1. Mapping JDF Attributes to PWG Print Job Ticket Elements

JDF attributes are encoded as XML attributes in XML schema instances – instead of as XML elements like the PWG Print Job Ticket (PJT) – this complicates mapping implementations. JDF attributes are defined in the CIP4 JDF Specification Release 1.4a [CIP4JDF] and profiled for various printing environments in a series of CIP4 ICS (Interoperability Conformance Specification) documents, in particular the CIP4 Integrated Digital Printing (IDP) ICS v1.3 [CIP4IDP].

Table - JDF Attributes to PWG Print Job Ticket Elements

| **JDF Attribute Name** | **PWG Print Job Ticket Element Name** |
| --- | --- |
| DocumentCompression | CompressionSupplied |
| SetCopies | Copies |
| Covers (Media, Sides, etc.)  CoverType=”Back”  Media  MediaType  Media | CoverBack  CoverType  Media  MediaType  MediaCol |
| Covers (Media, Sides, etc.)  CoverType=”Front”  Media  MediaType  Media | CoverFront  CoverType  Media  MediaType  MediaCol |
| *CoverType* | *CoverType* |
| <none> | DocumentCharsetSupplied |
| *DocCopies* | *DocumentCopies* |
| <none> | DocumentDigitalSignatureSupplied |
| *MimeType* | *DocumentFormat* |
| FileSpec  <none>  <none>  <none>  <none>  MimeType  DeviceID  MimeTypeVersion  DocumentNaturalLang | DocumentFormatDetailsSupplied  DocumentSourceApplicationName  DocumentSourceApplicationVersion  DocumentSourceOsName  DocumentSourceOsVersion  DocumentFormat  DocumentFormatDeviceId  DocumentFormatVersion  DocumentNaturalLanguage |
| *DeviceID* | *DocumentFormatDeviceId* |
| MimeType | DocumentFormatSupplied |
| *MimeTypeVersion* | *DocumentFormatVersion* |
| *MimeTypeVersion* | DocumentFormatVersionSupplied |
| CustomerMessage | DocumentMessageSupplied |
| DocNames | DocumentNameSupplied |
| *DocumentNaturalLang* | *DocumentNaturalLanguage* |
| *DocIndex* | *DocumentNumbers* |
| *<none>* | *DocumentSourceApplicationName* |
| *<none>* | *DocumentSourceApplicationVersion* |
| *<none>* | *DocumentSourceOsName* |
| *<none>* | *DocumentSourceOsVersion* |
| Orientation | FeedOrientation |
| Stapling, Stitching, Binding, etc. | Finishings |
| Stapling, Stitching, Binding, etc.  Stapling, Stitching, Binding, etc.  Stitching  ReferenceEdge  Offset  StitchPositions | FinishingsCol  FinishingTemplate  Stitching  StitchingReferenceEdge  StitchingOffset  StitchingLocations |
| Stapling, Stitching, Binding, etc. | FinishingTemplate |
| PreferredFont | FontNameRequested |
| FontSize | FontSizeRequested |
| ForceFrontSide | ForceFrontSide |
| Layout | ImpositionTemplate |
| <none> | Impressions |
| *RunList@Pages* | *InsertAfterPageNumber* |
| *RunList@PageCopies* | *InsertCount* |
| InsertSheet  InsertSheet  RunList@Pages  RunList@PageCopies  Media  MediaType  Media | InsertSheet  ISheet  InsertAfterPage  InsertCount  Media  MediaType  MediaCol |
| BillingCode | JobAccountingID |
| *<none>* | *JobAccountingOutputBin* |
| InsertSheet@SheetType= ”AccountingSheet”  <none>  Media  MediaType  Media  OutputBin | JobAccountingSheets  JobAccountingSheetsType  Media  MediaType  MediaCol  JobAccountingOutputBin |
| *<none>* | *JobAccountingSheetsType* |
| CustomerInfo@CustomerID | JobAccountingUserID |
| SetCopies | JobCopies |
| Covers (Media, Sides, etc.)  CoverType=”Back”  Media  MediaType  Media | JobCoverBack  CoverType  Media  MediaType  MediaCol |
| Covers (Media, Sides, etc.)  CoverType=”Front”  Media  MediaType  Media | JobCoverFront  CoverType  Media  MediaType  MediaCol |
| <none> | JobDelayOutputUntil |
| <none> | JobDelayOutputUntilTime |
| InsertSheet@SheetType=”ErrorSheet”  <none>  <none>  Media  MediaType  Media | JobErrorSheet  JobErrorSheetType  JobErrorSheetWhen  Media  MediaType  MediaCol |
| <none> | JobErrorSheetType |
| <none> | JobErrorSheetWhen |
| Stapling, Stitching, Binding, etc. | JobFinishings |
| Stapling, Stitching, Binding, etc.  Stapling, Stitching, Binding, etc.  Stitching  ReferenceEdge  Offset  StitchPositions | JobFinishingsCol  FinishingTemplate  Stitching  StitchingReferenceEdge  StitchingOffset  StitchingLocations |
| JDF@Activation | JobHoldUntil |
| JDF@FirstStart | JobHoldUntilTime |
| SettingsPolicy | JobMandatoryElements |
| <none> | JobMessageFromOperator |
| JDF/Comment@Name=”OperatorText” | JobMessageToOperator |
| <none> | JobMoreInfo |
| CustomerJobName | JobName |
| <none> | JobOriginatingUserName |
| <none> | JobOriginatingUserUri |
| Password | JobPassword |
| <none> | JobPasswordEncryption |
| Contact@ContactTypes=”Customer” | JobPhoneNumber |
