
**Information technology — Digital
publishing — EPUB 3.0.1 —**

**Part 3:
Content documents**

*Technologies de l'information — Publications numériques — EPUB
3.0.1 —*

Partie 3: Documents de contenu

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Foreword

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This document was prepared by the World Wide Web Consortium (W3C) (as EPUB Content Documents 3.0.1) and drafted in accordance with its editorial rules. It was adopted, under the JTC 1 PAS procedure, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

A list of all parts in the ISO/IEC 23736 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

EPUB Content Documents 3.0.1



Recommended Specification 26 June 2014

THIS VERSION

<http://www.idpf.org/epub/301/spec/epub-contentdocs-20140626.html>

LATEST VERSION

<http://www.idpf.org/epub3/latest/contentdocs>

PREVIOUS VERSION

<http://www.idpf.org/epub/301/spec/epub-contentdocs-20140228.html>

A [diff of changes](#) from the previous version is also available.

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

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› 1 Overview

› 1.1 Purpose and Scope

This section is informative

This specification, EPUB Content Documents 3.0.1, defines profiles of HTML5, SVG, and CSS for use in the context of EPUB® Publications.

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 3.0.1 [[Publications301](#)], which defines the semantics and overarching conformance requirements for each Rendition of an EPUB Publication.
- EPUB Open Container Format (OCF) 3.0.1 [[OCF301](#)], 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 3.0.1 [[MediaOverlays301](#)], which defines a format and a processing model for synchronization of text and audio.

This specification supersedes EPUB Content Documents 3.0 [[ContentDocs30](#)]. Refer to [[EPUB3Changes](#)] for information on differences between this specification and its predecessor.

› 1.2 Relationship to Other Specifications

This section is informative

› 1.2.1 Relationship to HTML5

The XHTML document type defined by this specification is based on W3C [[HTML5](#)], and inherits all definitions of semantics, structure and processing behaviors from the HTML5 specification unless otherwise specified.

In addition, this specification defines a set of extensions to the W3C HTML5 document model that Authors may include in XHTML Content Documents.

This specification defines a simplified processing model that does not require Reading Systems to support scripting, HTML5 forms or the HTML5 DOM. EPUB Reading Systems conformant with this specification are only required to be able to process a conforming EPUB Content Document. As support for scripting and HTML5 forms are optional Reading System features, a conformant Reading System might not be a fully-conformant HTML5 User Agent (i.e., it might not implement the complete HTML5 processing model).

› 1.2.2 Relationship to SVG

This specification defines a restricted subset of SVG 1.1 to represent vector graphics inline in XHTML Content Documents and as standalone SVG Content Documents.

› 1.2.3 Relationship to CSS

The CSS profile defined in this specification has CSS 2.1 [[CSS2.1](#)] as its baseline. Any CSS Style Sheet that conforms to CSS 2.1 may be used in the context of an EPUB Publication, except as noted in [CSS 2.1](#).

This specification also incorporates features defined by CSS3 Modules and introduces EPUB-specific CSS constructs.

› 1.2.4 Future Maintenance

This specification references W3C specifications that are not yet final, and incompatible changes to them may occur in the future that would cause EPUB 3 Content Documents that were previously conformant to no longer be conformant to the latest versions of the referenced specifications.

The IDPF anticipates revising this specification if and when such incompatible changes occur, updating the normative constraints defined herein as necessary.

› 1.3 Terminology

EPUB Publication

A collection of one or more Renditions conforming to this specification and its sibling specifications, packaged in an EPUB Container.

An EPUB Publication typically represents a single intellectual or artistic work, but this specification and its sibling specifications do not circumscribe the nature of the content.

Rendition

A logical document entity consisting of a set of interrelated resources representing one rendering of an EPUB Publication.

Publication Resource

A resource that contains content or instructions that contribute to the logic and rendering of at least one Rendition of an EPUB Publication. In the absence of this resource, the EPUB Publication might not render as intended by the Author. Examples of Publication Resources include a Rendition's Package Document, EPUB Content Document, EPUB Style Sheets, audio, video, images, embedded fonts and scripts.

With the exception of the Package Document itself, the Publication Resources required to render a Rendition are listed in that Rendition's manifest [Publications301] and bundled in the EPUB Container file (unless specified otherwise in Publication Resource Locations [Publications301]).

