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Information technology — Digital publishing — EPUB3 —

Part 1: EPUB3 Overview

Technologies de l'information — Publications numériques — EPUB3 —

Partie 1: Aperçu général de EPUB3

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Foreword

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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.

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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 3 Overview

Recommended Specification 11 October 2011

THIS VERSION

http://www.idpf.org/epub/30/spec/epub30-overview-20111011.html

LATEST VERSION

http://www.idpf.org/epub/30/spec/epub30-overview.html

PREVIOUS VERSION

http://www.idpf.org/epub/30/spec/epub30-overview-20110908.html

A diff of changes from the previous draft is available at this link.

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1 Introduction

1.1 Overview

The EPUB® specification is a distribution and interchange format standard for digital publications and documents. EPUB defines a means of representing, packaging and encoding structured and semantically enhanced Web content — including HTML5, CSS, SVG, images, and other resources — for distribution in a single-file format.

EPUB 3, the third major release of the standard, consists of a set of four specifications, each defining an important component of an overall EPUB Publication:

- 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 Open Container Format (OCF) 3.0 [OCF3], which defines a file format and processing model for encapsulating a set of related resources into a single-file (ZIP) EPUB Container.
- EPUB Media Overlays 3.0 [MediaOverlays30], which defines a format and a processing model for synchronization of text and audio.

EPUB has been widely adopted as the format for digital books (eBooks), and these new specifications significantly increase the format's capabilities in order to better support a wider range of publication requirements, including complex layouts, rich media and interactivity, and global typography features. The expectation is that EPUB 3 will be utilized for a broad range of content, including books, magazines and educational, professional and scientific publications.

This document provides a starting point for content authors and software developers wishing to understand these specifications. It consists of non-normative overview material, including a roadmap to the four building-block specification documents that compose EPUB 3.

Another non-normative document, EPUB 3 Changes from EPUB 2.0.1 [EPUB3Changes], describes changes in EPUB 3 from the previous version, but is intended primarily for Authors and EPUB Reading System vendors migrating from EPUB 2.0.1 to EPUB 3 and for those who anticipate supporting both

versions.

› 1.2 Roadmap

This section provides an overview of the EPUB 3 specifications by explaining in brief the components of a Publication. Links to additional information within this document and to the specifications are included.

An EPUB Publication, at its most basic level, is a bundled collection of resources that can be reliably and predictably ingested by an EPUB Reading System in order to render its contents to a User. Some of these resources facilitate the discovery and processing of the EPUB Publication, while others make up the content of the source publication. The latter, EPUB Content Documents, are described in Content Documents and are fully defined in [ContentDocs30].

A Publication's resources are typically bundled for distribution as a ZIP-based archive with the file extension `.epub`. As conformant ZIP archives, Publications can be unzipped by many software programs, simplifying both their production and consumption. The container format is introduced in Container and defined in [OCF3].

The container format not only provides a means of determining that the zipped content represents an EPUB Publication (the `mimetype` file), but also provides a universally-named directory of informative resources (`/META-INF`). Key among these is the `container.xml` file, which directs Reading Systems to the root file of the Publication, the Package Document.

The Package Document is itself a kind of information warehouse for the Publication, storing metadata about the specific work contained in the Publication, providing an exhaustive list of resources and defining a default reading order. The Package Document is introduced in Package Document and defined in [Publications30].

The preceding components of an EPUB Publication are not new to EPUB 3, and will be familiar to anyone who has worked with Publications before, although they have been changed and enhanced in this version. A new core addition to EPUB 3, however, is the Media Overlay Document, which defines a means of synchronizing text and audio playback. The Overlay Document is introduced in Multimedia and defined in [MediaOverlays30].

The following example shows the resources a minimal "Hello World" Publication might contain:

```
mimetype
META-INF/container.xml
Content/HelloWorld.opf
Content/HelloWorld.xhtml
```

While conceptually simple, an EPUB Publication is more than just a collection of HTML pages and dependent assets in a ZIP package as represented in this example. The following sections of this document delve into more detail about the primary features and functionality that Publications provide to enhance the reading experience.