

IEEE Standards Interpretations for IEEE Std 1003.5-1992

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Sponsor

**Portable Applications Standards Committee
of the
IEEE Computer Society**



Abstract: The Portable Applications Standards Committee of the IEEE Computer Society carried out a series of analyses of various problems encountered by users of IEEE Std 1003.5-1992, IEEE Standard for Information Technology—POSIX Ada Language Interfaces—Part 1: Binding for System Application Program Interface (API). The results of its deliberations are presented in this document. The intent is to give the POSIX Ada community reasonable ways of interpreting unclear portions of the standard.

Keywords: Ada, computer, computer environments, computer languages, interfaces, interpretations, portable operating system interface, POSIX

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IEEE Standards Interpretations

Occasionally, questions may arise regarding the meaning of portions of standards as they relate to specific applications. Such requests for interpretations should ask for clarifications of the exact nature of the contents of the standard.

Questions relating to such interpretations are reviewed and evaluated by a balance of members representing the specific committee interests. This officially formed interpretations subgroup creates and circulates a draft interpretation among its members. It transmits a final interpretation to the party initiating the request only after consensus has been achieved. The interpretation is also given to the standards-developing committee to consider addressing it in a supplement or the next revision to the standard.

Interpretations are issued to explain and clarify the intent of the standard and are not intended to constitute an alteration to the original standard or to supply consulting information. The interpretations subgroup cannot make new rules to fit situations not yet covered in the standard, even if the investigations of the subgroup lead it to conclude that the requirement is incomplete or in error. Changes to the standard are made only through revisions or supplements to the standard.

It is recognized that requests are frequently received that are partially or totally requests for information rather than requests for an interpretation. It is inappropriate to issue an official interpretation to answer such requests. The interpretations subgroup may, however, find from its research that the literal printing of the standards text is not identical to that approved by the standards developers and may issue an editorial correction as a part of its interpretation.

The original interpretations requests in this document have been lightly edited to remove extraneous matter and to focus on the problem presented. Some illustrations have been redrawn for publication. With these exceptions, requests are in the form received.



Procedure for Requesting an Interpretation

Requests for interpretations should be addressed to

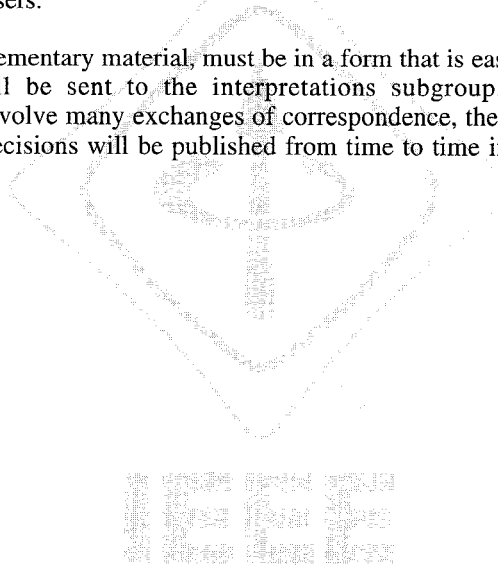
Secretary, IEEE Standards Board
IEEE Standards Department
445 Hoes Lane
P.O. Box 1331
Piscataway, NJ 08855-1331

Requests for interpretations should include

- a) The specific designation of the standard, including the year of publication.
- b) The specific subsection being questioned.
- c) The applicable conditions for the case in question.

Line drawings should be black ink or excellent black pencil originals. Photos should be black-and-white glossy prints. These illustrations must be reproduced for committee circulation and eventually will be used to supplement the text of the next edition. Clear diagrams and pictures will make the work of interpretation easier and more valuable to users.

Requests, including all supplementary material, must be in a form that is easily reproducible. If suitable for consideration, requests will be sent to the interpretations subgroup. After consideration by the subcommittee, which may involve many exchanges of correspondence, the inquirer will be notified of the decision of the subgroup. Decisions will be published from time to time in cumulative form and may be ordered from the IEEE.



Introduction

After approval and publication of a standard, questions may arise regarding the meaning of portions of standards as they relate to users of the standard. In the case of IEEE Std 1003.5-1992, these questions arose from both system implementors and application authors. When a need for interpretation is brought to the attention of the IEEE, the Institute initiates action to prepare appropriate responses.

IEEE Std 1003.5-1992 (POSIX.5) was developed by the Portable Applications Standards Committee (PASC) of the IEEE Computer Society. It is an Ada language binding to the content of IEEE Std 1003.1-1990 (POSIX.1). Each interpretation request is forwarded to the members of the PASC interpretations group and a subgroup is invited to generate a draft interpretation for review. The draft interpretation is made available to the whole interpretations group for review and comment. When consensus has been reached within the interpretations group, the IEEE transmits the final interpretation to the party initiating the request.

It is recognized that requests are frequently received that are partially or totally requests for information rather than requests for interpretation. The IEEE considers it inappropriate to issue an official interpretation to answer such requests. This includes requests for advice as to the means by which particular facilities described in the standard could be implemented.

Every IEEE standard is subjected to review at least every five years for revision or reaffirmation. The revision process takes input from a wide variety of sources in order to develop a revised standard. One of these sources is the interpretations that have been issued against the extant version of the standard. It is not to be expected that the text of the interpretation will appear in the revised standard, but rather that the revision will address the issues raised by the interpretation request through the consensus process. The revision process is allowed to resolve ambiguities in the original standard through textual change; this capability is not allowed within the interpretations process.

This document contains a compilation of all of the interpretations completed against IEEE Std 1003.5-1992 as of February 1994. The IEEE will provide details of interpretation requests received that have not yet appeared in a publication. Where a formal interpretation has been completed, this will include the text of the interpretation.

At the time that this compilation of interpretations was published, the following members had participated in the IEEE Std 1003.5-1992 interpretations group:

Portable Applications Standards Committee

Chair: Jim Isaak
Vice-Chair, Interpretations: Andrew Josey

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Bevin Brett
David Emery

Jayne Guyse
Jim Lonjers
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