EDUPUB Summit 주요점 요약
(Summary of EDUPUB Day 1 & 2)

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EDUPUB

Certifying EDUPUB Content, Authoring Tools, and Reading Systems

(Markus Gylling (IDPF/DAISY), Paul Belfanti (Pearson), Julie Morris (BISG))

Goal of this session

- **Define & review conformance criteria for**
  - EDUPUB Content
  - EDUPUB Reading Systems
  - EDUPUB Authoring Tools

- **Discuss options for conformance certification**
  - recommend path forward (with clear relation to IMS)

- **Establish roadmap for building and deploying needed conformance measurement framework(s)**

- **Establish options and recommend path forward for accessibility scoring of reading systems and authoring tools**

EDUPUB

Conformance measuring tools to build on

- **EPUBCheck**
  - Static validation of EPUB files
  - Partial EDUPUB support already in beta version
  - Can only validate static properties of content

- **EPUBTest**
  - Tests Reading System conformance of EPUB3
  - Close collaboration with IDPF & DAISY Consortium to launch http://epubtest.org
  - 2011-2015 expansion to include Accessibility testing
  - Maintained through a volunteer run working group + body of testers and moderators

EDUPUB

- **BISG: Book Industry Study Group** (in US)
  - Content Structure: EPUB3, EDUPUB and Accessibility
  - Metadata: ONIX 3.0 migration support, ONIX and schema.org mapping,
    and Educational Standards taxonomy (related to learning objectives)
    Note: 3 level metadata certification (bronze, silver and gold)
  - EDUPUB WG: guide to EDUPUB and further work to support adoption,
    based on research findings
  - EPUB3 Support Grid: http://epubtest.org

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EDUPUB Content Conformance (EPUB WG)

- must be a valid pub 3.0.1 publication
- must have at least one instance of shame:accessibilityFeature (metadata part)
- must declare the dc:type value "edupub" (metadata part)
- need to be able to verify that metadata specified in publication is true
- if a distributable object is declared, need to be able to validate the object
- validate section/heading requirements and ensure semantics are applied as intended
- scriptable components only require a few additional metadata/structural requirements on top of distributable objects - embed in iframe
- if annotations are included, need to ensure that they are included and conform to the open annotation spec
- the target reference for the annotation needs to be validated
- for fixed layouts, needs to have a reflow able alternative - using pub multiple renditions framework
- if pagebreak markers are included, the source publication and a page-list nav must be included

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EDUPUB Reading System Conformance (BISG)

- must confirm to the requirements for RSes in EPUB 3.0.1
- must support the rendering of Scriptable Components, as defined in 7.Scriptable Components
- must support multiple-Rendition Publications, as defined in [Multiple Renditions].
- must support the import and rendering of annotations, as defined in 10.Annotations

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EDUPUB Reading System Conformance (BISG)

Content requirements

- must confirm to the requirements for RSes in EPUB 3.0.1
- must support the rendering of Scriptable Components, as defined in 7.Scriptable Components
- must support multiple-Rendition Publications, as defined in [Multiple Renditions].
- must support the import and rendering of annotations, as defined in 10.Annotations

Annotation

- It must provide a mechanism for the import of annotations conformant with this specification
- It should provide a mechanism to export annotations conformant with this specification

EPUBSC Packaging

- **It must process parameters as defined in 2.4.3.6 The epubsc:required-params property**

EPUBSC API

- **Container-constrained scripting [ContentDocs301] must be supported**
- **All conformance requirements placed on Reading Systems by the ePUB specification, particularly the requirements for scripting [ContentDocs301], must be met.**
- **If spine-level scripting [ContentDocs301] is not supported, the Reading System must support the postMessage protocol defined 4.2.2 The postMessage Method for all Scriptable Components that are direct children of the spine. Otherwise, it must not provide the postMessage protocol, as the spine-level Components will already implement it.**

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EDUPUB Authoring Tools (who?)

- **must be able to create a publication conformant to the content specifications**
- **Provide an informative capabilities matrix
  - populated by a third party**
- **multi-level certification (bronze, silver and gold) based on capabilities matrix?**

EDUPUB

Summary: Roadmap and actions

Content Conformance
- **EPUBCheck group to produce complete test implementation**
- **Need for interactive QA tool to be discuss further tomorrow**
  - **EDUPUB WG to discuss SC change proposal (container-level only)**
  - **EDUPUB WG to discuss audio/video accessibility requirements**

Reading System Conformance
- **awaiting LTI/Caliper et al definitions…**
- **BISG Grid WG and IDPF to perform feasibility study re extending grid for EDUPUB**

Authoring Tool Conformance
- **provide an informative capabilities matrix populated by a third party**
- **multi-level certification (bronze, silver gold) based on capabilities matrix?**
- **still lacks natural owner**

EPUB 3.1

IDPF EDUPUB WG work 2015-16 : EPUB 3.1
(Markus Gylling (IDPF), Garth Conboy (Google), Brady Duga (Google))

Overview

- **Target: add smaller select set of often requested features to EPUB**
  - backwards compatible
  - complete before EOY 2015

- **Option to include some of the existing modular specs**
  - (AHL, SC, DO, OA, et. al.)

- **For each proposed feature, carefully weigh implementation cost**

- **Use new IDPF exit cirteria ("implementation readiness roadmap")**
  Note: report of active status for implementation

EPUB 3.1

Process & Timeline

- **Gather & prioritize feature requests**   **March-April 2015**
- **Proposal to DIPF Board**   **End April 2015**
- **Drafting (cyclic)**   **May-October 2015**
- **Proposed Recommendation**   **November 2015**

EPUB 3.1

Overhead so far …

- User ability to change granularity of MO synchronization?

- Add 3D format to core media types?

- Synchronize video with surrounding text (sign language)?

- Start migration from @epub:type to @role?

- Braille style sheets and media type?

- A formalized mechanism for personalization (font changes, etc)?

- Add speech-centric audio CoDec to core media types (AMR/3GP, OPUS, USAC)?

- Allow HTML serialization in content documents or iframes?

- Formalized mechanism for scripts making remote calls (e.g. edupub <-->LMS)?

- Navigation presentation mode metadata?

- Enumerate JavaScript APIs that must/should be supported by RS?

- Anything with DRM? LCP?

- Allow custom attributes in Package Document?

Thank You !!!

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