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

GB/T 38634.5-2024

**Systems and software engineering - Software testing - Part 5:
Keyword-driven testing**

系统与软件工程 软件测试 第5部分：关键字驱动测试
(English Translation)

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Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms, Definitions and Abbreviations
4 Compliance
5 Introduction to Keyword Driven Testing
6 Applications of Keyword Driven Testing
7 Keyword-driven testing framework
8 Data Exchange
Appendix A (Normative) Conventions
Appendix B (Informative) Advantages and Problems of Keyword-Driven Testing
Appendix C (Informative) Introduction to Keyword-Driven Testing
Appendix D (Informative) Roles and Tasks
Appendix E (Informative) Basic Keywords
Appendix F (Informative) Example
Appendix G (Informative) Typical Field Cases
Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 5 of GB/T 38634 "Systems and Software Engineering Software Testing". GB/T 38634 has been published as follows part.

- Part 1: Concepts and definitions;
- Part 2: Test procedure;
- Part 3: Test documentation;
- Part 4: Testing technology;
- Part 5: Keyword driven testing.

This document is modified to adopt ISO/IEC/IEEE29119-5.2016 "Software and systems engineering software testing part 5.keyword driven Dynamic Test".

Compared with ISO/IEC/IEEE29119-5.2016, this document has the following structural adjustments.

- Chapter 2 corresponds to Chapter 3 of ISO/IEC/IEEE29119-5.2016;
- Chapter 3 corresponds to Chapter 4 of ISO/IEC/IEEE29119-5.2016;
- Chapter 4 corresponds to Chapter 2 of ISO/IEC/IEEE29119-5.2016;
- References correspond to Appendix G of ISO/IEC/IEEE29119-5.2016.

The technical differences between this document and ISO/IEC/IEEE29119-5.2016 and their reasons are as follows.

- Changed and simplified the description of the scope to comply with the requirements of GB/T 1.1;
- Replaced ISO/IEC/IEEE24765 (see Chapter 3) with GB/T 11457 to match the corresponding national standards;
- The introductory words of terms and definitions add normative references to GB/T 38634.1 to match the corresponding national standards;
- Replaced ISO/IEC/IEEE29119-2 (see 6.6) with GB/T 38634.2-2020 to match the corresponding national standards;
- Replaced ISO/IEC/IEEE29119-3 (see 6.3, 7.3.2, F.2) with GB/T 38634.3-2020 to match the corresponding countries standard;
- Added abbreviations (see 3.2) and supplemented 7 abbreviations appearing in this document;
- Changed "High-level keywords" (see 3.1.2), "Test execution engine" (see 3.1.11), and moved the second half of the descriptive statement into the annotation.

Explanation;

- Changed the definition of "test framework" (see 3.1.12) and replaced it with the corresponding definition in ISO/IEC/IEEE29119.1.2022.

Adapt to the same series of standard definitions;

- Change Note 3 and Note 4 of 5.1, Note 3 of 5.2.4, Note 1 and Note 4 of 5.3.2, Note 5.4 in ISO/IEC/IEEE29119-5.2016 to Notes, Notes in 6.3, Notes in 7.2.4, Notes 2 and 3 in 7.3.3, Note 3 in Appendix A, and Note 2 in D.1 are all changed to the main text;
- Change the title of 7.3.2 and 7.4.2 from "General Properties" to "Documentation" to avoid the distinction between basic properties, advanced properties and general properties.

The understanding of nouns is confusing, and we need to grasp the common point that all attributes under this chapter must be documented;

--- Chapter 8 "It is advisable to use standards issued by internationally recognized standardization organizations" is changed to "It is advisable to use national standards or internationally recognized standards to match the corresponding national standards."

The following editorial changes have been made to this document.

--- To coordinate with the existing standard, the name of the standard is changed to "Systems and Software Engineering Software Testing Part 5: Keyword Driven test";

--- Added formatting notes to Figures 1 and 5;

--- Deleted the text editor application "for example" in 5.2.2 Example 1 of ISO/IEC/IEEE29119-5:2016, Brand-specific recommendations such as "A common example of this type of tool is" in 7.3.7;

--- In 6.3 and 6.6.5.1, change "see Appendix F" to "see Appendix F and Appendix G";

--- Correction Modify the reference chapter number and change "(see 5.6)" in 6.6.5.3 to "(see 6.4)";

--- Adjust the single item a) of 7.3.6, 7.3.8, 7.4.5 and 7.4.10 to a paragraph;

--- Change Appendix G to typical field cases.

Introduction

The purpose of GB/T 38634 "Systems and Software Engineering Software Testing" is to define a set of recognized software testing standards.

This set of standards can be used when managing or executing any form of software testing. GB/T 38634 is intended to consist of 5 parts.

--- Part 1: Concepts and definitions. The purpose is to establish the concepts and definitions of software testing.

--- Part 2: Test process. The purpose is to define the general process of software testing.

--- Part 3: Test Documentation. The purpose is to specify a document template for software testing, applicable to any organization, project or smaller testing activities.

--- Part 4: Test Techniques. The purpose is to define software test design techniques used in the test design process.

--- Part 5: Keyword-driven testing. The purpose is to define an efficient and consistent keyword-driven testing solution.

This document defines a unified approach to describing test cases in a modular way, which

helps projects create projects such as keyword-driven testing.

Specification and test automation framework. The term "keyword" refers to the elements used to combine test cases, such as building blocks. This document explains the the main concepts and applications of keyword-driven testing define the properties of the framework design used to support keyword-driven testing.

The various parts of GB/T 38634 are related to this document to a certain extent.

--- The concepts and definitions of software testing in GB/T 38634.1 apply to this document.

---GB/T 38634.2 defines the test process model based on the keyword-driven test framework, defines the organizational level, test management this document describes the software testing processes at the test and dynamic test levels and provides supporting information diagrams describing these processes.

GB/T 38634.2 Test design and implementation process in the specific implementation of keyword-driven testing, especially TD4 (derived test Use cases), TD5 (form test sets) and TD6 (derive test procedures) in keyword-driven testing.

--- The test document templates and examples defined in GB/T 38634.3 are applicable to this document.

--- GB/T 38634.4 test techniques are applied when designing test cases. Test cases are designed and described according to the keywords of this document.

Use case.

Systems and Software Engineering Software Testing Part 5: Keyword-driven testing

1 Scope

This document introduces the concept and application of keyword-driven testing, defines the keyword-driven testing framework, and supports keyword-driven testing.

Requirements for tool and data exchange.

This document is suitable for creating keyword-driven test specifications, creating and using keyword-driven test frameworks, and implementing keyword-based Automated testing.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.