

April 2, 2013
Technical Brief



The Printer Working Group

IPP Everywhere Self-Certification Manual 1.0

Status: Interim

Abstract: This document defines IPP Everywhere self-certification test procedures and the process required for registering the test results in order to use the "IPP Everywhere Certified" logo. It also includes a license agreement for the use of the IPP Everywhere logo.

This document is a PWG Technical Brief. For a definition of a "PWG Technical Brief", see: <ftp://ftp.pwg.org/pub/pwg/general/pwg-process30.pdf>

This document is available electronically at:

<ftp://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ippeveselfcert10-20130402.docx>
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9 Title: *IPP Everywhere Self-Certification Manual*

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38 flexible operational forum and support services. The IEEE-ISTO provides a forum not only
39 to develop standards, but also to facilitate activities that support the implementation and
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44 **About the IEEE-ISTO PWG**

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46 Technology Organization (ISTO) with member organizations including printer
47 manufacturers, print server developers, operating system providers, network operating
48 systems providers, network connectivity vendors, and print management application
49 developers. The group is chartered to make printers and the applications and operating
50 systems supporting them work together better. All references to the PWG in this
51 document implicitly mean “The Printer Working Group, a Program of the IEEE ISTO.” In
52 order to meet this objective, the PWG will document the results of their work as open
53 standards that define print related protocols, interfaces, procedures and conventions.
54 Printer manufacturers and vendors of printer related software will benefit from the
55 interoperability provided by voluntary conformance to these standards.

56 In general, a PWG standard is a specification that is stable, well understood, and is
57 technically competent, has multiple, independent and interoperable implementations with
58 substantial operational experience, and enjoys significant public support.

59 For additional information regarding the Printer Working Group visit:

60 <http://www.pwg.org>

61 Contact information:

62 The Printer Working Group
63 c/o The IEEE Industry Standards and Technology Organization
64 445 Hoes Lane
65 Piscataway, NJ 08854
66 USA
67

68 About the Internet Printing Protocol Work Group

69 The Internet Printing Protocol (IPP) working group has developed a modern, full-featured
70 network printing protocol, which is now the industry standard. IPP allows a print client to
71 query a printer for its supported capabilities, features, and parameters to allow the
72 selection of an appropriate printer for each print job. IPP also provides job information prior
73 to, during, and at the end of job processing.

74 For additional information regarding IPP visit:

75 <http://www.pwg.org/ipp/>

76 Implementers of this specification are encouraged to join the IPP mailing list in order to
77 participate in any discussions of the specification. Suggested additions, changes, or
78 clarification to this specification, should be sent to the IPP mailing list for consideration.
79

Table of Contents

80

81 1. Introduction7

82 1.1 Reporting Problems.....7

83 2. Terminology7

84 2.1 Conformance Terminology7

85 2.2 Other Terminology.....7

86 2.3 Acronyms and Organizations7

87 3. Requirements.....8

88 3.1 Rationale for Title of Document.....8

89 3.2 Use Cases.....8

90 3.3 Out of Scope8

91 3.4 Test Requirements8

92 4. Bonjour Test Procedure9

93 4.1 Test Description and Checklist.....9

94 4.2 Setup and System Requirements.....9

95 4.3 Running Test Tool9

96 4.4 Interpreting Results9

97 5. WS-Discovery Test Procedure.....10

98 5.1 Test Description and Checklist.....10

99 5.2 Setup and System Requirements.....10

100 5.3 Running Test Tool10

101 5.4 Interpreting Results10

102 6. IPP Test Procedure.....11

103 6.1 Test Description and Checklist.....11

104 6.2 Setup and System Requirements.....11

105 6.3 Running Test Tool11

106 6.4 Interpreting Results11

107 7. Document Data Test Procedure12

108 7.1 Test Description and Checklist.....12

109 7.2 Setup and System Requirements.....12

110 7.3 Running Test Tool12

111 7.4 Interpreting Results12

112 8. Submission of Test Report and License Agreement.....13

113 9. References.....14

114 9.1 Normative References.....14

115 10. Author's Addresses14

116 11. Release History.....15

117 12. IPP Everywhere Logo License Agreement16

118 12.1 Logo Placement and Minimum Space.....16

119 12.2 Logo Usage16

120 13. Change History17

121 13.1 April 2, 201317

122 13.2 March 11, 201317

List of Figures

126 **No table of figures entries found.**
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130 of contents, on the Document Elements tab, under Table of Contents, point to a style and
131 then click the down arrow button. Click one of the styles under Manual Table of Contents,
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139 of contents, on the Document Elements tab, under Table of Contents, point to a style and
140 then click the down arrow button. Click one of the styles under Manual Table of Contents,
141 and then type the entries manually.

