

What's New in EPUB?

HTML



CSS



tcworld conference 2017 - Stuttgart, Germany

Scott Prentice, Leximation, Inc.

Introduction

— [Scott Prentice, President of Leximation, Inc.

— [Specializing in FrameMaker plugin development as well as structured FrameMaker conversions, consulting, and development. FrameMaker user/developer since 1991.

— [Developed DITA-FMx, a FrameMaker plugin for efficient DITA authoring and publishing.

— [Consulting for custom Help systems, creative/functional web applications, and EPUB solutions.

What is EPUB?

— [EPUB: ebook file format for every device and platform

— [Requires a “reader” application or dedicated device

— [A collection of XHTML, XML, CSS, and media files wrapped in a “zip” archive

— [Defines the content, navigation, and formatting of ebook

— [“EPUB” is a registered trademark of the W3C (was IDPF)

EPUB timeline

1999 - Open eBook Publication (OEB)

2007 - Initial EPUB format

2010 - EPUB 2.0.1

2011 - EPUB 3

2014 - EPUB 3.0.1

2017 - EPUB 3.1

2017 - EPUB specification (now) maintained by the W3C



ePUB

EPUB 2 or EPUB 3?

— [EPUB 3 is current spec, but full support still weak

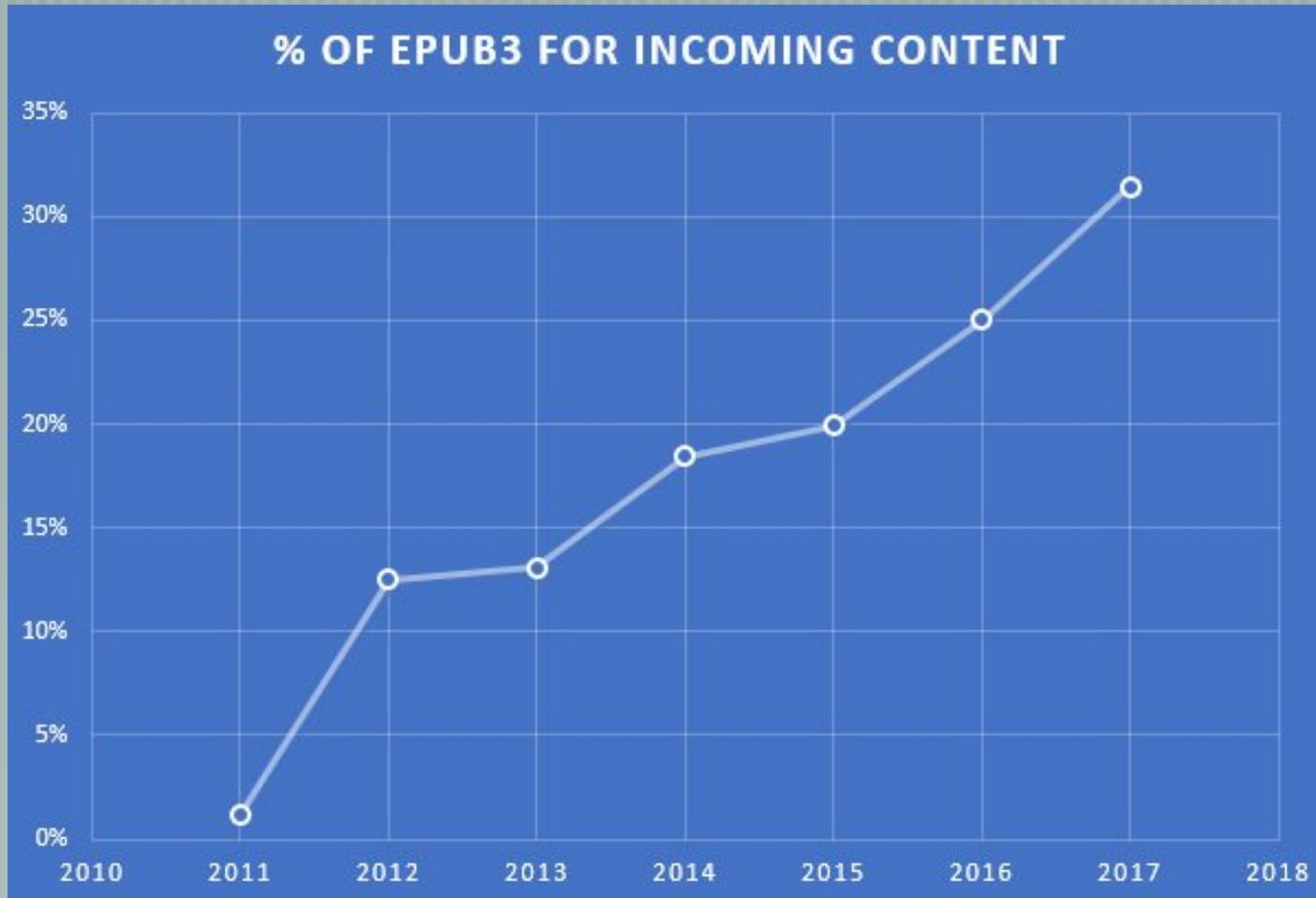
— [70% of new EPUBs are still EPUB 2 (but dropping!)

