



INTERNATIONAL STANDARD ISO/IEC 29500-4:2008
TECHNICAL CORRIGENDUM 1

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

**Part 4:
Transitional Migration Features**

TECHNICAL CORRIGENDUM 1

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

Partie 4: Caractéristiques de migration transitoire

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 29500-4:2008 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 34, *Document description and processing languages*.

It contains corrections that resolve various Defect Reports submitted against ISO/IEC 29500-4:2008.

A correction can involve changes to one or more clauses or subclauses; it can even apply to multiple parts of ISO/IEC 29500. For changes to ISO/IEC 29500-4:2008, each such change has its own entry below.

Changes are presented in ascending clause, subclause, and page number order.

Notational conventions

The title of each change is the complete reference to the clause or subclause being corrected. In all cases, the title begins with the clause or subclause number, the clause or subclause name, and the page number. In those cases containing changes to a particular row of a table, the value in that row's first column is appended to the title. As the lines in each XML schema are numbered starting at 1 and going to the end of a schema, corrections to schemas also contain the numbers of the lines being corrected.

A change can contain any one or more of the following kinds of edits:

- 1) Addition of text: New text is displayed in blue and is underlined, as demonstrated here.
- 2) Deletion of text: ~~Deleted text is displayed in red and is struck through, as demonstrated here.~~
- 3) Change of format of text: Text whose format (but not its content) has changed is displayed in green and is double-underlined, as demonstrated here.

Many changes involve edits to large paragraphs, tables, and/or XML fragments. In such cases, the changes contain only as much unchanged content as is necessary to establish the correct context of each change. Omitted content is identified via the use of ellipses (...).

Within a change, intent that cannot be represented directly as an edit is written as an instruction in italic and delimited by curly brackets; for example: *{In paragraph 2, item 4, and in paragraph 4, make the numbers in the text "17–23" hyperlinked forward references to Clauses 17 and 23.}*

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Changes

1. §1, “Scope”, p. 1

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 wordprocessing 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 shall only be used by documents of conformance class WML Transitional, SML Transitional, or PML Transitional.

The features described in this Part of ISO/IEC 29500 shall only be used 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.

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. Part 1, §2.4, “Document Conformance”, states that WML Strict, SML Strict and PML Strict documents shall not use any of the features defined in Part 4.

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.

2. §3, “Normative References”, p. 4

ISO/IEC 10646:2003, *Information technology — Universal Multiple-Octet Coded Character Set (UCS)*.

3. §3, “Normative References”, p. 5

ISO/IEC 29500-1:2008, *Information technology — Document description and processing languages — Office Open XML File Formats, Part 1: Fundamentals and Markup Language Reference.*

4. §3, “Normative References”, p. 6

The Unicode Consortium. *The Unicode Standard, Version 5.0, defined by: The Unicode Standard, Version xx5.0 (Reading, MA, Addison-Wesley, 2006. ISBN 0-321-48091-0),*

<http://www.unicode.org/unicodestandard/standard.html>.

5. §3, “Normative References”, p. 6

XML, Tim Bray, Eve Maler, Jean Paoli, C. M. Sperberg-McQueen, John Cowan, and François Yergeau (editors). *Extensible Markup Language (XML) 1.1*, Third Edition. World Wide Web Consortium. 2004. <http://www.w3.org/TR/2004/REC-xml11-20040204/> XML, Tim Bray, Jean Paoli, Eve Maler, C. M. Sperberg-McQueen, and François Yergeau (editors). *Extensible Markup Language (XML) 1.0*, Fourth Edition.¹ World Wide Web Consortium. 2006. <http://www.w3.org/TR/2006/REC-xml-20060816/>

¹ Implementers should be aware that a further correction of the normative reference to XML to refer to the 5th Edition will be necessary when the related Reference Specifications to which this International Standard also makes normative reference and which also depend upon XML, such as XSLT, XML Namespaces and XML Base, are all aligned with the 5th Edition.

