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Part 3: **Packages**

Technologies de l'information — Format de document ouvert pour applications de bureau (OpenDocument) v1.2 —

Partie 3: Progiciels

Reference number
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ISO/IEC 26300-3:2015 was prepared by the OASIS OpenDocument Technical Committee [as OASIS Open Document Format for Office Applications (OpenDocument) v1.0 (second edition)] and was adopted, under the PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by the national bodies of ISO and IEC. The content of ISO/IEC 26300-3 and OASIS OpenDocument v1.0 2nd ed. is identical.

ISO/IEC 26300-3 consists of the following parts, under the general title *Information technology — Open Document Format for Office Applications (OpenDocument) v1.2*:

— *Part 1: OpenDocument Schema*

— *Part 2: Recalculated Formula (OpenFormula) Format*

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Open Document Format for Office Applications (OpenDocument) Version 1.2

Part 3: Packages

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Related work:

This document is part of the OASIS Open Document Format for Office Applications (OpenDocument) Version 1.2 specification.

The OpenDocument v1.2 specification has these parts:

OpenDocument v1.2 part 1: OpenDocument Schema
OpenDocument v1.2 part 2: Recalculated Formula (OpenFormula) Format
OpenDocument v1.2 part 3: Packages (this part)

OpenDocument v1.2 part 3 defines these schemas and ontologies:

OpenDocument v1.2 Manifest Schema
OpenDocument v1.2 Digital Signature Schema
OpenDocument v1.2 Package Metadata Manifest Ontology

Declared XML namespaces:

urn:oasis:names:tc:opendocument:xmlns:manifest:1.0
urn:oasis:names:tc:opendocument:xmlns:digitalsignature:1.0
http://docs.oasis-open.org/ns/office/1.2/meta/pkg#

Abstract:

This document is part of the Open Document Format for Office Applications (OpenDocument) Version 1.2 specification.

It defines a package format for OpenDocument documents.

Status:

This document was last revised or approved by the OASIS Open Document Format for Office Applications (OpenDocument) TC on the above date. The level of approval is also listed above. Check the "Latest version" location noted above for possible later revisions of this document.

Technical Committee members should send comments on this specification to the Technical Committee's email list. Others should send comments to the Technical Committee by using the "Send A Comment" button on the Technical Committee's web page at http://www.oasis-open.org/committees/office/.

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1 Introduction

1.1 Introduction

This document is part of the Open Document Format for Office Applications (OpenDocument) Version 1.2 specification. It defines a package format for OpenDocument documents.

1.2 Terminology

All text is normative unless otherwise labeled.

Text with a gray background color which is contained in boxes is informative. It lists the XML element-element and element-attribute relations for cross reference purposes.

Within the normative text of this specification, the terms “shall”, “shall not”, “should”, “should not”, “may” and “need not” are to be interpreted as described in Annex H of [ISO/IEC Directives].

XML Element, attribute names, attribute value types, and attribute values appear in `monospace` font.

1.3 Normative References

[**ISO/IEC Directives**] ISO/IEC Directives, Part 2 (Fifth Edition) *Rules for the structure and drafting of International Standards*, International Organization for Standardization and International Electrotechnical Commission, 2004

[**OWL**] Deborah L. McGuinness, Frank van Harmelen, *OWL Web Ontology Language Overview*, http://www.w3.org/TR/2004/REC-owl-features-20040210/, W3C, 2004.

[**PNG**] David Duce, *Portable Network Graphics (PNG) Specification (Second Edition)*, http://www.w3.org/TR/2003/REC-PNG-20031110, W3C, 2003.

[**RDF-CONCEPTS**] Graham Klyne, Jeremy J. Carroll, Brian McBride, *Resource Description Framework (RDF): Concepts and Abstract Syntax*, http://www.w3.org/TR/2004/REC-rdf-concepts-20040210/, W3C, 2004.

[**RDF-XML**] Dave Beckett, Brian McBride, *RDF/XML Syntax Specification (Revised)*, http://www.w3.org/TR/2004/REC-rdf-syntax-grammar-20040210/, W3C, 2004.

[**RFC2898**] B. Kaliski, *PKCS #5: Password-Based Cryptography Specification Version 2.0*, http://www.ietf.org/rfc/rfc2898.txt, IETF, 2000.

[**RFC3174**] D. Eastlake, 3rd, P. Jones, *US Secure Hash Algorithm 1 (SHA1)*, http://www.ietf.org/rfc/rfc3174.txt, IETF, 2001.

[**RFC3986**] T. Berners-Lee, R. Fielding, L. Masinter, *Uniform Resource Identifier (URI): Generic Syntax*, http://www.ietf.org/rfc/rfc3986.txt, IETF, 2005.

[**RFC3987**] M. Duerst, M. Suignard, *Internationalized Resource Identifiers (IRIs)*, http://www.ietf.org/rfc/rfc3987.txt, IETF, 2005.

[**RFC4288**] N. Freed, J. Klensin, *Media Type Specifications and Registration Procedures*, http://www.ietf.org/rfc/rfc4288.txt, IETF, 2005.

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