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

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:**

   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

5. **Copy Service Review**
   5.1. Stable Draft Review
   - Terminology – removed some residual terms such as Document Ticket, since there is no document internal to Copy service.
     o 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.

48	• Operations Table – fixed Input and output parameters.
49	o Agreed that all ElementNaturalLanguage should be changed to
50	ElementsNaturalLanguage
51	• Agreed that Hold/ReleaseCopyJob are user operations.
52	o Pete will make sure that all operations are in proper class (user, admin), be
53	consistent with the MFD Overall spec.
54	• Agreed to change Page 1, line 2: the file name for copy spec "…Copymod…" to
55	"…copymodel…" (lower case C).
56	o Pete will make sure the correct file name is used here for the Stable version.
57	• Pete will make sure all external references are included and correct.
58	

5.2. Prototype Results

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

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

6. FaxOut Service Review

70	• Agreed to Pete reported changes made to the Stable version:
71	• Updated FaxOutServiceCapabilities for being aligned with the current schema.
72	• JobProcessing element originally had just DestinationURI. But there is an issue with the IETF
73	rfc3966 compliant DestinationURI. IETF Rfc3966 superseded rfc2806 and dropped fax
74	dialing string and also fax URI scheme; IETF wants URI scheme to represent a resource, not
75	how to actually reach the resource. We want to specify the dialing method to the receiving
76	fax device URI. Hence added annotations and PreDial- and PostDial-String and
77	T33Subaddress to the DestinationURI.
78	• Element name in schema is the same as type so to keep away from one of the bug/conflict.
79	• There was no problem with using (PreDialString)DestinationURI(PostDialString) syntax in
80	prototyping effort.
81	• Agreed to add example for DialString syntax in DestinationURI section of the spec.
82	• Agreed to fix some inconsistent capitalization of D and S in "DialString"
83	• Agreed to fix Line 599 – "sting" to "string"
84	• Agreed to add PreDialString, PostDialString, and T33Subaddress in Terminology.
85	• Agreed to reword the last paragraph of section 7.3.3.1.
86	• Agreed to align all user/admin operations with Overall Doc (put them in the right class).
87	• Agreed to changes in Table 1, and remove the Media example from line 416 in section 6.3, and
88	remove the "Media" from the spec globally.
89	

7. Service Operations Document for MFD Overall Model and Semantics

91 ftp://ftp.pwg.org/pub/pwg/mfd/white/ServiceOperations-20100517-rev.pdf
92 • Agreed to changes in Table 1 – MFD Common Operations and Antecedents
93 • Agreed to changes in Table 2 – Basic MFD Interface Request and Response and Notes
94 **Basic Operations -**

95	• Agreed to changes in Section 1.1.1
96	• Agreed to change "Retained Document" to "Retained Job" in section 1.1.1.16.
97	• Agreed to remove "3. The Service does not support the specified URI Scheme, or
98	4.The Job is not found. " in section 1.1.1.18 Send<service>Document.