6. §3, “Normative References”, p. 7

XML Namespaces, Tim Bray, Tim, Dave Hollander, Andrew Layman, and Richard Tobin (editors). *Namespaces in XML 1.0* (Third Edition), 8 December 2009. World Wide Web Consortium. 2004. <http://www.w3.org/TR/2004/REC-xml-names11-20040204/> <http://www.w3.org/TR/2009/REC-xml-names-20091208/>

7. §5, “Notational Conventions”, p. 10

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

1. The first occurrence of a new term is written in italics, *as in “normative”*. [Example: The text in ISO/IEC 29500 is divided into *normative* and *informative* categories. *end example*]
2. In each definition of a term in §4 (Terms and Definitions), the term is written in bold, **as in “behavior”**. [Example: **behavior** — External appearance or action. *end example*]
3. The tag name of an XML element is written using an Element style, *as in “document”*. [Example: The `bookmarkStart` and `bookmarkEnd` elements specify ... *end example*]
4. The name of an XML attribute is written using an Attribute style, *as in “id”*. [Example: The `dropCap` attribute specifies ... *end example*]
5. The value of an XML attribute is written using a constant-width style, *as in “CommentReference”*. [Example: The attribute value of `auto` specifies ... *end example*]
6. The qualified or unqualified name of a simple type, complex type, or base datatype is written using a Type style, *as in “xsd:anyURI”*. [Example: The possible values for this attribute are defined by the `ST HexColor` simple type. *end example*]

8. §9.7.3.11, “doNotSnapToGridInCell (Do Not Snap to Document Grid in Table Cells with Objects)”, p. 78

```
<w:sectPr>
  <w:docGrid w:type="snapToChars" w:charSpace="146636" />
</w:sectPr>
```

9. §9.7.3.14, “doNotUseEastAsianBreakRules (Do Not Compress Compressible Characters When Using Document Grid)”, p. 82

```
<w:sectPr>
  <w:docGrid w:type="snapToChars" w:charSpace="146636" ... />
</w:sectPr>
```

10. §9.7.3.19, “doNotWrapTextWithPunct (Do Not Allow Hanging Punctuation With CharacterGrid)”, p. 90

```
<w:sectPr>
  <w:docGrid w:type="snapToChars" w:charSpace="146636" ... />
</w:sectPr>
```

11. §9.9.4.8, “QUOTE”, p. 165, new subclause

9.9.4.8 QUOTE

This field retrieves the text specified by *text* in *field-argument*. In strict conformance mode, this text may include any other fields except SYMBOL. However, in transitional conformance mode, this text may include any other fields except AUTONUM, AUTONUMLGL, AUTONUMOUT, and SYMBOL.

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12. §9.10.9, “Additional enumeration values for ST_NumberFormat (Part 1, §17.18.59), p. 172, new subclause

Enumeration Value	Description
decimalFullWidth2 (Full Width Arabic Numerals Alternate)	<p>Specifies that the sequence shall consist of a set of full-width Arabic numbering.</p> <p>To determine the text that is displayed for any value, this sequence specifies a set of characters that represent positions 1–9 and then those same characters are combined with each other and 0 (represents the number zero) to construct the remaining values.</p> <p>The set of characters used by this numbering format for values 0–9 is U+FF10–U+FF19, respectively.</p> <p>For values greater than the size of the set, the number is constructed by following these steps:</p> <ol style="list-style-type: none"> 1. Divide the value by 10 and write the symbol which represents the remainder. 2. Divide the quotient of the previous division by 10 and write the symbol, which represents the remainder, to the left of the existing position. 3. Repeat step 2 until the remaining value is equal to zero. <p>[Example: The numbering for the items should be represented by the following pattern: 1, 2, 3, ..., 8, 9, 1 0, 1 1, 1 2, ..., 1 8, 1 9, 2 0, 2 1, ... end example]</p>

13. §10.3.2, “Additional attributes for dynamicFilter element (Part 1, §18.3.2.5)”, p. 183–184

10.3.2 ~~Additional attributes~~ [Attributes with modified descriptions](#) for dynamicFilter element (Part 1, §18.3.2.5)

The following ~~additional~~ [attributes have modified descriptions when can be](#) specified for a document of a transitional conformance class:

Attributes	Description
maxVal (Max Value)	... These types of dynamic filters shall use val/valIso and shall not use maxVal/maxValIso: aboveAverage and belowAverage. ...

