PWG Document Management Policy

Status: Approved

Abstract: This PWG Policy defines the 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:

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1. Terminology

1.1 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].

1.2 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 Document: A document produced by the PWG and approved via one of the PWG’s document approval procedures. [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]

Working Day: A normal business day ending at 10 PM US Pacific Time (Los Angeles, CA, USA).

1.3 Acronyms and Organizations

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


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

2. PWG Document Types

PWG Documents define technologies, provide guidance on implementation, and record the status of PWG operations. This section defines the various types of PWG Documents. PWG Workgroups or the PWG Steering Committee develop each PWG Document using a phased lifecycle defined in section 3. Section 4 defines the processes used to accept and publish a draft PWG Document.

PWG Process and PWG Policy documents are not described in this PWG Document Management Policy. Their development processes are defined in PWG Process [PWG_PROCESS].
2.1 Best Practice

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

3.3 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.

3.4 Document Status Levels

Document Editors MUST 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>
<thead>
<tr>
<th>Status keyword</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>Initial Working Draft</td>
</tr>
<tr>
<td>Interim</td>
<td>Intermediate Working Draft under active development; significant changes are possible</td>
</tr>
<tr>
<td>Prototype</td>
<td>Technically complete Working Draft that is ready for prototyping (section 3.5)</td>
</tr>
<tr>
<td>Stable</td>
<td>Stable Working Draft with prototype complete and documented; candidate for PWG Document Approval. A Stable draft of a PWG Document MUST NOT enter Formal Vote before all included Normative References are published.</td>
</tr>
<tr>
<td>Approved</td>
<td>Approved via PWG Formal Review and Approval (section 4.1) or PWG Call for Objections (section 4.1.2.4).</td>
</tr>
<tr>
<td>Deprecated</td>
<td>The previously Approved PWG Document has been deprecated and its contents SHOULD NOT be implemented.</td>
</tr>
<tr>
<td>Obsolete</td>
<td>The document has been obsoleted by another PWG standard or industry standard. The obsolete PWG document MUST NOT be implemented.</td>
</tr>
</tbody>
</table>

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).

3.5 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.
3.6 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.

4. 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, and:
   i) The draft PWG Document is a Registration (section 2.4); or
   ii) 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);

   then accept the Workgroup Last Call process for the draft PWG Document and begin the PWG Call for Objections Document Approval process (section 4.1.2.4) to seek that draft's approval; OR

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.
4.1 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.

4.1.1 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 PWG Document with rough consensus of the Workgroup.

A PWG Officer or one of its delegates starts a PWG Last Call by posting an announcement using the template in section 4.1.1.3. The duration of a PWG Last Call MUST be at least 16 full Working Days (minimum 22 calendar days). The announcing officer duration MAY be longer, based upon the content, complexity, holidays, or other circumstances.

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:
  o Resolved - Document updated to reflect the resolution
  o Rejected - No change required in the document

All issues and their resolution from the most recent Last Call MUST be published in a Last Call Review Comments Resolution document (section 4.1.1.1).

4.1.1.1 PWG Last Call Review Comments Resolution (PWG LCRC)

When PWG Last Call responses include comments, the Document Editors [PWG_ROLES] author a new draft of the PWG Document, along with a Last Call Review Comments (LCRC) file listing each comment its resolution (Approved or Rejected) and a description of the comment resolution if Approved. The Document Editors publish both and notify the originating Workgroup, who reviews and approves the new draft, and then it is ready for PWG Last Call Process Review.
4.1.1.2 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.

4.1.1.3 Template PWG Last Call Announcement Message

Below is a template for a PWG Last Call announcement message. The poster of the announcement replaces the placeholder elements highlighted in red bold italics with information relevant to the PWG Document.

To: pwg-announce@pwg.org
Subject: PWG Last Call: PWGEXAMPLE v1.1 (June 2 – June 26, 2024)

Greetings,

This announcement begins a PWG Last Call for the PWGEXAMPLE v1.1 (EXMPL) specification, available here:


This PWG Last Call starts today, October 31, 2022 and ends Friday, November 28, 2022 at 10pm US Pacific time.

The XYZ WG has completed extensive review of the various revisions of this document and a workgroup last call. This document updates PWG 5177.33-2002 "PWGEXAMPLE v1.0 (EXMPL)".

This PWG Last Call is NOT a Formal Vote, but it DOES require your review acknowledgment. PWG Process 4.0 and the PWG Document Management Policy require that a quorum of PWG members (30% or 10 members) must acknowledge a PWG Last Call (with or without comments), before the PWG Document subject of this PWG Last Call can progress to PWG Formal Vote.

