

## 1. Mapping PPD Keywords to PWG Job Ticket Elements

PPD keywords are separated into main keywords and option keywords. Main keywords are the primary selector and generally map to one or more PWG elements. Option keywords provide the value for a main keyword and generally correspond to one or more PWG element values.

This mapping information is based on the work done for CUPS [CUPSPPD] to support IPP-based printing using PPD files.

**Table 1 - PPD Keywords to PWG Elements**

PPD Main Keyword	PWG Element	Section
Collate	MultipleDocumentHandling	1.1.1
ColorModel	PrintColorMode	1.1.2
cupsiPPFinishings	Finishings	1.1.3
CustomPageSize	MediaCollection MediaSize	1.1.4
HWMargins	MediaCollection MediaSize BottomMargin LeftMargin RightMargin TopMargin	1.1.4
ParamCustomPageSize	Media	1.1.4
Duplex	Sides	1.1.5
ImageableArea	MediaCollection MediaSize BottomMargin LeftMargin RightMargin TopMargin	1.1.6
PaperDimension	MediaCollection MediaSize XDimension YDimension	1.1.6
PageSize	MediaCollection MediaSizeName	1.1.6
InputSlot	MediaCollection MediaSource	1.1.7
LeadingEdge	FeedDirection	1.1.8
MediaColor	MediaCollection MediaColor	1.1.9
MediaType	MediaCollection MediaType	1.1.10

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**Comment [1]:** Pete to confirm.

PPD Main Keyword	PWG Element	Section
MediaWeight	MediaCollection MediaWeight	1.1.11
NumCopies	Copies	Note 1
OutputBin	OutputBin	1.1.12
OutputMode	Quality	1.1.13
OutputOrder	PageDelivery	1.1.14
Resolution	Resolution	1.1.15
1284DeviceID	DeviceId	1.2.1
ColorDevice	ColorSupported	1.2.2
cupsBackSide	PwgRasterDocumentSheetBack	1.2.3
cupsICCProfile	IccProfiles	1.2.4
cupsICCQualifier1	IccProfiles	1.2.4
cupsICCQualifier2	IccProfiles	1.2.4
cupsICCQualifier3	IccProfiles	1.2.4
cupsUIConstraints	JobConstraintsSupported	1.2.5
cupsUIResolvers	JobResolversSupported	1.2.5
LandscapeOrientation	MediaCollection MediaSourceProperties FeedOrientation	1.2.6
NickName	MakeAndModel	1.2.7
PageStackOrder	[one of the MIB mappings?]	1.2.8
RenderingIntent	PrintRenderingIntent	1.2.9
Throughput	PagesPerMinute	1.2.10

9 Note:

10 1 = Not actually a main keyword, but the name of the PostScript page device  
11 element that is used to set the number of copies.  
12

### 13 1.1 Job Ticket Keywords

14 Job ticket keywords list all of the supported values of a printer. Each job ticket main  
15 keyword also includes a default main keyword, for example "DefaultDuplex" for "Duplex".

#### 16 1.1.1 Collate

17 The Collate main keyword determines whether copies are collated and corresponds to the  
18 PWG MultipleDocumentHandling element. The supported option keyword values are True  
19 and False, corresponding to SeparateDocumentsCollatedCopies and  
20 SeparateDocumentsUncollatedCopies, respectively.

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**Comment [2]:** Pete to confirm this is the correct mapping.

21 **1.1.2 ColorModel**

22 The ColorModel main keyword determines whether output is color or grayscale and  
 23 corresponds to the PrintColorMode element. The supported option keyword values are  
 24 Gray, RGB, and CMYK, corresponding to Monochrome, Color, and Color, respectively.

25 **1.1.3 cupsIPPFinishings**

26 The cupsIPPFinishings main keyword provides a mapping for the Finishings element.  
 27 Each option keyword corresponds to an integer value representing a FinishingType value.

28 **1.1.4 CustomPageSize, HWMargins, ParamCustomPageSize**

29 The CustomPageSize, HWMargins, and ParamCustomPageSize main keywords indicate  
 30 that the printer supports custom media sizes. The ParamCustomPageSize values  
 31 associated with the Width and Height option keywords provide the minimum and  
 32 maximum media dimensions in points.

