

1 PWG DRAFT  
2 ipp-finishings-attr-vals-981214.txt

C. Manros  
Xerox Corporation  
T. Hastings  
Xerox Corporation  
December 14, 1998

3  
4  
5  
6  
7  
8  
9 Internet Printing Protocol/1.0: "finishings" attribute values extension

10

11 Status of this Memo

12 This document is a Printer Working Group (PWG) DRAFT. The previous version  
13 (981108) was posted to the IPP mailing list for comment on 11/08/98 and reviewed at the  
14 November 12, 1998 PWG meeting in Tucson. This version contains the changes agreed  
15 to at that meeting and need to be reviewed by the participants on the mailing list using the  
16 Last Call PWG procedures.

17 **Abstract**

18 This document specifies additional enum values for the IPP/1.0 "finishings" Job  
19 Template attribute for use with the Internet Printing Protocol/1.0 (IPP) [ipp-mod,  
20 ipp-pro]. This attribute permits the client to specify additional finishing options,  
21 including values that include a specification of a coordinate system for the  
22 placement of finishings operation with respect to the corners and edges of portrait  
23 and landscape documents.

24

25

26 **TABLE OF CONTENTS**

27 1 Additional values for the "finishings" Job Template attribute ..... 2  
28 1.1 Problem ..... 2  
29 1.2 Suggested solution ..... 2  
30 1.2.1 Proposed Text ..... 3

31

32 **1 Additional values for the "finishings" Job Template attribute**

33 **1.1 Problem**

34 Need additional enum values for finishing to specify which of four corners to put a single  
35 staple, which of four edges to put two staples, and saddle and edge stitch generic values.

36 **1.2 Suggested solution**

37 This solution has been proposed at two previous meetings with comments returned and  
38 incorporated. The suggestion is to add additional enum values to the "finishings" Job  
39 Template attributes (also applies to "finishings-default" and "finishings-supported"  
40 attributes).

41 Coordination with the Finisher MIB has been done. There appears to be no direct way to  
42 use the same enum values, since the Finisher MIB divides up finishing into separate  
43 enum values by type. So all the stapling is done as a separate enum. Also all the  
44 punching is done as a separate enum.

45 The coordinate system scheme has been selected to agree with the Finisher MIB which in  
46 turn follows the ISO DPA approach of using a coordinate system as if the document were  
47 portrait. The approach for coordinate system being relative to the intended reading  
48 direction depends on the device being able to understand the orientation embedded in the  
49 PDL, which is too problematic for many PDLs. The approach for the coordinate system  
50 of being relative to the media feed direction is to dependent on the way the device is  
51 currently set up, i.e., pulling short edge first vs. long edge first, and can vary between  
52 different output-bins in the same device.

53 Keyword symbolic name of this enum value are:                   saddle-stitch  
54   edge-stitch  
55   staple-top-left  
56   staple-bottom-left  
57   staple-top-right  
58   staple-bottom-right  
59   edge-stitch-left  
60   edge-stitch-top  
61   edge-stitch-right  
62   edge-stitch-bottom  
63   staple-dual-left  
64   staple-dual-top  
65   staple-dual-right  
66   staple-dual-bottom  
67   saddle-stitch-single  
68   saddle-stitch-dual  
69

70

fold

71

trim

72

### 1.2.1 Proposed Text

73

Add the following paragraphs indicated with revision marks to the description of the

74

"finishings" Job Template attribute, section 4.2.6, so that the entire section would be:

75

#### 4.2.6 finishings (1setOf type2 enum)

76

This attribute identifies the finishing operations that the Printer uses for each copy of

77

each printed document in the Job. For Jobs with multiple documents, the "multiple-

78

document-handling" attribute determines what constitutes a "copy" for purposes of

79

finishing.

80

Standard enum values are:

81

Value	Symbolic Name and Description
-------	-------------------------------

82

83

'3'	'none': Perform no finishing
-----	------------------------------

84

'4'	'staple': Bind the document(s) with one or more staples. The exact number
-----	---

85

and placement of the staples is site-defined.

86

'5'	'punch': This value indicates that holes are required in the finished
-----	---

87

document. The exact number and placement of the holes is site-

88

defined. The punch specification MAY be satisfied (in a site- and

89

implementation-specific manner) either by drilling/punching, or by

90

substituting pre-drilled media.

91

'6'	'cover': This value is specified when it is desired to select a non-printed
-----	---

92

(or pre-printed) cover for the document. This does not supplant the

93

specification of a printed cover (on cover stock medium) by the

94

document itself.

