
**Information technology — Digital
publishing — EPUB3 —**

**Part 4:
Open Container Format**

*Technologies de l'information — Publications numériques — EPUB3 —
Partie 4: Format de conteneur ouvert*



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

In other circumstances, particularly when there is an urgent market requirement for such documents, the joint technical committee may decide to publish an ISO/IEC Technical Specification (ISO/IEC TS), which represents an agreement between the members of the joint technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/IEC TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/IEC TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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 TS 30135 series were prepared by Korean Agency for Technology and Standards (as KS X 6070 series) with International Digital Publishing Forum and were adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, Information technology, in parallel with its approval by the national bodies of ISO and IEC.

ISO/IEC TS 30135 consists of the following parts, under the general title *Information technology — Document description and processing languages — EPUB 3*:

- *Part 1: Overview*
- *Part 2: Publications*
- *Part 3: Content Documents*
- *Part 4: Open Container Format*
- *Part 5: Media Overlay*
- *Part 6: Canonical Fragment Identifier*
- *Part 7: Fixed-Layout Documents*

EPUB Open Container Format (OCF) 3.0



Recommended Specification 11 October 2011

THIS VERSION

<http://www.idpf.org/epub/30/spec/epub30-ocf-20111011.html>

LATEST VERSION

<http://www.idpf.org/epub/30/spec/epub30-ocf.html>

PREVIOUS VERSION

<http://www.idpf.org/epub/30/spec/epub30-ocf-20110908.html>

A diff of changes from the previous draft is available at [this link](#).

Please refer to the [errata](#) for this document, which may include some normative corrections.

Copyright © 2010, 2011 International Digital Publishing Forum™

All rights reserved. This work is protected under Title 17 of the United States Code. Reproduction and dissemination of this work with changes is prohibited except with the written permission of the [International Digital Publishing Forum \(IDPF\)](#).

EPUB is a registered trademark of the International Digital Publishing Forum.

Editors

James Pritchett, Learning Ally (formerly Recording for the Blind & Dyslexic)

Markus Gylling, DAISY Consortium

TABLE OF CONTENTS

[1. Overview](#)

- [1.1. Purpose and Scope](#)
- [1.2. Terminology](#)
- [1.3. Conformance Statements](#)
- [1.4. Content Conformance](#)
- [1.5. Reading System Conformance](#)

[2. OCF Abstract Container](#)

- [2.1. Overview](#)
- [2.2. File and Directory Structure](#)
- [2.3. Relative IRIs for Referencing Other Components](#)
- [2.4. File Names](#)
- [2.5. META-INF](#)
 - [2.5.1. Container – META-INF/container.xml](#)
 - [2.5.2. Encryption – META-INF/encryption.xml](#)
 - [2.5.3. Manifest – META-INF/manifest.xml](#)
 - [2.5.4. Metadata – META-INF/metadata.xml](#)
 - [2.5.5. Rights Management – META-INF/rights.xml](#)
 - [2.5.6. Digital Signatures – META-INF/signatures.xml](#)

[3. OCF ZIP Container](#)

- [3.1. Overview](#)
- [3.2. ZIP File Requirements](#)
- [3.3. OCF ZIP Container Media Type Identification](#)

[4. Font Obfuscation](#)

- [4.1. Introduction](#)
- [4.2. Obfuscation Algorithm](#)
- [4.3. Generating the Obfuscation Key](#)
- [4.4. Specifying Obfuscated Resources](#)

[A. Schemas](#)

- [A.1. Schema for `container.xml`](#)
- [A.2. Schema for `encryption.xml`](#)
- [A.3. Schema for `signatures.xml`](#)

[B. Example](#)

[C. The `application/epub+zip` Media Type](#)

[D. Acknowledgements and Contributors](#)

[References](#)

> 1 Overview

> 1.1 Purpose and Scope

This section is informative

This specification, EPUB Open Container Format (OCF) 3.0, defines a file format and processing model for encapsulating the sets of related resources that comprise one or more EPUB® Publications into a single-file container.

This specification is one of a family of related specifications that compose EPUB 3, the third major revision of an interchange and delivery format for digital publications based on XML and Web Standards. It is meant to be read and understood in concert with the other specifications that make up EPUB 3:

- The EPUB 3 Overview [[EPUB3Overview](#)], which provides an informative overview of EPUB and a roadmap to the rest of the EPUB 3 documents. The Overview should be read first.
- EPUB Publications 3.0 [[Publications30](#)], which defines publication-level semantics and overarching conformance requirements for EPUB Publications.
- EPUB Content Documents 3.0 [[ContentDocs30](#)], which defines profiles of XHTML, SVG and CSS for use in the context of EPUB Publications.
- EPUB Media Overlays 3.0 [[MediaOverlays30](#)], which defines a format and a processing model for synchronization of text and audio.

OCF is the required container technology for EPUB Publications. OCF may play a role in the following workflows:

- During the preparation steps in producing an electronic Publication, OCF may be used as the container format when exchanging in-progress Publications between different individuals and/or different organizations.
- When providing an electronic Publication from publisher or conversion house to the distribution or sales channel, OCF is the recommended container format to be used as the transport format.
- When delivering the final Publication to an EPUB Reading System or User, OCF is the required format for the container that holds all of the assets that make up the Publication.

The OCF specification defines the rules for structuring the file collection in the abstract: the "abstract container". It also defines the rules for the representation of this abstract container within a ZIP archive: the "physical container". The rules for ZIP physical containers build upon the ZIP technologies used by [[ODF](#)]. OCF also defines a standard method for obfuscating embedded fonts for those EPUB Publications that require this functionality.

This specification supersedes Open Container Format (OCF) 2.0.1 [\[OCF2\]](#). Refer to [\[EPUB3Changes\]](#) for information on differences between this specification and its predecessor.