Cloud Imaging WG Face-to-Face Minutes  
April 27, 2012

Meeting was called to order at approximately 9:00am local April 27, 2012.

Attendees

Danny Brennan (GTS)  
Russell Brudnicki (Kyocera)  
Nancy Chen (Oki Data)  
Daniel Dressler (OpenPrinting - call-in)  
Haisong Gu (Konica Minolta)  
Justin Hutchings (Microsoft - call in)  
Till Kamppeter (Canonical/OpenPrinting)  
Shane Lin (Monotype)  
Ira McDonald (High North/Samsung)  
Peter Mikalac (Shinesoft)  
Joe Murdock (Sharp)  
Naruhiko Ogasawara (Independent)  
Glen Petrie (Epson)  
Michael Sweet (Apple)  
Anil Thakkar (Thinxstream)  
Jerry Thrasher (Lexmark)  
Randy Turner (Amalfi)  
Paul Tykodi (TCS - call-in)  
Larry Upthegrove (End-user)  
Bill Wagner (TIC)  
Jay Wang (Toshiba)  
Tim Waugh (Red Hat - call-in)  
David Williams (Ricoh)  
Rick Yardumian (Canon)  
Peter Zehler (Xerox)

Agenda Items

1. IP Policy and Minute Taker  
   a. Policy accepted with Mike taking the minutes
2. Slides  
3. Cloud Model and Requirements  
   b. Section 2.1  
      - Update to current template  
   c. Section 2.2  
      - Title: Printing and Cloud Terminology  
        - Add introduction statement (source of terms, etc.)  
        - Put in alphabetical order  
        - Many terms have IPP-isms, try to use Semantic Model definitions where possible  
          - Client  
          - Device  
      - Line 162 (Cloud Print Provider): Change "Cloud Printer Manager" to "Cloud Print Manager"
- Registration: "Process by which a Cloud Print Manager ..." (drop client, fix manager)
- Additional objects/terms to define:
  - Visible Device; A Cloud Print Service that can be directly accessed by a Client.
  - Visible/Visibility; Refers to the ability of a Client to communicate directly with a Cloud Print Service, for example a Client is able to query for supported attributes, submit imaging job creation requests, and so forth.
  - Provide example of IP-based network connectivity

d. Section 3.1:
- Title: Rationale for Cloud Print Model and Requirements

e. Section 3.2:
- Add subsection titled "Common Preconditions"
- Use numbered list of common preconditions

f. Section 3.2.x:
- Switch to casual use case form (goals and preconditions in a lead-in paragraph)
- Accessible->Visible
- Action: Mike to provide updated use cases text for Cloud Print Model
- Action: Joe to update definition of visible/visibility to cover AAA

g. Section 3.3:
- "The following are out-of-scope for the Cloud Print Model and Requirements:" number list (drop OOS-N prefixes)
- OOS-3: Add "(extensions to existing protocols are still in scope)"
- Multifunction is out-of-scope but not precluding multifunction/designing with multifunction in mind

h. Section 3.4:
- Introduction text and list
- Action: Mike to provide updated design requirements for Cloud Print Model

i. Cloud Diagram
- First implementation: drop printer, add building/van/whatever outside cloud to indicate usage
- Show two clients on left ("...") between them)
- Show lines extending through firewall to Cloud Print Services (paired)
- Use standard terminology:
  - User-client -> Client
  - Print manager -> Cloud Print Manager
  - Service Provider -> Client Print Provider
- Add Cloud Print Service bubble(s) in cloud, link to Cloud Print Manager(s) on right
  - "Cloud Print Service(s)"
- Add "...") between the printers (to indicate it can be more than 2 printers and clean up Cloud Print Manager/printer grouping
- Q: Do we add another example with federated clouds to expose the requirements for federation?
  - A: Yes, copy last example showing two clouds ("...") between them to indicate 2 or more)
- Q: What about Multifunction?
  - A: Starting with Print, doing multifunction services next year
  - Expect multifunction spec to be deltas from print
  - (just like IPP)

