**PWG MFD Working Group Face-to-Face Meeting Minutes**

**At Xerox, Webster, NY**

**June 9, 2010**

1. **Attendees:**

Nancy Chen, Oki Data

Ira McDonald\*, High North (representing Samsung)

Joe Murdock, Sharp Lab America

Glen Petrie\*, Epson

Mike Sweet, Apple

Jerry Thrasher, Lexmark

Bill Wagner, TIC

Rick Yardumian, Canon

Peter Zehler, Xerox

\*Phone-in attendee

1. **Minutes Taker:** Nancy Chen
2. **PWG IP Policy:**

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

1. **Agenda:**

**Morning -**

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

9:15-10:15 : Prototype results for Copy and FaxOut Services

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdcopymodel10-20100601.pdf> <ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxoutmodel10-20100601.pdf>

10:15-11:15: Last Call discussion MFD Requirements

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdreq10-20100601.pdf>

11:15-12:00: Review System Service specification

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemservicemodel10-20100601.pdf>

Review of Services Operations & Health attribute schema

**Afternoon –**

1:30-2:30 : Continue review of System Service Specification

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdsystemservicemodel10-20100601.pdf>

2:30-4:45 : Review FaxIn Service specification

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdfaxinmodel10-20100607.pdf>

4:45-5:00 : Next Steps

1. **Copy Service Review**
   1. **Stable Draft Review**

* Terminology – removed some residual terms such as Document Ticket, since there is no document internal to Copy service.
  + Agreed that Digital Document should be removed, unless it’s referred to as out of scope. The word “Document” should be in lower case throughout the spec.
* Operations Table – fixed Input and output parameters.
  + Agreed that all ElementNaturalLanguage should be changed to ElementsNaturalLanguage
* Agreed that Hold/ReleaseCopyJob are user operations.
  + Pete will make sure that all operations are in proper class (user, admin), be consistent with the MFD Overall spec.
* Agreed to change Page 1, line 2: the file name for copy spec “…Copymod…” to “…copymodel…” (lower case C).
  + Pete will make sure the correct file name is used here for the Stable version.
* Pete will make sure all external references are included and correct.
  1. **Prototype** **Results**

Pete reported the results from the prototyping effort in Xerox. The Xerox prototyping group was trying to put all processing instructions of a job ticket in a single sequence and used PWG CopyService’s job ticket model with separated input side and output side. Found no issue with the internal representation of the copy job itself. The prototype effort covered user interfaces for Copy Service: mainly CreateCopyJob, CopyJobTicket.

Pete will send out email for prototype results report (for both Copy and FaxOut services, including the scope of model and operations prototyped).

1. **FaxOut** **Service Review**

* Agreed to Pete reported changes made to the Stable version:
* Updated FaxOutServiceCapabilities for being aligned with the current schema.
* JobProcessing element originally had just DestinationURI. But there is an issue with the IETF rfc3966 compliant DestinationURI. IETF Rfc3966 superseded rfc2806 and dropped fax dialing string and also fax URI scheme; IETF wants URI scheme to represent a resource, not how to actually reach the resource. We want to specify the dialing method to the receiving fax device URI. Hence added annotations and PreDial- and PostDial-String and T33Subaddress to the DestinationURI.
* Element name in schema is the same as type so to keep away from one of the bug/conflict.
* There was no problem with using (PreDialString)DestinationURI(PostDialString) syntax in prototyping effort.
* Agreed to add example for DialString syntax in DestinationURI section of the spec.
* Agreed to fix some inconsistent capitalization of D and S in “DialString”
* Agreed to fix Line 599 – “sting” to “string”
* Agreed to add PreDialString, PostDialString, and T33Subaddress in Terminology.
* Agreed to reword the last paragraph of section 7.3.3.1.
* Agreed to align all user/admin operations with Overall Doc (put them in the right class).
* Agreed to changes in Table 1, and remove the Media example from line 416 in section 6.3, and remove the “Media” from the spec globally.

1. **Service Operations Document for MFD Overall Model and Semantics**

<ftp://ftp.pwg.org/pub/pwg/mfd/white/ServiceOperations-20100517-rev.pdf>

* Agreed to changes in Table 1 – MFD Common Operations and Antecedents
* Agreed to changes in Table 2 – Basic MFD Interface Request and Response and Notes

**Basic Operations -**

* Agreed to changes in Section 1.1.1
* Agreed to change “Retained Document” to “Retained Job” in section 1.1.1.16.
* Agreed to remove “3. The Service does not support the specified URI Scheme, or

4.The Job is not found. “ in section 1.1.1.18 Send<service>Document.

