

1 **Meeting Minutes**  
2 **PWG MFD Working Group Face-to-Face Meeting**  
3 **April 18, 2008**

4 **On-Site Attendees:**  
5

Shah Bhatti	Samsung
Ron Burgman	Ricoh
Nancy Chen	Oki Data
Dennis DeYoung	Xerox
Lee Farrell	Canon
Joe Murdock	Sharp Lab
Harry Lewis	InfoPrint Solutions, Ricoh
Glen Petrie	Epson
Erhan Soyer-Osman	Microsoft
Jerry Thrasher	Lexmark
Randy Turner	Konica Minolta
Hiro Ueda	MWA
David Whitehead	Lexmark
Craig Whittle	Sharp Lab

6  
7 **Phone-In Participants:**

Mike Fenelon	Microsoft
Ira McDonald	High North Inc.
Bill Wagner	TIC

8  
9 Dennis DeYoung of Xerox presided this meeting on behalf of Peter Zehler who could not attend.

10  
11 **1. Introduction** - Attendees introduced themselves.

12  
13 **2. Minutes Takers Assigned** – Nancy Chen and Shah Bhatti, Dennis DeYoung also contributed his  
14 hand written notes.

15  
16 **3. Microsoft Presentation of WS-Scan and Q&A**

17 (The presentation slides are in the file: [ftp://ftp.pwg.org/pub/pwg/mfd/white/041708 Public Version](ftp://ftp.pwg.org/pub/pwg/mfd/white/041708%20Public%20Version%20Scan%20Service%20Definition.pdf)  
18 [Scan Service Definition.pdf](ftp://ftp.pwg.org/pub/pwg/mfd/white/041708%20Public%20Version%20Scan%20Service%20Definition.pdf))

19  
20 Erhan Soyer-Osman presented Microsoft's Scan Service definition with Mike Fenelon supporting  
21 over the phone.

22  
23 Erhan walked us through the purpose of the WS-Scan specification, the functional operation model,  
24 usage scenarios supported, and the service schema of WS-Scan model for network connected  
25 scanning devices. (Minutes taker's note: please see the slides for all the details.)

26  
27 Erhan concluded with some key points in WS-Scan model, and its relationship with PWG Scan  
28 Service model:

- 1 (1) WS-Scan service schema describes a scanning service model for both consumer and enterprise  
2 devices; whereas the operations and events specified are more focused on supporting consumer  
3 device usage scenarios (i.e. scanning from and to a client PC, a home, small device centric  
4 execution model).
- 5 (2) MS has worked with PWG to have WS-Scan v1.0 used for PWG Scan Service protocol mapping.  
6 The concepts, elements and data types of the two are the same, but operations supported by WS-  
7 Scan are a subset of PWG Scan Service. Wherever there is an overlap, PWG should use the  
8 names / keywords in WS-Scan v1.0 because WS-Scan v1.0 has been built into Windows Vista  
9 providing a strong commercial operating system support for the future PWG model prototyping  
10 effort that is required to advance the PWG model to a candidate standard.
- 11 (3) MS has worked with PWG through legal to open up WS-Scan. It's available at Windows Rally  
12 web site: <http://www.microsoft.com/WHDC/connect/rally/WSDspecs.aspx>. WS-Scan is a great  
13 opportunity for PWG Scan Service model protocol mapping with Windows Vista support.
- 14 (4) MS would like PWG members review the WS-Scan specification, work to merge PWG Scan  
15 Service model with WS-Scan model over time, avoid inconsistencies as much as possible.  
16

17 Questions:

- 18 (1) Does Job Execution include Data Transfer?  
19 A: Conceptually Job Execution is followed by Data transfer. However, in real implementation  
20 there could be buffering and transferring of scanned image data before the end of Job scanning in  
21 order to keep the HTTP connection between the MFD and client PC not been timed out. There  
22 could also multiple jobs in execution simultaneously, thus the implementation will need to buffer  
23 up image data and starts to transfer the data to destination client PC before HTTP connection is  
24 timed out.
- 25 (2) Does WS-Scan have control functions other than "Cancel"?  
26 A: No.  
27 [Note: the current PWG Scan Service supports also "Pause", "Resume", and some others.]
- 28 (3) How does CreateScanJob and RerieveImage work?  
29 A: It is expected that a CreateScanJob operation would be immediately be followed by a  
30 Retrieve Image.
- 31 (4) Where are errors conditions listed?  
32 A: Error conditions are well documented in the WS-Scan specification.
- 33 (5) Is WS-Scan supported in Server 2008?  
34 A: WS-Scan is not meant for Server 2008 Enterprise model, but should work if desktop  
35 experience and features and WS-Scan model are installed.
- 36 (6) Should PWG and MS work together to put out a press release on joint effort on Scan Service  
37 model definition alignment?  
38 A: there are several benefits for PWG members and MS:  
39 (1) The joint press release will encourage many parties to participate.  
40 (2) A good opportunity for PWG to advocate that it's not only working on printing standards  
41 any more. It is also working on MFD modeling standards.  
42 (3) A good opportunity for PWG to use the WS-Scan's strong support from Windows Vista  
43 for members to prototype the standard and advance it to a full standard in the future.  
44 (4) Participating companies will get credits from the prototyping effort.
- 45 (7) Is WS-Scan in Windows Vista today?  
46 A: Yes, Windows Vista RTM.