Attributes	Description
val (Value)	<p>A minimum numeric or serial date value for dynamic filter. (See description of valIso to understand when val is required.)</p> <p>If valIso and val are both present, valIso shall take precedence.</p> <p>The possible values for this attribute are defined by the W3C XML Schema double datatype.</p>
valIso (ISO Value)	<p>A minimum date value for dynamic filter. (See description of maxVal/maxValIso to understand when val/valIso is required.)</p> <p>The possible values for this attribute are defined by the W3C XML Schema dateTime datatype.</p>

14. §10.8, “Formulas”, p. 186, new subclause

15. §10.8.1, “Attribute synonym for c element (Part 1, §18.6.1)”, new subclause, p. 186

[The following additional attribute can be specified for a document of a transitional conformance class:](#)

<u>Attributes</u>	<u>Description</u>
ref (Cell Reference)	<p>An A-1 style reference to a cell.</p> <p>The possible values for this attribute are defined by the ST_CellRef simple type (Part 1, §18.18.7).</p>

[This attribute is semantically equivalent to r \(Part 1, §18.6.1\).](#)

[Only one or the other of r and ref can be defined in any given instance.](#)

16. §10.8.2, “Additional representation for dates and times (Part 1, Section 18.17.4)”, new subclause, p. 186

[For a document of a transitional conformance class, each unique instant in SpreadsheetML time shall be stored as an ISO 8601-formatted string or as a serial value.](#)

17. §14.1.2.5, “fill (Shape Fill Properties)”, p. 274

<u>Attributes</u>	<u>Description</u>
focus (Gradient Center)	<p>Specifies the center starting position of a gradient. Values are in the range from 100% to -100%. Default is 0.</p> <p>...</p>

18. §14.2.2.11, “extrusion (3D Extrusion)”, p. 645–659

Attributes	Description
brightness (Brightness)	<p>...</p> <p>This quantity is not specified using units. The numeric values are in the range from 0 to 1 (0f to 65536f), where 0 implies darkness and 1 implies light saturation.</p> <p>...</p>
diffusivity (Diffuse Reflection)	<p>Specifies the amount of diffusion of reflected light from an extruded shape, defined as the ratio of incident light to diffused reflected light. Default is 1. Normal values are in the range from 0 to 1. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied (as "f" indicates the value is a fraction). [Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</p> <p>This quantity is not specified using units. The numeric values are in the range from 0 to 1 (0f to 65536f), where 0 implies all reflected light is diffuse and 1 implies no reflected light is diffuse.</p> <p>...</p>
facet (Faceting Quality)	<p>...</p> <p>Allowed values are in the range from 1 to 65536, where 1 implies extremely low quality curve approximation and 65536 implies extremely high quality.</p> <p>...</p>
lightlevel (Primary Light Intensity)	<p>...</p> <p>This quantity is not specified using units. The numeric values are in the range from 0 to 1 (0f to 65536f), where 0 implies no direct light and 1 implies saturated direct light.</p> <p>...</p>
lightlevel2 (Secondary Light Intensity)	<p>...</p> <p>This quantity is not specified using units. The numeric values are in the range from 0 to 1 (0f to 65536f), where 0 implies no direct light and 1 implies saturated direct light.</p> <p>...</p>
skewamt (Extrusion Skew)	<p>Specifies the amount of skew, or length, of a parallel extrusion. Default is 50%. Applies only if the extrusion type is parallel. This attribute and backdepth interact to create the actual extrusion length. Allowed values are in the range from 0 (0%) to 1 (100%).</p> <p>...</p>
specularity (Specularity)	<p>Specifies the specularity of an extruded shape, defined as the ratio of incident light to specularly reflected light. Default is 0. Normal values are in the range from 0 to 1. This numeric value can also be specified in 1/65536-ths if a trailing "f" is supplied (as "f" indicates the value is a fraction). [Example: A value of "52429f" represents 52429/65536 or 0.8. end example]</p> <p>...</p>
viewpointorigin (Extrusion Viewpoint Origin)	<p>...</p> <p>The viewpoint is specified in terms of the x and y values of the original shape. The x and y values are in the range from 0.5 to -0.5 (50% to -50% of the shape's coordinate origin). Larger numbers move the viewpoint outside the bounding box.</p> <p>...</p>

19. §A.1, “WordprocessingML”, p. 811

[This schema is available in the file wml.xsd.](#)