142

143 **1. Introduction**

144 The Internet Printing Protocol supports all kinds of printing from low-end consumer through
145 multi-room production printers. The IPP Everywhere project developed a new baseline
146 specification [PWG5100.14] that enables printing from arbitrary clients using vendor-
147 neutral driver software. In order to allow vendors to market their conformance to the new
148 specification and consumers to easily determine which printers are compatible with their
149 clients, the Printer Working Group has developed this technical brief which defines a series
150 of self-certification tests that must be performed successfully in order to use the IPP
151 Everywhere Certified logo. IPP Everywhere self-certification is open to all vendors and
152 individuals regardless of membership status in the Printer Working Group.

153 **1.1 Reporting Problems**

154 Description of where to go to report problems in this document and/or in the test tools. Also
155 contact information for reporting misuse. "ipp-everywhere@lists.pwg.org" for
156 discussion/questions?

157 **2. Terminology**

158 **2.1 Conformance Terminology**

159 Capitalized terms, such as MUST, MUST NOT, RECOMMENDED, REQUIRED, SHOULD,
160 SHOULD NOT, MAY, and OPTIONAL, have special meaning relating to conformance as
161 defined in Key words for use in RFCs to Indicate Requirement Levels [RFC2119]. The
162 term CONDITIONALLY REQUIRED is additionally defined for a conformance requirement
163 that applies to a particular capability or feature.

164 **2.2 Other Terminology**

165 *Capitalized Term In Italics*: definition of the term with any references as appropriate.

166 **2.3 Acronyms and Organizations**

167 *IANA*: Internet Assigned Numbers Authority, <http://www.iana.org/>

168 *IETF*: Internet Engineering Task Force, <http://www.ietf.org/>

169 *ISO*: International Organization for Standardization, <http://www.iso.org/>

170 *PWG*: Printer Working Group, <http://www.pwg.org/>

171

172 **3. Requirements**

173 **3.1 Rationale for Title of Document**

174 Provide a rationale for the document.

175 **3.2 Use Cases**

176 Provide use cases for the document in subsections using the casual use case format.

177 **3.3 Out of Scope**

178 The following are considered out of scope for this specification:

- 179 1. Definition of foo
- 180 2. Protocols for bar
- 181 3. Requirements for bla

182 **3.4 Test Requirements**

183 The test requirements for this specification are:

- 184 1. Confirm minimum conformance and interoperability of Printer for Bonjour
- 185 discovery
- 186 2. Confirm minimum conformance and interoperability of Printer for WS-Discovery
- 187 discovery
- 188 3. Confirm minimum conformance and interoperability of Printer for HTTP
- 189 4. Confirm minimum conformance and interoperability of Printer for IPP
- 190 5. Confirm minimum conformance and interoperability of Printer for PWG Raster
- 191 Format and JPEG document data
- 192 6. If supported, confirm minimum conformance and interoperability of Printer for
- 193 OpenXPS and PDF document data

194 The test recommendations for this specification are:

- 195 1. Provide comprehensive document data for print testing

196

197	4. Bonjour Test Procedure
198	4.1 Test Description and Checklist
199	Description of all of the tests that are run
200	4.2 Setup and System Requirements
201	Where to download test tool
202	System requirements for running test tool
203	4.3 Running Test Tool
204	Instructions for running test tool.
205	4.4 Interpreting Results
206	Description of the output of the test tool.
207	

208 **5. WS-Discovery Test Procedure**

209 **5.1 Test Description and Checklist**

210 Description of all of the tests that will be run.

211 **5.2 Setup and System Requirements**

212 Where to download test tool

213 wsdebug_client.exe for WS-Discovery development (search for "ws-discovery testing")

214 System requirements for running test tool

215 **5.3 Running Test Tool**

216 Instructions for running test tool

217 **5.4 Interpreting Results**

218 Description of the output of the test tool

219

220	6. IPP Test Procedure
221	6.1 Test Description and Checklist
222	Description of all of the tests that will be run
223	6.2 Setup and System Requirements
224	Where to download test tool
225	System requirements for running test tool
226	6.3 Running Test Tool
227	
228	Instructions for running test tool
229	6.4 Interpreting Results
230	Description of the output of the test tool
231	

232 **7. Document Data Test Procedure**

233 **7.1 Test Description and Checklist**

234 Description of all of the tests that will be run

235 Required formats: PWG Raster Format and JPEG

236 Optional formats: OpenXPS and PDF

237 Job template attributes: copies, finishings, media/media-col, ipp-attribute-fidelity, output-
238 bin, page-ranges, print-color-mode, print-quality, printer-resolution, sides

239 **7.2 Setup and System Requirements**

240 Where to download test tool

241 System requirements for running test tool

242 **7.3 Running Test Tool**

243

244 Instructions for running test tool

245 **7.4 Interpreting Results**

246 Description of the output of the test tool

247

248 8. Submission of Test Report and License Agreement

249 Instructions for submitting the test report (results of all tests) to the ISTO/PWG through
250 www.pwg.org web page. License agreement needs to be mailed, faxed, or scanned and
251 emailed with signatures to PWG officers, perhaps a role account @pwg.org?