33 **1.1.5 Duplex**

34 The Duplex main keyword determines whether the output is simplex or duplex and  
 35 corresponds to the Sides element. The supported option keyword values are None,  
 36 DuplexNoTumble, and DuplexTumble, corresponding to OneSided, TwoSidedLongEdge,  
 37 and TwoSidedShortEdge.

38 **1.1.6 ImageableArea, PageSize, and PaperDimension**

39 The ImageableArea, PageSize, and PaperDimension main keywords determine the media  
 40 and correspond to the MediaCol element. The PaperDimension main keyword values  
 41 provide the media dimensions in points while the ImageableArea main keyword values  
 42 provide the media margins in points. Common option keyword values are shown in Table  
 43 2, however a proper mapping should use the PaperDimension values to lookup the  
 44 corresponding PWG media name.

45 **Table 2 - PPD and PWG Media Names**

PPD Option Keyword	PWG Media Name
Letter	na_letter_8.5x11in
Legal	na_legal_8.5x14in
Tabloid	na_tabloid_11x17in
4x6	na_index-4x6_4x6in
5x7	na_2r_5x7in
3.5x5	na_r_3.5x5in
3x5	na_index-3x5_3x5in
A3	iso_a3_297x420mm
A4	iso_a4_210x297mm

A5	iso_a5_148x210mm
A6	iso_a6_105x148mm
Env10	na_number-10_4.125x9.5in
EnvDL	iso_dl_110x220mm
SuperB	na_super-b_13x19in

### 46 1.1.7 InputSlot

47 The InputSlot main keyword determines the media source and corresponds to the  
 48 MediaSource element. The supported option keywords and the corresponding element  
 49 values are shown in Table 3.

50 **Table 3 - PPD and PWG Media Sources**

PPD InputSlot Option Keyword	PWG MediaSource Value
Auto	auto
Cassette	main
CDTray	disc
LargeCapacity	large-capacity
Lower	bottom
Middle	middle
Multipurpose	alternate
PhotoTray	photo
Roll	main-roll
Roll1	roll-1
Roll2	roll-2
Side	side
Tray1	tray-1
Tray10	tray-10
Tray2	tray-2
Tray3	tray-3
Tray4	tray-4
Tray5	tray-5
Tray6	tray-6
Tray7	tray-7
Tray8	tray-8
Tray9	tray-9
Upper	top

### 51 1.1.8 LeadingEdge

52 The LeadingEdge main keyword specifies how the media is loaded and corresponds to  
 53 the FeedDirection element. The supported option keyword values are Short and Long,  
 54 corresponding to ShortEdgeFirst and LongEdgeFirst, respectively.

55 **1.1.9 MediaColor**

56 The MediaColor main keyword specifies the color of the media and corresponds to the  
57 MediaColor element. The supported option keyword values are Title Case versions of the  
58 standard PWG media color names.

59 **1.1.10 MediaType**

60 The MediaType main keyword specifies the type of the media and corresponds to the  
61 MediaType element. The supported option keyword values are shown in Table 4.

62

**Table 4 - PPD and PWG Media Types**

<b>PPD MediaType Option Keyword</b>	<b>PWG MediaType Value</b>
Auto	auto
Card	card-stock
Coated	stationery-coated
Env	envelope
Glossy	photographic-glossy
HighGloss	photographic-high-gloss
Inkjet	stationery-inkjet
Letterhead	stationery-letterhead
Matte	photographic-matte
Plain	stationery
Preprinted	stationery-preprinted
Recycled	stationery-recycled
Transparency	transparency

63 **1.1.11 MediaWeight**

64 The MediaWeight main keyword specifies the weight of the media and corresponds to the  
65 MediaWeight element. The option keyword values are integers in grams per square  
66 meter.

67 **1.1.12 OutputBin**

68 The OutputBin main keyword specifies the output bin, finisher, mailbox, or other collection  
69 point for the output and corresponds to the OutputBin element. The supported option  
70 keyword values are Title Case versions of the standard PWG output bin names.

71 **1.1.13 OutputMode**

72 The OutputMode main keyword specifies the print quality and corresponds to the Quality  
73 element. The supported option keyword values are Draft, Normal, and High,  
74 corresponding to the same PWG quality names.