95 • Agreed to changes in Section 1.1.1
96 • Agreed to change "Retained Document" to "Retained Job" in section 1.1.1.16.
97 • Agreed to remove "3. The Service does not support the specified URI Scheme, or
98 4.The Job is not found. " in section 1.1.1.18 Send<service>Document.
99 • Agreed to add "If a document size, format, or compression is not supported" as one of the
100 reason to reject a Send<service>Document request in section 1.1.1.18.
101 • Agreed to also add "If a document size, format, or compression is not supported" as one of the
102 reason to reject a Send<service>URI request in section 1.1.1.19.
103 **Administrative Operations**
104 • Agreed to replace the text of Cancel<service>Job & CancelMy<service>Job with the new text
105 from IPP JPS2 spec.
106 • Agreed that in Table X – "**Legal Transitions Effected by Cancel<service>Jobs Operation "**, all
107 "Failure" should be changed to "Success". The only time this operation fails is when you don't
108 have appropriate permission/privilege.
109 • Agreed that in Table10 – In IPP the mandatory HoldNewJobs is a state reason, not first class
110 attribute. JPS2 does so too. Remove the "<service>Status" element "IsHoldingNewJobs" and
111 make sure a "<service>StateReason" value of ' HoldNewJobs' exists in the Schema. The text
112 description for HoldNew<service>Jobs operation should be corrected accordingly.
113 • Agreed that in the MFD Overall document, there should be description about Job State Reasons,
114 Service State Reasons and they are extensible; they work in tandem with Job State and Service
115 State to represent the state of a job or service. MFP Job State Reasons is a super set of IPP's.
116 Fault code should not be included, which is tool-dependent in WSDL binding.
117
118 **8. MFD Requirements Document Review**
119 • Agreed with the added Terminology section – a subset from Overall.
120 • Agreed that Section 1 – Table of Content should be regenerated
121 • Agreed to remove the Objective section (Section 4)
122 • Agreed to delete the Antecedents in Table 2 – only list operation names and reference rfc2911
123 only.
124 • Bill will update the document and post the Stable version to call for PWG-wide Last Call
125 tomorrow (June 10).
126
127 **9. SystemService Initial Draft Review**
128
129 • Agreed that Line 16 – change "extends" to "will extend". PWG Semantic Model Version 2 does
130 not exist yet.
131 • Agreed that in XML Schema, replace "MFDService"with "SystemService"
132 • Agreed to add the distinction between System Object and System Service, in section System
133 Model Overview.
134 • Agreed to clarify that there is no reason to bind this model to XML in section 4.3.
135 • Agreed to leave conformance terminologies out, leaves them in Overall document and put in
136 correct reference to Overall document only.
137 • Agreed to add to Rationale: for design requirement, use cases, etc., see MFD Requirements.
138 • Agreed to remove #3 in section 4.2. Out of scope.
139 • Agreed to change the document title to "System Object and Service Model and Semantics"
140 • Agreed to the Schema: System object should keep Services, SystemCapabilities,
141 SystemConfiguration, SystemDescription, and SystemStatus, but SystemService (was

142		MFDService) should inherit from Imaging Service base type, but remove
143		SystemServiceCapabilities, SystemServiceCapabilitiesReady, and DefaultSystemJobTicket
144		(because SystemService does NOT create Jobs).
145	•	System object at System level has SystemCapabilities that provides allowed values for system
146		operations. Currently we have power management capabilities only.
147	•	Agreed to separate System object and system service capabilities. Do the same for all others –
148		SystemDescription, SystemStatus, …etc.
149	•	Agreed to add ListServices operation – this gets endpoint URI, service status, service type for
150		SystemService and every other service hosted on the system.
151	•	**Issue regarding the ConditionTable**: There is a ConditionTable under the root (i.e.
152		System.SystemStatus.ConditionTable) and under the SystemService (i.e.,
153		System.Services.SystemService.SystemServiceStatus.ConditionTable). It is not clear to Pete if
154		the SystemService ConditionTable is a service specific view or if it is system wide. If it is service
155		specific we need a way for an operation(s) to differentiate. If it is system wide, the
156		ConditionTable under SystemService is redundant. Perhaps the ConditionTable should be
157		factored out of the base class and added to every service except SystemService. Then
158		SystemService will present a view of the system wide ConditionTable.
159	•	Agreed that the Restart operation provides two parameters to specify whether the service is
160		disabled, and /or paused. The default is what's previously documented,. i.e. IsAcceptingJob and
161		Disabled are true.
162	•	Agreed that for Startup – IsacceptingJob default to false (disabled) after the system comes up as
163		Idle. The operation provides parameter IsacceptingJob for optionally being set to true so that
164		the service is disabled ater system is started up. This can allow reconfiguration before accepting
165		jobs.
166	•	Agreed to the change of each entry of XriSupported to include XriUri, XriAuthentication,
167		XriSecurity.
168	•	Agreed that SystemDescription (for System object)
169	-	Delete XriSupported and VersionsSupported (The Services element contains the details of
170		the service instances including their XriSupported.)
171	-	AvailableResource contains resources available to the system
172	-	RepertoirSupported is a subset of character set, should be deleted
173	-	ServicesSupported and XriSupported should be combined so that multiple URL's per service
174		can be enumerated and URLs can be bound to service types
175	•	Comment: Table 1 – RequestedElements: could be different for difference service instances
176		even for the same type of service.
177		

10. FaxIn Service Review

179	•	Agreed to remove "Document" completely from the spec. There is only user data.
180	•	FaxIn does not have a Document. Only its data may need to be sent to a repository.
181	•	FaxIn data comes in, a FaxIn Document object (only one) is created. The disposal of the
182		document data is configurable.
183	•	Agreed to delete the out of scope item #1 from Rationale section.
184	•	Agreed to remove "Enterprise" and "Network connected" from all spec (FaxOut and FaxIn).
185	•	Comment: a FaxIn Service can have different queues (for network FaxIn, telephone FaxIn), or a
186		MFD may have multiple FaxIn Service instances, each has a different type of queue.

