The Printer Working Group

PWG Document Management Policy

Status: Approved

Abstract: This PWG Policy defines the different types of PWG Documents produced by the PWG, the development phases of PWG Documents, and the approval processes used to approve a stable draft PWG Document for adoption and publication.

This document is available electronically at:

https://ftp.pwg.org/pub/pwg/general/process/pwg-document-management-policy.pdf

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39 # 1. Terminology

40 ## 1.1 Conformance Terminology

41 Capitalized terms, such as MUST, MUST NOT, RECOMMENDED, REQUIRED, SHOULD,
42 SHOULD NOT, MAY, and OPTIONAL, have special meaning relating to conformance as
43 defined in Key words for use in RFCs to Indicate Requirement Levels [BCP14].

44 ## 1.2 Other Terminology

45 *Document Editor:* The individual responsible for publishing drafts of a PWG Document
46 incorporating their own work as well as contributions from others. [PWG_PROCESS]

47 *PWG Voting Member:* A PWG Member who has a current membership that includes voting
48 rights and that has paid their current membership dues. [PWG_PROCESS]

49 ## 1.3 Acronyms and Organizations

50 *IANA*: Internet Assigned Numbers Authority, https://www.iana.org/

51 *IETF*: Internet Engineering Task Force, https://www.ietf.org/

52 *ISO*: International Organization for Standardization, https://www.iso.org/

53 *PWG*: Printer Working Group, https://www.pwg.org/

54 # 2. PWG Document Types

55 The PWG publishes documents that specify technologies, documents that provide guidance
56 on implementation, and documents that record the status of PWG operations. The
57 development phases of a PWG Document are defined in section 3. The processes used to
58 approve a PWG Document for acceptance and publication are defined in section 4.

59 The document types for PWG Process and PWG Policy documents, and their development
60 process, are defined in PWG Process [PWG_PROCESS].

61 ## 2.1 Best Practice

62 A PWG Best Practice Document is a normative document that defines best practices for
63 using PWG technology. A PWG Best Practice MUST NOT define new PWG technologies or
64 extensions to existing PWG technologies.

2.2 Candidate Standard

A PWG Candidate Standard is the first level in the PWG standards-track development process and provides the foundation for initial product development and interoperability testing. Implementations can confidently proceed from a PWG Candidate Standard, knowing that it will not undergo significant change as it matures to a PWG Standard. However, if changes to a Candidate Standard become necessary, these changes will be accomplished via Working Drafts that MUST once again go through Last Call and an appropriate level of PWG Document Approval. The Working Draft will then and only then regain Candidate Standard status.

2.3 Informational

A PWG Informational document presents information about PWG technologies or outside technologies that relate in some way to PWG technologies. A PWG Informational Document MUST NOT include normative requirements of any kind. Examples of PWG Informational documents include white papers or books.

2.4 Registration

A Registration document defines new elements and/or new values for existing elements (e.g, attributes, keywords, enum values, OIDs, schema elements) defined in approved PWG Documents or related standards.

Each Workgroup defines, with SC approval, the criteria for deciding the scope threshold beneath which this lightweight process might be applicable, and the process for approving these new values. If the Workgroup or the SC determines that the scope exceeds the threshold, then the conventional document approval procedures described in section 4 are used.

2.5 Standard

When an approved PWG Candidate Standard has demonstrated widespread interoperability in a report to the PWG SC, has no open technical issues, and has been approved for three (3) years, the PWG SC, in consultation with the originating Workgroup, MAY promote the Candidate Standard to PWG Standard.

2.6 Statement of Requirements

A Statements of Requirements Document specifies the best effort collection of known requirements on a particular protocol, interface, procedure, or convention that represents a profound new area of work for the PWG. This work might substantively change the scope of an existing PWG Workgroup or trigger the creation of a new PWG Workgroup.

2.7 White Paper

A White Paper can be the starting point for new work in the PWG. A PWG White Paper is written using the PWG White Paper template [PWG_WPTEMP] and contains the rationale, use cases, design requirements, and possible technical solutions of the new work. A PWG White Paper MUST NOT assign, reserve, or register new standards-track names or values.

2.8 Workgroup Charter

At time of creation, a PWG Workgroup creates an initial Workgroup Charter that clearly describes the scope of their work and defines milestones. A PWG Workgroup Charter SHOULD be revised every other year or at the request of the PWG Steering Committee.

3. PWG Document Development

There are several phases in PWG Document development.

