



# EDUPUB Summit

Phoenix 26-27 Feb 2015



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## Certifying EDUPUB Content, Authoring Tools, and Reading Systems

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# Certifying EDUPUB Content, Authoring Tools, and Reading Systems

## Goals 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



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## 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 EPUB 3
  - Close collaboration with IDPF & DAISY Consortium to launch <http://epubtest.org>
  - 2014- 2015 expansion to include Accessibility testing
  - Maintained through a volunteer-run working group + body of testers and moderators



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**What is BISG doing?**

**What is IMS doing?**



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## EDUPUB Content Conformance

- must be a valid epub 3.0.1 publication
- must have at least one instance of schema:accessibilityFeature
- must declare the dc:type value "edupub"
- 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 reflowable alternative - using epub multiple renditions framework
- if pagebreak markers are included, the source publication and a page-list nav must be included
- for teacher's editions, must have aria-label on student content and should identify the corresponding student edition - must have appropriate dc:type in addition to edupub specifier



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## EDUPUB Reading System Conformance

### Content Requirements

- must conform to the requirements for reading systems 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 [\[MultipleRenditions\]](#).
- must support the import and rendering of annotations, as defined in [10. Annotations](#).

### Annotations

- 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.



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## EDUPUB Reading System Conformance

### EPUBSC Packaging

- It must process parameters as defined in [2.4.3.6 The epubsc:required-params property](#) - When invoking the Scriptable Component, the Reading System must provide the named parameter with appropriately typed data.

### EPUBSC API

- [Container-constrained scripting \[ContentDocs301\]](#) must be supported.
- 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 Tool Conformance

- 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 gold) based on capabilities matrix?



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## Accessibility Scoring of Reading Systems and Authoring Tools



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## Options for EDUPUB Certification



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## Summary: Roadmap and actions

### Content Conformance

- **EPUBCheck group** to produce complete test implementation
- Need for **interactive QA tool** to be discussed further tomorrow
  - EDUPUB WG to discuss SC change proposal (container-level only)
  - EDUÅUB 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



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## Summary: Roadmap and actions

**Proposed EDUPUB Alliance to serve as umbrella for organizing a coherent measurement/certification scheme**