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20. §A.1, “WordprocessingML”, p. 840, lines 1536–1543

```

<xsd:simpleType name="ST_DocGrid">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="default"/>
    <xsd:enumeration value="lines"/>
    <xsd:enumeration value="linesAndChars"/>
    <xsd:enumeration value="snapToChars" />
  </xsd:restriction>
</xsd:simpleType>

```

21. §A.1, “WordprocessingML”, p. 846, lines 1851–1857

```

<xsd:group name="EG_RPrMath">
  <xsd:choice>
    <xsd:group ref="EG_RPr"/>
    <xsd:element name="ins" type="CT_MathCtrlIns"/>
    <xsd:element name="del" type="CT_MathCtrlDel"/>
  </xsd:choice>
</xsd:group>
<xsd:complexType name="CT_MathCtrlIns">
  <xsd:complexContent>
    <xsd:extension base="CT_TrackChange">
      <xsd:choice minOccurs="0">
        <xsd:element name="del" type="CT_RPrChange" minOccurs="1"/>
        <xsd:element name="rPr" type="CT_RPr" minOccurs="1"/>
      </xsd:choice>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>
<xsd:complexType name="CT_MathCtrlDel">
  <xsd:complexContent>
    <xsd:extension base="CT_TrackChange">
      <xsd:choice minOccurs="0">
        <xsd:element name="rPr" type="CT_RPr" minOccurs="1"/>
      </xsd:choice>
    </xsd:extension>
  </xsd:complexContent>
</xsd:complexType>

```

22. §A.1, “WordprocessingML”, new type, p. 830, after line 997

```

<xsd:group name="EG_PContentMath">
  <xsd:choice>

```

```

<xsd:group ref="EG_PContentBase" minOccurs="0" maxOccurs="unbounded" />
<xsd:group ref="EG_ContentRunContentBase" minOccurs="0"
maxOccurs="unbounded" />
</xsd:choice>
</xsd:group>
<xsd:group name="EG_PContentBase">
<xsd:choice>
<xsd:element name="customXml" type="CT_CustomXmlRun"/>
<xsd:element name="fldSimple" type="CT_SimpleField" minOccurs="0"
maxOccurs="unbounded"/>
<xsd:element name="hyperlink" type="CT_Hyperlink"/>
</xsd:choice>
</xsd:group>
<xsd:group name="EG_ContentRunContentBase">
<xsd:choice>
<xsd:element name="smartTag" type="CT_SmartTagRun"/>
<xsd:element name="sdt" type="CT_SdtRun"/>
<xsd:group ref="EG_RunLevelElts" minOccurs="0" maxOccurs="unbounded" />
</xsd:choice>
</xsd:group>

```

23. §A.2, "SpreadsheetML", p. 879

This schema is available in the file [sml.xsd](#).

24. §A.2, “SpreadsheetML”, p. 879, lines 10–14

```
<xsd:import id="s"
namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
schemaLocation="shared-commonSimpleTypes.xsd"/>
<xsd:import id="xdn"
namespace="http://schemas.openxmlformats.org/drawingml/2006/spreadsheetDrawing"
schemaLocation="dml-spreadsheetDrawing.xsd"/>
```

25. §A.2, “SpreadsheetML”, p. 884, lines 264–271

```
<xsd:complexType name="CT_CalcCell">
  <xsd:attribute name="r" type="ST_CellRef" use="optionalrequired"/>
  <xsd:attribute name="ref" type="ST_CellRef" use="optional"/>
  ...
</xsd:complexType>
```

26. §A.2, “SpreadsheetML”, p. 951–952, lines 3849–3857

```
<xsd:complexType name="CT_ExternalLink">
  <xsd:sequence>
    <xsd:choice>
      ...
      <xsd:element name="oleLink" type="CT_OleLink" minOccurs="0" maxOccurs="1"/>
      <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
    </xsd:choice>
    <xsd:element name="extLst" minOccurs="0" type="CT_ExtensionList"/>
  </xsd:sequence>
</xsd:complexType>
```

27. §A.3, “PresentationML”, p. 963

[This schema is available in the file pml.xsd.](#)

