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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1. Terminology
   1. Conformance Terminology

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

* 1. Other Terminology

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

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

* 1. Acronyms and Organizations

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

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

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

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

1. PWG Document Types

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

The document types for PWG Process and PWG Policy documents, and their development process, are defined in PWG Process [PWG\_PROCESS].

* 1. Best Practice

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

* 1. 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.

* 1. 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.

* 1. 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.

* 1. 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.

* 1. 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.

* 1. 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.

* 1. 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.

1. PWG Document Development

There are several phases in PWG Document development.

* 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:
   1. **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
   2. **Within scope of new Workgroup**: PWG SC creates the new Workgroup and the new Workgroup does what is described in (a)
   3. **Out of scope of the PWG**: SC provides an explanation closes the matter
   4. Organizing and Naming Documents

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

* 1. Document Editing

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

* 1. Document Status Levels

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

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. |

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

* 1. Document Prototyping

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

* 1. Document Versioning and Updates

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

* Major version MUST be incremented if any changes to a PWG Document are not backward compatible with the previous approved version
* Minor version MUST be incremented if changes to a PWG Document include new features or editorial corrections but preserves backward compatibility with the previous approved version

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

1. PWG Document Adoption Procedures

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

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

* 1. If the draft PWG Document is not ready, then reject the Workgroup Last Call process for the draft PWG Document and provide an explanation why the draft PWG Document isn't ready for PWG Document Approval;
  2. If the draft PWG Document is ready, then accept the Workgroup Last Call process for the draft PWG Document and begin the PWG Call for Objections Document Approval process (section 4.2) to seek that draft's approval, if:
     1. The draft PWG Document is a Registration (section 2.4); or
     2. The draft PWG Document is a new minor version (section 3.6) of an existing PWG Best Practice (section 2.1), Candidate Standard (section 2.2), Informational (section 2.3), Statement of Requirements (section 2.6), PWG Standard (2.5), or Workgroup Charter (section 2.8);
  3. Otherwise, accept the Workgroup Last Call process for the draft PWG Document and begin the PWG Formal Review and Approval process (section 4.1).

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

* 1. PWG Formal Review and Approval

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

* + 1. PWG Last Call

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

For any PWG Document transitioning to Candidate Standard or Standard:

* Last Call MUST either conclude at or span a PWG Plenary Meeting [PWG\_MEETINGS] with an overview of the PWG Document in Last Call, and a review of any current detailed issues and their resolutions
* If less than 30 percent of the PWG membership have commented, participated, or communicated that they have no comments for a given document during Last Call, the Last Call period is automatically extended until that threshold is met.
* Within a reasonable period of time following closure of Last Call, all issues raised during Last Call MUST be either resolved or rejected as follows:
  + Resolved - Document updated to reflect the resolution
  + Rejected - No change required in the document

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

* + 1. PWG Last Call Review Comments Resolution (PWG LCRC)

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

* + 1. PWG Last Call Process Review

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

* + 1. PWG Formal Approval

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

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

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

* + - 1. Permissible Votes

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

* **YES** – MAY be accompanied by editorial comments
* **NO without Strong Objection** – MUST be accompanied by explanation of objection, and a description of the changes required to turn the NO vote to a YES
* **NO with Strong Objection** – MUST be accompanied by explanation of objection, and a description of the changes required to turn the NO vote to a YES
* **ABSTAIN** – comments WILL NOT be considered

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

* + - 1. Formal Approval

For a PWG Document to be formally approved:

* Votes MUST be cast by at least 25% of PWG Voting Members to achieve quorum
* 50% or more of the votes cast (including abstentions) MUST be **YES**
* 66% or more of the votes cast (not including abstentions) MUST be **YES**
* 80% or more of the votes cast (not including abstentions) MUST be **YES** when any vote is **NO with Strong Objection**

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

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

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

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

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

* + 1. Formal Approval Voting Rights

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

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

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

* 1. PWG Call for Objections

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

A PWG Call for Objections is...

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

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

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

* + 1. Call for Objections Template Message

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

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

Greetings:

OBJECTIONS ARE NOT CONFIDENTIAL! See instructions below.

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

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

The revision to replace it is located here:

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

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

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

HOW TO STATE AN OBJECTION:

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

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

Example:

PWGEXAMPLE Objection-Acme-McGee-Object

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

WHERE TO SEND YOUR OBJECTION:

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

ipp-chair AT pwg DOT org

ipp-vice-chair AT pwg DOT org

ipp-secretary AT pwg DOT org

ipp AT pwg DOT org (IPP WG mailing list)

NOTES:

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

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

The PWG Process 4.0 is located at:

https://www.pwg.org/chair/membership\_docs/pwg-process40.pdf

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

https://www.pwg.org/chair/membership\_docs/pwg-ip-policy.pdf

1. Overview of Changes
   1. PWG Document Management Policy 20230501

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

1. References
   1. Normative References

[BCP14] S. Bradner, "Key words for use in RFCs to Indicate Requirement Levels", RFC 2119/BCP 14, March 1997, <https://datatracker.ietf.org/doc/html/bcp14>

[PWG\_COMM] Printer Working Group, "PWG Communications Policy", PWG Policy Document, May 2023, <https://ftp.pwg.org/pub/pwg/general/process/pwg-comm-policy.pdf>

[PWG\_MEETINGS] Printer Working Group, "PWG Meetings Policy", May 2023, <https://ftp.pwg.org/pub/pwg/general/process/pwg-meetings-policy.pdf>

[PWG\_NAMING] Printer Working Group, "PWG Namespace Policy", July 2020, <https://ftp.pwg.org/pub/pwg/general/process/pwg-namespace-policy.txt>

[PWG\_ROLES] S. Kennedy, J. Leber, I. McDonald, "PWG Officials Roles and Responsibilities", May 2023, <https://ftp.pwg.org/pub/pwg/general/process/pwg-roles-and-responsibilities-policy.pdf>

[PWG\_PROCESS] S. Kennedy, J. Leber, I. McDonald, "PWG Process v4.0 (DRAFT)", May 2023, <https://ftp.pwg.org/pub/pwg/general/wd/wd-pwg-process-4-20230501.pdf>

[PWG\_PROTO] M. Sweet, “PWG Prototyping Policy”, October 2012, <https://ftp.pwg.org/pub/pwg/general/process/pwg-prototype-policy-20121029.txt>

[PWG\_WPTEMP] Printer Working Group, "PWG Whitepaper Template", January 2022, <https://ftp.pwg.org/pub/pwg/general/templates/white-template.docx>

[SEMVER] Semantic Versioning 2.0.0, <https://semver.org/spec/v2.0.0.html>

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