TECHNICAL SPECIFICATION

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Information technology — Digital publishing — EPUB3 —

Part 6: **EPUB Canonical Fragment Identifier**

Technologies de l'information — Publications numériques — EPUB3 — Partie 6: Identificateurs de fragment canoniques EPUB



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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.

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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 Canonical Fragment Identifier (epubcfi) Specification

<idpf>

Recommended Specification 11 October 2011

THIS VERSION

http://www.idpf.org/epub/linking/cfi/epub-cfi-20111011.html

LATEST VERSION

http://www.idpf.org/epub/linking/cfi/epub-cfi.html

Previous version

http://www.idpf.org/epub/linking/cfi/epub-cfi-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.

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> 1 Overview

> 1.1 Purpose and Scope

This specification, EPUB Canonical Fragment Identifier (epubcfi), defines a standardized method for referencing arbitrary content within an EPUB® Publication through the use of fragment identifiers.

The Web has proven that the concept of hyperlinking is tremendously powerful, but EPUB Publications have been denied much of the benefit that hyperlinking makes possible because of the lack of a standardized scheme to link into them. Although proprietary schemes have been developed and implemented for individual Reading Systems, without a commonly-understood syntax there has been no way to achieve cross-platform interoperability. The functionality that can see significant benefit from breaking down this barrier, however, is varied: from reading location maintenance to annotation attachment to navigation, the ability to point into any Publication opens a whole new dimension not previously available to developers and Authors.

This specification attempts to rectify this situation by defining an arbitrary structural reference that can uniquely identify any location, or simple range of locations, in a Publication: the EPUB CFI. The following considerations have strongly influenced the design and scope of this scheme:

- The mechanism used to reference content should be interoperable: references to a reading position created by one Reading System should be usable by another.
- Document references to EPUB content should be enabled in the same way that existing hyperlinks enable references throughout the Web.
- Each location in an EPUB file should be able to be identified without the need to modify the document.
- All fragment identifiers that reference the same logical location should be equal when compared.
- Comparison operations, including tests for sorting and comparison, should be able to be performed without accessing the referenced files.
- Simple manipulations should be possible without access to the original files (e.g., given a reference deep in a file, it should be possible to generate a reference to the start of the file).
- Identifier resolution should be reasonably efficient (e.g., processing of the first chapter is not required to resolve a fragment identifier that points to the last chapter).
- References should be able to recover their target locations through parser variations and document revisions.
- Expression of simple, contiguous ranges should be supported.

provided.			

• An extensible mechanism to accommodate future reference recovery heuristics should be