3.1 New Work

PWG Members or other interested individuals propose new work to the PWG using the following procedure:

1) Email proposal to a PWG Workgroup reflector or PWG Steering Committee. The proposal might be in the email body or attached as a White Paper (section 2.7)

2) PWG Workgroup Officers and/or PWG Steering Committee evaluate the proposal and decide whether the proposal is:

   a) **Within scope of existing Workgroup**: PWG SC sends it to that WG and SC task the Workgroup with updating the charter to include the new work if the WG has the member participation to pursue and accomplish the new work objectives

   b) **Within scope of new Workgroup**: PWG SC creates the new Workgroup and the new Workgroup does what is described in (a)

   c) **Out of scope of the PWG**: SC provides an explanation closes the matter

3.2 Organizing and Naming Documents

Draft PWG Documents are given a name that follows the conventions laid out in the PWG Namespace Policy [PWG_NAMING].

125 **3.3 Document Editing**

126 The Workgroup Chair or PWG Chair will appoint one or more Document Editors for each
127 PWG Document, depending on the PWG Document type (section 2). Document Editors
128 publish drafts that reflect Workgroup consensus, rather than their own personal views.

129 **3.4 Document Status Levels**

130 Document Editors SHALL label PWG Documents with a status level on the title page as
131 follows: Status: <keyword>, with the <keyword> being one of those listed in Table 1. The
132 status of a Working Draft is decided via Workgroup consensus.

133   **Table 1 - Document Status keywords**

Status keyword	Indicates
Initial	Initial Working Draft
Interim	Intermediate Working Draft under active development; significant changes are possible
Prototype	Technically complete Working Draft that is ready for prototyping (section 3.5)
Stable	Stable Working Draft with prototype complete and documented; candidate for PWG Document Approval. A Stable draft of a PWG Document MUST NOT enter Formal Approval before all included Normative References are published.
Approved	Approved via PWG Formal Review and Approval (section 4.1) or PWG Call for Objections (section 4.2).
Deprecated	The previously Approved PWG Document has been deprecated and its contents SHOULD NOT be implemented.
Obsolete	The document has been obsoleted by another PWG standard or industry standard. The obsolete PWG document MUST NOT be implemented.

134 Normally, a Working Draft will progress through each status level from "Initial" to "Stable". A
135 Workgroup Chair or the PWG Steering Committee can reduce the status of a Working Draft
136 if an unexpected problem is found (for example during prototyping).

137 **3.5 Document Prototyping**

138 All conformance requirements [RFC2119] in a PWG Document MUST be prototyped and
139 reported before the PWG Document advances to Stable status. The PWG Prototyping Policy
140 [PWG_PROTO] defines the PWG's prototyping procedures in more detail.

141 **3.6 Document Versioning and Updates**

142 Updates to PWG Documents are versioned using as subset of Semantic Versioning
143 [SEMVER] as follows:

144   • Major version MUST be incremented if any changes to a PWG Document are not
145   backward compatible with the previous approved version

146   • Minor version MUST be incremented if changes to a PWG Document include new
147   features or editorial corrections but preserves backward compatibility with the
148   previous approved version

149 PWG versioning does not use the "Patch" versioning level from Semantic Versioning
150 [SEMVER]. The first approved version of a PWG Document is version 1.0.

151 4. PWG Document Adoption Procedures

152 When a Stable draft PWG Document has cleared Workgroup Last Call, a Workgroup Officer
153 or the draft's Document Editor notifies the PWG Steering Committee the Workgroup is
154 submitting the draft PWG Document into PWG Document Approval.

155 The PWG Steering Committee reviews the Workgroup Last Call process and chooses one
156 of the following responses:

157   1. If the draft PWG Document is not ready, then reject the Workgroup Last Call process
158   for the draft PWG Document and provide an explanation why the draft PWG
159   Document isn't ready for PWG Document Approval;

160   2. If the draft PWG Document is ready, then accept the Workgroup Last Call process
161   for the draft PWG Document and begin the PWG Call for Objections Document
162   Approval process (section 4.2) to seek that draft's approval, if:

163   i) The draft PWG Document is a Registration (section 2.4); or

164   ii) The draft PWG Document is a new minor version (section 3.6) of an existing PWG
165   Best Practice (section 2.1), Candidate Standard (section 2.2), Informational
166   (section 2.3), Statement of Requirements (section 2.6), PWG Standard (2.5), or
167   Workgroup Charter (section 2.8);

168   3. Otherwise, accept the Workgroup Last Call process for the draft PWG Document and
169   begin the PWG Formal Review and Approval process (section 4.1).

170 The PWG Chair then sends the chosen response to the Workgroup mailing list of the
171 originating Workgroup informing them of the PWG Steering Committee's decision.

172 4.1 PWG Formal Review and Approval

173 The PWG Formal Review and Approval process consists of the steps described in this
174 section. All steps MUST be performed in order, and a step MUST NOT be performed if the
175 previous steps have not completed successfully.