* Agreed to add “If a document size, format, or compression is not supported” as one of the reason to reject a Send<service>Document request in section 1.1.1.18.
* Agreed to also add “If a document size, format, or compression is not supported” as one of the reason to reject a Send<service>URI request in section 1.1.1.19.

**Administrative Operations**

* Agreed to replace the text of Cancel<service>Job & CancelMy<service>Job with the new text from IPP JPS2 spec.
* Agreed that in Table X – “**Legal Transitions Effected by Cancel<service>Jobs Operation “,** all “Failure” should be changed to “Success”. The only time this operation fails is when you don’t have appropriate permission/privilege.
* Agreed that in Table10 – In IPP the mandatory HoldNewJobs is a state reason, not first class attribute. JPS2 does so too. Remove the "<service>Status" element "IsHoldingNewJobs" and make sure a "<service>StateReason" value of ' HoldNewJobs' exists in the Schema. The text description for HoldNew<service>Jobs operation should be corrected accordingly.
* Agreed that in the MFD Overall document, there should be description about Job State Reasons, Service State Reasons and they are extensible; they work in tandem with Job State and Service State to represent the state of a job or service. MFP Job State Reasons is a super set of IPP’s. Fault code should not be included, which is tool-dependent in WSDL binding.

1. **MFD Requirements Document Review**

* Agreed with the added Terminology section – a subset from Overall.
* Agreed that Section 1 – Table of Content should be regenerated
* Agreed to remove the Objective section (Section 4)
* Agreed to delete the Antecedents in Table 2 – only list operation names and reference rfc2911 only.
* Bill will update the document and post the Stable version to call for PWG-wide Last Call tomorrow (June 10).

1. **SystemService Initial Draft Review**

* Agreed that Line 16 – change “extends” to “will extend”. PWG Semantic Model Version 2 does not exist yet.
* Agreed that in XML Schema, replace “MFDService”with “SystemService”
* Agreed to add the distinction between System Object and System Service, in section System Model Overview.
* Agreed to clarify that there is no reason to bind this model to XML in section 4.3.
* Agreed to leave conformance terminologies out, leaves them in Overall document and put in correct reference to Overall document only.
* Agreed to add to Rationale: for design requirement, use cases, etc., see MFD Requirements.
* Agreed to remove #3 in section 4.2. Out of scope.
* Agreed to change the document title to “System Object and Service Model and Semantics”
* Agreed to the Schema: System object should keep Services, SystemCapabilities, SystemConfiguration, SystemDescription, and SystemStatus, but SystemService (was MFDService) should inherit from Imaging Service base type, but remove SystemServiceCapabilities, SystemServiceCapabilitiesReady, and DefaultSystemJobTicket (because SystemService does NOT create Jobs).
* System object at System level has SystemCapabilities that provides allowed values for system operations. Currently we have power management capabilities only.
* Agreed to separate System object and system service capabilities. Do the same for all others – SystemDescription, SystemStatus, …etc.
* Agreed to add ListServices operation – this gets endpoint URI, service status, service type for SystemService and every other service hosted on the system.
* **Issue regarding the ConditionTable**: There is a ConditionTable under the root (i.e. System.SystemStatus.ConditionTable) and under the SystemService (i.e., System.Services.SystemService.SystemServiceStatus.ConditionTable). It is not clear to Pete if the SystemService ConditionTable is a service specific view or if it is system wide. If it is service specific we need a way for an operation(s) to differentiate. If it is system wide, the ConditionTable under SystemService is redundant. Perhaps the ConditionTable should be factored out of the base class and added to every service except SystemService. Then SystemService will present a view of the system wide ConditionTable.
* Agreed that the Restart operation provides two parameters to specify whether the service is disabled, and /or paused. The default is what’s previously documented,. i.e. IsAcceptingJob and Disabled are true.
* Agreed that for Startup – IsacceptingJob default to false (disabled) after the system comes up as Idle. The operation provides parameter IsacceptingJob for optionally being set to true so that the service is disabled ater system is started up. This can allow reconfiguration before accepting jobs.
* Agreed to the change of each entry of XriSupported to include XriUri, XriAuthentication, XriSecurity.
* Agreed that SystemDescription (for System object)
* Delete XriSupported and VersionsSupported (The Services element contains the details of the service instances including their XriSupported.)
* AvailableResource contains resources available to the system
* RepertoirSupported is a subset of character set, should be deleted
* ServicesSupported and XriSupported should be combined so that multiple URL’s per service can be enumerated and URLs can be bound to service types
* Comment: Table 1 – RequestedElements: could be different for difference service instances even for the same type of service.

