1
Charter of the PWG Semantic Model (SM) Workgroup

2 **Status: PWG Approved**
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4 **ftp://ftp.pwg.org/pub/pwg/sm3/charter/ch-sm30-charter-20150405.pdf**
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Problem Statement:
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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.
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Current SM WG Projects:

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

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37 (a) **Semantic Model v3.0 Part 1: Imaging System (IS3)** – *(wd-smis30-yyyymmdd)* – update the PWG MFD
38 Model and Common Semantics specification [PWG 5108.01-2011], extending the model from that of an
39 MFD to a more generalized Imaging System, including the Transform Service

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41 (b) **Semantic Model v3.0 Part 2: Jobs & Documents (JD3)** – *(wd-smjd30-yyyymmdd)* – expand the scope
42 of the PWG Print Job Ticket specification to encompass all of the services supporting job ticketing
43 elements, as expressed in the currently existing version of the PWG Semantic Model Schema

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45 (c) **Mapping CIP4 JDF to PWG Print Job Ticket v1.0 (JDFMAP)** – *(wd-smjdfmap10-yyyymmdd)* – define in
46 a fully approved PWG specification a normative mapping from XML objects and attributes in the CIP4
47 Job Definition Format [CIP4JDF] to XML elements in the PWG Print Job Ticket and Associated Capabilities
48 [PWG5108.7]

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50 (d) **Mapping Adobe PPD to PWG Print Job Ticket v1.0 (PPDMAP)** – *(wd-smppdmap10-yyyymmdd)* –
51 define in a fully approved PWG specification a normative mapping from keywords in the Adobe
52 PostScript Print Description Format [PPD] to XML elements in the PWG Print Job Ticket and Associated
53 Capabilities [PWG5108.7]

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On Hold SM WG Projects:

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57 On hold SM WG projects include the following new or updated specifications:

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

63
64 (b) **Mapping Microsoft Print Schema to PWG Print Job Ticket v1.0 (MSPSMAP)** –
65 *(wd-smmspsmap10-yyyymmdd)* – define in a fully approved PWG specification a normative mapping
66 from XML elements in the Microsoft Print Schema [MSPS] to XML elements in the PWG Print Job Ticket
67 and Associated Capabilities [PWG5108.7]

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69 (c) **Mapping AFP Consortium MO:DCA and IPDS Formats to PWG Print Job Ticket v1.0 (AFPMAP)** –
70 *(wd-smafpmap10-yyyymmdd)* – define in a fully approved PWG specification a normative mapping from
71 XML elements, objects, or attributes in the AFP Consortium Mixed Object: Document Content
72 Architecture (MO:DCA) and Intelligent Printer Data Stream (IPDS) formats to XML elements in the PWG
73 Print Job Ticket and Associated Capabilities [PWG5108.7]

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Potential SM WG Projects:

Potential SM WG projects include the following new or updated specifications:

(a) **Extend W3C CSS Print Definition Capabilities** – create a whitepaper defining possible extensions to the W3C Cascading Style Sheets (CSS) suite of printing specifications, which will provide for the improvement of capabilities used for defining page rendering and for conveying user intent for the production of hardcopy documents and digital electronic publications.

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

(c) **Extend Semantic Model 3.0 to support 3D Imaging Devices** – add support for 3D devices by adding new capabilities to the model as necessary

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.

Objectives:

• **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 and maintain a normative 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).

Milestones:

Charter Stage:

- CH-1 Initial working draft of Semantic Model 3.0 Charter – March 2015 – DONE
- CH-2 Interim working draft of Semantic Model 3.0 Charter – April 2015 – DONE
- CH-3 Interim working draft of Semantic Model 3.0 Charter – April 2015 – DONE

Definition Stage:

- IS3-1   Initial working draft of IS3 – Q4 2015
- IS3-2   Prototype working draft of IS3 – Q3 2016
- JD3-1   Initial working draft of JD3 – Q3 2015
- JD3-2   Prototype working draft of JD3 – Q2 2016
- JDFMAP   Prototype working draft of JDFMAP – Q2 2015
- PPDMAP   Prototype working draft of PPDMAP – Q2 2015