

IBM: Our Move to EPUB

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IBM MobileFirst and Accessibility

MobileFirst – IBM Software Directive to prioritize mobile over desktop

Focus beyond Windows desktop platform

PDF not a usable format for handhelds

Print Fidelity less important on a mobile device

Opportunity to leverage accessibility work on open web platform for IBM Documentation

Accessibility – ePUB 3+

- The main competing eBook format (PDF).
- The new ePUB 3 standard is integrating the DAISY and Open Web Accessibility standards.
 - This means that ePUB documents will increasingly offer greater levels of 'out-of-the-box' Accessibility, including on the mobile platform.
- Use of MathML will allow access to Math.
- IBM leads ePUB Open Web component technologies such as HTML 5, SVG, WAI-ARIA.
- Teams within IBM are already deploying ePUB materials (RedBooks, TIE ID teams)

EPUB vs. PDF - mainstream

- EPUB is NOT designed for high print fidelity
- Reflow and scroll vs. pinch and squeeze on mobile
- More searchable (based on HTML5)
- Ability to create portable cloud annotation
 - Highlighting, bookmarks, notes, etc.
- Ability to increase fonts dynamically
- Easier to translate – (Based on HTML5)
- Tie speech to text (self voice)
- Future: Deliver a context aware experience
- Deliver Interactive Documentation (Already going on in Education)
- Able to phase in features as enterprise is ready
- And More: It is programmatically accessible

EPUB Adoption Today

- Second only to plain text and PDF in platform reader support
 - Kindle: Main exception but converters exist
- Document converters exist
 - Word to EPub
 - PDF to EPub
- Authoring Tools Are Available
- IBM working with Adobe to improve accessible EPUB generation in InDesign

Internal Transformation

- All Documentation is stored in OASIS Darwin Information Typing Architecture (DITA)
 - Many enterprises use DITA in part of their business
 - Use Oxygen XML Editors to author content
 - Oxygen DITA to EPUB converters
- Expanding internal web accessibility test tool to process EPUB
- Begin producing EPUB documents 3Q14
- EPUB Readers
 - Tactile: Lucifox plugin Firefox
 - Long Term Radium.js, Radium SDK (Cloud/Mobile)

The Move

- February 13, 2014 [IBM Announces Move to EPUB](#)
 - [IBM Blog Entry](#) on accessible mobile Content with EPUB
- That IBM should announce a commitment to:
 - Moving to XHTML and ePUB as the strategic output formats effective Jan 1st 2014.
 - Continue to support PDF for those requiring print fidelity
 - The motivation is accessibility and mobility
- IBM to start producing EPUB documentation in 3Q14
- Starting with Math, HTML5 and CSS components.
- Phasing in other EPUB features over time

Backup

Sample ePUB Exporters/Converters

- Document converters exist
 - Word to ePub
 - PDF to ePub
- Apache ePub exporters
 - EPUB generator – basic ePUB transform for OOXML Documents
 - WritetoPUB – converts any OO supported document to ePUB
 - ODFtoPUB – an ODF to ePub exporter

Sample ePUB Readers

- Apps
 - Apple iBooks
 - Google Play Books
 - Aldiko
 - Calibre
 - FB Reader
 - Various reader apps, such as Kobo, Nook, ...
- Web and cloud
 - Magic Software
 - Radium
 - EPUBReader
 - ...

PDF Accessibility

- Technical
 - Tagged PDF Very Hard to make Accessible.
 - Accessibility infrastructure outdated
 - Accessibility support limited beyond Windows
 - No access to Math and rich graphics
- Customers
 - Costly to remediate accessibility issues
 - Disabled users would like to see it 'go away'
- IBM had no control to fix