252 Web-based submission will examine test results to check for errors or issues, stored in
253 database for display on pwg.org (make, model, date of self-certification, firmware version,
254 type of certification)

255

256 **9. References**

257 **9.1 Normative References**

258 [RFC2119] S. Bradner, "Key words for use in RFCs to Indicate Requirement
259 Levels", RFC 2119/BCP 14, March 1997,
260 <http://www.ietf.org/rfc/rfc2119.txt>

261 [PWG5100.14] M. Sweet, I. McDonald, "IPP Everywhere", PWG 5100.14-2013,
262 January 2013, [ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippeve10-](ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippeve10-20130128-5100.14.pdf)
263 [20130128-5100.14.pdf](ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippeve10-20130128-5100.14.pdf)

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272 standard:

273 Daniel Manchala - Xerox
274 Ira McDonald - High North
275 Glen Petrie - Epson
276 William Wagner - TIC

277 **11. Release History**

278 This section will contain a list of high-level changes for quarterly? releases of the technical
279 brief.

280

281 **12. IPP Everywhere Logo License Agreement**

282 *Once an entity passes the required conformance tests in the IPP Everywhere Self-Certification*
283 *Manual (the "Manual"), that entity and its tested product/component will be considered "certified" in*
284 *accordance with the PWG Candidate Standard 5100.14: IPP Everywhere. Entities with certified*
285 *product(s) shall receive from the IEEE Standards and Technology Organization - Printer Working*
286 *Group ("ISTO-PWG") the original electronic source files of the IPP Everywhere self-certification*
287 *mark (the "Logo"). Certified entities should strictly use only those files provided; variants of the*
288 *Logo may not be used in any way and will be considered a violation to this agreement.*

289 **12.1 Logo Placement and Minimum Space**

290 The Logo should be allowed enough space between itself and surrounding elements to maintain its
291 prominence and impact on the page. White space around the Logo draws the eye first to the Logo,
292 and then to the attached message, thereby fortifying the Logo. With the exception of template
293 items such as letterhead, envelopes, press releases, and business cards, there are no strict
294 measurements for the space around the Logo. Space will vary depending on size of the area in
295 which the Logo is placed, as well as on the amount of additional information adjoining the Logo.

296 While the amount of space surrounding the Logo varies, additional type or temporary taglines
297 **MUST NOT** be directly attached or integrated into the Logo.

298 **12.2 Logo Usage**

299 The Logo may be posted on a test vendor's website, marketing collateral, and documentation
300 pertaining to the product/component certified, and must reference that the product/component is
301 certified against the test suite reported in the official Self-Certification Test Report (SCTR) publicly
302 posted on the ISTO-PWG's website. The ISTO-PWG deems a product/component self-certified
303 which has passed the test defined in the Manual. The Logo is for use exclusively and solely by the
304 signed party in this Agreement who is considered by the ISTO-PWG to be a certified product
305 vendor.

306 The Logo is provided in two forms: a black version for use on light backgrounds and a white
307 version for use on dark backgrounds. The version of Logo used **MUST** provide sufficient contrast
308 with the background to be legible under normal office lighting conditions.

309 The ISTO-PWG is the sole and exclusive owner of all rights, title and interest in and to the Logo
310 together with the goodwill related thereto, and retains all right to control the appearance and
311 manner of use of the Logo. In the event the Party listed here fails to comply with the above
312 standards, that party agrees to immediately, upon notice from the ISTO-PWG, remedy its usage or
313 discontinue use of the Logo until such time as it can comply. Party agrees not take any action that
314 could be detrimental or bring disrepute to the Logo and/ or to the ISTO-PWG and its rights
315 referenced herein.

316 By (Signature): _____ Date: _____

317 Name (Printed): _____ Company: _____

318 **13. Change History**

319 **13.1 April 2, 2013**

- 320 1. Added comments from workgroup review on March 11, 2013
- 321 2. Added new test section for document data/print testing
- 322 3. Added new license agreement section

323 **13.2 March 11, 2013**

324 Initial revision.