

## The Printer Working Group

*c/o The IEEE Industry Standards and Technology Organization*  
445 Hoes Lane  
Piscataway, NJ 08854  
<http://www.pwg.org>



# 1 Charter of the PWG Semantic Model (SM) Work Group

2 Status: PWG Approved  
3 Copyright © 2013 Printer Working Group  
4 <ftp://ftp.pwg.org/pub/pwg/sm3/charter/ch-sm-charter-20131126.pdf>  
5

## 6 Semantic Model WG Chair:

7 Daniel Manchala (Xerox)  
8

## 9 Semantic Model WG Vice Chair:

10 Paul Tykodi (Tykodi Consulting Services LLC)  
11

## 12 Semantic Model WG Secretary:

13 TBD  
14

## 15 Semantic Model WG Document Editors:

16 Bill Wagner (TIC), Daniel Manchala (Xerox), Paul Tykodi (Tykodi Consulting Services LLC), Ira McDonald  
17 (High North), Michael Sweet (Apple), Pete Zehler (Xerox)  
18

## 19 Mailing Lists and Documents:

20 PWG General Discussion: [pwg@pwg.org](mailto:pwg@pwg.org)  
21 SM WG Discussion: [sm3@pwg.org](mailto:sm3@pwg.org)  
22 To Subscribe: <http://www.pwg.org/mailhelp.html>  
23 SM WG Documents: <ftp://ftp.pwg.org/pub/pwg/sm3>

24

## 25 Problem Statement:

26  
27 The Semantic Model workgroup has previously modeled and defined interfaces for the services hosted  
28 on Multifunction Devices. With the advent of both mobile and cloud based imaging applications, the  
29 scope of the Semantic Model workgroup activities is being expanded to include the modeling and  
30 interfaces of distributed imaging systems.  
31

32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74

The projects of the Semantic Model WG are to develop specifications for the following topics:

(a) **PWG Semantic Model v3.0 (SM3)** – (*wd-sm30-yyyymmdd*) – update the PWG MFD Model and Common Semantics specification [PWG 5108.01-2011], extending the model from that of an MFD to a more generalized Imaging System, including the Transform Service.

(b) **Mapping Related Standards to PWG PJT v1.0 (PJTMAP)** – (*wd-smpjtmap10-yyyymmdd*) –define in a fully approved PWG specification the mapping of job ticketing elements from other well-known standards environments to the PWG PJT

- Microsoft PrintTicket – frequently referred to as Microsoft Print Schema (MSPS)
- CIP4 JDF Interoperability Conformance Specification (ICS) for Integrated Digital Printing (IDP)
- Adobe PostScript Printer Definition (PPD)

(c) **Mapping Related Standards to PWG PJT v2.0 (PJTMAP)** – (*wd-smpjtmap20-yyyymmdd*) –expand the number of mappings initially included in version 1.0 of the specification

- AFP Consortium Mixed Object: Document Content Architecture – Presentation (MO:DCA-P)
- AFP Consortium Intelligent Printer Data Stream (IPDS)

(d) **CWMP Printer Data Model** – (*wd-smcwmpprint10-yyyymmdd*) – define an abstract CWMP (BBF TR-069) Printer Data Model, including the algorithms for machine translation from the PWG Semantic Model XML Schema and mapping from IPP (service) and SNMP (device) attributes for CWMP Proxy implementations, based on BBF liaison and reviews and other public standards documents;

(e) **Semantic Model Orchestration v1.0** – (*wd-smorchestration10-yyyymmdd*) – define an abstract model of how digital document processes can be integrated with the services defined in the PWG Semantic Model

(f) **PWG Imaging Job Ticket v3.0** – (*wd-smjobticket30-yyyymmdd*) – expand the scope of the PWG Print Job Ticket specification to encompass all of the services supporting job ticketing elements, as expressed in the currently existing version of the PWG Semantic Model Schema

## Out-of-scope:

- **OOS-1.** Definition of any service management or job operations for Imaging Systems that are not network connected.
- **OOS-2.** Definition of any new document formats to be implemented in network Imaging Systems.
- **OOS-3.** Definition of any new workflow or orchestration languages.

75 **Objectives:**

76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88

- **OBJ-1.** Define management requirements, use cases and architectural model for Semantic Model 3.0.
- **OBJ-2.** Define consistent names and semantics for these Semantic Model 3.0 objects that can be accessed through any supported network protocol.
- **OBJ-3.** Define a companion set of XML Schema and WSDL files for the Semantic Model 3.0.
- **OBJ-4.** Define a set of mappings from related standards to the PWG Imaging Job Tickets.
- **OBJ-5.** Define one or more mappings to other standard management protocols or data models (e.g. CWMP Printer).

89 **Milestones:**

90

91 **Charter Stage:**

92  
93  
94  
95  
96  
97  
98

- CH-1 Initial working draft of Semantic Model 3.0 Charter – August 2013 – DONE
- CH-2 Interim working draft of Semantic Model 3.0 Charter – October 2013 – DONE
- CH-3 Interim working draft of Semantic Model Charter – November 2013 – DONE
- CH-4 Interim working draft of Semantic Model Charter – November 2013 – DONE
- CH-5 Interim working draft of Semantic Model Charter – November 2013 – DONE

99 **Definition Stage:**

100  
101  
102  
103  
104  
105  
106  
107  
108  
109

- SM3-2                      Prototype working draft of SM3 – Q1 2015
- PJTMAPv1-2              Prototype working draft of PJTMAPv1.0 – Q2 2014
- PJTMAPv2-1              Initial working draft of PJTMAP v2.0 – Q1 2014
- PJTMAPv2-2              Prototype working draft of PJTMAP v2.0 – Q4 2014
- CWMPPRINT-2            Prototype working draft of CWMP Printer Data Model – Q2 2014
- Orchestration-1        Initial working draft of Semantic Model Orchestration v1.0 – TBD
- JobTicket-1              Initial working draft of Imaging Job Ticket v3.0 – Q4 2014
- JobTicket-2              Prototype working draft of Imaging Job Ticket v3.0 – Q1 2015

110 **Implementation Stage:**

111  
112

- INTEROP-1                Interoperability testing of SM3 implementations – Q1 & Q2 2017