1. Mapping Microsoft Print Schema Elements to PWG Print Job Ticket Elements

The Microsoft Print Schema uses an XML element convention much like the PWG Print Job Ticket (PJT). One of the differences between the two print ticket formats is that Microsoft has added a third layer to their specification tree (Job, Document, Page) and rules for merging print ticket elements from the three levels together when processing a print request. The page level declarations present some interesting challenges when building the mapping outlined in this specification.

Table 1 - Microsoft Print Schema Element to PWG Print Job Ticket Element Mapping

| **Microsoft Print Schema Element Name** | **PWG Print Job Ticket Element Name** |
| --- | --- |
|  | CompressionSupplied |
|  | Copies |
| DocumentBannerSheet None Standard Custom BannerSheetSource |  |
| DocumentSeparatorSheet None StartSheet EndSheet BothSheets |  |
| DocumentPrimaryCoverBack NoCover BlankCover PrintFront PrintBack PrintBoth | CoverBack CoverType Media MediaType MediaCol |
| DocumentPrimaryCoverFront NoCover BlankCover PrintFront PrintBack PrintBoth | CoverFront CoverType Media MediaType MediaCol |
|  | *CoverType* |
|  | DocumentCharsetSupplied |
|  | *DocumentCopies* |
|  | DocumentDigitalSignatureSupplied |
| DocumentDuplex OneSided TwoSidedLongEdge TwoSidedShortEdge DuplexMode Automatic Manual |  |
|  | *DocumentFormat* |
|  | DocumentFormatDetailsSupplied DocumentSourceApplicationName DocumentSourceApplicationVersion DocumentSourceOsName DocumentSourceOsVersion DocumentFormat DocumentFormatDeviceId DocumentFormatVersion DocumentNaturalLanguage |
|  | *DocumentFormatDeviceId* |
|  | DocumentFormatSupplied |
|  | *DocumentFormatVersion* |
|  | DocumentFormatVersionSupplied |
| DocumentInputBin AutoSelect Manual Cassette Tractor AutoSheetFeeder |  |
|  | DocumentMessageSupplied |
|  | DocumentNameSupplied |
|  | *DocumentNaturalLanguage* |
|  | *DocumentNumbers* |
| *DocumentOutputBin* |  |
|  | *DocumentSourceApplicationName* |
|  | *DocumentSourceApplicationVersion* |
|  | *DocumentSourceOsName* |
|  | *DocumentSourceOsVersion* |
|  | FeedOrientation |
|  | Finishings |
| DocumentHolePunch None LeftEdge RightEdge TopEdge BottomEdge | FinishingsCol FinishingTemplate Other |
| DocumentStaple StapleTopLeft StapleTopRight StapleBottomLeft StapleBottomRight StapleDualLeft StapleDualRight StapleDualTop SaddleStitch Angle SheetCapacity | FinishingsCol FinishingTemplate Stitching StitchingReferenceEdge StitchingOffset StitchingLocations |
|  | FinishingTemplate |
|  | FontNameRequested |
|  | FontSizeRequested |
| PageForceFrontSide ForceFrontSize?  None | ForceFrontSide |
|  | ImpositionTemplate |
|  | Impressions |
|  | *InsertAfterPageNumber* |
|  | *InsertCount* |
|  | InsertSheet ISheet InsertAfterPage InsertCount Media MediaType MediaCol |
|  | JobAccountingID |
|  | *JobAccountingOutputBin* |
| JobAccountingSheet None Standard | JobAccountingSheets JobAccountingSheetsType Media MediaType MediaCol JobAccountingOutputBin |
|  | *JobAccountingSheetsType* |
|  | JobAccountingUserID |
| JobCollateAllDocuments |  |
|  | JobCopies |
|  | JobCoverBack CoverType Media MediaType MediaCol |
|  | JobCoverFront CoverType Media MediaType MediaCol |
|  | JobDelayOutputUntil |
|  | JobDelayOutputUntilTime |
| JobDuplexAllDocumentsContiguously OneSided TwoSidedLongEdge TwoSidedShortEdge DuplexMode Automatic Manual |  |
| JobErrorSheet None Standard Custom ErrorSheetSource | JobErrorSheet JobErrorSheetType JobErrorSheetWhen Media MediaType MediaCol |
|  | JobErrorSheetType |
| ErrorSheetWhen Always OnError | JobErrorSheetWhen |
|  | JobFinishings |
