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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 22, Programming languages, their environments and system software interfaces.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

This technical specification (TS) is part of the International Standard for Prolog, ISO/IEC 13211.

The Universal Coded Character Set (UCS) as standardised in ISO/IEC 10646 (plus amendments) is a widely recognized foundation for extended character sets. This TS defines the character classification for distinguishing categories of characters which are foreseen by the Prolog grammar, if such characters occur as quoted characters, and if the PCS is UCS.

This document extends the ISO/IEC 13211–1 Prolog standard, adopting a similar structure. In particular, this document adds new subclauses to, or modifies existing subclauses of ISO/IEC 13211–1. Throughout this document, instructions for such modifications are written as *slanted text*.

Information technology — Programming languages — Prolog —

Part 4:
Unicode characters in quoted characters of Prolog text

1 Scope

This document promotes the applicability and portability of Unicode characters in data processing systems that support standard Prolog as defined in ISO/IEC 13211–1:1995 and ISO/IEC 13211–2:2000, and the three Technical Corrigenda of 13211–1 2007, 2012, and 2017. This document specifies:

  a) The correspondence of character categories as defined by ISO/IEC 10646 to Prolog characters that occur in quoted tokens.

NOTE   The scope of ISO/IEC 13211–1:1995 applies to this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 13211–1:1995, *Information technology — Programming languages — Prolog — Part 1: General core.*

ISO/IEC 13211–2:2000, *Information technology — Programming languages — Prolog — Part 2: Modules.*

ISO/IEC 13211–1:1995/Cor.1:2006, *Information technology — Programming languages — Prolog — Part 1: General core — Technical Corrigendum 1*

ISO/IEC 13211–1:1995/Cor.2:2012, *Information technology — Programming languages — Prolog — Part 1: General core — Technical Corrigendum 2*

ISO/IEC 13211–1:1995/Cor.3:2017, *Information technology — Programming languages — Prolog — Part 1: General core — Technical Corrigendum 3*

ISO/IEC 10646:2020, *Information technology — Universal coded character set (UCS)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 13211–1 and the following apply. ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at www.iso.org/obp

— IEC Electropedia: available at www.electropedia.org

6 Syntax

6.4 Tokens

6.4.2 Names

6.4.2.1 Quoted characters

Add the following paragraph:

If the processor character set is the Universal Coded Character Set (UCS) as standardised in ISO/IEC 10646:2020 plus amendments, then the category of each quoted character is determined by ISO/IEC 10646:2020, using the following rules:

— `alpha char` is extended to include precisely every character that is not classified as any of:

  — *numeric*, *whitespace* or *control* by ISO/IEC 10646:2020 and its amendments

  — `graphic token char`, `layout char`, `meta char`, `solo char` by ISO/IEC 13211–1 and its corrigenda

— `alphanumeric char` is defined to comprise exactly:

  — every `alpha char`, and

  — every character classified as *numeric* by ISO/IEC 10646:2020 and its amendments.