Distributed Learning - Diagnostic, Advisement, and Technical Research (DL DART) Support Services

Army Learning Management System (ALMS) Shareable Content Object Reference Model (SCORM) 2004 3rd Edition
Player Window Exit Behavior

Functional Analysis Report

Provided for
The Army Distributed Learning Program
(TCM TADLP)

04 June 2015
## Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>04 June 2015</td>
<td>Initial release</td>
</tr>
</tbody>
</table>
Introduction
The purpose of this document is provide information regarding the ALMS SCORM 2004 3rd Edition player and its exit behavior with regard to rollup. This document serves as a supplement to the Strict and Relaxed Shareable Content Object Reference Model (SCORM) Content Settings on the Army Learning Management System (ALMS) Research Report, released 03 April 2015, and consolidates information from the report. This document covers the following conditions with respect to ALMS player window behavior for SCORM 2004 3rd Edition content:

- The player window closes automatically and triggers learning assignment status updates.
- The player window remains open and requires the learner to manually close the window after exiting the content to trigger learning assignment status updates.
ALMS SCORM 2004 3rd Edition Player General Exit Behavior

The ALMS SCORM 2004 3rd Edition Player (hereafter referred to as the player) exhibits the following behavior based on exit request and activity completion requirements:

Table 1: ALMS SCORM 2004 3rd Edition Player Window Exit Behavior

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a navigation request present?</td>
<td>Continue to the next step.</td>
<td>Learner must close player.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The player will not update the displayed status of the activity tree, and the learner is required to manually close the player. The learning assignment status is set to <em>Not Evaluated</em>.</td>
</tr>
<tr>
<td>Is the navigation request an <em>all</em> request? *</td>
<td>Player closes automatically.</td>
<td>Continue to next step.</td>
</tr>
<tr>
<td></td>
<td>The player updates the displayed statuses of the activity tree and automatically closes. The learning assignment status is set to <em>Successful</em> if all activities on the activity tree rollup a success status of <em>passed</em>; a status of <em>Unsuccessful</em> is set otherwise.</td>
<td>Note: A navigation request other than the <em>all</em> types is present in this case, e.g., exit or continue.</td>
</tr>
<tr>
<td>Do all activities on the activity tree rollup a completion status of <em>completed</em>? **</td>
<td>Player closes automatically.</td>
<td>Learner must close player.</td>
</tr>
<tr>
<td></td>
<td>The player updates the displayed statuses of the activity tree and automatically closes. The learning assignment status is set to <em>Successful</em> if all activities on the activity tree rollup a success status of <em>passed</em>; a status of <em>Unsuccessful</em> is set otherwise.</td>
<td>The player will update the displayed status of the activity tree, but the learner is required to manually close the player. The learning assignment status is set to <em>Not Evaluated</em>.</td>
</tr>
</tbody>
</table>

* A navigation request of exitAll, suspendAll, or abandonAll, either explicitly set by content or through ALMS features such as the Exit Options.

** A completion status of *completed* either explicitly set by content or by sequencing logic in the manifest.
Refer to appendix A to see the above table expressed as a flowchart. A discussion of the conditions under which the player will either close automatically or require learner action follows in the next section.

**Exit Behavior Conditions**

**Player Closes Automatically**

The player closes automatically after the `Terminate` method of the SCORM API is called under either of the following two conditions:

- The presence of a navigation request of `exitAll`, `suspendAll`, or `abandonAll` which instructs the player to perform the specified actions on all parts of the activity tree. The content itself, Exit Option selections, or content-level relaxed mode being active can set these statuses. Note that content-level relaxed mode only issues a navigation request of `exitAll` if active.

- A determination that all items on the activity tree have a completion status of completed upon execution of a navigation request. Either automatic implicit rollup rules or explicitly-defined rollup rules as part of sequencing logic within the manifest can make the determination.

**Player Requires Learner Action**

The player does not close automatically, and requires the learner to manually close the player under either of the following two conditions:

- The absence of any navigation request. The player will not update the displayed statuses on the activity tree if a navigation request is absent at the time of termination. The learner must close the player manually, which prevents the ALMS from evaluating the status of the learning assignment tied to the content; the status shown for the learning assignment will be *Not Evaluated*.

- A determination that one or more items on the activity tree do not have a completion status of completed, and no explicit rollup rules are defined to force rollup in the event of incomplete activities. In the event a navigation request that does not trigger automatic player closure is present, the player will update the displayed statuses of the activity tree, but the learner must close the player manually.

The process that occurs when the learner exits content and the Terminate method of the SCORM API is called is outlined in the flowchart below.

Figure 1: ALMS SCORM 2004 3rd Edition Player Window Exit Behavior Flowchart