1. **FaxIn Service Review**

* Agreed to remove “Document” completely from the spec. There is only user data.
* FaxIn does not have a Document. Only its data may need to be sent to a repository.
* FaxIn data comes in, a FaxIn Document object (only one) is created. The disposal of the document data is configurable.
* Agreed to delete the out of scope item #1 from Rationale section.
* Agreed to remove “Enterprise” and “Network connected” from all spec (FaxOut and FaxIn).
* Comment: a FaxIn Service can have different queues (for network FaxIn, telephone FaxIn), or a MFD may have multiple FaxIn Service instances, each has a different type of queue.
* FaxInJobTicketAvailable is a sequence of choice of either a FaxInmatrices or a FaxInJobticket which is now a sequence of FaxInJobTicketEntry, which is a mandatory faxInMatrix for a job ticket to apply to an incoming job.
* In FaxInMatrices,
* Agreed to change DateTime to TimePeriod (working hour, evening hour, weekend, …, etc.)
* There can be multiple matrices (a sequence) for binding a job ticket to a particular job.
* Agreed to delete OCR for now: for vendor extension. Currently it’s not clear how to specify this for filtering incoming fax job for OCR (barcode, cuecode, special text string, … for routing information).
* Agreed to add Color (binary, grayscale, or color), for whether you want to print in color in DocumentProcessing element.
* Agreed to keep Job level and document level DocumentProcessing element. But there is only one Document object.
* DefaultFaxInJobTicket is used when job is created – MUST be supplied. In other service this is optional. FaxInJobTicketReady is the one has matched with FaxInMatrices.
* Agreed: Update all Scan and other service spec to mandate DefaultJobTicket. But it does not have to be populated (an empty container), an administrator can set the contents.
* Agreed: In ImageingJobDescriptionType, Make JobOriginatingUserName, JobName mandatory
* Agreed In ImagingJobStatustype , change JobStateReasons from optional to Mandatory and could have None or infinite number of entries. Change DateTimeAtCreation to Mandatory in accord with IPP. Also change DateAtTimeCompleted and DateTimeAtProcessing to mandatory and if it’s empty, the state has never reached. Move Ticks and Uptime elements to Print service mandatory only, optional for other services.
* An attribute that can be naturalized, must include ElementsNatualLanguage. Pete and Ira to correct FaxOut, FaxIn, Copy, System specs for the above changes accordingly.
* Pete to change FaxIn Service Schema – Make sure there is only 0-1 Document.
* Update FaxInJobTicketAvailable with Pete’s updated ticket Schema.
* Agreed to move FaxInDefaultJobTicket to top service element level. Move FaxInJobTicketAvailable to top level too, and rename to “AvailableFaxInJobTicket”.
* Agreed that In Table 2, remove all Multiplexxx… elements, and DefaultFaxModem (need for FaxOut only), must accommodate both e-fax (mailto:) and PSTN fax (tel:).
* Agreed that In FaxInJobStatus – need incoming efax channel ID and modem ID over which an incoming fax is receive and distinguish whether efax channel vs. PSTN fax modem is used.
* Agreed that In FaxOut, Currently there is nothing represents different fax types other than URI – leave it that way.
* Agreed that change StateReasons of ImagingServiceStatusType to Mandatory to be consistent with previous discussion.
* Agreed that Schema change ServiceName, OperationsSupported, ServiceVersion to mandatory in FaxInServiceDescriptionType.
* Agreed that in FaxIn Job Model, JobHistory is mandatory. Add these in Schema for both FaxIn and FaxOut services, unlike for other services, it’s optional.
* FaxInJobStatus – added Job Channel for receiving fax job ( something like originating URI and subunit ID), TimeAtxxx should be removed, JobStateReasons should be mandatory.
* Agreed that FaxInJob counters does not distinguish the counts for different faxIn type (channel vs. modem) – can use different FaxIn Service to count different faxin type jobs.

1. **Next Steps**

* Bill Wagner will update the Requirement document, and start PWG last call tomorrow.
* Pete will update FaxOut and Copy Services with schema changes for working group last call.
* Next teleconference in 3 weeks – July 1, 2010, 3pm EDT.