28. §A.3, “PresentationML”, p. 964, lines 13–14

```
<xsd:import id="s"
  namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
  schemaLocation="shared-commonSimpleTypes.xsd"/>
```

29. §A.3, “PresentationML”, p. 988, lines 1336–1344

```
<xsd:complexType name="CT_GraphicalObjectFrame">
  <xsd:sequence>
    ...
  </xsd:sequence>
  <xsd:attribute name="bwMode" type="a:ST BlackWhiteMode" use="optional"/>
</xsd:complexType>
```

30. §A.4.1, “DrawingML – Main”, p. 996

[This schema is available in the file dml-main.xsd.](#)

31. §A.4.2, “DrawingML – Picture”, p. 1054

[This schema is available in the file dml-picture.xsd.](#)

32. §A.4.3, “DrawingML - Locked Canvas”, p. 1054

[This schema is available in the file dml-lockedCanvas.xsd.](#)

33. §A.4.4, “DrawingML - WordprocessingML Drawing”, p. 1054

[This schema is available in the file dml-spreadsheetDrawing.xsd.](#)

34. §A.4.5, “DrawingML - SpreadsheetML Drawing”, p. 1055

[This schema is available in the file dml-wordprocessingDrawing.xsd.](#)

35. §A.5.1, “DrawingML – Charts”, p. 1062

[This schema is available in the file dml-chart.xsd.](#)

36. §A.5.1, “Drawing ML - Charts”, p. 1068, lines 309–314

```
<xsd:simpleType name="ST_HoleSize">
  <xsd:restriction base="xsd:unsignedByte">
    <xsd:minInclusive value="10"/>
    <xsd:maxInclusive value="90"/>
  </xsd:restriction>
</xsd:simpleType>
```

37. §A.5.1, “Drawing ML - Charts”, p. 1070, lines 424–438

```
<xsd:simpleType name="ST_MarkerStyle">
  <xsd:restriction base="xsd:string">
    <xsd:enumeration value="circle"/>
    ...
    <xsd:enumeration value="x"/>
    <xsd:enumeration value="auto"/>
  </xsd:restriction>
</xsd:simpleType>
```

38. §A.5.1, “Drawing ML - Charts”, p. 1071, lines 493–498

```
<xsd:simpleType name="ST_Period">
  <xsd:restriction base="<del>xsd:unsignedByte</del>xsd:unsignedInt ">
    <xsd:minInclusive value="2"/>
  </xsd:restriction>
</xsd:simpleType>
```

39. §A.5.1, “Drawing ML - Charts”, p. 1081, lines 1024–1028

```
<xsd:simpleType name="ST_Skip">
  <xsd:restriction base="xsd:unsigned<del>Int</del>Short">
    <xsd:minInclusive value="1"/>
  </xsd:restriction>
</xsd:simpleType>
```

40. §A.5.2, “Drawing ML - Chart Drawing”, p. 1089

[This schema is available in the file dml-chartDrawing.xsd.](#)

41. §A.5.3, “Drawing ML – Diagrams”, p. 1092

[This schema is available in the file dml-diagram.xsd.](#)

42. §A.5.3, “DrawingML – Diagrams”, p. 1092, lines 12–13

```
<xsd:import id="s"
namespace="http://schemas.openxmlformats.org/officeDocument/2006/sharedTypes"
schemaLocation="shared-commonSimpleTypes.xsd"/>
```

43. §A.6.1, “VML”, p. 1113

[This schema is available in the file vml-main.xsd.](#)

44. §A.6.1, “Math”, p. 1147, lines 488–493

```
<xsd:group name="EG_OMathElements">
  <xsd:choice>
    <xsd:group ref="EG_OMathMathElements"/>
    <xsd:group ref="w:EG_RunLevelElementsw:EG_PContentMath"/>
  </xsd:choice>
</xsd:group>
```

45. §A.6.2 VML, “Office Drawing”, p. 1123

[This schema is available in the file vml-officeDrawing.xsd.](#)

46. §A.6.3 VML, “WordprocessingML Drawing”, p. 1133

[This schema is available in the file vml-wordprocessingDrawing.xsd.](#)

47. §A.6.4 VML, “SpreadsheetML Drawing”, p. 1135

[This schema is available in the file vml-spreadsheetDrawing.xsd.](#)

