Charter of the PWG
Cloud Imaging Model Working Group (WG)

Status: PWG Approved

ftp://ftp.pwg.org/pub/pwg/cloud/charter/ch-cloud-charter-20121030.pdf

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Problem Statement:

Cloud-based applications and solutions are increasingly common, and Cloud-based printing, scanning, and facsimile (collectively called "Cloud Imaging") are emerging in several different forms. Adopting standard protocols and schemas now will help interoperability, speed adoption, and address privacy and security issues involved in Cloud Imaging.

A basic functional model including a Client, Cloud Print Provider, Cloud Print Manager, and Printer was developed in Cloud Printing BOF sessions. This model revealed several new requirements beyond the existing PWG Semantic Model including registration, enumeration/selection, use of late transforms to preserve fidelity, additional notification events, strict privacy and security policies, and reliable logging. It has been determined that, although an outline of these requirements is an appropriate objective of the Cloud Imaging Model WG, a detailed design definition of registration, enumeration/selection, strict privacy and security policies, and reliable logging is out of scope because these aspects are not specific to Cloud Imaging but are functions of the overall Cloud service.

The goal of the Cloud Imaging project is to develop a model to support Cloud-based print and multifunction services using the PWG Semantic Model. This effort is divided into:

(a) Cloud Print Requirements and Model (CLOUDMODEL) (wd-cloudmodel10-yyyymmdd) – define the reference model, terminology, and requirements for Cloud Print services;

(b) Cloud Multifunction Requirements and Model (CLOUDMFD) (wd-cloudmfd10-yyyymmdd) – define the reference model, terminology, and requirements for Cloud Multifunction services.

Another objective of the Cloud WG is coordination with the PWG Semantic Model WG in the development and support of documents desirable to support Cloud Imaging. These documents include:

(1) Defining the PWG Print Job Ticket and Associated Capabilities (PWG Candidate Standard 5108.07-2012 - PWG Print Job Ticket and Associated Capabilities v1.0)
(2) Mapping the elements in the PWG Print Job Ticket and Associated Capabilities to and from elements in other standards currently used in Cloud Printing , including the Microsoft Print Schema Specification and the Adobe Postscript Printer Description.

Out-of-scope:

- OOS-1 Defining Cloud infrastructure interfaces and associated protocols and technologies.
- OOS-2 Defining the interface between the Cloud Imaging Manager and Imaging Device, specifically the interface for device status, job status, and job submission.
- OOS-3 Defining new protocols for authentication, authorization, and access control (AAA), enumeration, transport, notification, or device management.

- OOS-4 Defining new document file formats.
- OOS-5 Defining new abstract job tickets.

Objectives:

- OBJ-1 Develop requirements and model documents for Cloud Print and Cloud Multifunction based on the previous BOF discussions.
- OBJ-3 Collaborate w/ PWG IPP WG in the development of IPP binding documents for Cloud Print and Cloud Multifunction services.
- OBJ-4 Collaborate w/ PWG Semantic Model WG in the development of:
    - PWG Print Job Ticket and Associated Capabilities
    - Mapping PWG Print Job Ticket and Associated Capabilities to and from elements in other standards currently used in Cloud Printing , including the Microsoft Print Schema Specification and the Adobe Postscript Printer Description.
    - SOAP binding documents for Cloud Print and Cloud Multifunction services with associated XML schemas/WSDL definitions and equivalent informative REST bindings.
- OBJ-5 Cloud Print and Cloud Multifunction models should be compatible with existing cloud computing infrastructure.
- OBJ-6 Cloud Print and Cloud Multifunction models should be scalable from consumer-electronics clients to high-end servers.
- OBJ-7 Cloud Print and Cloud Multifunction models should define requirements for usage of document formats and job tickets to ensure imaging fidelity and interoperability.
- OBJ-8 Cloud Print and Cloud Multifunction models should be compatible with generic imaging clients for common operating systems.

Milestones:

Charter Stage:

- CH-1 Initial working draft of Cloud Imaging Charter – March 2011 – DONE
- CH-2 Stable working draft of Cloud Imaging Charter – March 2011 - DONE
- CH-3 PWG Approval via Formal Vote of Cloud Imaging Charter – June 2011 – DONE
- CH-4 Update Charter and submit for PWG Steering Committee Approval – January 2012 – DONE
- CH-5 Update Charter and submit for PWG Steering Committee Approval – March 2012 – DONE
- CH-6 Update Charter and submit for PWG Steering Committee Approval – April 2012 – DONE
- CH-7 Update Charter and submit for PWG Steering Committee Approval – October 2012 – DONE

Definition Stage:

- CLOUDMODEL-1 Initial working draft of Cloud Print Requirements and Model (CLOUDMODEL)– Q2 2012 – DONE
- CLOUDMODEL-2 PWG Last Call of Cloud Print Requirements and Model (CLOUDMODEL) – Q2 -2013 (Note that PWG Last Call requires previous notice of prototype of the model binding done by either the IPP or Semantic Model WG; meeting the date objective is beyond control of the Cloud WG.)
- CLOUDMFD-1 Initial working draft of Cloud Multifunction Requirements and Model (CLOUDMFD) – Q2 2013
- CLOUDMFD-2 PWG Last Call of Cloud Multifunction Requirements and Model (CLOUDMFD) – Q3 2013 (Note that PWG Last Call requires previous notice of prototype of the model binding done by either the IPP or Semantic Model WG; meeting the date objective is beyond control of the Cloud WG.)