

# 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

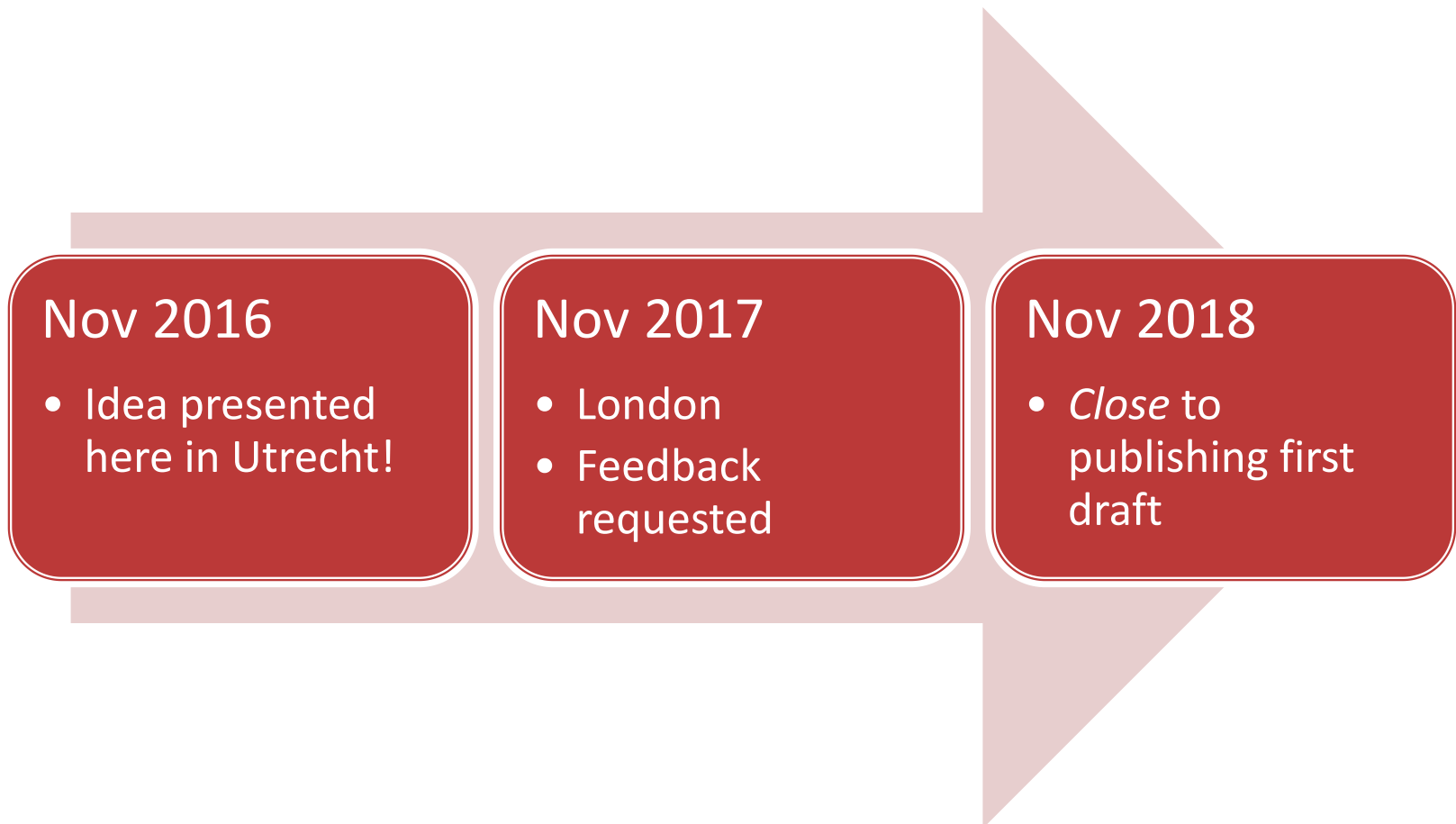
## Example Service Types



