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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 liaison 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

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This second edition cancels and replaces the first edition (ISO/IEC 1989:2002), which has been technically revised. It also incorporates the Technical Corrigenda ISO/IEC 1989:2002/Cor.1:2006, ISO/IEC 1989:2002/Cor.2:2006 and ISO/IEC 1989:2002/Cor.3:2009.

Introduction

COBOL began as a business programming language, but its present use has spread well beyond that to a general purpose programming language. Significant enhancements in this International Standard include:

- Dynamic-capacity tables
- Dynamic-length elementary items
- Enhanced locale support in functions
- Function pointers
- Increased size limit on alphanumeric, boolean, and national literals
- Parametric polymorphism (also known as method overloading)
- Structured constants
- Support for industry-standard arithmetic rules
- Support for industry-standard date and time formats
- Support for industry-standard floating-point formats
- Support for multiple rounding options

Annexes A, B, and C form a normative part of this International Standard. Annexes D through G are for information only.

Annex D, Concepts, includes an explanation of major features as well as the more complicated prior features and is the suggested starting point for the reading of this document.

A complete list of technical changes is given in Annex E.

The previous COBOL standard was published in 2002. Implementors have provided language extensions in response to the demands of their users. Several changes and extensions have, therefore, been made in this International Standard to prevent further divergence, and to ensure consistency among, and coherence within, various implementations.

Development of the COBOL language began before the invention of formal techniques for specification of programming languages. Hence, the COBOL standard uses its own description techniques, which are described in 5, Description techniques. These techniques involve general formats, which describe the syntax, and natural language.

During the development of this International Standard, great care was taken to minimize changes that would affect existing programs. Most substantive changes that potentially affect existing programs were introduced to resolve ambiguities in the previous COBOL standard. Details of the substantive changes are given in Annex E, Substantive changes list.

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