48. §A.6.5 VML, “PresentationML Drawing”, p. 1137

[This schema is available in the file vml-presentationDrawing.xsd.](#)

49. §A.7.1, “Math”, p. 1137

[This schema is available in the file shared-math.xsd.](#)

50. §A.7.1, “Math”, p. 1137–1138, lines 8–12

```
<xsd:import id="w" namespace="http://schemas.openxmlformats.org/wordprocessingml/2006/main"
schemaLocation="wml.xsd"/>
<xsd:import id="s" namespace="http://schemas.openxmlformats.org/officeDocument/10
2006/sharedTypes"
schemaLocation="shared-commonSimpleTypes.xsd"/>
<xsd:import id="xml" namespace="http://www.w3.org/XML/1998/namespace"/>
```

51. §A.7.2, “Extended Properties”, p. 1148

[This schema is available in the file shared-documentPropertiesExtended.xsd.](#)

52. §A.7.3, “Custom Properties”, p. 1149

[This schema is available in the file shared-documentPropertiesCustom.xsd.](#)

53. §A.7.4, “Variant Types”, p. 1151

[This schema is available in the file shared-documentPropertiesVariantTypes.xsd.](#)

54. §A.7.5, “Custom XML Data Properties”, p. 1154

[This schema is available in the file shared-customXmlDataProperties.xsd.](#)

55. §A.7.6, “Bibliography”, p. 1155

[This schema is available in the file shared-bibliography.xsd.](#)

56. §A.7.7, “Additional Characteristics”, p. 1158

[This schema is available in the file shared-additionalCharacteristics.xsd.](#)

57. §A.7.8, “Office Document Relationships”, p. 1158

[This schema is available in the file shared-relationshipReference.xsd.](#)

58. §A.7.9, “Shared Simple Types”, p. 1159

[This schema is available in the file shared-commonSimpleTypes.xsd.](#)

59. §A.8, “Custom XML Schema References”, p. 1162

[This schema is available in the file shared-customXmlSchemaProperties.xsd.](#)

60. §B.1, “WordprocessingML”, p. 1163

[This schema is available in the file wml.rnc.](#)

61. §B.1, “WordprocessingML”, p. 1181, lines 982–986

```
w_ST_DocGrid =
  string "default"
  | string "lines"
  | string "linesAndChars"
  | string "snapToChars snapToChars"
```

62. §B.1, “WordprocessingML”, p. 1185, lines 1185–1188

```
w_EG_RPrMath =
  w_EG_RPr
  | element ins { w_CT_RPrChange w CT MathCtrlIns }
  | element del { w_CT_RPrChange w CT MathCtrlDel }
w CT MathCtrlIns =
  w CT TrackChange,
  (element del { w CT RPrChange }
    | element rPr { w CT RPr })?
w CT MathCtrlDel =
  w CT TrackChange,
  (element rPr { w CT RPr })?
```

63. §B.1, “WordprocessingML”, new type, p. 1175, after line 659

```
w EG PContentMath = w EG PContentBase* | w EG ContentRunContentBase*
w EG PContentBase =
  element customXml { w CT CustomXmlRun }
  | element fldSimple { w CT SimpleField }*
  | element hyperlink { w CT Hyperlink }
w EG ContentRunContentBase =
  element smartTag { w CT SmartTagRun }
  | element sdt { w CT SdtRun }
  | w EG RunLevelElts*
```

64. §B.1.1.1, “Comments Part”, p. 1207

This schema is available in the file [WordprocessingML Comments.rnc](#).

65. §B.1.1.2, “Document Settings Part”, p. 1207

This schema is available in the file [WordprocessingML Document Settings.rnc](#).

66. §B.1.1.3, “Endnotes Part”, p. 1208

This schema is available in the file [WordprocessingML Endnotes.rnc](#).