**75 1.1.14 OutputOrder**

76 The OutputOrder main keyword specifies the order of printed pages and corresponds to  
77 the PageDelivery element. Supported option keyword values are Normal and Reverse,  
78 corresponding to the SameOrderFaceDown/Up and ReverseOrderFaceDown/Up values,  
79 respectively.

**80 1.1.15 Resolution**

81 The Resolution main keyword specifies the output resolution and corresponds to the  
82 Resolution element. Supported option keyword values are of the form "Hdpi" or "HxVdpi",  
83 where "H" is the integer Cross Feed resolution and "V" is the integer Feed resolution in  
84 dots per inch.

**85 1.2 Capability and Description Keywords****86 1.2.1 1284DeviceID**

87 The 1284DeviceID main keyword specifies the IEEE 1284 device ID string and  
88 corresponds to the DeviceID element.

**89 1.2.2 ColorDevice**

90 The ColorDevice main keyword specifies whether the printer supports color output and  
91 corresponds to the ColorSupported element.

**92 1.2.3 cupsBackSide**

93 The cupsBackSide main keyword specifies how the back side image of duplex sheets  
94 must be rendered for the printer and corresponds to the PwgRasterDocumentSheetBack  
95 element.

**96 1.2.4 cupsICCProfile, cupsICCQualifier1, cupsICCQualifier2, cupsICCQualifier3**

97 The cupsICCProfile, cupsICCQualifier1, cupsICCQualifier2, and cupsICCQualifier main  
98 keywords specify the device ICC profiles for the printer and correspond to the IccProfiles  
99 element. The option keywords for the cupsICCProfile main keyword are of the form  
100 "Qualifier1.Qualifier2.Qualifier3", where each of the qualifier strings may be empty or one  
101 of the supported option keyword values for the main keyword specified by the values of  
102 the cupsICCQualifier1, cupsICCQualifier2, and cupsICCQualifier3 main keywords.

**103 1.2.5 cupsUIConstraints, cupsUIResolver**

104 The cupsUIConstraints and cupsUIResolver main keywords specify constraints between  
105 job ticket elements and correspond to the JobConstraintsSupported and  
106 JobResolversSupported elements, respectively. The option keywords for each specify the  
107 ResolverName element while the values provide a whitespace-delimited list of job ticket  
108 elements and values of the form "\*MainKeyword OptionKeyword" or, in the case of

109 cupsUIConstraints values, "\*MainKeyword" without an option keyword when all option  
110 keywords conflict except None, False, or NotInstalled.

### 111 **1.2.6 LandscapeOrientation**

112 The LandscapeOrientation main keyword specifies the expected orientation of landscape  
113 media such as envelopes and corresponds to the FeedOrientation element. The  
114 supported option keyword values are Plus90 and Minus90, corresponding to the  
115 Landscape and ReverseLandscape values, respectively.

### 116 **1.2.7 NickName**

117 The NickName main keyword specifies the make and model of the printer and  
118 corresponds to the MakeAndModel element.

### 119 **1.2.8 PageStackOrder**

120 The PageStackOrder main keyword specifies whether output is face up in a given output  
121 bin and corresponds to the ??? element. The option keyword is an OutputBin option  
122 keyword and the value is Normal or Reverse corresponding to FaceDown or FaceUp.

### 123 **1.2.9 RenderingIntent**

124 The RenderingIntent main keyword specifies the supported colorimetric rendering intents  
125 for the printer and corresponds to the PrintRenderingIntent element. The option keywords  
126 correspond directly to element values.

### 127 **1.2.10 Throughput**

128 The ThroughPut main keyword specifies the speed of the printer in pages per minute and  
129 corresponds to the PagesPerMinute element. There is no differentiation for black-and-  
130 white versus color printing speed.

## 131 **2. References**

### 132 **2.1 Normative References**

- 133 [ADOBE5003] Adobe, "PostScript Printer Description File Format Specification  
134 Version 4.3", February 1996, Adobe TechNote 5003
- 135 [CUPSPPD] M. Sweet, "CUPS PPD Extensions",  
136 <http://www.cups.org/documentation.php/spec-ppd.html>