- ▶ 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

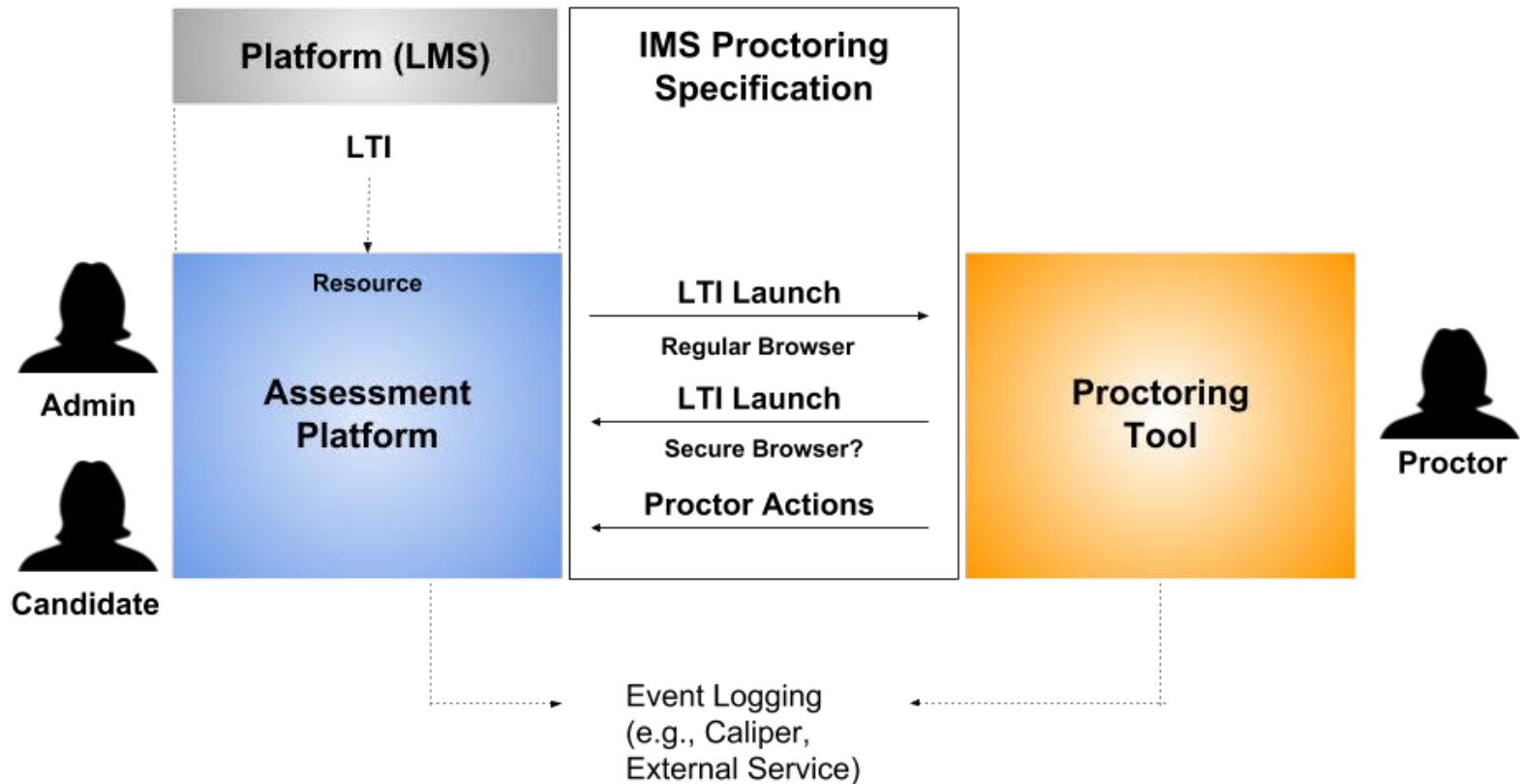


# Use Cases: Prioritized