



**prop-wash (prăp'-wôsh) *n.*** the surge or eddy of water from a propeller. Never an end in itself, prop-wash is essential for ships and airplanes to move and do their work for the American people. PTC provides "prop wash" in many forms - all of which help human performers do their job.

## **Joint ADL CO-Lab Prototype (PWO06)**

### **"Creating SCORM Conformant Shareable Content Objects (SCO's) From Synchronous Web-Based Training"**

#### **Background:**

In October 2000, the Department of Defense's prestigious Joint Advanced Distributed Learning Co-Laboratory (Joint ADL Co-Lab) requested proposals for projects that demonstrated use of the newly developed SCORM standards. The Sharable Content Object Reference Model (SCORM) defines an architecture in which learning objects can be mixed, matched, and swapped within different Learning Management Systems (LMS's) for distance learning. The following criteria were used to evaluate the proposals:

- Interservice & industry participation
- Leveraging of resources (cost-sharing)
- Support of the ADL desired end-states – adaptability, accessibility, interoperability, durability, and reusability
- Use of SCORM
- Value

The Coast Guard's Performance Technology Center (PTC) in partnership with JDH Technologies submitted a proposal, "Creating SCORM Conformant SCO's from Synchronous Web-Based Training," which met the criteria and was funded by the Co-Lab (\$72k).

#### **Description:**

This project used an existing web collaboration/training system to deliver live instruction to students who were geographically dispersed. This tool allows users to connect and communicate using any browser and delivers slide visuals, live audio, and text chat. The connection occurs over an intranet or the internet and is highly dependent upon available bandwidth. Typically the instructor conducts a class session showing visuals and other content, while providing audio instruction, assistance, and coaching. This delivery is archived for future playback, so students can replay the class experience in an asynchronous mode, including student questions, instructor feedback, and audio class dialogue.

The scope of this project was to provide the necessary tools to convert the archived instruction into Sharable Content Objects (SCO's) which could then be replayed asynchronously within a LMS. The original proposal promised three deliverable components – one or more SCO's, the

editor/translator capability, and the playback applet. Building on the archiving capabilities of the delivery system, the project developed the capability to edit the archive, breaking it into smaller, discreet units of instruction that could then be reused, repurposed, and reassembled within an LMS. The development of the playback applet required special code to communicate with the LMS and initiate the replay of the discreet learning objects. A TRACEN Yorktown class teaching the Incident Command System 200 was archived for content that was then edited into SCO's, tagged with metadata, and replayed within a SCORM conformant LMS.

**Performance:**

The project was demonstrated and delivered to the Joint Co-lab on February 27, 2001, fulfilling the requirements of the proposal and grant. The Co-lab has used this prototype in their demonstrations of successful ADL applications.

**Value:**

In the near future, training and performance support will draw heavily on digital courseware objects that are archived. When mature, this approach promises to greatly reduce development times for online learning and performance support. This project lays some of the foundation for that concept becoming a reality. Participating activities can easily archive live instruction using this system, edit the archive into SCO's, playback the SCO's in an LMS, thereby creating a faster, more cost-effective approach to developing recoverable, asynchronous content. This conversion from classroom to synchronous web to asynchronous web should reduce the costs typically involved with creating stand-alone, web-delivered content.

Additionally, the Coast Guard in conjunction with its industry partner demonstrated that this concept of reusable, recoverable content is not just a "vision," but a near reality. While work continues to refine the SCORM standards, this project proved that government and industry could continue to define standards, require interoperability among vendors, and demonstrate successful applications.

Finally, this project highlighted the value of the Coast Guard's Performance Technology Center in Yorktown, demonstrating the power of a group of innovators with technical savvy, organized around the philosophy of Human Performance Technology.

For more information, please contact [Ms. Becky Palmore](#) at (757) 856-2241 or [CDR Don Robison](#) at (757) 856-2016 or visit the [Performance Technology Center's website](#) to view other Propwash.