HOW TO RESPOND

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

Subject: <PWG Voting Member> has reviewed PWGEXAMPLE v1.0 (EXMPL) and has [no] comments

WHERE TO SEND YOUR RESPONSE

Please do NOT simply reply to this note on the PWG-Announce list.

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

xyz at pwg.org (XYZ WG mailing list - you must be subscribed!)
chair at pwg.org (Fred Flintstone, PWG Chair)
vice-chair at pwg.org (Wilma Flintstone, PWG Vice Chair)
secretary at pwg.org (Barney Rubble, PWG Secretary, XYZ WG Co-Chair)
xyz-vice-chair at pwg.org (Joe Rockhead, XYZ WG Vice-Chair)
xyz-secretary at pwg.org (Great Gazoo, XYZ WG Secretary, document editor)
Note: You must be subscribed to the XYZ WG mailing list to send email to that list - otherwise your email will be silently discarded. You can subscribe to this list at:

https://www.pwg.org/mailman/listinfo/xyz

The PWG Document Management Policy is located at:

The PWG Process 4.0 is located at:

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

4.1.2 PWG Formal Vote

Once all the PWG Last Call issues have been resolved, and the PWG Steering Committee has reviewed the PWG Last Call process and approved of its execution, the PWG Secretary will announce a PWG Formal Vote.

A PWG Formal Vote MUST be announced via the PWG-ANNOUNCE mailing list [PWG_COMM], using the template in section 4.1.2.4. The PWG Formal Vote MUST span at least 16 full Working Days (minimum 22 calendar days). The PWG Steering Committee MAY make the duration longer, at their discretion or at the request of the originating Workgroup Chair.

The PWG Secretary monitors the PWG Formal Vote with the assistance of the Workgroup Chair.

4.1.2.1 Permissible Votes

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

- **YES** – MAY be accompanied by editorial comments
- **NO** – MAY be accompanied by editorial comments
- **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** – MAY be accompanied by editorial comments

PWG Voting Members MAY change their vote before the PWG Formal Vote process ends.
4.1.2.2 Formal Vote Acceptance Criteria

All of the following criteria MUST be met for a draft PWG Document to be approved via PWG Formal Vote:

- At least 25% of PWG Voting Members MUST vote to achieve quorum
- At least 50% of ALL votes cast MUST be YES
- At least 66% of the votes cast (not including ABSTAIN) MUST be YES
- At least 80% of the votes cast (not including ABSTAIN) MUST be YES when any vote is NO with Strong Objection

The PWG Steering Committee changes the state of the PWG Document to "Approved" after it has approved the process used during PWG Formal Vote.

After the PWG Steering Committee has formally approved the PWG Document, the Document Editors make final publishing changes to the PWG Document (remove line numbers, change the status, remove change log) and they or one of the PWG Officers publishes the approved PWG Document and announces its publication.

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

If the draft PWG Document is not formally approved, then the Document Editors either resolve the technical issues and resubmit the updated PWG Document for a new PWG Last Call and PWG Formal Vote, or they can abandon the draft PWG Document.

All PWG Formal Vote 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]

4.1.2.3 Voting Rights for PWG Formal Vote

Each PWG Voting Member is permitted one vote, if the PWG Voting Member is in good standing. If more than one vote is received from a PWG Voting Member, all votes cast from that PWG Voting Member will be abandoned, and the PWG Steering Committee will contact the PWG Voting Member primary representative for their vote.

4.1.2.4 Template PWG Formal Vote Announcement Message

Below is a template for a PWG Formal Vote announcement message. The poster of the announcement replaces the placeholder elements highlighted in red bold italics with information relevant to the PWG Document.

To: pwg-announce@pwg.org
Subject: PWG Formal Vote: PWGEXAMPLE v1.1 (EXMPL) [Ends January 31, 2023]
Greetings,

VOTES ARE CONFIDENTIAL! See voting instructions below.

This announcement begins a PWG Formal Vote on the PWGEXAMPLE v1.1 (EXMPL) document as a PWG Candidate Standard, which is located at:


The complete list of PWG Last Call issues and resolutions is located at:


VOTING PERIOD

This Formal Vote starts today, January 3, 2023 and ends at 10pm (US Pacific Time) on January 31, 2023. Valid votes are: YES, NO, NO WITH STRONG OBJECTION, or ABSTAIN.

Representatives from PWG member companies are STRONGLY encouraged to exercise their right to vote.

