

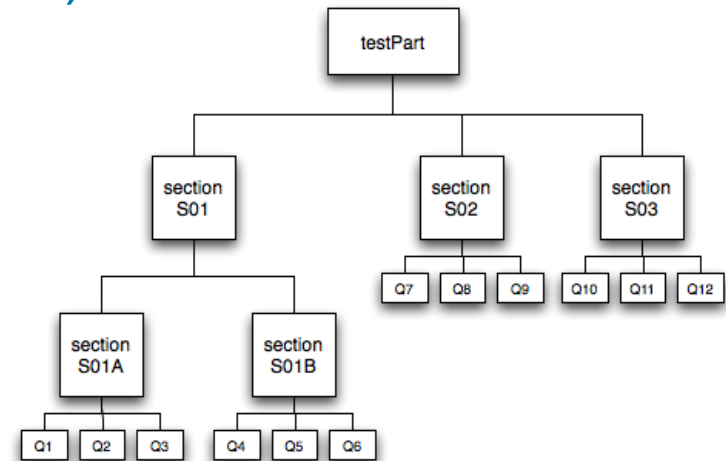
# The Dutch Exam Profile (DEP)

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# Outline

- Overview
  - Requirements
  - Principles
  - Versions
  - Samples
- Documentation structure (detail)
  - Schema mutations
    - Content Packaging
    - QTI
  - Procedural Agreements
    - Custom Interactions
    - Custom Operators
    - Adaptive API
    - Package encryption



# General Requirements

- Proper item display
  - Pixel perfect possible?
  - ExamenTester as baseline...
- Include all required metadata
  - Interfacing with DUO administration
- Support “external” modules
  - Custom Interactions (HTML5, legacy Flash)
  - Adaptive testing
    - Suitable for diagnostic testing
- Using open standards: QTI
  - For potential other content suppliers



now you know

# General Principles in using QTI

- Use QTI as “natively” as possible
  - Use extensions only where required
- Implement extensions with minimal impact
  - No modification of schemas
- Allow for “graceful degradation”
  - Functional (as much) without extensions
- Started of as a Profile + Extensions
  - Following principle: remove what isn’t used
  - Full QTI (2.1 final) from DEP Version 3.0



now you know

# Development Principles & Cycle

- Release frequent “Working Drafts”
  - Including sample “reference” package
- Freeze latest Working Draft as final version
  - Aligned with Facet version
    - E.g. Facet 1.0 works with DEP 1.0
- Aligned with Facet release cycle
  - Every September (production version)
    - Next to field trial, critical updates
  - DEP: May at the latest
    - This year in march/April



now you know

# Lot of dependencies...

- Cito
  - Questify Builder – item/test construction
    - Needs Facet Previewer Module for faithful preview...
- DUO
  - Facet Administration modules
    - Metadata dependencies
  - Facet Previewer Module
    - On FAO (Linux) environment
    - Requires QTI Item Previewer...
- Trifork/Citrus
  - Facet QTI Player
    - Item/test content dependencies
    - Facet QTI Item Previewer
  - Needs DEP packages to test...



now you know

# DEP Version History

- 2012: DEP 1.0
  - Based on QTI 2.1 Draft 2
  - Used for small scale pilots
  - Submitted to IMS ([www.imsglobal.org/validator](http://www.imsglobal.org/validator))
- 2013: DEP 2.0
  - Based on QTI 2.1 Draft 2
  - Used for first “basic” real examinations
    - Rekentoets VO, COE
- 2014: DEP 3.0
  - Based on QTI 2.1 Final
  - Supports more advanced item types
    - Focus on Language & Maths
  - Suitable for DTT (pretest): Diagnostic Testing
  - Targeted for IMS Certification & EduStandaard hand-over: starting now...
- 2015: DEP 4.0
  - More itemtypes & metadata
    - Focus on Math
  - Adaptive testing
  - DCET/ACET compatibility: time for a name change?

# Extensions Overview

- Package level (Content Packaging)
  - Identifiers, metadata for logistics, retry-rules, etc.
- AssessmentTest level
  - ConsecutiveNumbering, Title on TestPart-level
  - Adaptivity (module, driver) on section level
  - Item usage on ItemRef level: seeding, informational
- AssessmentItem level
  - Use of tools (calculator, protractor, etc.), reference material (shared stimulus), pop-ups, media, etc.
  - Interaction extensions, e.g. hottext extended to support “Selection & Correction” type





# Samples?

**John Do**  
Examen Engels VMBO (kb-en-vb-10) 2011

**Vraag 2 van 28**  
1p

Welke van de volgende elementen worden gebruikt om water te vormen?

**John Do**  
Examen Engels VMBO (kb-en-vb-10) 2011

**Vraag 9 van 28**  
1p

**Sed lacinia gravida justo venenatis**  
**Aliquam vitae sem quis ipsum tincidunt**

Sed lacinia gravida justo  
blockquote tag  
"Now is the winter of our discontent  
Made glorious summer by this sun of York;  
And all the clouds that lour'd upon our house

**John Do**  
Examen Engels VMBO (kb-en-vb-10) 2011

**Vraag 22 van 28**  
1p

Example of custom interaction integrating with a flash movie

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16 17 18 19 20 21 22 | 23 24 25 26

Overzicht Volgende >

# Further process

- Prepare DEP 3.0 for formal IMS Certification & EduStandaard hand-over
  - Starting today :-)
- For this, documentation needs to be (re)written
  - Especially on the functional level
  - Overview, Implementation guide, Information model, etc.
- Sample sets of packages need to be defined
  - Good sample of functionality



# Questions & Discussion

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