1 (8) Has Microsoft tried WS-Scan on actual device?

2 A: Yes. This is a good opportunity for PWG members to try WS-Scan for PWG Scan Service  
3 prototyping effort for the standard.  
4

5 Action Item:

6 (1) Everybody: Study and make a comparison between WS-Scan and PWG Scan Service model to  
7 see where inconsistencies exist that require alignments.

8 (2) Erhan Soyer-Osman to ask Microsoft's interest in a joint press release with PWG on the  
9 alignment of the two Scan Service models. PWG Chair will be the point of contact for  
10 Microsoft's communication on this subject.  
11

#### 12 4. Review of PWG Last Call Comments for Scan Service Use Cases and Requirements spec

13 (see file: <ftp://ftp.pwg.org/pub/pwg/mfd/wd/Scan-Req-LC-Comments-041708.pdf> )  
14

- 15 • The list of PWG Last Call comments was reviewed. No comments from the meeting floor.
- 16 • A poll was made on whether a sufficient number of members have reviewed the comments.  
17 Sharp expressed the need for postponing the closing date for the Last Call comments.
  - 18 ○ Decision: The period of the PWG Last Call for comments has been extended to end on  
19 May 1<sup>st</sup>, Thursday at the next MFD teleconference.
- 20 • Action Item: Dennis DeYoung / Nancy Chen will send out the announcement of the extended  
21 Last Call comment period to PWG and MFD email list to solicit further comments on the spec.  
22

#### 23 5. Review of the PWG MFD Scan Service Model spec

24 (see file: <ftp://ftp.pwg.org/pub/pwg/mfd/wd/wd-mfdscanmodel10-20080403.pdf> )  
25

26 The review started on page 13.

- 27 • **Section 5 – Scan Job Ticket Lifecycle**  
28 Figure 1 is too complex, should be simplified.  
29

30 Ira's recommendation: Editors break this into three simpler diagrams:

31 (1) A top level diagram of MFD Imaging system (from WIMS) in which subunits contain  
32 scan subunits.

33 (2) A Scan Service diagram

34 (3) A Template object diagram on how a Scan Job Template is edited and submitted by a  
35 user, becomes a ticket bound to a job and eventually stored in a repository.

- 36 • **Section 6 – Scan Service Model Overview**

37 ○ Discussion: Microsoft's WS-Scan uses JobTable for PWG's ActiveJobs and JobHistory.  
38 PWG traditionally uses plural form of object name which is the same as a table of objects.  
39 The intent is to avoid using table or group that causes confusion. If we change JobTable to  
40 ScanJobs, it requires all MS partners to change their implementations. It should be an  
41 objective for PWG naming being aligned with MS Scan naming and annotate the model  
42 document to keep DPA history. Problems will be we need to do reverse mapping. We need to  
43 match to WS-Scan wherever possible and reduce the amount of annotations on alignment of  
44 the two.

45 ○ Action Item: Peter Zehler to provide a mapping document to explain the difference between  
46 the two model.