| JobPriority | JobPriority |
| Layout@ShowList=”JobRecipientName” | JobRecipientName |
| **<TBD – complex mappings>** | JobSaveDisposition  SaveDisposition  SaveInfo  SaveDocumentFormat  SaveLocation  SaveName |
| InsertSheet@ShowList=”UserText” | JobSheetMessage |
| SheetType=”JobSheet”, etc. | JobSheets |
| SheetType=”JobSheet”, etc.  SheetType=”JobSheet”, etc.  Media  MediaType  Media | JobSheetsCol  JobSheets  Media  MediaType  MediaCol |
| <none> | KOctets |
| Media | Media |
| Media  Media@BackCoatings  Media@MediaColorName  Media@FrontCoatings  Media@GrainDirection  Media@HoleType  Media/Comment@Name=”Description”  Media@CatalogID  Media@MediaSetCount  Media@Preprinted  Media@Recycled  Media@Dimensions  (see Media@Dimensions)  (see Media@Dimensions)  Media  Media@Thickness  <none>  Media@MediaType  Media@Weight  <none>  <none>  <none>  <none>  Media@Location (input tray name) | MediaCol  MediaBackCoating  MediaColor  MediaFrontCoating  MediaGrain  MediaHoleCount  MediaInfo  MediaKey  MediaOrderCount  MediaPreprinted  MediaRecycled  MediaSize  XDimension  YDimension  MediaSizeName  MediaThickness  MediaTooth  MediaType  MediaWeightMetric  MediaBottomMargin  MediaLeftMargin  MediaRightMargin  MediaTopMargin  MediaSource |
| *Media@BackCoatings* | *MediaBackCoating* |
| *Media@MediaColorName* | *MediaColor* |
| *Media@FrontCoatings* | *MediaFrontCoating* |
| *Media@GrainDirection* | *MediaGrain* |
| *Media@HoleType* | *MediaHoleCount* |
| *Media/Comment@Name=”Description”* | *MediaInfo* |
| <none> | MediaInputTrayCheck |
| *Media@CatalogID* | *MediaKey* |
| *Media@MediaSetCount* | *MediaOrderCount* |
| *Media@Preprinted* | *MediaPreprinted* |
| *Media@Recycled* | *MediaRecycled* |
| <none> | MediaSheets |
| *Media@Dimensions* | *MediaSize* |
| *Media* | *MediaSizeName* |
| *Media@Thickness* | *MediaThickness* |
| *<none>* | *MediaTooth* |
| Media@MediaType | MediaType |
| *Media@Weight* | *MediaWeightMetric* |
| <none> | MultipleDocumentsHandling |
| NumberUp | NumberUp |
| FinishedPageOrientation | OrientationRequested |
| OutputBin | OutputBin |
| <none> | OutputDevice |
| **<TBD – complex mappings>** | Overrides  Override  Pages  PageRange  Lowerbound  Upperbound  DocumentNumbers  NumberRange  Lowerbound  Upperbound  DocumentCopies  PCopiesRange  Lowerbound  Upperbound  OverridingElements |
| PageDelivery | PageDelivery |
| PageOrder | PageOrderReceived |
| RunList@Pages  <none>  (see above)  (see above) | PageRanges  PageRange  Lowerbound  Upperbound |
| *<none>* | *Pages* |
| <none>  <none> | PagesPerSubset  Pages |
| <none>  <none>  <none>  <none>  <none> | PdlInitFiles  PdlInitFile  PdlInitFileLocation  PdlInitFileName  PdlInitFileEntry |
| *<none>* | *PdlInitFileEntry* |
| *<none>* | *PdlInitFileName* |
| *<none>* | *PdlInitFileEntry* |
| PresentationDirection | PresentationDirectionNumberUp |
| <none> | PrintColorMode |
| <none> | PrintContentOptimize |
| RenderingIntent | PrintRenderingIntent |
| **<TBD – complex mappings>** | ProofPrint  Copies  Media  MediaCol |
| PrintQuality | Quality |
| OutputResolution | Resolution |
| *<none>* | *SaveDisposition* |
| *<none>* | *SaveDocumentFormat* |
| *<none>* | *SaveInfo* |
| *<none>* | *SaveLocation* |
| *<none>* | *SaveName* |
| InsertSheet@SheetType=”Separator”  InsertSheet@SheetUsage  Media  MediaType  Media | SeparatorSheets  SeparatorSheetsType  Media  MediaType  MediaCol |
| *InsertSheet@SheetUsage* | *SeparatorSheetsType* |
| SheetCollate | SheetCollate |
| LayoutIntent@Sides | Sides |
| *StitchPositions* | *StitchingLocations* |
| *Offset* | *StitchingOffset* |
| *ReferenceEdge* | *StitchingReferenceEdge* |
| <none> | TemplateCreatorUserName |
| <none> | TemplateId |
| <none> | TemplateInfo |
| <none> | TemplateName |
| <none> | TemplateType |
| *(see MediaSizeName)* | *XDimension* |
| ImageShift@PositionX | XImagePosition |
| <none> | XImageShift |
| ImageShift@ShiftFront | XSide1ImageShift |
| ImageShift@ShiftBack | XSide2ImageShift |
| *(see MediaSizeName)* | *YDimension* |
| ImageShift@PositionY | YImagePosition |
| <none> | YImageShift |
| ImageShift@ShiftFront | YSide1ImageShift |
| ImageShift@ShiftBack | YSide2ImageShift |

1. References
   1. Normative References

[CIP4JDF] CIP4, "JDF Specification Release 1.4a", December 2009, http://www.cip4.org/menu.php?name=technical\_resources

[CIP4IDP] CIP4, "Integrated Digital Printing (IDP) ICS Version 1.3 Errata Revision A, February 2009, http://www.cip4.org/document\_archive/ics.php