176 **4.1.1 PWG Last Call**

177 A PWG Last Call provides the PWG Membership with a final opportunity to raise editorial or
178 technical issues against a Stable PWG Document. During this period all PWG Members are
179 encouraged to review the final working draft for both technical and editorial concerns, and
180 to provide comments to the Workgroup and the Document Editor. The Workgroup Chair
181 announces a Last Call on a document with rough consensus of the Workgroup. Last Calls
182 are posted to the PWG-ANNOUNCE mailing list [PWG_COMM]. The Last Call period MAY
183 vary, based upon the content, complexity, holidays, or other circumstances, but MUST be
184 at least 16 full working days (minimum 22 calendar days). A working day is a normal
185 business day and is considered to end at 10 PM US Pacific Time (Los Angeles, CA, USA).

186 For any PWG Document transitioning to Candidate Standard or Standard:

187 • Last Call MUST either conclude at or span a PWG Plenary Meeting
188 [PWG_MEETINGS] with an overview of the PWG Document in Last Call, and a review
189 of any current detailed issues and their resolutions

190 • If less than 30 percent of the PWG membership have commented, participated, or
191 communicated that they have no comments for a given document during Last Call,
192 the Last Call period is automatically extended until that threshold is met.

193 • Within a reasonable period of time following closure of Last Call, all issues raised
194 during Last Call MUST be either resolved or rejected as follows:

195 o Resolved - Document updated to reflect the resolution

196 o Rejected - No change required in the document

197 All issues and their resolution from the most recent Last Call MUST be published in the
198 Formal Approval announcement.

199 **4.1.2 PWG Last Call Review Comments Resolution (PWG LCRC)**

200 Comments included in Last Call responses MUST be documented and resolved in a Last
201 Call Review Comments (LCRC) file by the Document Editors [PWG_ROLES] and an
202 updated draft with resolutions and the LCRC document MUST be posted to the same place
203 where previous drafts of the PWG Document were posted. Once a draft is reviewed and
204 approved by the Workgroup, it is ready for PWG Last Call Process Review.

205 **4.1.3 PWG Last Call Process Review**

206 The PWG Steering Committee MUST review the PWG Last Call activities to confirm that the
207 Last Call process has been conducted properly.

208 **4.1.4 PWG Formal Approval**

209 Once all the Last Call issues have been resolved or rejected, and the PWG Steering
210 Committee has reviewed Last Call, the PWG Secretary will announce a vote for Formal
211 Approval. Formal Approval voting MUST be announced and conducted via the PWG-
212 ANNOUNCE mailing list [PWG_COMM] and the announcement MUST include a link to the
213 Last Call Review Comments document (section 4.1.2).

214 The Formal Approval period MUST last at least 16 full working days (minimum 22 calendar
215 days). A working day is a normal business day that ends at 7 PM US Pacific Time (Los
216 Angeles, CA, USA). The PWG Steering Committee MAY make the Formal Approval period
217 longer at their discretion or at the request of the originating Workgroup Chair.

218 The PWG Secretary will oversee the Formal Approval process with the assistance of the
219 Workgroup Chair.

220 **4.1.4.1 Permissible Votes**

221 PWG Voting Members MAY cast one of the following four votes to participate in a PWG
222 Formal Approval:

223 - **YES** – MAY be accompanied by editorial comments

224 - **NO without Strong Objection** – MUST be accompanied by explanation of objection,
225   and a description of the changes required to turn the NO vote to a YES

226 - **NO with Strong Objection** – MUST be accompanied by explanation of objection,
227   and a description of the changes required to turn the NO vote to a YES

228 - **ABSTAIN** – comments WILL NOT be considered

229 Voters MAY change their vote before the Formal Approval process ends.

230 **4.1.4.2 Formal Approval**

231 For a PWG Document to be formally approved:

232 - Votes MUST be cast by at least 25% of PWG Voting Members to achieve quorum

233 - 50% or more of the votes cast (including abstentions) MUST be **YES**

234 - 66% or more of the votes cast (not including abstentions) MUST be **YES**

235 - 80% or more of the votes cast (not including abstentions) MUST be **YES** when any
236   vote is **NO with Strong Objection**

237 If quorum is not achieved during the initial voting period, then the voting period MUST be
238 extended once or twice.

239 If the draft PWG Document is not formally approved, then the originating Workgroup either
240 resolves the technical issues and repeats Last Call and Formal Approval, or abandons the
241 PWG Document.

242 All Formal Approval comments MUST be posted to the Workgroup mailing list, resolved by
243 the originating Workgroup, and the responses archived to the PWG FTP site. [PWG_COMM]

244 The PWG Steering Committee grants Formal Approval after it approves the process used
245 during Last Call and Formal Approval.

246 After the PWG Steering Committee has formally approved the PWG Document, the
247 Document Editors make final publishing changes to the PWG Document and they or the one
248 of the PWG Officers publishes the approved PWG Document.

