INTERNATIONAL STANDARD

ISO/IEC 29500-3

Fourth edition
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Information technology — Document description and processing languages — Office Open XML File Formats —

Part 3: Markup Compatibility and Extensibility

Technologies de l'information — Description des documents et langages de traitement — Formats de fichier "Office Open XML" — Partie 3: Compatibilité et extensibilité du balisage

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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 standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 29500-3 was prepared by ISO/IEC JTC 1, Information technology, Subcommittee SC 34, Document description and processing languages.

This fourth edition cancels and replaces the third edition (ISO/IEC 29500-3:2012).

The major changes from the previous edition include:

- Specification of the core semantics in one place, and the interactions among semantic constructs and/or the processing model.
- Removal of the specification of namespace subsumption
- Expansion of examples, in particular, by providing output documents

The intended semantics remains the same as long as namespace subsumption is not used.

The major changes in the third edition included:

- Removed all traces of the concept of *markup editor*
- Removed the attributes PreserveAttributes and PreserveElements

There were no major changes in the second edition.

ISO/IEC 29500 consists of the following parts, under the general title *Information technology — Document description and processing languages — Office Open XML File Formats*:

- *Part 1: Fundamentals and Markup Language Reference*
- *Part 2: Open Packaging Conventions*
- *Part 3: Markup Compatibility and Extensibility*
- *Part 4: Transitional Migration Features*

Introduction

ISO/IEC 29500 specifies a family of XML schemas, collectively called *Office Open XML*, that define the XML vocabularies for word-processing, spreadsheet, and presentation office documents, as well as the packaging of office documents that conform to these schemas.

The goal is to enable the implementation of the Office Open XML formats by the widest set of tools and platforms, fostering interoperability across office productivity applications and line-of-business systems, as well as to support and strengthen document archival and preservation, all in a way that is fully compatible with the existing corpus of Microsoft® Office documents.

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Part 3:

Markup Compatibility and Extensibility (MCE)

1 Scope

This Part of ISO/IEC 29500 defines a set of conventions for forward compatibility of markup specifications, applicable not only to Office Open XML specifications as described in Parts 1 and 4 of this Standard, but also to other markup specifications. These conventions allow XML documents created by applications of later versions or extensions to be handled by applications of earlier versions.

2 Normative References

The following referenced standards are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced standard (including any amendments) applies.

XML, Tim Bray, Jean Paoli, Eve Maler, C. M. Sperberg-McQueen, and François Yergeau (editors). Extensible Markup Language (XML) 1.0, Fifth Edition. World Wide Web Consortium. 2008. http://www.w3.org/TR/2008/PER-xml-20080205/. [*Note*: Implementations of this Part of ISO/IEC 29500 are not required to support features of XML introduced by the Fifth Edition. *end note*]

XML Base, Marsh, Jonathan. *XML Base*. World Wide Web Consortium. 2009. http://www.w3.org/TR/2009/REC-xmlbase-20090128/

XML Information Set, John Cowan and Richard Tobin (editors). *XML Information Set (Second Edition)*, 4 February 2004. World Wide Web Consortium. http://www.w3.org/TR/2004/REC-xml-infoset-20040204/

XML Namespaces, Tim Bray, Dave Hollander, Andrew Layman, and Richard Tobin (editors). *Namespaces in XML 1.0* (Third Edition), 8 December 2009. World Wide Web Consortium. http://www.w3.org/TR/2009/REC-xml-names-20091208/

3 Terms and Definitions

For the purposes of this standard, the following terms and definitions apply:

3.1
application configuration
set of names of understood namespaces

3.2
application-defined extension element
element defined by a markup specification, the attributes and content of which are not to be processed by an MCE processor

3.3
markup configuration
set of expanded names of application-defined extension elements

3.4
markup specification
XML-based format specification that allows the use of elements and attributes in the MCE namespace

3.5
MCE processor
software used to process XML documents containing MCE elements and attributes

3.6
mismatch
incompatibility between the constraints specified by MCE elements and attributes, and the namespaces specified by an application configuration

3.7
understood namespace
namespace, the elements and attributes of which a consuming application is able to process

4 Notational Conventions

The following typographical conventions are used in ISO/IEC 29500:

1) The first occurrence of a new term is written in italics. [*Example*: The text in ISO/IEC 29500 is divided into *normative* and *informative* categories. *end example*]
2) The tag name of an XML element is written using a distinct style and typeface. [*Example*: The bookmarkStart and bookmarkEnd elements specify … *end example*]
3) The name of an XML attribute is written using a distinct style and typeface. [*Example*: The dropCap attribute specifies … *end example*]
4) The value of an XML attribute is written using a constant-width style. [*Example*: The attribute value of `auto` specifies … *end example*]

Except for whole clauses or annexes that are identified as being informative, informative text that is contained within normative text is indicated in the following ways:

1) [*Example:* code fragment, possibly with some narrative … *end example*]
2) [*Note:* narrative … *end note*]
3) [*Rationale:* narrative … *end rationale*]
4) [*Guidance*: narrative … *end guidance*]

5 General Description

This clause is informative

This Part of ISO/IEC 29500 is divided into the following subdivisions:

- Front matter (Clauses 1–5);
- Overview (Clause 6);
- Main body (Clauses 7–9);
- Annexes

Examples are provided to illustrate possible forms of the constructions described. References are used to refer to related clauses. Notes are provided to give advice or guidance to implementers or programmers.

The following form the normative pieces of this Part of ISO/IEC 29500:

- Clauses 1–4, and 7–9

The following make up the informative pieces of this Part of ISO/IEC 29500:

- Foreword
- Introduction
- Clauses 5 and 6
- All annexes
- All notes and examples

End of informative text