PWG Privacy Policy: Your vote is confidential and will not be disclosed by PWG officers or document editors.

HOW TO VOTE

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

PWGEXAMPLE v1.1 (EXMPL) Formal Vote-<company name>-<voter's last name>-<Yes/No/Abstain>

For example:

PWGEXAMPLE v1.1 (EXMPL) Formal Vote-Acme-McGee-Yes

VOTING RULES

1. Any YES vote MAY be accompanied by comments
2. Any NO vote MAY be accompanied by comments
3. Any NO WITH STRONG OBJECTION vote MUST be accompanied by a description of the *technical* changes required.
4. Any ABSTAIN vote MAY be accompanied by comments

WHERE TO SEND YOUR VOTE

Please send your vote to *all* of the following email addresses:
chair at pwg.org (Fred Flintstone, PWG Chair)
vice-chair at pwg.org (Wilma Flintstone, PWG Vice Chair)
secretary at pwg.org (Barney Rubble, PWG Secretary)

Please do NOT simply reply to this note on the PWG-Announce or IPP WG lists (to preserve the confidentiality of your vote).

NOTES

1. This Formal Vote is being conducted under the rules of the PWG Process/3.0 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.

2. To be eligible to vote the member MUST have submitted a signed copy of the PWG Membership Agreement and paid their dues for 2023.

The PWG Document Management Policy is located at:


The PWG Process 4.0 is located at:


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


4.2 PWG Call for Objections

The PWG uses a PWG Call for Objections process to seek approval for a candidate draft PWG Document that meets the criteria listed in section 4.

The Chair or Secretary of the PWG Workgroup originating the draft PWG Document starts a PWG Call for Objections by posting an announcement using the template in section 4.2.1. The duration of a PWG Call for Objections MUST be at least 16 full Working Days (minimum 22 calendar days). The duration MAY be longer, based upon the content, complexity, holidays, or other circumstances.

Anyone, regardless of affiliation or member status, MAY respond to a Call for Objections by submitting an objection. All objections submitted by PWG Voting Members during a Call for Objections MUST be resolved for the Call for Objections to complete successfully. Objections submitted by those who are not PWG Voting Members MAY be resolved, but their resolution is not required for the Call for Objections to complete successfully.

If any part of an objection submitted by a PWG Voting Member cannot or will not be resolved, then the Call for Objections fails. In this case, the originating PWG Workgroup can work to
resolve the objections in the Workgroup and/or submit the draft PWG Document to seek PWG approval via PWG Formal Review and Approval (section 4.1).

4.2.1 Template Call for Objections Announcement Message

Below is a template for a PWG Formal Vote announcement message. The poster of the announcement replaces the placeholder elements highlighted in red bold italics with information relevant to the PWG Document. Optional portions are encapsulated in "<<<" and ">>>" tags.

To: pwg-announce@pwg.org
Subject: PWG Call for Objections: PWGEXAMPLE (June 2 – June 26, 2020)

Greetings:

OBJECTIONS ARE NOT CONFIDENTIAL! See instructions below.

This announcement begins a PWG Call for Objections to approve the xyz Workgroup's draft PWGEXAMPLE v1.0 [Candidate Standard | Standard | Best Practices document | Registration]. The draft that is the subject of this PWG Call for Objections is located at:


   <<<
   This draft is a minor update to the previously approved PWGEXAMPLE v1.0 [Candidate Standard | Standard | Best Practices document | Registration] that [resolves open errata | adds to registrations | includes some other kind of fairly innocuous change]. The currently approved revision is located at:


   >>>

OBJECTION PERIOD: This PWG Call for Objection starts today, June 2, 2020 and ends at 10pm (US Pacific Time) on Friday, June 26, 2020.

   <<<
   Only responses with an objection to the changes made in this draft. republished PWGEXAMPLE specification.

   >>>

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 the PWG Document Management Policy and 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 be in good standing with the PWG.

The PWG Document Management Policy is located at:


The PWG Process 4.0 is located at:


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


5. Overview of Changes

5.1 PWG Document Management Policy 20240610

This release includes the following changes:

- Normalized on the term "Formal Vote" to cover what used to be ambiguously called either Formal Vote or Formal Approval;

- Added templates for the PWG Last Call and PWG Formal Vote announcements, which were missing from 20230501, and rewrote the template PWG Call for Objections announcement to normalize all templates as much as possible;

- Added procedure to be followed if a Call for Objections fails; and

- Rewrote some of the voting language for PWG Formal Vote to be more clear.
5.2 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.

6. References

6.1 Normative References


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