# Cloud Imaging WG Face-to-Face Minutes
## February 8, 2012

Meeting was called to order at approximately 9:00am PT, February 8, 2012.

## Attendees

Danny Brennen (GTS Services Delivery - call in)
Nancy Chen (Oki Data)
Justin Hutchings (Microsoft - call in)
Ira McDonald (High North/Samsung - call in)
Joe Murdock (Sharp)
Ron Nevo (Samsung)
Glen Petrie (Epson - call in)
Brian Smithson (Ricoh - call in)
Michael Sweet (Apple)
Anil Thakkar (Celstream - call in)
Jerry Thrasher (Lexmark)
Randy Turner (Amalfi)
Paul Tykodi (TCS - call in)
Larry Upthegrove (End User - call in)
Bill Wagner (TIC)
Jay Wang (Toshiba)
Rick Yardumian (Canon)
Pete Zehler (Xerox)

## Agenda Items

1. IP Policy and Minute Taker
   a. Policy accepted with Mike taking the minutes
2. Review of previous minutes:
   a. ftp://ftp.pwg.org/pub/pwg/cloud/minutes/cloud-concall-minutes-20120130.pdf
   c. Approved as posted
3. Review PWG Job Ticket and Printer Associated Capabilities comments
   a. ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-sm20-printjobticket10-20120117.pdf
   b. DocumentPasswordEncryption: No
   c. DocumentPassword lifecycle: to be added to JPS3, as long as the job is retained (with document data) so the job can be resubmitted
   d. DocumentMessage changes: no changes needed
   e. ImpositionTemplate + Z-Fold: Not at this time, needs to be defined in its own spec
   f. InsertSheet -> InsertSheetCol? No, IPP calls it insert-sheet, keep it InsertSheet (xxx-col/XxxCol is only used when xxx/Xxx was already used for a keyword attribute/element)
   g. Why no XxxType: focus on elements, not on types (which are an artifact of XML encoding)
   h. Margin information: stick with how they are defined in JPS3
   i. Should OrientationRequested be required? Yes, printers report their supported values, and existing conflict/unsupported attribute mechanisms allow the printer to tell the client what can't be done, add "None" well-known value
      - Action: Mike to add "none" enum value for orientation-requested in JPS3
      - Action: Pete to add "None" value to OrientationRequested in PJT
   j. MediaInputTrayCheck->MediaSourceCheck? No, but add some descriptive text explaining why we use a mix of input-tray and source (historical Printer MIB naming).
      - Action: Mike to add InputTray/Source history to JPS3
   k. MediaColSupported/Database: Explaining differences and cleaning up MediaCol definition
   l. JobPassword/Supported: Where to put? Move to DocumentGenerationElements renamed as JobCreationElements
   m. PrinterCapabilities: Change to PrintServiceJobCapabilities, add text explaining what it is
   n. Use complex type only when reused: Done
   o. Pete will issue a stable draft with a note about awaiting completion of "JPS3" and "Raster"; will go to formal vote once those specs enter formal vote.
4. Cloud Mobile Print Solutions Spreadsheet

- a. ftp://ftp.pwg.org/pub/pwg/cloud/white/cloud_mobile%20%20print%20solutions.xlsx
- b. AirPrint:
  - Wide-area Bonjour (traditional infrastructure DNS) allows access beyond subnet
  - Not cloud solution
- c. Google Cloud Print:
  - HP demonstrates email gateway/federation through GCP ("Oracle" acting on behalf of the user)
- d. DropBox hot-folder
- e. Looking at VPN-based solutions/configurations with Cloud servers
- f. Summary:
  - Lots of applications using email/ePrint/AirPrint/hot folders to print
  - Also server-side bits are available
  - Might be useful to provide some initial guidance on how to build a cloud print service from existing components/protocols
  - "Bring feeling of safety" to cloud printing?
- g. How is security information conveyed?
  - job/document password are passed as operation (non-sticky) attributes/elements over a secure channel
  - Service/Printer is responsible for security of the job/document
  - OAuth v2 or other authorization frameworks can be used for fine-grained access control, authorization, federation, usage, retention, etc.

5. MS Print Schema Specification
   - a. Document Types: PrintCapabilities and PrintTicket
   - b. PrintTicket is basically a subset of PrintCapabilities
     - Pick supported values from PrintCapabilities to use in PrintTicket
   - c. Both should map fairly cleanly to PJT
   - d. Constraints are handled by iteration with coloring of PrintCapabilities by the PrintTicket
     - Client requests PrintCapabilities with PrintTicket
     - Returned capabilities only show allowed values
   - e. PrintCapabilities describes parameters for things like job-password (PIN) and custom media sizes
     - Integer/alphanumeric
     - Number of digits
     - Range of allowed values
   - f. Property = groups of values - dimensions of media, etc.
   - g. Some color stuff won't map

6. Next steps
   - a. Larry is generating a skeleton document for the Cloud Imaging Model and Requirements
   - b. Editors for Model:
     - Larry (overall/skeleton)
     - Ira (operations)
     - Randy (location, authorization, registration)
     - Pete (schema)
     - Ron (general contributions)
   - c. Editors for IPP Binding: "IPP Shared Infrastructure Extensions (IPPSIX)"
     - Ira (primary)
     - Mike (backup)
     - Action: Mike to add "IPP Shared Infrastructure Extensions (IPPSIX)" to IPP Everywhere charter (phase 2)
     - Action: Ira to tweakerize cloud charter for bindings in corresponding WGs
     - Action: Pete to align SM with proposed IPPSIX operations
     - Equivalent additions will be added to SM 2.0 document
   - d. Primary changes to SM for Cloud:
     - Cloud to Printer
     - Registration
     - Security model
   - e. ftp://ftp.pwg.org/pub/pwg/ipp/slides/ipp-cloud-new-operations-20101022.pdf
   - f. Fetch-Jobs/Reply-To-Jobs/Fetch-Documents/Reply-To-Documents -> singular

## Next Steps / Open Actions

- Next conference call February 20, 2012 at 1pm Eastern Time
- Finish mapping document
- All members to work with Larry to fill out Cloud Printing spreadsheet (ONGOING - sending out a call for specific items)
- 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)
- Action: Ira to tweakerize cloud charter for bindings in corresponding WGs
- Action: Mike to add "none" enum value for orientation-requested in JPS3
- Action: Mike to add InputTray/Source history to JPS3
- Action: Mike to add "IPP Shared Infrastructure Extensions (IPPSIX)" to IPP Everywhere charter (phase 2)
- Action: Pete to add "None" value to OrientationRequested in PJT
- Action: Pete to align SM with proposed IPPSIX operations
- Action: Mike to add more examples to IPPTOOL.txt for January 2012 release of ipptool (DONE)
- Action: Justin to work with Microsoft Legal on the appropriate citation/reference to MSPS based on the new license for inclusion with the MSPS content in the mapping document, and any process for the PWG to make a formal request (ONGOING - working on wording)
- Action: Ron or Bill to post a call for wider participation of driver developers for the XPS/MSPS stuff (ONGOING - now unstuck)
- Action: Mike to prepare new draft of PPD Mapping whitepaper (ONGOING - pending table updates)