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## Part 4: Transitional Migration Features

*Technologies de l'information — Description des documents et langages de traitement — Formats de fichier "Office Open XML" —*

*Partie 4: Caractéristiques de migration transitoire*

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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.

ISO/IEC 29500-4 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 29500-4:2012), which has been technically revised by incorporation of the Technical Corrigenda ISO/IEC 29500-4:2012/Cor.1:2015 and ISO/IEC 29500-4:2012/Cor.2:2016.

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*

Annex A forms a normative part of this Part of ISO/IEC 29500. Annexes B, C, and D are for information only.

This Part of ISO/IEC 29500 includes two annexes (Annex A and Annex B) that refer to data files provided in electronic form.

The document representation formats defined by this Part are different from the formats defined in the corresponding Part of ECMA-376:2006. Some of the differences are reflected in schema changes, as shown in Annex D of this Part.

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# Introduction

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

The intent of this Part of ISO/IEC 29500 is to enable a transitional period during which existing binary documents being migrated to ISO/IEC 29500 can make use of legacy features to preserve their fidelity, while noting that new documents should not use them.

This Part of ISO/IEC 29500 is normative for the current edition of ISO/IEC 29500, but is not guaranteed to be included in future revisions of that Standard. The intent is to enable the group responsible for maintenance of ISO/IEC 29500 to choose, at a later date, to remove this set of features from a revised version of that Standard.

In general, this Part of ISO/IEC 29500 augments Part 1, and inherits the provisions of that Part. Exceptions to this are indicated explicitly.


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

Part 4:

## Transitional Migration Features

# 1. Scope

ISO/IEC 29500 defines a set of XML vocabularies for representing word-processing documents, spreadsheets and presentations. On the one hand, the goal of ISO/IEC 29500 is to represent faithfully the existing corpus of word-processing documents, spreadsheets and presentations that have been produced by Microsoft Office applications (from Microsoft Office 97 to Microsoft Office 2008, inclusive). It also specifies requirements for Office Open XML consumers and producers. On the other hand, the goal is to facilitate extensibility and interoperability by enabling implementations by multiple vendors and on multiple platforms.

This Part of ISO/IEC 29500 defines features for backward-compatibility and that are useful for high-quality migration of existing binary documents to ISO/IEC 29500. These features are used only by documents of conformance class WML Transitional (§2.1), SML Transitional (§2.1), or PML Transitional (§2.1). These features are sometimes needed for high-quality migration of existing binary documents to ISO/IEC 29500.

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# 2. Conformance

## 2.1 Document Conformance

A document of conformance class Office Open XML Transitional shall be a package of conformance class OPC, as specified in ISO/IEC 29500-2, for which all the following shall hold:

- The document obeys all constraints specified in this Part of ISO/IEC 29500
- The document is of category Wordprocessing, Spreadsheet, or Presentation. These categories are defined in ISO/IEC 29500-1:2011 §4
- VML Drawing Parts (§8.1) contain markup in the Markup Compatibility namespace as specified in ISO/IEC 29500-3. Any child elements of the root element of VMLDrawing Parts are valid against the VML schema shown in A.7, "VML", after the removal of any extensions specified using the mechanisms in ISO/IEC 29500-3. VML Drawing Parts obey all constraints specified in this Part of ISO/IEC 29500
- For each OPC Part of the document of the types listed in §9.2 or ISO/IEC 29500-1:2011 §11.3, §12.3, §13.3, §14.2, and §15.2, all the following shall hold:

    i. The Part may contain markup in the Markup Compatibility namespace as specified in ISO/IEC 29500-3

    ii. After the removal of any extensions by an MCE processor as specified in ISO/IEC 29500-3, the part is valid against the Transitional W3C XML Schema (Annex A)

This Part of ISO/IEC 29500 uses the following further terms to refer to documents of conformance class Office Open XML Transitional:

- *WML Transitional*, if the document is of category Wordprocessing
- *SML Transitional*, if the document is of category Spreadsheet
- *PML Transitional*, if the document is of category Presentation

## 2.2 Application Conformance

Application conformance incorporates both syntax and semantics.

- A conforming consumer shall not reject any conforming documents of at least one document conformance class.
- A conforming producer shall be able to produce conforming documents of at least one document conformance class.
- A conforming application shall treat the information in Office Open XML documents in a manner consistent with the semantic definitions given in ISO/IEC 29500. An application's intended behavior need not require that application to process all of the information in an Office Open XML document. However, the information that it does process shall be processed in a manner that is consistent with the semantic definitions given in ISO/IEC 29500.

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[*Note*: This note illustrates the third bullet above. Conforming applications might serve various functions. Examples include a viewer, an editor, and a back-end processor. Here is an illustration of how the third bullet applies to each of those examples:

- If a conforming viewer supports a given feature, then when it displays information using that feature, it respects the semantics of that feature as described in the Standard.
- If a conforming editor supports a given feature, then when it provides its user with an interface for manipulating information using that feature, it respects the semantics of that feature as described in the Standard.
- If a conforming back-end processor supports a given feature, then when that processor transforms or assembles information involving that feature, that processor respects the semantics of that feature as described in the Standard.

*end note*]

This Part of ISO/IEC 29500 defines the following application conformance classes:

- *WML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class WML Transitional.
- *SML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class SML Transitional.
- *PML Transitional*, if the application is a conforming application that is a consumer or producer of documents having conformance class PML Transitional.

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# 3. Normative References

The following referenced documents are indispensable for the application 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.

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# 4. Terms and Definitions

For the purposes of this document, the following terms and definitions apply. Other terms are defined where they appear in *italic* typeface, on the left side of a syntax rule, or within subclauses of language-specific grammars. Terms explicitly defined in this Part of ISO/IEC 29500 are not to be presumed to refer implicitly to similar terms defined elsewhere. [*Note*: This part uses terms defined in ISO/IEC 29500-1 and ISO/IEC 29500-2. *end note*]

**DOS file path** —A legacy file naming scheme which used a file name of at most eight characters, followed by a period ("."), followed by a filename extension of at most three characters. This name may be preceded by a slash-delimited path, and the combined structure may be preceded by a drive letter specifier. The grammar for DOS file paths is defined as follows:

```
filepath = [drive] [ folder] [filename]
filename = corefilename "." (0 * 3 validchar)
corefilename = (1 * 8 validchar)
validchar = uppercaseletter | decimaldigit | "!" | "#" | "$" | "%" | "&"
  | "'" | "\|" | "-" | "@" | "^" | "_" | "`" | "{" | "}" | "~"
corefoldername = (1 * 8 validchar) | "." | ".."
folder = 1 * (corefoldername "\\") | "\\"
drive = uppercaseletter ":\\"
uppercaseletter = "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" | "I" | "J"
  | "K" | "L" | "M" | "N" | "O" | "P" | "Q" | "R" | "S" | "T" | "U" | "V"
  | "W" | "X" | "Y" | "Z"
decimaldigit = "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9"
```

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