249 **4.1.5 Formal Approval Voting Rights**

250 The following voting rights policy applies to all Formal Approval voting:

251 − A voter MUST be a representative of a PWG Voting Member in good standing.

252 − Only one vote MAY be cast by each PWG Voting Member.

253 ## 4.2 PWG Call for Objections

254 The PWG Steering Committee MAY allow a Workgroup to use the PWG Call for Objections
255 process defined here to seek approval for a candidate draft PWG Document.

256 A PWG Call for Objections is...

257 The Chair or Secretary of the PWG Workgroup producing the updated PWG Document
258 initiates a Call for Objections by posting a Call for Objections message to the PWG-
259 ANNOUNCE mailing list [PWG_COMM].

260 The Call for Objections announcement message subject contains "PWG Call for Objections:
261 <DOCUMENT NAME> (<START DATE> - <END DATE>)", where "<DOCUMENT NAME>"
262 is replaced with the title of the PWG Document seeking approval, and "<START DATE>"
263 and "<END DATE>" are the start and end dates of the Call for Objections process. The body
264 contains the time of day at which the Last Call terminates, links to the posted PWG
265 Document draft, and process instructions. A template Call for Objections announcement
266 message is provided in section 4.2.1.

267 Anyone, regardless of affiliation or member status, MAY submit an objection. All objections
268 submitted by PWG Voting Members MUST be resolved in a subsequent final revision of the
269 PWG Document, which will be reviewed in a subsequent PWG Workgroup meeting.
270 Objections received from those who are not PWG Voting Members MAY be accepted, but
271 their resolution is not required.

272   **4.2.1 Call for Objections Template Message**

273   This template message assumes the title of the asset is "PWGEXAMPLE", the start date is
274   June 2, 2020, and the end date is June 24, 2020.

275   Subject: PWG Call for Objections: PWGEXAMPLE (June 2 - June 26, 2020)

276   Greetings:

277   OBJECTIONS ARE NOT CONFIDENTIAL! See instructions below.

278   This email initiates a Call for Objections by the PWG Membership on a republished
279   PWGEXAMPLE specification as an errata to the existing PWGEXAMPLE Standard.
280   The current standard is located here:

281   https://ftp.pwg.org/pub/pwg/candidates/cs-pwgexample-20020102.pdf

282   The revision to replace it is located here:

283   https://ftp.pwg.org/pub/pwg/ipp/wd/wd-pwgexample-20200409.pdf

284   OBJECTION PERIOD: The period for stating an objection starts today, June 2, 2020
285   and ends at 10pm (US Pacific Time) on Friday, June 26, 2020.

286   Only respond if you have an objection to the changes made in the republished
287   PWGEXAMPLE Service specification. PWG 5111.65-2013: PWGEXAMPLE was
288   formally approved by the PWG as a Candidate Standard in November 2002.

289

290   HOW TO STATE AN OBJECTION:

291   Send an email with *exactly* the following subject line format:

292   PWGEXAMPLE Objection-<company name>-<voter's last name>-Object

293   Example:

294   PWGEXAMPLE Objection-Acme-McGee-Object

295   All objections MUST include the technical reason for the objection, otherwise the
296   Objection will not be considered, as per PWG Process 4.0.

297

298   WHERE TO SEND YOUR OBJECTION:

299   Please send your objection to *all* of the following email addresses:

300   ipp-chair AT pwg DOT org

301   ipp-vice-chair AT pwg DOT org

302   ipp-secretary AT pwg DOT org

303   ipp AT pwg DOT org (IPP WG mailing list)

304

305   NOTES:

306   - This Call for Objections is being conducted under the rules of the PWG Process 4.0
307   and the current PWG Policy on Intellectual Property and Confidentiality agreement.
308   The PWG Membership Agreement calls out both of these documents and the links
309   are provided below.

310   - To be eligible to object the member MUST have submitted a signed copy of the
311   PWG Membership Agreement and paid their dues.

312   The PWG Process 4.0 is located at:

313   https://www.pwg.org/chair/membership_docs/pwg-process40.pdf

314   The PWG Policy on Intellectual Property and Confidentiality is located at:

315   https://www.pwg.org/chair/membership_docs/pwg-ip-policy.pdf

316 5. Overview of Changes

317 5.1 PWG Document Management Policy 20230501

318 The first release of this policy was based on the "PWG Document Approval" section from a
319 late stable draft of PWG Process 4.0 from Process 3.0 but was then extensively rewritten.

320 6. References

321 6.1 Normative References

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331   https://ftp.pwg.org/pub/pwg/general/process/pwg-namespace-
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334   Responsibilities", May 2023,
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336   responsibilities-policy.pdf

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