
- Service Integration with Workflow Environments v1.0
  - Using PWG SM Services in workflow environments, this document will describe how to combine PWG Semantic Model services in order to support workflow and job transfer solutions.



# Next Steps

- **Continue SM 3.0 work.**
- **Update SM 3.0 outline**
  - <http://ftp.pwg.org/pub/pwg/sm3/wd/wd-sm3-specifications-outline-20140814.pdf>
- **Update SM charter with new work items**
  - Digital in/out is domain of transform service
  - Print is digital documents to hardcopy output to one of services output devices
  - Scan is hardcopy input to digital documents



# More Info/How to participate

- **We welcome more participation from member companies**
- **The group maintains a Web Page for Semantic Model that includes links to the latest documents, schema and a browse-able version of the schema at <http://www.pwg.org/sm3>**
- **Next meeting – Feb 26, 2015; 11:00 – 12:00 PDT / 2:00 – 3:00 PM EDT.**

Call-in toll-free number (US/Canada): 1-866-469-3239

Call-in toll number (US/Canada): 1-650-429-3300

Call-in toll number (US/Canada): 1-408-856-9570

<https://ieee-isto.webex.com/ieee-isto>



## More Info/How to participate

- **Information on subscribing to the Semantic Model mailing list is available at**  
< <https://www.pwg.org/mailman/listinfo/sm3> >
- **SM holds periodic phone conferences, with dates, call numbers and agenda announced on the SM3 mail list.**

# Appendix



# Approved Documents

## **Print Service:** *Approved January 2004*

- PWG5105.1:  
PWG Semantic Model Specification Version 1.00
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm10-20040120-5105.1.pdf>

## **Scan Service:** *Approved April 2009*

- PWG5108.02-2009:  
Network Scan Service Semantic Model and Service Interface Version 1.0
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-scan10-20090410-5108.02.pdf>

## **Resource Service:** *Approved July 2009*

- PWG5108.03-2009:  
Network Resource Service Semantic Model and Service Interface Version 1.0
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-resource10-20090703-5108.03.pdf>



# Approved Documents

## MFD Common Semantics: *Approved April 2011*

- PWG5108.01-2011:  
MFD Model and Common Semantics Version 1.00
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-mfdmodel10-20110415-5108.1.pdf>

## Copy Service: *Approved June 2011*

- PWG5108.04-2011:  
Copy Service Semantic Model and Service Interface Version 1.00
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-copy10-20110610-5108.04.pdf>

## MFD Requirements: *Approved September 2010*

- Multifunction Device Service Model Requirements
- <ftp://ftp.pwg.org/pub/pwg/informational/req-mfdreq10-20100901.pdf>



# Approved Documents

## FaxOut Service : *Approved August 2011*

- PWG 5108.05-2011:  
FaxOut Service Semantic Model and Service Interface Version 1.0
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-faxout10-20110809-5108.05.pdf>

## System Control Service: *Approved February 2012*

- PWG 5108.06-2011:  
System Object and System Control Service Semantics Version 1.0
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-system10-20120217-5108.06.pdf>

## Print Job Ticket: *Approved August 2012*

- PWG 5108.07-2012:  
PWG Print Job Ticket and Associated Capabilities Version 1.0
- <ftp://ftp.pwg.org/pub/pwg/candidates/cs-sm20-pjt10-20120813-5108.07.pdf>