Cloud Imaging WG Conference Call Minutes
July 18, 2011

Meeting was called to order at approximately 1:00pm (EST) July 18, 2011.

Attendees

Nancy Chen (Oki Data)
Justin Hutchings (Microsoft)
Tim McCann (Konica Minolta)
Ira McDonald (High North/Samsung)
Ron Nevo (Samsung)
Glen Petrie (Epson)
Amir Shahindoust (Toshiba)
Michael Sweet (Apple)
Pul Tykodi (TCS)
Larry Upthegrove (end user)
Bill Wagner (TIC)
Rick Yardumian (Canon)

Agenda Items

1. IP Policy and Minute Taker
    a. Policy accepted with Mike taking the minutes
2. Review Cloud minutes from last meeting
    a. ftp://ftp.pwg.org/pub/pwg/cloud/minutes/cloud-concall-minutes-20110620.pdf
    b. Minutes approved as posted.
3. Job Tickets for Cloud Services
    a. OpenXPS does not include a schema for job tickets or printer descriptions.
        - MS XPS 1.0 does
        - Presumably a PWG schema could be used with OpenXPS
        - Action: Justin to look into XPS schema licensing/issues
    b. Look to see whether the XPS or PPD formats can be used/gateway to the PWG SM/job ticket
        - CUPS has supported PWG->PPD mapping for years, some options are hard to map
        - Might be useful to produce a best-practices document for mapping PPD and XPS to/from PWG
        - PPD mapping will be small - little standardization beyond what is defined in PPD 4.3 spec (1989)
        - Many of the PWG job ticket elements are not applicable to current cloud printing?
            - Provide guidance on required/suitable subset
            - Correlate with Bluetooth BPP?
        - Also late binding of things like copies, N-up?
            - Maybe have a "job ticket applied" section in the job ticket so that subsequent job processors know what properties have been applied?
            - "Status monitoring of transforms"
            - Do we create a new job ticket, modify the existing job ticket, or just annotate the job ticket to indicate which properties have been applied?
            - Job receipt is a place that can contain the annotations for what is applied
        - Also order of transforms may be an issue
            - Say landscape + crop - need to apply transforms in the correct order
            - Group transforms if there are dependencies - thus you may not be able to pre-apply transforms
    c. Some possibilities:
        - Use PWG job ticket schema
        - Develop best practices document(s) for mapping PWG to/from PPD and XPS print tickets
        - Also JDF (JTAPI project in Open Printing, but spec is 7 years out of date...)
    d. Single best practices spec "PWG Mapping of PWG Print Service and Job Elements to PPD and XPS":
        - Tables for mapping PWG job ticket and print service elements to XPS and PPD
            - Maybe address PWG->JDF mapping in best practices document?

- Numbered paragraphs providing details of the mapping
- Bonus: gives us the recommended set of PWG SM elements for Cloud
- Editors: Ron (keeper of the document), Mike (provide PPD), Justin (provide XPS), Ira, maybe Pete (confirm)
- Action: Mike to post PPD to PWG mapping table to cloud list
- Action: Justin to post URL for XPS schema to cloud list

5. Job Ticket Persistence
    a. Make sure that we cover the model for serializing job ticket with/along side document?
    b. Also address embedding of job ticket info in low-level formats (e.g. PWG Raster)
    c. Issue: How to bind job ticket to document data?
    d. Issue: How to support "dumb" ports/interfaces consistently?
    e. CIP4/JMF solution: ZIP file with a MIME media type used to bind job ticket and document data
    f. Include ZIP/OPC (ISO standard for XML + ZIP) discussion in best practices document
        - How to bind job ticket, job ticket receipt, and document data together
        - Action: Justin to post URL for OPC spec to cloud list

6. Use Case Discussion
    a. Mobile Device User Prints to a WAN Printer with security
        - Variation of "follow me" print with job recipient different from originator?
        - Or just anyone with the PIN code?
            - Could be, or maybe recipient authenticates on the printer and then provides PIN
        - Hotel printing related, but different security requirements
        - 2-factor authentication with recipient and PIN
        - In cloud case, printer has to authenticate on behalf of the user in order to fetch the job using the PIN
        - Two use cases:
            - Direct WAN/VPN print with authenticated recipient and PIN
            - Cloud print auth authenticated recipient and PIN
        - Add "document is protected" requirement without specifics
    b. Mobile Device User Prints on local LAN
        - Guest wireless printing use case
        - Drop User is authorized on the LAN - we'll pick this up as the top-level pre-condition Printer is Visible to the Client.
        - Precondition: Client and Printer support common protocol
        - Selection: discovery or name/address by being told the information by the front desk
            - Printer may be pre-configured on the Client from prior visit, so selection with last used device may also apply
        - Primarily direct print case
            - Hosted web application to submit file for printing?
            - This isn't for cloud - Student homework printing use case covers that
        - What about drivers?
            - Presumably you could download them over the wireless LAN based on the discovered info
            - Also IPP Everywhere won't need a special driver...

Next Steps / Open Actions

- Review new common use cases at F2F
- Review F2F slides at IPP telecon next week
- Next IPP conference call July 25, 2011 at 1:00pm (EST) to cover slides for both
- Next Cloud conference call August 15, 2011 at 1:00pm (EST)
- Action: Justin to look into XPS schema licensing/issues
- Action: Justin to post URL for XPS schema to cloud list (DONE)
- Action: Justin to post URL for OPC spec to cloud list (DONE)
- Action: Mike to post PPD to PWG mapping table to cloud list
- Action: Ron to post F2F slides prior to next week's IPP telecon
- Action: Mike to post corrected version to pwg-announce and web site (DONE)
- Action: Larry Upthegrove to provide set of Scenarios representing characteristic user situations (DONE)
- Action: Mike to maintain a word document containing all use cases - post as PWG best practices (ONGOING)