



Experience API Conformance Testing Group

Virtual Kickoff – January 21st, 2014

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Advanced Distributed Learning

Why We Are Here

- **Success of the Experience API (xAPI) has put us in a position where we need to think about Conformance Testing**
- **Version of the specification 1.0.1 is out and stable**
- **Expecting more adoption with more stability, so now is the time**

What is Conformance Testing?

- **Conformance Testing is the validation of a system (in xAPI “Learning Record Store(LRS)”) or content (in xAPI “client”) to the behaviors set forth in the specification.**
- **We will look at the xAPI specification and break it down into specific tests to determine conformance.**
- **In the case of xAPI as it was with SCORM, software will be used.**

Why is Conformance Testing Important?

- **Important to make sure all members of a Community of Practice are on the same page.**
- **Will make the specification “battle tested” and clean up grey areas.**
- **Helps the specification do what it does best – increases interoperability (via accountability)**

Why Should I Get Involved?

- **So many reasons!**
 - Chance to make a difference in development of what we see as a “big deal” in Educational Technology
 - Help to avoid shortcomings of the past by shared perspectives and effort
 - Start on the ground floor of an Open Source project with a lot of visibility
 - Experience and Networking

Why Doesn't ADL Just Take Care of This?

- **Being the sole author and not an end user is a bad combination**
- **Multiple perspectives gives a more thorough test**
- **To avoid the “Test Suite problem”**
 - Fluctuating ADL resources and allocations
 - Rapidly changing technology
 - Research vs. Maintenance

Isn't xAPI Going To A Standard's Body?

- **The end goal is still to have the Experience API become a formal spec via a Standard's Body**
- **ADL is working to find a match as well as vet legal issues around this transfer**
- **Still want to transition the best possible product to a Standard's Body**
- **Our “membership” is completely open, so it is better to get involved now!**

Isn't There Already an xAPI Group?

- **There is an xAPI Group that focuses on the actual specification document.**
- **However, that group may wish to explore deeper instructional issues, practices, etc.**
- **This group's sole focus is building software and documentation supporting conformance.**
- **Certainly cross-participation is welcomed! The meeting time and group mail/forums are the same to promote this practice.**

So, What's The Plan?

“Treelike” Conformance Approach

- **SCORM Conformance Testing had a single tool to allow both system (LMS) and content (package) to be deemed conformant.**
- **xAPI will do LRS Conformance Testing only, BUT will have LRSs be responsible for content conformance (meaning the LRS Test will test content conditions)**
- **This means ANY conformant LRS can test content/client conformance**

Modular Nature Of Tests

- **Specification will be broken down into LRS “MUST” requirements.**
- **Puts these in a Testing Requirements Document which LRS Tests can reference.**
- **Base set of LRS Tests establish conformance to xAPI, but will allow extensions for other Communities of Practice.**
- **Each LRS Test will reference exact requirements for what constitutes "Pass" and "Fail" states.**

Open Source

- **Apache 2 Creative Commons license**
- **Using GitHub**
(https://github.com/adlnet/xAPI_LRS_Test)
- **Completely Open to public, ADL manages pull requests and issues**
- **Restricted by GitHub permissions on projects, or would allow community admins as well**

Schedule

- **Meet twice per month for team meetings, but collaborate via email, forums, and GitHub in-between.**
- **First complete the base test, then proceed to other topic areas.**
- **Flexible schedule in terms of how long this takes and in how frequently we meet.**

So Who Should Be Involved?

LRS Developers

- **LRS Developers bring a valuable interpretation, often resulting in a particular implementation of the spec itself.**
- **We can leverage this to define a common understanding.**
- **Code snippets, testing plans, and other practices that developers are willing to share can accelerate development.**
- **Enable the idea of harnessing LRSs with the ability to test clients/content.**

xAPI Client and Content Developers

- **Those using xAPI for developing clients, apps, or content bring valuable experience with testing content to the table.**
- **Can make sure the practice of harnessing LRSs as conformance test, rather than a single central test, remains viable.**
- **May be able to provide format ideas for the Test “packages” of the software.**

Programmers

- **In the end, the effort will be a software development project.**
- **Without programmers, we can create documentation but nothing else.**
- **Feel free to help out even without xAPI knowledge, we will help fill in the gaps.**

Decision Makers

- **Behind every traditional LMS implementation, is someone that decided to either build or purchase it.**
- **This paradigm will likely remain the same for LRSs.**
- **May or may not know the technical implementations, but are very aware of pitfalls of systems and historical conflicts with conformance.**

Anyone With Perspective

- **Whether you have a professional or recreational interest in educational technology, your view and participation is welcomed.**
- **This isn't to discount other roles we haven't mentioned, it is just the perceived technical nature of the project and the narrow scope.**
- **This project could have needs of information or types of expertise we currently aren't accounting for, so we urge you to participate.**

Any Questions?

Action Page

- **All of this will be linked from the Experience API portion of adlnet.gov as well as mailed to the Google Group**
- **Google Group:**
<https://groups.google.com/a/adlnet.gov/forum/#!forum/xapi-spec>
- **Weekly Call:**
<https://www2.gotomeeting.com/register/641325538>
- **GitHub Site:**
https://github.com/adlnet/xAPI_LRS_Test
- **Or email me: andy.johnson.ctr@adlnet.gov**