— [EPUB 3 adds interactivity, multimedia, and much more

— [Hand code to take full advantage of EPUB 3, no tools provide interactive features (yet)

— [Some EPUB 3 features may limit the readers

EPUB 3 at Kobo



Posted on Twitter by Ben Dugas @bendu on Aug 16, 2017

What about Kindle?

— [Amazon uses proprietary ebook formats for Kindle readers

— [MOBI (like EPUB 2) and KF8 (like EPUB 3)

— [Download utility from amazon.com to convert EPUB to Kindle formats

— [Mostly “works” but some situations may require extra effort

— [We won't talk more about Kindle here

EPUB 3 changed everything!

— [Underlying technologies will be familiar to techcomm:
(X)HTML5 and CSS3

— [EPUB 3 supports features you'll see on the web

— [Supports most languages (text orientation and Unicode)

— [MathML, SVG, audio, video

— [Responsive design via media queries

— [JavaScript support including libraries like jQuery

Page layout options

- [Paged - typical ebook, default output for tools
 - Best for linear books
- [Fixed layout (FXL) - like a PDF but in HTML
 - Graphics intensive books
- [Vertical scrolling - per “topic” or entire book
 - References or online Help (EPUB Help?)

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Yosemite National Park

Yosemite National Park is a United States National Park spanning eastern portions of Tuolumne, Mariposa and Madera counties in the central eastern portion of California, United States.



Figure 1-1: Yosemite Valley from Tunnel View

Location	Tuolumne, Mariposa, & Madera counties, California, USA
Nearest city	Mariposa, California
Coordinates	37°44'43"N 119°35'54"W
Area	761,268 acres (308,074 ha)
Established	October 1, 1890
Visitors	3,951,393 (in 2011)
Governing body	National Park Service UNESCO World Heritage Site

The park covers an area of 761,268 acres (3,080.74 km²) and reaches across the western slopes of the Sierra Nevada mountain chain. Over 3.7 million people visit Yosemite each year: most spend their time in the seven square miles (18 km²) of Yosemite Valley. Designated a World Heritage Site in 1984, Yosemite is internationally recognized for its

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roof pendants because they were once the roof of the underlying granitic rock.

Erosion acting upon different types of uplift-created joint and fracture systems is responsible for creating the valleys, canyons, domes, and other features we see today. These joints and fracture systems do not move, and are therefore not faults. Spacing between joints is controlled by the amount of silica in the granite and granodiorite rocks; more silica tends to create a more resistant rock, resulting in larger spaces between joints and fractures.

Pillars and columns, such as Washington Column and Lost Arrow, are created by cross joints. Erosion acting on master joints is responsible for creating valleys and later canyons. The single most erosive force over the last few million years has been large alpine glaciers, which have turned the previously V-shaped river-cut valleys into U-shaped glacial-cut canyons (such as Yosemite Valley and Hetch Hetchy Valley). Exfoliation (caused by the tendency of crystals in plutonic rocks to expand at the surface) acting on granitic rock with widely spaced joints is responsible for creating domes such as Half Dome and North Dome and inset arches like Royal Arches.



Figure 1-3: El Capitan

Popular features

Yosemite Valley represents only one percent of the park area, but this is where most visitors arrive and stay.

- Tunnel View is the first view of the Valley for many visitors and is extensively photographed.

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EPUB Help

The screenshot shows a browser window with the Radium+Chrome extension. The main content area displays the help page for 'Using the Reference Manager'. The page includes a sidebar with a table of contents, a main text area with a section header and a list of links, and a figure showing a screenshot of the DITA-FMx Reference Manager dialog box. The dialog box has fields for file location, source file, element tag, and element data. The element data field shows 'id067FF8008E9 | INI-Only Settings'. The page also includes a navigation bar with 'Back to p.2' and '5 of 13'.

Using the Reference Manager

Lets you select a conref, xref, or link target by specifying the file, element type, and element.

The Reference Manager is displayed when inserting a conref, xref, or link. To insert a conref, choose Insert Conref from the DITA menu, to insert an xref or link, use the Element Catalog. Note that the Reference Manager is only displayed for xref or link elements if they are defined as a "Container" rather than a "Cross-Reference" element in your EDD.