67. §B.1.1.4, “Font Table Part”, p. 1208

[This schema is available in the file WordprocessingML_Font_Table.rnc.](#)

68. §B.1.1.5, “Footer Part”, p. 1209

[This schema is available in the file WordprocessingML_Footer.rnc.](#)

69. §B.1.1.6, “Footnotes Part”, p. 1209

[This schema is available in the file WordprocessingML_Footnotes.rnc.](#)

70. §B.1.1.7, “Glossary Document Part”, p. 1210

[This schema is available in the file WordprocessingML_Glossary_Document.rnc.](#)

71. §B.1.1.8, “Header Part”, p. 1210

[This schema is available in the file WordprocessingML_Header.rnc.](#)

72. §B.1.1.9, “Mail Merge Recipient Data Part”, p. 1211

[This schema is available in the file WordprocessingML_Mail_Merge_Recipient_Data.rnc.](#)

73. §B.1.1.10, “Main Document Part”, p. 1211

[This schema is available in the file WordprocessingML_Main_Document.rnc.](#)

74. §B.1.1.11, “Numbering Definitions Part”, p. 1211

[This schema is available in the file WordprocessingML_Numbering_Definitions.rnc.](#)

75. §B.1.1.12, “Style Definitions Part”, p. 1212

[This schema is available in the file WordprocessingML_Style_Definitions.rnc.](#)

76. §B.1.1.13, “Web Settings Part”, p. 1212

[This schema is available in the file WordprocessingML_Web_Settings.rnc.](#)

77. §B.2, “SpreadsheetML”, p. 1213

[This schema is available in the file sml.rnc.](#)

78. §B.2, “SpreadsheetML”, p. 1216, lines 218–234

```
sml_CT_CalcCell =
  attribute ( r | ref ) { sml ST CellRef }...
  ## default value: false
  attribute a { xsd:boolean }?
```

79. §B.2, “SpreadsheetML”, p. 1290, lines 4082–4086

```
sml_CT_ExternalLink =
  (element externalBook { sml_CT_ExternalBook }?
  | element ddeLink { sml_CT_DdeLink }?
  | element oleLink { sml_CT_OleLink }?)
  +element extLst { sml_CT_ExtensionList }?
```

80. §B.2.1.1, “Calculation Chain Part”, p. 1301

[This schema is available in the file SpreadsheetML_Calculation_Chain.rnc.](#)

81. §B.2.1.2, “Chartsheet Part”, p. 1301

[This schema is available in the file SpreadsheetML_Chartsheet.rnc.](#)

82. §B.2.1.3, “Comments Part”, p. 1302

[This schema is available in the file SpreadsheetML_Comments.rnc.](#)

83. §B.2.1.4, “Connections Part”, p. 1302

[This schema is available in the file SpreadsheetML_Connections.rnc.](#)

84. §B.2.1.5, “Custom XML Mappings Part”, p. 1302

[This schema is available in the file SpreadsheetML_Custom_XML_Mappings.rnc.](#)

85. §B.2.1.6, “Dialogsheet Part”, p. 1303

[This schema is available in the file SpreadsheetML_Dialogsheet.rnc.](#)

86. §B.2.1.7, “Drawing Part”, p. 1303

[This schema is available in the file SpreadsheetML_Drawing.rnc.](#)

87. §B.2.1.8, “External Workbook References Part”, p. 1303

[This schema is available in the file SpreadsheetML_External_Workbook_References.rnc.](#)

88. §B.2.1.9, “Metadata Part”, p. 1303

[This schema is available in the file SpreadsheetML_Metadata.rnc.](#)

89. §B.2.1.10, “Pivot Table Part”, p. 1304

[This schema is available in the file SpreadsheetML_Pivot_Table.rnc.](#)

90. §B.2.1.11, “Pivot Table Cache Definition Part”, p. 1304

[This schema is available in the file SpreadsheetML_Pivot_Table_Cache_Definition.rnc.](#)

91. §B.2.1.12, “Pivot Table Cache Records Part”, p. 1304

[This schema is available in the file SpreadsheetML_Pivot_Table_Cache_Records.rnc.](#)

92. §B.2.1.13, “Query Table Part”, p. 1305

[This schema is available in the file SpreadsheetML_Query_Table.rnc.](#)

93. §B.2.1.14, “Shared String Table Part”, p. 1305

[This schema is available in the file SpreadsheetML_Shared_String_Table.rnc.](#)

94. §B.2.1.15, “Shared Workbook Revision Headers Part”, p. 1305

[This schema is available in the file SpreadsheetML_Shared_Workbook_Revision_Headers.rnc.](#)