j. Section 4.1:
- Add cloud diagrams (one per configuration), list as subsections with titles
k. Section 4.1.x:
   - Make sure all terminology is capitalized, move to 4.2
l. Section 4.1.1 Client:
   - "... responsible for supplying information ..."
m. Section 4.2:
   - Make it clear that a Cloud Print Manager can register multiple Cloud Print Services - N to 1 mapping
   - Target of registration/association is the Cloud Print Provider
   - Registration creates a Registration object with an associated Cloud Print Service in the Cloud Print Provider
   - Association creates an Association object in the Cloud Print Provider
n. Section 4.3 Cloud Print Operations
   - Title: "Cloud Print Transactions"
   - Describe authorization, registration, etc. of Clients and Cloud Print Managers
   - With the Cloud Print Provider, the creation of Cloud Print Services when Cloud Print Managers register, etc.
   - Essentially defining the semantics of the model
o. Move figure 1 functional model diagram to section 4.3
   - Client registration -> association
   - Add Cloud Print Service in cloud
   - Printer -> Printer(s)
   - Use Cloud Diagram as source
   - Break up into multiple figures showing pairwise relationships
4. Cloud Print Spreadsheet
   b. Use existing implementations to describe general issues in the rationale/introduction of the model document
      - Lack of security (email)
      - Lack of status
      - Lack of capabilities/policy
      - Job tickets
      - Firewall compatibility
      - Vendor-specific
      - etc.
   c. Action: Larry to write a one-paragraph introduction covering key points of why we are writing a Cloud Print Model and Requirements
5. Cloud Mapping
   b. No objections to making this document standards-track (instead of best practice)
   c. Line 9: Fix title (missing paren)
   d. Action: Bill to supply initial section 3 rationale text for CLOUDMAP
   e. Q: Should we add IPDS mapping?
      - A: Yes, but not for first version of mapping
   f. Action: Paul to draft a mapping chapter for IPDS/AFP
   g. Action: Ira to update Cloud charter to change title, make CLOUDMAP standards-track, and add a CLOUDMAP2 with IPDS/AFP and DTMF/CIM
   h. Q: Should we provide mapping of job and service states?
      - A: Yes, adding mapping of state model to each chapter where appropriate.
   i. Q: Should we provide mapping for DTMF CIM?
      - A: Probably not, but add informative reference to CIM
   j. Latest CIM release has all print classes finalized (no longer experimental)
k. Q: Do we change title?
   - A: Yes, "Mapping Related Standards to/from PWG PJT (CLOUDMAP)"
I. Q: Do we move MSPS into CLOUDMAP2?
   - A: Let it float - if it is done in time, put it in the first version, otherwise it can be delayed to the second
   - Preference is to have MSPS in the first version since Google is using it

Next Steps / Open Actions

• Next conference call May 21, 2012 at 3pm ET
• Action: Mike to provide updated use cases text for Cloud Print Model
• Action: Mike to provide updated design requirements for Cloud Print Model
• Action: Joe to update definition of visible/visibility to cover AAA
• Action: Larry to write a one-paragraph introduction covering key points of why we are writing a Cloud Print Model and Requirements
• Action: Bill to supply initial section 3 rationale text for CLOUDMAP
• Action: Paul to draft a mapping chapter for IPDS/AFP
• Action: Ira to update Cloud charter to change title, make CLOUDMAP standards-track, and add a CLOUDMAP2 with IPDS/AFP and DMTF CIM
• Action: Continue work on Cloud Printing Requirements and Model (ONGOING)
• Action: All members to work with Larry to fill out Cloud Printing spreadsheet (ONGOING - updating with content from Epson and PrinterOn)
• Action: Continue Mapping of PWG Semantic Model elements into PPD, MSPS, and JDF formats (Best Practices Document)
  - Ira to work with Justin on MSPS mapping (PENDING)
  - Mike to prepare new draft of PPD Mapping whitepaper (ONGOING - pending table updates)
• Action: Mike to provide IPP slide on supply types and their printer-state-reasons (PENDING)
• Action: Ron or Bill to post a call for wider participation of driver developers for the XPS/MSPS stuff (ONGOING - who do contact?)