| JobHolePunch None LeftEdge RightEdge TopEdge BottomEdge | JobFinishingsCol FinishingTemplate Other |
| RollCutAtEndOfJob CutSheetAtImageEdge CutSheetAtStandardMediaSize None | JobFinishingsCol FinishingTemplate Other |
| JobStapleAllDocuments  StapleTopLeft StapleTopRight StapleBottomLeft StapleBottomRight StapleDualLeft StapleDualRight StapleDualTop StapleDualBottom SaddleStitch | JobFinishingsCol FinishingTemplate Stitching StitchingReferenceEdge StitchingOffset StitchingLocations |
|  | JobHoldUntil |
|  | JobHoldUntilTime |
| JobInputBin AutoSelect Manual Cassette Tractor AutoSheetFeeder |  |
|  | JobMandatoryElements |
|  | JobMessageFromOperator |
|  | JobMessageToOperator |
|  | JobMoreInfo |
|  | JobName |
| JobOutputOptimization ArchiveFormat OptimizeForPortability OptimizeForQuality OptimizeForSpeed None |  |
|  | JobOriginatingUserName |
|  | JobOriginatingUserUri |
|  | JobPassword |
|  | JobPasswordEncryption |
|  | JobPhoneNumber |
|  | JobPriority |
|  | JobRecipientName |
|  | JobSaveDisposition SaveDisposition SaveInfo SaveDocumentFormat SaveLocation SaveName |
|  | JobSheetMessage |
|  | JobSheets |
| JobPrimaryBannerSheet None Standard Custom BannerSheetSource | JobSheetsCol JobSheets Media MediaType MediaCol |
|  | KOctets |
|  | Media |
|  | MediaCol MediaBackCoating MediaColor MediaFrontCoating MediaGrain MediaHoleCount MediaInfo MediaKey MediaOrderCount MediaPreprinted MediaRecycled MediaSize XDimension YDimension MediaSizeName MediaThickness MediaTooth MediaType MediaWeightMetric MediaBottomMargin MediaLeftMargin MediaRightMargin MediaTopMargin MediaSource |
|  | *MediaBackCoating* |
| *PageMediaColor* | *MediaColor* |
|  | *MediaFrontCoating* |
|  | *MediaGrain* |
|  | *MediaHoleCount* |
|  | *MediaInfo* |
|  | MediaInputTrayCheck |
|  | *MediaKey* |
|  | *MediaOrderCount* |
|  | *MediaPreprinted* |
|  | *MediaRecycled* |
|  | MediaSheets |
| *PageMediaSize* | *MediaSize* |
|  | *MediaSizeName* |
|  | *MediaThickness* |
|  | *MediaTooth* |
| PageMediaType | MediaType |
|  | *MediaWeightMetric* |
|  | MultipleDocumentsHandling |
|  | NumberUp |
|  | OrientationRequested |
| JobOutputBin | OutputBin |
|  | OutputDevice |
|  | Overrides Override Pages PageRange Lowerbound Upperbound DocumentNumbers NumberRange Lowerbound Upperbound DocumentCopies PCopiesRange Lowerbound Upperbound OverridingElements |
|  | PageDelivery |
|  | PageOrderReceived |
|  | PageRanges PageRange Lowerbound Upperbound |
|  | *Pages* |
|  | PagesPerSubset Pages |
|  | PdlInitFiles PdlInitFile PdlInitFileLocation PdlInitFileName PdlInitFileEntry |
|  | *PdlInitFileEntry* |
|  | *PdlInitFileName* |
|  | *PdlInitFileEntry* |
|  | PresentationDirectionNumberUp |
| PageOutputColor | PrintColorMode  |
|  | PrintContentOptimize |
|  | PrintRenderingIntent |
|  | ProofPrint Copies Media MediaCol |
| PageOutputQuality | Quality |
| PageResolution | Resolution |
|  | *SaveDisposition* |
|  | *SaveDocumentFormat* |
|  | *SaveInfo* |
|  | *SaveLocation* |
|  | *SaveName* |
|  | SeparatorSheets SeparatorSheetsType Media MediaType MediaCol |
|  | *SeparatorSheetsType* |
| DocumentCollate | SheetCollate |
|  | Sides |
|  | *StitchingLocations* |
|  | *StitchingOffset* |
|  | *StitchingReferenceEdge* |
|  | TemplateCreatorUserName |
|  | TemplateId |
|  | TemplateInfo |
|  | TemplateName |
|  | TemplateType |
|  | *XDimension* |
|  | XImagePosition |
|  | XImageShift |
|  | XSide1ImageShift |
|  | XSide2ImageShift |
|  | *YDimension* |
|  | YImagePosition |
|  | YImageShift |
|  | YSide1ImageShift |
|  | YSide2ImageShift |

1. References
	1. Normative References

[MSPS] Microsoft Print Schema Reference Guide Version 1.0 rev A, November 2011 http://go.microsoft.com/fwlink/?LinkId=234563