

1 File: Toward-resolving-Apples-JSP2-comment-on-units-for-font-size-requested.doc

2
3 Since the font, highlighting, and indentation will be smashed when this mail message is turned to plain
4 text, I've attached a 47 KB .pdf which is much more readable, complete with line numbers to make it
5 easier to discuss at the telecon.
6

7 For the IPP WG telecon, tomorrow, Monday, July 19, here is input for the agenda topic:
8

- 9 > (5) Status of IPP WG Last Call on IPP JPS2 (Tom) - ends Monday 12 July
10 > -
11 > ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippjobprinterext10-v28-20100606-cl
12 > ean.pdf
13 > (ended Monday 12 July 2010)
14 >
15 > (6) Next Steps
16 > - IPP WG - Monday 26 July
17 > - IPP JPS2 into PWG Last Call?
18

19 Apple had made the following IPP WG Last Call comment:
20

21 2. The "font-size-requested" attribute uses points as the units,
22 however it should probably use a higher-precision unit (at least
23 decipoints, or 1/720th of an inch) to avoid issues with getting common
24 fixed-width font spacing right (e.g. 17 characters per inch with a
25 standard Courier font would need a point size of 5.293...) [And
26 apologies for the late notice on this - I haven't read through the
27 older material in a while...]
28
29

30 I had the action item to contact Xerox about whether or not it had implemented the "font-size-requested"
31 based on the draft submitted to the PWG in 2002. I had suggested the following possible alternatives to
32 Xerox:
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34 If Xerox hasn't really implemented the "font-size-requested" Job Template attribute, Xerox should
35 just agree to make the units be decipoints.
36

37 However, if Xerox has implemented the "font-size-requested" Job Template attribute, what should
38 the PWG do? Alternatives:
39

- 40 1. Xerox could argue that for real printing, the font size is specified in the document data,
41 NOT in the IPP protocol. In the document data, the size of the font can be specified in
42 finer units than points. So as the description says, this attribute is only used with
43 'text/plain', or 'text/html' (when there is no font size specified in the html), so the need for
44 higher precision is not really needed.
45
- 46 2. Xerox could change its implementation.
47
- 48 3. Xerox could keep its implementation and ignore the PWG IPP standard in this respect.
49
- 50 4. Xerox could make it an installation option or configurable setting whether the Printer uses
51 points or decipoints for this attribute.
52
- 53 5. Add a Printer attribute to the PWG spec that says what the units are for "font-size-
54 requested", say, "font-size-requested-units" (type2 keyword) = 'points', 'decipoints'. If
55 "font-size-requested-units" is NOT supported, clients MUST assume the units are:
56 'decipoints'.

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- 6. Add a Printer attribute to the PWG spec that says what the units are for "font-size-requested", say, "font-size-requested-units" (type2 keyword) = 'points', 'decipoints'. If "font-size-requested-units" is NOT supported, clients MUST assume the units are: 'points'.

Any other suggestions?

The IPP WG Last Call comment period has been extended from June 21 (today), to Friday July 9, so we have a little time to decide what to do and what to recommend to the PWG.

Thanks,
Tom

Dan Bell responded that Xerox had a long standing implementation and would be unlikely to change its implementation. He indicated his alternatives in order of decreasing desirability, including adding an additional suggestion #3 below:

Tom,

Thanks for the insights.

Xerox HAS implemented support for "font-size-requested", and it's been in existence for a long time. I don't know how extensively it's used, but it's there.

I would say it's highly unlikely that Xerox would be willing to change its long-time existing implementation at this point.

For the proposed options of adding a "font-size-requested-units" attribute, another option would be to make it a job-template attribute and have it passed in the job along with "font-size-requested". Then a "font-size-requested-units-supported" attribute could advertise what the printer supports. And if a job is submitted with no "font-size-requested-units" then either the device assumes it's points, or uses the "font-size-requested-units-default" value.

In my opinion the acceptable options, in order of preference, would be:

- 1. Xerox could argue that for real printing, the font size is specified in the document data, NOT in the IPP protocol. In the document data, the size of the font can be specified in finer units than points. So as the description says, this attribute is only used with 'text/plain', or 'text/html' (when there is no font size specified in the html), so the need for higher precision is not really needed.
- 2. Add a Printer attribute to the PWG spec that says what the units are for "font-size-requested", say, "font-size-requested-units" (type2 keyword) = 'points', 'decipoints'. If "font-size-requested-units" is NOT supported, clients MUST assume the units are: 'points'.
- 3. Add a Job template attribute to the PWG spec that what the units are for "font-size-requested" for the job, say, "font-size-requested-units" (type2 keyword) = 'points', 'decipoints'. If "font-size-requested-units-supported" is NOT supported on the Printer, clients MUST assume the units are: 'points'. If the job does not contain "font-size-requested-units", the Printer's default value is used.
- 4. Xerox could keep its implementation and ignore the PWG IPP standard in this respect.

113 To further support alternative #1, I urge the IPP WG to remember that the very few “xxx-requested” Job
114 Template attributes are ones that request the Printer to do something, as long as the document data is
115 silent on that feature. If the document data does specify something, then the document data takes
116 precedence. The “font-size-requested” is one of the 3 Job Template attributes whose precedence is
117 *lower* than the document data. Others are “font-name-requested” [JPS2] and “orientation-requested”
118 [RFC2911].

119
120 So the question is how likely is it that an application generates document data in which it can supply font
121 size in the data but fails to do so?

