

ONE-MINUTE SCORM OVERVIEW FOR ANYONE

“WHAT DO YOU KNOW ABOUT SCORM?”

This is frequently where we start with people who call us. Many of these people know only that their boss has asked them to “find out about SCORM and how it affects us,” or that a prospective customer insists it is necessary for their success.

For some, SCORM is simply an obstacle on the path to a sale. For others, SCORM is a tool that enables effective, efficient online training. At its core, SCORM allows content authors to distribute their content to a variety of Learning Management Systems (LMS) with the smallest headache possible.

“WHAT IS SCORM?”

The Sharable Content Object Reference Model defines a specific way of constructing Learning Management Systems and training content so that they work well with other SCORM conformant systems. Basically, the different versions of SCORM all govern the same two things: packaging content and exchanging data at runtime.

Packaging content determines how a piece of content should be delivered in a physical sense. At the core of SCORM packaging is a document titled the “imsmanifest”. This file contains every piece of information required by the LMS to import and launch content without human intervention. This manifest file contains XML that describes the structure of a course both from a learner’s perspective and from a physical file system perspective. Questions like, “Which document should be launched?” and “What is the name of this content?” are answered by this document.

Runtime communication, or data exchange, specifies how the content “talks” to the LMS while the content is actually playing. This is the part of the equation we describe as delivery and tracking. There are two major components to this communication. First, the content has to “find” the LMS. Once the content has found it, it can then communicate through a series of “get” and “set” calls and an associated vocabulary. Conceptually, these are things like “request the learner’s name” and “tell the LMS that the learner scored 95% on this test.” Based on the available SCORM vocabulary, many rich interactive experiences can be communicated to the LMS.

WHY SHOULD I USE SCORM?

SCORM is a really powerful tool for anyone involved in online training. Content can be created one time and used in many different systems and situations without modification. This plug-and-play functionality can be powerful *within* an organization but even more so *across* organizations. Content can be sold and delivered to the user more quickly, more robustly, and at a lower price.

SCORM is widely adopted by some huge organizations. It has the critical momentum and is the de facto industry standard. The US Department of Defense has specified that all of its content must be delivered via SCORM. *All of it.* Industry is following suit, and the standard appears in a vast majority of RFPs to procure both training content and Learning Management Systems.

Learning. Standards. Systems.

WHAT'S A SCO?

A Sharable Content Object is the most granular piece of training in a SCORM world. Some would call it a module, a chapter, a page... the point is that it varies wildly. A SCORM purist would tell you that it should be the smallest piece of content that is both reusable and independent. In terms of how the LMS treats it, this is the item shown separately in the table of contents and tracked separately from other items. It can contain its own bookmark, score, and completion status.

HOW DOES SCORM RELATE TO AICC?

SCORM is a reference model, which means that it is built on top of existing specifications. From the beginning, SCORM has been described as a “best of breed” solution, culling the best pieces of prior specifications. AICC, a standard from the aviation industry, was used as a basis for the runtime communication portion of the SCORM specification. Conforming to one standard does not mean that you automatically conform to the other.

WHICH VERSION OF SCORM IS RELEVANT?

The answer is all of them. The primary goal of adopting SCORM is generally to create an interoperable system that will work well with other systems. Support for all of the SCORM versions and AICC is essential to fulfilling that goal. To date, there are three released versions of SCORM, each building on top of the prior one.

- **SCORM 1.1** was essentially the first pass, and never gained wide acceptance. Some products still support it, but it is not widely adopted.
- **SCORM 1.2** followed on 1.1, and solved many of 1.1's problems. It was and *is* the widely adopted version. As of October 2005, every major LMS continues to support it, and the majority of content vendors still produce content that meets the 1.2 specification.
- **SCORM 2004** (formerly known as SCORM 1.3) is the most recent release. It extends and formalizes the packaging and runtime portions of the 1.2 standard, but its key addition is the sequencing and navigation (S&N) specification. S&N allows the content vendor to specify both the behavior within the SCO *and* the behavior *between* the SCOs. This allows for substantially richer content interactions and huge increases in the reuse of SCOs. Adoption has been slow, to this point, but the number of LMS's and content vendors supporting SCORM 2004 is increasing greatly.

AM I A CONTENT VENDOR OR AN LMS VENDOR?

An LMS is responsible for keeping track of people and what they do. Content is responsible for conveying knowledge to a learner that it doesn't have any knowledge of. Prior to SCORM, many hosted systems served as both the LMS and the content concurrently. Due to the structure of SCORM, this is substantially more difficult. If someone wants to play your content for their users and track that completion themselves, then you are the content vendor. If you wish to import someone else's content and play it, you are the LMS vendor.

WHAT IS SCORM NOT?

SCORM governs *online training only*, and only between a single user and the system. Offline training does not apply, nor does group training.

SCORM remains intentionally silent on many things as well. Window size, cosmetic appearances, reporting... these items belong to the LMS or the content, and are not commented on at all.