- 1 • **Section 6.2** – Delete blank lines 440-442.
- 2 • **Section 6.3.1 – Scan Device Coordinates**
- 3 ○ XFeed and CrossFeed are interchangeably used through out the document. XFeed should be
- 4 spelled out if it is an abbreviation of CrossFeed.
- 5     ▪ Decision: CrossFeed is used in IPP. We will pick one to use consistently throughout
- 6     the document. If the old one from IPP is not picked, put it into Appendix.
- 7 ○ Ira proposed to standardize dimension / units on metric instead of English units (let UI to do
- 8 the conversion if necessary). He pointed out that this is the first thing we need to do when
- 9 aligning PWG model to CIM model. This is important for PWG printer/MFD model
- 10 manageable by WS-Management in the future. However we recognized that DPI (dots per
- 11 inch) and LPI (lines per inch) are never being in metric units. Media sizes already use metric
- 12 units in PWG standard. This is an existing issue for a long time.
- 13     ▪ Decision: We left metric vs. English units as an open issue to be resolved later.
- 14 • **Section 6.4.1 Default Scan Ticket**
- 15 ○ Line 506 – “Scan Receipt” should be “Scan Job Receipt”. This is the first occurrence of the
- 16 term used before its semantic is described. Need to put a forward reference “see section....”
- 17 • **Section 6.4.2 Scan Service Capabilities**
- 18 ○ Line 518 – “Job Ticket” should be “Scan Job Ticket”.
- 19 ○ All schema diagrams should be manually redrawn to show the full name of each element
- 20 wherever possible.
- 21 • **Section 6.4.2.1 Scan Document Processing Capabilities**
- 22 ○ “NumberUp” – Should this be a number instead of a list of pages? Check the correct
- 23 definition with Pete Zehler and the definition in IPP.
- 24 ○ Need consistent presentation of data type for each element: some are in ( ) at the beginning of
- 25 definition, some are not!!!!
- 26 ○ Need nomenclature for some data types.
- 27 ○ “Magnification” – need to capture the units being used for the data type.
- 28 ○ “ColorSpace” – the informative text “as tuples of numbers” should be reworded or deleted.
- 29 ○ “Rotation” – the data type is keywords for vendor to easily extend. Keywords can’t start with
- 30 a number. Use “Rotation 90” instead of “90”. We should have the PWG standard support
- 31 0,90,180,270, and use a second property for other vendor extended arbitrary degrees.
- 32 ○ “OutputDocumentSize” – need the units being used here for the data type too.
- 33 ○ “Resolution” - This should be a complex data type in set of int for each feed direction, not
- 34 range of int. There should be a complex data type diagram like figure 10 provided.
- 35 ○ “Sides” - Two key words are duplicate (TwoSidedLongEdge)! Double check with IPP
- 36 specification to see whether there is another keyword!!!
- 37 ○ “SinglePageFile” – “Page” in print should be “image” in scan. This attribute intent to indicate
- 38 the Scan Service’s image output capability: for output of one image per file. Change
- 39 “SinglePageFile” to “SingleImageOutputFile”. Every scanner has this capability anyway. Do
- 40 we need this element? We should have “MultiImageOutputFile” that supports storing all
- 41 images of the Scanned Hardcopy Document as a single file.
- 42     ▪ Action Item: revisit the utility of this item.
- 43 ○ General comment: All “pages” should be changed to “images” in Scan Service representing a
- 44 soft copy of hardcopy page, in everywhere in this document.
- 45 • **Section 6.4.2.2 Scan Job Description Capabilities**

- 1       ○ “ElementsCharset” & “ElementsNaturalLanguage” – The definition should refer to IANA
- 2       registered languages.
- 3       ○ JobAccountingUserId – missing “(“.
- 4       ○ 6.4.2.2.10 “JobPassword” – should be “JobPasswordEncryption” by the resolution from the
- 5       last teleconference and all the MAC keywords should be deleted. Should we name it
- 6       “JobPasswordProtection” and keep MAC key words?
- 7           ▪ Decision: Check TLS spec what algorithm used there. We need to investigate further
- 8           what TLS encryption algorithms are registered with IANA.
- 9       ● **Section 6.4.2.3** – The label “Scan Job Processing Capabilities” is misplaced. Move the text from
- 10      the previous section to where it belongs.
- 11      ○ “JobHoldUntil”: the list of keywords here comes from DPA.
- 12      ● **Section 6.4.3** – the title should be “Scan Service Configuration”.
- 13      ○ “InputChannel” - needs to reference IANA registered channels in Printer MIB.
- 14           ▪ Issue: what new InputChannel are supported: – e.g. portSOAP.
- 15           ▪ We leave this as an open issue.
- 16      ○ General comment: Scan Service should not contain physical subunits, should only reference
- 17      them.
- 18      ● **Section 6.3.5** is a duplicate of section 6.3.4. It should be the definition of “Sides”.
- 19      ● **Section 6.4.4 Scan Service Description**
- 20          ○ 6.4.4.1 OwnerUri – needs recapping OwnerUri to OwnerURI. Delete “email/HTTP”.
- 21          ○ 6.4.4.3 ResourcesSupported – Resources are fonts, interpreters,..., etc.
- 22          ○ 6.4.4.6 ServiceURISupported – Change URL to URI in definition text.
- 23          ○ General comment: Change all URL to URI throughout the document.
- 24          ○ 6.4.4.7 ScanJobTimeout –
- 25              ▪ ISSUE6: Is this the desired behavior for timed out jobs?
- 26              ▪ Consensus: Yes. – Issue closed.
- 27      ● **Section 6.4.5 Scan Service Status**
- 28          ○ “AccessMode” came from WIMS service schema to do with specific access control for Scan
- 29          Service object itself. The change to AccessMode has to be limited to owner or admin group.
- 30          It’s basic Unix/Windows group access control.
- 31          ○ Issue: Why not rely on WS-Security. Is the intent of this element to show who can change the
- 32          properties of Scan Service????
- 33              ▪ We left this as an open issue requiring further investigation.

## 34       35       6. Next Steps

- 36       ● **We will review the results of today’s meeting in the next teleconference.**
- 37       ● **Next teleconference is on May 1, Thursday, 2008, EDT 3pm.**

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