Proctoring Services

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Introduction

- Increasing interest in proctoring of exams delivered electronically
- A number of proctoring services to choose between
- Proctoring service typically separate from the Assessment Management System
  - Sometimes referred to as the ‘Test Driver’
- The Proctoring Service API aims to standardize the touch-points
Proctoring Service

Example Service Types

- Photo Capture and Compare
  - Periodic ID check
- Record and Review
  - ID captured
  - Video/Audio captured
- Online Proctoring
  - ID verified
  - Video/Audio monitored
Progress Update
Specification Timeline

Nov 2016
• Idea presented here in Utrecht!

Nov 2017
• London
• Feedback requested

Nov 2018
• Close to publishing first draft
Use Cases: Prioritized List

- **Launch the Exam**
  - Launch the exam through the proctoring service

- **Add Proctoring Requirement**
  - Add proctoring requirement to an assessment

- **Proctor Intervenes**
  - Control a running exam to protect integrity of the process

- **Validate User System**
  - Check technology requirement for a specific PC, laptop or other device

- **Site-wide Proctoring Options**
  - Configuring proctoring options that will apply to all assessments delivered within the institution

- **Assessment Specific Proctoring Options**
  - Modify default proctoring options for an individual assessment

- **External Reviewer Launch of Proctoring System**
  - Review exceptions for an individual assessment
  - Review audit information for entire assessment program
Our Picture!
Sketched out F2F in March (Scottsdale)
IMS Learning Tools Interoperability (LTI)

https://www.imsglobal.org/activity/learning-tools-interoperability
Why LTI?

- Already used by LMS community
- Designed to solve the problem of ‘launching’ one web app from another
  - *(Assessment)* Platform launches *(Proctoring)* Tool
- One stop-shop:
  - User, context and role information
  - Resource placement (e.g., multiple exams to same group)
  - Authentication via OAuth signing
  - Return links for smooth hand-back
- What’s missing?
  - Safe way to communicate the Exam Launch information
LTI is changing

- LTI 1.3 is not quite ready
- In theory we could work with LTI 1.1
- But LTI 1.3 is the future and so we need to wait for it to come in to focus
- Hence “close” to draft!
LTI Advantage
LTI Extensions Build on Core LTI

Deep Linking
Enables a more intuitive way to add content and links to a platform from a learning tool or publisher content.

Core LTI
LTI Advantage requires IMS certification of core LTI v1.3

Names and Role Provisioning Services
Sends a list of course participants and faculty defined groups to learning tools in a safe and secure manner.

Connect
LT v1.3 ensures the most up-to-date privacy and security

Confirm

Exchange

Assignment and Grade Services
Exchanges assignment progress, comments, and scores from an assessment tool to the gradebook.

Future Extensions

Learning Platform
Tool Consumer

Learning Tools
Tool Provider
## Two Patterns

<table>
<thead>
<tr>
<th>Deep Linking</th>
<th>Grade Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTI Launch from Platform to Tool</td>
<td>Tools calls a service endpoint exposed by Platform</td>
</tr>
<tr>
<td>Tool performs some actions</td>
<td>Tool discovers endpoint during launch</td>
</tr>
<tr>
<td>Tool launches back to Platform</td>
<td></td>
</tr>
<tr>
<td>Sound familiar?</td>
<td></td>
</tr>
</tbody>
</table>
# Two Patterns

<table>
<thead>
<tr>
<th>Launch Exam</th>
<th>Assessment Control Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTI Launch from Assessment Platform to Proctoring Tool</td>
<td>Proctoring Tool calls a service endpoint exposed by Assessment Platform</td>
</tr>
<tr>
<td>Proctoring Tool performs some actions to secure session</td>
<td>Proctoring Tool discovers endpoint during launch</td>
</tr>
<tr>
<td>Proctoring Tool launches back to Assessment Platform to start the exam</td>
<td></td>
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</tbody>
</table>
Who is involved?

- Task Force members collaborating on the development of this specification include ETS, Open Assessment Technologies, Pearson, ProctorExam, Proctorio, ProctorU, Questionmark, University of Central Florida, and others.
Next steps...

Nov 2018
- Present in Utrecht!

Dec 2018
- LTI 1.3 stable?
- Deep Linking pattern stable

Year end?
- *Publish* first draft
- Provisionally straight to public
More information...

- We now have a home page:
  - https://www.imsglobal.org/proctoring-services
Questions?