

SUCCESS BRIEF SCORM4CROSSDOMAIN

Training Solutions
Moodle



Supporting SCORM in a Cross Domain Environment

Technology Transfer Services implements JCA Solutions' SCORM4CrossDomain to enable single source content within a Moodle environment.

Company

Technology Transfer Services (TTS) strives to tailor our instructional and educational services to fit the unique business needs of our clients. Our main focus is to maximize the value of your company's training by spotlighting the skills and knowledge your employees require to safely, accurately, and efficiently perform on-the-job tasks.

Challenge

Provide the ability for TTS to have a single content server that have the ability of serving SCORM content, mainly Articulate packages, to their many Moodle installations as well as to external client LMS installations.

This project supported the following items:

- The ability to launch content residing on a Content Server on domain "A" from a LMS Server residing on domain "B".
- SCORM 1.2 and SCORM 2004 data model elements supported by the host LMS.
- A conversion method to be able to convert the SCORM RTE of the SCO in the content repository to the version of SCORM used by the host LMS.

Solution

JCA Solutions' team worked with TTS to implement SCORM4CrossDomain to enable the transport of SCORM data from the courses loaded on the content server to the LMS and back using a combination of easyXDM (an open source project and JCA Solutions' SCORM communication API and Wrapper.

At the core easyXDM provides a transport stack capable of passing string based messages between two windows, a **consumer** (stub file that is uploaded to the LMS) and a **provider** (the course content from the content server included using an iframe). It does this by using one of several available techniques, always selecting the most efficient one for the current

browser.

For all implementations the transport stack offers bi-directionality, reliability, queueing and sender-verification.

The SCORM part requires 2 pieces, the **LMS Stub** and the **Content Server Wrapper**. The LMS Stub is a content package containing 3 categories of items,

1) imsmanifest.xml and accompanying xsd files 2) The SCORM JavaScript Wrapper and accompanying SCORM API Wrapper files, and 3) the easyXDM library. The purpose of this file is to accept the communication from the course content that will be loaded into the Content Server Wrapper and forward any messages to the LMS SCORM API Adapter.

The Content Server Wrapper will contain the course contents and around that will be wrapped an object called API, which will be a reference to what the course will believe to be the SCORM API, but it will really be an interface to the easyXDM (we will call this API the Fake API) that will talk to the LMS Stub and then the LMS Stub will talk with the actual LMS API Adapter.