

IEEE Standard

Adoption of International Standard ISO/IEC 12119: 1994(E)

Information Technology—Software packages—Quality requirements and testing

Sponsor

**Software Engineering Standards Committee
of the
IEEE Computer Society**

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IEEE-SA Standards Board

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Abstract: Quality requirements for software packages and instructions on how to test a software package against these requirements are established. The requirements apply to software packages as they are offered and delivered, not to the production process (including activities and intermediate products, such as specifications).

Keywords: quality requirements, software, software engineering, software package, testing

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Introduction

[This introduction is not part of IEEE Std 1465-1998, IEEE Standard—Adoption of International Standard ISO/IEC 12119: 1994(E)—Information Technology—Software packages—Quality requirements and testing.]

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IEEE Standard

Adoption of International Standard ISO/IEC 12119: 1994(E)

Information Technology—Software packages—Quality requirements and testing

Overview

IEEE Std 1465-1998 is an adoption of ISO/IEC 12119: 1994(E). IEEE Std 1465-1998 may be employed to

- a) Specify quality requirements for software, and provide instructions on how to test against these requirements.
- b) Manage and improve the organization's quality processes and personnel.
- c) Establish management and engineering environments based on the quality requirements and methods in ISO/IEC 12119: 1994(E).
- d) Foster improved understanding between customers and vendors, and among other parties involved in the software product life cycle.
- e) Facilitate world trade in software.

References

This standard shall be used in conjunction with the following publications. When the following standards are superseded by an approved revision, the revision shall apply.

IEEE Std 610.12-1990, IEEE Standard Glossary of Software Engineering Terminology.¹

IEEE Std 829-1998, IEEE Standard for Software Test Documentation.

IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications.

¹IEEE publications are available from the Institute of Electrical and Electronics Engineers, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, USA (<http://www.standards.ieee.org/>).

IEEE Std 1008-1987 (Reaff 1993), IEEE Standard for Software Unit Testing.

IEEE Std 1012-1998, IEEE Standard for Software Verification and Validation.

IEEE Std 1012a-1998, IEEE Standard for Software Verification and Validation: Content Map to IEEE/EIA 12207.1-1997.

IEEE Std 1016-1998, IEEE Recommended Practice for Software Design Descriptions.

IEEE Std 1063-1987 (Reaff 1993), IEEE Standard for Software User Documentation.

IEEE Std 1233, 1998 Edition, IEEE Guide for Developing System Requirements Specifications.

IEEE adoption implementation considerations

The following implementation notes relate to IEEE interpretation of ISO/IEC 12119: 1994(E).

Terminology correlation

Some differences exist between the terminology used in IEEE Std 1465-1998 and that in IEEE Std 610.12-1990. The reader should use the local definitions in IEEE Std 1465-1998 where there is a conflict with those of IEEE Std 610.12-1990. In some cases, the definition in IEEE Std 610.12-1990 may provide further clarification. However, it is important to keep in mind that full compatibility of definitions has yet to be achieved in the evolving field of software engineering.

Page 5: In subclause 3.1.6, change “efficiency” in the heading to “performance.”

Page 7: In subclause 3.3.4, change “efficiency” in the heading and text to “performance.”

Page 8: In clause 4, change “ergonomic” in the second complete paragraph to “human factor.”

Errata

Page 2: In subclause 2.6, change “test objective” in the first dash to “test objective(s).”

Page 2: Replace the text of the second dashed item with the following:

- The functions to be tested, and, if possible, a mapping to their related requirements.

Page 3: In subclause 3.1.1, change “easy to overview” in the first paragraph to “organized.”

Page 6: In subclause 3.2.5, change “easy to overview” in the first paragraph to “organized.”

Page 9: In subclause 4.3, add the following text above the first dashed item:

- a detailed list of all test objectives to be covered in the test cases;

Page 9: In subclause 4.4, change “objects” in the first paragraph to “objectives.”

Page 9: In subclause 4.4, in the last paragraph, delete “and the total number of its pages.” The intent of listing the total number of pages is to provide a way to verify that no part of the test report is missing.

INTERNATIONAL
STANDARD

ISO/IEC
12119

First edition
1994-11-15

**Information technology — Software
packages — Quality requirements and
testing**

Technologies de l'information — Logiciel — Exigences qualité et essais



Reference number
ISO/IEC 12119:1994

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