Parent: [Using DITA-FMx](#)
Related information
[INI-Only Settings](#)
[Update References](#)
[Insert Conref](#)
[Setting Up to Use Cross-References](#)

Figure 1. DITA-FMx Reference Manager

DITA-FMx - Reference Manager

1. File location: Files currently open in FrameMaker [F] [M] [X]

2. Source file: C:\Tools\lmi-docs\DITA-FMx2.0_Help_Source\ditafmx_ref_inionly.x [Edit]

3. Element tag: b dentry topic

4. Element data [id | content]: Show all elements
id067FF8008E9 | INI-Only Settings

Back to p.2 5 of 13

iBooks - iOS

Radium+Chrome - Mac

EPUB Help

The screenshot shows a desktop application window with a title bar that reads "AZARDI :: DITA-FMx User's Guide -". The main content area displays a help page titled "Using the Reference Manager". The page text explains that the Reference Manager allows users to select a conref, xref, or link target by specifying the file, element type, and element. It also notes that the Reference Manager is only displayed for xref or link elements if they are defined as a "Container" rather than a "Cross-Reference" element in the EDD. A sidebar on the right lists related information: "Parent: Using DITA-FMx", "Related information", "INI-Only Settings", "Update References", "Insert Conref", and "Setting Up to Use Cross-References".

Below the main text, a caption reads "Figure 1. DITA-FMx Reference Manager". Below the caption is a screenshot of the "DITA-FMx - Reference Manager" dialog box. The dialog box has a title bar with a close button. It contains several fields and buttons:

- 1. File location: Files currently open in FrameMaker (with buttons F, M, X)
- 2. Source file: C:\Tools\lmi-docs\DITA-FMx2.0_Help_Source\ditafmx_ref_inionly.x (with buttons ... and Edit)
- 3. Element tag: A list box containing "b", "dlntry", and "topic".
- 4. Element data [id | content]: A text field containing "id067FF8008E9 | INI-Only Settings". A checkbox "Show all elements" is also present.
- Alternate xref text: A text field.
- Key Reference: A text field with a "Key Reference" button.
- Buttons: "External Xref", "Insert", "Close", and "Help".

The screenshot shows an iPhone screen with the status bar at the top displaying "AT&T", "5:40 PM", and "83%". The app title is "Using the Reference". The main content area displays the same help page as the desktop version, titled "Using the Reference Manager". The text explains that the Reference Manager allows users to select a conref, xref, or link target by specifying the file, element type, and element. It also notes that the Reference Manager is only displayed for xref or link elements if they are defined as a "Container" rather than a "Cross-Reference" element in the EDD.

Gitden Reader - iOS

AZARDI Desktop - Mac

EPUB 3.1 updates

Resources may be loaded from remote locations

HTML and SVG versions are now the “current” version

CSS support removes EPUB-specific properties

EPUBCFI linking no longer “required” for readers

NCX file (EPUB 2 ToC) to be removed in next update

Guide element deprecated in favor of landmarks nav

Useful EPUB 3 readers

— [Desktop

- ADE (macOS, Windows, iOS, Android)
- Chrome+Readium (macOS, Linux, Windows) .. WAIT!
- AZARDI (macOS, Linux, Windows) .. maybe?

— [Mobile

- Apple iBooks (iOS)
- Gitden Reader (Android, iOS)

Authoring/publishing tools

— [Adobe FrameMaker

— [Adobe RoboHelp

— [MadCap Flare

— [MadCap DocToHelp

— [oXygen XML Editor

— [DITA-OT + DITA for
Publishers

— [Adobe InDesign

— [Calibre

— [Chapters

— [and .. epubcheck!

EPUB cleanup

— [Regardless of the tool, some cleanup will be needed ..

— [Use Oxygen XML Editor

— [Validate and correct errors

— [Strip all @style attributes

— [Add missing @class attributes so CSS works properly

— [Delete unused JavaScript and other resources

What now?

- [Yeah .. EPUB 3 features have limited support, for now

- [Start simple. Create basic “paged” EPUBs

- Makes your docs available on any device

- [Experiment. Play with alternate layouts and features

- May need to hand code, very doable

- [Automate. Easier to create consistent deliveries

Wrap-up

— [EPUB is like a “website in a box”!

— [With handoff of EPUB to W3C, convergence of online and offline seems inevitable

— [Don't be limited by the current tools

— [Talk to tool vendors about what you want

Resources

— [EPUB 3.1 specification — www.w3.org/Submission/epub31/

— [HTML 5 specification — www.w3.org/TR/html5/

— [CSS 3 specification — www.w3.org/TR/CSS/

— [CSS 3 module status — www.css3.info/modules

— [Responsive ebook design — medium.com/@sandersk/responsive-ebook-design-a-primer-8bba01328219

— [Follow #eprdctn on Twitter

— [Scott Prentice <[scott AT leximation.com](mailto:scott@leximation.com)> — www.leximation.com

Feedback



Your opinion is important!

Please tell us what you thought of the lecture. We look forward to your feedback via smartphone or tablet.

**Scan the QR code
or visit the URL:**

<http://mob03.honestly.de>

The feedback tool will be available even after the conference!