- 187   • FaxInJobTicketAvailable is a sequence of choice of either a FaxInmatrices or a FaxInJobticket
- 188   which is now a sequence of FaxInJobTicketEntry, which is a mandatory faxInMatrix for a job
- 189   ticket to apply to an incoming job.
- 190   • In FaxInMatrices,
- 191   - Agreed to change DateTime to TimePeriod (working hour, evening hour, weekend, …, etc.)
- 192   - There can be multiple matrices (a sequence) for binding a job ticket to a particular job.
- 193   - Agreed to delete OCR for now: for vendor extension. Currently it's not clear how to specify
- 194   this for filtering incoming fax job for OCR (barcode, cuecode, special text string, … for
- 195   routing information).
- 196   - Agreed to add Color (binary, grayscale, or color), for whether you want to print in color in
- 197   DocumentProcessing element.
- 198   • Agreed to keep Job level and document level DocumentProcessing element. But there is only
- 199   one Document object.
- 200   • DefaultFaxInJobTicket is used when job is created – MUST be supplied. In other service this is
- 201   optional. FaxInJobTicketReady is the one has matched with FaxInMatrices.
- 202   • Agreed: Update all Scan and other service spec to mandate DefaultJobTicket. But it does not
- 203   have to be populated (an empty container), an administrator can set the contents.
- 204   • Agreed: In ImageingJobDescriptionType, Make JobOriginatingUserName, JobName mandatory
- 205   • Agreed In ImagingJobStatustype , change JobStateReasons from optional to Mandatory and
- 206   could have None or infinite number of entries. Change DateTimeAtCreation to Mandatory in
- 207   accord with IPP. Also change DateAtTimeCompleted and DateTimeAtProcessing to mandatory
- 208   and if it's empty, the state has never reached. Move Ticks and Uptime elements to Print service
- 209   mandatory only, optional for other services.
- 210   • An attribute that can be naturalized, must include ElementsNatualLanguage. Pete and Ira to
- 211   correct FaxOut, FaxIn, Copy, System specs for the above changes accordingly.
- 212   • Pete to change FaxIn Service Schema – Make sure there is only 0-1 Document.
- 213   • Update FaxInJobTicketAvailable with Pete's updated ticket Schema.
- 214   • Agreed to move FaxInDefaultJobTicket to top service element level. Move
- 215   FaxInJobTicketAvailable to top level too, and rename to "AvailableFaxInJobTicket".
- 216   • Agreed that In Table 2, remove all Multiplexxx… elements, and DefaultFaxModem (need for
- 217   FaxOut only), must accommodate both e-fax (mailto:) and PSTN fax (tel:).
- 218   • Agreed that In FaxInJobStatus – need incoming efax channel ID and modem ID over which an
- 219   incoming fax is receive and distinguish whether efax channel vs. PSTN fax modem is used.
- 220   • Agreed that In FaxOut, Currently there is nothing represents different fax types other than URI –
- 221   leave it that way.
- 222   • Agreed that change StateReasons of ImagingServiceStatusType to Mandatory to be consistent
- 223   with previous discussion.
- 224   • Agreed that Schema change ServiceName, OperationsSupported, ServiceVersion to mandatory
- 225   in FaxInServiceDescriptionType.
- 226   • Agreed that in FaxIn Job Model, JobHistory is mandatory. Add these in Schema for both FaxIn
- 227   and FaxOut services, unlike for other services, it's optional.
- 228   • FaxInJobStatus – added Job Channel for receiving fax job (something like originating URI and
- 229   subunit ID), TimeAtxxx should be removed, JobStateReasons should be mandatory.
- 230   • Agreed that FaxInJob counters does not distinguish the counts for different faxIn type (channel
- 231   vs. modem) – can use different FaxIn Service to count different faxin type jobs.
- 232
- 233 **11. Next Steps**

234   • Bill Wagner will update the Requirement document, and start PWG last call tomorrow.
235   • Pete will update FaxOut and Copy Services with schema changes for working group last call.
236   • Next teleconference in 3 weeks – July 1, 2010, 3pm EDT.
237