95

'7'	'bind': This value indicates that a binding is to be applied to the document;
-----	---

96

the type and placement of the binding is site-defined."

97

8	'saddle-stitch': Bind the document(s) with one or more staples (wire
---	--

98

stitches) along the middle fold. The exact number and placement

99

of the staples is implementation and/or site-defined.

100

9	'edge-stitch': Bind the document(s) with one or more staples (wire
---	--

101

stitches) along one edge. The exact number and placement of the

102

staples is implementation and/or site-defined.

103

10-19	reserved for future generic finishing enum values.
-------	--

104

The following values are more specific; they indicate a corner or an edge as if the

105

document were a portrait document (see below):

106

20	'staple-top-left': Bind the document(s) with one or more staples in the top
----	---

107

left corner.

108

21	'staple-bottom-left': Bind the document(s) with one or more staples in the
----	--

109

bottom left corner.

Proposed IPP Additional Attributes and Attribute Values - Set 1

- 110 22 'staple-top-right': Bind the document(s) with one or more staples in the  
111 top right corner.
- 112 23 'staple-bottom-right': Bind the document(s) with one or more staples in  
113 the bottom right corner.
- 114 24 'edge-stitch-left': Bind the document(s) with one or more staples (wire  
115 stitches) along the left edge. The exact number and placement of  
116 the staples is implementation and/or site-defined.
- 117 25 'edge-stitch-top': Bind the document(s) with one or more staples (wire  
118 stitches) along the top edge. The exact number and placement of  
119 the staples is implementation and/or site-defined.
- 120 26 'edge-stitch-right': Bind the document(s) with one or more staples (wire  
121 stitches) along the right edge. The exact number and placement of  
122 the staples is implementation and/or site-defined.
- 123 27 'edge-stitch-bottom': Bind the document(s) with one or more staples (wire  
124 stitches) along the bottom edge. The exact number and placement  
125 of the staples is implementation and/or site-defined.
- 126 28 'staple-dual-left': Bind the document(s) with two staples (wire stitches)  
127 along the left edge assuming a portrait document (see above).
- 128 29 'staple-dual-top': Bind the document(s) with two staples (wire stitches)  
129 along the top edge assuming a portrait document (see above).
- 130 30 'staple-dual-right': Bind the document(s) with two staples (wire stitches)  
131 along the right edge assuming a portrait document (see above).
- 132 31 'staple-dual-bottom': Bind the document(s) with two staples (wire  
133 stitches) along the bottom edge assuming a portrait document (see  
134 above).
- 135 32 'saddle-stitch-single': Bind the document(s) with one staple (wire stitches)  
136 along the middle fold. The exact placement of the staple is  
137 implementation and/or site-defined.
- 138 33 'saddle-stitch-dual': Bind the document(s) with two staples (wire stitches)  
139 along the middle fold. The exact placement of the staples is  
140 implementation and/or site-defined.
- 141
- 142 Values 34 to 59 reserved for additional specific stapling values.
- 143
- 144 Folding and trimming values:
- 145 60 'fold': Fold the document(s) along the middle fold. The exact location of  
146 the middle fold is implementation and/or site-defined.
- 147 61 'trim': Trim the document(s).

148 The 'staple-xxx' values are specified with respect to the document as if the document  
149 were a portrait document. If the document is actually a landscape or a reverse-landscape  
150 document, the client supplies the appropriate transformed value. For example, to position  
151 a staple in the upper left hand corner of a landscape document when held for reading, the  
152 client supplies the 'staple-bottom-left' value (since landscape is defined as a +90 degree  
153 rotation from portrait, i.e., anti-clockwise). On the other hand, to position a staple in the  
154 upper left hand corner of a reverse-landscape document when held for reading, the client

## Proposed IPP Additional Attributes and Attribute Values - Set 1

155 supplies the 'staple-top-right' value (since reverse-landscape is defined as a -90 degree  
156 rotation from portrait, i.e., clockwise).

157 The angle (vertical, horizontal, angled) of each staple with respect to the document  
158 depends on the implementation which may in turn depend on the value of the attribute.

159 Note: The effect of this attribute on jobs with multiple documents is controlled by the  
160 "multiple-document-handling" job attribute (section 4.2.4) and the relationship of this  
161 attribute and the other attributes that control document processing is described in section  
162 16.3.

163 If the client supplies a value of 'none' along with any other combination of values, it is the  
164 same as if only that other combination of values had been supplied (that is the 'none'  
165 value has no effect).