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Information technology — Software product evaluation — Quality characteristics and guidelines for their use

Technologies de l'information Évaluation des produits logiciels — Caractéristiques de qualité de logiciel et directives d'utilisation



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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in Itaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an international Standard requires approval by at least 75% of the national bodies casting a vote.

International Standard ISO/IEC 9126 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology.

Annexes A and B of this International Standard are for information only.

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Introduction

As software applications have grown, so too has the importance of software quality. In order to manage software quality, the technology to specify and evaluate both the software product quality and development process quality objectively and quantitatively is most important. However, a framework is necessary that provides for the evaluation of software quality. This International Standard was produced as one part of a set of documents which provides that framework.



Information technology — Software product evaluation — Quality characteristics and guidelines for their use

1 Scope

This International Standard defines six characteristics that describe, with minimal overlap, software quality. These characteristics provide a baseline for further refinement and description of software quality. Guidelines describe the use of quality characteristics for the evaluation of software quality.

This International Standard does not provide subcharacteristics and metrics, and method for measurement, rating, and assessment. This International Standard adheres to the definition of quality in ISO 8402.

NOTE - A proposal for definitions of subcharacteristics is provided for information in annex A.

The definition of the characteristics and associated quality evaluation process model in this International Standard are applicable when specifying the requirements for and evaluating the quality of software products throughout their life cycle.

Its characteristics may be applicable to every kind of software, including computer programs and data contained in firmware.

This International Standard is intended for those associated with acquisition, development, use, support, maintenance, or audit of software.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISQ maintain registers of currently valid International Standards.

ISO/IEC 2382-20:1990, Information technology -- Vocabulary - Part 20 : Systems development. ISO 8402: 1986, Quality - Vocabulary .