

PWG MFD Working Group Face-to-Face Meeting Minutes

At Sharp, Camas, WA

April 6-7, 2010

Tuesday, April 6

1. Attendees:

Nancy Chen,	Oki Data
Ira McDonald*,	High North (representing Samsung)
Joe Murdock,	Sharp Lab America
Glen Petrie*,	Epson
Ole Skov,	MPITech
Mike Sweet,	Apple
Jerry Thrasher*,	Lexmark
Bill Wagner,	TIC
Rick Yardumian,	Canon
Peter Zehler,	Xerox

(*Phone-in attendee)

2. **Minutes Taker:** Nancy Chen

3. PWG IP Policy:

The working group Chair Peter Zehler announced that this meeting is held in accordance with PWG IP policy. No objection.

4. Agenda:

Tuesday

9:00-9:15 : Introductions, Assign Minute Taker(s)

9:15-12:00 Detailed review of Overall MFD specification

[<ftp://ftp.pwg.org/pub/pwg/mfd/white/ServiceOperations-20100330.pdf>](ftp://ftp.pwg.org/pub/pwg/mfd/white/ServiceOperations-20100330.pdf)

[<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdoverallmod10-20100203.pdf>](ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdoverallmod10-20100203.pdf)

Wednesday

10:00-11:00 : Continue review of Overall MFD specification

11:00-11:45 : High Level Discussion of FaxIn Service

11:45-12:00: Next Steps

5. MFD Overall Model and Semantics – Service Operations:

<ftp://ftp.pwg.org/pub/pwg/mfd/white/ServiceOperations-20100330.pdf>

- This document is an extraction of the sections on service operations in the Overall document with changes from Feb. face-to-face meeting.
- Table 1 is a new table that consists of service operations common to more than one service, most derived from IPP operations (antecedents).
- Add<service>HardcopyDocument: the antecedent is SendUri (from RFC 2911), similar to SendUri but not the same.
- Get<service>JobElement, Get<service>JobHistory and Get<service>Jobs are all user operations, but user only get the information he/she is authorized to, determined by the site policy. In IPP the return has the number of intervening jobs which express the list of jobs that has been left out. This list is not in the returned summary of JobHistory or Job Summary. CUPS is now adding job object security, a new government requirement; normal users only get obscured job information returned, some sort of job abstract ID and state, not the real job identification, owner name, or other attributes of the job, but can be configured for people who needs to see them – adding multi-level security.
- We discussed whether a service operation listed in Overall document is “Required” or “Optional” should be indicated in the Overall spec. Since Overall document is a reference document for all individual service specifications, there should be indication for “Required” or “Optional” for common operations for individual service document to follow. However it’s the job of individual service document to specify whether each operation is required or optional. In fact, the Overall specification is the extraction of common semantics from the individual service specifications, therefore without the completion of the individual service specifications, the Overall spec cannot complete. The discussion turned into a discussion of whether the Overall document is dependent on the individual service specification or vice versa. This mutual dependency could eventually cause that all MFD specs must wait for each other to become ready for PWG Last Call and the final vote at the same time, except for EmailIn, EmailOut, and Transform services. Nobody can review all specs for Last Call and final vote all at once. The final consensus is that we should complete the FaxIn Service spec and maybe FaxOut Service spec to the degree that the first version of common semantics for all services can be captured in the Overall spec. Then the initial version of Overall spec should be pushed to Last Call and final vote before any individual spec is Last Called and voted. We then proceed with the next phases of other service specs. The Overall spec may further need revisions in the following phases. It was further observed that MFD service common semantics are derived from IPP JPS2 spec, thus the Overall spec cannot be Last Called and voted until JPS2 spec has been voted and approved.
- Table 2:
 - All Get and Set operations that include localized string data, the request and response including messages must include NaturalLanguageElement.
 - AI: Pete will make the change throughout the XML Schema.
 - Cancel<service>Job : In IPP, you are allowed to pass in a message to the operator (in production printing semantics). In MFD schema no operation has any kind of message other than in JobTicket.

- Pete will go through Schema and make sure the operations allow for passing in a message in consistent with IPP spec.
 - Get<service>Document – the return is a list of document summaries. RequestedElement shouldn't be included in the request, only include the JobID. All Get Job and Document operations return summary information only.
 - GetActive<service>Jobs & Get<service>JobHistory – limited optional.
 - Set<service>Doc/JobElement – the format of RequestedElemnt is a sparsely populated doc/job ticket, if not, we will need Xpath for the name/value pair of all elements passed in.
- The various event definitions and notifications for a MFD so far has not been specified in any of the MFD specifications. Though IPP has specified the standard semantics for event notifications. The group consider this as non-critical, because it's not required for any prototyping or implementation of the specs; a polling mechanism can be used instead. This can be specified later after all core semantics and interface specifications are complete.
- Description of basic operations –
 - Cancel Jobs– MS implemented “edge” condition states which we handle with state reasons for major states, consistent with IPP.
 - CancelMy<service>Jobs –
 - Cancel a completed job is an error.
 - If the service cannot cancel all the requested jobs successfully, it must return an error unless the jobs that cannot be canceled are already in a terminated state. The service should return a warning for the jobs reached a terminated state, not an error. Then only administrator has the privilege to cancel the jobs that are already in a terminated state. (Need to see the consensus from IPP JPS2 semantics).
 - Mike S. will take the changes discussed above to IPP JPS2 spec review.
[Note: In April 7 IPP session, the changes here are also agreed by the IPP working group to be added in IPP JPS2 spec.]
 - Get<sevice>DocumentElement – This operation can ask for the top level document elements only. Change the sentence “The Service MUST NOT return any Job level elements that the Document object inherits and MUST NOT factor out common Document object elements and return them as Job object elements.” to mean if a user set document processing instructions at the Job level, and asks for document elements within the Job, the service does not return document processing information at the job level, must return document level elements.
 - Get<service>Documents – Returns document summaries. Request includes a job and document ID. Similar to Get<service>JobHistory and GetActive<service>Job.
 - Get<service> JobHistory – should include the discussion of whether to allow applying the site security policy to obscure/limit the returned information (e.g. job name, job originating user, ..., etc.)
 - GetActiveServiceJob – same comment as JobHistory.