List

- ▶ 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

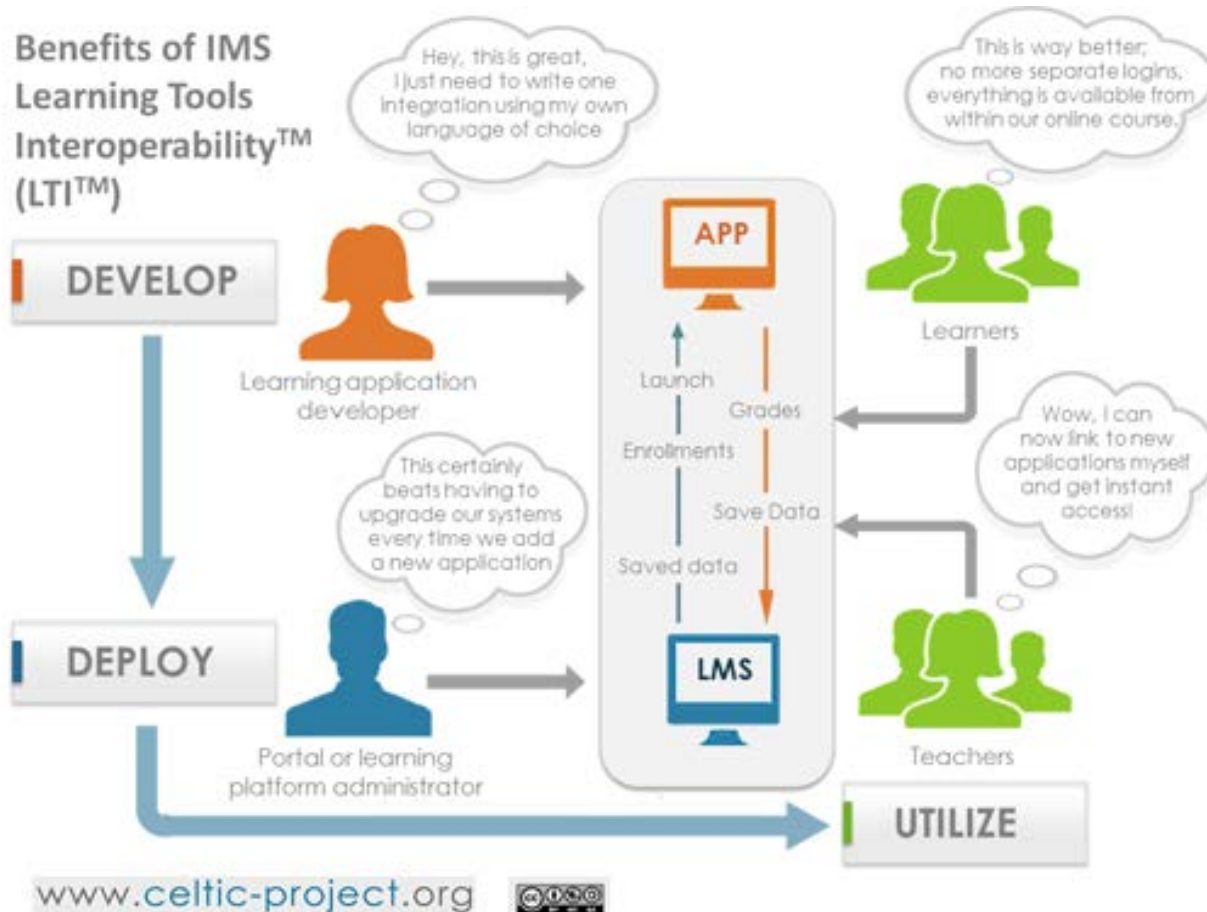
# Our Picture!

