

PWG MFD Working Group Teleconference Meeting Minutes January 15, 2009

1. Attendees:

Shah Bhatti,	Samsung
Nancy Chen,	Oki Data
Lee Ferrell,	Canon
Ira McDonald,	High North, Inc.
Glen Petrie,	Epson
Bill Wagner,	TIC
Dave Whitehead,	Lexmark

2. Identify Minute Taker – Nancy Chen

3. Approval of minutes from last teleconference <ftp://ftp.pwg.org/pub/pwg/mfd/minutes/pwg-mfd-minutes-20090108.pdf>

No objection to the minutes.

4. PWG process

Attendees were called attention to be aware of the PWG process. There was no objection.

5. Agenda bashing

Attendees agreed to the following agenda:

1) Data types discussion for Scan Service

a) Is the information in the document (summarized in table below) sufficient?

b) Shall we proceed with a second PWG Last Call?

<ftp://ftp.pwg.org/pub/pwg/mfd/wd/lcrc-mfdscanmodel10-20090112.pdf>

2) Discuss Storage subunit Description elements

a) Is a StorageInfo element required? And if so what is the difference between it and StorageUnitDescription

b) Is StorageDataEncryption element needed? If so the encryption algorithm and key size represented?

c) Is StorageURI required for NetworkStorage subunits?

3) Approve the list of Storage Types.

4) Discuss Bill Wagner's comments on Scan Service spec section 10.

5) Next steps

6. Data types discussion for Scan Service

(The spec in discussion used is: <ftp://ftp.pwg.org/pub/pwg/mfd/wd/lcrc-mfdscanmodel10-20090112.pdf>)

The data types defined in the table in section 6.4 of Scan Service spec were reviewed.

- It was noted that hexBinary defined as the hexadecimal representation of an octet is a specific data type name used by XML schema. In IPP, 'octetString' is used. For consistency, "hexBinary" should be changed to 'octetString'.

AI: Peter Zehler will look up IPP spec (section 4.1.10, in RFC 2911) for the exact definition of octetString to replace hexBinary, and replace 'hexBinary' with 'octetString' throughout the document.

- It was noted that the data types (interpreter) on Line# 1117, (interface) on Line #1122, and (CrossFeedDir, FeedDir) on Lines #938 and #959 are not defined in data type definition table. These are the class names of the corresponding complex type elements. It would be clearer if the data type is expressed as (complex – class name), for example (complex – CrossFeedDir).

AI: Peter Zehler will change all these undefined complex types to (complex – class name) throughout the document.

7. Approve the list of Storage Types.

The current list of Storage Types is a merge of the extracted types from the Host Resource MIB and others used by Xerox.

RAM (Random memory),
NVRam
ramDisk,
HardDisk (Non-removable, rigid, rotating storage),
RemovableHardDisk (Removable, rigid, rotating storage),
FloppyDisk (Non-rigid rotating magnetic storage),
VirtualMemory (Temporary storage of swapped or paged memory),
FlashMemory (Non-removable flash),
FlashCard (Removable flash),
NetworkStorage (Any storage external to an MFD),
CD (CompactDisk).
DVD,
OpticalDiskROM,
OpticalDiskWORM,
OpticalDiskRW,
Other (Any other vendor defined storage).

It was noted FlashMemory and FlashCard both belong to NVram since NVram means all non-volatile ram, flash is just the most prevalent NVram. The question is whether we should use NVram to represent non-flash type of NVram. We also noted that to represent a storage as 'removable' or 'non-removable' has important security implication for the use of the MFD. We resolved to have 'StorageRemovable' as an attribute of Storage that should apply for all storage types. Here 'removable' means the manufacture's design of the storage is intended to be removable by the customer at all.

AI: Remove 'RemovableHardDisk', 'FlashMemory' and 'FlashCard'. Add 'StorageRemovable' as a property of Storage.

8. Discuss Storage subunit Description elements

1) Is a StorageInfo element required? And if so what is the difference between it and StorageUnitDescription.

- It was noted that IPP semantic uses XXXInfo convention from DPA spec. StorageInfo should be used.

AI: Peter Zehler will replace 'StorageUnitDescription' with 'StorageInfo' from Resource Service Schema.

2) Is StorageDataEncryption element needed? If so the encryption algorithm and key size represented?

- Data Encryption algorithms and key sizes supported by a storage subunit although are not germane to most of users, could be important for administrator's initial setup configuration for storage subunit, and the users who need to know which MFD's storage support their security policy. However, exposing encryption algorithms and key sizes might not necessary. Allowing user to know whether StorageDataEncryption is supported should be sufficient.

AI: StorageDataEncryption will be added in XML Schema, and changed to of data type 'boolean' in the Resource Service specification.

9. Is StorageURI required for NetworkStorage subunits?

- The concern was that exposing the URI location of Storage subunit to users in the network might be dangerous for security. However it was recognized that administrator might need the URI for managing the storage. This should be an optional property.

AI: Pete Zehler will add StorageURI to StorageDescription.

10. Discuss Bill Wagner's comments on the Scan Service spec section 10.

[W1]a: Unclear.

[W1]b: Do we power-up (a device concept) a service?

[W1]c: Scan Devices (also used elsewhere should probably be Scanner(s) or Scanner Subunits(s)

- These comments refers to the working in lines #2119-2120.
- We recognized that after a MFD device power-up, the Scan Service starts up and initializes.

AI: Change ‘power-up’ to ‘start-up’.

- We concluded that ‘Scanner Subunit’ is better than ‘Scan Devices’; since it’s a subunit of a MFD, not a device.

AI: ‘Scan Devices’ will be replaced with ‘Scanner Subunit’ throughout the Scan Service document.

[W2] Processing as a service state must be distinguished from processing as a job state.

- Unfortunately since both DPA and IPP use the same ‘Processing’ state for both Service and Jobs, we can not do much about this.

[W3]Testing is defined as an Off_Line state in 7.1.5.10.1.

- This refers to the sentence on lines 2126-2127. ‘Testing’ is also applicable to On_Line state. However it conflicts with section 7.1.5.10.1 where Testing is defined as an Off_Line state.

AI: Remove ‘Testing’ from the sentence.

[W4]Observation: Disable does not change service state, as state is defined.

- Disable does not change service state, only changes condition in state reason.

[W5] CloseJob is not a defined operation.

AI: This sentence (lines 2133-2136) will be removed.

[W6]This appears to be in an administrator operation, not for a user. Further, that does not appear to be the purpose of JobHoldUntilTime.

- ‘JobHoldUntilTime’ is a job attribute, not an operation. Administrator can pass this attribute or ‘JobHoldUntil’ attribute in HoldScanJob operation.

AI: Will clarify this is an attribute in the sentence (line #2138).

[W7]Job in Processing state vs Service in processing state. Presumably, if there were a previous job being processed, the Service would already be in a processing state?

This refers to the sentence on lines 2143-2144. “When a Scan Job is released for scheduling and reached the top of ActiveJobs queue, the Scan Service immediately enters its Processing state.”

AI: Reword the sentence as “When a Scan Job is released for scheduling and reached the top of ActiveJobs queue, the Scan Job immediately enters its Processing state; the Scan Service enters or remains in its Processing state.”

[W8]RestartJob appears elsewhere but is not a defined operation.

AI: The sentence on lines #2159-2160 about RestartJob operation will be removed.

11. Next steps

- Next meeting will be on **Jan 29** in 2 weeks.
- Bill Wagner and Pete Zehler will work together on the overall document and distribute the document for the next teleconference.
- We will resolve all issues in resource service in the next teleconference and get ready for the last call of this specification.