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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17548-2008

Replacing GB/T 17548-1998

**Information technology -- Requirements and Guidelines for Test
Methods Specification and Test Method implementation for
Measuring Conformance to POSIX Standards**

信息技术 POSIX标准符合性的测试方法规范和测试方法实现的要求和指南
(English Translation)

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8.1 Introduction

8.2 Identification Prerequisites

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Foreword

This standard is identical with ISO/IEC 13210:1999 "Information Technology POSIX Conformance test specifications and test methods part Method to achieve the requirements and guidelines. " this standard is the International Standard in technical content is exactly the same, only made some editorial changes and Appendix B of the clauses by According to the order have been adjusted.

This standard replaces GB/T 17548-1998, compared with the 1998 version of the standard, this standard has undergone major changes are as follows.

- Standard name changed to "POSIX standards compliance test methods specifications and test method implementation requirements and guidance";
- Reference standard GB national standard terminology in software engineering/T 11457-2006 instead of the original text of IEEE Std 729, its He cited standards are changed to correspond to national standards;
- Increasing the types of assertions, and type of each assertion in terms of structure, grammar, etc. were introduced;
- Increased testing methods to achieve specification requirements and test methods test results description of the code;
- Increasing the contour test methods and content of macro aspects;
- Increasing the sample is written in C and Ada language assertions.

Appendix A of this standard and Appendix B is an informative annex.

The standard proposed by the People's Republic of China Ministry of Information Industry.

This standard by the National Information Technology Standardization Technical Committee.

This standard was drafted. China Electronics Standardization Institute.

1.1 Scope

This standard applies to the POSIX standard compliance test method development and use, but also for the development of other application programming interface specification and use. This standard is intended for test methods specifications and test method of

developers and users.

Users of this standard include.

- Assertion writers. Formatting assertion;
- Assertion test writers. Write assertion test;
- Test suite or system purchasers. interpretation of the results of the test suite.

This standard aims to measure an Implementation Under Test (IUT) POSIX compliant developed assertions and associated test methods may be Righteous requirements and provide guidance. Test method implementation including compliance testing software (CTS), POSIX conformance test procedures (CTP), and Compliance Documentation (CD) review.

For a standard implementation of the POSIX compliance tests include tests that achieve the claimed ability to meet the requirements of this standard and behavior, which these test methods are designed to provide a rational and realistic assurance, so that to achieve compliance with this standard. But the use of these test methods are not supported Paul an implementation will certainly comply with this standard. To ensure that such compliance usually requires exhaustive testing (see 7.2.1), while not exhaustive test on technically or economically it is not.

1.2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. Who does not note date reference documents, the latest versions apply to this standard.

GB/T 11457-2006 Information technology - Software engineering terminology GB/T 17178.1-1997 Information technology - OSI conformance testing methodology and framework - Part 1. Basic Concepts (Idt ISO/IEC 9646-1:1994) GB/T 27025-2008 testing and calibration laboratories General requirements (idt ISO/IEC 17025:2005)

1.3 Compliance Guidelines

Test Method for the specification and implementation claiming compliance with this standard shall comply with all the requirements contained in the standard, "shall" indicates the declaration must be met and requirements. This standard as a guide or a way to identify the material are either recommended or optional, such as all the examples, notes and footnotes.

1.3.1 Test Method Regulatory Compliance Guidelines

A test method conforming to this standard specification shall contain all of the following criteria.

- When applicable, use of this standard, required definitions, types, syntax and structure (see Chapter 3);
- Use a test result codes specified in this standard for test results defined in this standard (see Chapter 4);

GB/T 17548-2008/ISO/IEC 13210:1999