Sketched out F2F in March (Scottsdale)



# IMS Learning Tools Interoperability (LTI)

<https://www.imsglobal.org/activity/learning-tools-interoperability>





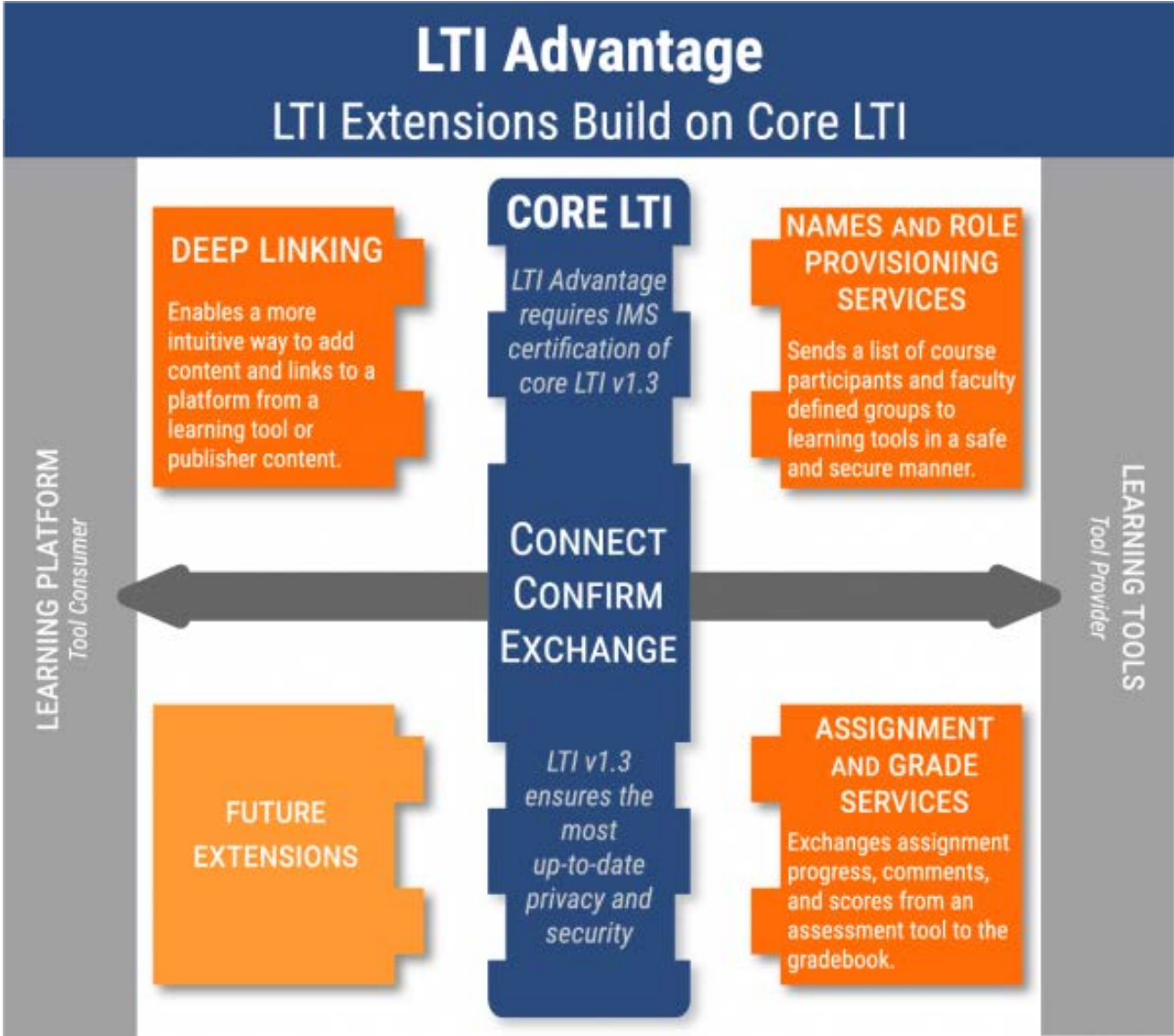
# Why LTI?

- ▶ 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 1.3



# Two Patterns

## Deep Linking

- ▶ LTI Launch from Platform to Tool
- ▶ Tool performs some actions
- ▶ Tool launches back to Platform
- ▶ Sound familiar?