Examples of resources that are not Publication Resources include those identified by the Package Document link [Publications301] element and those identified in outbound hyperlinks that resolve outside the EPUB Container (e.g., referenced from an [HTML5] a element href attribute).

Core Media Type Resource

A Publication Resource that is a Core Media Type and may therefore be included in the EPUB Publication without the provision of fallbacks [Publications301].

EPUB Content Document

A Publication Resource that conforms to one of the EPUB Content Document definitions (XHTML or SVG).

An EPUB Content Document is a Core Media Type, and may therefore be included in the EPUB Publication without the provision of fallbacks [Publications301].

XHTML Content Document

An EPUB Content Document conforming to the profile of [\[HTML5\]](#) defined in [XHTML Content Documents](#).

XHTML Content Documents use the [XHTML syntax](#) of [\[HTML5\]](#).

SVG Content Document

An EPUB Content Document conforming to the constraints expressed in [SVG Content Documents](#).

EPUB Navigation Document

A specialization of the XHTML Content Document, containing human- and machine-readable global navigation information, conforming to the constraints expressed in [EPUB Navigation Documents](#).

Scripted Content Document

An EPUB Content Document that includes scripting or an XHTML Content Document that contains [HTML5 forms](#) elements.

Refer to [Scripted Content Documents](#) for more information.

Top-level Content Document

An EPUB Content Document referenced from the spine, whether directly or via a [fallback chain](#) [\[Publications301\]](#).

Fixed-Layout Document

An EPUB Content Document directly referenced from the spine that has been designated **pre-paginated** in the Package Document, as defined in [The rendition:layout Property](#) [\[Publications301\]](#).

The dimensions to use for rendering Fixed-Layout Documents are defined in [Fixed-Layout Documents](#) [\[ContentDocs301\]](#).

Core Media Type

A set of Publication Resource types for which no fallback is required. Refer to [Publication Resources](#) [\[Publications301\]](#) for more information.

Package Document

A Publication Resource carrying bibliographical and structural metadata about a given Rendition of an EPUB Publication, as defined in [Package Documents](#) [\[Publications301\]](#).

Manifest

A list of all Publication Resources that constitute the given Rendition of a EPUB Publication.

Refer to [manifest](#) [\[Publications301\]](#) for more information.

Spine

An ordered list of Publication Resources, **typically** EPUB Content Documents, representing the default reading order of the given Rendition of an EPUB Publication.

Refer to [spine](#) [\[Publications301\]](#) for more information.

Text-to-Speech (TTS)

The rendering of the textual content of an EPUB Publication as artificial human speech using a synthesized voice.

EPUB Style Sheet (or Style Sheet)

A CSS Style Sheet conforming to the CSS profile defined in EPUB Style Sheets.

Viewport

The region of an EPUB Reading System in which the content of an EPUB Publication is rendered visually to a User.

CSS Viewport

A Viewport capable of displaying CSS-styled content.

SVG Viewport

A Viewport capable of displaying SVG images.

EPUB Container (or Container)

The ZIP-based packaging and distribution format for EPUB Publications defined in [OCF301].

Author

The person(s) or organization responsible for the creation of an EPUB Publication, which is not necessarily the creator of the content and resources it contains.

User

An individual that consumes an EPUB Publication using an EPUB Reading System.

EPUB Reading System (or Reading System)

A system that processes EPUB Publications for presentation to a User in a manner conformant with this specification and its sibling specifications.

› 1.4 Typographic Conventions

The following typographic conventions are used in this specification:

markup

All markup (elements, attributes, properties), code (JavaScript, pseudo-code), machine processable values (string, characters, media types) and file names are in red-orange monospace font.

markup

Links to markup and code definitions are underlined and in red-orange monospace font. Only the first instance in each section is linked.

http://www.idpf.org/

URIs are in navy blue monospace font.

hyperlink

Hyperlinks are underlined and in blue.

[reference]

Normative and informative references are enclosed in square brackets.

Term

Terms defined in the [Terminology](#) are in capital case.

Term

Links to term definitions have a dotted blue underline. Only the first instance in each section is linked.

Normative element, attribute and property definitions are in blue boxes.

Informative markup examples are in white boxes.

NOTE
Informative notes are in yellow boxes with a "Note" header.

CAUTION
Informative cautionary note are in red boxes with a "Caution" header.