- ReleaseServiceJob – A job could be held several times for multiple purposes, the last Hold overwrites the job hold condition. The release job removes job hold condition immediately.
- HoldJob operation – “holduntil” and “holduntiltime” There is a state reason for each type of holduntil. The last request replace all the previous ones. But there is no replacement across different operations. Can use site policy to prevent user to replace admin’s setting, or holdunitl across operations.
- Resubmit<service>Job – Add: Only job owner or admin can resubmit the jobs.
- Resume<service>job – add (rfc3998): this operation restricts only owner/operator/admin can resume the job through authentication.
- SendDocument – if URI scheme is not supported, reject. Report Error – “not supported URI”.
- SetServiceDocumentElement –
 - Set an element with NO Value has the same effect as IPP out-of-band DeleteElement.

Wednesday, April 7

1. Attendees:

Nancy Chen,	Oki Data
Ira McDonald*,	High North (representing Samsung)
Joe Murdock,	Sharp Lab America
Glen Petrie*,	Epson
Ole Skov,	MPITech
Mike Sweet,	Apple
Jerry Thrasher*,	Lexmark
Bill Wagner,	TIC
Rick Yardumian,	Canon
Peter Zehler,	Xerox
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2. Minutes Taker: Nancy Chen

3. PWG IP Policy: The working group Chair Peter Zehler announced that this meeting is held in accordance with PWG IP policy. No objection

4. Agenda:

- Continued Review of MFD Overall document
- Status of Copy Service, FaxOut Service & System Service
- High Level Discussion of FaxIn Service
- Next Steps

5. Continued Review of MFD Overall Model and Semantics – Service Operations:

- Set<service>JobElement – out-of-band delete will be handled the same as Set<service>DocumentElement. Has to be a job owner or admin operation => statement move to the front.
- SuspendCurrent<service>Job – stops output of the job. Optional JobId to avoid race condition. Can only suspend a processing job.
- Having access rights means need to be owner/administrator.

Admin Service Operations:

- Table 8 – Pete will send Bill about user/admin operation
 - Pete will make sure Schema is consistent with the table
 - Hold/Release operation: In schema, response is only success/failure, no JobId returned.
 - Notes for ElementNaturalLanguesRequested in user operation applies here too.
- Cancel<service>Jobs – It's not clear that the operation returns JobId only if JobId was supplied in request; otherwise it only returns job status.
 - Should make a note that any job that reached terminating state should not cause failure for this operation. [Note: This change was proposed to IPP JPS2 and agreed by the consensus from IPP WG.]
 - Should fix "failure" to "success" in table for completed, aborted, canceled jobs.
- HoldNew<service>Job
 - This is the same as Job Run-out in production printing for manual maintenance. This operation holds all new jobs but still allow jobs be submitted and queued.
- Pause<service> - stops output
- Pause<service>AfterCurrentJob – rfc3938. Change "job" to "jobs". Add: all jobs are allowed to be processed before the service is paused. Table 11: change "Note" to once a job reached terminating state....
- Promote<service>Job – Add optional JobId, and optional predecessor JobId.
- ReleaseNew<service>Jobs – This operation has no way to tell whether a job is held because explicitly being held, or because the job is implicitly held due to lack of resource...etc.
 - Add a Boolean attribute – After Hold<service>NewJob, ServiceIsHoldingANewJob is true, and any incoming job will have a job state reason: "JobHeldByService".
 - In ReleaseNew<service>Jobs – remove JobHeldByService job state reason, and change IsHoldingANewJob to false on the service.
 - ReleaseJobs will not affect HoldNewJob, only affect HoldJob.
- Restart<service>Service – this is warm boot of a service, which can be queried again.
- Resume<service>Service – counters Pause<service>Service.
- Set<service>ServiceElements – same comments in SetDocumentElement, supplying a no-value element will delete the element.
- Shutdown<service>Service – In IPP, no job should be lost if shutdown or power cycle, all jobs must be preserved. No query of service works.

- Startup<service>Service – should be a system service=> remove, not a MFD service. This operation requires mandatory ServiceType and optional ServiceId.
- Delete<service>Service – a system service.

6. High Level Discussion of FaxIn Service

- FaxIn service is defined the same as FaxOut service.
- Bad requests will be logged in a durable log.
- There will be attribute FaxInJobTicketAndCapabilitiesAvailable – based on sending phone number, receiving phone number, T-33 subaddress, ISDN subaddress, date/time, OCR(?), ..., etc. to restrict incoming fax.

7. Status of Copy Service, FaxOut Service, and System Service

- Copy Service can't start PWG Last Call until MFD Overall document is voted and approved.
- FaxOut needs a little update.
- Complete FaxIn Service to full spec before Overall document's Last Call.
- System Service spec will proceed in parallel with FaxIn Service spec.
- Bill will have MFD Requirement document ready for the next MFD concall.

8. Next Steps

- Teleconference in two week – April 22, Thursday, 3pm EDT.
- Bill to update MFD requirement doc and Overall doc in two weeks
- Pete to update 2 tables in Bill's document.
- Ira to provide FaxIn Service draft spec.