122 Or how likely is it that a user (1) received such a document or (2) received a plain text document from
123 somewhere that the user wants to specify the font to a size more precisely than one point?

124
125 Here is the current full text of the “font-size-requested” Job Template attribute which clearly describes
126 these lower precedence attributes which are intended only for text/plain and text/html document formats
127 or situations where the application could not or did not include the font size in the document data:

128 **7.3 font-size-requested (integer (1:MAX))**

129 **7.3.1 font-size-requested-default (integer (1:MAX))**

130 **7.3.2 font-size-requested-supported (1setOf rangeOfInteger (1:MAX))**

131 The OPTIONAL “font-size-requested” Job Template attribute enables an IPP client to specify
132 what default font size the printer MUST use to print a job if the document data is in a format that
133 does not have inherent font information (e.g., ‘text/plain’). For document formats which have
134 inherent font information (such as PostScript), this attribute will be ignored and will NOT override
135 that information.

136 For some document formats (such as ‘application/postscript’), the desired default font size of the
137 print-stream pages is specified within the document data. This information is generated by a
138 device driver prior to the submission of the print job. Other document formats (such as
139 ‘text/plain’) do not include the notion of desired font size within the document data. In the latter
140 case it is possible for the Printer object to bind the desired font size to the document data after it
141 has been submitted. It is expected that a Printer object would only support “font-size-requested”
142 for some document formats (e.g., ‘text/plain’ or ‘text/html’) but not others (e.g.,
143 ‘application/postscript’). This PDL-dependent behavior is no different than any other Job
144 Template attribute since a Printer object may support or not support any Job Template attribute
145 based on the document format supplied by the client. However, a special mention is made here
146 since it is very likely that a Printer object will support “font-size-requested” for only a subset of the
147 supported document formats.

148 The “font-size-requested” units are points, equivalent to 1/72nd of an inch.

149 This attribute can be specified as a Document Override that affects the Input-Document. The use
150 of this attribute on a Page override basis is not supported since changing the font characteristics
151 can affect the pagination.

152 NOTE: The use of the “xxx-requested” pattern for attribute names indicates that the value of the
153 attribute is to be used ONLY in the case when a value for the attribute is not contained within the
154 source document. This value will override the printer’s default value but will not override the
155 source document’s value. See the description of the “orientation-requested” Job Template
156 attribute in [RFC2911].

157 [At the meeting tomorrow and/or on the mail list, the IPP WG needs to consider the alternatives for](#)
158 [resolving Apple’s IPP WG Last Call comment.](#)

159

160 Thanks,
161 Tom

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165 -----Original Message-----

166 From: Ira McDonald [mailto:blueroofmusic@gmail.com]
167 Sent: Sunday, July 18, 2010 09:06
168 To: ipp@pwg.org; Michael R Sweet; Paul Tykodi; Tom Hastings; Ira McDonald
169 Subject: Re: IPP Agenda - 4pm EDT Monday 19 July 2010

170
171 Hi,

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173 REMINDER of tomorrow's IPP WG telecon

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175 Cheers,
176 - Ira

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178 On Mon, Jul 12, 2010 at 4:12 PM, Ira McDonald <blueroofmusic@gmail.com>
179 wrote:

180 > Hi,
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182 > [rescheduled from 12 July - apologies for missing agenda posting]
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184 > Reminder of our next IPP WG call:
185 >
186 > Monday 19 July - 1-2pm PDT / 4-5pm EDT
187 >
188 > Call-in toll-free number (US/Canada): 1-866-469-3239
189 > Call-in toll number (US/Canada): 1-650-429-3300 (Primary)
190 > Call-in toll number (US/Canada): 1-408-856-9570 (Backup)
191 >
192 > Attendee Access Code: *****#
193 > Attendee ID Code: # (empty)
194 >
195 > If you need the Attendee Access code, please email me a request.
196 >
197 >
198 > *** Main Objective - move IPP JPS2 into PWG Last Call ***
199 >
200 > Agenda:
201 >
202 > (1) PWG IP Policy and Minute Taker
203 > - Mike?
204 >
205 > (2) Approve IPP minutes from last meeting
206 > - ftp://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20100621.pdf
207 >
208 > (3) Status of IPP Version 2.0 Second Edition (Ira)
209 > - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp20-20100527-rev.pdf
210 > (or later draft if available)
211 >
212 > (4) Status of PWG Formal Vote on IPP Everywhere Charter (Mike/Ira)
213 > - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeverywhere-charter-20100610.pdf
214 > (ended Monday 12 July 2010)
215 >
216 > (5) Status of IPP WG Last Call on IPP JPS2 (Tom) - ends Monday 12 July

217 > - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippjobprinterext10-v28-20100606-
218 clean.pdf
219 > (ended Monday 12 July 2010)
220 >
221 > (6) Next Steps
222 > - IPP WG - Monday 26 July
223 > - IPP JPS2 into PWG Last Call?
224 >
225 > Ira McDonald (Musician / Software Architect)
226 > Chair - Linux Foundation Open Printing WG
227 > Co-Chair - TCG Hardcopy WG
228 > IETF Designated Expert - IPP & Printer MIB
229 > Blue Roof Music/High North Inc
230 > <http://sites.google.com/site/blueroofmusic>
231 > <http://sites.google.com/site/highnorthinc>
232 > <mailto:blueroofmusic@gmail.com>
233 > winter:
234 > 579 Park Place Saline, MI 48176
235 > 734-944-0094
236 > summer:
237 > PO Box 221 Grand Marais, MI 49839
238 > 906-494-2434
239 >
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