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› 1.5 Conformance Statements

The keywords **MUST**, **MUST NOT**, **REQUIRED**, **SHALL**, **SHALL NOT**, **SHOULD**, **SHOULD NOT**, **RECOMMENDED**, **MAY**, and **OPTIONAL** in this document are to be interpreted as described in [\[RFC2119\]](#).

All sections of this specification are normative except where identified by the informative status label "This section is informative". The application of informative status to sections and appendices applies to all child content and subsections they may contain.

All examples in this specification are informative.

› 1.6 Namespace prefix mappings

For convenience, the following namespace prefix mappings [\[XMLNS\]](#) are used throughout this specification:

prefix	namespace URI
epub	http://www.idpf.org/2007/ops

m	http://www.w3.org/1998/Math/MathML
pls	http://www.w3.org/2005/01/pronunciation-lexicon
ssml	http://www.w3.org/2001/10/synthesis
svg	http://www.w3.org/2000/svg

› 2 EPUB Content Documents

› 2.1 XHTML Content Documents

This section defines a profile of [\[HTML5\]](#) for creating XHTML Content Documents. An instance of an XML document that conforms to this profile is a [Core Media Type](#) and is referred to in this specification and its [sibling specifications](#) as an [XHTML Content Document](#).

Unless otherwise specified, this specification inherits all definitions of semantics, structure and processing behaviors from the [\[HTML5\]](#) specification.

CAUTION

The EPUB 3 XHTML Content Document definition references features in the W3C [\[HTML5\]](#) specification that are still works in progress and may change in incompatible ways. When utilizing such features, authors should consider the inherent risks in terms of the potential impact on interoperability and document longevity.

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› 2.1.1 Content Conformance

An [XHTML Content Document](#) **MUST** meet all of the following criteria:

Document Properties

- › It **MUST** meet the conformance constraints for XML documents defined in [XML Conformance \[Publications301\]](#) .
- › It **MUST** be an [\[HTML5\]](#) document that conforms to the [XHTML syntax](#).
- › For all document constructs used that are defined by [\[HTML5\]](#), it **MUST** conform to the conformance criteria defined for those constructs in that specification, unless explicitly overridden in [HTML5 Deviations and Constraints](#).
- › It **MAY** include extensions to the [\[HTML5\]](#) grammar as defined in [HTML5 Extensions](#), and **MUST** conform to all content conformance constraints defined therein.

File Properties

- › The XHTML Content Document filename **SHOULD** use the file extension **.xhtml**.

NOTE

All Publication Resources referenced from an XHTML Content Document must conform to the constraints for Publication Resources defined in [EPUB Publication — Content Conformance \[Publications301\]](#)

› 2.1.2 Reading System Conformance

A conformant EPUB Reading System **MUST** meet all of the following criteria for processing XHTML Content Documents:

- › Unless explicitly defined by this specification or its [sibling specifications](#) as overridden, it **MUST** process XHTML Content Documents using semantics defined by the [\[HTML5\]](#) specification and honor any applicable User Agent conformance constraints expressed therein.
- › It **MUST** meet all Reading System conformance criteria defined in [HTML5 Extensions](#).
- › It **MUST** recognize and adapt behaviorally to the constraints defined in [HTML5 Deviations and Constraints](#).
- › It **MUST** meet the Reading System conformance criteria defined in [Scripted Content Documents — Reading System Conformance](#).
- › It **MUST** support visual rendering of XHTML Content Documents as defined in [EPUB Style Sheets — Reading System Conformance](#).
- › It **SHOULD** recognize embedded ARIA markup and support exposure of any given ARIA roles, states and properties to platform accessibility APIs [\[WAI-ARIA\]](#).

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› 2.1.3 HTML5 Extensions

This section defines EPUB 3 XHTML Content Document extensions to the underlying [\[HTML5\]](#) document model.

› 2.1.3.1 Semantic Markup

› 2.1.3.1.1 Semantic Inflection

› 2.1.3.1.1.1 Introduction

This section is informative

Semantic inflection is the process of attaching additional meaning about the specific purpose and/or nature an element plays in an XHTML Content Document. In the context of EPUB Publications, the [epub:type](#) attribute is typically used to express domain-specific semantics, with the inflection(s) it carries complementing the underlying [\[HTML5\]](#) host vocabulary. The applied semantics always refine the meaning of their containing elements, never override their nature (e.g., the attribute can be used