

April 2, 2013
Technical Brief



The Printer Working Group

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IPP Everywhere Self-Certification Manual 1.0

Status: Interim

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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>
<ftp://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ippeveselfcert10-20130402.pdf>

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9 Title: *IPP Everywhere Self-Certification Manual*

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36 **About the IEEE-ISTO**

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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
 40 acceptance of standards in the marketplace. The organization is affiliated with the IEEE
 41 (<http://www.ieee.org/>) and the IEEE Standards Association (<http://standards.ieee.org/>).

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44 **About the IEEE-ISTO PWG**

45 The Printer Working Group (or PWG) is a Program of the IEEE Industry Standards and
 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:

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

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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

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 129 In your document, select the words to include in the table of contents, and then on the
 130 Home tab, under Styles, click a heading style. Repeat for each heading that you want to
 131 include, and then insert the table of contents in your document. To manually create a table
 132 of contents, on the Document Elements tab, under Table of Contents, point to a style and
 133 then click the down arrow button. Click one of the styles under Manual Table of Contents,
 134 and then type the entries manually.

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List of Tables

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 139 Home tab, under Styles, click a heading style. Repeat for each heading that you want to
 140 include, and then insert the table of contents in your document. To manually create a table
 141 of contents, on the Document Elements tab, under Table of Contents, point to a style and
 142 then click the down arrow button. Click one of the styles under Manual Table of Contents,
 143 and then type the entries manually.

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147 **1. Introduction**

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

157 **1.1 Reporting Problems**

158 Description of where to go to report problems in this document and/or in the test tools. [Also
159 contact information for reporting misuse. "ipp-everywhere@lists.pwg.org" for
160 discussion/questions?](#)

161 **2. Terminology**

162 **2.1 Conformance Terminology**

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

168 **2.2 Other Terminology**

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

170 **2.3 Acronyms and Organizations**

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

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

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

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

175

176 **3. Requirements**

177 **3.1 Rationale for Title of Document**

178 Provide a rationale for the document.

179 **3.2 Use Cases**

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

181 **3.3 Out of Scope**

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

- 183 1. Definition of foo
- 184 2. Protocols for bar
- 185 3. Requirements for bla

186 **3.4 Test Requirements**

187 The test requirements for this specification are:

- 188 1. [Confirm minimum conformance and interoperability of Printer for Bonjour](#)
- 189 [discovery](#)
- 190 2. [Confirm minimum conformance and interoperability of Printer for WS-Discovery](#)
- 191 [discovery](#)
- 192 3. [Confirm minimum conformance and interoperability of Printer for HTTP](#)
- 193 4. [Confirm minimum conformance and interoperability of Printer for IPP](#)
- 194 5. [Confirm minimum conformance and interoperability of Printer for PWG Raster](#)
- 195 [Format and JPEG document data](#)
- 196 6. [If supported, confirm minimum conformance and interoperability of Printer for](#)
- 197 [OpenXPS and PDF document data](#)

198 The test recommendations for this specification are:

- 199 1. [Provide comprehensive document data for print testing](#)

200

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209 **4. Bonjour Test Procedure**

210 **4.1 Test Description [and Checklist](#)**

211 Description of all of the tests that are run

212 **4.2 Setup and System Requirements**

213 Where to download test tool

214 System requirements for running test tool

215 **4.3 Running Test Tool**

216 Instructions for running test tool.

217 **4.4 Interpreting Results**

218 Description of the output of the test tool.

219

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

221 **5.1 Test Description [and Checklist](#)**

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

223 **5.2 Setup and System Requirements**

224 Where to download test tool

225 [wsddebug_client.exe for WS-Discovery development \(search for "ws-discovery testing"\)](#)

226 System requirements for running test tool

227 **5.3 Running Test Tool**

228 Instructions for running test tool

229 **5.4 Interpreting Results**

230 Description of the output of the test tool

231

232 **6. IPP Test Procedure**

233 **6.1 Test Description [and Checklist](#)**

234 Description of all of the tests that will be run

235 **6.2 Setup and System Requirements**

236 Where to download test tool

237 System requirements for running test tool

238 **6.3 Running Test Tool**

239

240 Instructions for running test tool

241 **6.4 Interpreting Results**

242 Description of the output of the test tool

243

244	<u>7. Document Data Test Procedure</u>
245	<u>7.1 Test Description and Checklist</u>
246	<u>Description of all of the tests that will be run</u>
247	<u>Required formats: PWG Raster Format and JPEG</u>
248	<u>Optional formats: OpenXPS and PDF</u>
249	<u>Job template attributes: copies, finishings, media/media-col, ipp-attribute-fidelity, output-</u>
250	<u>bin, page-ranges, print-color-mode, print-quality, printer-resolution, sides</u>
251	<u>7.2 Setup and System Requirements</u>
252	<u>Where to download test tool</u>
253	<u>System requirements for running test tool</u>
254	<u>7.3 Running Test Tool</u>
255	
256	<u>Instructions for running test tool</u>
257	<u>7.4 Interpreting Results</u>
258	<u>Description of the output of the test tool</u>
259	

260 8. Submission of Test Report [and License Agreement](#)

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

264 [Web-based submission will examine test results to check for errors or issues, stored in](#)
265 [database for display on pwg.org \(make, model, date of self-certification, firmware version,](#)
266 [type of certification\)](#)

267

268 **9. References**

269 **9.1 Normative References**

270 [\[RFC2119\]](#) S. Bradner, "Key words for use in RFCs to Indicate Requirement
 271 Levels", RFC 2119/BCP 14, March 1997,
 272 <http://www.ietf.org/rfc/rfc2119.txt>

273 [\[PWG5100.14\]](#) M. Sweet, I. McDonald, "IPP Everywhere", PWG 5100.14-2013,
 274 January 2013, [ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippeve10-](ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippeve10-20130128-5100.14.pdf)
 275 [20130128-5100.14.pdf](ftp://ftp.pwg.org/pub/pwg/candidates/cs-ippeve10-20130128-5100.14.pdf)

276 **10. Author's Addresses**

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 282 msweet@apple.com

283 The authors would also like to thank the following individuals for their contributions to this
 284 standard:

285 [Daniel Manchala - Xerox](#)
 286 [Jra McDonald - High North](#)
 287 [Glen Petrie - Epson](#)
 288 [William Wagner - TIC](#)

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298 **11. Release History**

299 This section will contain a list of high-level changes for quarterly? releases of the technical
300 brief.
301

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

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

310 **12.1 Logo Placement and Minimum Space**

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

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

319 **12.2 Logo Usage**

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

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

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

337 By (Signature): _____ Date: _____

338 Name (Printed): _____ Company: _____

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339 **13. Change History**

340 **[13.1 April 2, 2013](#)**

- 341 [1. Added comments from workgroup review on March 11, 2013](#)
- 342 [2. Added new test section for document data/print testing](#)
- 343 [3. Added new license agreement section](#)

344 **13.2 March 11, 2013**

345 Initial revision.