## Grade Services

- ▶ Tools calls a service endpoint exposed by Platform
- ▶ Tool discovers endpoint during launch

# Two Patterns

## Launch Exam

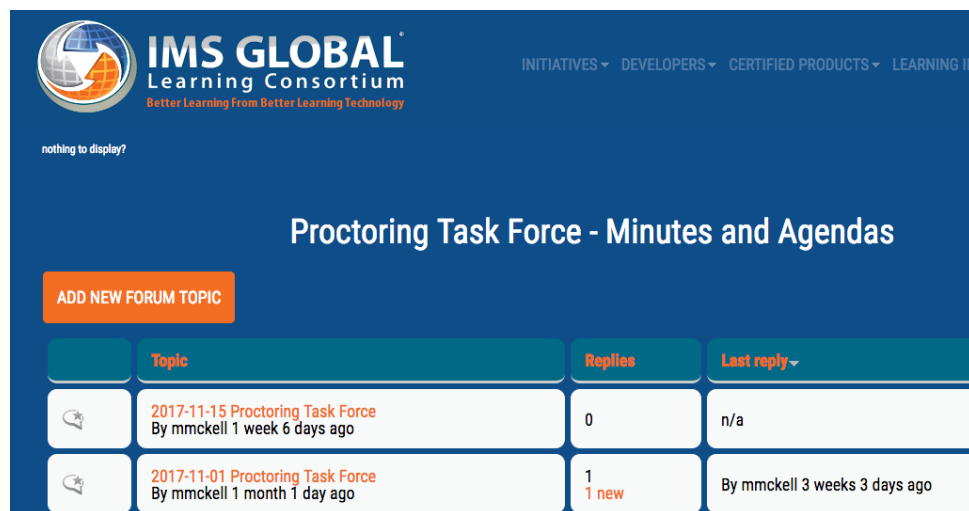
- ▶ LTI Launch from Assessment Platform to Proctoring Tool
- ▶ Proctoring Tool performs some actions to secure session
- ▶ Proctoring Tool launches back to Assessment Platform to start the exam

## Assessment Control Service

- ▶ Proctoring Tool calls a service endpoint exposed by Assessment Platform
- ▶ Proctoring Tool discovers endpoint during launch

# 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.



nothing to display?

Proctoring Task Force - Minutes and Agendas

ADD NEW FORUM TOPIC

	Topic	Replies	Last reply
	2017-11-15 Proctoring Task Force By mmckell 1 week 6 days ago	0	n/a
	2017-11-01 Proctoring Task Force By mmckell 1 month 1 day ago	1 1 new	By mmckell 3 weeks 3 days ago

# 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
  - <https://www.ims-global.org/proctoring-services>

The screenshot shows the IMS Global Learning Consortium website. The header is blue with the IMS Global logo and the tagline "Better Learning From Better Learning Technology". Navigation links include INITIATIVES, DEVELOPERS, CERTIFIED PRODUCTS, LEARNING IMPACT, and LEADERSHIP. The main content area is titled "Proctoring Services" and contains the following text:

Proctoring, or invigilation, in the digital world, is defined as a service that enables test candidates to take an assessment under a degree of supervision to ensure the security of the test environment and the integrity of the testing experience. Proctoring services might include controls such as a secure browser, use of the candidate's screen, cameras, and microphones, and other options to provide live or post-exam reviewing.

The IMS Proctoring Services specification is based on the **Learning Tools Interoperability® (LTI®)** core v1.3 standard and **LTI Advantage** extensions. LTI works on the concept of a browser-based launch from a platform into an external tool or application. For proctoring, a test delivery or assessment management system would be the platform and the proctoring service the tool as illustrated in the following diagram.

The diagram shows two boxes: "Platform (LMS)" on the left and "IMS Proctoring Specification" on the right. A dashed line labeled "LTI" connects the two boxes, indicating the integration point.



# Questions?