95. §B.2.1.16, “Shared Workbook Revision Log Part”, p. 1306

[This schema is available in the file SpreadsheetML_Shared_Workbook_Revision_Log.rnc.](#)

96. §B.2.1.17, “Shared Workbook User Data Part”, p. 1306

[This schema is available in the file SpreadsheetML_Shared_Workbook_User_Data.rnc.](#)

97. §B.2.1.18, “Single Cell Table Definitions Part”, p. 1306

[This schema is available in the file SpreadsheetML_Single_Cell_Table_Definitions.rnc.](#)

98. §B.2.1.19, “Styles Part”, p. 1306

[This schema is available in the file SpreadsheetML_Styles.rnc.](#)

99. §B.2.1.20, “Table Definitions Part”, p. 1307

[This schema is available in the file SpreadsheetML_Table_Definitions.rnc.](#)

100. §B.2.1.21, “Volatile Dependencies Part”, p. 1307

[This schema is available in the file SpreadsheetML_Volatile_Dependencies.rnc.](#)

101. §B.2.1.22, “Workbook Part”, p. 1307

[This schema is available in the file SpreadsheetML_Workbook.rnc.](#)

102. §B.2.1.23, “Worksheet Part”, p. 1308

[This schema is available in the file SpreadsheetML_Worksheet.rnc.](#)

103. §B.3, “PresentationML”, p. 1308

[This schema is available in the file pml.rnc.](#)

104. §B.3, “PresentationML”, p. 1319, line 621

```
p_ST_SlideSizeCoordinate =
  xsd:int {
minInclusive = "0"
    minInclusive = "914400"
    maxInclusive = "51206400"
  }
```

105. §B.3, “PresentationML”, pp. 1325, lines 940–944

```
p_CT_GraphicalObjectFrame =
  attribute bwMode { a ST BlackWhiteMode }?,
  element nvGraphicFramePr { p_CT_GraphicalObjectFrameNonVisual },
  ...
```

106. §B.3.1.1, “Comment Authors Part”, p. 1331

[This schema is available in the file PresentationML_Comments.rnc.](#)

107. §B.3.1.2, “Comments Part”, p. 1331

[This schema is available in the file PresentationML_Comment_Authors.rnc.](#)

108. §B.3.1.3, “Handout Master Part”, p. 1331

[This schema is available in the file PresentationML_Handout_Master.rnc.](#)

109. §B.3.1.4, “Notes Master Part”, p. 1331

[This schema is available in the file PresentationML_Notes_Master.rnc.](#)

110. §B.3.1.5, “Notes Slide Part”, p. 1332

[This schema is available in the file PresentationML_Notes_Slide.rnc.](#)

111. §B.3.1.6, “Presentation Part”, p. 1332

[This schema is available in the file PresentationML_Presentation.rnc.](#)

112. §B.3.1.7, “Presentation Properties Part”, p. 1332

[This schema is available in the file PresentationML_Presentation_Properties.rnc.](#)

113. §B.3.1.8, “Slide Part”, p. 1333

[This schema is available in the file PresentationML_Slide.rnc.](#)

114. §B.3.1.9, “Slide Layout Part”, p. 1333

[This schema is available in the file PresentationML_Slide_Layout.rnc.](#)

115. §B.3.1.10, “Slide Master Part”, p. 1333

[This schema is available in the file PresentationML_Slide_Master.rnc.](#)

116. §B.3.1.11, “Slide Synchronization Data Part”, p. 1333

[This schema is available in the file PresentationML_Slide_Synchronization_Data.rnc.](#)

117. §B.3.1.12, “User Defined Tags Part”, p. 1334

[This schema is available in the file PresentationML_Presentation.rnc.](#)

118. §B.3.1.13, “View Properties Part”, p. 1334

[This schema is available in the file PresentationML_Presentation_Properties.rnc.](#)

119. §B.4.1, “DrawingML - Main”, p. 1334

[This schema is available in the file dml-main.rnc.](#)

120. §B.4.1.1.1, “Table Styles Part”, p. 1378

[This schema is available in the file DrawingML_Table_Styles.rnc.](#)

121. §B.4.1.1.2, “Theme Part”, p. 1378

[This schema is available in the file DrawingML_Theme.rnc.](#)